A. GENERAL

1. APPLICABLE CODES. ALL PROJECTS SHALL COMPLY WITH THE 2019 CALIFORNIA BUILDING CODE (CBC) AND/OR CALIFORNIA RESIDENTIAL CODE (CRC), 2019 CALIFORNIA GREEN BUILDING STANDARDS CODE (CALGREEN), 2019 CALIFORNIA ELECTRICAL CODE (CEC), 2019 CALIFORNIA MECHANICAL CODE (CMC), 2019 CALIFORNIA PLUMBING CODE (CPC), 2019 CALIFORNIA FIRE CODE (CFC), AND THE 2019 CALIFORNIA BUILDING ENERGY EFFICIENCY STANDARDS (CBEES).

2. 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 CHARACTOR SIMILAR TO THOSE SHOWN SHALL BE USED, SUBJECT TO REVIEW.

3. THIS PLAN DOES NOT ADDRESS FLOOD ZONES, WILDLAND URBAN INTERFACE (WUI), DISTANCE TO PROPERTY LINE, DISTANCE TO BUILDINGS ONSITE, ETC., SO THE DESIGNER HAS A CHOICE TO EITHER PROVIDE INFORMATION FOR SOME OR ALL THESE ITEMS NOW, FACE ADDITIONAL PLAN REVIEW AS THESE ISSUES ARISE UPON SUBMITTAL FOR PERMITS, OR BE LIMITED AS TO WHERE THESE UNITS MAY BE LOCATED.

B. ELECTRICAL, PLUMBING, AND MECHANICAL

1. EXTERIOR LIGHTING. ALL PROJECTS SHALL COMPLY WITH THE RESPECTIVE CITY'S MUNICIPAL CODE.
2. 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)
3. 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)
4. LUMINAIRE REQUIREMENTS. INSTALLED LUMINAIRES SHALL MEET THE EFFICACY AND FIXTURE REQUIREMENTS OF CBEES 150.0(K).
5. SMOKE DETECTORS IN BUILDING REMODELS. 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. BATTERY–OPERATED DETECTORS ARE ACCEPTABLE IN EXISTING AREAS WITH NO CONSTRUCTION TAKING PLACE AND IN ALTERATIONS NOT RESULTING IN REMOVAL OF INTERIOR WALL OR CEILING FINISHES AND WITHOUT ACCESS VIA AN ATTIC, CRAWL SPACE, OR BASEMENT. (CRC R314.3)
6. CARBON MONOXIDE DETECTORS IN BUILDING REMODELS. CARBON MONOXIDE DETECTORS ARE REQUIRED SEPARATE SLEEPING AREA IN THE IMMEDIATE VICINITY OF SLEEPING ROOMS AND ON EACH STORY OF INCLUDING BASEMENTS. BATTERY–OPERATED DETECTORS ARE ACCEPTABLE IN EXISTING AREAS WITH N TAKING PLACE AND IN ALTERATIONS NOT RESULTING IN REMOVAL OF INTERIOR WALL OR CEILING FINIS WITHOUT ACCESS VIA AN ATTIC, CRAWL SPACE, OR BASEMENT. (CRC R315.3)
7. WATER HEATER SEISMIC STRAPPING. MINIMUM TWO 3/4–INCH–BY–24–GAUGE STRAPS REQUIRED AROU HEATERS, WITH 1/4–INCH–BY–3–INCH LAG BOLTS ATTACHED DIRECTLY TO FRAMING. STRAPS SHALL WITHIN UPPER THIRD AND LOWER THIRD OF WATER HEATER VERTICAL DIMENSION. LOWER CONNECTION MINIMUM 4 INCHES ABOVE CONTROLS. (CPC 507.2)
8. GAS APPLIANCES IN GARAGES. WATER HEATERS AND HEATING/COOLING EQUIPMENT CAPABLE OF IGNITI VAPORS SHALL BE PLACED ON MINIMUM 18–INCH–HIGH PLATFORM UNLESS LISTING REPORT NUMBER SHOWING IGNITION–RESISTANT APPLIANCE. (CPC 507.13 AND CMC 305.1)
9. IMPACT PROTECTION OF APPLIANCES. WATER HEATERS AND HEATING/COOLING EQUIPMENT SUBJECT TO IMPACT SHALL BE PROTECTED BY BOLLARDS OR AN EQUIVALENT MEASURE. (CPC 507.13.1 AND CMC
10. WATER CLOSET CLEARANCE. MINIMUM 30–INCH–WIDE BY 24–INCH–DEEP CLEARANCE REQUIRED AT FR CLOSETS. (CPC 402.5)
11. SHOWER SIZE. SHOWER COMPARTMENTS SHALL HAVE MINIMUM AREA OF 1024 SQUARE INCHES AND B ENCOMPASS A 30–INCH–DIAMETER CIRCLE. SHOWER DOORS SHALL HAVE A MINIMUM 22–INCH UNOB (CPC 408.5 AND CPC 408.6)
12. FIREPLACE APPLIANCES. FIREPLACES WITH GAS APPLIANCES ARE REQUIRED TO HAVE THE FLUE DAMPE FIXED IN THE OPEN POSITION AND FIREPLACES WITH LPG APPLIANCES ARE TO HAVE NO 'PIT' OR 'SU CONFIGURATIONS. (CMC 303.7.1)
13. CHIMNEY CLEARANCE. MINIMUM 2–FOOT CHIMNEY CLEARANCE REQUIRED ABOVE BUILDING WITHIN 10–F HORIZONTALLY OF CHIMNEY. THE CHIMNEY SHALL EXTEND MINIMUM 3 FEET ABOVE HIGHEST POINT WH PASSES THROUGH ROOF. (CRC R1003.9)

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 TR ADJACENT DWELLING UNITS OR OTHER SPACES, SUCH AS GARAGES, UNCONDITIONED CRAWLSPACES, O ATTICS. (CBEES 150.0(O))
2. INSTRUCTIONS AND LABELING. VENTILATION SYSTEM CONTROLS SHALL BE LABELED AND THE HOME OW 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 SYSTEMS SHALL BE DESIGNED TO PREVENT BACK DRAFTING. (CBEES 150.0(O))
4. GARAGES. THE WALL AND OPENINGS BETWEEN OCCUPIABLE SPACES AND THE GARAGE SHALL BE SEAL SYSTEMS THAT INCLUDE AIR HANDLERS OR RETURN DUCTS LOCATED IN GARAGES SHALL HAVE TOTAL NO MORE THAN 6% OF TOTAL FAN FLOW WHEN MEASURED AT 0.1 IN. W.C. USING CALIFORNIA TITLE EQUIVALENTS. (CBEES 150.0(O))
5. MINIMUM FILTRATION. MECHANICAL SYSTEMS SUPPLYING AIR TO OCCUPIABLE SPACE THROUGH DUCTWO PROVIDED WITH A FILTER HAVING A MINIMUM EFFICIENCY OF MERV 13 OR BETTER. (CBEES 150.0(O))
6. AIR INLETS. AIR INLETS (NOT EXHAUST) SHALL BE LOCATED AWAY FROM KNOWN CONTAMINANTS. (CBEES 150.0(O))
7. 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))
   A. ALL CONTINUOUSLY OPERATING FANS SHALL BE RATED AT A MAXIMUM OF 1.0 SONE.
   B. INTERMITTENTLY OPERATED WHOLE–BUILDING VENTILATION FANS SHALL BE RATED AT A MAXIMUM OF 1.0 SONE.
   C. INTERMITTENTLY OPERATED LOCAL EXHAUST FANS SHALL BE RATED AT MAXIMUM OF 3.0 SONE.
   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.

D. FOUNDATION

1. COMPACTION REPORT. COMPACTION REPORT REQUIRED FOR FILL MATERIAL 12 INCHES OR MORE IN DEPTH. (CBC 1803.5.8)
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 SPLICE SHALL BE 40 BAR DIAMETERS. THE MAXIMUM GAP BETWEEN NONCONTACT PARALLEL BARS AT A LAP SPLICE SHALL NOT EXCEED THE SMALLER OF ONE–FIFTH THE REQUIRED LAP LENGTH AND 6 INCHES [SEE FIGURER608.5.4(1)]
5. VAPOR RETARDER. A 6–MIL POLYETHYLENE OR APPROVED VAPOR RETARDER WITH JOINTS LAPPED MINIMUM 6 INCHES SHALL BE PLACED BETWEEN A CONCRETE SLAB–ON–GRADE AND THE BASE COURSE OR SUBGRADE. (CRC 506.2.3)
6. 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):
   A. MINIMUM 1/2–INCH–DIAMETER STEEL BOLTS, ASTM F1554, GR36
   B. BOLTS EMBEDDED AT LEAST 7 INCHES INTO CONCRETE OR MASONRY
   C. BOLTS SPACED MAXIMUM 6 FEET ON CENTER
   D. 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
   E. MINIMUM 3–INCH BY 3–INCH BY 0.229–INCH STEEL PLATE WASHER BETWEEN SILL AND NUT ON EACH BOLT
7. HOLD–DOWNS. ALL HOLD–DOWNS MUST BE TIED IN PLACE PRIOR TO FOUNDATION INSPECTION.
8. PROTECTION OF WOOD AGAINST DECAY. NATURALLY DURABLE OR PRESERVATIVE–TREATED WOOD SHALL BE PROVIDED IN THE FOLLOWING LOCATIONS (CRC R317.1):
   A. ALL WOOD IN CONTACT WITH GROUND, EMBEDDED IN CONCRETE IN DIRECT CONTACT WITH GROUND, OR EMBEDDED IN CONCRETE EXPOSED TO WEATHER
   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
   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
   D. SILLS AND SLEEPERS ON CONCRETE OR MASONRY SLAB IN DIRECT CONTACT WITH GROUND UNLESS SEPARATED FROM SUCH SLAB BY IMPERVIOUS MOISTURE BARRIER

E. WOOD FRAMING

MANUFACTURED ROOF TRUSSES WILL BE A DEFERRED SUBMITTAL.

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) EXCETPTION: 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

EXAMPLE ONLY

The following plan set is an example only. The sheets included in this plan set are pulled from four pre-reviewed plan sets that are available for use by local agencies in the San Joaquin Valley. The plans will require further review through each individual agency's plan review process and revisions before they are made available to the public. Interested local agencies should fill in the "Technical Assistance Request" form on the San Joaquin Valley REAP Webpage at www.sjvcogs.org/reap/reap-technical-assistance for ADUs. The full plan sets can be provided as CAD files. There is also funding available on a first come, first served basis for assistance with revising the plan sets for approval by your agency.

CRC):

7–16 FOR STRUCTURAL ITEMS THAT DO MEET THE REQUIREMENTS OF

   A. TWO–INCH NOMINAL LUMBER
   B. TWO THICKNESSES OF ONE–INCH NOMINAL LUMBER WITH BROKEN LAP JOINTS
   C. ONE THICKNESS OF 23/32–INCH WOOD STRUCTURAL PANEL WITH JOINTS BACKED BY 23/32–INCH WOOD STRUCTURAL PANEL
   D. ONE THICKNESS OF 3/4–INCH PARTICLEBOARD WITH JOINTS BACKED BY 3/4–INCH PARTICLEBOARD
   E. 1/2–INCH GYPSUM BOARD
   F. 1/4–INCH CEMENT–BASED MILLBOARD
   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):
   A. CEILING IS SUSPENDED UNDER THE FLOOR FRAMING
   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)

POSTS SHALL BE NO. 2 GRADE DOUGLAS FIR–LARCH OR BETTER.
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. STUCTURAL 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 2019 CALIFORNIA BUILDING CODE (CBC), EXCEPT ITEMS NOT SPECIFICALLY COVERED THERIN SHALL ALSO CONFORM TO ACI 318–14. 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)

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San Joaquin Valley REAP
REGIONAL EARLY ACTION PLANNING

REVISIONS
XX–XX–XXXX

PROJECT TITLE: SAN JOAQUIN VALLEY REAP – VALLEYWIDE ADU PROGRAM
SHEET DESCRIPTION: COVER
DATE: 10/14/2022
AGENCY: SJV REAP

ADU SQFT: 375

DRAWING SCALE: -

SHEET: C1

G. 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).
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. 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):
   - A. EXTERIOR DOOR AND WINDOW OPENINGS, EXTENDING TO THE SURFACE OF THE EXTERIOR WALL FINISH OR TO THE WATER–RESISTIVE BARRIER FOR SUBSEQUENT DRAINAGE
   - B. AT THE INTERSECTION OF CHIMNEYS OR OTHER MASONRY CONSTRUCTION WITH FRAME OR STUCCO WALLS, WITH PROJECTING LIPS ON BOTH SIDES UNDER STUCCO COPINGS
   - C. UNDER AND AT THE ENDS OF MASONRY, WOOD, OR METAL COPINGS AND SILLS
   - D. CONTINUOUSLY ABOVE ALL PROJECTING WOOD TRIM
   - E. WHERE EXTERIOR PORCHES, DECKS, OR STAIRS ATTACH TO A WALL OR FLOOR ASSEMBLY OF WOOD–FRAME CONSTRUCTION
   - F. AT WALL AND ROOF INTERSECTIONS
   - G. AT BUILT–IN GUTTERS
6. 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)
7. 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)

H. GREEN BUILDING STANDARDS CODE (CALGREEN) REQUIREMENTS

1. APPLICABILITY. CALGREEN RESIDENTIAL MANDATORY MEASURES SHALL APPLY TO EVERY NEWLY CONSTRUCTED BUILDING OR STRUCTURE AND WITHIN ANY ADDITION OR ALTERATION INCREASING A BUILDING'S CONDITIONED AREA, VOLUME, OR SIZE. (CALGREEN 101.3, CALGREEN 301.1.1)
   EXCEPTION: ALL RESIDENTIAL BUILDINGS UNDERGOING PERMITTED ALTERATIONS, ADDITIONS, OR IMPROVEMENTS SHALL REPLACE NONCOMPLIANT PLUMBING FIXTURES WITH WATER–CONSERVING PLUMBING FIXTURES PER CALGREEN 301.1.1 AND CALGREEN 4.303.1.
2. WATER CONSERVING PLUMBING FIXTURES AND FITTINGS. PLUMBING FIXTURES AND FITTINGS SHALL COMPLY WITH THE FOLLOWING PER CALGREEN 4.303.1:
   - A. WATER CLOSETS: MAXIMUM 1.28 GALLONS PER FLUSH
   - B. URINALS: MAXIMUM 0.5 GALLONS PER FLUSH
   - C. SINGLE SHOWERHEADS: MAXIMUM FLOW RATE OF 1.8 GALLONS PER MINUTE AT 80 PSI
   - D. MULTIPLE SHOWERHEADS SERVING ONE SHOWER: MAXIMUM COMBINED FLOW RATE OF 1.8 GALLONS PER MINUTE AT 80 PSI
   - E. LAVATORY FAUCETS: MAXIMUM FLOW RATE OF 1.2 GALLONS PER MINUTE AT 60 PSI, MINIMUM FLOW RATE OF 0.8 GALLONS PER MINUTE AT 20 PSI
   - F. KITCHEN FAUCETS: MAXIMUM FLOW RATE OF 1.8 GALLONS PER MINUTE AT 60 PSI
     EXCEPTION: TEMPORARY INCREASE ALLOWED TO MAXIMUM 2.2 GALLONS PER MINUTE AT 60 PSI IF FAUCET DEFAULTS BACK TO MAXIMUM 1.8 GALLONS PER MINUTE AT 60 PSI
3. IRRIGATION CONTROLLERS. AUTOMATIC IRRIGATION SYSTEM CONTROLLERS FOR LANDSCAPING SHALL COMPLY WITH THE FOLLOWING (CALGREEN 4.304.1):
   - A. CONTROLLERS SHALL BE WEATHER– OR SOIL MOISTURE–BASED CONTROLLERS THAT AUTOMATICALLY ADJUST IRRIGATION IN RESPONSE TO CHANGES IN PLANTS' NEEDS AS WEATHER CONDITIONS CHANGE.
   - B. WEATHER–BASED CONTROLLERS WITHOUT INTEGRAL RAIN SENSORS OR COMMUNICATION SYSTEMS THAT ACCOUNT FOR LOCAL RAINFALL SHALL HAVE A SEPARATE WIRED OR WIRELESS RAIN SENSOR WHICH CONNECTS OR COMMUNICATES WITH THE CONTROLLER(S). SOIL MOISTURE–BASED CONTROLLERS ARE NOT REQUIRED TO HAVE RAIN SENSOR INPUT.
4. JOINTS AND OPENINGS. OPENINGS IN THE BUILDING ENVELOPE SEPARATING CONDITIONED SPACE FROM UNCONDITIONED SPACE NEEDED TO ACCOMMODATE UTILITY AND OTHER PENETRATIONS MUST BE SEALED IN COMPLIANCE WITH THE CALIFORNIA ENERGY CODE. (CALGREEN 4.406.1)
   EXCEPTION: ANNULAR SPACES AROUND PIPES, ELECTRIC CABLES, CONDUITS OR OTHER OPENINGS IN PLATES AT EXTERIOR WALLS SHALL BE PROTECTED AGAINST THE PASSAGE OF RODENTS BY CLOSING SUCH OPENING WITH CEMENT MORTAR, CONCRETE MASONRY OR A SIMILAR METHOD ACCEPTABLE TO THE ENFORCING AGENCY.
5. CONSTRUCTION WASTE REDUCTION, DISPOSAL, AND RECYCLING. REDUCE AND/OR SALVAGE FOR REUSE A MINIMUM OF 65 PERCENT OF THE NONHAZARDOUS CONSTRUCTION AND DEMOLITION DEBRIS. (CALGREEN 4.408.1)
   EXCEPTION: EXCAVATED SOIL AND LAND–CLEARING DEBRIS.
   EXCEPTION: ALTERNATE WASTE REDUCTION METHODS DEVELOPED BY WORKING WITH LOCAL AGENCIES IF DIVERSION OR RECYCLE FACILITIES CAPABLE OF COMPLIANCE WITH THIS ITEM DO NOT EXIST OR ARE NOT LOCATED REASONABLY CLOSE TO THE JOBSITE THE CITY OF OAKLEY, DEPARTMENT OF PUBLIC WORKS AND ENGINEERING.
6. CONSTRUCTION WASTE MANAGEMENT PLAN. A CONSTRUCTION WASTE MANAGEMENT PLAN SHALL BE PREPARED AND AVAILABLE ON SITE DURING CONSTRUCTION. DOCUMENTATION DEMONSTRATING COMPLIANCE WITH THE PLAN SHALL BE ACCESSIBLE DURING CONSTRUCTION FOR THE ENFORCING AGENCY. (CALGREEN 4.408.2) THE PLAN:
   - A. IDENTIFY THE CONSTRUCTION AND DEMOLITION WASTE MATERIALS TO BE DIVERTED FROM DISPOSAL BY RECYCLING, REUSE ON THE PROJECT OR SALVAGE FOR FUTURE USE OR SALE
   - B. SPECIFY IF CONSTRUCTION AND DEMOLITION WASTE MATERIALS WILL BE SORTED ON–SITE (SOURCE–SEPARATED) OR BULK MIXED (SINGLE STREAM)
   - C. IDENTIFY DIVERSION FACILITIES WHERE THE CONSTRUCTION AND DEMOLITION WASTE MATERIALS WILL BE TAKEN.
   - D. IDENTIFY CONSTRUCTION METHODS EMPLOYED TO REDUCE THE AMOUNT OF CONSTRUCTION AND DEMOLITION WASTE GENERATED.
   - E. SPECIFY THAT THE AMOUNT OF CONSTRUCTION AND DEMOLITION WASTE MATERIALS DIVERTED SHALL BE CALCULATED BY WEIGHT OR VOLUME, BUT NOT BY BOTH.
7. OPERATION AND MAINTENANCE MANUAL. PRIOR TO FINAL INSPECTION, A MANUAL, COMPACT DISC, WEB–BASED REFERENCE, OR OTHER ACCEPTABLE MEDIA WHICH INCLUDES ALL OF THE FOLLOWING SHALL BE PLACED IN THE BUILDING (CALGREEN 4.410.1):
   - A. DIRECTIONS TO OWNER OR OCCUPANT THAT MANUAL SHALL REMAIN WITH THE BUILDING THROUGHOUT THE LIFE CYCLE OF THE STRUCTURE.
   - B. OPERATION AND MAINTENANCE INSTRUCTIONS FOR THE FOLLOWING:
     - I. EQUIPMENT AND APPLIANCES, INCLUDING WATER–SAVING DEVICES AND SYSTEMS, HVAC SYSTEM, PHOTOVOLTAIC SYSTEMS, WATER–HEATING SYSTEMS AND OTHER MAJOR APPLIANCES AND EQUIPMENT.
     - II. ROOF AND YARD DRAINAGE, INCLUDING GUTTERS AND DOWNSPOUTS.
     - III. SPACE CONDITIONING SYSTEMS, INCLUDING CONDENSERS AND AIR FILTERS.
     - IV. LANDSCAPE IRRIGATION SYSTEMS.
     - V. WATER REUSE SYSTEMS.
   - C. INFORMATION FROM LOCAL UTILITY, WATER, AND WASTE RECOVERY PROVIDERS ON METHODS TO FURTHER REDUCE RESOURCE CONSUMPTION, INCLUDING RECYCLE PROGRAMS AND LOCATIONS.
   - D. PUBLIC TRANSPORTATION AND/OR CARPOOL OPTIONS AVAILABLE IN THE AREA.
   - E. EDUCATIONAL MATERIAL ON THE POSITIVE IMPACTS OF AN INTERIOR RELATIVE HUMIDITY BETWEEN 30–60 PERCENT AND WHAT METHODS AN OCCUPANT MAY USE TO MAINTAIN THE RELATIVE HUMIDITY LEVEL IN THAT RANGE.
   - F. INFORMATION ABOUT WATER–CONSERVING LANDSCAPE AND IRRIGATION DESIGN AND CONTROLLERS WHICH CONSERVE WATER.
   - G. INSTRUCTIONS FOR MAINTAINING GUTTERS AND DOWNSPOUTS AND THE IMPORTANCE OF DIVERTING WATER AT LEAST 5 FEET AWAY FROM THE FOUNDATION.
   - H. INFORMATION ON REQUIRED ROUTINE MAINTENANCE MEASURES, INCLUDING, BUT NOT LIMITED TO, CAULKING, PAINTING, GRADING AROUND THE BUILDING, ETC.
   - I. INFORMATION ABOUT STATE SOLAR ENERGY AND INCENTIVE PROGRAMS AVAILABLE.
   - J. A COPY OF ALL SPECIAL INSPECTION VERIFICATIONS REQUIRED BY THE ENFORCING AGENCY OR CODE.
8. COVERING OF DUCT OPENINGS AND PROTECTION OF MECHANICAL EQUIPMENT DURING CONSTRUCTION. AT THE TIME OF ROUGH INSTALLATION OR DURING STORAGE ON THE CONSTRUCTION SITE AND UNTIL FINAL STARTUP OF THE HEATING AND COOLING EQUIPMENT, ALL DUCT AND OTHER RELATED AIR DISTRIBUTION COMPONENT OPENINGS SHALL BE COVERED WITH TAPE, PLASTIC, SHEETMETAL OR OTHER METHODS ACCEPTABLE TO THE ENFORCING AGENCY TO REDUCE THE AMOUNT OF DUST OR DEBRIS WHICH MAY COLLECT IN THE SYSTEM. (CALGREEN 4.504.1)
9. ADHESIVES, SEALANTS, CAULKS, PAINTS, AND COATINGS POLLUTANT CONTROL. ADHESIVES (INCLUDING CARPET ADHESIVES), SEALANTS, CAULKS, PAINTS, AND COATINGS SHALL COMPLY WITH VOC LIMITS PER CALGREEN 4.504.2. VERIFICATION OF COMPLIANCE SHALL BE PROVIDED AT THE REQUEST OF THE ENFORCING AGENCY. (CALGREEN 4.504.2.1)
10. CARPET SYSTEMS. ALL CARPET INSTALLED IN THE BUILDING INTERIOR SHALL MEET THE TESTING AND PRODUCT REQUIREMENTS OF ONE OF THE FOLLOWING (CALGREEN 4.504.3):
    - A. CARPET AND RUG INSTITUTE'S GREEN LABEL PLUS PROGRAM (ALL CARPET CUSHION MUST MEET THE REQUIREMENTS OF THIS PROGRAM).
    - B. CALIFORNIA DEPARTMENT OF PUBLIC HEALTH STANDARD PRACTICE FOR THE TESTING OF VOCS (SPECIFICATION 01350).
    - C. NSF/ANSI 140 AT THE GOLD LEVEL.
    - D. SCIENTIFIC CERTIFICATIONS SYSTEMS INDOOR ADVANTAGE™ GOLD.
11. RESILIENT FLOORING SYSTEMS. AT LEAST 80 PERCENT OF THE FLOOR AREA RECEIVING RESILIENT FLOORING SHALL COMPLY WITH ONE OF OR MORE OF THE FOLLOWING (CALGREEN 4.504.4):
    - A. VOC EMISSION LIMITS DEFINED IN THE COLLABORATIVE FOR HIGH PERFORMANCE SCHOOLS (CHPS) HIGH PERFORMANCE PRODUCTS DATABASE
    - B. PRODUCTS COMPLIANT WITH CHPS CRITERIA CERTIFIED UNDER THE GREENGUARD CHILDREN & SCHOOLS PROGRAM
    - C. CERTIFICATION UNDER THE RESILIENT FLOOR COVERING INSTITUTE (RFCI) FLOORSCORE PROGRAM
    - D. MEET THE CALIFORNIA DEPARTMENT OF PUBLIC HEALTH, "STANDARD METHOD FOR THE TESTING AND EVALUATION OF VOLATILE ORGANIC CHEMICAL EMISSIONS FROM INDOOR SOURCES USING ENVIRONMENTAL CHAMBERS," VERSION 1.1, FEBRUARY 2010 (ALSO KNOWN AS SPECIFICATION 01350)
12. COMPOSITE WOOD PRODUCTS. HARDWOOD PLYWOOD, PARTICLEBOARD AND MEDIUM DENSITY FIBERBOARD COMPOSITE WOOD PRODUCTS USED ON THE INTERIOR OR EXTERIOR OF THE BUILDING SHALL MEET THE REQUIREMENTS FOR FORMALDEHYDE AS SPECIFIED IN ARB'S AIR TOXICS CONTROL MEASURE FOR COMPOSITE WOOD (17 CCR 93120 ET SEQ.) BY OR BEFORE THE DATES SPECIFIED IN THOSE SECTIONS, AS SHOWN IN CALGREEN TABLE 4.504.5. THE FOLLOWING LIMITS ARE IN PARTS PER MILLION (CALGREEN 4.504.5):
    - A. HARDWOOD PLYWOOD VENEER CORE 0.05
    - B. HARDWOOD PLYWOOD COMPOSITE CORE 0.05
    - C. PARTICLE BOARD 0.09
    - D. MEDIUM–DENSITY FIBERBOARD (MDF) 0.11
    - E. THIN MDF (5/16 INCH OR LESS) 0.13
13. MOISTURE CONTENT OF BUILDING MATERIALS. BUILDING MATERIALS WITH VISIBLE SIGNS OF WATER DAMAGE SHALL NOT BE INSTALLED. WALL AND FLOOR FRAMING SHALL NOT BE ENCLOSED WHEN THE FRAMING MEMBERS EXCEED 19 PERCENT MOISTURE CONTENT. MOISTURE CONTENT SHALL BE VERIFIED IN COMPLIANCE WITH THE FOLLOWING (CALGREEN 4.505.3):
    - A. MOISTURE CONTENT SHALL BE DETERMINED WITH EITHER A PROBE–TYPE OR CONTACT–TYPE MOISTURE METER.
    - B. MOISTURE READINGS SHALL BE TAKEN AT A POINT 2 FEET TO 4 FEET FROM THE GRADE STAMPED END OF EACH PIECE TO BE VERIFIED.
    - C. AT LEAST THREE RANDOM MOISTURE READINGS SHALL BE PERFORMED ON WALL AND FLOOR FRAMING WITH DOCUMENTATION ACCEPTABLE TO THE ENFORCING AGENCY PROVIDED AT THE TIME OF APPROVAL TO ENCLOSE THE WALL AND FLOOR FRAMING.

    INSULATION PRODUCTS WHICH ARE VISIBLY WET OR HAVE HIGH MOISTURE CONTENT SHALL BE REPLACED OR ALLOWED TO DRY PRIOR TO ENCLOSURE IN WALL OR FLOOR CAVITIES. WET–APPLIED INSULATION PRODUCTS SHALL FOLLOW THE MANUFACTURERS' DRYING RECOMMENDATIONS PRIOR TO ENCLOSURE.
14. BATHROOMS WITH A BATHTUB AND/OR SHOWER SHALL BE MECHANICALLY VENTILATED PER THE FOLLOWING (CALGREEN 4.506.1):
    - A. FANS SHALL BE ENERGY STAR COMPLIANT AND DUCTED TO TERMINATE OUTSIDE BUILDING
    - B. UNLESS FUNCTIONING AS A COMPONENT OF A WHOLE–HOUSE VENTILATION SYSTEM, FANS SHALL HAVE HUMIDITY CONTROLS CAPABLE OF ADJUSTMENT – MANUALLY OR AUTOMATICALLY –– BETWEEN A RELATIVE HUMIDITY RANGE OF 50% TO 80%.
15. HEATING AND AIR–CONDITIONING SYSTEM DESIGN. HEATING AND AIR–CONDITIONING SYSTEMS SHALL BE SIZED, DESIGNED, AND HAVE THEIR EQUIPMENT SELECTED USING THE FOLLOWING METHODS (CALGREEN 4.507.2):
    - A. THE HEAT LOSS AND HEAT GAIN IS ESTABLISHED ACCORDING TO ANSI/ACCA 2 MANUAL J, ASHRAE HANDBOOKS, OR OTHER EQUIVALENT DESIGN SOFTWARE OR METHODS.
    - B. DUCT SYSTEMS ARE SIZED ACCORDING TO ANSI/ACCA 1 MANUAL D 2009, ASHRAE HANDBOOKS, OR OTHER EQUIVALENT DESIGN SOFTWARE OR METHODS.
    - C. SELECT HEATING AND COOLING EQUIPMENT ACCORDING TO ACCA 36–S MANUAL S OR OTHER EQUIVALENT DESIGN SOFTWARE OR METHODS

FOR SI: 1 INCH – 25.4MM, 1 FOOT – 304.9 MM, 1 MILE PER HOUR – 0.447 M/S, 1 KSI – 6.895 MPA.

- A. NAILS ARE SMOOTH COMMON, BOX OR DEFORMED SHANKS EXCEPT WHERE OTHERWISE STATED. NAILS USED FOR FRAMING AND SHEATHING CONNECTIONS SHALL HAVE MINIMUM AVERAGE BENDING YIELD STRENGTHS AS SHOWN: 80 KSI FOR SHANK DIAMETER OF 0.192 INCH (20D COMMON NAIL), 90 KSI FOR SHANK DIAMETERS LARGER THAN 0.142 INCH BUT NOT LARGER THAN 0.177 INCH, AND 100 KSI FOR SHANK DIAMETERS OF 0.142 OR LESS.
- B. STAPLES ARE 16 GAGE WIRE AND HAVE A MINIMUM 7/16 INCH ON DIAMETER CROWN WIDTH.
- C. NAILS SHALL BE SPACED AT NOT MORE THAN 6 INCHES ON CENTER AT ALL SUPPORTS WHERE SPANS ARE 48 INCHES OR GREATER.
- D. 4–FOOT BY 8–FOOT OR 4–FOOT BY 9–FOOT PANELS SHALL BE APPLIED VERTICALLY.
- E. SPACING OF FASTENERS NOT INCLUDED IN THIS TABLE SHALL BE BASED ON TABLE R602.3(2)
- F. FOR WOOD STRUCTURAL PANEL ROOF SHEATHING ATTACHED TO GABLE END ROOF FRAMING AND TO INTERMEDIATE SUPPORTS WITHIN 48 INCHES OF ROOF EDGES AND RIDGES, NAILS SHALL BE SPACED AT INCHES ON CENTER WHERE THE ULTIMATE DESIGN WIND SPEED IS LESS THAN 130 MPH AND SHALL BE SPACED 4 INCHES ON CENTER WHERE THE ULTIMATE DESIGN WIND SPEED IS 130 MPH OR GREATER BUT LESS THAN 140 MPH.
- G. GYPSUM SHEATHING SHALL CONFORM TO ASTM C1396 AND SHALL BE INSTALLED IN ACCORDANCE WITH GA 253. FIBERBOARD SHEATHING SHALL CONFORM TO ASTM C208.
- H. SPACING OF FASTENERS ON FLOOR SHEATHING PANEL EDGES APPLIES TO PANEL EDGES SUPPORTED BY FRAMING MEMBERS AND REQUIRED BLOCKING AND AT FLOOR PERIMETERS ONLY. SPACING OF FASTENERS ON ROOF SHEATHING PANEL EDGES APPLIES TO PANEL EDGES SUPPORTED BY FRAMING MEMBERS AND REQUIRED BLOCKING. BLOCKING OF ROOF OR FLOOR SHEATHING PANEL EDGES PERPENDICULAR TO THE FRAMING MEMBERS NEED NOT BE PROVIDED EXCEPT AS REQUIRED BY OTHER PROVISIONS OF THIS CODE. FLOOR PERIMETER SHALL BE SUPPORTED BY FRAMING MEMBERS OR SOLID BLOCKING.
- I. WHERE A RAFTER IS FASTENED TO AN ADJACENT PARALLEL CEILING JOIST IN ACCORDANCE WITH THIS SCHEDULE, PROVIDE TWO TOE NAILS ON ONE SIDE OF THE RAFTER AND TOE NAILS FROM THE CIELING JOIST TO TOP PLATE IN ACCORDANCE WITH THIS SCHEDULE. THE TOE NAIL ON THE OPPOSITE SIDE OF THE RAFTER SHALL NOT BE REQUIRED.
- J. RSRS–01 IS A ROOF SHEATHING RING SHANK NAIL MEETING THE SPECIFICATIONS IN ASTM F1667.

LIST OF DEFERRED ITEMS:

- A. FIRE SPRINKLERS (UNLESS THE PRIMARY HOUSE IS NOT SPRINKLERED)
- B. ROOF TRUSSES
- C. ENERGY CALCULATIONS (THESE SHALL BE SPECIFIC TO THE ORIENTATION ON EACH LOT AND SHALL BE INCORPORATED ONTO THE PLANS AND BE READABLE)
- D. THIS ITEM IS NOT DEFERRED AND SHALL BE COMPLETED UPON SUBMITTAL – SHEETS G1 & G2 SHALL BE COMPLETED. EACH ITEM SHALL BE MARKED YES OR N/A AND THE PARTY RESPONSIBLE FOR EACH ITEM (DESIGNER, CONTRACTOR, OWNER, ETC.) SHALL BE IDENTIFIED).
- E. SOLAR PV
- F. HVAC / MECHANICAL

THESE ARE MINIMUM REQUIREMENTS AND SHALL NOT SUPERSEDE MORE RESTRICTIVE SPECIFICATIONS ON THE PLANS OR AS REQUIRED BY APPLICABLE CODE.

MINIMUM NAIL		MINIMUM WOOD STRUCTURAL PANEL SPAN RATING	MINIMUM NOMINAL PANEL THICKNESS (inches)	MAXIMUM WALL STUD SPACING (inches)	PANEL NAIL SPACING	
Size	Penetration (inches)				Edges (inches o.c.)	Field (inches o.c.)
6d Common (2.0″ × 0.113″)	1.5	24/0	3/8	16	6	12
8d Common (2.5″ × 0.131″)	1.75	24/16	7/16	16	6	12
				24	6	12

ITEM	DESCRIPTION OF BUILDING ELEMENTS	NUMBER AND TYPE OF FASTENER[a, b, c]	SPACING AND LOCATION
	Roof		
1	Blocking between ceiling joists or rafters to top plate	4-8d box (2½" × 0.113") or 3-8d common (2½" × 0.131"); or 3-10d box (3" × 0.128"); or 3-3" × 0.131" nails	Toe nail
2	Ceiling joists to top plate	4-8d box (2½" × 0.113"); or 3-8d common 2½" × 0.131"); or 3-10d box (3" × 0.128"); or 3-3" × 0.131" nails	Per joist, toe nail
3	Ceiling joist not attached to parallel rafter, laps over partitions (see Section R802.5.2 and Table R802.5.2)	4-10d box (3" × 0.128"); or 3-16d common (3½" × 0.162"); or 4-3" × 0.131" nails	Face nail
4	Ceiling joist attached to parallel rafter (heel joint) (see Section R802.5.2 and Table R802.5.2)	Table R802.5.2	Face nail
5	Collar tie to rafter, face nail or 1¼" × 20 ga. ridge strap to rafter	4-10d box (3" × 0.128"); or 3-10d common (3" × 0.148"); or 4-3" × 0.131" nails	Face nail each rafter
6	Rafter or roof truss to plate	3-16d box nails (3½" × 0.135"); or 3-10d common nails (3" × 0.148"); or 4-10d box (3" × 0.128"); or 4-3" × 0.131" nails	2 toe nails on one side and 1 toe nail on opposite side of each rafter or truss[i]
7	Roof rafters to ridge, valley or hip rafters or roof rafter to minimum 2" ridge beam	4-16d (3½" × 0.135"); or 3-10d common (3" × 0.148"); or 4-10d box (3" × 0.128"); or 4-3" × 0.131" nails	Toe nail
		3-16d box 3½" × 0.135"); or 2-16d common (3½" × 0.162"); or 3-10d box (3" × 0.128"); or 3-3" × 0.131" nails	End nail
	Wall		
8	Stud to stud (not at braced wall panels)	16d common (3½" × 0.162")	24" o.c. face nail
		10d box (3" × 0.128"); or 3" × 0.131" nails	16" o.c. face nail
9	Stud to stud and abutting studs at intersecting wall corners (at braced wall panels)	16d box (3½" × 0.135"); or 3" × 0.131" nails	12" o.c. face nail
		16d common (3½" × 0.162")	16" o.c. face nail
10	Built-up header (2" to 2" header with ½" spacer)	16d common (3½" × 0.162")	16" o.c. each edge face nail
		16d box (3½" × 0.135")	12" o.c. each edge face nail
11	Continuous header to stud	5-8d box (2½" × 0.113"); or 4-8d common (2½" × 0.131"); or 4-10d box (3" × 0.128")	Toe nail
12	Top plate to top plate	16d common (3½" × 0.162")	16" o.c. face nail
		10d box (3" × 0.128"); or 3" × 0.131" nails	12" o.c. face nail
13	Double top plate splice	8-16d common (3½" × 0.162"); or 12-16d box (3½" × 0.135"); or 12-10d box (3" × 0.128"); or 12-3" × 0.131" nails	Face nail on each side of end joint (minimum 24" lap splice length each side of end joint)
14	Bottom plate to joist, rim joist, band joist or blocking (not at braced wall panels)	16d common (3½" × 0.162")	16" o.c. face nail
		16d box (3½" × 0.135"); or 3" × 0.131" nails	12" o.c. face nail
15	Bottom plate to joist, rim joist, band joist or blocking (at braced wall panel)	3-16d box (3½" × 0.135"); or 2-16d common (3½" × 0.162"); or 4-3" × 0.131" nails	3 each 16" o.c. face nail 2 each 16" o.c. face nail 4 each 16" o.c. face nail
16	Top or bottom plate to stud	4-8d box (2½" × 0.113"); or 3-16d box (3½" × 0.135"); or 4-8d common (2½" × 0.131"); or 4-10d box (3" × 0.128"); or 4-3" × 0.131" nails	Toe nail
		3-16d box (3½" × 0.135"); or 2-16d common (3½" × 0.162"); or 3-10d box (3" × 0.128"); or 3-3" × 0.131" nails	End nail
17	Top plates, laps at corners and intersections	3-10d box (3" × 0.128"); or 2-16d common (3½" × 0.162"); or 3-3" × 0.131" nails	Face nail
18	1" brace to each stud and plate	3-8d box (2½" × 0.113"); or 2-8d common (2½" × 0.131"); or 2-10d box (3" × 0.128"); or 2 staples 1¾"	Face nail
19	1" × 6" sheathing to each bearing	3-8d box (2½" × 0.113"); or 2-8d common (2½" × 0.131"); or 2-10d box (3" × 0.128"); or 2 staples, 1" crown, 16 ga., 1¾" long	Face nail
20	1" × 8" and wider sheathing to each bearing	3-8d box (2½" × 0.113"); or 3-8d common (2½" × 0.131"); or 3-10d box (3" × 0.128"); or 3 staples, 1" crown, 16 ga., 1¾" long	Face nail
		Wider than 1" × 8" 4-8d box (2½" × 0.113"); or 3-8d common (2½" × 0.131"); or 3-10d box (3" × 0.128"); or 4 staples, 1" crown, 16 ga., 1¾" long	
	Floor		
21	Joist to sill, top plate or girder	4-8d box (2½" × 0.113"); or 3-8d common (2½" × 0.131"); or 3-10d box (3" × 0.128"); or 3-3" × 0.131" nails	Toe nail
22	Rim joist, band joist or blocking to sill or top plate (roof applications also)	8d box (2½" × 0.113")	4" o.c. toe nail
		8d common (2½" × 0.131"); or 10d box (3" × 0.128"); or 3" × 0.131" nails	6" o.c. toe nail
23	1" × 6" subfloor or less to each joist	3-8d box (2½" × 0.113"); or 2-8d common (2½" × 0.131"); or 3-10d box (3" × 0.128"); or 2 staples, 1" crown, 16 ga., 1¾" long	Face nail
24	2" subfloor to joist or girder	3-16d box (3½" × 0.135"); or 2-16d common (3½" × 0.162")	Blind and face nail
25	2" planks (plank & beam—floor & roof)	3-16d box (3½" × 0.135"); or 2-16d common (3½" × 0.162")	At each bearing, face nail
26	Band or rim joist to joist	3-16d common (3½" × 0.162") 4-10 box (3" × 0.128"), or 4-3" × 0.131" nails; or 4-3" × 14 ga. staples, 7/16" crown	End nail
27	Built-up girders and beams, 2-inch lumber layers	20d common (4" × 0.192"); or	Nail each layer as follows: 32" o.c. at top and bottom and staggered.
		10d box (3" × 0.128"); or 3" × 0.131" nails	24" o.c. face nail at top and bottom staggered on opposite sides
		And: 2-20d common (4" × 0.192"); or 3-10d box (3" × 0.128"); or 3-3" × 0.131" nails	Face nail at ends and at each splice
28	Ledger strip supporting joists or rafters	4-16d box (3½" × 0.135"); or 3-16d common (3½" × 0.162"); or 4-10d box (3" × 0.128"); or 4-3" × 0.131" nails	At each joist or rafter, face nail
29	Bridging or blocking to joist	2-10d box (3" × 0.128"), or 2-8d common (2½" × 0.131"; or 2-3" × 0.131") nails	Each end, toe nail

ITEM	DESCRIPTION OF BUILDING ELEMENTS	NUMBER AND TYPE OF FASTENER[a, b, c]	SPACING OF FASTENERS	
			Edges (inches)[h]	Intermediate supports[c, e] (inches)
	Wood structural panels, subfloor, roof and interior wall sheathing to framing and particleboard wall sheathing to framing [see Table R602.3(3) for wood structural panel *exterior* wall sheathing to wall framing]			
30	3/8" – ½"	6d common (2" × 0.113") nail (subfloor, wall)[i] 8d common (2½" × 0.131") nail (roof); or RSRS- 01 (2⅜" × 0.113") nail (roof)[j]	6	12[f]
31	19/32" – 1"	8d common nail (2½" × 0.131"); or RSRS-01; (2⅜" × 0.113") nail (roof)[j]	6	12[f]
32	1⅛" – 1¼"	10d common (3" × 0.148") nail; or 8d (2½" × 0.131") deformed nail	6	12
	Other wall sheathing[g]			
33	½" structural cellulosic fiberboard sheathing	1½" galvanized roofing nail, 7/16" head diameter, or, 1¼" long 16 ga. staple with 7/16" or 1" crown	3	6
34	25/32" structural cellulosic fiberboard sheathing	1¾" galvanized roofing nail, 7/16" head diameter, or, 1½" long 16 ga. staple with 7/16" or 1" crown	3	6
35	½" gypsum sheathing[d]	1½" galvanized roofing nail; staple galvanized, 1½" long; 1¼" screws, Type W or S	7	7
36	5/8" gypsum sheathing[d]	1¾" galvanized roofing nail; staple galvanized, 1⅝" long; 1⅝" screws, Type W or S	7	7
	Wood structural panels, combination subfloor underlayment to framing			
37	¾" and less	6d deformed (2" × 0.120") nail; or 8d common (2½" × 0.131") nail	6	12
38	7/8" – 1"	8d common (2½" × 0.131") nail; or 8d deformed (2½" × 0.120") nail	6	12
39	1⅛" – 1¼"	10d common (3" × 0.148") nail; or 8d deformed (2½" × 0.120") nail	6	12

CONTINUED -->

San Joaquin Valley REAP
REGIONAL EARLY ACTION PLANNING

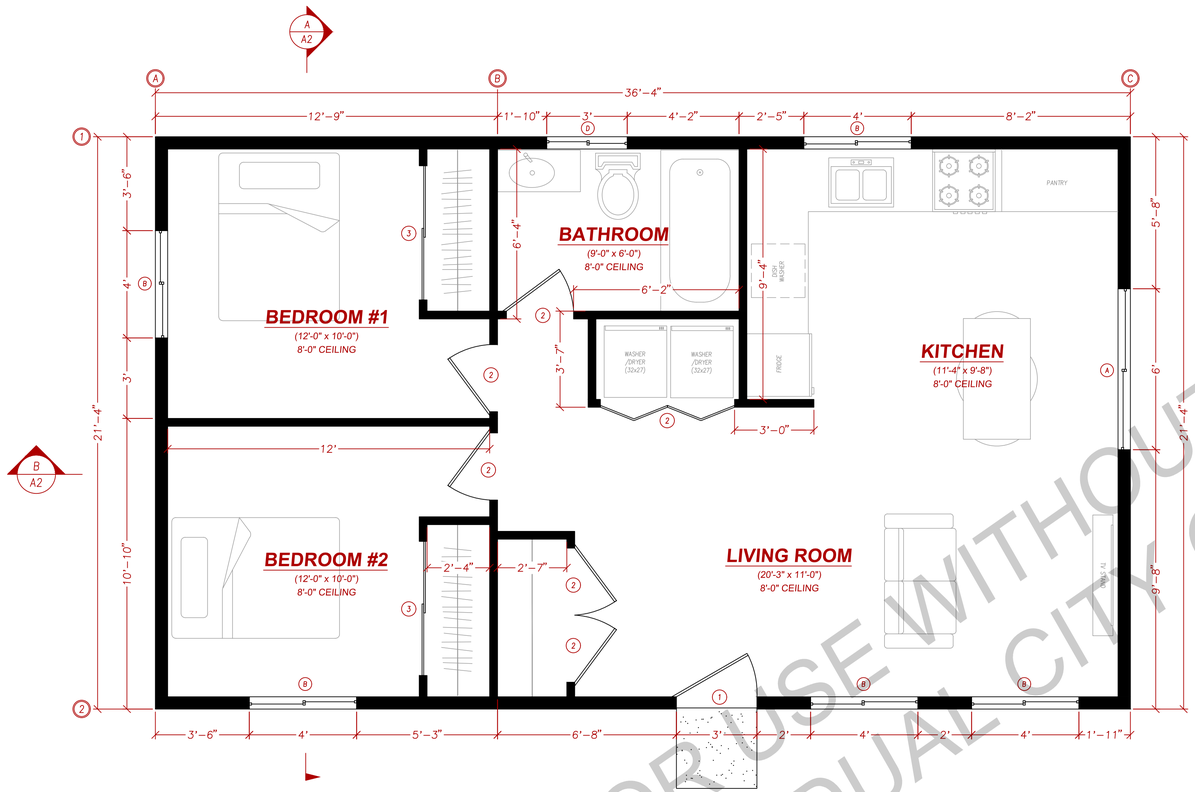
REVISIONS
-

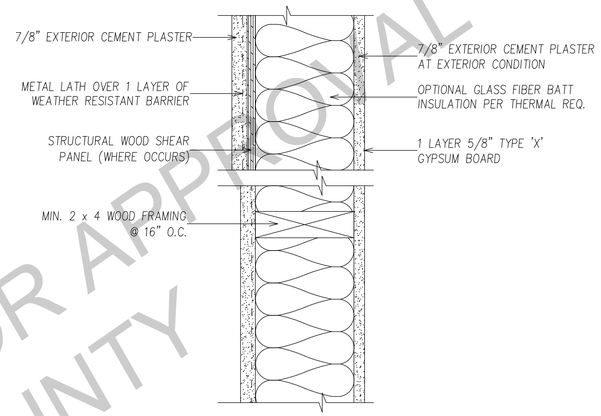
PROJECT TITLE: SAN JOAQUIN VALLEY REAP – VALLEYWIDE ADU PROGRAM
SHEET DESCRIPTION: COVER
DATE: 10/14/2022
AGENCY: SJV REAP

ADU SQFT
550

DRAWING SCALE
-

SHEET
C2





1-HOUR EXTERIOR STUCCO WALL DETAIL — A

ONE HOUR RATING PER IBC TABLE 720.1(2), ITEM 15-1.3

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 3'-0"	SLIDING		(NOT USED)
D	3'-0" x 1'-0"	SLIDING	TEMPERED GLAZING	6' ABOVE FLOOR

EXTERIOR WINDOWS, EXTERIOR GLAZED DOORS, GLAZED OPENINGS WITHIN EXTERIOR DOORS, GLAZED OPENINGS WITHIN EXTERIOR GARAGE DOORS, AND EXTERIOR STRUCTURAL GLASS VENEER SHALL COMPLY WITH ONE OF THE FOLLOWING: (SELECT ONE)

A. MULTI-PANE GLAZING WITH A MINIMUM OF ONE TEMPERED PANE MEETING THE REQUIREMENTS OF SECTION 2406 SAFETY GLAZING, AND WHERE ANY GLAZING FRAMES MADE OF VINYL MATERIALS SHALL HAVE WELDED CORNERS. METAL REINFORCEMENT IN INTERLOCK AREA, AND BE CERTIFIED TO AAMA/WDMA/CSA 101/I.S.2/A40

B. MINIMUM 20-MIN FIRE-RESISTANCE-RATED.

C. MEET PERFORMANCE REQUIREMENTS OF SFM STANDARD 12-7A-2

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" SOLID CORE
3	5'=0" x 6'-8"	SLIDING	5'-6" CLOSET
4	5'-0" x 6'-8"	BI-FOLD	LAUNDRY COVERING w/VENTILATION SLATS

EXTERIOR DOORS SHALL COMPLY WITH ONE OF THE FOLLOWING: (SELECT ONE)

A. EXTERIOR SURFACE OR CLADDING OF NON-COMBUSTIBLE OR IGNITION-RESISTANT MATERIAL

B. SOLID CORE WOOD COMPLYING WITH THE FOLLOWING:
- STILES AND RAILS MINIMUM 1-3/8 INCHES THICK
- RAISED PANELS MINIMUM 1-1/4 INCHES THICK
  EXCEPTION: EXTERIOR PERIMETER OF RAISED PANEL MAY TAPER TO A TONGUE MINIMUM 3/8 INCHES THICK

C. MINIMUM 20-MIN FIRE RATED WHEN TESTED PER NFPA 252

D. MEET PERFORMANCE REQUIREMENTS OF SFM STANDARD 12-7A-1

FLOOR PLAN NOTES

1. EXTERIOR WALLS WITHIN 3 FEET OF PROPERTY LINE (SPRINKLERS) OR 5 FEET OF PROPERTY LINE (WITHOUT SPRINKLERS) REQUIRE 1-HOUR FIRE RATING FOR EXPOSURE TO BOTH SIDES (SEE DETAIL A ON THIS SHEET)

2. PROJECTIONS:
   - PROHIBITED WITHIN 2 FEET OF PROPERTY LINE
   - 1-HOUR FIRE RATING ON THE UNDERSIDE WITHIN 3FT OF PROPERTY LINE (SPRINKLERS)
   - 1-HOUR FIRE RATING ON THE UNDERSIDE WITHIN 5FT OF PROPERTY LINE (WITHOUT SPRINKLERS)

3. OPENINGS:
   - PROHIBITED WITHIN 3FT OF PROPERTY LINE
   - MAXIMUM 25% OF WALL AREA WITHIN 5 FEET OF PROPERTY LINE (WITHOUT SPRINKLERS)

4. PENETRATIONS:
   - 1-HOUR FIRE-RATED PENETRATIONS OF WALLS WITHIN 3FT OF PROPERTY LINE (SPRINKLERS)
   - 1-HOUR FIRE-RATED PENETRATIONS OF WALLS WITHIN 5FT OF PROPERTY LINE (WITHOUT SPRINKLERS)

5. CONCRETE LANDING WITH MIN 36" DEPTH AND A MAXIMUM OF 1-1/2" LOWER THAN TOP OF DOOR THRESHOLD

6. IN CASES WHERE THE PRIMARY HOUSE HAS A FIRE SPRINKLER SYSTEM, THEN THE ADU WILL BE REQUIRED TO HAVE FIRE SPRINKLERS. SPRINKLER PLANS ARE SUBMITTED TO THE FIRE MARSHAL'S OFFICE FOR REVIEW AND APPROVAL. IF THE PRIMARY HOUSE DOES NOT HAVE A SPRINKLER SYSTEM, AND THE ADU IS 1200 SQUARE FEET OR LESS, THEN THE ADU DOES NOT REQUIRE A SPRINKLER SYSTEM. FIRE SPRINKLERS WOULD BE A SEPARATE SUBMITTAL.

OPTIONAL ROLL-IN SHOWER PLAN NOTES

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

1. 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

2. 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)

3. 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

4. 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

5. WHERE SOAP DISHES ARE PROVIDED, MAXIMUM 40 INCHES ABOVE SHOWER FLOOR AND WITHIN REACH LIMITS FROM THE SHOWER SEAT

6. MAXIMUM 2.1% SLOPE IN ALL DIRECTIONS OF ROLL-IN SHOWER FLOORS

7. MAXIMUM ½" HIGH THRESHOLDS WITH MAXIMUM 50% BEVELED SLOPE AT ROLL-IN SHOWERS

8. WHERE DRAINS ARE PROVIDED AT ROLL-IN SHOWERS, MAXIMUM ¼" GRATE OPENINGS FLUSH WITH SHOWER FLOOR SURFACE

San Joaquin Valley REAP
REGIONAL EARLY ACTION PLANNING

REVISIONS
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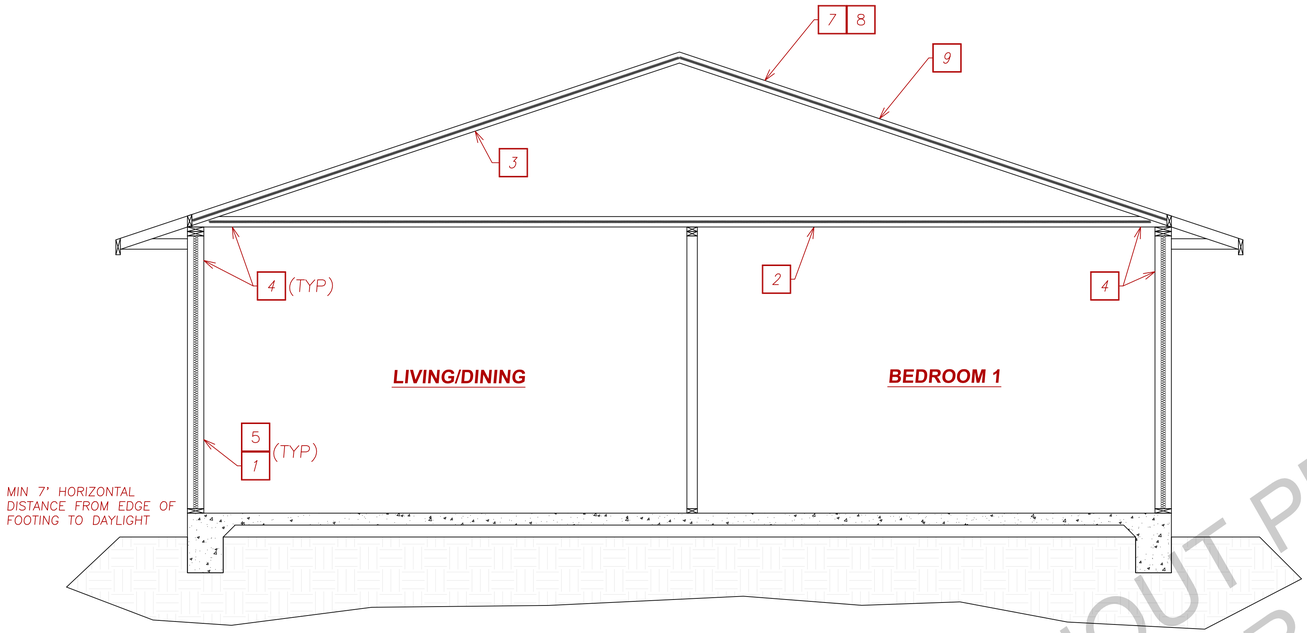
PROJECT TITLE: SAN JOAQUIN VALLEY REAP - VALLEYWIDE ADU PROGRAM
SHEET DESCRIPTION: FLOOR PLAN
DATE: 10/14/2022
AGENCY: SJV REAP

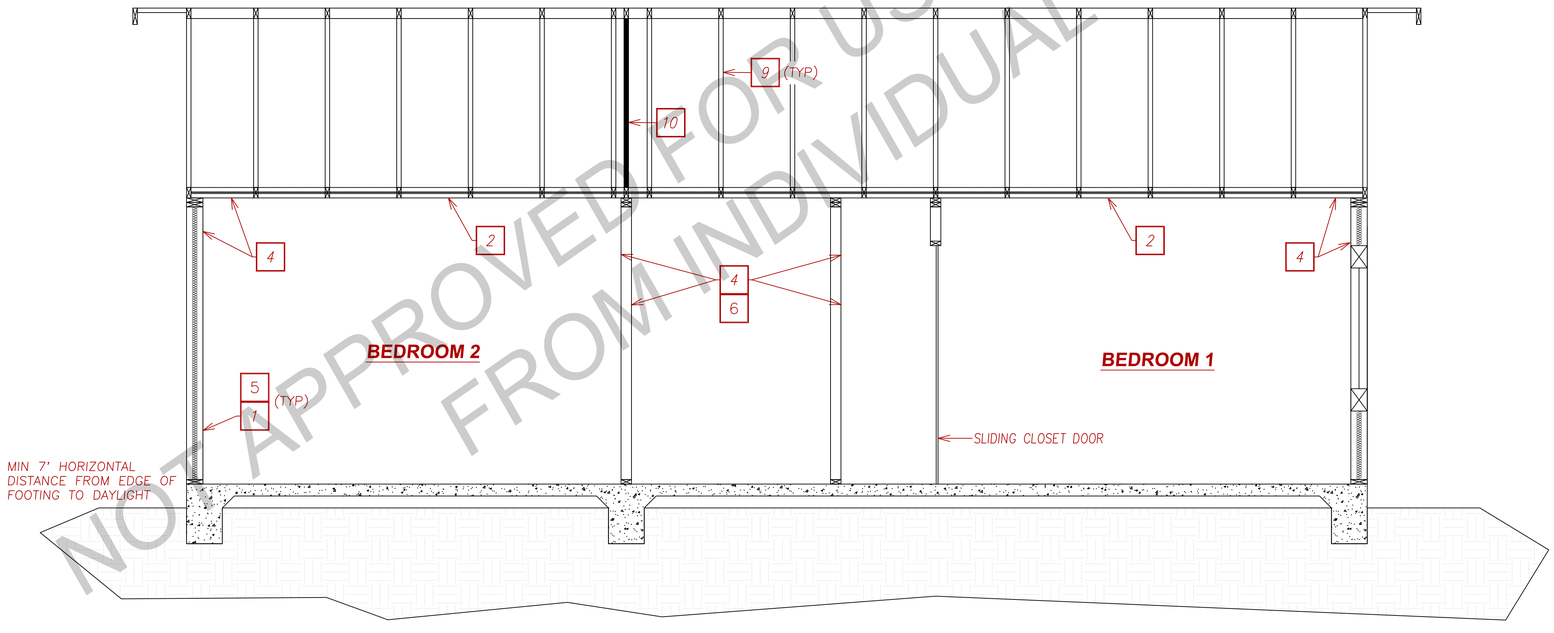
ADU SQFT
775

DRAWING SCALE
3/8" = 1'

SHEET
A1



SECTION A - A



SECTION B - B

SECTION KEYNOTES

1	WALL INSULATION: R19
2	CEILING INSULATION: R32
3	ROOF INSULATION: R32
4	INTERIOR FINISH: ½" GYPSUM BOARD
5	EXTERIOR WALL: 2x6 STUD WALL @ 24" O.C.
6	INTERIOR WALL: 2x4 STUD WALL @ 24" O.C.
7	RADIANT BARRIER IS REQUIRED
8	CLASS "A" ROOF
9	MANUFACTURED TRUSSES
10	MANUFACTURED DRAG TRUSS

SECTION NOTES

1. CEILING HEIGHT FOR HABITABLE SPACES SHALL BE 7 FT.
2. CEILING HEIGHT FOR BATHROOMS SHALL BE 6'–8".
3. WALLS SHALL NOT BE GREATER THAN 10 FT. IN HEIGHT

San Joaquin Valley REAP
REGIONAL EARLY ACTION PLANNING

REVISIONS
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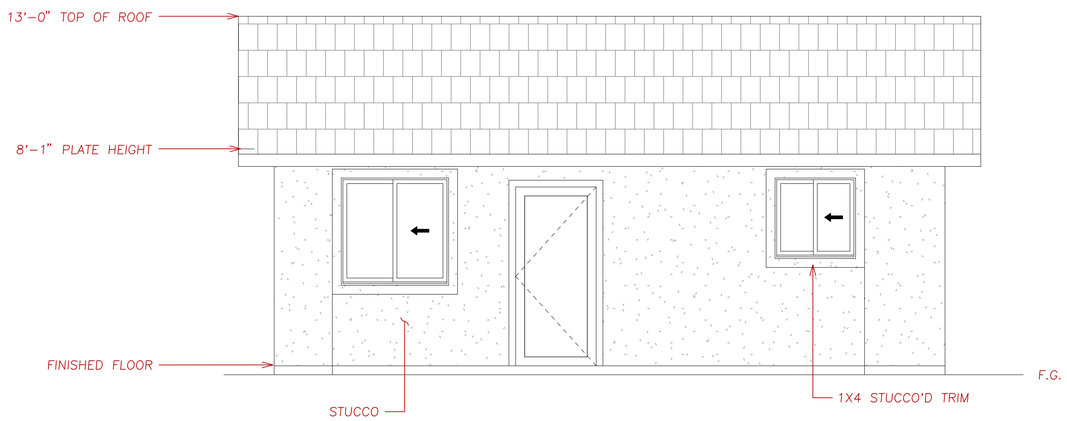
PROJECT TITLE: SAN JOAQUIN VALLEY REAP – VALLEYWIDE ADU PROGRAM
SHEET DESCRIPTION: SECTIONS
DATE: 10/14/2022
AGENCY: SJV REAP

ADU SQFT
910

DRAWING SCALE
½" = 1'

SHEET
A2



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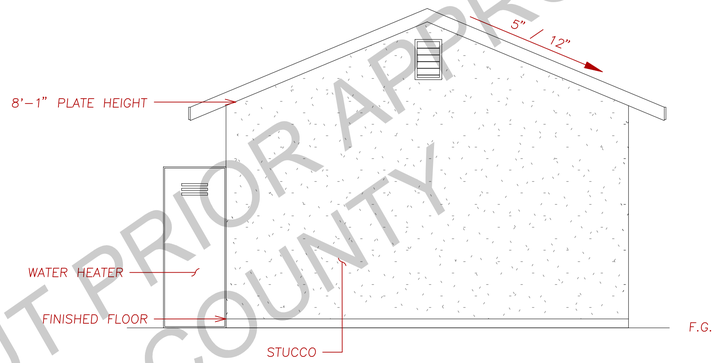
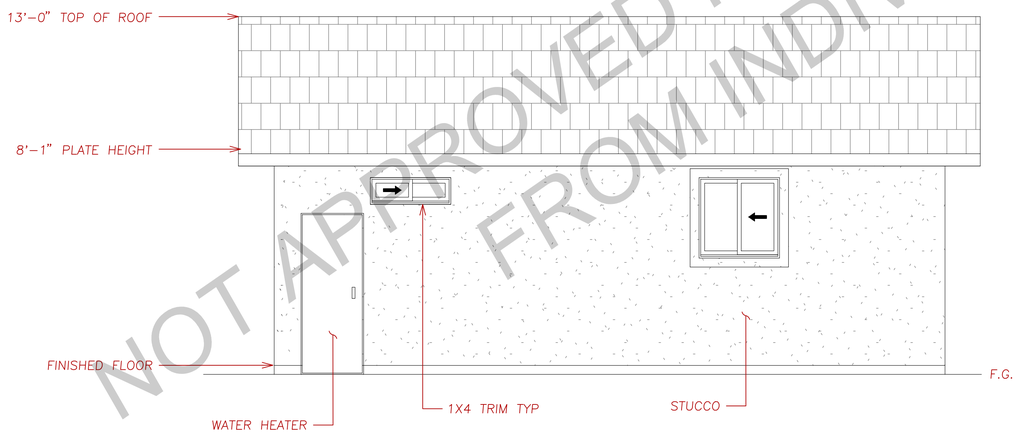


LEFT ELEVATION



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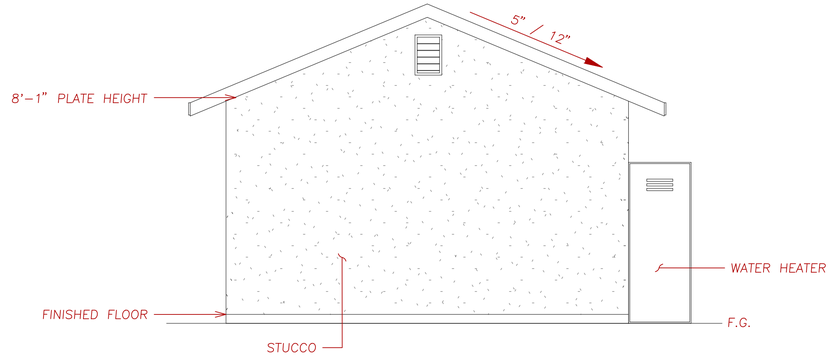


RIGHT ELEVATION

San Joaquin Valley REAP
REGIONAL EARLY ACTION PLANNING

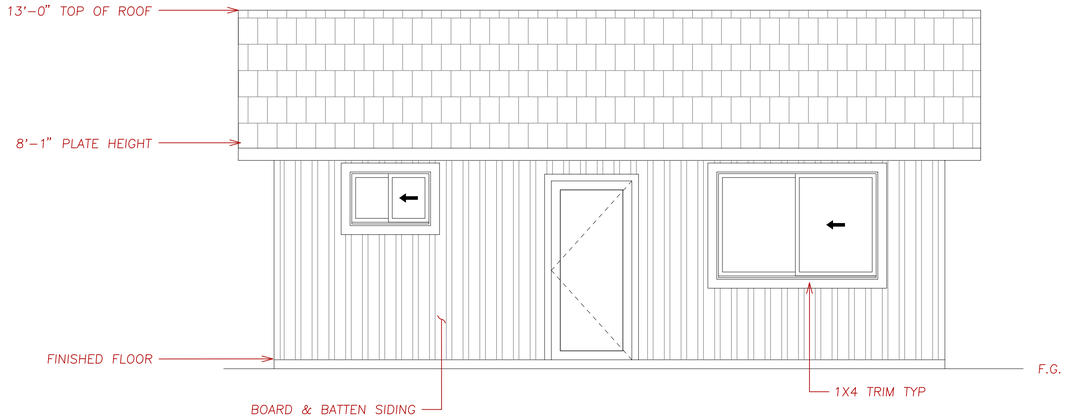
REVISIONS
XX-XX-XXXX

PROJECT TITLE: SAN JOAQUIN VALLEY REAP – VALLEYWIDE ADU PROGRAM
SHEET DESCRIPTION: ELEVATION A
DATE: 10/14/2022
AGENCY: SJV REAP

ADU SQFT
375

DRAWING SCALE
3/8" = 1'

SHEET
A3



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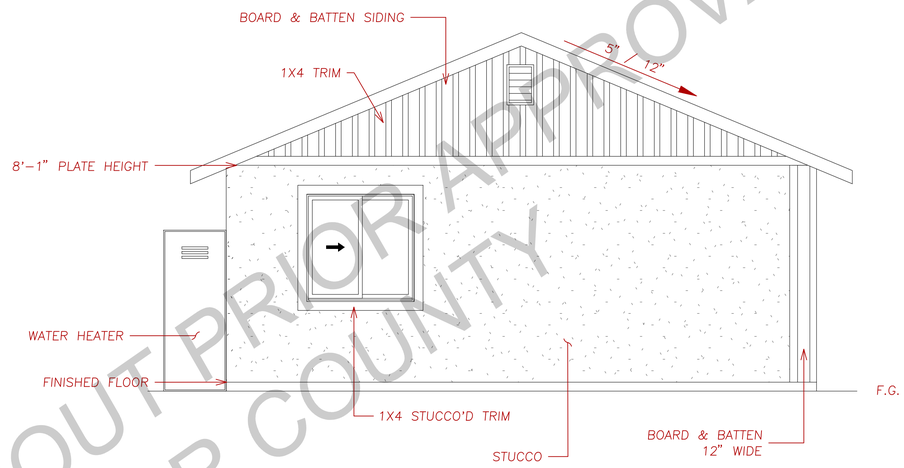
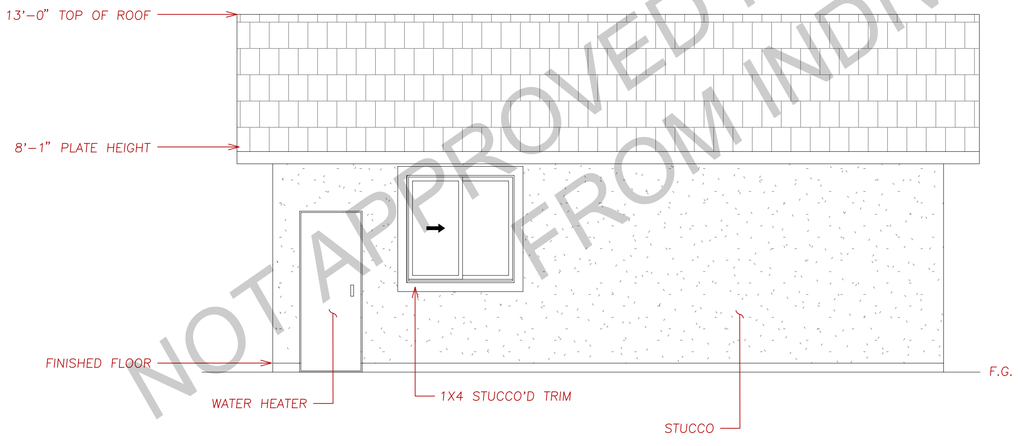


LEFT ELEVATION



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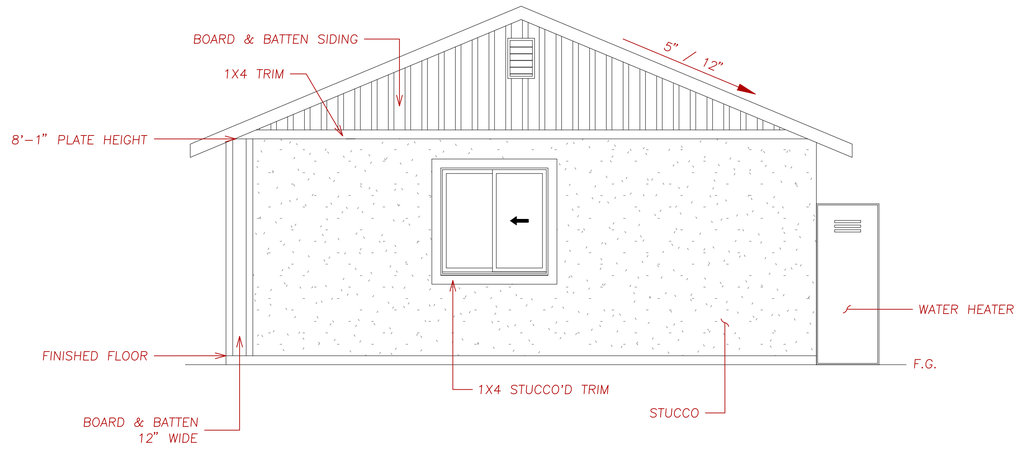


RIGHT ELEVATION

San Joaquin Valley REAP
REGIONAL EARLY ACTION PLANNING

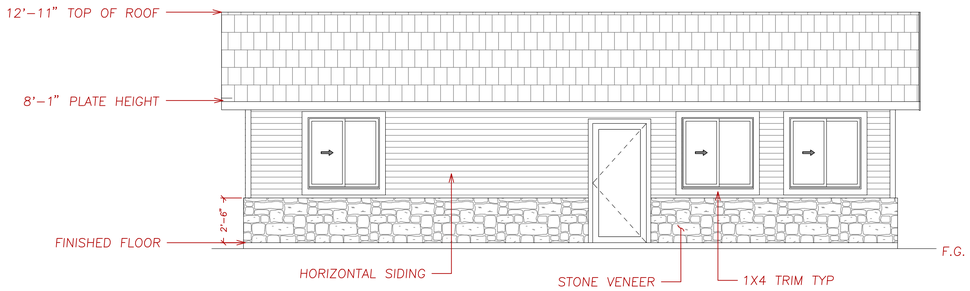
REVISIONS
XX-XX-XXXX

PROJECT TITLE: SAN JOAQUIN VALLEY REAP - VALLEYWIDE ADU PROGRAM
SHEET DESCRIPTION: ELEVATION B
DATE: 10/14/2022
AGENCY: SJV REAP

ADU SQFT
550

DRAWING SCALE
3/8" = 1'

SHEET
A4



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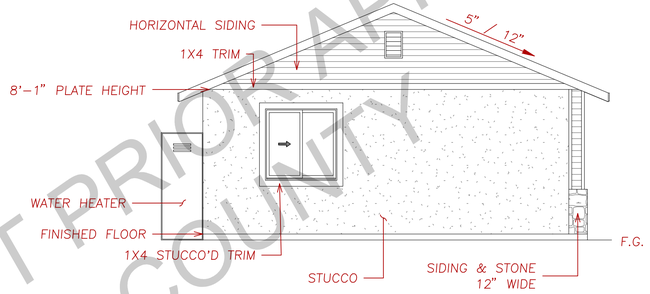

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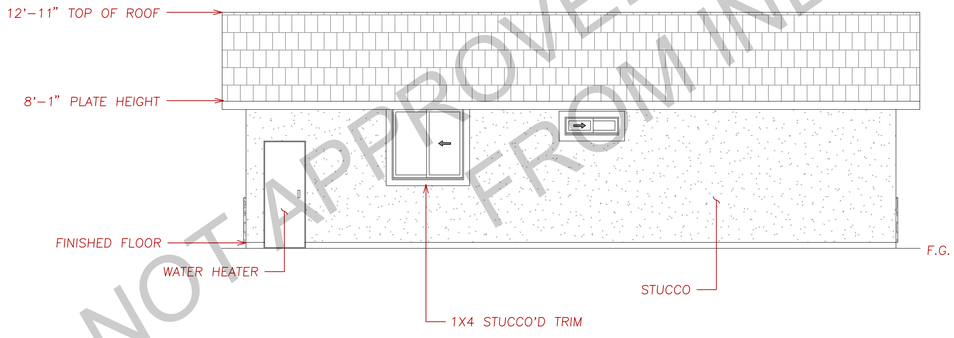

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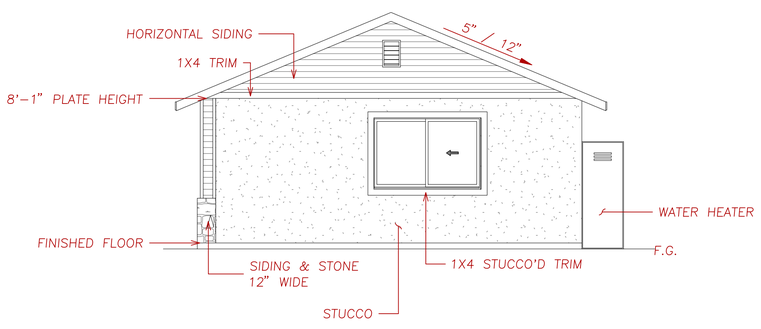


RIGHT ELEVATION

San Joaquin Valley REAP
REGIONAL EARLY ACTION PLANNING

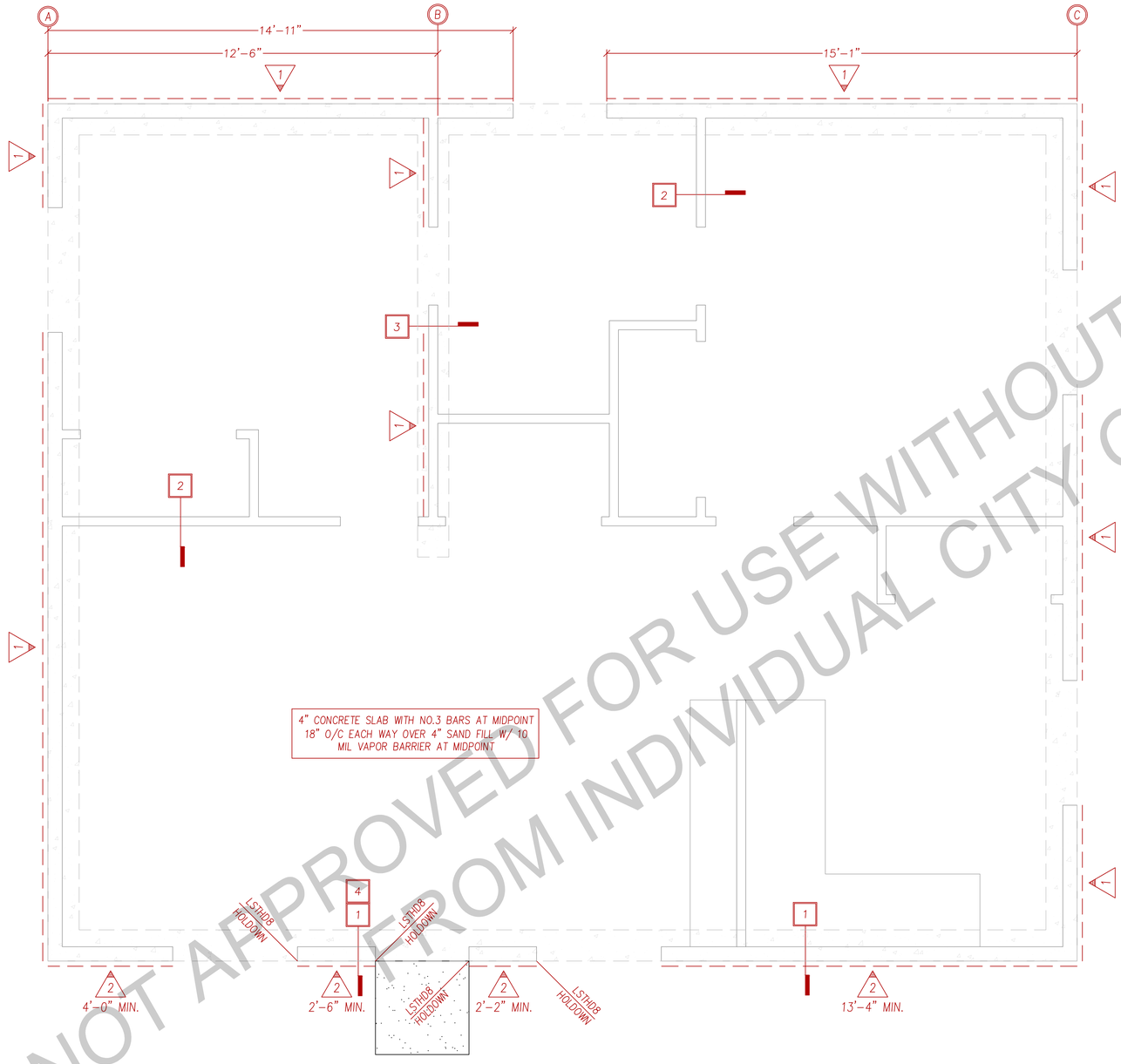
REVISIONS
XX-XX-XXXX

PROJECT TITLE: SAN JOAQUIN VALLEY REAP - VALLEYWIDE ADU PROGRAM
SHEET DESCRIPTION: ELEVATION C
DATE: 10/14/2022
AGENCY: SJV REAP

ADU SQFT
775

DRAWING SCALE
$\frac{1}{4}$" = 1'

SHEET
A5



FOUNDATION PLAN NOTES

1. ALL ANCHORS BOLTS SHALL BE $\frac{5}{8}$" DIAMETER AND HAVE A MINIMUM EMBEDMENT OF 7 INCHES INTO CONCRETE (UNO) AND NOT SPACED MORE THAN 6 FEET APART
2. 3"X3"X0.229" PLATE WASHERS SHALL BE USED ON EACH SILL PLATE ANCHOR BOLT
3. FOR STANDARD CUT WASHERS PLACED BETWEEN PLATE WASHER AND NUT, HOLE IN PLATE WASHER MAY BE DIAGONALLY SLOTTED WITH MAXIMUM $\frac{3}{16}$" LARGER WIDTH THAN BOLT DIAMETER AND MAXIMUM 1-3/4" SLOT LENGTH
4. PROVIDE A MINIMUM OF TWO ANCHOR BOLTS PER SILL PLATE WITH ONE BOLT LOCATED MAXIMUM 12" AND MINIMUM 7 BOLT DIAMETERS FROM EACH END OF EACH SECTION.
5. BOLTS LOCATED IN THE MIDDLE THIRD OF THE SILL PLATE WIDTH
6. FASTENERS FOR PRESSURE-PRESERVATIVE TREATED AND FIRE RETARDANT TREATED WOOD SHALL BE HOT-DIPPED ZINC COATED GALVANIZED, STAINLESS STEEL OR COPPER
7. NO LPG PIPING ASSEMBLIES ALLOWED IN OR BENEATH SLABS WITHIN THE STRUCTURE

KEYNOTES/LEGEND

(#) BRACED WALL LINE

[#] FOUNDATION PLAN DETAIL FOUND ON SHEET S3

INDICATES CONCRETE FOOTING AREA

WALL BRACING SCHEDULE		
TYPE	MATERIAL	NAILING/STAPLING
1	7/8" STUCCO [1]	STAPLES 16 GA. 7/8" LEGS @ 6" O.C.
2	3/8" PLYWD	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.

San Joaquin Valley REAP REGIONAL EARLY ACTION PLANNING

REVISIONS
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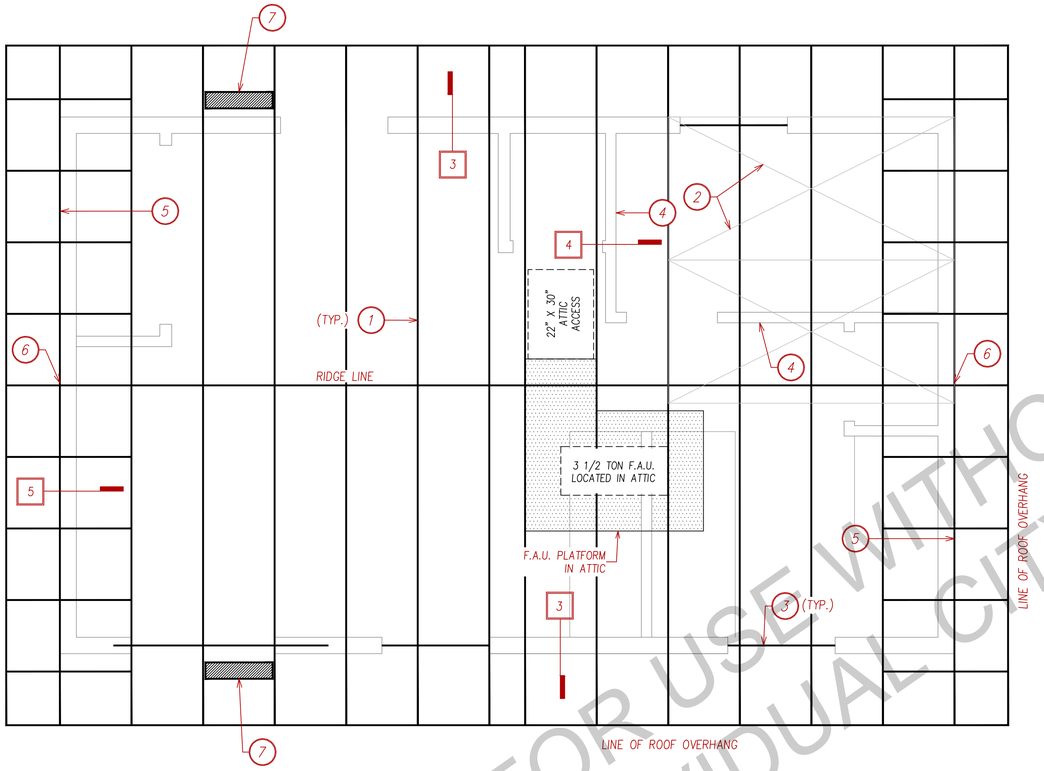
PROJECT TITLE: SAN JOAQUIN VALLEY REAP - VALLEYWIDE ADU PROGRAM
SHEET DESCRIPTION: FOUNDATION PLAN
DATE: 10/14/2022
AGENCY: SJV REAP

ADU SQFT
910

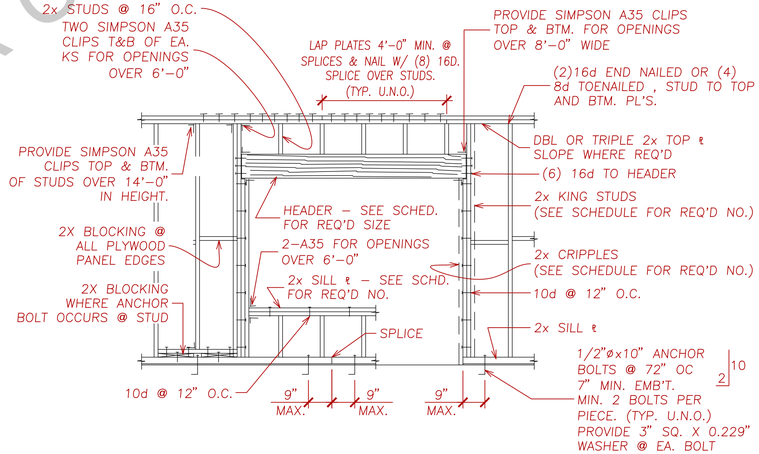
DRAWING SCALE
$\frac{1}{2}$" = 1'

SHEET
S1



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 @ 12" O.C.
3. 6X8 D.F. # 2
4. TOP OF NON-BEARING, NON-BRACED WALL (SEE DET. 4)
5. SEE DET. 3 FOR END WALL TRUSS SHEAR TRANSFER DESIGN REQUIREMENT
6. LOCATION OF 12"x18" GABLE END VENT
7. LOCATION OF 5 ½" x 22 ½" EVE VENT
- # FRAMING PLAN DETAIL FOUND ON SHEET S3



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

HEADER SCHEDULE

CLEAR SPAN OF OPENING	HEADER SIZE NOTE 1		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.

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

$\frac{375\ SQFT}{150} \cdot 144\ in/ft = (360\ in^2)$

PROVIDE:

2 - 12"x18" GABLE END VENT (140 in^2) = (280 in^2)

2 - 5 ½"x22½" EAVE VENT (83 in^2) = (166 in^2)

TOTAL PROVIDED: = (446 in^2)

San Joaquin Valley REAP REGIONAL EARLY ACTION PLANNING

REVISIONS
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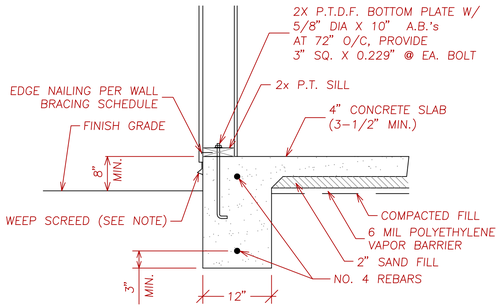
PROJECT TITLE: SAN JOAQUIN VALLEY REAP - VALLEYWIDE ADU PROGRAM
SHEET DESCRIPTION: ROOF FRAMING PLAN
DATE: 10/14/2022
AGENCY: SJV REAP

ADU SQFT
375

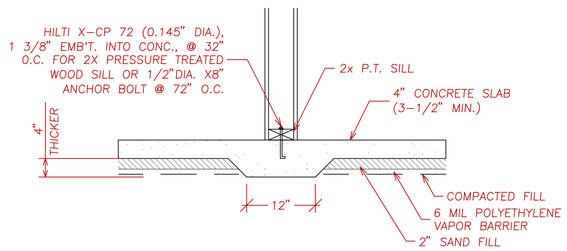
DRAWING SCALE
½" = 1'

SHEET
S2

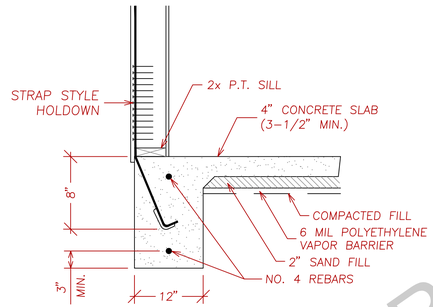


NOTE: STUCCO SHALL HAVE A MINIMUM CLEARANCE TO EARTH OF 4" AND 2" TO PAVED SURFACES WITH AN APPROVED WEEP SCREED

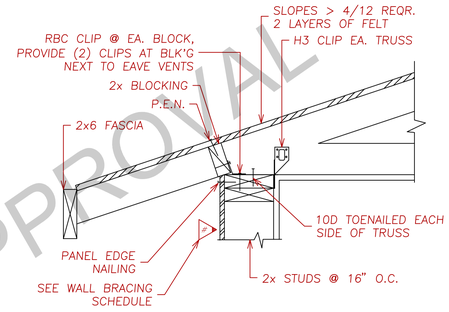
1 EXTERIOR FOOTING
N.T.S.



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

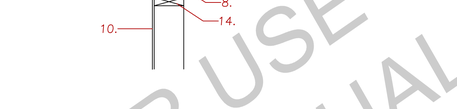


3 LSTHD8 HOLDOWN DETAIL
N.T.S.



4 TRUSS TO WALL CONNECTION
N.T.S.

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



1. DRAG TRUSS
2. OUT LOOKER PER SCHEDULE/PLANS
3. 2x BLOCK 2" LARGER THAN FINGER FRAMING W/ 16d @ 16" O.C.
4. E.N. PER WALL BRACING SCHEDULE
5. STANDARD TRUSSES @ 24" O.C.
6. 2x4 DFL #2 BRACE AT 4'-0" O.C. MAX. TO NEAREST TRUSS WITH 4-16d NAILS PER CONNECTION AT EACH END
7. SIMPSON A35, INSTALL BRACE PER MANUFACTURER'S INSTRUCTIONS
8. 2x BLOCKING W/16d @ 6" O.C.
9. 4-16d NAILS
10. SHEAR WALL AS PER PLANS. WITH 2x STUD WALL TO BOTTOM CHORD OF TRUSS ASSEMBLY, SEE PLAN.
11. 40-45 DEGREES FROM HORIZONTAL
12. NOT USED
13. 16d @ 16" O.C.
14. DOUBLE 2x TOP PLATE
15. 2x FINGER FRAMING AT 24" O.C.
16. PLYWOOD ROOF SHEATHING
17. 8d @ 8" O.C.
18. 2-16d NAILS
19. 2x BARGE

6 TRUSS TO WALL CONNECTION
N.T.S.

San Joaquin Valley REAP
REGIONAL EARLY ACTION PLANNING

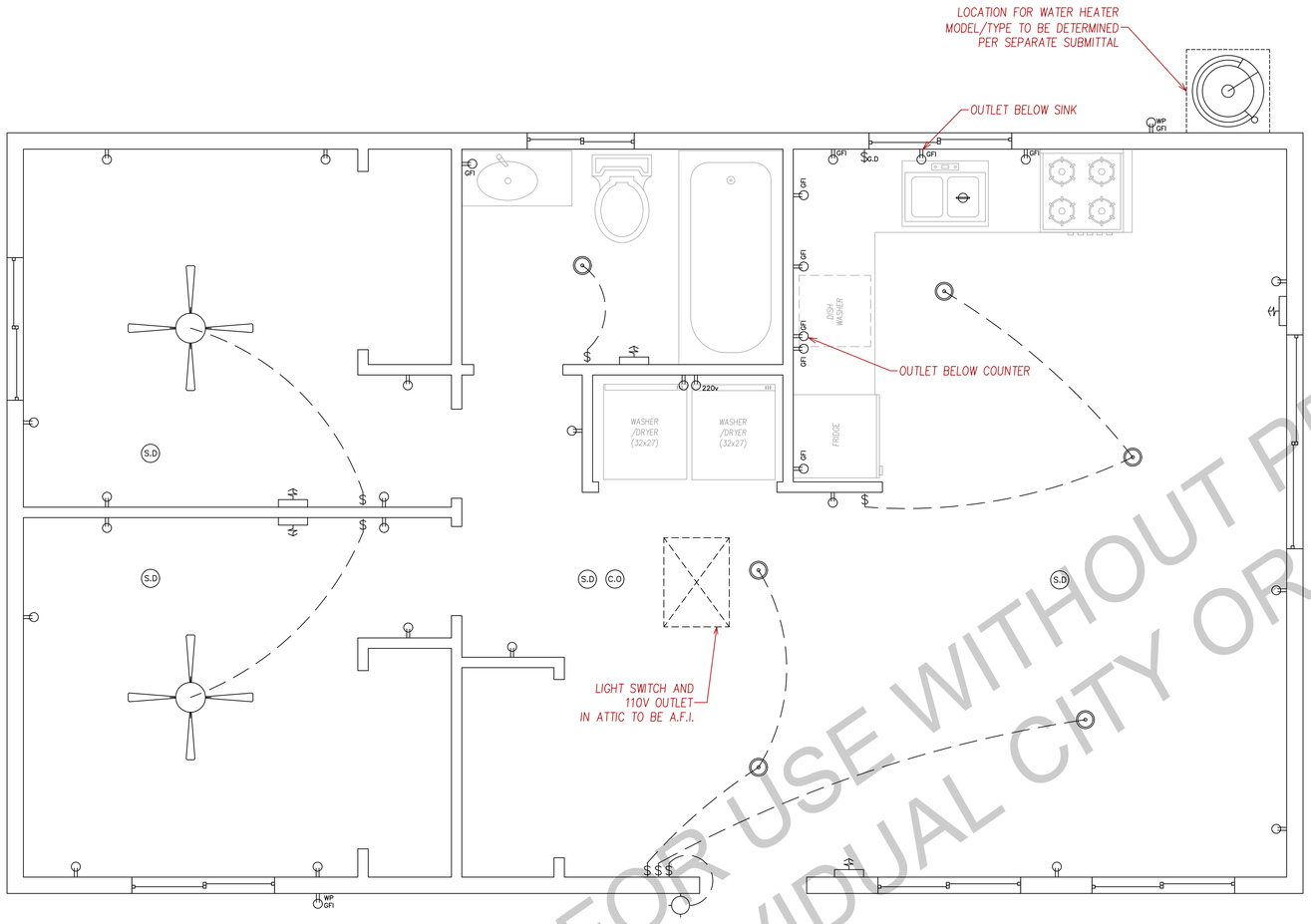
REVISIONS
XX-XX-XXXX

PROJECT TITLE: SAN JOAQUIN VALLEY REAP - VALLEYWIDE ADU PROGRAM
SHEET DESCRIPTION: DETAILS
DATE: 10/14/2022
AGENCY: SJV REAP

ADU SQFT
550

DRAWING SCALE
-

SHEET
S3



ELECTRICAL LEGEND

	DUPLEX OUTLET	C.O	CARBON MONOXIDE ALARM
GFI	GFCI OUTLET		FAN AND LIGHT COMBINATION
WP GFI	WEATHERPROOF GFCI OUTLET		HIGH EFFICACY LIGHT FIXTURE
$	WALL SWITCH		HIGH EFFICACY RECESSED LIGHT
$G.D	GARBAGE DISPOSAL SWITCH		GARBAGE DISPOSAL
$V.S	VACANCY SENSOR		FAN & LIGHT COMBO
	HVAC AIR DUCT LOCATION		
S.D	SMOKE DETECTOR		

ELECTRICAL PLAN NOTES

1. LOCAL EXHAUST FANS TO EXTERIOR TO PROVIDE MINIMUM 50 CFM INTERMITTENT OR 20 CFM CONTINUOUS VENTILATION.
2. SMOKE DETECTORS TO BE INTERCONNECTED PER CRC R314.4 AND HARD-WIRED WITH BATTERY BACK-UP PER CRC R314.6
3. CARBON MONOXIDE ALARMS TO BE INTERCONNECTED PER CRC R315.7 AND HARD-WIRED WITH BATTERY BACK-UP PER CRC R315.5
4. 4" ø DRYER VENT WITH MAXIMUM 14 FOOT COMBINED HORIZONTAL AND VERTICAL LENGTH WITH TWO 90 DEGREE ELBOWS.
5. A MECHANICAL EXHAUST VENTILATION SYSTEM, SUPPLY VENTILATION SYSTEM, OR COMBINATION THEREOF SHALL BE INSTALLED FOR EACH DWELLING UNIT TO PROVIDE WHOLE-BUILDING VENTILATION WITH OUTDOOR AIR IN COMPLIANCE WITH ASHRAE STANDARD 62.2 AS ADOPTED BY THE CALIFORNIA ENERGY COMMISSION.
6. 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. INTERMITTENT LOCAL EXHAUST VENTILATION AIRFLOW RATES SHALL BE 50 CFM IN BATHROOMS AND 100 CFM IN KITCHENS. CONTINUOUS LOCAL EXHAUST VENTILATION AIRFLOW RATES SHALL BE 20 CFM IN BATHROOMS AND 5 AIR CHANGES PER HOUR IN KITCHENS BASED ON KITCHEN VOLUME.
7. WATER HEATER OR FURNACE SHALL BE A DIRECT-VENT APPLIANCE
8. LISTED GASKETED SELF CLOSING DOOR REQUIRED FOR GAS FAU
9. GFCI PROTECTION SHALL BE PROVIDED FOR THE DISHWASHER, KITCHEN SINK, AND BATHROOM SINK RECEPTICLES [CEC 210.8(D)].
10. SOLAR PLAN REQUIRED BY THIRD PARTY CONTRACTOR.
11. ALL EXTERIOR ELECTRICAL RECEPTACLES SHALL BE WP/GFCI PROTECTED.
12. STOVE RANGE EXHAUST SHALL HAVE A MINIMUM AIR FLOW RATE OF 100 CFM AND SHALL EXHAUST TO THE EXTERIOR.

LIGHTING PLAN NOTES

1. ALL LUMINAIRES SHALL BE HIGH-EFFICACY IN ACCORDANCE WITH CBEES TABLE 150.0-A
2. ALL LED LUMINAIRES AND LAMPS SHALL BE MARKED "JA8-2019" AND LISTED IN THE CALIFORNIA ENERGY COMMISSION DATABASE AT HTTPS://CACERTAPPLIANCES. ENERGY.CA.GOV/PAGES/APPLIANCESEARCH.ASPX
3. ALL RECESSED DOWNLIGHT AND ENCLOSED LUMINAIRES SHALL BE MARKED "JA8-2019-E" AND LISTED IN THE CALIFORNIA ENERGY COMMISSION DATABSE AT HTTPS://CACERTAPPLIANCES.ENERGY.CA.GOV/PAGES/ APPLIANCESEARCH.ASPX
4. RECESSED DOWNLIGHT LUMINAIRES IN CEILINGS SHALL NOT BE SCREW-BASED
5. BATHROOMS, GARAGES, LAUNDRY ROOMS, AND UTILITY ROOMS: AT LEAST ONE LUMINAIRE IN EACH SPACE SHALL BE CONTROLLED BY A VACANCY SENSOR
6. ALL LUMINAIRES REQUIRING "JA8-2019" OR "JA8-2016-E" MARKING SHALL BE CONTROLLED BY A DIMMER OR VACANCY SENSOR
   EXCEPTION: CLOSETS LESS THAN 70 S.F. & HALLWAYS
7. OUTDOOR LIGHTING PERMANENTLY MOUNTED TO BUILDINGS SHALL BE CONTROLLED BY ONE OF THE FOLLOWING:
   - PHOTOCONTROL AND MOTION SENSOR
   - PHOTOCONTROL AND AUTOMATIC TIME-SWITCH CONTROL
   - ASTRONOMICAL TIME CLOCK
   - ENERGY MANAGEMENT CONTROL SYSTEM PER CBEES 150.0(K)3AIIIC

San Joaquin Valley REAP
REGIONAL EARLY ACTION PLANNING

REVISIONS
XX-XX-XXXX

PROJECT TITLE: SAN JOAQUIN VALLEY REAP - VALLEYWIDE ADU PROGRAM
SHEET DESCRIPTION: ELECTRICAL PLAN
DATE: 10/14/2022
AGENCY: SJV REAP

ADU SQFT
775

DRAWING SCALE
1/2" = 1'

SHEET
E1

CHAPTER 3
GREEN BUILDING
SECTION 301 GENERAL

301.1 SCOPE. Buildings shall be designed to include the green building measures specified as mandatory in the application checklists contained in this code. Voluntary green building measures are also included in the application checklists and may be included in the design and construction of structures covered by this code, but are not required unless adopted by a city, county, or city and county as specified in Section 101.7.

301.1.1 Additions and alterations. [HCD] The mandatory provisions of Chapter 4 shall be applied to additions or alterations of existing residential buildings where the addition or alteration increases the building's conditioned area, volume, or size. The requirements shall apply only to and/or within the specific area of the addition or alteration.

Note: On and after January 1, 2014, residential buildings undergoing permitted alterations, additions, or improvements shall replace noncompliant plumbing fixtures with water-conserving plumbing fixtures. Plumbing fixture replacement is required prior to issuance of a certificate of final completion, certificate of occupancy or final permit approval by the local building department. See Civil Code Section 1101.1, et seq., for the definition of a noncompliant plumbing fixture, types of residential buildings affected and other important enactment dates.

301.2 LOW-RISE AND HIGH-RISE RESIDENTIAL BUILDINGS. [HCD] The provisions of individual sections of CALGreen may apply to either low-rise residential buildings high-rise residential buildings, or both. Individual sections will be designated by banners to indicate where the section applies specifically to low-rise only (LR) or high-rise only (HR). When the section applies to both low-rise and high-rise buildings, no banner will be used.

SECTION 302 MIXED OCCUPANCY BUILDINGS

302.1 MIXED OCCUPANCY BUILDINGS. In mixed occupancy buildings, each portion of a building shall comply with the specific green building measures applicable to each specific occupancy.

ABBREVIATION DEFINITIONS:

HCD	Department of Housing and Community Development
BSC	California Building Standards Commission
DSA-SS	Division of the State Architect, Structural Safety
OSHPD	Office of Statewide Health Planning and Development
LR	Low Rise
HR	High Rise
AA	Additions and Alterations
N	New

CHAPTER 4
RESIDENTIAL MANDATORY MEASURES
DIVISION 4.1 PLANNING AND DESIGN
SECTION 4.102 DEFINITIONS

4.102.1 DEFINITIONS
The following terms are defined in Chapter 2 *(and are included here for reference)*

FRENCH DRAIN. A trench, hole or other depressed area loosely filled with rock, gravel, fragments of brick or similar pervious material used to collect or channel drainage or runoff water.

WATTLES. Wattles are used to reduce sediment in runoff. Wattles are often constructed of natural plant materials such as hay, straw or similar material shaped in the form of tubes and placed on a downflow slope. Wattles are also used for perimeter and inlet controls.

4.106 SITE DEVELOPMENT

4.106.1 GENERAL. Preservation and use of available natural resources shall be accomplished through evaluation and careful planning to minimize negative effects on the site and adjacent areas. Preservation of slopes, management of storm water drainage and erosion controls shall comply with this section.

4.106.2 STORM WATER DRAINAGE AND RETENTION DURING CONSTRUCTION. Projects which disturb less than one acre of soil and are not part of a larger common plan of development which in total disturbs one acre or more, shall manage storm water drainage during construction. In order to manage storm water drainage during construction, one or more of the following measures shall be implemented to prevent flooding of adjacent property, prevent erosion and retain soil runoff on the site.

1. Retention basins of sufficient size shall be utilized to retain storm water on the site.
2. Where storm water is conveyed to a public drainage system, collection point, gutter or similar disposal method, water shall be filtered by use of a barrier system, wattle or other method approved by the enforcing agency.
3. Compliance with a lawfully enacted storm water management ordinance.

Note: Refer to the State Water Resources Control Board for projects which disturb one acre or more of soil, or are part of a larger common plan of development which in total disturbs one acre or more of soil.

(Website: https://www.waterboards.ca.gov/water_issues/programs/stormwater/construction.html)

4.106.3 GRADING AND PAVING. Construction plans shall indicate how the site grading or drainage system will manage all surface water flows to keep water from entering buildings. Examples of methods to manage surface water include, but are not limited to, the following:

1. Swales
2. Water collection and disposal systems
3. French drains
4. Water retention gardens
5. Other water measures which keep surface water away from buildings and aid in groundwater recharge.

Exception: Additions and alterations not altering the drainage path.

4.106.4 Electric vehicle (EV) charging for new construction. New construction shall comply with Sections 4.106.4.1, 4.106.4.2, or 4.106.4.3 to facilitate future installation and use of EV chargers. Electric vehicle supply equipment (EVSE) shall be installed in accordance with the *California Electrical Code,* Article 625.

Exceptions:
1. On a case-by-case basis, where the local enforcing agency has determined EV charging and infrastructure are not feasible based upon one or more of the following conditions:
   1.1 Where there is no commercial power supply.
   1.2 Where there is evidence substantiating that meeting the requirements will alter the local utility infrastructure design requirements on the utility side of the meter so as to increase the utility side cost to the homeowner or the developer by more than $400.00 per dwelling unit.
2. Accessory Dwelling Units (ADU) and Junior Accessory Dwelling Units (JADU) without additional parking facilities.

4.106.4.1 New one- and two-family dwellings and townhouses with attached private garages. For each dwelling unit, install a listed raceway to accommodate a dedicated 208/240-volt branch circuit. The raceway shall not be less than trade size 1 (nominal 1-inch inside diameter). The raceway shall originate at the main service or subpanel and shall terminate into a listed cabinet, box or other enclosure in close proximity to the proposed location of an EV charger. Raceways are required to be continuous at enclosed, inaccessible or concealed areas and spaces. The service panel and/or subpanel shall provide capacity to install a 40-ampere minimum dedicated branch circuit and space(s) reserved to permit installation of a branch circuit overcurrent protective device.

4.106.4.1.1 Identification. The service panel or subpanel circuit directory shall identify the overcurrent protective device space(s) reserved for future EV charging as "EV CAPABLE". The raceway termination location shall be permanently and visibly marked as "EV CAPABLE".

4.106.4.2 New multifamily dwellings. If residential parking is available, ten (10) percent of the total number of parking spaces on a building site, provided for all types of parking facilities, shall be electric vehicle charging spaces (EV spaces) capable of supporting future EVSE. Calculations for the required number of EV spaces shall be rounded up to the nearest whole number.

Notes:
1. Construction documents are intended to demonstrate the project's capability and capacity for facilitating future EV charging.
2. There is no requirement for EV spaces to be constructed or available until EV chargers are installed for use.

4.106.4.2.1 Electric vehicle charging space (EV space) locations. Construction documents shall indicate the location of proposed EV spaces. Where common use parking is provided at least one EV space shall be located in the common use parking area and shall be available for use by all residents.

4.106.4.2.1.1 Electric Vehicle Charging Stations (EVCS) When EV chargers are installed, EV spaces required by Section 4.106.2.2, Item 3, shall comply with at least one of the following options:

1. The EV space shall be located adjacent to an accessible parking space meeting the requirements of the *California Building Code,* Chapter 11A, to allow use of the EV charger from the accessible parking space.
2. The EV space shall be located on an accessible route, as defined in the *California Building Code,* Chapter 2, to the building.

Exception: Electric vehicle charging stations designed and constructed in compliance with the *California Building Code*, Chapter 11B, are not required to comply with Section 4.106.4.2.1.1 and Section 4.106.4.2.2, Item 3.

Note: Electric Vehicle charging stations serving public housing are required to comply with the *California Building Code*, Chapter 11B.

4.106.4.2.2 Electric vehicle charging space (EV space) dimensions. The EV space shall be designed to comply with the following:

1. The minimum length of each EV space shall be 18 feet (5486 mm).
2. The minimum width of each EV space shall be 9 feet (2743 mm).
3. One in every 25 EV spaces, but not less than one EV space, shall have an 8-foot (2438 mm) wide minimum aisle. A 5-foot (1524 mm) wide minimum aisle shall be permitted provided the minimum width of the EV space is 12 feet (3658 mm).
   a. Surface slope for this EV space and the aisle shall not exceed 1 unit vertical in 48 units horizontal (2.083 percent slope) in any direction.

4.106.4.2.3 Single EV space required. Install a listed raceway capable of accommodating a 208/240-volt dedicated branch circuit. The raceway shall not be less than trade size 1 (nominal 1-inch inside diameter). The raceway shall originate at the main service or subpanel and shall terminate into a listed cabinet, box or enclosure in close proximity to the proposed location of the EV space. Construction documents shall identify the raceway termination point. The service panel and/or subpanel shall provide capacity to install a 40-ampere minimum dedicated branch circuit and space(s) reserved to permit installation of a branch circuit overcurrent protective device.

4.106.4.2.4 Multiple EV spaces required. Construction documents shall indicate the raceway termination point and proposed location of future EV spaces and EV chargers. Construction documents shall also provide information on amperage of future EVSE, raceway method(s), wiring schematics and electrical load calculations to verify that the electrical panel service capacity and electrical system, including any on-site distribution transformer(s), have sufficient capacity to simultaneously charge all EVs at all required EV spaces at the full rated amperage of the EVSE. Plan design shall be based upon a 40-ampere minimum branch circuit. Required raceways and related components that are planned to be installed underground, enclosed, inaccessible or in concealed areas and spaces shall be installed at the time of original construction.

4.106.4.2.5 Identification. The service panel or subpanel circuit directory shall identify the overcurrent protective device space(s) reserved for future EV charging purposes as "EV CAPABLE" in accordance with the *California Electrical Code.*

4.106.4.3 New hotels and motels. All newly constructed hotels and motels shall provide EV spaces capable of supporting future installation of EVSE. The construction documents shall identify the location of the EV spaces.

Notes:

1. Construction documents are intended to demonstrate the project's capability and capacity or facilitating future EV charging.
2. There is no requirement for EV spaces to be constructed or available until EV chargers are installed for use.

4.106.4.3.1 Number of required EV spaces. The number of required EV spaces shall be based on the total number of parking spaces provided for all types of parking facilities in accordance with Table 4.106.4.3.1. Calculations for the required number of EV spaces shall be rounded up to the nearest whole number.

TABLE 4.106.4.3.1

TOTAL NUMBER OF PARKING SPACES	NUMBER OF REQUIRED EV SPACES
0-9	0
10-25	1
26-50	2
51-75	4
76-100	5
101-150	7
151-200	10
201 and over	6 percent of total

4.106.4.3.2 Electric vehicle charging space (EV space) dimensions. The EV spaces shall be designed to comply with the following:

1. The minimum length of each EV space shall be 18 feet (5486mm).
2. The minimum width of each EV space shall be 9 feet (2743mm)

4.106.4.3.3 Single EV space required. When a single EV space is required, the EV space shall be designed in accordance with Section 4.106.4.2.3.

4.106.4.3.4 Multiple EV spaces required. When multiple EV spaces are required, the EV spaces shall be designed in accordance with Section 4.106.4.2.4.

4.106.4.3.5 Identification. The service panels or sub-panels shall be identified in accordance with Section 4.106.4.2.5.

4.106.4.3.6 Accessible EV spaces. In addition to the requirements in Section 4.106.4.3, EV spaces for hotels/motels and all EVSE, when installed, shall comply with the accessibility provisions for the EV charging stations in the *California Building Code,* Chapter 11B.

DIVISION 4.2 ENERGY EFFICIENCY
4.201 GENERAL

4.201.1 SCOPE. For the purposes of mandatory energy efficiency standards in this code, the California Energy Commission will continue to adopt mandatory standards.

DIVISION 4.3 WATER EFFICIENCY AND CONSERVATION
4.303 INDOOR WATER USE

4.303.1 WATER CONSERVING PLUMBING FIXTURES AND FITTINGS. Plumbing fixtures (water closets and urinals) and fittings (faucets and showerheads) shall comply with the sections 4.303.1.1, 4.303.1.2, 4.303.1.3, and 4.303.4.4.

Note: All noncompliant plumbing fixtures in any residential real property shall be replaced with water-conserving plumbing fixtures. Plumbing fixture replacement is required prior to issuance of a certificate of final completion, certificate of occupancy, or final permit approval by the local building department. See Civil Code Section 1101.1, et seq., for the definition of a noncompliant plumbing fixture, types of residential buildings affected and other important enactment dates.

4.303.1.1 Water Closets. The effective flush volume of all water closets shall not exceed 1.28 gallons per flush. Tank-type water closets shall be certified to the performance criteria of the U.S. EPA WaterSense Specification for Tank-type Toilets.

Note: The effective flush volume of dual flush toilets is defined as the composite, average flush volume of two reduced flushes and one full flush.

4.303.1.2 Urinals. The effective flush volume of wall mounted urinals shall not exceed 0.125 gallons per flush. The effective flush volume of all other urinals shall not exceed 0.5 gallons per flush.

4.303.1.3 Showerheads.

4.303.1.3.1 Single Showerhead. Showerheads shall have a maximum flow rate of not more than 1.8 gallons per minute at 80 psi. Showerheads shall be certified to the performance criteria of the U.S. EPA WaterSense Specification for Showerheads.

4.303.1.3.2 Multiple showerheads serving one shower. When a shower is served by more than one showerhead, the combined flow rate of all the showerheads and/or other shower outlets controlled by a single valve shall not exceed 1.8 gallons per minute at 80 psi, or the shower shall be designed to only allow one shower outlet to be in operation at a time.

Note: A hand-held shower shall be considered a showerhead.

4.303.1.4 Faucets.

4.303.1.4.1 Residential Lavatory Faucets. The maximum flow rate of residential lavatory faucets shall not exceed 1.2 gallons per minute at 60 psi. The minimum flow rate of residential lavatory faucets shall not be less than 0.8 gallons per minute at 20 psi.

4.303.1.4.2 Lavatory Faucets in Common and Public Use Areas. The maximum flow rate of lavatory faucets installed in common and public use areas (outside of dwellings or sleeping units) in residential buildings shall not exceed 0.5 gallons per minute at 60 psi.

4.303.1.4.3 Metering Faucets. Metering faucets when installed in residential buildings shall not deliver more than 0.2 gallons per cycle.

4.303.1.4.4 Kitchen Faucets. The maximum flow rate of kitchen faucets shall not exceed 1.8 gallons per minute at 60 psi. Kitchen faucets may temporarily increase the flow above the maximum rate, but not to exceed 2.2 gallons per minute at 60 psi, and must default to a maximum flow rate of 1.8 gallons per minute at 60 psi.

Note: Where complying faucets are unavailable, aerators or other means may be used to achieve reduction.

4.303.2 STANDARDS FOR PLUMBING FIXTURES AND FITTINGS. Plumbing fixtures and fittings shall be installed in accordance with the *California Plumbing Code*, and shall meet the applicable standards referenced in Table 1701.1 of the *California Plumbing Code*.

NOTE:
THIS TABLE COMPILES THE DATA IN SECTION 4.303.1, AND
IS INCLUDED AS A CONVENIENCE FOR THE USER.

TABLE - MAXIMUM FIXTURE WATER USE

FIXTURE TYPE	FLOW RATE
SHOWER HEADS (RESIDENTIAL)	1.8 GMP @ 80 PSI
LAVATORY FAUCETS (RESIDENTIAL)	MAX. 1.2 GPM @ 60 PSI MIN. 0.8 GPM @ 20 PSI
LAVATORY FAUCETS IN COMMON & PUBLIC USE AREAS	0.5 GPM @ 60 PSI
KITCHEN FAUCETS	1.8 GPM @ 60 PSI
METERING FAUCETS	0.2 GAL/CYCLE
WATER CLOSET	1.28 GAL/FLUSH
URINALS	0.125 GAL/FLUSH

4.304 OUTDOOR WATER USE

4.304.1 OUTDOOR POTABLE WATER USE IN LANDSCAPE AREAS. Residential developments shall comply with a local water efficient landscape ordinance or the current California Department of Water Resources' Model Water Efficient Landscape Ordinance (MWELO), whichever is more stringent.

NOTES:

1. The Model Water Efficient Landscape Ordinance (MWELO) is located in the *California Code Regulations,* Title 23, Chapter 2.7, Division 2. MWELO and supporting documents, including water budget calculator, are available at: https://www.water.ca.gov/

DIVISION 4.4 MATERIAL CONSERVATION AND RESOURCE EFFICIENCY
4.406 ENHANCED DURABILITY AND REDUCED MAINTENANCE

4.406.1 RODENT PROOFING. Annular spaces around pipes, electric cables, conduits or other openings in sole/bottom plates at exterior walls shall be protected against the passage of rodents by closing such openings with cement mortar, concrete masonry or a similar method acceptable to the enforcing agency.

4.408 CONSTRUCTION WASTE REDUCTION, DISPOSAL AND RECYCLING

4.408.1 CONSTRUCTION WASTE MANAGEMENT. Recycle and/or salvage for reuse a minimum of 65 percent of the non-hazardous construction and demolition waste in accordance with either Section 4.408.2, 4.408.3 or 4.408.4, or meet a more stringent local construction and demolition waste management ordinance.

Exceptions:

1. Excavated soil and land-clearing debris.
2. Alternate waste reduction methods developed by working with local agencies if diversion or recycle facilities capable of compliance with this item do not exist or are not located reasonably close to the jobsite.
3. The enforcing agency may make exceptions to the requirements of this section when isolated jobsites are located in areas beyond the haul boundaries of the diversion facility.

4.408.2 CONSTRUCTION WASTE MANAGEMENT PLAN. Submit a construction waste management plan in conformance with Items 1 through 5. The construction waste management plan shall be updated as necessary and shall be available during construction for examination by the enforcing agency.

1. Identify the construction and demolition waste materials to be diverted from disposal by recycling, reuse on the project or salvage for future use or sale.
2. Specify if construction and demolition waste materials will be sorted on-site (source separated) or bulk mixed (single stream).
3. Identify diversion facilities where the construction and demolition waste material collected will be taken.
4. Identify construction methods employed to reduce the amount of construction and demolition waste generated.
5. Specify that the amount of construction and demolition waste materials diverted shall be calculated by weight or volume, but not by both.

4.408.3 WASTE MANAGEMENT COMPANY. Utilize a waste management company, approved by the enforcing agency, which can provide verifiable documentation that the percentage of construction and demolition waste material diverted from the landfill complies with Section 4.408.1.

Note: The owner or contractor may make the determination if the construction and demolition waste materials will be diverted by a waste management company.

4.408.4 WASTE STREAM REDUCTION ALTERNATIVE [LR]. Projects that generate a total combined weight of construction and demolition waste disposed of in landfills, which do not exceed 3.4 lbs./sq.ft. of the building area shall meet the minimum 65% construction waste reduction requirement in Section 4.408.1

4.408.4.1 WASTE STREAM REDUCTION ALTERNATIVE. Projects that generate a total combined weight of construction and demolition waste disposed of in landfills, which do not exceed 2 pounds per square foot of the building area, shall meet the minimum 65% construction waste reduction requirement in Section 4.408.1

4.408.5 DOCUMENTATION. Documentation shall be provided to the enforcing agency which demonstrates compliance with Section 4.408.2, items 1 through 5, Section 4.408.3 or Section 4.408.4..

Notes:

1. Sample forms found in "A Guide to the California Green Building Standards Code (Residential)" located at www.hcd.ca.gov/CALGreen.html may be used to assist in documenting compliance with this section.
2. Mixed construction and demolition debris (C & D) processors can be located at the California Department of Resources Recycling and Recovery (CalRecycle).

4.410 BUILDING MAINTENANCE AND OPERATION

4.410.1 OPERATION AND MAINTENANCE MANUAL. At the time of final inspection, a manual, compact disc, web-based reference or other media acceptable to the enforcing agency which includes all of the following shall be placed in the building:

1. Directions to the owner or occupant that the manual shall remain with the building throughout the life cycle of the structure.
2. Operation and maintenance instructions for the following:
   a. Equipment and appliances, including water-saving devices and systems, HVAC systems, photovoltaic systems, electric vehicle chargers, water-heating systems and other major appliances and equipment.
   b. Roof and yard drainage, including gutters and downspouts.
   c. Space conditioning systems, including condensers and air filters.
   d. Landscape irrigation systems.
   e. Water reuse systems.
3. Information from local utility, water and waste recovery providers on methods to further reduce resource consumption, including recycle programs and locations.
4. Public transportation and/or carpool options available in the area.
5. Educational material on the positive impacts of an interior relative humidity between 30-60 percent and what methods an occupant may use to maintain the relative humidity level in that range.
6. Information about water-conserving landscape and irrigation design and controllers which conserve water.
7. Instructions for maintaining gutters and downspouts and the importance of diverting water at least 5 feet away from the foundation.
8. Information on required routine maintenance measures, including, but not limited to, caulking, painting, grading around the building, etc.
9. Information about state solar energy and incentive programs available.
10. A copy of all special inspections verifications required by the enforcing agency or this code.

4.410.2 RECYCLING BY OCCUPANTS. Where 5 or more multifamily dwelling units are constructed on a building site, provide readily accessible area(s) that serves all buildings on the site and are identified for the depositing, storage and collection of non-hazardous materials for recycling, including (at a minimum) paper, corrugated cardboard, glass, plastics, organic waster, and metals, or meet a lawfully enacted local recycling ordinance, if more restrictive.

Exception: Rural jurisdictions that meet and apply for the exemption in Public Resources Code Section 42649.82 (a)(2)(A) et seq. are note required to comply with the organic waste portion of this section.

DIVISION 4.5 ENVIRONMENTAL QUALITY
SECTION 4.501 GENERAL

4.501.1 Scope
The provisions of this chapter shall outline means of reducing the quality of air contaminants that are odorous, irritating and/or harmful to the comfort and well being of a building's installers, occupants and neighbors.

SECTION 4.502 DEFINITIONS

5.102.1 DEFINITIONS
The following terms are defined in Chapter 2 *(and are included here for reference)*

AGRIFIBER PRODUCTS. Agrifiber products include wheatboard, strawboard, panel substrates and door cores, not including furniture, fixtures and equipment (FF&E) not considered base building elements.

COMPOSITE WOOD PRODUCTS. Composite wood products include hardwood plywood, particleboard and medium density fiberboard. "Composite wood products" does not include hardboard, structural plywood, structural panels, structural composite lumber, oriented strand board, glued laminated timber, prefabricated wood I-joists or finger-jointed lumber, all as specified in California Code of regulations (CCR), title 17, Section 93120.1.

DIRECT-VENT APPLIANCE. A fuel-burning appliance with a sealed combustion system that draws all air for combustion from the outside atmosphere and discharges all flue gases to the outside atmosphere.

San Joaquin Valley REAP
REGIONAL EARLY ACTION PLANNING

REVISIONS
XX-XX-XXXX

PROJECT TITLE: SAN JOAQUIN VALLEY REAP – VALLEYWIDE ADU PROGRAM
SHEET DESCRIPTION: CALGREEN
DATE: 10/14/2022
AGENCY: SJV REAP

ADU SQFT
910

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MAXIMUM INCREMENTAL REACTIVITY (MIR). The maximum change in weight of ozone formed by adding a compound to the "Base Reactive Organic Gas (ROG) Mixture" per weight of compound added, expressed to hundredths of a gram (g O³/g ROC).
Note: MIR values for individual compounds and hydrocarbon solvents are specified in CCR, Title 17, Sections 94700 and 94701.

MOISTURE CONTENT. The weight of the water in wood expressed in percentage of the weight of the oven-dry wood.

PRODUCT-WEIGHTED MIR (PWMIR). The sum of all weighted-MIR for all ingredients in a product subject to this article. The PWMIR is the total product reactivity expressed to hundredths of a gram of ozone formed per gram of product (excluding container and packaging).
Note: PWMIR is calculated according to equations found in CCR, Title 17, Section 94521 (a).

REACTIVE ORGANIC COMPOUND (ROC). Any compound that has the potential, once emitted, to contribute to ozone formation in the troposphere.

VOC. A volatile organic compound (VOC) broadly defined as a chemical compound based on carbon chains or rings with vapor pressures greater than 0.1 millimeters of mercury at room temperature. These compounds typically contain hydrogen and may contain oxygen, nitrogen and other elements. See CCR Title 17, Section 94508(a).

4.503 FIREPLACES

4.503.1 GENERAL. Any installed gas fireplace shall be a direct-vent sealed-combustion type. Any installed woodstove or pellet stove shall comply with U.S. EPA New Source Performance Standards (NSPS) emission limits as applicable, and shall have a permanent label indicating they are certified to meet the emission limits. Woodstoves, pellet stoves and fireplaces shall also comply with applicable local ordinances.

4.504 POLLUTANT CONTROL

4.504.1 COVERING OF DUCT OPENINGS & PROTECTION OF MECHANICAL EQUIPMENT DURING CONSTRUCTION. At the time of rough installation, during storage on the construction site and until final startup of the heating, cooling and ventilating equipment, all duct and other related air distribution component openings shall be covered with tape, plastic, sheet metal or other methods acceptable to the enforcing agency to reduce the amount of water, dust or debris which may enter the system.

4.504.2 FINISH MATERIAL POLLUTANT CONTROL. Finish materials shall comply with this section.

4.504.2.1 Adhesives, Sealants and Caulks. Adhesives, sealant and caulks used on the project shall meet the requirements of the following standards unless more stringent local or regional air pollution or air quality management district rules apply:

1. Adhesives, adhesive bonding primers, adhesive primers, sealants, sealant primers and caulks shall comply with local or regional air pollution control or air quality management district rules where applicable or SCAQMD Rule 1168 VOC limits, as shown in Table 4.504.1 or 4.504.2, as applicable. Such products also shall comply with the Rule 1168 prohibition on the use of certain toxic compounds (chloroform, ethylene dichloride, methylene chloride, perchloroethylene and trichloroethylene), except for aerosol products, as specified in Subsection 2 below.

2. Aerosol adhesives, and smaller unit sizes of adhesives, and sealant or caulking compounds (in units of product, less packaging, which do not weigh more than 1 pound and do not consist of more than 16 fluid ounces) shall comply with statewide VOC standards and other requirements, including prohibitions on use of certain toxic compounds, of *California Code of Regulations*, Title 17, commencing with section 94507.

4.504.2.2 Paints and Coatings. Architectural paints and coatings shall comply with VOC limits in Table 1 of the ARB Architectural Suggested Control Measure, as shown in Table 4.504.3, unless more stringent local limits apply. The VOC content limit for coatings that do not meet the definitions for the specialty coatings categories listed in Table 4.504.3 shall be determined by classifying the coating as a Flat, Nonflat or Nonflat-High Gloss coating, based on its gloss, as defined in subsections 4.21, 4.36, and 4.37 of the 2007 California Air Resources Board, Suggested Control Measure, and the corresponding Flat, Nonflat or Nonflat-High Gloss VOC limit in Table 4.504.3 shall apply.

4.504.2.3 Aerosol Paints and Coatings. Aerosol paints and coatings shall meet the Product-weighted MIR Limits for ROC in Section 94522(a)(2) and other requirements, including prohibitions on use of certain toxic compounds and ozone depleting substances, in Sections 94522(e)(1) and (f)(1) of *California Code of Regulations*, Title 17, commencing with Section 94520; and in areas under the jurisdiction of the Bay Area Air Quality Management District additionally comply with the percent VOC by weight of product limits of Regulation 8, Rule 49.

4.504.2.4 Verification. Verification of compliance with this section shall be provided at the request of the enforcing agency. Documentation may include, but is not limited to, the following:

1. Manufacturer's product specification.
2. Field verification of on-site product containers.

TABLE 4.504.1 - ADHESIVE VOC LIMIT[1,2]

(Less Water and Less Exempt Compounds in Grams per Liter)

ARCHITECTURAL APPLICATIONS	VOC LIMIT
INDOOR CARPET ADHESIVES	50
CARPET PAD ADHESIVES	50
OUTDOOR CARPET ADHESIVES	150
WOOD FLOORING ADHESIVES	100
RUBBER FLOOR ADHESIVES	60
SUBFLOOR ADHESIVES	50
CERAMIC TILE ADHESIVES	65
VCT & ASPHALT TILE ADHESIVES	50
DRYWALL & PANEL ADHESIVES	50
COVE BASE ADHESIVES	50
MULTIPURPOSE CONSTRUCTION ADHESIVE	70
STRUCTURAL GLAZING ADHESIVES	100
SINGLE-PLY ROOF MEMBRANE ADHESIVES	250
OTHER ADHESIVES NOT LISTED	50
SPECIALTY APPLICATIONS	
PVC WELDING	510
CPVC WELDING	490
ABS WELDING	325
PLASTIC CEMENT WELDING	250
ADHESIVE PRIMER FOR PLASTIC	550
CONTACT ADHESIVE	80
SPECIAL PURPOSE CONTACT ADHESIVE	250
STRUCTURAL WOOD MEMBER ADHESIVE	140
TOP & TRIM ADHESIVE	250
SUBSTRATE SPECIFIC APPLICATIONS	
METAL TO METAL	30
PLASTIC FOAMS	50
POROUS MATERIAL (EXCEPT WOOD)	50
WOOD	30
FIBERGLASS	80

1. IF AN ADHESIVE IS USED TO BOND DISSIMILAR SUBSTRATES TOGETHER, THE ADHESIVE WITH THE HIGHEST VOC CONTENT SHALL BE ALLOWED.

2. FOR ADDITIONAL INFORMATION REGARDING METHODS TO MEASURE THE VOC CONTENT SPECIFIED IN THIS TABLE, SEE SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT RULE 1168.

TABLE 4.504.2 - SEALANT VOC LIMIT

(Less Water and Less Exempt Compounds in Grams per Liter)

SEALANTS	VOC LIMIT
ARCHITECTURAL	250
MARINE DECK	760
NONMEMBRANE ROOF	300
ROADWAY	250
SINGLE-PLY ROOF MEMBRANE	450
OTHER	420
SEALANT PRIMERS	
ARCHITECTURAL	
NON-POROUS	250
POROUS	775
MODIFIED BITUMINOUS	500
MARINE DECK	760
OTHER	750

TABLE 4.504.3 - VOC CONTENT LIMITS FOR ARCHITECTURAL COATINGS[2,3]

GRAMS OF VOC PER LITER OF COATING, LESS WATER & LESS EXEMPT COMPOUNDS

COATING CATEGORY	VOC LIMIT
FLAT COATINGS	50
NON-FLAT COATINGS	100
NONFLAT-HIGH GLOSS COATINGS	150
SPECIALTY COATINGS	
ALUMINUM ROOF COATINGS	400
BASEMENT SPECIALTY COATINGS	400
BITUMINOUS ROOF COATINGS	50
BITUMINOUS ROOF PRIMERS	350
BOND BREAKERS	350
CONCRETE CURING COMPOUNDS	350
CONCRETE/MASONRY SEALERS	100
DRIVEWAY SEALERS	50
DRY FOG COATINGS	150
FAUX FINISHING COATINGS	350
FIRE RESISTIVE COATINGS	350
FLOOR COATINGS	100
FORM-RELEASE COMPOUNDS	250
GRAPHIC ARTS COATINGS (SIGN PAINTS)	500
HIGH TEMPERATURE COATINGS	420
INDUSTRIAL MAINTENANCE COATINGS	250
LOW SOLIDS COATINGS[1]	120
MAGNESITE CEMENT COATINGS	450
MASTIC TEXTURE COATINGS	100
METALLIC PIGMENTED COATINGS	500
MULTICOLOR COATINGS	250
PRETREATMENT WASH PRIMERS	420
PRIMERS, SEALERS, & UNDERCOATERS	100
REACTIVE PENETRATING SEALERS	350
RECYCLED COATINGS	250
ROOF COATINGS	50
RUST PREVENTATIVE COATINGS	250
SHELLACS	
CLEAR	730
OPAQUE	550
SPECIALTY PRIMERS, SEALERS & UNDERCOATERS	100
STAINS	250
STONE CONSOLIDANTS	450
SWIMMING POOL COATINGS	340
TRAFFIC MARKING COATINGS	100
TUB & TILE REFINISH COATINGS	420
WATERPROOFING MEMBRANES	250
WOOD COATINGS	275
WOOD PRESERVATIVES	350
ZINC-RICH PRIMERS	340

1. GRAMS OF VOC PER LITER OF COATING, INCLUDING WATER & EXEMPT COMPOUNDS

2. THE SPECIFIED LIMITS REMAIN IN EFFECT UNLESS REVISED LIMITS ARE LISTED IN SUBSEQUENT COLUMNS IN THE TABLE.

3. VALUES IN THIS TABLE ARE DERIVED FROM THOSE SPECIFIED BY THE CALIFORNIA AIR RESOURCES BOARD, ARCHITECTURAL COATINGS SUGGESTED CONTROL MEASURE, FEB. 1, 2008. MORE INFORMATION IS AVAILABLE FROM THE AIR RESOURCES BOARD.

TABLE 4.504.5 - FORMALDEHYDE LIMITS[1]

MAXIMUM FORMALDEHYDE EMISSIONS IN PARTS PER MILLION

PRODUCT	CURRENT LIMIT
HARDWOOD PLYWOOD VENEER CORE	0.05
HARDWOOD PLYWOOD COMPOSITE CORE	0.05
PARTICLE BOARD	0.09
MEDIUM DENSITY FIBERBOARD	0.11
THIN MEDIUM DENSITY FIBERBOARD[2]	0.13

1. VALUES IN THIS TABLE ARE DERIVED FROM THOSE SPECIFIED BY THE CALIF. AIR RESOURCES BOARD, AIR TOXICS CONTROL MEASURE FOR COMPOSITE WOOD AS TESTED IN ACCORDANCE WITH ASTM E 1333. FOR ADDITIONAL INFORMATION, SEE CALIF. CODE OF REGULATIONS, TITLE 17, SECTIONS 93120 THROUGH 93120.12.

2. THIN MEDIUM DENSITY FIBERBOARD HAS A MAXIMUM THICKNESS OF 5/16" (8 MM).

DIVISION 4.5 ENVIRONMENTAL QUALITY (continued)

4.504.3 CARPET SYSTEMS. All carpet installed in the building interior shall meet the testing and product requirements of at least one of the following:

1. Carpet and Rug Institute's Green Label Plus Program.
2. California Department of Public Health, "Standard Method for the Testing and Evaluation of Volatile Organic Chemical Emissions from Indoor Sources Using Environmental Chambers" Version 1.1, February 2010 (also known as Specification 01350).
3. NSF/ANSI 140 at the Gold level.
4. Scientific Certifications Systems Indoor Advantage™ Gold.

4.504.3.1 Carpet cushion. All carpet cushion installed in the building interior shall meet the requirements of the Carpet and Rug Institute's Green Label program.

4.504.3.2 Carpet adhesive. All carpet adhesive shall meet the requirements of Table 4.504.1.

4.504.4 RESILIENT FLOORING SYSTEMS. Where resilient flooring is installed , at least 80% of floor area receiving resilient flooring shall comply with one or more of the following:

1. Products compliant with the California Department of Public Health, "Standard Method for the Testing and Evaluation of Volatile Organic Chemical Emissions from Indoor Sources Using Environmental Chambers," Version 1.1, February 2010 (also known as Specification 01350), certified as a CHPS Low-Emitting Material in the Collaborative for High Performance Schools (CHPS) High Performance Products Database.
2. Products certified under UL GREENGUARD Gold (formerly the Greenguard Children & Schools program).
3. Certification under the Resilient Floor Covering Institute (RFCI) FloorScore program.
4. Meet the California Department of Public Health, "Standard Method for the Testing and Evaluation of Volatile Organic Chemical Emissions from Indoor Sources Using Environmental Chambers", Version 1.1, February 2010 (also known as Specification 01350).

4.504.5 COMPOSITE WOOD PRODUCTS. Hardwood plywood, particleboard and medium density fiberboard composite wood products used on the interior or exterior of the buildings shall meet the requirements for formaldehyde as specified in ARB's Air Toxics Control Measure for Composite Wood (17 CCR 93120 et seq.), by or before the dates specified in those sections, as shown in Table 4.504.5

4.504.5.1 Documentation. Verification of compliance with this section shall be provided as requested by the enforcing agency. Documentation shall include at least one of the following:

1. Product certifications and specifications.
2. Chain of custody certifications.
3. Product labeled and invoiced as meeting the Composite Wood Products regulation (see CCR, Title 17, Section 93120, et seq.).
4. Exterior grade products marked as meeting the PS-1 or PS-2 standards of the Engineered Wood Association, the Australian AS/NZS 2269, European 636 3S standards, and Canadian CSA 0121, CSA 0151, CSA 0153 and CSA 0325 standards.
5. Other methods acceptable to the enforcing agency.

4.505 INTERIOR MOISTURE CONTROL

4.505.1 General. Buildings shall meet or exceed the provisions of the *California Building Standards Code*.

4.505.2 CONCRETE SLAB FOUNDATIONS. Concrete slab foundations required to have a vapor retarder by California Building Code, Chapter 19, or concrete slab-on-ground floors required to have a vapor retarder by the California Residential Code, Chapter 5, shall also comply with this section.

4.505.2.1 Capillary break. A capillary break shall be installed in compliance with at least one of the following:

1. A 4-inch (101.6 mm) thick base of 1/2 inch (12.7mm) or larger clean aggregate shall be provided with a vapor barrier in direct contact with concrete and a concrete mix design, which will address bleeding, shrinkage, and curling, shall be used. For additional information, see American Concrete Institute, ACI 302.2R-06.
2. Other equivalent methods approved by the enforcing agency.
3. A slab design specified by a licensed design professional.

4.505.3 MOISTURE CONTENT OF BUILDING MATERIALS. Building materials with visible signs of water damage shall not be installed. Wall and floor framing shall not be enclosed when the framing members exceed 19 percent moisture content. Moisture content shall be verified in compliance with the following:

1. Moisture content shall be determined with either a probe-type or contact-type moisture meter.Equivalent moisture verification methods may be approved by the enforcing agency and shall satisfy requirements found in Section 101.8 of this code.
2. Moisture readings shall be taken at a point 2 feet (610 mm) to 4 feet (1219 mm) from the grade stamped end of each piece verified.
3. At least three random moisture readings shall be performed on wall and floor framing with documentation acceptable to the enforcing agency provided at the time of approval to enclose the wall and floor framing.

Insulation products which are visibly wet or have a high moisture content shall be replaced or allowed to dry prior to enclosure in wall or floor cavities. Wet-applied insulation products shall follow the manufacturers' drying recommendations prior to enclosure.

4.506 INDOOR AIR QUALITY AND EXHAUST

4.506.1 Bathroom exhaust fans. Each bathroom shall be mechanically ventilated and shall comply with the following:

1. Fans shall be ENERGY STAR compliant and be ducted to terminate outside the building.
2. Unless functioning as a component of a whole house ventilation system, fans must be controlled by a humidity control.
   a. Humidity controls shall be capable of adjustment between a relative humidity range less than or equal to 50% to a maximum of 80%. A humidity control may utilize manual or automatic means of adjustment.
   b. A humidity control may be a separate component to the exhaust fan and is not required to be integral (i.e., built-in)

Notes:

1. For the purposes of this section, a bathroom is a room which contains a bathtub, shower or tub/shower combination.
2. Lighting integral to bathroom exhaust fans shall comply with the *California Energy Code.*

4.507 ENVIRONMENTAL COMFORT

4.507.2 HEATING AND AIR-CONDITIONING SYSTEM DESIGN. Heating and air conditioning systems shall be sized, designed and have their equipment selected using the following methods:

1. The heat loss and heat gain is established according to ANSI/ACCA 2 Manual J - 2011 (Residential Load Calculation), ASHRAE handbooks or other equivalent design software or methods.
2. Duct systems are sized according to ANSI/ACCA 1 Manual D - 2014 (Residential Duct Systems), ASHRAE handbooks or other equivalent design software or methods.
3. Select heating and cooling equipment according to ANSI/ACCA 3 Manual S - 2014 (Residential Equipment Selection), or other equivalent design software or methods.

Exception: Use of alternate design temperatures necessary to ensure the system functions are acceptable.

CHAPTER 7
INSTALLER & SPECIAL INSPECTOR QUALIFICATIONS

702 QUALIFICATIONS

702.1 INSTALLER TRAINING. HVAC system installers shall be trained and certified in the proper installation of HVAC systems including ducts and equipment by a nationally or regionally recognized training or certification program. Uncertified persons may perform HVAC installations when under the direct supervision and responsibility of a person trained and certified to install HVAC systems or contractor licensed to install HVAC systems. Examples of acceptable HVAC training and certification programs include but are not limited to the following:

1. State certified apprenticeship programs.
2. Public utility training programs.
3. Training programs sponsored by trade, labor or statewide energy consulting or verification organizations.
4. Programs sponsored by manufacturing organizations.
5. Other programs acceptable to the enforcing agency.

702.2 SPECIAL INSPECTION [HCD]. When required by the enforcing agency, the owner or the responsible entity acting as the owner's agent shall employ one or more special inspectors to provide inspection or other duties necessary to substantiate compliance with this code. Special inspectors shall demonstrate competence to the satisfaction of the enforcing agency for the particular type of inspection or task to be performed. In addition to other certifications or qualifications acceptable to the enforcing agency, the following certifications or education may be considered by the enforcing agency when evaluating the qualifications of a special inspector:

1. Certification by a national or regional green building program or standard publisher.
2. Certification by a statewide energy consulting or verification organization, such as HERS raters, building performance contractors, and home energy auditors.
3. Successful completion of a third party apprentice training program in the appropriate trade.
4. Other programs acceptable to the enforcing agency.

Notes:

1. Special inspectors shall be independent entities with no financial interest in the materials or the project they are inspecting for compliance with this code.
2. HERS raters are special inspectors certified by the California Energy Commission (CEC) to rate homes in California according to the Home Energy Rating System (HERS).

[BSC] When required by the enforcing agency, the owner or the responsible entity acting as the owner's agent shall employ one or more special inspectors to provide inspection or other duties necessary to substantiate compliance with this code. Special inspectors shall demonstrate competence to the satisfaction of the enforcing agency for the particular type of inspection or task to be performed. In addition, the special inspector shall have a certification from a recognized state, national or international association, as determined by the local agency. The area of certification shall be closely related to the primary job function, as determined by the local agency.

Note: Special inspectors shall be independent entities with no financial interest in the materials or the project they are inspecting for compliance with this code.

703 VERIFICATIONS

703.1 DOCUMENTATION. Documentation used to show compliance with this code shall include but is not limited to, construction documents, plans, specifications, builder or installer certification, inspection reports, or other methods acceptable to the enforcing agency which demonstrate substantial conformance. When specific documentation or special inspection is necessary to verify compliance, that method of compliance will be specified in the appropriate section or identified applicable checklist.

San Joaquin Valley REAP
REGIONAL EARLY ACTION PLANNING

REVISIONS
XX-XX-XXXX

PROJECT TITLE: SAN JOAQUIN VALLEY REAP – VALLEYWIDE ADU PROGRAM
SHEET DESCRIPTION: CALGREEN
DATE: 10/14/2022
AGENCY: SJV REAP

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