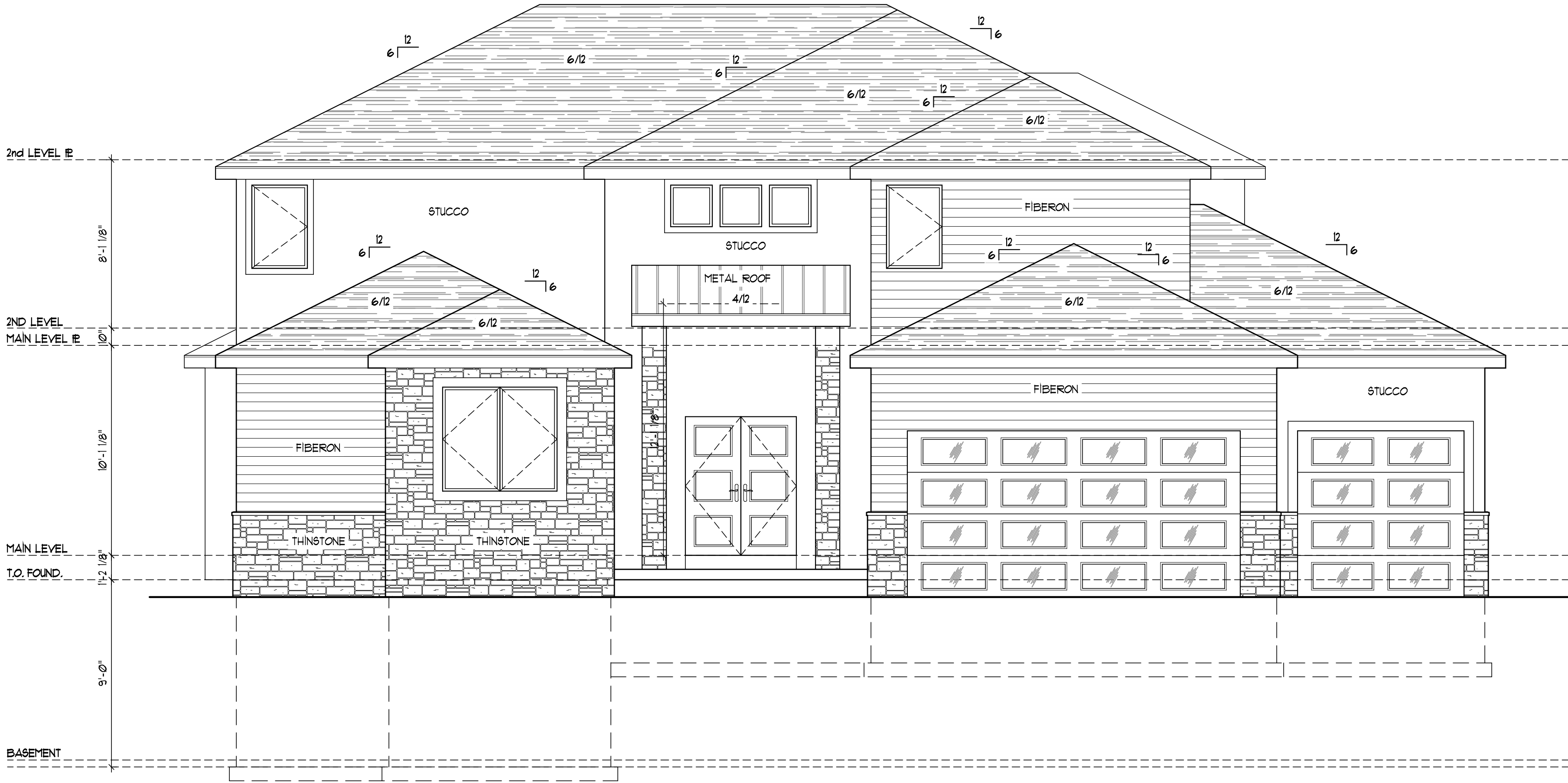
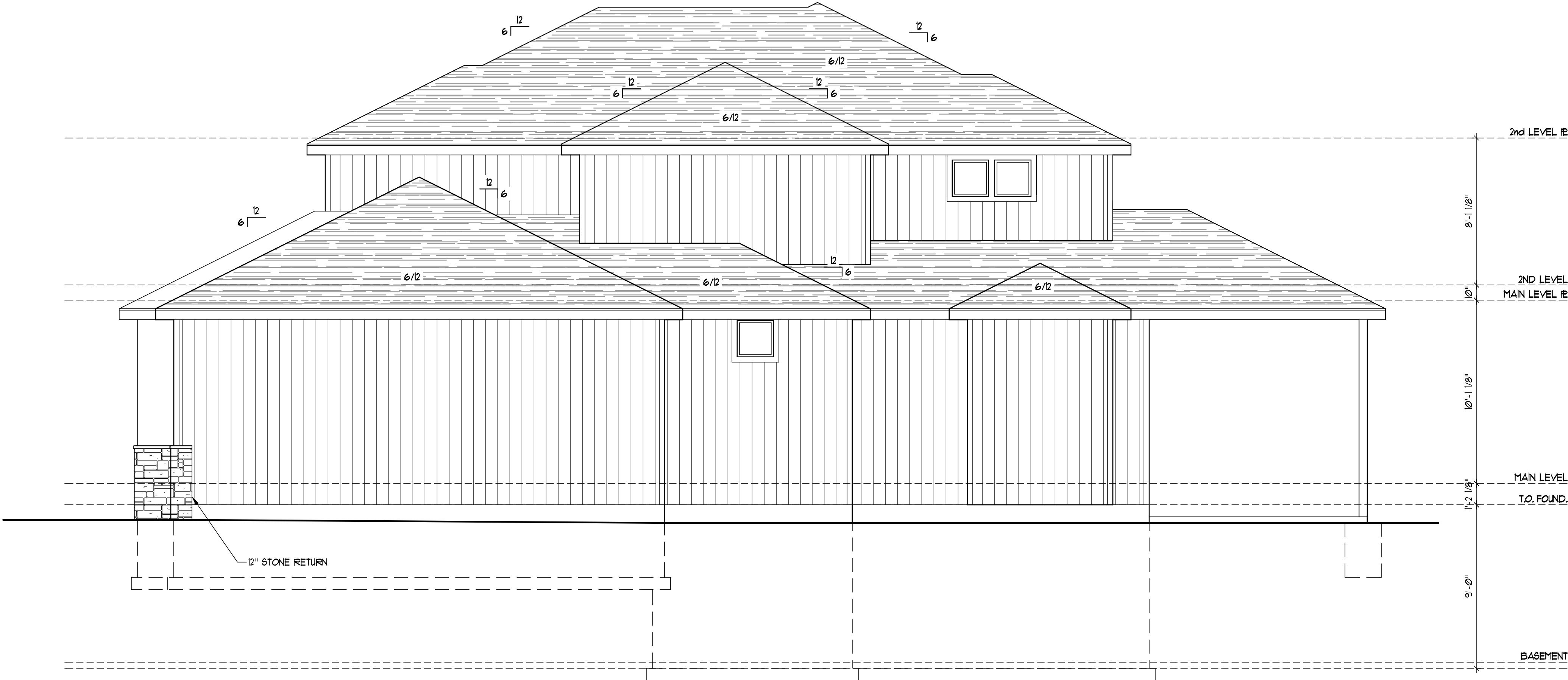




FRONT ELEVATION
SCALE: 1/4" = 1'-0"



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

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LEE'S SUMMIT, MISSOURI
01/09/2025



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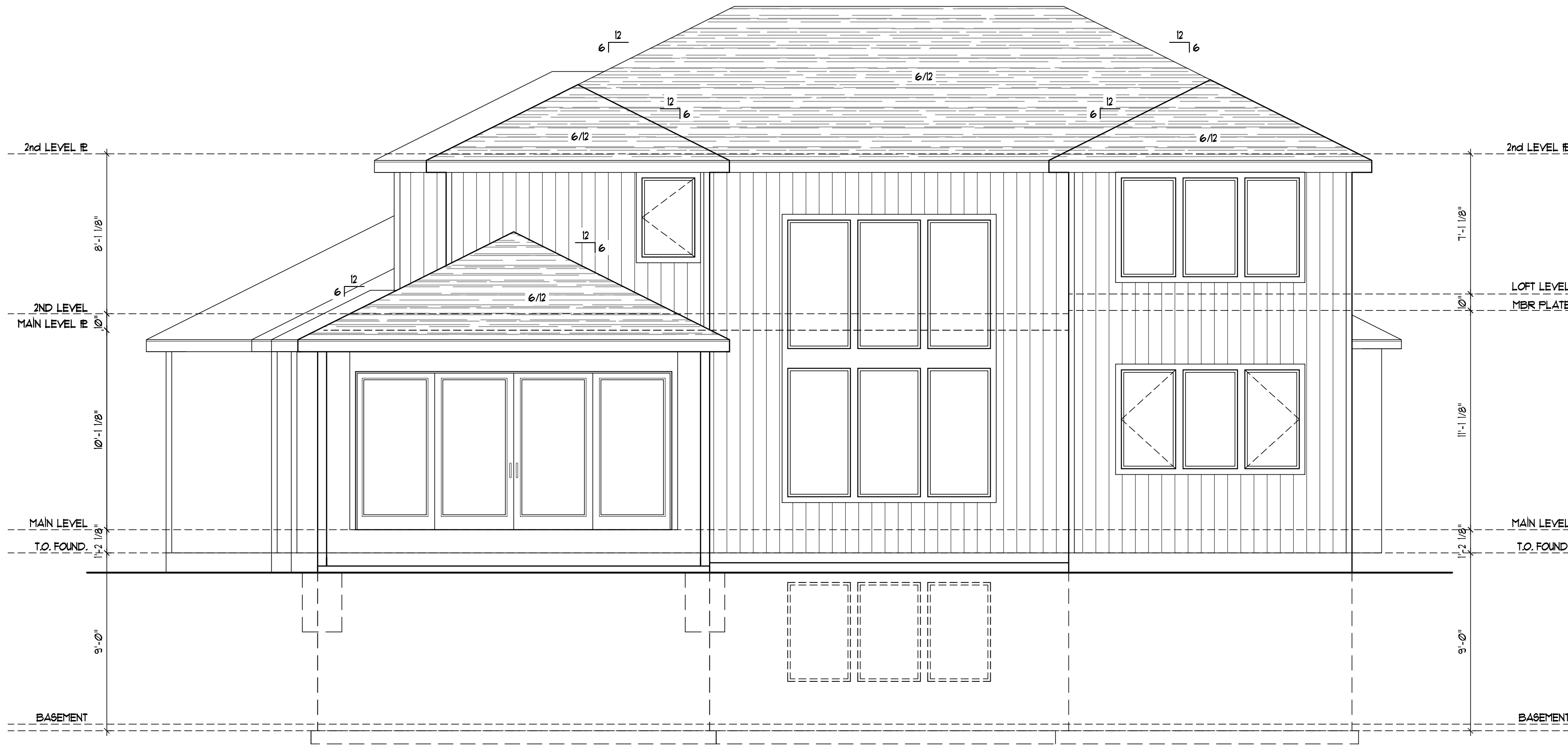
Permit: 11/23/2024

ELEVATIONS FOR:

THE MAPLEWOOD III - MODERN

Kourtney Halford & Andrew Baggett
2734 SW Heartland Rd, Lee's Summit, MO
Lot 194 - Hookfarms

GA1



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



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



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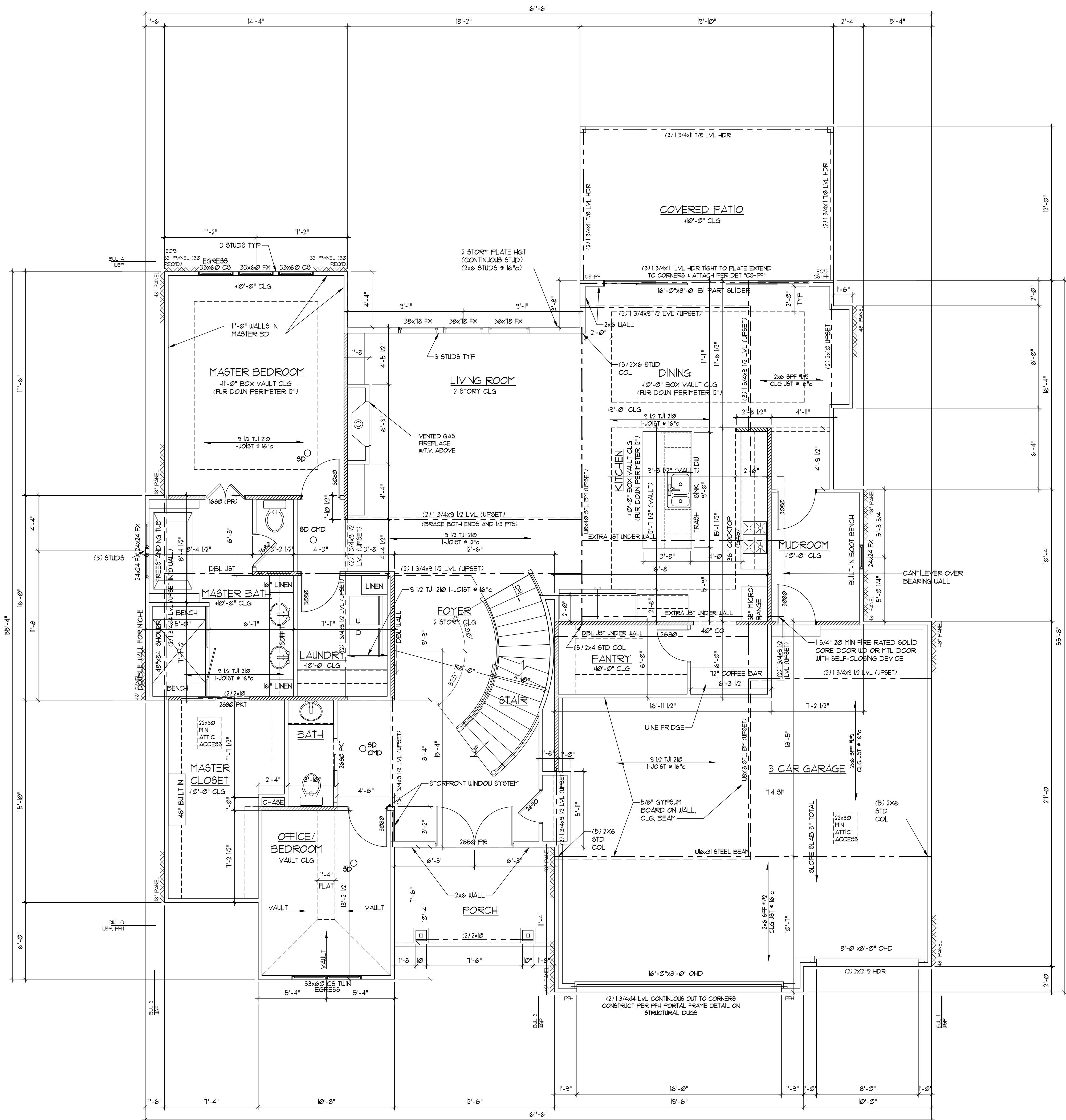
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MAIN FLOOR PLAN
SCALE: 1/4" = 1'-0"

GENERAL PLAN REQUIREMENTS

- ALL STUD WALL FRAMING SHALL BE CONTINUOUS FROM THE FLOOR TO ROOF OR CEILING DIAPHRAGM UNO. ALL WALLS OVER 10'-0" ARE TO BE 2x6 @ 16" C UNO.
- PROVIDE WATER RESISTANT EXTERIOR WALL COVERING ON ALL FRAMED WALLS TO COMPLY WITH IRC SECTION 103.2.
- PROVIDE GFCI ELECTRICAL OUTLETS ON EXTERIOR, IN UNFINISHED BASEMENT, IN BATHROOMS, ABOVE KITCHEN COUNTERS, IN GARAGE, AND WITHIN 6'-0" OF ANY SINK.
- ALL EXTERIOR DOORS SERVED BY LANDING.
- INSTALL CARBON MONOXIDE DETECTORS PER IRC SECTION 315 OUTSIDE OF EACH SLEEPING AREA.
- INSTALL SMOKE DETECTORS IN EACH SLEEPING ROOM, OUTSIDE OF EACH SLEEPING AREA, WITH A MINIMUM OF ONE ON EACH FLOOR PER IRC SECTION 314.
- PROVIDE A "UFER" GROUND PER IRC 3608.1.
- REFER TO SHEET 89 FOR ALL WALL BRACING DETAILS AND/OR CALCULATIONS.
- INSTALL BLOCKING FOR TP HOLDERS, TOWEL BARS, AND TRIM BEARS.
- GARAGE DOOR H-FRAME, THE H-FRAME FOR ATTACHMENT OF THE TRACK AND COUNTER BALANCE SHALL CONSIST OF THE FOLLOWING: 2x6 VERTICAL JAMBS RUNNING FROM FLOOR TO CEILING ATTACHED WITH 3 1/4"x10" NAILS @ 1" C STAGGERED WITH (1) 3 1/4"x10" NAILS THRU JAMB INTO HEADER, MINIMUM 2x8 HEADER FOR ATTACHMENT OF COUNTER BALANCE SYSTEM.
- OVERHEAD GARAGE DOORS TO MEET 18" MPH WIND LOAD RESISTANCE REQUIREMENTS OF DASHA 102-11 AND ASTM E 330-02.
- MAXIMUM RISER HEIGHT OF STAIRWAYS SHALL NOT EXCEED 1 3/4" AND THE TREADS SHALL PROVIDE A MINIMUM TREAD DEPTH OF 10".
- ALL EXTERIOR AND LOAD BEARING WINDOW AND DOOR HEADERS TO BE (2) 2x8 DFR #2 UNLESS NOTED OTHERWISE ON PLANS.
- ALL HEADER BEARINGS OTHER THAN WINDOWS TO BE (2) 2x4 STUDS UNLESS NOTED OTHERWISE. WINDOW HEADER BEARING TO BE (1) 2x4 EA END UNLESS NOTED OTHERWISE.
- SLOPING VAULTS SHALL BE FURRED DOWN WITH 2x MATERIAL & AFFIXED WITH 1/2" OSB FLITCH PLATE TO PROVIDE REQUIRED DEPTH FOR INSULATION (RE: ENERGY REQUIREMENTS and/or FRAMING DETAILS).

//////// DENOTES LOAD BEARING STUD WALL

WINDOW AND DOOR NOTES

- ALL WINDOWS ARE SHOWN IN INCHES (I.E. 3060 IS A 30"x60" WINDOW). ALL DOORS SHOWN IN FEET AND INCHES (I.E. 2868 DOOR IS A 2'-8"x6'-8" DOOR). CONTRACTOR/INSTALLER TO VERIFY R.O. DIMENSIONS WITH BUILDER SUPPLIED CUT SHEET PRIOR TO FRAMING.
- ALL WINDOWS TO BE LOW-E GLASS TO MEET ALL LOCAL ENERGY CODE REQUIREMENTS.
- PROVIDE EGRESS WINDOW IN ALL SLEEPING ROOMS. WINDOWS SHALL COMPLY WITH THE FOLLOWING:
 - A. MINIMUM OPEN AREA: 5.7 SF
 - B. MINIMUM OPENING HEIGHT: 24 INCHES
 - C. MINIMUM OPENING WIDTH: 20 INCHES
 - D. SILL HEIGHT 44" MAX ABOVE FLOOR
- ALL WINDOW SILLS ARE TO BE 24" MIN ABOVE FINISH FLOOR, OR SHALL BE FIXED/INOPERABLE.
- ALL WINDOWS AND GLAZED DOORS SHALL COMPLY WITH IRC SECTION R308, IRC SECTION R308.4. GLAZING IN HAZARDOUS LOCATIONS SHALL BE OF APPROVED SAFETY GLAZING MATERIALS. GLASS IN STORM DOORS, INDIVIDUAL FIXED OR OPERABLE PANELS ADJACENT TO A DOOR WHERE THE NEAREST VERTICAL EDGE IS WITHIN A 24" ARC OF THE DOOR IN A CLOSED POSITION AND WHOSE BOTTOM EDGE IS WITHIN 60" OF THE FLOOR WALLS ENCLOSING STAIRWAYS AND LANDINGS WHERE THE GLAZING IS WITHIN 60" OF THE TOP OR BOTTOM OF STAIR ENCLOSURES FOR TUBS, SHOWERS AND WHIRLPOOLS. GLAZING IN FIXED OR OPERABLE PANELS EXCEEDING 9 SF AND WHOSE BOTTOM EDGE IS LESS THAN 18" ABOVE THE FLOOR OR WALKING SURFACE WITHIN 36".
- ALL OPERABLE WINDOWS SHALL HAVE FALL PROTECTION PER IRC R312.2.
- ALL GLAZING IN WINDOWS AND DOORS SHALL COMPLY WITH THE TEST CRITERIA FOR CATEGORY II IN ACCORDANCE WITH CPSC 16 CFR 1201.
- WINDOW MANUFACTURER TO CONFIRM EXACT SAFETY AND EGRESS WINDOW LOCATIONS PER LOCAL CODES.

ENERGY REQUIREMENTS

CONTRACTOR TO PROVIDE ENERGY AUDIT USING THE HERS ENERGY RATING SYSTEM. IN LIEU OF AN ENERGY AUDIT, THE FOLLOWING PRESCRIPTIVE REQUIREMENTS MAY BE FOLLOWED:

- ALL DUCTS, AIR HANDLERS, FILTER BOXES, AND BUILDING CAVITIES TO BE SEALED PER IRC SECTION N102.2.
- THE BUILDING THERMAL ENVELOPE IS REQUIRED TO BE SEALED PER IRC SECTION N102.4.
- CONTRACTOR TO SUBMIT "MANUAL J" AND "MANUAL D" CALCULATIONS FOR THE HVAC SYSTEM.
- INSULATION TO COMPLY WITH IECC AS FOLLOWS:

WALLS	R-13
CEILING (FLAT)	R-49
CEILING (VAULTED)	R-38 (NOTE: VAULTED AREA NOT TO EXCEED 500sq ft. OR 20% OF ROOF AREA, WHICHEVER IS LESS)
FLOORS OVER UNCONDITIONED SPACE	R-19
CRAWL SPACE WALLS	R-13 (or R-10 CONTINUOUS)
BASEMENT WALLS	R-13 (or R-10 CONTINUOUS)
SLABS	N/R
DUCTWORK	R-8
WINDOWS	U 0.32 (MAX)
U-FACTOR	0.40 (MAX)
SHGC	0.40 (MAX)
SKYLIGHTS	U 0.32 (MAX)
U-FACTOR	0.40 (MAX)
SHGC	0.40 (MAX)

WALL BRACING NOTES:

- ALL WALLS ARE TYPE "CS-W8P" AND ARE CONTINUOUSLY SHEATHED UNLESS NOTED OTHERWISE. THE BRACED WALL NOTATIONS (IF SHOWN) REFLECT THE MINIMUM SHEATHING REQUIREMENTS PER CODE.
 - IF NO NOTATIONS ARE SHOWN FOR WALLS TYPE "CS-W8P" ON PLAN, WALL IS FULLY SHEATHED AND MEETS ALL REQUIREMENTS WITH END CONDITION #1, #3, OR #4.
 - EC # - END CONDITION PER IRC FIGURE R602.10.1, (FOR CONDITIONS #1, #3, & #4 NO HOLDDOWN REQUIRED)
 - INTERIOR WALL BRACING NOT REQUIRED
- XXXXXXXXXX DENOTES EXTERIOR BRACED WALL WOOD STRUCTURAL PANEL (W8P OR CS-W8P) ATTACHED PER DETAILS AND GENERAL NOTES

MAIN LEVEL	
FINISH:	2192 SF
GARAGE:	692 SF
COVERED DECK:	238 SF



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Project #: 8083-XXXX

DATE:

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MAIN FLOOR PLAN FOR:

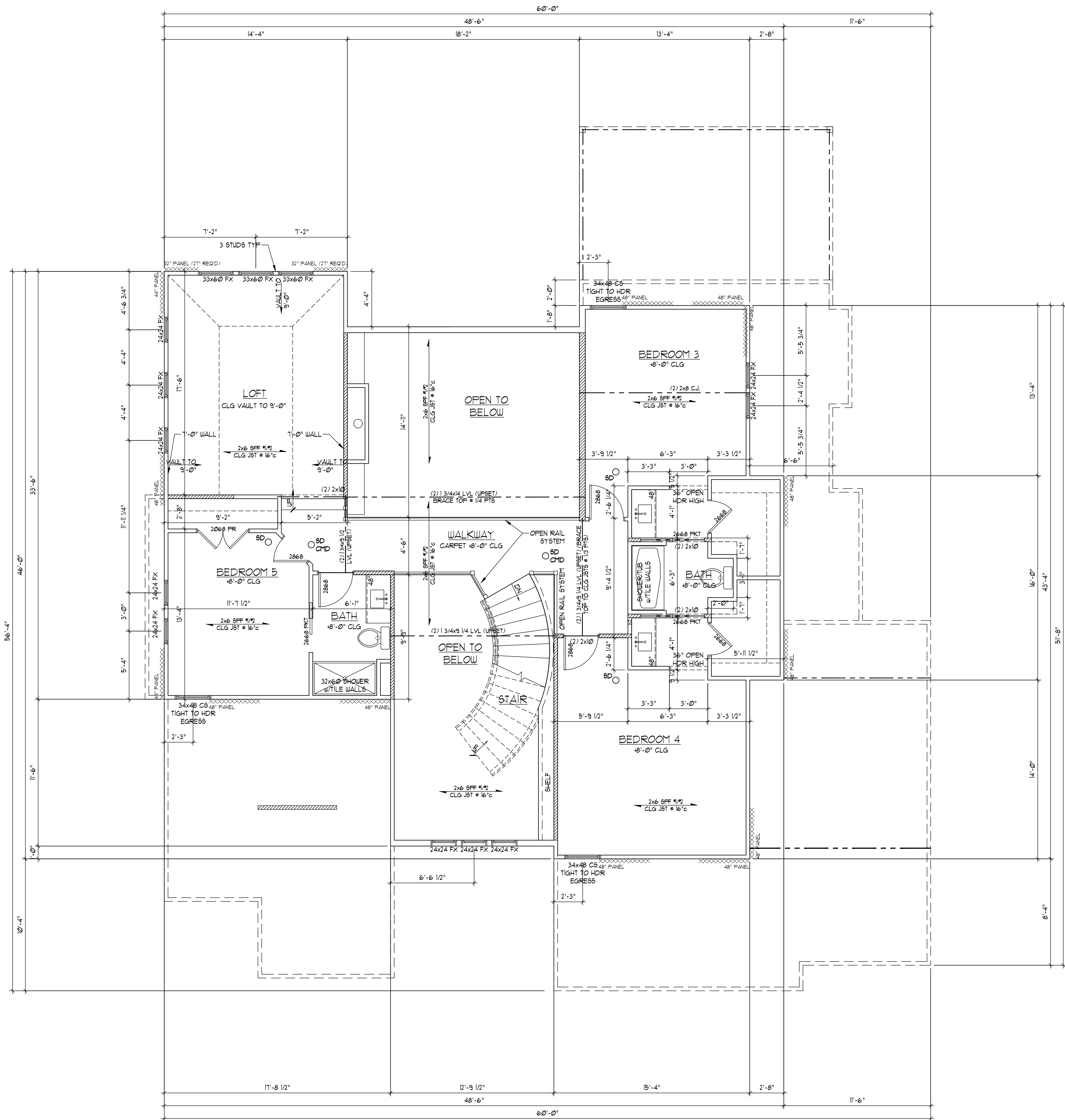
THE MAPLEWOOD III - MODERN

Kourtney Halford & Andrew Baggett

2734 SW Heartland Rd, Lee's Summit, MO

Lot 194 - Hookfarms

GA4



SECOND FLOOR PLAN
SCALE: 1/4" = 1'-0"

GENERAL PLAN REQUIREMENTS

- ALL STUD WALL FRAMING SHALL BE CONTINUOUS FROM THE FLOOR TO ROOF OR CEILING DIAPHRAGM UNO. ALL WALLS OVER 10'-0" ARE TO BE 2x6 @ 16" C UNO.
- PROVIDE WATER-RESISTANT EXTERIOR WALL COVERING ON ALL FRAMED WALLS TO COMPLY WITH IRC SECTION 103.2.
- PROVIDE GFCI ELECTRICAL OUTLETS ON EXTERIOR, IN UNFINISHED BASEMENT, IN BATHROOMS, ABOVE KITCHEN COUNTERS, IN GARAGE, AND WITHIN 6'-0" OF ANY SINK.
- ALL EXTERIOR DOORS SERVED BY LANDING.
- INSTALL CARBON MONOXIDE DETECTORS PER IRC SECTION 315 OUTSIDE OF EACH SLEEPING AREA.
- INSTALL SMOKE DETECTORS IN EACH SLEEPING ROOM, OUTSIDE OF EACH SLEEPING AREA, WITH A MINIMUM OF ONE ON EACH FLOOR PER IRC SECTION 314.
- PROVIDE A "UFER" GROUND PER IRC 3608.1.
- REFER TO SHEET 93 FOR ALL WALL BRACING DETAILS AND/OR CALCULATIONS.
- INSTALL BLOCKING FOR TF HOLDERS, TOWEL BARS, AND TRIM BEAMS.
- GARAGE DOOR H-FRAME, THE H-FRAME FOR ATTACHMENT OF THE TRACK AND COUNTER BALANCE SHALL CONSIST OF THE FOLLOWING: 2x6 VERTICAL JAMBS RUNNING FROM FLOOR TO CEILING ATTACHED WITH 3 1/4"x120 NAILS @ 1" C STAGGERED WITH (1) 3 1/4"x120 NAILS THRU JAMB INTO HEADER, MINIMUM 2x8 HEADER FOR ATTACHMENT OF COUNTER BALANCE SYSTEM.
- OVERHEAD GARAGE DOORS TO MEET 185 MPH WIND LOAD RESISTANCE REQUIREMENTS OF DASHA 102-11 AND ASTM E 330-02.
- MAXIMUM RISER HEIGHT OF STAIRWAYS SHALL NOT EXCEED 7 3/4" AND THE TREADS SHALL PROVIDE A MINIMUM TREAD DEPTH OF 10".
- ALL EXTERIOR AND LOAD BEARING WINDOW AND DOOR HEADERS TO BE (2) 2x8 DFR 2 UNLESS NOTED OTHERWISE ON PLANS.
- ALL HEADER BEARINGS (OTHER THAN WINDOWS) TO BE (2) 2x4 STUDS UNLESS NOTED OTHERWISE. WINDOW HEADER BEARING TO BE (1) 2x4 EA END UNLESS NOTED OTHERWISE.
- SLOPING VAULTS SHALL BE FURRED DOWN WITH 2x MATERIAL & AFFIXED WITH 1/2" OSB FLITCH PLATE TO PROVIDE REQUIRED DEPTH FOR INSULATION (RE: ENERGY REQUIREMENTS and/or FRAMING DETAILS).

//////// DENOTES LOAD BEARING STUD WALL

WINDOW AND DOOR NOTES

- ALL WINDOWS ARE SHOWN IN INCHES (I.E. 30x60 IS A 30"x60" WINDOW). ALL DOORS SHOWN IN FEET AND INCHES (I.E. 28x8 DOOR IS A 2'-8"x6'-8" DOOR). CONTRACTOR/INSTALLER TO VERIFY R.O. DIMENSIONS WITH BUILDER SUPPLIED CUT SHEET PRIOR TO FRAMING.
- ALL WINDOWS TO BE LOW-E GLASS TO MEET ALL LOCAL ENERGY CODE REQUIREMENTS.
- PROVIDE EGRESS WINDOW IN ALL SLEEPING ROOMS. WINDOWS SHALL COMPLY WITH THE FOLLOWING:
 - MINIMUM OPEN AREA 5.7 SF
 - MINIMUM OPENING HEIGHT 24 INCHES
 - MINIMUM OPENING WIDTH 20 INCHES
 - SILL HEIGHT 44" MAX ABOVE FLOOR
- ALL WINDOW SILLS ARE TO BE 24" MIN ABOVE FINISH FLOOR, OR SHALL BE FIXED/INOPERABLE.
- ALL WINDOWS AND GLAZED DOORS SHALL COMPLY WITH IRC SECTION R308, IRC SECTION R308.4. GLAZING IN HAZARDOUS LOCATIONS SHALL BE OF APPROVED SAFETY GLAZING MATERIALS. GLASS IN STORM DOORS, INDIVIDUAL FIXED OR OPERABLE PANELS ADJACENT TO A DOOR WHERE THE NEAREST VERTICAL EDGE IS WITHIN A 24" ARC OF THE DOOR IN A CLOSED POSITION AND WHOSE BOTTOM EDGE IS WITHIN 60" OF THE FLOOR WALLS ENCLOSING STAIRWAYS AND LANDINGS WHERE THE GLAZING IS WITHIN 60" OF THE TOP OR BOTTOM OF STAIR, ENCLOSURES FOR LUBS, SHOWERS AND WHIRLPOOLS. GLAZING IN FIXED OR OPERABLE PANELS EXCEEDING 9 SF AND WHOSE BOTTOM EDGE IS LESS THAN 18" ABOVE THE FLOOR OR WALKING SURFACE WITHIN 36".
- ALL OPERABLE WINDOWS SHALL HAVE FALL PROTECTION PER IRC R312.2.
- ALL GLAZING IN WINDOWS AND DOORS SHALL COMPLY WITH THE TEST CRITERIA FOR CATEGORY II IN ACCORDANCE WITH CPSC 16 CFR 1201.
- WINDOW MANUFACTURER TO CONFIRM EXACT SAFETY AND EGRESS WINDOW LOCATIONS PER LOCAL CODES.

ENERGY REQUIREMENTS

CONTRACTOR TO PROVIDE ENERGY AUDIT USING THE HERS ENERGY RATING SYSTEM. IN LIEU OF AN ENERGY AUDIT, THE FOLLOWING PRESCRIPTIVE REQUIREMENTS MAY BE FOLLOWED:

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- THE BUILDING THERMAL ENVELOPE IS REQUIRED TO BE SEALED PER IRC SECTION N102.4.
- CONTRACTOR TO SUBMIT "MANUAL J" AND "MANUAL D" CALCULATIONS FOR THE HVAC SYSTEM.
- INSULATION TO COMPLY WITH IECC AS FOLLOWS:

WALLS	R-13
CEILING (FLAT)	R-49
CEILING (VAULTED)	R-38 (NOTE: VAULTED AREA NOT TO EXCEED 500sq ft. OR 20% OF ROOF AREA, WHICHEVER IS LESS)
FLOORS OVER UNCONDITIONED SPACE	R-19
CRAWL SPACE WALLS	R-13 (or R-10 CONTINUOUS)
BASEMENT WALLS	R-13 (or R-10 CONTINUOUS)
SLABS	N/R
DUCTWORK	R-8
WINDOWS	U 0.32 (MAX)
U-FACTOR	0.40 (MAX)
SHGC	0.40 (MAX)
SKYLIGHTS	U 0.32 (MAX)
U-FACTOR	0.40 (MAX)
SHGC	0.40 (MAX)

WALL BRACING NOTES:

- ALL WALLS ARE TYPE "CS-W8P" AND ARE CONTINUOUSLY SHEATHED UNLESS NOTED OTHERWISE. THE BRACED WALL NOTATIONS (IF SHOWN) REFLECT THE MINIMUM SHEATHING REQUIREMENTS PER CODE.
 - IF NO NOTATIONS ARE SHOWN FOR WALLS TYPE "CS-W8P" ON PLAN, WALL IS FULLY SHEATHED AND MEETS ALL REQUIREMENTS WITH END CONDITION #1, #3, OR #4.
 - EC # - END CONDITION PER IRC FIGURE R602.10.1, (FOR CONDITIONS #1, #3, & #4 NO HOLDDOWN REQUIRED)
 - INTERIOR WALL BRACING NOT REQUIRED
- XXXXXXXXXXXX DENOTES EXTERIOR BRACED WALL WOOD STRUCTURAL PANEL (W8P or CS-W8P) ATTACHED PER DETAILS AND GENERAL NOTES

UPPER LEVEL
FINISH: 1261 SF



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Project #: 8083-XXXX

DATE:

Permit: 11/23/2024

SECOND FLOOR PLAN FOR:

THE MAPLEWOOD III - MODERN

Kourtney Halford & Andrew Baggett

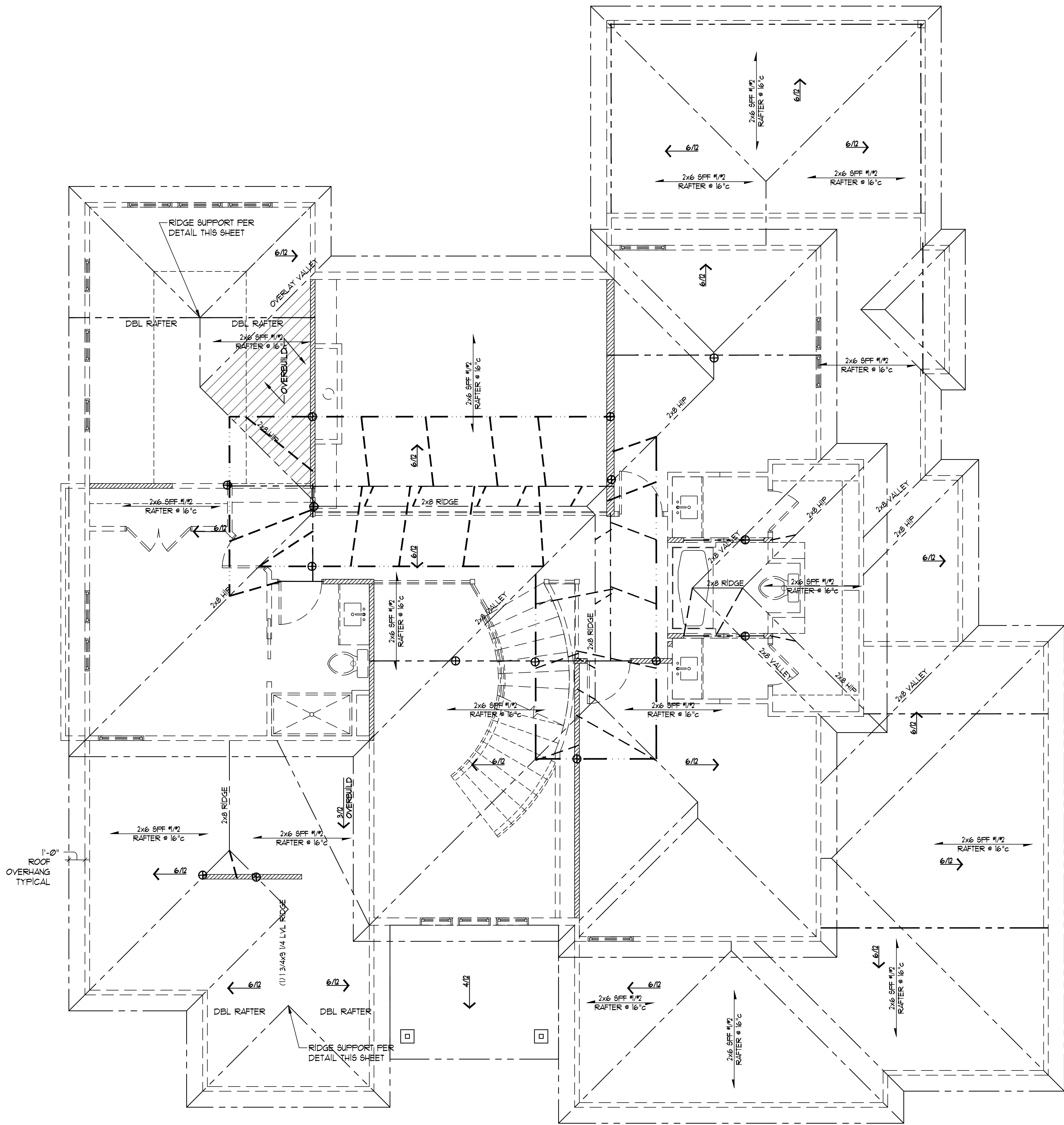
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Lot 194 - Hookfarms

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RELEASE FOR CONSTRUCTION
AS NOTED FOR PLAN REVIEW
ENVIRONMENTAL SERVICES
LEE'S SUMMIT, MISSOURI

01/09/2025



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

ROOF PLAN NOTES

- ALL ROOF RAFTERS NOT CALLED OUT ARE TO BE 2x6 SFF #1/2 @ 16" c
- ALL CEILING JOISTS NOT CALLED OUT ARE TO BE 2x6 SFF #1/2 @ 16" c
- ALL VALLEYS TO BE FURRED DOWN w/2x MATERIAL TO PROVIDE FOR R-38 INSULATION
- ALL EXTERIOR AND LOAD BEARING WINDOW AND DOOR HEADERS TO BE (2) 2x10 DFR #2 UNLESS NOTED OTHERWISE ON PLANS
- ALL RIDGES, HIPs, AND VALLEYS NOT MARKED SHALL BE (1) NOMINAL SIZE LARGER THAN THE INTERSECTING RAFTERS
- CEILING JOISTS AND RAFTERS SHALL BE NAILED TO EACH OTHER WITH (3) 16d COM (3 1/2"x0.62") NAILS AND THE RAFTER SHALL BE NAILED TO THE TOP WALL PLATE WITH (3) 8d COM (2 1/2"x0.131") NAILS. CEILING JOISTS SHALL BE CONTINUOUS OR SECURELY JOINED WITH (3) 16d COM (3 1/2"x0.62") NAILS WHERE THEY MEET OVER INTERIOR PARTITIONS AND ARE NAILED TO ADJACENT RAFTERS TO PROVIDE A CONTINUOUS TIE ACROSS THE BUILDING WHEN SUCH JOISTS ARE PARALLEL TO THE RAFTERS
- WHERE CEILING JOISTS ARE NOT CONNECTED TO THE RAFTERS AT THE TOP WALL PLATE (or AT LOCATIONS WHERE C.J. ARE PERPENDICULAR TO RAFTERS), INSTALL 2x4 RAFTER TIES @ 16" c WITH (3) 16d COM (3 1/2"x0.62") NAILS EA END.
- ADDITIONAL NOTE: ROOFS WITH SLOPE OF 4/12 OR SHALLOWER SHALL HAVE (5) 16d COM NAILS AT THE CONNECTIONS LISTED IN NOTE #6 AND #1.
- RAFTER CONNECTIONS DESIGNED TO RESIST UPLIFT FORCES PER IRC TABLE B02.11. ROOF HEADERS DO NOT HAVE NOTABLE UPLIFT TO REQUIRE HOLD DOWNS. REFER TO STRUCTURAL DETAIL SHEET S1 CONNECTION TABLE FOR FASTENERS
- INSTALL 2x4 COLLAR TIES @ 48" c IN UPPER 1/3rd OF ROOF RAFTER. IF COLLAR TIES CAN NOT BE INSTALLED (AND FOR VAULTED/ CATHEDRAL ROOFS) INSTALL 1 1/4"x 20ga RIDGE STRAP (SIMPSON LSTA2 or EQUIV.) PER FASTENER SCHEDULE.
- PROVIDE METAL FLASHING OR CLOSED CUT CORNER VALLEY w/ice 4 WATER SHIELD AT ALL ROOF VALLEYS.
- ROOF AND SOFFIT VENTS PER LOCAL CODES. WHERE POSSIBLE, PROVIDE ROOF VENTING ON BACK SIDE OF ROOF. BATH VENTS TO VENT DIRECTLY TO THE OUTSIDE.
- PER IRC SECTION R802.3 - FOR ROOF PITCHES 3/12 OR GREATER, STRUCTURAL MEMBERS THAT SUPPORT RAFTERS AND CEILING JOISTS SUCH AS RIDGE BEAMS, HIPs AND VALLEYS THAT ARE SUPPORTED BY BRACES AND/OR FURLING AT THE ENDS ARE NOT REQUIRED TO BE DESIGNED AS BEAMS AND ARE TO BE FRAMED USING LUMBER THAT IS NOMINALLY 2" WIDE BY ONE SIZE GREATER THAN ATTACHING FRAMING MEMBER (NOTE #5). THERE IS NO STRUCTURAL LINE LOADING ON THE MEMBER.
- ALL HIPs AND HIP TO RIDGE CONNECTIONS SHOULD BE INSTALLED AND TIED PER THE ATTACHED DETAILS ON SHEET S2. THIS INCLUDES ADDITIONAL 2x8 CEILING JOISTS AND COLLAR TIES.
- EXACT GUTTER AND DOWNSPOUT LOCATION BY GUTTER INSTALLER.

ROOF BRACING

- ROOF FURLINS TO BE PLACED APPROXIMATELY WHERE SHOWN ON PLANS. USE 2x6 STUD GRADE FURLIN PLACED PERPENDICULAR TO RAFTERS (UNLESS NOTED OTHERWISE ON PLANS)
- RIDGE, HIP, VALLEY, AND FURLIN BRACE STRUTS TO BE PLACED AS SHOWN ON PLANS. STRUTS TO BE 2x4 STUD GRADE w/ MAXIMUM UNBRACED LENGTH OF 8'-0" AND AT A 45° ANGLE w/ HORIZONTAL OR GREATER (VERTICAL WHERE POSSIBLE)
- BRACES LONGER THAN 8'-0" SHALL BE 2x4 STRONG BACK BRACES

NOMENCLATURE

- CEILING HEADERS AND BEAMS
- 2x6 ROOF FURLINS (UNLESS NOTED OTHERWISE ON PLANS)
- 2x4 FURLIN/RIDGE BRACING @ 4'-0" c (STRONG BACK IF OVER 8'-0" LONG)
- 2x4 STRONGBACK HIP, VALLEY, OR RIDGE RAFTER SUPPORT
- LOAD BEARING STUD WALLS



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Project #: 8083-XXXX

DATE:

Permit: 11/23/2024

ROOF PLAN FOR:

THE MAPLEWOOD III - MODERN

Kourtney Halford & Andrew Baggett
2734 SW Heartland Rd, Lee's Summit, MO
Lot 194 - Hookfarms

GA6

RELEASE FOR CONSTRUCTION
AS NOTED FOR PLAN REVIEW
DEVELOPMENT SERVICES
LEE'S SUMMIT, MISSOURI
01/09/2025

1. Design and construction work for this project shall conform to the requirements of the 2016 International Residential Code as amended by the City of Lee's Summit, MO.
2. Furnish all labor, materials and equipment necessary to complete the work as shown or in the drawings.
3. Design Loads:

A. Elevated Floors:	
Residential (Live Loads)	40 PSF
Sleeping rooms (Live Loads)	30 PSF
Floor Dead Load	10 PSF
Floor Slabs Deflection (Total)	L/240
Floor Joist Deflection (Live)	L/360
Attic Storage (Live Loads)	10 PSF
Ceiling Dead Load	5 PSF
Ceiling Joists Deflection	L/240
B. Roof Live Load	20 PSF
C. Roof Snow Load:	
Ground Snow Load, pg	20 PSF
Flat Roof Snow Load, pf	20 PSF
Snow Exposure Factor, Ce	1.0
Snow Load Importance Factor, Is	1.0
Thermal Factor, Ct	1.0

1. It is recommended that the contractor employ the services of a geotechnical engineer to observe, test and approve all excavation, fill and backfill work, and to determine that subgrade conditions are compatible with those used in the design.
2. All existing and proposed retaining walls shall be designed in accordance with Table 1504.2 of the International Building Code. All footings are designed to be on natural undisturbed soil or controlled fill placed and adequately sustaining a maximum bearing pressure of 1500 psf. If suitable bearing capacity is not encountered at the elevation indicated in the drawing, contractor shall notify the architect immediately.
3. All topsoil, organic material and existing structures shall be removed from building areas and from areas to be paved. Stockpile all topsoil for reuse.
4. Controlled Fill Materials:
 - a. Granular Fill - Granular fill shall consist of washed, evenly graded mixture of crushed stone, crushed or uncrushed gravel, with 100 percent passing a 1 1/2 inch sieve and not more than 5 percent passing a No. 4 sieve.
 - b. Shrinkage or Controlled Fill - Shrinkage-swell controlled fill shall consist of material having a relatively low plasticity with a liquid limit of less than 45 percent and a plasticity index of less than 21 percent.
 - c. Controlled Fill - Controlled fill shall be either granular or shrinkage-swell controlled fill as specified above and as approved by the geotechnical engineer.
 - d. Controlled fill shall consist of material having a relatively low plasticity with a liquid limit of less than 45 percent and a plasticity index of less than 21 percent.
5. Foundation Preparation:
 - a. Picofoot site to identify soft or disturbed areas. If areas are found to be unsuitable for support of footings and/or slab-on-grade placement, contact the Engineer for record.
 - b. Backfill directly under slab-on-grade with minimum of 4 inches of granular fill consisting of washed, evenly graded mixture of crushed stone, crushed or uncrushed gravel, with 100 percent passing a 1 1/2 inch sieve and not more than 5 percent passing a No. 4 sieve.

1. All concrete work shall conform to the requirements of ACI 318 "Building Code Requirements for Reinforced Concrete" and ACI 301 "Specification for Structural Concrete Buildings."
2. Concrete materials shall comply with:
 - A. Cement - ASTM C 150 Type I
 - B. Aggregate - ASTM C 33, maximum aggregate size 3/4 inch
 - C. Water - Potable
 - D. Air-entraining admixture - ASTM C 260
 - E. Water-reducing admixture - ASTM C 494, including superplasticizers.
 - F. Fly ash - ASTM C 618, Class C
3. Concrete shall develop the following minimum 28 day design compressive strength(f_c)

Type of Construction	Compressive Strength(f _c)
A. Footings, walls and basement slab	3000 PSI
B. Garage Slab	3500 PSI
C. Exterior slabs, steps, and curbs	4000 PSI
D. (air-entrained concrete)	

- Concrete proportions shall be established on the basis of field experience and/or trial mixtures in accordance with ACI 318-68 Sections 5.2 and 5.3. When fly ash is utilized in the mix, mix shall contain a water-reducer. Fly ash shall be added at a rate of not more than 100 pounds per cubic yard of concrete. Maximum replacement shall be not more than 15 percent by weight. Proportion and design measures to result in concrete slump at point of placement not more than 4 inches, except good for 5" or more than 6 inches.
- Use an earth-retention system to support the concrete slab to result in concrete at point of placement having an air content of 15 percent tentered air.
- Reinforcing Steel:
 - A. Reinforcing bars - ASTM A 615, grade 40, deformed.
 - B. Welded bars - ASTM A 108, type 1, at least one full mesh and lace splices with wire.
 - C. Supports for reinforcement - comply with CRSI recommendations.
- Concrete Work Execution:
 - A. Minimum concrete cover for reinforcement shall be, unless noted otherwise on the drawings:
 - Exposed and exposed to earth ————— 3 inches
 - Cast against earth or weather ————— 2 inches
 - Not exposed to earth or weather ————— 1 1/2 inches
 - B. All concrete is reinforced, reinforcement not otherwise indicated with same dimensions as similar sections.
 - C. Protect concrete surface from physical damage or reduced strength due to weather extremes:
 1. In cold weather comply with ACI 308
 2. In hot weather comply with ACI 305
 - D. In order of grade, beams and walls provide corner reinforcement. Lap two feet each, each corner in corners, face, matching size and spacing of horizontal reinforcement.
 - E. At openings in walls, and one bar (opening dimension plus 60 bar diameters) each face, each corner of opening.
- Provide one 4" dia diagonally at each end of all steps in grabeis and foundation walls.
- Provide reinforcement joints in foundation walls and beams and not greater than 50 feet in any direction. Provide control joints in slabs-on-grade at not greater than 20 feet on center in any direction. Use cast control joints minimum 1/4" slab depth, and seal after slab finishing as possible without damage.
- Coordinate concrete work with architectural and mechanical drawings for line fittings, recesses, doors, embedded items and other conditions.

1. All rough carpentry shall conform to the requirements of NRPFA "National Design Specification of Wood Construction"; TPI "Design Specifications for Light Metal Plate Connected Wood Trusses"; APA "Plywood Design Specifications"; DDC PS 1 "Product Standard for Construction and Industrial Plywood"; DDC PS 56 "Structural Glued Laminated Timber" and Chapter 23 of the International Building Code.
2. Rough carpentry materials shall comply with:
 - A. Lumber - SAS, surface dry, grade marked, complying with PS 20; graded under WWPA or SPIB rules:

Studs:	Stud Grade - Spruce-Pine-Fir
Joist:	No. 2 Douglas Fir No. 2 Hem Fir
Header:	No. 2 Douglas Fir
Rafter:	No. 3 Douglas Fir No. 2 Spruce-Pine-Fir
Plates:	No. 3 Spruce-Pine-Fir
Blocking:	No. 3 Spruce-Pine-Fir

- B. Metal framing fasteners - ASTM A153, 1025 galvanized fasteners complying with ICC's hulls.
- C. Plywood - APA rated exterior, comply to PS-1.
- D. LVL - Laminated veneer lumber shall be grade 2800 F-OR and shall meet the requirements of NER-442, NER-470 or ER-442.
- E. Joint details - All joints from APA rated fastening board wall, LVL, flanges, utilities, waterproof type grade shall meet requirements of NER-450, NER-444, NER-476 or ICBO #PSP-374.
- F. Joint details - Combination 20'-0" in accordance with Table 25-1 Part C of Chapter 23 of the International Building Code.
- G. Fiberglass Sheathing - DGC Standard PS 57-73.
- H. Gypsum Sheathing Board - ASTM C 368 or UBC Standard No. 47-10.
- I. Gypsum Wallboard - ASTM C 368 and UBC Standard No. 47-11.
- J. Roof sheathing for standard asphalt roofing shall be 1/2 inch APA rated sheathing 240 exterior grade plywood or 1/2 inch APA rated sheathing 242 interior grade plywood 3216 exterior grade clipped. Lay sheathing with face grain perpendicular to support members and stagger end joints 4'-0". FASTEN PER SCHEDULE BELOW.
- K. Interior sheathing shall be 1/2 inch APA rated sheathing 242/4 exterior grade. Lay sheathing with face grain perpendicular to support members and stagger end joints 4'-0". FASTEN PER SCHEDULE BELOW.
- L. Exterior sheathing shall be 1/2 inch APA rated sheathing 240 / 7/16 inch LP Smart Side exterior grade. Provide solid sheathing at all unsupported panel edges FASTEN PER SCHEDULE BELOW. For LP Siding, fasten through both panels at edge supports.
- M. Interior sheathing where noted shall be 1/2 inch gypsum wallboard. FASTEN PER SCHEDULE BELOW.
- N. Attach metal framing fasteners to framing members with minimum number and size of nails listed in Table No. 125B.
- O. Provide 1/2" depth solid sheathing 1" x 4 cross bracing, or 16 gauge metal cross bracing bridging at ends of members and 8'-0" intervals along members.

		WALL			
8	Stud to stud (not at braced wall panels)	16d common 10d box	3 1/2" x 16" 2' 3" x 12" 8'	24" face nail 16" face nail	
9	Stud to stud and abutting studs at intersecting wall corners (at braced wall panels)	16d box 16d common	3 1/2" x 13" 3' 3" x 13" 1'	16" face nail	
10	Roll-up header 2" to 2" header with 1/2" spacer	16d common 16d box	3 1/2" x 16" 2' 3 1/2" x 13" 3'	16" each edge face nail 12" each edge face nail	
11	Continuous header to stud	(5) 8d box (4) 8d common (4) 10d box	(5) 2 1/2" x 11" 3' (2) 3 1/2" x 13" 1' (3) 3" x 12" 8'	Toe nail	
12	Top plate to top plate	16d common 16d box	3 1/2" x 16" 2' 3" x 12" 8'	16" face nail 12" face nail	
13	Double top plate splice for SDCs A-D2 with seismic braced wall panel spacing < 25'	(8) 16d common (12) 16d box (12) 10d box	(8) 3 1/2" x 16" 2' (12) 3 1/2" x 13" 3' (12) 3" x 12" 8'	Face nail on each side of end joint (minimum 24" lap splice length each side of end joint)	
14	Double top plate splice SDCs D1, D1, or D2, and braced wall panel spacing > 25'	(12) 16d	(12) 3 1/2" x 13" 3'		
15	Bottom plate to stud, rim joist, band joint or blocking (not at braced wall panels)	16d box 16d common	3 1/2" x 16" 2' 3 1/2" x 13" 3'	16" face nail 12" face nail	
16	Bottom plate to stud, rim joist, band joint or blocking (at braced wall panel)	(3) 16d box 2" 16d common	(3) 3 1/2" x 13" 3' (2) 3 1/2" x 16" 2' (3) 3" x 13" 1'	3 each 16" face nail 2 each 16" face nail 4 each 16" face nail	
17	Top or bottom plate to stud	(4) 8d box (3) 16d box (4) 8d common (4) 10d box	(4) 2 1/2" x 11" 3' (3) 3 1/2" x 13" 3' (4) 2 1/2" x 13" 1' (4) 3" x 12" 8'	Toe nail	
18	Top plates, laps at corners and intersections	(3) 16d box 2" 16d common	(3) 3 1/2" x 13" 3' (2) 3 1/2" x 16" 2' (3) 3" x 13" 1'	End nail	
19	1" brace to each stud and plate	(3) 8d box (2) 8d common (2) 10d box (2) Staples	(3) 2 1/2" x 11" 3' (2) 2 1/2" x 13" 1' (3) 3" x 12" 8'	Face nail	
20	1" x 6" sheathing to each bearing	(3) 8d box (3) 8d box (3) 8d common (3) 10d box (3) Staples	(3) 2 1/2" x 11" 3' (2) 2 1/2" x 13" 1' (2) 3" x 12" 8'	Face nail	
21	1" x 8" and wider sheathing to each bearing	(4) 8d box (3) 8d common (3) 10d box (4) Staples	(4) 2 1/2" x 11" 3' (3) 2 1/2" x 13" 1' (3) 3" x 12" 8'	Face nail	
22	Wider than 1" x 8"	(4) 8d box (3) 8d common (3) 10d box (4) Staples	(4) 2 1/2" x 11" 3' (3) 2 1/2" x 13" 1' (3) 3" x 12" 8'		

ITEM	DESCRIPTION OF BUILDING ELEMENTS	NUMBER AND TYPE OF FASTENER ^{a, b, c}		SPACING AND LOCATION	
		COMMON NAIL	PNEUMATIC NAIL	Edges (inches) ^d	Intermediate (inches) ^{e, f}
WOOD STRUCTURAL PANELS, SUBFLOOR, ROOF AND INTERIOR WALL SHEATHING TO FRAMING AND PARTICLEBOARD WALL SHEATHING TO FRAMING					
30	3/8" – 1/2"	8d common 8d common (roof)	2" x 10" 131° 2 1/2" x 0.131"	6	12 ^g
31	1/9/32" – 1"	8d common	2 1/2" x 0.131"	6	12 ^g
32	1 1/8" – 1 1/4"	10d common 8d reformed nail	3" x 0.148" 2 1/2" x 0.131"	6	12 ^g
OTHER WALL SHEATHING					
33	1/2" structural cellululosic fibrousboard sheathing	1 1/2" galv. roofing nail, 7/16" Ø hole, crown staple 16 ga., 1 1/4" long		3	6
34	25/32" structural cellululosic fibrousboard sheathing	1 3/4" galv. roofing nail, 7/16" Ø hole, crown staple 16 ga., 1 1/4" long			
35	1/2" gypsum sheathing ^d	1 1/2" galv. roofing nail, staple galv., 1 1/2" long, 1 1/4" screws, Type W or s		7	7
36	5/8" gypsum sheathing ^d	1 3/4" galv. roofing nail, staple galv., 1 5/8" long, 1 1/4" screws, Type W or s		7	7
WOOD STRUCTURAL PANELS, COMBINATION SUBFLOOR UNDERLAYER TO FRAMING					
37	3/4" and less	8d reformed 8d common	2" x 0.120" 2 1/2" x 0.131"	6	12
38	7/8" – 1"	8d common 8d reformed	2 1/2" x 0.131" 2 1/2" x 0.120"	6	12
39	1 1/8" – 1 1/4"	10d common 8d reformed	3" x 0.148" 2 1/2" x 0.120"	6	12

a. Nails are smooth-common, box or deformed shanks except where otherwise stated. Nails used for framing and sheathing connectors shall have minimum average bending plate strength of 1,000 lb. and shear resistance of 1,100 lb. per inch of nail. For nail shank diameters larger than 1/4 inch, nail length shall not be less than 1 1/2 in. and 100 lb. for shank diameters of 1/4 inch and less.

b. Staples are 16 gauge wire and have maximum 7/16-in. on diameter common.

c. Nails shall be spaced of not more than 6 inches on center at all supports where spans are 48 inches or greater.

d. Four foot by 8 foot or 4 foot by 8 foot panels shall be applied vertically.

e. Spacing of fasteners not included in this table shall be based on Table R602.3.03.

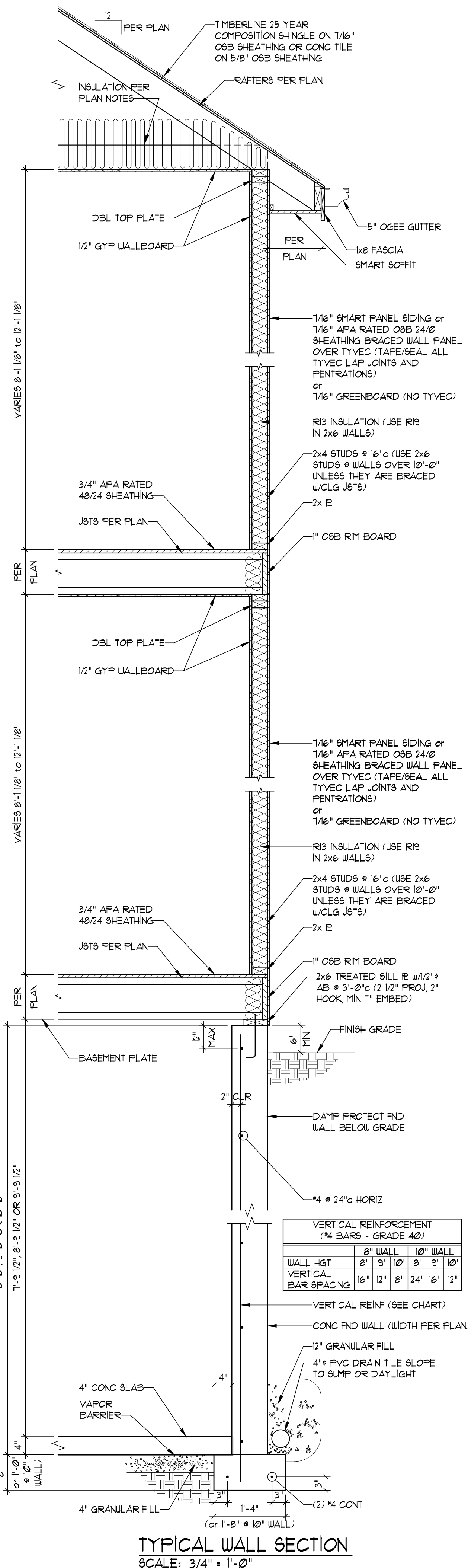
f. Where the ultimate design wind speed is greater than 130 mph, nails on sheathing panel roof sheathing to gable end wall framing shall be spaced 6 inches on center. Where the ultimate design wind speed is greater than 130 mph, nails on sheathing panel roof sheathing to intermediate supports shall be spaced 6 inches on center for minimum 6-inch distance from ridge, eaves and gable ends and on vertical end wall framing.

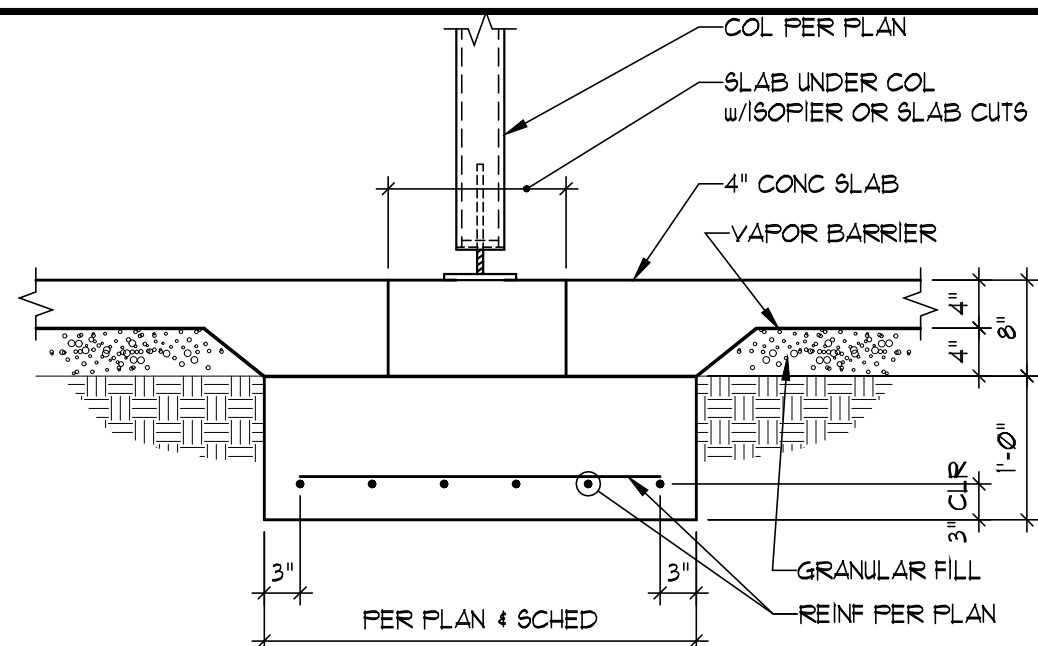
g. Gypsum sheathing shall conform to ASTM C 1396 and shall be installed in accordance with AC 205.3. Fibrousboard sheathing shall conform to ASTM C 208.

h. Spacing of fasteners for roof sheathing panel edges and panel ends supported by framing members and sheathing blocking and at four corners only. Spacing of fasteners on roof sheathing panel supports at panel edges supported by framing members and framing blocking. Blocking and at four corners only. Spacing of fasteners for framing members need not be provided except as required by other provisions of this code. Floor paneling shall be supported by framing members or blocking.

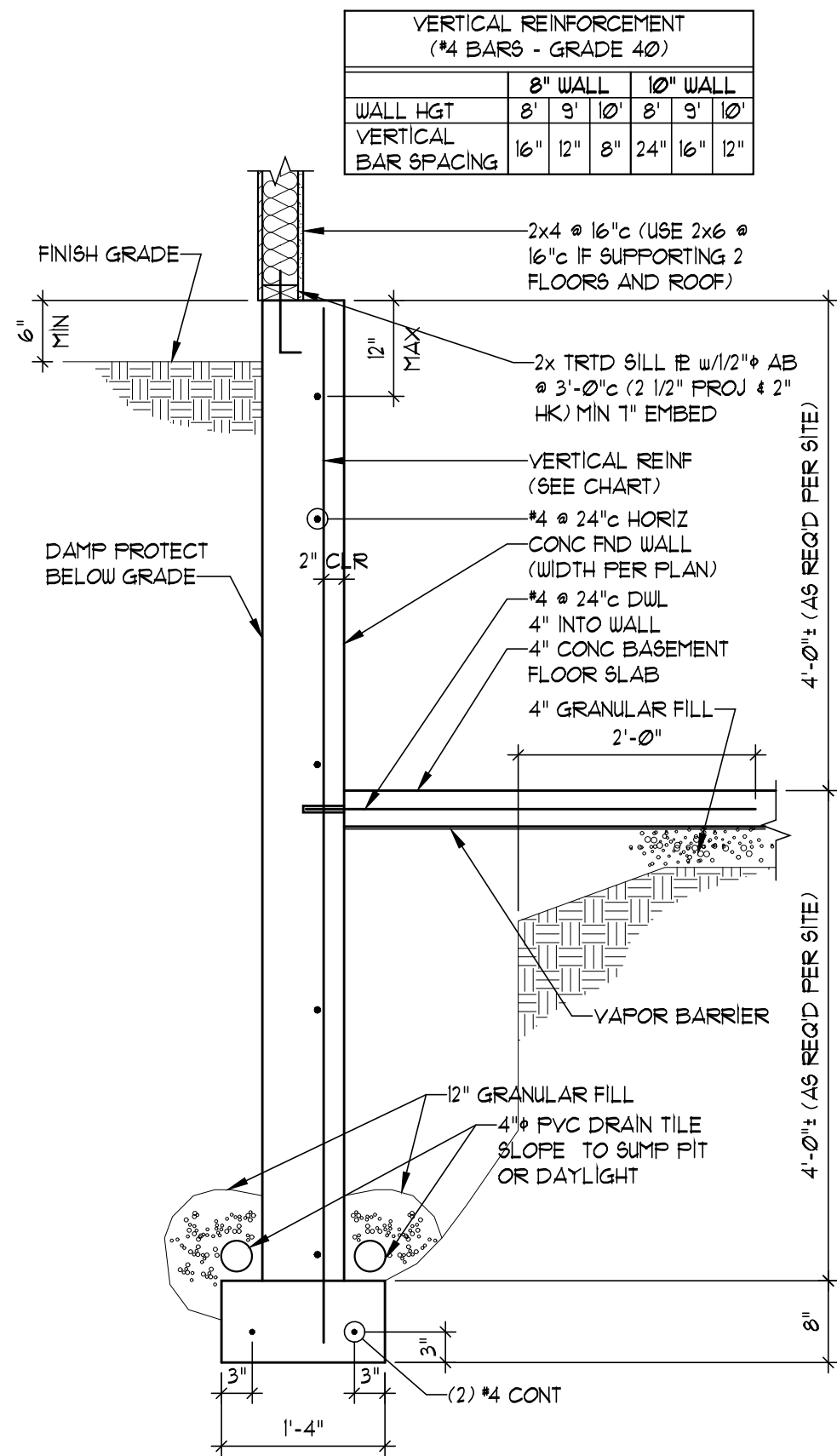
i. Where a rafter is fastened to an adjacent girdler ceiling joist in accordance with this schedule, provide two toe nails on one side of the rafter and toe nails from the ceiling joist to top plate in parallel with the schedule. The toe nail on the opposite side of the rafter shall not be required.

j. Staples to be 7" crown, 16ga., 1 3/4" long.

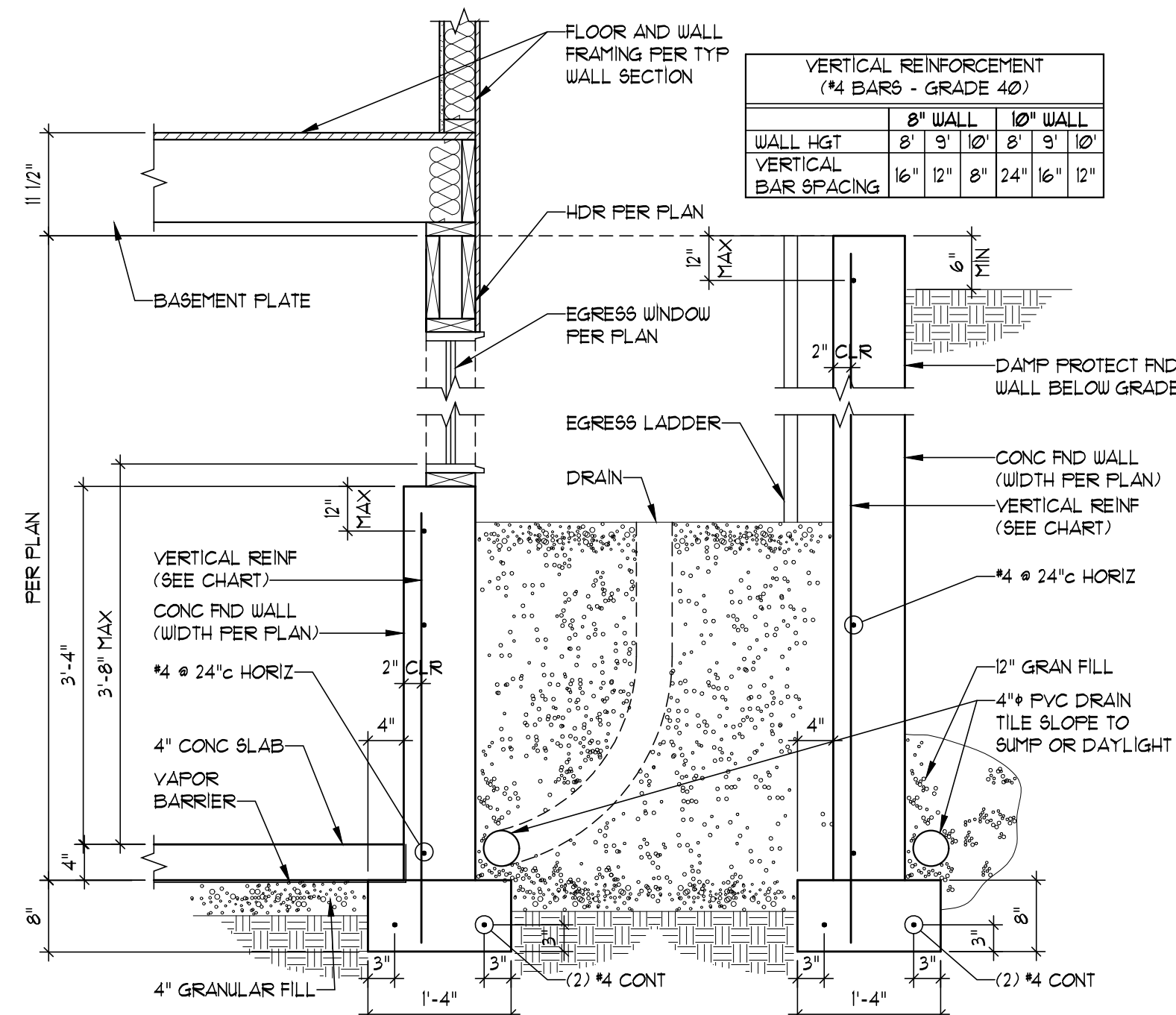




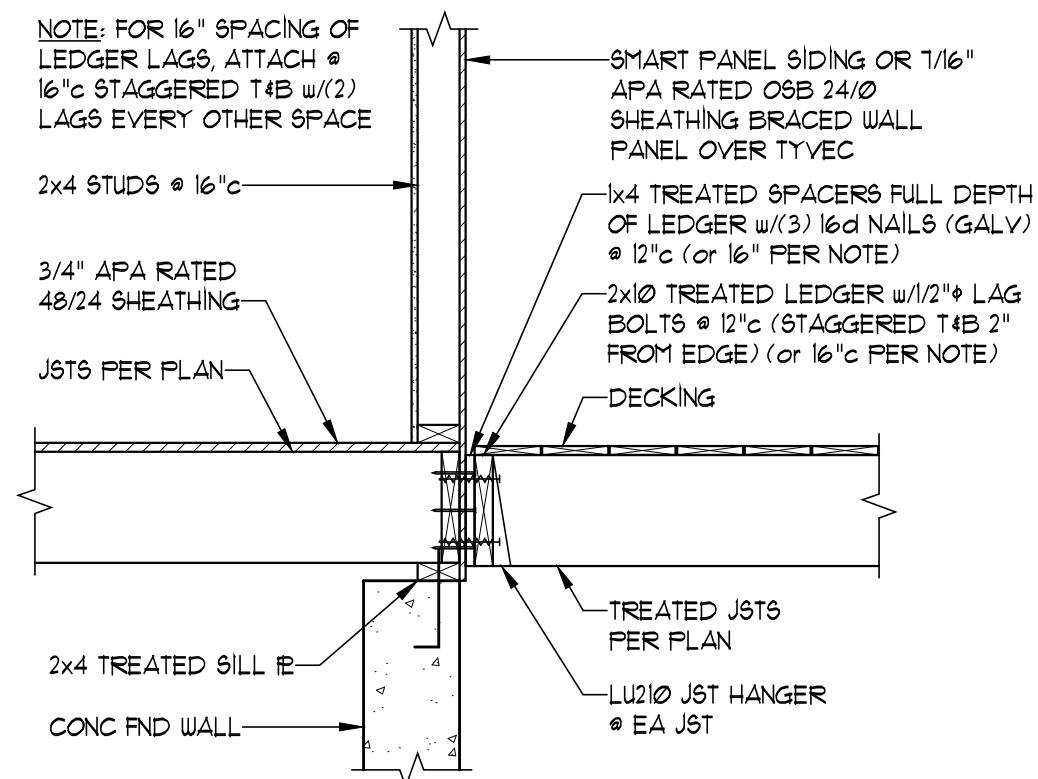
TYPICAL INTERIOR COLUMN
SCALE: 3/4" = 1'-0"



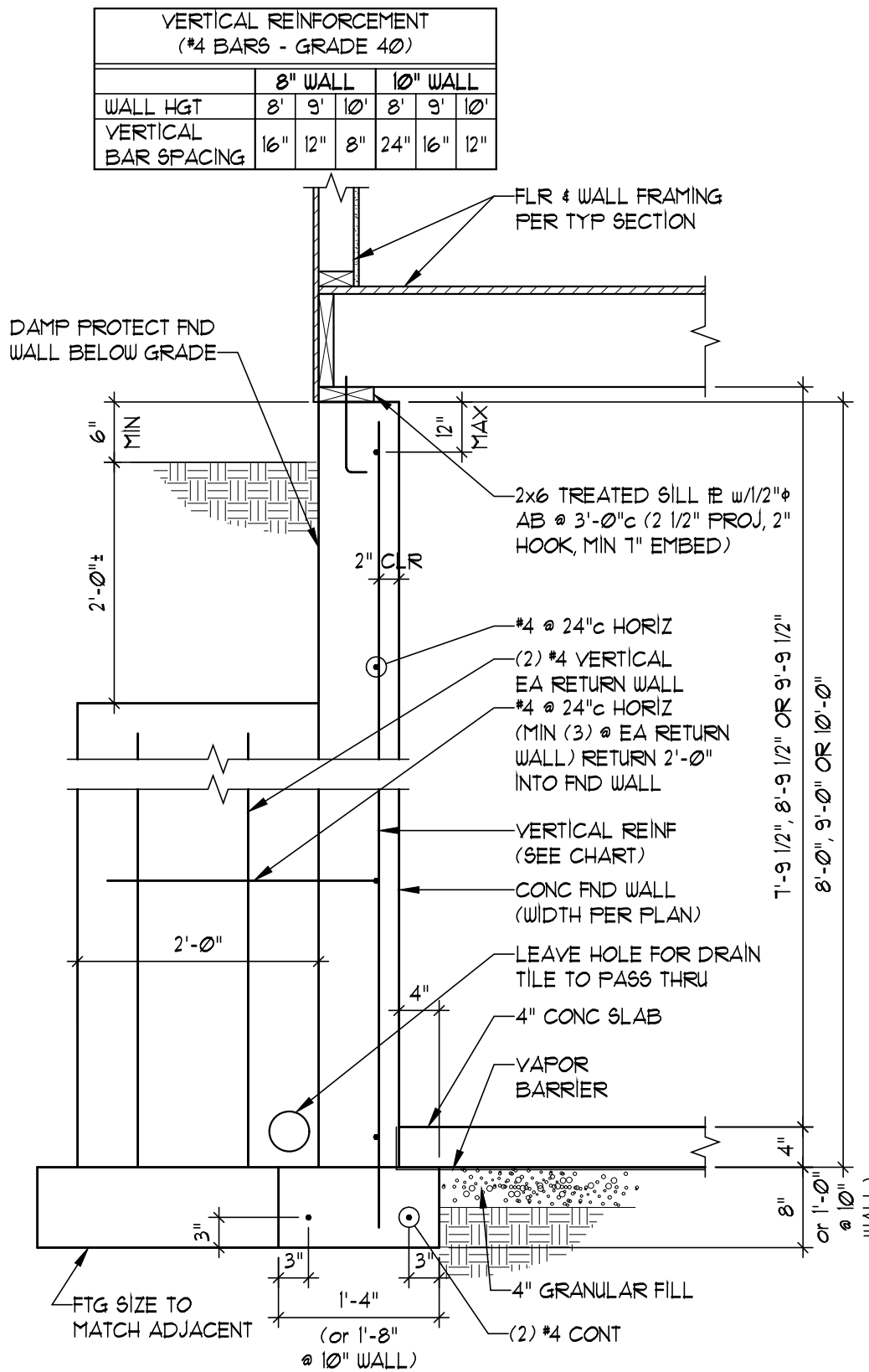
TYPICAL DAYLIGHT SECTION
SCALE: 3/4" = 1'-0"



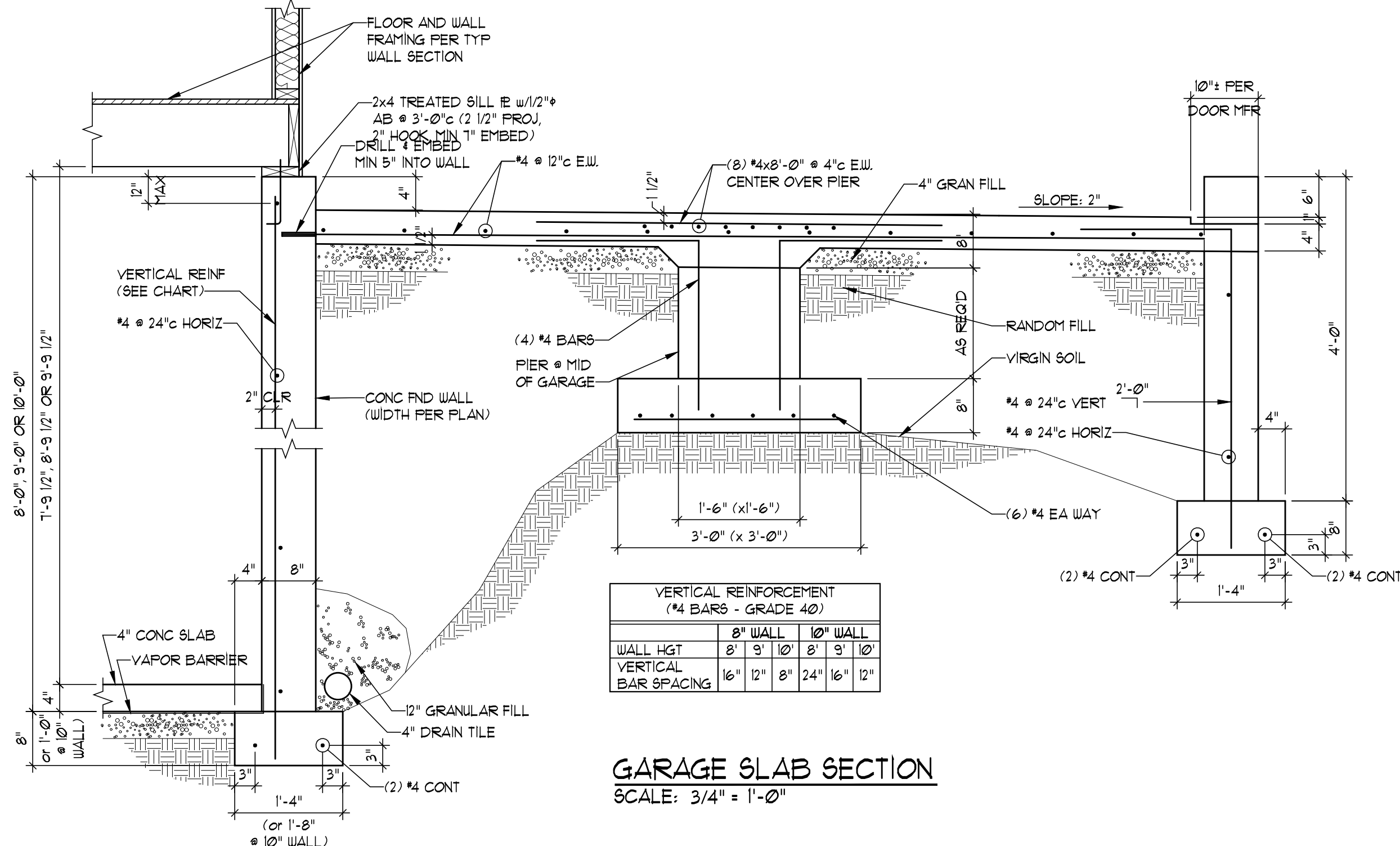
TYPICAL WINDOW WELL
SCALE: 3/4" = 1'-0"



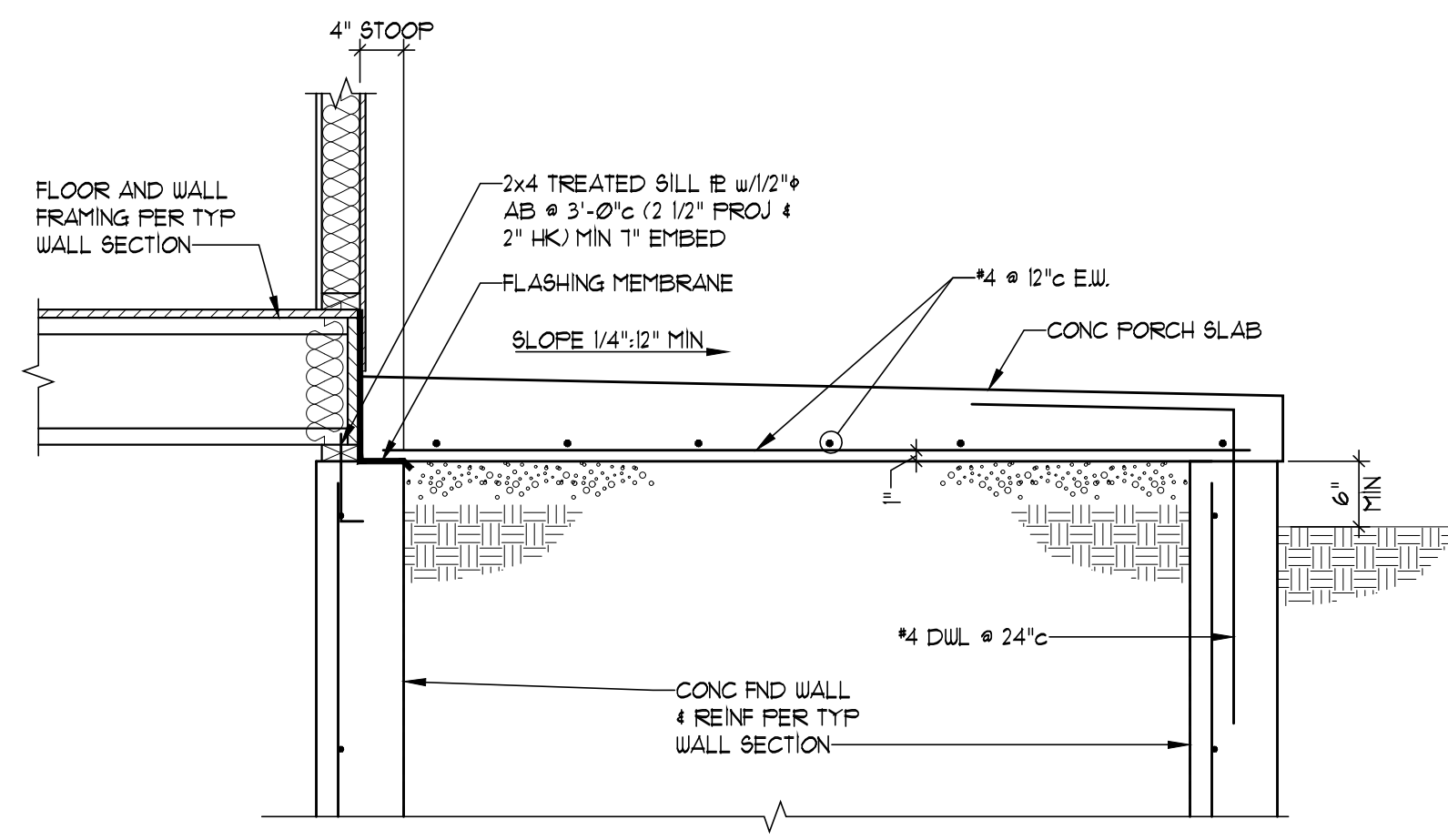
DECK ATTACHMENT
SCALE: 3/4" = 1'-0"



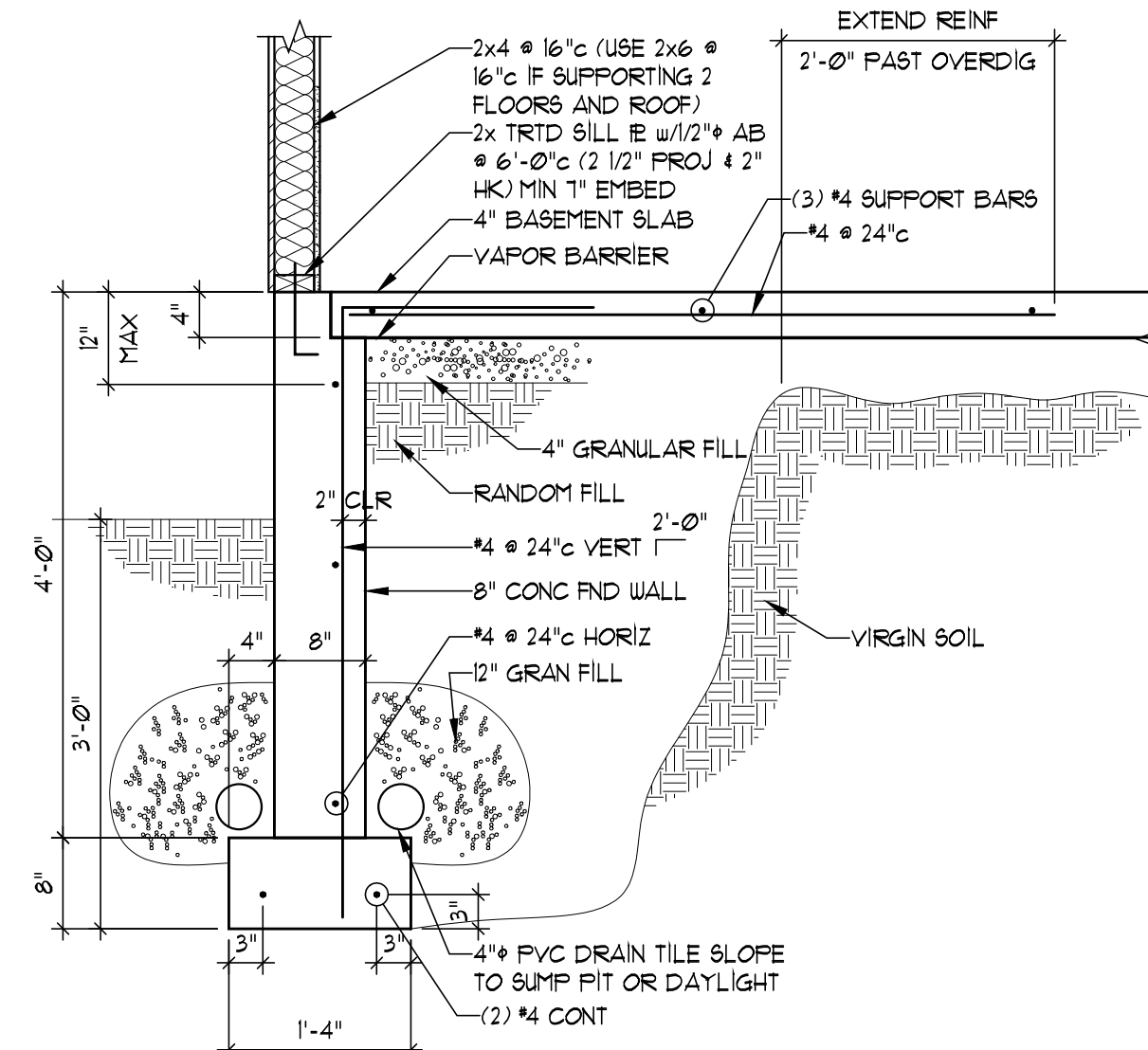
TYPICAL PILASTER SECTION
SCALE: 3/4" = 1'-0"



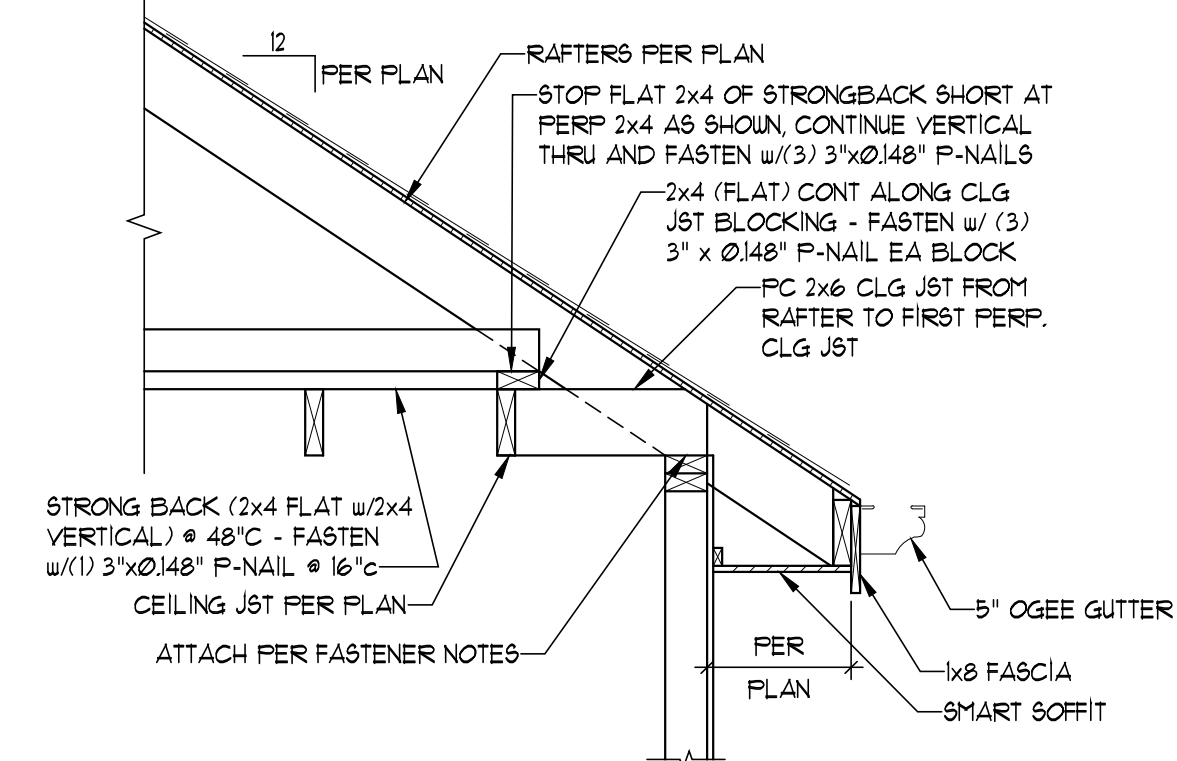
GARAGE SLAB SECTION
SCALE: 3/4" = 1'-0"



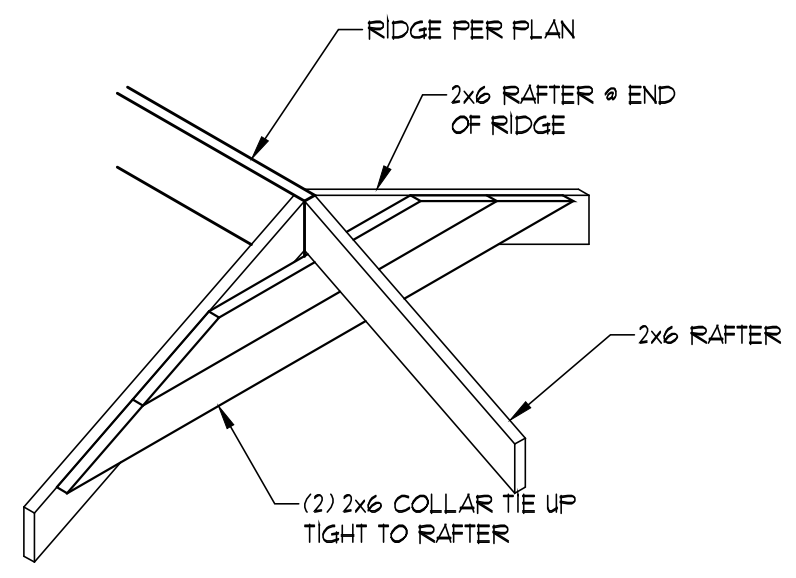
TYPICAL SECTION THRU PORCH
SCALE: 3/4" = 1'-0"



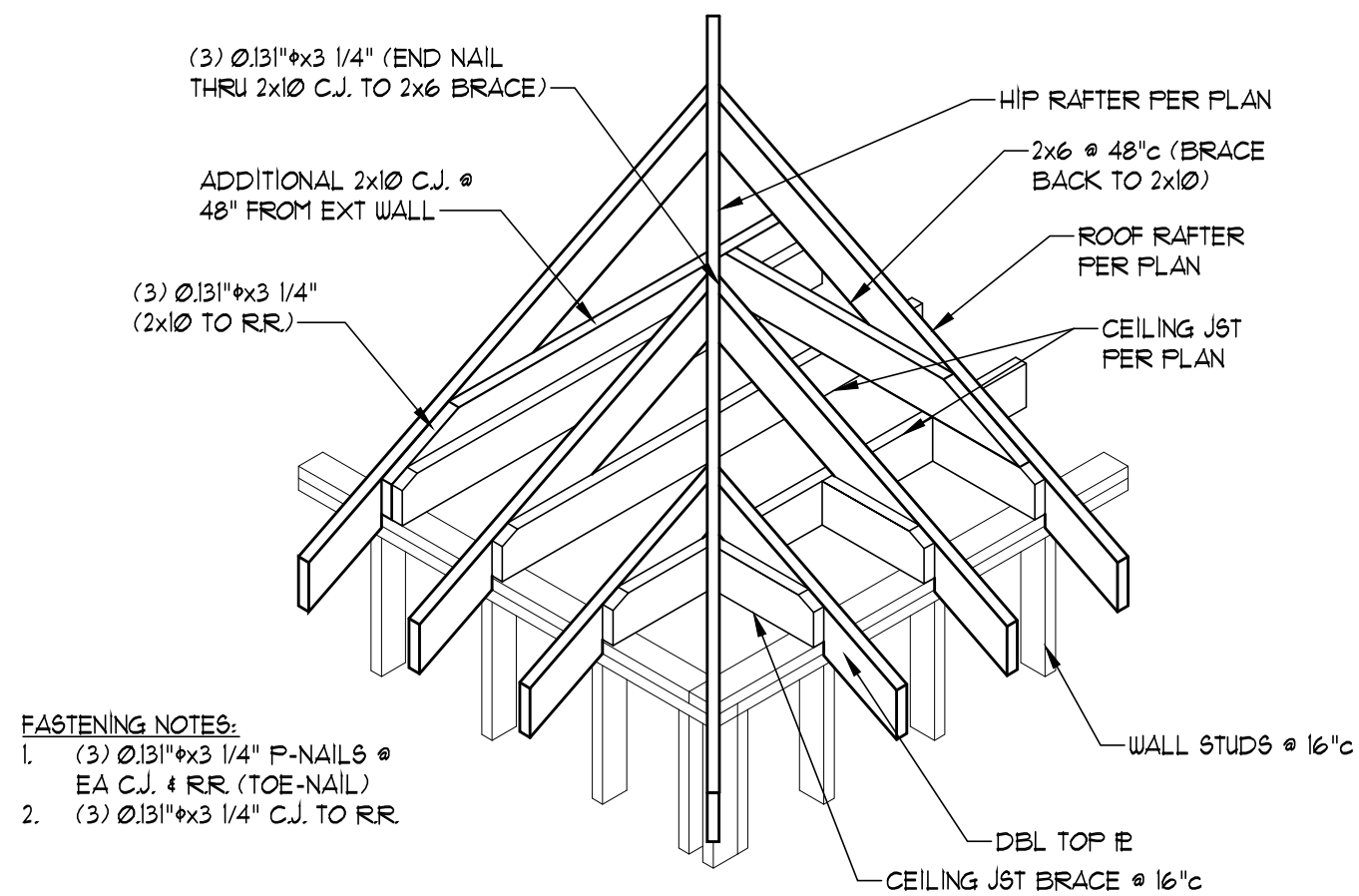
TYPICAL WALKOUT SECTION
SCALE: 3/4" = 1'-0"



RAFTER ATTACHMENT AT PERPENDICULAR CONDITIONS
SCALE: 3/4" = 1'-0"



HIP RIDGE SUPPORT
SCALE: 1/2" = 1'-0"



CEILING JOIST AND ROOF RAFTER CONNECTION @ HIP
SCALE: 1/2" = 1'-0"



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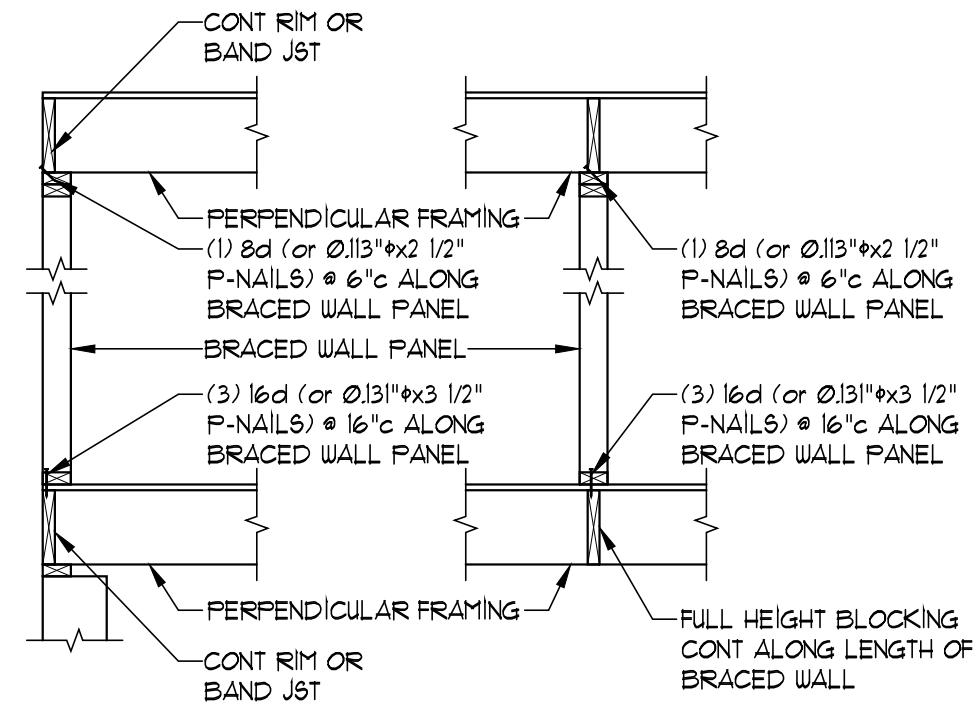
DATE:

Permit: 11/23/2024

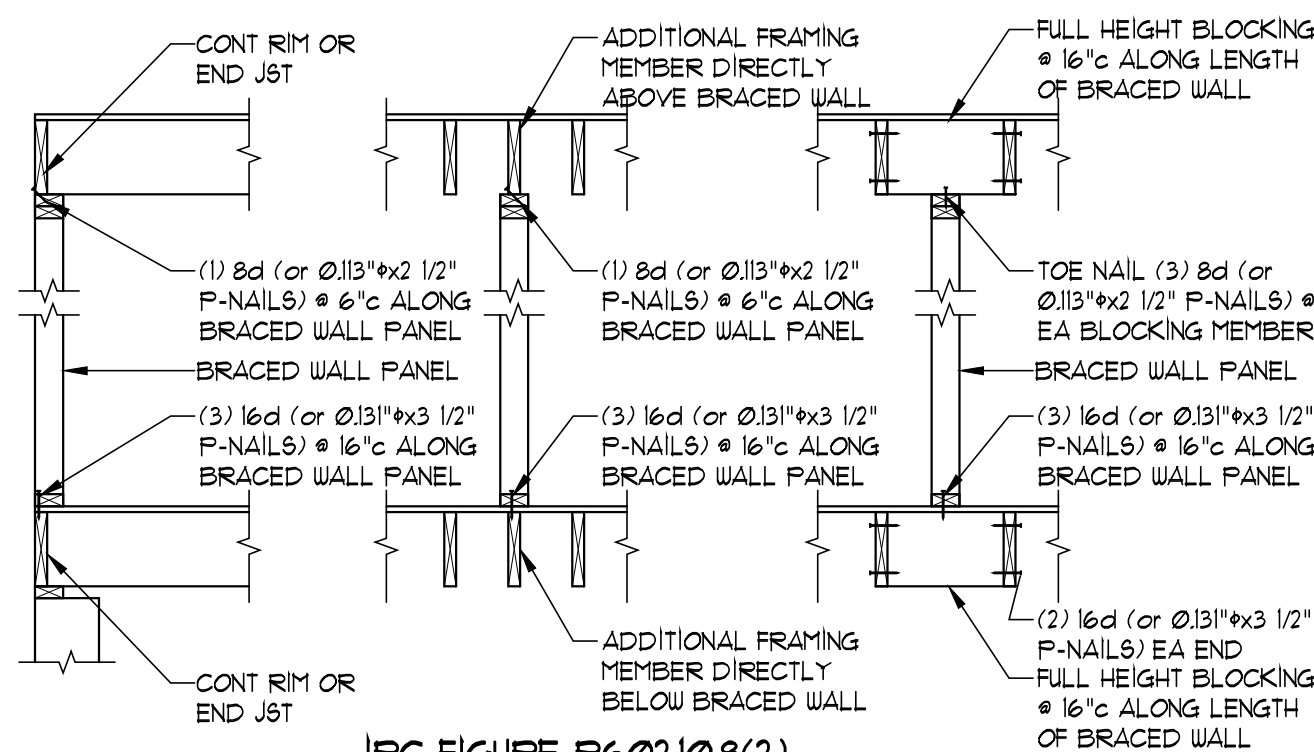
STRUCTURAL DETAILS FOR:
THE MAPLEWOOD III - MODERN
Kourtney Halford & Andrew Baggett
2734 SW Heartland Rd, Lee's Summit, MO
Lot 194 - Hookfarms

S2

RELEASE FOR CONSTRUCTION
AS NOTED FOR PLAN REVIEW
DEVELOPMENT SERVICES
LEE'S SUMMIT, MISSOURI
01/09/2025



IRC FIGURE R602.10.8(1)
BRACED WALL PANEL CONNECTION WHEN
PERPENDICULAR TO FLOOR/CEILING FRAMING



IRC FIGURE R602.10.8(2)
BRACED WALL PANEL CONNECTION WHEN
PARALLEL TO FLOOR/CEILING FRAMING

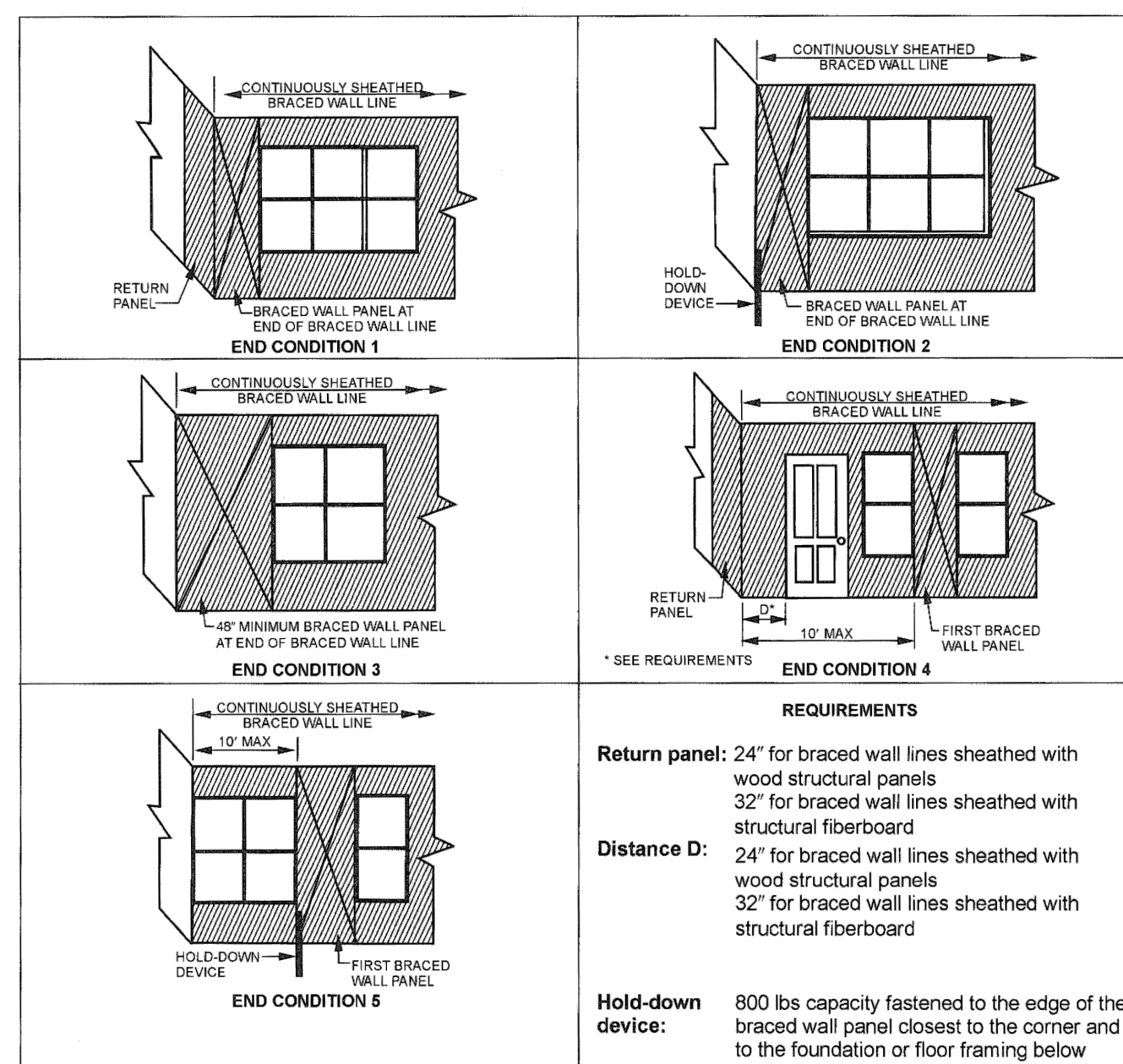
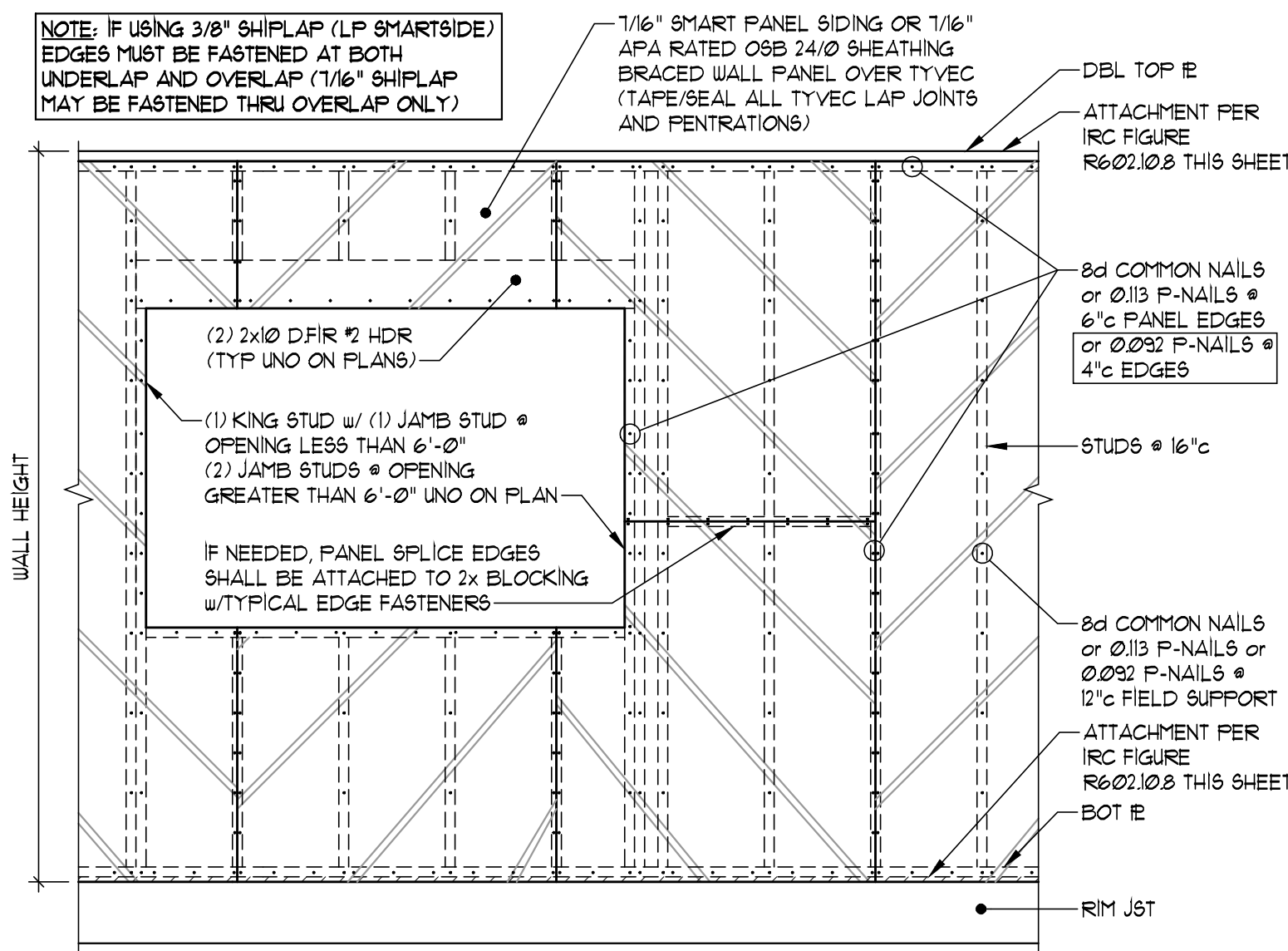
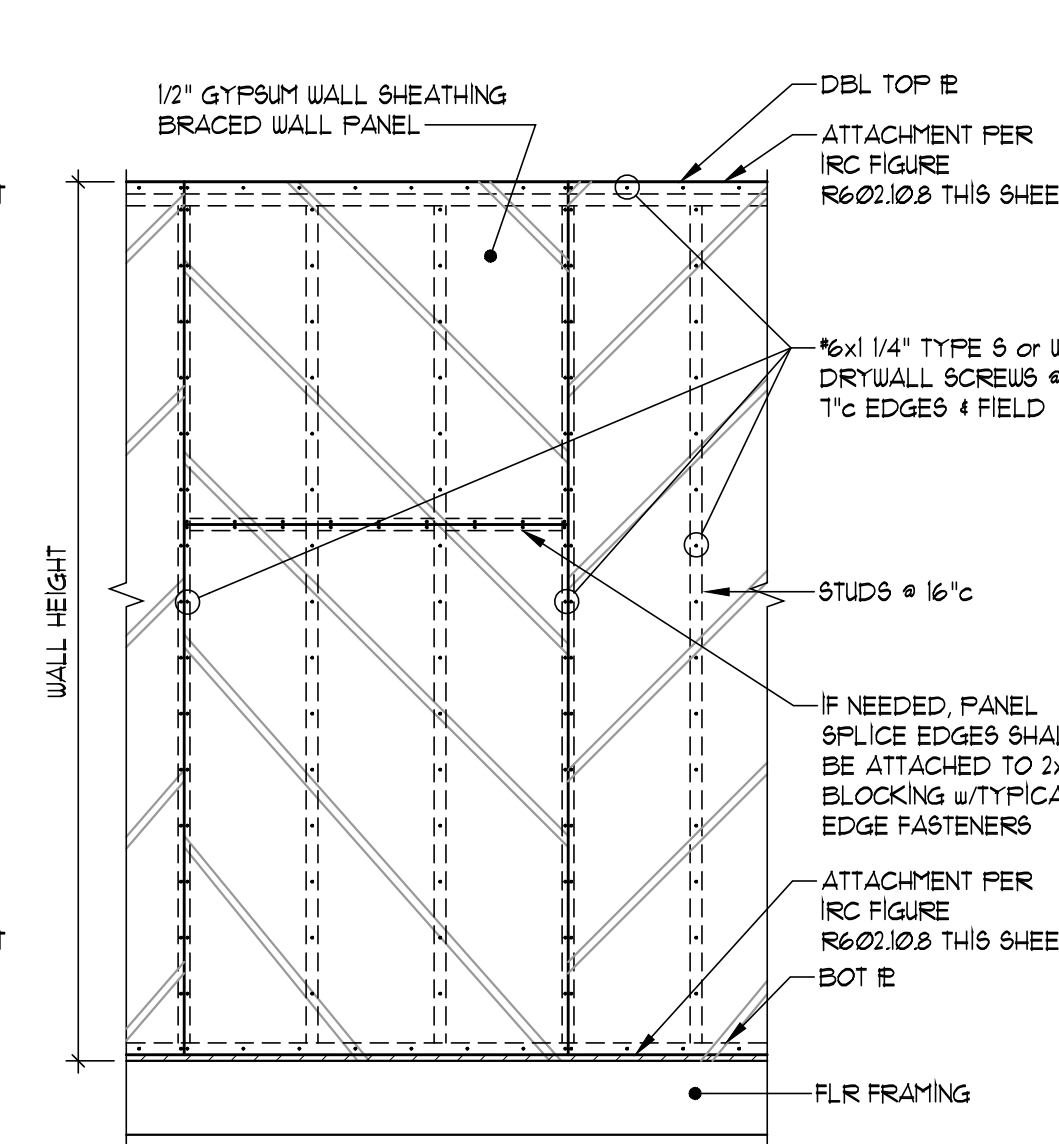


FIGURE R602.10.7
END CONDITIONS FOR BRACED WALL LINES WITH CONTINUOUS SHEATHING

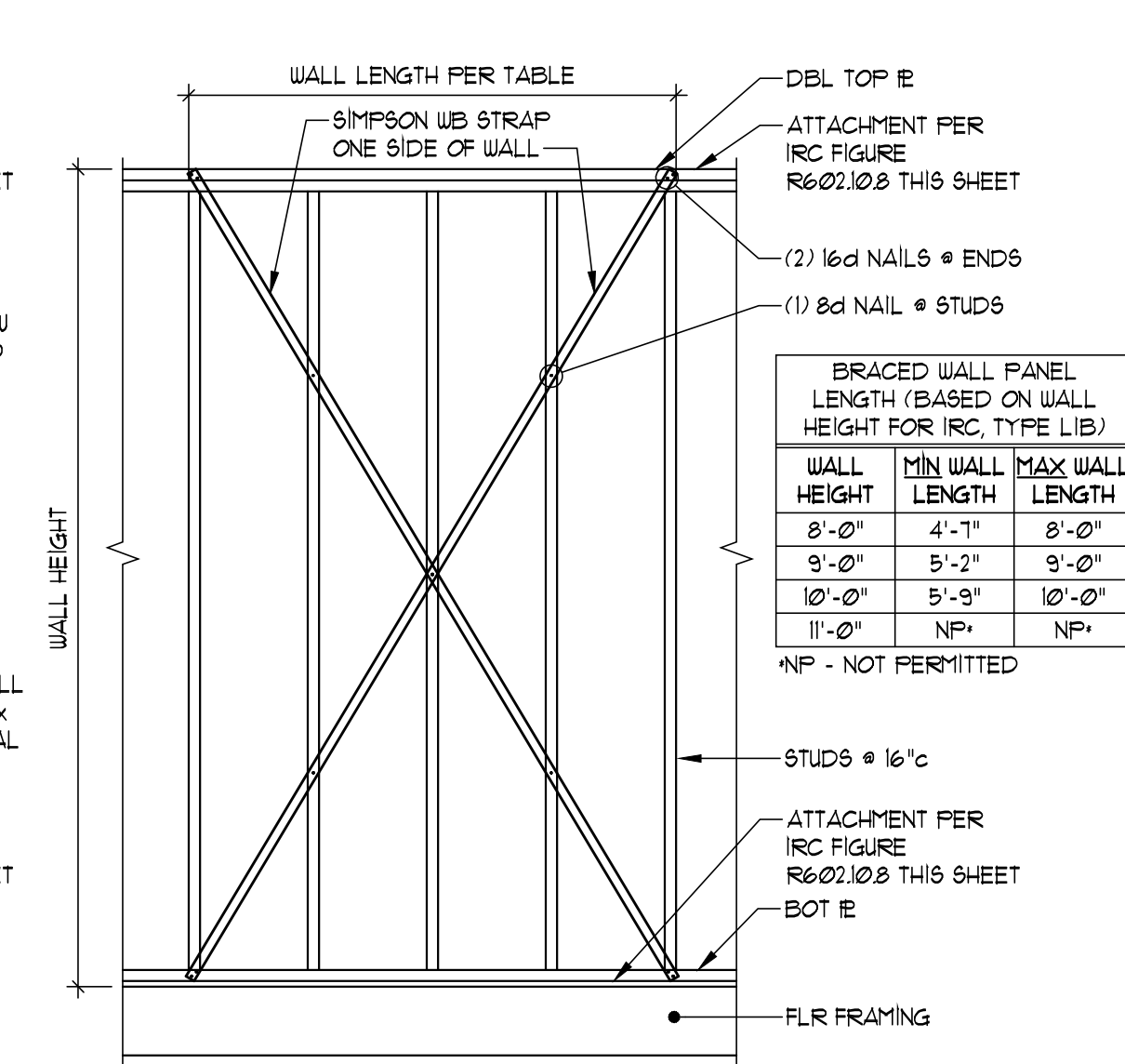
MINIMUM WALL STUD FRAMING NOMINAL SIZE AND GAGE	MAXIMUM PONY WALL HEIGHT (FEET)	MAXIMUM TOTAL WALL HEIGHT (FEET)	MAXIMUM OPENING WIDTH (FEET)	TENSION STRAP CAPACITY REQUIRED (LBS) FOR V _{ult} = 115mph	
				EXPOSURE B	EXPOSURE C
2x4 #2 GRADE	0	10	10	1000	1000
	1	10	9	1000	1000
			16	1275	2500
			18	1275	2500
			9	1000	1875
	2	10	16	2175	4125
			18	2500	DESIGN
			9	1500	3175
	2	12	16	3375	DESIGN
			18	3375	DESIGN
	4	12	9	2175	DESIGN
			12	3175	DESIGN
2x6 STUD GRADE	2	12	9	1000	2025
			16	2150	3675
			18	2500	DESIGN
			9	1150	DESIGN
	4	12	16	2400	DESIGN
			18	3000	DESIGN



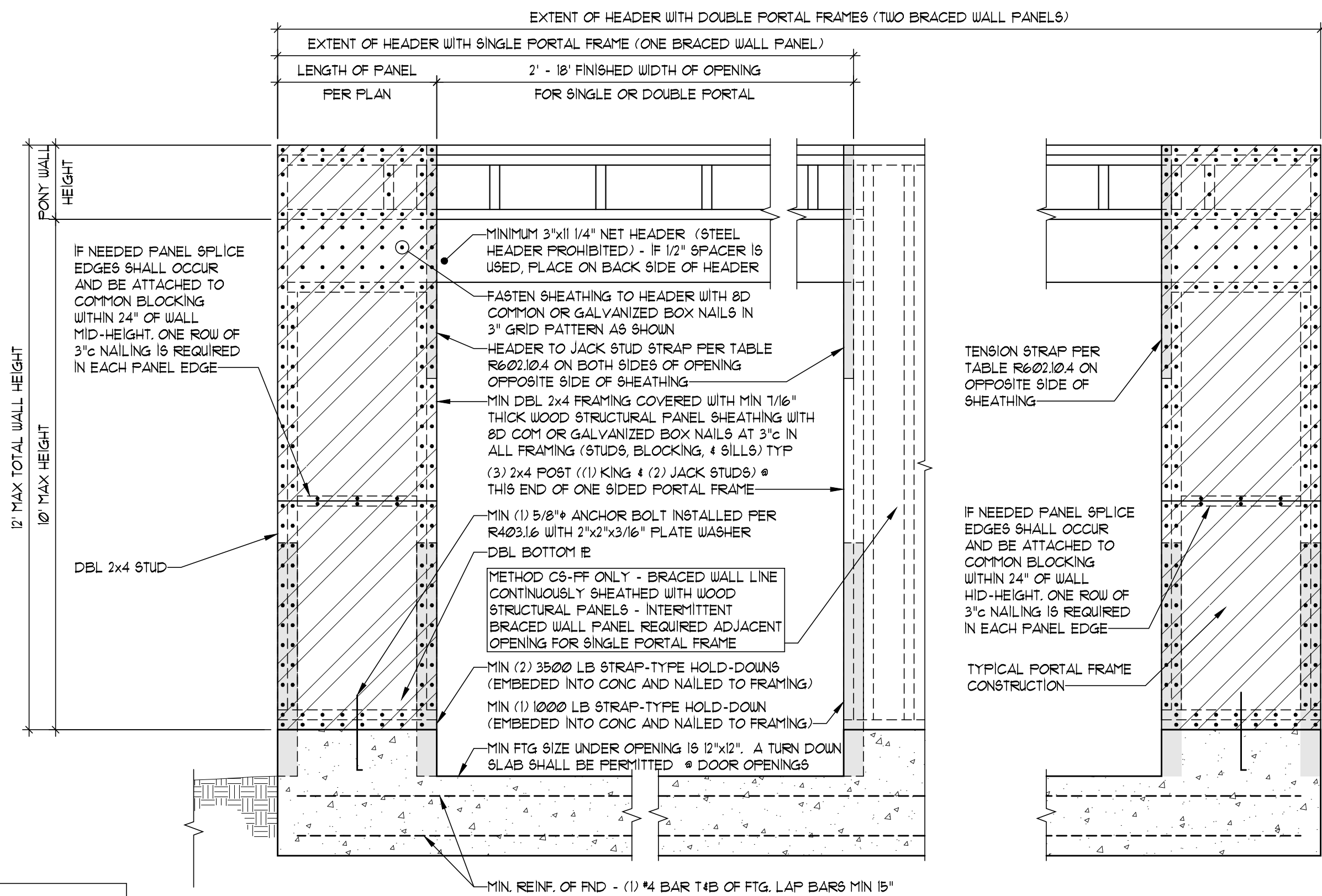
TYPICAL EXTERIOR SHEATHING
INSTALLATION (METHOD WSP & CS-WSP)
SCALE: 1/2" = 1'-0"



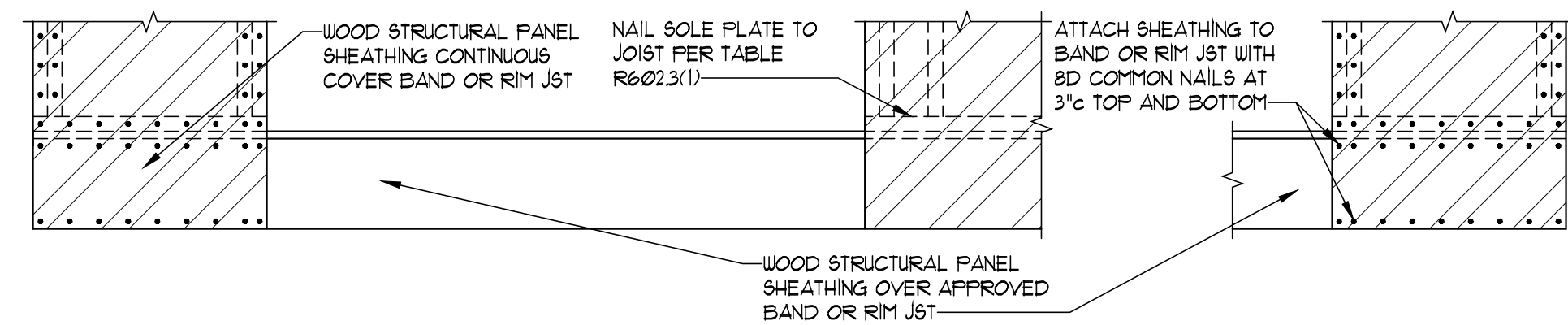
TYPICAL INTERIOR SHEATHING
INSTALLATION (METHOD GB)
SCALE: 1/2" = 1'-0"



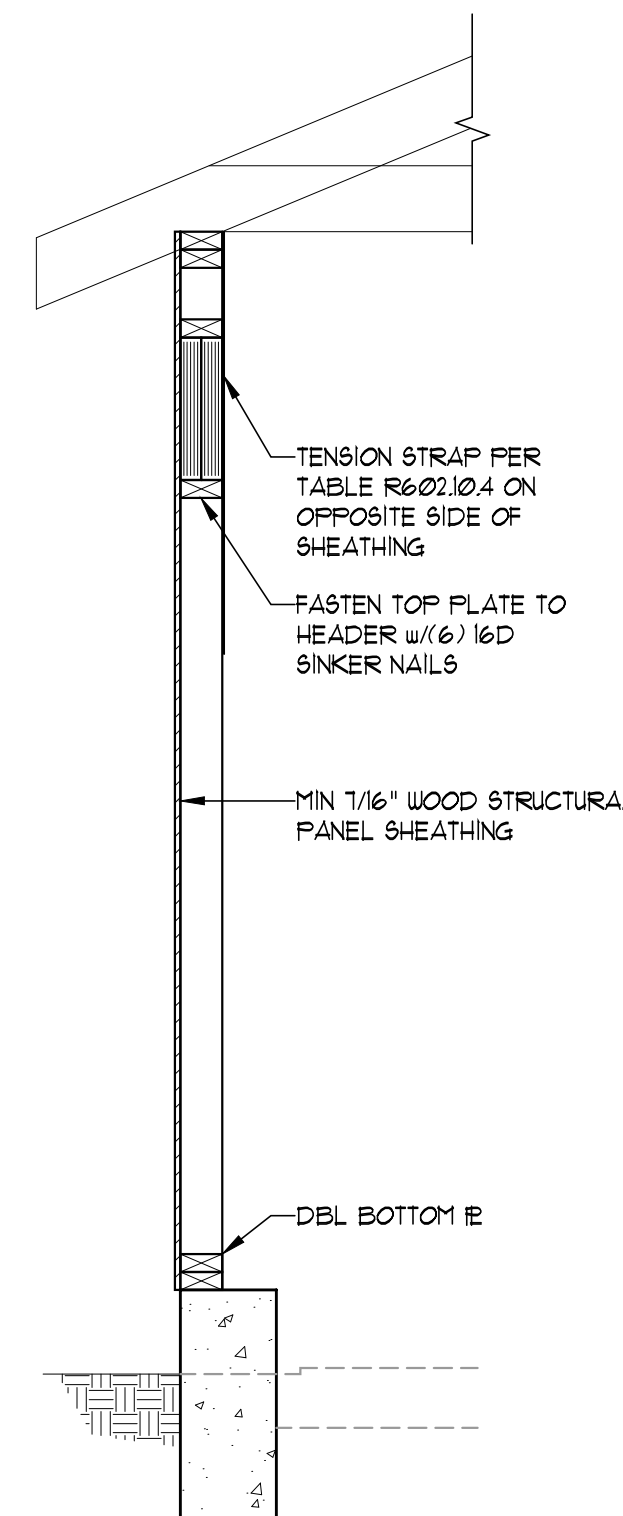
INTERIOR SHEATHING
INSTALLATION (METHOD LIB)
SCALE: 1/2" = 1'-0"



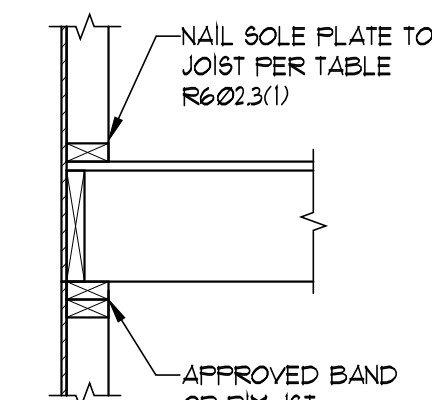
BRACED WALL METHOD "PFH" (also HEADER ATTACHMENT FOR CS-PF)
SCALE: 3/4" = 1'-0"



BRACED WALL METHOD "CS-PF" (ATTACHMENT TO WOOD FLOOR)
(REFER TO BRACED WALL METHOD "PFH" FOR HEADER ATTACH)
SCALE: 3/4" = 1'-0"



SECTION



SECTION



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