

ZONING ANALYSIS

PROPERTY INFO
 PLANNING SITE PLAN
 ADDRESS: 4701 88TH AVE SE, MERCER ISLAND, WA 98040
 PARCEL # 215100-0060
 ZONE: R-35

SETBACKS:
 FRONT: 30'
 SIDES: 5/10'
 REAR: 25'

GROSS FLOOR AREA MAX: 40%
 1224 X 40% = 489.6 MAX. GFA

STRUCTURE IMPERVIOUS
 EXIST. MAIN RESIDENCE: 1499 SQFT
 PROPOSED ADDITION: 55 SQFT
 EXIST. DECK: 593 SQFT
 EXIST. CYRD PORCH: 95 SQFT
 SUBTOTAL: 2240 SQFT

WITH OVERHANG: 1793 SQFT

HARDSURFACE IMPERVIOUS:
 HARDSURFACE: 666 SQFT
 SUBTOTAL: 666 SQFT

SUBTOTALS:
 TOTAL IMPERVIOUS: 2906 SQFT
 TOTAL LOT AREA: 1224 SQFT
 BUILDING IMPERVY %: 18.9%
 TOTAL IMPERVY %: 23.2%

LEGAL DESCRIPTION:
 GILBERT ADD
 Plot Block:
 Plot Lot: 6

LOT SLOPE CALCULATIONS

HIGHEST ELEVATION POINT OF LOT: 335 FT
 LOWEST ELEVATION POINT OF LOT: 285 FT
 ELEVATION DIFFERENCE: 50 FT
 HORIZONTAL DISTANCE: 140 FT
 LOT SLOPE: 35.7%

LEGEND

- ◆ PROPERTY CORNER
- WATER
- SEWER
- SETBACK
- PROPERTY LINE
- EXISTING CONTOURS
- EROSION CONTROL FENCING
- ▨ PROPOSED ADDITION
- ▩ EXISTING HARD SURFACE

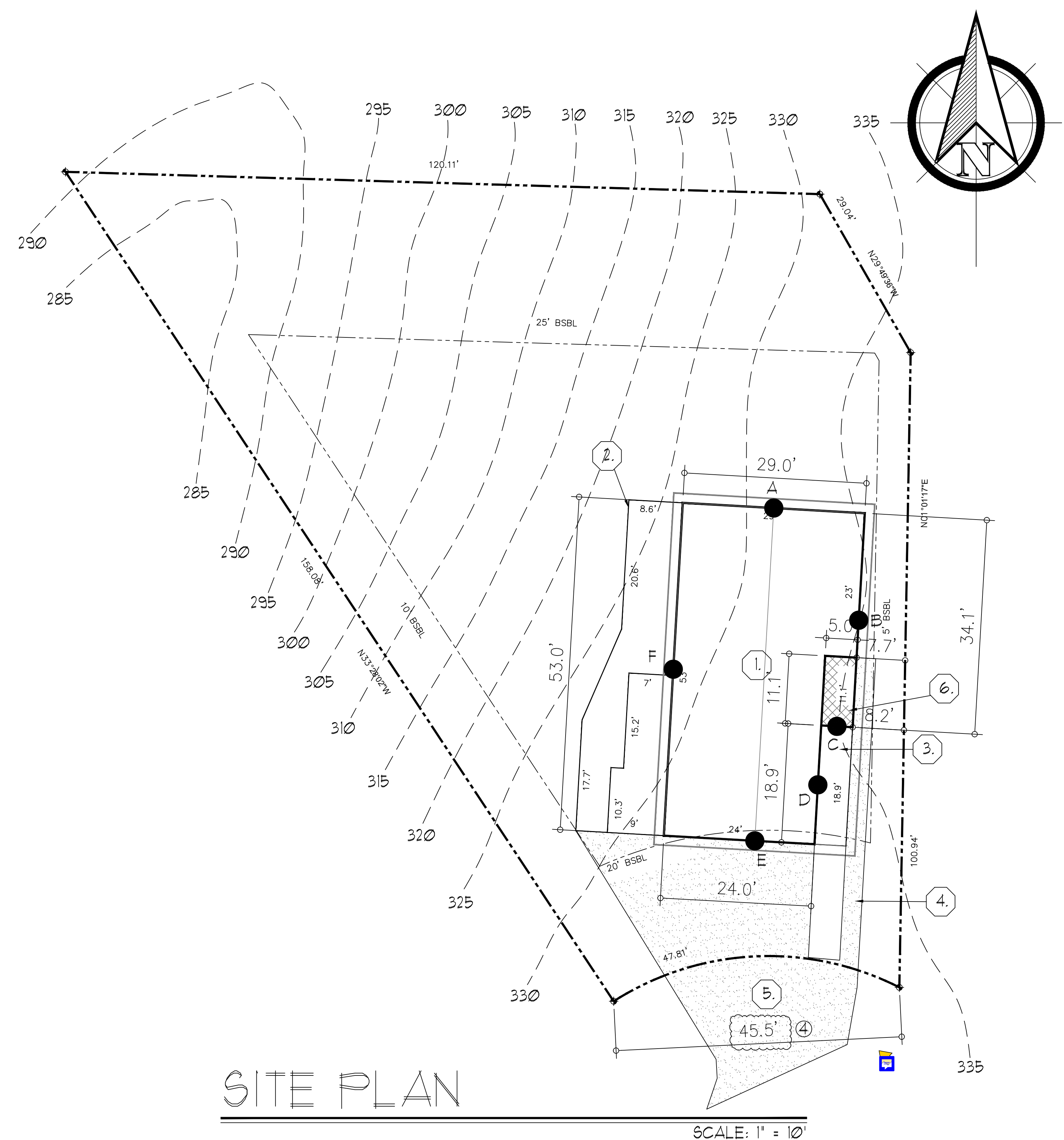
- SITE PLAN KEY NOTES:**
- EXISTING RESIDENCE
 - EXISTING DECK
 - EXISTING CYRD PORCH
 - EXISTING WALKWAY
 - EXISTING DRIVEWAY
 - PROPOSED ADDITION 2

AVERAGE BUILDING ELEVATION

MIDPOINT ELEVATION	WALL SEGMENT LENGTH	TOTAL
A = 331.2'	A = 29'	A = 9604.8
B = 335	B = 34'	B = 11390
C = 334.8	C = 5'	C = 1674
D = 334.4	D = 18.9'	D = 6320.2
E = 322.6	E = 24'	E = 7742.4
F = 328.6	F = 53'	F = 1745.8
	SUBTOTAL = 163.9	SUBTOTAL = 48847.2

541412 / 163.9 = 3304 ABE

THIS PLOT PLAN IS PREPARED TO SHOW THE DIMENSIONAL RELATIONSHIP FROM BUILDING FOUNDATION TO PROPERTY LINE. IT IS NOT A SURVEY. IT IS BASED OFF ONLINE JURISDICTION COUNTY MAPS AND SITE OBSERVATION. ALL CONSTRUCTION SHALL BE CONSISTENT WITH CITY STANDARDS. CONTRACTOR SHALL VERIFY WITH CITY ON APPROVED IMPROVEMENTS PLANS & BETTER PRACTICE MANAGEMENT PRACTICES



SITE WORK

GENERAL

UNLESS A SOILS INVESTIGATION BY A QUALIFIED SOILS ENGINEER IS PROVIDED, FOUNDATION DESIGN IS BASED ON AN ASSUMED AVERAGE SOIL BEARING UN200 PSF. EXTERIOR FOOTINGS SHALL BEAR 18" (MINIMUM) BELOW FINISHED GRADE. ALL FOOTINGS TO BEAR ON FIRM UNDISTURBED EARTH BELOW ORGANIC SURFACE SOILS. BACKFILL TO BE THOROUGHLY COMPACTED. BOLT HEADS AND NUTS BEARING AGAINST WOOD TO BE PROVIDED WITH 1/4"x3/4" PLATE WASHERS. WOOD BEARING ON OR INSTALLED WITHIN 1' OF MASONRY OR CONCRETE TO BE PRESURE TREATED WITH AN APPROVED PRESERVATIVE. FOUNDATION BOLT SILLS TO BE 5/8" DIAMETER AT 6'-0" O.C. UNDO. WITH MIN. 1' EMBEDMENT METAL FRAMING CONNECTORS TO BE MANUFACTURED BY SIMPSON STRONG-TIE OR USP STRUCTURAL CONNECTORS

CARPENTRY

GENERAL

ALL NAILING TO COMPLY WITH REQUIREMENTS OF IRC TABLE R602.3(1)(2)(3) SUPPORTS AND FASTENERS USED TO ATTACH GYPSUM BOARD AND GYPSUM PANEL PRODUCTS SHALL COMPLY WITH TABLE R702.3(3) GYPSUM SHEATHING SHALL BE ATTACHED TO EXTERIOR WALLS IN ACCORDANCE WITH TABLE R602.3(1) GYPSUM BOARD AND GYPSUM PANEL PRODUCTS SHALL BE APPLIED AT RIGHT ANGLES OR PARALLEL TO FRAMING MEMBERS. ALL EDGES AND ENDS OF GYPSUM BOARD AND GYPSUM PANEL PRODUCTS SHALL OCCUR ON THE FRAMING MEMBERS EXCEPT THOSE EDGES AND ENDS THAT ARE PERPENDICULAR TO THE FRAMING MEMBERS. INTERIOR GYPSUM BOARD SHALL NOT BE INSTALLED WHERE IT IS DIRECTLY EXPOSED TO THE WEATHER OR WATER

FASTENERS

USRC R311.3 FASTENERS, INCLUDING NUTS AND WASHERS, AND CONNECTORS IN CONTACT WITH PRESERVATIVE-TREATED WOOD AND FIRE-RETARDANT-TREATED WOOD SHALL BE IN ACCORDANCE WITH THIS SECTION. THE COATING WEIGHTS FOR ZINC-COATED FASTENERS SHALL BE IN ACCORDANCE WITH ASTM A93. STAINLESS STEEL DRIVEN FASTENERS SHALL BE IN ACCORDANCE WITH THE MATERIAL REQUIREMENTS OF ASTM F1661.

R311.3) FASTENERS FOR PRESERVATIVE-TREATED WOOD

FASTENERS, INCLUDING NUTS AND WASHERS, FOR PRESERVATIVE-TREATED WOOD SHALL BE OF HOT-DIPPEED, ZINC-COATED GALVANIZED STEEL, STAINLESS STEEL, SILICON BRONZE OR COPPER. STAPLES SHALL BE OF STAINLESS STEEL. COATING TYPES AND WEIGHTS FOR CONNECTORS IN CONTACT WITH PRESERVATIVE-TREATED WOOD SHALL BE IN ACCORDANCE WITH THE CONNECTOR MANUFACTURER'S RECOMMENDATIONS. IN THE ABSENCE OF MANUFACTURER'S RECOMMENDATIONS, NOT LESS THAN ASTM A653 TYPE G185 ZINC-COATED GALVANIZED STEEL, OR EQUIVALENT, SHALL BE USED.

EXCEPTIONS:

1. 1/2"-INCH DIAMETER (12.7) OR GREATER STEEL BOLTS
2. FASTENERS OTHER THAN NAILS, STAPLES AND TIMBER RIVETS SHALL BE PERMITTED TO BE MECHANICALLY DEPOSITED ZINC-COATED STEEL WITH COATING WEIGHTS IN ACCORDANCE WITH ASTM B655, CLASS 555 MINIMUM.
3. FLAT CARBON STEEL FASTENERS IN 5BX/DOT AND ZINC BORATE PRESERVATIVE TREATED WOOD IN AN INTERIOR, DRY ENVIRONMENT SHALL BE PERMITTED.

- 8' MIN. CLEARANCE BETWEEN WOOD AND EARTH.
12' MIN. CLEARANCE BETWEEN FLOOR BEAMS AND EARTH.
18' MIN. CLEARANCE BETWEEN FLOOR JOIST AND EARTH.

FASTENERS

ALL NAILS SPECIFIED ON THIS PLAN SHALL BE COMMON OR GALVANIZED BOX (UNLESS NOTED OTHERWISE) OF THE DIAMETER AND LENGTH LISTED BELOW OR AS PER APPENDIX L OF THE NATIONAL DESIGN SPECIFICATION FOR WOOD CONSTRUCTION (ND5) 80 COMMON (0.131" DIA. 2-1/2" LENGTH), 80 BOX (0.131" DIA. 2-1/2" LONG), 100 COMMON (0.148" DIA. 3" LONG), 100 BOX (0.127" DIA. 3" LENGTH), 160 COMMON (0.162" DIA. 3-1/2" LONG), (0.148 DIA. 3-1/4" LONG), 50 COOLER (0.086" DIA. 1-5/8" LONG), 60 COOLER (0.092" DIA. 1-7/8" LONG).

LUMBER GRADES

FRAMING LUMBER SHALL COMPLY WITH THE LATEST EDITION OF THE GRADING RULES OF THE WESTERN PRODUCTS ASSOCIATION OR THE WEST COAST LUMBER INSPECTION BUREAU. ALL SAWN LUMBER SHALL BE UNADJUSTED WITH THE GRADE MARK OF AN APPROVED LUMBER GRADING AGENCY AND SHALL HAVE THE FOLLOWING UNADJUSTED DESIGN MINIMUM PROPERTIES:

JOISTS:	WOOD TYPE:
2X4	H F #2 - Fd+915 psi, Fv+150 psi, Fc+1300 psi, E+13000000psi
2X6 OR LARGER	H F #2 - Fd+915 psi, Fv+150 psi, Fc+1300 psi, E+13000000psi
BEAM	
4X	DF-L #2 - Fd+900 psi, Fv+180 psi, Fc+1350 psi, E+16000000psi
6X OR LARGER	DF-L #2 - Fd+875 psi, Fv+170 psi, Fc+1600 psi, E+13000000psi
STUDS	
2X4	H F #2 - Fd+915 psi, Fv+150 psi, Fc+1300 psi, E+13000000psi
2X6 OR LARGER	H F #2 - Fd+915 psi, Fv+150 psi, Fc+1300 psi, E+13000000psi
FOISTS	
4X4	H F #2 - Fd+915 psi, Fv+150 psi, Fc+1300 psi, E+13000000psi
4X6 OR LARGER	H F #2 - Fd+915 psi, Fv+150 psi, Fc+1300 psi, E+13000000psi
6X6 OR LARGER	DF-L #1 - Fd+1200 psi, Fv+170 psi, Fc+1000 psi, E+16000000psi

GLUED-LAMINATED BEAM (GLB)

SHALL BE 24F-V4 FOR SINGLE SPANS & 24F-V8 FOR CONTINUOUS OR CANTILEVER SPANS WITH THE FOLLOWING MINIMUM PROPERTIES:
Fd + 2,400 PSI, Fv + 165 PSI, Fc + 650 PSI (PERPENDICULAR), E + 1,800,000 PSI.

ENGINEERED WOOD BEAMS AND I-JOIST

CONTRACTOR SHALL SUBMIT SHOP DRAWINGS AND SPECIFICATIONS FOR APPROVAL BY BUILDING OFFICIAL. DESIGN, FABRICATION AND ERECTION IN ACCORDANCE WITH THE LATEST ICC EVALUATION REPORT.

BEAMS DESIGNATED AS 'PSL' SHALL HAVE THE MINIMUM PROPERTIES:

Fd + 2,900 PSI, Fv + 290 PSI, Fc + 150 PSI (PERPENDICULAR), E + 2,000,000 PSI.

BEAMS DESIGNATED AS 'LVL' SHALL HAVE THE MINIMUM PROPERTIES:

Fd + 2,600 PSI, Fv + 285 PSI, Fc + 150 PSI (PERPENDICULAR), E + 1,900,000 PSI.

BEAMS DESIGNATED AS 'LSL' SHALL HAVE THE MINIMUM PROPERTIES:

Fd + 1,100 PSI, Fv + 400 PSI, Fc + 600 PSI (PERPENDICULAR), E + 1,900,000 PSI.

CALCULATIONS SHALL INCLUDE DEFLECTION AND CAMBER REQUIREMENTS.

DEFLECTION SHALL BE LIMITED AS FOLLOWS:
FLOOR LIVE LOAD MAXIMUM + L/180, FLOOR TOTAL LOAD MAXIMUM + L/240.

WINDOW INSTALLATION

WINDOWS SHALL BE INSTALLED AND FINISHED IN ACCORDANCE WITH THE MANUFACTURER'S WRITTEN INSTALLATION INSTRUCTIONS. WRITTEN INSTALLATION INSTRUCTIONS SHALL BE PROVIDED BY THE MANUFACTURER FOR EACH WINDOW.

INSULATION AND MOISTURE PROTECTION

GENERAL

MAINTAIN 1" CLEARANCE ABOVE INSULATION FOR FREE AIR FLOW. INSULATION Baffles TO EXTEND 6" ABOVE INSULATION TO EXTEND 12" ABOVE INSULATION. LOOSE-FILL INSULATION INSULATE BEHIND TUBS/SHOWERS, PARTITIONS AND CORNERS FACE-STAPLE FACED Batts FRICTION-FIT UNFACED Batts USE 4 MIL POLY VAPOR RETARDER AT EXTERIOR WALLS R-10 INSULATION UNDER ELECTRIC WATER HEATERS.

INSULATION MATERIALS

INSULATION MATERIAL, INCLUDING FACINGS, SUCH AS VAPOR RETARDERS OR VAPOR PERMEABLE MEMBRANES INSTALLED WITHIN FLOOR-CEILING ASSEMBLIES, ROOF-CEILING ASSEMBLIES, WALL ASSEMBLIES, CRAWL SPACES, AND ATTICS SHALL HAVE A FLAME-SPREAD INDEX NOT TO EXCEED 25 WITH AN ACCOMPANYING SMOKE-DEVELOPED INDEX NOT TO EXCEED 450 WHEN TESTED IN ACCORDANCE WITH ASTM E 84

EXCEPTIONS:

1. WHEN SUCH MATERIAL ARE INSTALLED IN CONCEALED SPACES, THE FLAME-SPREAD AND SMOKE-DEVELOPMENT LIMITATIONS DO NOT APPLY TO THE FACINGS, PROVIDED THAT THE FACING IS INSTALLED IN SUBSTANTIAL CONTACT WITH THE UNEXPOSED SURFACE OF THE CEILING, FLOOR OR WALL FINISH.
2. CELLULOSE LOOSE-FILL INSULATION WHICH IS NOT SPRAY APPLIED, COMPLYING WITH THE REQUIREMENTS OF IRC R302.103, SHALL ONLY BE REQUIRED TO MEET THE SMOKE-DEVELOPED INDEX OF NOT MORE THAN 450.

INFILTRATION CONTROL

EXTERIOR JOINTS AROUND WINDOWS AND DOOR FRAMES, PENETRATIONS IN FLOORS, ROOFS AND WALLS AND ALL SIMILAR OPENINGS SHALL BE SEALED, CAULKED, GASKETED OR WEATHERSTRIPPED TO LIMIT AIR LEAKAGE.

VAPOR BARRIERS / GROUND COVERS

AN APPROVED VAPOR BARRIER SHALL BE PROPERLY INSTALLED IN ROOF DECKS, IN ENCLOSED CEILING SPACES AND AT EXTERIOR WALLS.
A GROUND COVER OF 6 MIL (0.006") BLACK POLYETHYLENE OR EQUIVALENT SHALL BE LAID OVER THE GROUND IN ALL CRAWL SPACES. THE GROUND COVER SHALL BE OVERLAPPED ONE FOOT AT EACH JOINT AND SHALL EXTEND TO THE FOUNDATION WALL.

WALL FLASHING

APPROVED CORROSION-RESISTANT FLASHING SHALL BE PROVIDED IN THE EXTERIOR WALL ENVELOPE IN SUCH A MANNER AS TO PREVENT ENTRY OF WATER INTO THE WALL CAVITY OR PENETRATION OF WATER TO THE BUILDING STRUCTURAL FRAMING COMPONENTS. THE FLASHING SHALL EXTEND TO THE SURFACE OF THE EXTERIOR WALL FINISH AND SHALL BE INSTALLED TO PREVENT WATER FROM REENTERING THE EXTERIOR WALL ENVELOPE. APPROVED CORROSION-RESISTANT FLASHINGS SHALL BE INSTALLED AT ALL OF THE FOLLOWING LOCATIONS:

1. AT TOP OF ALL EXTERIOR WINDOWS AND DOOR OPENINGS IN SUCH A MANNER AS TO BE LEAKPROOF EXCEPT THAT SELF-FLASHING UNDOUS HAVING A CONTINUOUS LAP OF NOT LESS THAN 1-1/8" (28 mm) OVER THE SHEATHING MATERIAL AROUND THE PERIMETER OF THE OPENING. INCLUDING CORNERS, DOO NOT REQUIRE ADDITIONAL FLASHING; JAMB FLASHING MAY ALSO BE OMITTED WHEN SPECIFICALLY APPROVED BY THE BUILDING OFFICIAL.
2. AT THE INTERSECTION OF CHIMNEYS OR OTHER MASONRY CONSTRUCTION WITH FRAME OR STUCCO WALLS, WITH PROJECTING LIPS ON BOTH SIDES UNDER STUCCO OPENINGS.
3. UNDER AND AT THE ENDS OF MASONRY, WOOD, OR METAL COPINGS AND SILLS.
4. CONTINUOUSLY ABOVE ALLPROJECTING WOOD TRIM.
5. WHERE EXTERIOR PORCHES, DECKS, OR STAIRS ATTACH TO A WALL OR FLOOR ASSEMBLY OF WOOD CONSTRUCTION.
6. AT WALL AND ROOF INTERSECTIONS.
7. AT BUILT-IN GUTTERS.

DRAFTSTOPPING & FIRE BLOCKING

DRAFTSTOPPING

IN COMBUSTIBLE CONSTRUCTION WHERE THERE IS USABLE SPACE BOTH ABOVE AND BELOW THE CONCEALED SPACE OF A FLOOR-CEILING ASSEMBLY, DRAFTSTOPS SHALL BE INSTALLED SO THAT THE AREA OF THE CONCEALED SPACES DOES NOT EXCEED 1000 SQUARE FEET (92.9 M²). DRAFTSTOPPING SHALL DIVIDE THE CONCEALED SPACE INTO APPROXIMATELY EQUAL AREAS WHERE THE ASSEMBLY IS ENCLOSED BY A FLOOR MEMBRANE ABOVE AND A CEILING MEMBRANE BELOW. DRAFTSTOPPING SHALL BE PROVIDED IN FLOOR-CEILING ASSEMBLIES UNDER THE FOLLOWING CIRCUMSTANCES:

1. CEILING IS SUSPENDED UNDER THE FLOOR FRAMING.
2. FLOOR FRAMING IS CONSTRUCTED OF TRUSS-TYPE OPEN-WEB OR PERFORATED MEMBERS.
- USRC R302.1(2) DRAFTSTOPPING MATERIALS SHALL BE NOT LESS THAN 1/2"-INCH (12.7) GYPSUM BOARD, 3/8"-INCH (9.5) WOOD STRUCTURAL PANELS OR OTHER APPROVED MATERIALS ADEQUATELY SUPPORTED. DRAFTSTOPPING SHALL BE INSTALLED PARALLEL TO THE FLOOR FRAMING MEMBERS UNLESS OTHERWISE APPROVED BY THE BUILDING OFFICIAL. THE INTEGRITY OF THE DRAFTSTOPS SHALL BE MAINTAINED.

FIREBLOCKING

FIREBLOCKING SHALL BE PROVIDED TO CUT OFF ALL CONCEALED DRAFT OPENINGS (BOTH VERTICAL AND HORIZONTAL) AND TO FORM AN EFFECTIVE BARRIER BETWEEN STORES, AND BETWEEN A TOP STORY AND THE ROOF SPACE. FIREBLOCKING SHALL BE PROVIDED IN WOOD-FRAME CONSTRUCTION IN THE FOLLOWING LOCATIONS:

1. IN CONCEALED SPACES OF STUD WALLS AND PARTITIONS, INCLUDING FURRED SPACES AND PARALLEL ROUS OF STUDS OR STAGGERED STUDS AS FOLLOWS:
 - 1). VERTICALLY AT THE CEILING AND FLOOR LEVELS.
 - 2). HORIZONTALLY AT INTERVALS NOT EXCEEDING 10ft.
2. AT ALL INTERCONNECTIONS BETWEEN CONCEALED VERTICAL AND HORIZONTAL SPACES SUCH AS OCCUR AT SOFFITS, DROP CEILINGS, AND COVE CEILINGS.
3. UNDER-STAIR PROTECTION ENCLOSED SPACE UNDER STAIRS THAT IS ACCESSED BY A DOOR OR ACCESS PANEL SHALL HAVE WALLS, UNDER-STAIR SURFACE AND ANY SOFFITS PROTECTED ON THE ENCLOSED SIDE WITH 1" GYPSUM BOARD
4. AT OPENINGS AROUND VENTS, PIPES, AND DUCTS AT CEILING AND FLOOR LEVEL, WITH AN APPROVED MATERIAL TO RESIST THE FREE PASSAGE OF FLAME AND PRODUCTS OF COMBUSTION.
5. FOR THE FIREBLOCKING OF CHIMNEYS AND FIREPLACES
6. FIREBLOCKING OF CORNICES OF A TWO-FAMILY DWELLINGS IS REQUIRED AT THE LINE OF DWELLING UNIT SEPERATION.

FOUNDATION WATERPROOFING &

DAMPROOFING

DAMPROOFING

USRC R605.2 IN AREAS WHERE A HIGH WATER TABLE OR OTHER SEVERE SOIL-WATER CONDITIONS ARE KNOWN TO EXIST, EXTERIOR FOUNDATION WALLS THAT RETAIN EARTH AND ENCLOSE INTERIOR SPACES AND FLOORS BELOW GRADE SHALL BE WATERPROOFED FROM THE HIGHER OF (A) THE TOP OF THE FOOTING OR (B) 6 INCHES (152 MM) BELOW THE TOP OF THE BASEMENT FLOOR, TO THE FINISHED GRADE. WALLS SHALL BE WATERPROOFED IN ACCORDANCE WITH ONE OF THE FOLLOWING:

1. TWO-PLY HOT-MOPPED FELTS
2. FIFTY-FIVE-POUND ROLL ROOFING
3. SIX-MIL POLYVINYL CHLORIDE
4. SIX-MIL POLYETHYLENE
5. FORTY-MIL POLYMER-MODIFIED ASPHALT.
6. SIXTY-MIL FLEXIBLE POLYMER CEMENT
7. ONE-EIGHTH-INCH CEMENT-BASED, FIBER-REINFORCED, WATERPROOF COATING
8. SIXTY-MIL SOLVENT-FREE LIQUID-APPLIED SYNTHETIC RUBBER

FOUNDATION WATERPROOFING &

DAMPROOFING (CONTINUED)

WATERPROOFING

IN AREAS WHERE HIGH WATER TABLE OR OTHER SEVERE SOIL-WATER CONDITIONS ARE KNOWN TO EXIST, EXTERIOR FOUNDATION WALLS THAT RETAIN EARTH OR ENCLOSE INTERIOR SPACES AND FLOORS BELOW GRADE SHALL BE WATERPROOFED FROM THE TOP OF FOOTING TO FINISHED GRADE. WALLS SHALL BE WATERPROOFED IN ACCORDANCE WITH ONE OF THE FOLLOWING.

1. 2-PLY HOT MOPPED FELT
 2. 55 POUND ROOF ROLLING
 3. 6-MIL POLYVINYL CHLORIDE
 4. 6-MIL POLYETHYLENE
 5. 40-MIL POLYMER-MODIFIED ASPHALT
 6. 60-MIL FLEXIBLE POLYMER CEMENT
 7. 1/8" CEMENT-BASED, FIBER-REINFORCED, WATERPROOF COATING
 8. 60-MIL SOLVANT-FREE, LIQUID-APPLIED SYNTHETIC RUBBER
- EXCEPTION: ORGANIC-SOLVANT-BASED PRODUCTS SUCH AS HYDROCARBONS, CHLORINATED HYDROCARBONS, KETONS AND ESTERS SHALL NOT BE USED FOR ICF WALLS WITH EXPANDED POLYSTYRENE FOAM MATERIAL. USE OF PLASTIC ROOFING CEMENTS, ACRYLIC COATINGS, LATEX COATINGS, MORTARS AND PARKINGS TO SEAL ICF WALLS IS PERMITTED. COLD-SETTING ASPHALT OR HOT ASPHALT SHALL CONFORM TO TYPE C OF ASTM D 449. HOT ASPHALT SHALL BE APPLIED AT A TEMPERATURE OF LESS THAN 200 DEG. F. ALL JOINTS IN MEMBRANE WATERPROOFING SHALL BE LAPPED AND SEALED WITH AN ADHESIVE COMPATIBLE WITH THE MEMBRANE.

DOORS, WINDOWS AND SKYLIGHTS

GENERAL

ALL SKYLIGHTS AND SKY WALLS TO BE LAMINATED GLASS UNLESS NOTED OTHERWISE. BEDROOM EMERGENCY EGRESS WINDOWS SHALL HAVE MINIMUM NET CLEAR OPENING OF 5.7 SQ. FT. WITH MINIMUM NET CLEAR OPENING WIDTH OF 20" AND MINIMUM NET CLEAR OPENING HEIGHT OF 24". FINISHED BILT HEIGHT SHALL BE MAXIMUM 44" ABOVE FLOOR, MEASURED FROM THE FINISHED FLOOR TO THE BOTTOM OF THE CLEAR OPENING.
USRC R703.85 FLASHING SHALL BE LOCATED BENEATH THE FIRST COURSE OF MASONRY ABOVE FINISHED GROUND LEVEL ABOVE THE FOUNDATION WALL OR SLAB AND AT OTHER POINTS OF SUPPORT, INCLUDING STRUCTURAL FLOORS, SHELF ANGLES AND LINTELS WHERE MASONRY VENEERS ARE DESIGNED.

PROPOSED SINGLE FAMILY DWELLING AND REMODELS & ADDITIONS SHALL CONFORM TO THE FOLLOWING CODES:

- 2018 INTERNATIONAL BUILDING CODE
- 2018 INTERNATIONAL RESIDENTIAL CODE
- 2018 UNIFORM FIREBLOOD CODE
- 2018 WASHINGTON STATE ENERGY CODE
- 2018 WASHINGTON STATE AMENDMENTS

MECHANICAL

HEATING EQUIPMENT

M1401 HEATING AND COOLING EQUIPMENT AND APPLIANCES SHALL BE INSTALLED IN ACCORDANCE WITH THE MANUFACTURERS INSTRUCTIONS AND THE REQUIREMENTS OF THIS CODE.

VENTILATION

M1505.4.4 LOCAL EXHAUST RATES. LOCAL EXHAUST SYSTEMS SHALL BE DESIGNED TO HAVE THE CAPACITY TO EXHAUST THE MINIMUM AIRFLOW RATE DETERMINED IN ACCORDANCE WITH TABLE M1505.4.4

MINIMUM REQUIRED LOCAL EXHAUST RATES FOR ONE-AND

TWO-FAMILY DWELLINGS PER USRC 2018 TABLE M1505.4.4(1)

AREA TO BE EXHAUSTED	EXHAUSTED RATES	
	INTERMITTENT	CONTINUOUS
KITCHENS	100 CFM	30 CFM
BATHROOMS - TOILET ROOMS	50 CFM	20 CFM

FOR 9'- INCH + 25.4 MM, 1 FOOT + 304.8 MM, 1 CUBIC FOOT PER MINUTE + 0.0004719 m³ /s, 1 INCH WATER GAGE+249 PA

2018 WASHINGTON STATE ENERGY CODE - R403.6.1

WHOLE-HOUSE MECHANICAL VENTILATION SYSTEM FAN EFFICACY. MECHANICAL VENTILATION SYSTEM FANS SHALL MEET THE EFFICACY REQUIREMENTS OF TABLE R403.6.1. EXCEPTION: WHERE AN AIR HANDLER THAT IS INTEGRAL TO THE TESTED AND LISTED HVAC EQUIPMENT IS USED TO PROVIDE WHOLE-HOUSE VENTILATION, THE AIR HANDLER SHALL BE POWERED BY AN ELECTRONICALLY CONTROLLED MOTOR.

TABLE R403.6.1

MECHANICAL VENTILATION SYSTEM FAN EFFICACY

FAN LOCATION	AIR FLOW RATE MINIMUM (CFM)	MINIMUM EFFICACY (CFM/WATT)	AIR FLOW RATE MAXIMUM (CFM)
HRV OR ERV	ANY	12 CFM/WATT	ANY
RANGE HOODS	ANY	2.8 CFM/WATT	ANY
IN-LINE-FAN	ANY	2.8 CFM/WATT	ANY
BATHROOM, UTILITY ROOM	10	14 CFM/WATT	30
BATHROOM, UTILITY ROOM	30	2.8 CFM/WATT	ANY

MECHANICAL VENTILATION IRC SECTION 1505

M1505.4.4 LOCAL EXHAUST RATES

LOCAL EXHAUST SYSTEMS SHALL BE DESIGNED TO HAVE THE CAPACITY TO EXHAUST THE MINIMUM AIRFLOW RATE DETERMINED IN ACCORDANCE WITH TABLE M1505.4.4

M1505.4 WHOLE-HOUSE MECHANICAL VENTILATION SYSTEM

WHOLE-HOUSE MECHANICAL VENTILATION SYSTEMS SHALL BE DESIGNED IN ACCORDANCE WITH SECTIONS M1505.4.1 THROUGH M1505.4.4

M1505.4.1 SYSTEM DESIGN

THE WHOLE-HOUSE VENTILATION SYSTEM SHALL CONSIST OF ONE OR MORE SUPPLY OR EXHAUST FANS, OR A COMBINATION OF SUCH, AND ASSOCIATED DUCTS AND CONTROLS. LOCAL EXHAUST OR SUPPLY FANS ARE PERMITTED TO SERVE AS SUCH A SYSTEM. OUTDOOR AIR DUCTS CONNECTED TO THE RETURN SIDE OF AN AIR HANDLER SHALL BE CONSIDERED AS PROVIDING SUPPLY VENTILATION.

M1505.4.2 SYSTEM CONTROLS

THE WHOLE-HOUSE MECHANICAL VENTILATION SYSTEM SHALL PROVIDE OUTDOOR AIR AT A CONTINUOUS RATE AS DETERMINED IN ACCORDANCE WITH TABLE M1505.4.3(1) OR EQUATION B-1 VENTILATION RATE IN CUBIC FEET PER MINUTE + (0.01 x TOTAL SQUARE FOOT AREA OF HOUSE) + 15 x (NUMBER OF BEDROOMS + 1)

M1505.4.3 MECHANICAL VENTILATION RATE

THE WHOLE-HOUSE MECHANICAL VENTILATION SYSTEM SHALL PROVIDE OUTDOOR AIR AT A CONTINUOUS RATE AS DETERMINED IN TABLE M1505.4.3(1) OR EQUATION B-1 VENTILATION RATE IN CUBIC FEET PER MINUTE + (0.01 x TOTAL SQUARE FOOT AREA OF HOUSE) + 15 x (NUMBER OF BEDROOMS + 1)

EXCEPTION: THE WHOLE-HOUSE MECHANICAL VENTILATION SYSTEM IS PERMITTED TO OPERATE INTERMITTENTLY WHERE THE SYSTEM HAS CONTROLS THAT ENABLE OPERATION FOR NOT LESS THAN 25 PERCENT OF EACH 4-HOUR SEGMENT AND THE VENTILATION RATE PRESCRIBED IN TALE M1505.4.3(1) IS MULTIPLIED BY THE FACTOR DETERMINED IN ACCORDANCE WITH TABLE M1505.4.3(2).

TABLE M1505.4.3(1)

CONINUOUS WHOLE-HOUSE MECHANICAL VENTILATION SYSTEM AIRFLOW RATE REQUIREMENTS

DWELLING UNIT FLOOR AREA (SQUARE FEET)	NUMBER OF BEDROOMS			
	0-1	2	3	4
500	30	30	35	45
501-1000	30	35	40	50
1001-1500	30	40	45	55
1501-2000	35	45	50	60
2001-2500	40	50	55	65
2501-3000	45	55	60	70
3001-3500	50	60	65	75
3501-4000	55	65	70	80
4001-4500	60	70	75	90
4501-5000	65	75	80	95

TABLE M1505.4.3(2) SYSTEM COEFFICIENT

SYSTEM TYPE	DISTRIBUTED	NOT DISTRIBUTED
BALANCED	10	125
NOT BALANCED	125	15

TABLE M1505.4.3(3)

INTERMITTENT WHOLE-HOUSE MECHANICAL VENTILATION RATE FACTORS⁶⁰

TABLE M1505.4.3(3)				
RUN-TIME PERCENTAGE IN EACH 4-HOUR SEGMENT	50%	66%	75%	100%
FACTOR	2	15	13	(10)

- a. FOR VENTILATION SYSTEM RUN TIME VALUES BETWEEN THOSE GIVEN, THE FACTORS ARE PERMITTED TO BE DETERMINED BY INTERPOLATION.
- b. EXTRAPOLATION BEYOND THE TABLE IS PROHIBITED.

DUCT LEAKAGE PROTECTION:

DUCTS SHALL BE LEAK TESTED IN ACCORDANCE WITH USU R5-33, USING THE MAXIMUM DUCT LEAKAGE RATES SPECIFIED.

BUILDING AIR LEAKAGE TESTING 2018 USEC SEC. 402.4.12

THE BUILDING OR DWELLING UNIT SHALL BE TESTED AND VERIFIED AS HAVING AN AIR LEAKAGE RATE OF NOT EXCEEDING 5 AIR CHANGES PER HOUR. TESTING SHALL BE CONDUCTED WITH A BLOWER DOOR AT A PRESSURE OF 02 INCHES WG. FOR THIS TEST ONLY, THE VOLUME OF THE HOME SHALL BE THE CONDITIONED FLOOR AREA IN FT² MULTIPLIED BY 8.5 FEET, WHERE REQUIRED BY THE CODE OFFICIAL. TESTING SHALL BE CONDUCTED BY AN APPROVED THIRD PARTY. A WRITTEN REPORT OF THE RESULTS OF THE TEST SHALL BE SIGNED BY THE PARTY TO THE TEST AND PROVIDED TO THE CODE OFFICIAL. TESTING SHALL BE PERFORMED AT ANY TIME AFTER CREATION OF ALL PENETRATIONS OF THE BUILDING THERMAL ENVELOPE, ONCE VISUAL INSPECTION HAS CONFIRMED SEALING (SEE TABLE R402.4.11). OPERABLE WINDOWS AND DOORS MANUFACTURED BY SMALL BUSINESS SHALL BE PERMITTED TO BE SEALED OFF AT THE FRAME PRIOR TO THE TEST.

TEMPERATURE CONTROL

AT LEAST ONE THERMOSTAT SHALL BE PROVIDED FOR EACH SEPARATE HEATING AND COOLING SYSTEM IRC SECTION R302.10. THE THERMOSTAT SHALL ALLOW FOR, AT A MINIMUM, A 5-2 PROGRAMMABLE SCHEDULE (WEEKDAY WEEKENDS) AND BE CAPABLE OF PROVIDING AT LEAST TWO PROGRAMMABLE SETBACK/SETUP PERIODS PER DAY.

2018 WASHINGTON STATE ENERGY CODE - TABLE 402.11

THE BUILDING THERMAL ENVELOPE SHALL MEET THE REQUIREMENTS OF TABLE R402.11 BASED ON THE CLIMATE ZONE SPECIFIED IN CHAPTER 3

PENETRATION U-FACTOR		CEILING W/ ATTIC	WOOD FRAMED WALL	FRAMED FLOOR	WALL BELOW GRADE	SLAB ON GRADE
VERTICAL	SKYLIGHT	R-49	R-21	R-38	R-10/15/21 INT + 5 BT	R-10' ²
0.30	0.50					

USRC 1505.4.4(1) MINIMUM LOCAL EXHAUST RATES

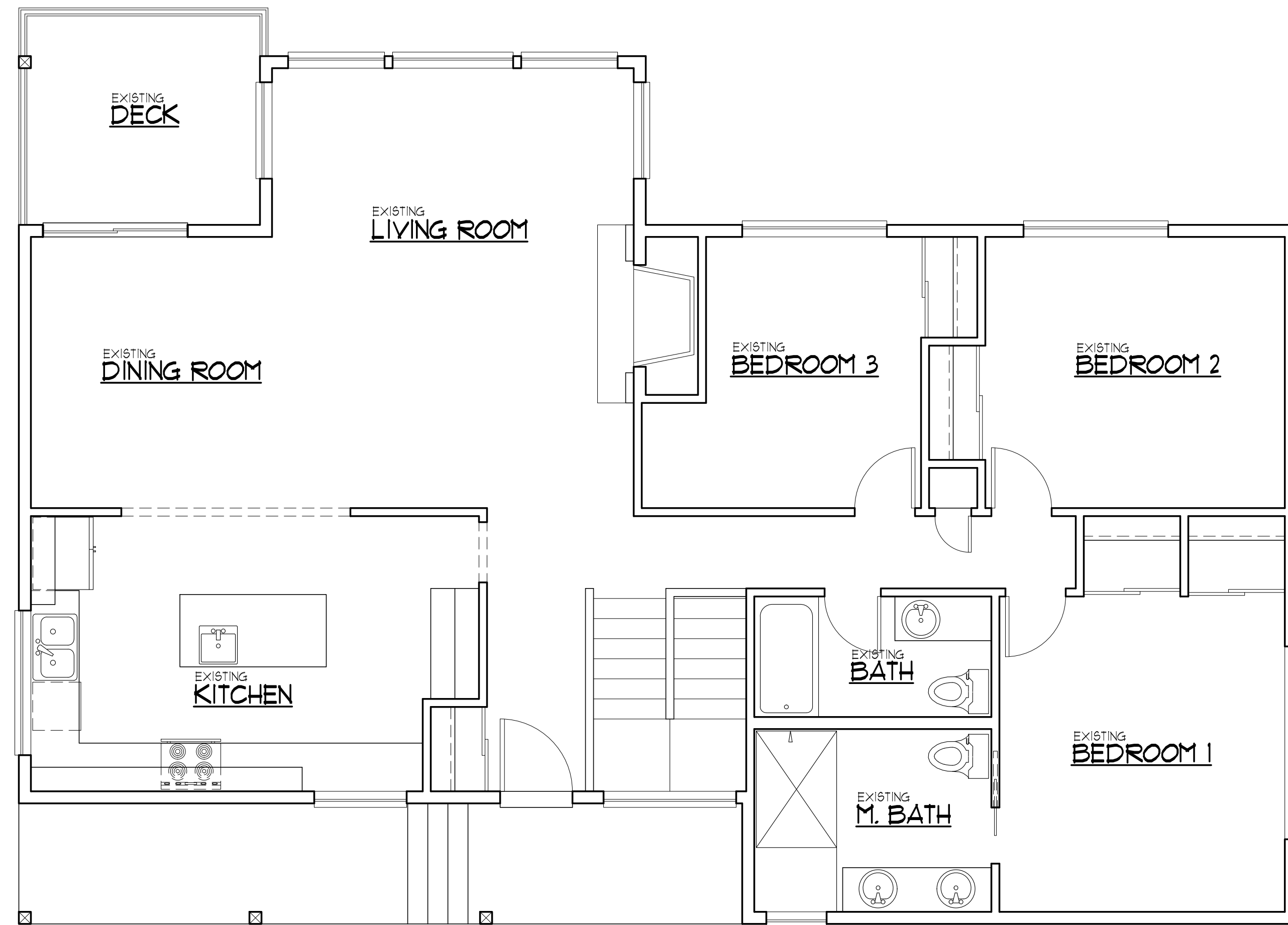
VENTILATION SCHEDULE

VENTILATION REQUIREMENTS OF IRC TABLE USRC M1505.4.4

SYMBOL		
	1	KITCHENS
		100 CFM INTERMITTENT OR 30 CFM CONTINUOUS
	2	BATHROOMS-TOILET ROOMS
		MECHANICAL EXHAUST CAPACITY OF 50 CFM INTERMITTENT OR 20 CFM CONTINUOUS

USRC 403.6.1 WHOLE-HOUSE MECHANICAL VENTILATION SYSTEM

	3	EACH DWELLING UNIT SHALL BE EQUIPPED WITH A VENTILATION SYSTEM. THE WHOLE-HOUSE MECHANICAL VENTILATION SYSTEMS SHALL BE DESIGNED IN ACCORDANCE WITH SECTIONS M1505.4.1 THROUGH M1505.4.4
	3	Each Dwelling Unit shall be equipped with a ventilation system. The whole-house mechanical ventilation systems shall be designed

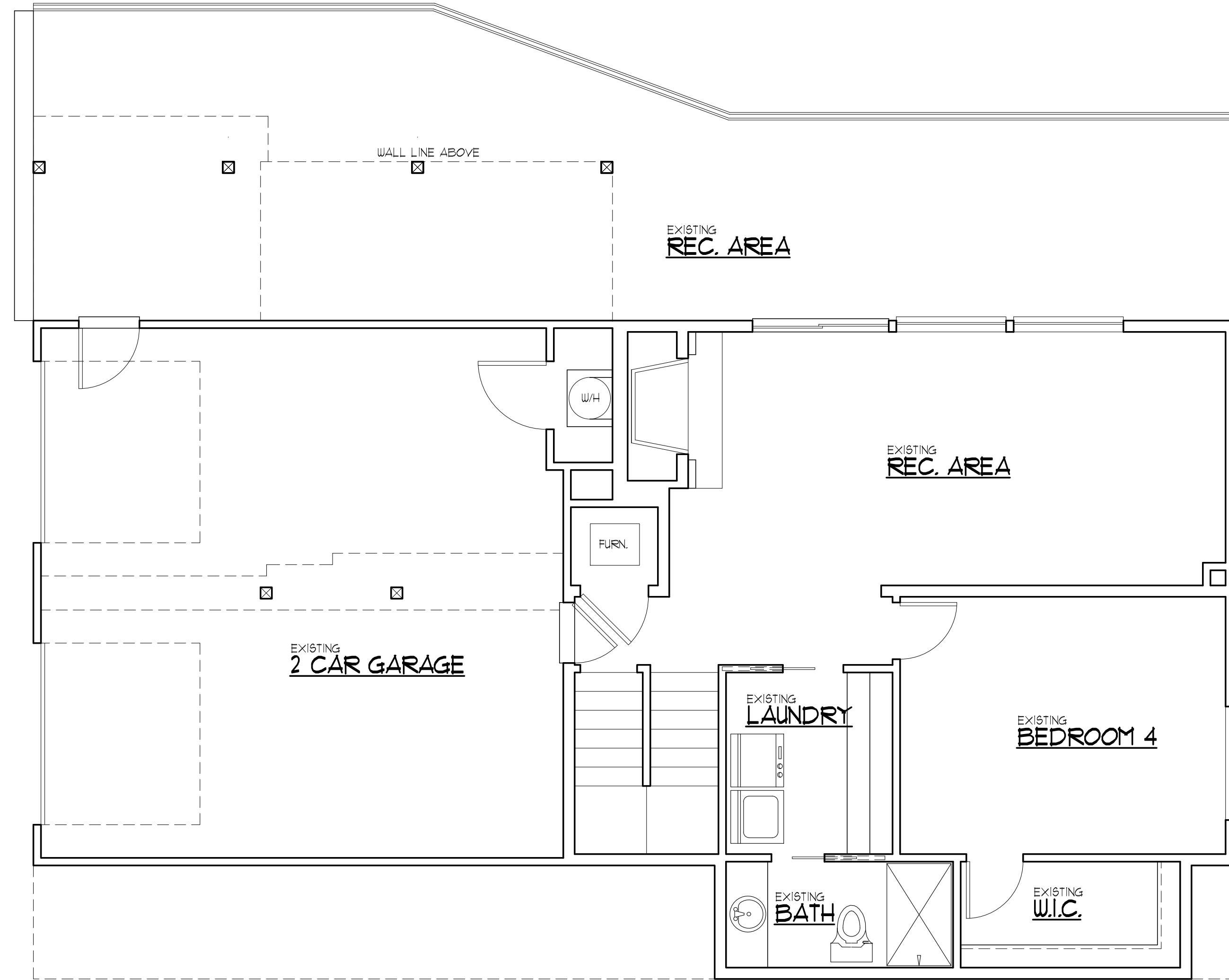


MAIN FLOOR PLAN

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EXISTING

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



LOWER FLOOR PLAN

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EXISTING

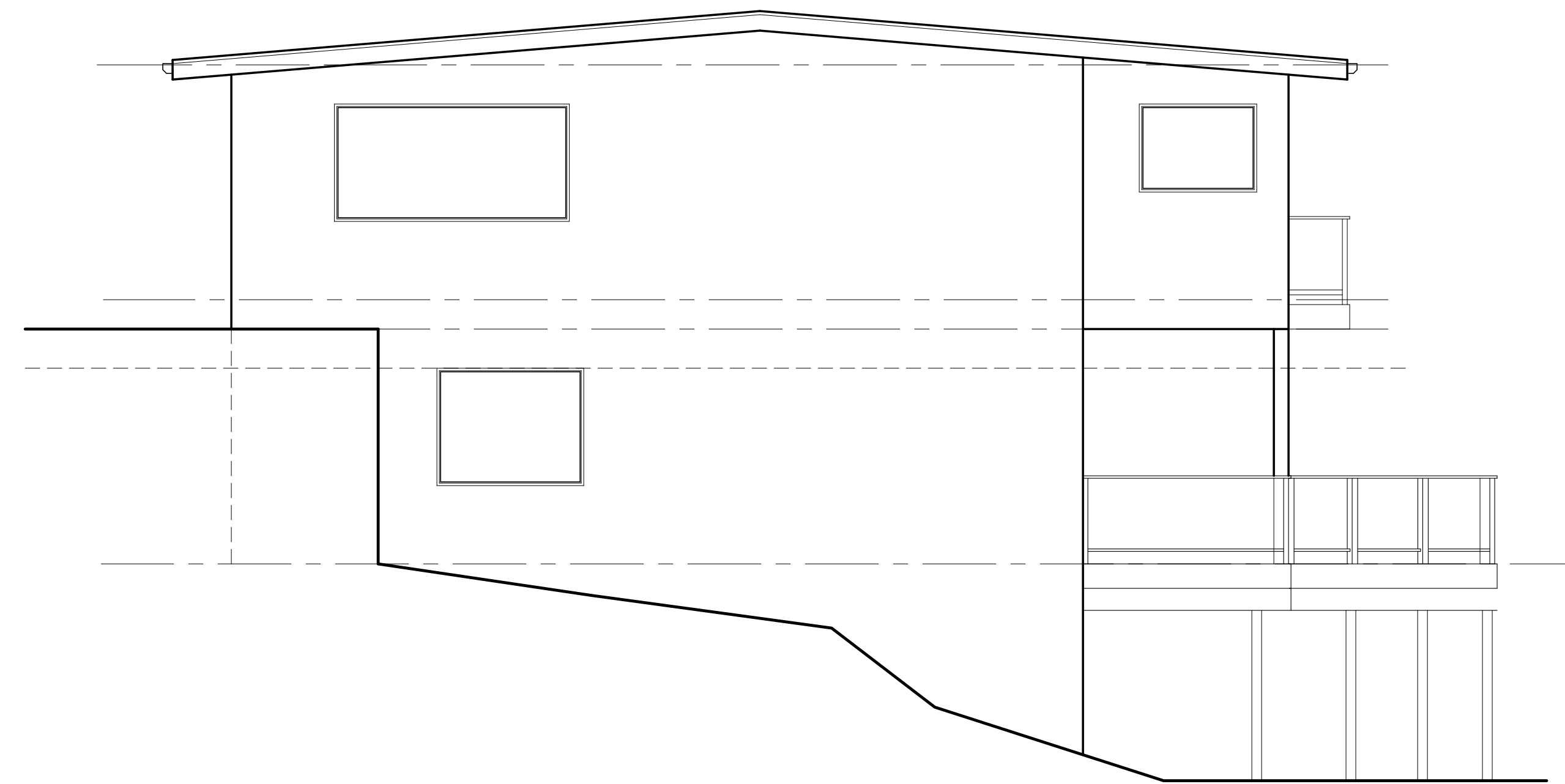
SCALE : 1/4" = 1'-0"

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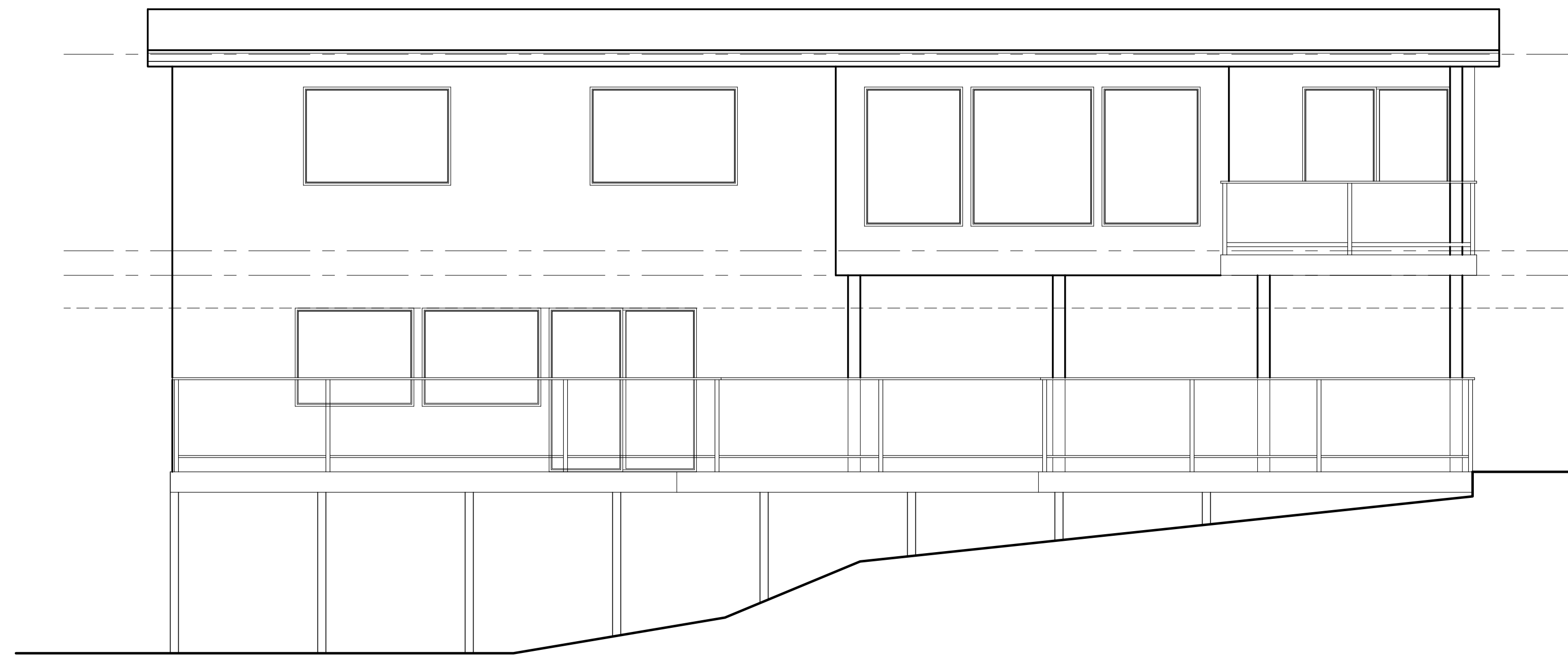
DESIGNER: 0
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 DATE: 10/10/23
 PROJECT NO: 22104



REAR ELEVATION

EXISTING

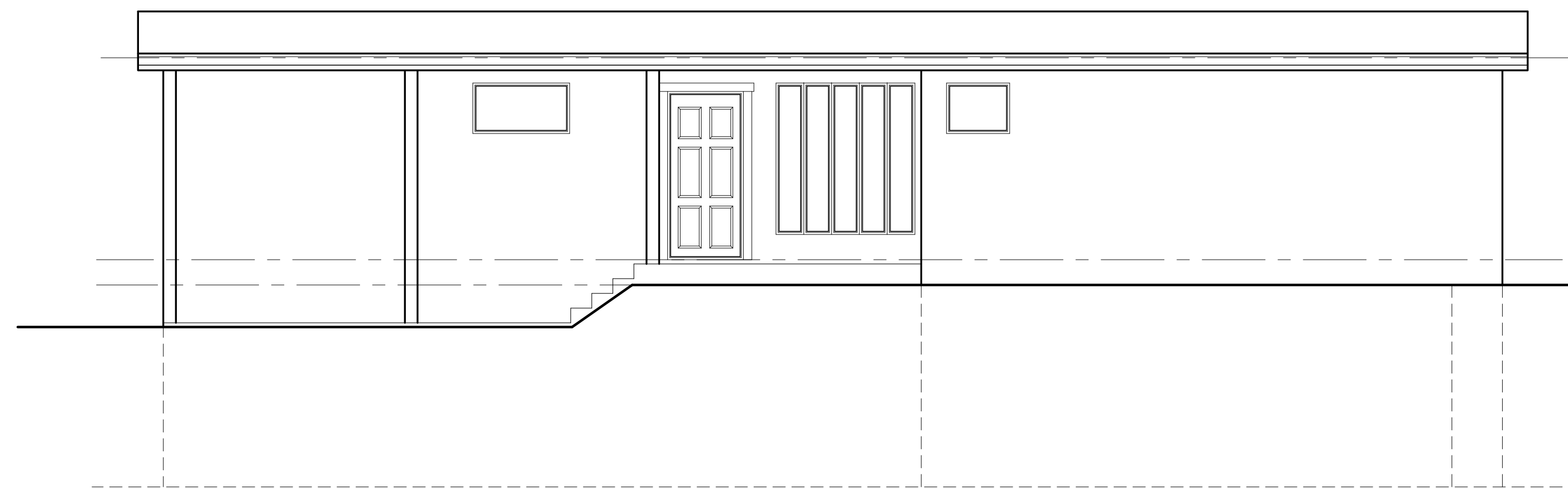
SCALE : 1/4" = 1'-0"



LEFT ELEVATION

EXISTING

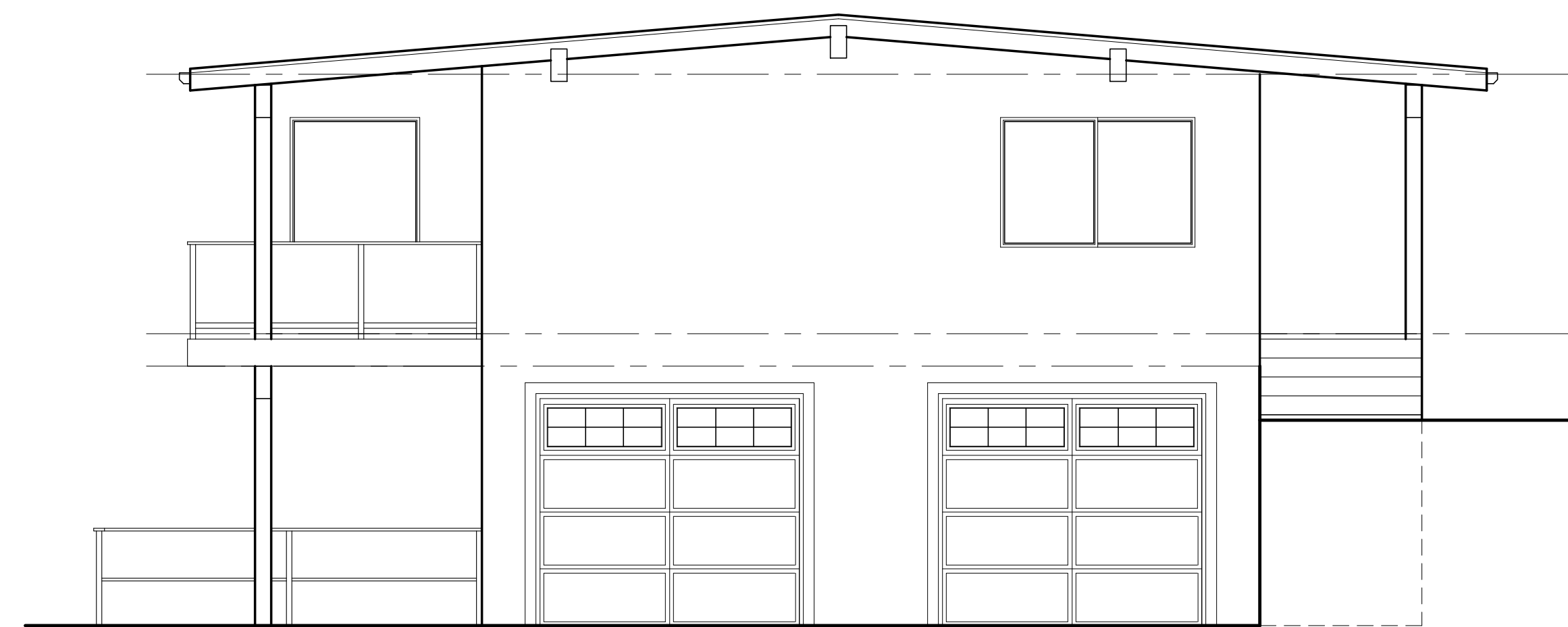
SCALE : 1/4" = 1'-0"



RIGHT ELEVATION

EXISTING

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



FRONT ELEVATION

EXISTING

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

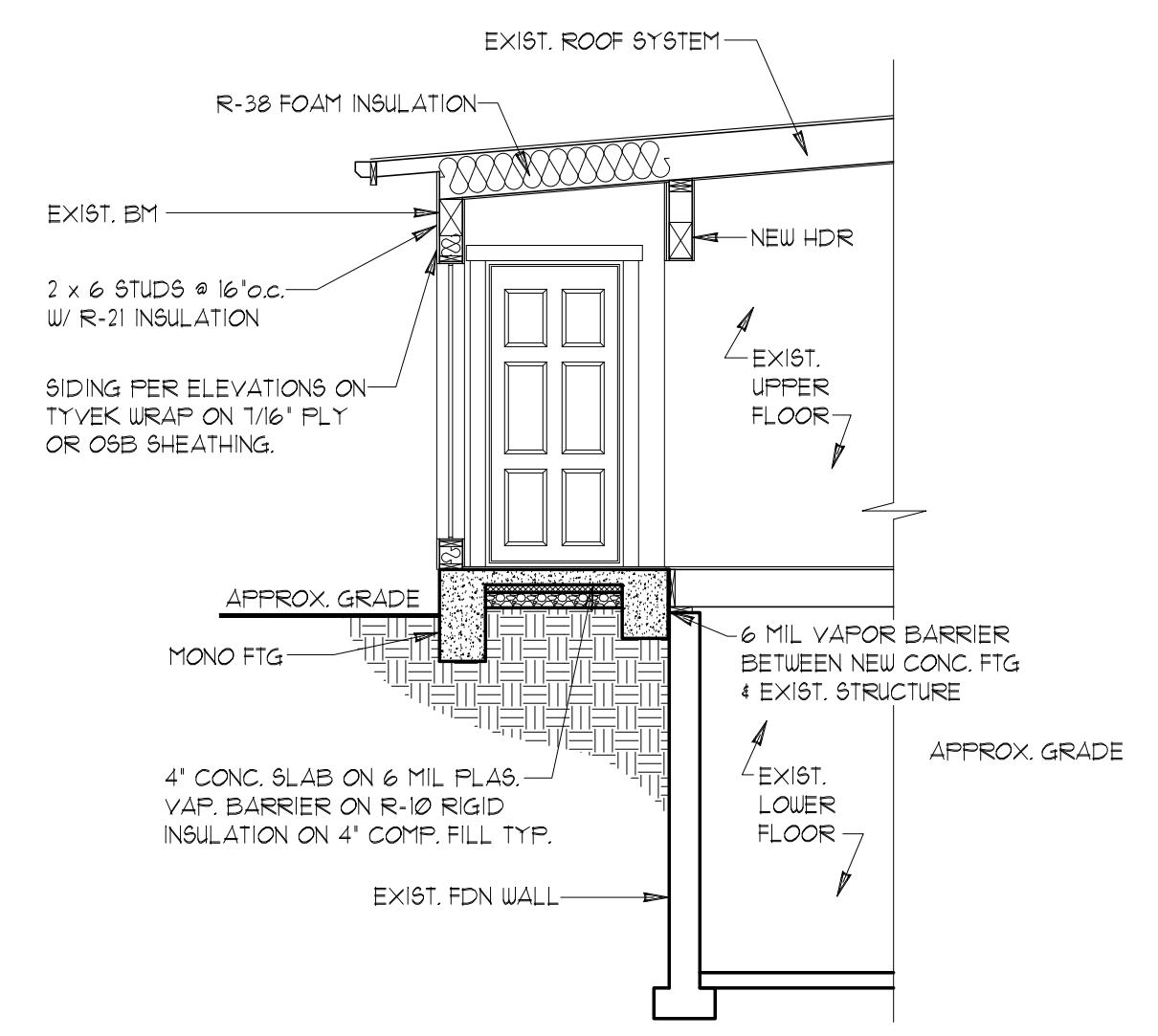
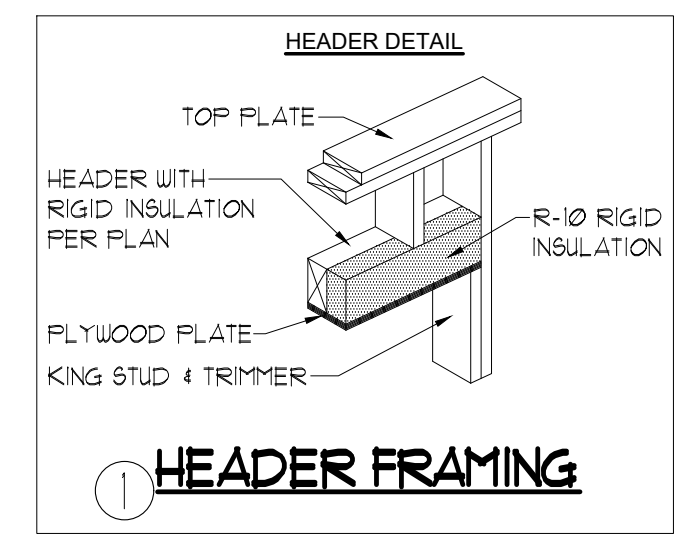
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SECTION B

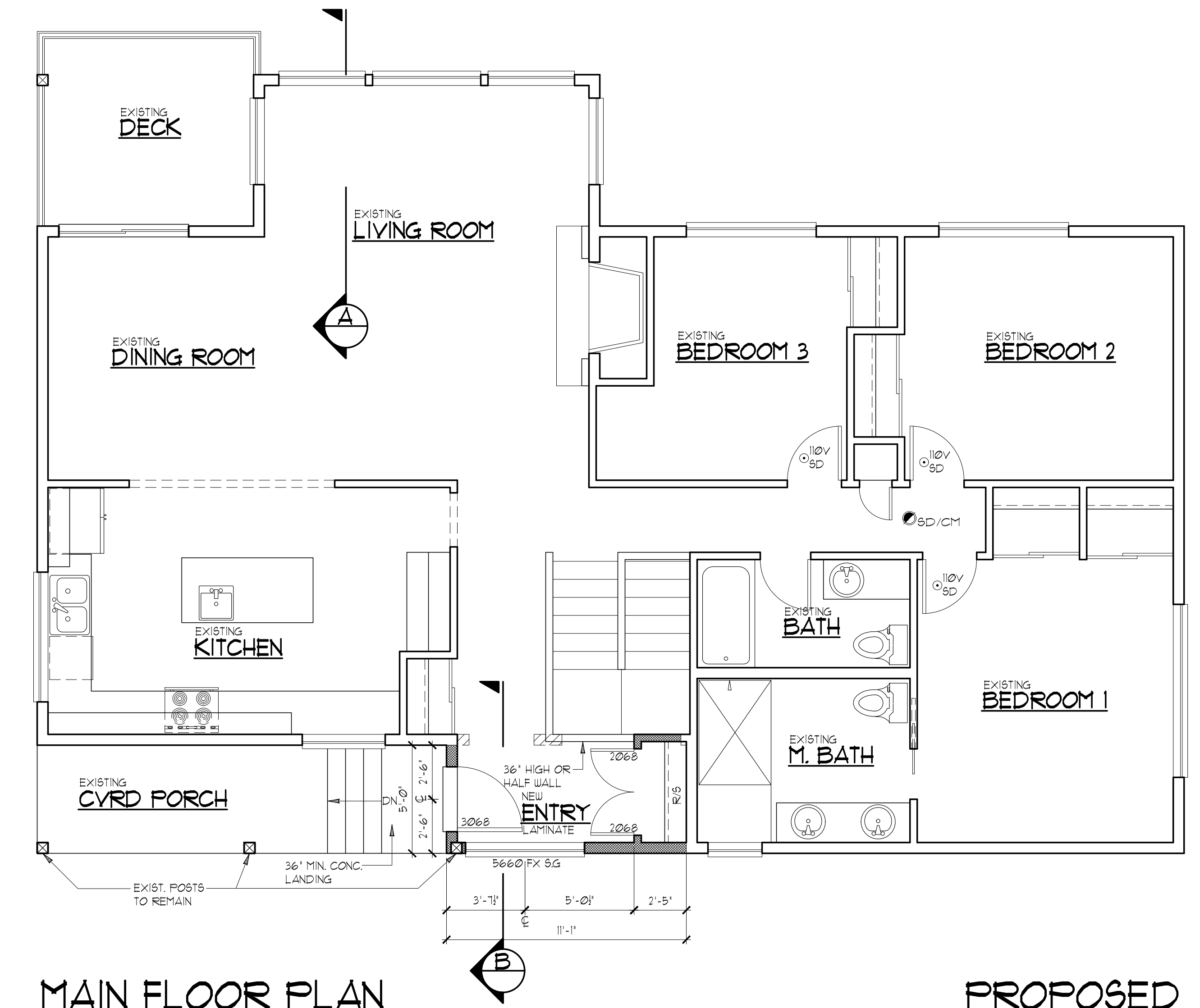
SCALE : 1/4" = 1'-0"

TYPICAL ROOF CONSTRUCTION

- R-38 FOAM INSULATION
- TYPICAL WALL CONSTRUCTION**
- SIDING AND/OR VENEER PER ELEVATION
- 1/16" FLY OR OSB SHTG. (UNO)
- TYVEK BUILDING WRAP OR EQ.
- 2x6 STUDS @ 16" O.C. EXTERIOR WALLS UNO. EXTERIOR WALL NOTCH 25%, BORING 40% 60% BORING IF DOUBLED & NOT MORE THAN TWO SUCCESSIVE STUDS.
- 2x4 STUDS @ 16" O.C. INTERIOR PARTITIONS (2x6 @ FLUMING WALLS)
- NON-BEARING WALL MAXIMUM NOTCH 40%, BORING 60% HOLES NO CLOSER THE 5/8 INCH TO FACE OF STUD
- R-21 INSULATION WITH VAPOR BARRIER
- 1/2" GWB. INTERIOR SHEATHING

TYPICAL FLOOR CONSTRUCTION

- 4' CONC. SLAB ON 6 MIL FLAS. VAP. BARRIER ON R-10 RIGID INSULATION ON 4' COMP. FILL TYP.



MAIN FLOOR PLAN

© 2022 RECTOR RESIDENTIAL DESIGN, LLC

PROPOSED

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

ENERGY CREDIT 1.5 CREDITS

ENERGY CREDIT 5.4: -15 CREDIT

EFFICIENT WATER HEATING OPTION

WATER HEATING SYSTEM SHALL INCLUDE ONE OF THE FOLLOWING:
ELECTRIC HEAT PUMP WATER HEATER MEETING THE STANDARDS FOR TIER 1 OF NEEA'S ADVANCED WATER HEATING SPECIFICATION, OR
FOR R-2 OCCUPANCY, ELECTRIC HEAT PUMP WATER HEATER MEETING THE STANDARDS FOR TIER 1 OF NEEA'S ADVANCED WATER HEATING SPECIFICATION, SHALL SUPPLY DOMESTIC HOT WATER TO ALL UNITS. IF ONE WATER HEATER IS SERVING MORE THAN ONE DWELLING UNIT, ALL HOT WATER SUPPLY AND RECIRCULATION PIPING SHALL BE INSULATED WITH R-8 MINIMUM PIPE INSULATION.

NOTE:
REFER TO STRUCTURAL SHEETS FOR SHEAR WALL SCHEDULE AND ENGINEERING PLAN WHICH CONTAIN DETAIL REFERENCES AND/OR INSTRUCTIONS PERTAINING TO EACH SHEAR WALL INDICATED IN THIS PLAN.

NOTE:
CONTRACTOR TO VERIFY ALL DIMENSIONS AND CONDITIONS OF PROJECT AND REPORT ANY OMISSIONS / DISCREPANCIES TO DESIGNER PRIOR TO COMMENCING WORK. DESIGNER SHALL NOT BE RESPONSIBLE FOR DISCREPANT CONDITIONS RESULTING FROM UNAUTHORIZED WORK PERFORMED BY THE CONTRACTOR.

SMOKE DETECTORS

08D INSTALL SMOKE DETECTORS PER CODE

110V INTERCONNECTED W/ BATTERY BACKUP INSTALLED ON EACH FLOOR, IN EACH SLEEPING AREA, AND OUTSIDE EACH SEPARATE SLEEPING AREA LISTED IN ACCORDANCE WITH UL 217 AND INSTALLED PER THE HOUSEHOLD FIRE WARNING EQUIPMENT PROVISIONS OF NFPA 72

CARBON MONOXIDE

08D/CM INSTALL SMOKE DETECTOR/ CARBON MONOXIDE ALARM PER CODE

COMBINATION SMOKE ALARM & CARBON MONOXIDE ALARMS. SMOKE ALARM REQUIREMENTS AS LISTED ABOVE. INSTALLED ON EACH FLOOR, AND OUTSIDE EACH SEPARATE SLEEPING AREA IN THE IMMEDIATE VICINITY OF THE BEDROOMS. CARBON MONOXIDE ALARMS LISTED AS COMPLYING WITH UL 2075 AND INSTALLED PER MANUFACTURER'S INSTALLATION INSTRUCTIONS

AREA SUMMARY

	EXISTING	PROPOSED	TOTAL
MAIN FLOOR:	1499 SF.	55 SF.	1554 SF.
LOWER FLOOR:	142 SF.	000 SF.	142 SF.
TOTAL:	2241 SF.	55 SF.	2296 SF.
GARAGE:	581 SF.	000 SF.	
GRAND TOTAL:	2296 SF.	000 SF.	

GLAZING SUMMARY

	SF.
WINDOWS:	33 SF.
DOORS W/ MORE THAN 50% GLAZING:	20 SF.
SKYLIGHTS:	0 SF.
TOTAL:	53 SF.
GLAZING PERCENT:	23.1% WDW SF / FIR SF. (%)

PLAN KEY

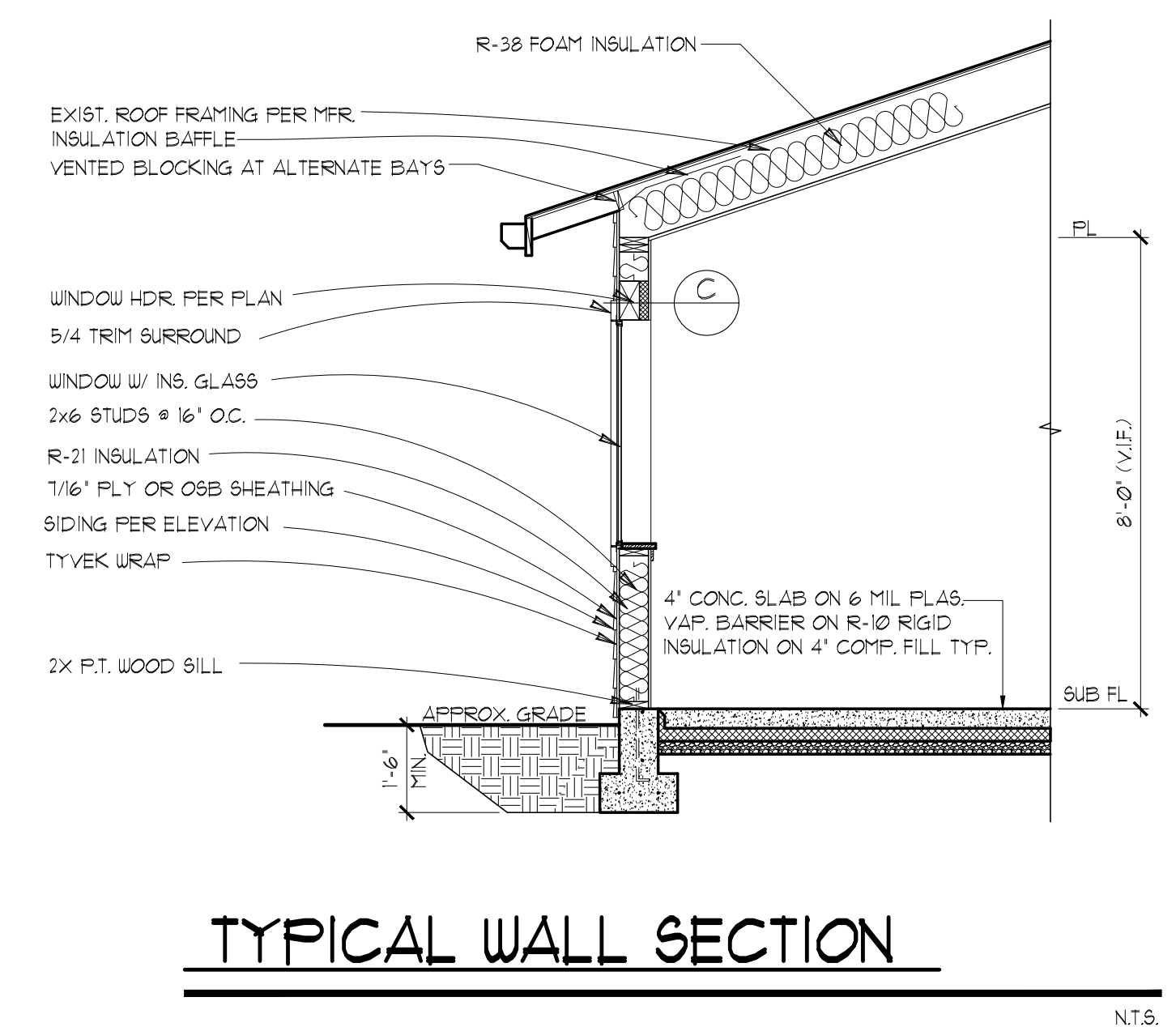
WALLS:

- NEW CONSTRUCTION
- EXISTING WALLS TO REMAIN
- EXISTING WALLS AND WINDOWS TO BE REMOVED AND OR MODIFIED

NEW DOOR

EXISTING DOOR

EXISTING DOOR TO BE REMOVED AND OR MODIFIED



TYPICAL WALL SECTION

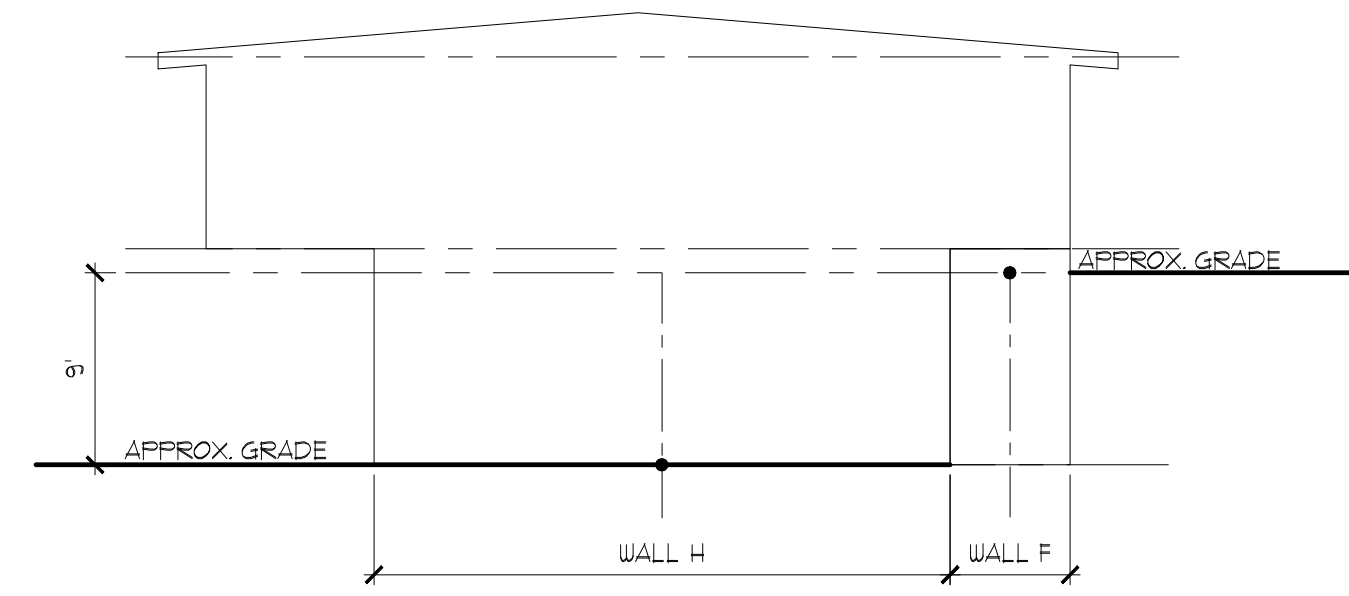
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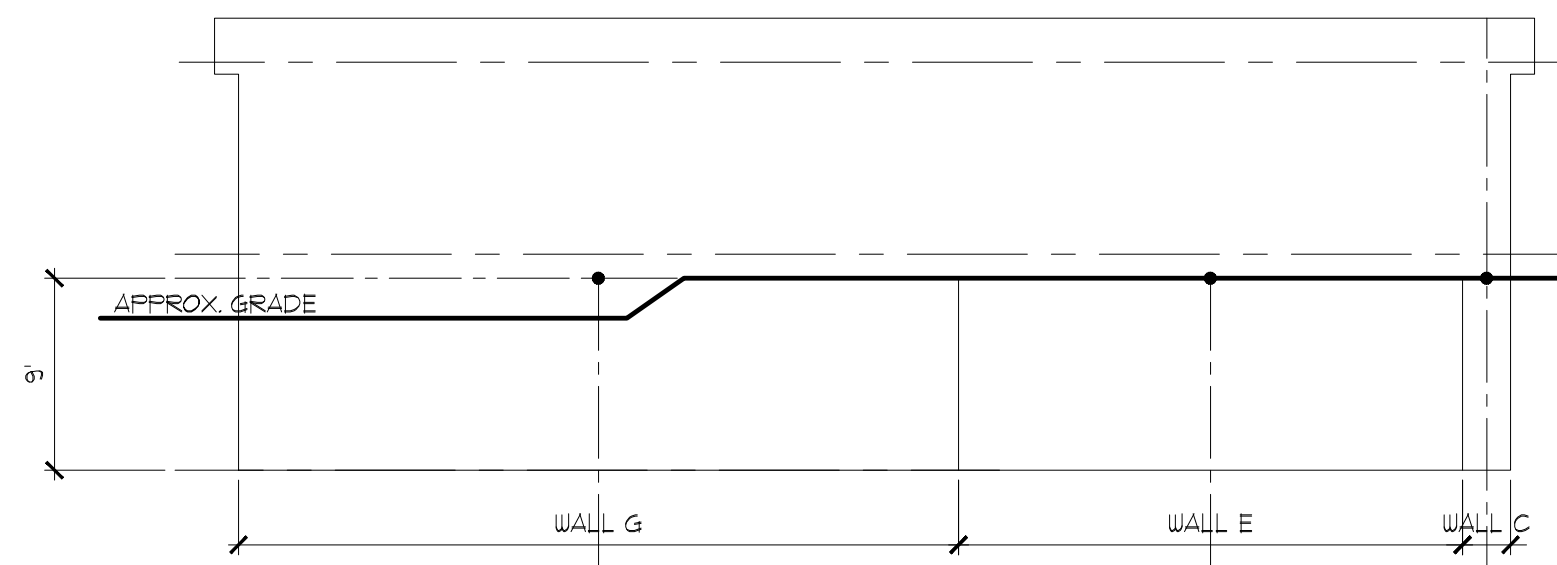
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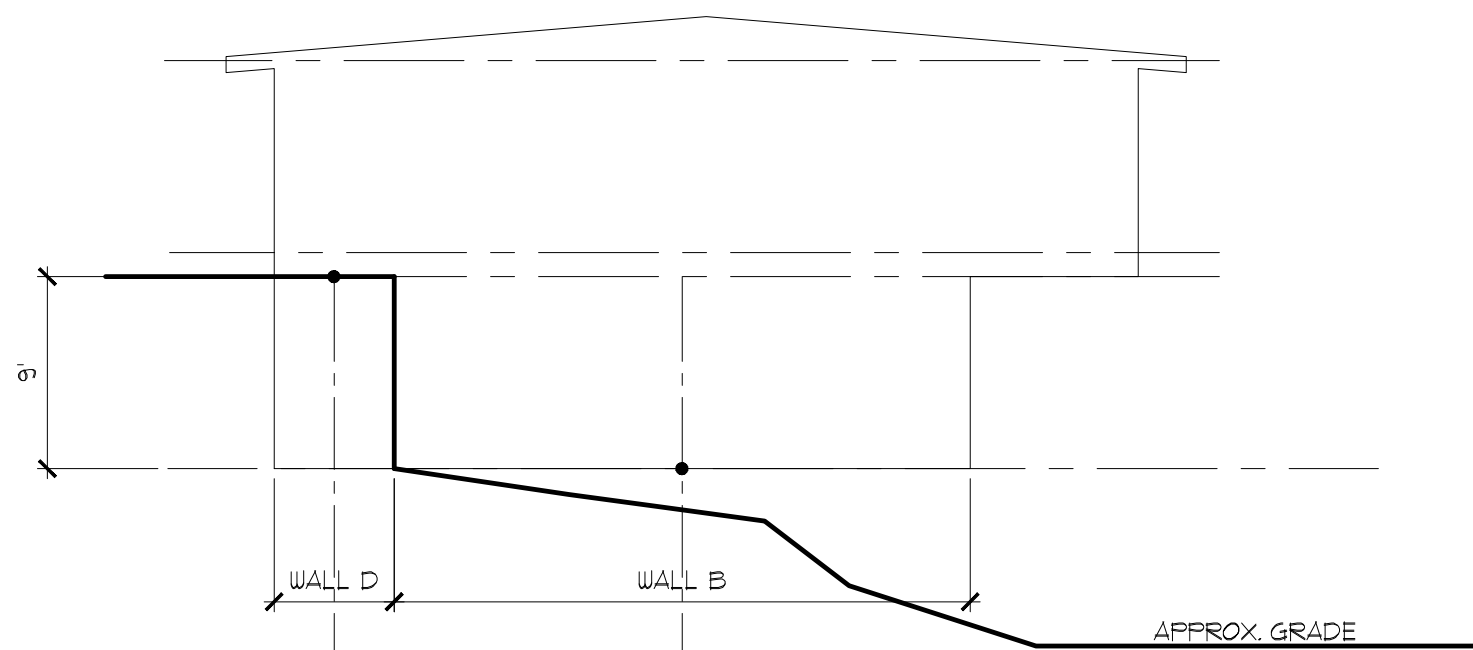
FRONT ELEVATION

SCALE : 1/8" = 1'-0"



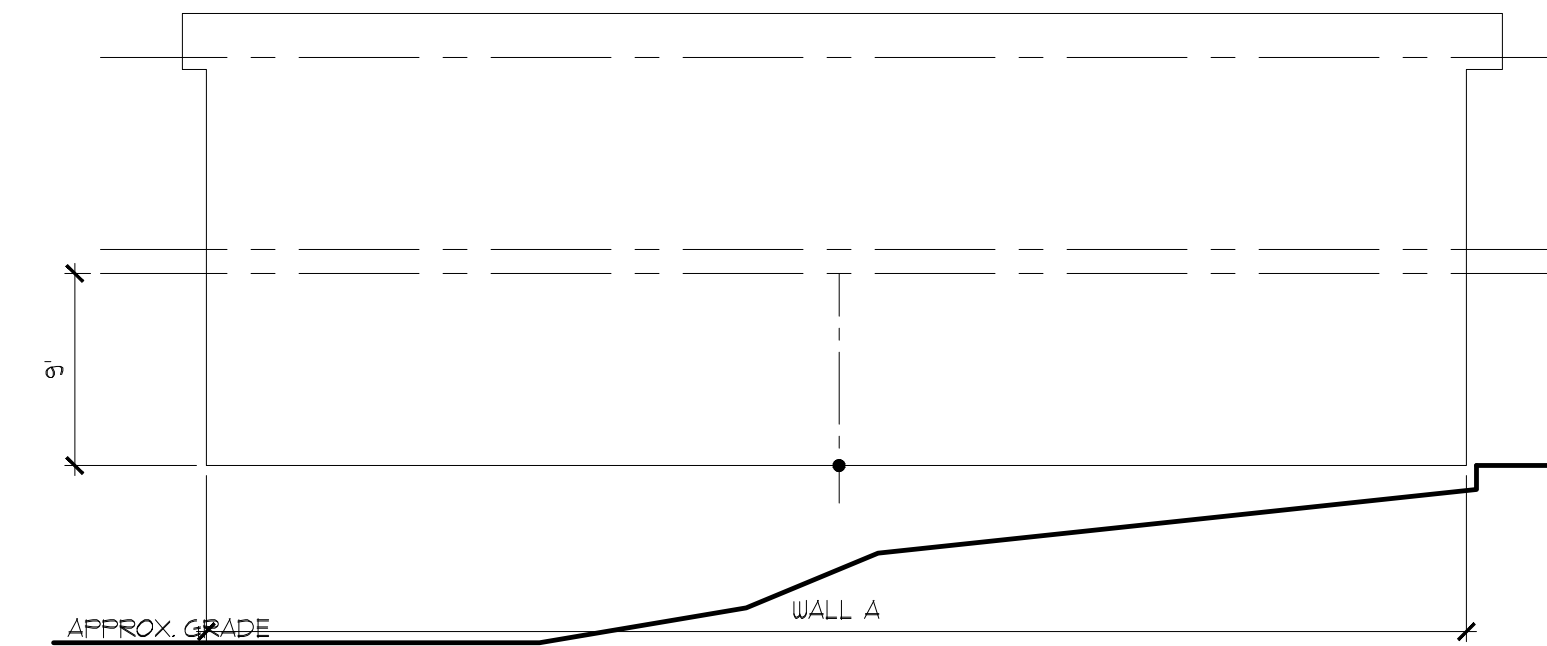
RIGHT ELEVATION

SCALE : 1/8" = 1'-0"



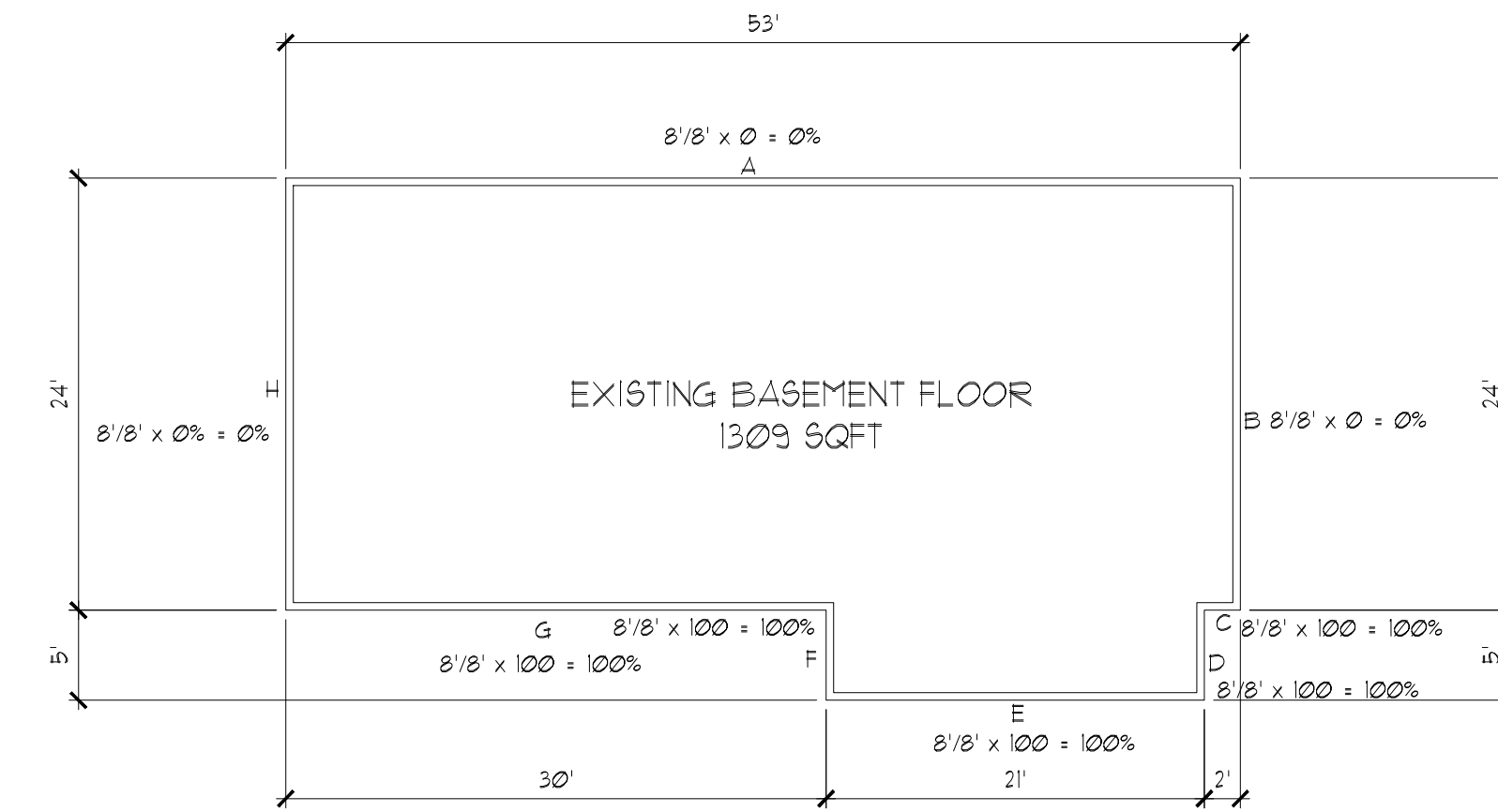
REAR ELEVATION

SCALE : 1/8" = 1'-0"



LEFT ELEVATION

SCALE : 1/8" = 1'-0"



BASEMENT FLOOR PLAN

SCALE : 1/8" = 1'-0"

WALL SEGMENT	LENGTH X	COVERAGE*	RESULT
A	53'	0%	0%
B	24'	0%	0%
C	2'	100%	2%
D	5'	100%	50%
E	21'	100%	21%
F	5'	100%	50%
G	30'	100%	30%
H	24'	0%	0%
TOTALS	164'	N/A	153%

1309 SQFT X 153% = 164'
 *1212 EXCLUDED FROM THE GROSS FLOOR AREA
 EXISTING BASEMENT FLOOR GFA: 1309 SQFT - 1212 SQFT = 97 SQFT
 EXISTING MAIN FLOOR GFA: 141 GFA
 PROPOSED MAIN FLOOR GFA: 48 GFA
 SUBTOTAL GFA: 1546.8 - 1212 SQFT LOT SIZE X 40% = 4489.6 MAX. GFA

GROSS FLOOR AREA

REMODEL AND ADDITION TO THE WRIGHT/HIGASHIJIMA RESIDENCE
 4701 88TH AVE SE
 MERCER ISLAND, WA 98040

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PROJECT NO: 22104		

SHEET NO:

STRUCTURAL GENERAL NOTES U.N.O.

GENERAL STRUCTURAL NOTES:

- THE STRUCTURAL DRAWINGS SHALL BE USED IN CONJUNCTION WITH THE DRAWINGS OF ALL OTHER DISCIPLINES AND THE SPECIFICATIONS. THE CONTRACTOR SHALL VERIFY THE REQUIREMENTS OF OTHER TRADES AS TO SLEEVES, CHASES, HANGERS, INSERTS, ANCHORS, HOLES AND OTHER ITEMS TO BE PLACED OR SET IN THE STRUCTURAL WORK.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR COMPLYING WITH ALL SAFETY PRECAUTIONS AND REGULATIONS DURING THE WORK. THE ENGINEER WILL NOT ADVISE ON NON-SITE DIRECTION AS TO SAFETY PRECAUTIONS AND PROGRAMS.
- THE STRUCTURAL DRAWINGS HEREIN REPRESENT THE FINISHED STRUCTURE. THE CONTRACTOR SHALL PROVIDE ALL TEMPORARY BRACING AND BRACING REQUIRED TO ERECT AND HOLD THE STRUCTURE IN PROPER ALIGNMENT UNTIL ALL STRUCTURAL WORK AND CONNECTIONS HAVE BEEN COMPLETED. THE INVESTIGATION, DESIGN, SAFETY, ADEQUACY AND INSPECTION OF ERECTION BRACING, SHORING, TEMPORARY WORK AND CONNECTIONS IS THE SOLE RESPONSIBILITY OF THE CONTRACTOR.
- THE ENGINEER SHALL NOT BE RESPONSIBLE FOR THE METHODS, TECHNIQUES AND SEQUENCES OF PROCEDURES TO BE USED TO PERFORM THE WORK. THE SUPERVISION OF THE WORK IS THE SOLE RESPONSIBILITY OF THE CONTRACTOR.
- DRAWINGS INDICATE GENERAL AND PHYSICAL DETAILS OF CONSTRUCTION WHERE CONDITIONS ARE NOT SPECIFICALLY SHOWN. SIMILAR DETAILS OF CONSTRUCTION SHALL BE USED. SUBJECT TO APPROVAL BY THE ENGINEER.
- ALL STRUCTURAL SYSTEMS WHICH ARE TO BE COMPOSED OF COMPONENTS TO BE FIELD ERECTED SHALL BE SUPERVISED BY THE SUPPLIER DURING MANUFACTURE, DELIVERY, HANDLING, STORAGE AND ERECTION IN ACCORDANCE WITH THE SUPPLIER'S INSTRUCTIONS AND REQUIREMENTS.
- LOADING APPLIED TO THE STRUCTURE DURING THE PROCESS OF CONSTRUCTION SHALL NOT EXCEED THE SAFE LOAD-CARRYING CAPACITY OF THE STRUCTURAL MEMBERS. THE LIVE LOADINGS LESS THAN THE DESIGN OF THIS STRUCTURE ARE INDICATED IN THE DESIGN CRITERIA NOTES. DO NOT EXCEED ANY DESIGN LOADINGS EXCEPT AS SHOWN. ALL LOADINGS ARE PROPERLY COMBINED TOGETHER AND UNTIL ALL TEMPORARY BRACING IS IN PLACE.
- ALL ASTM AND OTHER REFERENCES ARE PER THE LATEST EDITIONS OF THESE STANDARDS, UNLESS OTHERWISE NOTED.

- SHOP DRAWINGS AND OTHER ITEMS SHALL BE SUBMITTED TO THE ENGINEER FOR REVIEW PRIOR TO FABRICATION. ALL SHOP DRAWINGS SHALL BE REVIEWED BY THE GENERAL CONTRACTOR BEFORE SUBMITTAL. THE ENGINEER'S REVIEW IS TO BE IN CONFORMANCE WITH THE SCHEDULE OF SPECIFICATIONS. ALL FABRICATORS SHALL SATISFY THE "EXCEPTION" NOTED IN SECTION 1703.2 WHICH REQUIRES THE FABRICATOR TO MAINTAIN AN AGREED-UPON QUALITY CONTROL PROGRAM. THE SHOP DRAWINGS PRIOR TO SUBMISSION, THE CONTRACTOR REMAINS SOLELY RESPONSIBLE FOR THE DESIGN AND CONSTRUCTION OF THE STRUCTURE. THE CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND DETAIL REQUIREMENTS AS THEY PERTAIN TO MEMBER SIZES, DETAILS, DIMENSIONS, ETC.
- SUBMIT SHOP DRAWINGS IN THE FORM OF TWO BLUELINE PRINTS AND ONE SET. IN NO CASE SHALL REPRODUCTION OF THE CONTRACT DRAWINGS BE USED AS SHOP DRAWINGS. AS A MINIMUM, SUBMIT THE FOLLOWING ITEMS FOR REVIEW:
 - CONCRETE MIX DESIGN(S)
 - REINFORCING STEEL SHOP DRAWINGS
 - STRUCTURAL STEEL SHOP DRAWINGS
 - STEEL JOIST ORDER SHOP DRAWINGS
 - METAL DECKING SHOP DRAWINGS
 - PRE-MANUFACTURED WOOD SYSTEM/STRESS SHOP DRAWINGS (SEE NOTES)
 - PRE-ENGINEERED METAL BUILDING SYSTEM (SEE NOTES)

- OTHER SUBMITTALS MAY BE REQUIRED PER THE "30-DAY NOTICE OF SPECIAL INSPECTIONS" OR THE SEPARATE EMBEDED CONTINGENT CONTRACT AGREEMENT. PORTLAND CEMENT SHALL BE DESIGNED PER ASTM C 311, USING PORTLAND CEMENT AGGREGATE CONFORMING TO ASTM C-33, AND ADMIXTURES CONFORMING TO ASTM C-494. ALL CONCRETE SHALL BE READY-MAIXED IN ACCORDANCE WITH ASTM C-94.
 - ALL CONCRETE SHALL CONFORM TO THE FOLLOWING COMPRESSIVE STRENGTH, SLUMP AND WATER/CEMENT RATIO REQUIREMENTS:

FOUNDATION NOTES:

- ALL FOOTINGS SHALL BEAR ON UNDISTURBED, FIRM NATURAL SOIL OR COMPACTED FILL. CAPABLE OF SUPPORTING A DESIGN BEARING PRESSURE OF 1500 PSF. ALL FOUNDATION EXCAVATIONS SHALL BE EVALUATED BY THE GEO-TECHNICAL ENGINEERING TESTING AGENCY PRIOR TO POURING FOUNDATION CONCRETE.
- ALL FOOTINGS HAVE BEEN DESIGNATED BASED UPON AN ASSUMED SOIL BEARING PRESSURE OF 1500 PSF. ALL FOOTINGS SHALL BEAR ON UNDISTURBED, FIRM NATURAL SOIL OR COMPACTED FILL. ALL FOUNDATION EXCAVATIONS SHALL BE EVALUATED BY THE GEO-TECHNICAL ENGINEERING TESTING AGENCY PRIOR TO POURING FOUNDATION CONCRETE.
- TOP OF FOOTING ELEVATION SHALL BE AS SHOWN ON THE FOUNDATION PLAN. THESE ELEVATIONS ARE A MAXIMUM AND SHALL BE COVERED AS REQUIRED TO OBTAIN THE REQUIRED DESIGN BEARING PRESSURE.
- ALL FOUNDATION CONCRETE SHALL OBTAIN A 28 DAY COMPRESSIVE STRENGTH OF 3500 PSI. ALL CONCRETE TO BE PERMANENTLY EXPOSED TO WEATHER SHALL BE AIR ENTRAINED TO 5% (11%) WITH AN ADMIXTURE THAT CONFORMS TO ASTM C-494.
- ALL FOUNDATION WORK SHALL CONFORM TO THE REQUIREMENTS OF ACI 301 "SPECIFICATION FOR STRUCTURAL CONCRETE BUILDINGS".
- ALL WEATHER CONCRETE SHALL BE IN ACCORDANCE WITH ACI 308. COLD WEATHER CONCRETING SHALL BE IN ACCORDANCE WITH ACI 306.
- ALL REINFORCING STEEL SHALL CONFORM TO ASTM A-615, GRADE 60.
- UNLESS OTHERWISE NOTED, THE FOLLOWING MINIMUM CONCRETE COVER SHALL BE PROVIDED FOR REINFORCEMENT:
 - CONCRETE CAST AGAINST & PERMANENTLY EXPOSED TO EARTH - 3"
 - CONCRETE EXPOSED TO EARTH OR WEATHER:
 - THROUGH #8 BARS - 2"
 - REINFORCING BARS WITH SMALLER - 1 1/2"
 - ALL REINFORCING MARKED CONTINUOUS (CONT) ON THE PLANS AND DETAILS SHALL BE LAPPED 8X BAR DIAMETERS AT SPACES UNLESS OTHERWISE NOTED.
 - NO UNBALANCED BACKFILLING SHALL BE DONE AGAINST FOUNDATION WALLS UNLESS WAJERS ARE SECURELY BRACED AGAINST OVERTURNING, EITHER BY TEMPORARY BRACING OR PERMANENT CONSTRUCTION.
 - PRIOR TO COMMENCING ANY FOUNDATION WORK, COORDINATE WORK WITH ANY EXISTING UTILITIES. FOUNDATIONS SHALL BE LOWERED WHERE REQUIRED TO AVOID UTILITIES.
 - UNLESS OTHERWISE NOTED, THE CENTERLINE OF COLUMN FOUNDATIONS (PILE CAPS) SHALL BE LOCATED ON COLUMN CENTERLINES.
 - ALL RETAINING WALLS SHALL HAVE AT LEAST 1" OF FREE-DRAINING GRANULAR BACKFILL FULL HEIGHT TO WALL. PROVIDE CONTROL JOINTS IN RETAINING WALLS AT APPROXIMATELY EQUAL INTERVALS OF 20 FEET. PROVIDE 2" MINIMUM SPACING OF CONTROL JOINTS AT EVERY FOURTH CONTROL JOINT, UNLESS OTHERWISE INDICATED.

CAST-IN-PLACE CONCRETE NOTES:

CONCRETE	MIN. F.C. (28 DAYS)	SLUMP	W/C RATIO
COLUMNS	4000 PSI	2" to 4"	.46
ELEVATED SLABS	3000 PSI	2" to 4"	.46
CONCRETE NOT NOTED	2500 PSI	2" to 4"	.50
FOUNDATION	"SEE FOR NOTES"	2" to 4"	.50
SLABS-ON-GRADE	"SEE 'SLAB-ON-GRADE NOTES'"		

* AT CONTRACTOR'S OPTION, AN APPROVED ADMIXTURE MAY BE USED TO PRODUCE FLOWABLE CONCRETE. MAXIMUM SLUMP SHALL NOT EXCEED 10 INCHES. THE CONTRACTOR SHALL SUBMIT TEST RESULTS OF THE PROPOSED CONCRETE MIXES ALONG WITH THE MANUFACTURER'S TECHNICAL DATA FOR APPROVAL PRIOR TO POURING CONCRETE.

- ALL CONCRETE WORK SHALL CONFORM TO THE REQUIREMENTS OF ACI 301, USING PORTLAND CEMENT AGGREGATE CONFORMING TO ASTM C-33, AND ADMIXTURES CONFORMING TO ASTM C-494.
- ALL WEATHER CONCRETE SHALL BE IN ACCORDANCE WITH ACI 308. COLD WEATHER CONCRETING SHALL BE IN ACCORDANCE WITH ACI 306.
- ALL REINFORCING STEEL SHALL CONFORM TO ASTM A-615, GRADE 60.
- ALL WELDING OF REINFORCING STEEL SHALL BE IN ACCORDANCE WITH AWS D1.1 EPOXY COATED REINFORCING SHALL CONFORM TO ASTM A-775.
- ALL WELDED WIRE FABRIC (WWF) SHALL CONFORM TO ASTM A-185.
- ALL REINFORCING STEEL SHALL BE SET AND TIED IN PLACE PRIOR TO POURING OF CONCRETE. EMBED ALL WELDED BUNDLES OF MASONRY WALL REINFORCING MAY BE "FLOATED" IN PLACE, DO NOT FIELD BEND BARS PARTIAL LENGTH. ALL WELDED BUNDLES OF CONCRETE SHALL BE SPECIFICALLY INDICATED OR APPROVED BY THE ENGINEER.
- REINFORCING STEEL, INCLUDING HOOKS AND BENDS, SHALL BE DETAILED IN ACCORDANCE WITH ACI 308. ALL REINFORCING STEEL INDICATED AS BEING CONTINUOUS (CONT) SHALL BE LAPPED WITH A TYPE 2 LAP SPICE UNLESS OTHERWISE NOTED.
- UNLESS OTHERWISE NOTED, THE FOLLOWING MINIMUM CONCRETE COVER SHALL BE PROVIDED FOR REINFORCEMENT:
 - CONCRETE EXPOSED TO EARTH OR WEATHER:
 - THROUGH #8 BARS - 2"
 - REINFORCING BARS WITH SMALLER - 1 1/2"
 - CONCRETE NOT EXPOSED TO EARTH OR WEATHER:
 - WALLS, ELEVATED SLABS & JOISTS - 3/4"
 - BEAMS AND COLUMNS - 1 1/2"
 - FOUNDATION CONCRETE ("SEE 'FOUNDATION NOTES'")

EXISTING CONSTRUCTION NOTES:

- BEFORE PROCEEDING WITH ANY WORK WITHIN THE EXISTING FACILITY, THE CONTRACTOR SHALL FAMILIARIZE HIMSELF WITH EXISTING STRUCTURE AND CONDITIONS. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO PROVIDE ALL NECESSARY BRACING, SHORING AND OTHER SAFEGUARDS TO MAINTAIN ALL PARTS OF THE EXISTING WORK IN A SAFE CONDITION DURING THE PROCESS OF DEMOLITION AND CONSTRUCTION AND TO PROTECT FROM DAMAGE THOSE PORTIONS OF THE EXISTING WORK WHICH ARE TO REMAIN.
- THE CONTRACTOR SHALL FIELD VERIFY THE DIMENSIONS, ELEVATIONS, ETC. NECESSARY FOR THE PROPER CONSTRUCTION AND ALIGNMENT OF THE NEW PORTIONS OF THE WORK TO THE EXISTING WORK. THE CONTRACTOR SHALL MAKE ALL MEASUREMENTS NECESSARY FOR FABRICATION AND ERECTION OF STRUCTURAL MEMBERS. ANY CORRECTIONS SHALL BE IMMEDIATELY BROUGHT TO THE ATTENTION OF THE ENGINEER.
- WELDING TO AND WITHIN AN EXISTING FACILITY PRESENTS POTENTIAL HAZARDS, INCLUDING:
 - FIRE HAZARD: DUE TO THE EXISTING CONSTRUCTION AND BUILDING CONTENTS.
 - STRUCTURAL LIQUEFACTION/DUE TO WELDING ACROSS THE FULL SECTION OF STRUCTURAL STEEL MEMBERS.
- RECOMMENDATIONS TO PREVENT THESE HAZARDS INCLUDE:
 - FIRE HAZARD-PROTECT EXISTING COMBUSTIBLES PRIOR TO WELDING. KEEP A SEPARATE WATCHMAN AND SEVERAL FIRE EXTINGUISHERS ON HAND.
 - STRUCTURAL LIQUEFACTION/WELD IN SMALL INCREMENTS, ALLOW WELDS TO HARDEN BEFORE CONTINUING TO THE NEXT INCREMENT.
 - DO NOT LEAVE THE SITE UNTIL SATISFIED THAT NO FIRE HAZARD EXISTS.
- INFORMATION USED IN PREPARING THESE DRAWINGS WAS TAKEN FROM DRAWINGS PREPARED BY THE FIRM OF [] DATED [].
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE DESIGN AND ERECTION OF ALL SHORING NECESSARY TO SAFEGUARD THE EXISTING STRUCTURE. THE SHORING SHOWN IS AN IDEAL AND SCHEMATIC REPRESENTATION OF THAT REQUIRED. THE CONTRACTOR SHALL SUBMIT A DETAILED PLAN FOR SHORING, INCLUDING DIMENSIONS AND CONNECTIONS. BEAR THE SEAL OF A PROFESSIONAL ENGINEER REGISTERED IN THE COMMONWEALTH OF VIRGINIA AND BE SUBMITTED TO THE ENGINEER FOR REVIEW PRIOR TO BEGINNING THE WORK.

CAST-IN-PLACE CONCRETE NOTES (CONTINUED):

- UNLESS OTHERWISE NOTED, ALL CONCRETE WALLS (OTHER THAN RETAINING WALLS) SHALL BE REINFORCED AS FOLLOWS:

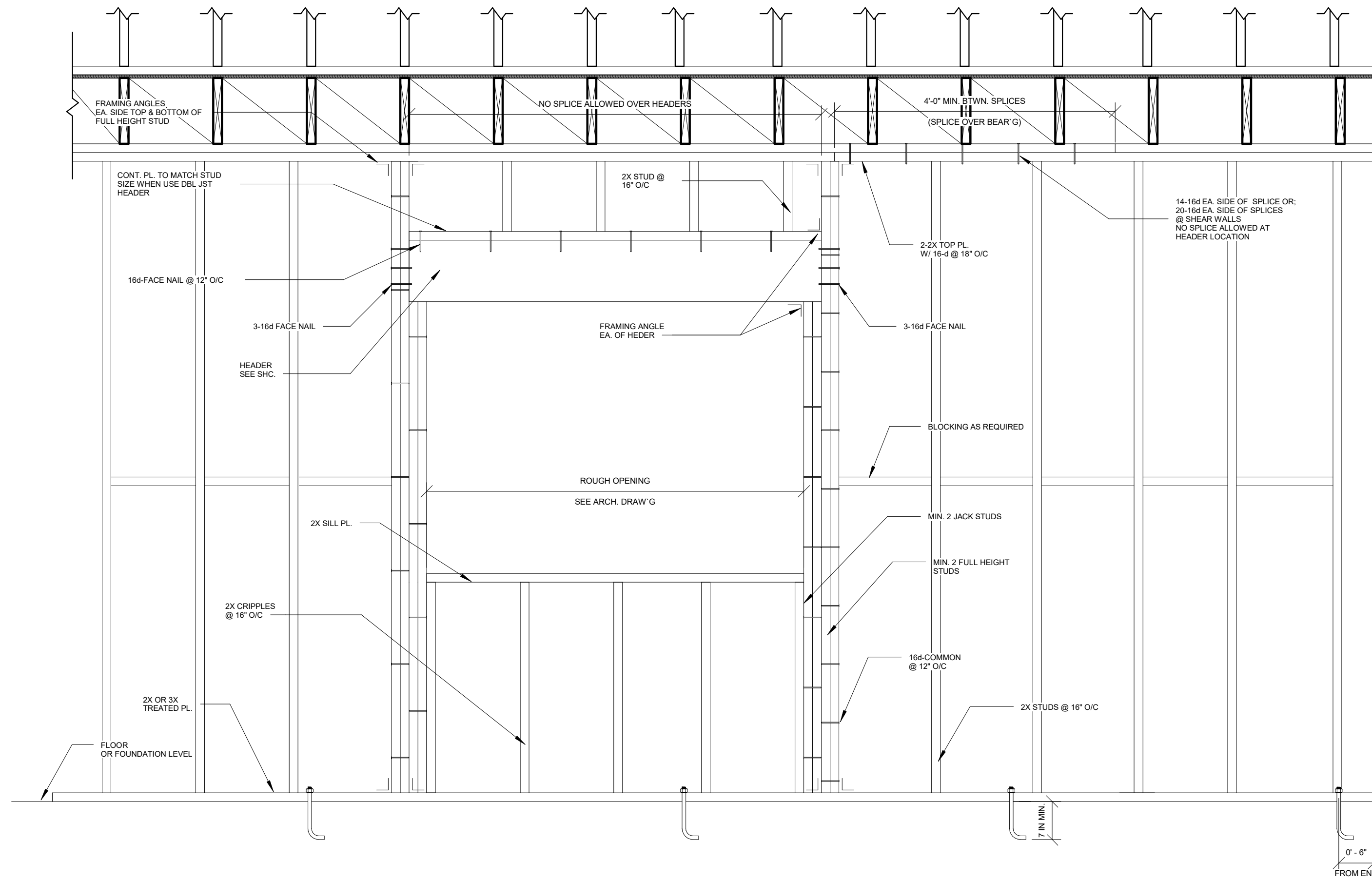
WALL THICKNESS	HORIZONTAL	VERTICAL	LOCATION
4" TO 8"	#4 @ 18" O.C.	#4 @ 18" O.C.	CENTERED
8"	#4 @ 12" O.C.	#4 @ 18" O.C.	CENTERED
10"	#4 @ 18" O.C.	#4 @ 18" O.C.	EACH FACE
12"	#4 @ 18" O.C.	#4 @ 18" O.C.	EACH FACE
- ALL EDGES OF PERMANENTLY EXPOSED CONCRETE SURFACES SHALL BE CHAMFERED 3/4" UNLESS OTHERWISE NOTED.
- THE CONTRACTOR SHALL PROVIDE THE ENGINEER WITH DOCUMENTATION THAT ALL MATERIALS CONFORM TO THE QUALITY STANDARDS SPECIFIED IN IRC 2018.
- IN ACCORDANCE WITH IRC 2018, SPECIAL INSPECTIONS ARE REQUIRED FOR THE CONCRETE WORK. THE OWNER WILL HIRE THE SPECIAL INSPECTOR TO PERFORM ALL REQUIRED SPECIAL INSPECTIONS.
- IN ORDER TO AVOID CONCRETE SHRINKAGE CRACKING, PLACE CONCRETE SLABS IN AN ALTERNATING PATTERN. THE MAXIMUM LENGTH OF EACH SLAB CAST IN ANY ONE CONTINUOUS POUR SHALL BE LIMITED TO 80 FEET.
- FORMWORK SHALL REMAIN IN PLACE UNTIL CONCRETE HAS OBTAINED AT LEAST 90% OF ITS 28-DAY COMPRESSIVE STRENGTH. THE CONTRACTOR SHALL PROVIDE ALL SHORING AND RESHORING.

SLAB ON GRADE NOTES:

- PROVIDE CONCRETE SLABS OVER A MIL POLYETHYLENE VAPOR BARRIER AND 4" POLYFOAM INSULATION.
- ALL OTHER AREAS AT SLAB ON GRADE WITH WWF 300 - 1010 UNO WELDED WIRE FABRIC OR #3 @ 12" O.C. E/W AND WITH 2,500 PSI MIX CONCRETE. MAXIMUM SLUMP FOR ALL CONCRETE SLABS SHALL BE 6 INCHES. USING TYPE II CEMENT.
- PRE-FABRICATED WOOD JOISTS
- ALL WELDED WIRE FABRIC SHALL BE IN ACCORDANCE WITH ASTM A-185. LAP JOINTS SHALL BE AT LEAST ONE FULL MESH.
- ALL POROUS FILL MATERIAL SHALL BE A CLEAN GRANULAR MATERIAL WITH 100% PASSING A 1/2" SIEVE AND NO MORE THAN 5% PASSING A NO. 10 SIEVE. POROUS FILL SHALL BE COMPACTED TO 95% MAX DRY DENSITY PER ASTM D-698.
- SLAB JOINTS SHALL BE FILLED WITH APPROVED MATERIAL. THIS SHOULD TAKE PLACE AS EARLY AS POSSIBLE, PREFERABLY 4 TO 8 WEEKS AFTER THE SLAB HAS BEEN CAST. PRIOR TO FILLING, REMOVE ALL DEBRIS FROM THE SLAB JOINTS. THEN FILL IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS AND FOLLOWS.
- UNLESS OTHERWISE NOTED, THE FOLLOWING MINIMUM CONCRETE COVER SHALL BE PROVIDED FOR REINFORCEMENT:
 - CONCRETE CAST AGAINST & PERMANENTLY EXPOSED TO EARTH - 3"
 - CONCRETE EXPOSED TO EARTH OR WEATHER:
 - THROUGH #8 BARS - 2"
 - REINFORCING BARS WITH SMALLER - 1 1/2"
 - ALL REINFORCING MARKED CONTINUOUS (CONT) ON THE PLANS AND DETAILS SHALL BE LAPPED 8X BAR DIAMETERS AT SPACES UNLESS OTHERWISE NOTED.
 - NO UNBALANCED BACKFILLING SHALL BE DONE AGAINST FOUNDATION WALLS UNLESS WAJERS ARE SECURELY BRACED AGAINST OVERTURNING, EITHER BY TEMPORARY BRACING OR PERMANENT CONSTRUCTION.
 - PRIOR TO COMMENCING ANY FOUNDATION WORK, COORDINATE WORK WITH ANY EXISTING UTILITIES. FOUNDATIONS SHALL BE LOWERED WHERE REQUIRED TO AVOID UTILITIES.
 - UNLESS OTHERWISE NOTED, THE CENTERLINE OF COLUMN FOUNDATIONS (PILE CAPS) SHALL BE LOCATED ON COLUMN CENTERLINES.
 - ALL RETAINING WALLS SHALL HAVE AT LEAST 1" OF FREE-DRAINING GRANULAR BACKFILL FULL HEIGHT TO WALL. PROVIDE CONTROL JOINTS IN RETAINING WALLS AT APPROXIMATELY EQUAL INTERVALS OF 20 FEET. PROVIDE 2" MINIMUM SPACING OF CONTROL JOINTS AT EVERY FOURTH CONTROL JOINT, UNLESS OTHERWISE INDICATED.

WOOD MATERIALS:

- LUMBER
- ALL WOOD MEMBERS USED FOR LOAD-BEARING PURPOSES, INCLUDING END-JOINTED AND EDGE-GLUED LUMBER, SHALL BE IDENTIFIED BY THE GRADEMARK OF A LUMBER GRADING OR INSPECTION AGENCY WHICH PARTICIPATES IN AN ACCREDITATION PROGRAM SUCH AS THE AMERICAN LUMBER STANDARDS COMMITTEE OR EQUIVALENT. THE GRADEMARK SHALL INCLUDE AN EASY-TO-READ MARK OR NUMBER OF THE GRADING AGENCY WHICH COMPLES WITH THE REQUIREMENTS OF U.S. DEPARTMENT OF COMMERCE VOLUNTARY PRODUCT STANDARD #2520 AMERICAN SPOKEWOOD LUMBER MARKING STANDARD.
- GLUE LAMINATED TIMBERS SHALL MEET THE PROVISIONS OF ANSI/APA C11 STRUCTURAL GLUED LAMINATED TIMBER.
- PREFABRICATED WOOD JOISTS
- ASSEMBLIES USING PREFABRICATED WOOD JOISTS SHALL MEET THE PROVISIONS OF ASTM D3053 STANDARD SPECIFICATION FOR TESTS AND MONITORING STRUCTURAL CAPACITIES OF PREFABRICATED WOOD JOISTS. THIS MANUAL, THE GOVERNING BUILDING CODE, AND ANY ADDITIONAL REQUIREMENTS AS SET FORTH IN THE MANUFACTURER'S CODE EVALUATION REPORT.
- STRUCTURAL COMPOSITE LUMBER
- SINGLE MEMBERS OF COMPOSITE LUMBER SHALL MEET THE PROVISIONS OF ASTM D3053 STANDARD SPECIFICATION FOR EVALUATIONS OF STRUCTURAL COMPOSITE LUMBER PRODUCTS. THIS MANUAL, THE GOVERNING BUILDING CODE, AND ANY ADDITIONAL REQUIREMENTS AS SET FORTH IN THE MANUFACTURER'S CODE EVALUATION REPORT.
- PREFABRICATED WOOD TRUSSES
- ASSEMBLIES USING PREFABRICATED WOOD TRUSSES SHALL MEET THE PROVISIONS OF THIS MANUAL, THE GOVERNING BUILDING CODE, AND ANY ADDITIONAL REQUIREMENTS AS SET FORTH IN ANSIP/1 NATIONAL DESIGN STANDARD FOR METAL PLATE CONNECTED WOOD TRUSS CONNECTION, THE TRUSS DESIGN DRAWINGS, OR THE MANUFACTURER'S CODE EVALUATION REPORT.
- GYPSUM BOARD
- GYPSUM MATERIAL USED IN A STRUCTURAL APPLICATION SHALL MEET THE PROVISIONS OF ASTM C 1396/C 1398M, STANDARD SPECIFICATION FOR GYPSUM BOARD.
- HARDBOARD USED IN A STRUCTURAL APPLICATION SHALL MEET THE PROVISIONS OF ANS/APA A135.6 HARDBOARD SIDING.
- STRUCTURAL PANELS
- CREATED-STRAND BOARD (OSB), WATERBOARD, ORIENTED-STRAND BOARD OR WATERBOARD USED IN STRUCTURAL APPLICATIONS SHALL MEET THE PROVISIONS OF F55 OR F56 OR F57 OR F58 OR F59 OR F60 OR F61 OR F62 OR F63 OR F64 OR F65 OR F66 OR F67 OR F68 OR F69 OR F70 OR F71 OR F72 OR F73 OR F74 OR F75 OR F76 OR F77 OR F78 OR F79 OR F80 OR F81 OR F82 OR F83 OR F84 OR F85 OR F86 OR F87 OR F88 OR F89 OR F90 OR F91 OR F92 OR F93 OR F94 OR F95 OR F96 OR F97 OR F98 OR F99 OR F100 OR F101 OR F102 OR F103 OR F104 OR F105 OR F106 OR F107 OR F108 OR F109 OR F110 OR F111 OR F112 OR F113 OR F114 OR F115 OR F116 OR F117 OR F118 OR F119 OR F120 OR F121 OR F122 OR F123 OR F124 OR F125 OR F126 OR F127 OR F128 OR F129 OR F130 OR F131 OR F132 OR F133 OR F134 OR F135 OR F136 OR F137 OR F138 OR F139 OR F140 OR F141 OR F142 OR F143 OR F144 OR F145 OR F146 OR F147 OR F148 OR F149 OR F150 OR F151 OR F152 OR F153 OR F154 OR F155 OR F156 OR F157 OR F158 OR F159 OR F160 OR F161 OR F162 OR F163 OR F164 OR F165 OR F166 OR F167 OR 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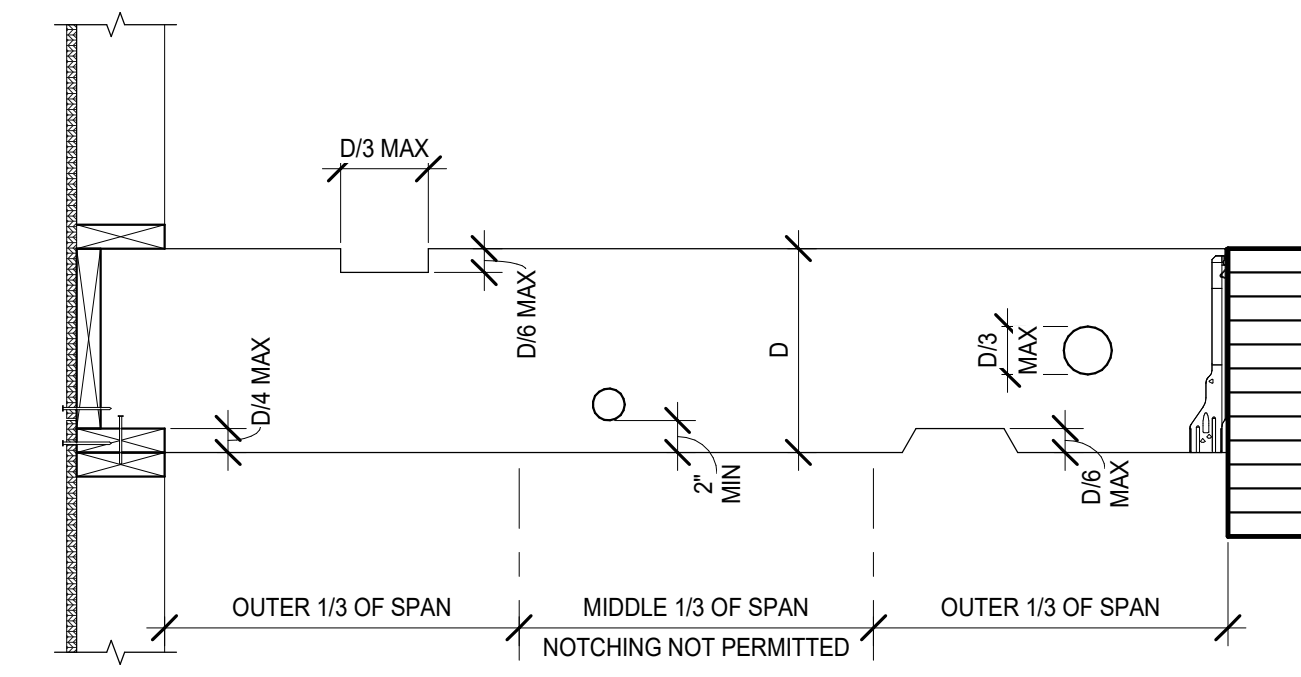


1 TYP. STUD WALL CONSTRUCTION
3/4" = 1'-0"

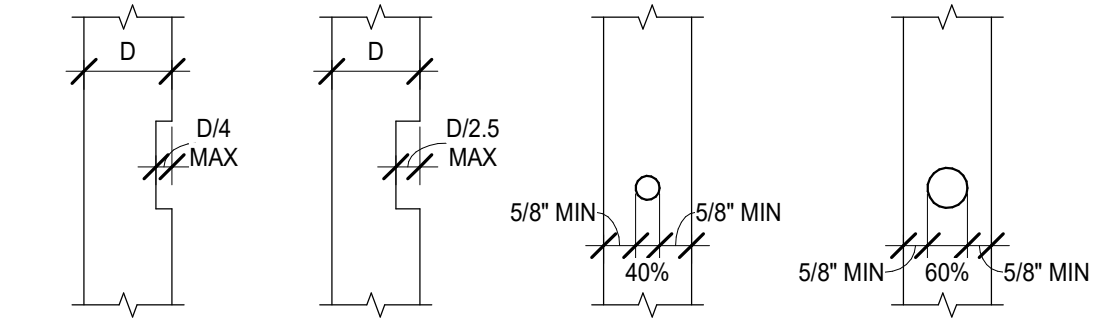
STUD WALL HEADER AT ROOF OPENING U.N.O.	
MAX. ROUGH OPENING	HEADER, U.N.O.
UP TO 4'-0"	6x6 OR 4x8
4'-1" TO 6'-0"	6x8 OR 4x10
6'-1" TO 8'-0"	6x10 OR 4x12
8'-1" TO 10'-0"	6x12 OR 4x14
OVER 10'-0"	SEE PLANS

STUD WALL HEADER AT FLOOR OPENING U.N.O.	
MAX. ROUGH OPENING	HEADER, U.N.O.
UP TO 4'-0"	6x6 OR 4x10
4'-1" TO 6'-0"	6x10 OR 4x14
6'-1" TO 8'-0"	3 1/8"x12"GLB OR 6x12
8'-1" TO 10'-0"	3 1/8"x12"GLB OR 5 1/8"x10 1/2"GLB
OVER 10'-0"	SEE PLANS

NOTE:
USE HANGERS WITH CONCEALED FLANGES FOR HEADER AND MIN 6x6 POSTS AT SPANS GREATER THAN 10'-0" OR AT GLULAM BEAMS



BEAMS & PURLINS
WWPA AND NDS PRESCRIPTIVE RECOMMENDATIONS



USE APPROVED STUD SHOE FOR LARGER OPENINGS. INSTALL PER MANUFACTURER INSTRUCTIONS

DRILL D/6 HOLE BEFORE CUTTING NOTCH IN WOOD

WOOD STUD(S) AS REQUIRED

NOTE: THIS DETAIL SHALL APPLY FOR ELECTRICAL CONDUITS, PLUMBING AND FOR ANY OTHER USES WHICH REQUIRED NOTCHING.

2 NOTCHES AND PENETRATIONS IN SOLID SAWN JOISTS AND STUDS
1" = 1'-0"



W & HAJ
Wilson & HAJ Consultant Engineers, LLC

NOTES:
1- THESE DRAWINGS ARE THE PROPRIETARY WORK PRODUCT AND PROPERTY OF WILSON & HAJ CONSULTANT ENGINEERS, LLC. DEVELOPED FOR THE EXCLUSIVE USE OF WILSON & HAJ CONSULTANT ENGINEERS, LLC. USE OF THESE DRAWINGS AND CONCEPTS CONTAINED THEREIN WITHOUT THE WRITTEN PERMISSION OF WILSON & HAJ CONSULTANT ENGINEERS, LLC IS PROHIBITED.
2- TO THE BEST OF MY KNOWLEDGE THESE PLANS ARE DRAWN TO COMPLY WITH OWNERS AND/OR BUILDERS SPECIFICATIONS AND ANY CHANGES MADE ON THEM AFTER PRINTS ARE MADE WILL BE DONE AT THE OWNERS AND/OR BUILDERS EXPENSE AND RESPONSIBILITY. THE CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND ENCLOSED DRAWING. WILSON & HAJ CONSULTANT ENGINEERS, LLC IS NOT LIABLE FOR ERRORS OR OMISSIONS MADE IN THE PREPARATION OF THIS PLAN TO AVOID MISTAKES. THE MAKER CAN NOT GUARANTEE AGAINST HUMAN ERROR. THE CONTRACTOR OF THE JOB MUST CHECK ALL DIMENSIONS AND OTHER DETAILS PRIOR TO CONSTRUCTION AND BE SOLELY RESPONSIBLE THEREAFTER.
3- CONTRACTOR SHALL VERIFY ALL CONDITIONS AND DIMENSIONS AT THE JOB SITE AND NOTIFY THE DESIGNER OF ANY DIMENSIONAL ERRORS, OMISSIONS OR DISCREPANCIES BEFORE BEGINNING OR FABRICATING ANY WORK.

THE WRIGHT/HIGASHIJIMA

Client Name
Owner

Project Address
4701 88TH, AVE. SE, MERCER ISLAND, WA 98040

Revisions		
Rev#	Description	Date

STRUCTURAL TYPICAL DETAILS

Project number _____ Project Number _____
Date _____ Issue Date _____
Drawn By _____ Author _____
Checked By _____ Checker _____

SD3.1

Scale _____ As indicated _____