

CONSTRUCTION SPECIFICATIONS

1. GENERAL NOTES: 2015 IRC
- A. SEISMIC DESIGN CATEGORY D1
 - B. WIND EXPOSURE AND SPEED 110mph, EXP. B
 - C. SNOW LOAD # 25 psf
 - D. FLOOR LIVE LOAD 40 psf
 - E. DECK LIVE LOAD 60 psf
 - F. SOIL BEARING PRESSURE 1500 psf
 - G. ALL GLASS IN DOORS, SIDELIGHTS, AND OTHER HAZARDOUS LOCATIONS TEMPERED GLASS (IRC 308.4)
2. FOUNDATION:
- A. FOOTINGS SHOWN AS MINIMUM ON DRAWING AND TO BE POURED ON CENTER OF WALL DIMENSIONS.
 - FOOTINGS ARE TO BE POURED ON UNDISTURBED OR PROPERLY COMPACTED SOIL.
 - 4" PERFORATED DRAIN PIPE IS TO BE LAID AROUND PERIMETER OF FOOTING AND OVERLAID W/ 1/2"-2" DRAIN ROCK
 - B. FOUNDATION WALLS: TO BE BUILT TO SIZE SPECIFIED ON DRAWINGS AND THICKNESS SPECIFIED IS MINIMUM REQUIREMENTS. PLACED IN ACCORDANCE W/ FOUNDATION PLAN.
 - C. REINFORCEMENT STEEL: TO BE AS SPECIFIED THICKNESS CALLED OUT ON DRAWINGS AND TO BE DETAILED AND PLACED IN ACCORDANCE W/ BUILDING CODE REQUIREMENTS FOR REINFORCED CONCRETE AND TO BE DEFORMED STEEL BARS CONFORMING TO ASTM A615, GRADE 40.
 - D. CONCRETE: SHALL BE OF "READY-MIXED CONCRETE" AND SHALL CONFORM TO ASTM C94 (B BACK OR BETTER)
 - AFTER CONCRETE HAS BEEN PROPERLY CURED IT SHALL HAVE A COMPRESSIVE STRENGTH OF 2500 PSI UNLESS OTHERWISE SPECIFIED.
 - E. CONCRETE WALL DAMP-PROOFING PER IRC 406
 - F. PORCHES, CARPORT SLABS, AND STEPS EXPOSED TO THE WEATHER AND GARAGE SLABS SHALL HAVE A COMPRESSIVE STRENGTH OF NO LESS THAN 3000 PSI PER IRC TABLE R402.2
3. FRAMING:
- A. FLOOR: TO BE FRAMED IN ACCORDANCE W/ SPECIFICATIONS OF DRAWINGS.
 - AND TO HAVE ALLOWABLE FLOOR LOAD AS SET FORTH IN IRC SEC R502.3 AND R502.3.2
 - ALL STRUCTURAL MEMBERS OF FLOOR TO BE PROPERLY SET AND FASTENED IN ACCORDANCE W/ IRC.
 - STRUCTURAL LUMBER TO BE #2 DOUGLASS FIR OR BETTER.
 - B. WALLS: EXTERIOR WOOD FRAMED WALLS TO BE 2x6 DF-L #2 W/ STUDS @ 16" O.C. PER IRC 602.3, HEIGHT OF EXTERIOR WALL TO BE AS SHOWN.
 - ALL EXTERIOR WALLS SHALL BE SHEATHED W/ 1/2" STRUCTURAL PLYWOOD OR 7/8" OSB SHEATHING IN PLAN. BRACING WILL BE DETAILED IN PLAN.
 - ALL WINDOW HEADERS AND BEARING WALL BEAMS TO BE 4x10 UNLESS SPECIFIED ON DRAWINGS.
 - INTERIOR WALLS TO BE 2x4 CONSTRUCTION PLACED @ 16" O.C. STUD HEIGHT TO BE AS SHOWN.
 - INTERIOR BATHROOM WALLS W/ EXTENSIVE PLUMBING FIXTURES MAY HAVE 2x6 FRAMED WALLS TO PROVIDE CLEARANCE AND COMFORTABLE WORKING SPACE.
 - BATHROOM WALL COVERINGS SHALL BE MOISTURE RESISTANT CEMENT PLASTER, TILE, OR APPROVED EQUAL TO 1/2 INCHES ABOVE DRAIN AT SHOWERS OR TUB W/ SHOWERS. (R102.2.5 & R102.4.2)
 - ALL NOTCHING & DRILLING OF FRAMING TO BE DONE IN ACCORDANCE WITH IRC 602.6 & 602.6.1
 - C. ROOF: DRAWINGS WILL SPECIFY TRUSSES OR RAFTER CONSTRUCTION.
 - ENG. TRUSS DETAIL TO BE CHECKED BY GENERAL CONTRACTOR OR BUILDING DESIGNER BEFORE INSTALLATION.
 - STANDARD SNOWLOAD TO BE VERIFIED PER STATE ISSUING JURISDICTION PER TOTAL LOAD UNLESS SPECIFIED OTHERWISE ON DRAWINGS.
 - ROOF SHEATHING TO BE 1/2" CDX STANDARD, BUT WILL VARY W/ ROOFING PRODUCT USED.
 - D. CONNECTIONS
 - ALL CONNECTORS ARE SPECIFIED AS SIMPSON EQUIVALENT LUMBERLOCK CONNECTORS WILL BE SATISFACTORY
 - NAILING SCHEDULE TO BE IN ACCORDANCE W/ TABLE R602.3 (1)
 - E. BEAM BEARING POINTS IN WALLS (B.P.)
 - ALL BEAM B.P. IN WALLS MUST HAVE 2x STUDS NAILED TOGETHER TO A MIN. WIDTH NOT LESS THAN BEAM BEING SUPPORTED
4. ENERGY CODE: COMPLY WITH WASHINGTON STATE ENERGY CODE
- A. ALL WINDOWS & DOORS TO BE SEALED INTO WALL W/ CAULKING & WEATHERSTRIPPING
 - B. ALL FRAMING INTERSECTIONS BETWEEN CONDITIONED TO UNCONDITIONED WALLS & FOUNDATIONS TO BE CAULKED TO STOP AIR LEAKAGE
 - C. ALL PENETRATIONS FOR PLUMBING, WIRING, & DUCTING TO BE SEALED
 - D. VENTILATION DUCTS SHALL HAVE R-4 INSULATION COVERING
 - E. PROVIDE 6" INTAKE DUCT WITHIN 4'-0" OF FURNACE FLENUM (DAMPERS & TIMER INTEGRATED INTO FURNACE SYSTEM)
5. INSULATION: (2015 IBC)
- A. MINIMUM INSULATION:
 - 1. CLG R-49 INSULATION OR R-38 ADVANCED FRAMING
 - 2. VAULT CLG R-38 INSULATION
 - 3. WALLS ABOVE GRADE R-21
 - 4. WALL INT BELOW GRADE R-21
 - 5. WALL EXT BELOW GRADE R-10
 - 6. FLOOR R-38
 - 1. SLAB ON GRADE - R-10 (ENTIRE SLAB)
 - B. ALL EXTERIOR WALLS: TO HAVE EITHER VAPOR BARRIER (A) OR (B) INSTALLED PER MANUFACTURER'S SPECS. WITH WINDOW & JOINT TAPE PER IRC 102.3 & TABLE IRC 102.3(1)
 - TYVEK HOUSE WRAP AND DUPONT FLASHING SYSTEMS FOR ALL WINDOWS AND DOOR. CONSULT DUPONT MANUAL AND REP. FOR INSTALLATION INSTRUCTIONS.
6. FLASHING:
- A. CONTRACTOR & HOME OWNER TO INSTALL ADEQUATE FLASHING AT ALL WATER INFILTRATION POINTS SUCH AS, BUT NOT LIMITED TO, WINDOWS, DOORS, DECKS, SKYLIGHTS, CHIMNEYS, VENTS, TRIM BOARDS, BALCONIES AND ROOF VALLEYS.
 - B. WATER PROOF DECKS AND BALCONIES TO BE FLASHED PER MANUF. SPECS. FOR WATER PROOF MEMBRANE.
 - C. ALL CAULKING MUST BE INSPECTED & MAINTAINED ANNUALLY BY HOME OWNER USING APPROVED EXTERIOR SIDING CAULK.
- CODES: VALLEY FLASHING - IRC 302.2.2, IRC 302.4, 302.5.6, 302.7.6 & 302.8.2
 WATERPROOFING WEATHER EXPOSED AREAS, IE DECKS & BALCONIES - IRC 103.4
 MASONRY - R103.3 AND WINDOWS - R610 AND R103.4

MECHANICAL SPECIFICATIONS

1. THE MAXIMUM LENGTH OF A CLOTHES DRYER DUCT SHALL NOT EXCEED 35 FEET (10.668 M) FROM THE DRYER LOCATION TO THE WALL OR ROOF TERMINATION. THE MAXIMUM LENGTH OF THE DUCT SHALL BE REDUCED 2.5 FEET (762 MM) FOR EACH 45-DEGREE (0.8 RAD) BEND AND 5 FEET (1524 MM) FOR EACH 90-DEGREE (1.6 RAD) BEND. THE MAXIMUM LENGTH OF THE EXHAUST DUCT DOES NOT INCLUDE THE TRANSITION DUCT. (M1502.4.5)
2. ELEMENTS OF APPLIANCES WHICH CREATE A GLOW SPARK OR FLAME SHALL BE LOCATED A MINIMUM OF 18" ABOVE THE GARAGE FLOOR. (MC 304.3)
3. EXHAUST DUCTS TO BE CONSTRUCTED OF SMOOTH-BORE, NONCOMBUSTIBLE MATERIALS. APPROVED FLEX CONNECTORS NOT EXCEEDING 6 FT. IN LENGTH MAY BE USED IN CONNECTION WITH DOMESTIC DRYER EXHAUST. (MC 504.6)
4. HOT WATER TANKS HAVING FLEXIBLE PIPE CONNECTIONS AND OVER FOUR FEET TALL SHALL BE STRAPPED DOWN TO PREVENT OVERTURN IN AN EARTHQUAKE. (UPC 508.2)
5. PROVIDE PROTECTION OF GAS BURNING APPLIANCES PER IRC SEC M1301
6. EXHAUST AIR FROM BATHROOMS AND TOILET ROOMS SHALL BE EXHAUSTED DIRECTLY OUTDOORS (IRC M1501.2)
7. ALL EXHAUST OPENINGS SHALL TERMINATE NOT LESS THAN 3 FEET FROM PROPERTY LINES, OPENINGS, AND 10 FEET FROM MECHANICAL AIR INTAKES (UNLESS 3 FEET ADV.).

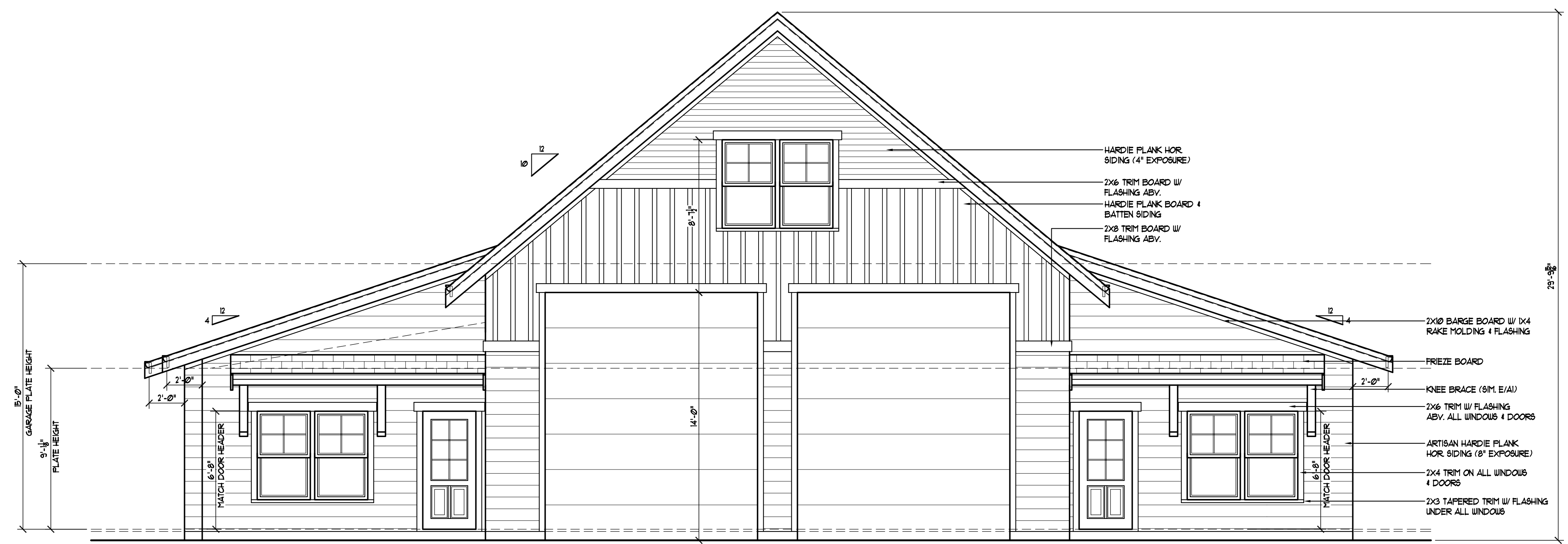
PLUMBING SPECIFICATIONS

1. PROVIDE PRESSURE RELIEF VALVE FOR HOT WATER TANK DRAIN TO THE OUTSIDE OF THE BUILDING WITH DRAIN END NOT MORE THAN TWO FEET NOR LESS THAN 6" ABOVE THE GROUND, POINTING DOWN. (UPC 608.5)
2. PROVIDE AN AIR GAP FOR THE DISHWASHER IF PROVIDED. (UPC 801.4)
3. PROVIDE AN APPROVED BACK FLOW PREVENTION DEVICE AT ALL HOSE BIBBS. (UPC 608.4.1)
4. PROVIDE A CLEAN-OUT WHERE BUILDING DRAIN AND BUILDING SEWER LINES CONNECT. (UPC 113.1)
5. EACH HORIZONTAL DRAINAGE PIPE SHALL BE PROVIDED WITH A CLEANOUT AT ITS UPPER TERMINAL. (UPC 101.4)

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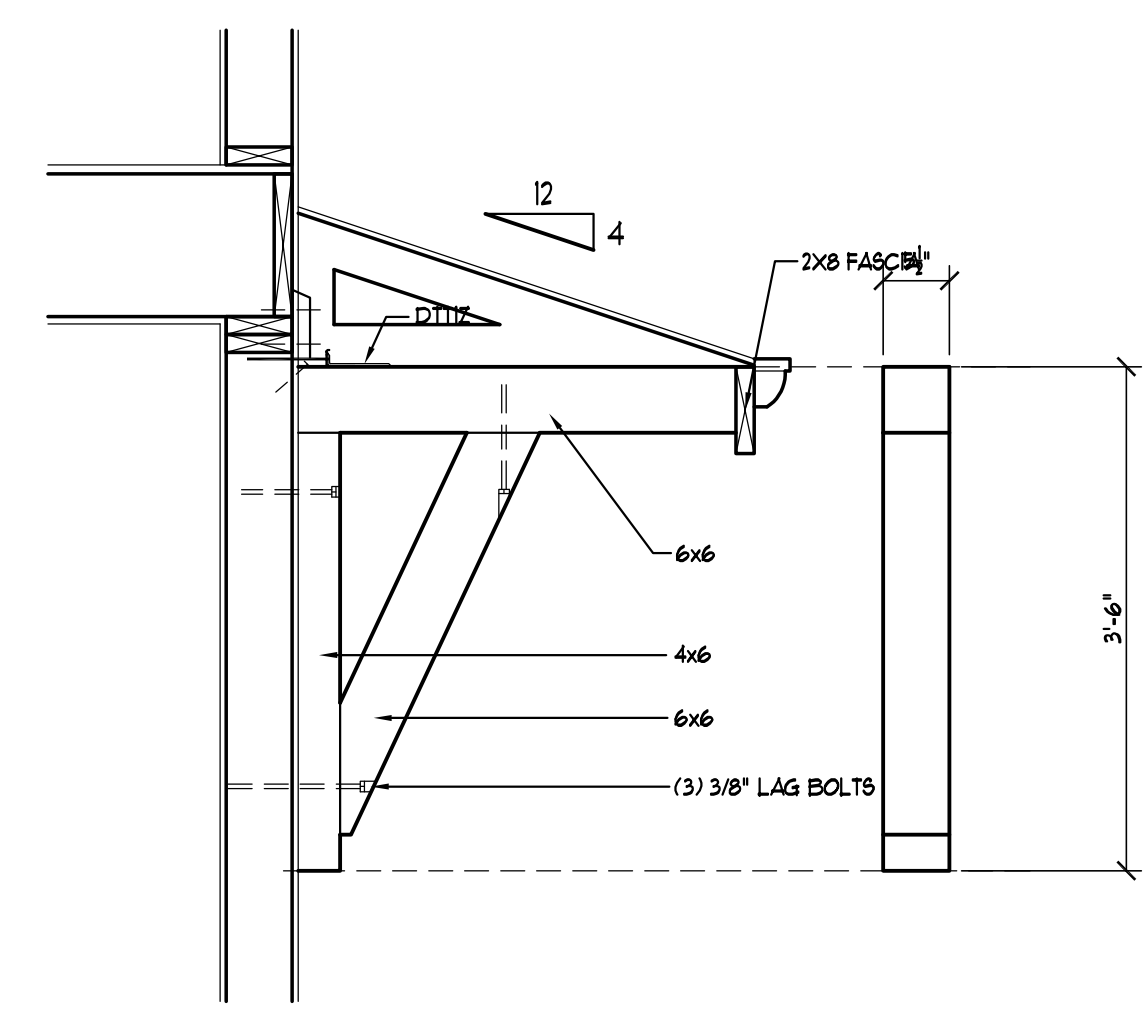
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FRONT ELEVATION

SCALE 1/4" = 1'-0"



KNEE BRACE DETAIL

SCALE 3/4" = 1'-0"



LEFT ELEVATION

SCALE 1/4" = 1'-0"

**Barndominium
501**
Plan # 23-1073

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EXTERIOR ELEVATIONS

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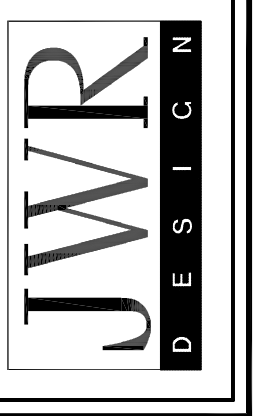
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DESIGN

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SCALE	AS NOTED
CHECKED	J.W.R.
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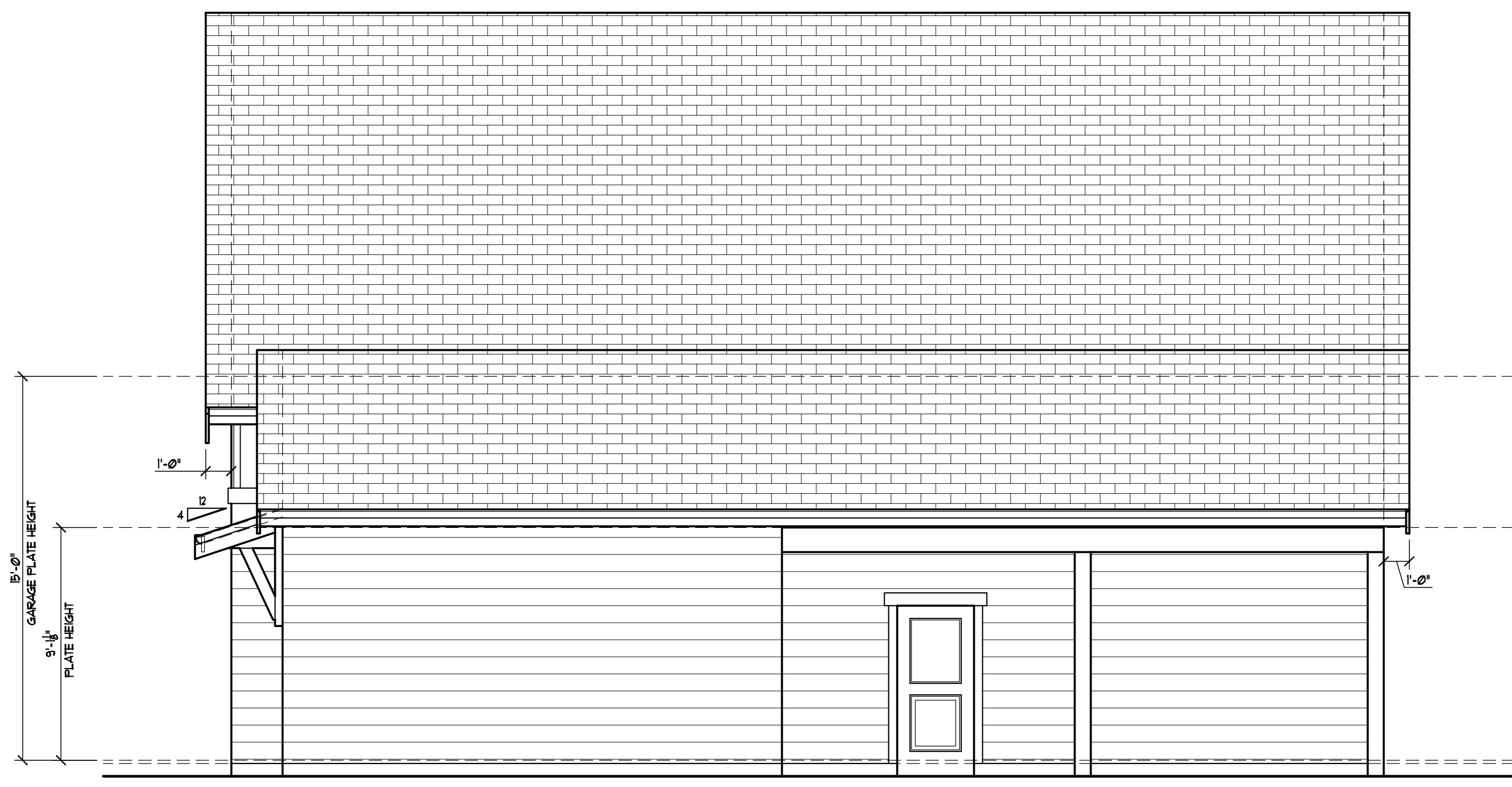


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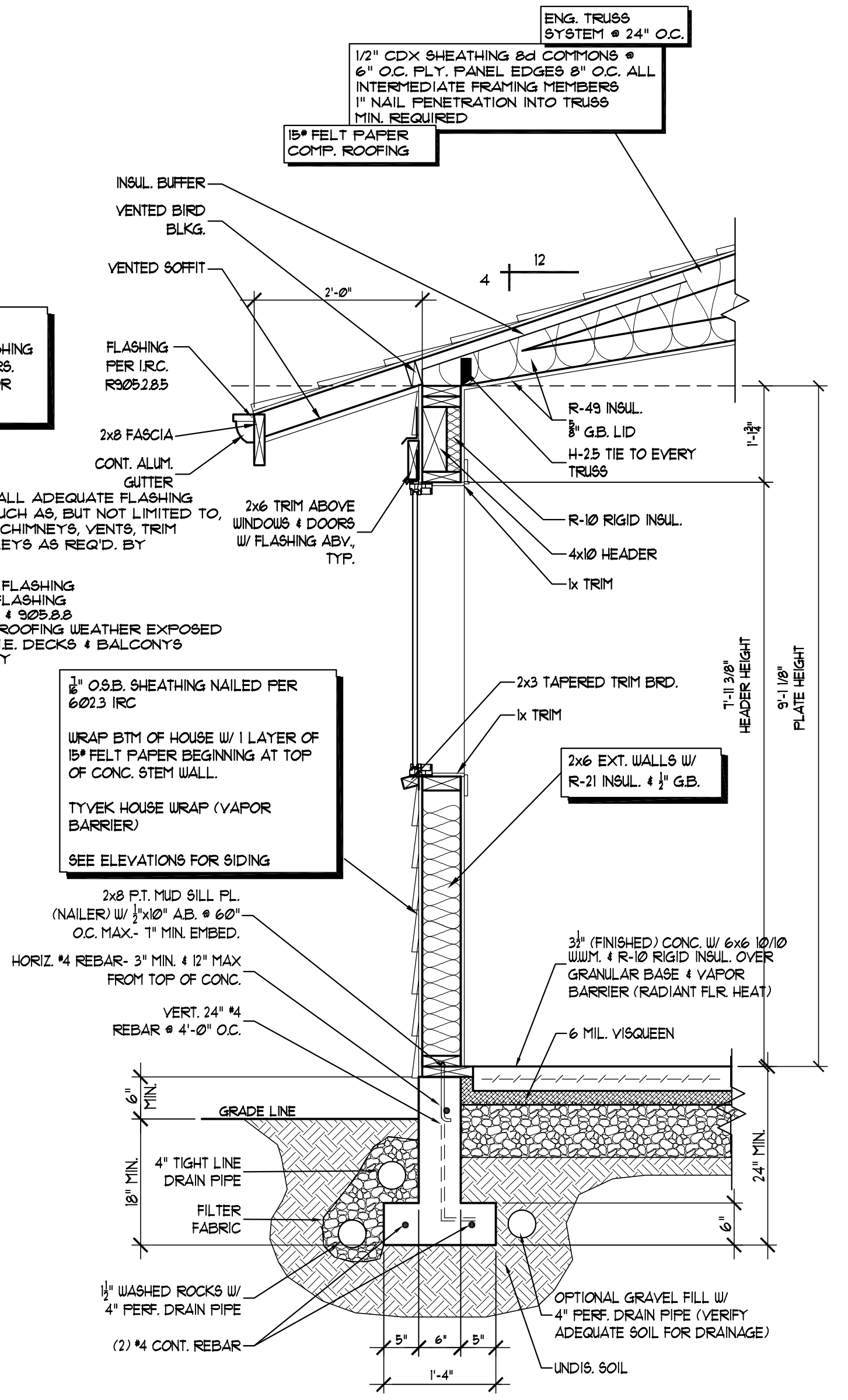
REAR ELEVATION

SCALE 1/4" = 1'-0"



RIGHT ELEVATION

SCALE 1/4" = 1'-0"



TYPICAL WALL DETAIL

SCALE 3/4" = 1'-0"

WINDOW & TYVEK INSTALLATION
TYVEK HOUSE WRAP AND DUPONT FLASHING SYSTEMS FOR ALL WINDOWS AND DOORS. CONSULT DUPONT MANUAL AND REP FOR INSTALLATION INSTRUCTIONS.

NOTE FLASHING:
CONTRACTOR & HOME OWNER TO INSTALL ADEQUATE FLASHING AT ALL WATER INFILTRATION POINTS SUCH AS, BUT NOT LIMITED TO, WINDOWS, DOORS, DECKS, SKYLIGHTS, CHIMNEYS, VENTS, TRIM BOARDS, BALCONYS AND ROOF VALLEYS AS REQ'D. BY ALL LOCAL BUILDING CODES

CODES: IRC 905.2.2, 905.4.6 VALLEY FLASHING
IRC 905.2.2, 905.3.2, OTHER FLASHING
905.4.6, 905.6.6, 905.1.6 & 905.2.2
IRC 103.4 WATERPROOFING WEATHER EXPOSED AREAS, I.E. DECKS & BALCONYS
IRC 103.8 MASONRY

3" O.S.B. SHEATHING NAILED PER 6023 IRC
WRAP BTM OF HOUSE W/ 1 LAYER OF 15# FELT PAPER BEGINNING AT TOP OF CONC. STEM WALL.
TYVEK HOUSE WRAP (VAPOR BARRIER)
SEE ELEVATIONS FOR SIDING

2x8 FT. MID SILL PL. (NAILER) W/ 1/2" x 2" x 6" O.C. MAX. 1" MIN. EMBED.
HORIZ. 1/4" REBAR- 3" MIN. & 12" MAX. FROM TOP OF CONC.
VERT. 24" x 4" REBAR @ 4'-0" O.C.

1/2" WASHED ROCKS W/ 4" FERF. DRAIN PIPE
(2) 1/4" CONT. REBAR

2x3 TAPERED TRIM BRD.
1x TRIM

2x6 EXT. WALLS W/ R-21 INSUL. & 1/2" G.B.

3" FINISHED CONC. W/ 6x6 10/10 W/ 1" R-10 RIGID INSUL. OVER GRANULAR BASE & VAPOR BARRIER (RADIANT FLR. HEAT)

6 MIL. VISQUEEN

UNDIS. SOIL

ENG. TRUSS SYSTEM @ 24" O.C.
1/2" CDX SHEATHING 8d COMMONS @ 6" O.C. FLY PANEL EDGES 8" O.C. ALL INTERMEDIATE FRAMING MEMBERS 1" NAIL PENETRATION INTO TRUSS MIN. REQUIRED
15# FELT PAPER COMP. ROOFING

INSUL. BUFFER
VENTED BIRD BLKG.
VENTED SOFFIT

FLASHING PER IRC R305.2.2.5
2x8 FASCIA
CONT. ALLUM. GUTTER

R-49 INSUL. 3" G.B. LID
H-25 TIE TO EVERY TRUSS

R-10 RIGID INSUL.
4x10 HEADER
1x TRIM

2x6 TRIM ABOVE WINDOWS & DOORS W/ FLASHING ASBY, TYP.

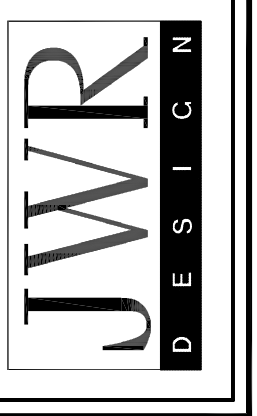
15'-0" GARAGE PLATE HEIGHT
9'-1 1/2" PLATE HEIGHT

11'-0" HEADER HEIGHT
8'-1 1/2" PLATE HEIGHT

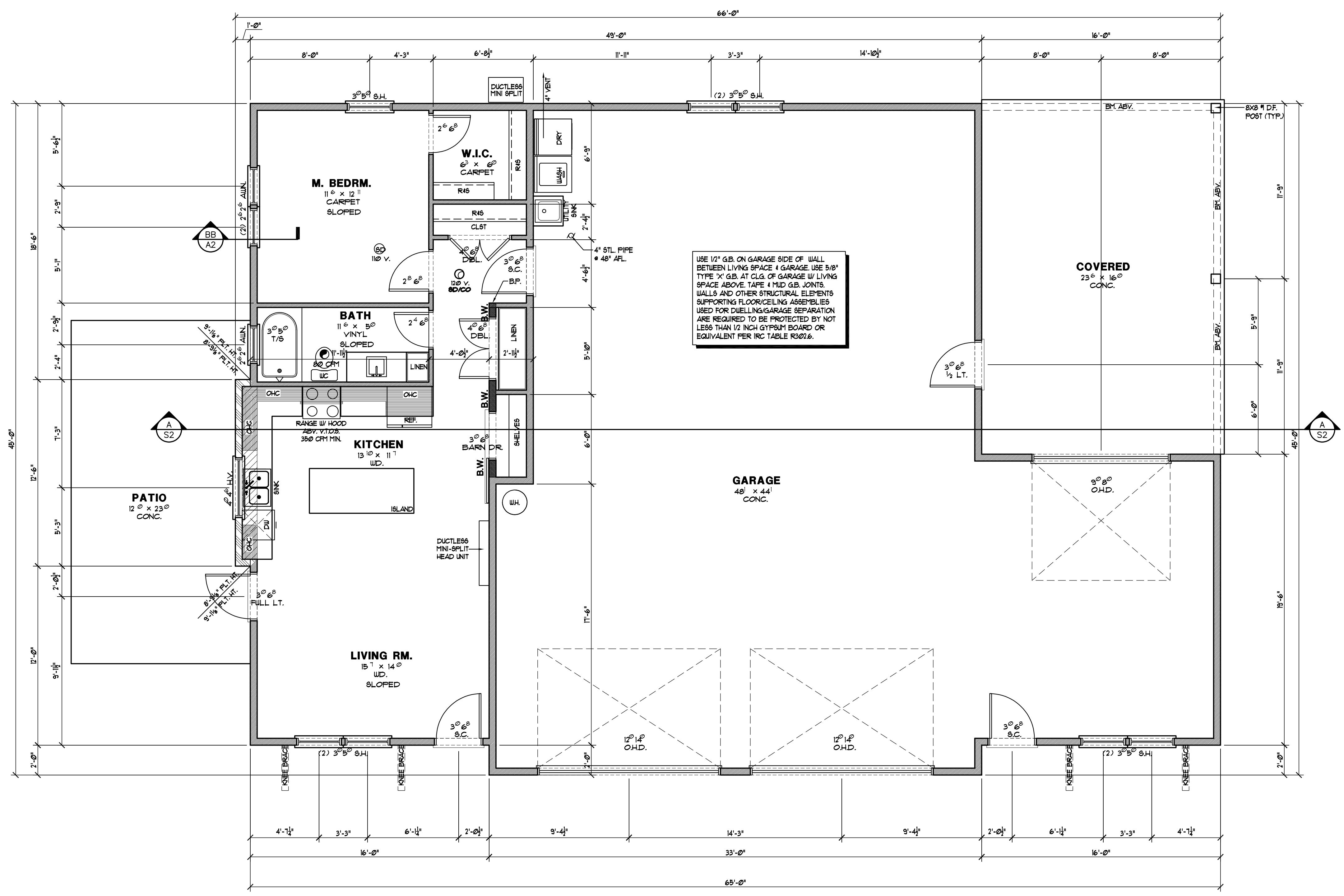
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MAIN FLOOR PLAN

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MAIN FLOOR PLAN

SCALE 1/4" = 1'-0"

DUCT CONSTRUCTION:
- DUCTS IN THE GARAGE AND DUCTS PENETRATING THE WALLS OR CEILING SEPARATING THE DWELLING FROM THE GARAGE SHALL BE CONSTRUCTED OF A MINIMUM OF NO. 26 GAUGE SHEET STEEL AND HAVE NO OPENINGS INTO THE GARAGE. THIS WOULD ALSO PROHIBIT FILTER ACCESS OPENINGS IN THE RETURN AIR DUCT SYSTEM.

SMOKE ALARM NOTE:
- SMOKE ALARMS TO BE INTERCONNECTED OR WIRELESSLY CONNECTED SO THAT THE ACTIVATION OF ONE ALARM ACTIVATES ALL ALARMS IN A DWELLING UNIT.

DUCT SEALING & BLOWER TESTING:
- DUCTS LOCATED OUTSIDE THE CONDITIONED SPACE MUST BE SEALED & TIGHTNESS VERIFIED BY LEAKAGE TESTING PER USEC SECTION 403.22, AND INSULATED TO A MINIMUM OF R-8.
- AIR LEAKAGE TESTING REQUIRED FOR NEW HOUSES, MAXIMUM LEAKAGE ALLOWED PER USEC 403.22.

FURNACE & HOT WATER TANK NOTE:
- FURNACE & HOT WATER APPLIANCES SHALL BE DIRECT VENT.
- ALL COMBUSTION AIR TO COME DIRECTLY FROM EXTERIOR.
- 30" CLEAR SPACE IN FRONT OF FURNACE.
- APPLIANCES TO BE FASTENED IN PLACE PER CODE.
- WATER HEATER TO BE INSTALLED A MIN. OF 18" ABV. FLR.
- INSULATION FOR ALL HOT WATER PIPES SHALL HAVE A MIN. THERMAL RESISTANCE OF R-3 WITHIN AND OUTSIDE CONDITIONED SPACE. INS. CAN BE INTERRUPTED WHEN PASSING THROUGH JST, STUDS, & STRUCTURAL MEMBERS, OR WHERE PASSING OTHER PIPING, CONDUIT, OR VENTS, PROVIDED THE INS. IS SECURED TIGHTLY TO EACH OBSTRUCTION.

WHOLE HOUSE VENTILATION SYSTEMS SHOULD COMPLY WITH MS0713:
- FAN NOISE: WHOLE HOUSE FANS LOCATED 4' OR LESS FROM INTERIOR GRILL SHALL HAVE A SONE RATING OF 19 IN WATER GAUGE.
- OUT DOOR AIR SHALL BE DISTRIBUTED TO EACH HABITABLE SPACE BY INDIVIDUAL OUTDOOR AIR INLETS.
- DOORS SHALL BE UNDERCUT TO A MIN. OF 1/2" ABV. FIN FLR COVERING.
- INDIVIDUAL R41 OUTDOOR AIR INLETS SHALL PROVIDE NOT LESS THAN 4 SQ. IN. OF NET FREE AREA OF OPENING FOR EA. HABITABLE SPACE.

FLOOR PLAN NOTES:
1. VINYL FRAME WINDOWS TYPICAL. ROUGH OPENINGS MAY VARY, VERIFY PER MFG. SPECS.
2. CABINET DESIGN BY OTHERS TO BE VERIFIED W/ ACTUAL FRAMED (AS BUILT) DIMENSIONS ON SITE.
3. FOR ALL BEAM SIZES & LOCATIONS REFER TO STRUCTURAL FRAMING PLANS & ENGINEERING CALCS DURING CONSTRUCTION.
4. SEE STRUCTURAL PLANS: FOUNDATION, FRAMING & SHEAR WALL SHEETS FOR ALL SHIMSON HOLD-DOWNS AND STRAPS AND HANGERS.

FRAMING NOTE:
FOR ALL BEAM SIZES & LOCATIONS REFER TO STRUCTURAL FRAMING PLANS & ENGINEERING CALCS. DURING FRAMING CONSTRUCTION.

GUARDRAIL NOTE:
SHOP DRAWINGS, SIGNED & SEALED BY A REGISTERED DESIGN PROFESSIONAL, WILL BE REQUIRED FOR THE GUARDRAIL SYSTEMS AT THE STAIRS & DECK.

HIGH EFFICIENCY HVAC EQUIPMENT 3D. 102
- DUCTLESS SPLIT SYSTEM HEAT PUMPS, ZONAL CONTROL. IN HOMES WHERE THE PRIMARY SPACE HEATING SYSTEM IS ZONAL ELECTRIC HEATING, A DUCTLESS HEAT PUMP SYSTEM SHALL BE INSTALLED AND PROVIDE HEATING TO THE LARGEST ZONE OF THE HOUSING UNIT. TO QUALIFY FOR THIS CREDIT, THE BUILDING PERMIT DRAWINGS SHALL SPECIFY THE OPTION BEING SELECTED AND SHALL SPECIFY THE HEATING EQUIPMENT TYPE AND THE MINIMUM EQUIPMENT EFFICIENCY.

EFFICIENT WATER HEATING 5A. 8
- ALL SHOWERHEAD & KITCHEN SINK FAUCETS INSTALLED IN THE HOUSE SHALL BE RATED AT 1.75 GPM OR LESS. ALL OTHER LAVATORY FAUCETS SHALL BE RATED AT 1.0 GPM OR LESS. TO QUALIFY TO CLAIM THIS CREDIT, THE BUILDING PERMIT DRAWINGS SHALL SPECIFY THE OPTION BEING SELECTED AND SHALL SPECIFY THE MAXIMUM FLOW RATES FOR ALL SHOWERHEADS, KITCHEN SINK FAUCETS, AND OTHER LAVATORY FAUCETS.

NOTE:
PROVIDE TEMPERED GLAZING IN ALL WINDOWS WITH EXPOSED AREAS GREATER THAN 8 SF, AND IN WINDOWS WITH BTM. EDGE LESS THAN 18" ABV. FLOOR.

CHIMNEY NOTE
BALLOON-FRAME CHIMNEY FROM MAIN FLOOR PLATFORM.

ABBREVIATION KEY

GB	= GYPSUM BOARD
SK	= SKI SHEETROCK
BLU	= BELOW
SF	= SQUARE FEET
FWL	= FINISHED FLOOR LEVEL
E1W	= EACH WAY
CL	= CENTER LINE
FWL	= FINISHED FLOOR LEVEL
AF	= ABOVE FLOOR LEVEL
BL	= BOTTOM OF
TD	= TOP OF
BP	= BEARING POINT
BW	= BEARING WALL
PT	= PRESSURE TREATED
DF	= DOUGLAS FIR
INT.	= INTERIOR
EXT.	= EXTERIOR
BY	= BEAM
ABV.	= ABOVE
EXP.	= EXPOSE
○	= HOSE BIB
+	= GAS STUD
⊕	= DOWN SPOUT

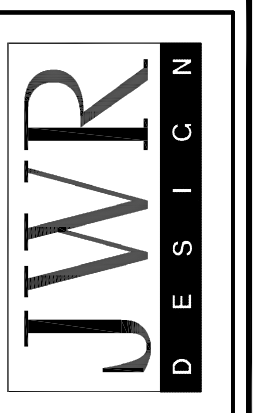
SQUARE FOOTAGE

LIVING SPACE:	184 SF.
GARAGE:	1,713 SF.
TOTAL:	2,497 SF.
COVERED:	376 SF.

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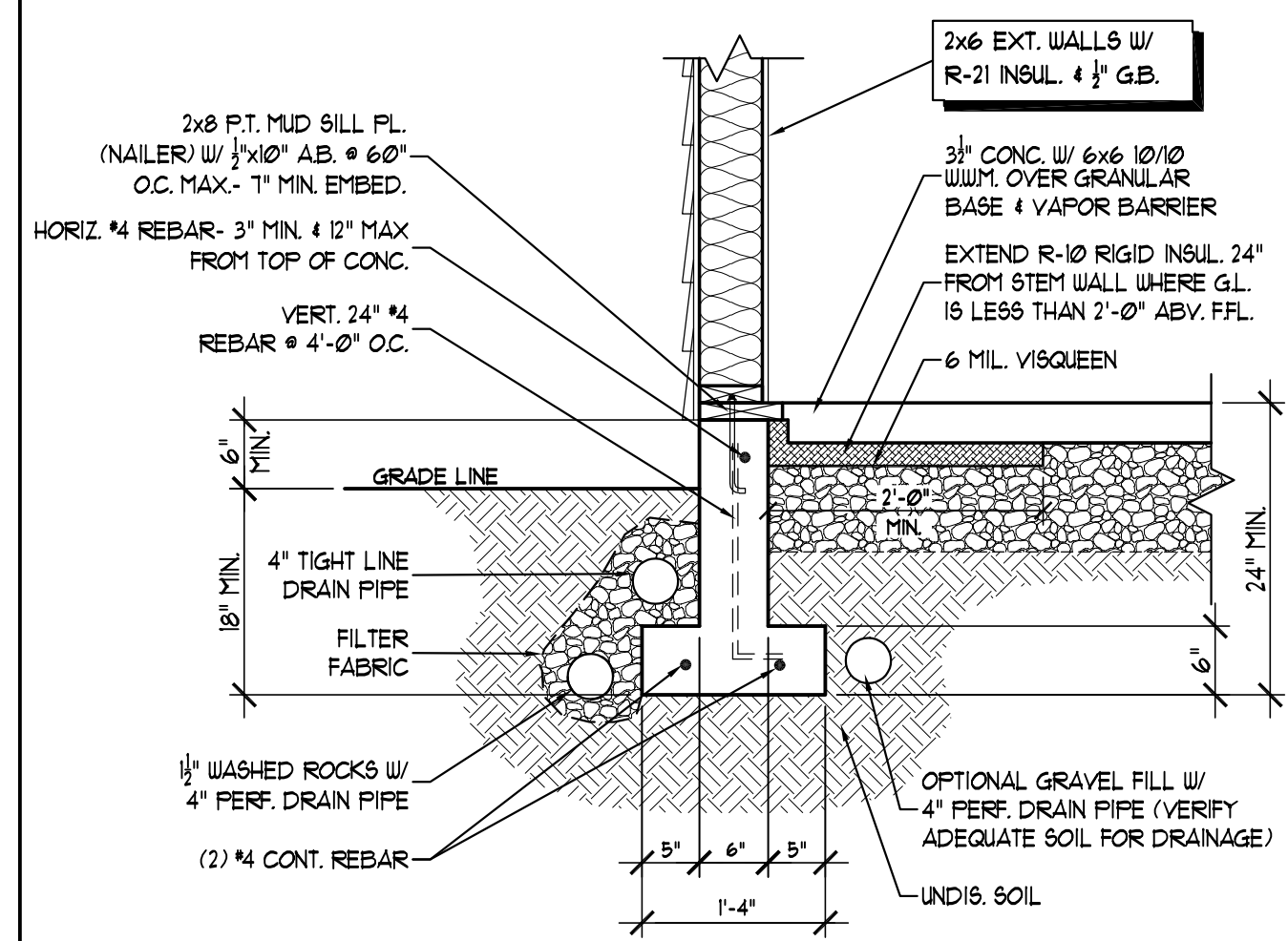
FOUNDATION PLAN

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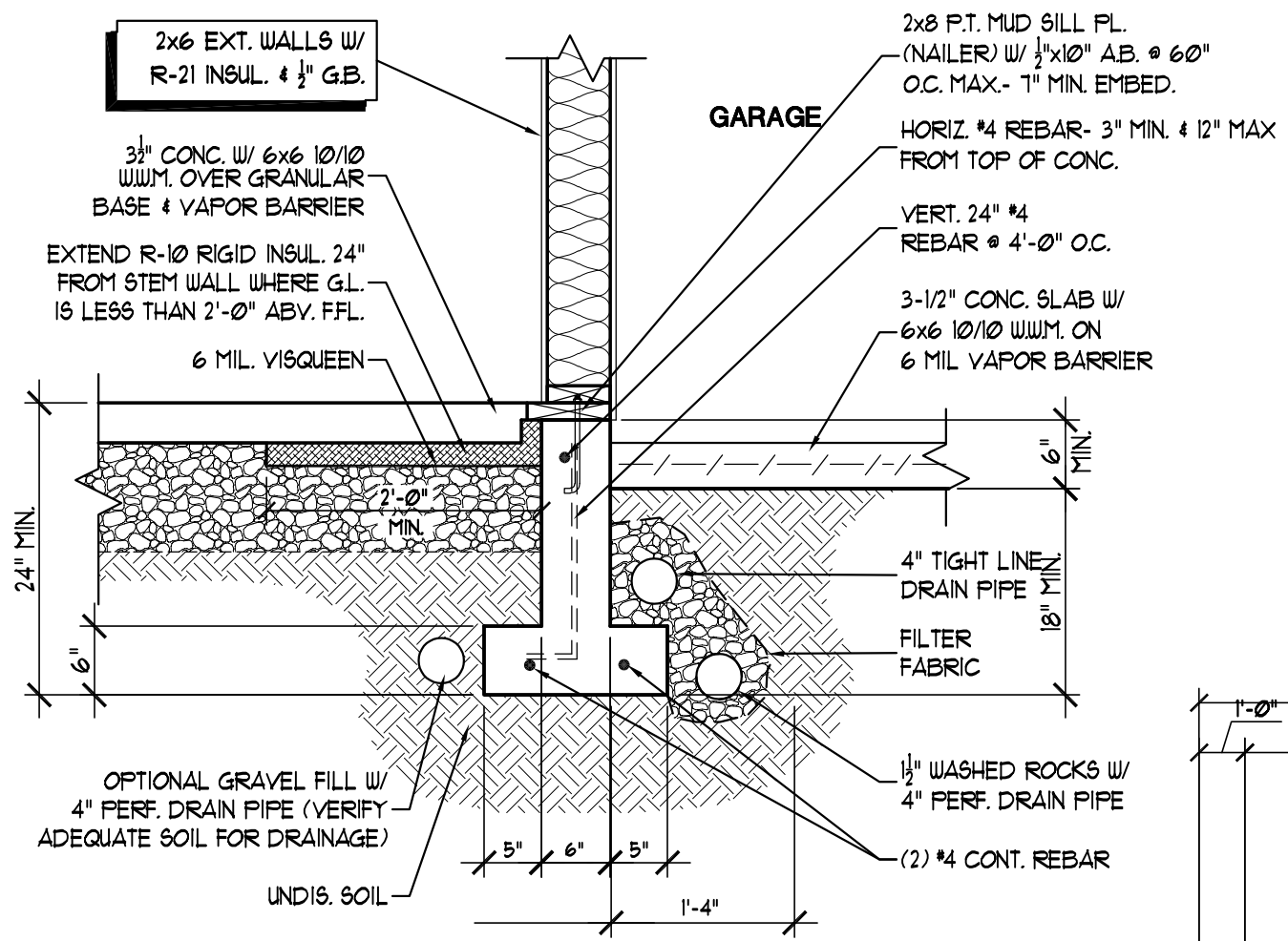
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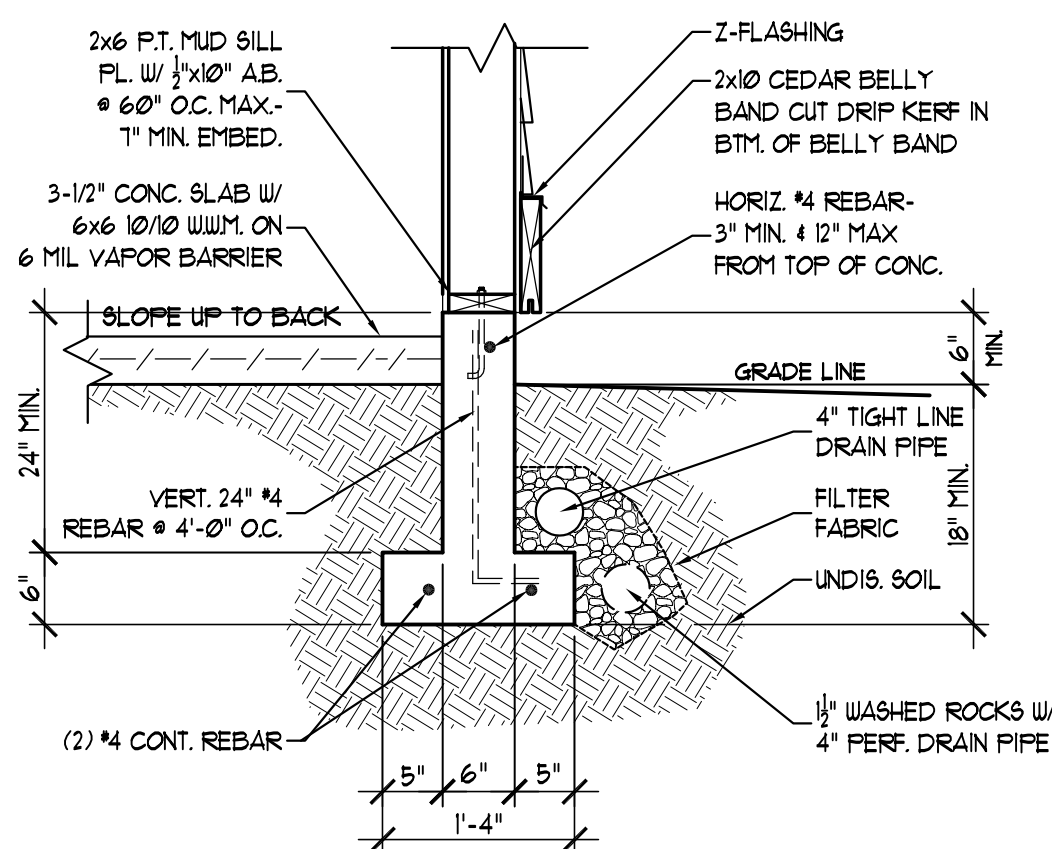
STEM WALL DETAIL

SCALE 3/4" = 1'-0"



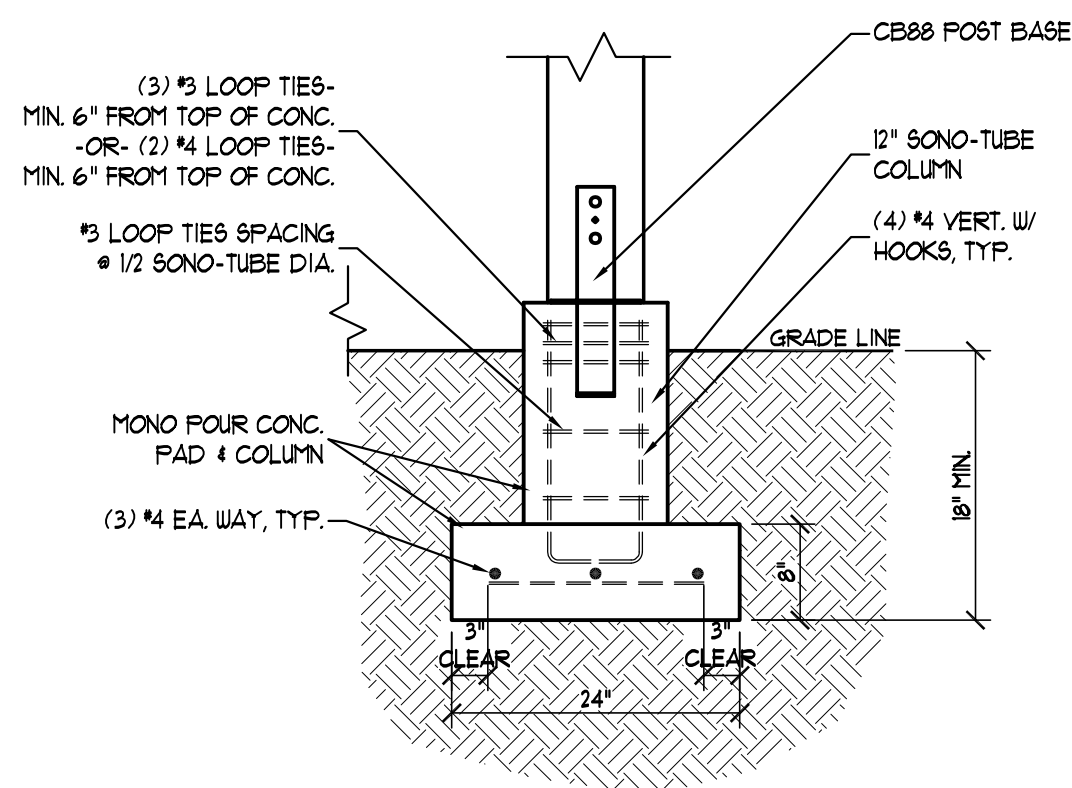
STEM WALL DETAIL

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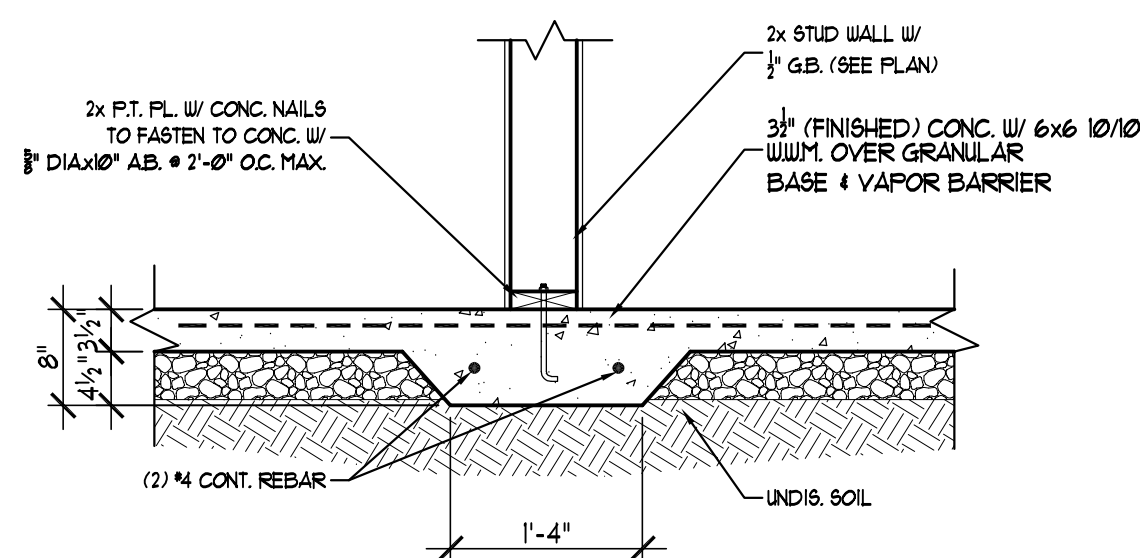
GARAGE FTG. DETAIL

SCALE 3/4" = 1'-0"



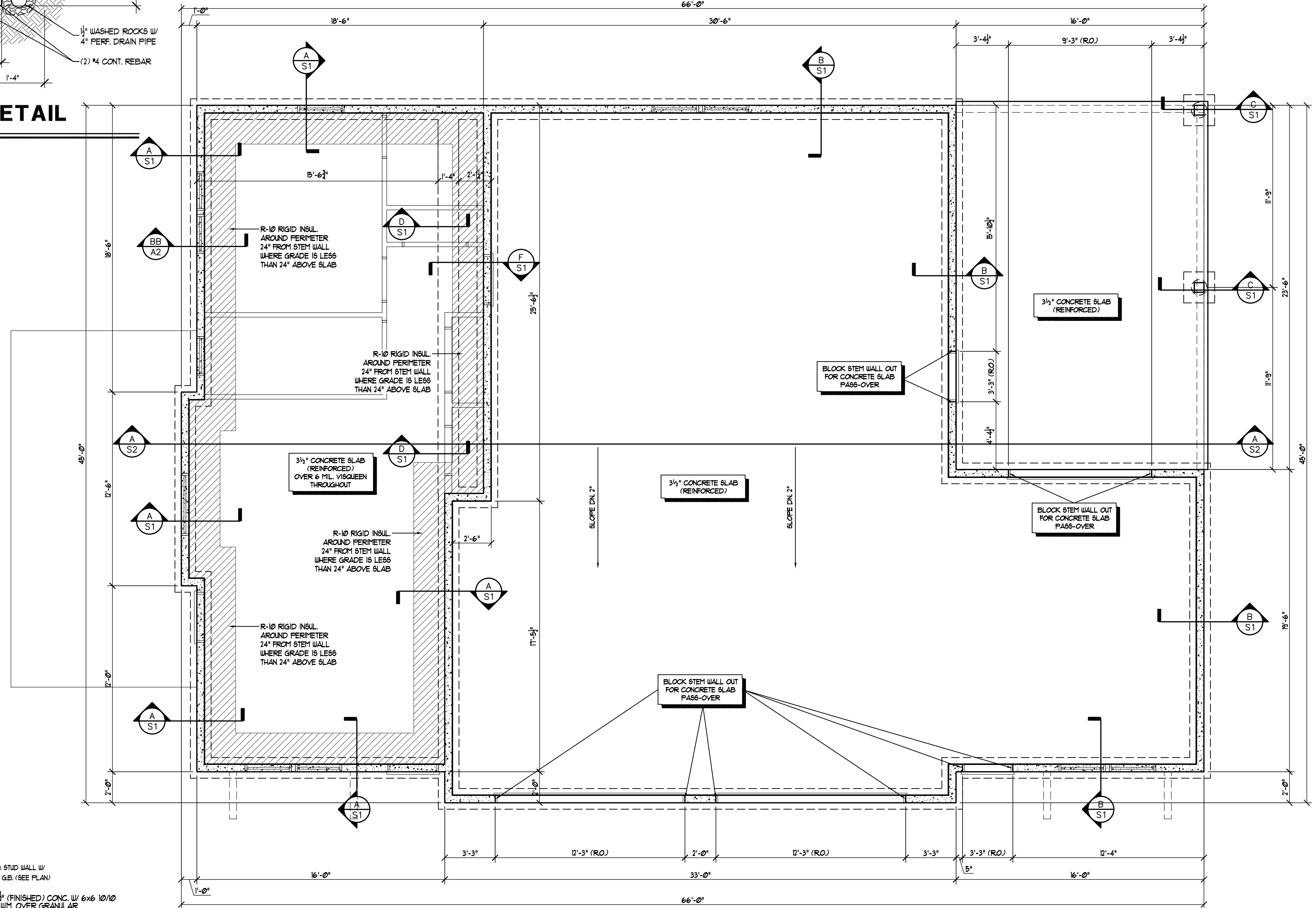
**SONO TUBE
CONC. PAD DETAIL**

SCALE 3/4" = 1'-0"



BEARING WALL

SCALE 3/4" = 1'-0"



FOUNDATION PLAN

SCALE 1/4" = 1'-0"

