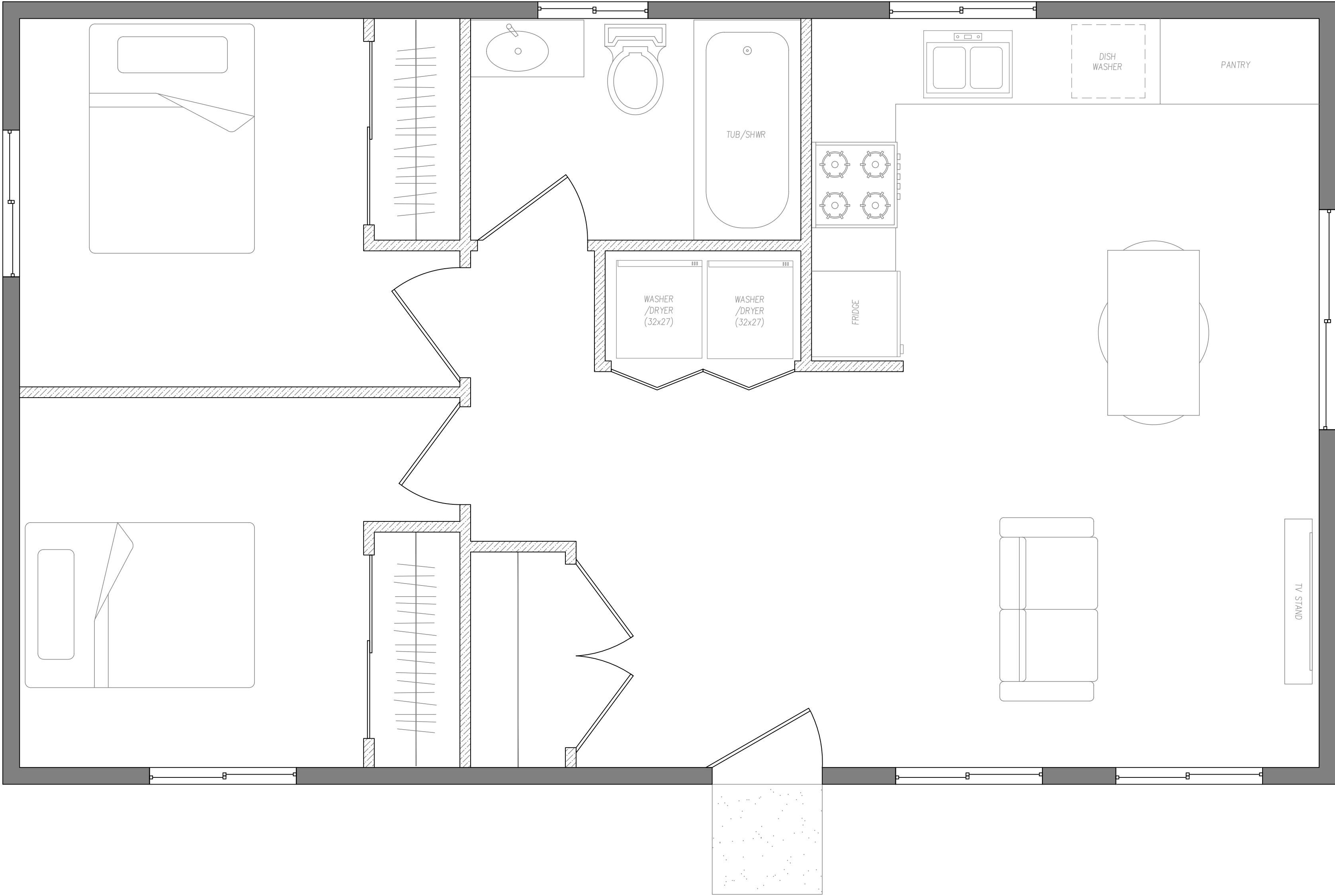


CITY OF HANFORD  
PRE-REVIEWED  
ACCESSORY DWELLING UNIT PROGRAM



775 SQ. FT.  
2 BED 1 BATH  
ACCESSORY DWELLING UNIT  
DETACHED

These plans and documents have been reviewed for compliance with the applicable codes requirements of the jurisdiction. The stamping of these plans shall not be held to permit or be an approval of any violation of applicable codes and standards nor relieve the owner, design professional of record or contractor of compliance with applicable codes and standards

ROD CARSEY CONSULTING & PLAN CHECK  
SERVICE 11/8/2024

SHEET INDEX	
COVER SHEETS	
C0	COVER
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EN1	ENERGY COMPLIANCE

ADU INFO

OCCUPANCY TYPE	R-3
CONSTRUCTION TYPE	VB
CLIMATE ZONE	13

ADDITIONAL REQUIREMENTS DUE AT TIME OF SUBMITTAL

TRUSS DRAWINGS AND ANALYSIS  
FIRE SPRINKLER PLAN - if applicable  
SOLAR PHOTOVOLTAIC (PV) PLAN  
GEOTECHNICAL SOILS AND FOUNDATION INVESTIGATION  
Current CalGreen Forms - if submitted after 12/31/2025  
Current Energy Compliance Sheets - if submitted after 12/31/2025

BUILDING CODE:

2022 BUILDING STANDARDS ADMINISTRATIVE CODE, PART 1, TITLE 24 C.C.R.  
2022 CALIFORNIA RESIDENTIAL CODE (CRC) PART 2, TITLE 24 PART 2.5 (2021 INTERNATIONAL BUILDING CODE WITH CALIFORNIA AMENDMENTS).  
2022 CALIFORNIA ELECTRICAL CODE (CEC), PART 3, TITLE 24 C.C.R. (2020 NATIONAL ELECTRICAL CODE OF THE NATIONAL FIRE PROTECTION ASSOCIATION)  
2022 CALIFORNIA MECHANICAL CODE (CMC), PART 4, TITLE 24 C.C.R. (2021 UNIFORM MECHANICAL CODE AND CA AMENDMENTS)  
2022 CALIFORNIA PLUMBING CODE (CPC), PART 5, TITLE 24 C.C.R. (2020 UNIFORM PLUMBING CODE AND AMENDMENTS)  
2022 CALIFORNIA ENERGY CODE AND ENERGY COMMISSION STANDARDS (CECS), PART 6, TITLE 24 C.C.R.  
2022 CALIFORNIA FIRE CODE (CFC), PART 9, TITLE 24 C.C.R. (2021 INTERNATIONAL FIRE CODE)  
2022 CALIFORNIA GREEN BUILDING STANDARDS CODE, PART 11 TITLE 24 C.C.R.  
2022 CALIFORNIA REFERENCED STANDARDS CODE, PART 12 TITLE 24 C.C.R.  
2022 TITLE 19 C.C.R. PUBLIC SAFETY, STATE FIRE MARSHAL

CONTRACTOR SHALL REFER TO THE ABOVE CITED CODES AND LOCAL REGULATIONS WHERE SPECIFIC DETAILS ARE REQUIRED BUT NOT DEPICTED IN THE APPROVED PLANS.

MASTER PLAN DESIGN  
ADU775  
APPROVAL DATE: 12/11/2025  
EXPIRES: 12/11/2035  
10 YEAR LOCK IS NOT APPLICABLE TO THE CALIFORNIA ENERGY CODE, PV REQUIREMENTS, OR CALGREEN AND LANDSCAPE WATER-EFFICIENCY STANDARDS

CITY OF HANFORD BUILDING DIVISION  
APPROVED

THIS SET OF PLANS AND SPECIFICATIONS  
MUST BE KEPT ON THE JOB AT ALL TIMES AND  
NO CHANGES OR ALTERATIONS SHALL BE  
MADE EXCEPT BY THE BUILDING DIVISION.

THE STAMPING OF THIS PLAN AND  
SPECIFICATIONS SHALL NOT BE HELD TO  
PERMIT OR TO BE AN APPROVAL OF THE  
VIOLATION OF ANY PROVISIONS OF ANY CITY  
ORDINANCE OR STATE LAW. "REVIEWED FOR  
CODE COMPLIANCE."

BY: Mitchell Couch  
12/11/2025

DISCLAIMER:  
BY USING THESE STANDARD PLANS, THE USER AGREES TO  
RELEASE THE CITY OF HANFORD FROM ANY AND ALL CLAIMS,  
LIABILITIES, SUITS AND DEMANDS ON ACCOUNT OF ANY  
INJURY, DAMAGE, OR LOSS TO PERSONS OR PROPERTY,  
INCLUDING INJURY OR DEATH, OR ECONOMIC LOSSES, ARISING  
OUT OF THE USE OF THESE CONSTRUCTION DOCUMENTS. THE  
USE OF THESE PLANS DOES NOT ELIMINATE OR REDUCE THE  
USER'S RESPONSIBILITY TO VERIFY ANY AND ALL INFORMATION.



REVISIONS	

PROJECT TITLE		CITY OF HANFORD - PRE-REVIEWED ADU PROGRAM	
SHEET DESCRIPTION		COVER	
AGENCY		DATE	
SJV REAP		10/28/2024	

ADU SQFT	775
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DRAWING SCALE	----
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SHEET	C0
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A. GENERAL

1. NOTES AND DETAILS OR THE DRAWINGS SHALL TAKE PRECEDENCE OVER THESE NOTES. THE DETAILS ON THE DRAWINGS SHALL APPLY IN ALL CASES UNLESS SPECIFICALLY SHOWN OTHERWISE. WHERE CONDITIONS ARE NOT SPECIFICALLY INDICATED, DETAILS OF A CHARACTER SIMILAR TO THOSE SHOWN SHALL BE USED, SUBJECT TO REVIEW.

B. ELECTRICAL, PLUMBING, AND MECHANICAL

1. EXTERIOR LIGHTING. ALL PROJECTS SHALL COMPLY WITH THE RESPECTIVE CITY'S MUNICIPAL CODE.
2. DETECTORS. ALL DETECTORS MUST BE HARD WIRED TO THE BUILDING'S ELECTRICAL SYSTEM, INSTALLED PER THE MANUFACTURER'S INSTALLATION INSTRUCTIONS AND SHALL BE INTERCONNECTED, WITH BATTERY BACKUP [CRC R314.1]
- 2.1. SMOKE DETECTORS. SMOKE DETECTORS ARE REQUIRED IN EACH EXISTING SLEEPING ROOM, OUTSIDE EACH SEPARATE SLEEPING AREA IN THE IMMEDIATE VICINITY OF SLEEPING ROOMS, AND ON EACH STORY OF A DWELLING INCLUDING BASEMENTS. (CRC R314.3)
- 2.2. CARBON MONOXIDE DETECTORS. CARBON MONOXIDE DETECTORS ARE REQUIRED OUTSIDE EACH SEPARATE SLEEPING AREA IN THE IMMEDIATE VICINITY OF SLEEPING ROOMS AND ON EACH STORY OF A DWELLING INCLUDING BASEMENTS. (CRC R315.3)
3. WATER HEATER SEISMIC STRAPPING. MINIMUM TWO 3/4-INCH-BY-24-GAUGE STRAPS REQUIRED AROUND WATER HEATERS, WITH 1/4-INCH-BY-3-INCH LAG BOLTS ATTACHED DIRECTLY TO FRAMING. STRAPS SHALL BE AT POINTS WITHIN UPPER THIRD AND LOWER THIRD OF WATER HEATER VERTICAL DIMENSION. LOWER CONNECTION SHALL OCCUR MINIMUM 4 INCHES ABOVE CONTROLS. (CPC 507.2)
4. WATER CLOSET CLEARANCE. MINIMUM 30-INCH-WIDE BY 24-INCH-DEEP CLEARANCE REQUIRED AT FRONT OF WATER CLOSETS. (CPC 402.5)
5. SHOWER SIZE. SHOWER COMPARTMENTS SHALL HAVE MINIMUM AREA OF 1024 SQUARE INCHES AND BE ABLE TO ENCOMPASS A 30-INCH-DIAMETER CIRCLE. SHOWER DOORS SHALL HAVE A MINIMUM 22-INCH UNOBSTRUCTED WIDTH. (CPC 408.5 AND CPC 408.6)

C. MECHANICAL VENTILATION AND INDOOR AIR QUALITY (ASHRAE 62.2-2010)

1. TRANSFER AIR. VENTILATION AIR SHALL BE PROVIDED DIRECTLY FROM THE OUTDOORS AND NOT AS TRANSFER AIR FROM ADJACENT DWELLING UNITS OR OTHER SPACES, SUCH AS GARAGES, UNCONDITIONED CRAWLSPACES, OR UNCONDITIONED ATTICS. (CBEES 150.0(O))
2. INSTRUCTIONS AND LABELING. VENTILATION SYSTEM CONTROLS SHALL BE LABELED AND THE HOME OWNER SHALL BE PROVIDED WITH INSTRUCTIONS ON HOW TO OPERATE THE SYSTEM. (CBEES 150.0(O))
3. COMBUSTION AND SOLID-FUEL BURNING APPLIANCES. COMBUSTION APPLIANCES SHALL BE PROPERLY VENTED AND AIR SYSTEMS SHALL BE DESIGNED TO PREVENT BACK DRAFTING. (CBEES 150.0(O))
4. MINIMUM FILTRATION. MECHANICAL SYSTEMS SUPPLYING AIR TO OCCUPABLE SPACE THROUGH DUCTWORK SHALL BE PROVIDED WITH A FILTER HAVING A MINIMUM EFFICIENCY OF MERV 13 OR BETTER. (CBEES 150.0(O))
5. AIR INLETS. AIR INLETS (NOT EXHAUST) SHALL BE LOCATED AWAY FROM KNOWN CONTAMINANTS. (CBEES 150.0(O))
6. AIR MOVING EQUIPMENT. AIR MOVING EQUIPMENT USED TO MEET EITHER THE WHOLE-BUILDING VENTILATION REQUIREMENT OR THE LOCAL VENTILATION EXHAUST REQUIREMENT SHALL BE RATED IN TERMS OF AIRFLOW AND SOUND. (CBEES 150.0(O))
- 6.A. ALL CONTINUOUSLY OPERATING FANS SHALL BE RATED AT A MAXIMUM OF 1.0 SONE.
- 6.B. INTERMITTENTLY OPERATED WHOLE-BUILDING VENTILATION FANS SHALL BE RATED AT A MAXIMUM OF 1.0 SONE.
- 6.C. INTERMITTENTLY OPERATED LOCAL EXHAUST FANS SHALL BE RATED AT MAXIMUM OF 3.0 SONE.
- 6.D. REMOTELY LOCATED AIR-MOVING EQUIPMENT (MOUNTED OUTSIDE OF HABITABLE SPACES) NEED NOT MEET SOUND REQUIREMENTS IF AT LEAST 4 FEET OF DUCTWORK BETWEEN FAN AND INTAKE GRILL.
7. LOCAL EXHAUST FANS TO EXTERIOR TO PROVIDE MINIMUM 50 CFM INTERMITTENT OR 20 CFM CONTINUOUS VENTILATION OR AS SPECIFIED IN ENERGY REPORT.
8. AN INTERMITTENTLY OR CONTINUOUSLY OPERATING LOCAL MECHANICAL EXHAUST VENTILATION SYSTEM SHALL BE INSTALLED IN EACH BATHROOM WITH A BATHTUB, SHOWER, OR SIMILAR MOISTURE SOURCE AND IN EACH KITCHEN IN COMPLIANCE WITH ASHRAE STANDARD 62.2 AS ADOPTED BY THE CALIFORNIA ENERGY COMMISSION.
- 8.1. BATHROOMS: INTERMITTENT LOCAL EXHAUST VENTILATION AIRFLOW RATES SHALL NOT BE LESS THAN 50 CFM. CONTINUOUS OPERATION SHALL NOT BE LESS THAN 20 CFM. (CMC 405.3.1)
- 8.2. KITCHENS: INTERMITTENT CONTROLLED OPERATIONS, THE EXHAUST RATE SHALL NOT BE LESS THAN 100 CFM FOR RANGE HOODS OR 300 CFM FOR MECHANICAL EXHAUST FANS INCLUDING DOWNDRAFT APPLIANCES. CONTINUOUS OPERATED VENTILATION, THE EXHAUST RATE SHALL NOT BE LESS THAN 5CFM OR 4% OF THE OCCUPIED FLOOR AREA. (CMC 405.4.1)

D. FOUNDATION

1. PROJECTS DETERMINED TO BE IN SEISMIC DESIGN CATEGORY (SDC) "D" REQUIRE A GEOTECHNICAL SOILS AND FOUNDATION INVESTIGATION [CBC 1803.2 & 1803.5.12] UNLESS WAIVED BY THE BUILDING OFFICIAL. THE SOILS ENGINEER SHALL BE RESPONSIBLE FOR REVIEWING AND COORDINATING THE SITE PLAN AND THE FOUNDATION PLAN PREPARED BY OTHERS FOR CONFORMANCE WITH THE RECOMMENDATIONS OF HIS SOILS REPORT AND SHALL SIGNIFY HIS REVIEW BY CERTIFYING THE FIRST SHEET OF SAID PLANS [CRC R301.1.3.1].
- 1.1. SAMPLE CERTIFICATION.
- THESE PLANS CONFORM TO THE GEOTECHNICAL REPORT # \_\_\_\_\_ DATED \_\_\_\_\_ AS PREPARED UNDER MY SUPERVISION. WE MAKE NO REPRESENTATION AS TO THE ACCURACY OF DIMENSIONS, MEASUREMENTS, CALCULATIONS OR ANY PORTION OF THE DESIGN.
2. FOUNDATION REINFORCEMENT. CONTINUOUS FOOTINGS AND STEM WALLS SHALL BE PROVIDED WITH A MINIMUM TWO LONGITUDINAL NO. 4 BARS, ONE AT THE TOP AND ONE AT THE BOTTOM OF THE FOOTING. (CRC R403.1.3.3)
3. INTERIOR BRACED WALL FOUNDATION SUPPORT. BRACED WALLS SHALL BE SUPPORTED BY CONTINUOUS FOUNDATIONS. (CRC 403.1.3.4)
4. HORIZONTAL REINFORCEMENT SHALL BE THE LONGEST LENGTHS PRACTICAL. WHERE SPLICES ARE NECESSARY IN REINFORCEMENT, THE LENGTH OF LAP SPICE SHALL BE 40 BAR DIAMETERS. THE MAXIMUM GAP BETWEEN NONCONTACT PARALLEL BARS AT A LAP SPICE SHALL NOT EXCEED THE SMALLER OF ONE-FIFTH THE REQUIRED LAP LENGTH AND 6 INCHES [SEE FIGURER608.5.4(1)]
5. ANCHOR BOLTS AND SILLS. FOUNDATION PLATES OR SILLS SHALL BE BOLTED OR ANCHORED TO THE FOUNDATION OR FOUNDATION WALL PER THE FOLLOWING (CRC R403.1.6 AND CRC R602.11.1):
- 5.A. MINIMUM 1/2-INCH-DIAMETER STEEL BOLTS, ASTM F1554, GR36
- 5.B. BOLTS EMBEDDED AT LEAST 7 INCHES INTO CONCRETE OR MASONRY
- 5.C. THE BOLTS SHALL BE LOCATED IN THE MIDDLE THIRD OF THE WIDTH OF THE PLATE.
- 5.D. BOLTS SPACED MAXIMUM 6 FEET ON CENTER
- 5.E. MINIMUM TWO BOLTS PER PLATE/SILL PIECE WITH ONE BOLT LOCATED MAXIMUM 12 INCHES AND MINIMUM 7 BOLT DIAMETERS FROM EACH END OF EACH SILL PLATE/PIECE
- 5.F. MINIMUM 3-INCH BY 3-INCH BY 0.229-INCH STEEL PLATE WASHER BETWEEN SILL AND NUT ON EACH BOLT EXCEPT WHERE APPROVED ANCHOR STRAPS ARE USED. THE HOLE IN THE PLATE WASHER IS PERMITTED TO BE DIAGONALLY SLOTTED WITH A WIDTH OF UP TO 1/8 INCH LARGER THAN THE BOLT DIAMETER AND A SLOT LENGTH NOT TO EXCEED 1-3/4 INCHES, PROVIDED STANDARD CUT WASHER IS PLACED BETWEEN THE PLATE WASHER AND THE NUT.
6. HOLD-DOWNS. ALL HOLD-DOWNS MUST BE TIED IN PLACE PRIOR TO FOUNDATION INSPECTION.
7. FASTENERS FOR PRESSURE-PRESERVATIVE TREATED AND FIRE RETARDANT TREATED WOOD SHALL BE HOT-DIPPED ZINC COATED GALVANIZED, STAINLESS STEEL OR COPPER (CRC R317.3)
8. VAPOR RETARDER.
- 8.1. A VAPOR RETARDER INSPECTION WILL BE REQUIRED PRIOR TO PLACEMENT OF THE SAND TO CONFIRM PROPER INSTALLATION (VAPOR RETARDER IS TO BE ASTM E1745 CLASS A COMPLIANT AND MANUFACTURER'S INSTALLATION REQUIREMENTS MUST BE AVAILABLE FOR INSPECTION PURPOSES).
- 8.2. A MINIMUM 10-MIL VAPOR RETARDER CONFORMING TO ASTM E1745 CLASS A REQUIREMENTS WITH JOINTS LAPPED NOT LESS THAN 6" IS REQUIRED.
- 8.3. PROVIDE 4" NOMINAL THICK CONCRETE SLAB WITH #3 REBAR AT 24" O.C. EACH WAY, PLACED MID-HEIGHT OF SLAB OVER 2" SAND BLOTTER INSTALLED OVER 10 MIL VAPOR RETARDER CONFORMING TO ASTM E1745 OVER AN ADDITIONAL 2" SAND OVER COMPACTED FILL COMPLYING WITH SITE SOILS REPORT.

E. WOOD FRAMING

1. FASTENER REQUIREMENTS. THE NUMBER, SIZE, AND SPACING OF FASTENERS CONNECTING WOOD MEMBERS/ELEMENTS SHALL NOT BE LESS THAN THAT SET FORTH IN CRC TABLE R602.3(1). (CRC R602.3)
2. SILL PLATE. STUDS SHALL HAVE FULL BEARING ON NOMINAL 2-INCH THICK OR LARGER SILL PLATE WITH WIDTH AT LEAST EQUAL TO STUD WIDTH. (CRC R602.3.4)
3. BEARING STUDS. WHERE JOISTS, TRUSSES, OR RAFTERS ARE SPACED MORE THAN 16 INCHES ON CENTER AND THE BEARING STUDS BELOW ARE SPACED 24 INCHES ON CENTER, SUCH MEMBERS SHALL BEAR WITHIN 5 INCHES OF THE STUDS BENEATH. (CRC R602.3.3) EXCEPTION: THE TOP PLATES ARE TWO 2-INCH BY 6-INCH OR TWO 3-INCH BY 4-INCH MEMBERS.

4. DRILLING AND NOTCHING OF STUDS. ANY STUD IN AN EXTERIOR WALL OR BEARING PARTITION MAY BE CUT OR NOTCHED TO A DEPTH NOT EXCEEDING 25% OF ITS WIDTH. STUDS IN NONBEARING PARTITIONS MAY BE NOTCHED TO A DEPTH NOT TO EXCEED 40% OF A SINGLE STUD WIDTH. ANY STUD MAY BE BORED OR DRILLED, PROVIDED THE DIAMETER OF THE RESULTING HOLE IS NO MORE THAN 60% OF THE STUD WIDTH, THE EDGE OF THE HOLE IS NO MORE THAN 5/8 INCH TO THE EDGE OF THE STUD, AND THE HOLE IS NOT LOCATED IN THE SAME SECTION AS A CUT OR NOTCH. STUDS LOCATED IN EXTERIOR WALL OR BEARING PARTITIONS DRILLED OVER 40% AND UP TO 60% SHALL ALSO BE DOUBLED WITH NO MORE THAN TWO SUCCESSIVE STUDS BORED. (CRC R602.6) EXCEPTION: USE OF APPROVED STUD SHOES IS PERMITTED WHERE THEY ARE INSTALLED IN ACCORDANCE WITH THE MANUFACTURE'S RECOMMENDATIONS.
5. TOP PLATE. WOOD STUD WALLS SHALL BE CAPPED WITH A DOUBLE TOP PLATE INSTALLED TO PROVIDE OVERLAPPING AT CORNERS AND AT INTERSECTIONS WITH OTHER PARTITIONS. END JOINTS IN DOUBLE TOP PLATES SHALL BE OFFSET AT LEAST 24 INCHES. JOINTS IN PLATES NEED NOT OCCUR OVER STUDS. PLATES SHALL BE MINIMUM NOMINAL 2 INCHES THICK AND HAVE WIDTH AT LEAST EQUAL TO WIDTH OF STUDS. (CRC R602.3.2)
6. TOP PLATE SPLICES. TOP PLATE LAP SPLICES SHALL BE FACE-NAILED WITH MINIMUM 8 16D NAILS ON EACH SIDE OF SPLICE. (CRC R602.10.8.1)
7. DRILLING AND NOTCHING OF TOP PLATE. WHEN PIPING OR DUCTWORK IS PLACED IN OR PARTLY IN AN EXTERIOR WALL OR INTERIOR LOAD-BEARING WALL, NECESSITATING CUTTING, DRILLING, OR NOTCHING OF THE TOP PLATE BY MORE THAN 50% OF ITS WIDTH, A GALVANIZED METAL TIE NOT LESS THAN 0.054-INCH THICK AND 1-1/2-INCHES WIDE SHALL BE FASTENED ACROSS AND TO THE PLATE AT EACH SIDE OF THE OPENING WITH NOT LESS THAN 8 10D NAILS HAVING A MINIMUM LENGTH OF 1-1/2 INCHES AT EACH SIDE OR EQUIVALENT. THE METAL TIE MUST EXTEND MINIMUM 6 INCHES PAST THE OPENING. (CRC R602.6.1)
8. SHEAR WALL AND DIAPHRAGM NAILING. ALL SHEAR WALLS, ROOF DIAPHRAGMS, AND FLOOR DIAPHRAGMS SHALL BE NAILED TO SUPPORTING CONSTRUCTION PER CRC TABLE R602.3(1). (CRC R604.3)
9. SHEAR WALL JOINTS. ALL VERTICAL JOINTS IN SHEAR WALL SHEATHING SHALL OCCUR OVER, AND BE FASTENED TO, COMMON STUDS. HORIZONTAL JOINTS IN SHEAR WALLS SHALL OCCUR OVER, AND BE FASTENED TO, MINIMUM 1-1/2-INCH-THICK BLOCKING. (CRC R602.10.10)
10. FRAMING OVER OPENINGS. HEADERS, DOUBLE JOISTS, OR TRUSSES OF ADEQUATE SIZE TO TRANSFER LOADS TO VERTICAL MEMBERS SHALL BE PROVIDED OVER WINDOW AND DOOR OPENINGS IN LOAD-BEARING WALLS AND PARTITIONS. (CBC 2304.3.2).
11. ROOF TRUSSES TRUSSES SHALL BE BRACED TO PREVENT ROTATION AND PROVIDE LATERAL STABILITY IN ACCORDANCE WITH THE REQUIREMENTS SPECIFIED IN THE INDIVIDUAL TRUSS DESIGN DRAWINGS. IN THE ABSENCE OF SPECIFIC BRACING REQUIREMENTS, TRUSSES SHALL BE BRACED IN ACCORDANCE WITH ACCEPTED INDUSTRY PRACTICE SUCH AS THE SBCA BUILDING COMPONENT SAFETY INFORMATION (BCSI) GUIDE TO GOOD PRACTICE FOR HANDLING, INSTALLING & BRACING OF METAL PLATE CONNECTED WOOD TRUSSES.
12. ROOF DIAPHRAGM UNDER FILL FRAMING. ROOF PLYWOOD SHALL BE CONTINUOUS UNDER CALIFORNIA FILL FRAMING.
13. ROOF DIAPHRAGM AT RIDGES. MINIMUM 2-INCH NOMINAL BLOCKING REQUIRED FOR ROOF DIAPHRAGM NAILING AT RIDGES.
14. BLOCKING OF ROOF TRUSSES. MINIMUM 2-INCH NOMINAL BLOCKING REQUIRED BETWEEN TRUSSES AT RIDGE LINES AND AT POINTS OF BEARING AT EXTERIOR WALLS.
15. TRUSS CLEARANCE. MINIMUM 1/2-INCH CLEARANCE REQUIRED BETWEEN TOP PLATES OF INTERIOR NON-BEARING PARTITIONS AND BOTTOM CHORDS OF TRUSSES.
16. FIREBLOCKING. FIREBLOCKOUT SHALL BE PROVIDED IN THE FOLLOWING LOCATIONS (CRC R302.11 AND CRC R1003.19):
- 16.A. IN CONCEALED SPACES OF STUD WALLS AND PARTITIONS, INCLUDING FURRED SPACES, AND PARALLEL ROWS OF STUDS OR STAGGERED STUDS, AS FOLLOWS:
- 16.A.1. VERTICALLY AT THE CEILING AND FLOOR LEVELS
- 16.A.2. HORIZONTALLY AT INTERVALS NOT EXCEEDING 10 FEET
- 16.B. AT ALL INTERCONNECTIONS BETWEEN CONCEALED VERTICAL AND HORIZONTAL SPACES SUCH AS OCCUR AT SOFFITS, DROP CEILINGS, AND COVE CEILINGS
- 16.C. IN CONCEALED SPACES BETWEEN STAIR STRINGERS AT THE TOP AND BOTTOM OF THE STAIRS
- 16.D. AT OPENINGS AROUND VENTS, PIPES, DUCTS, CABLES AND WIRES AT CEILING AND FLOOR LEVELS
- 16.E. MATERIAL TO RESIST THE FREE PASSAGE OF FLAME AND PRODUCTS OF COMBUSTION
- 16.F. AT CHIMNEYS AND FIREPLACES PER ITEM E.49
- 16.F. CORNICES OF A TWO-FAMILY DWELLING AT THE LINE OF DWELLING-UNIT SEPARATION
17. FIREBLOCKING MATERIALS. EXCEPT AS OTHERWISE SPECIFIED IN ITEMS E.48 AND E.49, FOLLOWING MATERIALS WITH THE INTEGRITY MAINTAINED (CRC R302.11.1):
- 17.A. TWO-INCH NOMINAL LUMBER
- 17.B. TWO THICKNESSES OF ONE-INCH NOMINAL LUMBER WITH BROKEN LAP JOINTS
- 17.C. ONE THICKNESS OF 23/32-INCH WOOD STRUCTURAL PANEL WITH JOINTS BACKED BY PANEL
- 17.D. ONE THICKNESS OF 3/4-INCH PARTICLEBOARD WITH JOINTS BACKED BY 3/4-INCH PARTICLEBOARD
- 17.E. 1/2-INCH GYPSUM BOARD
- 17.F. 1/4-INCH CEMENT-BASED MILLBOARD
- 17.G. BATTS OR BLANKETS OF MINERAL OR GLASS FIBER OF OTHER APPROVED MATERIALS INSTALLED IN SUCH A MANNER AS TO BE SECURELY RETAINED IN PLACE. BATTS OR BLANKETS OF MINERAL OR GLASS FIBER OR OTHER APPROVED NON-RIGID MATERIALS SHALL BE PERMITTED FOR COMPLIANCE WITH THE 10-FOOT HORIZONTAL FIREBLOCKING IN WALLS CONSTRUCTED USING PARALLEL ROWS OF STUDS OR STAGGERED STUDS. UNFACED FIBERGLASS BATT INSULATION USED AS FIREBLOCKING SHALL FILL THE ENTIRE CROSS-SECTION OF THE WALL CAVITY TO A MINIMUM HEIGHT OF 16 INCHES MEASURED VERTICALLY. WHEN PIPING, CONDUIT, OR SIMILAR OBSTRUCTIONS ARE ENCOUNTERED, THE INSULATION SHALL BE PACKED TIGHTLY AROUND THE OBSTRUCTION. LOOSE-FILL INSULATION MATERIAL SHALL NOT BE USED AS A FIREBLOCK UNLESS SPECIFICALLY TESTED IN THE FORM AND MANNER INTENDED FOR USE TO DEMONSTRATE ITS ABILITY TO REMAIN IN PLACE AND TO RETARD THE SPREAD OF FIRE AND HOT GASES.
18. FIREBLOCKING AT OPENINGS AROUND VENTS, PIPES, DUCTS, CABLES, AND WIRES AT CEILING AND FLOOR LEVEL. SUCH OPENINGS SHALL BE FIREBLOCKED WITH AN APPROVED MATERIAL TO RESIST THE FREE PASSAGE OF FLAME AND PRODUCTS OF COMBUSTION. (CRC R302.11)
19. FIREBLOCKING OF CHIMNEYS AND FIREPLACES. ALL SPACES BETWEEN CHIMNEYS AND FLOORS AND CEILINGS THROUGH WHICH CHIMNEYS PASS SHALL BE FIREBLOCKED WITH NONCOMBUSTIBLE MATERIAL SECURELY FASTENED IN PLACE. THE FIREBLOCKING OF SPACES BETWEEN CHIMNEYS AND WOOD JOISTS, BEAMS, OR HEADERS SHALL BE SELF-SUPPORTING OR BE PLACED ON STRIPS OF METAL OR METAL LATH LAID ACROSS THE SPACES BETWEEN COMBUSTIBLE MATERIAL AND THE CHIMNEY. (CRC R1003.19)
20. 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 SPACE DOES NOT EXCEED 1000 SQUARE FEET. 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 (CRC R302.12):
- 20.A. CEILING IS SUSPENDED UNDER THE FLOOR FRAMING
- 20.B. FLOOR FRAMING IS CONSTRUCTED OF TRUSS-TYPE OPEN-WEB OR PERFORATED MEMBERS
21. DRAFTSTOPPING MATERIALS. DRAFTSTOPPING SHALL NOT BE LESS THAN 1/2-INCH GYPSUM BOARD, 3/8-INCH 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 DRAFTSTOPS SHALL BE MAINTAINED. (CRC R302.12.1)
22. COMBUSTIBLE INSULATION CLEARANCE. COMBUSTIBLE INSULATION SHALL BE SEPARATED MINIMUM 3 INCHES FROM RECESSED LUMINAIRES, FAN MOTORS, AND OTHER HEAT-PRODUCING DEVICES. (CRC R302.14)
23. PROTECTION OF WOOD AGAINST DECAY. NATURALLY DURABLE OR PRESERVATIVE-TREATED WOOD SHALL BE PROVIDED IN THE FOLLOWING LOCATIONS (CRC R317.1):
- 23.A. ALL WOOD IN CONTACT WITH GROUND, EMBEDDED IN CONCRETE IN DIRECT CONTACT WITH GROUND, OR EMBEDDED IN CONCRETE EXPOSED TO WEATHER
- 23.B. WOOD FRAMING MEMBERS THAT REST ON CONCRETE OR MASONRY EXTERIOR FOUNDATION WALLS AND ARE LESS THAN 8 INCHES FROM EXPOSED EARTH SHALL BE OF NATURALLY DURABLE OR PRESERVATIVE-TREATED WOOD
- 23.C. WOOD FRAMING, SHEATHING, AND SIDING ON THE EXTERIOR OF THE BUILDING AND HAVING CLEARANCE LESS THAN 6 INCHES FROM THE EXPOSED GROUND OR LESS THAN 2 INCHES VERTICALLY FROM CONCRETE STEPS, PORCH SLABS, PATIO SLABS, AND SIMILAR HORIZONTAL SURFACE EXPOSED TO WEATHER
- 23.D. SILLS AND SLEEPERS ON CONCRETE OR MASONRY SLAB IN DIRECT CONTACT WITH GROUND UNLESS SEPARATED FROM SUCH SLAB BY IMPERVIOUS MOISTURE BARRIER

F. BASIS OF DESIGN

NOTE: WINTER DESIGN TEMP, FLOOD HAZARDS, AIR FREEZING INDEX AND MEAN ANNUAL TEMP SECTIONS ARE REQUIRED BY APPLICANT AT TIME OF SUBMITTAL.

GROUND SNOW LOAD	WIND DESIGN		SEISMIC DESIGN CAT	SUBJECT TO DAMAGE FROM			Winter Design Temp	ICE BARRIER UNDERLAYMENT REQUIRED		FLOOD HAZARDS	AIR FREEZING INDEX	MEAN ANNUAL TEMP
	Speed (mph)	T-to-g graphic effects		Weathering	Frost Line Depth	Termite						
0	110	NO	D	<5000=NEG	<5000=12"	YES	74	<5000=NO		N/A	1500	64

G. GENERAL MATERIAL SPECIFICATIONS

1. LUMBER. ALL JOISTS, RAFTERS, BEAMS, AND POSTS SHALL BE NO. 2 GRADE DOUGLAS FIR-LARCH OR BETTER. STUDS NOT MORE THAN 8 FEET LONG SHALL BE STUD-GRADE DOUGLAS FIR-LARCH OR BETTER WHEN SUPPORTING NOT MORE THAN ONE FLOOR, ROOF, AND CEILING. STUDS LONGER THAN 8 FEET SHALL BE NO. 2 GRADE DOUGLAS FIR-LARCH OR BETTER.
2. STRUCTURAL PLYWOOD SHALL CONFORM TO COMMERIAL STANDARD DOC PS 1-09 AND HAVE A PANEL GRADE OF C-D. WOOD BASED STRUCTURAL -USE PANELS (I.E. ORIENTED STRAND BOARD) SHALL CONFORM TO THE APA PRP-108 PERFORMANCE STANDARD OF THE VOLUNTARY PRODUCT STANDARD DOC PS 2-10. "PERFORMANCE STANDARD FOR WOOD-BASED STRUCTURAL-USE PANELS". PUBLISHED BY THE DEPARTMENT OF COMMERCE AND THE AMERICAN PLYWOOD ASSOCIATION. ALL PLYWOOD AND STRUCTURAL-USE PANELS SHALL BE APA RATED SHEATHING, EXPOSURE 1. SHEATHING EXPOSED TO WEATHER SHALL BE GRADE C-C EXTERIOR WITH A RANGE INDEX AS TO MATCH BODY OF DIAGRAM SPECIFIED.
3. CONCRETE. THE QUALITY AND DESIGN OF CONCRETE SHALL BE IN ACCORDANCE WITH 2022 CALIFORNIA BUILDING CODE (CBC), EXCEPT ITEMS NOT SPECIFICALLY COVERED THEREIN SHALL ALSO CONFORM TO ACI 318-14.
4. CONCRETE SHALL HAVE A MINIMUM COMPRESSIVE STRENGTH OF 2,500 PSI AT 28 DAYS (CRC R402.2)
4. REINFORCING STEEL. REINFORCING STEEL USED IN CONSTRUCTION OF REINFORCED CONCRETE STRUCTURES SHALL BE DEFORMED AND COMPLY WITH ASTM A 615., GRADE 40 (CRC R403.1.3.5.1)
5. FASTENERS FOR PRESERVATIVE-TREATED WOOD. FASTENERS FOR PRESERVATIVE-TREATED AND FIRE-RETARDANT-TREATED WOOD -- INCLUDING NUTS AND WASHERS -- SHALL BE OF HOT DIPPED ZINC-COATED GALVANIZED STEEL, STAINLESS STEEL, SILICON BRONZE, OR COPPER. (CRC R317.3.1)
- EXCEPTION: 1/2-INCH DIAMETER OR GREATER STEEL BOLTS
- EXCEPTION: FASTENERS OTHER THAN NAILS AND TIMBER RIVETS MAY BE OF MECHANICALLY DEPOSITED ZINC-COATED STEEL WITH COATING WEIGHTS IN ACCORDANCE WITH ASTM B 695, CLASS 55 MINIMUM
- EXCEPTION: PLAIN CARBON STEEL FASTENERS ACCEPTABLE IN SBX/DOT AND ZINC BORATE PRESERVATIVE-TREATED WOOD IN AN INTERIOR, DRY ENVIRONMENT
6. FASTENERS FOR FIRE-RETARDANT-TREATED WOOD. FASTENERS FOR FIRE-RETARDANT-TREATED WOOD USED IN EXTERIOR APPLICATIONS OR WET OR DAMP LOCATIONS SHALL BE OF HOT DIPPED ZINC-COATED GALVANIZED STEEL, STAINLESS STEEL, SILICON BRONZE, OR COPPER. (CRC R317.3.3)
7. WALL FLASHING. APPROVED CORROSION-RESISTANT FLASHING SHALL BE APPLIED SHINGLE FASHION AT THE FOLLOWING LOCATIONS TO PREVENT ENTRY OF WATER INTO THE WALL CAVITY OR PENETRATION OF WATER TO THE BUILDING STRUCTURAL FRAMING COMPONENTS (CRC R703.8):
- 7.A. EXTERIOR DOOR AND WINDOW OPENINGS, EXTENDING TO THE SURFACE OF THE EXTERIOR WALL FINISH OR TO THE WATER-RESISTIVE BARRIER FOR SUBSEQUENT DRAINAGE
- 7.B. AT THE INTERSECTION OF CHIMNEYS OR OTHER MASONRY CONSTRUCTION WITH FRAME OR STUCCO WALLS, WITH PROJECTING LIPS ON BOTH SIDES UNDER STUCCO COPINGS
- 7.C. UNDER AND AT THE ENDS OF MASONRY, WOOD, OR METAL COPINGS AND SILLS
- 7.D. CONTINUOUSLY ABOVE ALL PROJECTING WOOD TRIM
- 7.E. WHERE EXTERIOR PORCHES, DECKS, OR STAIRS ATTACH TO A WALL OR FLOOR ASSEMBLY OF WOOD-FRAME CONSTRUCTION
- 7.F. AT WALL AND ROOF INTERSECTIONS
- 7.G. AT BUILT-IN GUTTERS

H. LIGHTING

RESIDENTIAL LIGHTING. CA ENERGY CODE 150.0(K)

1. LUMINAIRE REQUIREMENTS.
- 1.A. LUMINAIRE EFFICACY. ALL INSTALLED LUMINAIRES SHALL MEET THE REQUIREMENTS IN TABLE 150.0-A.
- EXCEPTION 1 TO SECTION 150.0(K)1A: INTEGRATED DEVICE LIGHTING. LIGHTING INTEGRAL TO EXHAUST FANS, KITCHEN RANGE HOODS, BATH VANITY MIRRORS AND GARAGE DOOR OPENERS.
- EXCEPTION 2 TO SECTION 150.0(K)1A: NAVIGATION LIGHTING SUCH AS NIGHT LIGHTS, STEP LIGHTS, AND PATH LIGHTS LESS THAN 5 WATTS.
- EXCEPTION 3 TO SECTION 150.0(K)1A: CABINET LIGHTING. LIGHTING INTERNAL TO DRAWERS, CABINETS AND LINEN CLOSETS WITH AN EFFICACY OF 45 LUMENS PER WATT OR GREATER.
- 1.B. SCREW-BASED LUMINAIRES. SCREW-BASED LUMINAIRES SHALL CONTAIN LAMPS THAT COMPLY WITH REFERENCE JOINT APPENDIX JAB.
- 1.C. RECESSED DOWNLIGHT LUMINAIRES IN CEILINGS: LUMINAIRES RECESSED INTO CEILINGS SHALL MEET ALL OF THE FOLLOWING REQUIREMENTS:
- i. SHALL NOT CONTAIN SCREW BASE LAMP SOCKETS; AND
- ii. HAVE A LABEL THAT CERTIFIES THE LUMINAIRE IS AIRTIGHT WITH AIR LEAKAGE LESS THAN 2.0 CFM AT 75 PASCALS WHEN TESTED IN ACCORDANCE WITH ASTM E283. AN EXHAUST FAN HOUSING WITH INTEGRAL LIGHT SHALL NOT BE REQUIRED TO BE CERTIFIED AIRTIGHT; AND
- iii. BE SEALED WITH A GASKET OR CAULK BETWEEN THE LUMINAIRE HOUSING AND CEILING, AND HAVE ALL AIR LEAK PATHS BETWEEN CONDITIONED AND UNCONDITIONED SPACES SEALED WITH A GASKET OR CAULK, OR BE INSTALLED PER MANUFACTURER'S INSTRUCTIONS TO MAINTAIN AIRTIGHTNESS BETWEEN THE LUMINAIRE HOUSING AND CEILING; AND
- iv. MEET THE CLEARANCE AND INSTALLATION REQUIREMENTS OF CALIFORNIA ELECTRICAL CODE SECTION 410.116 FOR RECESSED LUMINAIRES.
- EXCEPTION TO SECTIONS 150.0(K)1cii AND iii: RECESSED LUMINAIRES MARKED FOR USE IN FIRE-RATED INSTALLATIONS EXTRUDED INTO CEILING SPACE AND RECESSED LUMINAIRES INSTALLED IN NONINSULATED CEILINGS.
- 1.A. LIGHT SOURCES IN ENCLOSED OR RECESSED LUMINAIRES. LAMPS AND OTHER SEPARABLE LIGHT SOURCES THAT ARE NOT COMPLIANT WITH THE JAB ELEVATED TEMPERATURE REQUIREMENTS, INCLUDING MARKING REQUIREMENTS, SHALL NOT BE INSTALLED IN ENCLOSED OR RECESSED LUMINAIRES.
- 1.B. BLANK ELECTRICAL BOXES. THE NUMBER OF ELECTRICAL BOXES THAT ARE MORE THAN 5 FEET ABOVE THE FINISHED FLOOR AND DO NOT CONTAIN A LUMINAIRE OR OTHER DEVICE SHALL BE NO GREATER THAN THE NUMBER OF BEDROOMS. THESE ELECTRICAL BOXES MUST BE SERVED BY A DIMMER, VACANCY SENSOR CONTROL, LOW VOLTAGE WIRING OR FAN SPEED CONTROL.
2. INDOOR LIGHTING CONTROLS.
- 2.A. LIGHTING SHALL HAVE READILY ACCESSIBLE WALL-MOUNTED CONTROLS THAT ALLOW THE LIGHTING TO BE MANUALLY TURNED ON AND OFF.
- EXCEPTION TO SECTION 150.0(K)2A: CEILING FANS MAY PROVIDE CONTROL OF INTEGRATED LIGHTING VIA A REMOTE CONTROL.
- 2.B. NO CONTROLS SHALL BYPASS A DIMMER, OCCUPANT SENSOR OR VACANCY SENSOR FUNCTION WHERE THAT DIMMER OR SENSOR HAS BEEN INSTALLED TO COMPLY WITH SECTION 150.0(K).
- 2.C. LIGHTING CONTROLS SHALL COMPLY WITH THE APPLICABLE REQUIREMENTS OF SECTION 110.9.
- 2.D. AN ENERGY MANAGEMENT CONTROL SYSTEM (EMCS) OR A MULTISCENE PROGRAMMABLE CONTROL MAY BE USED TO COMPLY WITH DIMMING, OCCUPANCY AND LIGHTING CONTROL REQUIREMENTS IN SECTION 150.0(K)2 IF IT PROVIDES THE FUNCTIONALITY OF THE SPECIFIED CONTROLS IN ACCORDANCE WITH SECTION 110.9, AND THE PHYSICAL CONTROLS SPECIFIED IN SECTION 150.0(K)2A.

I. ROOFING AND WEATHERPROOFING

1. ROOF COVERING. ALL ROOF COVERING SHALL BE INSTALLED PER APPLICABLE REQUIREMENTS OF CBC 1507. ROOF COVERINGS SHALL BE AT LEAST CLASS A RATED IN ACCORDANCE WITH ASTM E 108 OR UL 790, WHICH SHALL INCLUDE COVERINGS OF SLATE, CLAY OR CONCRETE ROOF TILE, EXPOSED CONCRETE ROOF DECK, FERROUS OR COPPER SHINGLES OR SHEETS.
2. ROOF FLASHING. FLASHING SHALL BE INSTALLED AT WALL AND ROOF INTERSECTIONS, AT GUTTERS, WHEREVER THERE IS A CHANGE IN ROOF SLOPE OR DIRECTION, AND AROUND ROOF OPENINGS. WHERE FLASHING IS OF METAL, THE METAL SHALL BE CORROSION-RESISTANT WITH A THICKNESS OF NOT LESS THAN 0.019 INCH (NO. 26 GALVANIZED SHEET). (CRC R903.2.1)
3. CRICKETS AND SADDLES. A CRICKET OR SADDLE SHALL BE INSTALLED ON THE RIDGE SIDE OF ANY CHIMNEY OR PENETRATION MORE THAN 30 INCHES WIDE AS MEASURED PERPENDICULAR TO THE SLOPE. CRICKET OR SADDLE COVERING SHALL BE SHEET METAL OR THE SAME MATERIAL AS THE ROOF COVERING. (CRC R903.2.2)
4. WATER-RESISTIVE BARRIER. A MINIMUM OF ONE LAYER OF NO. 15 ASPHALT FELT SHALL BE ATTACHED TO STUDS OR SHEATHING OF ALL EXTERIOR WALLS. SUCH FELT OR MATERIAL SHALL BE APPLIED HORIZONTALLY, WITH THE UPPER LAYER LAPPED OVER THE LOWER LAYER MINIMUM 2 INCHES. WHERE JOINTS OCCUR, FELT SHALL BE LAPPED MINIMUM 6 INCHES. THE FELT SHALL BE CONTINUOUS TO THE TOP OF WALLS AND TERMINATED AT PENETRATIONS AND BUILDING APPENDAGES IN A MANNER TO MAINTAIN A WEATHER-RESISTANT EXTERIOR WALL ENVELOPE. (CRC R703.2)
5. DAMPPROOFING. DAMPPROOFING MATERIALS FOR FOUNDATION WALLS ENCLOSING USABLE SPACE BELOW GRADE SHALL BE INSTALLED ON THE EXTERIOR SURFACE OF THE WALL, AND SHALL EXTEND FROM THE TOP OF THE FOOTING TO FINISHED GRADE. (CRC R406.1)
6. WEEP SCREED. A MINIMUM 0.019-INCH (NO. 26 GALVANIZED SHEET GAGE), CORROSION-RESISTANT WEEP SCREED OR PLASTIC WEEP SCREED WITH A MINIMUM VERTICAL ATTACHMENT FLANGE OF 3-1/2 INCHES SHALL BE PROVIDED AT OR BELOW THE FOUNDATION PLATE LINE ON EXTERIOR STUD WALLS IN ACCORDANCE WITH ASTM C 92. THE WEEP SCREED SHALL BE PLACED A MINIMUM 4 INCHES ABOVE THE EARTH OR 2 INCHES ABOVE PAVED AREAS AND SHALL BE OF A TYPE ALLOWING TRAPPED WATER TO DRAIN TO THE EXTERIOR OF THE BUILDING. (CRC R703.7.2.1)

DISCLAIMER: BY USING THESE STANDARD PLANS, THE USER AGREES TO RELEASE THE CITY OF HANFORD FROM ANY AND ALL CLAIMS, LIABILITIES, SUITS AND DEMANDS ON ACCOUNT OF ANY INJURY, DAMAGE, OR LOSS TO PERSONS OR PROPERTY, INCLUDING INJURY OR DEATH, OR ECONOMIC LOSSES, ARISING OUT OF THE USE OF THESE CONSTRUCTION DOCUMENTS. THE USER AGREES TO MAINTAIN THE CITY OF HANFORD'S RIGHT TO MODIFY THESE PLANS WITHOUT NOTICE AND WITHOUT THE USER'S RESPONSIBILITY TO VERIFY ANY AND ALL INFORMATION.



REVISIONS

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PROJECT TITLE	CITY OF HANFORD - PRE-REVIEWED ADU PROGRAM		COVER	DATE	10/28/2024
	SHEET DESCRIPTION	AGENCY			
ADU SQFT		SJV REAP			

775

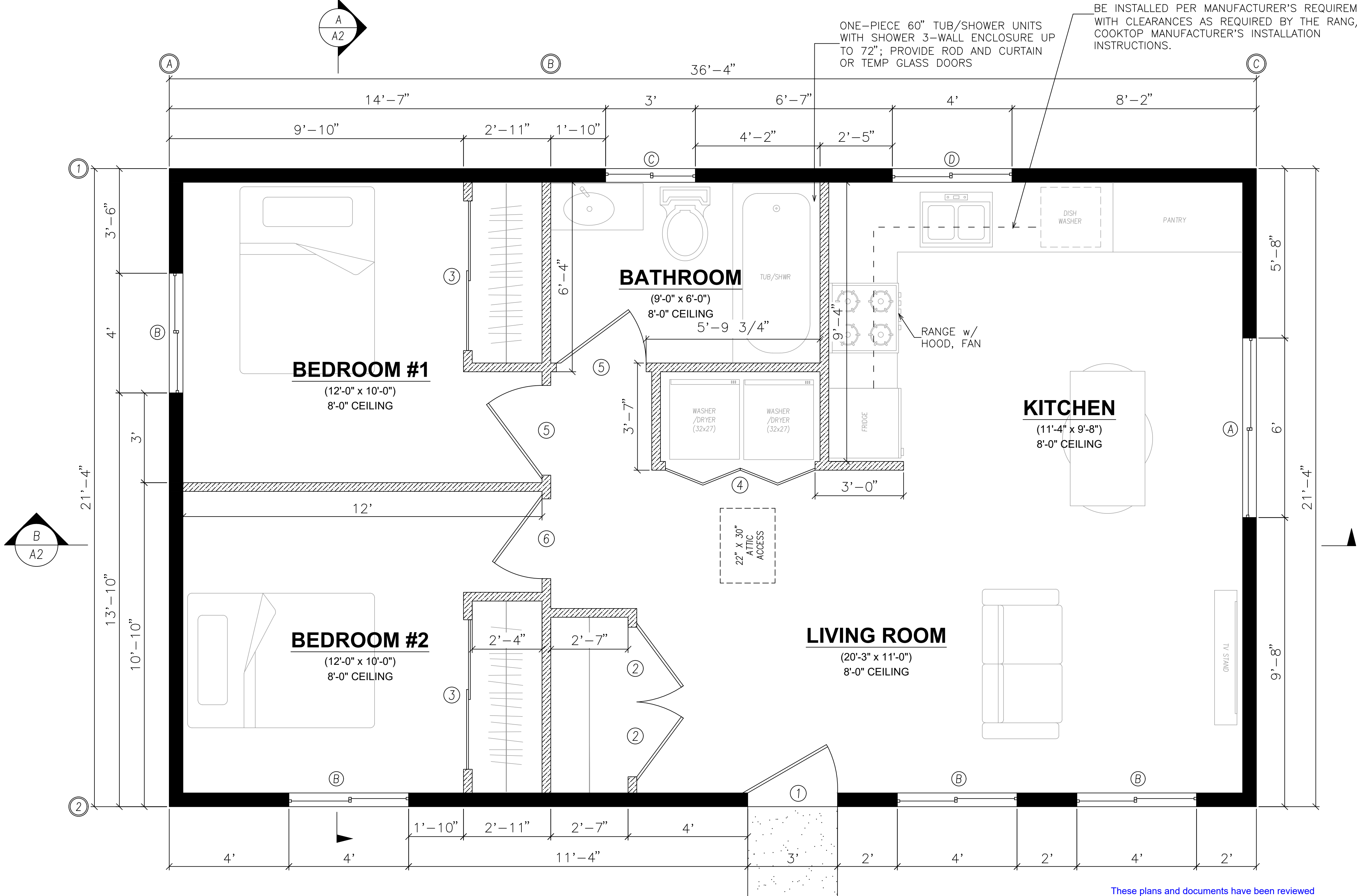
DRAWING SCALE

CITY OF HANFORD BUILDING DIVISION  
APPROVED

THIS SET OF PLANS AND SPECIFICATIONS SHALL NOT BE USED TO PERMIT OR TO BE AN APPROVAL OF THE VIOLATION OF ANY PROVISIONS OF ANY CITY ORDINANCE OR STATE LAW OR VIEW FOR CODE COMPLIANCE.

By: Mitchell Consh  
12/11/2025





DASHED LINE: UPPER CABINETS SHALL BE A MINIMUM OF 18" ABOVE FINISHED DECK OR THE HOOD IS TO BE INSTALLED PER MANUFACTURER'S REQUIREMENTS WITH CLEARANCES AS REQUIRED BY THE RANG/ COOKTOP MANUFACTURER'S INSTALLATION INSTRUCTIONS.

ONE-PIECE 60" TUB/SHOWER UNITS WITH SHOWER 3-WALL ENCLOSURE UP TO 72"; PROVIDE ROD AND CURTAIN OR TEMP GLASS DOORS

AGING-IN-PLACE DESIGN AND FALL PREVENTION. NEWLY CONSTRUCTED DWELLINGS SUBJECT TO THE REQUIREMENTS OF THIS CODE SHALL BE DESIGNED AND CONSTRUCTED IN ACCORDANCE WITH SECTIONS R327.1.1 THROUGH R327.1.4.PAGE

AT LEAST ONE BATHROOM ON THE ENTRY LEVEL SHALL BE PROVIDED WITH REINFORCEMENT INSTALLED IN ACCORDANCE WITH THIS SECTION. WHERE THERE IS NO BATHROOM ON THE ENTRY LEVEL, AT LEAST ONE BATHROOM ON THE SECOND OR THIRD FLOOR OF THE DWELLING SHALL COMPLY WITH THIS SECTION. [CRC R327.1.1]

INFORMATION AND/OR DRAWINGS IDENTIFYING THE LOCATION OF GRAB BAR REINFORCEMENT SHALL BE PLACED IN THE OPERATION AND MAINTENANCE MANUAL IN ACCORDANCE WITH THE CALIFORNIA GREEN BUILDING STANDARDS CODE, CHAPTER 4, DIVISION 4.4.[CRC R327.1.1.1]

ELECTRICAL RECEPTACLE OUTLET, SWITCH AND CONTROL HEIGHTS. ELECTRICAL RECEPTACLE OUTLETS, SWITCHES AND CONTROLS (INCLUDING CONTROLS FOR HEATING, VENTILATION AND AIR CONDITIONING) INTENDED TO BE USED BY OCCUPANTS SHALL BE LOCATED NO MORE THAN 48 INCHES MEASURED FROM THE TOP OF THE OUTLET BOX AND NOT LESS THAN 15 INCHES MEASURED FROM THE BOTTOM OF THE OUTLET BOX ABOVE THE FINISH FLOOR. [CRC R327.1.2]

EFFECTIVE JULY 1, 2024, AT LEAST ONE BATHROOM AND ONE BEDROOM ON THE ENTRY LEVEL SHALL PROVIDE A DOORWAY WITH A NET CLEAR OPENING OF NOT LESS THAN 32 INCHES, MEASURED WITH THE DOOR POSITIONED AT AN ANGLE OF 90 DEGREES FROM THE CLOSED POSITION; OR, IN THE CASE OF A TWO- OR THREE-STORY SINGLE FAMILY DWELLING, ON THE SECOND OR THIRD FLOOR OF THE DWELLING IF A BATHROOM OR BEDROOM IS NOT LOCATED ON THE ENTRY LEVEL. [CRC R327.1.3]

DOORBELL BUTTONS OR CONTROLS, WHEN INSTALLED, SHALL NOT EXCEED 48 INCHES (1219.2 MM) ABOVE EXTERIOR FLOOR OR LANDING, MEASURED FROM THE TOP OF THE DOORBELL BUTTON ASSEMBLY. WHERE DOORBELL BUTTONS INTEGRATED WITH OTHER FEATURES ARE REQUIRED TO BE INSTALLED ABOVE 48 INCHES MEASURED FROM THE EXTERIOR FLOOR OR LANDING, A STANDARD DOORBELL BUTTON OR CONTROL SHALL ALSO BE PROVIDED AT A HEIGHT NOT EXCEEDING 48 INCHES ABOVE EXTERIOR FLOOR OR LANDING, MEASURED FROM THE TOP OF THE DOORBELL BUTTON OR CONTROL. [CRC R327.1.4]

### OPTIONAL ROLL-IN SHOWER PLAN NOTES

NOTE: OPTIONAL ROLL IN SHOWERS OFFERED FOR CONVENIENCE NOT FOR COMPLIANCE WITH ACCESSIBILITY STANDARDS.

- SHOWER COMPARTMENT SEAT
  - MUST BE FOLDING TYPE, NOT TO EXCEED MORE THAN 6 INCHES FROM MOUNTING WALL WHEN FOLDED
  - LOCATED WITHIN 27 INCHES OF SHOWER CONTROLS
  - MOUNTED MINIMUM 17 INCHES AND MAXIMUM 19 INCHES ABOVE BATHROOM FINISHED FLOOR.
  - SEAT INSTALLED ON SIDE WALL ADJACENT TO CONTROLS AND EXTENDING FROM BACK WALL TO POINT WITHIN 3 INCHES OF SHOWER COMPARTMENT ENTRY
  - STRUCTURAL ADEQUACY OF MOUNTING HARDWARE AND FASTENERS TO ACCOMMODATE 250 POUND POINT LOAD APPLIED AT ANY POINT ON THE GRAB BAR, FASTENER, MOUNTING DEVICE, OR SUPPORTING STRUCTURE
- SHOWER GRAB BARS
  - MOUNTED MINIMUM 33 INCHES AND MAXIMUM 36 INCHES ABOVE SHOWER FLOOR
  - NOT EXTENDING OVER SHOWER SEAT
  - IF CROSS SECTION IS CIRCULAR, MINIMUM 1-1/4" AND MAXIMUM 2" OUTSIDE DIAMETER
  - IF CROSS SECTION IS NON-CIRCULAR, MINIMUM 4" AND MAXIMUM 4.8" PERIMETER AND MAXIMUM 2-1/4" CROSS SECTION DIMENSION
  - GRAB BARS MOUNTED ADJACENT TO A WALL, 1-1/2" ABSOLUTE SPACE BETWEEN WALL AND GRAB BAR
  - MINIMUM 1-1/2" SPACE BETWEEN GRAB BAR AND PROJECTING OBJECTS BELOW AND AT ENDS
  - MINIMUM 12 INCH SPACE BETWEEN GRAB BAR AND PROJECTING OBJECTS ABOVE
  - SURFACE MATERIAL OF ANY WALLS OR OBJECTS ADJACENT TO GRAB BARS MUST BE FREE OF SHARP OR ABRASIVE ELEMENTS AND HAVE ROUNDED EDGES.
  - STRUCTURAL ADEQUACY OF MOUNTING HARDWARE AND FASTENERS TO ACCOMMODATE 250 POUND POINT LOAD APPLIED AT ANY POINT ON THE GRAB BAR, FASTENER, MOUNTING DEVICE, OR SUPPORTING STRUCTURE
  - WALL REINFORCEMENT TO BE PROVIDED AT LOCATION OF GRAB BARS (E.G. BLOCKING)
  - REINFORCEMENT SHALL BE A SOLID LUMBER OR OTHER CONSTRUCTION MATERIALS APPROVED BY THE ENFORCING AGENCY
  - REINFORCEMENT SHALL NOT BE LESS THAN 2"x8" NOMINAL LUMBER (1-1/2"x7-1/4" ACTUAL DIMENSION) OR OTHER CONSTRUCTION MATERIAL PROVIDING EQUAL HEIGHT AND LOAD CAPACITY. REINFORCEMENT SHALL BE LOCATED BETWEEN 32 INCHES AND 39-1/4 INCHES ABOVE THE FINISHED FLOOR FLUSH WITH THE WALL FRAMING.
  - SHOWER REINFORCEMENTS SHALL BE CONTINUOUS WHERE WALL FRAMING IS PROVIDED.
- OPERABLE PARTS OF SHOWER CONTROLS AND FAUCETS:
  - INSTALLED ON BACK WALL OF SHOWER COMPARTMENT ADJACENT TO SEAT WALL
  - LOCATED MINIMUM 19 INCHES AND MAXIMUM 27 INCHES FROM SEAT WALL
  - LOCATED ABOVE GRAB BAR BUT NO HIGHER THAN 48 INCHES ABOVE SHOWER FLOOR
  - CENTERLINE AT MINIMUM 39 INCHES AND MAXIMUM 41 INCHES ABOVE SHOWER FLOOR
  - SINGLE-LEVER DESIGN
  - OPERABLE WITH MAXIMUM 5 POUNDS OF FORCE
  - OPERABLE WITH ONE HAND AND WITHOUT TIGHT GRASPING, PINCHING, OR TWISTING OF WRIST
- SPRAYER UNIT AND ASSOCIATED OPERABLE PARTS SHALL BE PROVIDED PER THE FOLLOWING:
  - OPERABLE PARTS, INCLUDING HANDLE, TO BE INSTALLED ON BACK WALL OF SHOWER COMPARTMENT MINIMUM 19 INCHES AND MAXIMUM 27 INCHES FROM SEAT WALL
  - OPERABLE PARTS LOCATED ABOVE GRAB BAR BUT NO HIGHER THAN 48 INCHES ABOVE SHOWER FLOOR, MEASURED TO TOP OF MOUNTING BRACKET
  - MINIMUM 59 INCH LONG HOSE
  - CAPABLE FOR USE AS FIXED SHOWER HEAD AND HAND HELD SHOWER
  - ON/OFF CONTROL WITH NON-POSITIVE SHUT OFF
  - ADJUSTABLE -HEIGHT SHOWER HEADS ON VERTICAL BAR SHALL NOT OBSTRUCT USE OF BATHTUB GRAB BARS
- WHERE SOAP DISHES ARE PROVIDED, MAXIMUM 40 INCHES ABOVE SHOWER FLOOR AND WITHIN REACH LIMITS FROM THE SHOWER SEAT
- MAXIMUM 2.1% SLOPE IN ALL DIRECTIONS OF ROLL-IN SHOWER FLOORS
- MAXIMUM 1/2" HIGH THRESHOLDS WITH MAXIMUM 50% BEVELED SLOPE AT ROLL-IN SHOWERS
- WHERE DRAINS ARE PROVIDED AT ROLL-IN SHOWERS, MAXIMUM 1/4" GRATE OPENINGS FLUSH WITH SHOWER FLOOR SURFACE

These plans and documents have been reviewed for compliance with the applicable codes requirements of the jurisdiction. The stamping of these plans shall not be held to permit or be an approval of any violation of applicable codes and standards nor relieve the owner, design professional of record or contractor of compliance with applicable codes and standards

ROD CARSEY CONSULTING & PLAN CHECK SERVICE

### LEGEND

EXTERIOR LOAD BEARING 2 x 6 @ 16" o.c., 9 ft PL HT; REFER TO EXTERIOR ELEVATIONS FOR EXTERIOR WALL COVERINGS; 1/2" WALLBOARD INTERIOR; R-21 BATT INSULATION IN STUD CAVITY; APA CDX PLYWD OR OSB SHEATHING ON EXTERIOR FACE OF STUDS; 2 LAYERS NO. 15 BUILDING PAPER OVER PLWD R-5 RIGID INSUL ON EXTERIOR FACE OF SHEATHING.

INTERIOR NON-LOAD-BEARING WALL 2 x 4 @ 16" o.c., 1/2" WALLBOARD INTERIOR

EXCERPT FROM R602.3.3 - BEARING STUDS WHERE JOISTS, TRUSSES OR RAFTERS ARE SPACED MORE THAN 16 INCHES (406 MM) ON CENTER AND THE BEARING STUDS BELOW ARE SPACED 24 INCHES (610 MM) ON CENTER, SUCH MEMBERS SHALL BEAR WITHIN 5 INCHES (127 MM) OF THE STUDS BENEATH.

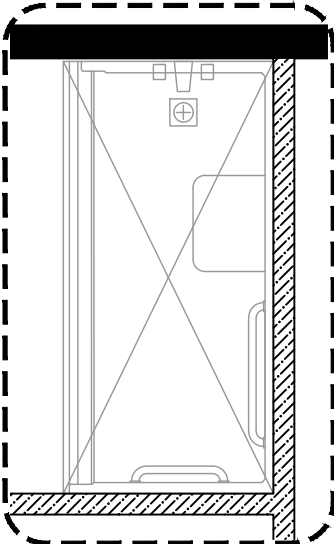
WINDOW SCHEDULE				
MARK	DIMENSION	TYPE	TEMPERED	NOTES
(A)	6'-0" x 4'-0"	SLIDING		
(B)	4'-0" x 4'-0"	SLIDING		
(C)	3'-0" x 1'-0"	SLIDING	TEMPERED GLAZING	6' ABOVE FLOOR
(D)	4'-0" x 3'-0"	SLIDING		

MINIMUM LI = 0.32 SHGC = 0.28

THE BOTTOM OF THE CLEAR OPENING OF WINDOWS IN SLEEPING ROOMS SHALL NOT BE MORE THAN 44" ABOVE THE FLOOR (CRC R310.2.3)

ALL WINDOWS TO BE INSTALLED WITH OVERHANGS OR FINS TO MEET HERS ENERGY ANALYSIS REQUIREMENTS

DOOR SCHEDULE			
MARK	DIMENSION	TYPE	NOTES
(1)	3'-0" x 6'-8"	SWINGING	1-3/8" SOLID CORE
(2)	2'-6" x 6'-8"	SWINGING	1-3/8" HOLLOW CORE
(3)	5'-0" x 6'-8"	SLIDING	5'-6" CLOSET
(4)	5'-0" x 6'-8"	BI-FOLD	LAUNDRY COVERING w/VENTILATION SLATS
(5)	3'-0" x 6'-8"	SWINGING	1-3/8" HOLLOW CORE
(6)	2'-8" x 6'-8"	SWINGING	1-3/8" HOLLOW CORE



OPTIONAL ROLL-IN SHOWER

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CITY OF HANFORD



#### REVISIONS

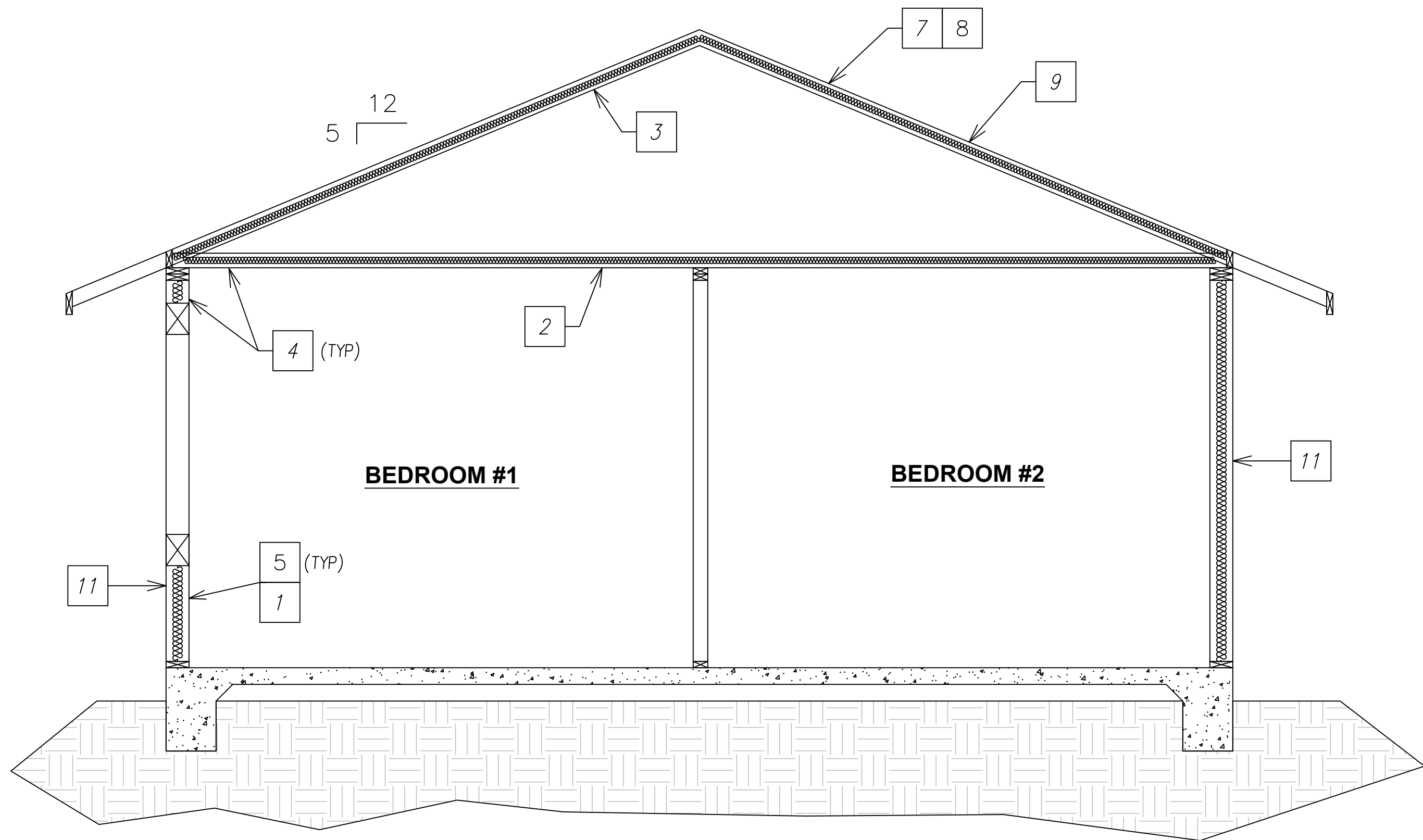
NO.	DESCRIPTION	DATE

PROJECT TITLE		CITY OF HANFORD – PRE-REVIEWED ADU PROGRAM	SHEET DESCRIPTION	FLOOR PLAN	AGENCY		DATE	
ADU SQFT					775		DRAWING SCALE	
ADU PERMIT					10/28/2024		10/28/2024	

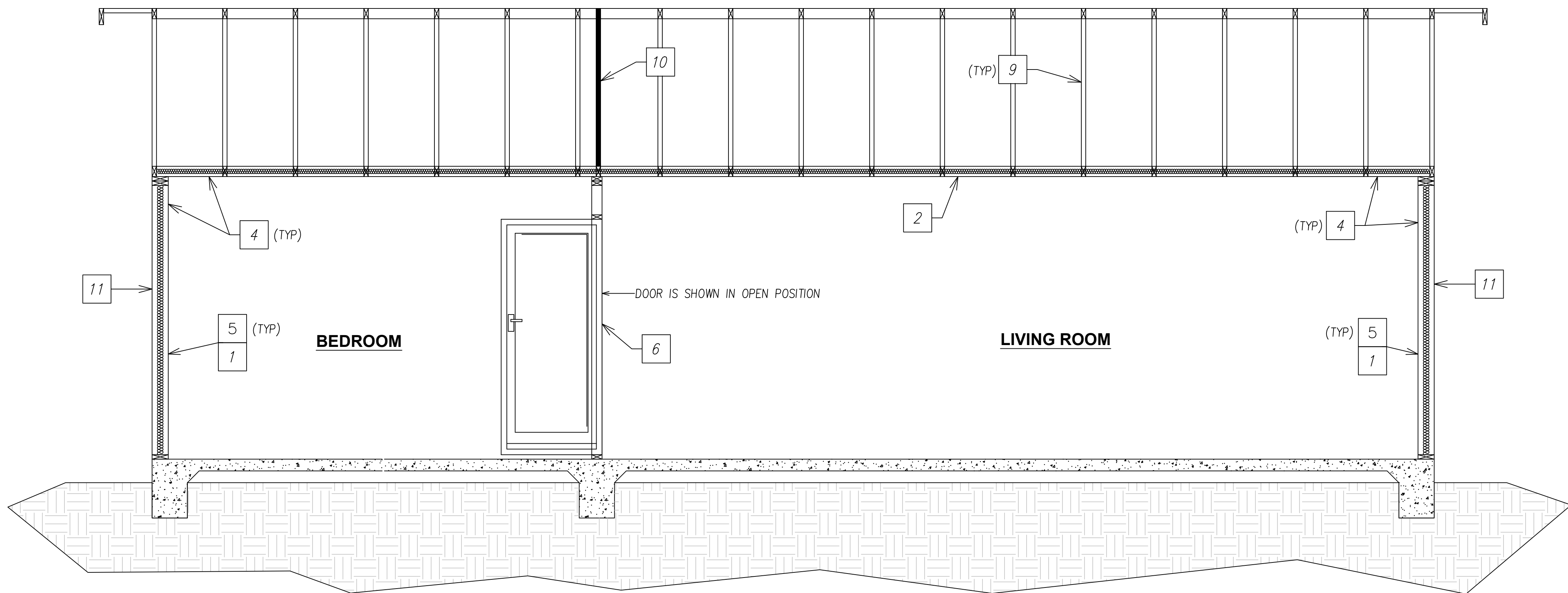
1/2" = 1'

THIS SET OF PLANS AND SPECIFICATIONS MUST BE KEPT ON THE JOB AT ALL TIMES AND NO CHANGES OR ALTERATIONS SHALL BE MADE EXCEPT BY THE BUILDING DIVISION. THE STAMPING OF THIS PLAN AND SPECIFICATIONS SHALL NOT BE HELD TO PERMIT OR TO BE AN APPROVAL OF THE QUALITY OF ANY WORKMANSHIP OR THE ORDINANCE OF STATE LAW. REVIEWED FOR CODE COMPLIANCE.

By: Mitchell Consh  
12/11/2025



SECTION A - A



SECTION B - B

SECTION KEYNOTES

- 1 WALL INSULATION: R21
- 2 CEILING INSULATION: R38
- 3 ROOF INSULATION: R13
- 4 INTERIOR FINISH:  $\frac{1}{2}$ " GYPSUM BOARD (UNLESS WALL IS FIRE RESISTANT ASSEMBLY)
- 5 EXTERIOR WALL: 2x6 STUD WALL @ 24" O.C.
- 6 INTERIOR WALL: 2x4 STUD WALL @ 24" O.C.
- 7 RADIANT BARRIER IS REQUIRED
- 8 ROOFING: REFER TO ELEVATIONS
- 9 PRE-ENGINEERED, PRE-FABRICATED ROOF TRUSSES (REQUIRED BY APPLICANT AT TIME OF SUBMITTAL)
- 10 MANUFACTURED DRAGG TRUSS
- 11 EXTERIOR WALL COVERING AS DENOTED AT EXTERIOR ELEVATION. ALL WALL COVERINGS SHALL BE APPLIED OVER WATER RESISTIVE BARRIER APPLIED TO WOOD SHEATHING PER (CRC 703.7.3.1)

- NOTE:
1. DESIGN OF ROOF TRUSSES SHALL ACCOMMODATE PHYSICAL DIMENSIONS AND GRAVITY LOAD OF ATTIC MOUNTED AIR HANDLER, AND PV PANEL WEIGHT.
  2. VERIFY INSULATION VALUES WITH ENERGY COMPLIANCE REPORT.
  3. FOR 1-HOUR FIRE RATED ASSEMBLY" AND "1-HOUR FIRE RATED GABLE END" DETAIL ON SHEETS S4 WHERE REQUIRED.

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REVISIONS	

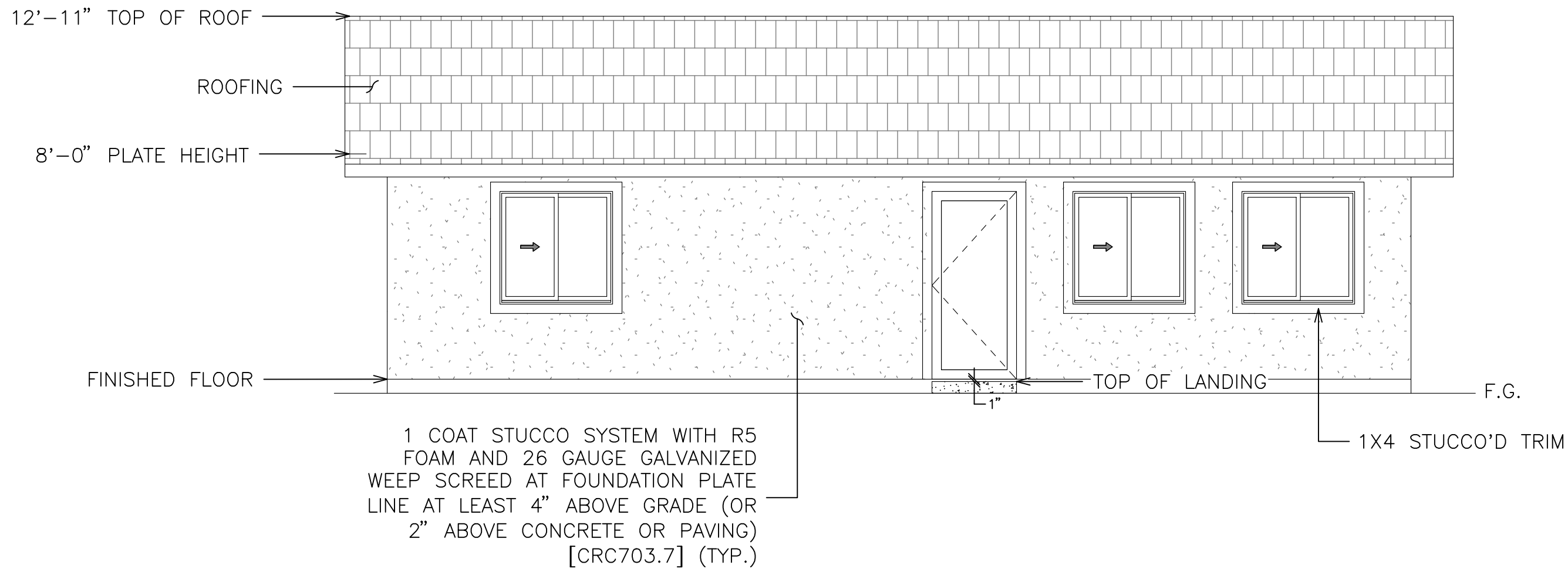
PROJECT TITLE		SHEET DESCRIPTION		AGENCY	
CITY OF HANFORD - PRE-REVIEWED ADU PROGRAM		SECTIONS		DATE	

ADU SQFT
775

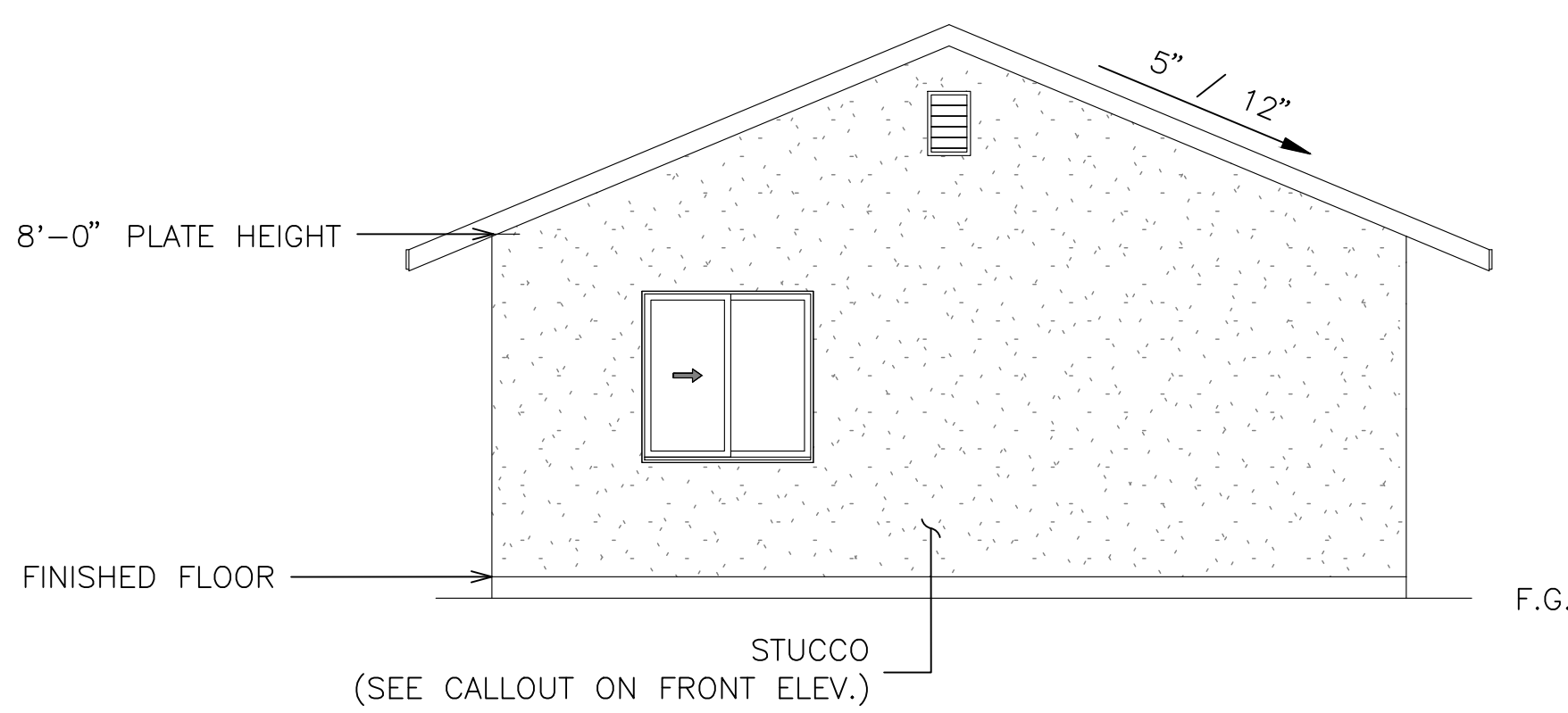
DRAWING SCALE
1/2" = 1'

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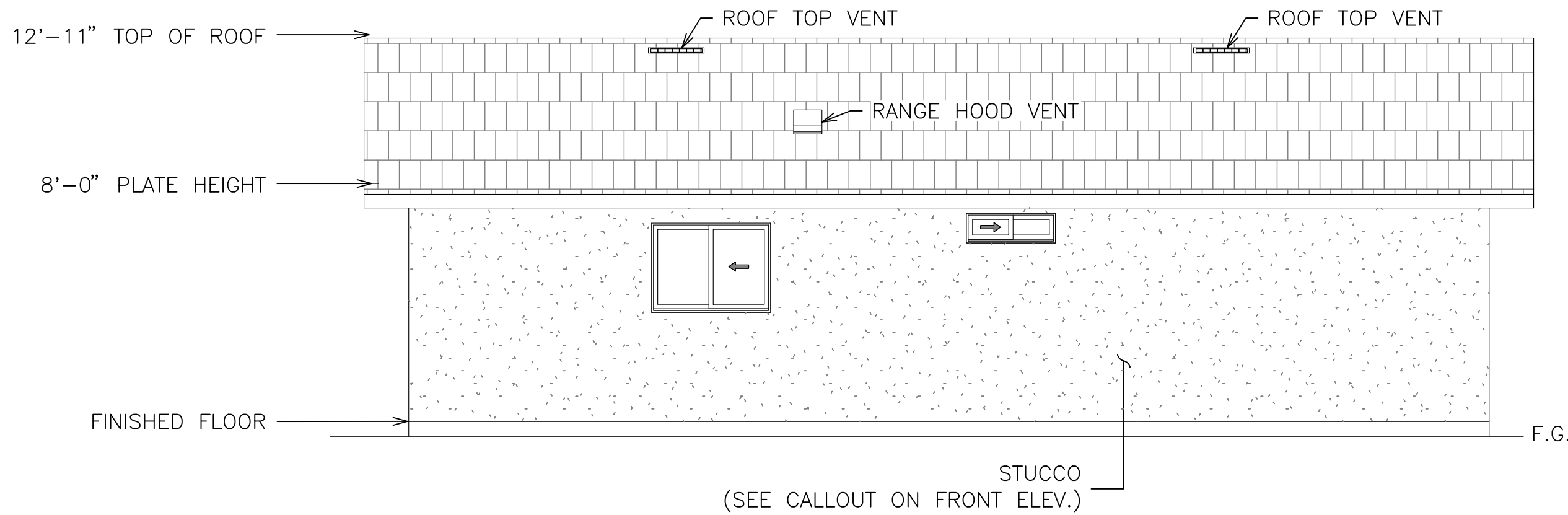
By: Mitchell Conch  
12/11/2025



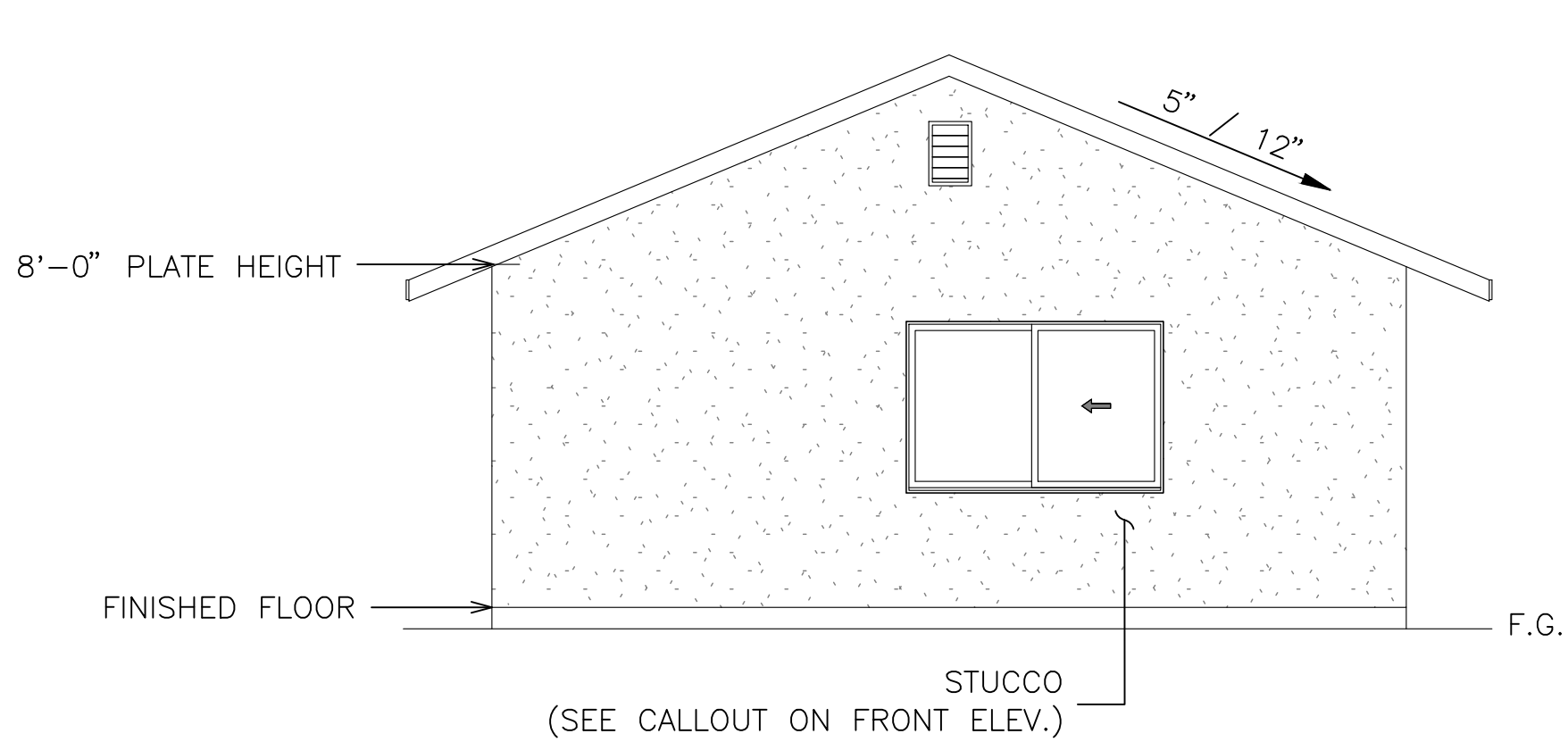
FRONT ELEVATION



LEFT ELEVATION



REAR ELEVATION



RIGHT ELEVATION

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REVISIONS	

PROJECT TITLE		CITY OF HANFORD - PRE-REVIEWED ADU PROGRAM	
SHEET DESCRIPTION		ELEVATION A	
AGENCY		SJV REAP	DATE 10/28/2024

ADU SQFT
775

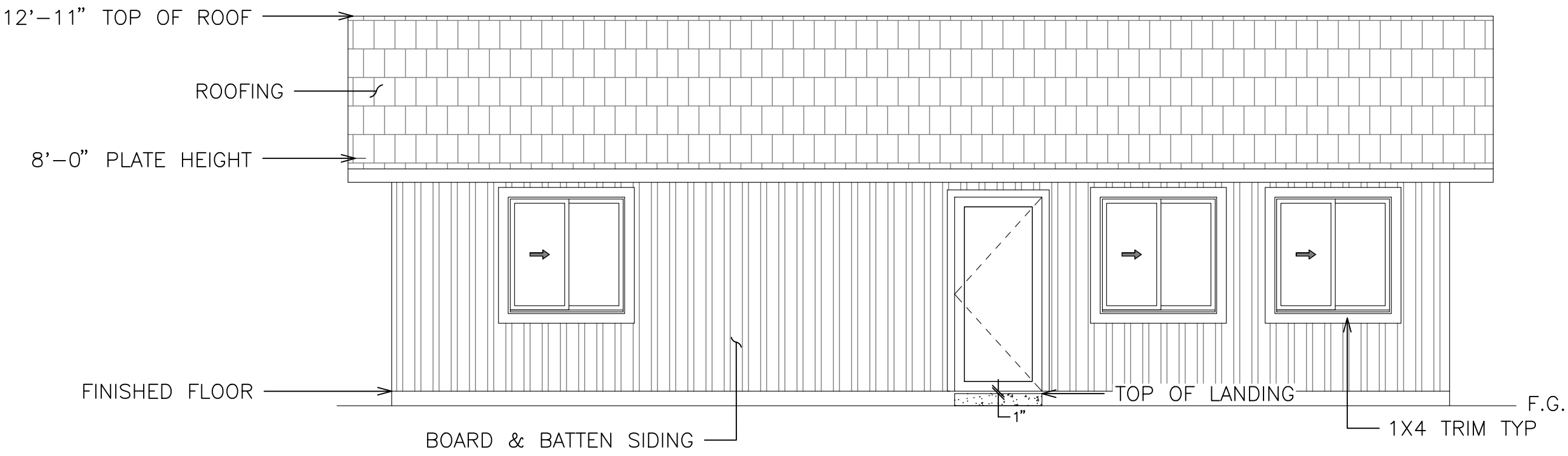
DRAWING SCALE
1/4" = 1'

CITY OF HANFORD BUILDING DIVISION  
**APPROVED**

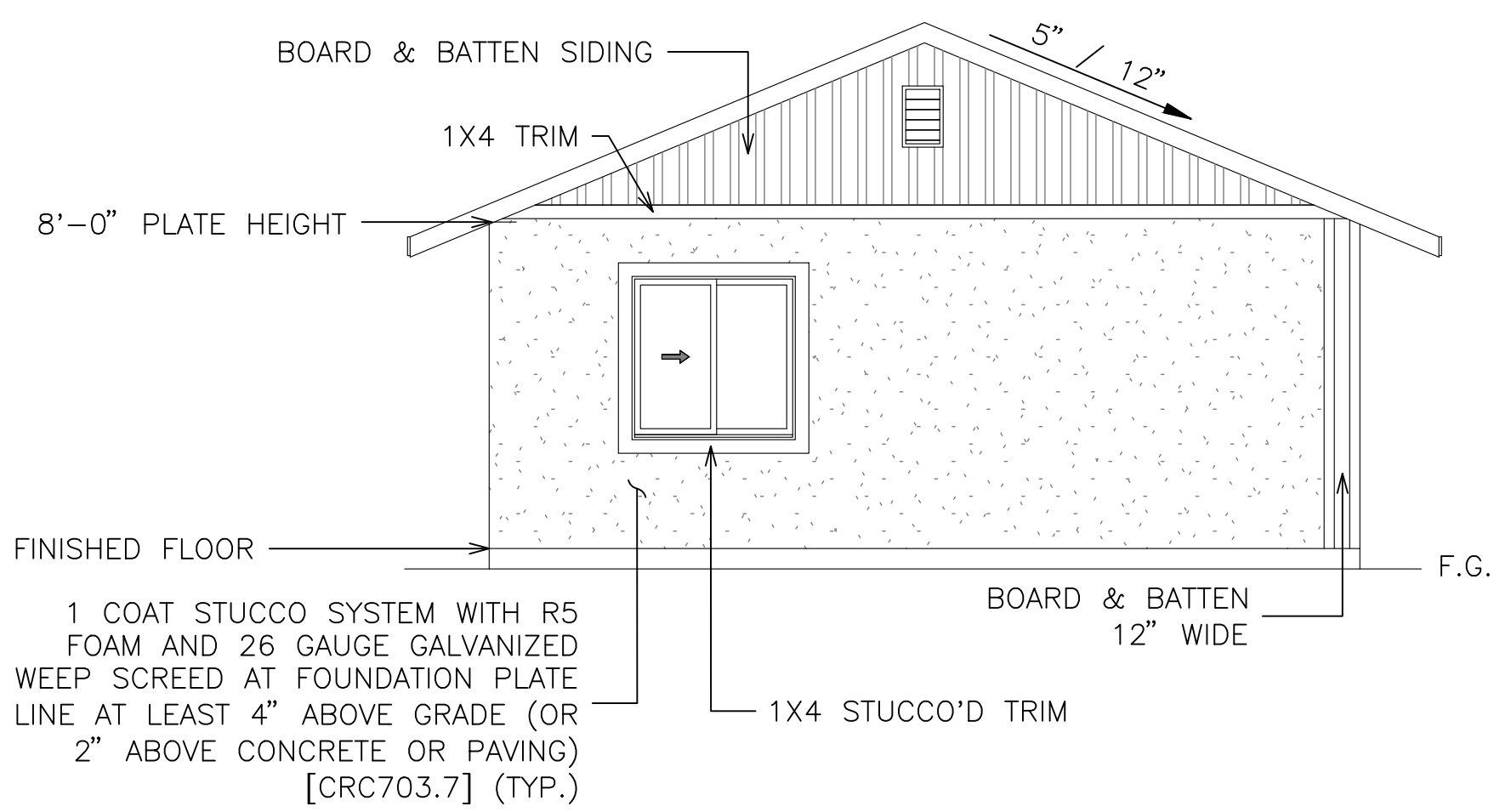
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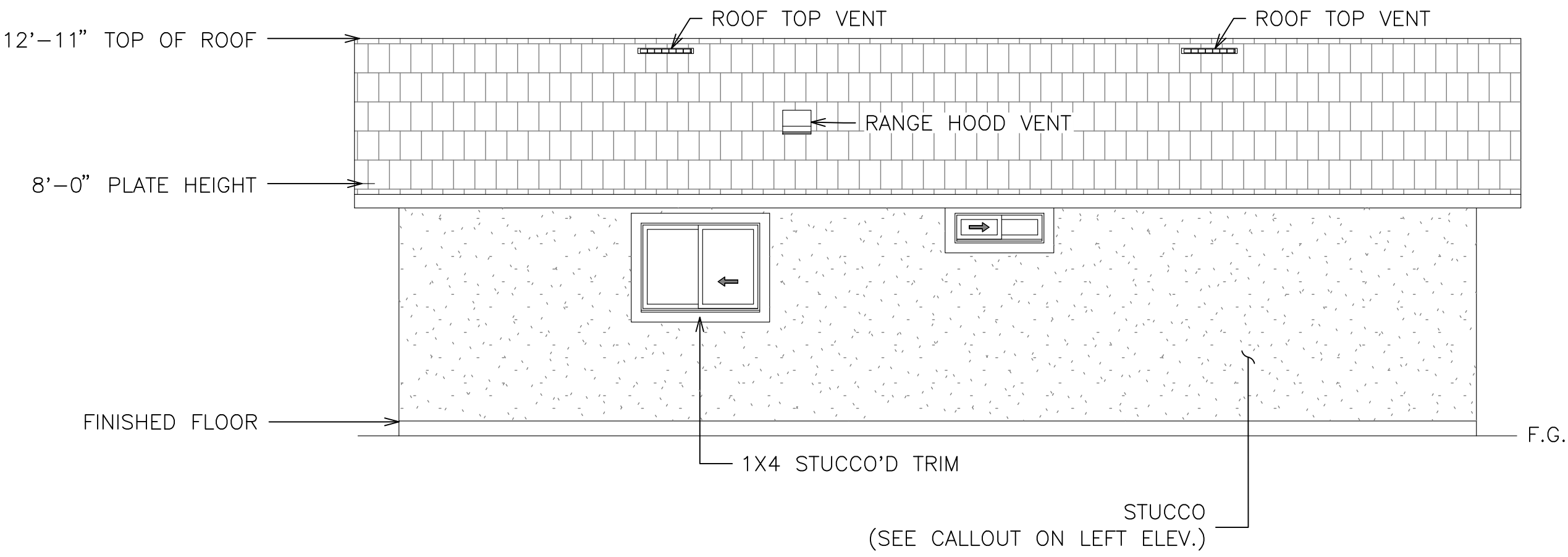
BY: Mitchell Conch  
12/11/2025



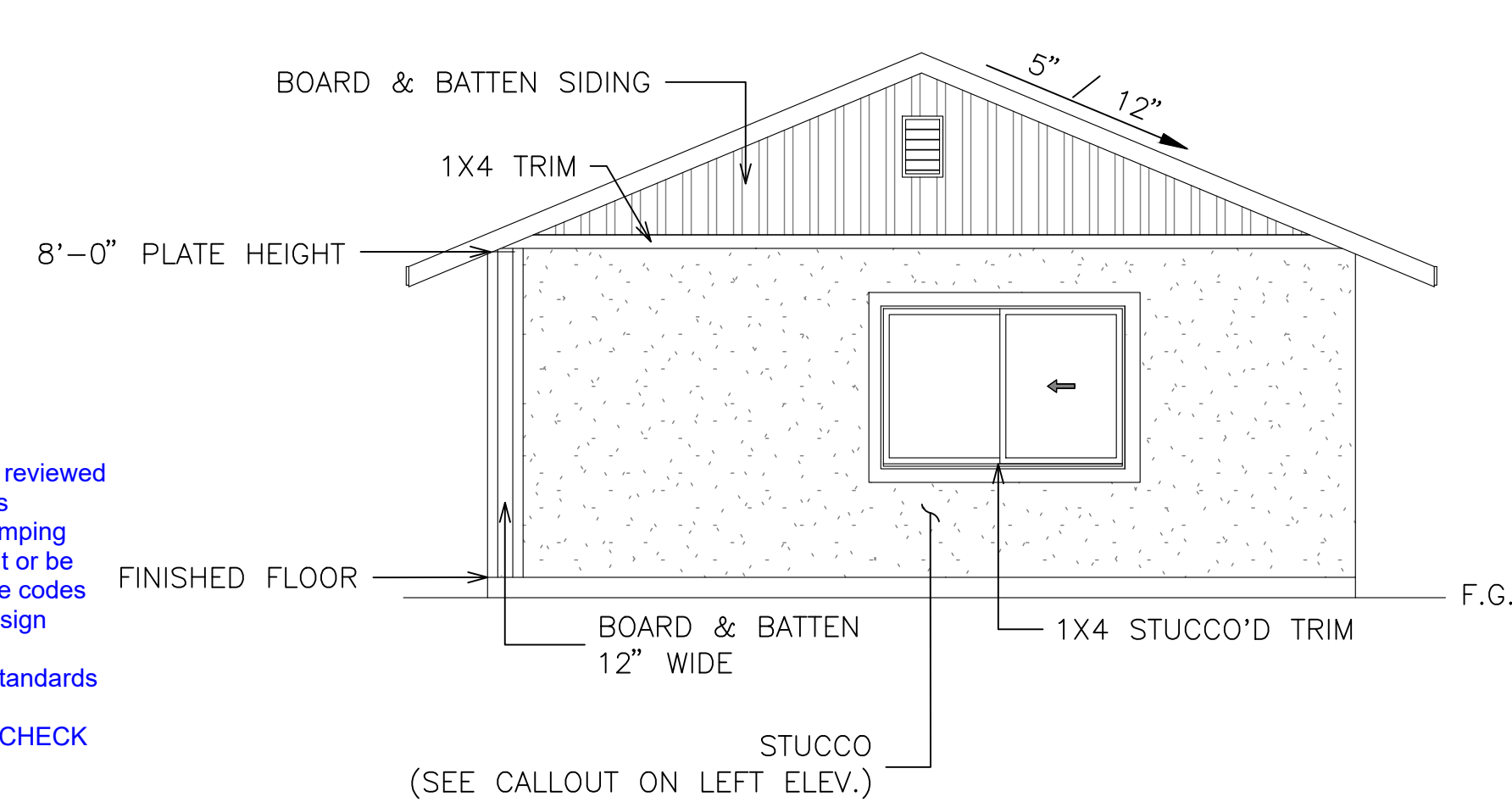
FRONT ELEVATION



LEFT ELEVATION



REAR ELEVATION



RIGHT ELEVATION

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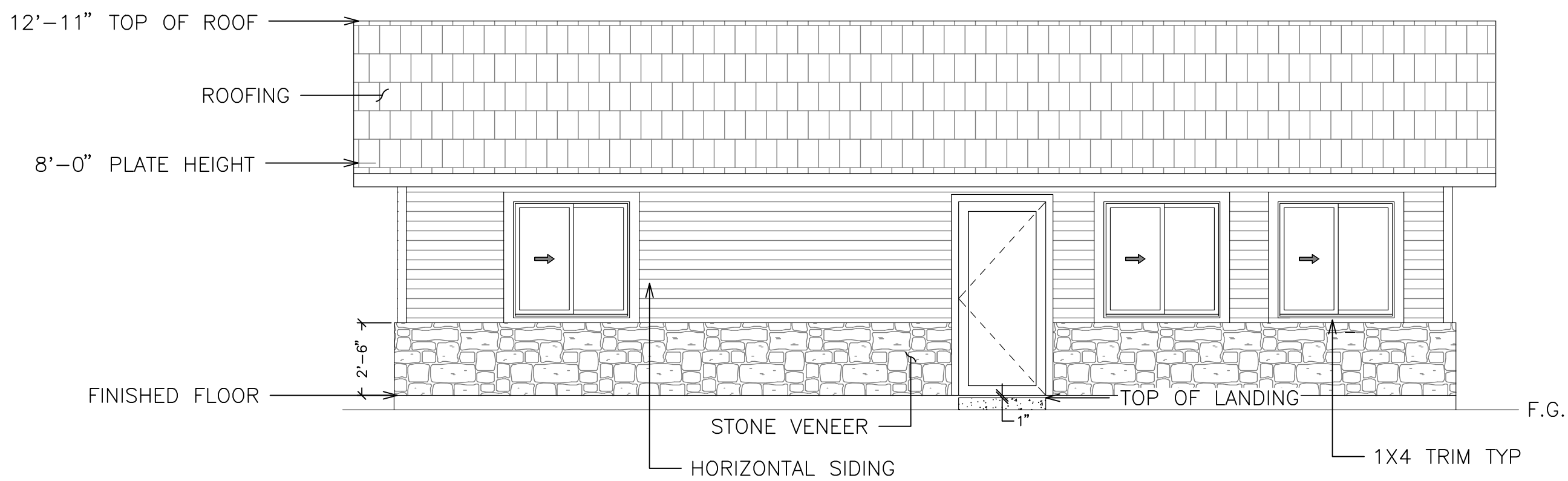
REVISIONS	

PROJECT TITLE		CITY OF HANFORD - PRE-REVIEWED ADU PROGRAM	
SHEET DESCRIPTION		ELEVATION B	
AGENCY		DATE	
SJV REAP		10/28/2024	

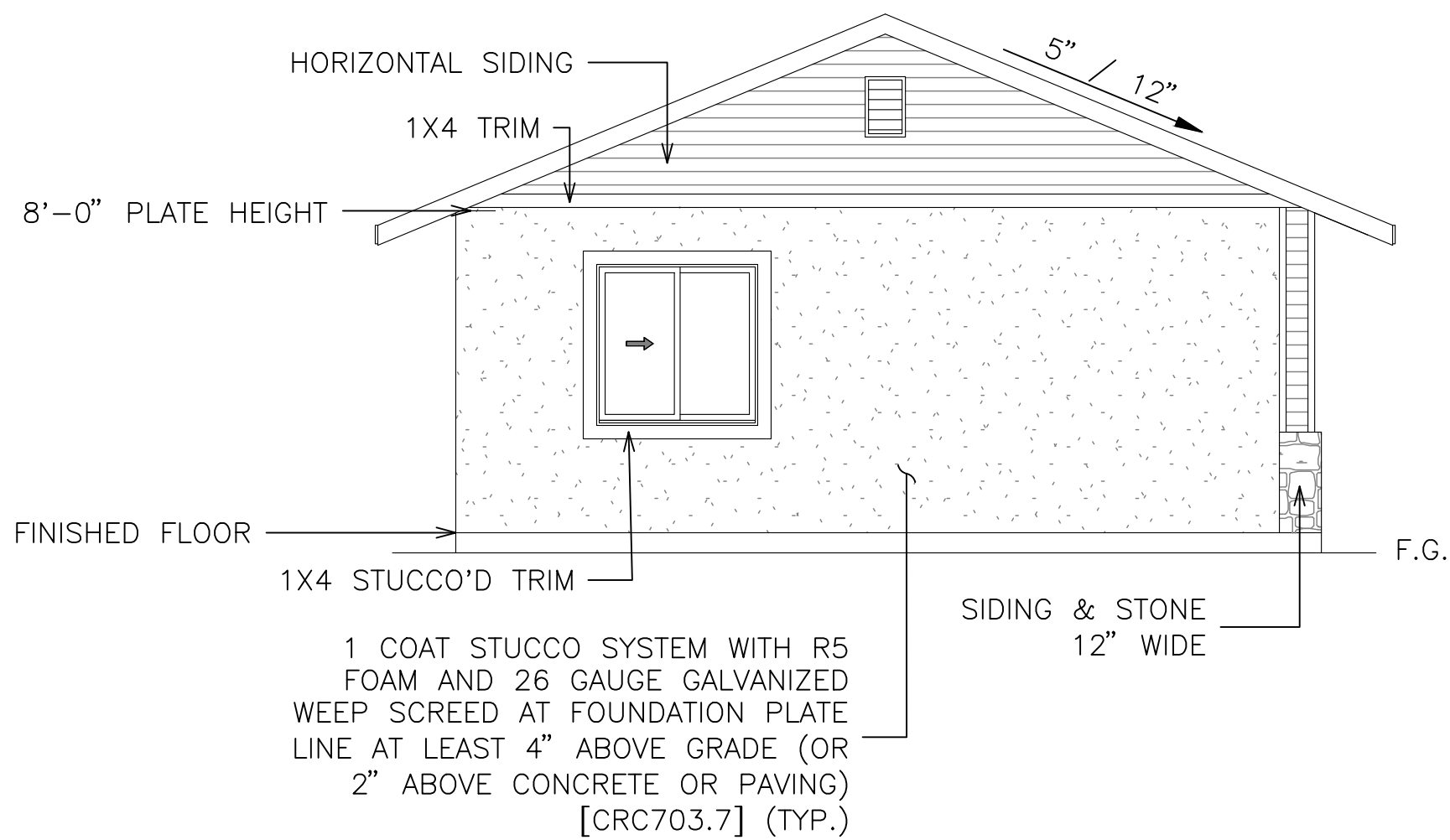
ADU SQFT
775

DRAWING SCALE

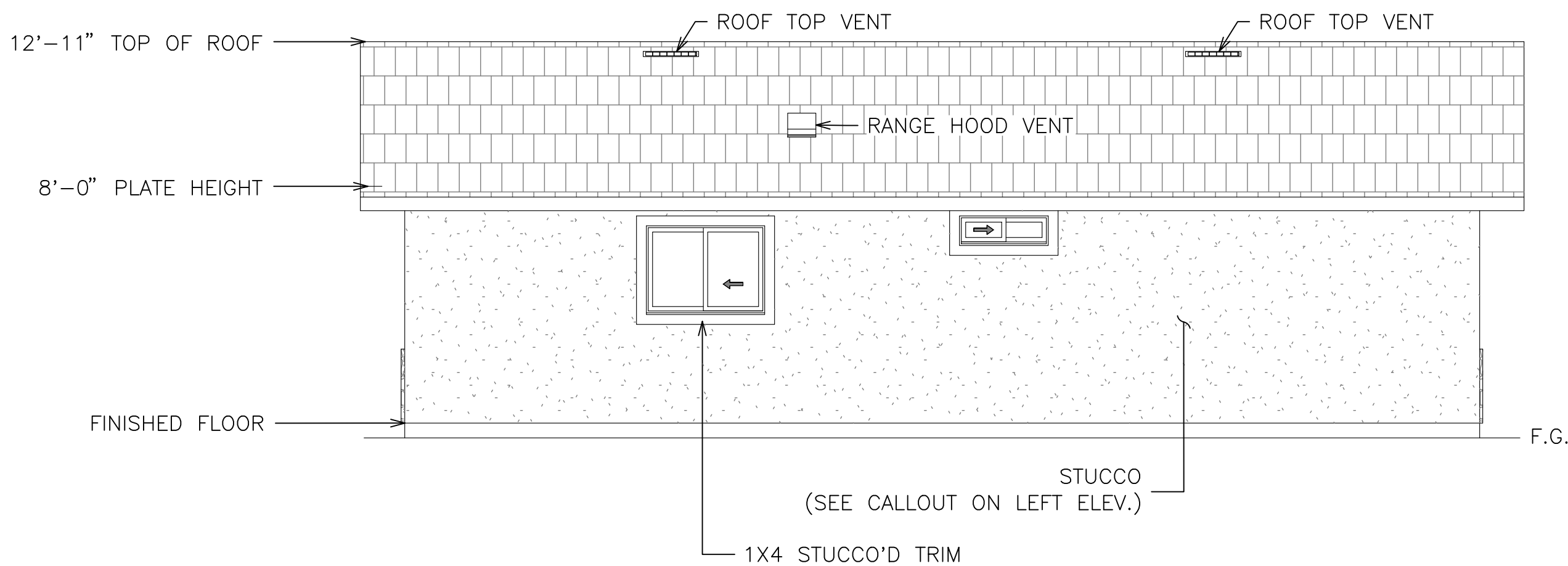
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BY: Mitchell Conch  
12/11/2025



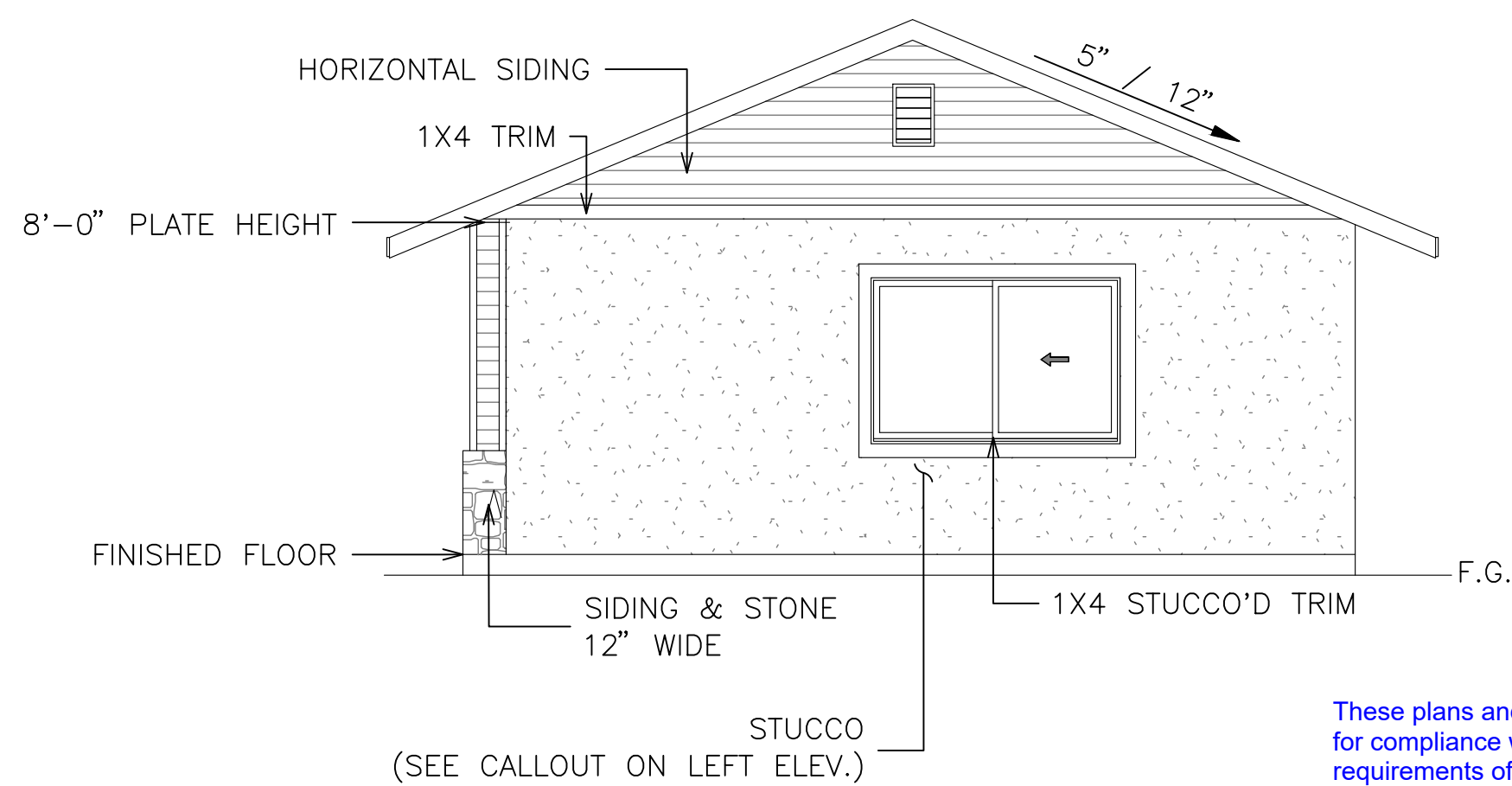
FRONT ELEVATION



LEFT ELEVATION



REAR ELEVATION



RIGHT ELEVATION

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REVISIONS	

PROJECT TITLE	
CITY OF HANFORD - PRE-REVIEWED ADU PROGRAM	
SHEET DESCRIPTION	
ELEVATION C	
AGENCY	
SJV REAP	
DATE	
10/28/2024	

ADU SQFT
775

DRAWING SCALE
1/4" = 1'

CITY OF HANFORD BUILDING DIVISION  
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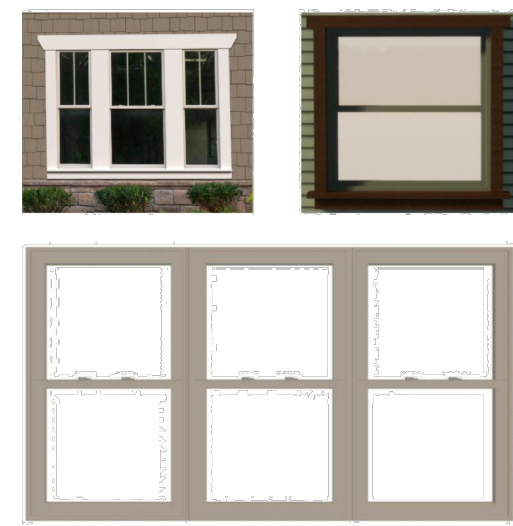
By: *Mitchell Conch*  
12/11/2025

CRAFTSMAN / BUNGALOW

ROOF SLOPES 4:12 AND STEEPER



CRAFTSMAN ARCHITECTURE IS KNOWN FOR ITS EMPHASIS ON SIMPLICITY, FUNCTIONALITY, SOLIDLY MADE WITH NATURAL MATERIALS AND NATURE-INSPIRED COLORS AND MOTIFS.



WINDOWS



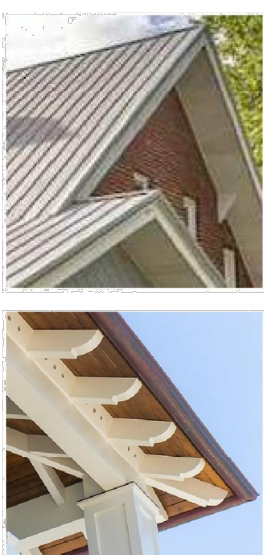
DOORS



COLORS



BRACKETS



EXPOSED EAVES AND SHAPED RAFTER TAILS (2 FT OVERHANG & GREATER)



GABLE END VENT



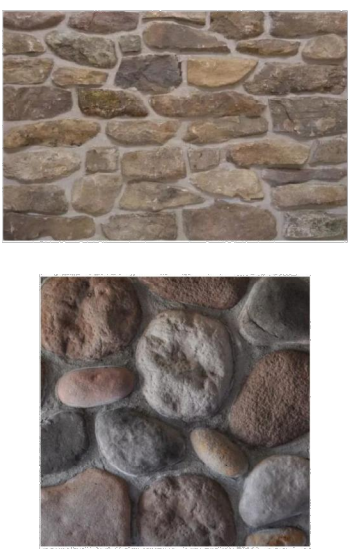
STUCCO



HORIZONTAL SIDING



SHINGLE



STONE VENEER



LIGHT FIXTURES

MODERN / FARMHOUSE

ROOF SLOPES 4:12 AND STEEPER



MODERN FARMHOUSE ARCHITECTURE BLENDS THE SIMPLICITY AND CHARM OF TRADITIONAL FARMHOUSES WITH CONTEMPORARY DESIGN ELEMENTS AND COLOR SCHEMES.



WINDOWS



DOORS



COLORS



EXPOSED EAVES WITH BEAM TAILS (2 FT OVERHANG & GREATER OVERHANG)



GABLE END VENT



HORIZONTAL SIDING



WOOD PLANK



STUCCO



STONE VENEER



LIGHT FIXTURES

SPANISH / MEDITERRANEAN

LOW SLOPE ROOFS 2 1/2:12 AND STEEPER



SPANISH MEDITERRANEAN ARCHITECTURE IS CHARACTERIZED BY ITS WARM AND INVITING AESTHETIC, THE ARE GENERALLY FREE ADAPTATIONS IN THE MISSION STYLE.



WINDOWS



DOORS



COLORS



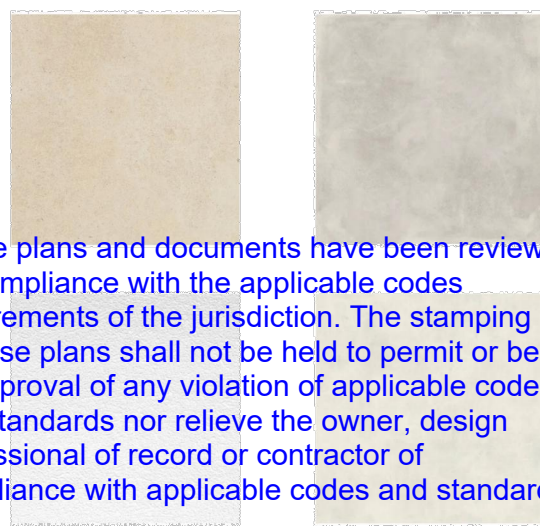
EXPOSED EAVES WITH BEAM TAILS (12 INCHES OR LESS)



WINDOW AWNING WITH TIMBER BRACKET



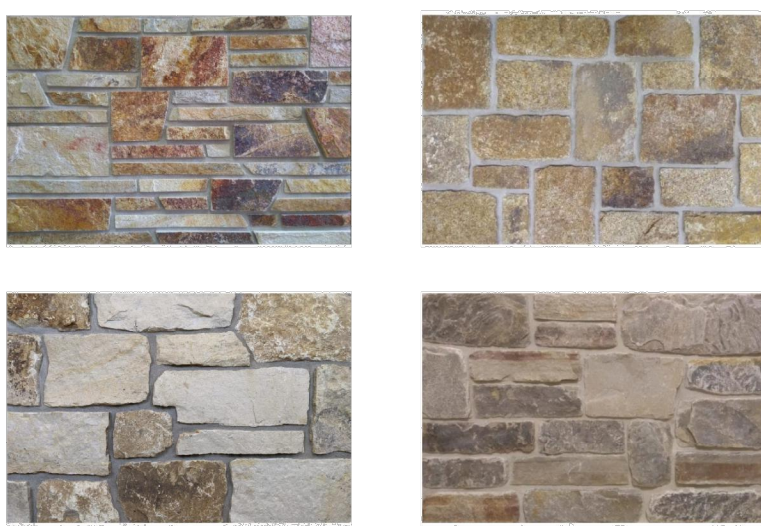
GABLE END VENT



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ROD CARSEY CONSULTING & PLAN CHECK SERVICE

SMOOTH STUCCO



STONE VENEER



LIGHT FIXTURES

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CITY OF HANFORD



REVISIONS	

PROJECT TITLE	CITY OF HANFORD - PRE-REVIEWED ADU PROGRAM	
	SHEET DESCRIPTION	ARCHITECTURAL DETAILS
AGENCY	DATE	
	SUV REAP	10/28/2024

ADU SQFT

775

DRAWING SCALE

CITY OF HANFORD BUILDING DIVISION

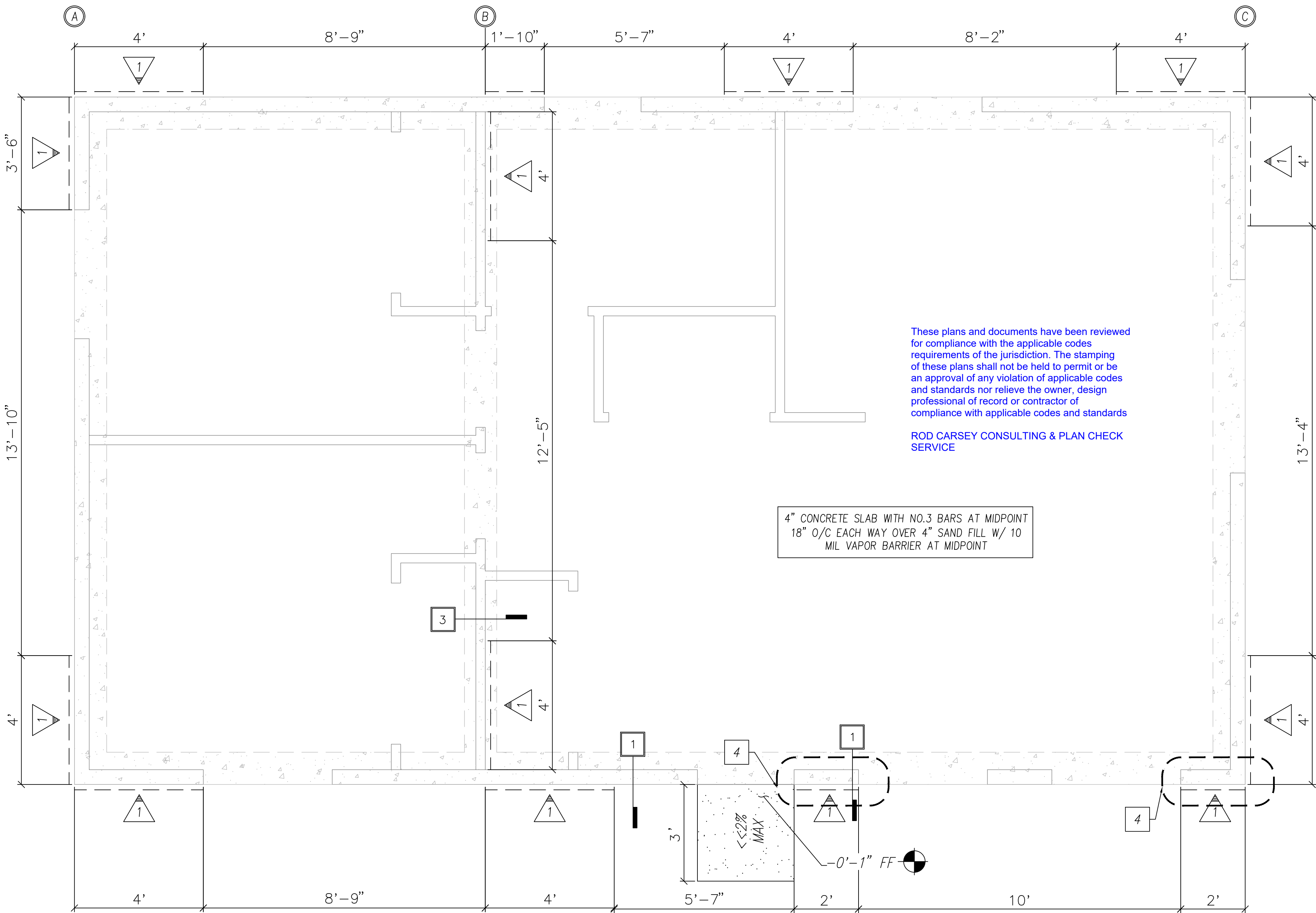
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By: Mitchell Conch

12/11/2025



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4" CONCRETE SLAB WITH NO.3 BARS AT MIDPOINT  
18" O/C EACH WAY OVER 4" SAND FILL W/ 10 MIL VAPOR BARRIER AT MIDPOINT

## KEYNOTES/LEGEND

- # BRACED WALL LINE
- # FOUNDATION PLAN DETAIL FOUND ON SHEET S3
- INDICATES CONCRETE FOOTING AREA

WALL BRACING SCHEDULE		
TYPE	MATERIAL	NAILING/STAPLING
1	3/8" PLYWD <sup>2</sup>	6d NAILS; EDGES @ 6" O.C. , FIELD NAIL @ 12" O.C.

1. EXPANDED METAL OR WOVEN WIRE LATH STAPLED TO ALL STUDS, TOP AND BTM.
2. STRUCTURAL PANEL SHEATHING TO BE USED ON ALL EXTERIOR SURFACES INCLUDING AREAS ABOVE AND BELOW OPENINGS.

TABLE R602.3(3)  
REQUIREMENTS FOR WOOD STRUCTURAL PANEL WALL SHEATHING USED TO RESIST WIND PRESSURES<sup>a,b,c</sup>

MINIMUM NAIL		MINIMUM WOOD STRUCTURAL PANEL SPAN RATING	MINIMUM NOMINAL PANEL THICKNESS (inches)	MAXIMUM WALL STUD SPACING (inches)	PANEL NAIL SPACING		ULTIMATE DESIGN WIND SPEED $V_{ult}$ (mph)		
Size	Penetration (inches)				Edges (inches o.c.)	Field (inches o.c.)	Wind exposure category		
6d Common (2.0" x 0.113")	1.5	24/0	3/8	16	6	12	B	C	D
8d Common (2.5" x 0.131")	1.75	24/16	7/16	16	6	12	140	140	135
				24	6	12	140	115	110

- For SI: 1 inch = 25.4 mm, 1 mile per hour = 0.447 m/s.
- a. Panel strength axis parallel or perpendicular to supports. Three-ply plywood sheathing with studs spaced more than 16 inches on center shall be applied with panel strength axis perpendicular to supports.
- b. Table is based on wind pressures acting toward and away from building surfaces in accordance with Section R301.2. Lateral bracing requirements shall be in accordance with Section R602.10.
- c. Wood structural panels with span ratings of Wall-16 or Wall-24 shall be permitted as an alternate to panels with a 24/0 span rating. Plywood siding rated 16 o.c. or 24 o.c. shall be permitted as an alternate to panels with a 24/16 span rating. Wall-16 and Plywood siding 16 o.c. shall be used with studs spaced not more than 16 inches on center.

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

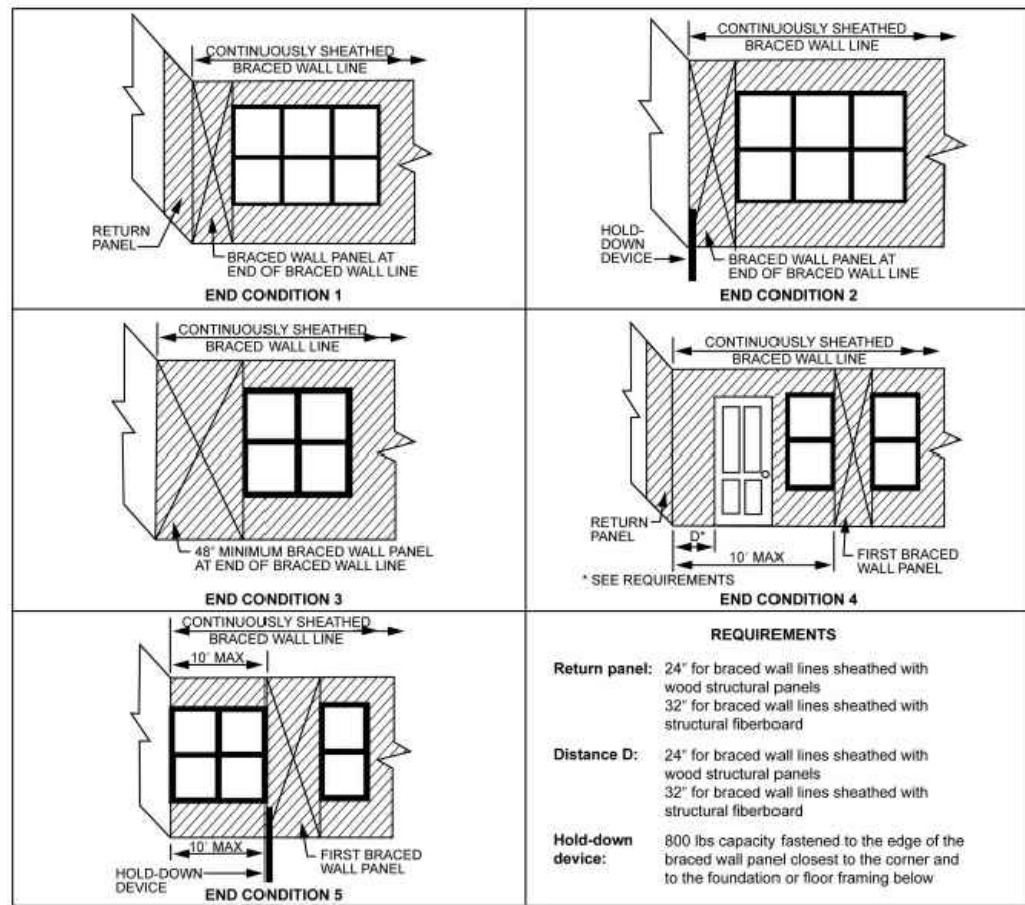
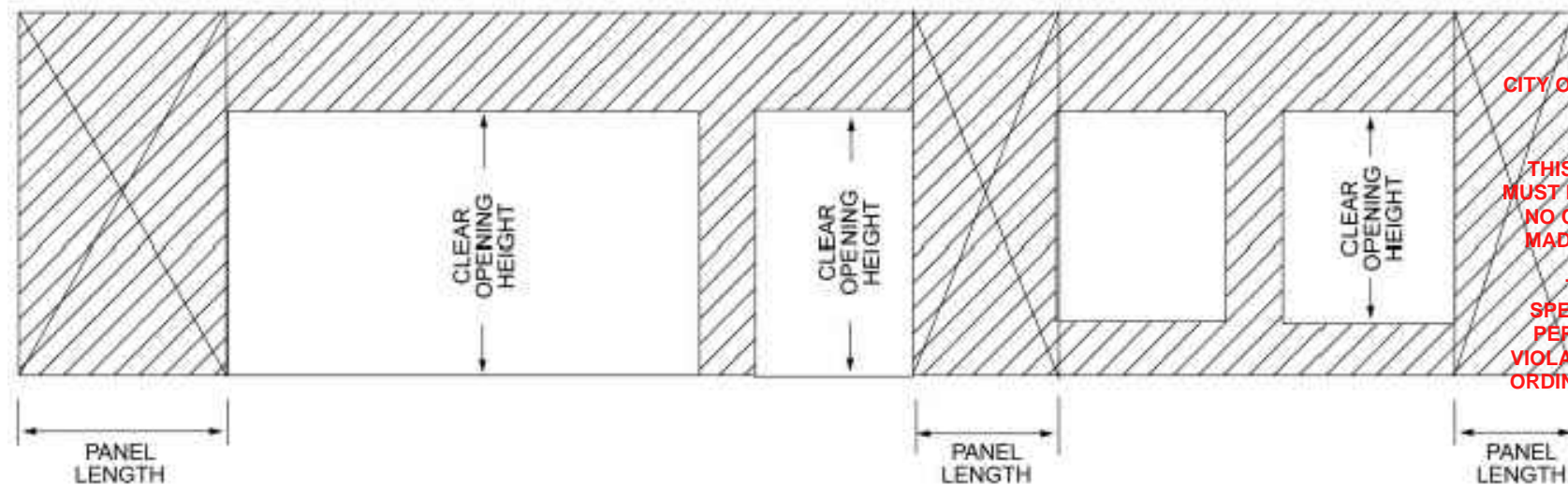


FIGURE R602.10.5  
BRACED WALL PANELS WITH CONTINUOUS SHEATHING



## WALL BRACING NOTES

- FOR THE PURPOSE OF DETERMINING THE AMOUNT AND LOCATION OF BRACING REQUIRED IN EACH STORY LEVEL OF A BUILDING, BRACED WALL LINES SHALL BE DESIGNATED AS STRAIGHT LINES IN THE BUILDING PLAN PLACED IN ACCORDANCE WITH THIS SECTION.(CRC602.10.1)
- THE LENGTH OF A BRACED WALL LINE SHALL BE THE DISTANCE BETWEEN ITS ENDS. THE END OF A BRACED WALL LINE SHALL BE THE INTERSECTION WITH A PERPENDICULAR BRACED WALL LINE, AN ANGLED BRACED WALL LINE AS PERMITTED IN SECTION R602.10.1.4 OR AN EXTERIOR WALL AS SHOWN IN FIGURE R602.10.1.1. (CRC602.10.1.1)
- EACH BRACED WALL LINE SHALL BE LOCATED SUCH THAT NO MORE THAN TWO-THIRDS OF THE REQUIRED BRACED WALL PANEL LENGTH IS LOCATED TO ONE SIDE OF THE BRACED WALL LINE. BRACED WALL PANELS SHALL BE PERMITTED TO BE OFFSET UP TO 4 FEET (1219 MM) FROM THE DESIGNATED BRACED WALL LINE. BRACED WALL PANELS PARALLEL TO A BRACED WALL LINE SHALL BE OFFSET NOT MORE THAN 4 FEET (1219 MM) FROM THE DESIGNATED BRACED WALL LINE LOCATION AS SHOWN IN FIGURE R602.10.1.1. EXTERIOR WALLS PARALLEL TO A BRACED WALL LINE SHALL BE OFFSET NOT MORE THAN 4 FEET (1219 MM) FROM THE DESIGNATED BRACED WALL LINE LOCATION AS SHOWN IN FIGURE R602.10.1.1. INTERIOR WALLS USED AS BRACING SHALL BE OFFSET NOT MORE THAN 4 FEET (1219 MM) FROM A BRACED WALL LINE THROUGH THE INTERIOR OF THE BUILDING AS SHOWN IN FIGURE R602.10.1.1. (CRC602.10.1.2)
- THE SPACING BETWEEN PARALLEL BRACED WALL LINES SHALL BE IN ACCORDANCE WITH TABLE R602.10.1.3. INTERMEDIATE BRACED WALL LINES THROUGH THE INTERIOR OF THE BUILDING SHALL BE PERMITTED. (CRC602.10.1.3)

TABLE R602.10.1.3  
BRACED WALL LINE SPACING

APPLICATION	CONDITION	BUILDING TYPE	BRACED WALL LINE SPACING CRITERIA	
			Maximum Spacing	Exception to Maximum Spacing
Wind bracing	Ultimate design wind speed 100 mph to < 140 mph	Detached, townhouse	60 feet	None
	SDC A – C	Detached	Use wind bracing	
	SDC A – B	Townhouse	Use wind bracing	
	SDC C	Townhouse	35 feet	Up to 50 feet when length of required bracing per Table R602.10.3(3) is adjusted in accordance with Table R602.10.3(4).
	SDC D <sub>o</sub> , D <sub>1</sub> , D <sub>2</sub>	Detached, townhouses, one- and two-story only	25 feet	Up to 35 feet to allow for a single room not to exceed 900 square feet. Spacing of all other braced wall lines shall not exceed 25 feet.
Seismic bracing	SDC D <sub>o</sub> , D <sub>1</sub> , D <sub>2</sub>	Detached, townhouse	25 feet	Up to 35 feet when length of required bracing per Table R602.10.3(3) is adjusted in accordance with Table R602.10.3(4).

For SI: 1 foot = 304.8 mm, 1 square foot = 0.0929 m<sup>2</sup>, 1 mile per hour = 0.447 m/s.

- BRACED WALL LINES WITH A LENGTH OF 16 FEET (4877 MM) OR LESS SHALL HAVE NOT LESS THAN TWO BRACED WALL PANELS OF ANY LENGTH OR ONE BRACED WALL PANEL EQUAL TO 48 INCHES (1219 MM) OR MORE. BRACED WALL LINES GREATER THAN 16 FEET (4877 MM) SHALL HAVE NOT LESS THAN TWO BRACED WALL PANELS. (CRC602.10.2.3)
- TABLE R602.10.3(1) AND THE APPLICABLE ADJUSTMENT FACTORS IN TABLE R602.10.2(2) (CRC602.10.3)

TABLE R602.10.3(3)  
BRACING REQUIREMENTS BASED ON SEISMIC DESIGN CATEGORY

Seismic Design Category	Story Location	Braced Wall Line Length (feet) <sup>a</sup>	MINIMUM TOTAL LENGTH (FEET) OF BRACED WALL PANELS REQUIRED ALONG EACH BRACED WALL LINE <sup>a</sup>				
			Method LIB <sup>a</sup>	Method GB	Methods DWB, SFB, PBS, PCP, HPS, CS-SFB <sup>a</sup>	Method WSP	Methods CS-WSP, CS-G, CS-PF
D <sub>o</sub>		10	NP	2.8	2.8	1.8	1.6
		20	NP	5.5	5.5	3.6	3.1
		30	NP	8.3	8.3	5.4	4.6
		40	NP	11.0	11.0	7.2	6.1
		50	NP	13.8	13.8	9.0	7.7
		10	NP	5.3	5.3	3.8	3.2
		20	NP	10.5	10.5	7.5	6.4
		30	NP	15.8	15.8	11.3	9.6
		40	NP	21.0	21.0	15.0	12.8
		50	NP	26.3	26.3	18.8	16.0
		10	NP	7.3	7.3	5.3	4.5
		20	NP	14.5	14.5	10.5	9.0
		30	NP	21.8	21.8	15.8	13.4
		40	NP	29.0	29.0	21.0	17.9
		50	NP	36.3	36.3	26.3	22.3

For SI: 1 inch = 25.4 mm, 1 foot = 304.8 mm, 1 pound per square foot = 0.0479 kPa.

NP = Not Permitted.

- Linear interpolation shall be permitted.
- Wall bracing lengths are based on a soil site class "D." Interpolation of bracing length between the  $S_{ds}$  values associated with the seismic design categories shall be permitted when a site-specific  $S_{ds}$  value is determined in accordance with Section 1613.2 of the *California Building Code*.
- Where the braced wall line length is greater than 50 feet, braced wall lines shall be permitted to be divided into shorter segments having lengths of 50 feet or less, and the amount of bracing within each segment shall be in accordance with this table.
- Method LIB shall have gypsum board fastened to not less than one side with nails or screws in accordance with Table R602.3(1) for exterior sheathing or Table R702.3.5 for interior gypsum board. Spacing of fasteners at panel edges shall not exceed 8 inches.
- Methods PFG and CS-SFB do not apply in Seismic Design Categories D<sub>o</sub>, D<sub>1</sub>, and D<sub>2</sub>.
- Where more than one bracing method is used, mixing methods shall be in accordance with Section R602.10.4.1.

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## REVISIONS


PROJECT TITLE		CITY OF HANFORD – PRE-REVIEWED ADU PROGRAM	
SHEET DESCRIPTION		FOUNDATION PLAN	
AGENCY	SUV REAP	DATE	
		10/28/2024	

ADU SQFT

775

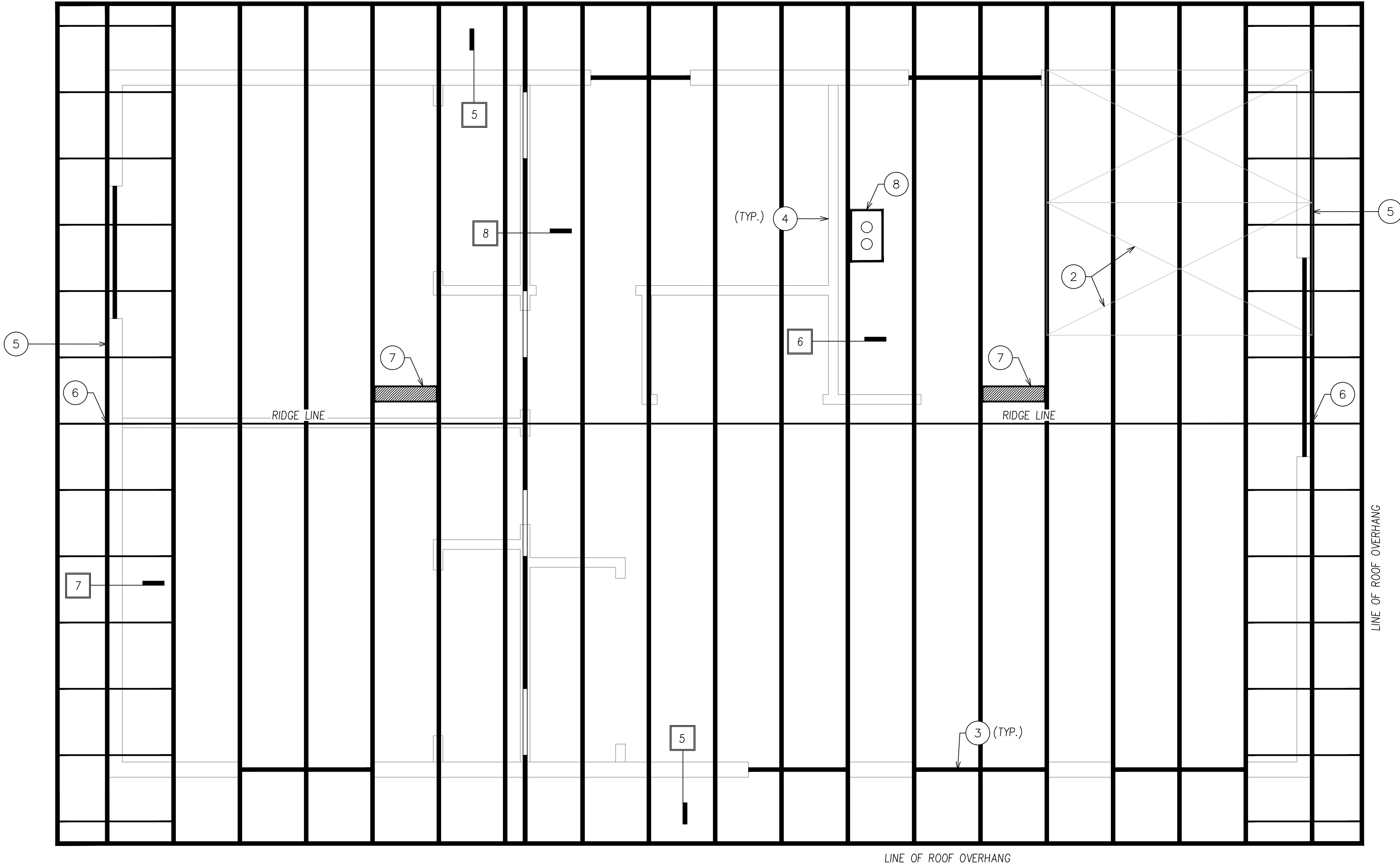
DRAWING SCALE

1/2" = 1'

APPROVED

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By: Mitchell Consh  
12/11/2025



KEYNOTES

- 1
- PRE-MFR. TRUSSES @ 24" O.C.
- 2
- 15/32" APA RATED PLYW'D OR OSB, P.I. 32/16, EDGE NAIL W/8D @ 6" O.C. & FIELD NAIL @ 6" O.C.
- 3
- 6X8 D.F. # 2
- 4
- TOP OF NON-BEARING, NON-BRACED WALL. SEE DETAIL 5.
- 5
- SEE DETAIL 3 FOR END WALL TRUSS SHEAR TRANSFER DESIGN REQUIREMENT
- 6
- LOCATION OF 12"x18" GABLE END VENT
- 7
- LOCATION OF 5 1/2" x 22 1/2" ROOF TOP VENT
- 8
- LOCATION OF RANGE HOOD VENT
- #
- FRAMING PLAN DETAIL FOUND ON SHEET S3

NOTES

1.
- TRUSS CALCULATIONS (FROM THE TRUSS MANUFACTURER) SHALL BE PROVIDED TO THE BUILDING DEPARTMENT PRIOR TO A REQUEST FOR ROOF AND SHEAR INSPECTION

ATTIC VENTILATION REQUIREMENTS

775 SQFT

300

•

144 in/ft

=

(372 in³)

PROVIDE:

2 - 12"x18" GABLE END VENT (140 in³)

=

(280 in³)

2 - 5-1/2" x 22-1/2" ROOF TOP VENT (83 in³)

=

(166 in³)

TOTAL PROVIDED:

=

(446 in³)

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REVISIONS	

PROJECT TITLE	
CITY OF HANFORD - PRE-REVIEWED ADU PROGRAM	
SHEET DESCRIPTION	
ROOF FRAMING PLAN	
AGENCY	
SJV	REAP
DATE	
10/28/2024	

ADU SQFT
775

DRAWING SCALE

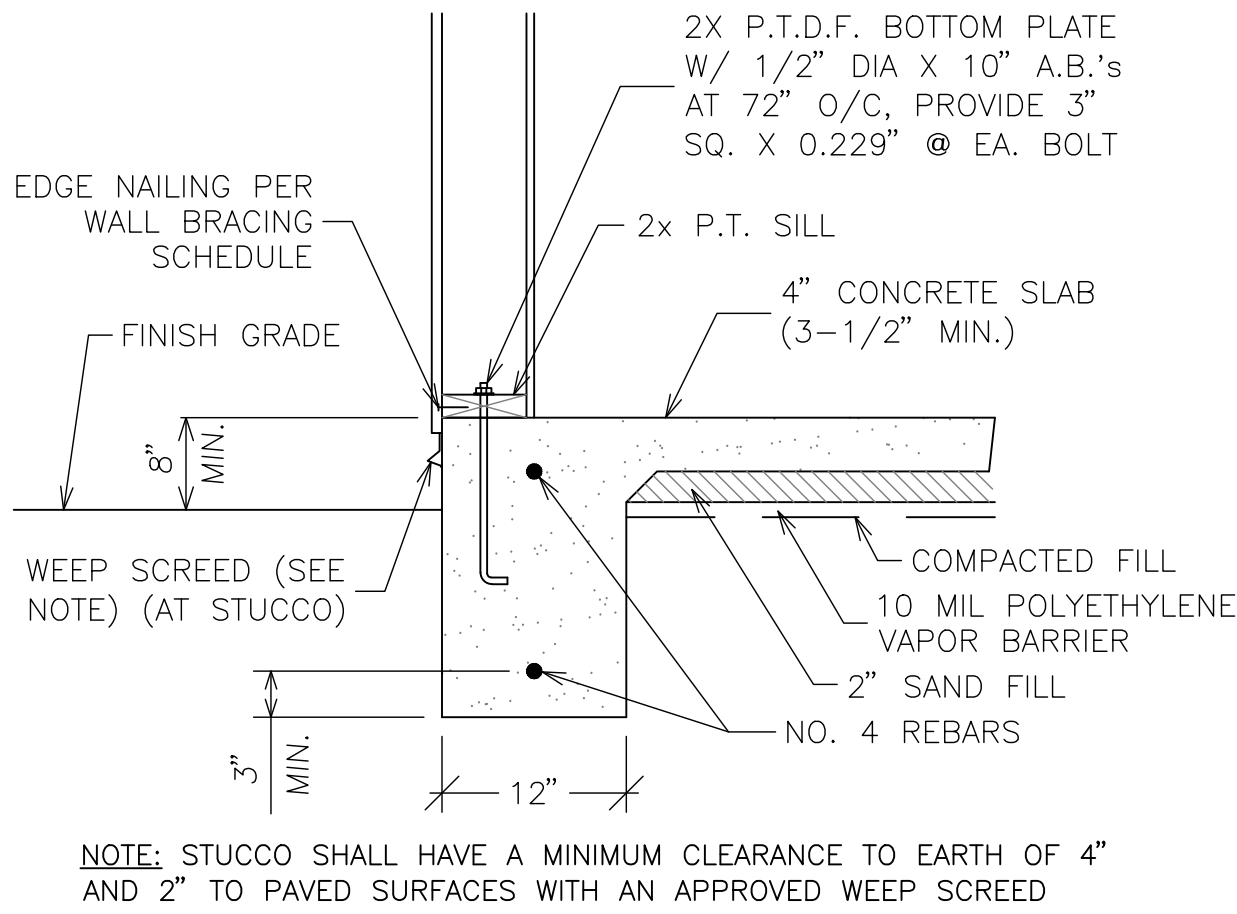
1/2" = 1'

CITY OF HANFORD BUILDING DIVISION  
APPROVED

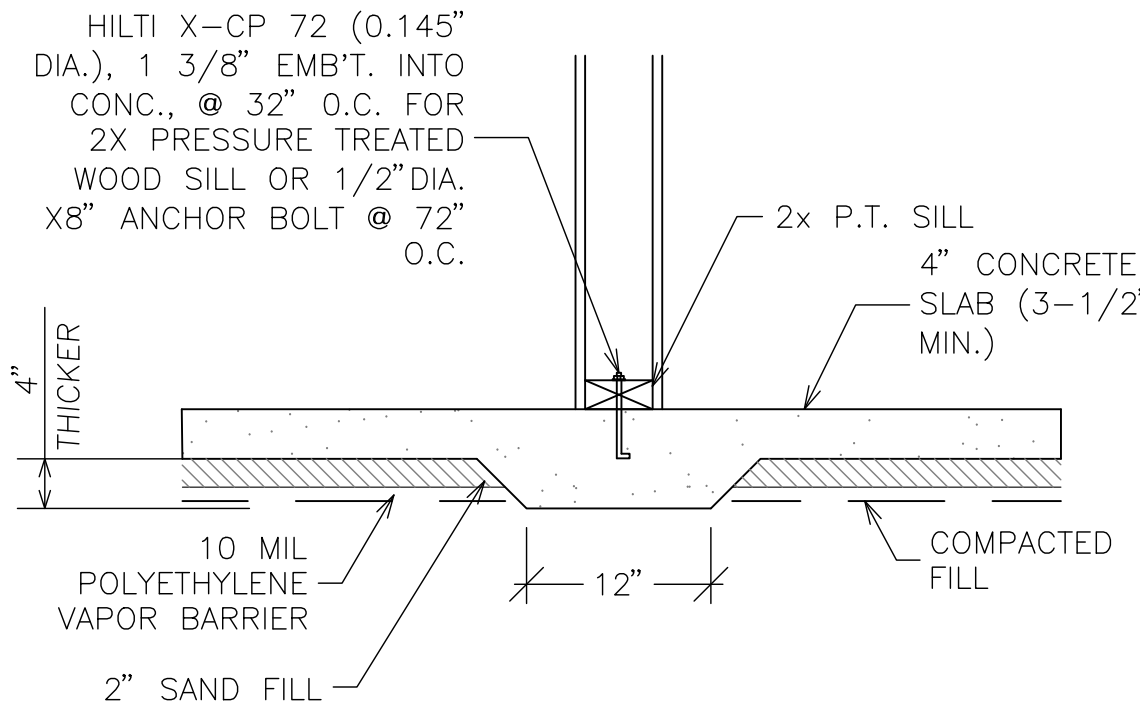
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By: Mitchell Couch  
12/11/2025



1 EXTERIOR FOOTING  
N.T.S.



2 NON-BEARING INTERIOR FOOTING  
N.T.S.

TENSION STRAP AT INTERIOR FACE OF WALL, STRAP ACROSS HEADER AND JAMB STUDS: SIMPSON MST-A 30 (2,050 lbs TENSION)

7/16\"/>

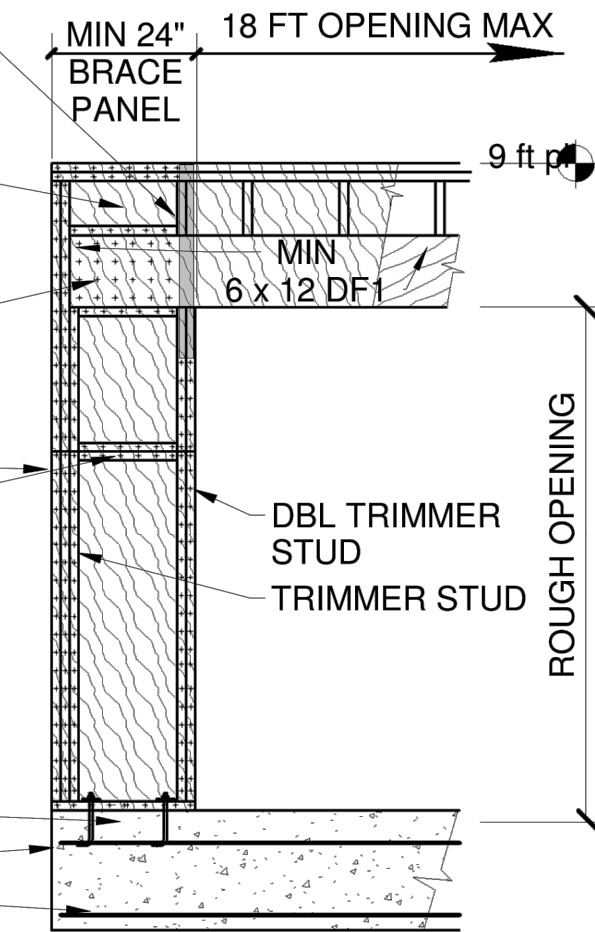
FASTEN SHEATHING TO HEADER WITH 8d COMMON IN 3 INCH GRID PATTERN AS SHOWN

MIN DBL STUD AT CORNER  
4 x BLOCKING AT ALL PANEL EDGES

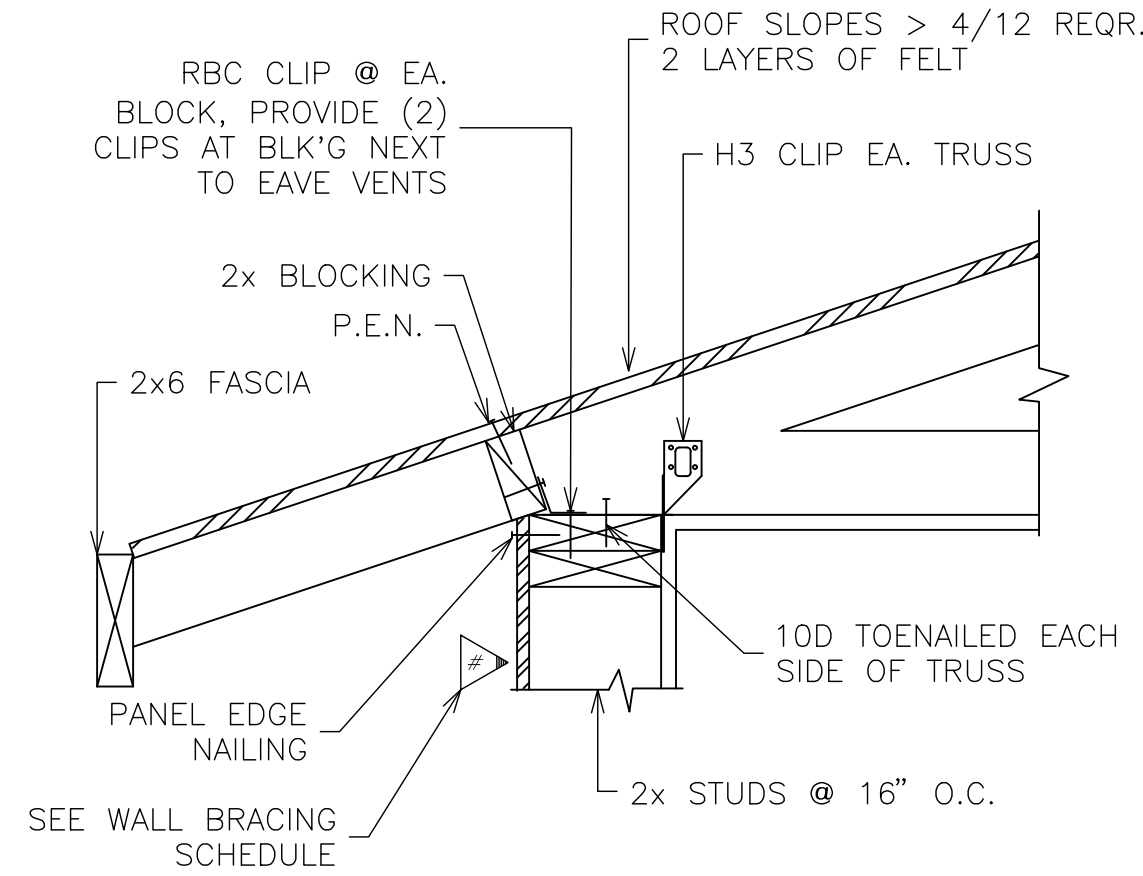
2 x 6 PT SILL PL W/ MINIMUM (2) 1/2\"/>

# 4 TOP AND BOT, LAPS MIN 15\"/>

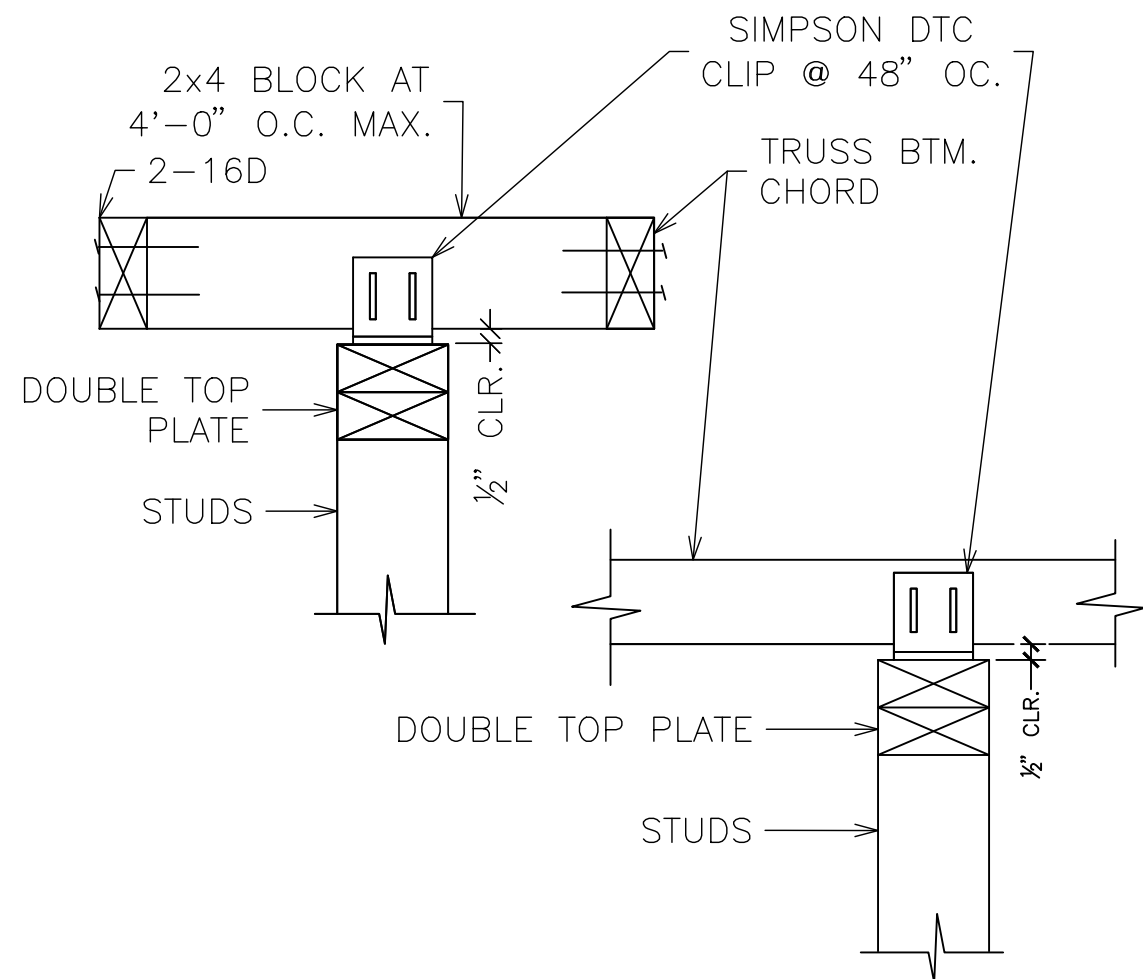
DERIVED FROM CRC  
FIGURE R602.10.4.2



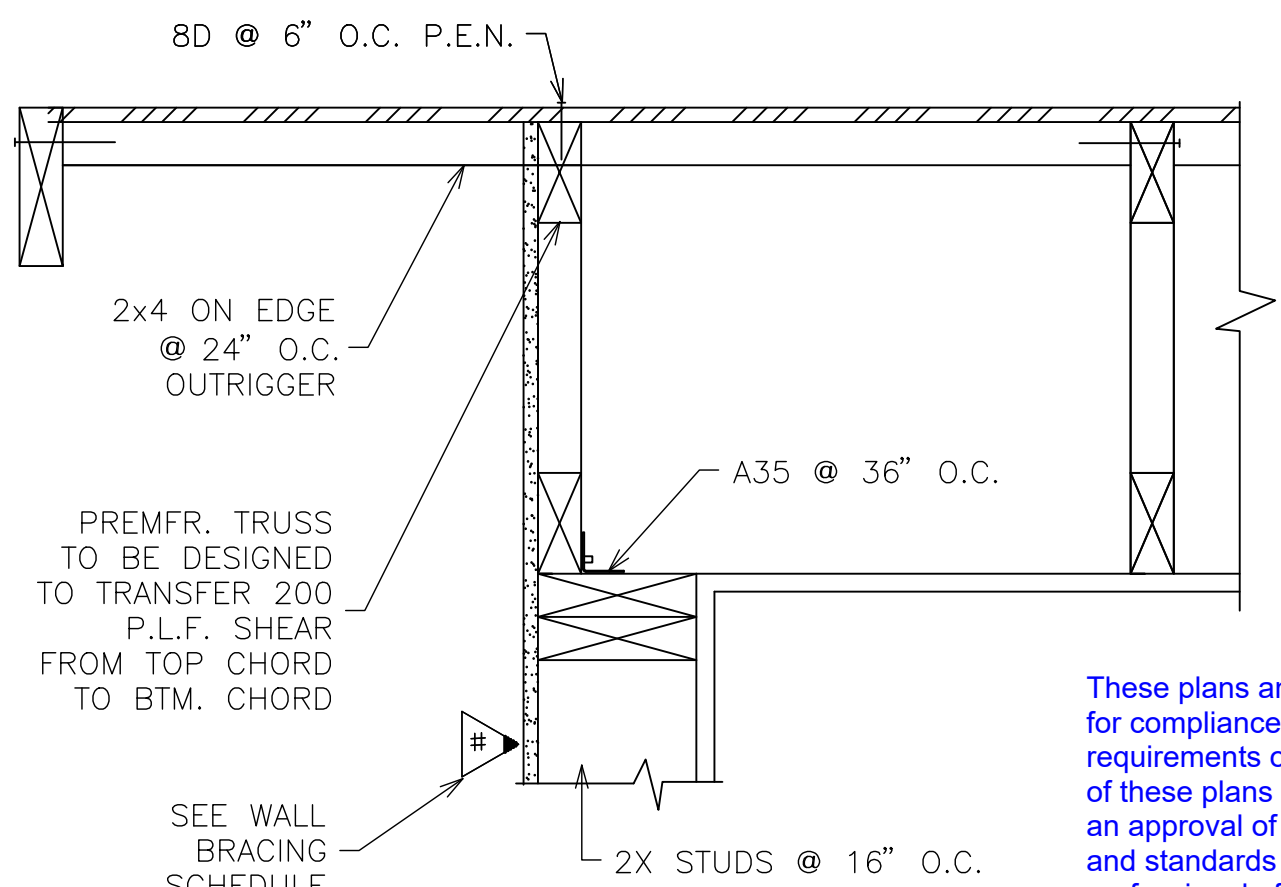
3 CS-PF DETAIL  
N.T.S.



4 EAVE DETAIL  
N.T.S.



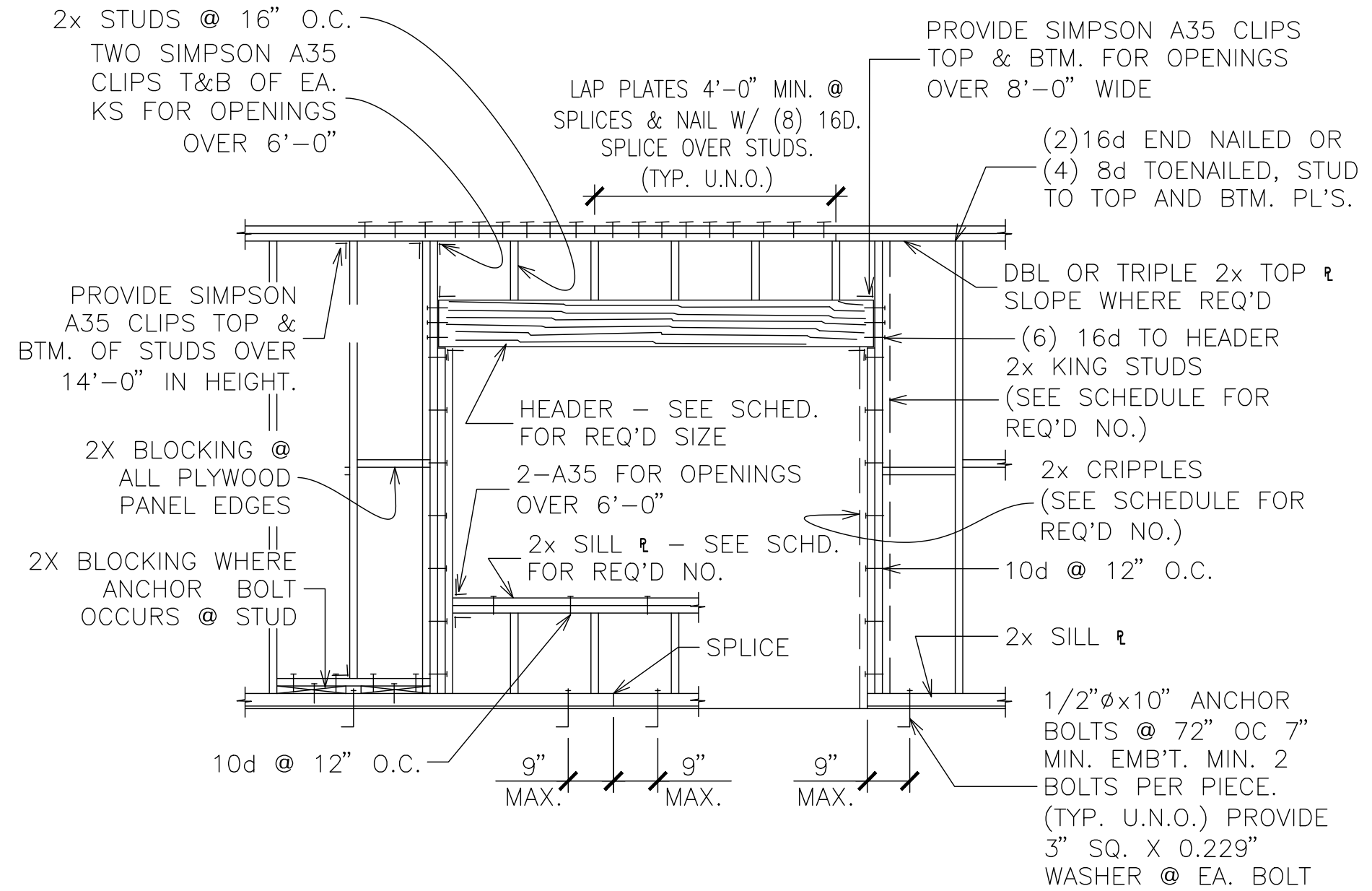
5 NON-BRG., NON-BRACED WALL CONNECTION  
N.T.S.



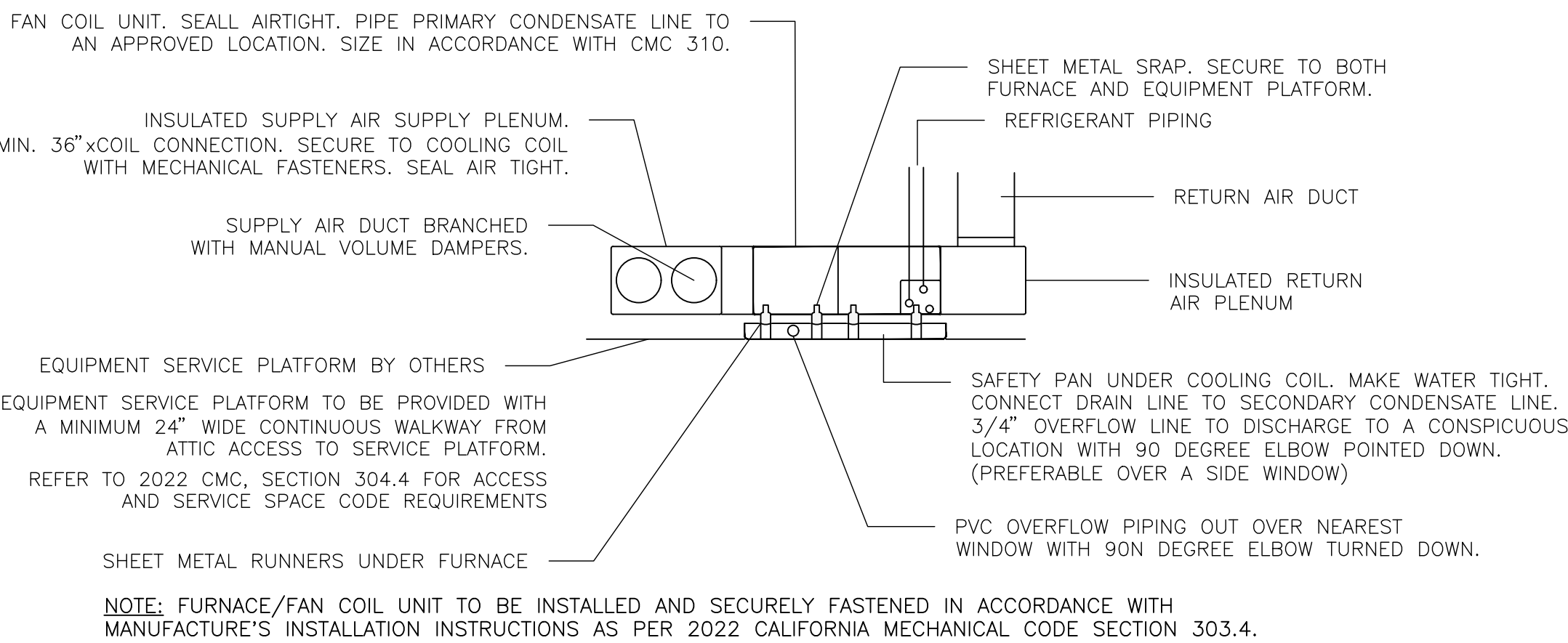
6 GABLE END DETAIL  
N.T.S.

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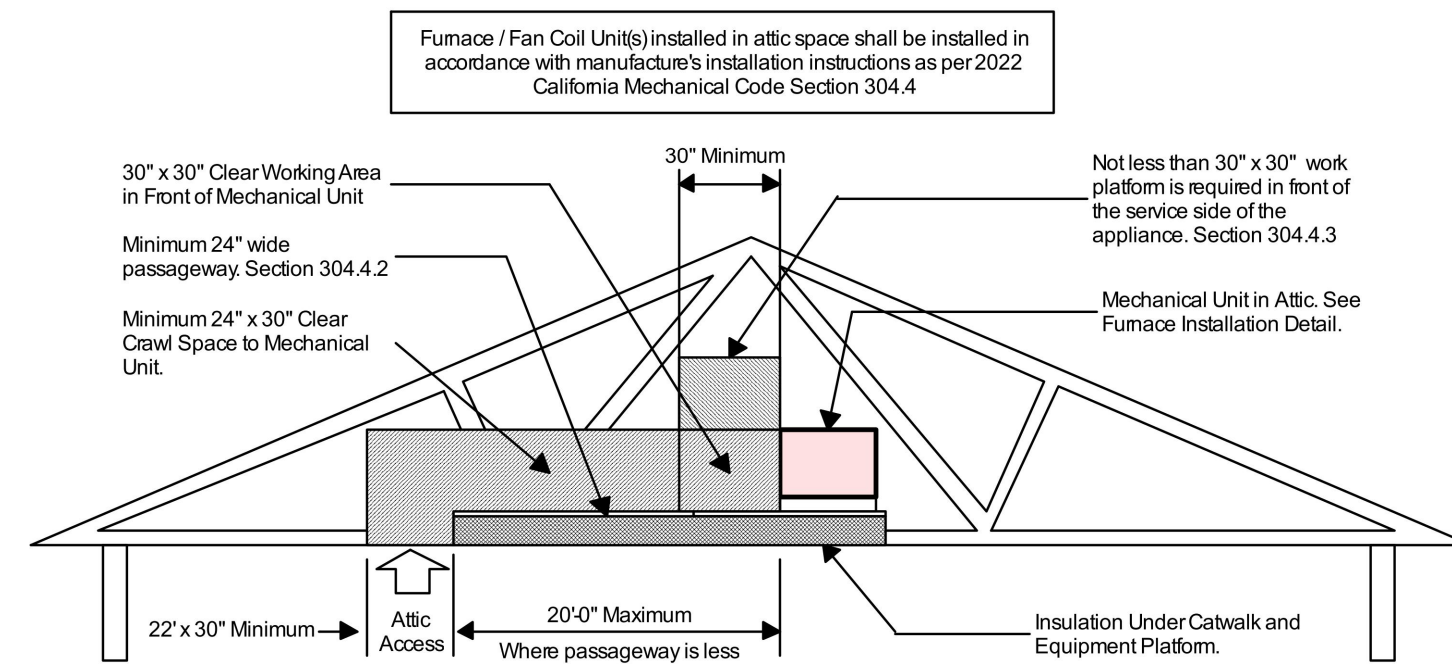
ROD CARSEY CONSULTING & PLAN CHECK SERVICE



TYP. WALL FRAMING AT OPENING  
N.T.S.



7 FAN COIL INSTALLATION IN ATTIC  
N.T.S.



NOTES:  
1. ATTIC ACCESS DOORS SHALL HAVE PERMANENTLY ATTACHED INSULATION USING ADHESIVE OR MECHANICAL FASTENERS. THE ATTIC ACCESS SHALL BE GASKETED TO PREVENT AIR LEAKAGE.  
[CA. ENERGY CODE 150.0(a)2]

2. FURNACE/FAN COIL UNIT(S) INSTALLED IN ATTIC SPACE SHALL BE INSTALLED IN ACCORDANCE WITH MANUFACTURE'S INSTALLATION INSTRUCTIONS AS PER (CMC 304.4)

8 ATTIC MOUNTED AIR HANDLER  
N.T.S.

CLEAR SPAN OF OPENING	HEADER SIZE		NUMBER OF CRIPPLES		NUMBER OF KING STUDS		NUMBER OF SILL PLATES	
	BEARING WALL	NON-BRG WALL	BRG WALL	NON-BRG WALL	EXTERIOR	INTERIOR	EXTERIOR	INTERIOR
UP TO 6'-0"	4 x 8	4 x 6	1	1	1	1	1	1

NOTES:  
1. 4x HEADER SIZE SHOWN IS FOR 2x4 STUD WALL. REVISE TO 6x FOR 2x6 STUD WALLS AND 8x FOR 2x8 STUD WALLS.  
2. DETAILS AND MEMBER SIZES ARE TYPICAL UNLESS OTHERWISE NOTED OR DETAILED.  
3. NOTES AND MEMBER SIZES SHOWN ON FRAMING PLANS SHALL TAKE PRECEDENCE OVER SCHEDULE.

9 HEADER DETAIL  
N.T.S.

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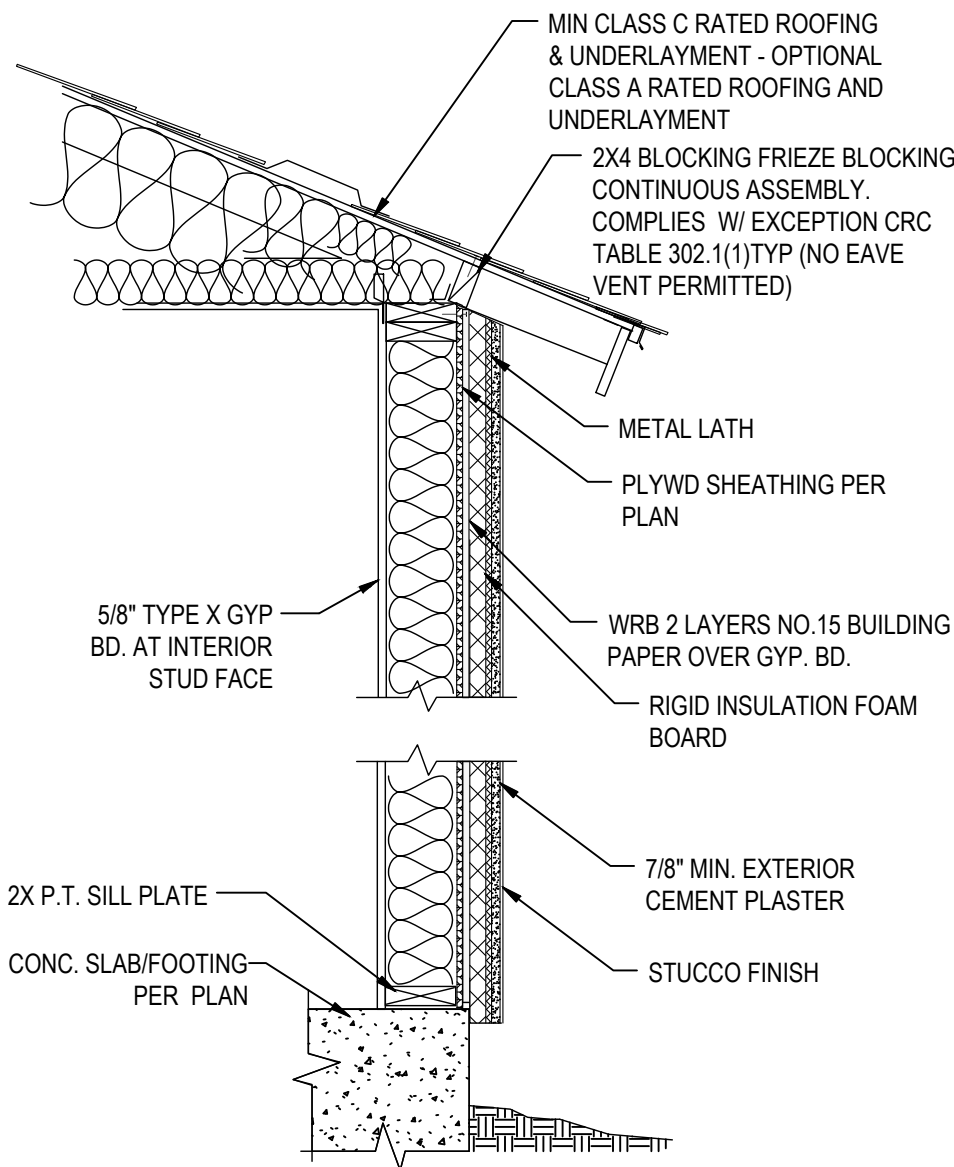
REVISIONS	

PROJECT TITLE	CITY OF HANFORD - PRE-REVIEWED ADU PROGRAM	SHEET DESCRIPTION	DETAILS	DATE	10/28/2024

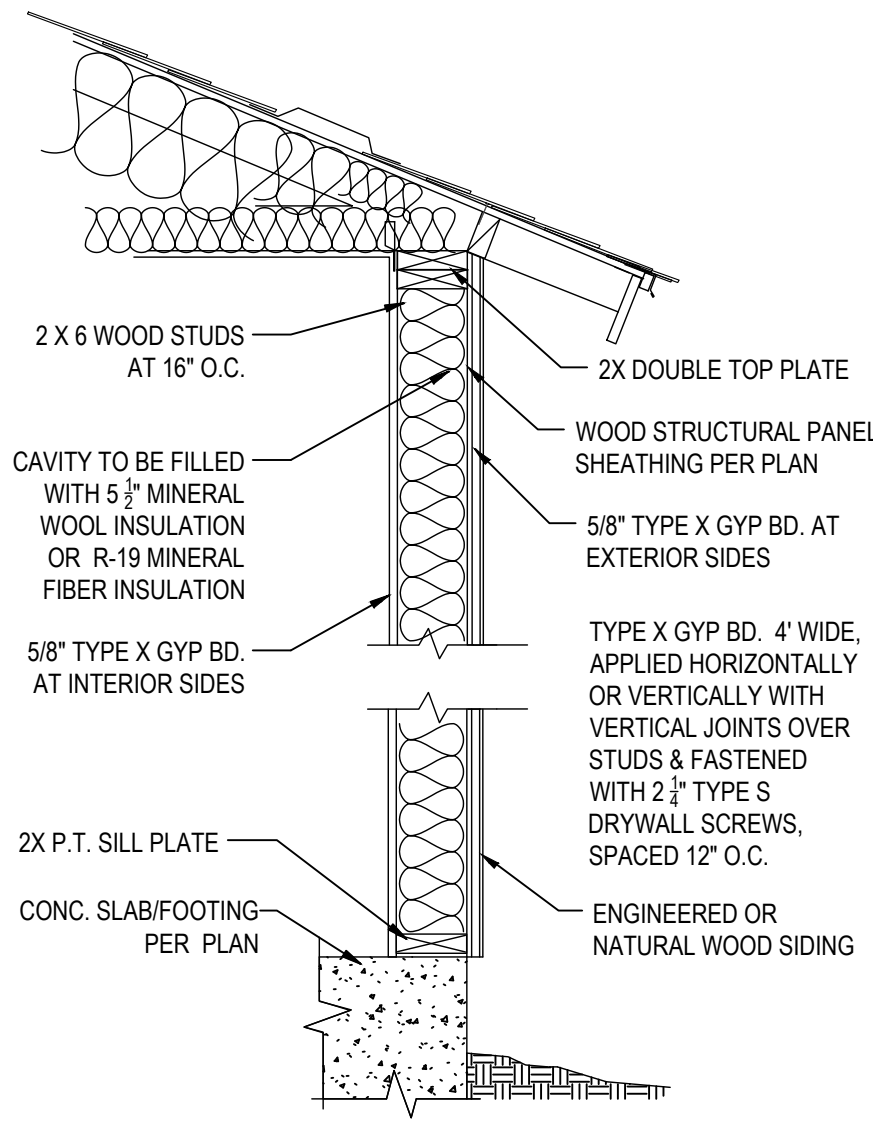
ADU SQFT
775

DRAWING SCALE

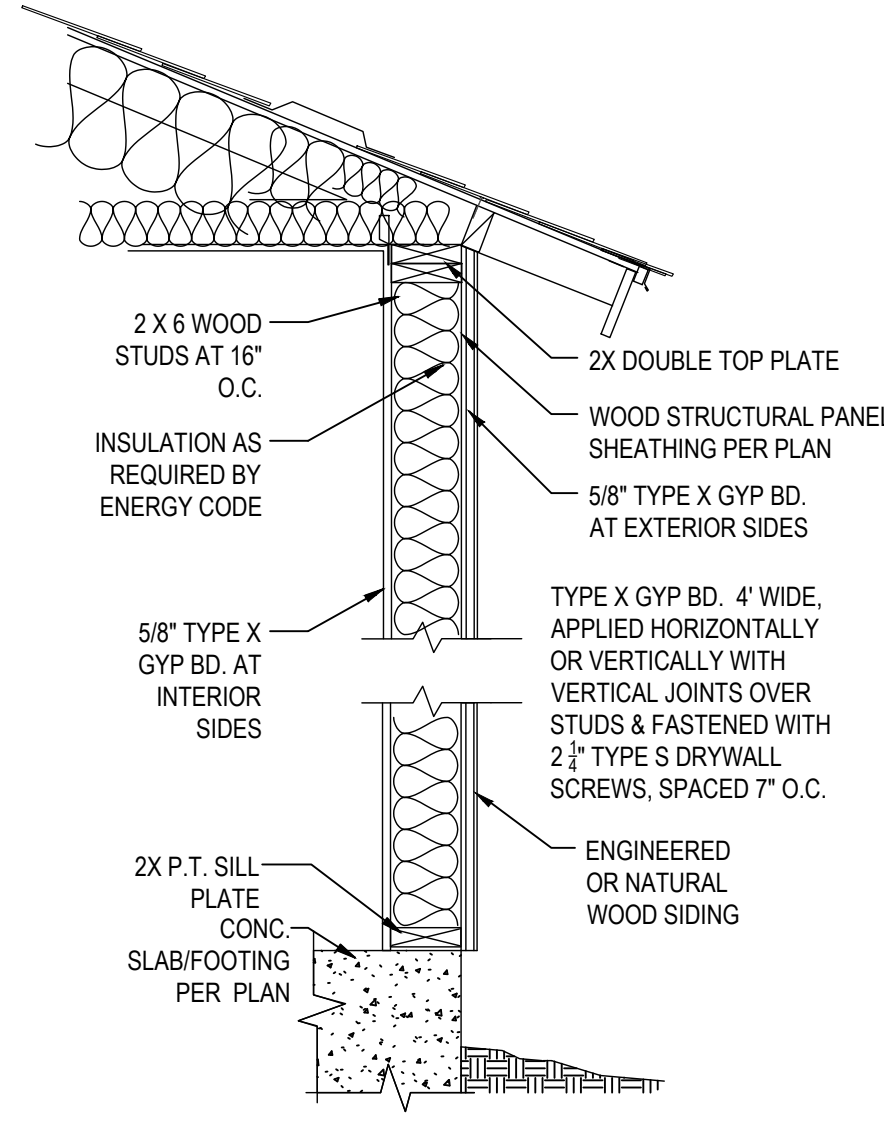
CITY OF HANFORD BUILDING DIVISION  
**APPROVED**  
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By: Mitchell Consh  
12/11/2025



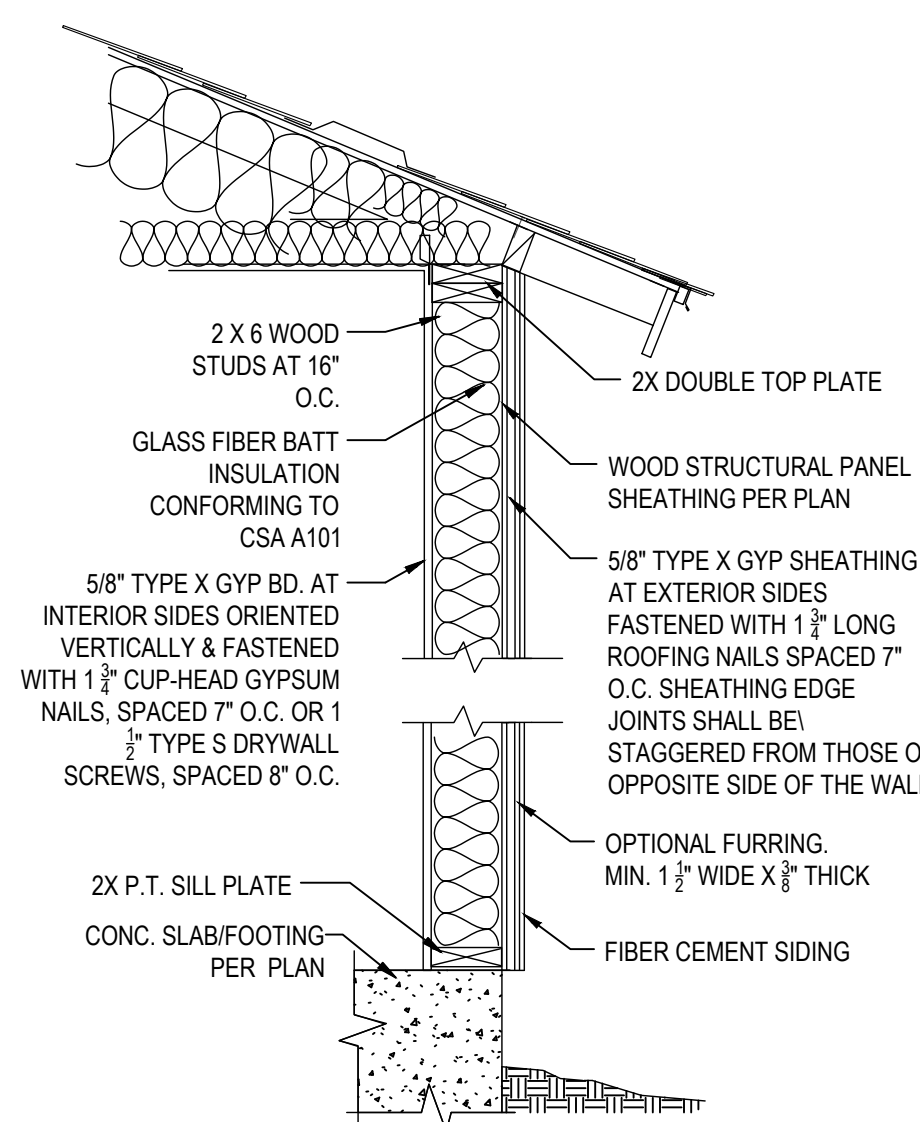
**10** 1-HOUR FIRE RATED ASSEMBLY FOR STUCCO FINISH  
N.T.S.



**11** 1-HOUR FIRE RATED ASSEMBLY FOR  
ENGINEERED OR NATURAL WOOD SIDING  
N.T.S.



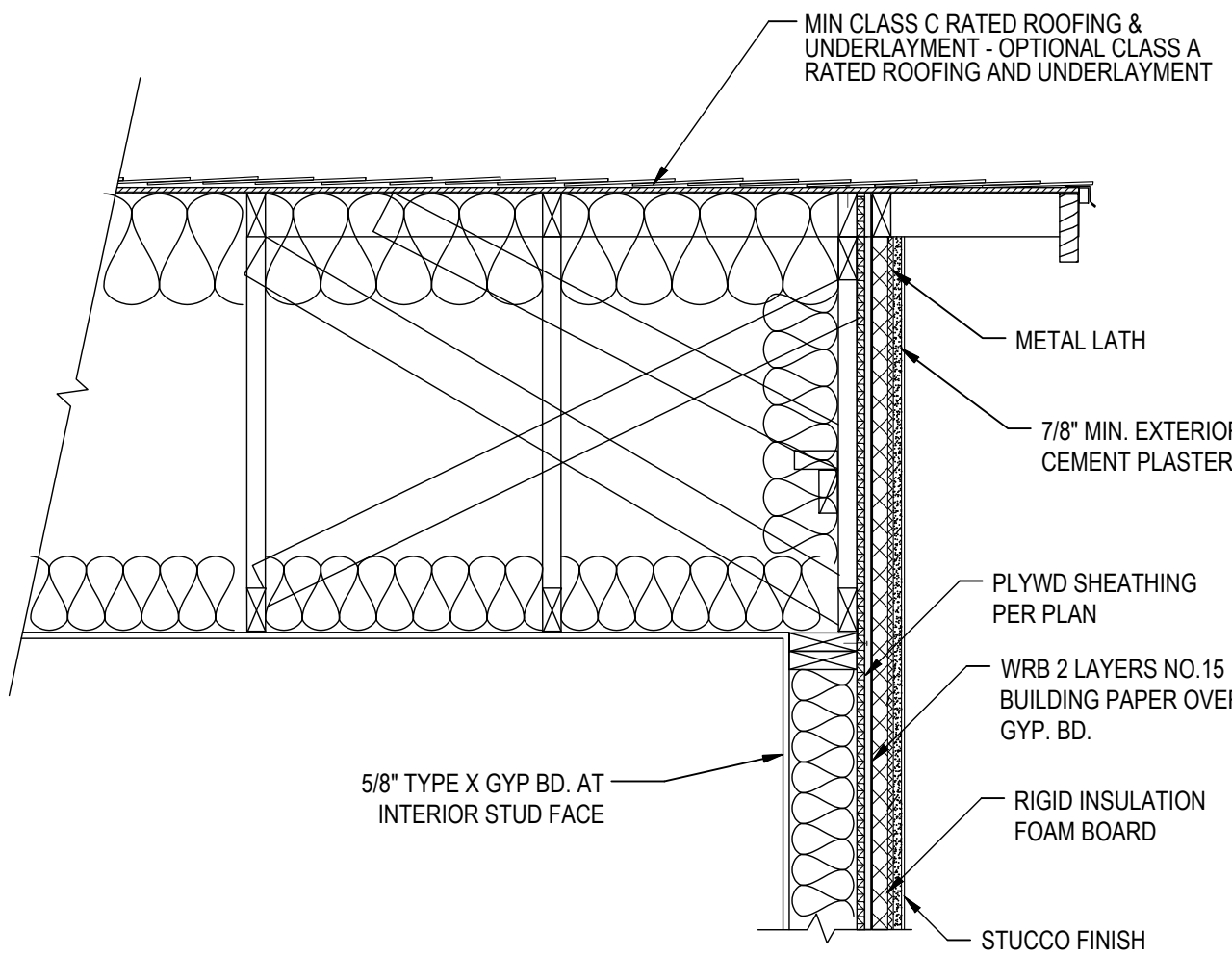
**12** 1-HOUR FIRE RATED ASSEMBLY FOR  
ENGINEERED OR NATURAL WOOD SIDING  
N.T.S.



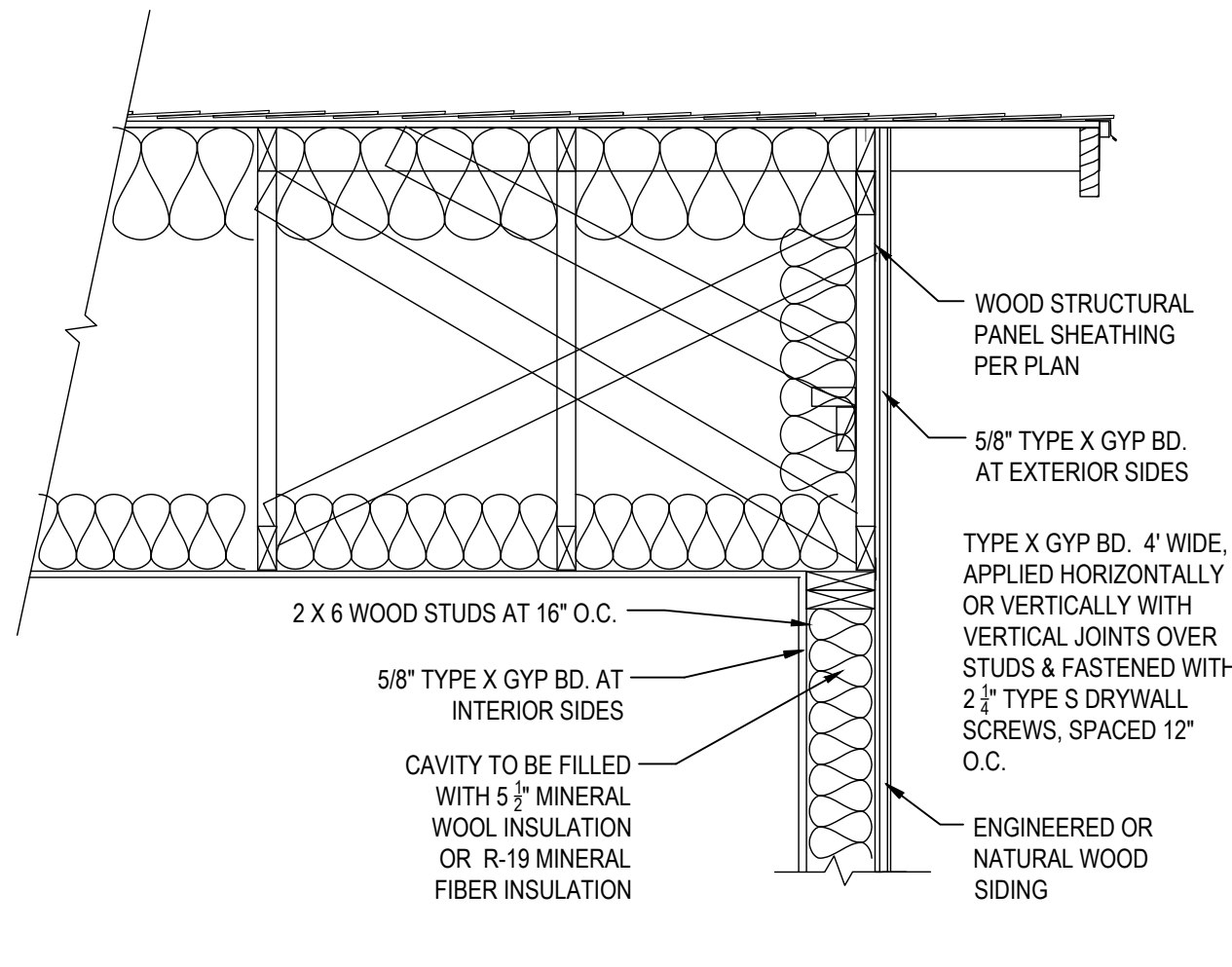
**13** 1-HOUR FIRE RATED ASSEMBLY FOR  
FIBER CEMENT SIDING  
N.T.S.

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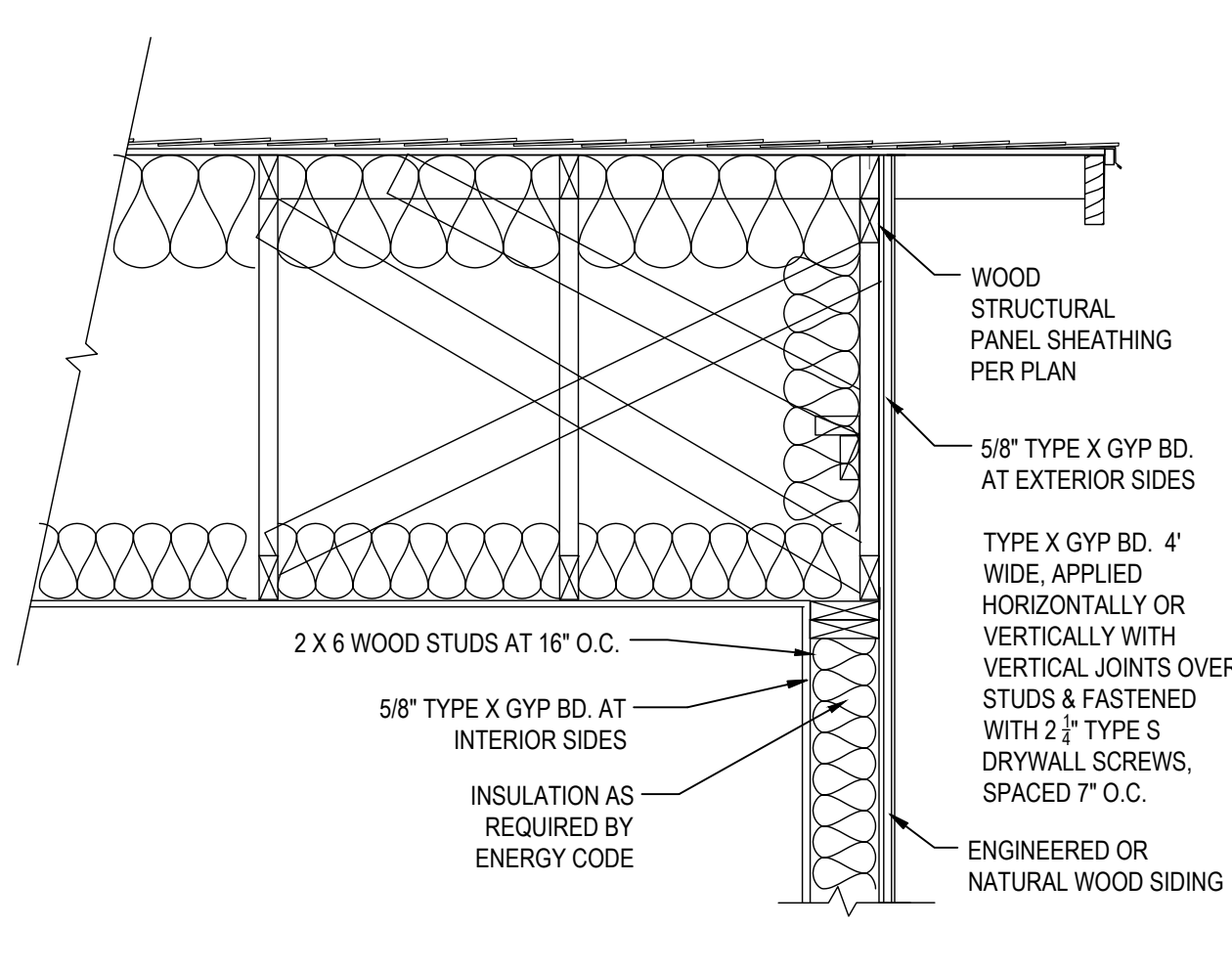
ROD CARSEY CONSULTING & PLAN CHECK SERVICE



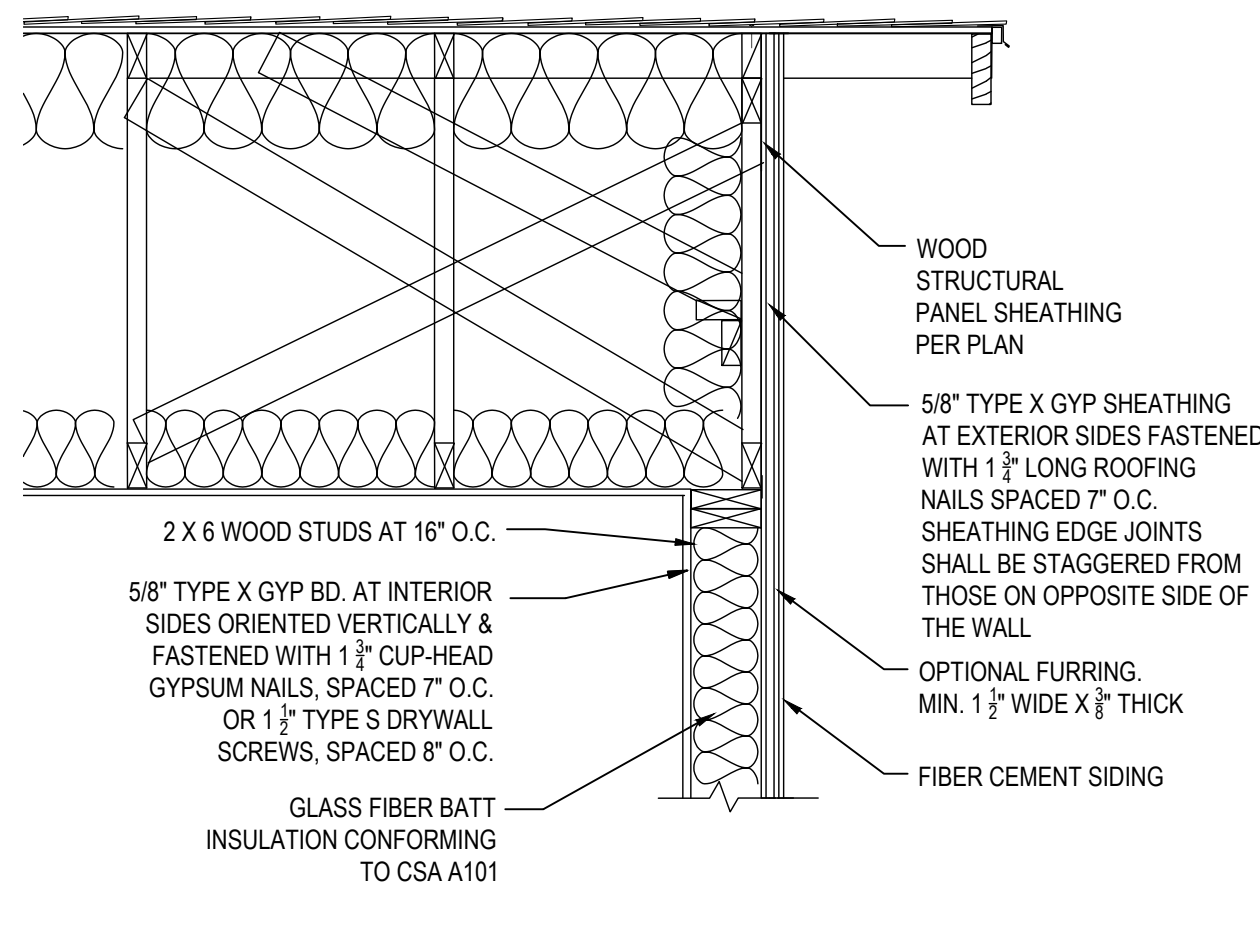
**14** 1-HOUR FIRE RATED GABLE END FOR STUCCO FINISH  
N.T.S.



**15** 1-HOUR FIRE RATED GABLE END FOR ENGINEERED OR  
NATURAL WOOD SIDING  
N.T.S.



**16** 1-HOUR FIRE RATED GABLE END FOR ENGINEERED OR  
NATURAL WOOD SIDING  
N.T.S.



**17** 1-HOUR FIRE RATED GABLE END FOR FIBER CEMENT SIDING  
N.T.S.

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CITY OF  
**HANFORD**



REVISIONS	

PROJECT TITLE		CITY OF HANFORD - PRE-REVIEWED ADU PROGRAM	
SHEET DESCRIPTION		DETAILS	DATE
			10/28/2024

ADU SQFT  
**775**

DRAWING SCALE

CITY OF HANFORD BUILDING DIVISION  
**APPROVED**

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By: *Mitchell Consh*  
12/11/2025

120/240V 1PH 3 WIRE 100 AMP

MLO

NEMA-1 FLUSH MOUNT 30 CK

PANEL SCHEDULE -PANEL 'A'

10KAIC

#498

DESCRIPTION	CKT	OCPD	PHASE A	PHASE B	OCPD	CKT	DESCRIPTION
RECEPTACLES	1	20 AMP	1800	1300	15 AMP	2	LIGHTING
WASHER	3	20 AMP	1800	2700	30 AMP	4	DRYER
RANGE	5	40 AMP	3700	2700	30 AMP	6	DRYER
RANGE	7	40 AMP	3700	1350	20 AMP	8	KITCHEN APPLIANCE
KITCHEN APPLIANCE	9	20 AMP	1350	1800	20 AMP	10	DISH WASHER
RECEPTACLES	11	20 AMP	1800	1800	20 AMP	12	DISPOSAL
EF #1 AND EF #2	13	20 AMP	600	4000	50 AMP	14	COOK TOP
	15			4000	50 AMP	16	COOK TOP
WATER HEATER	17	30 AMP	2400	2400	30 AMP	18	FURNACE
WATER HEATER	19	30 AMP	2400	2400	30 AMP	20	FURNACE
SPACE	21					22	SPACE
SPACE	23					24	SPACE
SPACE	25					26	SPACE
SPACE	27					28	SPACE
SPACE	29					30	SPACE
SPACE	31					32	SPACE
SPACE	33					34	SPACE
SPACE	35					36	SPACE
SPACE	37					38	SPACE
SPACE	39					40	SPACE
SPACE	41					42	SPACE

TOTAL VA LOAD	14150	11650
25% LCU/IML	3538	2913
TOTAL LOAD	17688	14563
TOTAL LOAD AMPS	64	53

ELECTRICAL LEGEND		
	DUPLEX OUTLET	FAN AND LIGHT COMBINATION (HE LIGHT)
	GFCI OUTLET	HIGH EFFICACY LIGHT FIXTURE
	WEATHERPROOF GFCI OUTLET	HIGH EFFICACY RECESSED LIGHT
	WALL SWITCH	GARBAGE DISPOSAL
	GARBAGE DISPOSAL SWITCH	HVAC AIR DUCT LOCATION
	VACANCY SENSOR	FAN & LIGHT COMBO
	SMOKE DETECTOR	
	CARBON MONOXIDE ALARM	

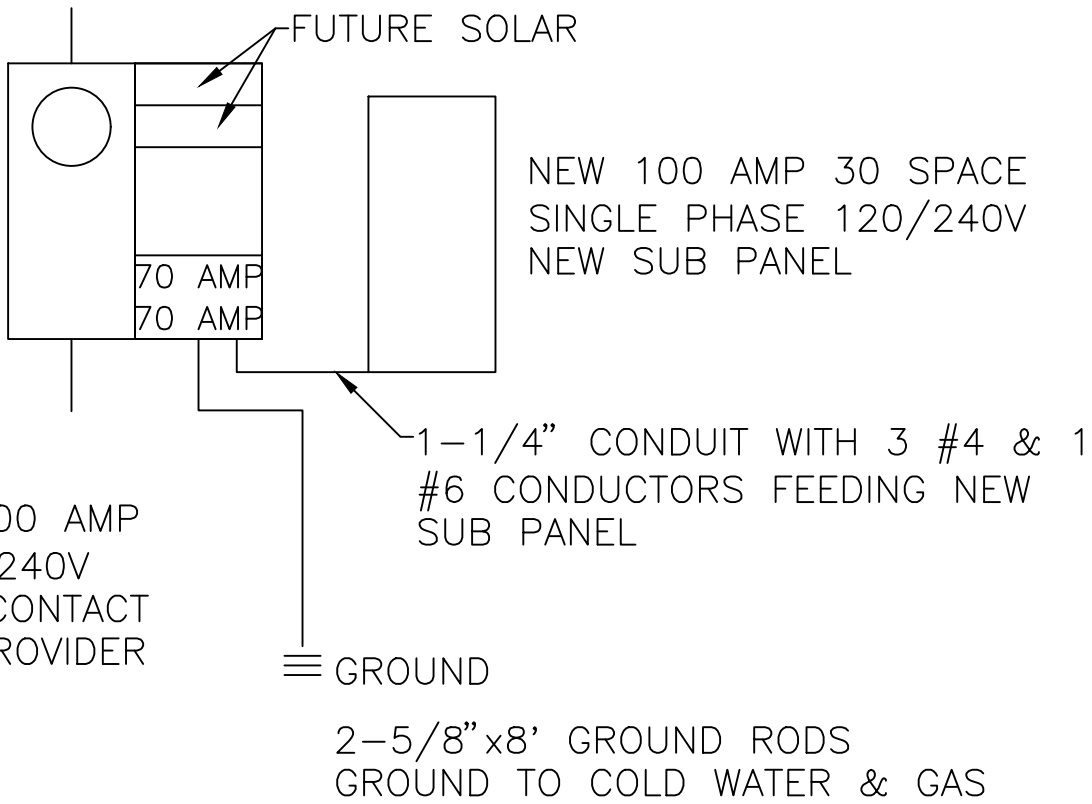
SOLAR READY KEYNOTES #

NOTE: SOLAR READY NOTES SHOWN TO DEMONSTRATE PLAN IS SOLAR READY. SEPARATE PERMIT AND FEES ARE REQUIRED. IF REQUIRED, CONTACT A PV/SOLAR PROVIDER FOR PLANS AND PERMITS.

- THE MAIN ELECTRICAL SERVICE PANEL SHALL NOT BE OF A TYPE WITH A CENTER-FED MAIN CIRCUIT BREAKER AND SHALL INCLUDE RESERVED SPACE ALLOWING FOR INSTALLATION OF DOUBLE-POLE CIRCUIT BREAKERS FOR A FUTURE SOLAR PHOTOVOLTAIC SYSTEM. SUCH RESERVED SPACE SHALL BE POSITIONED AT THE OPPOSITE (LOAD) END FROM THE INPUT FEEDER OR MAIN CIRCUIT BREAKER LOCATION. THE RESERVED SPACE SHALL BE PERMANENTLY AND VISIBLY MARKED AS "FOR FUTURE SOLAR PHOTOVOLTAIC"
- APPROVED MINIMUM 4-INCH SQUARE ELECTRICAL JUNCTION BOX LOCATED WITHIN 72 INCHES HORIZONTALLY AND 12 INCHES VERTICAL OF MAIN ELECTRICAL SERVICE PANEL
- MINIMUM 1 INCH DIAMETER LISTED ELECTRICAL METALLIC RACEWAY ORIGINATING AT READILY ACCESSIBLE ATTIC LOCATION WITH PROXIMITY TO SOLAR ZONE AREA AND TERMINATING AT THE REQUIRED ELECTRICAL JUNCTION BOX
- MINIMUM 1 INCH DIAMETER LISTED ELECTRICAL METALLIC RACEWAY ORIGINATING AT THE REQUIRED ELECTRICAL JUNCTION BOX AND TERMINATING AT THE MAIN ELECTRICAL SERVICE PANEL
- ELECTRICAL JUNCTION BOX AND SEGMENT OF METALLIC RACEWAY IN THE ATTIC SHALL BE PERMANENTLY AND VISIBLY MARKED AS "FOR FUTURE SOLAR PHOTOVOLTAIC"

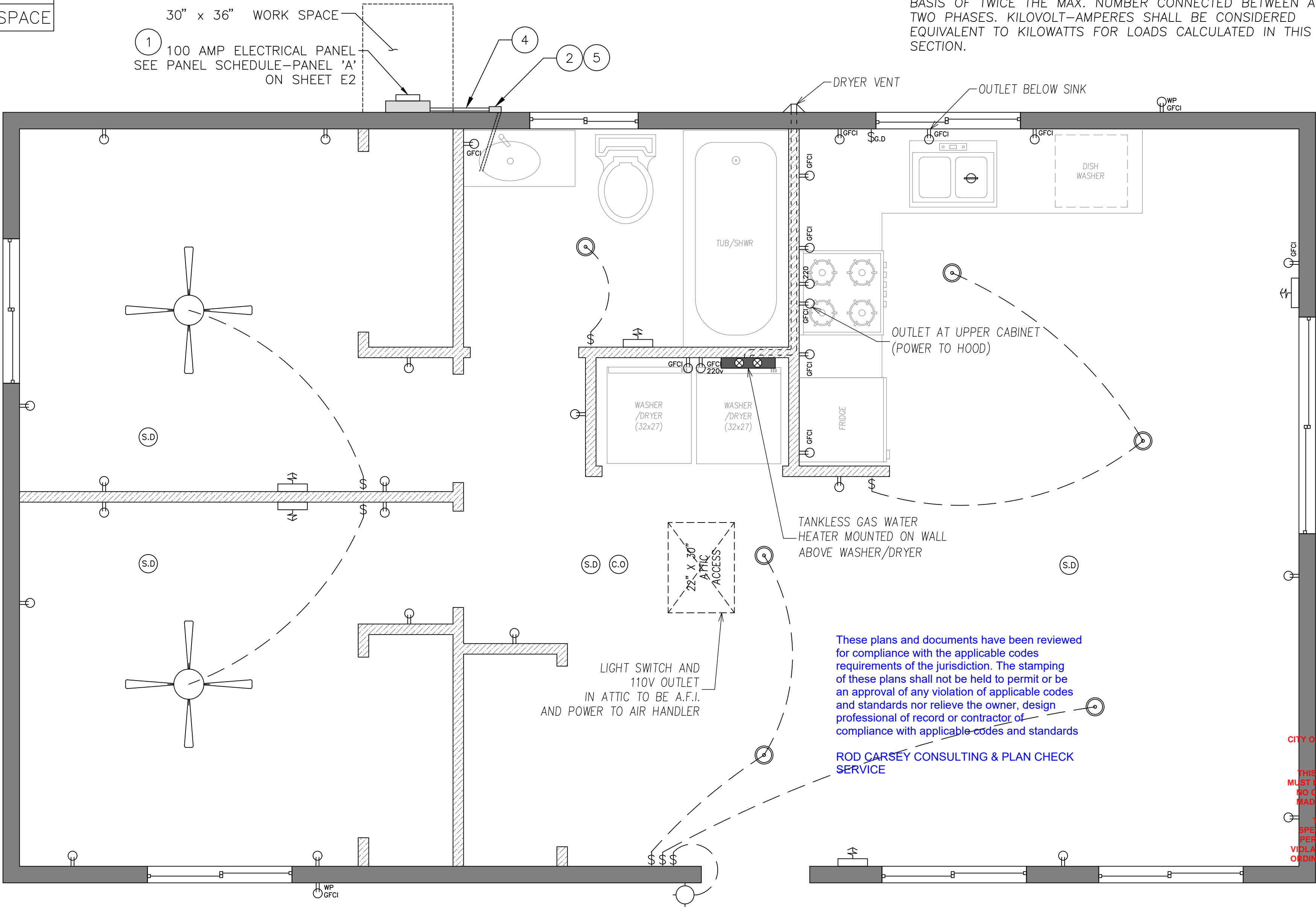
N.T.S.

SUB-PANEL & SWITCH GEAR FOR FUTURE BATTERY STORAGE



OUTLET NOTES

- RECEPTACLES SHALL BE INSTALLED SUCH THAT NO POINT MEASURED HORIZONTALLY ALONG THE FLOOR LINE OF ANY WALL SPACE IS MORE THAN 6 FEET FROM A RECEPTACLE OUTLET.[CEC 210.52(A)(1)]
- GFCI OUTLETS. GROUND FAULT CIRCUIT INTERRUPTER (GFCI) OUTLETS ARE REQUIRED IN BATHROOMS, AT KITCHEN COUNTERTOPS, AT LAUNDRY AND WET BAR SINKS, IN GARAGES, IN CRAWLSPACES, IN UNFINISHED BASEMENTS, AND OUTDOORS. (CEC 210.8)
- AFCI OUTLETS. ELECTRICAL CIRCUITS IN BEDROOMS, LIVING ROOMS, DINING ROOMS, DENS, CLOSETS, HALLWAYS, OR SIMILAR ROOMS MUST BE PROTECTED BY ARC FAULT CIRCUIT INTERRUPTERS (AFCI). (CEC 210.12)
- RECEPTACLE OUTLETS SHALL BE LOCATED IN ONE OR MORE OF THE FOLLOWING:
  - ON OR ABOVE COUNTERTOP OR WORK SURFACES: ON OR ABOVE, BUT NOT MORE THAN 20 INCHES ABOVE, THE COUNTERTOP OR WORK SURFACE.
  - IN COUNTERTOP OR WORK SURFACES: RECEPTACLE OUTLET ASSEMBLIES LISTED FOR USE IN COUNTERTOPS OR WORK SURFACES SHALL BE PERMITTED TO BE INSTALLED IN COUNTERTOPS OR WORK SURFACES.
  - BELOW COUNTERTOP OR WORK SURFACES: NOT MORE THAN 12 INCHES BELOW THE COUNTERTOP OR WORK SURFACE. RECEPTACLES INSTALLED BELOW A COUNTERTOP OR WORK SURFACE SHALL NOT BE LOCATED WHERE THE COUNTERTOP OR WORK SURFACE EXTENDS MORE THAN 6 INCHES BEYOND ITS SUPPORT BASE. [CEC 210.52(C)(3)]
- BATHROOMS AT LEAST ONE RECEPTACLE OUTLET SHALL BE INSTALLED IN BATHROOMS WITHIN 3FEET OF THE OUTSIDE EDGE OF EACH BASIN. THE RECEPTACLE OUTLET SHALL BE LOCATED ON A WALL OR PARTITION THAT IS ADJACENT TO THE BASIN OR BASIN COUNTERTOP, LOCATED ON THE COUNTERTOP, OR INSTALLED ON THE SIDE OR FACE OF THE BASIN CABINET. IN NO CASE SHALL THE RECEPTACLE BE LOCATED MORE THAN 12 INCHES BELOW THE TOP OF THE BASIN OR BASIN COUNTERTOP RECEPTACLE OUTLET ASSEMBLIES LISTED FOR USE IN THE COUNTERTOPS SHALL BE PERMITTED TO BE INSTALLED IN THE COUNTERTOP. [CEC 210.52(D)]
- OUTDOOR OUTLETS ALL EXTERIOR RECEPTACLES SHALL BE WP/GFCI PROTECTED. FOR A ONE-FAMILY DWELLING THAT IS AT GRADE LEVEL, AT LEAST ONE RECEPTACLE OUTLET READILY ACCESSIBLE FROM GRADE AND NOT MORE THAN 6 1/2 FEET ABOVE GRADE LEVEL SHALL BE INSTALLED AT THE FRONT AND BACK OF THE DWELLING. [210.52(E)(1)]
- LAUNDRY AREAS IN DWELLING UNITS, AT LEAST ONE RECEPTACLE OUTLET SHALL BE INSTALLED IN AREAS DESIGNATED FOR THE INSTALLATION OF LAUNDRY EQUIPMENT. [210.52(F)]
- GFCI OUTLETS. GROUND FAULT CIRCUIT INTERRUPTER (GFCI) OUTLETS ARE REQUIRED IN BATHROOMS, AT KITCHEN COUNTERTOPS, AT LAUNDRY AND WET BAR SINKS, IN GARAGES, IN CRAWLSPACES, IN UNFINISHED BASEMENTS, AND OUTDOORS. (CEC 210.8)
- AFCI OUTLETS. ARC FAULT CIRCUIT INTERRUPTERS (AFCI) PROTECTION IS REQUIRED THROUGHOUT ALL 15 AND 20-AMP 120V CIRCUITRY THAT IS NOT GFCI PROTECTED. (CEC 210.12)



CLOTHES DRYER VENT NOTES

- 4" Ø DRYER VENT WITH MAXIMUM 14 FOOT COMBINED HORIZONTAL AND VERTICAL LENGTH WITH TWO 90 DEGREE ELBOWS.
- SMALL APPLIANCE CIRCUIT LOAD IN EACH DWELLING UNIT, THE LOAD SHALL BE CALCULATED AT 1500 VOLT-AMPERES FOR EACH 2-WIRE SMALL APPLIANCE BRANCH CIRCUIT AS COVERED BY 210.11(C)(1). WHERE THE LOAD IS SUBDIVIDED THROUGH TWO OR MORE FEEDERS, THE CALCULATED LOAD FOR EACH SHALL INCLUDE NOT LESS THAN 1500 VOLT-AMPERES FOR EACH 2-WIRE SMALL APPLIANCE BRANCH CIRCUIT. THESE LOADS SHALL BE PERMITTED TO BE INCLUDED WITH THE GENERAL LIGHTING LOAD AND SUBJECTED TO THE DEMAND FACTORS PROVIDED IN TABLE 220.42.
  - THE INDIVIDUAL BRANCH CIRCUIT PERMITTED BY 210.52(B)(1). EXCEPTION NO. 2, SHALL BE PERMITTED TO EB EXCLUDED FROM THE CALCULATION REQUIRED BY 220.52.
- LAUNDRY CIRCUIT LOAD A LOAD OF NOT LESS THAN 1500 VOLT-AMPERES SHALL IN INCLUDED FOR EACH 2-WIRE LAUNDRY BRANCH CIRCUIT INSTALLED AS COVERED BY 210.11(C)(2). THIS LOAD SHALL BE SUBJECTED TO THE DEMAND FACTORS PROVIDED IN TABLE 220.42. [CEC 220.43(B)]
- APPLIANCE LOAD-DWELLING UNITS IT SHALL BE PERMISSIBLE TO APPLY A DEMAND FACTOR OF 75 PERCENT TO THE NAMEPLATE RATING LOAD OF FOUR OR MORE APPLIANCES RATED 1/2 HP OR GREATER, OR 500 WATTS OR GREATER, THAT ARE FASTENED IN PLACE AND THAT ARE SERVED BY THE SAME FEEDER OR SERVICE INA ONE-FAMILY,TWO-FAMILY, OR MULTIFAMILY DWELLING. THIS DEMAND FACTOR SHALL NOT APPLY TO: HOUSEHOLD ELECTRIC COOKING EQUIPMENT THAT IS FASTENED IN PLACE, CLOTHES DRYERS, SPACE HEATING EQUIPMENT, ADN AIR-CONDITIONING EQUIPMENT. [CEC 220.53]
- ELECTRIC CLOTHES DRYER THE LOAD FOR HOUSEHOLD ELECTRIC CLOTHES DRYERS INA DWELLING UNIT SHALL BE EITHER 5,000 WATTS OR THE NAMEPLATE RATING, WHICHEVER IS LARGER, FOR EACH DRYER SERVED. THE USE OF THE DEMAND FACTORS IN TABLE 220.54 SHALL BE PERMITTED. WHERE TWO OR MORE SINGLE-PHASE DRYERS ARE SUPPLIED BY A 3-PHASE,4-WIRE FEEDER OR SERVICE, THE TOTAL LOAD SHALL BE CALCULATED ON THE BASIS OF TWICE THE MAX. NUMBER CONNECTED BETWEEN ANY TWO PHASES. KILOVOLT-AMPERES SHALL BE CONSIDERED EQUIVALENT TO KILOWATTS FOR LOADS CALCULATED IN THIS SECTION.

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REVISIONS	

PROJECT TITLE		CITY OF HANFORD - PRE-REVIEWED ADU PROGRAM	
SHEET DESCRIPTION		ELECTRICAL PLAN	
AGENCY		DATE	
SUV REAP		10/28/2024	

ADU SQFT  
**775**

DRAWING SCALE  
**1/2" = 1'**

CITY OF HANFORD BUILDING DIVISION  
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By: *Mitchell Couch*  
12/11/2025

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REVISIONS	

PROJECT TITLE		SHEET DESCRIPTION	PLUMBING PLAN	DATE
CITY OF HANFORD – PRE-REVIEWED ADU PROGRAM				
		AGENCY	SJV REAP	10/28/2024

ADU SQFT
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By: *Mitchell Conch*  
12/11/2025

### 610.3 Quantity of Water

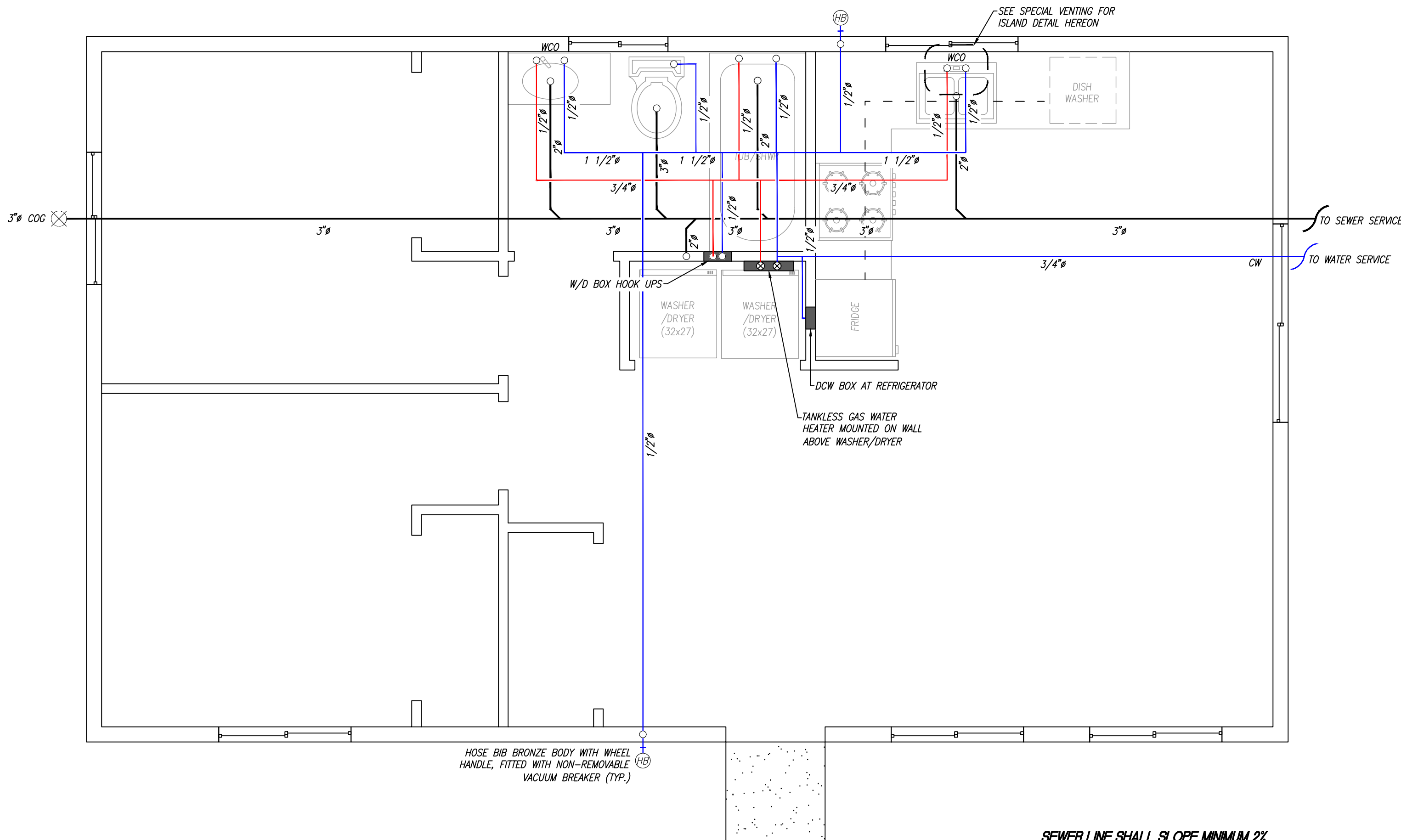
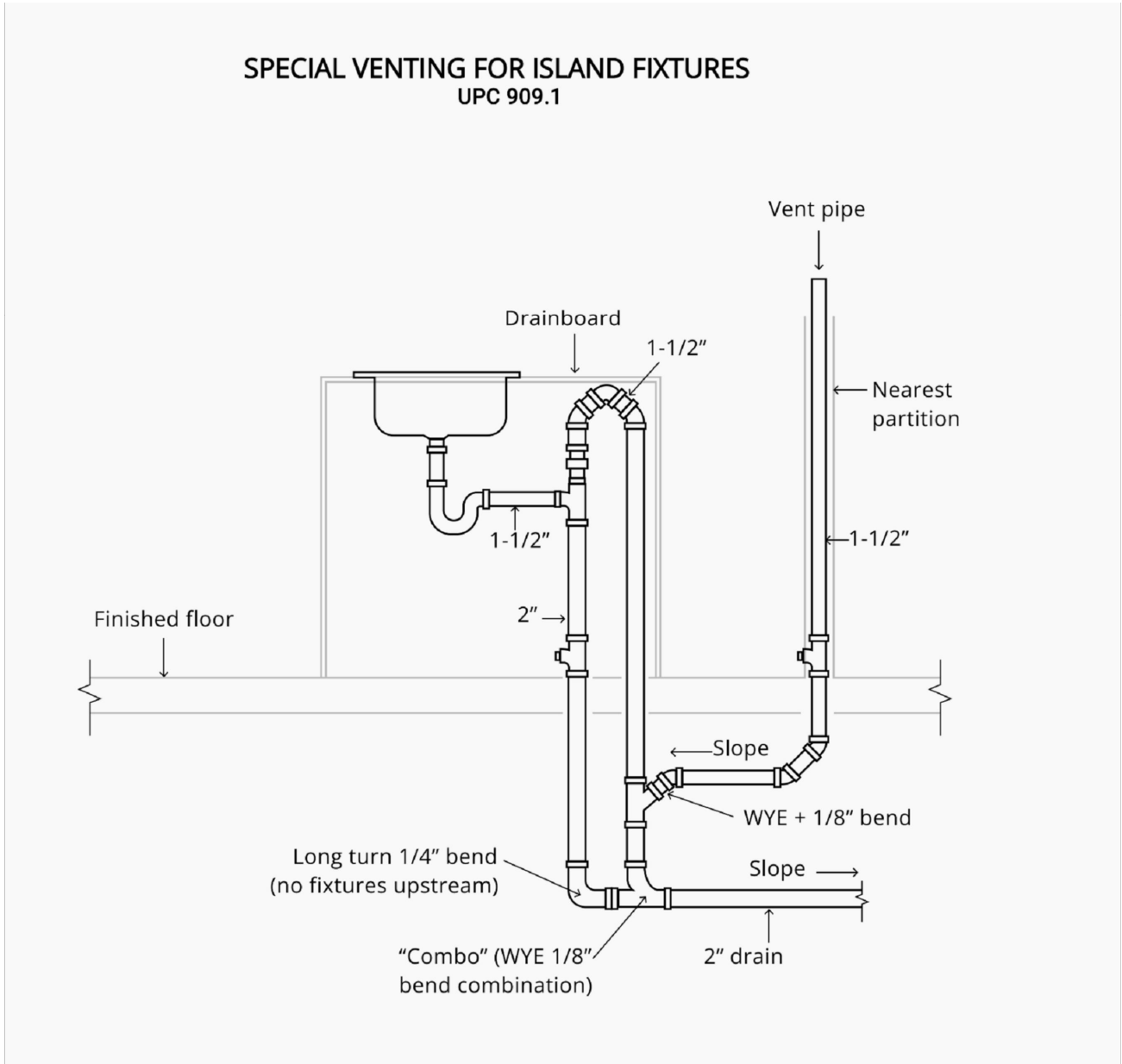
The quantity of water required to be supplied to every plumbing fixture shall be represented by fixture units, as shown in Table 610.3. Equivalent fixture values shown in Table 610.3 include both hot and cold water demand.

TABLE 610.3 WATER SUPPLY FIXTURE UNITS (WSFU) AND MINIMUM FIXTURE BRANCH PIPE SIZES <sup>1</sup>				
APPLIANCES, APPURTENANCES OR FIXTURES <sup>2</sup>	MINIMUM FIXTURE BRANCH PIPE SIZE <sup>1,4</sup> (inches)	PRIVATE	PUBLIC	ASSEMBLY <sup>6</sup>
Bathtub or Combination Bath/Shower (fill)	1/2	4.0	4.0	—
3/4 inch Bathtub Fill Valve	3/4	10.0	10.0	—
Bidet	1/2	1.0	—	—
Clothes Washer	1/2	4.0	4.0	—
Dental Unit, cuspidor	1/2	—	1.0	—
Dishwasher, domestic	1/2	1.5	1.5	—
Drinking Fountain or Water Cooler	1/2	0.5	0.5	0.75
Hose Bibb	1/2	2.5	2.5	—
Hose Bibb, each additional <sup>8</sup>	1/2	1.0	1.0	—
Lavatory	1/2	1.0	1.0	1.0
Lawn Sprinkler, each head <sup>5</sup>	—	1.0	1.0	—
Mobilehome or Manufactured Home, each (minimum) <sup>9</sup>	—	6.0	—	—
Sinks	—	—	—	—
Bar	1/2	1.0	2.0	—
Clinical Faucet	1/2	—	3.0	—
Clinical Flushometer Valve with or without faucet	1	—	8.0	—
Kitchen, domestic with or without dishwasher	1/2	1.5	1.5	—
Laundry	1/2	1.5	1.5	—
Service or Mop Basin	1/2	1.5	3.0	—
Washup, each set of faucets	1/2	—	2.0	—
Shower, per head	1/2	2.0	2.0	—
Urinal, 1.0 GPF Flushometer Valve	3/4	See Footnote <sup>7</sup>		
Urinal, greater than 1.0 GPF Flushometer Valve	3/4	See Footnote <sup>7</sup>		
Urinal, flush tank	1/2	2.0	2.0	3.0
Urinal with Drain Cleansing Action	1/2	1.0	1.0	1.0
Wash Fountain, circular spray	3/4	—	4.0	—
Water Closet, 1.6 GPF Gravity Tank	1/2	2.5	2.5	3.5
Water Closet, 1.6 GPF Flushometer Tank	1/2	2.5	2.5	3.5
Water Closet, 1.6 GPF Flushometer Valve	1	See Footnote <sup>7</sup>		
Water Closet, greater than 1.6 GPF Gravity Tank	1/2	3.0	5.5	7.0
Water Closet, greater than 1.6 GPF Flushometer Valve	1	See Footnote <sup>7</sup>		

For SI units: 1 inch = 25 mm

#### Notes:

- <sup>1</sup> Size of the cold branch pipe, or both the hot and cold branch pipes.
- <sup>2</sup> Appliances, appurtenances, or fixtures not referenced in this table shall be permitted to be sized by reference to fixtures having a similar flow rate and frequency of use.
- <sup>3</sup> The listed fixture unit values represent their load on the cold water building supply. The separate cold water and hot water fixture unit value for fixtures having both hot and cold water connections shall be permitted to be each taken as three-quarter of the listed total value of the fixture.
- <sup>4</sup> The listed minimum supply branch pipe sizes for individual fixtures are the nominal (I.D.) pipe size.
- <sup>5</sup> For fixtures or supply connections likely to impose continuous flow demands, determine the required flow in gallons per minute (gpm) (L/s), and add it separately to the demand in gpm (L/s) for the distribution system or portions thereof.
- <sup>6</sup> Assembly (Public Use (See Table 422.1)).
- <sup>7</sup> Where sizing flushometer systems, see Section 610.10.
- <sup>8</sup> Reduced fixture unit loading for additional hose bibbs is to be used where sizing total building demand and for pipe sizing where more than one hose bibb is supplied by a segment of water distribution pipe. The fixture branch to each hose bibb shall be sized on the basis of 2.5 fixture units.
- <sup>9</sup> For water supply fixture unit values related to lots within mobilehome parks in all parts of the State of California, see California Code of Regulations, Title 25, Division 1, Chapter 2, Article 5, Section 1278. For water supply fixture unit values related to lots within special occupancy parks in all parts of the State of California, see California Code of Regulations, Title 25, Division 1, Chapter 2, Article 5, Section 2278.



SEWER LINE SHALL SLOPE MINIMUM 2%  
UTILITY FEEDS, MPOE's, AND METER/SERVICE  
LOCATIONS ARE NOT LOCATED IN PLANS

These plans and documents have been reviewed for compliance with the applicable codes requirements of the jurisdiction. The stamping of these plans shall not be held to permit or be an approval of any violation of applicable codes and standards nor relieve the owner, design professional of record or contractor of compliance with applicable codes and standards

ROD CARSEY CONSULTING & PLAN CHECK  
SERVICE

TABLE 610.4  
FIXTURE UNIT TABLE FOR DETERMINING WATER PIPE AND METER SIZES

METER AND STREET SERVICE (inches)	BUILDING SUPPLY AND BRANCHES (inches)	MAXIMUM ALLOWABLE LENGTH (feet)															
		40	60	80	100	150	200	250	300	400	500	600	700	800	900	1000	
PRESSURE RANGE — 30 to 45 psi <sup>1</sup>																	
3/4	1/2 <sup>3</sup>	6	5	4	3	2	1	1	1	0	0	0	0	0	0	0	0
3/4	3/4	16	16	14	12	9	6	5	5	4	4	3	2	2	2	1	1
3/4	1	29	25	23	21	17	15	13	12	10	8	6	6	6	6	6	6
1	1	36	31	27	25	20	17	15	13	12	10	8	6	6	6	6	6
3/4	1 1/4	36	33	31	28	24	23	21	19	17	16	13	12	12	11	11	11
1	1 1/4	54	47	42	38	32	28	25	23	19	17	14	12	12	11	11	11
1 1/2	1 1/4	78	68	57	48	38	32	28	25	21	18	15	12	12	11	11	11
1	1 1/2	85	84	79	65	56	48	43	38	32	28	26	22	21	20	20	20
1 1/2	1 1/2	150	124	105	91	70	57	49	45	36	31	26	23	21	20	20	20
2	1 1/2	151	129	129	110	80	64	53	46	38	32	27	23	21	20	20	20
1	2	85	85	85	85	85	85	82	80	66	61	57	52	49	46	43	43
1 1/2	2	220	205	190	176	155	138	127	120	104	85	70	61	57	54	51	51
2	2	370	327	292	265	217	185	164	147	124	96	70	61	57	54	51	51
2	2 1/2	445	418	390	370	330	300	280	265	240	220	198	175	158	143	133	133

For SI units: 1 inch = 25 mm, 1 foot = 304.8 mm, 1 pound-force per square inch = 6.8947 kPa

- Notes:
- <sup>1</sup> Available static pressure after head loss.
  - <sup>2</sup> Building supply, not less than 3/4 of an inch (20 mm) nominal size.



# 2022 CALIFORNIA GREEN BUILDING STANDARDS CODE

## RESIDENTIAL MANDATORY MEASURES, SHEET 1 (January 2023)

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**DISCLAIMER:** THIS DOCUMENT IS PROVIDED AND INTENDED TO BE USED AS A MEANS TO INDICATE AREAS OF COMPLIANCE WITH THE CALIFORNIA GREEN BUILDING STANDARDS (CALGREEN) CODE. DUE TO THE VARIABLES BETWEEN BUILDING DEPARTMENT JURISDICTIONS, THIS CHECKLIST IS TO BE USED ON AN INDIVIDUAL PROJECT BASIS AND MAY BE MODIFIED BY THE END USER TO MEET THOSE INDIVIDUAL NEEDS. THE END USER ASSUMES ALL RESPONSIBILITY ASSOCIATED WITH THE USE OF THIS DOCUMENT, INCLUDING VERIFICATION WITH THE FULL CODE.

REVISIONS
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PROJECT TITLE		CITY OF HAINFORD – PRE-REVIEWED ADU PROGRAM
SHEET DESCRIPTION		
CALGREEN FORM		
AGENCY	SJV REAP	DATE 10/28/2024

775

DRAWING SCALE

CITY OF HANFORD BUILDING DIVISION

**APPROVED**

THIS SET OF PLANS AND SPECIFICATIONS  
MUST BE KEPT ON-SITE AT ALL TIMES AND  
NO CHANGES OR ALTERATIONS SHALL BE  
MADE EXCEPT BY THE BUILDING DIVISION.

THE STAMPING OF THIS PLAN AND SPECIFICATIONS SHALL NOT BE HELD TO PERMIT OR TO BE AN APPROVAL OF THE VIOLATION OF ANY PROVISIONS OF ANY CITY ORDINANCE OR STATE LAW. "REVIEWED FOR CODE COMPLIANCE."

BY: *Mitchell Couch*  
12/11/2025

Heating, Ventilating and Air Conditioning  
INSTALLATION REQUIREMENTS

General Notes

- The following Codes apply to this plan: 2022 California Residential Code, 2022 California Building Code, 2022 California Mechanical Code, 2022 California Energy Code, and the 2022 California Green Code.
- Calculations and specifications are based upon Title 24 documents provided at the time the design was performed. Any subsequent changes or additions to these documents or structure may affect the design attached herewith.
- Mechanical exhaust systems in bathrooms shall be in accordance with California 2022 Green Building Standards, Residential Mandatory Measures, Section 4.506.1 a Bathroom is room which contains a bathtub, shower or tub/shower combination.
- Mechanical exhaust systems in private toilet rooms are required and shall have a minimum capacity of 50 CFM intermittent or 25 CFM continuous as per 2022 California Mechanical Code, Table 4-4.
- All mechanical equipment and devices shall be installed in accordance to applicable federal, state and local codes and standards. All applicable codes shall supersede any feature directly or indirectly implied by these plans and specifications. Where work of a higher degree is indicated in the plans and specifications, this requirement shall govern.
- Equipment, registers and grilles are to be as specified, or equal. Substitutions must demonstrate equivalence on unit capacities and air flow performance based upon design conditions, including SEER, EER, AFUE, sensible capacity at design conditions, heating output, airflow at design static pressure, cooling coil static pressure drop across wet coil, etc. All equipment must be installed in accordance with manufacturer's recommendations.
- Where mechanical equipment is located in the attic provide access and passage way in accordance with 2022 California Mechanical Code, Section 304.4 Provide a minimum 24" wide solid floor passageway to the equipment. The centerline distance from the access point to the equipment shall not exceed 20ft. The passage way must be unobstructed and the access shall be large enough to remove the largest piece of equipment.
- Adhesives, sealants and caulks used on the project shall meet requirements of the 2022 California Green Code, Section 4.504.1.
- This design was based upon the architectural and structural plans provided to the designer at the time this design was performed. It is the owner/builders responsibility to coordinate these plans with framing and other trades.
- Installing contractor shall review the design and assume full responsibility for proper installation, operation, and acceptable noise levels.

Installation Notes

- Locations of equipment, registers, grilles and duct shown on these plans are approximate and are shown for schematic purposes only and for clarity. If the actual location of equipment, registers, grilles and ducts significantly vary from the plans to the extent that airflow may be impeded or reduced, it is the installing contractor's responsibility to meet the intended design performance.
- Cooling coil(s) condensate and overflow lines are to be properly trapped, vented, and sloped for drainage in accordance with 2022 California Mechanical Code, Sections 310.4, 310.5 and 310.6.
- Cooling coils installed in attic spaces are to be installed over an auxiliary water tight safety pan. Safety pan is to have drainage in case of cooling coil overflow. Drainage overflow piping to be piped to an outside wall and over a window. Pipe through wall is to be terminated with a 90-degree elbow, turned down. Piping through walls is to be flashed and made water tight.
- Exact location of heating and cooling unit(s) is to be verified and determined on site.
- All ductwork shall be installed and supported in accordance with 2022 California Mechanical Code and manufacturer's published recommendations.
- All supply air registers boots are to be provided and installed with sheet rock grounds and transitional duct connections (PH-1, PH-2 or PH-3) B-Boxes or shallow boots with tap-ins is not allowed unless approved otherwise.
- All return air boots are to be a minimum of 6" in depth and be provide and installed with sheet rock grounds.
- In accordance with 2022 California Green Code, Section 4.504.1, At time of rough installation, or during storage on the construction site and until final start up of the heating and cooling equipment, all duct and other related air distribution component openings shall be covered.
- All sheet metal duct and fittings and register/grille boots, including seams, are to be sealed air tight with approved duct sealant. After installation, the entire system shall be tested and certified in accordance with the Title 24 CF-1R document.
- All sheet metal duct and fittings are to be externally insulated with in accordance with Title 24 specifications. Insulation is to be lapped, pulled tight and secured in accordance with manufacturer's recommendations. Pulling up flexible duct insulation and vinyl covering over sheet metal fittings is NOT acceptable.
- Exhaust fan discharge air is to be discharged outside. As per 2022 California Mechanical Code, Section 407.2, the point of discharge air shall be located a minimum of 10ft. from any mechanical ventilation intake and a minimum of 10ft. from any occupied areas, doors or windows which allows air entry into the building.
- All cavities and spaces provided to convey supply, return or fresh air shall be fully ducted using duct board, sheet metal, flexible duct or other approved materials. Plywood, drywall, OSB, 2x4's, 2x6's, etc are NOT approved materials. Boxed in framing members, panned joists and stud bays, or other non-ducted building cavities are prohibited.
- This design incorporates trunk and branch layouts for the strict purpose of zoning and air balancing. The installing contractor shall furnish and install inline-balancing dampers, with locking quadrants, in all main ducts leading away from the primary supply air plenum and/or where shown on plans.
- Final air balancing is the responsibility of the installing contractor as per 2022 California Mechanical Code, Section 314.1. Air balancing is to be performed on every home using a calibrated Balometer. Unless otherwise noted, the CFM shown at each register is an average design CFM of cardinal orientations, unless specified otherwise, required to meet the room heating and cooling loads. Air balancing using register adjustments is acceptable for fine tuning the air balance only. When an Air Balancing Schedule is provided, air balance to the specific orientation.
- Refrigerant line sets are to be sized in accordance with manufacturer's recommendations and are not to exceed the maximum distance per manufacturer's specifications.
- Refrigeration service ports located outdoors shall be fitted with locking-type tamper-resistant caps or shall be protected from unauthorized access by means acceptable to the Enforcing Agency in accordance with 2022 California Mechanical Code, Section 1105.11.
- Refrigerant suction piping is to be insulated in accordance with T24 Mandatory Measures 150(g), Building Energy Efficiency Standards Table 150-B and Equation 150-A, Protection of insulation shall be in accordance with Section 150(j)(8)A - Mandatory Features and Devices.
- If applicable, special care must be taken in lying out, cutting and installing duct through TGI floor joists. Passage through floor joist is to be in accordance with floor joist manufacturer's recommendations and guidelines.
- Thermostats shall be 5-day/2-Day programmable night setback.

Indoor Air Quality (IAQ)
Minimum calculated ventilation rate is calculated in accordance the 2022 Residential Compliance Manual Section 4.6.5. When the performance compliance approach is used, the compliance software completes all the calculations given in Equations 4-1, 4-2, 4-3, and 4-4, and Qian is reported on the CF1R.
<b>Minimum Calculated CFM per CF1R = 45 CFM</b>
Hall EF-2 Exhaust Fan is designated as the continuous operating Indoor Air Quality Ventilation fan. Exhaust shall be equal to or greater than 89 CFM @ .25" ESP and rated at $\leq 1.0$ Sones, in accordance with 2022 Residential Compliance Manual. Exhaust duct shall be sized in accordance with the prescriptive duct sizing method. The homeowner is to be provided with instructions on how to operate the system.
<b>Wall switch to be mounted @ 7'-0" above finish floor</b> Wall switch is to be labeled "Whole House Ventilation Fan to Remain ON at all times the House is Occupied unless outdoor air quality is poor". The homeowner is to be provided with instructions on how to operate the ventilation system.
<b>REGISTERED copy of the CF3R-MCH-27 form shall be submitted prior to final inspection, signed by a Certified HERS Rater</b>

HVAC Title 24
<b>2022 Energy Standards</b>
See T24 CF-1R Energy Compliance Document for Selected and/or Required Energy Measures.
<b>Humidity Control</b>
2022 California Green Building Standards Code, Section 4.506.1 for bathrooms with tub, shower, or combination tub/shower only
<b>H</b> 1. Humidity controls shall be capable of adjustment between a relative humidity range of not less than 50% to a maximum of 80%. 2. Humidity control may utilize manual or automatic means of adjustment. 3. Humidity control may be a separate component to the exhaust fan and is not required to be integral (i.e., built-in)

Minimum Air Filtration
2022 California Mechanical Code ASHRAE 62.2, Section 401.2 requires that minimum filtration be no less than MERV 13, installed prior to occupancy in HVAC systems outside air and return air having more than 10 ft of ductwork.
<b>MANDATORY: Filter racks or filter grilles shall be gasketed or sealed to prevent air from bypassing the filter per Section 150.0(m)2bV</b>
<b>Environmental Quality</b>
2022 California Green Building Standards Code, Section 4.504.1 Mandatory Measure requires that at time of rough installation, all duct and other related air distribution component openings shall be covered.

Installer and Special Inspector Qualifications
<b>2022 California Green Building Standards, Chapter 7</b>
702.1 HVAC Systems installer shall be trained and certified in the proper installation of HVAC systems.
702.2 Special inspectors employed to provide compliance with this code shall be qualified and/or certified in the discipline they are inspecting.
703.1 Documentation shall be provided showing compliance with the mandatory measures for this code.

Heating, Ventilation and Air Conditioning Design Note
Heating and Air Conditioning System Design is in accordance with 2022 California Green Building Standards, Section 4.507.2. Note: 1) Duct system is sized in accordance with ACCA Manual J Load Calculations and Manual D Duct Sizing based upon maximum air flow requirement for cooling CFM. 2) Duct has been sized to accommodate cardinal orientations. 3) CFM distribution noted on plans represent the air flow requirements for the noted orientation. 4) Ducts can be oversized one duct size (i.e. 7" to 8"), but not undersized. Oversizing reduces air velocity, therefore, the mechanical contractor is to install manual volume dampers in oversized duct in order to adjust air flow and maintain balance in the duct system. 5) Heating and cooling equipment is sized in accordance with ACCA Manual S based upon building loads calculated in accordance with ACCA Manual J. 6) Contractor to verify SEER, EER, Duct R-Value and testing requirements as specified in Title-24 Energy Compliance Document Form CF-1R.
<b>Wrightsoft Universal, Version 24.0.01</b> Energy and HVAC Consulting Services
<i>Alan M. Intosh</i>

Humidistat control integrated with with Exhaust Fan EF-1. See Exhaust Fan Schedule. (Typical)

Ceiling exhaust fan. See Exhaust Fan Schedule. (Typical)

Indoor Fan Coil Unit in attic mechaical space. See Fan Coil Installatin Schematic on M2. See Installation Note 2.

IAQ Ventilation Exhaust Fan. Set fan CFM to meet or exceed required ventilation rate. See Indoor Air Quality block note.

Exhaust fan duct thru roof complete with weather proof discharge cap. Size as Noted. (Typical)

Ceiling return air filter grille for 2" - MERV 13 Filter. The return air filter boot is to be a minimum 8" deep. See Minimum Air Filtration and Register / Grille Schedule.

Thermostat mounted on wall at +5'-0" above finish floor.

IAQ Ventilation control switch. See Indoor Air Quality block Note.

Outdoor Heat Pump Unit to be securely fastened on concrete housekeeping pad. Unit location varies by lot size. Verify location.

HP Condensing units refrigerant service ports to be furnished with locking, tamper resistant caps. See Installation Note 16.

Outdoor condensing unit to be installed and securely fastened in accordance with manufacturer's installation instructions. Installation instructions shall be provided to the field inspector. (CMC Section 303.4)

Install recessed DryerBox in wall. 3x6 clothes dryer vent duct up wall. Transition to 5" duct in attic and discharge through roof wall with weather proof discharge cap complete with back draft damper. See Dryer Vent Block Note on M2.

Range hood duct thru Roof complete with weather tight discharge roof cap. Verify size, location and height AFF See Range Hood Air Flow Rate block note.

Kitchen Rang Hood (by others) to be HVI or AHAM Directory Rated. Minimum intermittent ventilation airflow sized in accordance with the 2022 Title 24 Residential Standards Table 150.0-G; HERS Verified.

Manual Volume Damper. Set full open on initial installation. HVAC Contractor to set damper upon air balancing. (Typical)

R-8 Duct in attic space supported every 4'-0". Size as noted. Typical of all duct shown.

Ceiling supply air register. See Register and Grille Schedule. (Typical)

Register Key. CFM and register size noted. See Cardinal CFM Distribution Schedule and Register and Grille Schedule. (Typical)

Kitchen Range Hood Air Flow Rates		
Table 150.0.G Kitchen Range Hood Airflow Rates (cfm) and ASHRAE 62.2-2019 Table 150.0-G Kitchen Range Hood The Energy Code requires verification that range hoods are HVI or AHAM-certified to provide at least one speed setting at which they can deliver at least 100 CFM at a noise level of 3 sones or less type		
Dwelling Unit Floor Area (SqFt)	Hood Over Electric Range	Hood Over Natural Gas Range
>1500	50% CE or 110 cfm	70% CE or 180 cfm
>1000 - 1500	50% CE or 110 cfm	80% CE or 250 cfm
750 - 1000	55% CE or 130 cfm	85% CE or 280 cfm
<750	65% CE or 160 cfm	85% CE or 280 cfm

2022 Energy Efficiency Contractor Requirements
It is the Builder and Installing Contractor responsibility to refer to the Title 24 CF1R Certificates of Energy Compliance for verification of energy measures and required contractor testing.
After installation the installing contractor shall submit an Installation Certificate (Form, CF2R), completed and signed by the installer, listing the equipment installed (manufacturer, model, and efficiencies), along with other field verifications and Testing as specified in the Title 24 Certificate of Compliance (Form CF1R).
Registered copies of Installing Contractor CF2R and HERS Rater CF3R Field Verified and Diagnostic Testing Forms are to be submitted prior to final inspection in accordance with CEES Sections 10-103(a)(3) and 10-103 (a)(5).

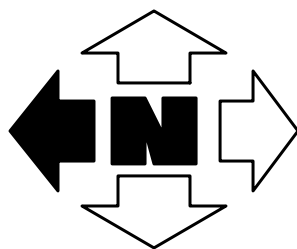
100 CFM  
14 x 6 - CS3

HVAC Floor Plan

Scale: 1/2" = 1'-0"

These plans and documents have been reviewed for compliance with the applicable codes requirements of the jurisdiction. The stamping of these plans shall not be held to permit or be an approval of any violation of applicable codes and standards nor relieve the owner, design professional of record or contractor of compliance with applicable codes and standards

ROD CARSEY CONSULTING & PLAN CHECK SERVICE



CITY OF HANFORD BUILDING DIVISION  
**APPROVED**  
THIS SET OF PLANS AND SPECIFICATIONS MUST BE KEPT ON THE JOB AT ALL TIMES AND NO CHANGES OR ALTERATIONS SHALL BE MADE EXCEPT BY THE BUILDING DIVISION.  
THE STAMPING OF THIS PLAN AND SPECIFICATIONS SHALL NOT BE HELD TO PERMIT OR TO BE AN APPROVAL OR THE VIOLATION OF ANY PROVISIONS OF ANY CITY ORDINANCE OF STATE LAW, OR FEDERAL OR CODE COMPLIANCE.  
By *Mitchell Consh*  
12/11/2025

DISCLAIMER:  
BY USING THESE STANDARD PLANS, THE USER AGREES TO RELEASE THE CITY OF HANFORD FROM ANY AND ALL CLAIMS, LIABILITIES, SUITS, AND DEMANDS ON ACCOUNT OF ANY INJURY, DAMAGE, OR LOSS TO PERSONS OR PROPERTY, INCLUDING INJURY OR DEATH, OR ECONOMIC LOSSES, ARISING OUT OF THE USE OF THESE CONSTRUCTION DOCUMENTS. THE USE OF THESE PLANS DOES NOT ELIMINATE OR REDUCE THE USER'S RESPONSIBILITY TO VERIFY ANY AND ALL INFORMATION.



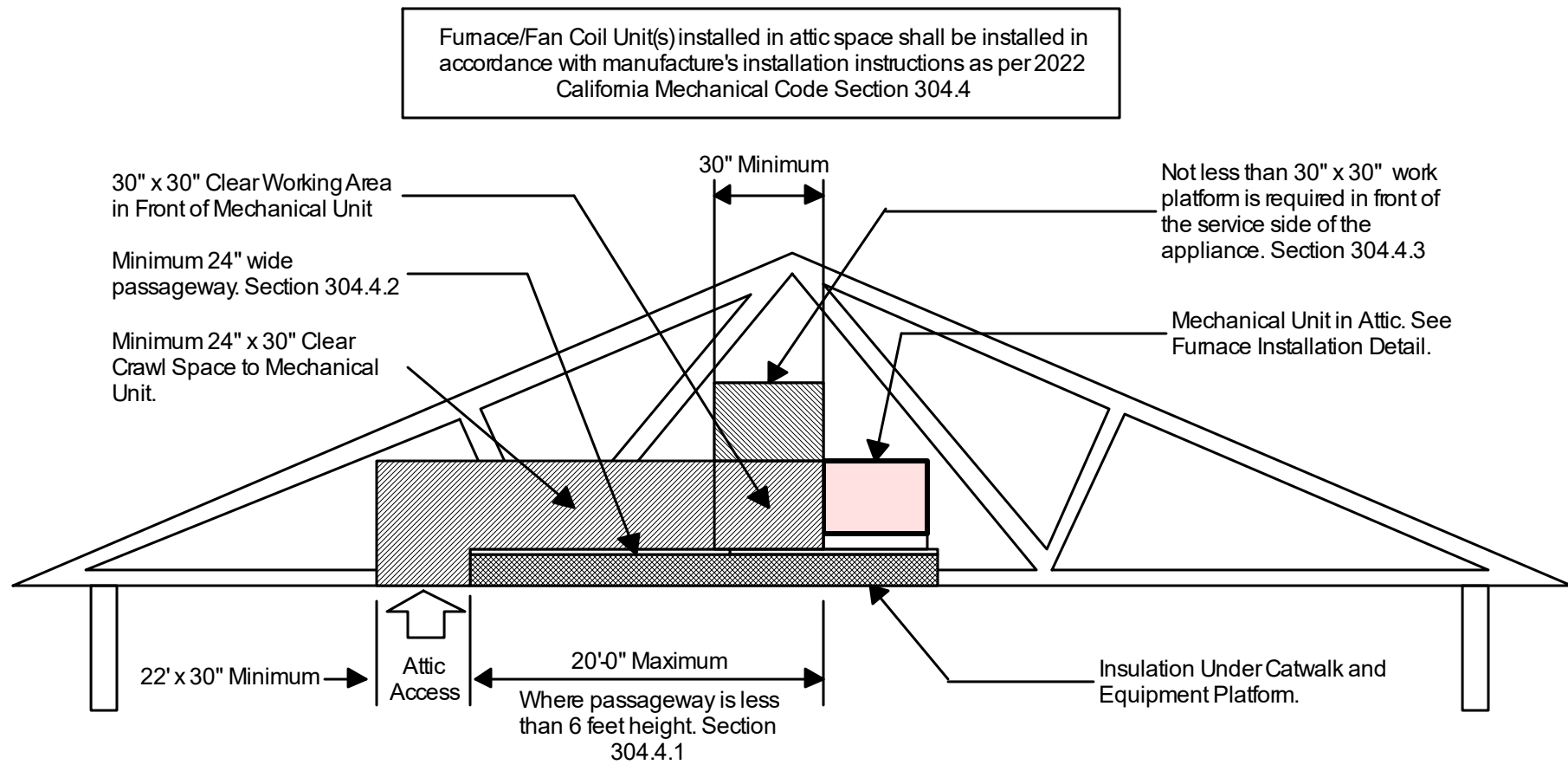
REVISIONS	

PROJECT TITLE		DATE	
CITY OF HANFORD - PRE-REVIEWED ADU PROGRAM		04/22/2024	
SHEET DESCRIPTION		AGENCY	
HVAC PLAN		SJV REAP	

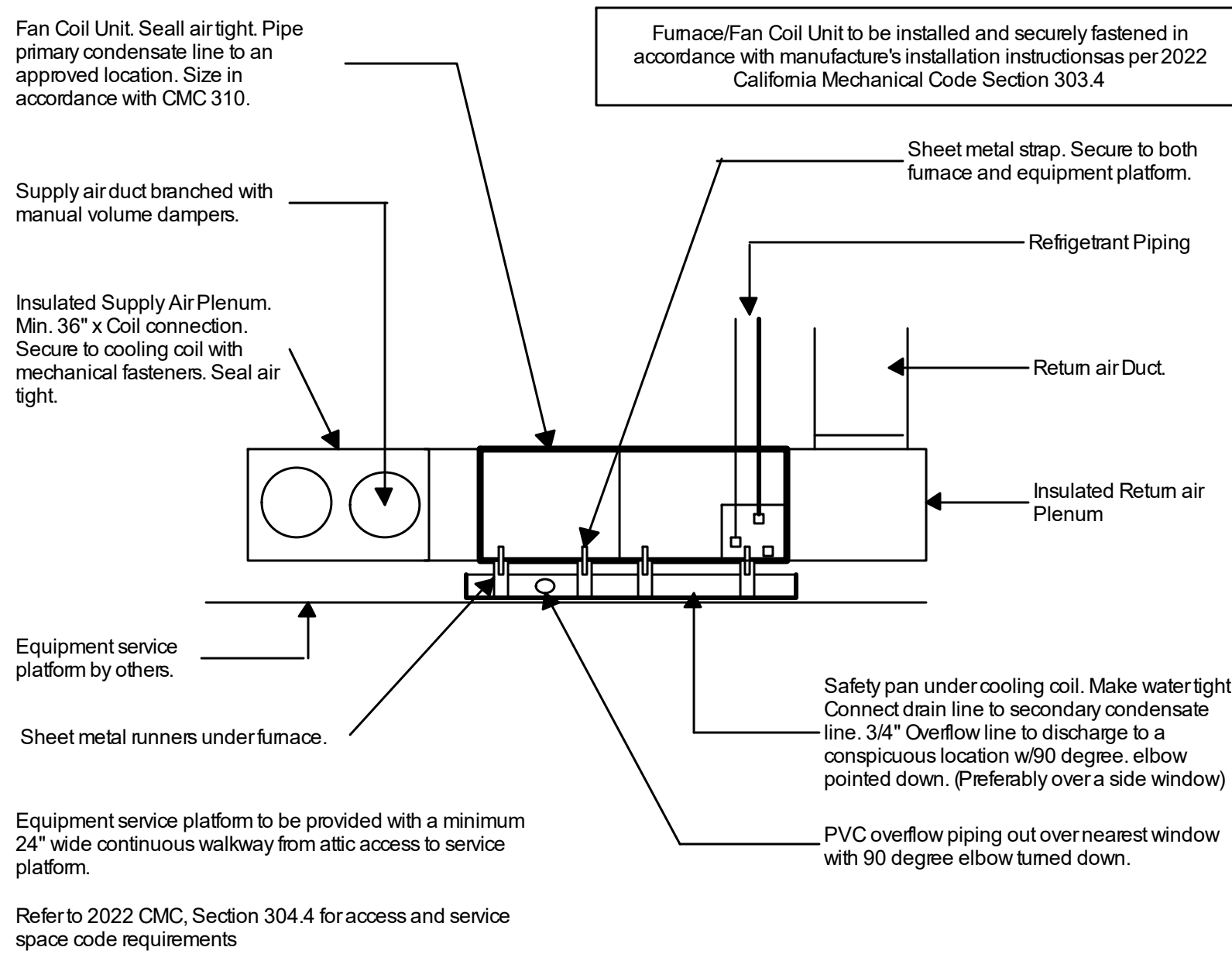
ADU SQFT  
**775**

DRAWING SCALE

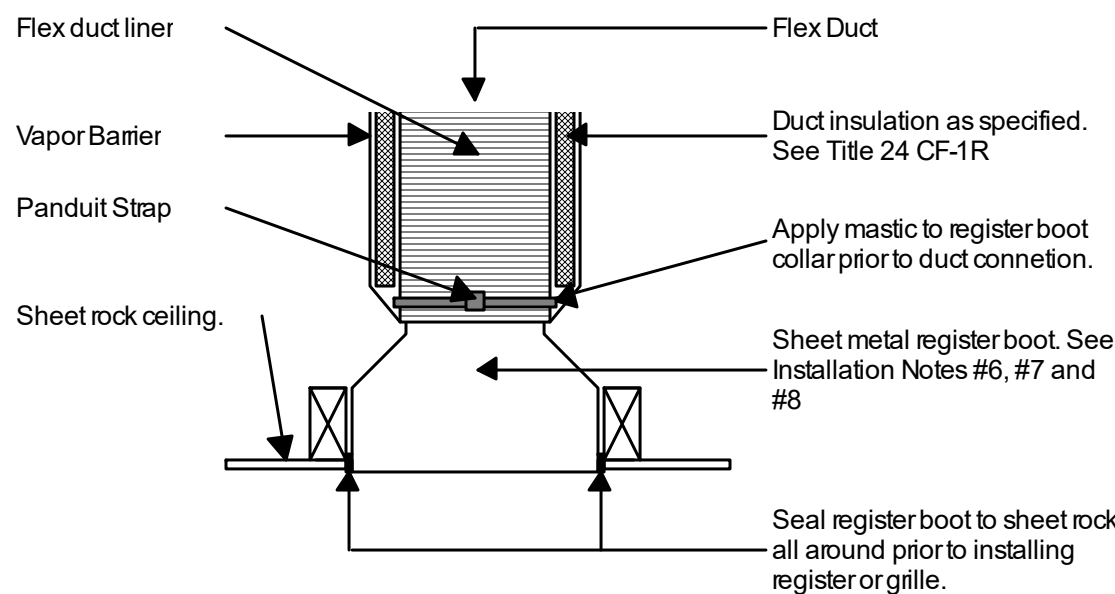
**1/2" = 1'**



Minimum Attic Equipment Access Requirements



Fan Coil Installation In Attic Detail



Note: 2022 California Green Building Standards Code, Section 4.504.1 Mandatory Measure requires that at time of rough installation, all duct and other related air distribution component openings shall be covered.

Register Boot Installation

#### Clothes Dryer Venting Note

Clothes Dryer Venting: 1) Dryer venting shall be installed in accordance with Section 504.4.2 of the 2022 California Mechanical Code, unless otherwise permitted and approved by the building official. 2) A minimum four (4) inch diameter dryer vent is allowed. 3) The total length of a 4" dryer vent shall not exceed a total combined horizontal and verticle length of 14 feet, including (2) two 90-degree elbows. 4) Increasing the size of the dryer vent ducting to increase total length, less than or equal to the pressure drop of item 3, is allowed subject to the local Administrative Authority. 5) Dryer vent ducting is to be five (5) inch unless noted otherwise. 6) Dryer duct is to terminate on the outside of the building and shall be equipped with a back draft damper. Duct is to be sealed airtight. Duct in crawl spaces or attic space is to be exteriorly insulated with 1", 3/4lb. duct wrap.

#### Heating and Cooling Equipment Schedule

Outdoor Heat Pump Unit											
Mark	Mfr	Model Number	Nom. Tons	Cooling MBH		Heating MBH		Electrical			WT LBS
				Total	Sens.	47degF	17degF	Volts/Ph	MCA	MOP	
HP-1	Goodman	GSZH5024	2.0	23.2	18.4	22.8	13.6	208/230-1	15.3	25	193
Fan Coil Unit w/Electric Heat											
Mark	Mfr	Model Number	CFM	ESP In. W.C.	Type	Electrical Single Circuit			WT LBS	Remarks	
						Load	Volts/Ph	MCA			
FC-1	Goodman	AMST30BU	800	0.7	HP	3/4	208/230-1	5.6/5.6	15/15	129	R-410A w/TVX
SEER, EER, MBH Cooling MBH based upon 95 deg.F OADB, 67 deg.F EWB, 80 deg.F EDB with scheduled cooling coil.											
AHRI Certificate						Electric Heat Pack Installed					
Mark	Certificate No.	SEER2	EER2	HSPF2	Mark	Mfr	Model Number	KW	AMPS	MCA	MOP
HP/FC-1	208509795	15.2	12.5	7.8	FC-1	Goodman	HKS*05XC	5	17.3/20	27/30.6	30/35
Fan Coil Fan to be a Variable Speed ECM Motor. Set CFM dip switches. Maximum 0.45 Watts per CFM											
Fan Coil Unit are to be side or bottom return air inlet only. Units are to be mounted on metal runners.											
Fan Coil Unit to be registered with the CEC as a Low Leakage Air Handling Unit											

#### Exhaust Fan Schedule

Mark	Mfr	Model Number	CFM Set Point	S.P. W.G.	In. W.G.	Sones	Electrical				Type	Duct Conn	Op. Wt. LBS
							Watts	CFM/Watts	Volts	Ph			
EF-1	Broan	AE80S Humidity Sensing	80	0.1	0.7	0.7	24.5	3.3	120	1	Ceiling	4" Dia	9
EF-2	Broan	AE50	50	0.1	0.5	0.5	20.0	3.5	120	1	Ceiling	4" Dia	10
Exhaust fan(s) serving bathrooms which contains a bathtub, shower or tub/shower combination are to be controlled by a Humidistat which shall be readily accessible as per 2019 California Green Code, Section 4.506.1 Mandatory Measure. Humidistat shall be capable of adjustment between a relative humidity range of 50 to 80 percent.													
Bathroom Exhaust fan(s) are to be on with either a light switch or motion sensor.													
Exhaust fan(s) designated as the IAQ Ventilation Fan is to meet minimum requirements of exhaust rate @ .25: ESP and <= 1.0 Sone level. See Indoor Air Quality (IAQ) block Note.													
Exhaust ducting is to be sized in accordance with Table 150.0-H (ASHRAE 62.2: Table 5-3) Prescriptive Duct Sizing for Single Fan Exhaust Systems.													
Ducts shall be securely connected, be supported and secured using approved steps. All joints are to be seal airtight. Exhaust fans are to be provided with back draft damper. Install an appropriate screened termination cap.													

Table 150.0-H Prescriptive Ventilation System Duct Sizing [ASHRAE 62.2: Table 5-3]

Fan Airflow Rating, cfm at minimum static pressure <sup>a</sup> 0.25 in. water cfm (U.S. at minimum 52.5 Pa)	<=50 (25)		<=60 (40)		<=125 (60)		<=150 (70)		<=175 (85)		<=200 (95)		<=250 (120)		<=350 (165)		<=400 (190)		<=450 (210)		<=700 (330)		<=800 (380)	
	Minimum Duct Diameter, In. (mm)		For Rigid duct		For Rigid duct		For Rigid duct		For Rigid duct		For Rigid duct		For Rigid duct		For Rigid duct		For Rigid duct		For Rigid duct		For Rigid duct		For Rigid duct	
Minimum Duct Diameter, In. (mm)	4 (100)	5 (125)	5 (125)	6 (150)	6 (150)	6 (150)	7 (175)	7 (175)	7 (175)	7 (175)	8 (200)	8 (200)	8 (200)	9 (225)	9 (225)	10 (250)	10 (250)	10 (250)	12 (300)	12 (300)	12 (300)	12 (300)	12 (300)	12 (300)
Minimum Duct Diameter, In. (mm)	4 (100)	4 (125)	6 (150)	6 (150)	7 (175)	7 (175)	7 (175)	8 (200)	8 (200)	8 (200)	8 (200)	9 (225)	9 (225)	9 (225)	10 (250)	10 (250)	10 (250)	10 (250)	NP	NP	NP	NP	NP	NP

Footnotes for Table 150.0-H

- For noncircular ducts, calculate the diameter as four times the cross-sectional area divided by the perimeter.
- NP = application of the prescriptive table is not permitted for this scenario.
- Use of this table for ventilation of flex duct systems requires flex duct to be fully extended and any flex duct elbows to have a minimum bend radius to duct diameter ratio of 1.0.
- For this scenario, use of elbows is not permitted.
- For this scenario, 4 in. (100 mm) oval duct shall be permitted, provided the minor axis of the oval is greater than or equal to 3 in. (75 mm).
- When a vented range hood utilizes a capture efficiency rating to demonstrate compliance with 150.0(e)1 G1b, a static pressure greater than or equal to 0.25 in. of water at the rating point shall not be required, and the airflow listed in the approved directory corresponding to the compliant capture efficiency rating point shall be applied to Table 150.0-H for determining compliance.

#### Register and Grille Schedule

Mark	Mfr	Model	Service	Type	Pattern	Size	CFM
CS2	Shoemaker	202	Supply	Ceiling	2-Way	As Noted	As Noted
CS3	Shoemaker	203	Supply	Ceiling	3-Way	As Noted	As Noted
CS4	Shoemaker	204	Supply	Ceiling	4-Way	As Noted	As Noted
SW	Shoemaker	950	Supply	Sidewall	Spread	As Noted	As Noted
FGR	Shoemaker	935FG2	Return	Ceiling/Sidewall	Bar Faced	As Noted	-
CR/CTG	Shoemaker	1050	Return	Ceiling/Sidewall	-	As Noted	-
Scheduled registers and grilles are for reference only and can be substituted with "or equal".							

#### Plan 775

##### CFM Distribution Schedule

Room Name	House Facing				Max	Min	Average
	North	East	South	West			
	Cool	Cool	Cool	Cool			
Ground Floor Zone							
Living Room	406	354	394	386	406	354	385
Kitchen	153	170	161	156	170	156	162
Bathroom	67	124	61	95	124	61	87
Bedroom 1	95	70	111	63	111	63	85
Bedroom 2	73	82	73	100	100	73	82
<b>Total CFM</b>	800	800	800	800	911	707	800
Air Balancing Notes: 1) CFM delivery allocations is based upon ACCA Manual J room-by-room heat gain/heat loss calculations. 2) Depending upon homeowner lifestyle and space usage, air balancing requirements may vary. 3) Air Balance to within +/- 15% of stated air flow. 4) After air balancing to the above, it is the homeowners responsibility to fine tune air flows to individual requirements.							

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CITY OF HANFORD



#### REVISIONS


PROJECT TITLE		CITY OF HANFORD - PRE-REVIEWED ADU PROGRAM	
SHEET DESCRIPTION		HVAC PLAN	
AGENCY		DATE	04/22/2024
S/J		REAP	

ADU SQFT

775

DRAWING SCALE

1/2" = 1'

CITY OF HANFORD BUILDING DIVISION APPROVED

THIS SET OF PLANS AND SPECIFICATIONS MUST BE KEPT ON THE JOB AT ALL TIMES AND NO CHANGES OR ALTERATIONS SHALL BE MADE EXCEPT BY THE BUILDING DIVISION.

THE STAMPING OF THIS PLAN AND SPECIFICATIONS SHALL NOT BE HELD TO PERMIT OR TO BE AN APPROVAL OR ANY VIOLATION OF ANY PROVISIONS OF ANY ORDINANCE OF STATE OR FEDERAL OR CODE COMPLIANCE.

By Mitchell Consh  
12/11/2025

CERTIFICATE OF COMPLIANCE - RESIDENTIAL PERFORMANCE COMPLIANCE METHOD					CIPR-PHF-01-E (Page 1 of 13)	
Project Name: Harford Plan 775 ADU					Calculation Date/Time: 2024-10-23T16:31:18Z 07:00	
Calculation Description: Title 24 Analysis					Input File Name: Precision_Engineering_Harford Plan 775 ADU.rbd2x	
<b>GENERAL INFORMATION</b>						
01	Project Name	Harford Plan 775 ADU				
02	Run Title	Title 24 Analysis				
03	Project Location	Various Locations				
04	City	Harford	05	Standards Version	2022	
06	Zip code	92320	07	Software Version	Energysp 9.3	
08	Climate zone	13	09	Front Orientation (deg. Cardinal)	All orientations	
10	Building Type	Single Family		Number of Dwelling Units	1	
12	Project Scope	Newly Constructed	13	Number of Bedrooms	2	
14	Addition Cond. Floor Area (sq.ft.)	0	15	Number of Stories	1	
16	Existing Cond. Floor Area (sq.ft.)	0	17	Foundation Average R Factor	0.3	
18	Total Cond. Floor Area (sq.ft.)	0	19	Glazing Percentage (%)	13.20%	
20	ADU Bedroom Count	n/a	21	ADU Conditioned Floor Area	n/a	
22	Fuel Type	Natural gas	23	No Dwelling Unit	No	
<b>COMPLIANCE RESULTS</b>						
01	Building Compliant with Computer Performance					
02	This building incorporates features that require final testing and/or verifications by a certified HERS rater under the supervision of a CEC-approved HERS provider.					
03	This building incorporates one or more Special Features shown below:					

<b>CERTIFICATE OF COMPLIANCE - RESIDENTIAL PERFORMANCE COMPLIANCE METHOD</b>			<b>C19-PRF-01-01</b>			
Project Name: Harford Plan 775 ADU			Calculation Date/Time: 2024-10-23T16:33:18-07:00			
Calculation Identifier: T23-A Analysis			(Page 2 of 13)			
Input File Name: Process_Engineering_Harford Plan 775 ADU.rbd2x						
ENERGY DESIGN RATINGS						
	Energy Design Ratings			Compliance Metrics		
	Source Energy (EORR)	Efficiency <sup>(1)</sup> EDR (EDR/EORR)	Total <sup>(2)</sup> EDR (EDRTotal)	Source Energy (EORR)	Efficiency <sup>(1)</sup> EDR (EDR/Efficiency)	Total <sup>(2)</sup> EDR (EDRTotal)
Standard Design	10.4	45.2	34.1			
Proposed Designs						
North Facing	48.3	43.5	33	2.3	1.7	3.1
East Facing	48.3	43.1	33	2.1	1.5	1.1
South Facing	47.9	42.7	32.6	2.5	2.5	3.5
West Facing	46.4	44.6	33.8	2	0.4	0.3
<b>RESULT<sup>(3)</sup> PASS</b>						
<sup>(1)</sup> Efficiency EDR includes improvements like a better building envelope and more efficient equipment. Total EDR includes efficiency and demand response measures such as photovoltaic (PV) energy production facilities. *Building compliance may cause source energy, efficiency and total compliance metrics are greater than or equal to zero and unmet loads have limits are not exceeded						
<b>Standard Design Source Capacity: 2.48 kW(s)</b> <b>Proposed PV Capacity: South = 2.48 kW(s) East = 2.48 kW(s) West = 2.48 kW(s) North = 2.48 kW(s)</b>						

CERTIFICATE OF COMPLIANCE - RESIDENTIAL PERFORMANCE COMPLIANCE METHOD						C19-PR-01 (Page 3 of 13)
Project Name: Harford Plan 775 ADU			Calculation Date/Time: 2024-10-23T16:33:18-07:00			
Calculation Description: Title 24 Analysis			Input File Name: Proposed Engineering_Harford Plan 775 ADU/rsd2d			
ENERGY USE SUMMARY						
Energy Use	Standard Design Source Energy (EEDI) (Btu/hm <sup>2</sup> -yr)	Standard Design TDV Energy (EEDT) (Btu/hm <sup>2</sup> -yr)	Proposed Design Source Energy (EEDI) (Btu/hm <sup>2</sup> -yr)	Proposed Design TDV Energy (EEDT) (Btu/hm <sup>2</sup> -yr)	Compliance Margin (EEDI)	Compliance Margin (EEDT)
Space Heating	1.57	11.59	1.6	11.94	-0.03	-0.35
Space Cooling	2.09	54.84	2.6	54.16	0.09	0.7
HVAC Ventilation	0.45	4.83	0.45	4.83	0	0
Water Heating	9.9	41.63	8.89	37.54	1.01	4.09
Self Utilization/Flexibility Credit			0	0	0	0
<b>Net-to-Fair Efficiency Compliance Total</b>	<b>14.61</b>	<b>112.89</b>	<b>13.54</b>	<b>108.45</b>	<b>1.07</b>	<b>4.44</b>
Space Heating	1.57	11.59	1.58	11.59	-0.01	0
Space Cooling	2.09	54.84	2.67	55.07	0.02	-0.23
HVAC Ventilation	0.45	4.83	0.45	4.83	0	0
Water Heating	9.9	41.63	8.89	37.54	1.01	4.09
Self Utilization/Flexibility Credit			0	0	0	0
<b>End-Using Efficiency Compliance Total</b>	<b>14.61</b>	<b>112.89</b>	<b>13.59</b>	<b>109.03</b>	<b>1.02</b>	<b>3.86</b>

CERTIFICATE OF COMPLIANCE - RESIDENTIAL PERFORMANCE COMPLIANCE METHOD					CFSR PRF-01 (Page 4 of 13)
Project Name: Hanford Plan 775 ADU			Calculation Date/Time: 2024-10-23T16:33:18-07:00		
Calculation Description: Title 24 Analysis			Input File Name: Precision Engineering_Hanford Plan 775 ADU.rbd2x		
ENERGY USE SUMMARY					
Energy Use	Standard Design Source Energy (ESED) [kBtu/(ft <sup>2</sup> ·yr)]	Standard Design TDV Energy (EDSD) [kWh/(ft <sup>2</sup> ·yr)]	Proposed Design Source Energy (ESDP) [kBtu/(ft <sup>2</sup> ·yr)]	Proposed Design TDV Energy (EDPD) [kWh/(ft <sup>2</sup> ·yr)]	Compliance Margin (EM%)
Space Heating	1.57	11.99	1.43	10.47	0.14
Space Cooling	2.69	54.84	2.6	53.81	0.09
HVAC Ventilation	0.45	0.45	0.45	0.45	0
Water Heating	9.9	41.63	8.89	37.54	1.01
Utilization/Facility Credit			0	0	0
North Facing Efficiency Compliance Total	14.61	112.89	13.37	106.65	1.24
South Facing Efficiency Compliance Total					6.24
Space Heating	1.57	11.99	1.54	11.4	0.05
Space Cooling	2.69	54.84	2.75	58.06	-0.06
HVAC Ventilation	0.45	0.45	0.45	0.45	0
Water Heating	9.9	41.63	8.89	37.54	1.01
Utilization/Facility Credit			0	0	0
West Facing Efficiency Compliance Total	14.61	112.89	13.63	111.83	0.98

Registration Number: 624-PJ-102590A-000-20000000000000000000	Registration Date/Time: 1/24/2024 0:30	HPSI Provider: CHERS
Project Name: Hartford Plan 775 ADU	Report Description: 2022.0000 Precision Energy Audit Report with all optional features and all optional features included.	Report Generated: 2024-10-29 16:33:50
Calculation Description: Title 18 Analysis	Report Version: 2022.0000	
Cd Building Energy Efficiency Standards - 2022 Residential Compliance	Schema Version: net2020081	

CERTIFICATE OF COMPLIANCE - RESIDENTIAL PERFORMANCE COMPLIANCE METHOD	CFIR-PHF-01-E (Page 5 of 3)
Project Name: Hartford Plan 775 ADU	Calculation Date/Time: 2024-10-23T16:33:18-07:00
Calculation Description: Title 18 Analysis	Input File Name: Precision_EnergyAudit_HartfordPlan_775 ADU\Ind2.txt

ENERGY USE INTENSITY	Standard Design (Btu/kWh <sup>2</sup> · yr)	Proposed Design (Btu/kWh <sup>2</sup> · yr)	Compliance Margin (Btu/kWh <sup>2</sup> · yr)	Margin Percentage
<b>North Facing</b>				
Gross EUI <sup>1</sup>	34.5	33.34	1.16	3.36
Net EUI <sup>2</sup>	17.3	16.15	1.15	6.65
<b>East Facing</b>				
Gross EUI <sup>1</sup>	34.5	33.54	0.96	2.78
Net EUI <sup>2</sup>	17.3	16.85	0.45	2.59
<b>South Facing</b>				
Gross EUI <sup>1</sup>	34.5	33.26	1.24	3.59
Net EUI <sup>2</sup>	17.3	16.07	1.23	7.11
<b>West Facing</b>				
Gross EUI <sup>1</sup>	34.5	33.6	0.9	2.61
Net EUI <sup>2</sup>	17.3	16.41	0.89	5.14

Notes:  
1 Net EUI is Energy Use Total (not including PV). Total Building Area.  
2 Net EUI is Energy Use Total (including PV). Total Building Area.

CERTIFICATE OF COMPLIANCE - RESIDENTIAL PERFORMANCE COMPLIANCE METHOD										Calculation Date/Time: 2024-10-23T16:33:18.07:00		C18-Pref 01-18
Project Name: Hartford Plan 775 ADU										Input File Name: Processing_Engagement_HartfordPlan_775_ADU.rbd2d2s		Page 6 of 13
REGULATORY PV SYSTEMS												
Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12	
DC System Size (kWdc)	Exception	Module Type	Air/Way Type	Power Electronics	CFI	Airpath (m³/h)	TBR Input	Away Angle (deg)	TDR Lx (in)	Inverter EOL (%)	Annual Solar Access (%)	
2.46	N/A	Standard (144-27W)	Fixed	n/a	n/a	156/270	n/a	n/a	n/a	>=72	96	
<b>REQUIRED SPECIAL FEATURES</b> The following are special features that must be installed as conditions for certifying the monitored home energy performance for this computer analysis. <ul style="list-style-type: none"> <li>■ Insulation below roof deck</li> <li>■ Quality membrane insulation (QMI)</li> <li>■ Indoor air quality ventilation</li> <li>■ Airaches single leak</li> <li>■ Verified LEED/GreenGuard</li> <li>■ Verified IECC/EnergyStar</li> <li>■ Verified Energy Star Certified Water Heater</li> <li>■ Verified ENERGY STAR certified Dishwasher</li> <li>■ Verified HERSI2</li> <li>■ Verified heat pump duct sealing capacity</li> <li>■ Duct leakage testing</li> </ul>												
<b>HERS RATING SUMMARY</b> The following is a summary of the features that must be certified verified by certifying the HERS Rater as a condition for meeting the modeled home energy performance for this computer analysis. Additional detail is provided in the Building systems tables. Registered Q2(R) and CFI(R)s are required to be completed in the HERS Registry												
<b>HERS FEATURE SUMMARY</b> ■ Quality membrane insulation (QMI) ■ Indoor air quality ventilation ■ Airaches single leak ■ Verified LEED/GreenGuard ■ Verified IECC/EnergyStar ■ Verified Energy Star Certified Water Heater ■ Verified ENERGY STAR certified Dishwasher ■ Verified HERSI2 ■ Verified heat pump duct sealing capacity ■ Duct leakage testing												
<b>BUILDING - FEATURES INFORMATION</b>												
Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12	
Project Name	Conditioned Floor Area (sq ft)	Number of Dwelling Units	Number of Bedrooms	Number of Zones	Number of Ventilation Coiling Systems	Number of Water Heating Systems						
Hartford Plan 775 ADU	775		2	1								

<b>STATEMENT OF COMPLIANCE - RESIDENTIAL PERFORMANCE COMPLIANCE METHOD</b> Project Name: <b>Harford Plan 775 ADU</b> Calculation Date: <b>2024-10-23T16:33:18.07</b>										<b>C318-PF-06-1</b> <b>(Page 7 of 13)</b>			
Input File Name: <b>Prevision Engineering_Harford Plan 775 ADU.rbx32</b>													
<b>ZONE INFORMATION</b>													
Zone Name	Zone Type	HWAC System Name	Zone Floor Area (ft²)	Avg. Ceiling Height	Water Heating System 1	Status							
Whole House	Conditioned	Rpt HVAC1	775	8	DHW Sp 1	New							
<b>CLIMATE SURVIVALS</b>													
Event	Zone	Condition	Altitude	Orientation	Gross Area (ft²)	Windflow and Door Area (ft²)							
Front Wall	Whole House	R21 Wall + R5	n/a	Front	291	68							
Left Wall	Whole House	R21 Wall + R5	n/a	Left	171	32							
Back Wall	Whole House	R21 Wall + R5	n/a	Back	291	13							
Right Wall	Whole House	R21 Wall + R5	n/a	Right	171	24							
Roof Wall	Whole House	R08 Attic + R13 Roof	n/a	n/a	720	n/a							
Attic Platform	Whole House	R21 Attic + R13 Roof	n/a	n/a	n/a	n/a							
<b>ATC</b>													
Event	Zone	Condition Type	Roof Slope (ft in 12)	Roof Reflectance	Roof Emittance	Radiant Barrier	Cool Roof						
Attic Whole House	Attic	Combustible	Vertical	1	0.3	0.85	No						
<b>FENESTRATION / GLAZING</b>													
01	02	03	04	05	06	07	08	09	10	11	12	13	14
Window	Type	Surface	Orientation	Altitude	Width (ft)	Height (ft)	Mult.	U-factor	U-factor Source	SHGC	SHGC Source	External Shading	
W003 4040 X0	Window	Front Wall	Front	0	4	4	1	16	0.3	NFRC	0.23	NFRC	Bug Screen
W004 4040 X0	Window	Front Wall	Front	0	4	4	1	16	0.3	NFRC	0.23	NFRC	Bug Screen
W005 4040 X0	Window	Front Wall	Front	0	4	4	1	16	0.3	NFRC	0.23	NFRC	Bug Screen

CERTIFICATE OF COMPLIANCE - RESIDENTIAL PERFORMANCE CALCULATION METHOD														Project Name: Hanford Plan 775 ADU		Calculation Date/Time: 2024-10-23T16:53:18-07:00		Input File Name: Precision Engineering_Hanford Plan 775 ADU_rbd23x		CF19-P98-01-03 (Page 8 of 13)	
FINISTRATION / GLAZING																					
01	02	03	04	05	06	07	08	09	10	11	12	13	14								
Window	Type	Surface	Orientation	Admittance	Width (in)	Height (in)	Area (ft <sup>2</sup> )	U-factor	U-factor Source	SHGC	SHGC Source	Exterior Shading									
W04-040D NO	Window	Left Wall	Left	5.0	3	1	16	0.3	NFRC	0.23	NFRC	Bug Screen									
W05-303D NO	Window	Back Wall	Back	180	3	1	3	0.3	NFRC	0.23	NFRC	Bug Screen									
W06-430D NO	Window	Back Wall	Back	180	4	4	0	12	0.3	NFRC	0.23	NFRC	Bug Screen								
W07-040D NO	Window	Right Wall	Right	270		1	24	0.3	NFRC	0.23	NFRC	Bug Screen									

OPAQUE DOORS									
01		02		03		04			
Name		Side of Building		Area (ft <sup>2</sup> )		U-factor			
3068 Front Door		Front Wall		20		0.2			

OVERHANGS AND FINS													
01	02	03	04	05	06	07	08	09	10	11	12	13	14
Overhang						Left Fin				Right Fin			
Window	Depth	Dist Up	Left Extent	Right Extent	Fixt Mt	Depth	Top Up	Dist L	Bot Up	Depth	Top Up	Dist R	Bot Up
W01-040D NO	1.5	0.7	2.0	3	0	0	0	0	0	0	0	0	0
W02-040D NO	1.5	0.7	2.0	7	0	0	0	0	0	0	0	0	0
W03-040D NO	1.5	0.7	4.5	20	0	0	0	0	0	0	0	0	0
W05-303D NO	1.5	0.7	6	19	0	0	0	0	0	0	0	0	0
W06-430D NO	1.5	0.7	9	20	0	0	0	0	0	0	0	0	0

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**CERTIFICATE OF COMPLIANCE - RESIDENTIAL PERFORMANCE COMPLIANCE METHOD**

Project Name: **Harford Zone 775 ADSU**

Calculation Description: **Table 24 Analysis**

Calculation Date/Time: **2024-10-23T16:33:18.07Z**

Input File Name: **Process\_Engineering\_Harford\_Plan 775 ADSU.tbln2x**

**CPR-PRF-01-E**

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SLAB FIGURES							
01	02	03	04	05	06	07	08
Name	Zone	Area [ft²]	Perimeter [ft]	Edge-Insul. R-value and Depth	Edge-Insul. R-value and Depth	Curved Fraction	Heated
Slab Floor	Whole House	775	115	none	0	80%	No

ONIQUE SURFACE CONDITIONS							
01	02	03	04	05	06	07	08
Construction Name	Surface Type	Construction Type	Draining	Total Ceiling R-value	Interior / Exterior Continuous R-value	U-factor	Assembly Layers
R21 Wall + R5	Exterior Walls	Wood Framed Wall	2x6 @ 16 in. O. C.	R-21	None / 5	0.048	Inside Finish: Gypsum Board Ceiling Finish: R-13 + 2x4 Sheathing / Insulation Exterior Finish: R-5 Sheathing Exterior Finish: Synthetic Stone
Attic: Roof/Whole House	Attic: Roofs	Wood Framed Ceiling	2x4 @ 24 in. O. C.	R-13	None / 0	0.078	Roofing: Light Roof (Asphalt Shingles) Roof Deck: Wood Siding/Sheathing/Decking Ceiling / Frame: R-13 / 2x4 Around Roof Joists: R-0 (insul.)
R18 Attic + R13 Roof	Ceilings (Below attic)	Wood Framed Ceiling	2x4 @ 24 in. O. C.	R-38	None / None	0.025	Over Ceiling Joists: R-28 Insul. Ceiling / Frame: R-8 / 2x4
R21 Attic + R13 Roof	Ceilings (Below attic)	Wood Framed Ceiling	2x4 @ 24 in. O. C.	R-21	None / None	0.044	Over Ceiling Joists: R-13 Insul. Ceiling / Frame: R-8 / 2x4 Under Ceiling Joists: Gypsum Board

BUILDING ENVELOPE - HEAT VERIFICATION				
01	02	03	04	05
Quality Insulation Installation (QSI)	High R-Value Service Frame Insulation	Building Envelope Air Leakage	CHS20	CHS10
Required	Not Required	N/A	n/a	n/a

Registration Number: **22A-10000000-000-000-00000000-00000000-00000000**

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CERTIFICATE OF COMPLIANCE - RESIDENTIAL PERFORMANCE CALCULATION METHOD										C19-96B-01-1	
Project Name: Hartford MD 775 ADU					Calculation Date/Time: 2024-10-23T16:33:18-07:00.					(Page 10 of 13)	
Calculation Description: Title 24 Analysis					Input File Name: Process\Engineering_Hartford Plan 775 ADU.rvt.mdx						
WATER HEATING SYSTEMS											
#1	#2	#3	#4	#5	#6	#7	#8	#9	#10	#11	
Name	System Type	Distribution Type	Water Heater Name	Number of Units	Solar Heating System	Compact Distribution	HDRS Verification	Water Heater Name (#)			
DHW Sys 1	Domestic Hot Water (DHW)	Standard	DHW Heater 1	1	N/A	None	N/A	DHW Heater 1(E)			
<b>WATER HEATS</b>											
#1	#2	#3	#4	#5	#6	#7	#8	#9	#10	#11	
Name	Heating Element Type	Task Type	# of Units	Task Vol [gph]	Heating Efficiency (%)	Efficiency	Rated Input Type	Input Rating or Pilot	Task Minimum Fuel Input [MBtu/h]	Standing Loss Recovery @ 1st lit. Bulb at Flow Rate	Task Location
DHW Heater 1	Gas	Consumer Installation Gas	1	0	LIFT	10.93	StpLvs+H	200000	0	n/a	n/a
WATER HEATING - HEAT VERIFICATION											
#1	#2	#3	#4	#5	#6	#7	#8	#9	#10	#11	
Name	Plan Insulation	Parallel Flange	Compact Distribution	Compact Distribution Type	Recirculation Control	Shower Drain Water Heat					
DHW Sys 1 - V13	Not Required	Not Required	Not Provided	None	Not Required	Not Required					
<b>ENERGY CONSERVATION SYSTEMS</b>											
#1	#2	#3	#4	#5	#6	#7	#8	#9	#10	#11	
Name	System Type	Heating Unit Count	Heating Equipment Count	Cooling Unit Name	Cooling Equipment Count	Fan Name	Distribution Name	Required Thermostat Type			
Res HVACC	Heat pump heating cooling	Heat Pump System 1	1	Heat Pump Cooling System 1	1	HVAC Fan 1	Air Distribution System 1	Setback			

<b>CERTIFICATE OF COMPLIANCE - RESIDENTIAL PERFORMANCE COMPLIANCE METHOD</b> Project Name: <b>Hartford Plan 775 ADU</b> Calculation Date/Time: <b>2024-10-23 17:16:00</b>										C181 PRG 01-18 (Page 11 of 18)	
Calculation Description: <b>Titre 24 Analysis</b> Input File Name: <b>Process Engineering_Hartford Plan 775 ADU.rptadu2x</b>											
<b>HVAC HEAT PUMPS</b>											
01	02	03	04	05	06	07	08	09	10	11	12
			Heating			Cooling					
Name	System Type	Number of Units	Heating Efficiency (HSP/COOP)	Cap 67	Cap 17	Cooling Efficiency (ESR2/EER2)	ESR2/EER2	ESR2/EER2	Zone/Cooling	Compressor Type	HERS Verification
Heat Pump System 1	Central/Air HP - 1	1	HP072	7.75	20000	12000	ESR2EER2	15.2	11.5	Not Zoned	Single Stage
											Heat Pump System 1 - 1 heat pump
<b>HVAC HEAT PUMPS - HERS VERIFICATION</b>											
01	02	03	04	05	06	07	08	09	10	11	12
Name	Verified Airflow	Airflow Target	Verified ESR2/EER2	Verified HSP/ESR2	Verified Refrigerant Charge	Verified HSP/HP072	Verified Heating Cap 67	Verified Heating Cap 17			
Heat Pump System 1 - 1 heat pump	Required	\$50	Required	Required	Yes	Yes	Yes	Yes			
<b>HVAC DISTRIBUTION SYSTEMS</b>											
01	02	03	04	05	06	07	08	09	10	11	12
Name	Type	Design Type	Dist Loss 2-3 Input Supply Return	Dist Location	Surface Area	Supply Return	Exhaust Out	Dist Leakage	HERS Verification		
No Distribution System 1	Unconditional/Attic	Non-Required	R - R - R - R	Attic	Attic	N/A	N/A	No Exhaust Out	Sealed and Tested	Air Distribution System 1 - 1 heat dist	

<b>CERTIFICATE OF COMPLIANCE - RESIDENTIAL PERFORMANCE COMPLIANCE METHOD</b>								<b>F19R-PHF-01-01</b>			
<b>Project Name:</b> Harford Pan 175 ADU				<b>Calculation Date/Time:</b> 2024-10-23T16:33:18+07:00				<b>(Page 12 of 13)</b>			
<b>Calculation Description:</b> T24 Analysis				<b>Input File Name:</b> Precision Calculation_Harford Pan 175 ADU/rb2t2x							
<b>HVAC Distribution - HERS Verification</b>											
Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9			
Name	Duct Leakage Verification	Duct Leakage Target (%)	Verified Duct Location	Verified Duct Design	Buried Ducts	Deeply Buried Ducts	Low-leakage Air Handler	Low-leakage Ducts Entirety in Conditioned Space			
Air Distribution System 2-hrs delay	Yes	5.0	Not Required	Not Required	Not Required	Credit not taken	Not Required				
<b>HVAC - FAN SYSTEMS</b>											
Q1	Q2		Q3		Q4						
Name	Type	Fan Power (Watts/KFM)		Name							
HVAC Fan 1	HVAC fan	0.45		HVAC Fan 3-hrs fan							
<b>HVAC FAN SYSTEMS - HERS VERIFICATION</b>											
Q1	Q2		Q3								
Name	Verified Fan Watt Draw		Required Fan Efficiency (Watts/KFM)								
HVAC Fan 3-hrs-fan	Required		0.45								
<b>INDOOR AIR QUALITY (IAQ) RANS</b>											
Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9			
Dwelling Unit	Airflow [CFM]	Fan Efficiency [%]	IAQ Fan Type	Includes Heat/Energy Recovery?	IAQ Recovery Effectiveness >=SEASAE	Includes Fresh Indicator Display?	HERS Verification	Status			
Sfarn IAQVentprft	45	0.35	Exhaust	No	n/a / n/a	No					

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 Schema Version: rev 20220901

<b>CERTIFICATE OF COMPLIANCE - RESIDENTIAL PERFORMANCE COMPLIANCE METHOD</b> Project Name: Hanford Plan 775 ADU Calculation Reference: Title 24 Analysis		Calculation Date/Time: 2024-10-23T16:38-07:00 Input File Name: Processors_Engineering_Hanford Plan 775 ADU.rpt622a	C156 (Per 15-1) (Page 13 of 13)
<b>DECLARATION AND SIGNATURE INFORMATION</b>			
1. I certify that this Certificate of Compliance documentation is accurate and complete.  Declaration Author Name: Alan Moritzsch Company: Energy & HVAC Consulting Services PO Box 6423 Chula Vista, CA 91920		Declaration Author Signature:  Date: 10/24/2024 City/State/County Identification (if applicable): Phone: 619-734-8500	
<b>RESPONSOR'S DECLARATION STATEMENT</b>			
I certify the following under penalty of perjury, under the laws of the State of California: 1. I am eligible under Division 19 of the Building and Performance Code to accept responsibility for the building program identified on this Certificate of Compliance. 2. I certify that the energy features and performance specifications identified in this Certificate of Compliance conform to the requirements of the Title 24, Part 1 and Part 6 of the California Code of Regulations, and that the energy features and system design features identified on this Certificate of Compliance are implemented and maintained as specified on the drawings, specifications, calculations, plans and specifications submitted to the enforcement agency for approval with this building permit application.			
Respondent Name: Jasmin Marquez Company: Precision Civil Engineering, Inc. Address: 1234 S. D. Chula Vista, CA 91922		Respondent Signature:  Date: 10/24/2024 District: City/State/County: Phone: (558) 499-4500	

These plans and documents have been reviewed for compliance with the applicable codes requirements of the jurisdiction. The stamping of these plans shall not be held to permit or be an approval of any violation of applicable codes and standards nor relieve the owner, design professional of record or contractor of compliance with applicable codes and standards.

ROD CARSEY CONSULTING & PLAN CHECK  
SERVICE