

STRUCTURAL DETAIL SHEET INDEX	
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 WINDOW

FRONT ELEVATION

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

STRUCTURAL NOTES:

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

ELEVATIONS:

1. GARAGE DOORS SHALL MEET DASMA OR ULTIMATE DESIGN WIND SPEED OF 115 MPH REQUIREMENTS.
2. WALL FRAMING SHALL BE DOUGLAS FIR LARCH #2 UNLESS OTHERWISE NOTED.
3. IN BEARING WALLS: STUDS WHICH ARE NOT MORE THAN TEN FEET IN LENGTH SHALL BE SPACED NOT MORE THAN IS SPECIFIED BY IRC TABLE R602.3(S) FOR CORRESPONDING STUD SIZE.
4. WATER-RESISTIVE EXTERIOR WALL BARRIER IN WALL SECTION SHALL COMPLY WITH IRC R703.2.
5. WHEN APPLICABLE, CONTINUOUS STUDS BETWEEN FLOOR AND ROOF/CEILING DIAPHRAGM SHALL COMPLY WITH IRC R602.3.
6. ALL UNMARKED HEADERS SHALL BE A MINIMUM #2 DOUGLAS FIR LARCH (2) 2 X 10 ON LOAD BEARING WALLS.
7. SHIPLAP SIDING MUST BE FASTENED AT BOTH UNDERLAP AND OVERLAP.

RELEASE FOR CONSTRUCTION
AS NOTED ON PLANS REVIEW
DEVELOPMENT SERVICES
LEE'S SUMMIT, MISSOURI
05/31/2024 3:45:37



REAR ELEVATION

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

PLAN INDEX:	
A1.0	ELEVATIONS - FRONT AND REAR
A1.1	ELEVATIONS - LEFT AND RIGHT
A2.0	FOUNDATION PLAN
A3.0	MAIN LEVEL PLAN
A5.0	ROOF PLAN
E2.0	ELECTRICAL PLAN - LOWER LEVEL
E3.0	ELECTRICAL PLAN - MAIN LEVEL

TRANSITIONAL 1

TYPE	NAME	SQ FT
FINISHED	MAIN LEVEL	1518
		1518
UNFINISHED	3 CAR GARAGE	659
	COVERED DECK	189
	FRONT PORCH	116
	GARAGE	469
	LOWER LEVEL - UNFINISHED	1446
		2879
		4398

GENERAL NOTES - ELEVATIONS

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

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.

REFERENCE KEYNOTES

- 01 - FOUNDATION
- 01.12 - TOP OF FOOTING DEPTH DETERMINED PER SITE.
 - 01.23 - STEP FOUNDATION TO BELOW FROST LINE AS REQUIRED PER SITE
 - 01.42 - 6X6 CEDAR POST
 - 01.71 - CONCRETE WINDOW WELL FOR EGRESS WITH LADDER. PROVIDE SLEEVE THROUGH WALL FOR FOUNDATION DRAIN. TOP OF WINDOW WELL TO BE 3" BELOW TOP OF FOUNDATION.

- 02 - TRIM
- 02.61 - 5/4"x8" LP SMART TRIM. UNLESS NOTED OTHERWISE ON ELEVATION.

- 03 - SIDING
- LP SMART LAP SIDING WITH 5/4X6 LP SMART TRIM AROUND DOORS, WINDOWS, AND CORNERS UNLESS NOTED OTHERWISE.
 - 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.

- 03.15 - LP SMART BOARD AND BATTEN.
- 03.17 - MANUFACTURED STONE VENEER.
- 03.18 - CAST STONE CAP
- 03.38 - 6X6 CEDAR POST. 1X6 TRIM AT BASE. 1X4 TRIM AT TOP.
- 03.57 - 26"x6" CEDAR BRACKET
- 03.62 - CEDAR SHUTTERS. ALL SHUTTERS TO BE 18" WIDE USING (3) 2X6 BOARDS. LP SMART TRIM TO BE INSTALLED AROUND WINDOW PRIOR TO SHUTTER INSTALLATION.

- 04 - ROOF
- 04.11 - MINIMUM ROOFING COMPOSITION - 30 YR COMPOSITE SHINGLES ON 15# FELT ON 7/16" OSB SHEATHING OR AS REQUIRED BY CODE.

- 07 - MISCELLANEOUS & PLAN NOTES
- 07.67 - BACK WALL OF GARAGE.

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HAWTHORN RIDGE, Lot 165
HEATHER - TRANSITIONAL 1

HEATHER

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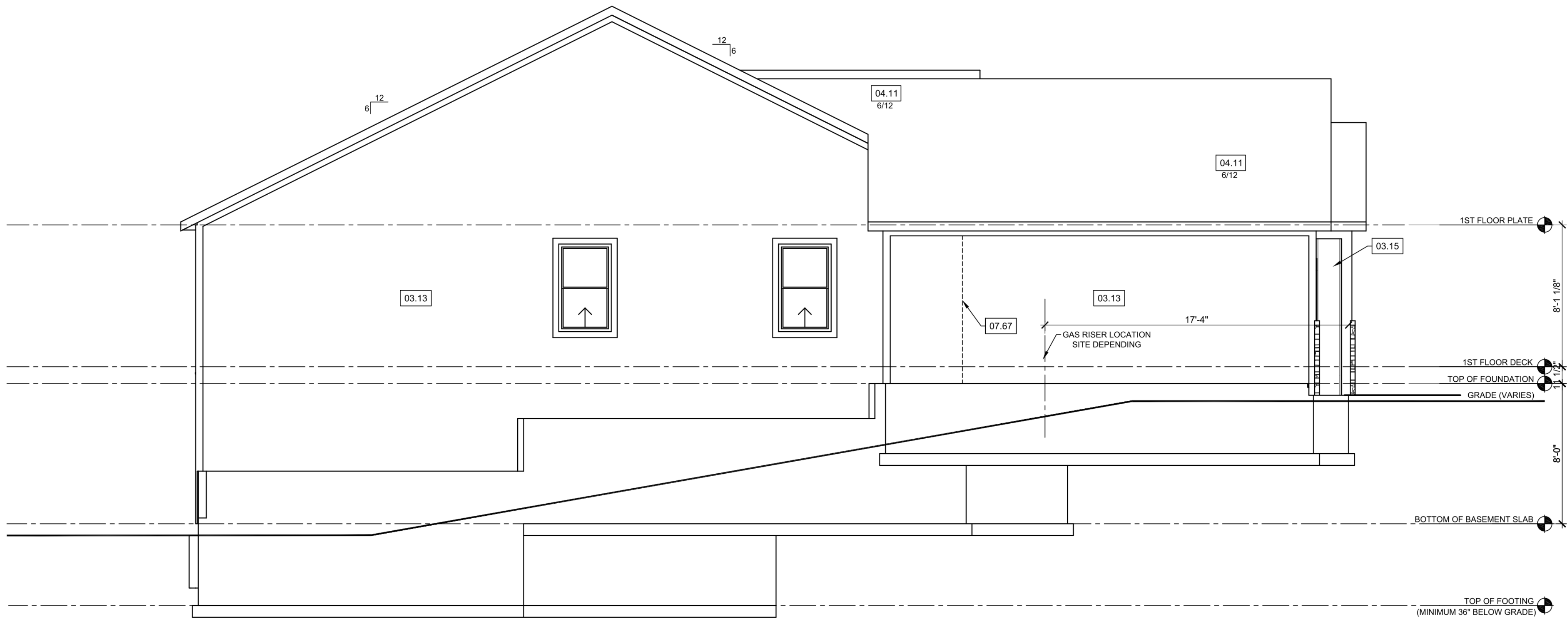
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A1.0

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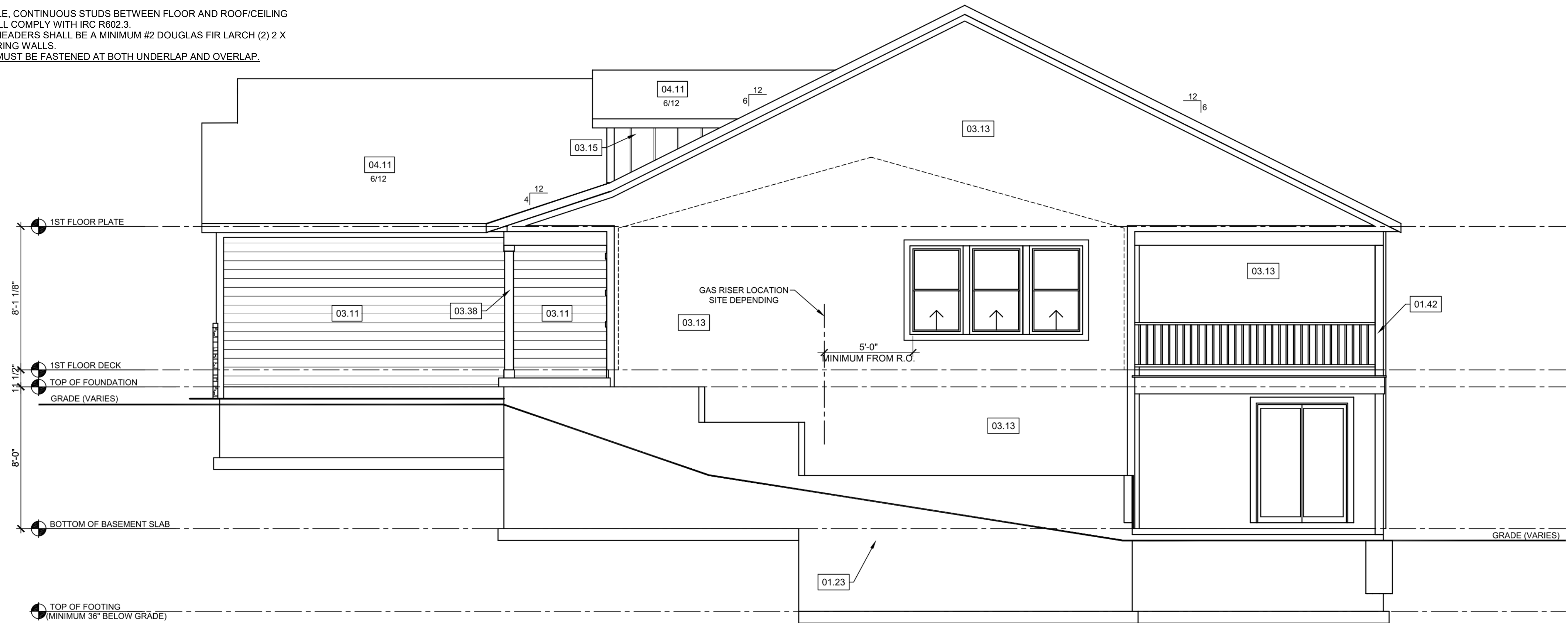
8'-0" FOUNDATION WALL EXCEPT AT STEP DOWNS TO BE LOCATED IN THE FIELD.

UNBALANCED FILL
NOT TO EXCEED 4'-0" AT UNRESTRAINED WALL

STEP DOWN FOOTING TO
BELOW FROST LINE (3'-0")
AS REQUIRED PER SITE

LEFT ELEVATION

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



RIGHT ELEVATION

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

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- 07.67 - BACK WALL OF GARAGE.

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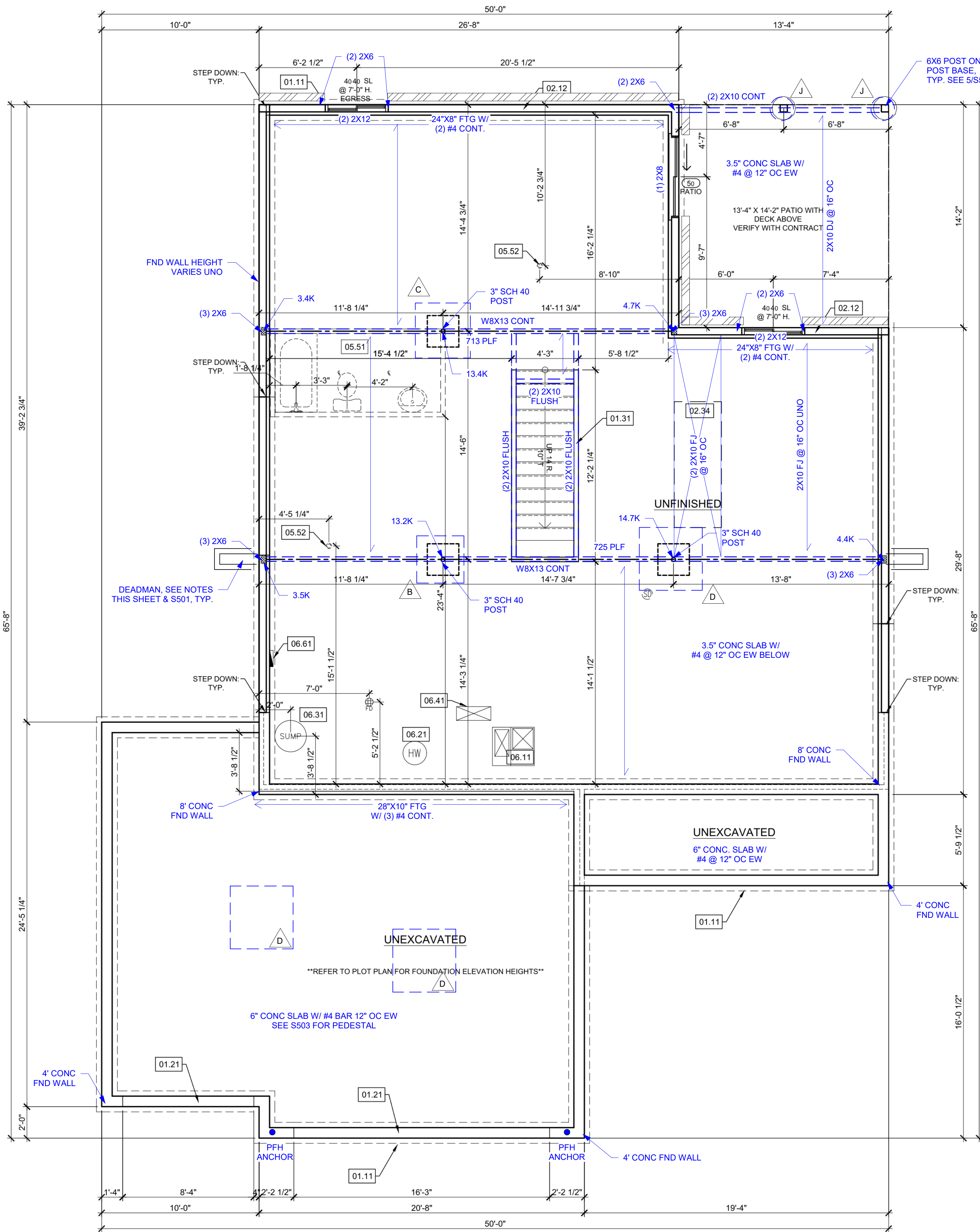
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FOUNDATION WALL AND FOOTING TABLE (3000 PSI CONCRETE AND 40 KSI REBAR PLACED 2" FROM INSIDE TENSION FACE)				
WALL TYPE	NOMINAL WALL THICKNESS	VERTICAL SPACING AND SIZE	HORIZONTAL SPACING AND SIZE	FOOTING SPECIFICATION U.N.O. ON PLANS
3'-6" TRENCH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

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

WINDOW SCHEDULE					
TYPE	STYLE	WIDTH	HEIGHT	TEMP	QUANTITY
SL	SLIDER	4'-0"	4'-0"		1
SL	BASEMENT EGRESS SLIDER	4'-0"	4'-0"		1

DOOR SCHEDULE				
STYLE	WIDTH	HEIGHT	FRAME DEPTH	QUANTITY
SLIDING - DOUBLE - FULL LITE	5'-9"	6'-8"	5 1/2"	1

FOUNDATION PLAN

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

REFERENCE KEYNOTES

- 01 - FOUNDATION
- 01.11 - CONTINUOUS CONCRETE FOOTING
- 01.21 - RECESS TOP OF FOUNDATION WALL
- 01.31 - 2X4 STUD WALL WITH TREATED SILL PLATE
- 02 - TRIM
- 02.12 - 2X6 STUD WALL
- 02.34 - PROVIDE ADDITIONAL BRACING FOR ISLAND ABOVE.
- 05 - PLUMBING
- DRAIN LINE ONLY FOR FUTURE USE.
- 05.51 - LOCATION TO BE MARKED WITH REBAR AND CUT FLUSH TO FLOOR FINISH.
- 05.52 - PLUMBING FLANGE ABOVE. HEADER JOISTS AS NEEDED
- 06 - MECHANICAL
- DIRECT FURNACE. FUEL BURNING APPLIANCES
- 06.11 - SHALL BE DIRECT VENTED TO EXTERIOR FOR COMBUSTION AIR.
- 06.21 - HOT WATER HEATER WITH THERMAL EXPANSION CONTROL DEVICE
- 06.31 - SUMP PIT AND PUMP. PROVIDE ELECTRICAL GFCI PROTECTION. PROVIDE SLEEVE THROUGH FOOTING.
- 06.41 - HVAC CHASE ABOVE
- 06.61 - 200 AMP ELECTRICAL PANEL. LOCATION TO BE DETERMINED ON SITE.

- 09 - ELECTRICAL - SEE ELECTRICAL PLANS
- 09.01 - PROVIDE GFCI RECEPTACLE AND SWITCH FOR HUMIDIFIER.
- 09.02 - PROVIDE GFCI RECEPTACLE FOR SUMP PUMP.
- 09.03 - CONTINUE SWITCH CIRCUIT TO SWITCH AT TOP OF STAIRS.

STRUCTURAL NOTES:

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

FOUNDATION NOTES:

1. ALL FOOTINGS MEET OR EXCEED MINIMUM FROST DEPTH OF 36".
2. SOIL BEARING CAPACITY SHALL BE 1500 PSF.
3. COMPRESSIVE 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".
4. FOUNDATION WALLS SHALL BE DAMPPROOFED PER IRC SECTION R406.
5. FOUNDATION DRAINAGE WILL BVE IN ACCORDANCE WITH IRC SECTION R406.
6. BASEMENT EGRESS OPENINGS SHALL BE IN ACCORDANCE WITH IRC SECTION R310.1.
7. ALL INTERIOR FOOTINGS OF LOAD BEARING WALLS AND COLUMNS SHALL BE ISOLATED FROM THE BASEMENT FLOOR SLAB.
8. ALL ANCHOR BOLTS SHALL NOT BE SPACED MORE THAN 3' O.C. AND BE EMBEDDED INTO THE CONCRETE A MINIMUM OF 7".
9. IF BASEMENT SLAB ELEVATION IS ABOVE GRADE CONSULT ENGINEER.

DEAD MAN SPACING:

1. 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.
2. DEAD MEN ARE NOT REQUIRED ON EXTERIOR GARAGE WALLS OR FOUNDATION WALLS THAT ARE 5' OR LESS.
3. 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 MORE.

GENERAL NOTES - FOUNDATION BASEMENT

BACK WATER VALVES REQUIRED ON ALL BASEMENT PLUMBING FIXTURES. PROVIDE MEANS OF CONTROLLING PRESSURE CAUSED BY THERMAL EXPANSION.

ALL SILLS & SLEEPERS SUPPORTED ON CONCRETE OR MASONRY SHALL BE OF DECAY-RESISTANT MATERIALS.

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

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

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

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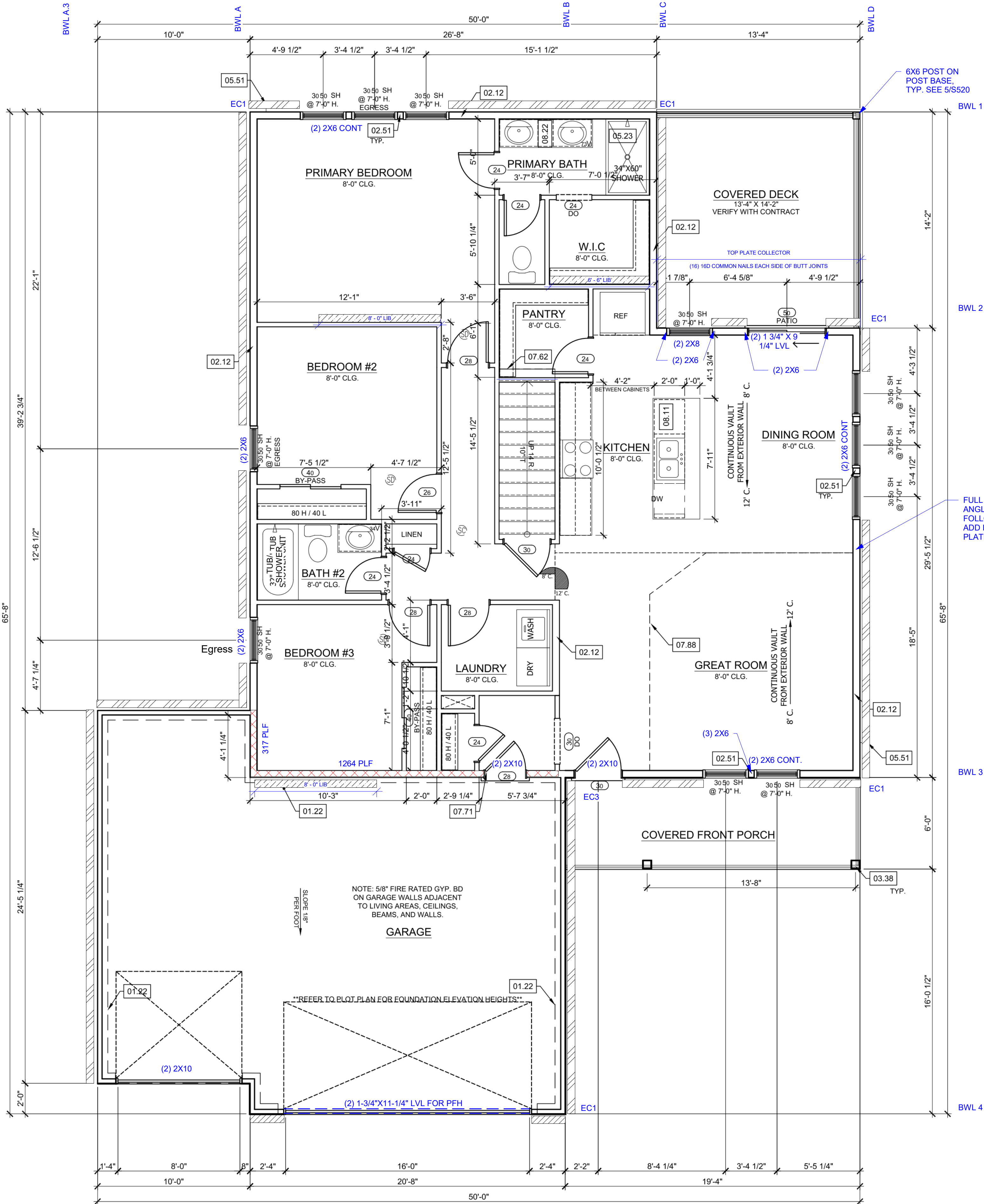
05/03/2024

SHEET NUMBER:

A2.0

FOR CONSTRUCTION
AS NOTED ON PLANS
DEVELOPMENT SERVICES
LEE'S SUMMIT, MISSOURI
05/31/2024 12:02:08.44:53

IRC TABLE N1102.1.2 (R402.1.2) INSULATION AND FENESTRATION REQUIREMENTS BY COMPONENT (PARTIAL) AND ENERGY CONSERVATION CODE COMPLIANCE											
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



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-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

FULL HEIGHT 2X6 STUDS W/ ANGLED DBL TOP PLATE TO FOLLOW PROFILE OF VAULT. ADD HORIZ BLOCKING AT 8' TOP PLATE HEIGHT

WINDOW SCHEDULE

TYPE	STYLE	WIDTH	HEIGHT	TEMP	QUANTITY
SH	SINGLE HUNG	3'-0"	5'-0"		11

DOOR SCHEDULE

STYLE	WIDTH	HEIGHT	FRAME DEPTH	QUANTITY
DRYWALL OPENING	3'-0"	6'-8"	4 1/2"	1
GARAGE DOOR - 8' 16 PANEL	8'-0"	7'-0"	4 1/2"	1
HINGED - SINGLE	3'-0"	6'-8"	4 1/2"	1
SLIDING - DOUBLE - FULL LITE	5'-0"	6'-8"	6"	1
DRYWALL OPENING	2'-4"	6'-8"	4 1/2"	1
HINGED - SINGLE	2'-4"	6'-8"	4 1/2"	6
FRONT DOOR - 2 PANEL - CRAFTSMAN	3'-0"	6'-8"	6 1/2"	1
HINGED - SINGLE	2'-8"	6'-8"	4 1/2"	3
HINGED - SINGLE	2'-6"	6'-8"	4 1/2"	1
HINGED - SINGLE - GARAGE	2'-8"	6'-8"	6 5/8"	1
SLIDING - DOUBLE	4'-0"	6'-8"	4 1/2"	2
GARAGE DOOR - 16' 32 PANEL	16'-0"	7'-0"	4 1/2"	1

MAIN LEVEL PLAN

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

REFERENCE KEYNOTES

01 - FOUNDATION

01.22 - EXPOSED TOP OF FOUNDATION WALL.

02 - TRIM

02.12 - 2X6 STUD WALL

02.51 - 3 STUDS BETWEEN WINDOW UNITS

03 - SIDING

03.38 - 6X6 CEDAR POST. 1X6 TRIM AT BASE. 1X4 TRIM AT TOP.

05 - PLUMBING

05.23 - FIBERGLASS UNIT

05.51 - DRAIN LINE ONLY FOR FUTURE USE. LOCATION TO BE MARKED WITH REBAR AND CUT FLUSH TO FLOOR FINISH.

07 - MISCELLANEOUS & PLAN NOTES

07.62 - DASHED LINE REPRESENTS STAIRS BELOW

07.71 - 20 MINUTE FIRE RATED SOLID CORE WITH SELF-CLOSING HINGES

07.88 - CHANGE IN FLOORING MATERIAL

08 - CABINETRY

08.11 - 24" CABINET + 12" OVERHANG FLAT ISLAND. VERIFY LOCATION WITH PERSONAL BUILDER.

08.22 - CONTINUOUS FLAT VANITY

09 - ELECTRICAL - SEE ELECTRICAL PLANS

09.04 - CONTINUE SWITCH CIRCUIT DOWN TO SWITCH AT BOTTOM OF STAIRS.

09.05 - SWITCH AND POWER FOR GARBAGE DISPOSAL.

09.06 - PROVIDE POWER BELOW COUNTER FOR DISHWASHER.

09.07 - FLOOD LIGHT - DETERMINED ON SITE.

GENERAL NOTES - FLOOR PLAN

WINDOWS TO COMPLY WITH IRC R312.2 FOR FALL PROTECTION.

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

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.

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.

CPG DBA

clover
&
hive

120 SE 30TH ST.
LEE'S SUMMIT, MO 64082
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VERSION:

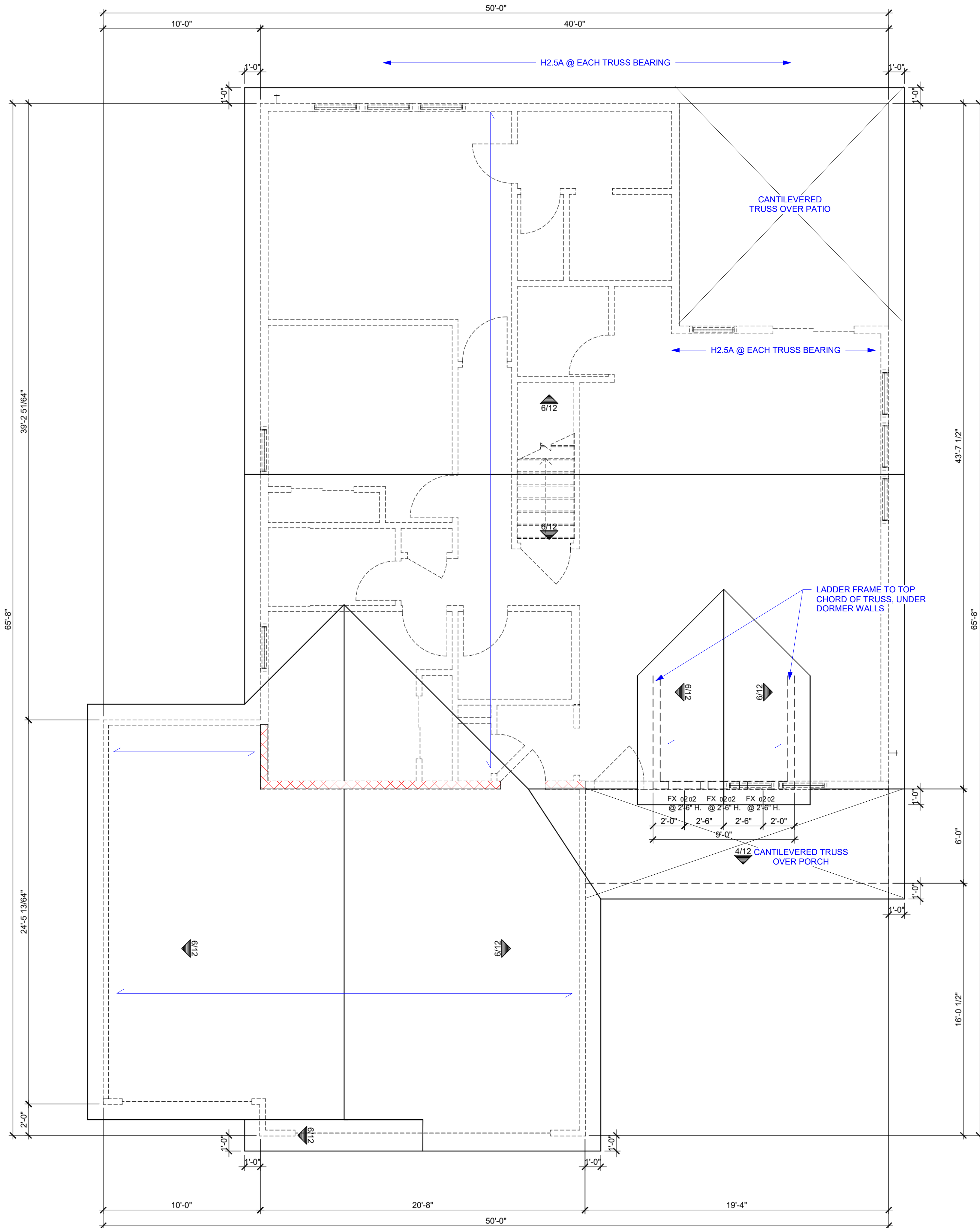
R4.02X6

ISSUE DATE:

05/03/2024

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A3.0



- TRUSS FRAMED ROOF NOTES**
1. ALL CONSTRUCTION SHALL CONFORM TO 2018 INTERNATIONAL RESIDENTIAL CODE OR ATTACHED ENGINEER SPECIFICATIONS WHERE APPLICABLE.
 2. DESIGNED FOR LIGHT ROOF COVERING, UNO, SEE G000 FOR MINIMUM LOADING.
 3. ALL EXTERIOR AND/OR LOAD BEARING WALL HEADERS SHALL BE MIN. (2) #2 2X10 UNO.
 4. CONSULT ENGINEER IF TRUSSES BEAR ON INTERIOR WALLS SHOWN AS NON-LOAD BEARING ON APPROVED POINTS.
 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.
 7. CONSULT ENGINEER IF TRUSSES BEAR ON INTERIOR WALLS SHOWN AS NON-LOAD BEARING ON APPROVED PRINTS.
 8. GIRDER TRUSSES MUST HAVE LOAD CARRIED DOWN TO THE FOUNDATION OR LOAD SUPPORTING MEMBER. STUD PACK / COLUMN SHOWN ON PLANS.
 9. ROOF COVERING SHALL BE ASPHALT SHINGLES AND SHALL COMPLY WITH IRC 2018 SECT. R905.2.
 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 SCREWS**
1. TRUSS SCREWS MAY BE USED INSTEAD OF THE FASTENING NOTED IN TABLE R602.3(1).
 2. TRUSS SCREWS MUST BE INSTALLED PER MANUFACTURER'S INSTRUCTIONS.
 3. BASIS OF DESIGN SHOWN ON PLANS:
 - A. LENGTH: 6"
 - B. 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
 - b. (2) 6" SCREWS - MIN 1195 LBS UPLIFT WHEN BOTH SCREWS ARE INSTALLED VERTICALLY INTO TRUSS.
 4. 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

WINDOW SCHEDULE

TYPE	STYLE	WIDTH	HEIGHT	TEMP	QUANTITY
FX	FIXED	2'-0"	2'-0"		3

GENERAL NOTES - ROOF

ROOF AND CEILING FRAMING ARE PRE-ENGINEERED ROOF TRUSSES.

ASPHALT SHINGLES MIN 2/12. FLASH ALL PENETRATIONS AND INTERSECTIONS.

ENCLOSED ATTICS SHALL HAVE CROSS VENTILATION FOR EACH SEPARATE SPACE BY VENTILATING OPENINGS PROTECTED AGAINST THE ENTRANCE OF RAIN OR SNOW. VENTILATING OPENINGS SHALL BE PROVIDED WITH CORROSION-RESISTANT WIRE MESH, WITH 1/8 TO 1/4 OPENINGS. THE TOTAL FREE VENTILATING AREA SHALL NOT BE LESS THAN 1/150 OF THE AREA OF SPACE VENTILATED, EXCEPT WHERE THE VENTILATORS AREA LOCATED IN THE UPPER PORTION OF THE SPACE TO BE VENTILATED THE REQUIRED AREA MAY BE REDUCED TO 1/300.

BUILD CRICKET VALLEY AWAY FROM INTERSECTION FOR POSITIVE DRAINAGE. SEE FRAMING SPECIFICATIONS FOR DETAILS.

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.

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

ROOF PLAN

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

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VERSION:

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ISSUE DATE:

05/03/2024

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A5.0

RELEASE FOR CONSTRUCTION
AS NOTED ON PLANS REVIEW
DEVELOPMENT SERVICES
LEE'S SUMMIT, MISSOURI
05/31/2024 3:48:58

A. GENERAL NOTES IRC 2018

A.1 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

DEAD	
ROOF	10 PSF UNO
ROOF + CEILING (NO STORAGE)	15 PSF
ROOF + CEILING (STORAGE)	20 PSF
CEILING JOISTS (STORAGE)	10 PSF
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	20 PSF
FLOOR LIVE LOAD	40 PSF (HABITABLE)
GARAGE	50 PSF WITH 2000 LB POINT LOAD
STORAGE	20 PSF (UNINHABITABLE)
GUARDRAIL:	
CONTINUOUS LINEAR	50 PLF
MAXIMUM POINT	200 LBS
SNOW	
GROUND SNOW LOAD	20 PSF
WIND	
VELOCITY	115 MPH
EXPOSURE CATEGORY	B

B. SOIL AND SITE ASSUMPTIONS

B.1 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 RECORD.

B.2 ACCESSORY STRUCTURES WITH AN EAVE HEIGHT LESS THAN 10'-0" AND AN AREA LESS THAN 600 FT² MAT PROVIDE A MINIMUM SOIL COVER OF 12 INCHES MEASURED FROM THE BOTTOM OF CONCRETE.

B.3 LATERAL SOIL PRESSURES UNLESS OTHERWISE NOTED

ACTIVE	60 PSF
AT REST	100 PSF

B.4 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.

C. FOUNDATION NOTES

C.1 FOUNDATION ANCHORAGE (IRC R403.1.6)

- SILL PLATES SHALL BE BOLTED TO THE FOUNDATION WALL WITH A MINIMUM ½" 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 BOLT).
- 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.

C.3 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 12".
- 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 OF 1/4 INCH AMPLITUDE.
- 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
 - 1) SLABS, WALLS, JOISTS 1.5 IN CLR
 - 2) 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 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.
- HOOKEED DOWELS:
 - HOOKEED DOWELS FROM FOUNDATIONS TO WALL SHALL BE PROVIDED TO MATCH VERTICAL WALL REINFORCING AND EXTENDED TO 3" CLEAR FROM BOTTOM OF FOUNDATION.
 - HOOKEED DOWELS MATCH SLAB REINFORCING FROM SLAB TO WALLS OR SLAB TO FOUNDATION.
- PROVIDE (2) - #5 BARS AROUND PERIMETER OF ALL SUSPENDED SLABS.
- WHERE SPLICES ARE NECESSARY IN REINFORCEMENT, THE LENGTH OF LAP SPICE SHALL BE IN ACCORDANCE WITH TABLE R608.5.4(1) AND FIGURE R608.5.4(1). THE MAXIMUM GAP BETWEEN ADJACENT LAP SPICES AT A LAP SPICE 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 WALL.
- 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 FAHRENHEIT.
- THE MINIMUM CONCRETE TEMPERATURE AT THE TIME OF MIXING SHALL NOT BE BELOW 65 DEGREES FAHRENHEIT.
- 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	
TYPE OR LOCATION OF CONCRETE CONSTRUCTION	MINIMUM SPECIFIED COMPRESSIVE STRENGTH (f'c) FOR SEVER WEATHERING POTENTIAL
BASEMENT WALLS, FOUNDATIONS AND OTHER CONCRETE NOT EXPOSED TO THE WEATHER	2,500
BASEMENT SLABS AND INTERIOR SLABS ON GRADE, EXCEPT GARAGE FLOOR SLABS	2,500
BASEMENT WALLS, FOUNDATION WALLS, EXTERIOR WALLS AND OTHER VERTICAL CONCRETE WORK EXPOSED TO THE WEATHER	3,000
PORCHES, CARPORT SLABS AND STEPS EXPOSED TO THE WEATHER,AND GARAGE FLOOR SLABS	3,500
SUSPENDED SLABS	4,000

D. FRAMING/STRUCTURE

D.1 FRAMING NOTES

- 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) OR BETTER.
 - 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 SPICE
 - FIELD APPLIED LAP SPICED 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 MIMUM DESIGN REQUIREMENTS			
	F _b (PSI)	E (PSI)	F _v (PSI)
LVL	3100	1.9X10 ⁶	285
DOUGLAS FIR-LARCH	900	1.6X10 ⁶	180
GLU-LAM	2400	1.8X10 ⁶	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: ASTM A500 (F_y = 46 KSI)
 - CHANNELS, PLATES, ANGLES, AND COLUMNS: ASTM A36 (F_y = 36 KSI)
 - WIDE FLANGES: ASTM A992 (F_y = 50 KSI)
 - STEEL PIPE COLUMN: ASTM A53 GR.B (F_y = 35 KSI)
 - ANCHOR RODS: ASTM F1554 (F_y = 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 OTHERWISE.
- ALL WELDS SPECIFIED AS FIELD WELDS MAY BE SHOP WELDED AT THE CONTRACTOR'S OPTION IF ERECTION CAN STILL BE EXECUTED.

E. GLAZING

- 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.
- GLAZING IN WALLS, ENCLOSURES OR FENCES CONTAINING OR FACING HOT TUBS, SPAS, WHIRLPOLS, SAUNAS, STEAM ROOMS, BATHTUBS, SHOWERS, AND INDOOR OR 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. STAIRWAYS

- STAIRWAYS SHALL PROVIDE A MAXIMUM 7-3/4" RISE AND A MINIMUM 10" RUN.
- 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 EDGES OF THE TREADS.
 - 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 ½" GYPSUM BOARD ON ENCLOSURE PER IRC R302.7.

G. 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 E530-96 (IRC R301.2.1).

H. ROOF

- 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."

I. 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. ENERGY REQUIREMENTS

- 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 M1504.3.
- MAKEUP AIR SYSTEMS SHALL BE INSTALLED FOR KITCHEN EXHAUST HOODS THAT EXCEED 400 CFM AS REQUIRED PER IRC M1503.6.
- AN AIR HANDLING SYSTEM SHALL NOT SERVE BOTH THE LIVING SPACE AND THE GARAGE PER IRC M1601.6 ENERGY CONSERVATION.

K. ABBREVIATIONS

- AFF: ABOVE FINISHED FLOOR
- CLR: CLEAR
- EFF: EFFECTIVE
- EPF: EQUIV FLUID PRESSURE
- EOR: ENGINEER OF RECORD
- EQUIV: EQUIVALENT
- MAX: MAXIMUM
- MIN: MINIMUM
- NTS: NOT TO SCALE
- O.C.: ON CENTER
- 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



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CLOVER & HIVE

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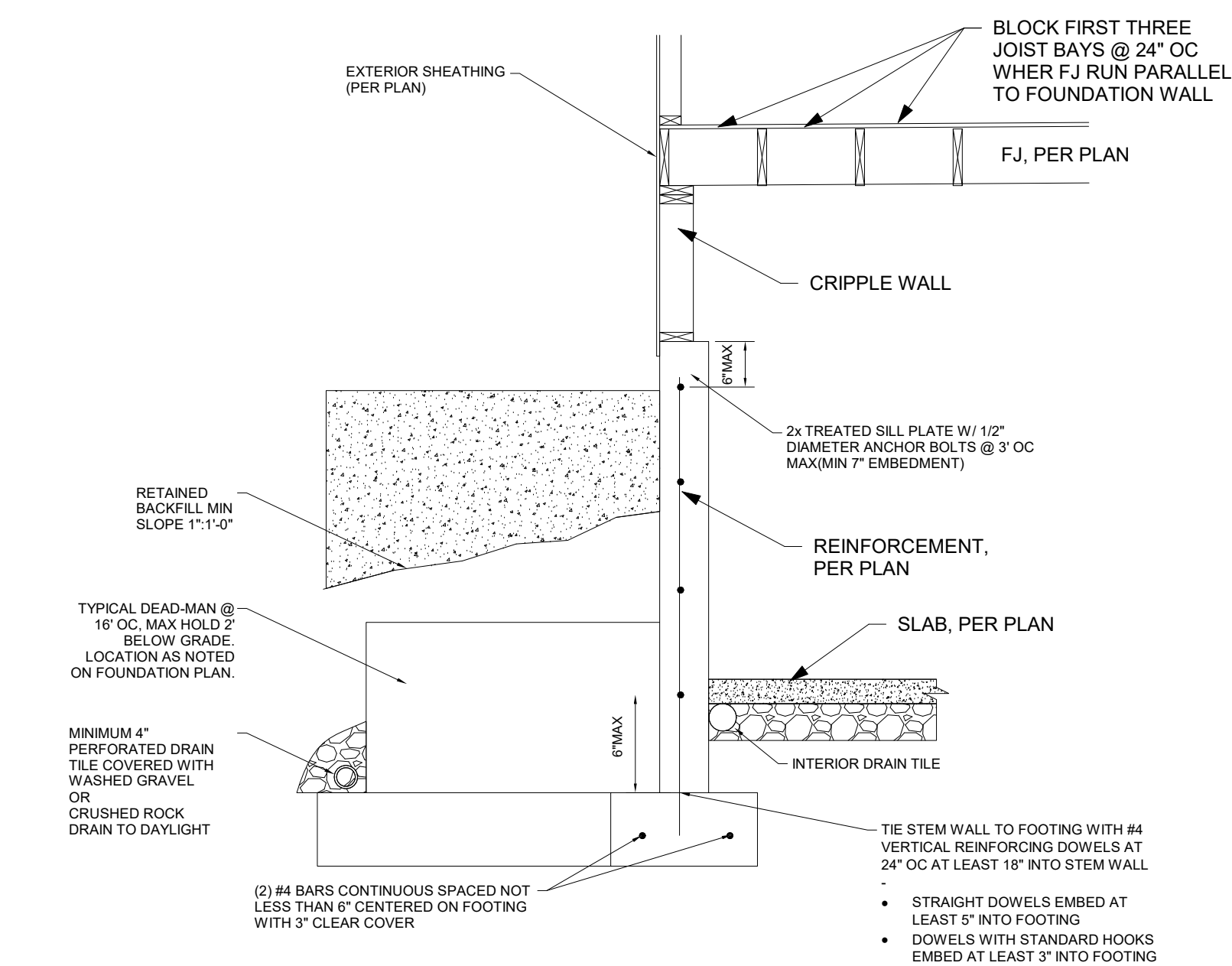
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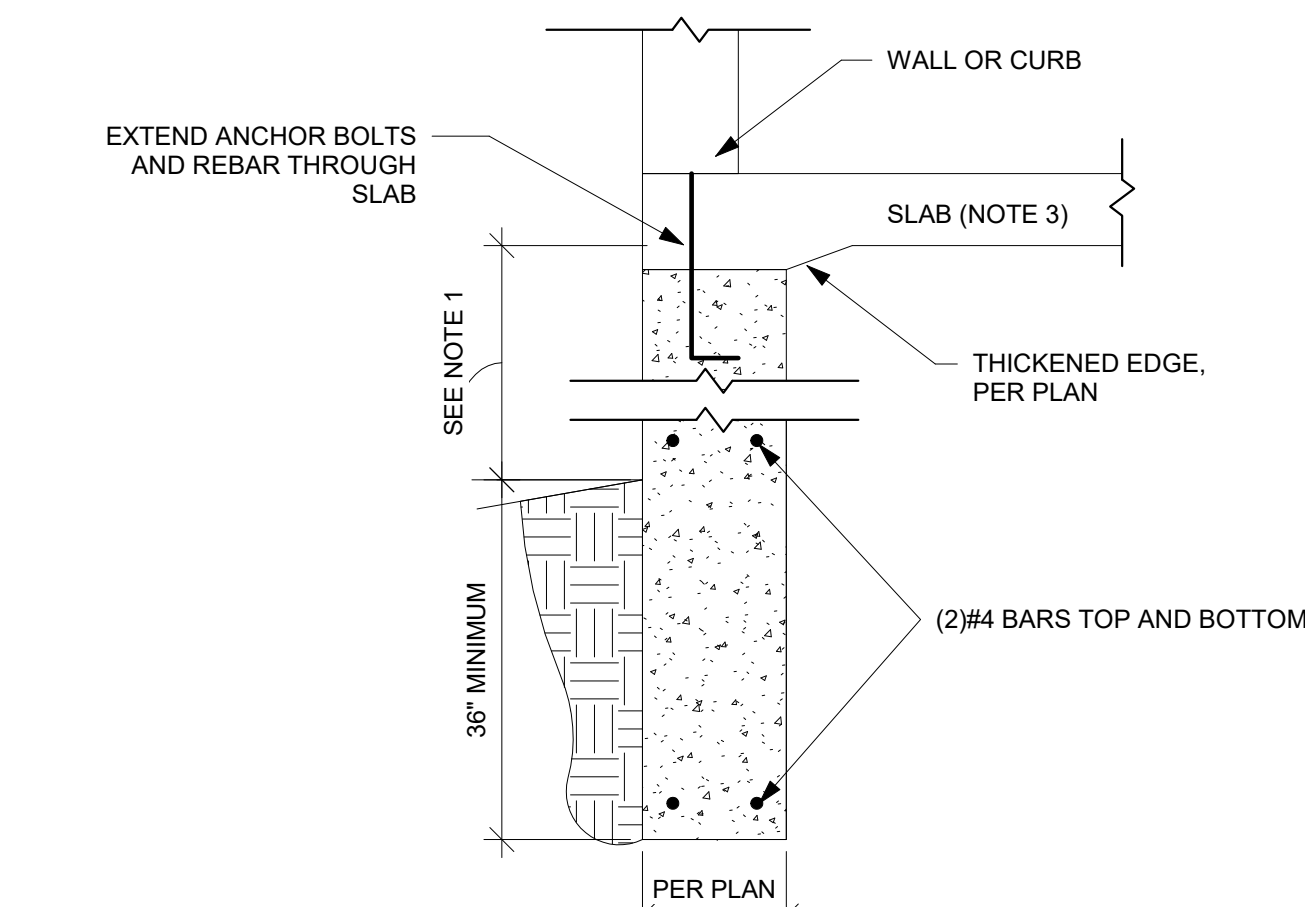
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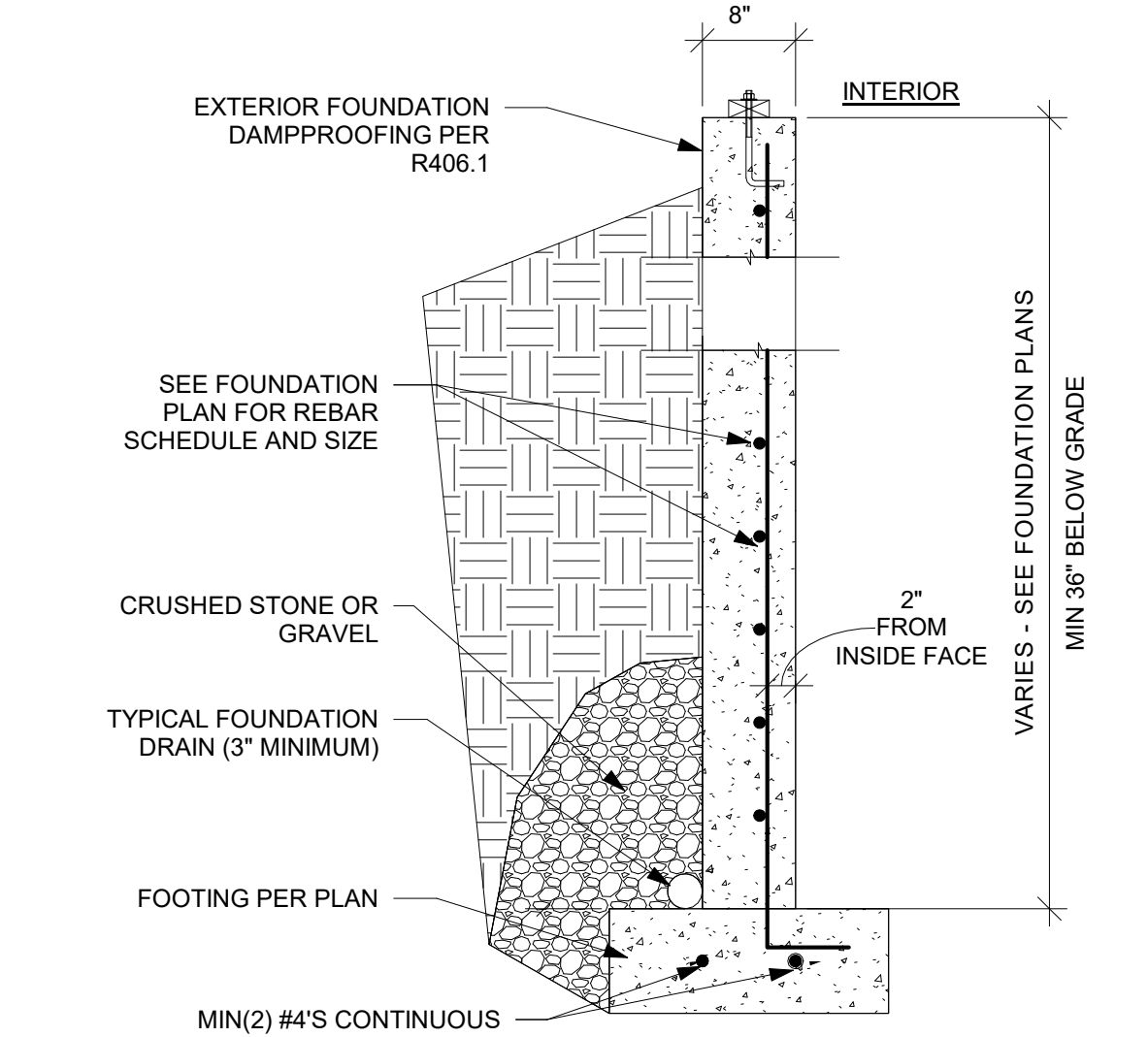
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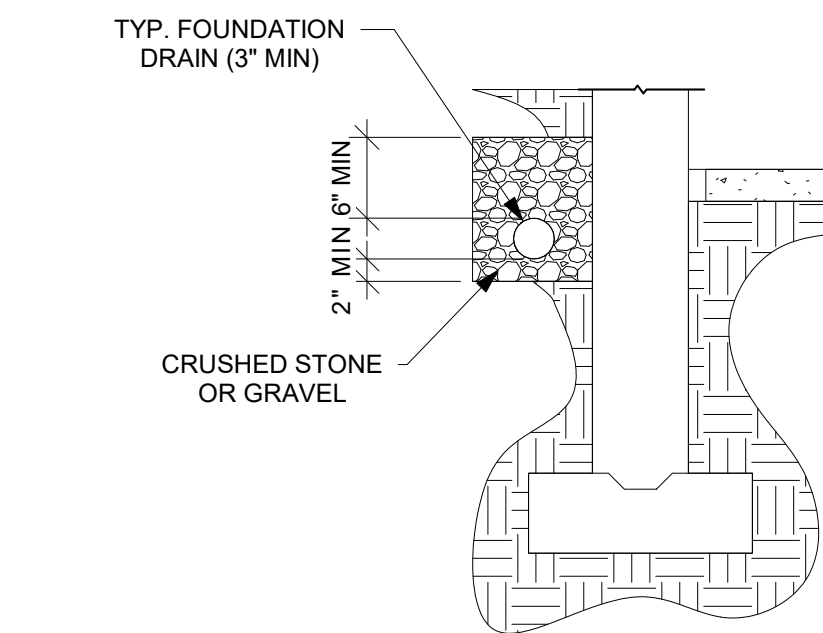
1 TYPICAL "UNRESTRAINED" FOUNDATION WALL DETAIL NTS



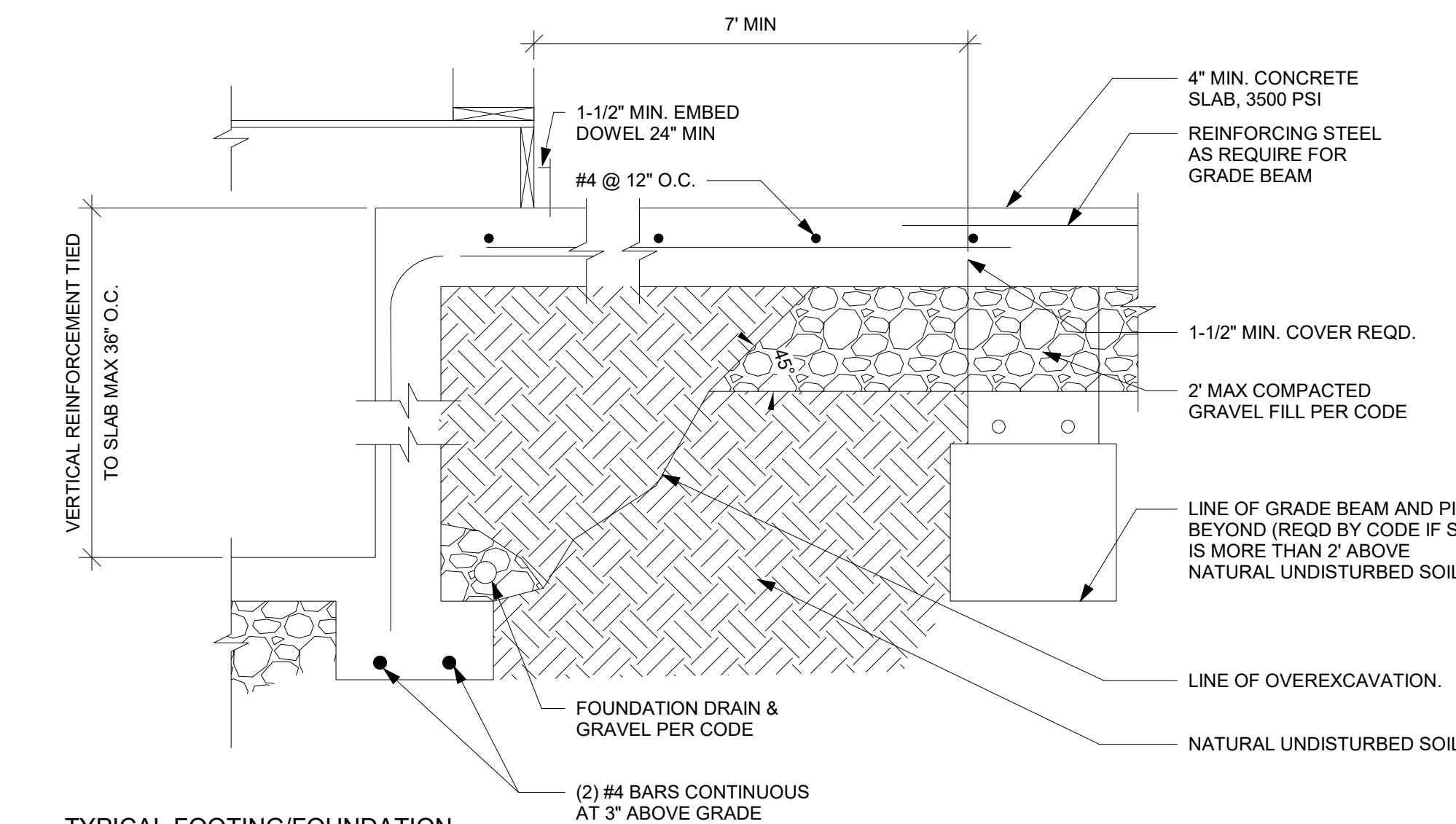
2 TRENCH FOOTING WITH SLAB DETAIL NTS



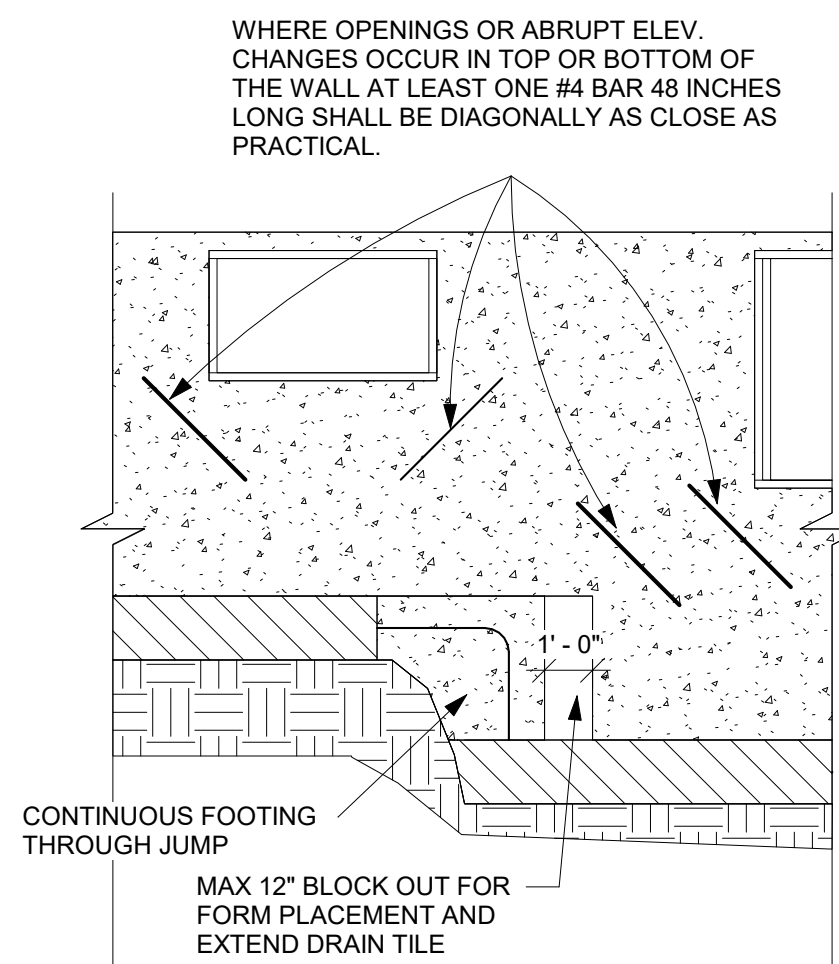
3 TYPICAL WALL SECTION DETAIL NTS



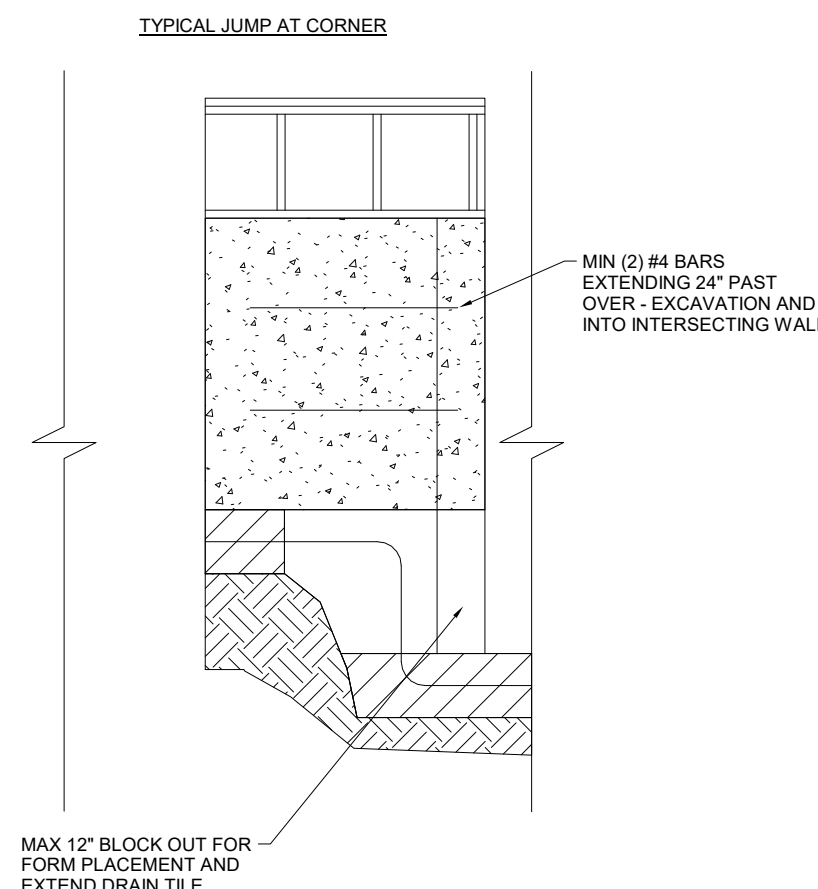
4 FOUNDATION DRAIN AND RAISED SLAB DETAIL NTS



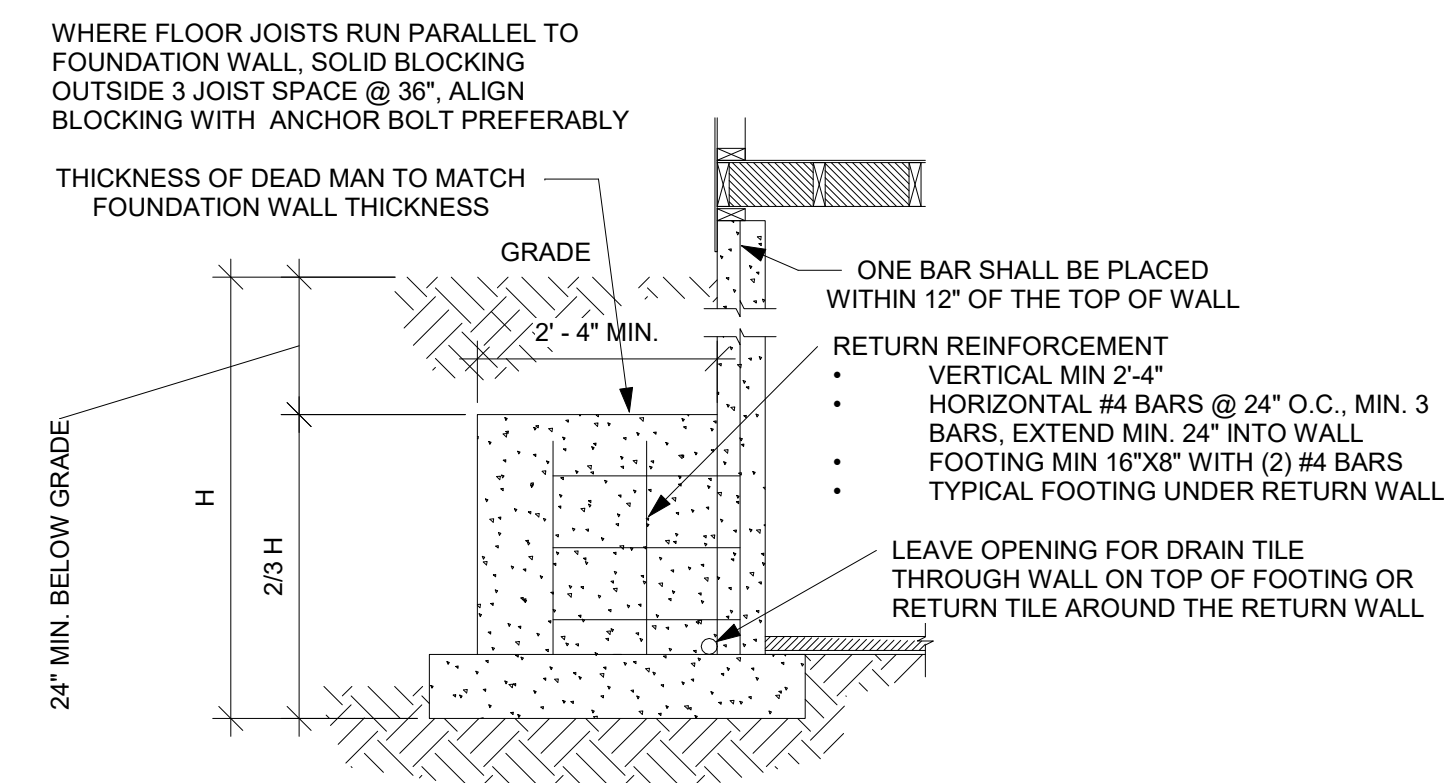
5 TYPICAL FOOTING/FOUNDATION WALL/STANDARD SLAB AT MAX 4 OVERDIG NTS



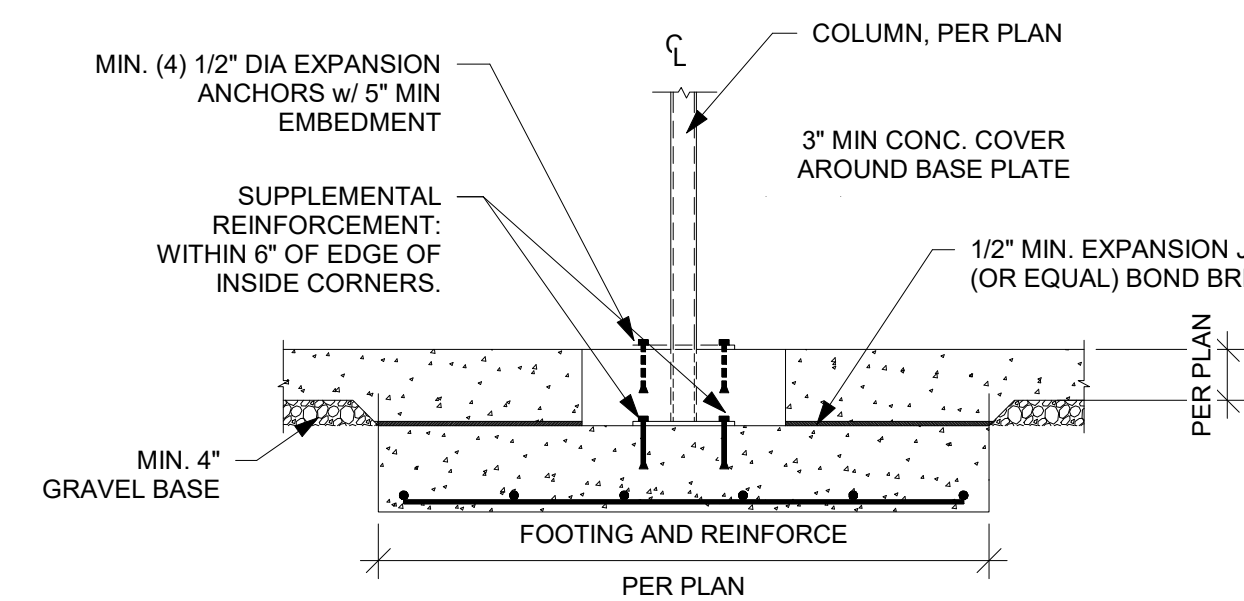
6 FOUNDATION WALL JUMP DETAIL NTS



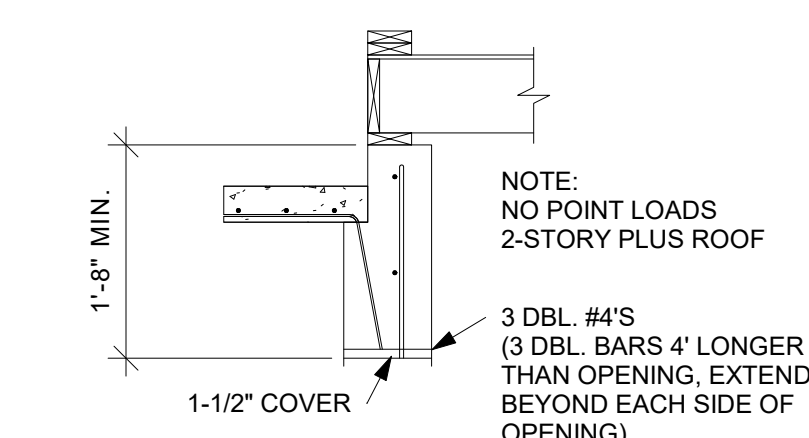
7 FOUNDATION WALL JUMP DETAIL 2 NTS



8 TYPICAL DEAD MAN DETAIL NTS

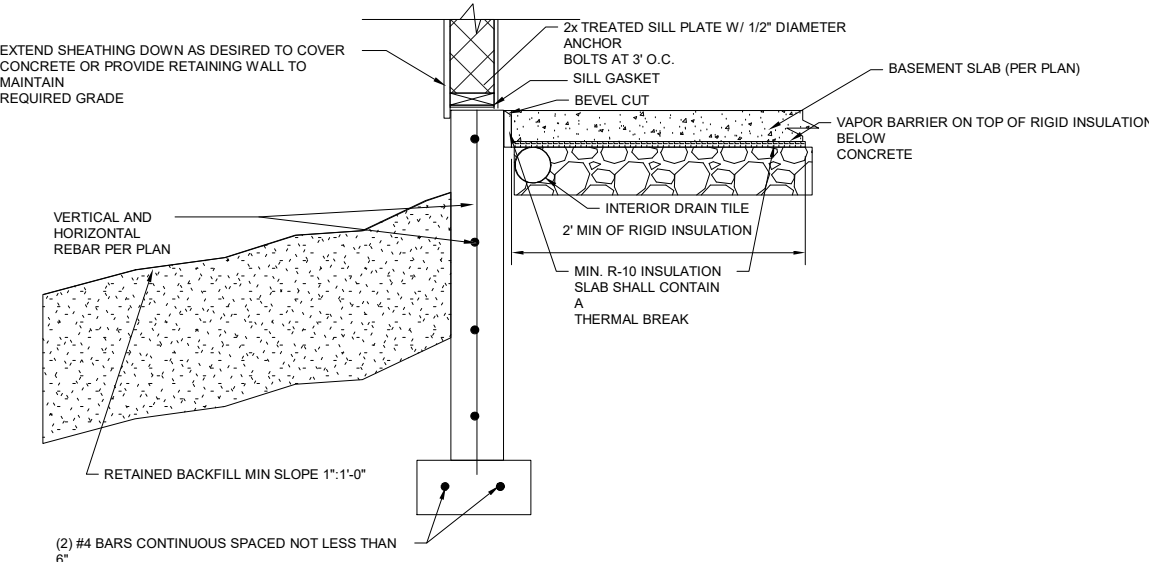


9 TYPICAL COLUMN PAD DETAIL NTS



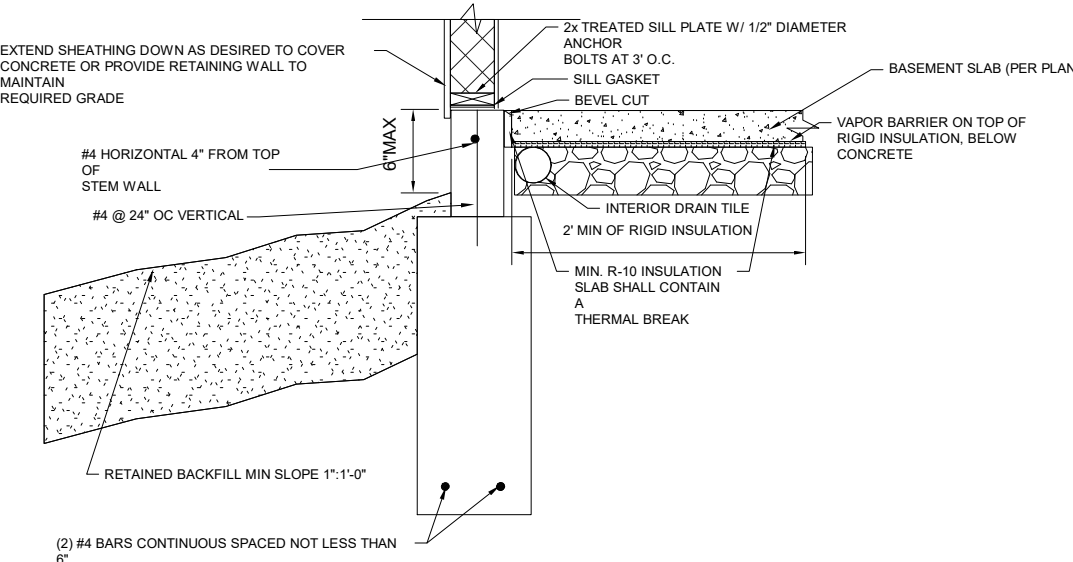
10 6' MAXIMUM OPENING HEADER DETAIL NTS

APPLIES TO BASEMENT SLABS WITH FLOOR SURFACE LESS THAN 12" BELOW GRADE

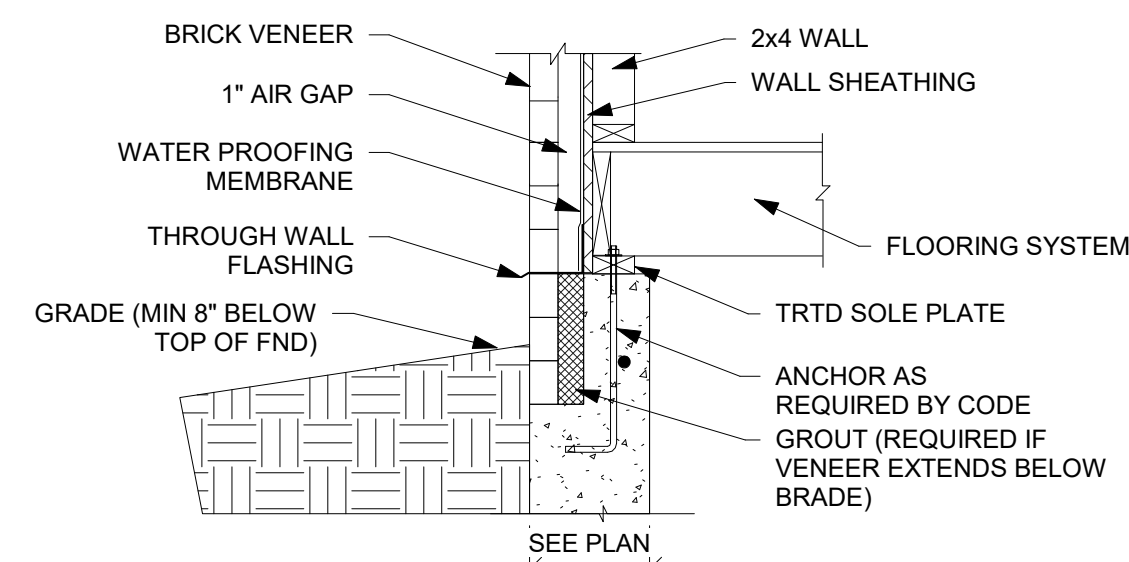


11 SLAB INSULATION DETAIL FOR STEM WALL AND FOOTING NTS

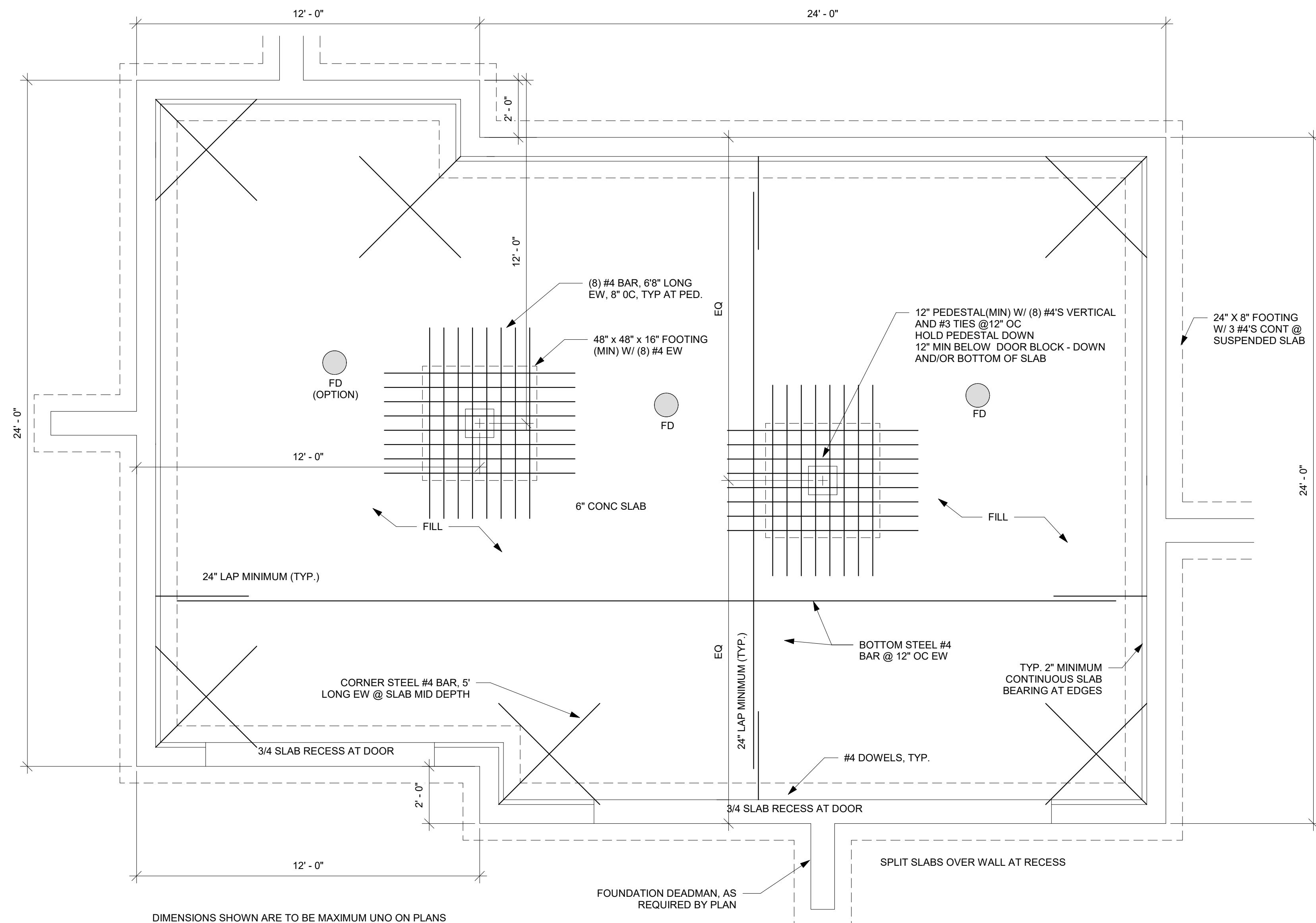
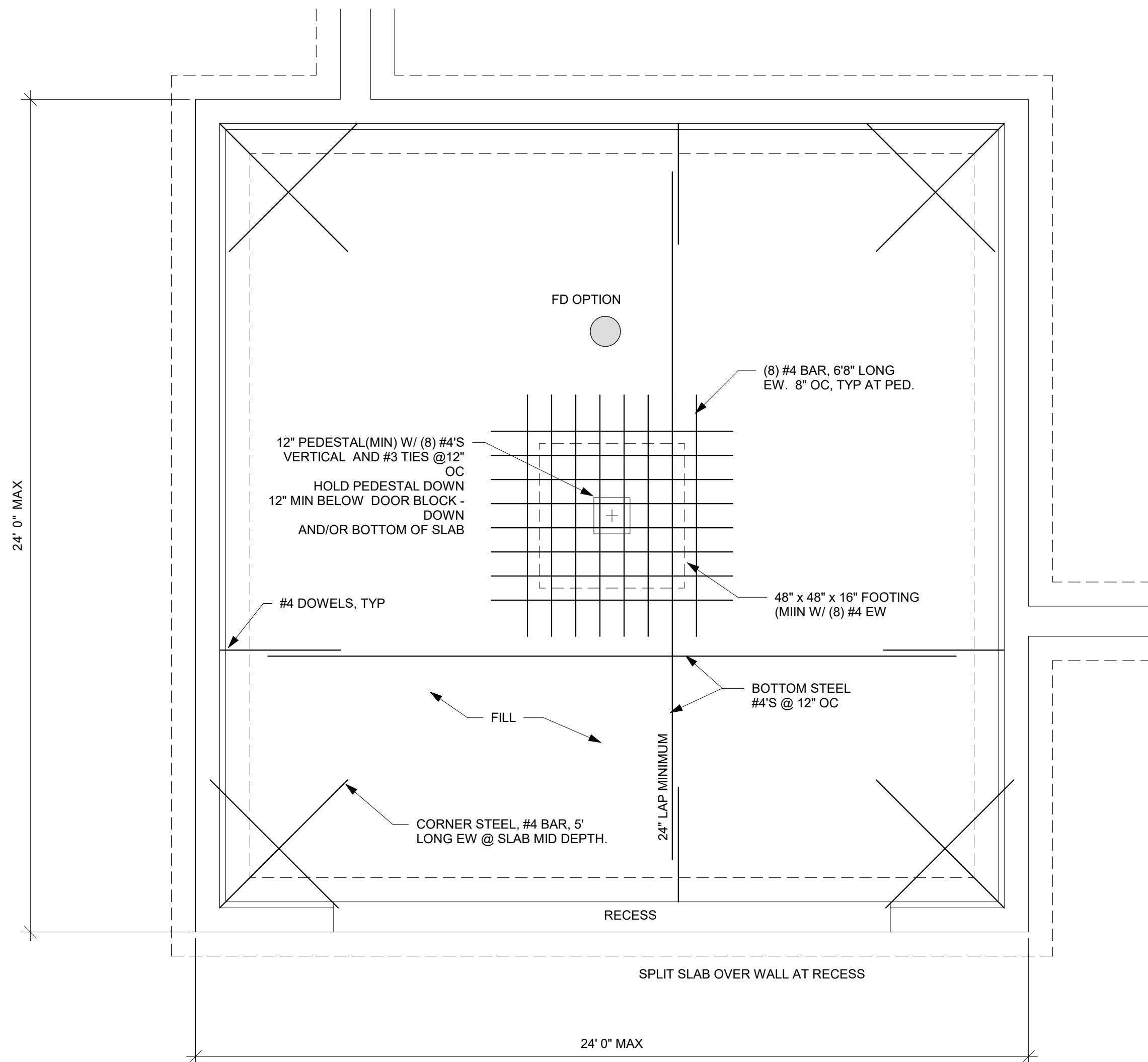
APPLIES TO BASEMENT SLABS WITH FLOOR SURFACE LESS THAN 12" BELOW GRADE



12 SLAB INSULATION DETAIL FOR TRENCH FOOTING WITH STEM WALL NTS

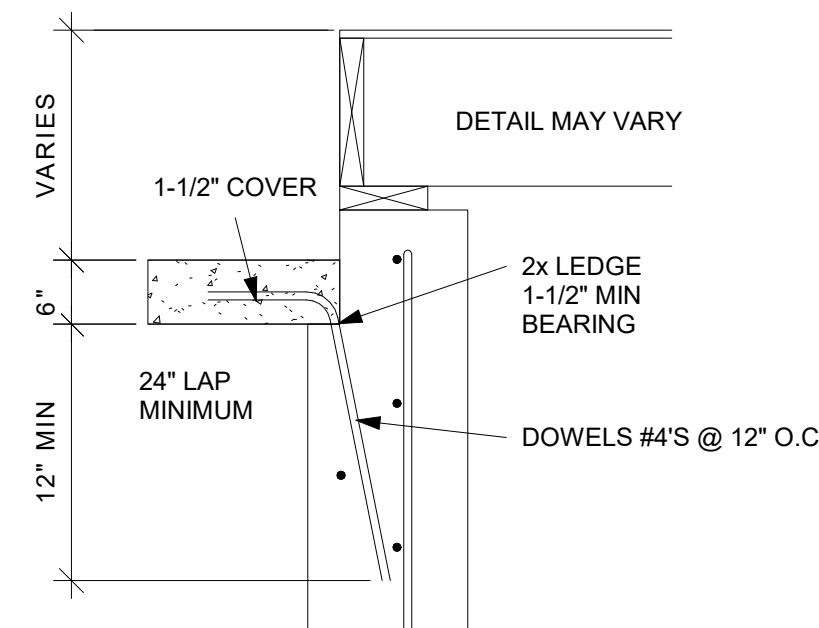


13 BRICK VENEER DETAIL NTS

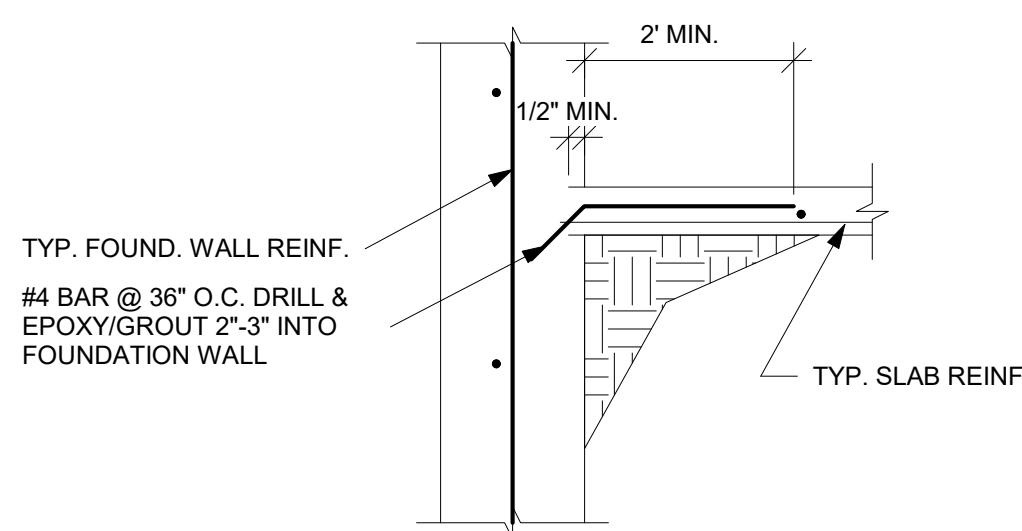


① 2 CAR GARAGE SLAB ON FILL DETAIL NTS

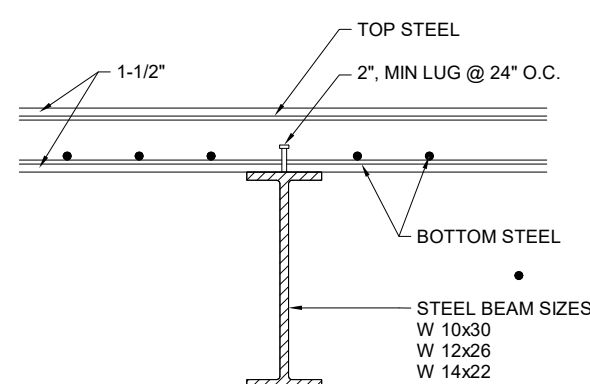
② 3 CAR GARAGE SLAB ON FILL DETAIL 2 NTS



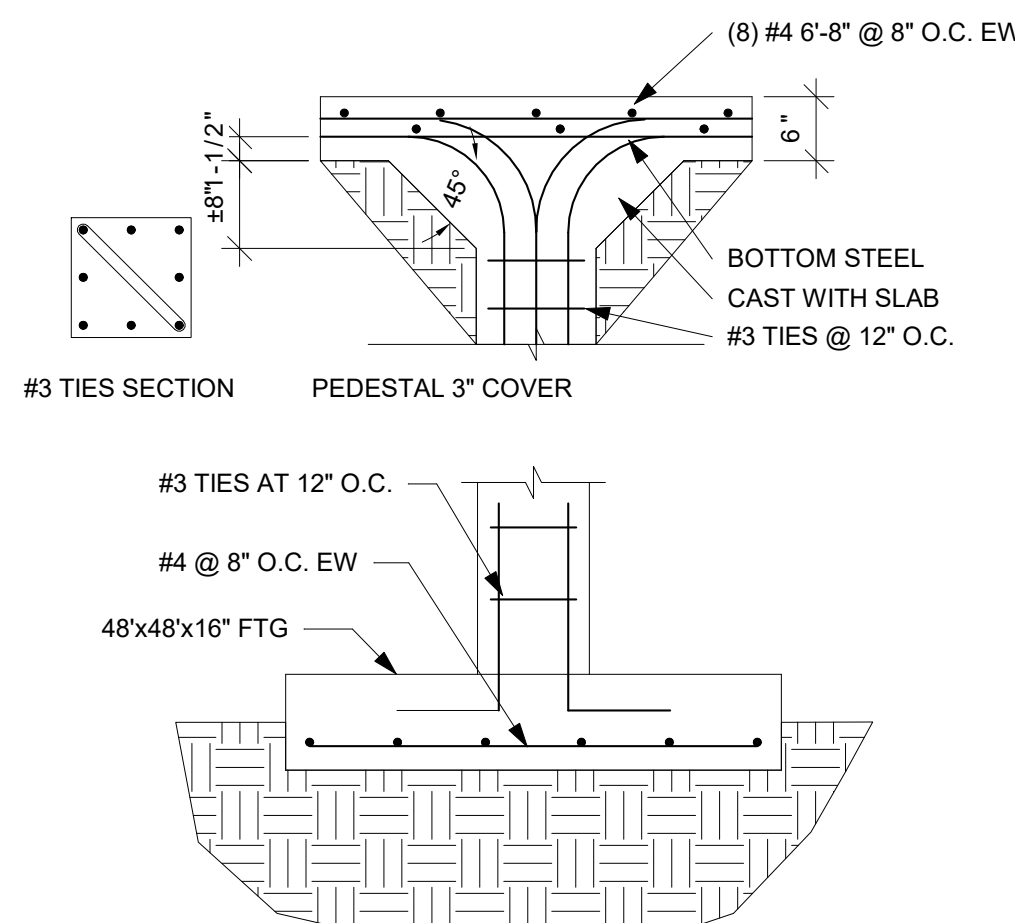
③ SLAB AT WALL DETAIL NTS



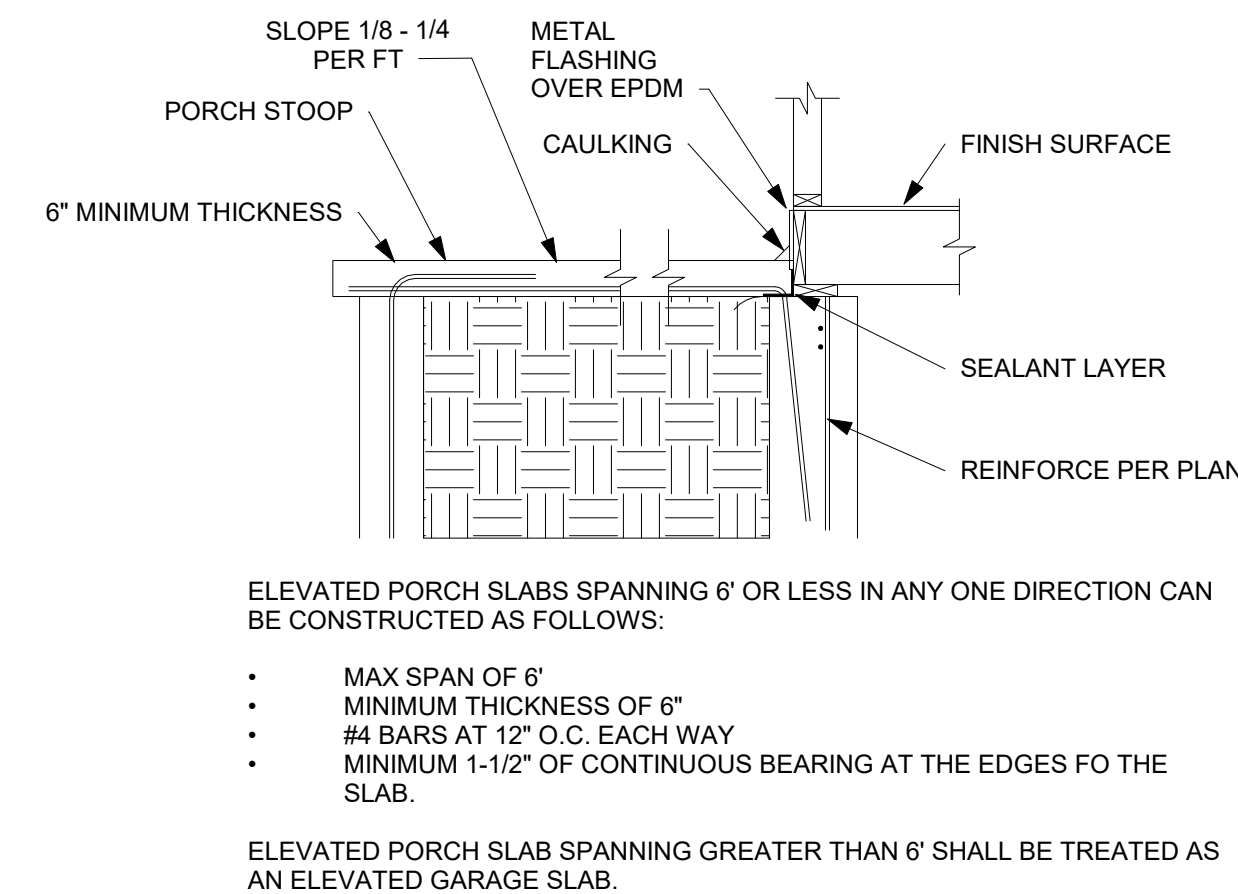
④ ALT. SLAB CONNECTION DETAIL NTS



⑦ SLAB OVER BEAM 1/4" = 1'-0"



⑤ PEDESTAL AT SLAB AND FOOTING DETAIL NTS



⑥ STANDARD PORCH SLAB DETAIL NTS

The diagram illustrates the connection of a second-story wall to a first-story wall, showing three methods: Platform Framing, Intermediate Bearing Wall, and Balloon Framing.

Platform Framing: This method shows a second-story wall (labeled "SECOND STORY") supported by a first-story wall. The second-story wall is connected to the first-story wall using a "TOP PLATE" and a "BOTTOM PLATE". The first-story wall is supported by a "CRAWL SPACE OR BASEMENT FOUNDATION". The second-story wall is also supported by a "RAFTERS AND CEILING JOISTS OR APPROVED ROOF TRUSS". The first-story wall is supported by a "SUB FLOOR". The second-story wall is supported by a "FLOOR JOIST, SEE DRILLING AND NOTCHING PROVISIONS SECTION F502.8". The first-story wall is supported by a "SILL PLATE". The second-story wall is supported by a "BAND JOIST OR BLOCKING". The first-story wall is supported by a "BAND JOIST OR BLOCKING". The second-story wall is supported by a "JOIST IS PERMITTED TO BE OUT OR NOTCHED BETWEEN THESE LIMITS". The first-story wall is supported by a "D/3 (MAX)". The second-story wall is supported by a "1/3 SPAN". The first-story wall is supported by a "D/3 MAX". The second-story wall is supported by a "D/6 MAX". The first-story wall is supported by a "FOR BLOCKING AND BRIDGING, SEE SECTION R502.7". The second-story wall is supported by a "BEARING WALL". The first-story wall is supported by a "LAP JOIST 3" MIN. OR SPACE SEE SECTION R502.6.1". The second-story wall is supported by a "SEE SECTION R602.8 FOR FIREBLOCKING".

Intermediate Bearing Wall: This method shows a second-story wall (labeled "SECOND STORY") supported by a first-story wall. The second-story wall is connected to the first-story wall using a "TOP PLATE" and a "BOTTOM PLATE". The first-story wall is supported by a "CRAWL SPACE OR BASEMENT FOUNDATION". The second-story wall is supported by a "RAFTERS AND CEILING JOISTS OR APPROVED ROOF TRUSS". The first-story wall is supported by a "SUB FLOOR". The second-story wall is supported by a "FLOOR JOIST, SEE DRILLING AND NOTCHING PROVISIONS SECTION F502.8". The first-story wall is supported by a "SILL PLATE". The second-story wall is supported by a "BAND JOIST OR BLOCKING". The first-story wall is supported by a "BAND JOIST OR BLOCKING". The second-story wall is supported by a "JOIST IS PERMITTED TO BE OUT OR NOTCHED BETWEEN THESE LIMITS". The first-story wall is supported by a "D/3 (MAX)". The second-story wall is supported by a "1/3 SPAN". The first-story wall is supported by a "D/3 MAX". The second-story wall is supported by a "D/6 MAX". The first-story wall is supported by a "FOR BLOCKING AND BRIDGING, SEE SECTION R502.7". The second-story wall is supported by a "BEARING WALL". The first-story wall is supported by a "LAP JOIST 3" MIN. OR SPACE SEE SECTION R502.6.1". The second-story wall is supported by a "SEE SECTION R602.8 FOR FIREBLOCKING".

Balloon Framing: This method shows a second-story wall (labeled "SECOND STORY") supported by a first-story wall. The second-story wall is connected to the first-story wall using a "TOP PLATE" and a "BOTTOM PLATE". The first-story wall is supported by a "CRAWL SPACE OR BASEMENT FOUNDATION". The second-story wall is supported by a "RAFTERS AND CEILING JOISTS OR APPROVED ROOF TRUSS". The first-story wall is supported by a "SUB FLOOR". The second-story wall is supported by a "FLOOR JOIST, SEE DRILLING AND NOTCHING PROVISIONS SECTION F502.8". The first-story wall is supported by a "SILL PLATE". The second-story wall is supported by a "BAND JOIST OR BLOCKING". The first-story wall is supported by a "BAND JOIST OR BLOCKING". The second-story wall is supported by a "JOIST IS PERMITTED TO BE OUT OR NOTCHED BETWEEN THESE LIMITS". The first-story wall is supported by a "D/3 (MAX)". The second-story wall is supported by a "1/3 SPAN". The first-story wall is supported by a "D/3 MAX". The second-story wall is supported by a "D/6 MAX". The first-story wall is supported by a "FOR BLOCKING AND BRIDGING, SEE SECTION R502.7". The second-story wall is supported by a "BEARING WALL". The first-story wall is supported by a "LAP JOIST 3" MIN. OR SPACE SEE SECTION R502.6.1". The second-story wall is supported by a "SEE SECTION R602.8 FOR FIREBLOCKING".

A cross-section diagram of a basement wall assembly. From left to right, the components are: a vertical section of 5/8" Type X Gypsum Wall Board or Equivalent, a layer of Fiberglass Batt Insulation (R-13), a vertical section of #2-2 x 4 Studs at 16" O.C., a horizontal section of the Top Plate, and a horizontal section of the Floor Joist. Arrows point from the labels to their respective components. The wall board is labeled with two lines: one for the vertical section and one for the horizontal section. The insulation is labeled with one line. The studs are labeled with one line. The top plate is labeled with one line. The floor joist is labeled with one line.

Labels and dimensions shown in the diagram:

- 5/8" TYPE X GYPSUM WALL BOARD OR EQUIVALENT
- PARALLEL OR AT RIGHT ANGLE TO EACH SIDE OF 2 x 4 STUDS W/ 1-1/4" TYPE W DRYWALL SCREWS AT 12" O.C.
- #2-2 x 4 STUDS AT 16" O.C.
- FIBERGLASS BATT INSULATION (R-13)
- TOP PLATE
- FLOOR JOIST

BUILT-UP STUDS W/ 10D (3"x10", 128") NAILS @ 24" O.C.

2x BLOCKING DIRECTLY BELOW STUD PACK FOR LOAD TRANSFERS

SILL OR BOTTOM PLATE

FOUNDATION OR BEAM

Technical drawing illustrating the construction details of a wall and floor assembly. The drawing shows a cross-section of a wall and floor system. Key components and labels include:

- STUDPACK W/ BLOCKING**: A vertical assembly of studs and blocking.
- SEE BEAM TO STUD PACK DETAILS**: Reference to the connection between the beam and the stud pack.
- DROP BEAM**: A horizontal beam below the main floor beam.
- JOIST**: A horizontal structural member supporting the floor.
- SEE BLOCKING DETAIL**: Reference to the blocking between joists.
- SHEATHING**: The outer layer of the wall and floor.
- FLUSH BEAM**: A horizontal beam at the top of the wall.
- SEE JOIST TO BEAM DETAILS**: Reference to the connection between the joist and the beam.
- POST**: A vertical support for the joist.
- CONCRETE FOOTING**: The foundation for the post.

WOOD BEAM

SIMPSON MST126 STRAP TIE

KING STUDS

BUILT-UP STUDS W/ 10D (3"X0.128") NAILS @ 24" O.C. SEE PLAN FOR QUANTITY

Diagram illustrating the construction of a built-up beam. The diagram shows a cross-section of a beam with multiple layers. Labels indicate:

- NEW BEAM
- KING STUDS SHALL EXTEND TO TOP OF BEAM AND NAILED TO BEAM W/ 10D (3"X0.128") NAILS. SEE GENERAL NOTES.
- BUILT-UP STUDS W/ 10D (3"X0.128") NAILS @ 24" O.C. SEE PLAN FOR QUANTITY.

TOP PLATE

BORED HOLE: MAXIMUM DIA 40% OF STUD DEPTH

5/8 INCH MIN. TO EDGE

NOTCHING: 25% MAXIMUM OF STUD DEPTH

CCA TREATED PLATE IF IN CONTACT WITH CONC. SLAB

STUD

5/8 INCH MIN. TO EDGE

IF HOLE IS BETWEEN 40% AND 60% OF STUD DEPTH, THEN STUD MUST BE DOUBLE AND NO MORE THAN TWO SUCCESSIVE STUDS ARE DOUBLED AND SO BORED

BORED HOLES SHALL NOT BE LOCATED IN THE SAME CROSS-SECTION OF CUT OR NOTCH IN STUD.

EXISTING FLOOR JOIST

GLUE SISTER FLOOR JOIST TO EXISTING FLOOR JOIST WITH CONSTRUCTION ADHESIVE

SISTERED FLOOR JOIST

ATTACH TO BEAM WITH SIMPSON HANGER AS NOTED ON PLAN

A cross-sectional diagram showing a vertical wooden joist resting on a horizontal wooden beam. The beam is labeled 'BEAM' and the joist is labeled 'JOIST'.

MULTI PLY LUMBER

4-PLY BEAM: Front view showing a square plate with four bolts (two in the center, two on the sides) connecting four vertical plies.

3-PLY BEAM: Front view showing a square plate with four bolts (two in the center, two on the sides) connecting three vertical plies.

2-PLY BEAM: Front view showing a square plate with four bolts (two in the center, two on the sides) connecting two vertical plies, tilted at an angle.

STEEL BEAM

BEAM CLIP SUPPORT: Front view showing a rectangular clip with two bolts connecting a steel beam to a support.

BEAM BOLT ON: Front view showing a rectangular plate with four bolts connecting a steel beam to a support.

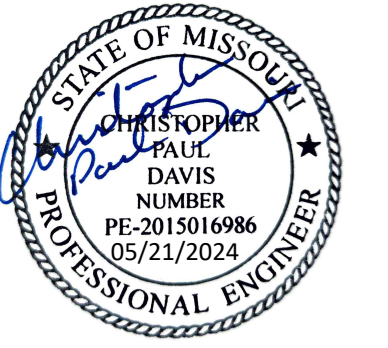
END VIEW: Side view of the 4-ply beam connection, showing the beam profile and the clip.

END VIEW: Side view of the 3-ply beam connection, showing the beam profile and the clip.

END VIEW: Side view of the 2-ply beam connection, showing the beam profile and the clip.

SIDE VIEW: Side view of the steel beam clip support, showing the beam profile and the clip.

SIDE VIEW: Side view of the steel beam bolt on, showing the beam profile and the plate.

The logo for Everstead Engineering & Design features a stylized orange house icon above the company name. The name "EVERSTEAD" is in large, bold, white capital letters, and "ENGINEERING & DESIGN" is in smaller, orange capital letters below it.

CLOVER & HIVE

HAWTHORN RIDGE #165 - HEATHER TRANSITIONAL 1

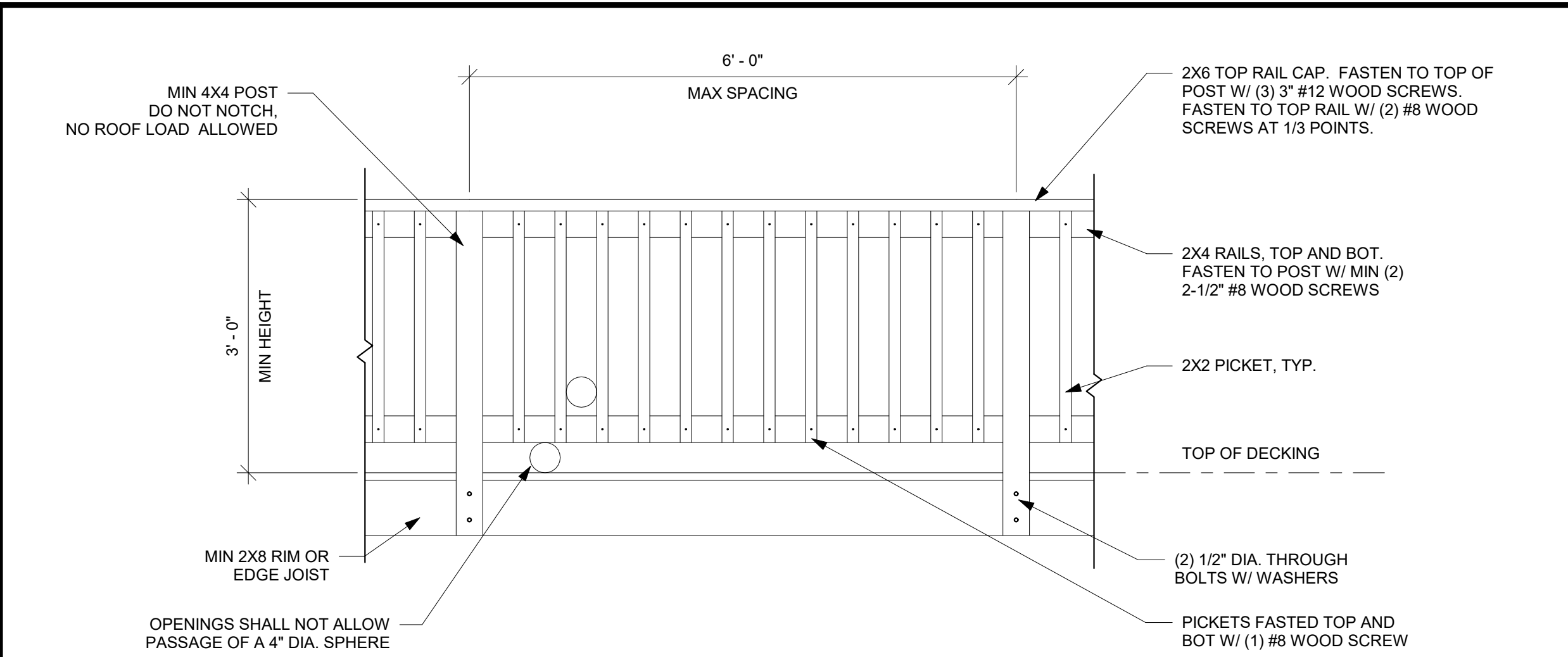
1628 SW BUCKTHORN ST LEES SUMMIT, MO 64082

REVISIONS

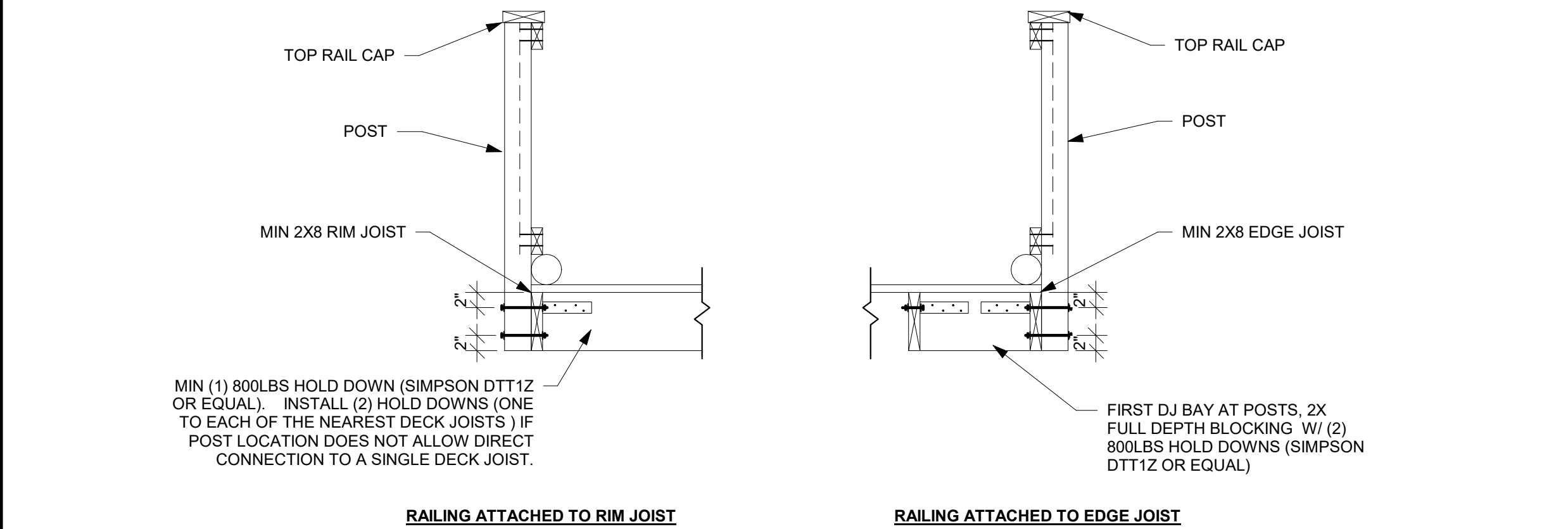
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S510

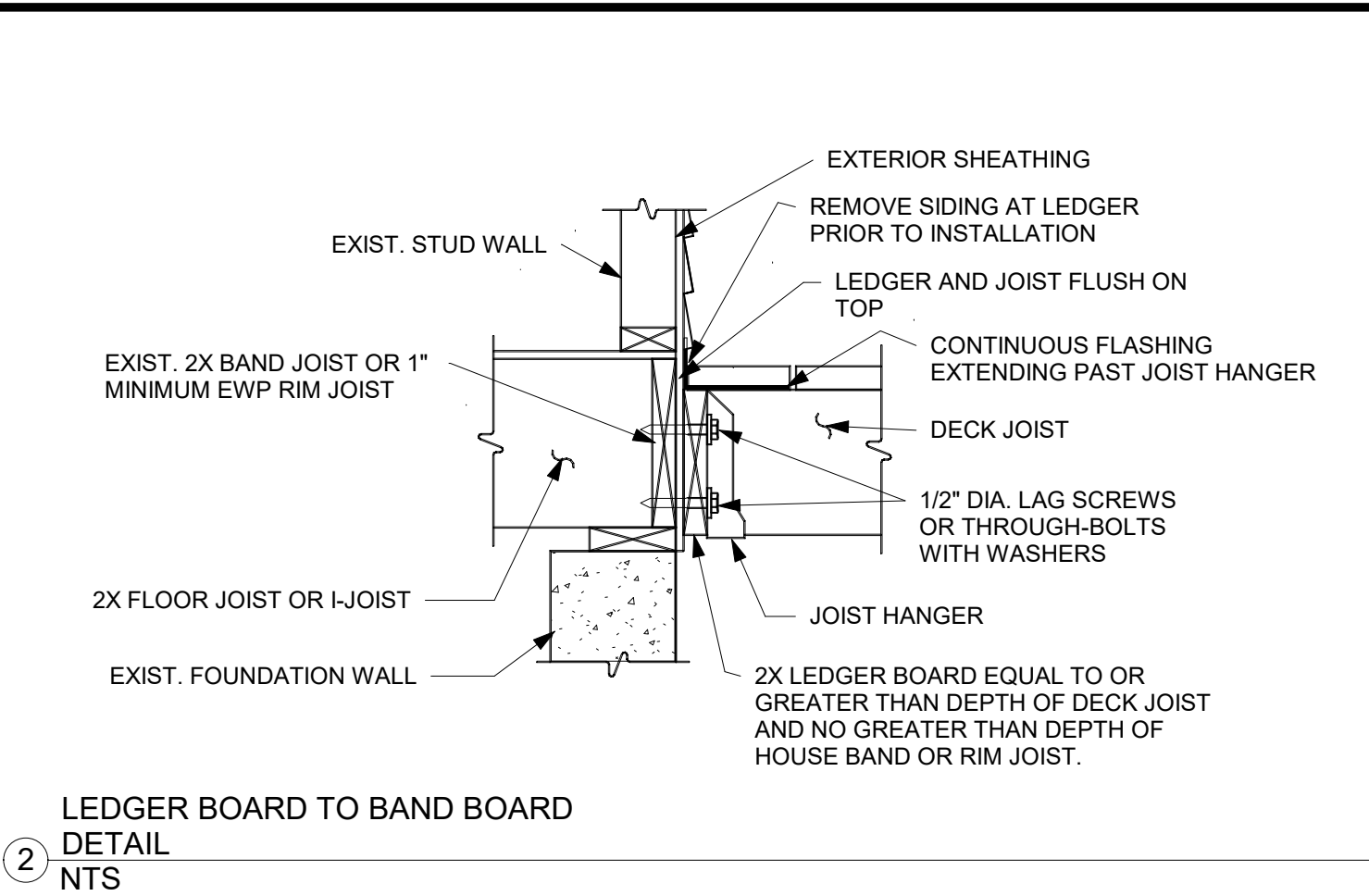
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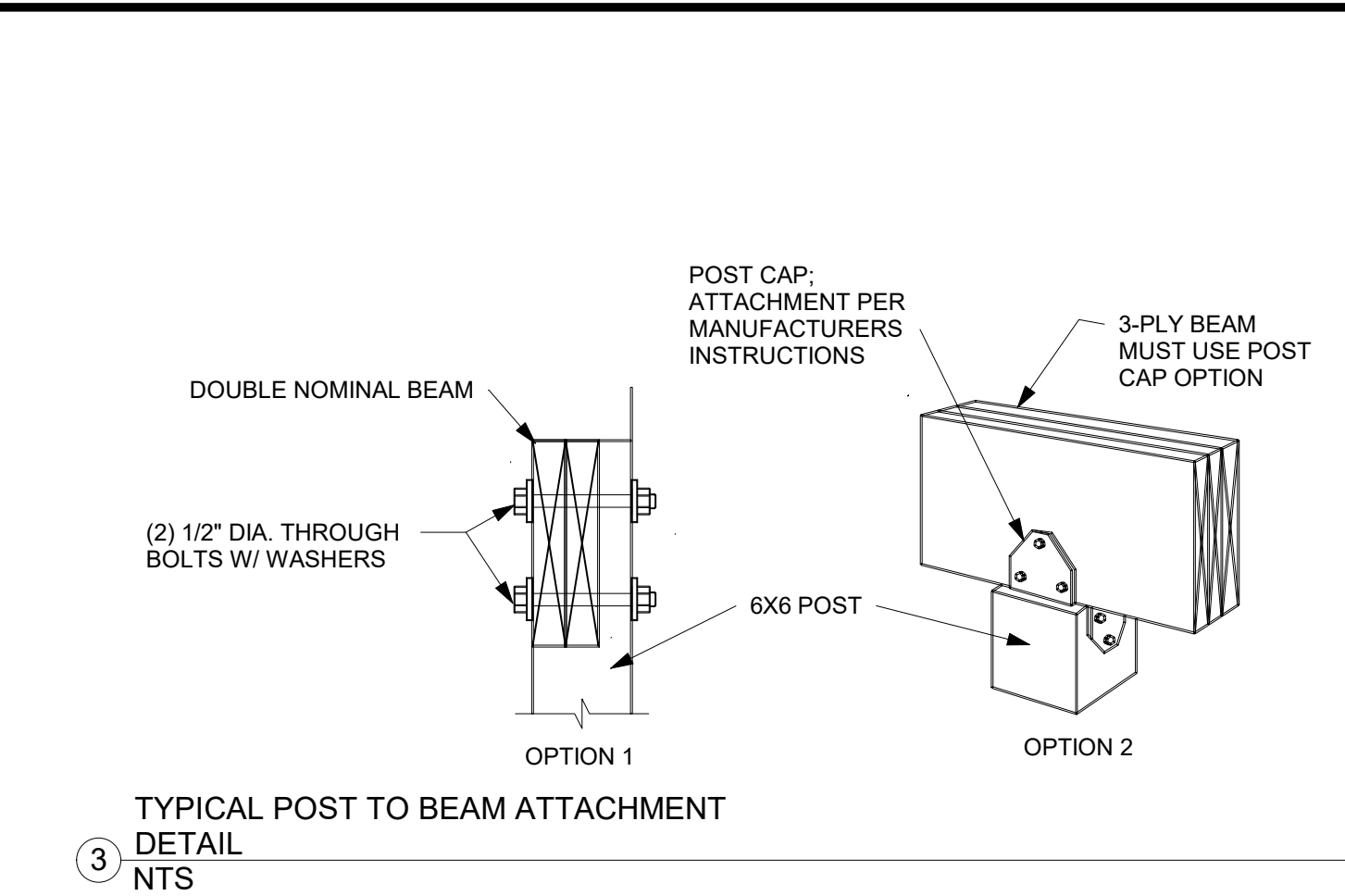
DECK RAILING DETAIL DRAWN TO MEET THE INTENT OF R312 OF THE 2018 IRC AND A CONCENTRATED LOAD OF 200 LBS PER 1607.8.1 OF THE 2018 IBC.



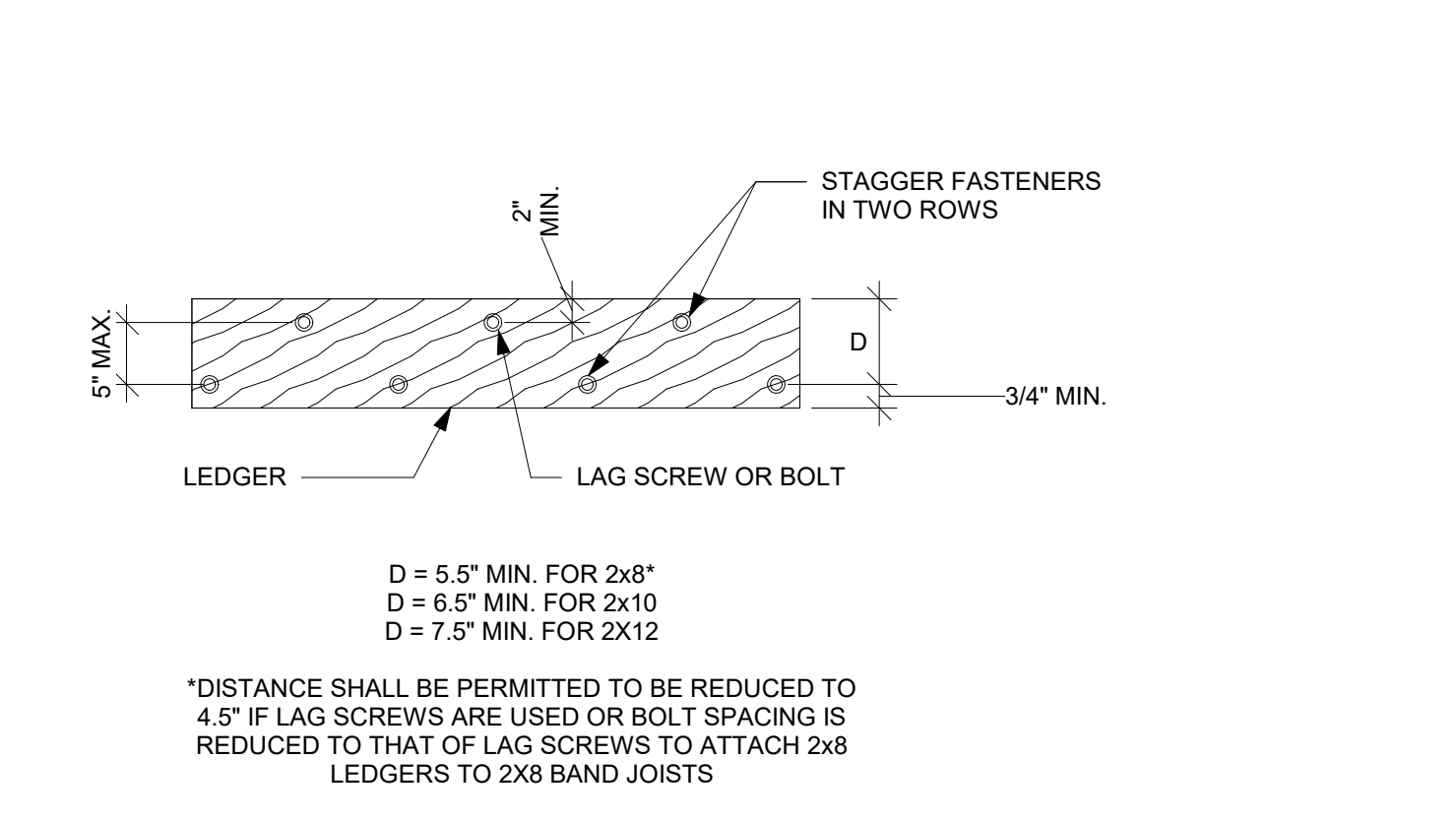
1 DECK RAILING
NTS



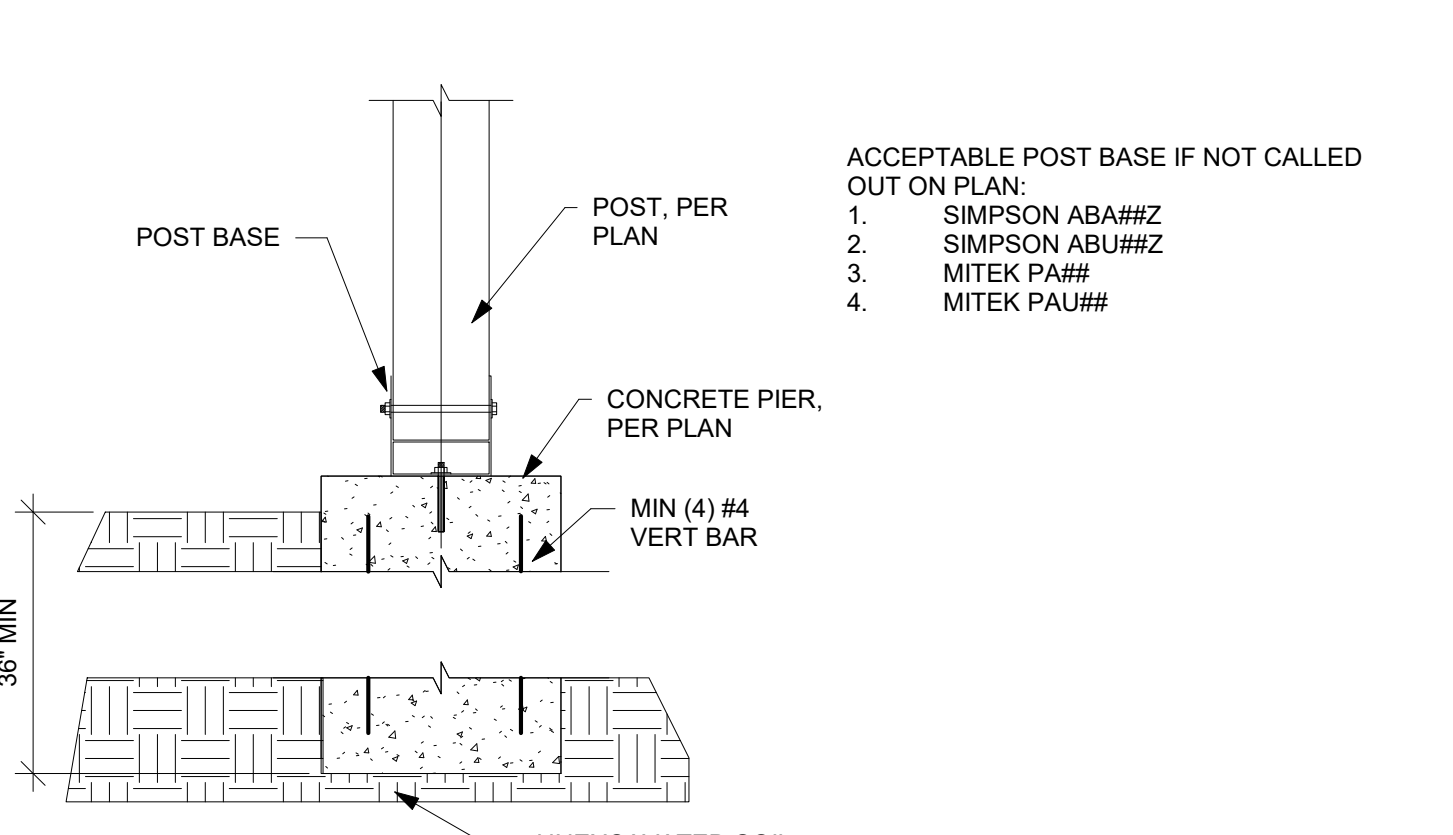
2 LEDGER BOARD TO BAND BOARD
DETAIL
NTS



3 TYPICAL POST TO BEAM ATTACHMENT
DETAIL
NTS



4 DECK LEDGER DIMENSION DETAIL
NTS



5 POST BASE DETAIL
NTS

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 = 40PSF, 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'
CONNECTION DETAILS	ON CENTER SPACING OF FASTENERS						
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



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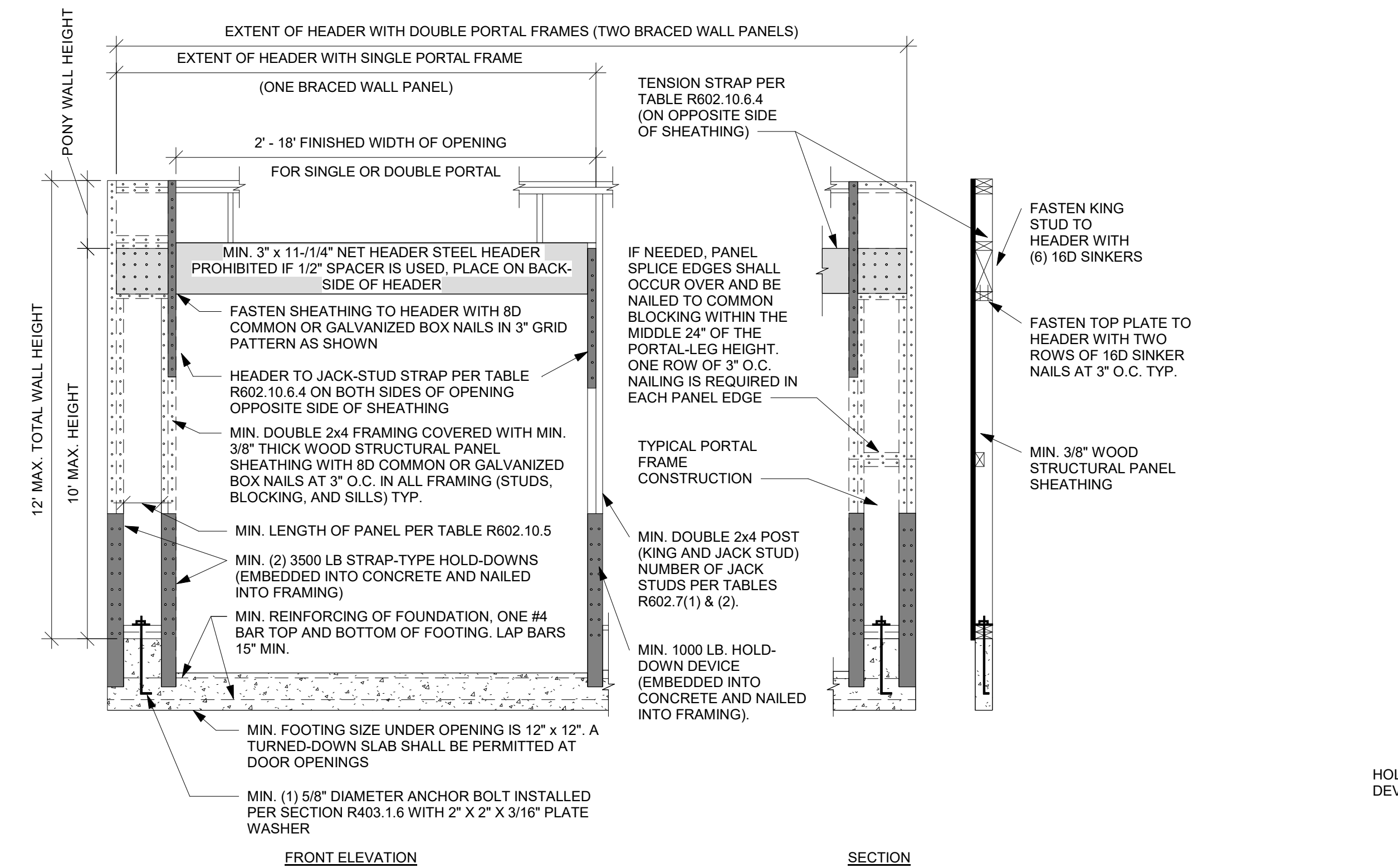
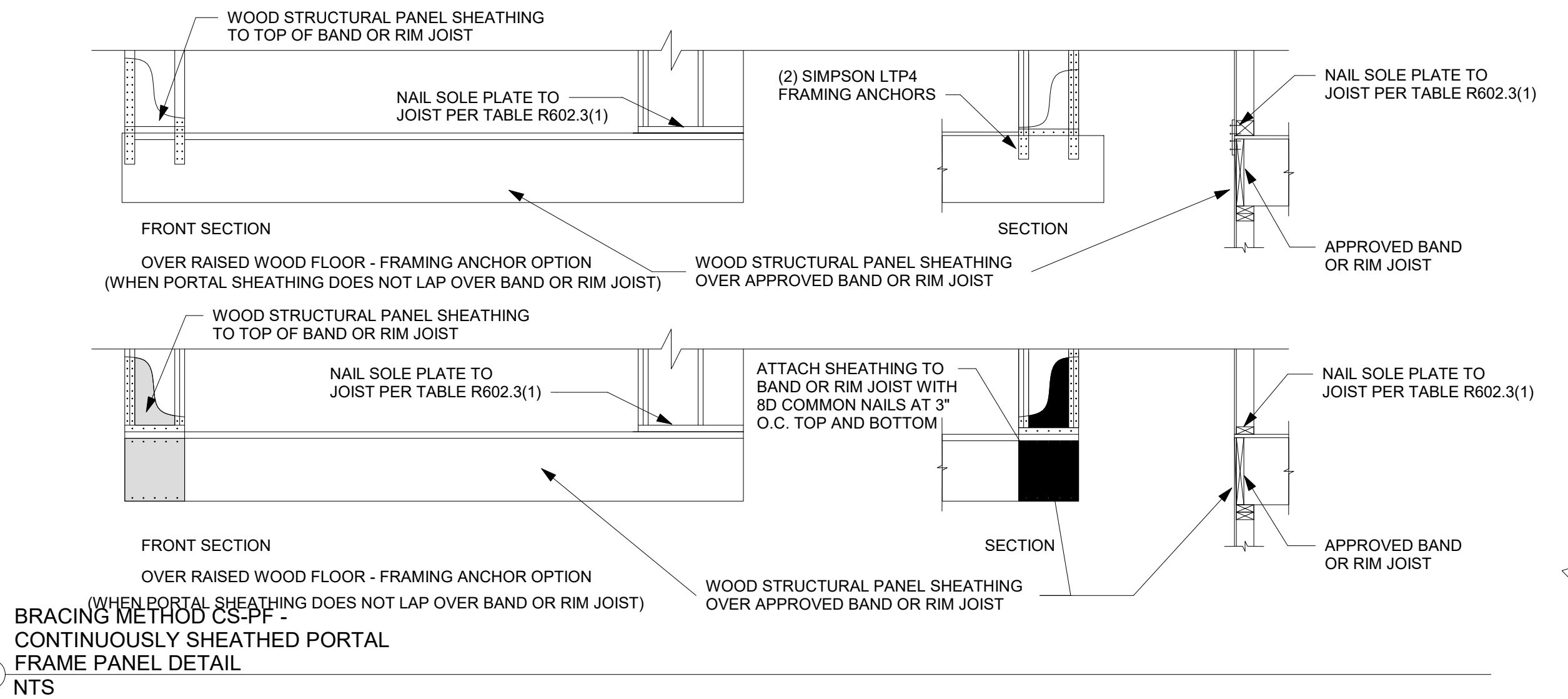
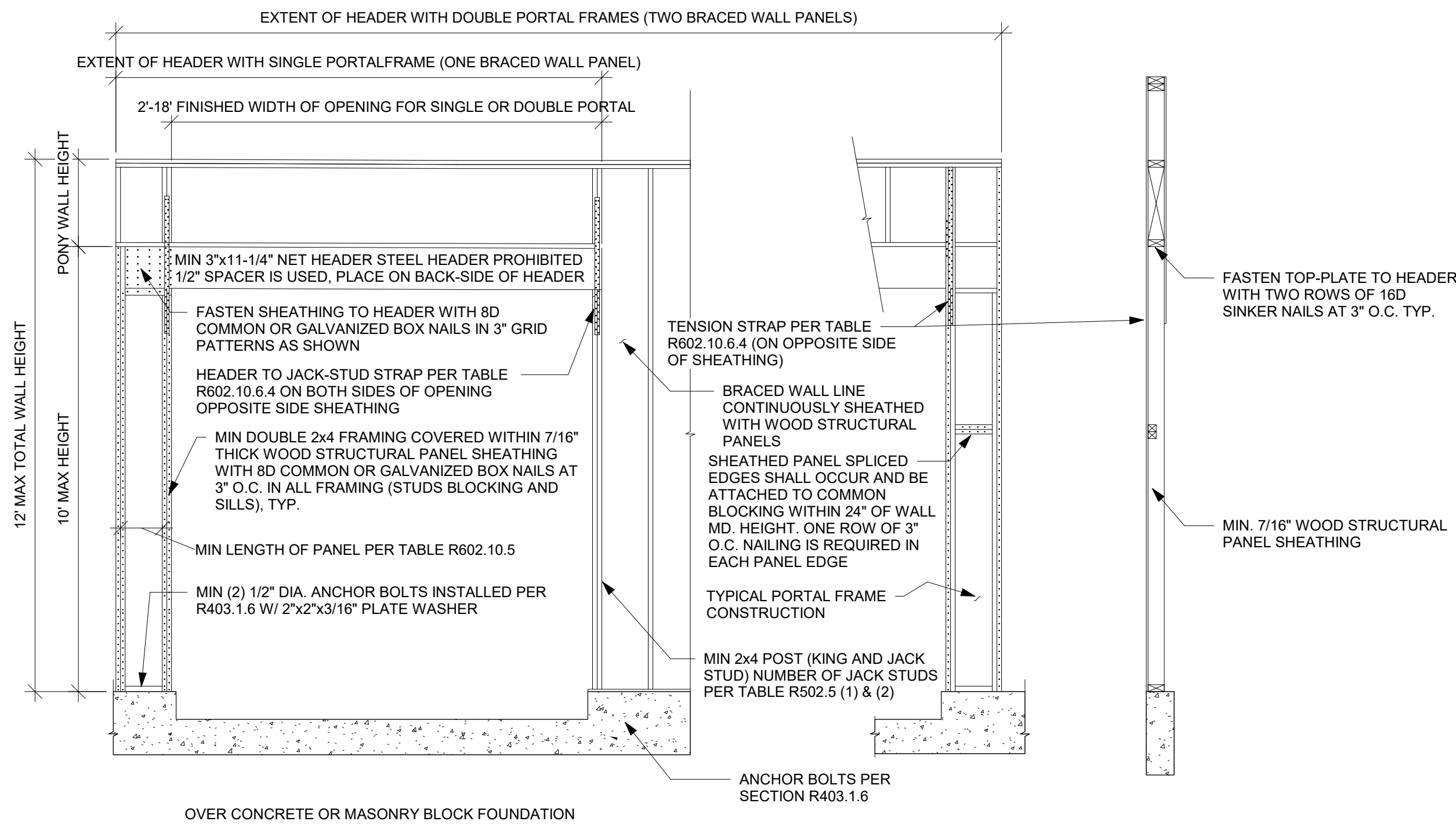
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HAWTHORN RIDGE #165 - HEATHER TRANSITIONAL 1
1628 SW BUCKTHORN ST LEES SUMMIT, MO 64082

REVISIONS

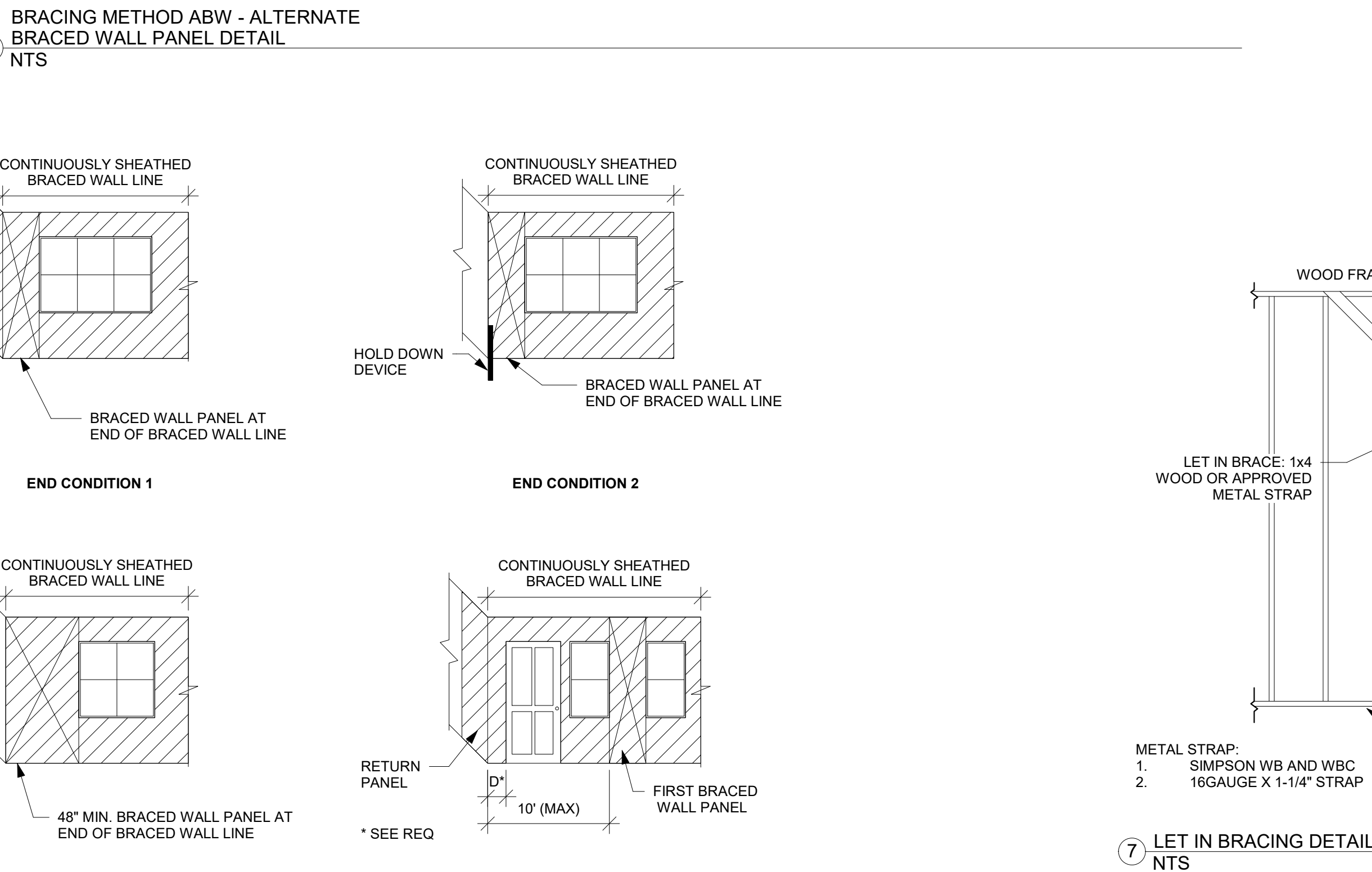
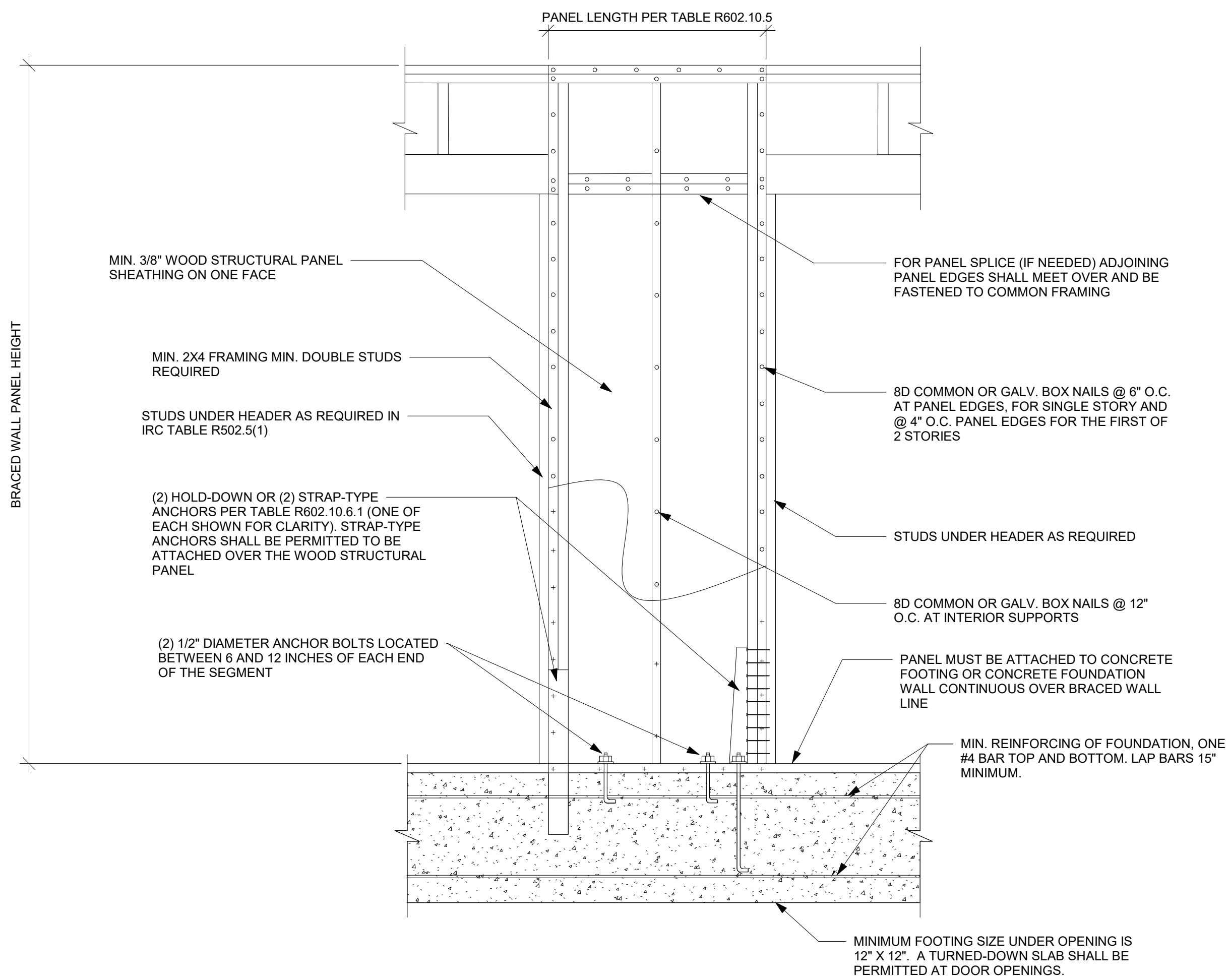
DECK DETAILS

S520

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BRACING METHOD PFH - PORTAL FRAME WITH HOLD DOWNS DETAIL NTS



REQUIREMENTS:

RETURN PANEL:

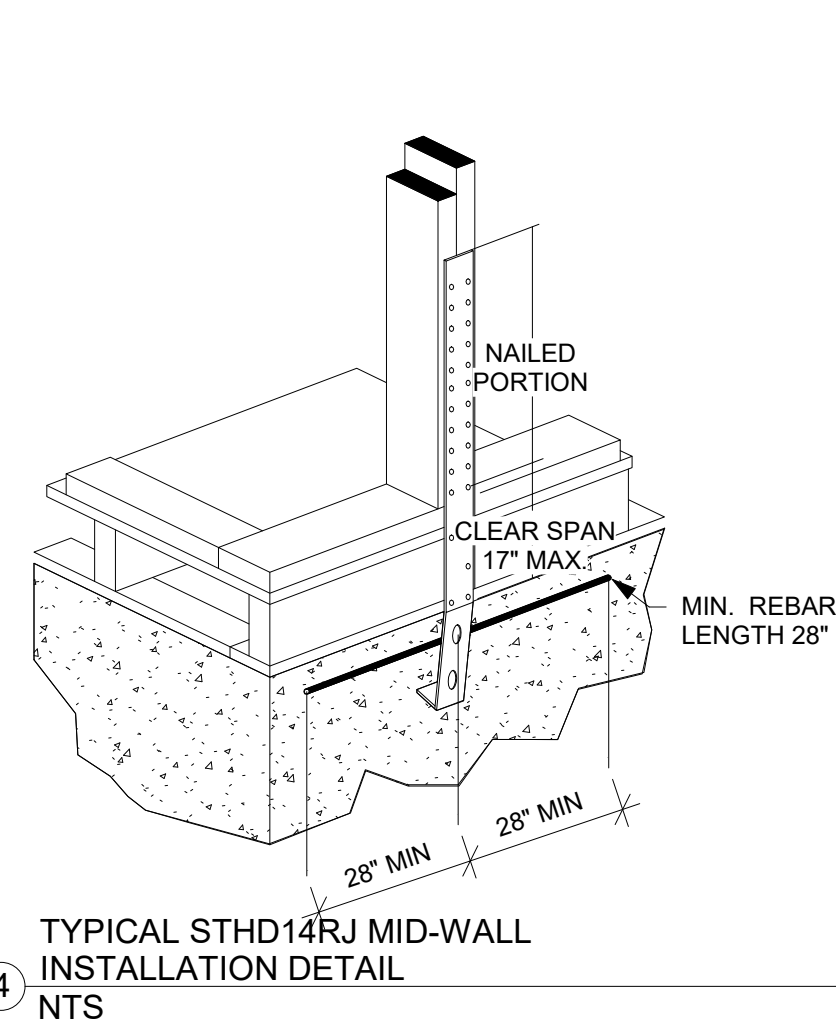
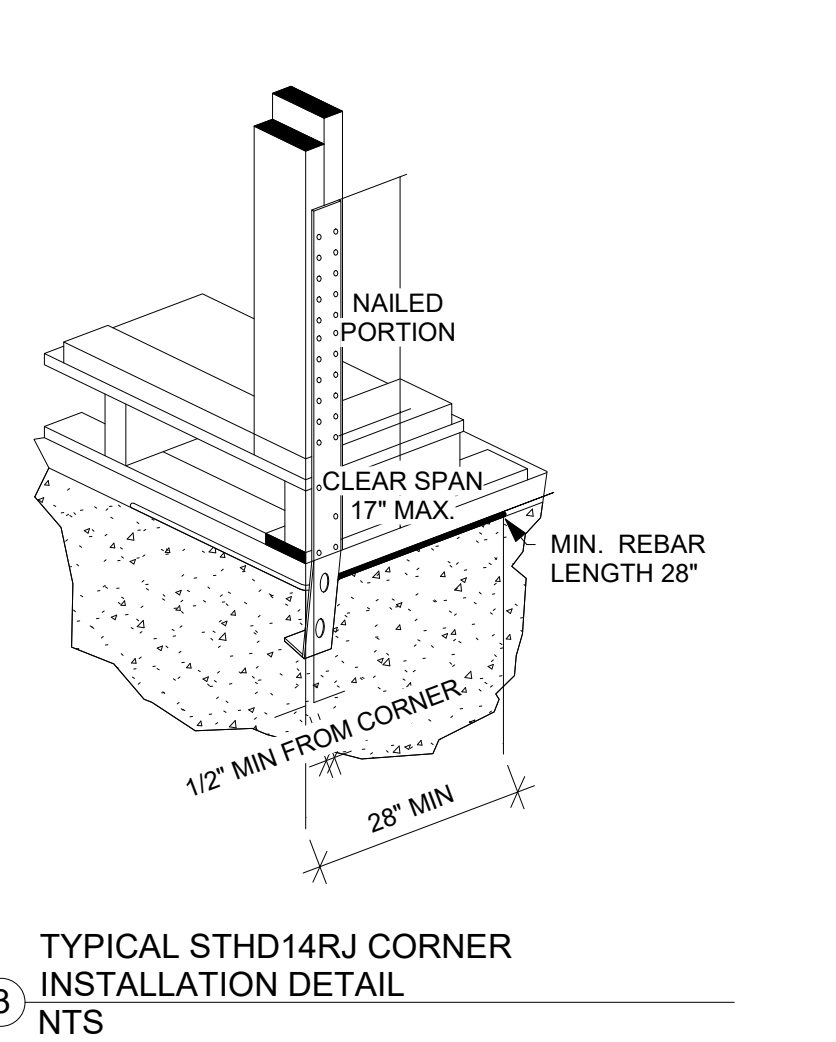
- 24" FOR BRACED WALL LINES SHEATHED WITH WOOD STRUCTURAL PANELS
- 32" FOR BRACED WALL LINES SHEATHED WITH STRUCTURAL FIBERBOARD

DISTANCE D:

- 24" FOR BRACED WALL LINES SHEATHED WITH WOOD STRUCTURAL PANELS
- 32" FOR BRACED WALL LINES SHEATHED WITH STRUCTURAL FIBERBOARD

HOLD DOWN DEVICE: 800 # CAPACITY FASTENED TO THE EDGE OF THE BRACED WALL PANEL CLOSEST TO THE CORNER AND TO THE FOUNDATION OR FLOOR FRAMING BELOW

MINIMUM NAIL		MINIMUM WOOD STRUCTURAL PANEL SPAN RATING	MINIMUM NOMINAL PANEL THICKNESS (IN)	MAX WALL STUD SPACING	PANEL NAIL SPACING		ULTIMATE DESIGN WIND SPEED, V _{ULT} (MPH)
SIZE	PENETRATION (IN)				EDGES (IN O.C.)	FIELD (IN O.C.)	
6d COMMON	1.5	24/0	3/8	16	6	12	140
8d COMMON	1.75	24/16	7/16	16	6	12	170
				24	6	12	140



BRACING METHODS TABLE R602.10.4 (PARTIAL)			
METHODS, MATERIAL	MINIMUM THICKNESS	CONNECTION CRITERIA	
		FASTENERS	SPACING
WSP - WOOD STRUCTURAL PANEL AND CS-WSP CONTINUOUSLY SHEATHED WOOD STRUCTURAL PANEL	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
	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 STRAPS AT 45 TO 60 DEGREE ANGLES FOR MAX 16" STUD SPACING	WOOD: 2-8d COMMON NAILS OR 3-8d (2-1/2" LONG x .113" DIA.) NAILS	WOOD: PER STUD AND TOP AND BOTTOM PLATES
		SIMPSON WB/WBC INSTALLED IN "X" PAIRS OR IN OPPOSING "Y" 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
GB-GYPSUM BOARD	1/2"	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, .098" DIA., 1-5/8" LONG; 15/64" HEAD; OR GYPSUM BOARD NAIL, .096" 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 LOCATIONS: 7" EDGES (INCLUDING TOP AND BOTTOM PLATES) 7" FIELD
		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)	
		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 RIDGE, VALLEY OR HIP RAFTERS	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
	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 AT BRACED WALL PANELS)	16d COMMON (3-1/2"x0.162")	24" O.C. FACE NAIL
	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 (AT BRACED WALL PANELS)	16d BOX (3-1/2"x0.135") OR 3"x0.131" NAIL	12" O.C. FACE NAIL
	16d COMMON (3-1/2"x0.162")	16" O.C. FACE NAIL
BUILT-UP HEADER, TWO PIECES WITH 1/2" SPACER	16d COMMON (3-1/2"x0.162")	16" O.C. EACH EDGE FACE NAIL
	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
	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, BAND JOIST, OR BLOCKING (NOT BRACED WALL PANELS)	16d COMMON (3-1/2"x0.162")	16" O.C. FACE NAIL
	-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
	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
	3-10d BOX (3"x0.128") OR 2-16d COMMON (3-1/2"x0.162") OR 3-3"x0.131" NAILS	FACE 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 SHEATHING TO 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	FACE NAIL
	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	

DESCRIPTION OF BUILDING MATERIALS	NUMBER AND TYPE OF FASTENER	SPACING AND LOCATION OF FASTENERS	
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 NAIL	
RIM JOIST, BAND JOIST OR BLOCKING TO SILL OR TOP PLATE (ROOF APPLICATIONS ALSO)	8d BOX (2-1/2"x0.113")	4" O.C. TOE NAIL	
	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	
BUILT-UP GIRDERS AND BEAMS, 2" LUMBER LAYERS	20d COMMON (3"x0.128")	NAIL EACH LAYER AS FOLLOWS: 32" O.C AT TOP END AND BOTTOM AND STAGGERED.	
	10d BOX (3"x0.128") OR 3"x0.131" NAIL	24" O.C. FACE NAIL AT TOP AND BOTTOM STAGGERED ON OPPOSITE 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 EACH 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, FACE 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)
WOOD STRUCTURAL PANELS, SUBFLOOR, ROOF AND INTERIOR WALL SHEATHING TO FRAMING AND [SEE TABLE R602.3(3) FOR WOOD STRUCTURAL PANEL EXTERIOR WALL SHEATHING TO WALL 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 UNDERLAYMENT TO FRAMING			
3/4" AND LESS	6d DEFORMED (2"x0.120") NAIL OR 8d COMMON (2-1/2"x0.131") NAIL	6	12
7/8" - 1"	8d COMMON (2-1/2"x0.131") NAIL OR 8d DEFORMED (2-1/2"x0.120") NAIL	6	12
1-1/8" - 1-1/4"	10d COMMON (3"x0.148") 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	BOTTOM EDGE	ENDS	ROW SPACING
LEDGER	2	3/4	2	1-5/8 MIN. 5 MAX
BAND JOIST	3/4	2	2	1-5/8 MIN 5 MAX



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REVISIONS

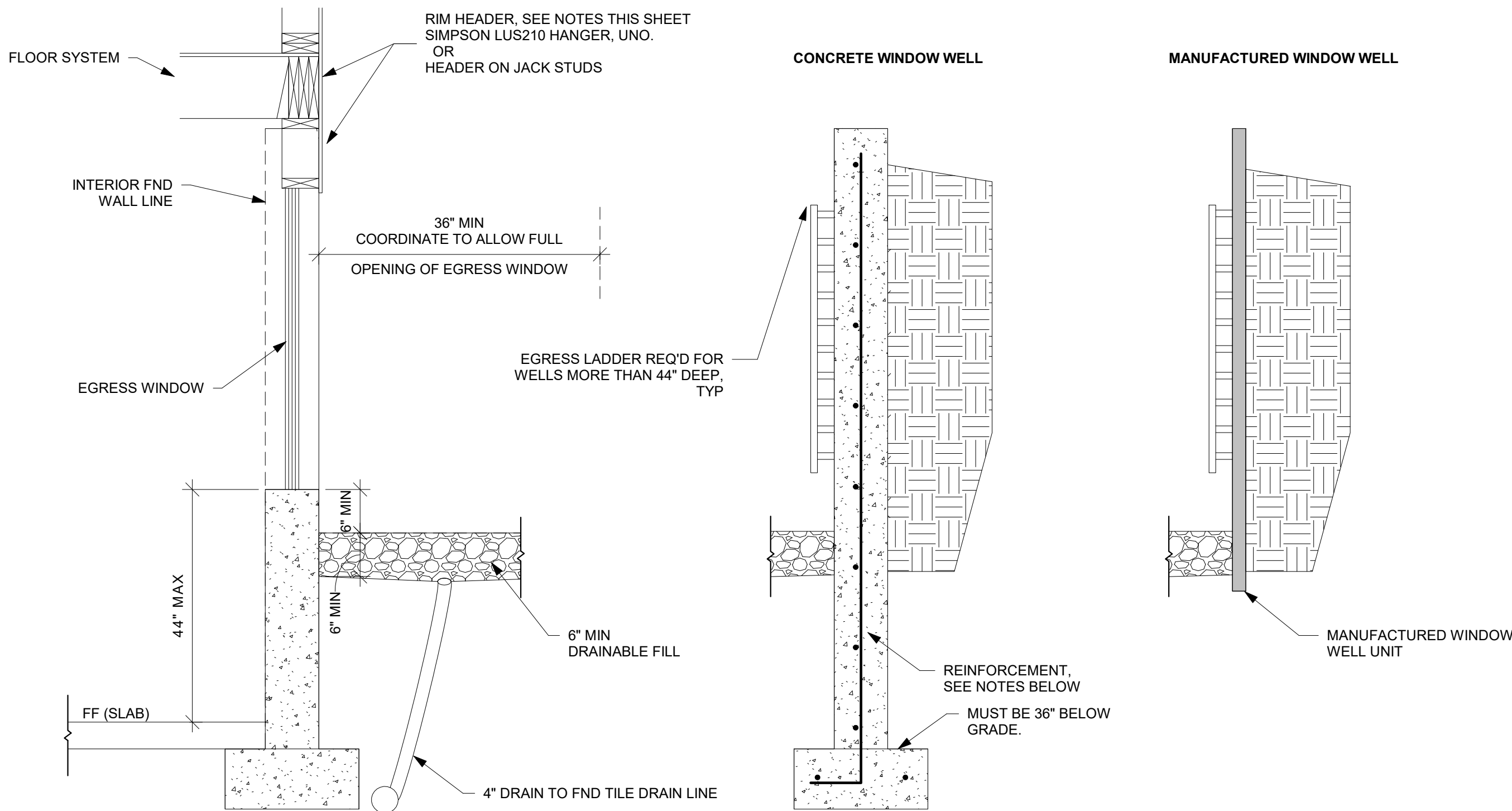
FASTENING
SCHEDULE

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DATE 10/10/2023
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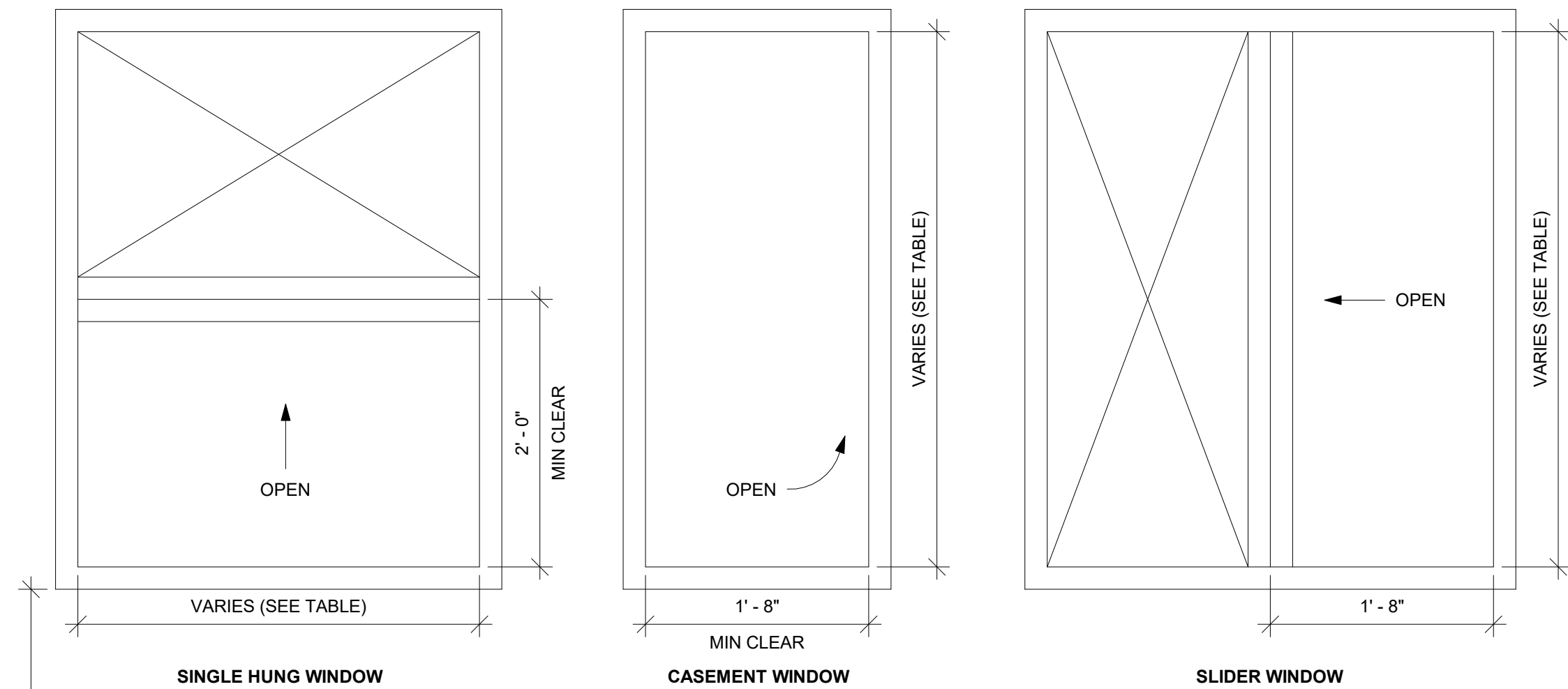
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AS NOTED ON PLANS REVIEW
DEVELOPMENT REVIEW
LEE'S SUMMIT, MISSOURI
05/31/2024 3:48:58

- GENERAL NOTES**
- ALL CONSTRUCTION SHALL CONFORM TO 2018 INTERNATIONAL RESIDENTIAL CODE OR ATTACHED ENGINEER SPECIFICATIONS WHERE APPLICABLE.
 - THE INFORMATION PROVIDED ON THIS PLAN SHEET IS DESIGNED AND REVIEWED IN ACCORDANCE WITH THE IRC.
 - CONCRETE WINDOW WELLS SHALL BE MINIMUM 3000 PSI COMPRESSIVE STRENGTH.
 - ASSUMED SOIL MINIMUM BEARING CAPACITY 1500 PSF.
 - CONTRACTOR IS RESPONSIBLE FOR VERIFICATION OF EXISTING CONDITIONS AND DIMENSIONS CRITICAL FOR CONSTRUCTION OF NEW WORK.
 - MEANS AND METHODS OF CONTRUCTION ARE OUT OF SCOPE OF THE DESIGN PROVIDED.
 - TEMPORARY SUPPORTS SHALL BE INSTALLED BEFORE REMOVAL OF LOAD BEARING STRUCTURES.
 - DIMENSIONAL LUMBER SHALL BE MINIMUM DOUGLAS FIR LARCH NO. 2.
 - LVL BEAMS SHALL HAVE MINIMUM 2.0E AND 3100F_b
 - STEEL POST COLUMNS SHALL BE MINIMUM SCHEDULE 40, F_y=35KSI.
 - MINIMUM HEADERS
 - A. ASSUMES LOADING FOR BUILDING WITH MAXIMUM WIDTH OF 36 FT (ROOF WITH 30PSF SNOW LOADS, CEILING, AND TWO FLOORS W/ CENTER BEARING) PER TABLE R602.7(1)
- | HEADER | MAX CLEAR SPAN | MIN JACK STUDS |
|--------------------|----------------|----------------|
| (2) 2X10 | 4'-0" | 2 |
| (3) 2X10 | 5'-1" | 2 |
| (2) 2X12 | 4'-9" | 3 |
| (3) 2X12 | 5'-11" | 2 |
| (2) 1.75X9.25 LVL | 7'-6" | 3 |
| (2) 1.75X11.25 LVL | 9'-3" | 3 |



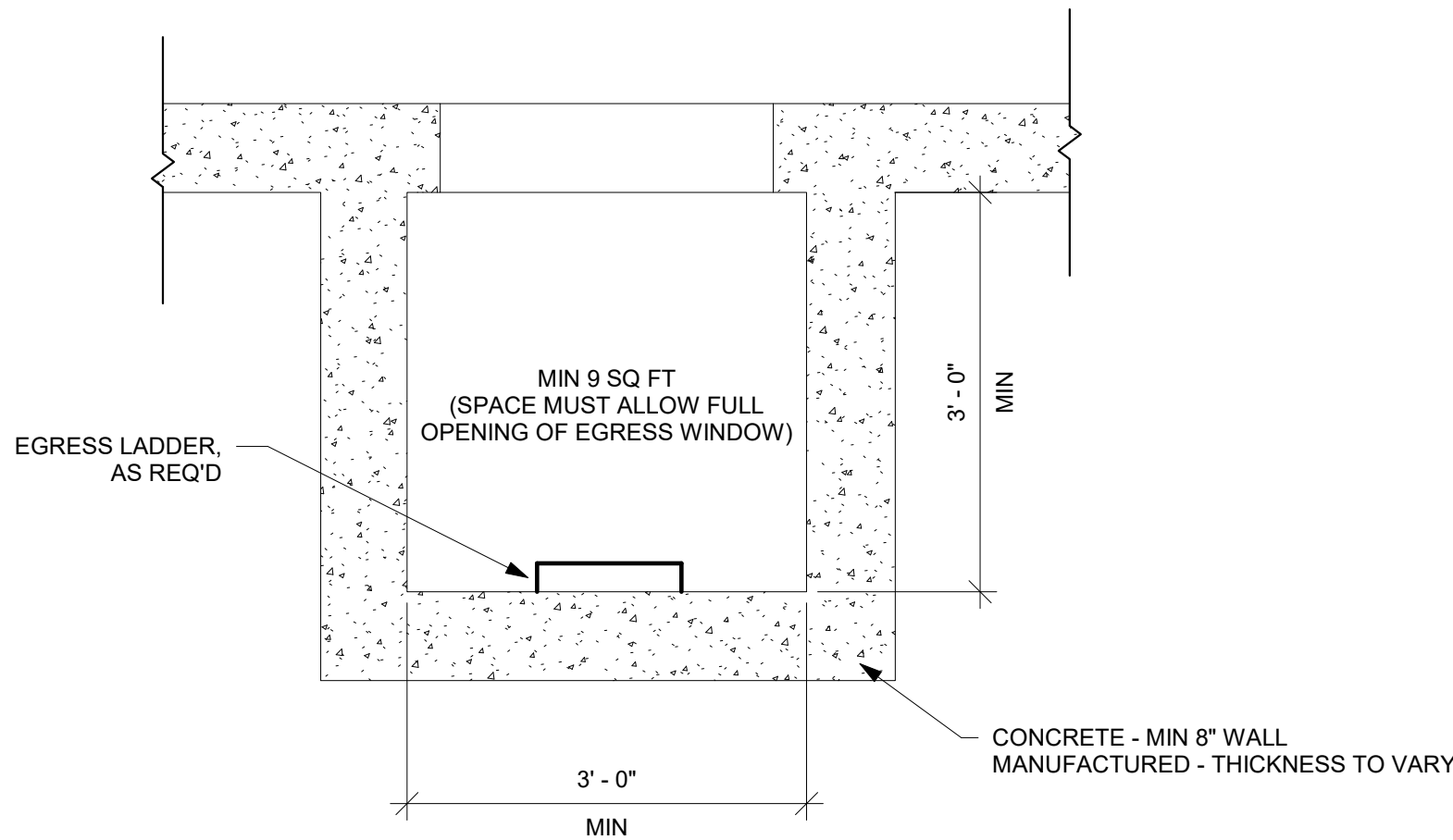
- NOTES:**
- WINDOW WELL MUST MEET REQUIREMENT IN R310.2.6 OF THE IRC AND LOCALLY ADOPTED CODE
 - CONCRETE WINDOW WELL
 - INTALLED WITH NEW FOUNDATION
 - POUR WINDOW WELL MONOLITHICALLY WITH ADJACENT FND WALL.
 - REINFORCEMENT
 - MATCH ADJACENT WALL REINFORCEMENT, SEE PLANS
 - INSTALLED TO EXISTING FOUNDATION
 - REINFORCEMENT
 - #4 BAR @ 12" OC EW IN WALLS
 - DRILL AND EXPOY HOR BAR INTO EX FND, MIN 6" EMBEDMENT INTO EX FND WALL.
 - (2) #4 BAR CONT IN WALL FTG.
 - SEAL WHERE NEW CONCRETE IS POURED AGAINST EX FND WITH MASTIC STRIPS OR OTHER WATER STOP MATERIAL.
 - MANUFACTURED WINDOW WELL
 - INSTALL PER MANUFACTURER'S WRITTEN INSTRUCTIONS
 - COORDINATE DEPTH OF WELL WITH WINDOW AND MANUFACTURER REQUIREMENTS.

SECTION



- NOTES**
- 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 | MODEL | SINGLE HUNG | CASEMENT | SLIDER |
|--------------|------------|-------------|----------|--------|
| ANDERSON | 200 SERIES | 36X60 | -- | -- |
| ANDERSON | 400 SERIES | -- | 36X40 | 48X40 |
| JELD-WEN | V-2500 | 36X60 | -- | 48X48 |
| JELD-WEN | V-4500 | -- | 36X48 | -- |
| PELLA | 250 SERIES | 36X60 | 36X42 | -- |
| PELLA | 150 SERIES | -- | -- | 48X48 |

WINDOW EGRESS (NTS)



PLAN

WINDOW WELL FOR EGRESS (NTS)



EVERSTEAD
ENGINEERING & DESIGN



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CLOVER & HIVE

HAWTHORN RIDGE #165 - HEATHER TRANSITIONAL 1
1628 SW BUCKTHORN ST LEES SUMMIT, MO 64082

REVISIONS

**EGRESS
WINDOWS**

S560

DATE 10/10/2024
SCALE

2024-10-10 3:48:58 PM
AS NOTED ON PLANS REVIEW
DESIGNER: J. DAVIS
CHECKER: J. DAVIS
DATE: 05/31/2024 3:48:58 PM