

PLAN CHECK REV. 4
MAR. 19, 2024

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MAR. 19, 2024

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9115 OVERLOOK ROAD OS GATOS, CA 95030

A.P.N. 510-31-011

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<u>00.02</u> The contractor is responsible for thorough review of compliance with the soils investigation report, the structural calculations report, Title-24 energy report, and any other consultant reports listed. All reports and recommendations are to be considered part of these construction documents.

<u>00.03</u> The contractor shall notify the architect immediately of any discrepancies or conflicts found in these drawings.

00.04 The contractor shall give the architect adequate notice (min. 3 business days) for any necessary site visits or drawing

00.05 Should the contractor or owner disagree with any of the requirements of this set he/she shall notify the architect in writing prior to signing of the contract for construction and the architect shall be contracted to provide additional or alternative information needed or requested.

00.06 By using these documents for the construction, the Contractor and Owner warrant that they have read, do understand, and agree to these conditions.

#### 1.0 GENERAL NOTES:

.01 All work depicted on these drawings is required to comply with the California Building Standards Commission (CBSC) Title 24 Code of Regulations, 2022 California Residential Code. Construction is to comply with all volumes, sections and subsections of that code. It is the Contractor's responsibility to be familiar with the standard requirements for construction, and to maintain a copy of the 2022 California Residential Code at all times. The code(s) is/are to be considered a part of this set.

1.02 The contractor is to provide all work and materials in accordance with or as required by the 2022 California Building Code (CBC) Volume 1 & 2, 2022 California Residential Code (CRC), 2022 California Green Building Standards Code (CGBSC), 2022 California Mechanical Code (CMC), 2022 California Plumbing Code (CPC), 2022 California Electrical Code (CEC), 2022 California Fire Code (CFC), 2022 California Energy Code, 2022 California Reference Standards Code, and all other applicable state, federal and local codes.

1.03 These drawings and specifications are the property and copyright of the Architect and shall not be used on any other work or project except by written agreement with the Architect.

1.04 CONTRACTOR IS RESPONSIBLE FOR THOROUGH REVIEW OF, AND FAMILIARITY WITH, THESE DOCUMENTS INCLUDING PLANS, ELEVATIONS, NOTES, DETAILS, CONSULTANT REPORTS, AND SUPPORTING DOCUMENTS PRIOR TO THE COMMENCEMENT OF ANY WORK. Any discrepancy in this set of construction documents is to be brought to the immediate attention of the Architect.

1.05 If specifications vary within this set, the most stringent is said to apply unless clarified in writing by the Architect.

1.06 If any details are noted to be missing or incomplete, written questions are to be directed to the Architect for clarification prior to the signing of any contract for construction.

1.07 The General Contractor is required to notify Architect in writing of any substitution, revision or proposed alternate at least two weeks prior to the expected date of order or installation of said alternate in order to allow adequate time of coordination and approvals by Architect, any professional consultants as well as the local code enforcement agency. A two week response is not guaranteed, so the greater the notice period, the better.

1.08 The General Contractor shall be responsible for scheduling and being present for all required inspections.

1.09 Written dimensions shall take precedence over scaled dimensions and shall be verified on the job site. Where appropriate, alignments to existing walls and finishes should govern. Any discrepancy shall be immediately brought to the attention of the Architect prior to the commencement of any work. The General Contractor shall verify all dimensions and site/grade conditions prior to commencing any work. The general contractor shall keep a set of these plans and specifications on the job site as reference at all times. The general contractor and framing contractor are responsible for working to coordinate shear wall lengths and hold-down locations with plumbing and mechanical infrastructure. Furring and soffits should be framed as required with verification of owner or Architect.

1.10 The construction contractor and his subcontractors agree that in accordance with generally accepted construction practices, the construction contractor and his subcontractors will be required to assume sole and complete responsibility for job site conditions during the course of construction of the project, including safety and security of all persons and property. This requirement shall be made to apply continuously and not limited to normal working hours, and the construction contractor and his subcontractors further agree to defend, indemnify and hold the Architect harmless from any and all liability, real or alleged, in connection with the performance of the work on the project, except liability arising from the sole negligence of the

1.11 The General Contractor is required to designate a contact person for the project to receive all information related to job site information. The contact's name and phone number are to be given to the Owner and the Architect. Unless specified by the Owner, the General Contractor is to provide responsible, appropriate supervision on the job site for the duration of the project. General Contractor is to provide and maintain a job site phone number, e-mail or fax. Contractor is responsible for adequate supervision of all sub-trades.

1.12 The Contractor shall confine operations to the site areas permitted by law, ordinances, permits, and the contract documents and shall not unreasonably encumber the site with any materials or equipment.

1.13 No portion of the work requiring a shop drawing or sample submission (per the request of the owner, General Contractor, or Architect) shall be commenced until the submission has been reviewed and acted upon by the said party. All such portions of the work shall be in accordance with the approved shop drawings and samples.

1.14 General Contractor is responsible for visiting the job site prior to bidding and conducting reasonable inspection of existing conditions for purpose of accurately assessing the scope of work, site conditions and overall project intent. Questions arising from this site visit are to be directed to Young and Borlik Architects for clarification prior to bid.

1.15 These drawings are intended to illustrate a complete job. Unless specified, work is to include all common and necessary accessories (i.e. toilet roll holders, towel bars, mirrors, etc.), as well as all components required to meet current code requirements in the jurisdiction where work is being performed. Contractor is responsible for including sub-structure furring including floor, wall or ceiling padding to assure surfaces are plumb, level, and aligned within 1/4" on an 8' measure. Concealment of Steel structural brackets, beams, tabs, bolts and protruding elements are to be considered at the time of rough frame bidding and are to be included in the construction. Furring, notching, alternative welding, and other means may be considered pending approval of the structural engineer.

1.16 Certain items, materials, and features represented within this set may not be approved as part of the building permit. Questions regarding the specifics of approvals shall be directed to local jurisdiction.

1.17 Notice: This set has been produced for the purpose of obtaining a building permit. These drawings are not intended to be accurate "as-builts," nor inclusive of all details, drawings, material specifications, etc. needed to address all possible construction issues.

1.18 These working drawings are not to be used in any construction for which building permits have not been obtained. Additionally, Young and Borlik Architects, Inc. is not responsible for the correctness of any work undertaken prematurely if it is based on plans that have not been reviewed and approved by the building department. This stipulation applies to original submittal drawings, and revisions. All drawings are preliminary until a permit is issued. Revisions and substitutions are to be submitted to the building department and must be approved prior to continuing work.

1.19 A BUILDING OPERATIONS MANUAL must be provided to the owner per Green Building Code section 4.410.1

## 2.0 DEMOLITION NOTES:

2.01 General Contractor to verify any existing features and finishes to remain prior to demolition. Materials, fixtures, hardware, appliances, etc which are to be re-used shall be stored and protected from damage until they are to be re-installed

2.02 Verify with owners whether removed or unused doors, windows, fixtures, hardware, and miscellaneous materials should be saved for possible future reuse or discarded. Owner shall mark or list such items prior to demolition.

<u>2.03</u> General Contractor is responsible for replacement of items damaged by demolition or removed in error.

2.04 No asbestos removal is to be undertaken by any party except as allowed by law.

2.05 General Contractor to provide Visqueen or equivalent dust screening during demolition to protect existing residence, appliances and furnishings. As appropriate, positive ventilation is to be provided for dust control.

2.06 Per 2022 CRC R408.5, General Contractor is to be responsible for removal of all construction debris and other organic materials from the structure and the site. Framed areas to be free of debris prior to sheetrocking. Underfloor and attic areas must be left clean and free of debris, cut-offs, scrap, sawdust, associated garbage, etc.

2.07 Design and installation of all temporary shoring is the sole responsibility of the general contractor. All existing framing and load transfer is to be field verified prior to shoring of any portion of the structure.

2.08 All unused and demolished electrical is to be removed back to the nearest utilized junction. No dead-hots to remain after construction. Temporary power for the duration of construction is the responsibility of the electrical contractor.

3.0 SITE DEVELOPMENT NOTES:

3.01 Verify locations of all underground utilities and services prior to excavation.

3.02 Contractor shall confirm the locations of all property boundaries for the site and verify all setback and easement locations prior to construction. Owner is responsible for providing a licensed survey and title report for contractor use, or as required by the local jurisdiction. Any discrepancies should be brought to the attention of the architect before further commencement of work.

3.03 Contractor is responsible for notifying and scheduling the project Geotechnical Engineer for site inspections and observations of excavations, drilling, drainage, backfill, etc.

3.04 Soil compaction for grading or backfilling shall be placed in accordance with the soils engineers recommendations. If there is no soils engineer, use 6" lifts to 90% compaction.

3.05 Temporary earth shoring is the responsibility of the contractor.

4.0 FOUNDATION AND CONCRETE NOTES:

4.01 For general reference see 2022 CRC, Chapter 4.

4.02 Foundation Vents - Per 2022 CRC Section R408.1 Provide vent openings of not less than 1 sf. for each 150 sf. of crawl space area. Openings shall be covered with corrosion resistant wire mesh with the least dimension being 1/8 inch thick and not exceed 1/4 inch (or per R408.2). Where moisture due to climate and groundwater conditions is not considered excessive, and the ground surface is covered by a Class 1 vapor retarder material, the required net area of vent openings may be reduced to 1 s.f. per 1,500 s.f provided vent openings are located within 3' of each corner of the building, or as approved to provide cross ventilation of the space per 2022 CRC R408.1. Unvented Crawl Spaces are to comply with R408.3

4.03 Crawl Space Access - Per 2022 CRC Section R408.4, Access shall be provided to all under-floor spaces. Access openings through the floor shall be a minimum of 18 inches by 24 inches. Openings through a perimeter wall shall be not less than 16 inches by 24 inches. Through wall access openings shall not be located under a door to the residence. Pipes, ducts and other non-structural construction shall not interfere with accessible clearances to or within under-floor areas.

4.04 Decay Protection - Per 2022 CRC, Section R317.1, wood framing less than 8" from exposed earth shall be of naturally durable or preservative treated wood. Provide 8" wood framing separation from exposed earth, or, if less than 8", use naturally durable or preservative treated wood. If earth is paved at least 18" wide w/ asphalt or concrete and draining away from building, bottom sills may be 6" above such slab.

4.05 All concrete rough opening sizes, elevations, etc. are to be verified prior to foundation pour. Locations of hold-downs, curbs, steps, curtains, plumbing and mechanical, etc. are to be coordinated by the General Contractor. Should additional clarifications to these drawings be required, the contractor should contact the Architect as early as possible. Owner is responsible for providing finish thickness information or allowances, general contractor to verify prior to pour.

4.06 All cold joints to be chipped for rough surface, sandblasted clean and free of soil or debris. Dampen surface immediately prior to concrete pour. Cold joints must be approved by the structural engineer.

4.07 Special inspection will be required for water proofing below grade. Special inspections are required per the structural engineering drawings, and as per any jurisdictional approval checklist.

4.08 Should contractor elect to use shot-crete, special inspection will be required and structural engineer must be given opportunity to revise re-bar schedule.

#### 5.0 FLOOR PLAN NOTES

5.01 All work is to comply with 2022 CRC, with respect to 2022 CBC, Group R occupancies.

5.02 Flame spread - Flame spread and smoke index for wall and ceiling finishes shall be in accordance with Sections R302.9. Through R302.9.4. Flame spread and smoke index for insulation shall be in accordance with Sections R302.10.1 Through

5.03 Fireblocking - All pipe, wire, and duct penetrations in walls are to be caulked or blocked with approved materials to resist passage of flame per CRC R302.11.

5.04 Draftstopping - Per 2022 CRC, Section R302.12, Draft stops shall be installed in the following locations: horizontal floor/ceiling assemblies - where there is a usable space above and below the concealed space of a floor/ceiling assembly, including soffits and inter-floor plenum spaces. Draft stops shall be installed so that the area of the concealed space does not exceed 1,000 square feet and is divided into approximately equal areas. Draft stops are required in floor/ceiling assemblies of buildings having more than one dwelling unit and shall be installed in line with walls separating sleeping units and dwelling units.

5.05 Ventilation & Lighting - Per 2022 CRC, Section R303, All habitable rooms shall have an aggregate glazing area of not less than 8 percent of the floor area of such rooms. Natural ventilation shall be through windows, doors, louvers or other approved openings to the outdoor air. Such openings shall be provided with ready access or shall otherwise be readily controllable by the building occupants. The minimum openable area to the outdoors shall be 4 percent of the floor area being ventilated. See R303.1 Exceptions for allowed whole house mechanical ventilation systems and provided artificial light capability. Adjoining rooms and exception per Section R303.2. Rooms containing bathtubs, showers, spas and similar bathing fixtures shall be mechanically ventilated per CMC. Minimum exhaust rates shall be as specified by CMC Table 403.7. See, also door & window requirement

5.06 Egress door - Per 2022 CRC, Section R311.2. At least one egress door shall be provided for each dwelling unit. The egress door shall be sidehinged, And shall provide a minimum clear width of 32 inches (813 mm) when measured between the face of the door and the stop, with the door open 90 degrees (1.57 rad). The minimum clear height of the door opening shall not be less than 78 inches (1981 mm) in height measured from the top of the threshold to the bottom of the stop. Other doors shall not be required to comply with these minimum dimensions. Egress doors shall be readily openable from inside the dwelling without the use of a key or special knowledge or effort.

5.07 Floors and Landings at Exterior Doors - per 2022 CRC, Section R311.3, There shall be a landing or floor on each side of each exterior door. The width of each landing shall not be less than the door served. Every landing shall have a minimum dimension of 36 inches (914 mm) measured in the direction of travel. Exterior landings shall be permitted to have a slope not to exceed 1/4 unit vertical in 12 units horizontal (2-percent). Landings or finished floors at the required egress door shall not be more than 1 1/2 inches (38 mm) lower than the top of the threshold, R311.3.1 Exception: the landing or floor on the exterior side shall not be more than 7 3/4 inches (196 mm) below the top of the threshold provided the door does not swing over the landing or floor. Doors other than the required egress door shall be provided with landings or floors not more than 7 3/4 inches (196 mm) below the top of the threshold. R311.3.2 Exception: a top landing is not required where a stairway of not more than two risers is located on the exterior side of the door, provided the door does not swing over the stairway.

5.08 Hallways - Per 2022 CRC, Section R311.6, The minimum width of a hallway shall be not less than 3 feet.

5.09 Fire Sprinklers - Per 2022 CRC, Section R313. Verify applicable fire sprinkler requirements for remodel and new construction projects with the local building and fire departments prior to construction. Fire sprinkler design drawings are to be a deferred submittal by the fire sprinkler contractor to be approved by the fire department and designed for local flow rates and monitoring as required.

5.10 Smoke Detectors - Install per 2022 CRC, Sections R314. Detectors shall be installed in accordance with approved manufacturer's instructions, comply with UL 217 and NFPA 72. Detectors shall be mounted on the ceiling or high on wall in each sleeping area and at a point located adjacent in the corridor or area giving access to each separate sleeping area, and at least one on each level of the building as required by the above section and all other applicable codes. Smoke detectors shall receive their primary power from the building wiring (110 V hard-wired) with battery back-up power. Smoke and fire alarms shall be interconnected in such a manner as activation of one alarm will activate all the alarms.

5.11 Carbon Monoxide Alarms- Install per 2022 CRC, Sections R315. For new construction, an approved carbon monoxide alarm shall be installed in dwelling units and in sleeping units within which fuel-burning appliances are installed and in dwelling units that have attached garages. Carbon monoxide alarms shall be listed as complying with UL 2034 and be installed and maintained in accordance with NFPA 720 and the manufacturer's instructions.

5.12 Per 2022 CGBSC, Section 4.504 Pollutant Control. All finishes are to comply with V.O.C. and formaldehyde limits set forth in Tables 4.504. (1, 2, 3, and 5). Verification shall be required as requested by the enforcement agency.

5.13 All joints and openings between conditioned and unconditioned space are to be closed or sealed.

# 6.0 ROOF PLAN NOTES:

6.01 Roof Ventilation - Per 2022 CRC, Section R806.2, The minimum net free ventilating area shall be 1/150 of the area of the vented space. However this may be reduced to 1/300 when provided in accordance with exception listed in R806.2. There shall be a minimum of 1" of clear space for venting between roof sheathing and insulation and at the location of the vent, R806.3. Unvented attic and unvented enclosed rafter assemblies are permitted when all conditions of CRC Section R806.5 are met.

6.02 Attic Access - Per 2022 CRC, Section R807.1, Buildings with combustible ceiling or roof construction shall have an attic access opening to attic areas that exceed 30 square feet (2.8 m2) and have a vertical height of 30 inches (762 mm) or greater. The vertical height shall be measured from the top of the ceiling framing members to the underside of the roof framing members. The rough-framed opening shall not be less than 22 inches by 30 inches (559 mm by 762 mm) and shall be located in a hallway or other readily accessible location.

6.03 Conventional light wood framing per 2022 CRC, Chapter 8

6.04 Roof Assemblies - Per 2022 CRC, Chapter 9. Roofs shall be covered with materials as set forth in Sections R904 and R905, and shall be tested in accordance with UL790 or ASTM E108. Roof decks shall be covered with approved roof coverings secured to the building or structure in accordance with the provision of chapter 9

#### 7.0 GENERAL STRUCTURAL NOTES:

7.01 Shear Components - General Contractor is responsible for having a general understanding of shear resisting elements and components within this design. Shear transfer and hardware is to be installed per manufacturer's requirements.

7.02 Note that structural detailing within the Structural sheets may indicate hardware, brackets, bolted connections and metal fasteners which protrude from the plane of the rough framing. It is the Framing contractors responsibility to include furring strips, taper strips, fill wedges and blocking as required to bring finish surfaces past the plane of rough structural components. Alternative detailing, such as welded rods in place of bolted connections may be substituted only as approved by the Structural

7.03 Lumber Quality - Contractor is responsible for reviewing lumber quality at the time of each delivery. Excessively wet, visually cupped, warped, or knotty material is not to be accepted on the job site. Contractor is responsible for storing materials in a neat, dry, level environment where damage will not occur.

7.04 Structural drawings, and detailing by others are included as a part of this contract for construction.

7.05 All components shall be fastened or nailed per 2022 CRC Table R602.3(1) unless provided otherwise by Structural Drawings. It is the responsibility of the General Contractor to coordinate requirements for Notching and Boring per 2022 CRC, Section R602.6 Drilling and Notching of Studs, Top Plate R602.6.1, Figure R602.6(2) and Figure R602.6.1 with any associated sub-trades. Verify furring and blocking, up-size framing where required.

8.0 DOOR, WINDOW AND SKYLIGHT NOTES: Per 2022 CRC, Section R609.

8.01 Unless otherwise requested by the owner, the contractor shall be responsible for the verification of all door and window units, rough openings, operation characteristics, egress conditions, etc. prior to final order of doors and windows. The owner, contractor, architect, and window supplier should be given the opportunity to walk through the entire job, review shop drawings and verify each unit prior to order.

8.02 Safety Glazing - Per 2022 CRC, Except as indicated in Section R308.1.1, each pane of glazing installed in hazardous locations as defined in Section R308.4 (R308.4.1 through R308.4.7) shall be provided with safety glazing. Safety/ tempered glass or plastic is required at all glazed doors, glazing within 24" of doors, within 18" of any floor, and within 60" of floors in bathtubs, showers hot tubs, whirlpools, saunas, steam rooms and stairs / ramps. Each unit of safety glazing shall be permanently identified by manufacturer, or for other than tempered glass, the building inspector, at their discretion, may approve a certificate. Site built windows per Section R308.5.

8.03 Egress Windows - Per 2022 CRC, Section R310.2.1, all escape or rescue openings shall have a net clear opening of not less than 5.7 square feet. The minimum net clear height dimension shall be 24 inches and the net clear width shall be not less than 20 inches. When windows are provided as a means of egress, escape or rescue, they shall have a finished sill height of not more than 44 inches above the floor per CRC R310.2.2. See CRC R312.1.3 for opening limiting device and window fall protection requirements and egress operation. Where a window sill is located within 24" of the finish floor, the window must be equipped with a limiting device to prevent the passage of a 4" sphere.

8.04 Skylights - shall comply with 2022 CRC, Section R308.6. Contractor shall provide ICC numbers for prefabricated skylights and assemblies to Building Inspector for approval prior to purchase and installation. Indicate glazing type. Refer to Section R308.6.3 Through R308.6.7 for screens.

9.0 STAIRWAYS: Per 2022 CRC, Section R311.7

9.01 Width - Per 2022 CRC, Section R311.7.1, stairways shall not be less than 36 inches in clear width at all points above the permitted handrail height and below the required headroom height. Handrails shall not project more than 4.5 inches on either side of the stairway and the minimum clear width of the stairway at and below the handrail height, including treads and landings, shall not be less than 31 1/2 inches where a handrail is installed on one side and 27 inches where handrails are pro-Exception per R311.7.10.1.

9.02 Headroom - Per 2022 CRC, Section R311.7.2, The minimum headroom in all parts of the stairway shall not be less than 6 feet 8 inches measured vertically from the sloped line adjoining the tread nosing or from the floor surface of the landing or platform on that portion of the stairway.

9.03 Vertical Rise - Per 2022 CRC, Section R311.7.3, A flight of stairs shall not have a vertical rise larger than 151 inches between floor levels or landings.

9.04 Walkline - Per 2022 CRC, Section R311.7.4, the walkline across winder treads shall be concentric to the curved direction of travel through the turn and located 12 inches from the side where the winders are narrower. The 12-inch dimension shall be measured from the widest point of the clear stair width at the walking surface of the winder. If winders are adjacent within the flight, the point of the widest clear stair width of the adjacent winders shall be used.

9.05 Risers - Per 2022 CRC, Section R311.7.5.1, The maximum riser height shall be not more than 7 3/4 inches.

9.06 Treads - Per 2022 CRC, Section R311.7.5.2, The minimum tread depth shall be not less than 10 inches. Winder treads per R311.7.5.2.1, shall have a minimum tread depth of 10 inches measured between the vertical planes of the foremost projection of adjacent treads at the intersections with the walkline. Winder treads shall have a tread depth of not less than 6 inches at any point

9.07 Nosing - Per 2022 CRC, Section R311.7.5.3, The radius of curvature at the nosing shall be no greater than 9/16 inch. A nosing not less than 3/4 inch but not more than 1-1/4 inches shall be provided on Stairways with solid risers.

9.08 Landings for Stairways - Per 2022 CRC, Section R311.7.6, There shall be a floor or landing at the top and bottom of each stairway. The minimum width perpendicular to the direction of travel shall be no less than the width of the flight served. Landings of shapes other than square or rectangular shall be permitted provided the depth at the walk line and the total area is not less than that of a quarter circle with a radius equal to the required landing width. Where the stairway has a straight run, the minimum depth in the direction of travel shall be not less than 36 inches. Exception: A floor or landing is not required at the top of an interior flight of stairs, including stairs in an enclosed garage, provided a door does not swing over the stairs.

9.09 Stairway Walking Surface - Per 2022 CRC, Section R311.7.7, the walking surface of treads and landings of stairways shall be sloped no steeper than one unit vertical in 48 inches horizontal (2-percent slope).

9.10 Handrails Height and Continuity - Per 2022 CRC, Section R311.7.8.1-2, Handrail height, measured vertically from the sloped plane adjoining the tread nosing, or finish surface of ramp slope, shall be not less than 34 inches and not more than 38 inches. Handrails for stairways shall be continuous for the full length of the flight, from a point directly above the top riser of the flight to a point directly above the lowest riser of the flight. Handrail ends shall be returned or shall terminate in newel posts or safety terminals. handrails adjacent to a wall shall have a space of not less than 1-1/2 inch between the wall and the handrails.

9.11 Grip Size - Per 2022 CRC, Section R311.7.8.5, All required handrails shall be either Type I circular with diameter minimum 1-1/4 inch maximum 2 inch; noncircular handrails must have a perimeter of minimum 4 inch maximum 6-1/4 inch with a maximum cross dimension of 2-1/4"; or type II or provide equivalent graspability.

9.12 lilumination - Per 2022 CRC, Section R311.7.9. All stairs shall be provided with illumination in accordance with Section R303.7 and R303.8.

9.13 Special Stairways - Per 2022 CRC, Section R311.7.10.

9.14 Guards - Per 2022 CRC, Section R312.1, Guard hall be located along open-sided walking surfaces, including stairs, ramps and landings, that are located more than 30 inches measured vertically to the floor or grade below at any point within 36 inches horizontally to the edge of the open side. Required guard at open-sided walking surfaces, including stairs, porches, balconies or landings, shall be not less than 42 inches high.

9.15 Opening Limitations - Per 2022 CRC, Section R312.1.3, Required guards shall not have opening from the walking surface to the required guard height which allow passage of a sphere 4 inches in diameter.

9.16 Handrails and Guardrails shall resist a single concentrated load of 200 pounds.

9.17 Under Stair Fire Protection - Walls and soffits of enclosed closet or storage space under stairs shall be protected on the enclosed side with minimum one-hour fire protection, or use 5/8" type "x" gypsum board.

10.0 FIREPLACE NOTES: Per 2022 CRC, Chapter10

10.01 New fireplace to be EPA approved direct vent, sealed-combustion type gas fireplaces. Effective November 1, 2016, wood-burning devices shall not be installed in new building construction.

10.02 Factory-built Fireplaces - Per 2022 CRC, Section R1004, Factory-built fireplaces shall be listed and labeled and shall be installed in accordance with the conditions of the listing. Factory-built fireplaces shall be tested in accordance with UL 127, R1004.1, Hearth extensions of approved factory-built fireplaces shall be installed in accordance with the listing of the fireplace and shall comply with UL 1618, R1004.2. Decorative shrouds per RI004.3. Contractor shall provide ICC numbers for prefabricated metal insert fireplaces and assemblies to building inspector for approval prior to purchase and installation.

10.03 Exterior Air Supply - Per 2022 CRC, Section R1006, All fireplace units shall be equipped with an exterior air supply to assure proper fuel combustion unless the room is mechanically ventilated and controlled so that the indoor pressure is neutral or positive.

10.04 Masonry fireplaces shall be constructed in accordance with 2022 CRC section R1001.1 and the applicable provisions of chapters 3 and 4.

10.04 Masonry chimneys shall be constructed in accordance with 2022 CRC section R1003.1 with respect to foundations, seismic anchorage and reinforcement, dimensions, termination caps, clearances, materials, and all other applicable components

#### 11.0 MECHANICAL NOTES:

11.01 All work shall comply with the 2022 California Mechanical Code (CMC) and all applicable federal, state, and local codes. Mechanical work is to be bid design/build and provided complete per code.

11.03 Mechanical System Design - Mechanical contractor to accept sole responsibility for proper design and installation of mechanical system. Mechanical contractor to coordinate with the general contractor to design and install suitable mechanical distribution system per Title 24. See sheet index for location of Title 24 conformance worksheets and energy compliance notes within this set.

11.04 Duct systems are sized, designed, and equipment is selected using the following methods: 1. Establish heat loss and heat gain values according to ANSI/ACCA 2 manual J-2016 or equivalent.

2. Size duct systems according to ANSI/ACCA 1 manual D-2016 or equivalent.

3. Select heating and cooling equipment according to ANSI/ACCA 3 manual S-2014 or equivalent. 11.05 HVAC system installers required to be trained and certified in the proper installation of HVAC systems.

11.06 Special inspectors employed by the enforcing agency must be qualified and able to demonstrate competence in the discipline they are inspecting.

#### 12.0 ELECTRICAL NOTES:

12.01 All work shall comply with the 2022 California Electrical Code (CEC) and all applicable federal, state, and local states and ordinances. Electrical work is to be bid design/build and provided complete per code.

12.02 All electrical load sheets and calculations required by the building department shall be the responsibility of the Electrical Subcontractor.

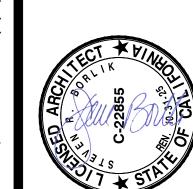
12.03 Verify all fixture locations with owner prior to installation. All recessed fixtures to be approved by owner. Coordinate locations of recessed fixtures with framing, provide owner an opportunity to walk at "box-out" and include relocations as requested. Decorative fixtures are to be supplied by owner.

12.04 Electrical subcontractor is to determine service requirements for the new work prior to bid. Verify that existing service is sufficient to handle increased loads. Locate new sub-panels as directed by owner. All circuit panels are to be labeled.

13.01 All work shall comply with the 2022 California Plumbing Code (CPC) and all applicable federal, state, and local codes. plumbing work is to be bid design/build and provided complete per code.

13.02 Mechanical and plumbing subcontractors are responsible for assessing existing services for compliance with proposed service requirements and recommending any measures required to handle additional loads prior to bid.

13.03 Plumbing subcontractor is required to coordinate with general contractor and framing contractor to ensure proper notching and boring of framing members per CRC R602 and structural requirements within this set. General contractor is to verify plumbing and mechanical runs within framing spaces. It is the general contractors responsibility to notify architect of conflicts prior to the onset of rough framing. When possible, locate all plumbing vents, roof jacks, vents and flues to less visible side and rear roof slopes (rather than in primary view).



ISSUE LOG

MAR 19 2024

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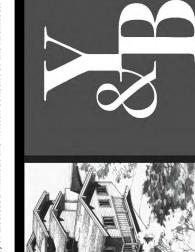
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A.P.N. 510-31-011

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MAY. 28. 2020



#### COUNTY OF SANTA CLARA

2022 CALGREEN RESIDENTIAL CHECKLIST (MANDATORY)

County Amendments to CALGreen are in Italics.

- Designer to cross out items that are not applicable to the project.

- Installer or designer shall verify all applicable requirements have been satisfied and sign and date each row. County Inspectors will verify completion signatures and supporting documentation DURING CONSTRUCTION.

			APPLICANT TO COMPLETE Plan Check Review Data		Ins	staller or Designer Verification
	CALGreen CODE		REFERENCE	Note or Detail		Installer or Designer
ITEM #	SECTION	REQUIREMENT	SHEET	No.	Date	Signature
		PLANNING AND DESIGN: MAND	ATORY REC	UIREMENTS		
1	4.106.2	A plan is developed and implemented to manage storm water drainage during construction.	AO.4			
2	4.106.3	Construction plans indicates how site grading or a drainage system will manage all surface water flows to keep water from entering buildings.	AO.4			
3	4.106.4.1	For new dwellings with attached garages and <b>rebuild</b> of existing dwellings that include a panel upgrade or construction between panel and parking area, a Level 2 EV Ready Space and Level 1 EV Ready Space, is installed.	N/A			
		ENERGY EFFICIENCY: MANDA	ATORY REQU	JIRMENTS		
4	4.201.1	Building meets or exceeds the requirements of the California Building Energy Efficiency Standards.	A2.0			
	W	ATER EFFICIENCY & CONSERVATION	: MANDATO	RY REQUIREME	NTS	#
5	4.303.1	Plumbing Fixtures (water closets and urinals) and fittings (faucets and showerheads) installed in residential buildings comply with CALGreen Sections 4.303.1.1 through 4.303.1.4.	A2.0			
6	4.303.3	Plumbing fixtures and fittings required in CALGreen Section 4.303.1 are installed in accordance with the CPC and meet the applicable referenced standards.	A2.0			
7	4.304.1	Outdoor potable water use in landscape areas comply with a local water efficient landscape or the current California DWR MWELO, whichever is more stringent.	A2.0			
8		Not Used				

TABLE 4.504.1  ADHESIVE VOC LIMIT <sup>1, 2</sup> s Water and Less Exempt Compounds in Grams per Liter					
ARCHITECTURAL APPLICATIONS	VOC LIMIT				
or carpet adhesives	50				
et pad adhesives	50				
oor carpet adhesives	150				
4.61	100				

ARCHITECTURAL APPLICATIONS	VOC LIMIT	
ndoor carpet adhesives	50	
Carpet pad adhesives	50	
Outdoor carpet adhesives	150	
Wood flooring adhesive	100	
Rubber floor adhesives	60	
Subfloor adhesives	50	
Ceramic tile adhesives	65	
/CT and asphalt tile adhesives	50	
Drywall and panel adhesives	50	
Cove base adhesives	50	
Multipurpose construction adhesives	70	
Structural glazing adhesives	100	
Single-ply roof membrane adhesives	250	
Other adhesives not specifically 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 and trim adhesive	250	
SUBSTRATE SPECIFIC APPLICATIONS		
Metal to metal	30	
Plastic foams	50	
Porous material (except wood)	50	
Vood	30	
iberglass	80	

For additional information regarding methods to measure the VOC content specified in this table, see South Coast Air Quality Management District Rule

TABLE 4.9 SEALANT VO	
Less Water and Less Exempt Co	
SEALANTS	VOC LIMIT
Architectural	250
Marine deck	760
Nonmembrane roof	300
Roadway	250
Single-ply roof membrane	450
Other	420
SEALANT PRIMERS	
Architectural	
Nonporous	250
Porous	775
Modified bituminous	500
Marine deck	760
Other	750

TABLE 4.504.3 VOC CONTENT LIMITS FOR ARCHITECTURAL COATINGS2,3 Grams of VOC per Liter of Coating, Less Water and Less Exempt Compounds

COATING CATEGORY	VOC LIMIT
Flat coatings	50
Nonflat 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 <sup>1</sup>	120
Magnesite cement coatings	450
Mastic texture coatings	100
Metallic pigmented coatings	500
Multicolor coatings	250
Pretreatment wash primers	420
Primers, sealers, and undercoaters	100
Reactive penetrating sealers	350
Recycled coatings	250
Roof coatings	50
Rust preventative coatings	250
Shellacs	
Clear	730
Opaque	550
Specialty primers, sealers and undercoaters	100
Stains	250
Stone consolidants	450
Swimming pool coatings	340
Fraffic marking coatings	100
Γub and 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 and including exempt

2. The specified limits remain in effect unless revised limits are listed in

3. Values in this table are derived from those specified by the California Air

Resources Board, Architectural Coatings Suggested Control Measure,

February 1, 2008. More information is available from the Air Resources Board.

subsequent columns in the table.

			APPLICANT TO COMPLETE Plan Check Review Data			
			Plan Chec	k Review Data		Verification
	CALGreen					
	CODE		REFERENCE	Note or Detail		Installer or Designer
ITEM #	SECTION	REQUIREMENT	SHEET	No.	Date	Signature
	MATERIA	L CONSERVATION & RESOURCE EFFI	CIENCY: MA	NDATORY REQU	IREME	NTS
		Annular spaces around pipes, electric				
		cables, conduits or other openings in				
		plates at exterior walls are protected against the passage of rodents by				
9	4.406.1	closing such openings with cement	A2.0			
		mortar, concrete masonry or similar				
		method acceptable to the County of				
		Santa Clara.				
		Recycle and/or salvage for reuse a				
		minimum of 65 percent of the				
		nonhazardous construction and				
10	4.408.1	demolition waste. Submit either a	A2.0			
		Construction Waste management plan (CALGreen 4.408.2) or Utilize a waste				
		management company (CALGreen				
		4.408.3).				
		Documentation is provided to County				
		of Santa Clara which demonstrates	A2.0			
11	4.408.5	compliance with CALGreen sections	A2.0			
		4.408.2 or 4.408.3.				
		An operation and maintenance manual				
12	4.410.1	is placed in the building at the time of	A2.0	l I		
		final inspection.				
H	-	ENVIRONMENTAL QUALITY: MAN	DATORY R	QUIREMENTS		
		Any installed gas fireplace is a direct-				
13	4.503.1	vent sealed-combustion type. Any installed woodstove or pellet stove	A2.0			
15	4.505.1	comply with US EPA Phase II emission				
		limits where applicable.				
		Duct openings and other related air	420			
14	4.504.1	distribution component openings are	A2.0			
		covered during construction until final				
		startup of the HVAC equipment. Adhesives, sealants and caulks are				
15	4.504.2.1	compliant with VOC and other toxic	A2.0			
	"""	compound limits.	72.0			
		Architectural paints and coatings are				
16	4.504.2.2	compliant with VOC limits.	A2.0			
	1	ļ ·				
		Aerosol paints and coatings are compliant with product weighted MIR				
17	4.504.2.3	limits for ROC and other toxic	A2.0			
		compounds.				
	1	Documentation are provided to the				-
18	4 504 2 4	County of Santa Clara to verify that	A2.0			
10	4.504.2.4	compliant VOC limit finish materials				
	have been used.					
	-		ystems meet the		l	
	4 504 3	Carpet and carpet systems meet the	x20		A2.0	
19	4.504.3	applicable testing and product	A2.0			
19	4.504.3	applicable testing and product requirements.	A2.0			
19	4.504.3 4.504.4	applicable testing and product requirements.  80 percent of floor area receiving	100			
		applicable testing and product requirements.	100			
20	4.504.4	applicable testing and product requirements.  80 percent of floor area receiving resilient flooring comply with applicable standards.  Hardwood plywood, particleboard and	A2.0			
		applicable testing and product requirements.  80 percent of floor area receiving resilient flooring comply with applicable standards.	100			

		APPLICANT TO COMPLETE Plan Check Review Data		Ins	staller or Designer Verification	
ITEM #	CALGreen CODE SECTION	REQUIREMENT	REFERENCE SHEET	Note or Detail	Date	Installer or Designe Signature
	EN	VIRONMENTAL QUALITY: MANDATO	RY REQUIRE	MENTS (Continu	ued)	
22	4.504.5.1	Documentation is provided to the County of Santa Clara to verify composite wood meets applicable formaldehyde limits.	A2.0			
23	4.505.2	Vapor retarder and capillary break is installed at slab-on-grade foundations.	A2.0			
24	4.505.3	Moisture content of building materials used in wall and floor framing do not exceed 19% prior to enclosure and is checked before enclosure. Insulation products are dry prior to enclosure.	A2.0			
25	4.506.1	Each bathroom is mechanically ventilated and comply with applicable requirements.	A2.0			
26	4.507.2	Heating and air-conditioning systems are sized, designed, and equipment is selected by using one of the methods listed.	A2.0			
	INSTALLE	R AND SPECIAL INSPECTOR QUALIFI	CATIONS: M	ANDATORY REQ	UIREM	ENTS
27	702.1	HVAC system installers are trained and certified in the proper installation of HVAC systems.	A2.0			
28	702.2	If required by County of Santa Clara, owner or owner's agent shall employ special inspector who are qualified and able to demonstrate competence in the discipline they are inspecting.	A2.0			
29	703.1	Documentation used to show compliance with this code may include construction documents, plans, specifications, builder or installer certification, inspection reports, or other methods acceptable to County of Santa Clara which show substantial conformance.	A2.0			

#### **TABLE 4.504.5** FORMALDEHYDE LIMITS<sup>1</sup> Maximum Formaldehyde Emissions in Parts per Million Hardwood plywood veneer core Hardwood plywood composite core 0.09 Particleboard 0.11 Medium density fiberboard Thin medium density fiberboard<sup>2</sup> 1. Values in this table are derived from those specified by the California Air Resources Board, Air Toxics Control Measure for Composite Wood as

tested in accordance with ASTM E1333. For additional information, see

California Code of Regulations, Title 17, Sections 93120 through 93120.12.

Thin medium density fiberboard has a maximum thickness of <sup>5</sup>/<sub>16</sub> inch (8 mm).

# Construction Waste Management (CWM) Plan

Fill out the form including diversion rate and facility names and addresses

Project Name: <u>I∨E</u>	RSEN RESIDENCE		 Legend:	
Job #: <u>DEV24-19</u>	28-REVI		 	Hauling Company
Project Manager:		:		Sorting Facility Name and Location
Waste Hauling Con	npany:			Disposal Service Company
Contact Name:				

All Subcontractors shall comply with the project's Construction Waste Management Plan. All Subcontractor foremen shall sign the CWM Plan Acknowledgment Sheet.

Subcontractors who fail to comply with the Waste Management Plan will be subject to backcharges or withholding of payment, as deemed appropriate. For instance, Subcontractors who contaminate debris boxes that have been designated for a single material type will be subject to backcharge or withheld payment, as deemed appropriate.

- The project's overall rate of waste diversion will be \_\_\_\_\_\_\_\_%.
- This project shall generate the least amount of waste possible by planning and ordering carefully, following all proper storage and handling procedures to reduce broken and damaged materials and reusing materials whenever possible. The majority of the waste that is generated on this jobsite will be diverted from the landfill and recycled for other use.
- 3. Spreadsheet 1, enclosed, identifies the waste materials that will be generated on this project, the diversion strategy for each waste type and the anticipated diversion rate. 4. Waste prevention and recycling activities will be discussed at the beginning of weekly subcontractor meetings. As each new subcontractor comes on-site, the WMP Coordinator will present him/her with a copy of the CWM Plan and provide a tour of the jobsite to

identify materials to be salvaged and the procedures for handling jobsite debris. All Subcontractor foremen will acknowledge in writing that they have read and will abide by the CWM Plan. Subcontractor Acknowledgment Sheet enclosed. The CWM Plan will be

- posted at the jobsite trailer. 5. Salvage: Excess materials that cannot be used in the project, nor returned to the vendor, will be offered to site workers, the owner, or
- donated to charity if feasible. ensure the highest waste diversion rate possible.
- 7. In the event that the waste diversion rate achievable via the strategy described in (6) above, is projected to be lower than what is required, then a strategy of source-separated waste diversion and/or waste stream reduction will be implemented. Source separated waste refers to jobsite waste that is not commingled but is instead allocated to a debris box designated for a single material type, such as clean wood or metal.
  - 1. Waste stream reduction refers to efforts taken by the builder to reduce the amount of waste generated by the project to below four (4) pounds per square foot of building area.
- 2. When using waste stream reduction measures, the gross weight of the product is subtracted from a base weight of four (4) pounds per square foot of building area. This reduction is considered additional diversion and can be used in the waste reduction percentage calculations.
- will track and calculate the quantity (in tons) of all waste leaving the project and calculate the waste diverwill provide Project Manager with an updated monthly report on gross weight hauled and the waste diversion rate being achieved on the project. monthly report will track separately the gross weights and diversion rates for commingled debris and for each source-separated waste stream leaving the project. In the event does not service any or all of the debris boxes on the project, the with the responsible parties to track the material type and weight (in tons) in such debris boxes in order to determine waste diversion rates for these materials.
- 9. In the event that Subcontractors furnish their own debris boxes as part of their scope of work, such Subcontractors shall not be weight and waste diversion data for their excluded from complying with the CWM Plan and will provide
- 10. In the event that site use constraints (such as limited space) restrict the number of debris boxes that can be used for collection of designated waste the project Superintendent will, as deemed appropriate, allocate specific areas onsite where individual material types are to be consolidated. These collection points are not to be contaminated with non-designated waste types.
- 11. Debris from jobsite office and meeting rooms will be collected by will, at a minimum, recycle office paper, plastic, metal and cardboard.

# Construction Waste Management (CWM) Worksheet

Job Number: _DEV24-1928-REV	/		
Project Manager:			
Waste Hauling Company:			
Construction Waste Management (C			
			,
	DIVERSION M	STREET, STREET	PROJECTED
WASTE MATERIAL TYPE	COMMINGLED AND SORTED OFF SITE	SOURCE SEPARATED ON SITE	DIVERSION RATE
Asphalt			
Concrete			
Shotcrete			
Metals			,
Wood			
Rigid insulation			
Fiberglass insulation			
Acoustic ceiling tile			
Gypsum drywall			,
Carpet/carpet pad			
Plastic pipe			,
Plastic buckets			·
Plastic			1
Hardiplank siding and boards			
Glass			
Cardboard			
Pallets			
Job office trash, paper, glass & plastic bottles, cans, plastic			
Alkaline and rechargeable batteries, toner cartridges, and electronic devices			
Other:			,
Other:			
Other:			

## Construction Waste Management (CWM) Acknowledgment

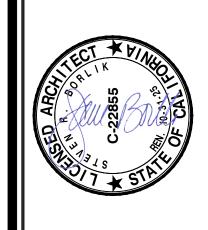
Project Name: VERSEN RES	SIDENCE		
Job Number: DEV24-1928	-REVI		
Project Manager:			
Waste Hauling Company:			
CWM Plan Acknowledgment			
I have read the Waste Manageme		nion and scree to tallow the pr	
plan.	ent Plan for the project; I understand the goals of this SUBCONTRACTOR COMPANY NAME	FOREMAN NAME	
plan.			SIGNATUF
plan.			

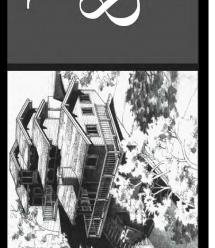
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A.P.N. 510-31-011 CS, DT MAY. 28. 2020

MAR. 19. 201 C. SUBMITTAL MAR 19 2024 APR 09 2024 A PLANNING SUBMITTAL^ NOV. 14. 2024 / 8

ISSUE LOG





#### **CALGREEN 2022 NOTES - MANDATORY REQUIREMENTS:**

1. 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. SEE CALGREEN 4.106.2 FOR FURTHER DETAILS.

2. CONSTRUCTION PLANS SHALL INDICATE HOW THE SITE GRADING OR DRAINAGE SYSTEM WILL MANAGE ALL SURFACE WATER FLOWS TO KEEP WATER FROM ENTERING BUILDINGS. SWALES, WATER COLLECTION AND DISPOSAL SYSTEMS, FRENCH DRAINS, WATER RETENTION GARDENS, AND OTHER MEASURES CAN BE USED. EXCEPTION: ADDITIONS AND ALTERATIONS NOT ALTERING THE DRAINAGE PATH.

3. FOR ANY NEW DWELLING UNITS WITH ATTACHED GARAGES AND FOR REBUILDS OF EXISTING DWELLING UNITS THAT INCLUDE A PANEL UPGRADE OR CONSTRUCTION BETWEEN THE PANEL AND PARKING AREA, INSTALL A LEVEL 2 EV READY SPACE AND LEVEL 1 EV READY SPACE. THE RACEWAY TERMINATION LOCATION SHALL BE PERMANENTLY AND VISIBLY MARKED AS "LEVEL 2 EV-READY."

EXCEPTION: FOR EACH DWELLING UNIT WITH ONLY ONE PARKING SPACE, INSTALL A LEVEL 2 EV READY SPACE.

LEVEL 1 EV READY SPACE IS A PARKING SPACE SERVED BY A COMPLETE ELECTRIC CIRCUIT WITH A MINIMUM OF 110/120 VOLT, 20-AMPERE CAPACITY, INCLUDING ELECTRICAL PANEL CAPACITY; AN OVERPROTECTION DEVICE; A MINIMUM 1" DIAMETER RACEWAY THAT MAY INCLUDE MULTIPLE CIRCUITS AS ALLOWED BY THE COUNTY ELECTRICAL CODE; PROPERLY SIZED CONDUCTORS; GROUNDING AND BONDING; AND EITHER (A) A RECEPTACLE LABELLED "ELECTRIC VEHICLE OUTLET" WITH AT LEAST A ½" FONT ADJACENT TO THE PARKING SPACE, OR (B) LABELED ELECTRIC VEHICLE SUPPLY EQUIPMENT (EVSE).

LEVEL 2 EV READY SPACE IS A PARKING SPACE SERVED BY A COMPLETE ELECTRIC CIRCUIT WITH A MINIMUM OF 208/240 VOLT, 40-AMPERE CAPACITY, INCLUDING THE REQUIRED ELECTRICAL PANEL CAPACITY; AN OVERCURRENT PROTECTION DEVICE; A MINIMUM 1" DIAMETER RACEWAY THAT MAY INCLUDE MULTIPLE CIRCUITS AS ALLOWED BY THE COUNTY ELECTRICAL CODE; PROPERLY SIZED CONDUCTORS; GROUNDING AND BONDING; AND EITHER (A) A RECEPTACLE LABELED "ELECTRIC VEHICLE OUTLET" WITH A MINIMUM ½" FONT, ADJACENT TO THE PARKING SPACE, OR (B) A BLANK LABELED ELECTRIC VEHICLE SUPPLY EQUIPMENT (EVSE) WITH A MINIMUM OUTPUT OF 40 AMPERES.

4. ACCESSORY DWELLING UNITS (ADU) AND JUNIOR ACCESSORY DWELLING UNITS (JADU) WITHOUT ADDITIONAL PARKING SPACES AND WITHOUT ELECTRICAL PANEL UPGRADE OR NEW PANEL INSTALLATION ARE EXEMPT FROM REQUIREMENTS ON NOTE 3. ADUS AND JADUS WITHOUT ADDITIONAL PARKING BUT WITH ELECTRICAL PANEL UPGRADES OR NEW PANELS MUST HAVE RESERVED BREAKERS AND ELECTRICAL CAPACITY ACCORDING TO THE REQUIREMENTS OF NOTE 3.

5. ALL NONCOMPLIANT PLUMBING FIXTURES 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 BUILDING AND INSPECTION DIVISION. 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.

- A. 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.
- B. 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.
- C. WHEN A SHOWER IS SERVED BY MORE THAN ONE SHOWERHEAD, THE COMBINED FLOW RATE OF ALL SHOWER-HEADS 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 ALLOW ONLY ONE SHOWER OUTLET TO BE IN OPERATION AT A TIME. A HAND-HELD SHOWER SHALL BE CONSIDERED A SHOWERHEAD.
- D. 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.
- E. 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.

**6.** 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.

7. RESIDENTIAL DEVELOPMENTS SHALL COMPLY WITH COUNTY OF SANTA CLARA WATER EFFICIENT LANDSCAPE ORDINANCE OR THE CURRENT CALIFORNIA DEPARTMENT OF WATER RESOURCES' MODEL WATER EFFICIENT LANDSCAPE ORDINANCE (MWELO), WHICHEVER IS MORE STRINGENT.

8. Not used.

9. 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 COUNTY OF SANTA CLARA.

**10.** RECYCLE AND/OR SALVAGE FOR REUSE A MINIMUM OF 65 PERCENT OF THE NONHAZARDOUS CONSTRUCTION AND DEMOLITION WASTE IN ACCORDANCE WITH CALGREEN SECTION 4.408.2 OR 4.408.3.

- A. A CONSTRUCTION WASTE MANAGEMENT PLAN IS PROVIDED. THE CONSTRUCTION WASTE MANAGEMENT PLAN SHALL BE UPDATED AS NECESSARY AND SHALL BE AVAILABLE DURING CONSTRUCTION FOR EXAMINATION BY THE COUNTY OF SANTA CLARA.
- 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 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.
- B. A WASTE MANAGEMENT COMPANY CAN BE UTILIZED IF APPROVED BY THE COUNTY OF SANTA CLARA. SEE CALGREEN 4.408.3 FOR FURTHER .DETAILS

**11.** DOCUMENTATION SHALL BE PROVIDED TO THE COUNTY OF SANTA CLARA WHICH DEMONSTRATES COMPLIANCE WITH NOTE 10.

**12.** AT THE TIME OF FINAL INSPECTION, A MANUAL, COMPACT DISC, WEB-BASED REFERENCE, OR OTHER MEDIA ACCEPTABLE TO THE COUNTY OF SANTA CLARA INCLUDES ALL OF THE REQUIRED INFORMATION, SHALL BE PLACED IN THE BUILDING. SEE CALGREEN 4.410.1 FOR DETAILS OF REQUIRED INFORMATION.

13. 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 SANTA CLARA COUNTY ORDINANCES AND BAY AREA AIR QUALITY MANAGEMENT DISTRICT REGULATION 6, RULE 3.

14. 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 COUNTY OF SANTA CLARA TO REDUCE THE AMOUNT OF WATER, DUST AND DEBRIS, WHICH MAY ENTER THE SYSTEM.

15. ADHESIVES, SEALANTS AND CAULKS USED ON THE PROJECT SHALL MEET THE REQUIREMENTS OF CALGREEN TABLES 4.504.1 OR 4.504.2 AS REPRODUCED ON SHEET CG-1. 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 BELOW.

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.

16. ARCHITECTURAL PAINTS AND COATINGS SHALL COMPLY WITH VOC LIMITS AS SHOWN IN TABLE 4.504.3 SHEET CG-1. 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, SHEET CG-1 SHALL APPLY.

17. 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.

**18.** VERIFICATION OF COMPLIANCE WITH NOTES 15, 16, AND 17 SHALL BE PROVIDED AT THE REQUEST OF THE COUNTY OF SANTA CLARA.

19. ALL CARPET AND CARPET CUSHION INSTALLED IN THE BUILDING INTERIOR SHALL MEET THE REQUIREMENTS OF CALIFORNIA DEPARTMENT OF PUBLIC HEALTH, "STANDARD METHOD FOR THE TESTING AND EVALUATION OF VOLATILE ORGANIC CHEMICAL EMISSIONS FROM INDOOR SOURCES USING ENVIRONMENTAL CHAMBERS," VERSION 1.2, JANUARY 2017 (EMISSION TESTING METHOD FOR CALIFORNIA SPECIFICATION 01350)

ALL CARPET ADHESIVE SHALL MEET THE REQUIREMENTS OF TABLE 4.504.1, SHEET CG-1.

20. WHERE RESILIENT FLOORING IS INSTALLED, AT LEAST 80 PERCENT OF FLOOR AREA RECEIVING RESILIENT FLOORING SHALL MEET THE REQUIREMENTS OF 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 1.2, JANUARY 2017 (EMISSION TESTING METHOD FOR CALIFORNIA SPECIFICATION 01350)

**21.** 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 TABLE 4.504.5 SHEET CG-1.

**22.** VERIFICATION OF COMPLIANCE WITH NOTE 21 SHALL BE PROVIDED AT THE REQUEST OF THE COUNTY OF SANTA CLARA.

23. CONCRETE SLAB FOUNDATIONS REQUIRED TO HAVE A VAPOR RETARDER BY CBC, CHAPTER 19 OR CONCRETE SLAB-ON-GROUND FLOORS REQUIRED TO HAVE A VAPOR RETARDER BY CRC CHAPTER 5, SHALL COMPLY WITH FOLLOWING REQUIREMENT:

A CAPILLARY BREAK SHALL BE INSTALLED IN COMPLIANCE WITH AT LEAST ONE OF THE FOLLOWING:

- A. A 4-INCH-THICK BASE OF 1/2 INCH OR LARGER CLEAN AGGREGATE SHALL BE PROVIDED WITH A VAPOR RETARDER IN DIRECT CONTACT WITH CONCRETE AND A CONCRETE MIX DESIGN, WHICH WILL ADDRESS BLEEDING, SHRINKAGE, AND CURLING, SHALL BE USED.
- B. A SLAB DESIGN SPECIFIED BY THE LICENSED DESIGN PROFESSIONAL.

24. 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. 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.

**25.** EACH BATHROOM SHALL BE MECHANICALLY VENTILATED AND SHALL COMPLY WITH THE FOLLOWING:

- A. FANS SHALL BE ENERGY STAR COMPLIANT AND BE DUCTED TO TERMINATE OUTSIDE THE BUILDING.
- B. UNLESS FUNCTIONING AS A COMPONENT OF A WHOLE HOUSE VENTILATION SYSTEM, FANS MUST BE CONTROLLED BY A HUMIDITY CONTROL.
- HUMIDITY CONTROLS SHALL BE CAPABLE OF ADJUSTMENT BETWEEN A RELATIVE HUMIDITY RANGE OF ≤ 50 PERCENT TO A MAXIMUM OF 80 PERCENT. A HUMIDITY CONTROL MAY UTILIZE MANUAL OR AUTOMATIC MEANS OF ADJUSTMENT.
- A HUMIDITY CONTROL MAY BE A SEPARATE COMPONENT TO THE EXHAUST FAN AND IS NOT REQUIRED TO BE INTEGRAL.

**26.** HEATING AND AIR-CONDITIONING SYSTEMS SHALL BE SIZED, DESIGNED AND HAVE THEIR EQUIPMENT SELECTED USING THE FOLLOWING METHODS:

- A. THE HEAT LOSS AND HEAT GAIN IS ESTABLISHED ACCORDING TO ANSI/ACCA 2 MANUAL J—2016 (RESIDENTIAL LOAD CALCULATION), ASHRAE HANDBOOKS OR OTHER EQUIVALENT DESIGN SOFTWARE OR METHODS.
- B. DUCT SYSTEMS ARE SIZED ACCORDING TO ANSI/ACCA 1 MANUAL D—2016 (RESIDENTIAL DUCT SYSTEMS), ASHRAE HANDBOOKS OR OTHER EQUIVALENT DESIGN SOFTWARE OR METHODS.
- C. SELECT HEATING AND COOLING EQUIPMENT ACCORDING TO ANSI/ACCA 3 MANUAL S—2014 (RESIDENTIAL EQUIPMENT SELECTION) OR OTHER EQUIVALENT DESIGN SOFTWARE OR METHODS.

27. 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.

28. IF REQUIRED BY THE COUNTY OF SANTA CLARA, 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 COUNTY OF SANTA CLARA FOR THE PARTICULAR TYPE OF INSPECTION OR TASK TO BE PERFORMED. SPECIAL INSPECTORS SHALL BE INDEPENDENT ENTITIES WITH NO FINANCIAL INTEREST IN THE MATERIALS OR THE PROJECT THEY ARE INSPECTING FOR COMPLIANCE WITH THIS CODE.

29. 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 COUNTY OF SANTA CLARA 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 IN THE APPLICATION CHECKLIST.



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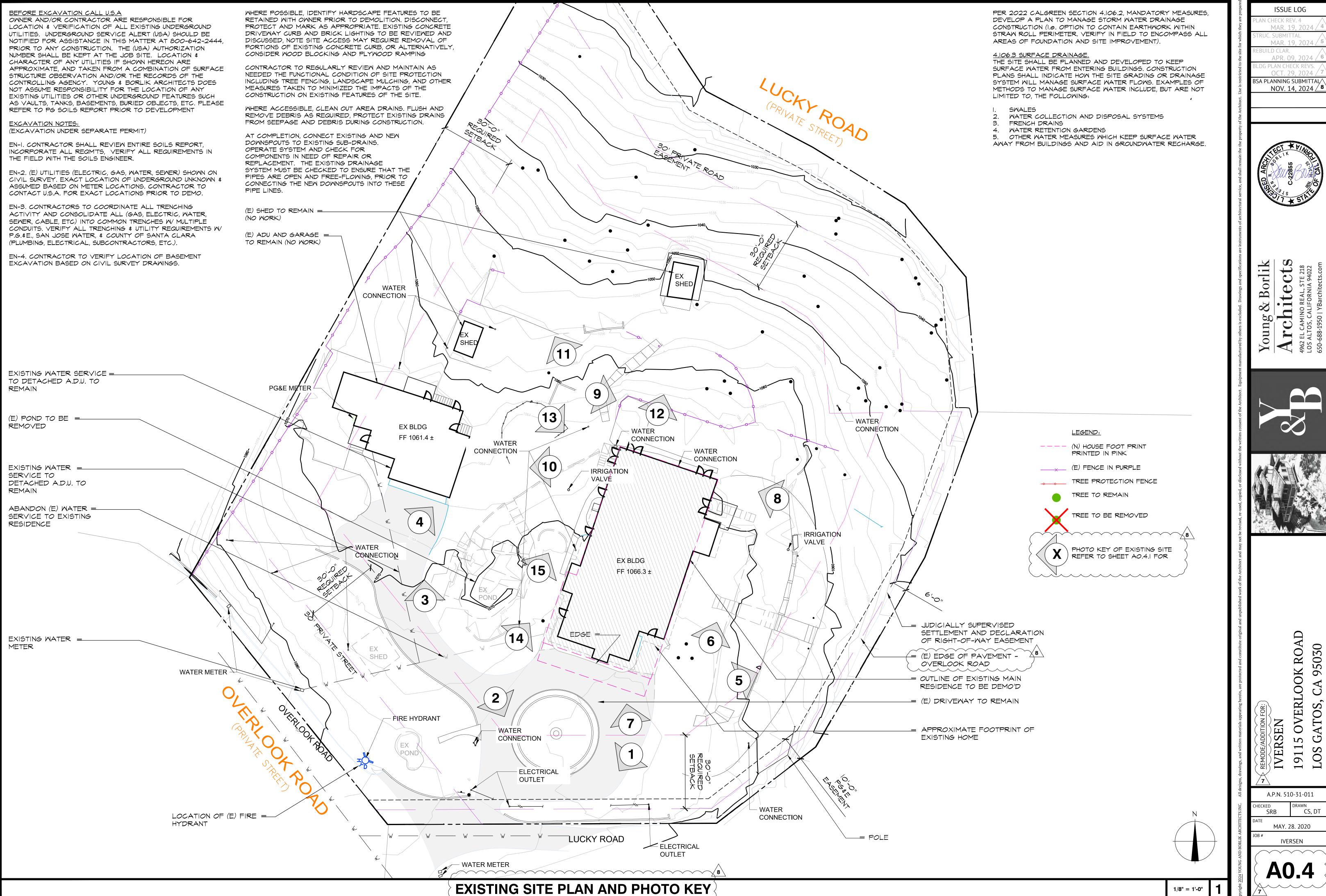
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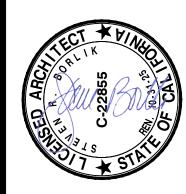
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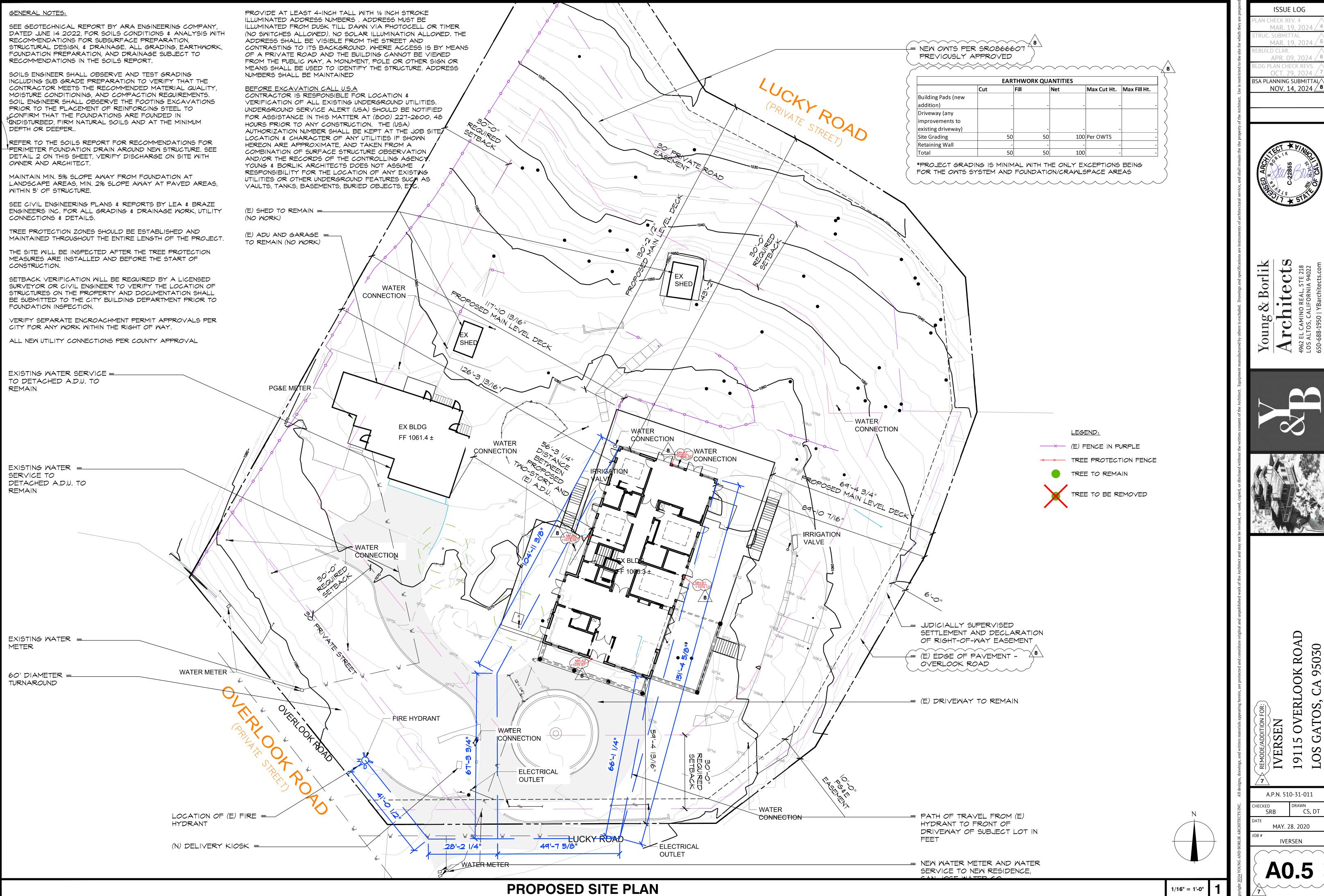
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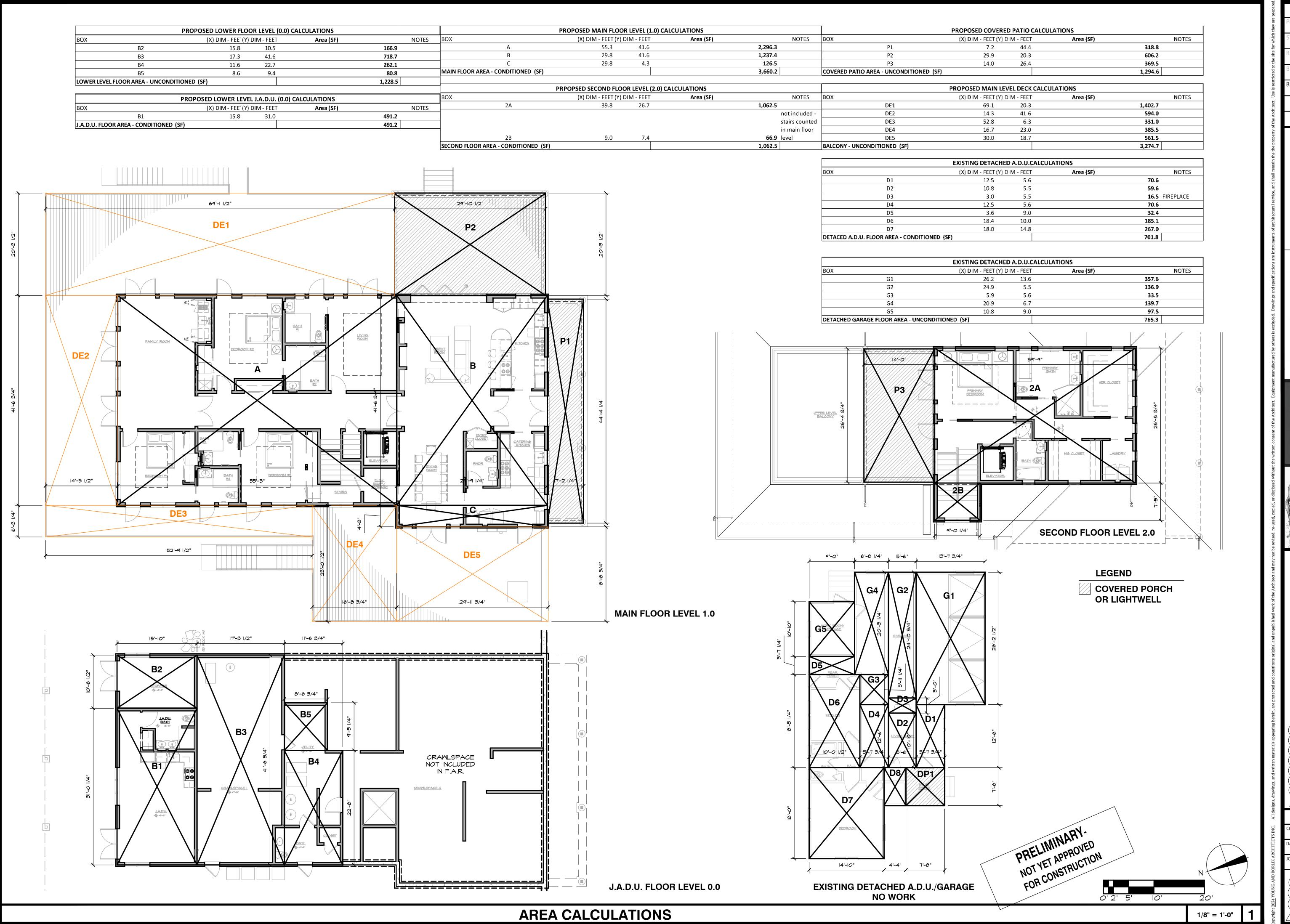




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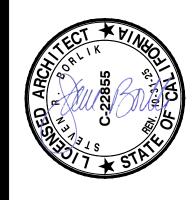
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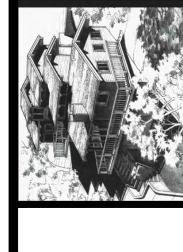
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#### ROOFING GENERAL NOTES:

ROOFING: CLASS "A" ASPHALT COMPOSITION SHINGLES OVER UNDERLAYMENT MEMBRANE OVER PLYMD. SHEATHING (PER STRUCTURAL) SEE CRC R905.2 REQMTS FOR INSTALLATION, UNDERLAYMENT, FLASHING, ETC.

ON ROOF SECTIONS OF 4:12 PITCH AND GREATER, ONE-LAYER 15# ROOFING FELT (or APPROVED EQUIVALENT) OF 36" WIDTH SHEETS W/ 2" OVERLAP, PER TABLE R905.1.1(2)

ON ROOF SLOPES AT LEAST 2:12 AND UP TO 4:12, PROVIDE TWO-LAYERS OF UNDERLAYMENT, OF 36" WIDTH SHEETS W/ 19" OVERLAP OVER 19" STARTING STRIP, PER TABLE R905.1.1(2)

ON ROOF SLOPES LESS THAN 2:12 BUT AT LEAST \$\frac{1}{4}\$:12, PROVIDE APPROVED BUILT-UP ROOFING, MODIFIED BITUMENT, OR THERMOSET SINGLE-PLY MEMBRAME SYSTEM.

#### ALL ROOFING FASTENERS SHALL BE CORROSION-RESISTANT PER CRC R905.2.5

FLASHING SHALL BE INSTALLED AT WALL AND ROOF INTERSECTIONS, 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 O.OI9 INCHES (O.483 MM) (E.G. NO. 26 GALVANIZED SHEET) AND SHALL BE PRIMED AND PAINTED. [PAMC 16.06.253]

SHEET METAL AT CHIMNEY CRICKET AND FLASHING CONDITIONS SHALL BE PAINTED TO MATCH ROOF, TYP.

PAINTED G.I. SHEET METAL GUTTERS W/ DOWNSPOUTS
TO MATCH EXISTING, VERIFY IN FIELD W/ OWNER

GUTTERS W/ GUTTER GUARD TO PREVENT ACCUMULATION OF LEAVES & DEBRIS, VERIFY SELECTION W/ OWNER. GUTTERS ARE TO BE OF NON-COMBUSTIBLE MATERIAL. (I.E. SHEET METAL) WITH RWL DISCHARGE TO SUB-DRAIN TIGHT LINE OR TO SPLASH CONCRETE BLOCK PER CIVIL.

ALL NEW SKYLIGHTS BY "VELUX", (WDMA TESTING REPORT UES-199) IN ACCORDANCE WITH AAMA/WDMA/CSA 101/15.2/A440-08 \$-05 SEE SKYLIGHT SCHEDULE A9.1 FOR MODEL #.

SANITARY SEMER VENTS SHALL TERMINATE AT LEAST 10'-0" AWAY HORIZONTALLY OR AT LEAST 3"-0" ABOVE VERTICALLY FROM ANY OPERABLE SKYLIGHT.

DIRECT ROOF JACKS, VENTS, AND OTHER PENETRATIONS TO THE REAR FACING ROOF PLANE WHERE POSSIBLE.

NO EAVES ALLOWED WHEN LOCATED LESS THAN 2 FT. FROM THE PROPERTY LINE, CBC 704.2

SEE ALSO STRUCTURAL DETAILS.

# 2022 CRC R806.5 UN-VENTED ATTIC AND UN-VENTED ENCLOSED RAFTER ASSEMBLIES

UN-VENTED ATTICS AND UN-VENTED ENCLOSED ROOF FRAMING ASSEMBLIES CREATED BY CEILINGS THAT ARE APPLIED DIRECTLY TO THE UNDERSIDE OF THE ROOF FRAMING MEMBERS AND STRUCTURAL ROOF SHEATHING APPLIED DIRECTLY TO THE TOP OF THE ROOF FRAMING MEMBERS/RAFTERS, SHALL BE PERMITTED WHERE ALL THE FOLLOWING CONDITIONS ARC MET:

I. THE UN-VENTED ATTIC SPACE IS COMPLETELY WITHIN THE BUILDING THERMAL ENVELOPE.

2. INTERIOR CLASS I VAPOR RETARDERS ARE NOT INSTALLED ON THE CEILING SIDE (ATTIC FLOOR) OF THE UN-VENTED ATTIC ASSEMBLY OR ON THE CEILING SIDE OF THE UN-VENTED ENCLOSED ROOF FRAMING ASSEMBLY.

## 3. NOT USED.

4. IN CALIFORNIA CLIMATE ZONES 14 AND 16, ANY AIR-IMPERMEABLE INSULATION SHALL BE A CLASS II VAPOR RETARDER, OR SHALL HAVE A CLASS II VAPOR RETARDER COATING OR COVERING IN DIRECT CONTACT WITH THE UNDERSIDE OF THE INSULATION.

4.1 A CLASS I OR CLASS II VAPOR RETARDER SHALL BE INSTALLED ON THE INDIRECTLY CONDITIONED SPACE SIDE OF ALL INSULATION IN AN UNVENTED ATTIC WITH AIR-PERMEABLE INSULATION FOR CONDENSATION CONTROL. SEE THE CALIFORNIA ENERGY CODE, FIGURE 100.1-A CALIFORNIA CLIMATE ZONES.

5. INSULATION SHALL COMPLY WITH ITEM 5.3 AND EITHER ITEM 5.1 OR 5.2.

2022 CRC R806.5 UN-VENTED ATTIC AND UN-VENTED ENCLOSED RAFTER ASSEMBLIES (CONT'D)

5.1 ITEM 5.1.1, 5.1.2, 5.1.3 OR 5.1.4 SHALL BE MET, DEPENDING ON THE AIR PERMEABILITY OF THE INSULATION DIRECTLY UNDER THE STRUCTURAL ROOF SHEATHING. NO INSULATION SHALL BE REQUIRED WHEN ROOF TILES, WOOD SHINGLES OR WOOD SHAKES, OR ANY OTHER ROOFING SYSTEM USING BATTENS AND NO CONTINUOUS UNDER-LAYMENT IS INSTALLED. A CONTINUOUS UNDER LAYMENT SHALL BE CONSIDERED TO EXIST IF SHEATHING, ROOFING PAPER OR ANY CONTINUOUS LAYER HAVING A PERM RATE OF NO MORE THAN ONE PERM UNDER THE DRY CUP METHOD IS PRESENT.

5.1.1 WHERE ONLY AIR-IMPERMEABLE INSULATION IS PROVIDED, IT SHALL BE APPLIED IN DIRECT CONTACT WITH THE UNDERSIDE OF THE STRUCTURAL ROOF SHEATHING.

5.1.2. WHERE AIR-PERMEABLE INSULATION IS INSTALLED DIRECTLY BELOW THE STRUCTURAL SHEATHING, RIGID BOARD OR SHEET INSULATION SHALL BE INSTALLED DIRECTLY ABOVE THE STRUCTURAL ROOF SHEATHING IN ACCORDANCE WITH THE R-VALUES IN TABLE R806.5 OF THE CRC FOR CONDENSATION CONTROL.

5.1.3. WHERE BOTH AIR-IMPERMEABLE AND AIR PERMEABLE INSULATION ARE PROVIDED, THE AIR-IMPERMEABLE INSULATION SHALL BE APPLIED IN DIRECT CONTACT WITH THE UNDERSIDE OF THE STRUCTURAL ROOF SHEATHING IN ACCORDANCE WITH ITEM 5.1.1 AND SHALL BE IN ACCORDANCE WITH THE R-VALUES IN TABLE R806.5 OF THE CRC FOR CONDENSATION CONTROL. THE AIR-PERMEABLE INSULATION SHALL BE INSTALLED DIRECTLY UNDER THE AIR-IMPERMEABLE INSULATION.

5.I.4. ALTERNATIVELY, SUFFICIENT RIGID BOARD OR SHEET INSULATION SHALL BE INSTALLED DIRECTLY ABOVE THE STRUCTURAL ROOF SHEATHING TO MAINTAIN THE MONTHLY AVERAGE TEMPERATURE OF THE UNDERSIDE OF THE STRUCTURAL ROOF SHEATHING ABOVE 45°F (7°C). FOR CALCULATION PURPOSES, AN INTERIOR AIR TEMPERATURE OF 68°F (20°C) IS ASSUMED AND THE EXTERIOR AIR TEMPERATURE IS ASSUMED TO BE THE MONTHLY AVERAGE OUTSIDE AIR TEMPERATURE OF THE THREE COLDEST MONTHS.

# 5.2. IN CLIMATE ZONES 3-15, AIR-PERMEABLE INSULATION INSTALLED IN UNVENTED ATTICS SHALL MEET THE FOLLOWING REQUIREMENTS:

5.2.1. AN APPROVED VAPOR DIFFUSION PORT SHALL BE INSTALLED NOT MORE THAN 12 IN. (305 mm) FROM THE HIGHEST POINT OF THE ROOF, MEASURED VERTICALLY FROM THE HIGHEST POINT OF THE ROOF TO THE LOWEST EDGE OF THE PORT

5.2.2. THE PORT AREA SHALL BE GREATER THAN OR EQUAL TO 1:600 OF THE CEILING AREA. WHERE THERE ARE MULTIPLE PORTS IN THE ATTIC, THE SUM OF THE PORT AREAS SHALL BE GREATER THAN OR EQUAL TO THE AREA REQUIREMENT.

5.2.3. THE VAPOR-PERMEABLE MEMBRANE IN THE VAPOR DIFFUSION PORT SHALL HAVE A VAPOR PERMEANCE RATING OF GREATER THAN OR EQUAL TO 20 PERMS WHEN TESTED IN ACCORDANCE WITH PROCEDURE A OF ASTM E96

5.2.4. THE VAPOR DIFFUSION PORT SHALL SERVE AS AN AIR BARRIER BETWEEN THE ATTIC AND THE EXTERIOR OF THE BUILDING.

5.2.5. THE VAPOR DIFFUSION PORT SHALL PROTECT AGAINST THE ENTRANCE OF RAIN AND SNOW.

5.2.6. FRAMING MEMBERS AND BLOCKING SHALL NOT BLOCK THE FREE FLOW OF WATER VAPOR TO THE PORT. NOT LESS THAN A 2-INCH (51 mm) SPACE SHALL BE PROVIDED BETWEEN ANY BLOCKING AND THE ROOF SHEATHING. AIR-PERMEABLE INSULATION SHALL BE PERMITTED WITHIN THAT SPACE.

5.2.7. THE ROOF SLOPE SHALL BE GREATER THAN OR EQUAL TO 3:12 (VERTICAL/HORIZONTAL)

5.2.8. WHERE ONLY AIR-PERMEABLE INSULATION IS USED, IT SHALL BE INSTALLED DIRECTLY BELOW THE STRUCTURAL ROOF SHEATHING.

5.2.9 AIR-IMPERMEABLE INSULATION, IF ANY, SHALL BE DIRECTLY ABOVE OR BELOW THE STRUCTURAL ROOF SHEATHING AND IS NOT REQUIRED TO MEET THE R-VALUE IN TABLE 806.5 OF THE CRC. WHERE DIRECTLY BELOW THE STRUCTURAL ROOF SHEATHING, THERE SHALL BE NO SPACE BETWEEN THE AIR-IMPERMEABLE INSULATION AND AIR-PERMEABLE INSULATION.

5.2.10. THE AIR SHALL BE SUPPLIED AT A FLOW RATE GREATER THAN OR EQUAL TO 50 CFM (23.6 \( \)s) PER 1,000 SQUARE FEET (93 m²) OF CEILING. THE AIR SHALL BE SUPPLIED FROM DUCTWORK PROVIDING SUPPLY AIR TO THE OCCUPIABLE SPACE WHEN THE CONDITIONING SYSTEM IS OPERATING. ALTERNATIVELY, THE AIR SHALL BE SUPPLIED BY A SUPPLY FAN WHEN THE CONDITIONING SYSTEM IS OPERATING.

5.3 WHERE PREFORMED INSULATION BOARD IS USED AS THE AIR-IMPERMEABLE INSULATION LAYER, IT SHALL BE SEALED AT THE PERIMETER OF EACH INDIVIDUAL SHEET INTERIOR SURFACE TO FORM A CONTINUOUS LAYER.

2022 CALGREEN RESIDENTIAL MANDATORY MEASURES:

4.106.2. DEVELOP A PLAN TO MANAGE STORM WATER DRAINAGE CONSTRUCTION.

4.106.3. PLAN AND DEVELOP GRADING AND PAVING PLAN TO KEEP SURFACE WATER AWAY FROM BUILDINGS.

4.106.4 ELECTRIC VEHICLE (EV) CHARGING: FOR NEW CONSTRUCTION SHALL COMPLY WITH SECTION 4.106.4.1 OR 4.106.4.2 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

4.303.1.1. ALL TOILETS ARE MAXIMUM 1.28 GPF OR DUAL-FLUSH.

4.303.1.3.1. SHOWERHEADS HAVE MAX FLOW RATE OF 1.8 GPM AT 80 PSI. SHOWERHEADS SHALL BE CERTIFIED TO THE PERFORMANCE CRITERIA OF THE U.S. EPA WATERSENSE SPECS.

4.303.1.3.2. WHEN A SHOWER IS SERVED BY MORE THAN ONE SHOWERHEAD, THE COMBINED FLOW RATE OF ALL SHOWERHEADS AND/OR OTHER SHOWER OUTLETS CONTROLLED BY A SINGLE VALVE SHALL NOT EXCEED 1.8 GPM AT 80 PSI, OR THE SHOWER SHALL BE DESIGNED TO ALLOW ONLY ONE SHOWER OUTLET TO BE IN OPERATION AT A TIME.

4.303.1.4.1. MAX FLOW RATE FOR ALL LAVATORY FAUCETS IS 1.2 GPM AT 60 PSI. MIN FLOW RATE SHALL NOT BE LESS THAN 0.8 GPM AT 60

4.303.1.4.4. KITCHEN FAUCETS SHALL NOT EXCEED 1.8 GPM AT 60 PSI. KITCHEN FAUCETS MAY TEMPORARILY INCREASE THE FLOW ABOVE THE MAXIMUM RATE, BUT NOT TO EXCEED 2.2 GPM AT 60 PSI, AND MUST DEFAULT TO A MAXIMIM FLOW RATE OF 1.8 GPM AT 60 PSI.

4.303.2 PLUMBING FIXTURES AND FITTINGS SHALL COMPLY WITH CA PLUMBING CODE.

2022 CALGREEN RESIDENTIAL MANDATORY MEASURES (CONT'D): 4.304.1 ALL DEVELOPMENT SHALL COMPLY WITH A LOCAL WATER

4.304.1 ALL DEVELOPMENT SHALL COMPLY WITH A LOCAL WATER EFFICIENT LANDSCAPE ORDINANCE OR THE CURRENT CALIFORNIA DEPT OF WATER RESOURCES' MWELO. REFER TO https://www.water.ca.gov/

4.406.1. PROTECT ANNULAR SPACES AROUND PIPES, ELECTRIC CABLES, & CONDUITS AT EXTERIOR WALLS AGAINST THE PASSAGE OF RODENTS.

4.408.1. DIVERT A MINIMUM OF 65% OF CONSTRUCTION WASTE.

 $\underline{4.408.2}$ . SUBMIT CONSTRUCTION WASTE MANAGEMENT PLAN OR IN ACCORDANCE WITH THE LOCAL ORDINANCE.

4.408.3 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.

4.410.1. AT PROJECT COMPLETION, PROVIDE A COPY OF THE OPERATIONS AND MAINTENANCE MANUAL TO THE BUILDING OCCUPANT OR OWNER ADDRESSING ITEMS | THROUGH 10.

4.503.1 ANY INDOOR GAS FIREPLACES INSTALLED SHALL BE A DIRECT-VENT SEALED-COMBUSTION TYPE. ANY INSTALLED WOODSTOVE OR PELLET STOVE SHALL COMPLY WITH US 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

4.504.1. COVER DUCT OPENINGS AND OTHER RELATED AIR DISTRIBUTION COMPONENT OPENING DURING CONSTRUCTION.

4.504.2.1. ADHESIVES, SEALANTS, CAULKS AND OTHER TOXIC COMPOUNDS USED DURING CONSTRUCTION SHALL BE COMPLIANT WITH VOC LIMITS.

2022 CALGREEN RESIDENTIAL MANDATORY MEASURES (CONT'D): 4.504.2.2. PAINTS, STAINS AND OTHER COATING SHALL BE COMPLIANT

 $\underline{4.504.2.3}$ . AEROSOL PAINTS AND COATINGS SHALL BE COMPLIANT WITH PRODUCT WEIGHTED MIR LIMITS FOR ROC AND TOXIC

COMPOUNDS.

4.504.3. CARPET AND CARPET SYSTEMS SHALL BE COMPLIANT WITH

4.504.4. MINIMUM 80% OF FLOOR AREA RECEIVING RESILIENT FLOORING SHALL COMPLY WITH THE VOC EMISSION LIMITS PER SECTIONS.

WITH YOC LIMITS.

VOC LIMITS.

4.504.5. COMPOSITE WOOD PRODUCTS, PARTICLE BOARD, MEDIUM DENSITY FIBERBOARD (MDF) AND HARDWOOD PLYWOOD USED IN INTERIOR FINISH SYSTEMS SHALL COMPLY WITH LOW FORMALDEHYDE EMISSION STANDARDS.

4.505.2. INSTALL CAPILLARY BREAK VAPOR RETARDER AT SLAB ON GRADE FOUNDATIONS.

4.505.3. WALL AND FLOOR FRAMING SHALL NOT BE ENCLOSED WHEN THE FRAMING MEMBERS EXCEED 19 PERCENT MOISTURE CONTENT. BUILDING MATERIALS WITH VISIBLE SIGNS OF WATER DAMAGE SHALL NOT BE INSTALLED.

4.507.2. DUCT SYSTEMS ARE SIZED & DESIGNED WITH EQUIPMENT SELECTED PER SECTION. HVAC SYSTEM INSTALLERS MUST BE TRAINED AND CERTIFIED, AND SPECIAL INSPECTORS EMPLOYED BY THE ENFORCING AGENCY MUST BE QUALIFIED.

# CALGREEN RESIDENTIAL MANDATORY MEASURE NOTES

<u>GENERAL NOTES:</u>
VERIFY ALL HARDSCAPE, DRIVEWAY,AND LANDSCAPE LAYOUTS AND FINISHES WITH OWNER.

ALL NEW WALLS SHOWN SHADED, TYPICAL.

EXTERIOR WALLS- STUCCO CEMENT PLASTER (3-COAT APPLICATION W/ CONTINUOUS G.I. WEEP SCREED AT MUDSILL), OVER METAL LATHE, OVER 2-LAYERS GRADE "D" BLDG. PAPER (OR EQUIVALENT HOME WRAP MEMBRANE) OVER EXTERIOR SHEAR PLYWD., OVER 2X FRAMING @ 16"O.C. U.N.O. SEE STRUCTURAL PLANS FOR SHEAR WALL & HOLDDOWN LOCATIONS & NAILING. SEE EXTERIOR ELEVATIONS FOR LOCATIONS OF EACH MATERIAL.

INTERIOR WALLS - 1/2" OR 5/8" GYP. BD. ON 2X STUDS @ 16"O.C. U.N.O. SEE STRUCTURAL PLANS FOR SHEAR WALL & HOLDDOWN LOCATIONS & NAILING. (2X6 MIN. @ PLUMBING WALLS). 5/8" TYPE 'X' GYPSUM BOARD @ ALL SEPARATION WALLS & CEILING IN GARAGE AND AT ENCLOSED SPACE UNDER STAIRS. LEVEL/PLUMB CEILINGS AT KITCHENS AND OTHER AREAS WITH FULL HEIGHT CABINETRY. VERIFY WITH OWNER OPTIONS & EXTENT FOR ACOUSTICAL BATTS INSULATION AT INTERIOR WALLS OR FLOORS.

SEE STRUCTURAL PLANS FOR SHEAR WALL AND HOLDDOWN LOCATIONS. SEE BUILDING SECTIONS FOR TYPICAL WALL INSULATION LOCATIONS & R-VALUES.

ALL NEW MINDOWS TO BE DOUBLE PANE ALUMINUM CLAD MOOD MINDOW. SEE SHEET A9.1 FOR MINDOW/DOOR SCHEDULE, ELEVATION SHEETS FOR GRIDS PATTERN. PROVIDE TEMPERED GLAZING AT MINDOWS AT SHOWERS, ABOVE BATHTUBS AND IN THE STAIR WELL.

VERIFY FINISH SELECTIONS, BASEBOARD, CEILING TRIM, AND DOOR & WINDOW CASINGS W/ OWNER AND ARCHITECT IN FIELD. PROVIDE BLOCKING AS NECESSARY FOR BATHROOM AND OTHER ACCESSORIES, WINDOW TREATMENTS, ETC.

VERIFY ALL FLOOR FINISH SELECTIONS W/ OWNER PRIOR CONSTRUCTION. CONTRACTOR AND FLOOR SUBCONTRACTORS TO DETERMINE FINISH HEIGHTS OF SLABS FOR DIFFERENT FLOOR FINISHES PRIOR TO CONCRETE FORMING.

MECHANICAL/ELECTRICAL/PLUMBING - FRAMING CONTRACTOR SHALL CAREFULLY REVIEW ALL ELECTRICAL, MECHANICAL, & STRUCTURAL PLANS AND CONSIDER ALL ISSUES IN LOCATION OF SIGNIFICANT BEAMS AND LAYOUT OF FLOOR & CEILING JOISTS TO ACCOMMODATE LIGHT CANS, PLUMBING, MINIMIZE HEADING OFF, CENTER FLOOR REGISTERS W/ DOORS, ALIGN CHUTES & CHASES, ETC. VERIFY ALL PLUMBING FIXTURES, APPLIANCES, LIGHTING SELECTIONS, DIMENSIONS, & REQUIREMENTS ETC. W/ OWNER PRIOR TO ROUGH FRAMING. SEE MEP AND LS PLANS FOR LIGHTS, SWITCHES, OUTLETS, TV, PHONE LOCATIONS, ETC. VERIFY W/ ELECTRICIAN, OWNER DURING FRAMING. COORDINATE ALIGNMENT W/ TILE FINISHES, HEIGHTS, WALL DEPTHS & FINISH, BLOCKING, ETC. MECHANICAL CONTRACTOR TO VERIFY ALL AIR DUCTS, CHASES, LOCATIONS, CONFIGURATIONS, ETC. W/ FRAMING CONTRACTOR DURING FOUNDATION WORK, PRIOR TO FRAMING.

REFER TO SHEET AO.2.1, AO.3.1, AND AO.2.3.2 FOR CALGREEN MANDATORY CHECKLIST AND NOTES.

#### BATHROOM NOTES:

BN-I. (N) BATH CABINETS W/ GRANITE COUNTERTOPS, HANSGROHE, TOTO, KOHLER OR EQUAL PLUMBING FIXTURES, TILE OR STONE FLOORING. VERIFY ALL SELECTIONS, FINISHES, ACCESSORIES, ETC. WITH OWNER. VERIFY ALL ROUGH PLUMBING REQUIREMENTS/DIMENSIONS PRIOR TO CONCRETE AND FRAMING.

BN-2. SHOWERS OR TUB/SHOWER COMBINATIONS SHALL BE PROVIDED WITH INDIVIDUAL CONTROL VALVES OF THE THERMOSTATIC MIXING OR PRESSURE BALANCE TYPE ADJUSTED TO 120 DEGREES MAXIMUM.

BN-3. AT ALL SHOWERS AND TUB/SHOWER COMBINATIONS, A SMOOTH, HARD, NONABSORBENT SURFACE (e.g., CERAMIC TILE OR FIBERGLASS) OVER A MOISTURE RESISTANT UNDERLAYMENT (e.g., CEMENT, FIBER CEMENT, OR GLASS MAT GYPSUM BACKER) TO A HEIGHT OF 12" ABOVE THE DRAIN INLET. CRC R307.2. MATERIALS OTHER THAN STRUCTURAL ELEMENTS SHALL BE MOISTURE RESISTANT. WATER RESISTANT GYPSUM BACKING BOARD (i.e. GREEN BOARD) SHALL NOT BE USED IN BATH TUBS OR SHOWERS WHERE THERE WILL BE DIRECT EXPOSURE TO WATER. PROVIDE BACKERS SUCH AS WONDER-BOARD, HARDI-BACKER OR EQUIVALENT. VERIFY FINISH MATERIALS WONNER.

BN-4. WHERE SHOWER IS PROPOSED, INSTALL HOT-MOP SHOWER PAN @ ALL SHOWERS (TYPICAL). BASE MATERIAL BENEATH SHOWER PAN TO SLOPE TO DRAIN. VERIFY DRAIN LOCATION WOWNER.

BN-5. TEMPERED GLASS FRAMELESS SHOWER ENCLOSURE. MIN. 3/8" THICK GLASS, AND 22" WIDE DOOR SWING OUT.

BN-6. ALL SHOWER COMPARTMENTS, REGARDLESS OF SHAPE, SHALL HAVE A MINIMUM FINISHED INTERIOR OF 1,024 SQUARE INCHES, AND SHALL ALSO BE CAPABLE OF ENCOMPASSING A 30-INCH CIRCLE, PER CPC 408.6.

BN-7. NO WATER CLOSET OR BIDET SHALL BE SET CLOSER THAN 15" FROM ITS CENTER TO ANY SIDE WALL OR OBSTRUCTION NOR CLOSER THAN 30" CENTER TO CENTER TO ANY SIMILAR FIXTURE. THE CLEAR SPACE IN FRONT OF ANY WATER CLOSET OR BIDET SHALL NOT BE LESS THAN 24".

BN-8. INSTALL BATHROOM ACCESSORIES, I.E. MIRRORS, MEDICINE CABINETS, TOWEL BARS & HOOKS, TOILET PAPER HOLDERS, SOAP DISHES, ETC., SELECTED BY OWNER. VERIFY SIZES AND MOUNTING LOCATIONS, PROVIDE PROPER BLOCKING.

BN-9. INSTALL EXHAUST FAN TO PROVIDE MINIMUM 5 AIR EXCHANGE PER HOUR VENTED TO EXTERIOR WITH A BACK DRAFT DAMPER.

BN-10. REFER TO "INDOOR AIR QUALITY" ON MP SHEETS FOR REQUIRED SINGLE FAN EXHAUST SYSTEM MIN. DUCT SIZE.

BN-II. BATHTUB AND SHOWER FLOORS AND WALLS ABOVE BATHTUBS WITH INSTALLED SHOWER HEADS AND IN SHOWER COMPARTMENTS SHALL BE FINISHED WITH A NONABSORBENT SURFACE. SUCH WALL SURFACES SHALL EXTEND TO A HEIGHT OF NOT LESS THAN 6 FEET ABOVE THE FLOOR. CRC R307.2

BN-12. GYPSUM BOARD SHALL NOT BE USED WHERE THERE WILL BE DIRECT EXPOSURE TO WATER, OR IN AREAS SUBJECT TO CONTINUOUS HIGH HUMIDITY. CRC R702.3.7.

#### NEW STAIR NOTES PER 2022 CRC R311.7 SN-1. STAIRWAY WIDTH. STAIRWAY SERVING

SN-1. STAIRMAY MIDTH. STAIRMAY SERVING AN OCCUPANT LOAD OF LESS THAN 50 SHALL HAVE A MIDTH OF NOT LESS THAN 36 INCHES.

SN-2. HEADROOM. STAIRWAYS SHALL HAVE A MINIMUM HEADROOM CLEARANCE OF 80 INCHES MEASURED VERTICALLY FROM A LINE CONNECTING THE EDGE OF THE NOSINGS. SUCH HEADROOM SHALL BE CONTINUOUS ABOVE THE STAIRWAY TO THE POINT WHERE THE LINE INTERSECTS THE LANDING BELOW, ONE TREAD DEPTH BEYOND THE BOTTOM RISER. THE MINIMUM CLEARANCE SHALL BE MAINTAINED THE FULL WIDTH OF THE STAIRWAY AND LANDING.

SN-3. WALKLINE. THE WALKLINE ACROSS WINDER TREADS SHALL BE CONCENTRIC TO THE DIRECTION OF TRAVEL THROUGH THE TURN AND LOCATED 12 INCHES FROM THE SIDE WHERE THE WINDERS ARE NARROWER. THE 12-INCH DIMENSION SHALL BE MEASURED FROM THE WIDEST POINT OF THE CLEAR STAIR WIDTH.

SN-4. STAIR TREADS AND RISERS. THE MAXIMUM RISER HEIGHT SHALL BE 1-3/4 INCHES; THE MINIMUM TREAD DEPTH SHALL BE 10 INCHES; THE MINIMUM WINDER TREAD DEPTH AT THE WALKLINE SHALL BE 10 INCHES; AND THE MINIMUM WINDER TREAD DEPTH SHALL BE 6 INCHES. A NOSING NOT LESS THAN 3/4 INCHES BUT NOT MORE THAN 1-1/4 INCHES SHALL BE PROVIDED ON STAIRWAYS WITH SOLID RISERS WHERE THE TREAD DEPTH IS LESS THAN II INCHES. EXCEPTION 2019 CRC R311.7.5.3.

SN-5. DIMENSIONAL UNIFORMITY. MAINTAIN REQUIRED RISE AND RUN DIMENSIONAL UNIFORMITY NOT TO EXCEED 3/8".

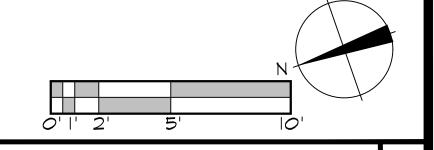
SN-6. ALL TREADS & RISERS TO BE HARDWOOD OR EQUAL. VERIFY WOMNER. STAIR DESIGN & LAYOUT BY STAIR MANUFACTURER. PROVIDE SHOP DRAWINGS, FOR APPROVAL WARCHITECT & COMPLIANCE W/ C.R.C. IN FIELD PRIOR TO CONSTRUCTION.

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SN-9. GUARDRAILS AT OPEN-SIDED WALKING SURFACES SHALL BE NOT LESS THAN 42" IN HEIGHT WITH GUARDS SPACED SUCH THAT A 4" SPHERE CANNOT PASS THROUGH, UNLESS THE GUARDS ARE ON THE OPEN SIDES OF STAIRS OR ALSO SERVES AS A HANDRAIL THEN THE HEIGHT SHALL NOT BE LESS THAN 34" NOR HIGHER THAN 38" AND THE GUARDS SHALL BE SPACED SUCH THAT A 4-3/8" SPHERE CANNOT PASS THROUGH (CRC R312.1.2 & R312.1.3). MUST RESIST A CONCENTRATED LOAD OF 200LB APPLIED ANY WHERE ALONG THE TOP RAILING, PER CBC 1607.8.1.

SN-10. HANDRAIL GRASPABILITY (2019 CBC 1014.3): ALL REQUIRED HANDRAILS SHALL COMPLY WITH SECTION R311.7.8.5 OR SHALL PROVIDE EQUIVALENT GRASPABILITY.



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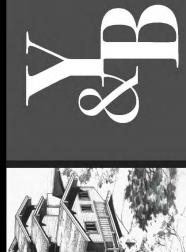
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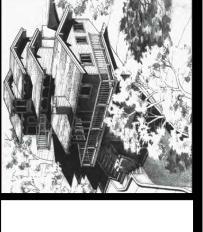
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Architect

Architect

4962 EL CAMINO REAL, ST
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650-688-1950 | YBarchitect





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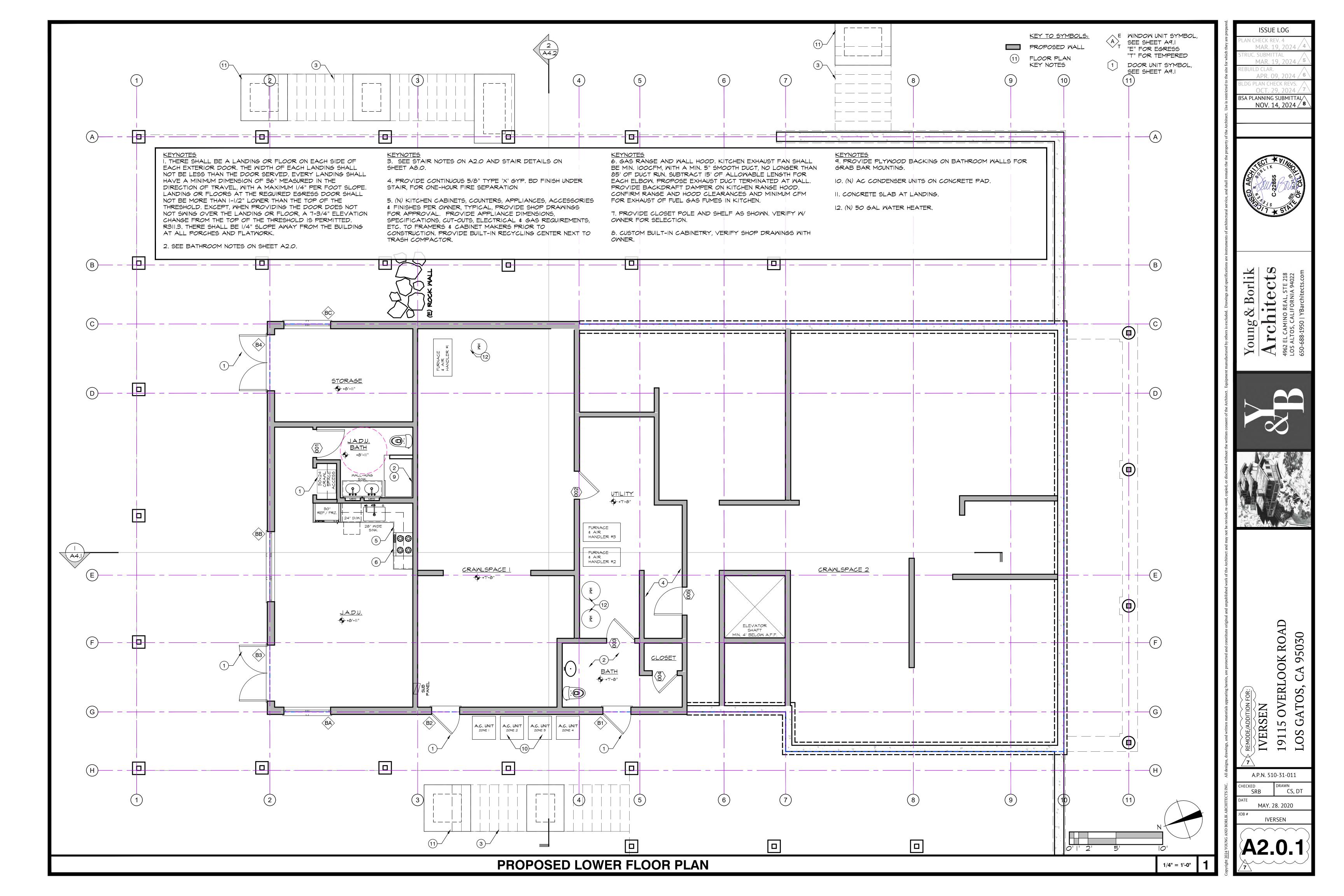
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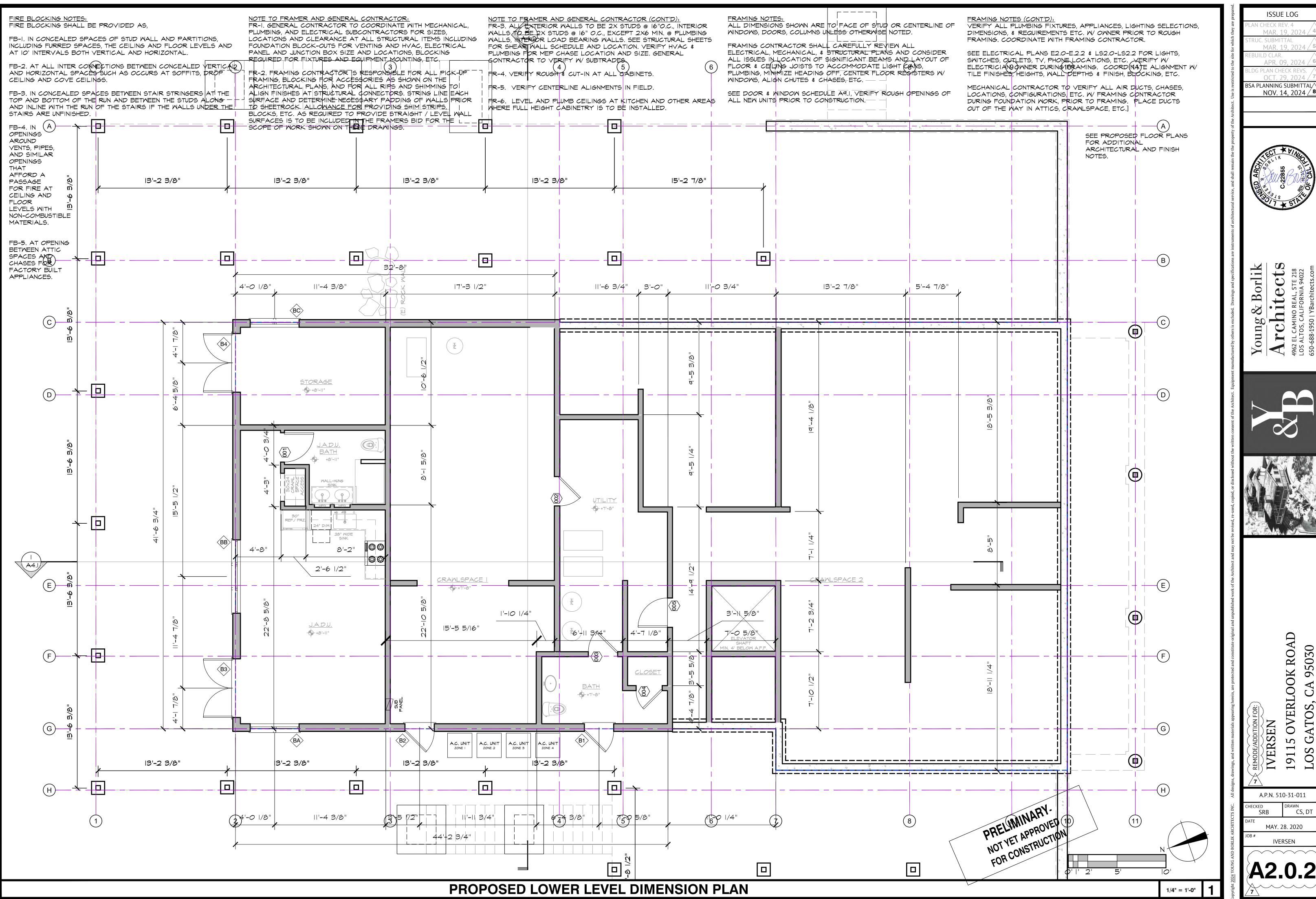
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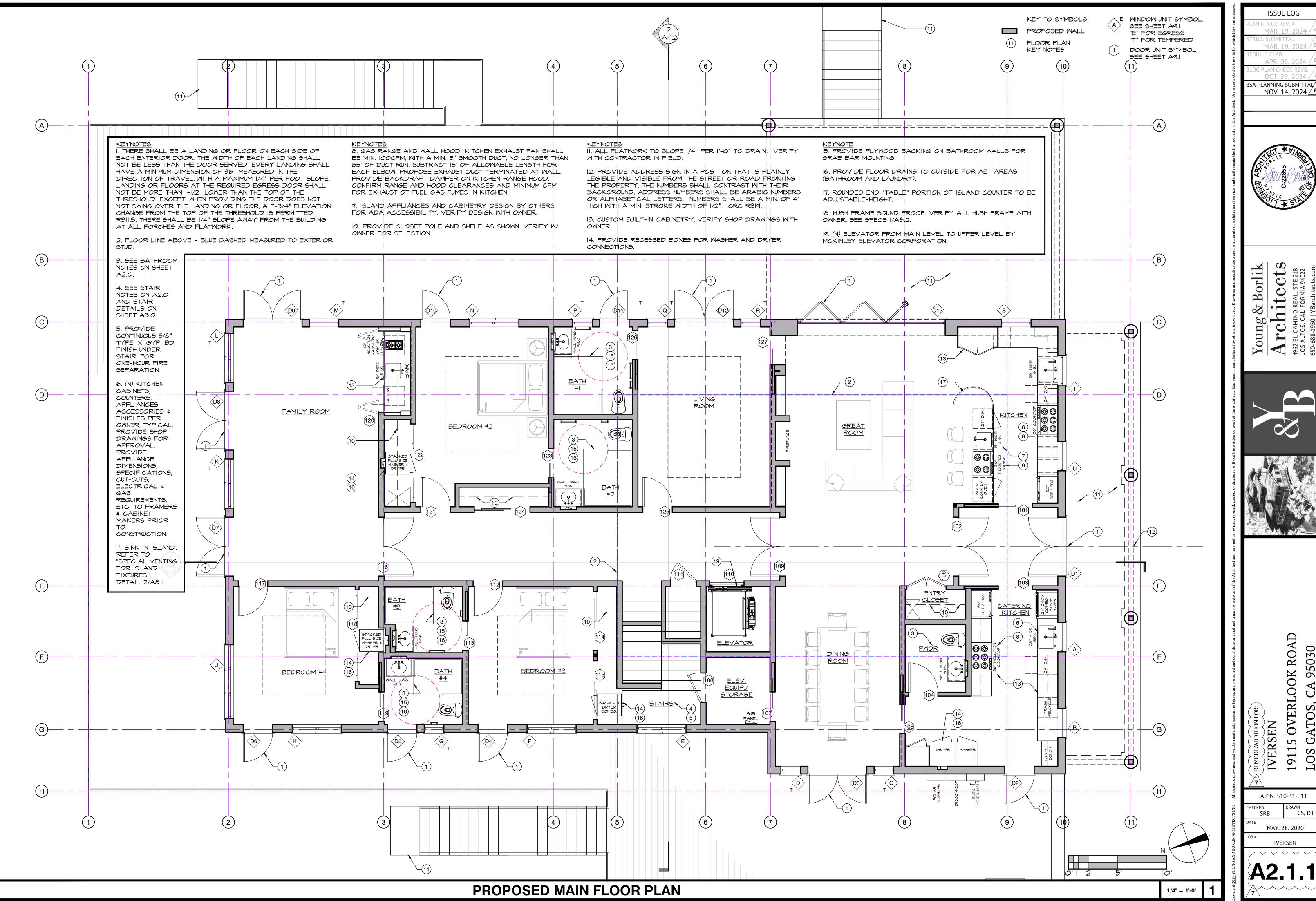




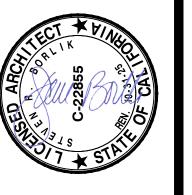
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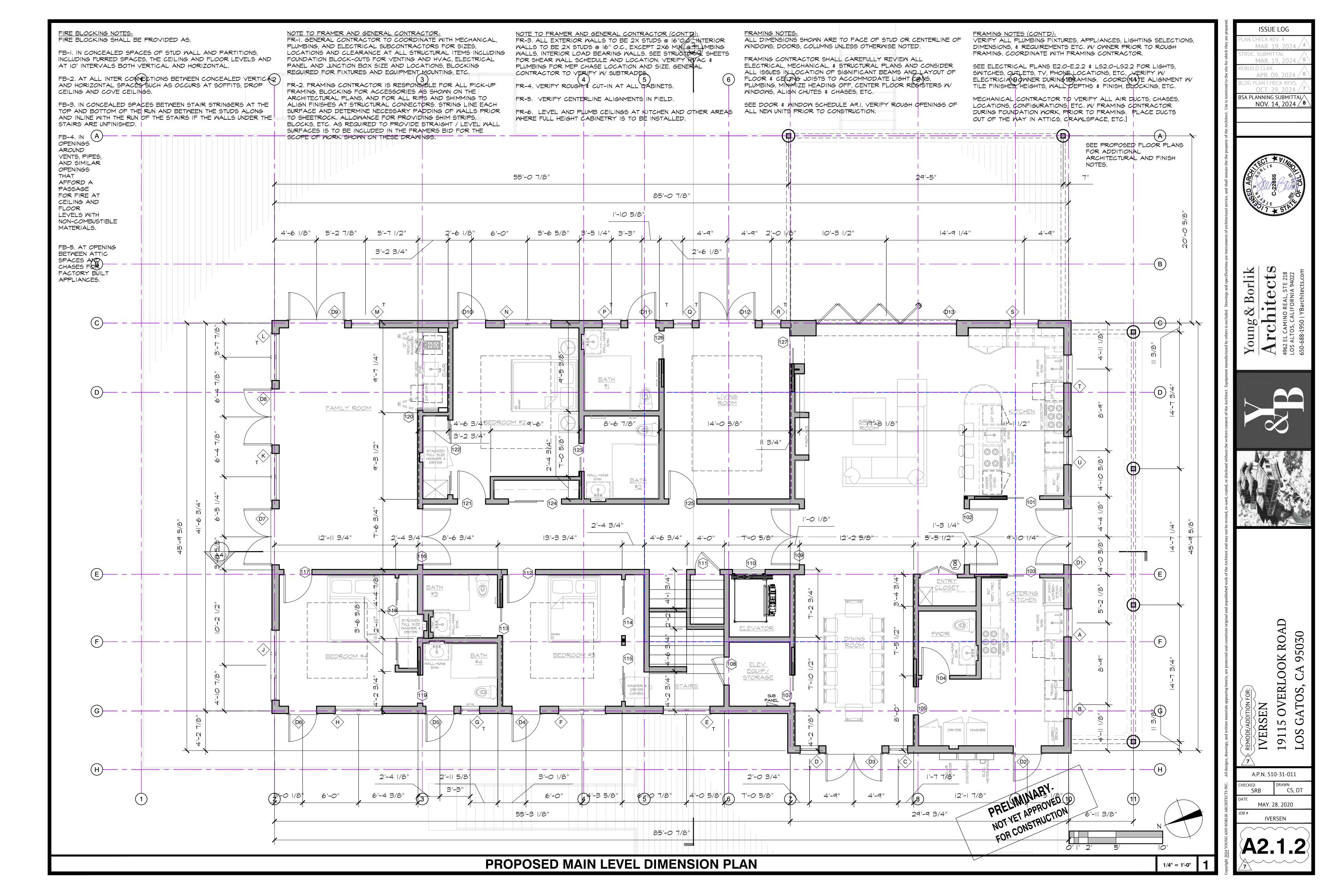
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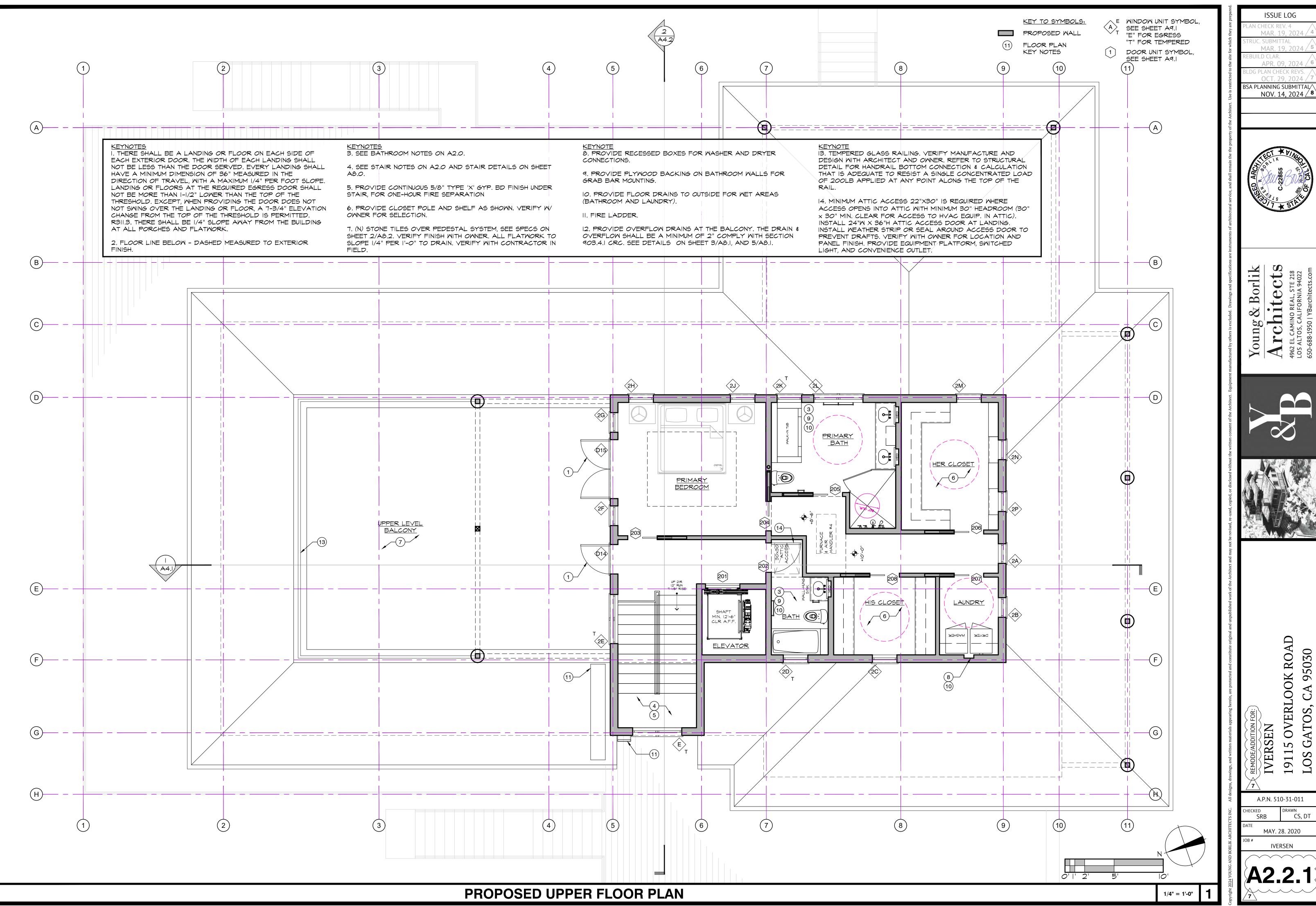


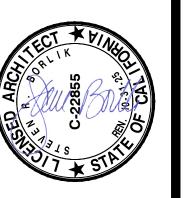
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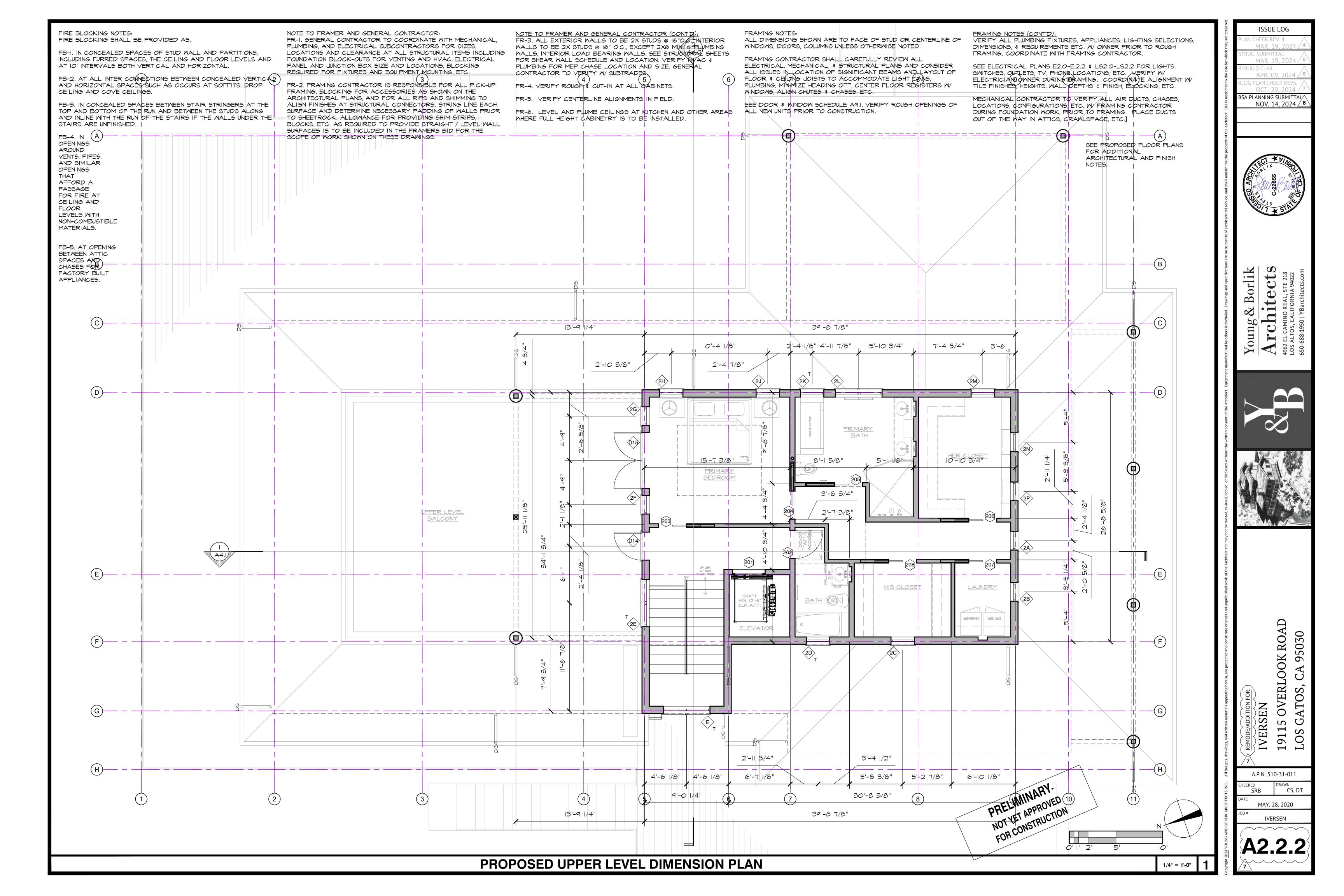


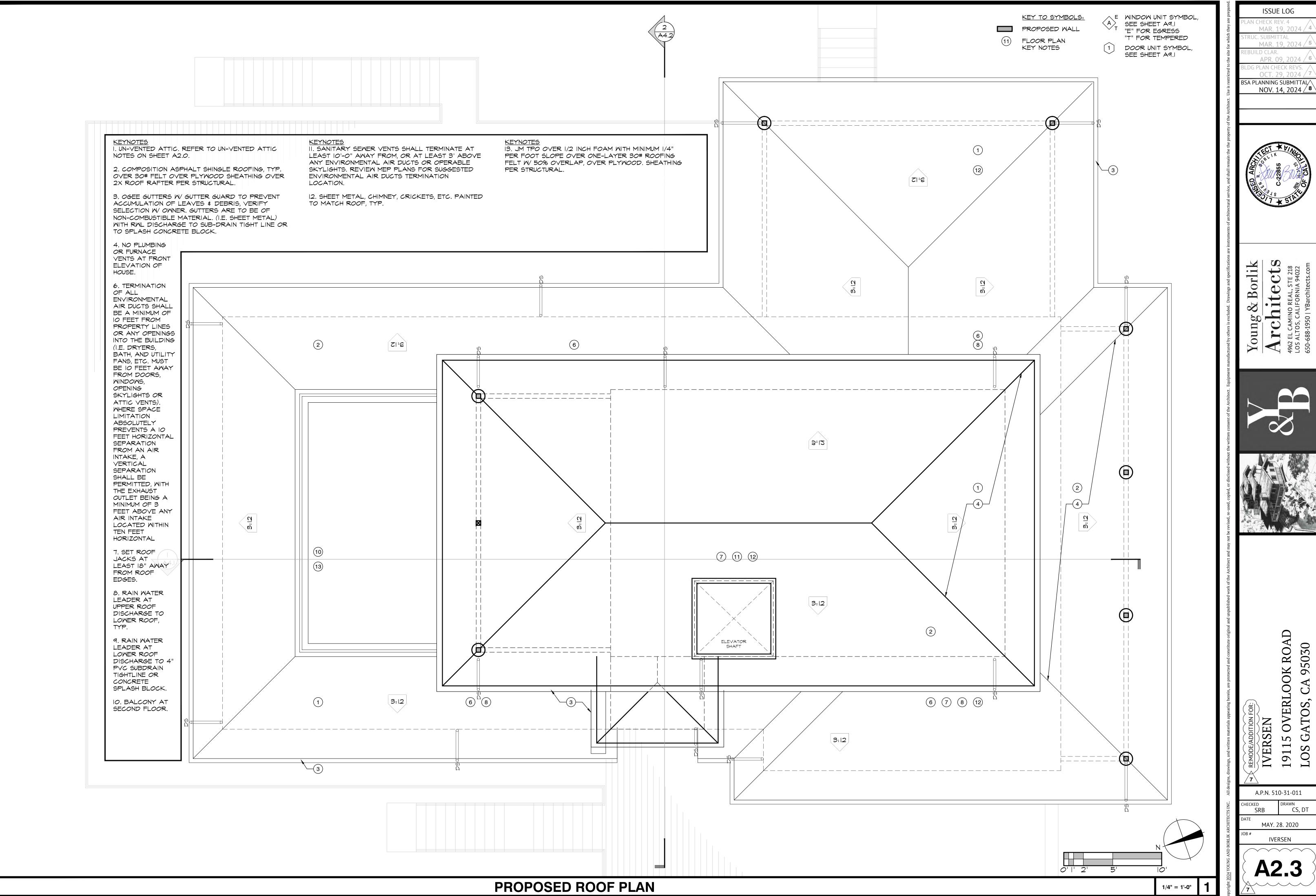


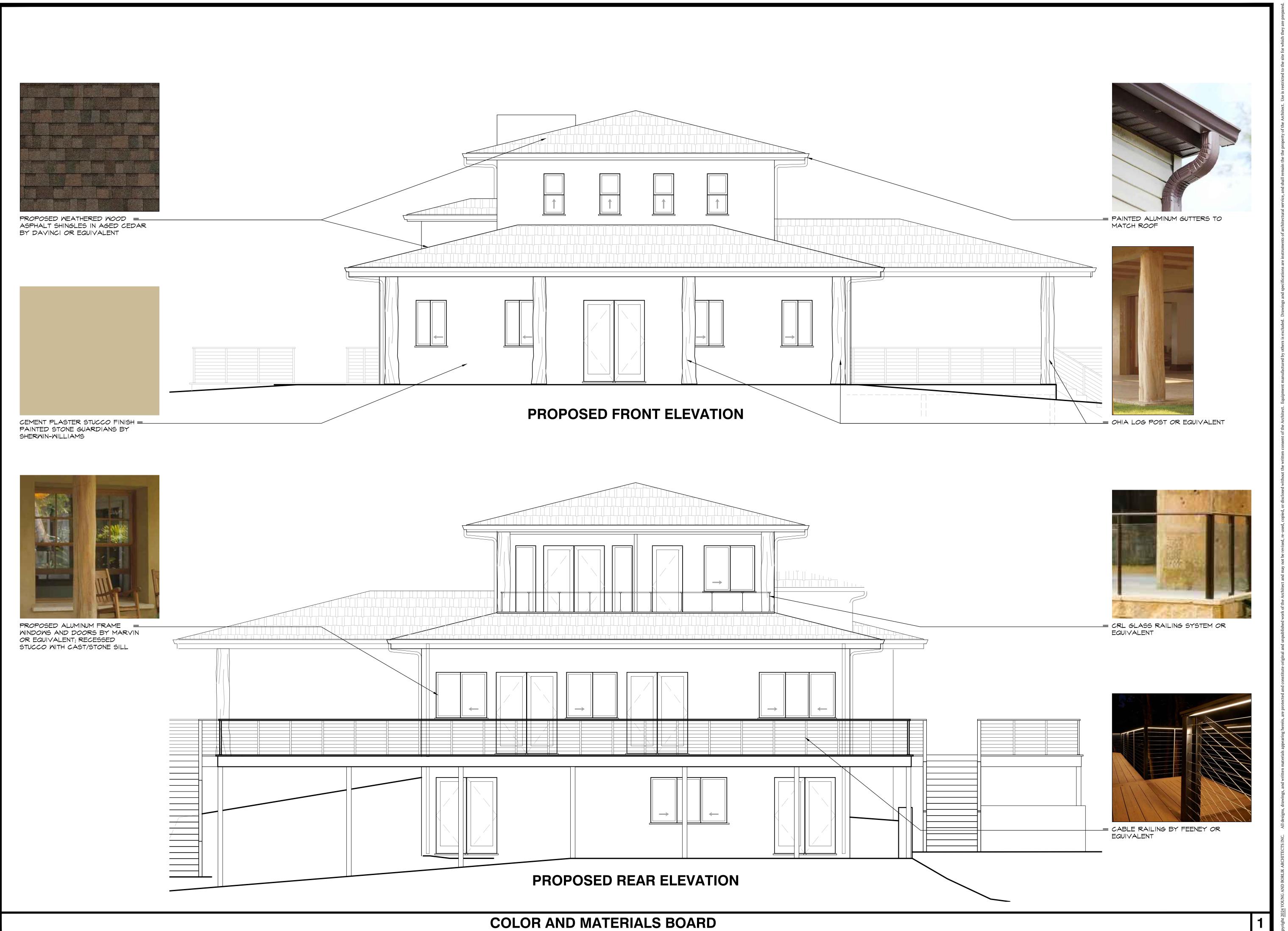












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Trohitects Camino Real, STE 218
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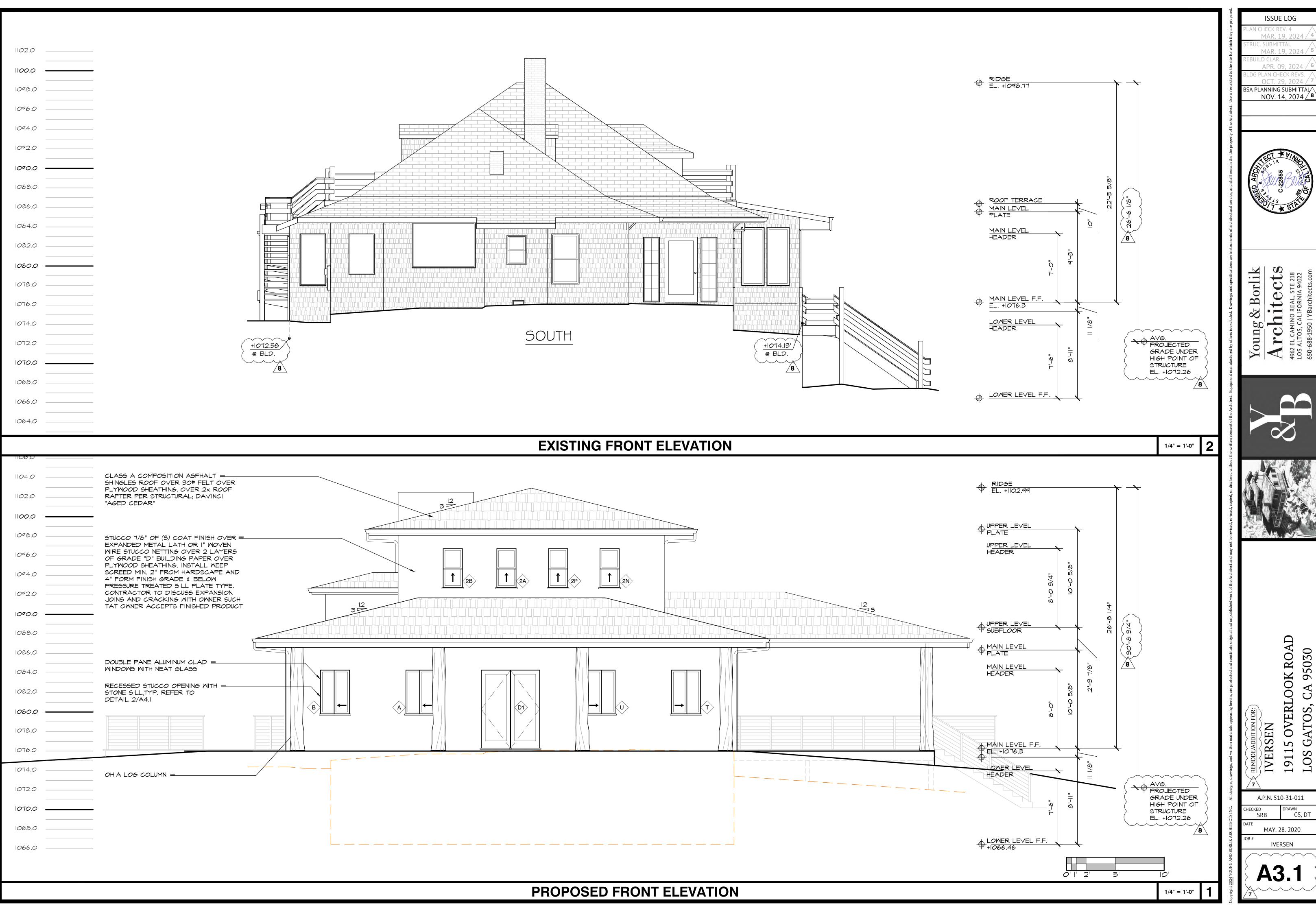
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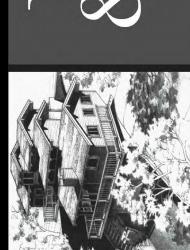
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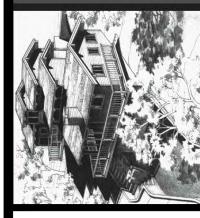
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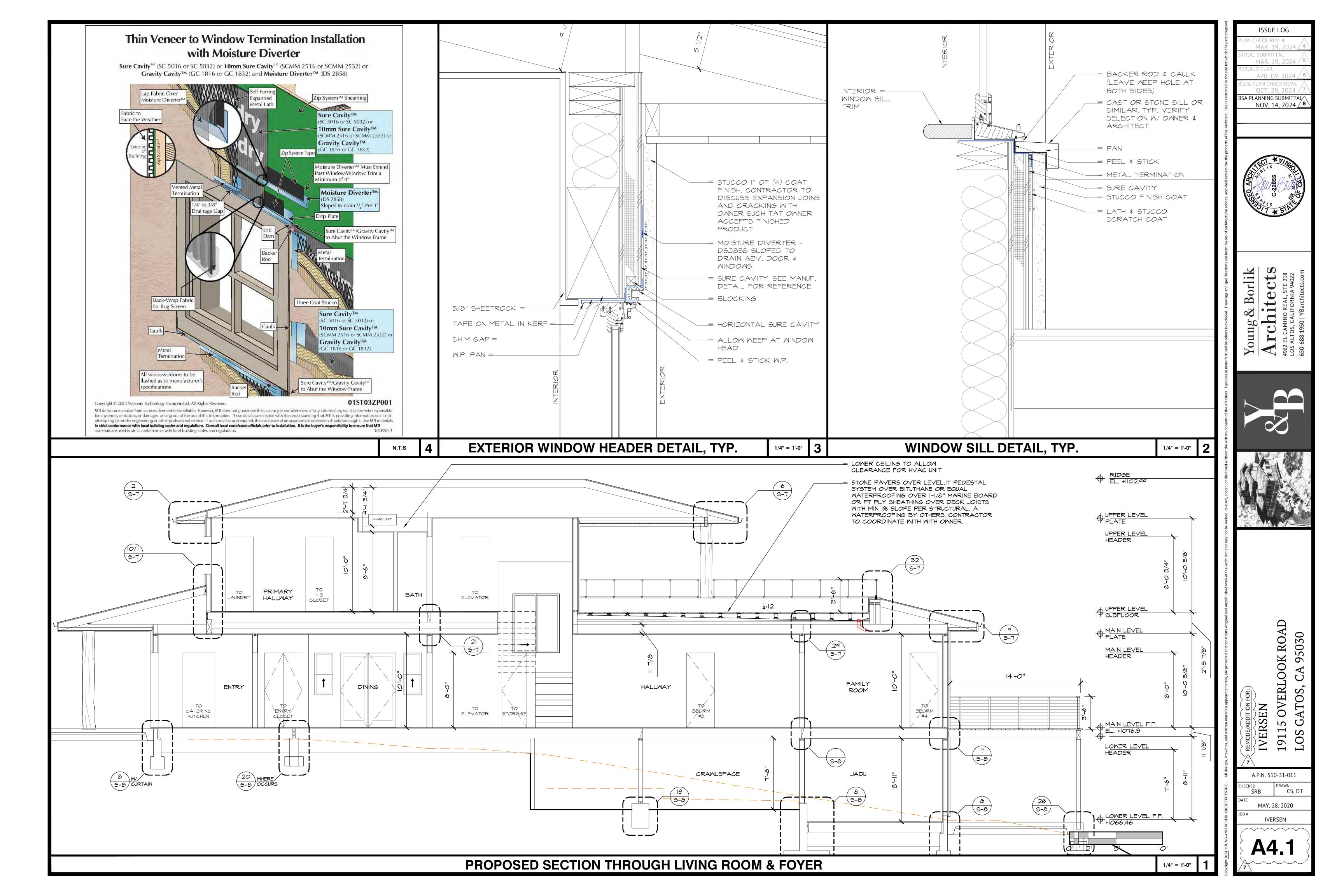
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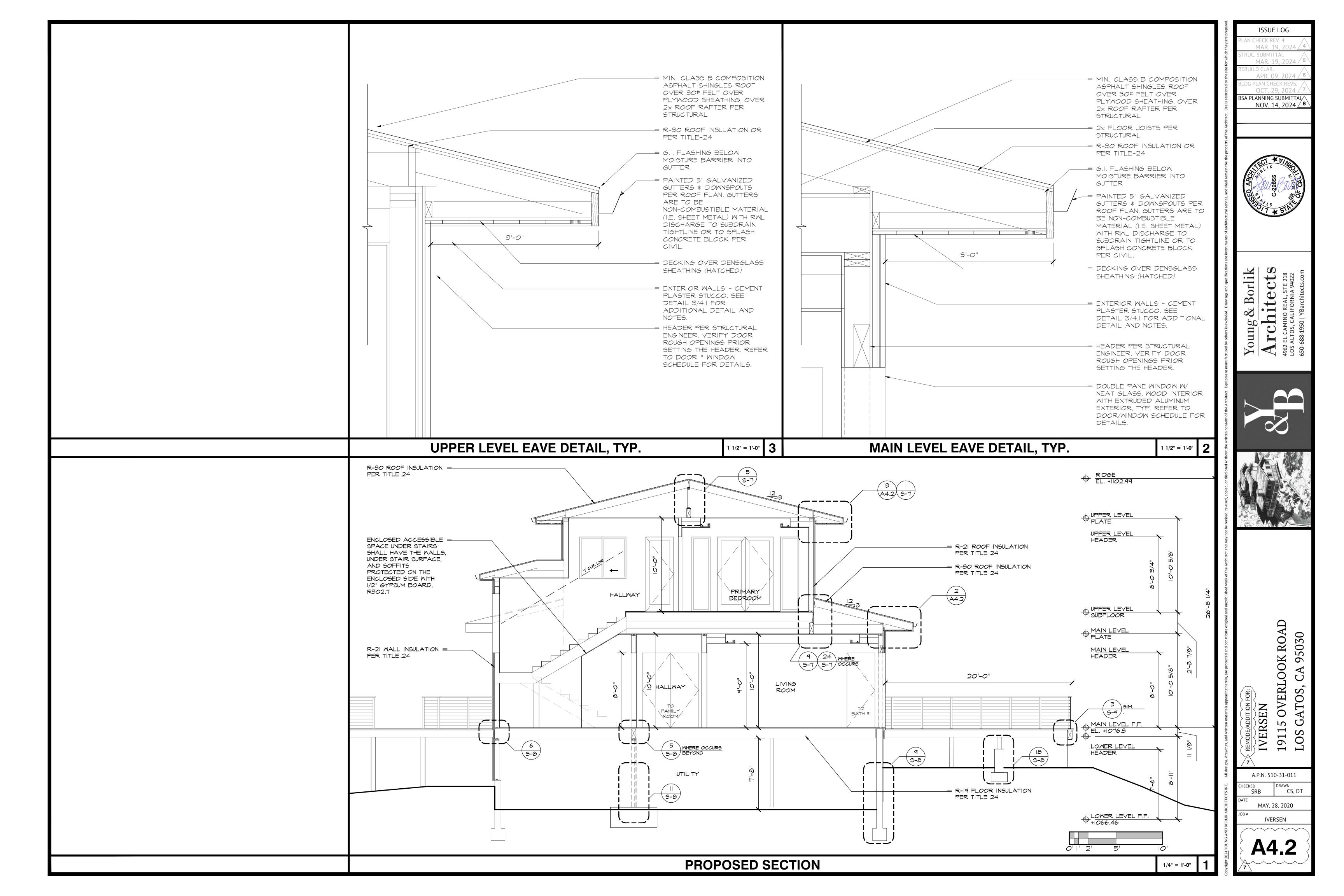
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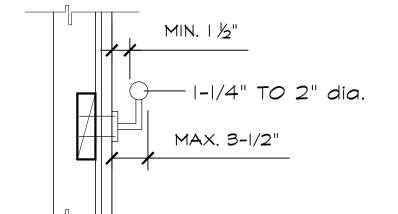
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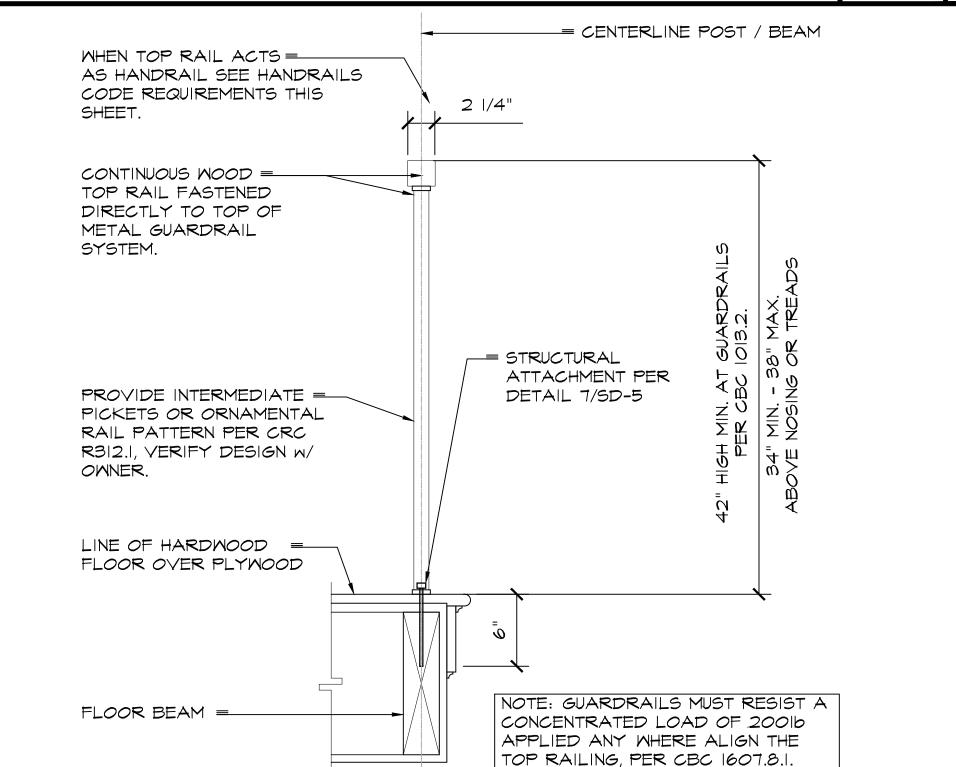


HANDRAILS HAVE A 1-1/4" TO 2" GRASPABILITY CROSS SECTION, NO SHARP CORNERS, HEIGHT OF 34" TO 38" ABOVE NOSING, EXTEND CONTINUOUSLY FROM TOP TO BOTTOM RISER, AND TERMINATE AT NEWEL POSTS OR RETURN TO WALLS.

SOLID 2X6 BLOCKING AT HANDRAIL SUPPORT POINTS, ATTACHMENTS FOR FASTENERS & SPACING PER MANUFATR. SPECIFICATIONS.

# HANDRAIL DETAIL





STAIN GRADE HARDWOOD HANDRAIL TO TERMINATE WITH HARDWOOD NEWELL POST AT EACH END = PAINT GRADE ROUND BALUSTER WITH I-3/4" ROUND BASE AND CLASSICAL ENTASIS 4" SPHERE NOT TO PASS THROUGH, TYP. NOTE: HANDRAIL GRIP AND GUARD RAIL SYSTEM ARE TO SUPPORT A MIN. OF 200 LBS OF LATERAL FORCE, TYP. STAIN GRADE HARDWOOD STAIR TREAD = PAINT GRADE MOLDING = PAINT GRADE SKIRT = PAINT GRADE MOLDING

# RAILING DETAIL

WALL TO STRINGER CONNECTION DETAIL

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

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

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

= 3/4" HARDWOOD STAIR TREAD

PAINT GRADE MOLDING

■ 3/4" PLYWOOD AT RISER

1-1/8" A.C. PLYWOOD STAIR

SIMPSON A35 CLIP AT EACH

= 3/4" HARDWOOD FINISH FLOOR

= FLOOR JOIST PER STRUCTURAL

—≡ I-I/8" PLYWOOD SUB-FLOOR

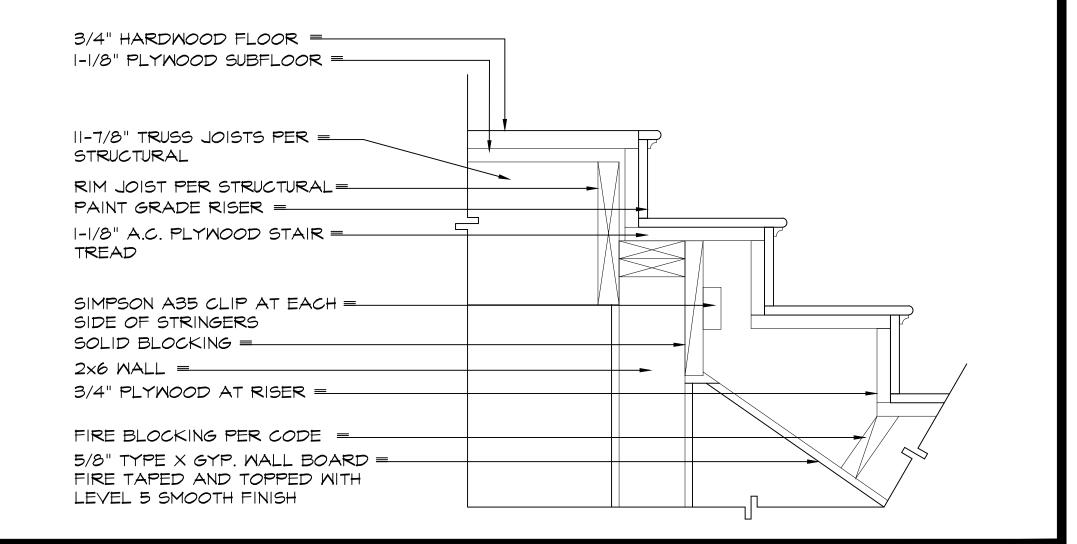
PAINT GRADE RISER

SIDE OF STRINGERS

■ INSULATION PER T-24

= SOLID BLOCKING

TREAD



# **STAIR NOTES**

1-1/4" SQ. POST, MAXIMUM 32" O.C.-SPACING. SEE CONNECTION DETAIL AND CALCULATION BY ELEMENTS CODE HANDRAIL. SEE STRUCTURAL STRUCTURAL ENGINEERING. FOR BOTTOM CONNECTION AND CALCULATION. MUST WITHHOLD A STAIR TREAD -CONCENTRATED LOAD OF 200LB APPLIED ANYWHERE ALONG THE TOP RAILING. 2× "L" STEEL ANGLE WELDED TO STRINGER  $\frac{1}{4}$ " POPLAR FINISH ON 3 SIDES ON BOTH SIDES 2x 14 STEEL STRINGER. 3/16" LUAN PLY LAMINATE LAYER TO 2-1/2"

**GUARDRAIL DETAIL** 

STRINGER DETAIL SCALE: |-|/2"=|'-0"

PROVIDE 6X6 BLOCK 5/8" SHEET ROCK BETWEEN STUDS WITH A35 CLIP EA. END OR -1/2" PLY WALL 4X6 POST WITH A35 SHEATHING CLIP EA SIDE. TOP -2X6 STUDS WALL AND BOTTOM OF POST I" GAP CONNECT TO BLK'G IN WALL

N.T.S.

INSET 5/8" SHEET ROCK @

CENTER LINE OF J" DIAMETER LAG -CODE HANDRAIL. SCREW WITH 4" PENETRATION INTO BOTTOM OF 2" STUD. (4) SCREMS TOTAL. WIDE STEEL STRINGER MIDDLE CONNECTION

SCALE: |-|/2"=|-0"

**STAIR DETAILS** 

UNDERSIDE OF THE STAIR FOR ADDED CLEARANCE MST 24 TOP -\$ BOTTOM LTP5 EACH SIDE-COUNTERSUNK (3) -1/2"dia. X 10" STAIR HANGER BOLTS, EMBEDMENT PER MANUFACTURE.

THICK

CONNECTION @ TOP

SCALE: |-|/2"=|'-0"

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

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

STAIR TO FLOOR CONNECTION DETAIL

ERLOOK

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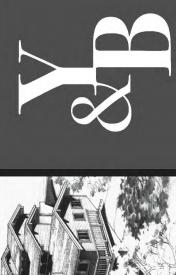
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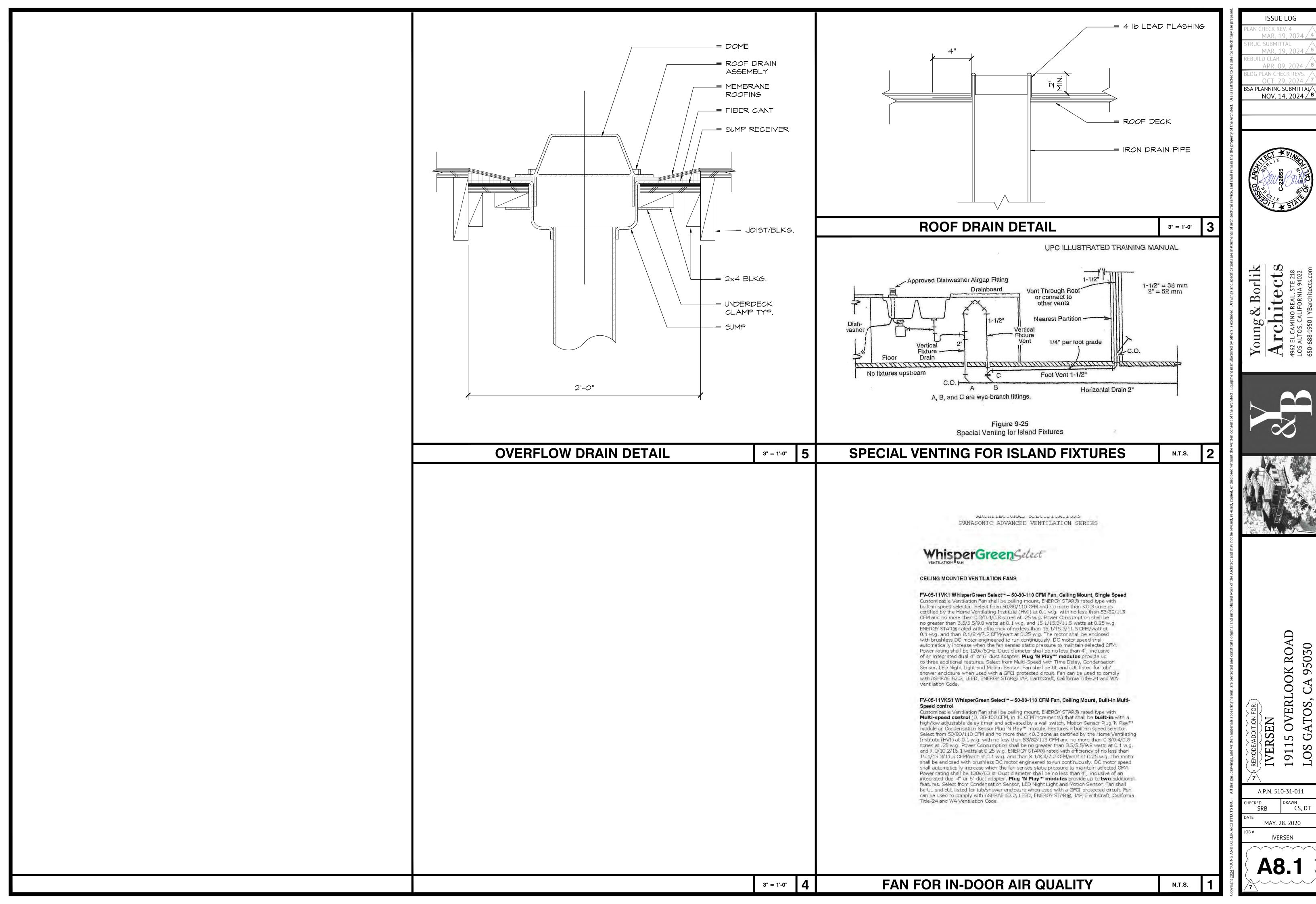
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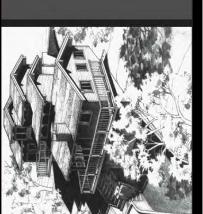
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# SIMPLE INGENUITY

#### May 2013

## LEVEL.IT ADJUSTABLE DECK SUPPORTS

- Simple, extended height range pedestal
- Patented design features exclusive internal coupler
- Commercial quality and durable
- Fast and easy installation promotes labor savings
- Screw-to-adjust pedestals assures perfectly level decks
- No maintenance and long lasting
- Made in the U.S.A.



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- SPECIFICATIONS

  Supports 750 lbs per pedestal (FS:3)
  Level.it adjustable system height range is 2 inches to 12 inches
  - Accessories for heights from 1/8 inch to 2 inches

		sually ships in 1 - 2 business delade in the U.S.A.	,	
-	Model No.	Description	Height Range	Max Height
	LC-316 LC-18	Adjustable Pedestal (Select 1/8" or 3/16" Tab Stze)	2" - 4 3/4"	4 3/4"
	C1	Gray Coupler	Adds up to 1 1/2"	
	C4	Black Coupler	Adds up to 4" each	12 "
		4		
sqe_	LC18 LC316	Tab	3/16" wide 1/8" wide	
65	VT18 VT316	Use for Ultra Low Height (Select 1/8" or 3/16" Tab Stze)	1/8" high	1/8"
41-11	HD25-18 HD25-316 HD50-18 HD50-316 HD75-18 HD75-316	Fixed Height Stackable Pedestals (Select 1/8" or 3/16" Tab Size)	1/4" 1/2" 3/4"	Stack up to 4
	LO-18 LO-316	Low Height Adjustable Pedestal (Select 1/6" or 3/16" Tab Size)	1 1/4" - 2"	2"
	B11	Flexible Shim	1/16"	1/16"
	PS1	Plastic Shim	1/8"	1/8"
<b>*</b>	LD4	Base Leveler	0" - 1" per foot slope Stack up to 4	3/8"center thickness
essories	FS1	Wood Tile Fastening Kit	Secure Bison V to pedestal	Vood Tiles system.
Acc.	BB Wedge	Bison Wedge Spacers	adds 3/16" in w	idth nominal
	л	Joist Top (Works with 2"x 4" and 4"x4" Lumber)	adds 3	/16"
	FIB	Floating Insulation Base	12" x 12" x For use over roofin 20 psi and less than	
	FFB	Floating Foundation Base	12" x 12" For use on grade each ped	e (soil) under
	U:	5 Patent 7,921,412 and Patents Pending. Copyrigi	the state of the s	
1/4" 3/4" lei HD25 Model HD75 1 1/4" - 2" Model L0	2" - 4 3/4" Model LC: Top, Base, Yell	low Coupler 4 3/4" - 6 1/4"	Base I	.eweler

# HushFrame - Silence the Noise





The only decoupling device that works with:

- Wood Furring-

The only UL one-hour fire-rated floor/ceiling assembly that allows wood furring - UL M565



Typical raft spacing 24"x32" or 24"x48" grid

#### HUSHFRAME'S UNIQUE TWO STEP INSTALLATION:

Raft dimensions: 4-7/8" x 1-7/8" x 2-1/2"

Raft®Connectors

Noise and Vibration Isolating Structural Decoupling Connectors

For controlling the movement of sound through walls,

floor/ceiling assemblies, and associated components.

HushFrame's unique side-mount design allows

Adds 14-18 IIC points to typical floor / ceiling

for varying depth alignment adjustment.

Adds 14-21 STC points to typical wall

Recommended connected load limits:

50 lbs. shear - 1.5 mm max. deflection 80 lbs. tension - 1 mm max. deflection

- The rafts are fastened to studs and joists with two 1 5/8" course-thread bugle-head screws or 8P ring nails.
- Then 1x3 wood furring is attached to the rafts with one 2" coarse-thread bugle-head

#### UL ONE-HOUR FIRE RESISTANCE RATED DESIGNS:

UL- M565 floor/ceiling with wood furring UL- M548 floor/ceiling with metal hat channel UL- U311 single wood-stud wall

UL- U340 staggered wood-stud bearing wall UL- U344 single wood-stud shear wall UL- W307 single-stud bearing exterior wall UL- W473 metal-stud interior wall

# BCD, LLC dba/ Building Component Development 55 WOODROCK RD., BAY 9, WEYMOUTH, MA, 02189 800-809-4874 sales@hushframe.com www.hushframe.com

# HushFrame - Silence the Noise

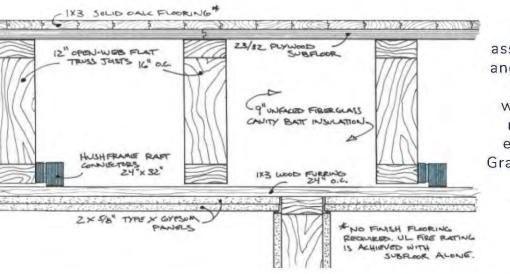
# HOW DOES HUSHFRAME

Decoupling is the most effective strategy to defeat noise transmission through walls and floor/ceiling assemblies. Waves of noise vibrational energy travel easily through dense building materials such as wood framing.

The soft Shore A Durometer 25 hardness of the pure silicone HushFrame cores consumes noise vibration through the scientific phenomenon known as the "Viscous Drag Method of Absorption".

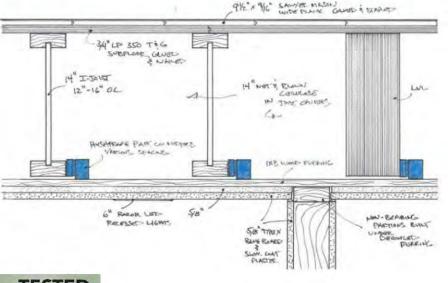
# HOW LONG WILL HUSHFRAME LAST?

Metal decoupling clips are manufactured with various polymers that start to break down in as little as 15 years. Our pure silicone will stay the course for 100+ years.



This simple floor/ceiling assembly conforms to UL M565 and obtained an STC 54 and IIC 53 in acoustic field testing where STC 45 and IIC 45 are mandated by code, thereby exceeding the ICC Acoustics Grade B criterion field allowance of NNIC 52 and NISR 52.

> No Gypcrete, no resilient underlayment pad, just exceptional performance.

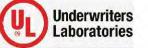


This simple floor/ceiling assembly conforms to UL M565 and obtained an STC 60 and IIC 59 in acoustic field testing where STC 45 and IIC 45 are mandated by code, thereby exceeding the ICC Acoustics Grade A criterion field allowance of NNIC 57.

No Gypcrete, no resilient underlayment pad, just exceptional performance.



2



BCD, LLC dba/ Building Component Development 55 WOODROCK RD., BAY 9, WEYMOUTH, MA, 02189 800-809-4874 sales@hushframe.com www.hushframe.com

Underwriters Laboratories

**A8.2** 

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OVERLOOK

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CS, DT

A.P.N. 510-31-011

MAY. 28. 2020

**IVERSEN** 

SRB

**ISSUE LOG** 

MAR. 19, 2024 JC. SUBMITTAL

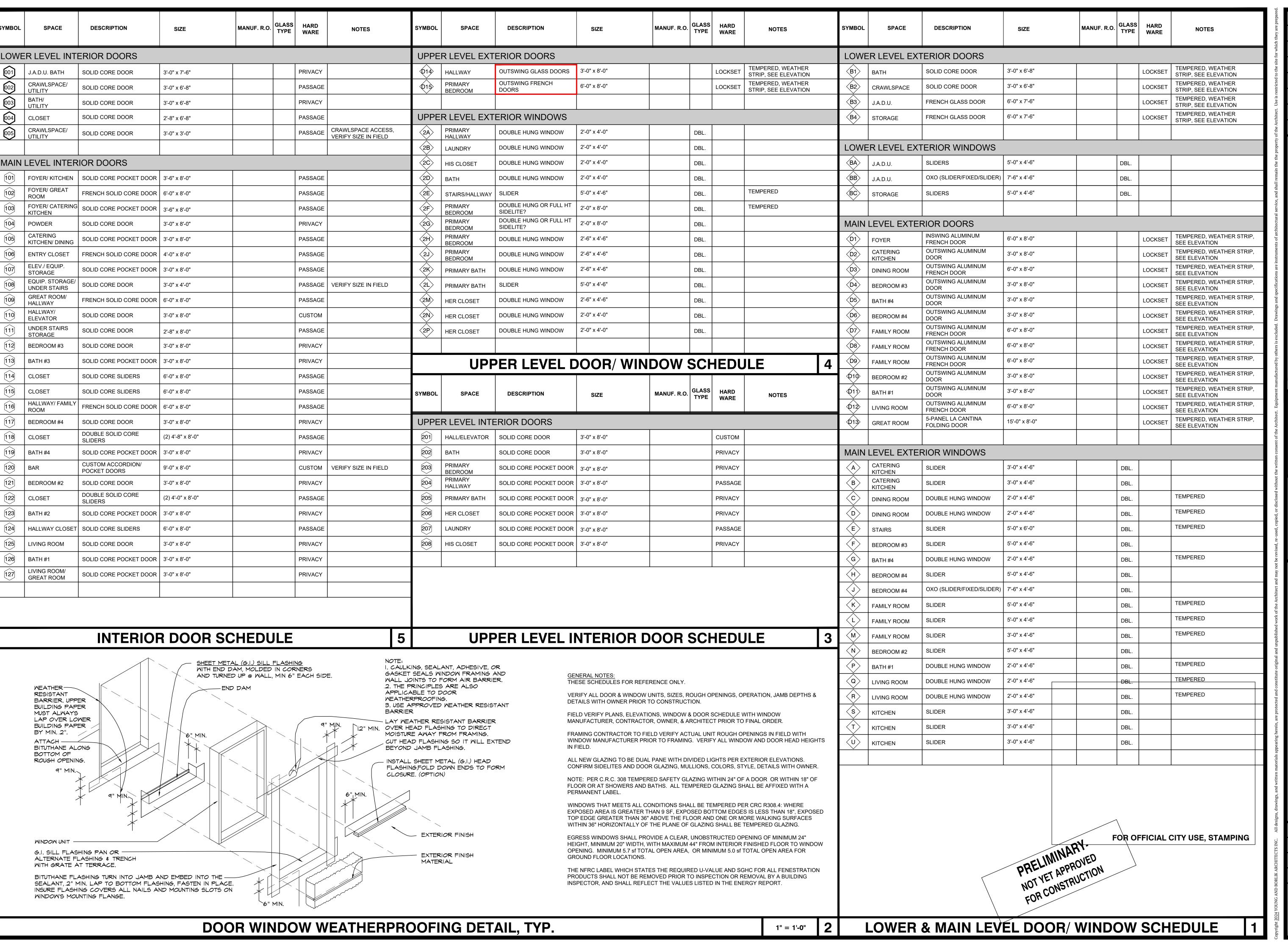
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BSA PLANNING SUBMITTAL∕\

NOV. 14, 2024 / 8 \

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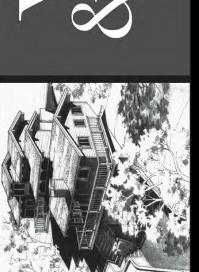
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NOV. 14, 2024 / 8



Borlik



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A.P.N. 510-31-011

CS, DT

MAY. 28. 2020 **IVERSEN** 

I. COMPARTMENT DIMENSION SHALL HAVE 3" MINIMUM CLEARANCE ON SIDE AND BACK, 8" MINIMUM CLEAR FROM FRONT OF EQUIPMENT TO COMBUSTION AIR INTAKE. THE MINIMUM WIDTH PERMITTED IS 12" GREATER THAN THE EQUIPMENT.

2. FURNACE LOCATED IN COMPARTMENTS WITH RETURN AIR AT BOTTOM SHALL HAVE TIGHT FITTING DOORS TO MAINTAIN POSITIVE SEPARATION FROM THE RETURN AIR GRILL.

3. INSTALL AUTOMATIC NIGHT SETBACK THERMOSTATS ON ALL HVAC EQUIPMENT.

4. AN UNOBSTRUCTED WORKING SPACE NOT LESS THAN 30" IN DEPTH AND THE HEIGHT OF THE FURNACE, BUT NOT LESS THAN 30", SHALL BE PROVIDED ALONG THE ENTIRE FRONT OF EVERY WARM-AIR FURNACE WHEN THE DOOR OF THE FURNACE ENCLOSURE IS OPEN.

5. AREA OF COMBUSTION AIR OPENING OF I SQUARE INCH PER 1000 BTU (100 SQUARE INCH MINIMUM) IS REQUIRED INTO COMPARTMENT, HALF OF AREA WITHIN 12" OF CEILING AND HALF WITHIN 12" OF FLOOR

6. COMBUSTION AIR FROM EXTERIOR TO BE PROVIDED THROUGH 26 GA. GALVANIZED SLEEVE EXTENDING 6" MINIMUM ABOVE CEILING JOISTS AND NOT THROUGH A SCREEN. ATTIC TO HAVE ADEQUATE VENTILATION.

7. COMBUSTION AIR FROM OUTSIDE SHALL HAVE AN 1/8 TO 1/16 INCH SCREEN AT OUTSIDE OPENING TO MEET WUI REQUIREMENTS.

8. SEPARATE DUCTS FOR UPPER AND LOWER COMBUSTION AIR SUPPLY OPENINGS

ADDITIONAL REQUIREMENTS FOR FURNACE IN ATTIC:

I. SCUTTLE 30"x30" NOT OVER 20 FEET FROM THE EQUIPMENT
2. UNOBSTRUCTED PASSAGEWAY 24" WIDE OF SOLID CONTINUOUS FLOORING FROM SCUTTLE TO EQUIPMENT AND ITS CONTROL.

3. LIGHT OVER EQUIPMENT WITH SWITCH AT SCUTTLE.

4. VENT THROUGH ROOF A MINIMUM OF 5' ABOVE THE HIGHEST VENT COLLAR WHICH IT SERVES. 5. FURNACE INSTALLATION SHALL MEET ALL LISTED CLEARANCE. NOT LINE CONTACT PERMITTED. FURNACE IS NOT ALLOWED IN ATTIC AREA OF TRUSSED ROOFS.

ADDITIONAL REQUIREMENTS FOR FURNACE IN CRAWL SPACE:

1. 30" WORKING SPACE AT CONTROLS

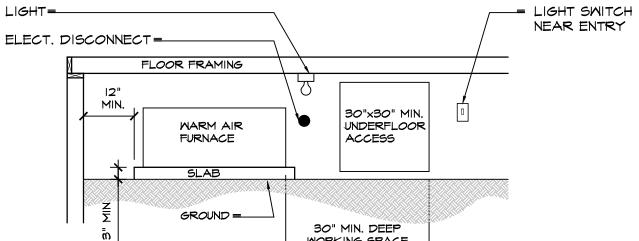
2. OUTLET AND LIGHT AT UNIT CONTROL SIDE 3. SWITCH TO LIGHT AT UNDER FLOOR ACCESS ENTRANCE

4. APPLIANCE ON 3" MINIMUM CONCRETE SLAB ABOVE GRADE

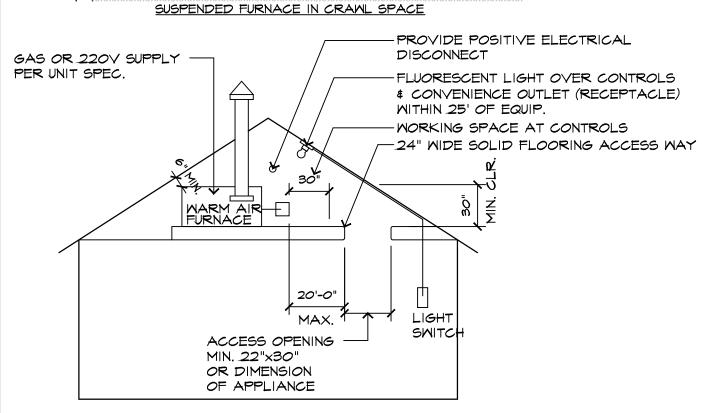
5. IF SUSPENDED, MINIMUM 6" FROM GROUND

6. ACCESS DOOR TO BE MINIMUM 30"x30". MAXIMUM DISTANCE TO APPLIANCE IS 20' 7. 4" THICK CONCRETE BED IF EXCAVATION GREATER THAN 12" BELOW GRADE.

8. 12" SIDE CLEARANCE TO SOIL OR COMBUSTIBLES.



MORKING SPACE FURNACE IN CRAWL SPACE ON SLAB - LIGHT SMITCH ELECT. DISCONNECT = NEAR ENTRY HANG FROM DBL JOIST =\_ FLOOR FRAMING UNDERFLOOR ALL SIDES 30"x30" MIN. FURNACE **UNDERFLOOR** ACCESS 30" MIN. DEEP MORKING SPACE GROUND =\_



CENTRAL WARM-AIR FURNACES INSTALLED IN THE ATTIC MUST BE ACCESSIBLE FOR ROUTINE INSPECTION AND MAINTENANCE BY THE OWNER, OCCUPANT AND FOR SERVICE AND REPAIR AS NEEDED. CHANGING FILTERS, LUBRICATING MOTOR AND FAN BEARINGS, CHECKING BELT TENSIONS AND RE-TIGHTING THE PILOT FOLLOWING A SERVICE INTERRUPTION ARE NORMAL OWNER FUNCTIONS. ADEQUATE LIGHT, AN ELECTRICAL OUTLET, SAFE ACCESS WAY AND SUFFICIENT WORKING SPACE ON THE CONTROL SIDE ALL ENCOURAGE AND FACILITATE MAINTENANCE AND ENABLE RAPID EGRESS IN AN EMERGENCY.

MARM AIR FURNACES INSTALLED IN ATTICS OR FURRED SPACES SHALL BE INSTALLED AS FOLLOWING:

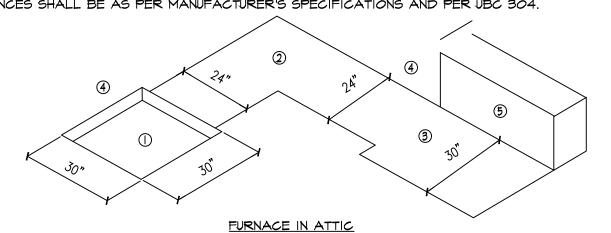
I. A MINIMUM 30"X30" ACCESS (20 FEET MAXIMUM FROM FURNACE)

2. CONTINUOUS SOLID FLOORING (5/8" CDX OR EQ.) 24" MIN. WIDE FROM ACCESS TO FURNACE
3. A LEVEL WORKING PLATFORM 30" MIN. IN DEPTH ALONG THE ENTIRE FIREBOX SIDE OF FURNACE
4. A PERMANENT IIOV ELECTRICAL OUTLET AND LIGHTING FIXTURE LOCATED AT OR NEAR FURNACE
LIGHTING FIXTURE TO BE CONTROLLED BY A SWITCH LOCATED AT ACCESS.

LIGHTING FIXTURE TO BE CONTROLLED BY A SMITCH LOCATED AT ACCESS.

5. THE FAU SHALL BE LISTED FOR INSTALLATION IN ATTICS AND ON COMBUSTIBLE FLOORING.

CLEARANCES SHALL BE AS PER MANUFACTURER'S SPECIFICATIONS AND PER UBC 304.



MATER HEATER ENCLOSURE:

I. 75 GALLON AND INSULATED TYPE, SEE TITLE 24 ENERGY CALCULATION.

2. CLEARANCES - INSULATED WATER HEATERS SHALL NOT BE INSTALLED CLOSER THAN 2 INCHES TO UNPROTECTED COMBUSTIBLE CONSTRUCTION NOR CLOSER THAN ONE INCH TO PROTECTED COMBUSTIBLE CONSTRUCTION. THE CLEARANCE MAY BE REDUCED FOR WATER HEATERS WHICH ARE DESIGNED AND LISTED OR APPROVED FOR INSTALLATION ADJACENT TO COMBUSTIBLE MATERIALS AND INSTALLED IN ACCORDANCE WITH THE CONDITIONS OF SUCH APPROVAL. PROTECTED COMBUSTIBLE CONSTRUCTION SHALL BE NOT LESS THAN ON HOUR FIRE RESISTIVE CONSTRUCTION, CONSISTING OF 2x4 OR 2x6 STUDS SPACED @ 16" O.C. WITH A LAYER OF 5/8" TYPE "X" GYPSUM BOARD ON EACH FACE. FIRE TAPE ALL JOINTS.

3. DOOR - SHALL BE SOLID CORE FOR EXTERIOR LOCATIONS.

4. ENCLOSURE & COMBUSTION AIR - A MINIMUM OF 6 INCHES OF UNOBSTRUCTED SPACE SHALL BE REQUIRED ACROSS THE ENTIRE FRONT OF THE WATER HEATER AND SHALL EXTEND FROM THE DOOR TO AT LEAST THE TOP OF THE WATER HEATER. AREA OF DUCTS OR OPENINGS SHALL BE DIVIDED WITH AT LEAST ONE-HALF OF THE TOTAL REQUIRED AREA EXTENDING INTO THE UPPER 12 INCHES OF THE WATER HEATER ENCLOSURE. REQUIRED OPENING SHALL NOT BE LESS THAN 3 INCHES IN THE LEAST DIMENSION, SEE PLAN FOR SIZE OF VENTS. VENTS SHALL BE SCREENED WITH NOT SMALLER THAN 1/4" MESH. FRAME AND MESH OF VENTS SHALL BE OF GALVANIZED METAL FOR EXTERIOR APPLICATION.

5. PRESSURE RELIEF VALVE - SHALL BE INSTALLED WITH 3/4" MINIMUM SIZE COPPER PIPE TO EXTERIOR OF BUILDING LOCATED WITH 6" OF THE EXTERIOR OF BUILDING LOCATED WITH 6" OF THE EXTERIOR

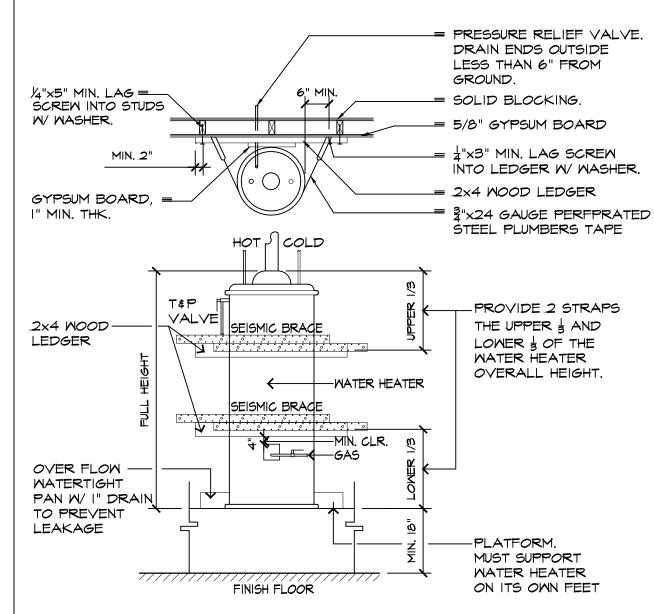
GRADE, WITH 1/4" PER FOOT MINIMUM SLOPE.

6. ELECTRICAL - ENCLOSURE SHALL BE PROVIDED WITH A GFI DUPLEX OUTLET.
THE ENCLOSURE SHALL HAVE ONE FLUORESCENT LIGHT FIXTURE SET ON A
SWITCH LOCATED NEXT TO THE DOOR.

7. VENTING - SHALL BE AS PER MANUFACTURE'S RECOMMENDATIONS AND AS PER THE REQUIREMENTS OF THE STATE OF CALIFORNIA AND LOCAL JURISDICTIONS.

8. SAFETY PAN - FURNISH AND INSTALL AN ALUMINUM SAFETY PAN WITH 3/4" DRAIN OUTLET TO THE EXTERIOR OF THE BUILDING. TERMINATE AS PER PRESSURE RELIEF VALVE.

9. SEISMIC STRAP - SHALL BE 3" WIDE x 16 GA. STEEL STRAP WITH 1/2" DIAMETER LAG BOLT EACH END INTO NEAREST WOOD STUD. THE SEISMIC STRAPPING SHALL BE AT TWO LOCATIONS, ONE AT 1/3 FROM THE TOP AND ONE AT 1/3 FROM THE BOTTOM OF THE WATER HEATER. THE LOWER 1/3 STRAP HAS A MINIMUM 4" CLEARANCE BETWEEN THE CONTROLS.



<u>MATER HEATER:</u>
PER 2022 RESIDENTIAL ENERGY CODE 150.0 (n), SYSTEMS USING GAS OR

PROPANE WATER HEATERS SHALL:

A. WITHIN 3 FEET OF EACH WATER HEATER AND ACCESSIBLE TO THE WATER HEATER WITH NO OBSTRUCTIONS, INSTALL A DEDICATED 125 VOLT, 20 AMP ELECTRICAL RECEPTACLE THAT IS CONNECTED TO THE ELECTRIC PANEL WITH A 120/240 VOLT 3 CONDUCTOR, 10 AWG COPPER BRANCH CIRCUIT.

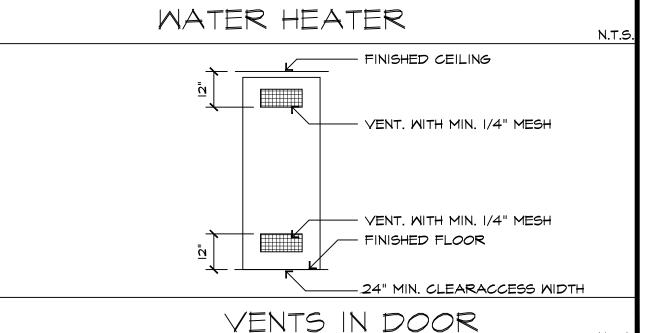
(I) BOTH ENDS OF THE UNUSED CONDUCTOR SHALL BE LABELED WITH THE

WORD "SPARE" AND BE ELECTRICALLY ISOLATED

(II) A RESERVED SINGLE POLE CIRCUIT BREAKER SPACE IN THE ELECTRICAL PANEL ADJACENT TO THE CIRCUIT BREAKER FOR THE BRANCH CIRCUIT AND LABELED WITH THE WORDS "FUTURE 240V USE" (ENERGY CODE §150.0(N)).

B. A CATEGORY III, IV, OR A TYPE B VENT WITH A STRAIGHT PIPE BETWEEN THE OUTSIDE TERMINATION AND THE SPACE WHERE THE WATER HEATER IS LOCATED SHALL BE INSTALLED.

C. A CONDENSATE DRAIN THAT IS A MAXIMUM OF TWO (2) INCHES HIGHER THAN THE BASE OF THE INSTALLED WATER HEATER THAT ALLOWS NATURAL DRAINING WITHOUT PUMP ASSISTANCE SHALL BE INSTALLED.



MECHANICAL NOTES:

1. All work shall comply with the 2022 California Mechanical Code (CMC) and all applicable federal, state, and local codes. Mechanical work is to be bid design/build and provided complete per code.

2. Mechanical Layout - Layout shown is schematic and is shown for design intent only. Mechanical contractor to coordinate with the general contractor to design and install suitable mechanical distribution system per Title 24 and CGBSC. Verification of compliance with CGBSC may include construction documents, plans, specifications builder or installer certification, inspection reports, or other methods acceptable to the enforcing agency which show substantial conformance.

3. Mechanical System Design - Mechanical contractor to accept sole responsibility for proper design and installation of mechanical system.

Mechanical contractor to coordinate with the general contractor to design and install suitable mechanical distribution system per Title 24. See sheet index for location of Title 24 conformance worksheets and energy compliance notes within this set.

4. Environmental comfort shall comply with CGBSC Residential Mandatory Measure section 4.507 for heating and air conditioning system. Duct systems are sized, designed, and equipment is selected using the following methods:

systems are sized, designed, and equipment is selected using the following methods:

a. Establish heat loss and heat gain values according to ANSI/ACCA 2 manual J-2016 or equivalent.

b. Size duct systems according to ANSI/ACCA 1 manual D-2016 or equivalent.
c. Select heating and cooling equipment according to ANSI/ACCA 3 manual S-2014 or equivalent.

5. Heating - Per 2022 CRC, Section R303.10 heating facilities shall be capable of maintaining a minimum room temperature of 68°F at a point three feet above the floor and two feet from exterior walls in all habitable rooms at the design temperature. For the purpose of sizing the space-conditioning (HVAC) system, the indoor design temperatures shall be 68°F for heating and 75°F for cooling. Outdoor design conditions shall be selected from Reference Joint Appendix JA2, which is based on data from the ASHRAE Climatic Data for Region X.

6. HVAC system installers required to be trained and certified in the proper installation of HVAC systems. Special inspectors employed by the enforcing agency must be qualified and able to demonstrate competence in the discipline they are inspecting.

. Mechanical contractor to verify all air ducts, chases, locations, configurations, etc. w/ framing contractor during foundation work, prior to framing. Place ducts out of the way in attic usable storage area.

8. Furnace Clearance - Provide a minimum 6 inch clear space in front of furnaces, or per manufacturer specifications. Furnaces shall be installed per manufacturer's specifications and shall meet requirements of the 2022 CMC, Section 904.0. Verify all clearance and installation requirements per CMC Section 304.0 Service and Access to Equipment and Appliances prior to ordering or installing equipment.

9. Attic Furnaces - Per CMC 304.4 for furnaces installed in attics, provide a minimum 22" x 30" access opening or not less than the largest component, with a level platform, convenience duplex outlet, and area light switched from attic opening.

10. For stoves with indoor barbecue units, an exhaust duct and fan having a minimum capacity of 100 CFM per square foot of hood intake shall be installed, as wide as the unit and centered over the unit. When the duct penetrates a ceiling or floor, it shall be enclosed in a fire-resistive shaft covered on one side as required for one-hour fire-resistive construction, with the duct separated from the shaft with a minimum 1" airspace, and terminate minimum 18" above the roof surface.

11. Appliances designed to be fixed in position shall be securely fastened in place. Supports for appliances shall be designed and constructed to sustain vertical and horizontal loads as required by the CMC, Section 303.4. Anchorage of Appliances.

12. Garage Appliance Protection - Garage appliances with glow, spark, or flame ignition shall have igniter 18" above floor and shall be protected from auto impact (CMC, Sec. 305.1 Protection Against Damage).

13. Termination of all environmental air ducts shall be a minimum of 3 feet from property line; 3 feet from opening into the building; minimum 10 feet horizontally or 3 feet vertically from any operable skylight.

14. Use a minimum diameter of 4" dryer vent, soild-wall sheet metal beyond the dryer connection point, with a back draft damper, maximum length of 14' including two 90 degree elbows. Each additional elbow will cost 2' of overall length. Every pipe-to-pipe joint must be sealed with metal

15. Fan duct requirement per ASHRAE 62.2, table 7-1:

foil tape and screws are prohibited.

a. for bathrooms: fan must be attached to a minimum 4" duct, no longer than 70' of flex duct. Subtract 15' of allowed length for each elbow.

b. for kitchen range hood fan: fan must be attached to a minimum 5" smooth duct, no longer that 85' of duct. Subtract 15' of allowed length for each elbow.

16. Provide required access to all dampers. Verify locations with owner and framing contractor prior to any rough-in.

17. The AC condensate waste pipe shall be connected indirectly to the drainage system through an air gap or air break.

18. Provide carbon monoxide testing & correction prior to occupancy. Install carbon monoxide alarms.

19. When a clothes dryer is installed in a closet, a minimum opening of 100 square inches for makeup air shall be provided in the door or by other approved means. CMC 504.4.1.

PLUMBING NOTES

Urinals

1. All work shall comply with the 2022 California Plumbing Code (CPC) and all applicable federal, state, and local codes. plumbing work is to be bid design/build and provided complete per code.

Mechanical and plumbing subcontractors are responsible for assessing existing services for compliance with proposed service requirements and recommending any measures required to handle additional loads prior to bid.
 Plumbing subcontractor is required to coordinate with general contractor and framing contractor to ensure proper notching and boring of

framing members per CRC R602 and structural requirements within this set. General contractor is to verify plumbing and mechanical runs within framing spaces. It is the general contractors responsibility to notify architect of conflicts prior to the onset of rough framing. When possible, locate all plumbing vents, roof jacks, vents and flues to less visible side and rear roof slopes (rather than in primary view).

4. Verify all plumbing fixtures, appliances, lighting selections, dimensions, & requirements etc. w/ owner prior to rough framing. coordinate with framing contractor.

to prevent the possible back flow of contaminated water into the potable water system.

6. Water heaters shall be anchored or strapped to resist horizontal displacement due to earthquake motion. Strapping shall be within the upper

third and lower third (1/3) of the vertical dimensions, with the lower with a minimum of 4" clearance above the controls.

7. Water heaters installed in garages shall be located minimum 18" above floor level, and located out of the normal path of any vehicles using the

8. Water heaters shall be provided with a pressure temperature relief valve with a drain terminating to the exterior, per CPC 608.5

9. All building water supply systems installed with quick acting valves shall be provided with devices to absorb water hammer pressure caused from quick valve closing, located as close as possible to these valves.

10. No building sewer or other drainage pipe, or part thereof can be constructed of materials other than cast iron, copper, stainless steel 316l, schedule 40 ABS, DWV, schedule 40 PVC DWV, or extra strength vitrified clay pipe when installed under or within 2" of any building or structure, or less than 1' below the surface of the ground. the minimum depth of the building sewer is 12" below grade to the top of the pipe. galvanized steel, galvanized wrought iron and stainless steel 304 cannot be used underground and must be at least 6" above ground. CPC 313.3 & 701.1.

11. A minimum of 2% slope (1/4" per ft) for the horizontal drainage piping. CPC section 708.0.

garage or protected from any mechanical damage from vehicles by a suitable enclosure or barrier.

12. No under-floor cleanout shall be located exceeding 5 feet from an access door, trap door, or crawl hole. CPC 707.9

13. Waste and vent piping 2" and smaller above grade shall be standard weight cast iron or copper with matching fittings. All waste and vent lines 2-1/2" and larger inside building shall be standard weight cast iron. Approved plastic pipe may be used. Verify with local ordinance.

14. Water piping above ground to be minimum type M copper, water piping below ground to be minimum type I.

15. No dish washing machine shall be directly connected to drainage system or food disposer without the use of an approved air gap fitting on the discharge side of dish washing machine. CPC section 807.4.

16. Plumbing fixture water efficiency standards GPM requirements must meet 2022 California Green Building Standards code - Residential Mandatory Measures:
<u>Fixture type</u>
<u>Flow rate</u>

Shower heads (residential)

Lavatory faucets (residential)

Lavatory faucets in common & public use areas

Kitchen faucets

Metering faucets

Water closet

1.8 gpm at 80 psi

1.2 gpm max. @ 60psi, 0.8 gpm min. @ 20psi

0.5 gpm @ 60 psi

1.8 gpm @ 60 psi

0.20 gal / cycle

1.28 gal / flush

17. Verify plumbing system integrity & leak detection prior to covering with finishes.

18. All hot water pipe is required to be insulated in new construction per cpc 609.11

24. Gas piping shall be schedule 40 black steel with 150 pound black steel fittings or as approved by local gas company.

0.125 gal / flush

25. Gas piping shall not pass under to through foundation or embedded within or below concrete slabs.26. Gas shut-off valves for appliance fireplaces shall be located within 36" of the appliance

**ELECTRICAL & LIGHTING NOTES:** 

to
1. All work shall comply with the 2022 California Electrical Code (CEC) and all applicable federal, state, and local states and ordinances. Electrical work is to be bid design/build and provided complete per code.

2. Electrical subcontractor is to determine service requirements for the new work prior to bid. Verify that existing service is sufficient to handle increased loads. Locate new sub-panels as directed by owner. All circuit panels are to be labeled.

4. All electrical load sheets and calculations required by the building department shall be the responsibility of the Electrical

5. All unused and demolished electrical is to be removed back to the nearest utilized junction. No "dead hots" to remain after construction. Junction boxes must be accessible.

construction. Junction boxes must be accessible.

6. Coordinate electrical with framing contractor to accommodate switches, outlets, can lights, etc. within rough framing prior to construction. Verify blocking locations in field as necessary. Verify height of all wall mounted fixtures prior to drywall.

8. Verify all fixture locations with owner prior to installation. All recessed fixtures to be approved by owner. Coordinate locations of recessed fixtures with framing, provide owner an opportunity to walk at "box-out" and include relocations as requested. Decorative fixtures are to be supplied by owner.

9. Low Voltage wiring and outlets to be coordinated by Owner. Contractor to verify location of all telephone, network, security, alarm, audio, video and other low voltage outlets with owner prior to installation of drywall.

10. All installed luminaries shall be high-efficacy in accordance with table 150.0-a. Verify all light fixture selections with owner.

11. Screw-based luminaires shall contain lamps that comply with Reference Joint Appendix JA8.

7. Verify all appliance specifications and requirements with manufacturer prior to construction

12. Per 2022 CEC, Article 210.70, at least one wall switch-controlled lighting outlet shall be installed in every habitable room, kitchen, and bathroom; in bathrooms, hallways, stairways, attached garages, and detached garages with electrical power; and at least one shall be installed at outdoor entrances or exits.

13. In bathrooms, garages, laundry rooms, walk-in closets and utility rooms, at least one luminaries in each of these spaces shall be controlled by a vacancy sensor.

14. Per 2022 CEC, Article 210.70, at least one wall switch-controlled lighting outlet shall be installed in every habitable room, kitchen, and bathroom; in bathrooms, hallways, stairways, attached garages, and detached garages with electrical power; and at least one shall be installed at outdoor entrances or exits. Lighting in habitable spaces (inc. living room, dining room, kitchen, and bedroom) shall have readily accessible wall-mounted dimming controls. Exceptions: Lighting controlled by vacancy sensor; remote control integrated lighting in ceiling fan; lighting on circuit with less than 20 watts of lighting power; navigation lighting such as night lights, step lights, and path lights less than 5 watts; lighting internal to drawers and cabinetry with opaque fronts or doors with automatic off controls.

15. Outdoor lighting: all outdoor lighting shall be controlled by a manual on and off switch that does not override to on; or controlled by one of the following methods: controlled by photocell and motion sensor. controls that override to on shall not be allowed unless the override automatically reactivates the motion sensor within 6 hours; photo control and automatic time switch control; astronomical time clock, or energy management control system. 150(k)3.

16. Luminaries recessed into ceilings shall meet all of the following per 150.0(k)1c: listed for zero clearance insulation, labeled that certifies the luminaries is airtight with a leakage less than 2.0cfm at 75 pascals, sealed with a gasket or caulk, allow replacement and maintenance to be readily accessible from below the ceiling without cutting holes in the ceiling, shall not contain screw base sockets; and shall contain light sources that comply with JA8.

17. Under cabinet lighting, display case lighting, shelf lighting, and switched outlets shall be switched separately than from other lighting systems. 150.0(k)2G. Provide separate switches for fan and light combinations light fixtures.

18. Per 2022 CEC, Article 210.52, Receptacles shall be installed such that no point measured horizontally along the floor line of any wall space is more than 6 ft from a receptacle outlet.

19. Per CEC, Article 680.43(B)(1), and (C): lighting fixtures, lighting outlets and fans located over an indoor spa or hot tub less than 7'-6" above the maximum water level and shall be protected by a ground-fault circuit interrupter and installed as follows:

A. Recessed luminaires with a glass or plastic lens and nonmetallic or electrically isolated metal trim, suitable for use in damp locations.

B. Surface-mounted luminaires with a glass or plastic globe and a non-metallic body or a metallic body isolated from contact and suitable for use in damp locations.

Note: Lighting fixtures, lighting outlets and ceiling fans located 12 ft. or more above the maximum water level shall not require

protection by a ground-fault circuit-interrupter.

20. Arc Fault Circuit Interrupter (AFCI) protected receptacles: all 120-volt, single phase, 15-amp & 20-amp branch circuits supplying outlets installed in dwelling unit kitchens, dining rooms, family rooms, living rooms, parlors, libraries, dens, bedrooms, sunrooms,

rec rooms, closets, laundry areas, hallways and similar rooms shall be protected by a listed arc-fault circuit interrupter,

21. All 125-volt, 15-amp & 20-amp receptacle outlets shall be listed tamper-resistant receptacles per CEC 406.11.

combination type, installed to provide protection of the branch circuit, CEC 210.12

22. Counter top receptacles in the kitchen, nook pantries, dining rooms and similar areas shall be spaced such that any point along the wall at the counter levle is not more than 2' from a receptacle. any counter space more than 12" wide shall be provided with a receptacle. countertops interrupted by ranges, sinks or other appliances shall be considered separate counters. cec 210.52(c)

23. Per 2022 CEC, Article 210.52(C), receptacles along the counter tops shall be spaced a maximum of 2 feet from the sink(s) and 4 feet on-center. Island and peninsular counter tops with a long dimension of 24 inches or greater shall have at least one receptacle. No point of the wall may be more than 24" from an outlet. Kitchen outlets shall be on at least two separate circuits

24. Provide dedicated 20-amp circuit for required bathroom outlets, separate from other receptacles, lights, or fans.

Provide an approved non-removable anti-siphon back flow device at all interior and exterior hose bibbs., except the clothes washer connection, 25. Provide two dedicated 20-amp branch circuits for small appliance outlets in kitchen at wall and counter space.

26. Provide dedicated individual GFCI protected circuit at dishwasher and garbage disposal, verify in field per manufacture

27. Provide dedicated 30-amp circuit to dryer per CEC 220.54.

with ground-fault circuit interrupt protection.

28. Provide UFER ground.

29. Electric vehicle (EV) charging for New Construction 4.106.4.1, For new one- and two-family dwellings and town-houses with attached private garages, 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 208/240-volt minimum dedicated branch circuit and space(s) reserved to permit installation of a branch circuit overcurrent protective device. Exception: a raceway is not required if a minimum 40-ampere 208/240-volt dedicated ev branch circuit is installed in close proximity to the proposed location of an ev charger at the time of original construction in accordance with the california electrical code. 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".

MAR. 19, 2024 5

REBUILD CLAR.

APR. 09, 2024 6

BLDG PLAN CHECK REVS.

OCT. 29, 2024 7

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ISSUE LOG

CHECK REV. 4

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Young & Borlik

Architects

4962 EL CAMINO REAL, STE 218
LOS ALTOS, CALIFORNIA 94022



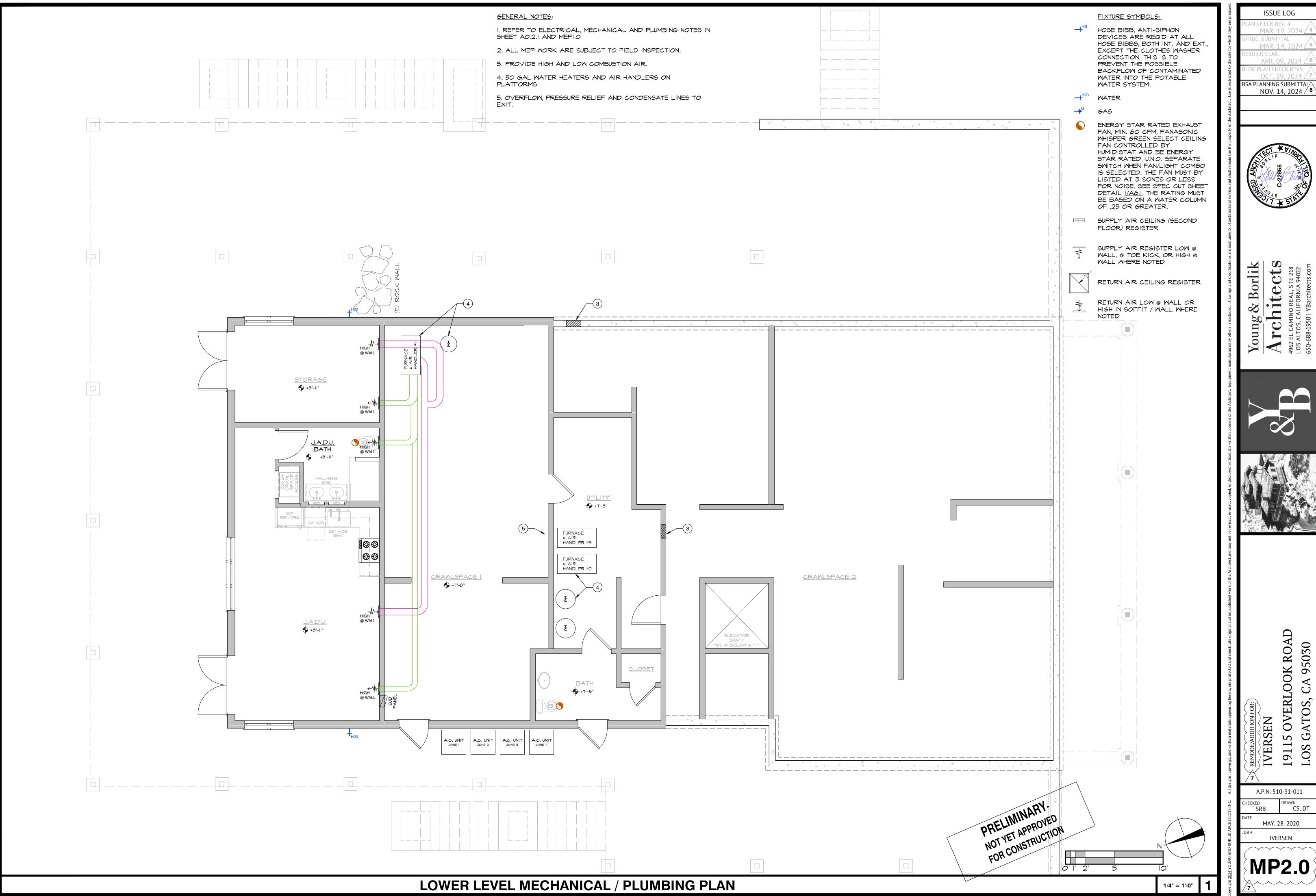
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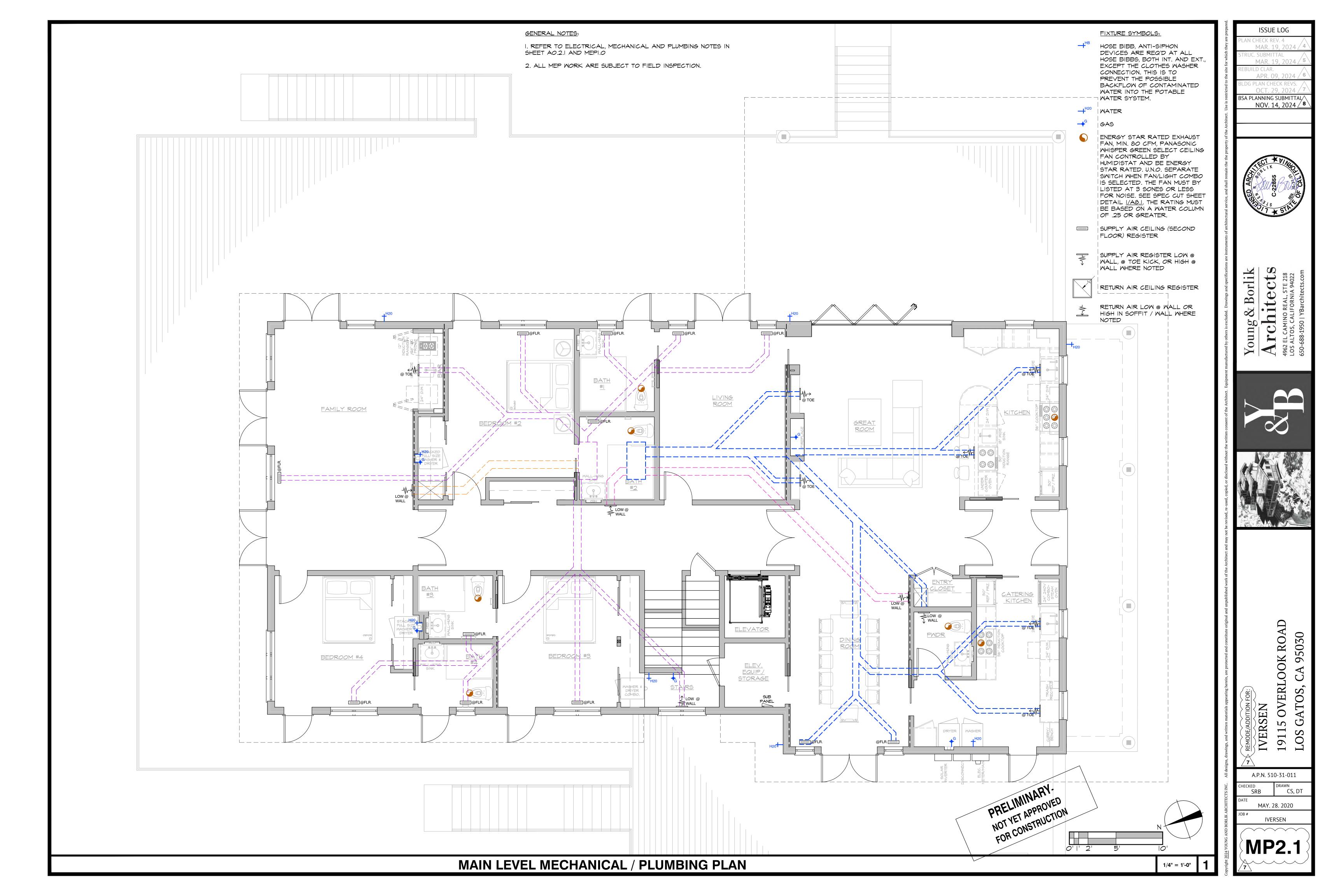
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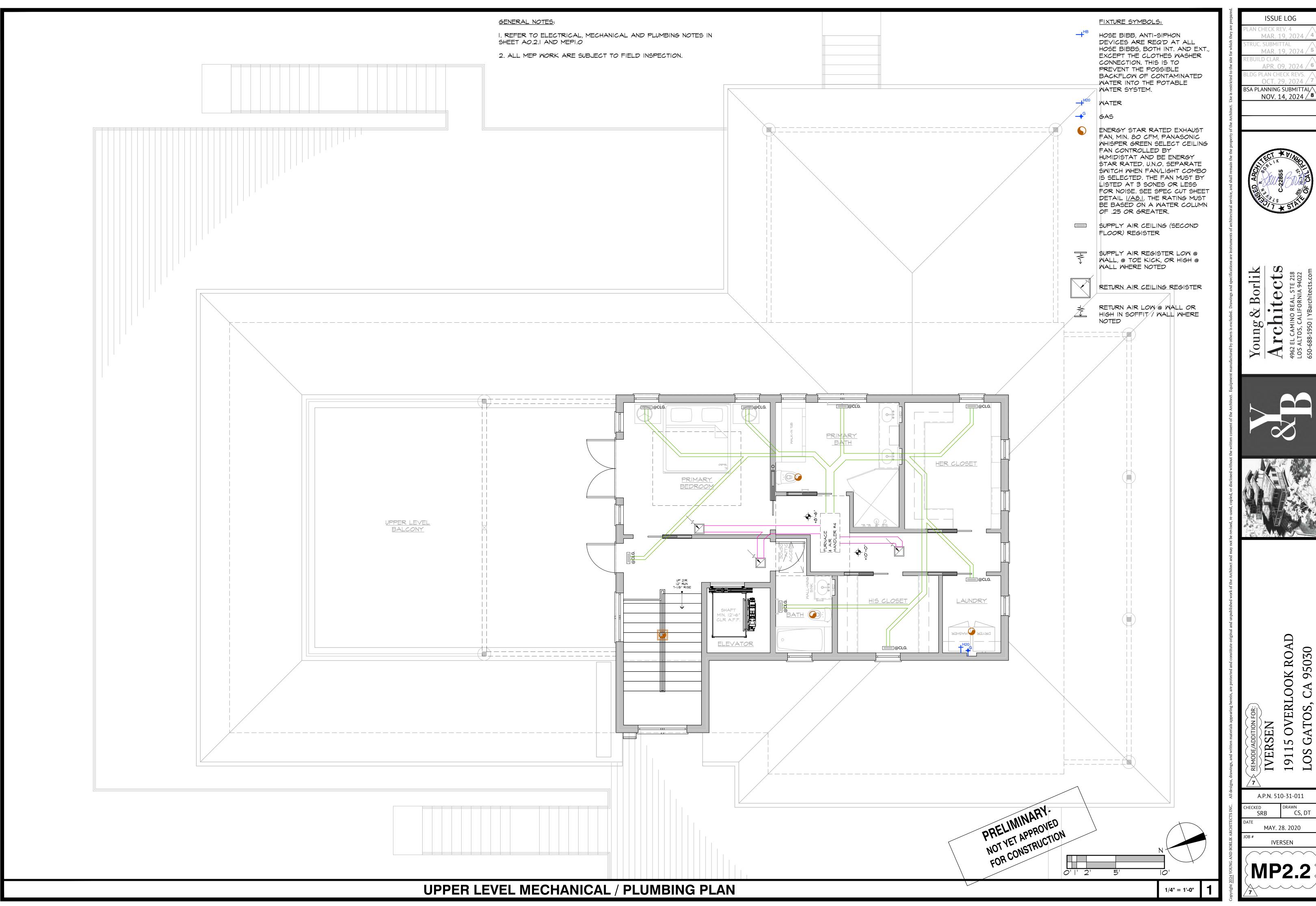
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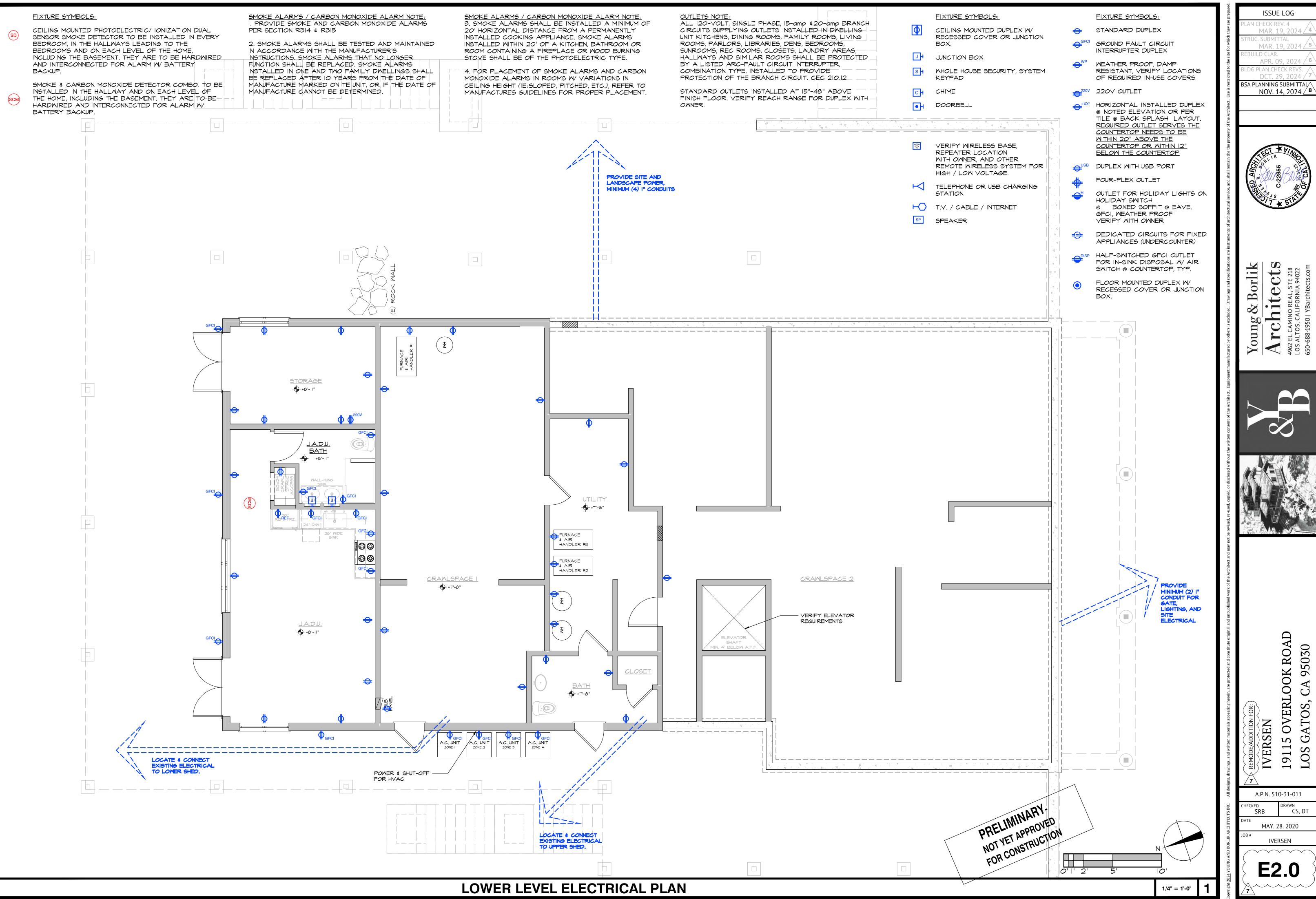
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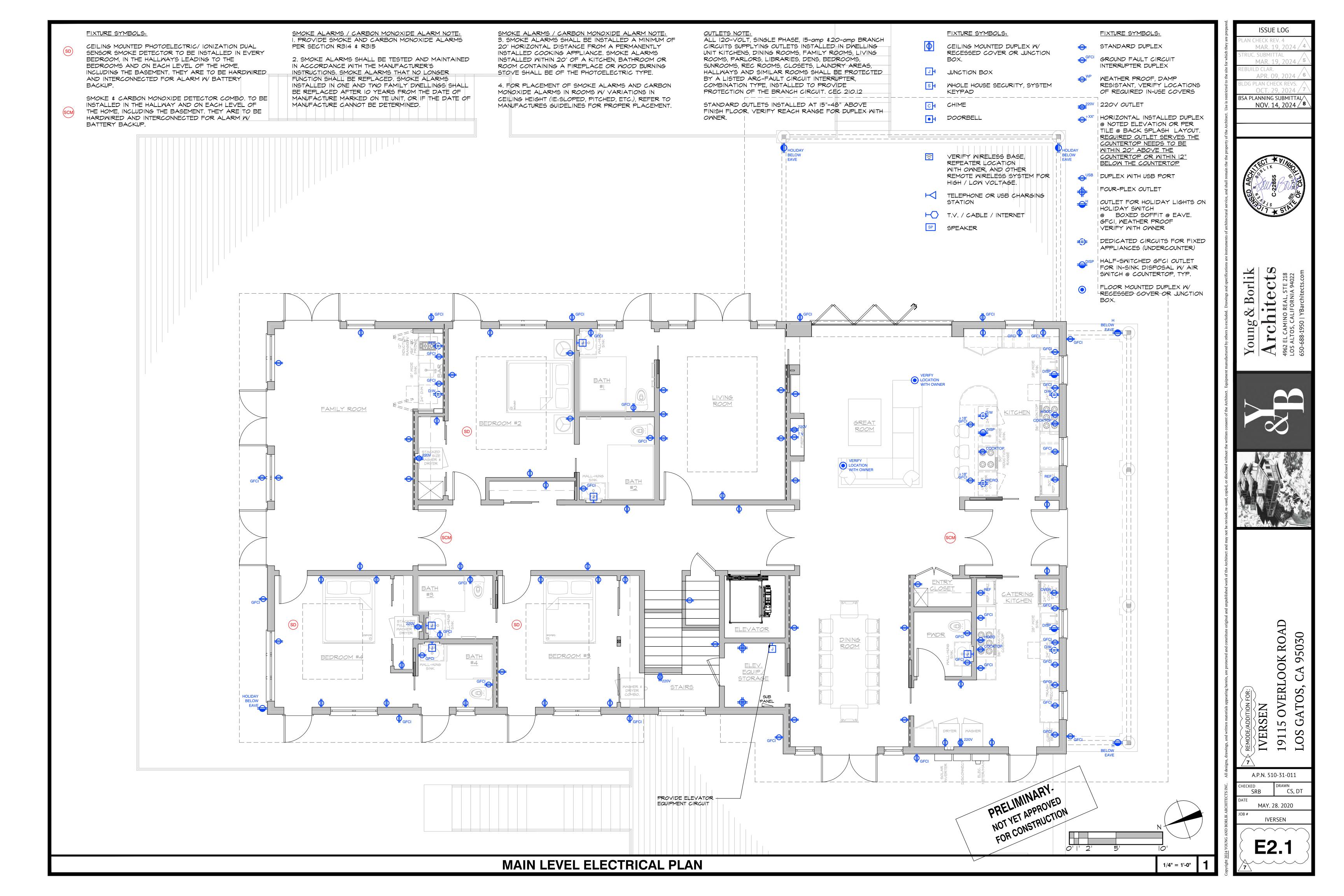
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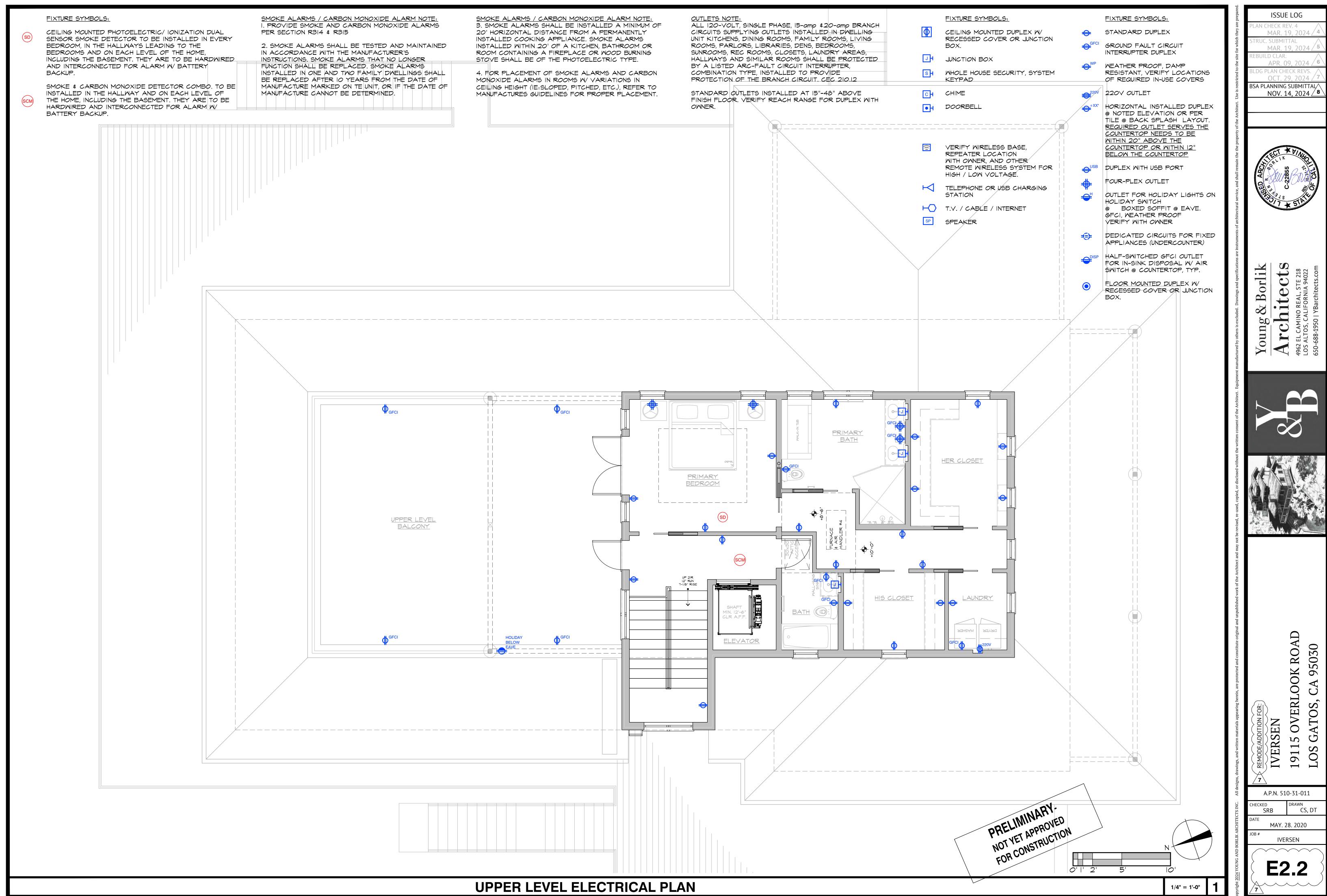


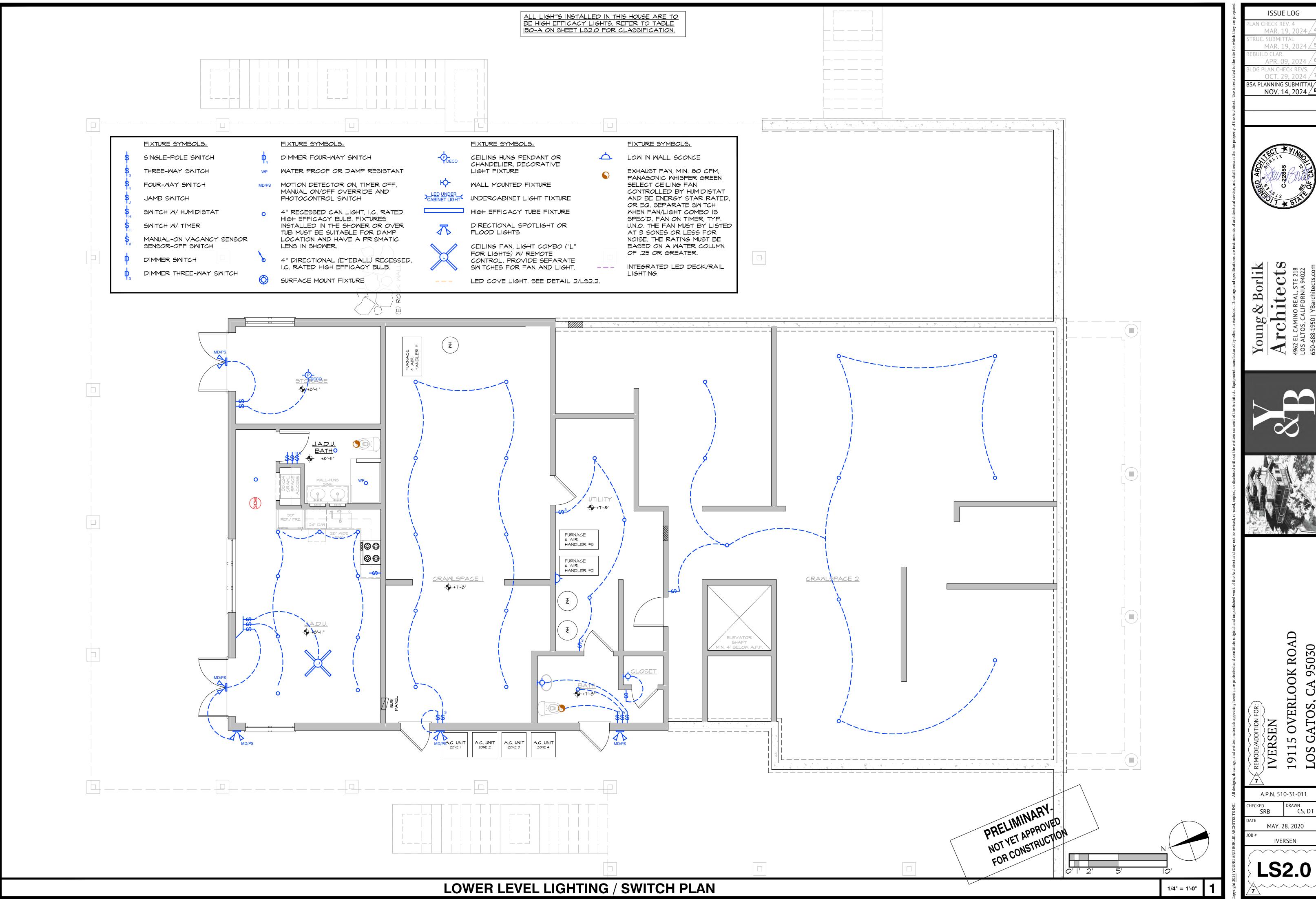




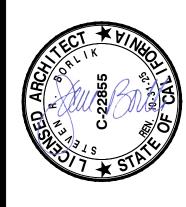




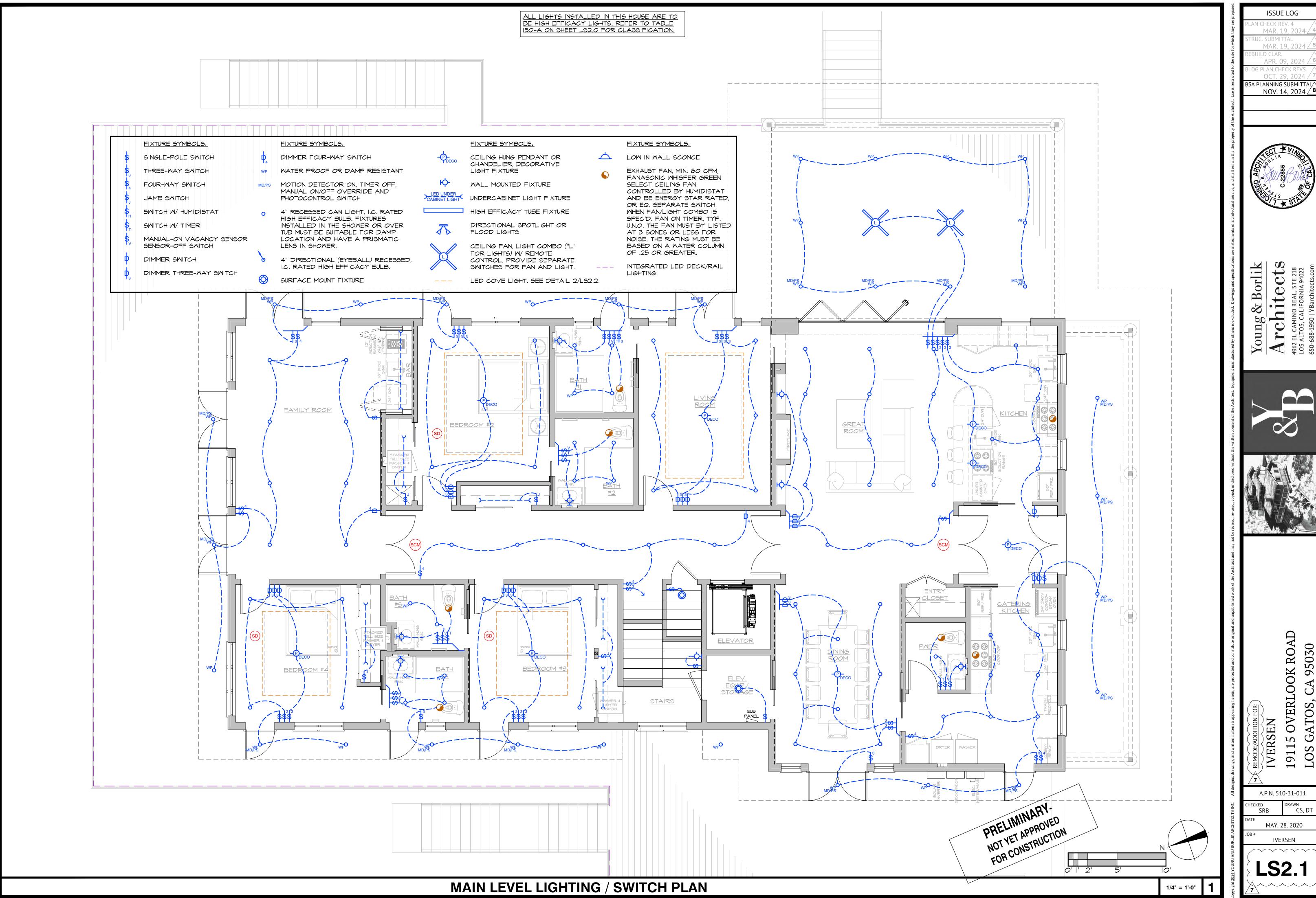




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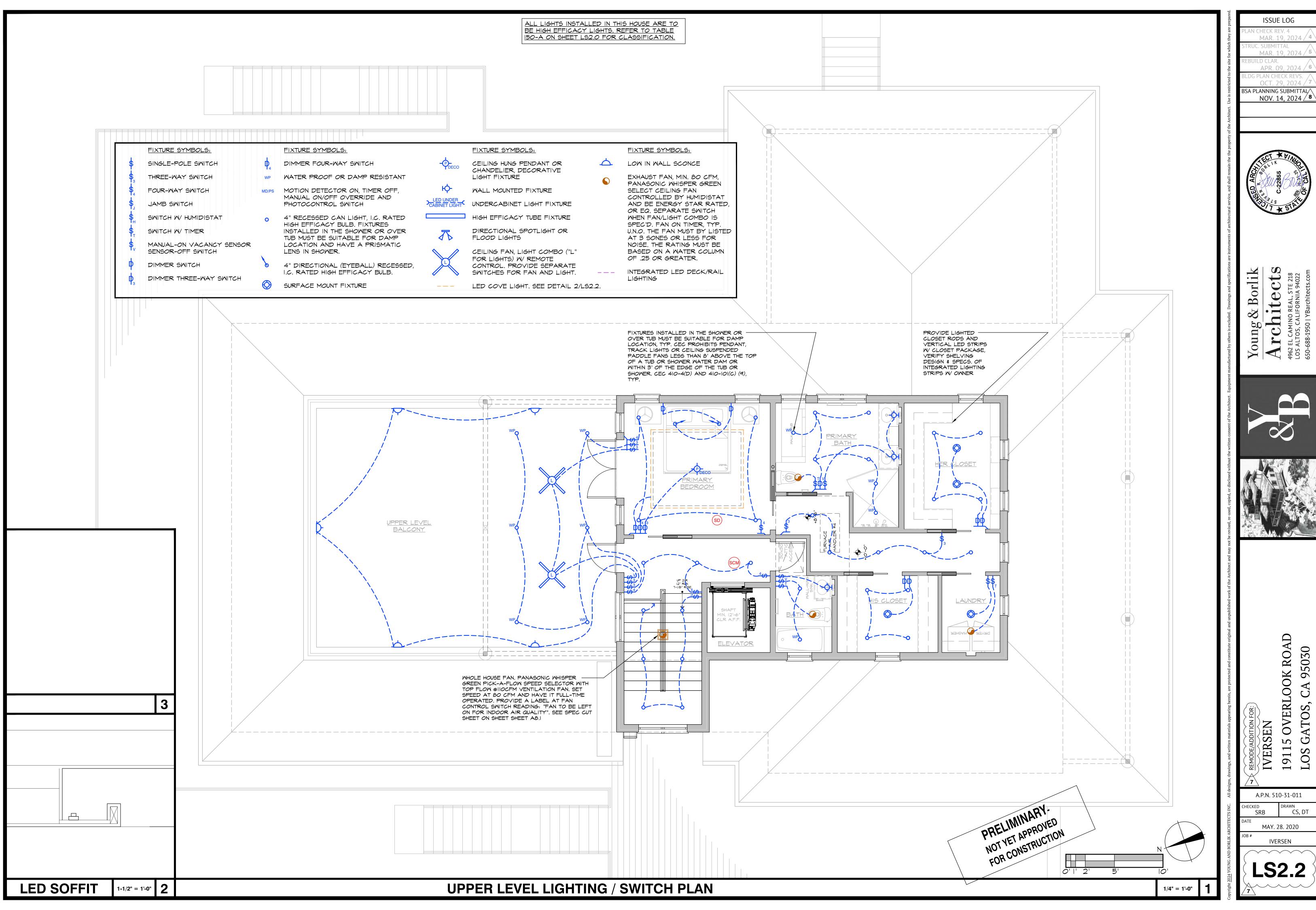


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ENERAL IN	FORMATION				
01	Project Name	New Residence			
02	Run Title	Title 24 Analysis			
03	Project Location	19115 Overlook Road			
04	City	Los Gatos	05	Standards Version	2022
06	Zip code	95030	07	Software Version	EnergyPro 9.3
08	Climate Zone	4	09	Front Orientation (deg/ Cardinal)	200
10	Building Type	Single family	11	Number of Dwelling Units	1
12	Project Scope	Newly Constructed	13	Number of Bedrooms	5
14	Addition Cond. Floor Area (ft <sup>2</sup> )	D .	15	Number of Stories	3
16	Existing Cond. Floor Area (ft <sup>2</sup> )	n/a	17	Fenestration Average U-factor	0.32
18	Total Cond. Floor Area (ft <sup>2</sup> )	5213.9	19	Glazing Percentage (%)	23.72%
20	ADU Bedroom Count	n/a	21	ADU Conditioned Floor Area	n∕a
22	FuelType	Natural gas	23	No Dwelling Unit:	No

102 This building incorporates features that require field testing and/or verification by a certified HERS rater under the supervision of a CEC-approved HERS provider.

COMPLIANCE RESULTS

Calculation Description: Title 24 Analysis

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

CA Building Energy Efficiency Standards - 2022 Residential Compliance

Project Name: New Residence

FENESTRATION / GLAZING

Calculation Description: Title 24 Analysis

CERTIFICATE OF COMPLIANCE - RESIDENTIAL PERFORMANCE COMPLIANCE METHOD

01 Building Complies with Computer Performance

O3 This building incorporates one or more Special Features shown below

CF1R-PRF-01-E CERTIFICATE OF COMPLIANCE - RESIDENTIAL PERFORMANCE COMPLIANCE METHOD Project Name: New Residence Calculation Date/Time: 2024-10-29T10:17:22-07:00 (Page 2 of 14) Calculation Description: Title 24 Analysis Input File Name: 27391-ybarchitects-19115 Overlook Road.ribd22x

NERGY DESIGN RATINGS	1	Energy Design Ratings	Ī	Compliance Margins		
	Source Energy (EDR1)	Efficiency <sup>1</sup> EDR (EDR2efficiency)	Total <sup>2</sup> EDR (EDR2total)	Source Energy (EDR1)	Efficiency <sup>1</sup> EDR (EDR 2efficiency)	Total <sup>2</sup> EDR (EDR2total)
Standard Design	37.1	44.7	30			
Pro posed Design	28	43.4	29.2	9.1	1.3	0.8
	- 11	RES ULT <sup>3</sup>	: PASS			
<sup>1</sup> Efficiency EDR indudes improvements lik <sup>2</sup> Total EDR indudes efficiency and demand <sup>3</sup> Building complies when source energy, ef	l response measures such as p	photovoltaic (PV) system ar	nd batteries	met load hour limits are i	not exceeded	

ENERGY USES UM MARY Standard Design Source Standard Design TDV Energy Proposed Design Source Proposed Design TDV Energy Compliance Compliance Energy Use nergy (EDR1) (kBtu/ft²-yr (EDR2) (kTDV/ft<sup>2</sup>-yr) Energy (EDR1) (kBtu/ft2-yr) (EDR2) (kTDV/ft<sup>2</sup>-yr) Margin (EDR1) Margin (EDR2) Space Heating 3,76 16.63 14.12 1.83 2.51 17,97 Space Cooling 0.31 0.4 20,49 -0.09 -2.52 IAQ Ventilation 0.26 2.83 0.26 2.83 0 Water Heating 0.75 8.06 0.58 5.77 0.17 1.29 Utilization/Flexibility Credit Efficiency Compliance 45.49 44.21 1.91 1,28 Photovoltaics -22,29 -0.66 -22.4 -0.66 Battery Flexibility Indoor Lighting 4.87 0.49 0.49 4.87 Appl. & Cooking 1.28 8.14 1.28 8.17 14.57 14.57 Plug Loads 1.4 1.4 Outdoor Lighting 0.14 1.3 0.14 1,3 TOTAL COMPLIANCE

Calculation Date/Time: 2024-10-29T10:17:22-07:00

Input File Name: 27391-ybarchitects-19115 Overlook Road.ribd22x

CERTIFICATE OF COMPLIANCE - RESIDENTIAL PERFORMANCE COMPLIANCE METHOD

Project Name: New Residence

Calculation Description: Title 24 Analysis

Registration Number: 424-P010264056A-000-000-0000-0000 Registration Date/Time: 10/29/2024 10:55 HERS Provider: CHEERS

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CERTIFICATE OF COMPLIANCE - RESIDENTIAL PERFORMANCE COMPLIANCE METHOD Project Name: New Residence Calculation Date/Time: 2024-10-29T10:17:22-07:00

	Standard Design (kBtu/ft <sup>2</sup> -yr)	Proposed Design (kBtu/ft²-yr)	Compliance Margin (kBtu/ft <sup>2</sup> - yr)	Margin Percentage
Gross EUI <sup>1</sup>	10.18	7.57	2.61	25,64
Net EUF	6.1	3.49	2.61	42.79

Input File Name: 27391-ybarchitects-19115 Overlook Road.ribd22x

REQUIRED PV SYSTE	MS										
01	02	03	04	05	06	07	08	09	10	11	12
DC System Size (kWdc)	Exception	Module Type	Ага ү Түре	Power Electronics	CFI	Azimuth (deg)	Tilt Input	Array Angle (deg)	Tilt: (x in 12)	Inverter Eff. (%)	Annual So lar Acces (%)
3.94	NA	Standard (14-17%)	Fixed	none	true	150-270	n/a	n/a	<=7:12	96	98

REQ	REQUIRED SPECIAL FEATURES	
The	The following are features that must be installed as condition for meeting the modeled energy performance for this computer analysis,	
	Insulation below roof deds	
*	Ducts in crawl space	
	<ul> <li>Northwest Energy Efficiency Alliance (NEEA) rated heat pump water heater; specific brand/model, or equivalent, must be installed</li> </ul>	

Reg istration Number: 424-P010264056A-000-000-0000-0000 Reg istration Date/Time: 10/29/2024 10:55 HERS Provider: CHEERS

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Report Version: 2022.0.000 Schema Version: rev 20220901

Calculation Date/Time: 2024-10-29T10:17:22-07:00

Input File Name: 27391-ybarchitects-19115 Overlook Road,ribd22x

11

Schema Version: rev 20220901 CERTIFICATE OF COMPLIANCE - RESIDENTIAL PERFORMANCE COMPLIANCE METHOD CF1R-PRF-01-E Project Name: New Residence Calculation Date/Time: 2024-10-29T10:17:22-07:00 (Page 5 of 14) Calculation Description: Title 24 Analysis Input File Name: 27391-ybarchitects-19115 Overlook Road.ribd22x HERS CEATURE SUMMARY

Report Version: 2022,0.000

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Number of Ventilation

Coo ling Systems

Number of Water

Heating Systems

CF1R-PRF-01-E

Name

Attic 1st Floor

Construction

Attic Roof1st Floor

AtticRoof2nd Floor

Registration Number: 424-P010264056A-000-000-0000000-0000
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CA Building Energy Efficiency Standards - 2022 Residential Compliance

CF1R-PRF-01-E

Report Generated: 2024-10-29 10:18:38

CF1R-PRF-01-E

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uer	is provided in the building tables below. Registered CF2Rs and CF3Rs are required to be completed in the HERS Registry
	Indoor air quality ventilation
	Kitchen range hood
	Minimum Airflow
٠	Verified EER/EER2
٠	Verified SEER/SEER2
	Verified Refrigerant Charge
	Fan Efficacy Watts/CFM
	Verified HSPF2
	Verified heat pump rated heating capacity
	Duct leakage testing

Number of Dwelling

Conditioned Floor Area (ft<sup>2</sup>)

CERTIFICATE OF COMPLIANCE - RESIDENTIAL PERFORMANCE COMPLIANCE METHOD

		A STATE OF THE PARTY OF THE PAR				4.	
New Residence	5213.9	1		5	3	D	1
NE INFORMATION		77.1		31.7			
01	02	03	04		05	06	07
Zone Name	Zone Type	HVAC System Name	Zone Floor A	rea (ft <sup>2</sup> )	Avg. Ceiling Height	Water Heating System 1	Status
Basement IADU	Conditioned	HVACIADU1	491.2	2	g	DHW Sys 1	New
1st Floor	Conditioned	HVAC1st Floor2	3660	2	10	DHW Sys 1	New
2nd Floor	Conditioned	HVAC 2nd Floor3	1062.	5	10	DHW Sys 1	New
AQUE SURFACES							
01	02	03	04	05	06	07	08
Name	Zone	Construction	Azirouth	Orientation	Gross Area (f	(2) Window and Door	Tilt (deg)

Registration Number: 424-P010264056A-000-000-0000000-0000 NOTICE: This document has been generated by California, Home Energy Efficiency Rating Services (CHEER: and cannot guarantee, the accuracy or completeness of the information contained in this document.	Registration Date/Time: 10/29/2024 10:55 S) using information uplicaded by third parties not affiliated with o	HERS Provider: CHEERS or related to CHEERS. Therefore, CHEERS is not responsible for,
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PAQUE SURFACE CONSTR	RUCTIONS						
01	02	03	04	05	06	07	08
Construction Name	Surface Type	Construction Type	Framing	Total Cavity R-value	Interior / Exterior Continuous R-value	U-factor	Assembly Layers
R-15 Wall + 1 rigid	Exterior Walls	Wood Framed Wall	2x4 @ 15 īn, Q. C.	R-15	None / 5	0,06	Inside Finish: Gypsum Board Cavity / Frame: R-15 / 2x4 Sheathing / Insulation: R-5 Sheathing Exterior Finish: 3 Coat Stucco
R-15 Wall (Interior)	Interior Walls	Wood Framed Wall	2x4 @ 15 in, O. C.	R-15	None / None	0,086	Inside Finish: Gypsum Board Cavity / Frame: R-15 / 2x4 Other Side Finish: Gypsum Board
AtticRoof1st Floor	Attic Roofs	Wood Framed Celling	2x8@=24 in. O.C.	R-30	None / 0	0.037	Roofing: Light Roof (Asphalt Shingle) Roof Deck: Wood Siding/sheathing/decking Cavity / Frame: R-26.9 / 2x8 Around Roof Joists: R-3.1 insul
Attic Roof2nd Floor	Attic Roofs	Wood Framed Ceiling	2x8 @ 24 in. O. C.	R-30	None / 0	0.037	Roofing: Light Roof (Asphalt Shingle) Roof Deck: Wood Siding/sheathing/decking Cavity / Frame: R-26.9 / 2x8 Around Roof Joists: R-3.1 insul.
R-19 Floor Crawlspace	Floors Over Crawlspace	Wood Framed Floor	2x12 @ 16 in. O. C.	R-19	None / None	0,045	Floor Surface: Carpeted Floor Deck: Wood Siding/sheathing/decking Cavity / Frame: R-19 / 2x12
R-30 Roof	Ceilings (below attic)	Wood Framed Celling	2x6 @ 16 in. O. C.	R-0	None / None	0.467	Cavity / Frame: no insul. / 2×6 Inside Finish: Gypsum Board
R-19 Floor (Interior)	Interior Floors	Wood Framed Floor	2x12 @ 15 in, O. C.	R-19	None / None	0.044	Floor Surface: Carpeted Floor Deck: Wood Siding/sheathing/decking Cavity / Frame: R-19 / 2×12 Ceiling Below Finish: Gypsum Board

Registration Number: 424-P010264056A-000-000-0000-0000 Registration Date/Time: 10/29/2024 10:55 HERS Provider: CHEERS

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Calculation Description	: Title 24 Analysis		1	Input File Name: 27391-ybarchitects-19115 Overlook Road.ribd22x							
PAQUE SURFACES											
01	02	03	04	05	06	07	08				
Name	Zone	Construction	Azimuth	Orientation	Gross Area (ft <sup>2</sup> )	Window and Door Area (ft 2)	Tilt (deg)				
Rear Walls	Basement JADU	R-15 Wall + 1 rigid	20	Back	281.25	78.75	90				
Front Walls	1st Floor	R-15 Wall +1 rigid	200	Front	463.3	102	90				
Left Walls 2	1st Floor	R-15 Wall +1 rigid	290	Left	855.8	246	90				
Rear Walls 2	1st Floor	R-15 Wall + 1 rigid	20	Back	463.3	174.75	90				
Right Walls	1st Floor	R-15 Wall + 1 rigid	110	Right	855,8	340,5	90				
Front Walls 2	2nd Floor	R-15 Wall + 1 rigid	200	Pront	346.7	32	90				
Left Walls 3	2nd Floor	R-15 Wall + 1 rigid	290	Left	402.5	46	90				
Rear Walls 3	2nd Floor	R-15 Wall + 1 rigid	20	Back	346.7	126.5	90				
Right Walls 2	2nd Floor	R-15 Wall +1 rigid	110	Rig ht	402.5	67.5	90				
Interior Wall to Storage	Basement JADU	R-15 Wall (Interior)	n/a	n/a	144.72	0	n/a				
Interior Wall to Crawlspa	Basement JADU	R-15 Wall (Interior)	n/a	n/a	281.25	Û	n/a				
Roof	1st Floor	R-30 Roaf	n/a	n/a	1717.7	n/a	n/a				
Roof 2	1st Floor	R-30 Roof	n/a	n/a	880	n/a	n/a				
Roof 3	2nd Floor	R-30 Roof	n/a	n/a	1062,5	n/a	n/a				
Raised Floor	Basement JADU	R-19 Floor Crawlspace	n/a	n/a	491.2	n/a	n/a				
Raised Floor 2	1st Floor	R-19 Floor Crawlspace	n/a	n/a	3169	n/a	n/a				
Interior Floor	1st Floor	R-19 Floor (Interior)	n/a	n/a	491,2	n/a	n/a				
Interior Floor 2	2nd Floor	R-O Floor (Interior)	n/a	n/a	1062,5	ri/a	n/a				

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1.98372

Unventilated

Univentilate d

Roof Rise (x in 12) Roof Reflectance

0.1

0.1

0,85

0.85

Radiant Barrier

No.

No

roject Name: New Residation Description:		vsis		Calc	00 (Page 9 of ook Road.ribd22x			
PAQUE SURFACE CONSTR						,		
01	02		03	04	05	06	07	08
Construction Name	Surface T	уре	Construction Type	Framing	Total Cavity R-value	Interior / Exterior Continuous R-value	U-factor	Assembly tayers
R-0 Floor (Interior)	InteriorFlo	oors	Wood Framed Floor	2x12 @ 15 in, O. C.	R-0	None / None	0.196	Floor Surface: Carpeted Floor Deck: Wood Siding/sheathing/decking Cavity / Frame: no insul. / 2x12 Ceiling Below Finish: Gypsum Board
UILDING ENVELOPE - HER	S VERIFICATIO	N .						
01			02	03		04		05
Quality Insulation Installa	tion (QII) H	igh R-valu	e Spray Foam Insulation	Building Envelope Ai	r Lea kage	CFM50		CFM50

ATER HEATING SY	STEMS							
01	02	03	04	05	06	07	08	09
Name	System Type	Distribution Type	Water Heater Name	Number of Units	Solar Heating System	Compact Distribution	HERS Verification	WaterHeater Name (#)
DHW Sys 1	DomesticHot Water (DHW)	Standard	DHW Heater 1	2	n/a	None	n/a	DHW Heater 1 (2)

R HEATERS - NEEA	HEAT PUMP						
01	02	03	04	05	06	07	08
Na me	# of Units	Tank Vol. (gal)	NEEA Heat Pump Brand	NEEA Heat Pump Model	Tank Location	Duct Inlet Air Source	Duct Outlet Air Source
DHW Heater 1	2	50	Generic	NEEA Tier 3 Generic	TankZone	Crawl Space	Crawl Space

Registration Number: 424-P010264056A-000-000-0000000-0000
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0.32 NFRC 0.25 NERC Left Walls Bug Screen JADU Rear Glazing Rear Walls 0.32 NFRC 0.25 NFRC Bug Screen Mindow JADU Front Glazing Front Walls NFRC 0.25 NFRC Bug Screen 1st Floor Left Glazing 1st Left Walls 2 0.32 NFRC 0.25 NERC Floor

U-factor SHGCSource ExteriorShading Name SHGC Bug Screen Rear Glazing Rear Walls 2 NERC 0.25 NFRC Bug Screen 1st Floor 0.25 0.32 NFRC NFRC Right Bug Screen Window -Right Walls 1st Floor Front Glazing Front Walls 2 0.32 0.25 NERC Bug Screen 2nd Floor Left Glazing 0.32 0.25 NERC Window Left Walls 3 NFRC Bug Screen 2nd Floor Rear Glazing 0.32 0.25 Bug Screen 2nd Floor Right 0.32 0.25 NERC Bug Screen Window Right Walls 2 2nd Floor

Registration Number: 424-P010264056A-000-000-0000000-00000 Registration Date/Time: 10/29/2024 10:55 HERS Provider: CHEERS
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**TITLE 24 ENERGY COMPLIANCE REPORT - PAGE 1** 

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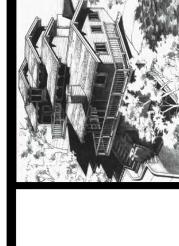
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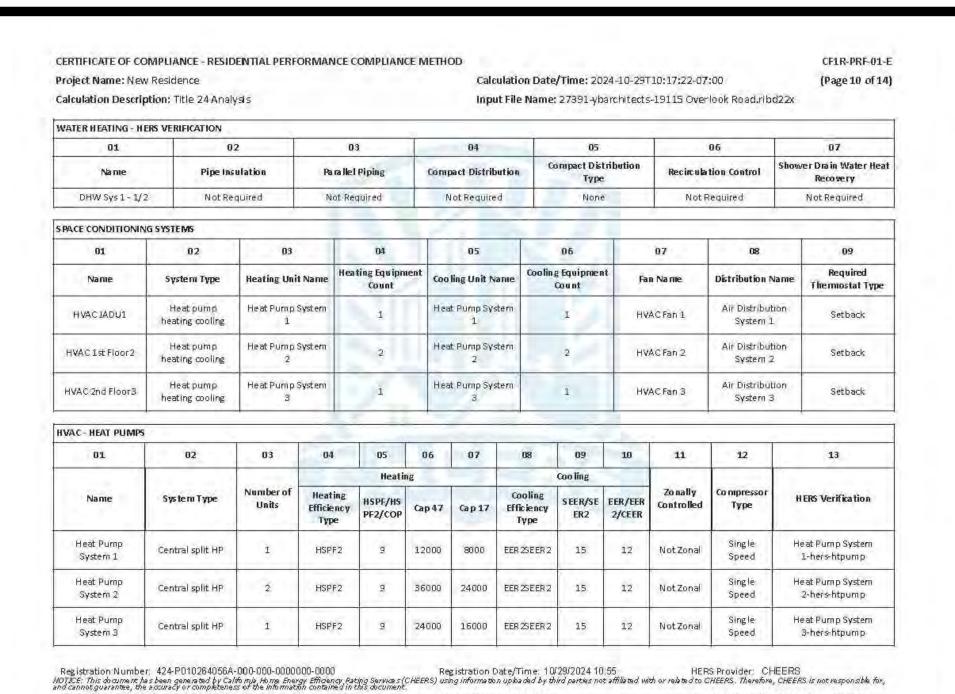




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Schema Version: rev 20220901

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CA Building Energy Efficiency Standards - 2022 Residential Compliance

01	02	03	04	05	06	07	.08	09
Dwelling Unit	Airflow (CFM)	Fan Efficacy (W/CFM)	ІАО Гап Туре	Includes Heat/Energy Recovery?	IAQ Recovery Effective ness - SRE/AS RE	Includes Fault Indicator Display?	HERS Verification	Status
SFam IAQVentRpt	178	0.35	Exhaust	Ñο	n/a/n/a	No	Ves	

Registration Number: 424-P010264056A-000-000-0000000-0000 Registration Date/Time: 10/29/2024 10:55 HERS Provider: CHEERS

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Schema Version: rev 20220901

	MPLIANCE - RESIDE	MINEFERIORINA	IVEL COM	LIAINCE IV	ETHOD	establish.	an Make Pr	d 2024	10 00710.17.00 0	7.00	CF1R-PRF-01
Project Name: New Calculation Descrip	rkesiderice ition: Title 24 Analys	4.5							-10-29T10:17:22-0	rlook Road,ribd22x	(Page 11 of 1
carculation bescrip	don. Title 24 Aridiys	45				mpucriii	e Maine, 2	1991-Angu	critects-15113 Ove	FIOOK NOBULIDUZZX	
HVAC HEAT PUMPS -	HERS VERIFICATION		,								
01	02	03	0	14	0	5	0	)6	07	08	09
Name	Verified Airflow	Airflow Target	Verified	EER/EER2	Ver SEER/	ified SEER2	100	defrigerant arge	Verified HSPF/HSPF2	Verified Heating Cap 47	Verified Heating Cap 17
Heat Pump System 1-hers-htpump	Required	350	Requ	uired	Regi	uired	Y	es	Yes	Yes	Yes
Heat Pump System 2-hers-htpump	Required	350	Requ	uired	Requ	uired	٧	'es	Yes	Yes	Yes
Heat Pump System 3-hers-htpump	Required	350	Req	uired	Requ	ıíred	Y	'es	Yes	Yes	Yes
HVAC - DISTRIBUTION	N SYSTEMS			m				7.1			
01	02	03	04	05	06	07	08	09	10	11	12
42.60	New York	Turk Davies Turk	Duct Ins. R-value		Duct Location		Surface Area		Barrense		urnery 'C. P
Name	Туре	Design Type	Supply	Return	Supply	Return	Supply	Return	Bypass Duct	Duct Leakage	HERS Verification
Air Distribution System 1	Unconditioned crawl space	Non-Verified	R-8	R-8	Crawl Space	Crawl Space	n/a	n/a	No Bypass Duct	Sealed and Tested	Air Distribution System 1-hers-dis
Air Distribution System 2	Unconditioned attic	Non-Verified	R-8	R-8	Attic	Attic	n/a	n/a	No Bypass Duct	Sealed and Tested	Air Distribution System 2-hers-dis
Air Distribution System 3	Unconditioned attic	Non-Verified	R-8	R-8	Attic	Attic	n/a	n/a	No Bypass Duct	Sealed and Tested	Air Distribution System 3-hers-dis
HVAC DISTRIBUTION	- HERS VERIFICATION		-		1			,		1	1
01	02	03	0	14	0	5	0	06	07	08	09
Name	Duct Leakage Verification	Duct Leakage Target (%)	7000 700	ed Duct etion	400000000000000000000000000000000000000	d Duct sign	Buriec	i Ducts	Deeply Buried Ducts	Low-leakage Air Handler	Low Leakage Ducts Entirely in Conditioned Space
Air Distribution System 1-hers-dist	Yes	5.0	NotRe	equired	NotRe	quired	Not Re	equired	Credit not taken	Not Required	Nα

CERTIFICATE OF COMPLIANCE - RESIDENTIAL PERFORMANCE COMPLIANCE METHO Project Name: New Residence	CF1R-PRF-01 Calculation Date/Time: 2024-10-29T10:17:22-07:00 (Page 14 of 1
Calculation Description: Title 24 Analysis	Input File Name: 27391-ybarchitects-19115 Overlook Road.ribd22x
DOCUMENTATION AUTHOR'S DECLARATION STATEMENT	input the Name. 27351 your chieces 15115 Overlook toba.hba22x
I certify that this Certificate of Compliance documentation is accurate and complete.	
Documentation Author Name: Michael Kunz	Documentation Author Signature:  Michael Kunz
Company: Energy Performance Services	Signature Date: 10/29/2024
Address: P.O. Box 587	CEA/ HERS Certification Identification (If applicable):
City/State/Zip: Blue Lake, CA 95525	Phone: 888-828-9488
RESPONSIBLE PERSON'S DECLARATION STATEMENT	
	of Compliance conform to the requirements of Title 24, Part 1 and Part 6 of the California Code of Regulations. ance are consistent with the information provided on other applicable compliance documents, worksheets,
Responsible Designer Name: Dolly Tran	Responsible Designer Signature:  Dolly Traw
Company: Young and Borlik Architects, Inc.	Date Signed: 10/29/2024
Address: 4962 El Camino Real Suite 218	License:

Registration Number: 424-P010264056A-000-000-0000000-0000 Registration Date/Time: 10/29/2024 10:55 HERS Provider: CHEERS
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CA Building Energy Efficiency Standards - 2022 Residential Compliance

Registration Number: 424-P010264056A-000-000-0000000-00000 Registration Date/Time: 10/29/2024 10:55 HERS Provider: CHEERS

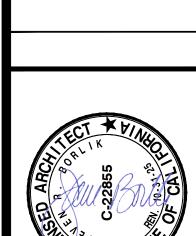
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Project Name: New	Residence			Calculation	on Date/Time: 2024	4-10-29T10:17:22-07	:00	(Page 12 of 14
Calculation Descript		aj s				rchitects-19115 Over		1. 26
HVAC DISTRIBUTION -								
01	02	03	04	05	06	07	08	09
Name	Duct Lea kage Verification	Duct Leakage Target (%)	Verified Duct Location	Verified Duct Design	Buried Ducts	Deeply Buried Ducts	Low-leakage Air Handler	Low Leakage Ducts Entirely in Conditioned Space
Air Distribution System 2-hers-dist	Yes	5,0	Not Required	Not Required	Not Required	Credit not taken	Not Required	No
Air Distribution System 3-hers-dist	Yes	5,0	Not Required	Not Required	Not Required	Credit not taken	Not Required	No
HVAC - FAN SYSTEMS	,		7 11					
	01		02			03		04
-	Name		Тур	e	Fan Pos	wer (Watts/CFM)		Name
	HVACFan 1		HVAC	Fan		0.45	HVACI	Fan 1-hers-fan
	HVACFan 2		HVAC	Fan		0.45	HVACT	Fan 2-hers-fan
	HVAC Fan 3		HVAC	Fan		0.45	HVAC Fan 3-her-fan	

01	02	03  Required Fan Efficacy (Watts/CFM)	
Name	Verified Fan Watt Draw		
HVAC Fan 1-hers-fan	Required	0.45	
HVAC Fan 2-hers-fan	Required	0.45	
HVAC Fan 3-hers-fan	Required	0.45	

Registration Number: 424-P010264056A-000-000-00000000-0000 Registration Date/Time: 10/29/2024 10:55 HERS Provider: CHEERS
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ISSUE LOG

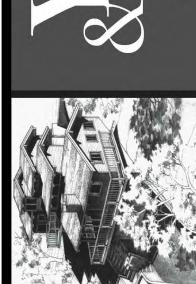
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BSA PLANNING SUBMITTAL∕\ NOV. 14, 2024 **8** 

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MAY. 28. 2020

#### 2022 Single-Family Residential Mandatory Requirements Summary

Space Conditioning System Airflow Rate and Fan Efficacy. Space conditioning systems that use ducts to supply cooling must have a hole for the placement of a static pressure probe, or a permanently installed static pressure probe in the supply plenum. Airflow must be ≥ 350 CFM per ton of nominal cooling capacity, and an air-handling unit fan efficacy ≤ 0.45 watts per CFM for gas furnace air handlers and ≤ 0.58 watts per CFM for all others. Small duct high velocity systems must provide an airflow ≥ 250 CFM per ton of nominal cooling capacity, and an air-handling unit fan efficacy ≤ 0.62 watts per CFM. Field verification testing is required in accordance with Reference Residential Appendix RA3.3.\*

§ 150.0(o) 1:	Requirements for Ventilation and Indoor Air Quality. All dwelling units must meet the requirements of ASHRAE Standard 62.2, Ventilation and Acceptable Indoor Air Quality in Residential Buildings subject to the amendments specified in § 150.0(i) 1.*
§ 150.0(o) 1B:	Central Fan Integrated (CFI) Ventilation Systems. Continuous operation of CFI air handlers is not allowed to provide the whole-dwelling unit ventilation airflow required per §150.0(o) 1C. A motorized damper(s) must be installed on the ventilation duct(s) that prevents all airflow through the space conditioning duct system when the damper(s) is closed and controlled per §150.0(o) 1Biii&iv. CFI ventilation systems must have controls that track outdoor air ventilation run time, and either open or close the motorized damper(s) for compliance with §150.0(o) 1C.
§ 150.0(o)10:	Whole-Dwelling Unit Mechanical Ventilation for Single-Family Detached and townhouses. Single-family detached dwelling units, and attached dwelling units not sharing ceilings or floors with other dwelling units, occupiable spaces, public garages, or commercial spaces must have mechanical ventilation airflow specified in § 150.0(o)1Ci-iii
§ 150.0(o)1G:	Local Mechanical Exhaust. Kitchens and bathrooms must have local mechanical exhaust; nonenclosed kitchens must have demand-controlled exhaust system meeting requirements of §150.0(o) 1Giii, enclosed kitchens and bathrooms can use demand-controlled or continuous exhaust meeting §150.0(o) 1Giii-iv. Airflow must be measured by the installer per §150.0(o) 1Gv, and rated for sound per §150.0(o) 1Gvi. **
§ 150.0(c)1H&I:	Airflow Measurement and Sound Ratings of Whole-Dwelling Unit Ventilation Systems. The airflow required per § 150 0(o) 1© must be measured by using a flow hood, flow grid, or other airflow measuring device at the fan's inlet or outlet terminals/grilles per Reference Residential Appendix RA3.7. Whole-Dwelling unit ventilation systems must be rated for sound per ASHRAE 62.2 §7.2 at no less than the minimum airflow rate required by § 150.0(o) 1C.
§ 150.0(o)2:	Field Verification and Diagnostic Testing. Whole-Dwelling Unit ventilation airflow, vented range hood airflow and sound rating, and HRV and ERV fan efficacy must be verified in accordance with Reference Residential Appendix RA3.7 Vented range hoods must be verified per Reference Residential Appendix RA3.7 4.3 to confirm if it is rated by HVI or AHAM to comply with the airflow rates and sound requirements per §150.0(o) 1G
ool and Spa Sys	stems and Equipment:
§ 110.4(a):	Certification by Manufacturers. Any pool or spa heating system or equipment must be certified to have all of the following compliance with the Appliance Efficiency Regulations and listing in MAEDbS, an on-off switch mounted outside of the heater that allows shutting off the heater without adjusting the thermostat setting, a permanent weatherproof plate or card with operating instructions, and must not use electric resistance heating.*
§ 110.4(b)1.	Piping. Any pool or spa heating system or equipment must be installed with at least 36 inches of pipe between the filter and the heater, or dedicated suction and return lines, or built-in or built-up connections to allow for future solar heating.
§ 110.4(b)2:	Covers. Outdoor pools or spas that have a heat pump or gas heater must have a cover
§ 110.4(b)3:	Directional Inlets and Time Switches for Pools. Pools must have directional inlets that adequately mix the pool water, and a time switch that will allow all pumps to be set or programmed to run only during off-peak electric demand periods.
§ 110.5:	Pilot Light. Natural gas pool and spa heaters must not have a continuously burning pilot light.
§ 150.0(p)	Pool Systems and Equipment Installation. Residential pool systems or equipment must meet the specified requirements for pump sizing, flow rate, piping, filters, and valves. *
ighting:	
§ 110.9:	<b>Lighting Controls and Components.</b> All lighting control devices and systems, ballasts, and luminaires must meet the applicable requirements of § 1109.

Lighting Controls and Components. All lighting control devices and systems, ballasts, and luminaires must meet the applicable requirements of § 110.9. \*

§ 150.0(k)1A

Luminaire Efficacy. All installed luminaires must meet the requirements in Table 150.0-A, except lighting integral to exhaust fans, kitchen range hoods, bath vanity mirrors, and garage door openers, navigation lighting less than 5 watts, and lighting internal to drawers, cabinets, and linen closets with an efficacy of at least 45 lumens per watt.

Screw based luminaires. Screw based luminaires must contain lamps that comply with Reference Joint Appendix JA8. \*

Recessed Downlight Luminaires in Ceilings. Luminaires recessed into ceilings must not contain screw based sockets, must be airtight.

Recessed Downlight Luminaires in Ceilings. Luminaires recessed into ceilings must not contain screw based sockets, must be airlight, and must be sealed with a gasket or caulk. California Electrical Code § 410.116 must also be met.

Light Sources in Enclosed or Recessed Luminaires. Lamps and other separable light sources that are not compliant with the JA8 elevated temperature requirements, including marking requirements, must not be installed in enclosed or recessed luminaires.

Blank Electrical Boxes. The number of electrical boxes that are more than five feet above the finished floor and do not contain a luminaire or other device shall be no more than the number of bedrooms. These boxes must be served by a dimmer, vacancy sensor control, low voltage wring, or fan speed control.

Lighting Integral to Exhaust Fans. Lighting integral to exhaust fans (except when installed by the manufacturer in kitchen exhaust hoods) must meet the applicable requirements of § 150.0(k).\*

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5/6/22

oject Name ew Residence		an internet				Date 10)	22/2024
vstem Name VAC JADU						Floor	Area <b>491</b>
NGINEERING CHECKS		SYSTEM LOAD					7 7 1
umber of Systems	1		COIL	COOLING P	EAK	COIL H	TG. PEAK
eating System			CFM	Sensible	Latent	CFM	Sensible
Output per System	12,000	Total Room Loads	215	4,499	314	111	4,299
Total Output (Btuh)	12,000	Return Vented Lighting		0			
Output (Btuh/sqft)	24.4	Return Air Ducts		124			200
ooling System		Return Fan	11	0			0
Output per System	12,000	Ventilation	0	0	0	0	
Total Output (Btuh)	12,000	Supply Fan	-	0			0
Total Output (Tons)	1.0	Supply Air Ducts		124			200
Total Output (Btuh/sqft)	24.4						
Total Output (sqft/Ton)	491.2	TOTAL SYSTEM LOAD	- 1	4,746	314		4,698
ir System							
CFM per System	350	HVAC EQUIPMENT SELECTION					
Airflow (cfm)	350	Heat Pump JADU		8,964	2,368		7,495
Airflow (cfm/sqft)	0.71						
Airflow (cfm/Ton)	350.0						
Outside Air (%)	0.0%	Total Adjusted System Output		8,964	2,368		7,495

HVAC SYSTEM HEATING AND COOLING LOADS SUMMARY

Outside Air (cfm/sqft)

Note: values above given at ARI conditions

HEATING SYSTEM PSYCHROMETRICS (Airstream Temperatures at Time of Heating Peak)

26 °F 67 °F 105 °F

)/69 <sup>a</sup> F	75 / 62 °F 55 / 54 °F 55 / 54 °F	- W
Outside Air O cfm	Supply Fan	55 / 54 °F
o cim	Cooling Coil 350 cfm	47 1% ROOM
75 / 62 °F	<b>→</b> 8 1 1 1 8 <b>→</b>	75/62°F I

HVAC SYSTEM HEATING AND COOLING LOADS SUMMARY 10/22/2024 New Residence HVAC 1st Floor 3,660 ENGINEERING CHECKS SYSTEM LOAD Number of Systems 
 CFM
 Sensible
 Latent
 CFM
 Sensible

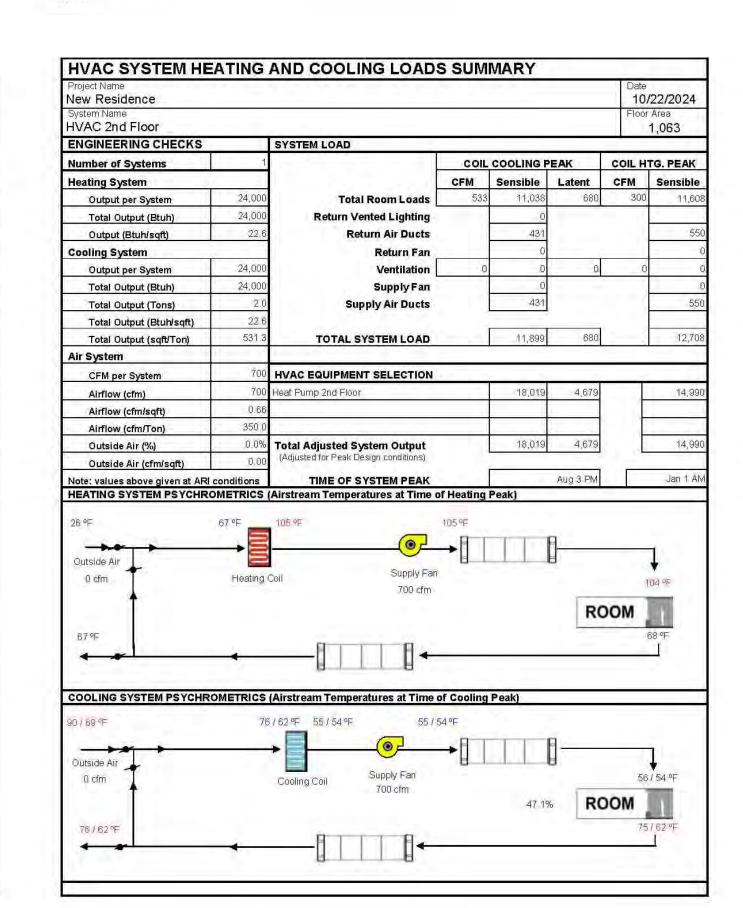
 1,737
 35,871
 2,342
 930
 35,895
 Heating System Output per System Return Vented Lighting Total Output (Btuh) **Return Air Ducts** Output (Btuh/sqft) Return Fan Cooling System Ventilation Output per System Total Output (Btuh) Supply Fan Total Output (Tons) **Supply Air Ducts** Total Output (Btuh/sqft) Total Output (sqft/Ton) Air System CFM per System 1,050 HVAC EQUIPMENT SELECTION Airflow (cfm) Airflow (cfm/sqft) Airflow (cfm/Ton) 54,000 14,162 Total Adjusted System Output Outside Air (%) Outside Air (cfm/sqft) TIME OF SYSTEM PEAK Aug 3 PM HEATING SYSTEM PSYCHROMETRICS (Airstream Temperatures at Time of Heating Peak) Outside Air Supply Fan 0 cfm Heating Coil 2,100 cfm ROOM 67°F COOLING SYSTEM PSYCHROMETRICS (Airstream Temperatures at Time of Cooling Peak) 0/69°F 76 / 62 °F 55 / 54 °F 55 / 54 °F Dutside Air 0 cfm Cooling Coil 2,100 cfm ROOM 76/62°F

#### 2022 Single-Family Residential Mandatory Requirements Summary

§ 150.0(k) 1G:	Screw based luminaires. Screw based luminaires must contain lamps that comply with Reference Joint Appendix JA8.*
§ 150.0(k) 1H:	Light Sources in Enclosed or Recessed Luminaires. Lamps and other separable light sources that are not compliant with the JA8 elevated temperature requirements, including marking requirements, must not be installed in enclosed or recessed luminaires.
§ 150.0(k) 11.	Light Sources in Drawers, Cabinets, and Linen Closets. Light sources internal to drawers, cabinetry or linen closets are not required to comply with Table 150.0-A or be controlled by vacancy sensors provided that they are rated to consume no more than 5 watts of power, emit no more than 150 lumens, and are equipped with controls that automatically turn the lighting off when the drawer, cabinet or linen closet is closed.
§ 150.0(k)2A.	Interior Switches and Controls. All forward phase cut dimmers used with LED light sources must comply with NEMA SSL 7A.
§ 150.0(k)2B	Interior Switches and Controls. Exhaust fans must be controlled separately from lighting systems. *
§ 150.0(k)2A	Accessible Controls. Lighting must have readily accessible wall-mounted controls that allow the lighting to be manually turned on and off. *
§ 150.0(k)2B	Multiple Controls. Controls must not bypass a dimmer, occupant sensor, or vacancy sensor function if the dimmer or sensor is installed to comply with § 150.0(k).
§ 150.0(k)20:	Mandatory Requirements. Lighting controls must comply with the applicable requirements of § 110.9.
§ 150.0(k)2D:	Energy Management Control Systems. An energy management control system (EMCS) may be used to comply with dimming, occupancy, and control requirements if it provides the functionality of the specified control per § 110.9 and the physical controls specified in § 150.0(k)2A.
§ 150.0(k)2E	Automatic Shutoff Controls. In bathrooms, garages, laundry rooms, utility rooms and walk-in closets, at least one installed luminaire must be controlled by an occupancy or vacancy sensor providing automatic-off functionality. Lighting inside drawers and cabinets with opaque fronts or doors must have controls that turn the light off when the drawer or door is closed.
§ 150.0(k)2F	Dimmers. Lighting in habitable spaces (e.g., living rooms, dining rooms, kitchens, and bedrooms) must have readily accessible wall-mounted dimming controls that allow the lighting to be manually adjusted up and down. Forward phase cut dimmers controlling LED light sources in these spaces must comply with NEMA SSL 7A.
§ 150,0(k)2K:	Independent controls. Integrated lighting of exhaust fans shall be controlled independently from the fans. Lighting under cabinets or shelves, lighting in display cabinets, and switched outlets must be controlled separately from ceiling installed lighting.
§ 150.0(k)3A:	Residential Outdoor Lighting. For single-family residential buildings, outdoor lighting permanently mounted to a residential building, or lother buildings on the same lot, must have a manual on/off switch and either a photocell and motion sensor or automatic time switch control) or an astronomical time clock. An energy management control system that provides the specified control functionality and meets applicable requirements may be used to meet these requirements.
§ 150.0(k)4:	Internally Illuminated address signs. Internally illuminated address signs must either comply with § 140.8 or consume no more than 5 watts of power.
§ 150.0(k)5	Residential Garages for Eight or More Vehicles. Lighting for residential parking garages for eight or more vehicles must comply with the applicable requirements for nonresidential garages in §§ 110.9, 130.0, 130.1, 130.4, 140.6, and 141.0
olar Readiness	
§ 110.10(a)1	Single-family Residences. Single-family residences located in subdivisions with 10 or more single-family residences and where the application for a tentative subdivision map for the residences has been deemed complete and approved by the enforcement agency, which do not have a photovoltaic system installed, must comply with the requirements of § 110.10(b)-(e).
§110:10(b)1A:	Minimum Solar Zone Area. The solar zone must have a minimum total area as described below. The solar zone must comply with access, pathway, smoke ventilation, and spacing requirements as specified in Title 24, Part 9 or other parts of Title 24 or in any requirements adopted by a local jurisdiction. The solar zone total area must be comprised of areas that have no dimension less than 5 feet and are no less than 80 square feet each for buildings with roof areas less than or equal to 10,000 square feet or no less than 160 square feet each for buildings with roof areas greater than 10,000 square feet. For single-family residences, the solar zone must be located on the roof or overhang of the building and have a total area no less than 250 square feet.
§ 110 10(b)2:	Azimuth. All sections of the solar zone located on steep-sloped roofs must have an azimuth between 90-300° of true north.
§ 110.10(b)3A	<b>Shading.</b> The solar zone must not contain any obstructions, including but not limited to: vents, chimneys, architectural features, and roof mounted equipment.
§ 110.10(b)3B:	Shading. Any obstruction located on the roof or any other part of the building that projects above a solar zone must be located at least twice the horizontal distance of the height difference between the highest point of the obstruction and the horizontal projection of the nearest point of the solar zone, measured in the vertical plane. *
§ 110 10(b)4	Structural Design Loads on Construction Documents. For areas of the roof designated as a solar zone, the structural design loads for roof dead load and roof live load must be clearly indicated on the construction documents.
§ 110.10(c)	Interconnection Pathways. The construction documents must indicate: a location reserved for inverters and metering equipment and a pathway reserved for routing of conduit from the solar zone to the point of interconnection with the electrical service; and for single-family residences and central water-heating systems, a pathway reserved for routing plumbing from the solar zone to the water-heating system.  Documentation. A copy of the construction documents or a comparable document indicating the information from § 110.10(b)-(c) must be
§ 110.10(d)	provided to the occupant.
§ 110.10(e)1:	Main Electrical Service Panel. The main electrical service panel must have a minimum busbar rating of 200 amps.
§ 110 10(e)2:	Main Electrical Service Panel. The main electrical service panel must have a reserved space to allow for the installation of a double pole

circuit breaker for a future solar electric installation. The reserved space must be permanently marked as "For Future Solar Electric."

10.10.0



/6/22

§ 150.0(v)

\*Exceptions may apply.

2022 Single-Family Residential Mandatory Requirements Summary

Energy Storage System (ESS) Ready. All single-family residences must meet all of the following: Either ESS-ready interconnection equipment with backed up capacity of 60 amps or more and four or more ESS supplied branch circuits, or a dedicated race way from the

main service to a subpanel that supplies the branch circuits in § 150.0(s), at least four branch circuits must be identified and have their

near the primary exit, and one circuit supplying a sleeping room receptacle outlet, main panelboard must have a minimum busbar rating of

225 amps, sufficient space must be reserved to allow future installation of a system isolation equipment/transfer switch within 3' of the ma

panelboard, with raceways installed between the panelboard and the switch location to allow the connection of backup power source.

Heat Pump Space Heater Ready. Systems using gas or propane furnaces to serve individual dwelling units must include: A dedicated

unobstructed 240V branch circuit wiring installed within 3' of the furnace with circuit conductors rated at least 30 amps with the blank co

permanently marked as "For Future 240V use." **Electric Cooktop Ready.** Systems using gas or propane cooktop to serve individual dwelling units must include: A dedicated unobstruction of the cooktop ready.

240V branch circuit wiring installed within 3' of the cooktop with circuit conductors rated at least 50 amps with the blank cover identified as

"240V ready," and a reserved main electrical service panel space to allow for the installation of a double pole circuit breaker permanently

Electric Clothes Dryer Ready, Clothes dryer locations with gas or propane plumbing to serve individual dwelling units must include. A

dedicated unobstructed 240V branch circuit wring installed within 3' of the dryer location with circuit conductors rated at least 30 amps with

the blank cover identified as "240V ready," and a reserved main electrical service panel space to allow for the installation of a double pole circuit breaker permanently marked as "For Future 240V use."

identified as "240V ready," and a reserved main electrical service panel space to allow for the installation of a double pole circuit breaker

A.P.N. 510-31-011

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DATE MAY. 28. 2020

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**ISSUE LOG** 

MAR. 19, 2024, UC. SUBMITTAL MAR 19, 2024

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BSA PLANNING SUBMITTAL NOV. 14, 2024 8

#### GENERAL PROVISIONS

- 1. THESE DRAWINGS AND SPECIFICATIONS WERE PREPARED EXCLUSIVELY FOR USE ON THIS PROJECT ONLY. THE DRAWINGS AND SPECIFICATIONS. OR PORTIONS THEREOF, SHALL NOT BE USED ON OTHER PROJECTS NOR ADDITIONS TO THIS PROJECT EXCEPT BY AGREEMENT IN WRITING AND WITH APPROPRIATE COMPENSATION TO THE ENGINEER.
- THE ENGINEER WILL MAKE PERIODIC VISITS TO THE JOBSITE TO OBSERVE THE PROGRESS OF THE WORK. THE ENGINEER SHALL NOT HAVE CONTROL OR CHARGE OF, AND SHALL NOT BE RESPONSIBLE FOR CONSTRUCTION MEANS, METHODS, TECHNIQUES, SEQUENCES OR PROCEDURES, OR SAFETY PRECAUTIONS AND PROGRAMS IN CONNECTION WITH THE WORK FOR THE ACTS OR OMISSIONS OF THE CONTRACTOR, SUBCONTRACTORS OR ANY OTHER PERSONS PERFORMING ANY OF THE WORK OR FOR THE FAILURE OF ANY OF THEM TO CARRY OUT THE WORK IN CONFORMANCE WITH THE CONTRACT DOCUMENTS.
- 3. ALL WORK SHALL BE DONE IN CONFORMANCE WITH THE LATEST EDITION OF 2022 CBC , AS WELL AS ALL APPLICABLE FEDERAL
- STATE, OSHA, COUNTY AND CITY ORDINANCES, AMENDMENTS AND RULINGS. THE CONTRACTOR SHALL GIVE ALL NOTICES NECESSARY AND INCIDENTAL TO THE LAWFUL EXECUTION OF THE WORK. THE CONTRACTOR SHALL OBTAIN ALL LICENSES AND PERMITS AS REQUIRED FOR COMPLETION OF THE WORK.
- THE STRUCTURAL SYSTEMS HAVE BEEN DESIGNED TO CARRY THE SUPERIMPOSED LIVE LOADS AS PRESCRIBED BY THE BUILDING CODE AND IN ACCORDANCE WITH STANDARD ENGINEERING PRACTICES, WITH NO SPECIAL PROVISIONS TO CARRY CONCENTRATED LOADS FROM STORAGE AND HANDLING OF CONSTRUCTION MATERIALS OR FROM OPERATION OF CONSTRUCTION EQUIPMENT. THE CONTRACTOR SHALL MAINTAIN THE INTEGRITY OF ALL SCAFFOLDING, BRACING, AND SHORING SYSTEMS AS REQUIRED FOR INSTALLATION, STABILITY AND SAFETY OF NEW WORK AS WELL AS EXISTING STRUCTURES, PIPING AND FOUNDATION SYSTEMS; AND PROVIDE PROTECTION AS REQUIRED FOR THE SAFETY OF PEDESTRIANS AND JOBSITE PERSONNEL. AT ALL TIMES, THE CONTRACTOR SHALL BE SOLELY AND COMPLETELY RESPONSIBLE FOR THE CONDITIONS OF THE JOBSITE, INCLUDING SAFETY OF PERSONS AND PROPERTY, AND SHALL RETAIN HIS OWN CONSULTANTS TO REVIEW AND INSPECT ALL JOB CONDITIONS, THE REMOVAL, CUTTING, DRILLING, ETC., OF EXISTING OR NEW WORK SHALL BE PERFORMED WITH SMALL TOOLS IN ORDER NOT TO JEOPARDIZE THE STRUCTURAL INTEGRITY OF THE BUILDING. THE CONTRACTOR SHALL PROTECT NEW AND EXISTING CONSTRUCTION FROM INCLEMENT WEATHER AND FROM PHYSICAL DAMAGE TO FINISH SURFACES AND MATERIALS.
- THE CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND COORDINATE SCOPE OF ALL WORK WITH EXISTING AND JOB CONDITIONS AND COMPARE STRUCTURAL DRAWINGS FOR COORDINATION WITH ARCHITECTURAL MECHANICAL, AND ELECTRICAL DRAWINGS BEFORE COMMENCING WORK EXISTING CONSTRUCTION SHALL BE DETERMINED BY OBSERVATION WHERE POSSIBLE OR ASSUMED WHERE NO ACCESS WAS PROVIDED. NOTIFY ARCHITECT-ENGINEER OF ANY DISCREPANCIES, SPECIAL OR CHANGED CONDITIONS BEFORE PROCEEDING WITH THE WORK. IF PREVIOUS PLACED FRAMING, ANCHOR BOLTS, PIPING OR DUCTWORK INTERFERES WITH PLACEMENT OF FRAMING, NOTIFY ENGINEER FOR CLARIFICATION OF METHODS TO MODIFY THE STRUCTURAL ASSEMBLY.
- UNLESS OTHERWISE SHOWN OR NOTED, ALL TYPICAL DETAILS SHALL BE USED WHERE APPLICABLE. IN THE EVENT CERTAIN FEATURES OF THE CONSTRUCTION ARE NOT FULLY SHOWN OR SPECIFIED, THEN THEIR CONSTRUCTION SHALL BE OF THE SAME CHARACTER AS FOR SIMILAR CONDITIONS THAT ARE CALLED FOR OR DETAILED. DETAILS TAKE PRECEDENCE OVER GENERAL SECTIONS AND DRAWINGS. ALL REQUIRED DIMENSIONS FOR CONSTRUCTION SHALL BE SUPPLIED BY THE ARCHITECTURAL OR STRUCTURAL DRAWINGS. DO NOT SCALE DRAWINGS.
- PROVIDE TESTS AND INSPECTIONS AS REQUIRED BY THE BUILDING CODE AND THE APPROVED PERMIT SET OF DRAWINGS. THE CONTRACTOR SHALL NOTIFY THE ENGINEER AND BUILDING INSPECTOR A MINIMUM OF 24 HOURS PRIOR TO TIME OF INSPECTIONS.
- PROVIDE MIX DESIGNS AND/OR BATCH PLANT RECEIPTS FOR ALL CONCRETE AND GROUT INCORPORATED IN THIS WORK.
- PROVIDE SHOP DRAWINGS FOR REINFORCING STEEL, TRUSSES, AND STRUCTURAL STEEL. ALL SUBMITTALS AND SHOP DRAWINGS SHALL BEAR THE STAMP OF THE CONTRACTOR AS EVIDENCE THAT THEY HAVE BEEN CHECKED AND COORDINATED BY THE CONTRACTOR BEFORE SUBMITTING TO ENGINEER & BUILDING DEPT. FOR REVIEW.

## <u>FOUNDATION - EARTHWORK</u>

- CONTRACTOR SHALL VERIFY DEPTHS AND LOCATION OF UTILITY SYSTEMS, PIPING, AND FOUNDATION SYSTEMS ADJACENT TO THIS WORK PRIOR TO START OF CONSTRUCTION. AREAS TO RECEIVE FILL SHALL BE EXCAVATED TO DEPTHS REQUIRED TO PROVIDE FIRM BEARING FOR THE FILLS.
- 2. ALL STUMPS, ROOTS, AND VEGETATION SHALL BE REMOVED FROM THE SOIL TO A DEPTH OF AT LEAST 12" BELOW THE GROUND SURFACE IN THE AREA OCCUPIED BY THE BUILDING, PAVING, AND WALKS. ALI WOOD CONCRETE FORMS SHALL BE REMOVED FROM THE SITE. BEFORE COMPLETION OF WORK. ALL LOOSE OR CASUAL WOOD SHALL BE REMOVED FROM DIRECT CONTACT WITH THE GROUND UNDER THE BUILDING
- ALL MATERIALS RESULTING FROM DEMOLITION, EXCAVATION AND EARTHWORK SHALL BE REMOVED AND LAWFULLY DISPOSED OF OFF THE
- FILL MATERIALS SHALL BE WITH IMPORTED MATERIALS THAT HAVE PRIOR APPROVAL BASED UPON SAMPLES PROVIDED BY THE CONTRACTOR. SELECTED SITE SOIL MATERIALS SHALL BE UNIFORMLY GRADED, FREE OF VEGETABLE MATTER, ROCK FRAGMENTS GREATER THAN 3 INCHES IN DIAMETER, AND OTHER DELEGATED DELETERIOUS MATERIAL
- FILL MATERIALS SHALL BE PLACED IN 6 INCH LAYERS WITH SUFFICIENT MOISTURE CONTENT TO BE COMPACTED TO 95% OF MAXIMUM DRY DENSITY BY ASTM D1557 TEST METHODS. USE 90% COMPACTING AT AREAS MORE THAN 5 FEET FROM BUILDINGS THAT ARE NOT TO RECEIVE PAVING. BACK FILL MATERIALS SHALL NOT BE PLACED AGAINST WALLS UNTIL THE WALLS AND THEIR BRACING SLABS HAVE DEVELOPED THEIR DESIGN
- PROVIDE PERFORATED DRAIN TILE WITH DRAIN ROCK TO WITHIN 12" OF THE TOP OF FINISHED GRADE BEHIND ALL RETAINING WALLS AND WHERE DETAILED ON DRAWINGS. DRAIN PIPE SHALL BE PITCHED TO DRAIN TO A SETTLEMENT PIT BEFORE TIED TO A SEWER SYSTEM. WHERE CALLED FOR ON DRAWINGS, PROVIDE WEEP HOLES AT 8'-0" MAXIMUM SPACING.
- SOIL CONDITIONS SHALL BE REEVALUATED AT THE TIME OF EXCAVATION AS TO THEIR CONFORMANCE WITH DESIGN CRITERIA. THE FOUNDATION HAS BEEN DESIGNED PER GEOTECHNICAL INVESTIGATION BY:

ARA ENGINEERING COMPANY, INC. 5063 NERISSA WAY, SAN JOSE, CA 95124 PHONE 415-570-1004 DATE: JUNE 14, 2022 JOB: 286-1, LH-2528

## GYPSUM WALL BOARD

GYPSUM WALL BOARD AT WALLS AND CEILINGS SHALL BE NAILED WITH COOLER NAILS TO ALL STUDS, JOISTS, BLOCKING AND TOP PLATES. USE 5d @ 7" O.C. WITH 1/2" WALL BOARD, AND 6d @ 6" O.C. WITH 5/8" WALL BOARD. WIRE LATH AT STUCCO SHALL BE NAILED OR STAPLED AT 6" O.C. TO ALL STUDS, BLOCKING, TOP & BOTT. PLATES. GYPSUM SHEATHING BOARD SHALL BE NAILED @ 7" O.C. TO ALL STUDS, BLOCKING, TOP & BOT. PLATES. SIZE OF FASTENERS SHALL COMPLY WITH TABLES 2505 AND 2506 CBC 2507,

#### **CONCRETE FORMWORK**

- FORMS SHALL BE CONSTRUCTED TO PROVIDE THE SHAPES, FORMS, LINES, AND GRADES AS SHOWN OR INFERRED ON THE DRAWINGS. THE FORMWORK SHALL PRODUCE FINISH CONCRETE SURFACES WITHIN THE TOLERANCE LIMITS OF ACI 347. FORMWORK SHALL BE DESIGNED AND CONSTRUCTED IN ACCORDANCE WITH PART 1926, SUBPART 'Q' OF THE FEDERAL CONSTRUCTION SAFETY AND HEALTH REGLATIONS AND ACI 347. THE CONTRACTOR SHALL RETAIN A LICENSED PROFESSIONAL ENGINEER TO DESIGN AND SUPERVISE THE INSTALLATION AND REMOVAL OF THE
- PROVIDE VENTILATION LOUVERS AND ACCESS SYSTEMS TO ALL CRAWL SPACES. PROVIDE SLEEVES FOR ALL PIPES. CONDUITS AND DUCTS PASSING THRU FOUNDATION AND STRUCTURAL ASSEMBLIES. INSTALL AND SECURELY TIE IN PLACE ALL INSERTS, BOLTS, ANCHORS, AND SLEEVES PRIOR TO PLACEMENT OF CONCRETE.
- APPLY FORM COATING AND COMPOUNDS WITH APPROVED MANUFACTURER'S DIRECTIONS PRIOR TO PLACEMENT OF REINFORCING STEEL. PRIOR TO PLACEMENT OF CONCRETE, REMOVE DIRT CHIPS, SAWDUST, ETC. FROM THE FORMS.
- FORMS ON VERICAL SURFACES SHALL NOT BE REMOVED UNTIL 72 HOURS AFTER PLACEMENT OF CONCRETE. FORMS FOR HORIZONTAL SURFACES SHALL BE LEFT IN PLACE FOR 21 DAYS. ALL FORMWORK SHALL BE REMOVED WITHOUT DAMAGE TO THE CONCRETE. AFTER STRIPPING OF FORMS, PROTECT CONCRETE FROM DAMAGE FROM STAINING, WEATHER, TRAFFIC, OR OTHER CAUSES.
- ALL EXPOSED CONCRETE SURFACES SHALL HAVE SMOOTH SURFACES AS PROVIDED BY THE FORMS WITHOUT SEAMS, JOINSTS, UNEVEN TEXTURES, PROJECTIONS, FINS, OFFSETS, CORNER IRREGULARITIES, STAINS, OR OTHER VISUAL DEFORMITIES. ALL EXPOSED CONCRETE SURFACE IRREGULARITIES SHALL BE CORRECTED TO THE SATISFACTION OF THE ENGINEER AND OWNER.

#### **CONCRETE WORK**

AIR CONTENT

CONCRETE SHALL BE PROPORTIONED WITH CEMENT HAVING A MIN. 5 1/2 SACKS PER CU. YD , HARDROCK AGGREGATES, AND ADMIXTURES TO PROVIDE STRENGTHS AS SHOWN BELOW. THE REQUIREMENTS FROM SECTION 1903, 1904 CBC SHALL BE FOLLOWED FOR WATER-CEMENT RATIOS AND

## DO NOT USE PEA GRAVEL

<u>LOCATION</u>	28 DAY STRENGTH		<u>AGGREGATE</u>	<u>SLUMP</u>
SLAB-ON-GRADE	2,500	P.S.I.	3/4"	3"
FOUNDATIONS	2,500	P.S.I.	3/4"	4"
WALLS < 10'-0"	2,500	P.S.I.	3/4"	4"
ALL WALLS	3,000	P.S.I.	3/4"	4"
COLUMNS	3,000	P.S.I.	3/4"	4"
SUSPENDED SLAB	3,000	P.S.I.	3/4"	4"
GRADE BEAM & PIER	3,000	P.S.I.	3/4"	4"

- ALL EXCAVATIONS, FORMS, AND REINFORCING STEEL SHALL BE INSPECTED BY THE BUILDING INSPECTOR AND ENGINEER PRIOR TO PLACEMENT OF CONCRETE.
- PROTECT FORMS, ANCHOR BOLTS, REINFORCING STEEL AND OTHER ITEMS EMBEDDED IN THE CONCRETE FROM DISPLACEMENT OR DAMAGE UNTIL THE CONCRETE HAS FULLY CURED. ALL ANCHOR BOLTS AND "HOLDOWN" BOLTS SHALL BE TEMPLATED IN PRIOR TO INSPECTION BY THE
- CONCRETE SHALL BE MIXED AND PLACED IN ACCORDANCE WITH SECTION 1705.3 OF THE CA. BUILDING CODE, ACI 304, ASTM C94 AND THE SPECIFICATIONS. ONCE PLACING OF CONCRETE HAS STARTED, THE WORK SHALL BE CARRIED ON AS ONE CONTINUOUS OPERATION UNTIL THE SECTION BETWEEN PREDETERMINED AND APPROVED CONSTRUCTION JOINTS IS COMPLETE.
- CONCRETE SLABS SHALL BE FINISHED TO A TRUE SMOOTH SURFACE WITHOUT DEVIATIONS IN EXCESS OF 1/8" FROM A TEN FOOT STRAIGHT EDGE. SLABS SHALL BE KEPT COVERED AND MOIST WITH POLYETHYLENE OR OTHER SUITABLE MATERIAL FOR 14 DAYS AFTER PLACEMENT OF CONCRETE.
- SLABS ON GRADE SHALL BE POURED WITH CONSTRUCTION JOINTS, EACH WAY, DIVIDING THE SLAB INTO AREAS NOT EXCEEDING 100 SQ. FT., WITH NO PORTION OF THE SLAB GREATER THAN 15 LINEAR FT. CONTROL JOINTS SHALL BE PLACED IN LOCATIONS MIDWAY BETWEEN CONSTRUCTION JOINTS, EACH DIRECTION.
- CONCRETE NOT MEETING THE SPECIFIED STRENGTH OR NOT PROVIDING A UNIFORM PLANE WITHOUT ROCK POCKETS, RIPPLES, ETC. SHALL BE REPAIRED AND/OR REPLACED TO THE SATISFACTION OF THE ENGINEER.

## REINFORCING STEEL ( REBAR )

- REINFORCING STEEL (REBAR) SHALL BE GRADE 60, IN ACCORDANCE WITH ASTM A-615. PROVIDE SUITABLE PROPRIETARY DEVICES TO HOLD REBAR IN ITS PROPER LOCATION. REBAR SHALL BE KEPT 3" FROM EARTH IN OPEN EXCAVATIONS AND 2" CLEAR OF CONCRETE FORMS WHEN BACKFILLED WITH EARTH. STIRRUPS, TIES, AND SPIRALS OF BEAMS AND COLUMNS SHALL BE 1-1/2" CLEAR OF FORMS. REBAR SHALL BE 1 1/2" CLEAR OF EXTERIOR WALL FORMS. MAINTAIN A MINIMUM OF 3/4" CLEAR OF CONCRETE SURFACES IN OTHER LOCATIONS OR AS DETAILED.
- REBAR SHALL BE PLACE IN ACCORDANCE WITH C.R.S.I. "MANUAL OF STANDARD PRACTICE" AND WITHIN THE SETTING TOLERANCES AND OTHER REQUIREMENTS OF SECTION 1907 OF THE BUILDING CODE. REBAR SHALL BE LAPPED 48 BAR DIAMETERS IN CONCRETE MEMBERS AND 48 BAR DIAMETERS IN CONCRETE BLOCK (CMU) AND MASONRY ASSEMBLIES. UNLESS DETAILED OTHERWISE, PROVIDE STANDARD 90 DEGREE HOOKS FOR ALL HORIZONTAL BARS AT ALL CORNERS AND INTERSECTIONS OF WALLS, FOUNDATIONS AND CURBS. STAGGER SPLICES OF REBAR WHEREVER POSSIBLE, TO CONFORM WITH THE MAINTAINING OF STRUCTURAL CONTINUITY.
- WELDED WIRE FABRIC SHALL CONFORM TO ASTM 185. THE FABRIC SHALL BE LAPPED A MIN. OF 8" AND WIRE TIED AT 12" APART ALONG THE SPLICE. THE FABRIC SHALL BE LIFTED TO 1 1/2" FROM THE TOP OF THE SLAB AT TIME OF FINAL PLACEMENT AND SCREEDING OF CONCRETE.
- TOP BARS OF BEAMS, JOISTS, AND SLABS SHALL BE LAP SPLICED AT MIDPOINT BETWEEN SUPPORTS, UNLESS DETAILED OTHERWISE. BOTTOM REBAR SHALL BE LAP SPLICED AT POINTS OF SUPPORT. UNLESS DETAILED OTHERWISE. STAGGER SPLICES OF ADJACENT BARS. STAGGER STANDARD HOOK LOCATIONS OF ADJACENT TIES AND STIRRUPS.
- 5. AT TIME OF POURING OF CONCRETE, THE REBAR SHALL BE FREE FROM LOOSE RUST, OR ANY OTHER COATING OR MATERIALS WHICH WILL DESTROY OR REDUCE BOND BETWEEN THE CONCRETE AND REBAR. REBAR SHALL NOT BE BENT NOR STRAIGHTENED IN A MANNER WHICH WILL DAMAGE THE MATERIAL. THE REBAR SHALL BE ACCURATELY PLACED AND POSITIVELY SECURED IN DESIGNATED LOCATIONS AGAINST DISPLACEMENT BY CONSTRUCTION AND CONCRETE PLACEMENT OPERATIONS.

FIELD TREATMENT: FIELD CUT ENDS, NOTCHES, AND DRILLED HOLES OF PRESERVATIVE-TREATED WOOD SHALL BE TREATED IN FIELD IN ACCORDANCE WITH AWPA M4, PER 2022 CALIFORNIA RESIDENTIAL CODE SECTION R 317.1.1

EPOXY GROUTING WILL BE USED IN ALL LOCATIONS WHERE EITHER

EXISTING CONCRETE AS TENSION ELEMENTS.

BLOWN OUT WITH OIL-FREE COMPRESSED AIR.

THE HOLE BEFORE IT HAS SET.

"SET-3G22-N" ICC-ES AC 308

FNGINFER FOR APPROVAL

DEPARTMENT

CBC 1705.2

1705.12.2 OF 2022 CBC.

FULLY THREADED RODS OR REBAR ARE BEING EMBEDDED INTO THE

HOLES SHALL BE DRILLED WITH A ROTARY HAMMER. SIZES SHALL BE

1/8 IN DIAMETER LARGER THAN THE ROD OR REBAR. IMMEDIATELY

BEFORE APPLYING EPOXY GROUT, HOLES SHALL BE REAMED WITH A

EPOXY GROUT FOR DOWNWARD HOLES MAY BE EITHER NON-SAG OR

LIQUID TYPE, NORMAL SET. HORIZONTAL OR OVERHEAD HOLES SHALL

BE NON-SAG TYPE, NORMAL SET. LIQUID EPOXY SHALL BE POURED

GROUT SHALL BE INJECTED WITH A CAULKING GUN WITH AN EXTENSION

SLOWLY INTO THE HOLE TO AVOID TRAPPED AIR. NON-SAG EPOXY

NOZZLE FITTED TO REACH THE END OF THE HOLE. IN BOTH TYPES,

REBAR OF THREADED RODS SHALL BE SLOWLY INSERTEDND TURNED

ALTERNATIVES WILL BE CONSIDERED, IF REQUESTED, PROVIDED THE

THE DOWEL WHEN INSTALLING. REMOVE ANY EPOXY GROUT AROUND

A MINIMUM OF ONE ROTATION. DO NOT PULL UP AND DOWN ON

THE CONTRACTOR SHALL MIX RESIN AND HARDENER PER THE

MANUFACTURER'S SPECIFICATIONS. **EPOXY GROUT SHALL BE** 

REQUESTOR SUBMITS ADEQUATE SPECIFICATIONS TO THIS

<u>SPECIAL NOTES</u> (IF COUNTY REQUIRED)

1. SPECIAL INSPECT TO COMPLY WITH SECTION 1705.1 OF 2022 CBC

2. ALL SHOP DRAWINGS AND CALCULATIONS SHALL BE SUBMITTED TO

BUILDING DEPARTMENT FOR APPROVAL PRIOR TO INSPECTION.

DIAPHRAGM NAILING AND ALL STRAPS AND HOLD-DOWNS PER

3. SPECIAL INSPECTION IS REQUIRED FOR WELDING PER 2022

4. SPECIAL INSPECTION IS REQUIRED FOR SHEAR WALL AND

5. STRUCTURAL OBSERVATION IS REQUIRED FOR CONCRETE

7. SPECIAL INSPECTION IS REQUIRED FOR EPOXY GROUT OF

ANCHOR BOLT INSTALLATIONS PER ICC-ES REPORT

8. SPECIAL INSPECTION IS REQUIRED FOR INSTALLATION OF

9. SPECIAL INSPECTION IS REQUIRED FOR INSTALLATION OF

SIZE AND PLACEMENT AND ALL CONCRETE WORKS.

11. ENGINEER OBSERVATION FOR FOUNDATION EXCAVATION BY

10. STRUCTURAL OBSERVATION IS REQUIRED FOR REINFORCEMENT

12. STRUCTURAL OBSERVATION IS REQUIRED FOR WOOD FRAMED

13. STRUCTURAL OBSERVATION IS REQUIRED FOR MAIN BEAMS,

WALLS PRIOR TO COVERING OR INSTALLING WALL FINISHING

BEAM PER PLAN

<u>AT WOOD FLOOR - TYPE "E"</u>

POST MIN. SAME

SIMPSON STRONGWALLS PER ICC-ES REPORT

GREATER THAN 2500 PSI PER 1705.3

ANCHOR BOLTS PER CBC 1705.12.2

GEO CONSULTANT IF THERE IS ONE

FLOOR JOISTS, ROOF RAFTERS

<u>AT WOOD FLOOR - TYPE "F"</u>

BEAM PER PĻAN

ANCHOR BOLTS ( A.B.

5/8"øx12" LONG

(IN NEW

CÒNCRETE)

8" O.C.

12" O.C.

16" O.C.

1'-6" O.C.

2'-0" O.C.

2'-8" O.C.

3'-6" O.C.

A.B. PER MANUF

5/8"øx12" LONG

(IN EXISTING

CONCRETE)

NOT APPLICABLE

9" O.C.

12" O.C.

1'-2" O.C.

1'-6" O.C.

2'-0" O.C.

2'-10" O.C.

A.B. PER MANUF.

PER PLAN

REINFORCEMENT PLACEMENT IF CITY / COUNTY REQUIRED

6. SPECIAL INSPECTION IS REQUIRED FOR CONCRETE GRADE BEAM

AND PIERS AND ALL CONCRETE REQUIRING DESIGN STRENGTH

ENGINEER'S INSPECTION REPORT SHALL BE SUBMITTED TO BUILDING

THE HOLE SHOULD BE FILLED APPROXIMATELY HALF FULL.

CIRCULAR WIRE BRUSH ATTACHED TO A DRILL MOTOR AND THEN

#### **WOOD FRAMING** EPOXY GROUTING

- HORIZONTAL WOOD FRAMING SHALL BE DOUGLAS FIR, NO. 1, UNLESS OTHERWISE NOTED. HORIZONTAL FRAMING OF LAMINATED JOISTS OR MEMBERS 4" OR THICKER, SHALL BE DOUGLAS FIR, NO. 1, UNLESS OTHERWISE NOTED. ALL EXPOSED WOOD SHALL BE SELECTED FOR APPEARANCE AND SANDED. PROVIDE DOUBLE JOISTS UNDER WALLS PARALLEL TO JOISTS. AND SOLID BLOCKING FOR WALLS PERPENDICULAR TO JOISTS. PROVIDE SOLID BLOCKING AT ALL POINTS OF SUPPORT OF HORIZONTAL MEMBERS. BRIDGING FOR JOISTS SHALL BE SPACED NO MORE THAN 8'-0" ON CENTERS OR 8' FROM POINTS OF SUPPORT, UNLESS OTHERWISE DETAILED. BRIDGING AT RAFTERS MAY BE 10'-0" ON CENTERS. MAXIMUM MOISTURE CONTENT AT TIME OF INSTALLATION BE 19% REGARDLESS OF MOISTURE CONTENT AT TIME OF MANUFACTURE SEE N.D.S. 4.1.4 IF MOISTURE CONTENT IN USE MORE THAN 19% NOTIFY ENGINEER TO USE USE WET SERVICE FACTOR " CM".
- VERTICAL WOOD STUD FRAMING SHALL BE STUD GRADE OR DOUGLAS FIR NO. 2, U.O.N. ALL POSTS SHALL BE DOUGLAS FIR NO. 1 EXPOSED MULLIONS AND POSTS IN OUTSIDE WALLS SHALL BE FREE OF BOXHEART. PROVIDE CRIPPLES, POSTS, OR BUILT-UP STUD COLUMNS AT BEARING OF BEAMS, HEADERS, OR BUILT-UP SECTIONS. WALL FRAMING SHALL COMPLY WITH SECTION 2308 OF THE 2022 CBC. PROVIDE BACKING FOR ALL FINISH SURFACES, EDGES OF MATERIAL, TRIM, AS WELL AS SUPPORT OF EQUIPMENT AND CABINETS.
  MAXIMUM MOISTURE CONTENT AT TIME OF INSTALLATION BE 19% REGARDLESS
  OF MOISTURE CONTENT AT TIME OF MANUFACTURE SEE N.D.S. 4.1.4 IF MOISTURE CONTENT IN USE MORE THAN 19% NOTIFY ENGINEER TO USE USE WET SERVICE FACTOR " CM".
- SILL PLATES BEARING ON CONCRETE OR CONCRETE BLOCK SHALL BE <del>FOUNDATION GRADE REDWOOD OR</del> PRESSURE—TREATED DOUGLAS FIR. PROVIDE ANCHOR BOLTS AS DETAILED ((USE 3"x3"x1/4" PLATE WASHER PER 2022 CBC 2304.3.4.2)) WITH A MINIMUM OF 2 BOLTS PER PIECE. AND SPACE NOT FURTHER THAN 4" FROM THE END OF ANY PLATE. BOLTS SHALL CONFORM TO ASTM A307.
- ALL FRAMING MEMBERS EXPOSED TO WEATHER, FROM ANY DIRECTION, SHALL BE PRESSURE TREATED.
- MINIMUM NAILING AND FASTENING SHALL COMPLY WITH TABLE 2304.10.2 OF THE 2022 CBC. PROVIDE WASHERS FOR ALL BOLTS, LAG BOLTS, AND NUTS BEARING AGAINST WOOD. ALL NAILS SHALL BE COMMON NAILS. PREDRILL WHERE NECESSARY TO PREVENT SPLITTING OF WOOD AND FOR INSTALLATION OF WOOD SCREWS AND LAG SCREWS. METAL FRAMING DEVICES AND STEEL FRAMING CONNECTIONS SHALL HAVE PRIOR APPROVAL BY THE I.C.C. THEY SHALL BE MANUFACTURED BY SIMPSON CO. OR BE FROM AN APPROVED EQUAL. JOSTS HANGERS SHALL BE U SERIES UNLESS SPECIFIED ON PLANS. ALL POSTS SHALL HAVE A POST BASE AND CAP CONNECTOR, BC OR PB, PC OR CC, RESPECTIVELY, UNLESS OTHERWISE SPECIFIED ON PLANS. BOLTS AT EXPOSED LOCATIONS SHALL EXTEND NO FURTHER THAN 3/4" BEYOND NUT. ALL FASTENERS AND FRAMING DEVICES EXPOSED TO WEATHER SHALL BE GALVANIZED.
- PROVIDE FIRE AND DRAFT STOPS AS PER SECTION 718 OF THE 2022 CBC
- ALL PLYWOOD SHEATHING SHALL BE C-D GRADE WITH EXTERIOR GLUE, WITH THICKNESS SPECIFIED ON PLANS, AND SHALL HAVE AN A.P.A. SPAN IDENTIFICATION INDEX STAMP. PLYWOOD FOR FLOORS SHALL BE TONGUE & GROOVE , UNLESS ALL EDGES ARE FIRMLY BLOCKED, U.O.N. MINIMUM NAILING SHALL BE 6" O.C. AT ALL EDGES. OR AS NOTED: AND 12" INTERMEDIATE (FIELD) NAILING, U.O.N. VERIFY NAILING ON PLANS SPECIFICALLY. FACE GRAIN OF TYPICAL 4'x8' PLYWOOD PANELS OF ROOF & FLOOR SHEATHING SHALL RUN PERPENDICULAR TO THE JOISTS RAFTERS, OR TRUSSES. FACE GRAIN OF WALL PLYWOOD MAY BE PLACED PARALLEL WITH THE STUDS, ALTHOUGH PREFERRABLE ORIENTATION IS PERPENDICULAR TO THE STUDS. PLACEMENT OF PLYWOOD PANELS SHAL BE IN A STAGGERED JOINT PATTERN AS DETAILED, U.O.N. MINIMUM NAIL SIZES FOR PLYWOOD SHALL BE 8d FOR 3/8" THICK PLYWOOD, AND 10d FOR 1/2" AND GREATER THICKNESŚ PLYWOOD. MINIMUM PLYWOOD PANEĹ NOT LESS THAN 24"
- ALL FASTENERS, CLIPS, NAILS, BOLTS, SCREWS ATTACHED OR OTHERWISE IN CONTACT WITH PRESSURE TREATED FRAMING SHALL BE HOT DIPPED GALVANIZED STEEL, STAINLESS STEEL, SILICON BRONZE OR COPPER

- 1. ALL WORK SHALL BE PERFORMED IN ACCORDANCE WITH THE AISC "SPECIFICATIONS FOR DESIGN, FABRICATION, AND ERECTION OF STRUCTURAL STEEL FOR BUILDINGS."
- 2. ALL MISCELLANEOUS STEEL SHALL CONFORM WITH ASTM A36, U.O.N. 3. STEEL PIPE SHALL CONFORM WITH ASTM A 501.
- 4. STRUCTURAL TUBING SHALL CONFORM WITH ASTM A500 (Fy = 46 K.S.I.) ALL STEEL-TO-STEEL BOLTS SHALL CONFORM WITH ASTM A325N, U.O.N. 5. PAINT STEEL (EXCEPT PORTIONS TO BE ENCASED IN CONCRETE)
- WITH ONE COAT OF RED LEAD OR EQUAL. 6. ALL WELDING SHALL BE IN CONFORMANCE WITH THE AMERICAN WELDING SOCIETY, BY WELDERS HAVING A CURRENT CERTIFICATION; AND USING E70XX ELECTRODES. WELDING OF REINFORCING BARS SHALL BE DONE WITH LOW HYDROGEN ELECTRODES AND PREHEATING BETWEEN 200°-400° F.
- 7. PER AISC "SEISMIC" THE FILLER METAL FOR WELDS SHOULD BE SPECIFIED TO HAVE CHARPY V-NOTCH TOUGHNESS OF 20 FT-Ibs AT MINUS 20 DEGREES F, AND WELDING SHOULD BE REQUIRED TO BE PERFORMED USING A WELDING PROCEDURE SPECIFICATION (WPS) AS REQUIRED BY AWS D1.1 AND APPROVED BY THE ENGINEER OF RECORD.

## GLUED LAMINATED TIMBER BEAMS (GLULAMS)

1. GLULAM BEAMS SHALL BE MANUFACTURED IN ACCORDANCE WITH CS253,

AITC 117 AND CBC STANDARD 2312. ALL BEAMS SHALL BE ARCHITECTURAL GRADE, 24F-V8. THEY SHALL BE SEALED WITH PENETRATING SEALER AND INDIVIDUALLY WRAPPED. "  $E = 1.8 \times 10^6$  psi ", " Fb = 2400 psi ", " Fv = 190 psi

ABBR.

MATL

"STRUCT I"

"STRUCT I"

"STRUCT I"

1/2" PLYWOOD

1/2" PLYWOOD

1/2" PLYWOOD

1/2" PLYWOOD

STAGG'D. IN ALL CASES

SHEARWALL SCHEDULE

"SIMPSON" SHR. WALL

PLYWOOD

" PLYWOOD

\*1 \*2 (2) (2)

k1 \*2 <2>

\*2 <4>

\*2 (3) (3

\*2 (4) (4)

2. GLU-LAM BEAM INSPECTION CERTIFICATION SHALL BE SUBMITTED TO FIELD INSPECTOR PRIOR TO COMPLETION OF FRAME INSPECTION FOR ALL GLULAM BEAMS.

VALUE

1416

1104

846.4

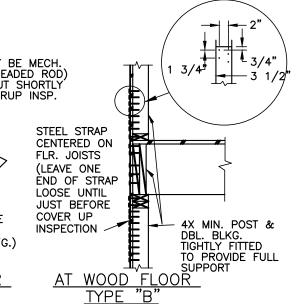
552

423

285

\*1. PLYWD. JOINT AND MUDSILL PLATE NAILING IS

#### - ANCHOR (MAY BE MECH. BOLT OR THREADED ROD) RETIGHTEN NUT SHORTLY BEFORE COVERUP INSP STEEL STRAP CENTERED ON FLR. JOISTS (LEAVE ONE **ÈND OF STRAF** LOOSE UNTIL JUST BEFORE COVER UP S.BLK'G. SAME INSPECTION -SIZE AS WALL (MIN. 4x BLK'G.)



FRAMING MEMBERS

END

STUD

3x STUD

3x STUD

3x STUD

2x PL. | 2x STUD | 2x STUD

PER MANUF. | PER MANUF. | PER MANUF.

3x STUD 3x STUD

3x STUD 3x STUD

3x STUD | 3x STUD

TOP

& BOT.

PLATES

3x PL.

3x PL.

3x PL.

3x PL.

3x PL.

3x PL.

\_ MUD SILL SHOULD BE 3>

EDGE STUD

STAGGE'D

STAGGE'D

STAGGE'

N/A

N/A

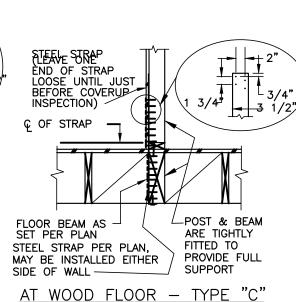
N/A

20d AT 3" O.C.

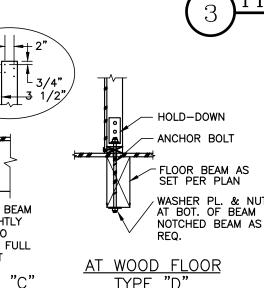
16d AT 2.5" O.C.

16d AT 4" O.C.

PER MANUF.



COUNTER



BEAM PER PLAN

<u> WOOD FLOOR — TYPE "G'</u>

TYPE "D" NAILING OF SILL PLATE (P.N.) ADJOINING 16d OR 20d NAILS 1/4"øx6" LAGS TOP PLATE CONN TO SOLID BLOCK'G (2x SILL PLATE)  $(3\times SILL PLATE)$ OR JOIST 1/4"x6" LAGS HSLQ AT 16" O.C. AT 2.0" O.C. STAGG'D. 1/4"x6" LAGS HSLQ AT 16" O.C. AT 2.75" O.C. STAGG'D. A35 AT 4.5" O.C. 1/4"x6" LAGS AT 3.5" O.C. STAGG'D. (3-A35 PER 16" BAY) 1/4"x6" LAGS A35 AT 4.5" O.C.

> 1/4"x6" LAGS A35 AT 12" O.C. AT 7" O.C. STAGG'D 1/4"x6" LAGS A35 AT 16" O.C. AT 9" O.C. STAGG'D. OR L90 AT 24" O.C. PER MANUF. A35 AT 5" O.C.

(3-A35 PER 16" BAY)

A35 AT 8" O.C.

3. USE BPS 5/8-3 PL. WASHER AT ALL ANCHOR BOLTS, U.O.N. 4. PANEL JOINTS OF ALL DBL. SIDED SHEAR WALLS SHALL BE

\*2. USE 10d AT 12" O.C. TYPICAL AT FIELD OFFSET TO FALL ON 3x STUD. Nails and any other fasteners connecting to P.T. members (mudsills) and plate washers for P.T. mudsills shall be hot—dipped zinc galvanized, stainless steel, silicon bronze or copper. (Simpson BP are HDG or ZMAX).

# SIMPSON STRONG WALL

1. ICC - ES ESR-1679 AND ICC - ES ESR-2652

AT 4.5" O.C. STAGG'D.

1/4"x6" LAGS

AT 5.5" O.C. STAGG'D.

SPECIFICATION OF SIMPSON STRONG WALL SHALL BE SUBMITTED TO BUILDING DEPARTMENT FOR APPROVAL PRIOR TO INSPECTION

## <u>PARALLAM BEAMS (PSL)</u>

1. ALL WORKS BE PERFORMED IN ACCORDANCE WITH "ICC - ES REPORT ESR - 1387" "E =  $2.0 \times 10^6$  PSI, Fb = 2900 PSI, Fv = 290 PSI **WIND DESIGN CRITERIA** WIND SPEED =

REVISIONS

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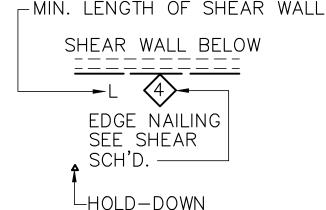
10-18-24

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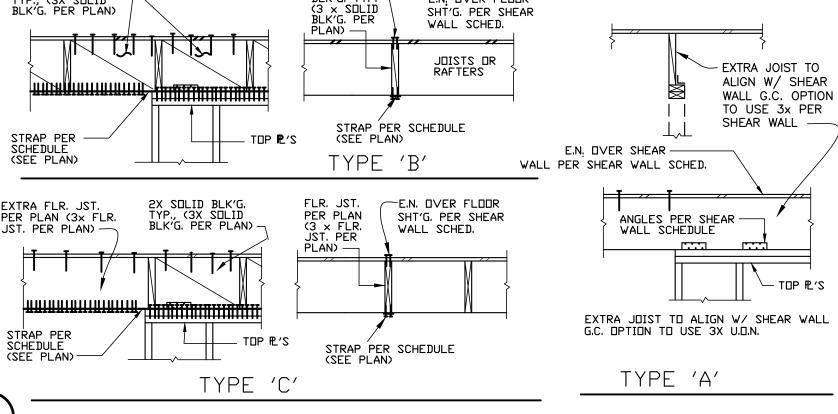
WIND OCCUPANCY CATEGORY: II WIND IMPORTANCE FACTOR (I) = 1.0EXPOSURE =

### INTERNAL COEFFICIENT = 0.18 SEISMIC DESIGN CRITERIA

SITE CLASS = DSDC = ESs = 2.546g Fa = 1.00 SDs = 1.698gS1 = 0.886g  $F_V = NULL$  SD1 = 1.004SEISMIC OCCUPANCY CATEGORY: II SEISMIC IMPORTANCE FACTOR (I) = 1.0STRUCTURAL SYSTEMS (R) = 6.5



-HOLD-DOWN SHEAR WALL ABV.



−E.N. DVER FLOOR

DO NOT SCALE THESE DRAWINGS FOR DIMENSIONS

= 300 PCF

= 0.30

= 20 PSF

= 10 PSF

= 40 PSF

WALL BELOW

WALL ABOVE

WALL UNDER

2× SOLID

FOUNDATION DESIGN CRITERIA

MIN. DEPTH = 24" LOWEST ADJACENT

SEE SOIL REPOST FOR INFO. NOT NOTED

ATTIC WITH LIMITED STORAGE = 20 PSF

POST ABOVE & BELOW

PER PLAN TYP.

UPPER LEVEL HOLDOWNS

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\_\_\_\_\_

■ POST BELOW

O POST ABOVE

PASSIVE PRESSURE

MIN. WIDTH = 18"

SKIN FRICTION

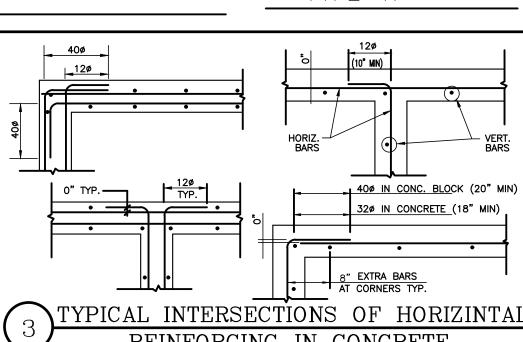
LIVE LOAD

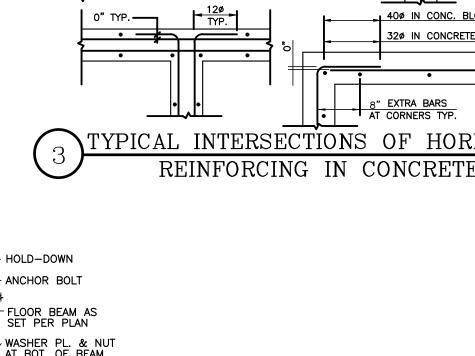
ROOF

ATTIC

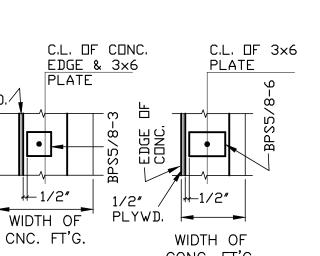
FLOOR

ALLOWABLE SOIL BEARING PRESSURE = 1800 PSF





PLYWD.



CONC. FT'G. TYPICAL BP PLATE LOCATION

DWG NO.

NGINEER

CHECKED

C46161

24-026N

OCT 24

≥ EX. 12/31/24

THE CONTRACTOR SHALL VERIFY ALL CONDITIONS IN THE FIELD AND REPORT ANY DISCREPANCIES TO THIS ENGINEER PRIOR TO WORKING AFFECTED AREAS

E.N.

FACH SIDE

10d AT 3" O.C.

EACH SIDE

10d AT 4" O.C.

10d AT 2" O.C.

10d AT 3" O.C.

10d AT 4" O.C.

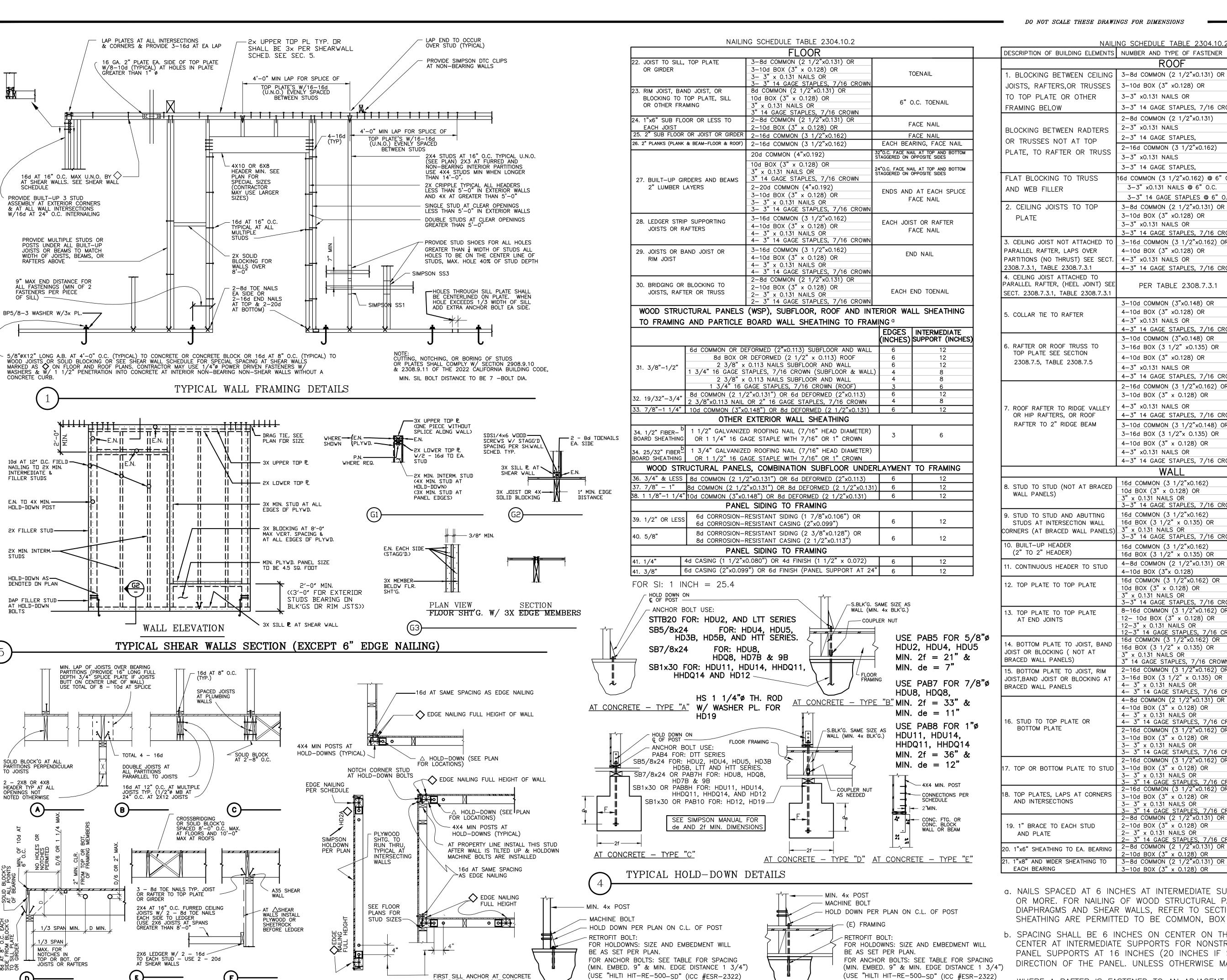
10d AT 6" O.C.

PER MANUF.

EACH SIDE

EDGE NAILING TO

STUDS, PLATES SOLID BLOCK'G



(USE "HILTI HIT-RE-500-SD" (ICC #ESR-2322)

OR "SET-XP" SIMPSON (ICC-ÈS ESR 2508))

N.T.S.

TYPICAL HOLD-DOWN AND

ANCHOR BOLTS RETROFIT DETAIL

 $(2B)_{\overline{\mathsf{SCALE}_{\mathsf{I}}}}$ 

N.T.S.

OR "SET-XP" SIMPSON (ICC-ÈS ESR 2508))

TYPICAL HOLD-DOWN AND

ANCHOR BOLTS RETROFIT DETAIL

THE CONTRACTOR SHALL VERIFY ALL CONDITIONS IN THE FIELD AND REPORT ANY DISCREPANCIES TO THIS ENGINEER PRIOR TO WORKING AFFECTED AREAS

FIRST SILL ANCHOR AT CONCRETE

(2A)

PER SHEAR WALL SCHEDULE

TYPICAL SHEARWALL PLAN DETAILS

TYPICAL HORIZONTAL FRAMING DETAILS

DESCRIPTION OF BUILDING ELEMENTS NUMBER AND TYPE OF FASTENER SPACING AND LOCATION BLOCKING BETWEEN CEILING | 3-8d COMMON (2 1/2"x0.131) OR EACH END, TOENAIL 3-10d BOX (3" x0.128) OR 3-3" x0.131 NAILS OR 3-3" 14 GAGE STAPLES, 7/16 CROWN 2-8d COMMON (2 1/2"x0.131) 2-3" x0.131 NAILS EACH END, TOENAIL 2-3" 14 GAGE STAPLES, 2-16d COMMON (3 1/2"x0.162) 3-3" x0.131 NAILS END NAIL 3-3" 14 GAGE STAPLES, 16d COMMON (3 1/2"x0.162) @ 6" O.C 3-3" x0.131 NAILS @ 6" O.C. FACE NAIL 3-3" 14 GAGE STAPLES @ 6" 0.0 3-8d COMMON (2 1/2"x0.131) OR 3-10d BOX (3" x0.128) OR EACH JOIST, TOENAIL 3-3" x0.131 NAILS OR 3-3" 14 GAGE STAPLES. 7/16 CROWN 3. CEILING JOIST NOT ATTACHED TO  $\mid$  3-16d COMMON (3 1/2" $\times$ 0.162) OR 4-10d BOX (3" x0.128) OR FACE NAIL 4-3" x0.131 NAILS OR 4-3" 14 GAGE STAPLES, 7/16 CROWN FACE NAIL PER TABLE 2308.7.3.1 3-10d COMMON (3"x0.148) OR 4-10d BOX (3" x0.128) OR FACE NAIL 4-3" x0.131 NAILS OR 4-3" 14 GAGE STAPLES, 7/16 CROWN 3-10d COMMON (3"x0.148) OR 3-16d BOX (3 1/2" x0.135) OR 4-10d BOX (3" x0.128) OR TOE NAIL 4-3" x0.131 NAILS OR 4-3" 14 GAGE STAPLES, 7/16 CROWN 2-16d COMMON (3 1/2"x0.162) OR  $3-10d BOX (3" \times 0.128) OR$ END NAIL 4-3" x0.131 NAILS OR 4-3" 14 GAGE STAPLES, 7/16 CROWN 3-10d COMMON (3 1/2"x0.148) OR 3-16d BOX (3 1/2"x 0.135) ORTOE NAIL  $4-10d BOX (3" \times 0.128) OR$ 4-3" x0.131 NAILS OR 4-3" 14 GAGE STAPLES, 7/16 CROWN 24" O.C. FACE NAIL 16d COMMON (3 1/2"x0.162) 10d BOX (3" x 0.128) OR 16" O.C. FACE NAIL  $3" \times 0.131$  NAILS OR 5-3" 14 GAGE STAPLES, 7/16 CROWN 16" O.C. FACE NAIL 16d COMMON (3 1/2"x0.162) 16d BOX (3 1/2" x 0.135) OR  $3" \times 0.131$  NAILS OR 12" O.C. FACE NAIL 3-3" 14 GAGE STAPLES, 7/16 CROWN 16" O.C. EA. EDGE FACE NAIL 16d COMMON (3 1/2"x0.162) 16d BOX (3 1/2" x 0.135) OR 2" O.C. EA. EDGE FACE NAIL 4-8d COMMON (2 1/2"x0.131) OR TOE NAIL 4—10d BOX (3"x 0.128) 16d COMMON (3 1/2"x0.162) OR 16" O.C. FACE NAIL 10d BOX (3" x 0.128) OR 12" O.C. FACE NAIL 3" x 0.131 NAILS OR 3-3" 14 GAGE STAPLES, 7/16 CROWN 8-16d COMMON (3 1/2"x0.162) OR EACH SIDE OF END JOINT, FACE 12- 10d BOX (3" x 0.128) OR NAIL(MIN. 24"LAP SPLICE LENGTH 12-3" x 0.131 NAILS OR EACH SIDE OF END JOINT) 2-3" 14 GAGE STAPLES, 7/16 CROV 16" O.C. FACE NAIL 16d COMMON (3 1/2"x0.162) OR 16d BOX (3 1/2" x 0.135) OR 3" x 0.131 NAILS OR 12" O.C. FACE NAIL 3" 14 GAGE STAPLES, 7/16 CROWN 2-16d COMMON (3 1/2"x0.162) OR 3-16d BOX (3 1/2" x 0.135) OR 16" O.C. FACE NAIL 4- 3" x 0.131 NAILS OR 4- 3" 14 GAGE STAPLES, 7/16 CROWN 4-8d COMMON (2 1/2"x0.131) OR 4-10d BOX (3" x 0.128) OR TOENAIL 4- 3" x 0.131 NAILS OR 4- 3" 14 GAGE STAPLES, 7/16 CROWN 2-16d COMMON (3 1/2"x0.162) OR  $3-10d BOX (3" \times 0.128) OR$ END NAIL 3- 3" x 0.131 NAILS OR 3- 3" 14 GAGE STAPLES, 7/16 CROWN 2—16d COMMON (3 1/2"x0.162) OR  $3-10d BOX (3" \times 0.128) OR$ END NAIL – 3" x 0.131 NAILS OR 3- 3" 14 GAGE STAPLES, 7/16 CRO 2-16d COMMON (3 1/2"x0.162) OR  $3-10d BOX (3" \times 0.128) OR$ FACE NAIL 3- 3" x 0.131 NAILS OR 3- 3" 14 GAGE STAPLES, 7/16 CROV 2-8d COMMON (2 1/2"x0.131) OR  $2-10d BOX (3" \times 0.128) OR$ FACE NAIL 3" x 0.131 NAILS OR 2- 3" 14 GAGE STAPLES, 7/16 CROV 2-8d COMMON (2 1/2"x0.131) OR FACE NAIL -10d BOX (3" x 0.128) OR 3-8d COMMON (2 1/2"x0.131) OF FACE NAIL  $3-10d BOX (3" \times 0.128) OR$ 

a. NAILS SPACED AT 6 INCHES AT INTERMEDIATE SUPPORTS WHERE SPANS 48' OR MORE. FOR NAILING OF WOOD STRUCTURAL PANEL AND PARTICLEBOARD DIAPHRAGMS AND SHEAR WALLS, REFER TO SECTION 2305. NAILS FOR WALL SHEATHING ARE PERMITTED TO BE COMMON, BOX OR CASING

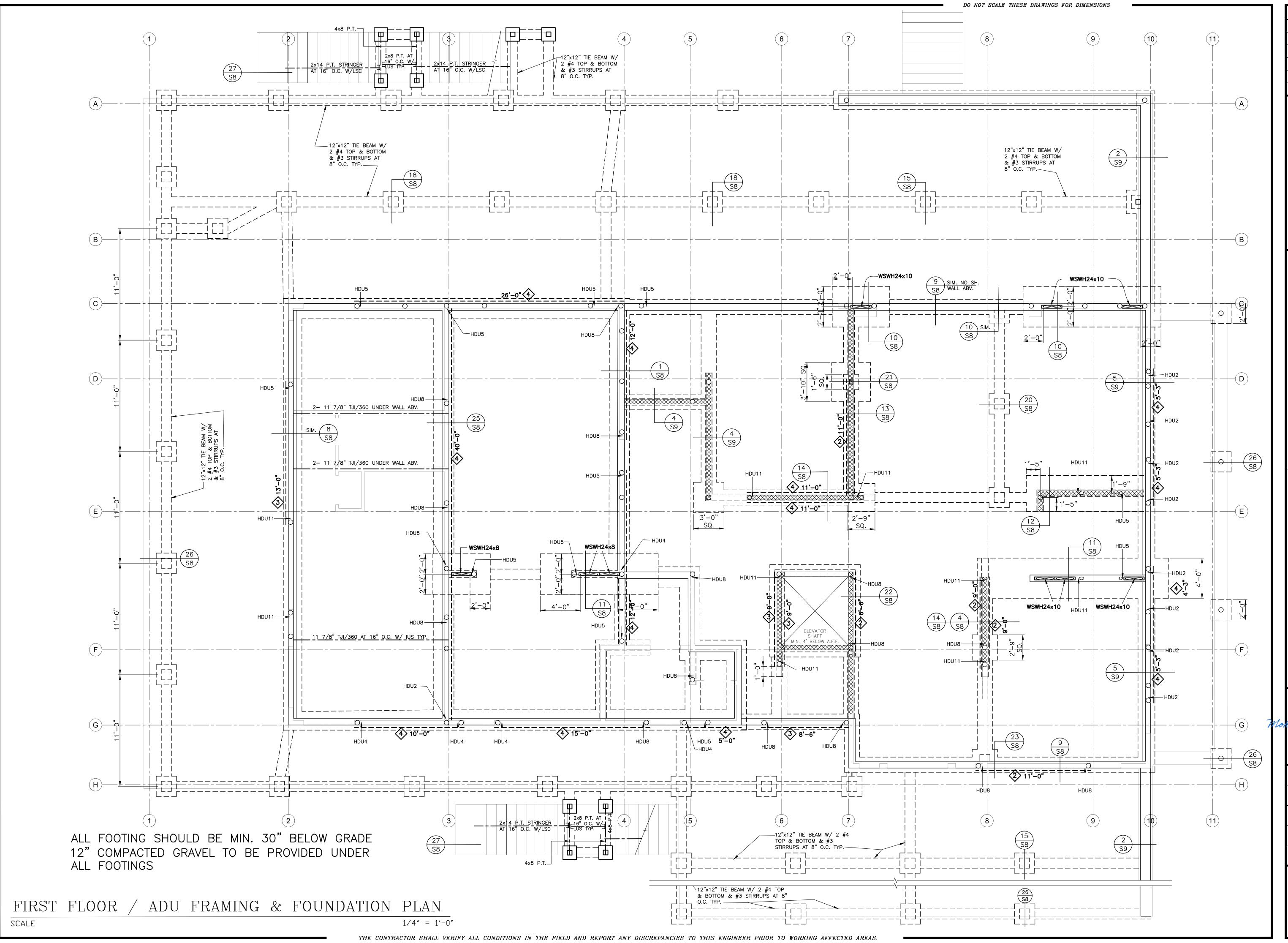
- b. SPACING SHALL BE 6 INCHES ON CENTER ON THE EDGES AND 12 INCHES ON CENTER AT INTERMEDIATE SUPPORTS FOR NONSTRUCTURAL APPLICATIONS. PANEL SUPPORTS AT 16 INCHES (20 INCHES IF STRENGTH AXIS IN THE LONG DIRECTION OF THE PANEL. UNLESS OTHERWISE MARKED)
- WHERE A RAFTER IS FASTENED TO AN ADJACENT PARALLEL CEILING JOIST IN ACCORDANCE WITH THIS SCHEDULE AND THE CEILING JOIST IS FASTENED TO THE TOP PLATE IN ACCORDANCE WITH THIS SCHEDULE, THE NUMBER OF TOENAILS IN THE RAFTER SHALL BE PERMITTED TO BE REDUCED BY ONE NAIL

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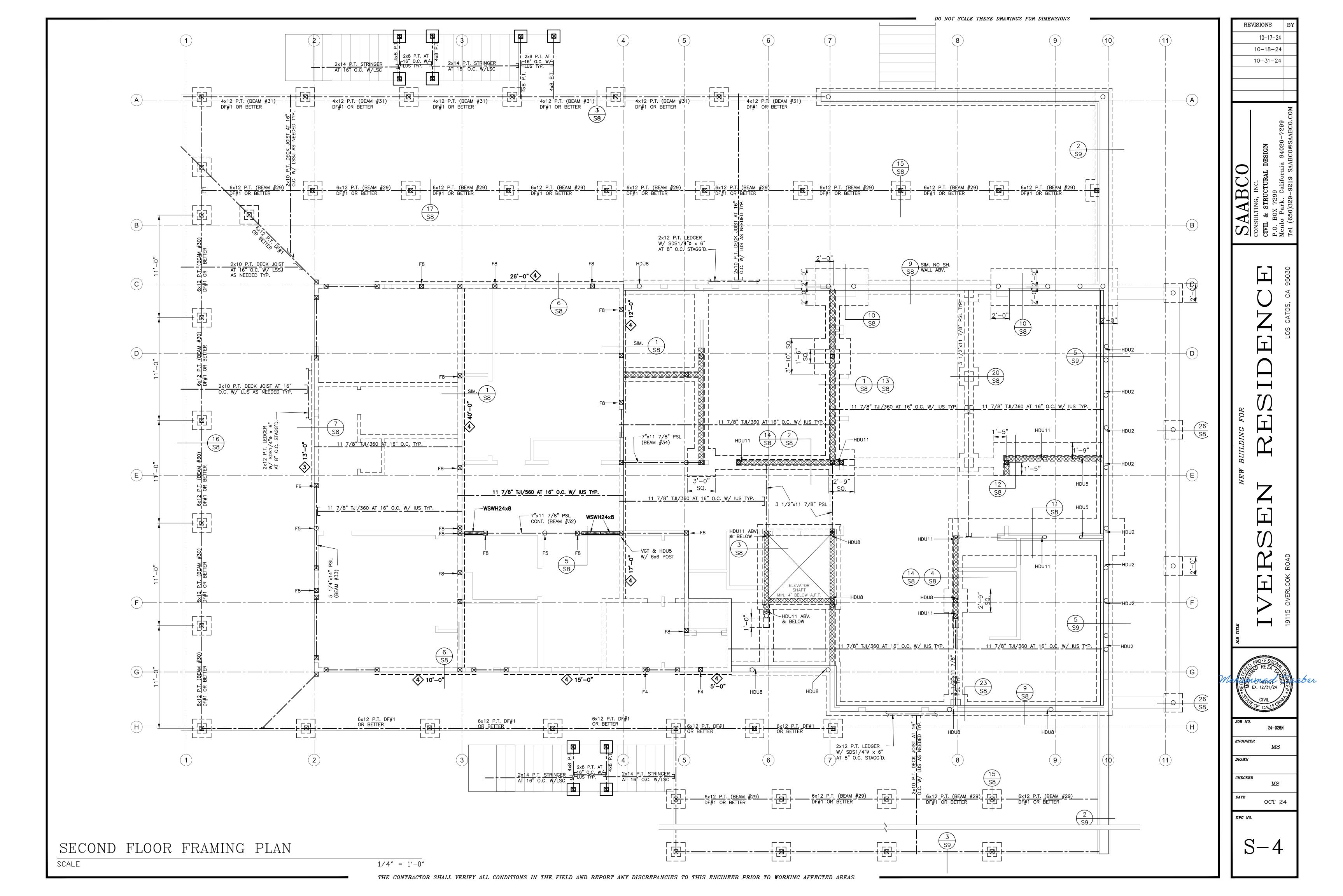
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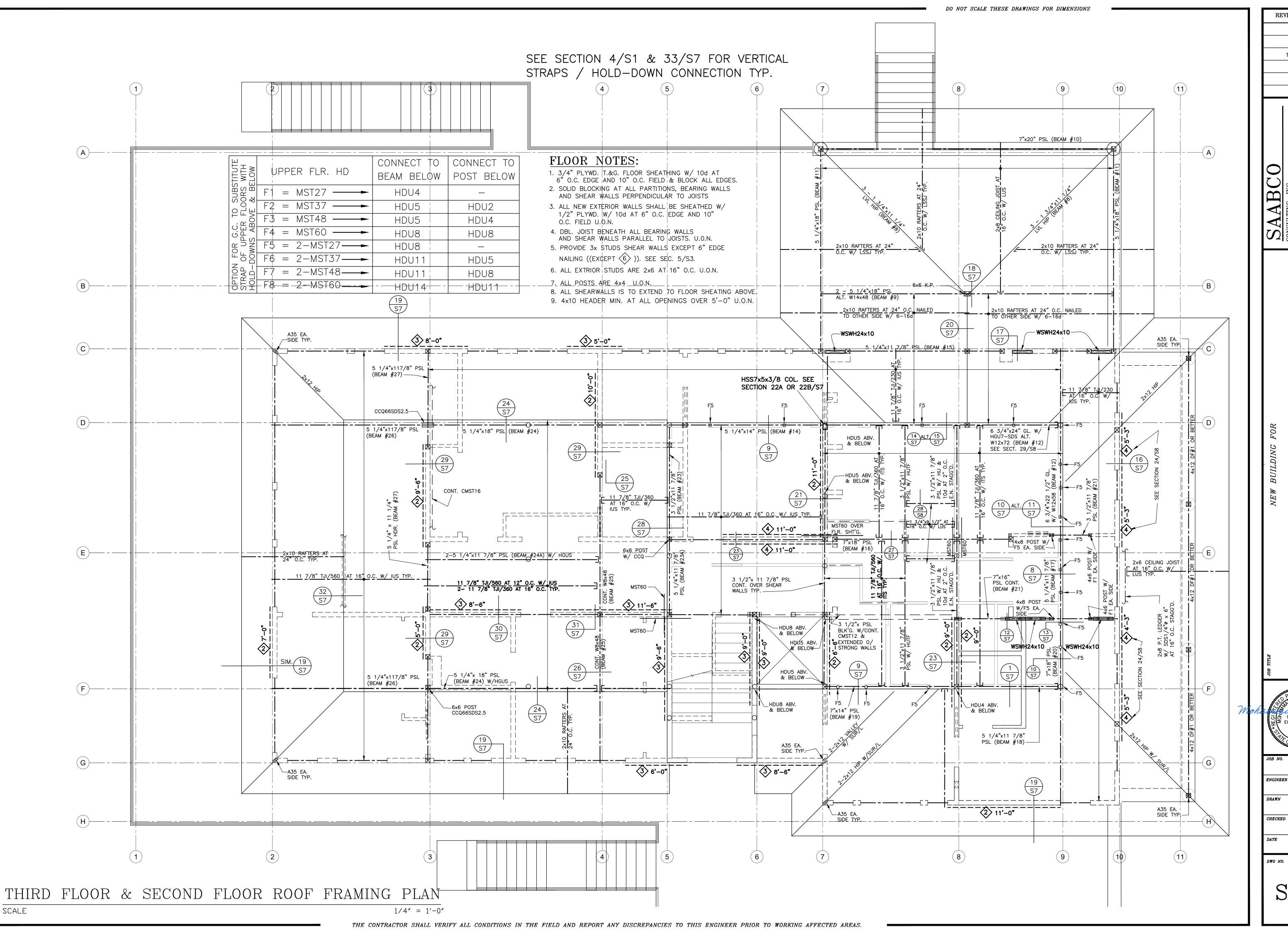
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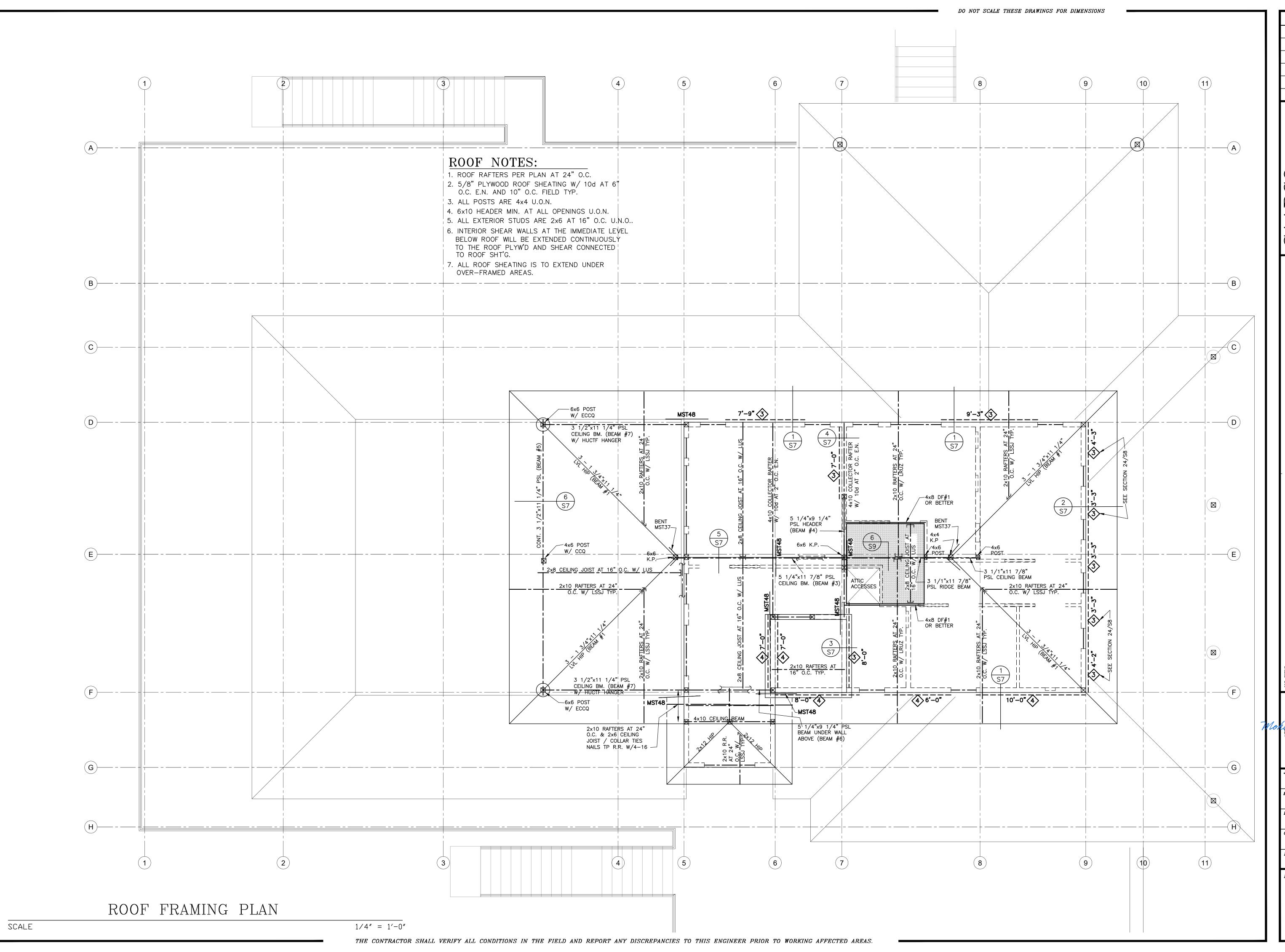
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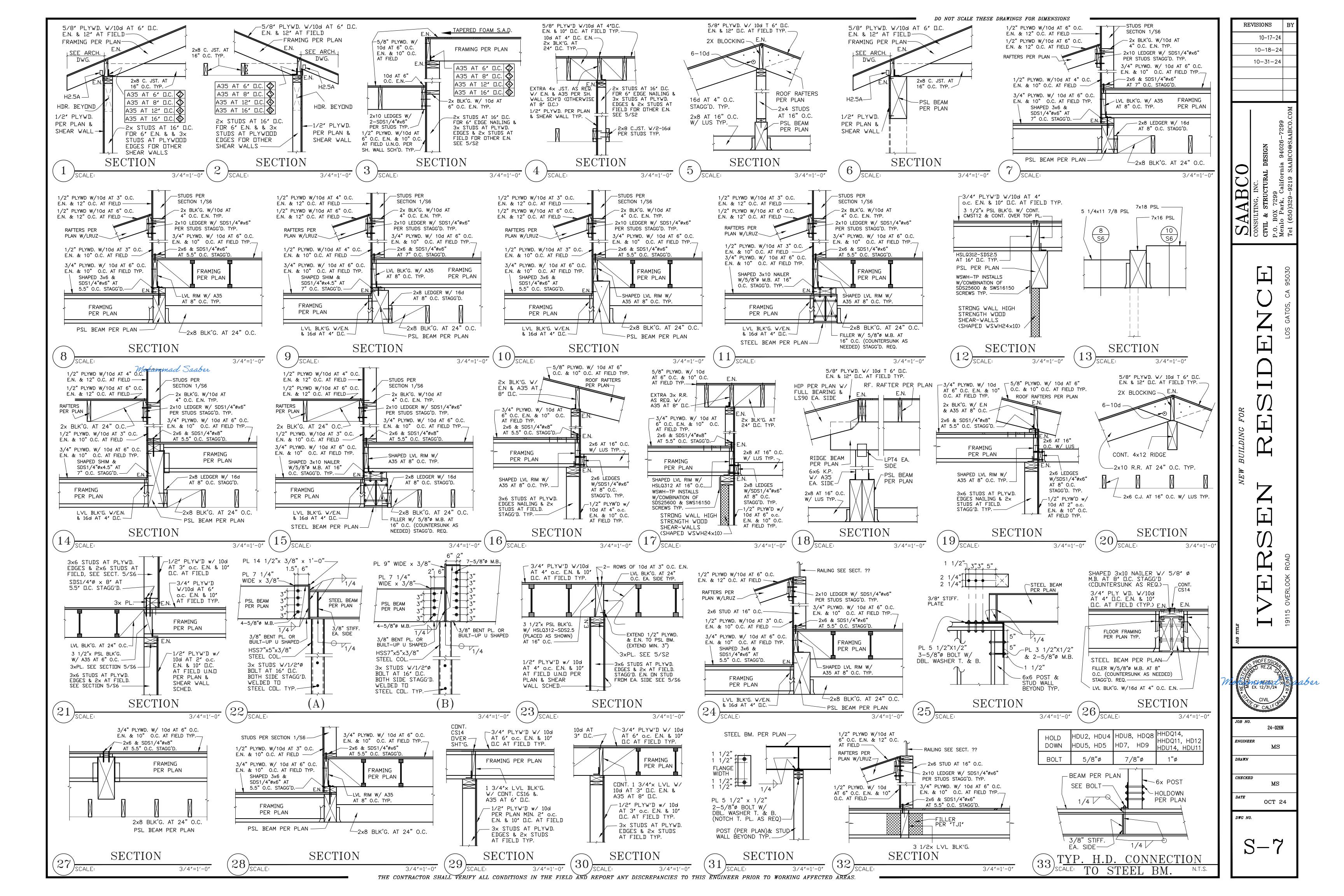


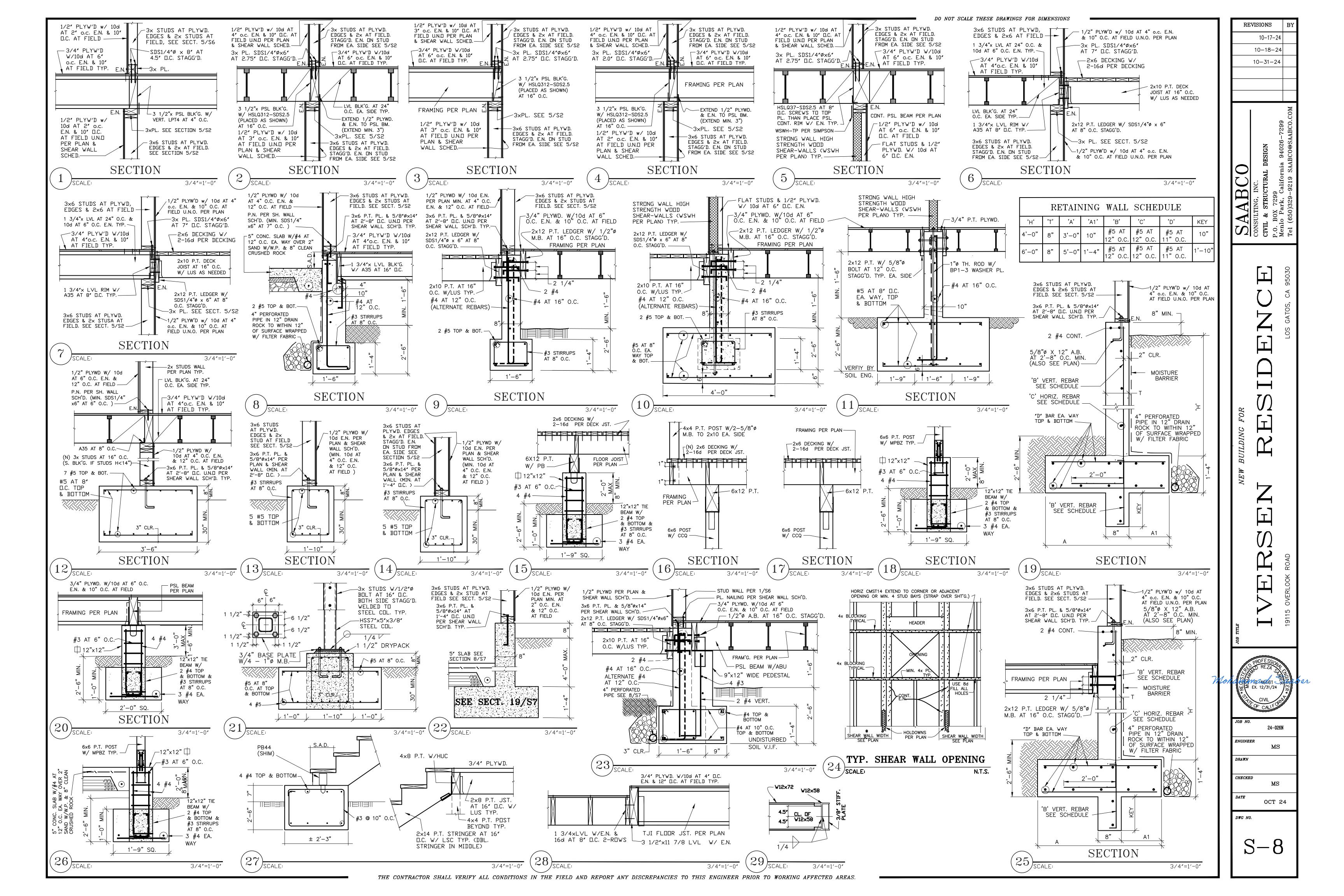
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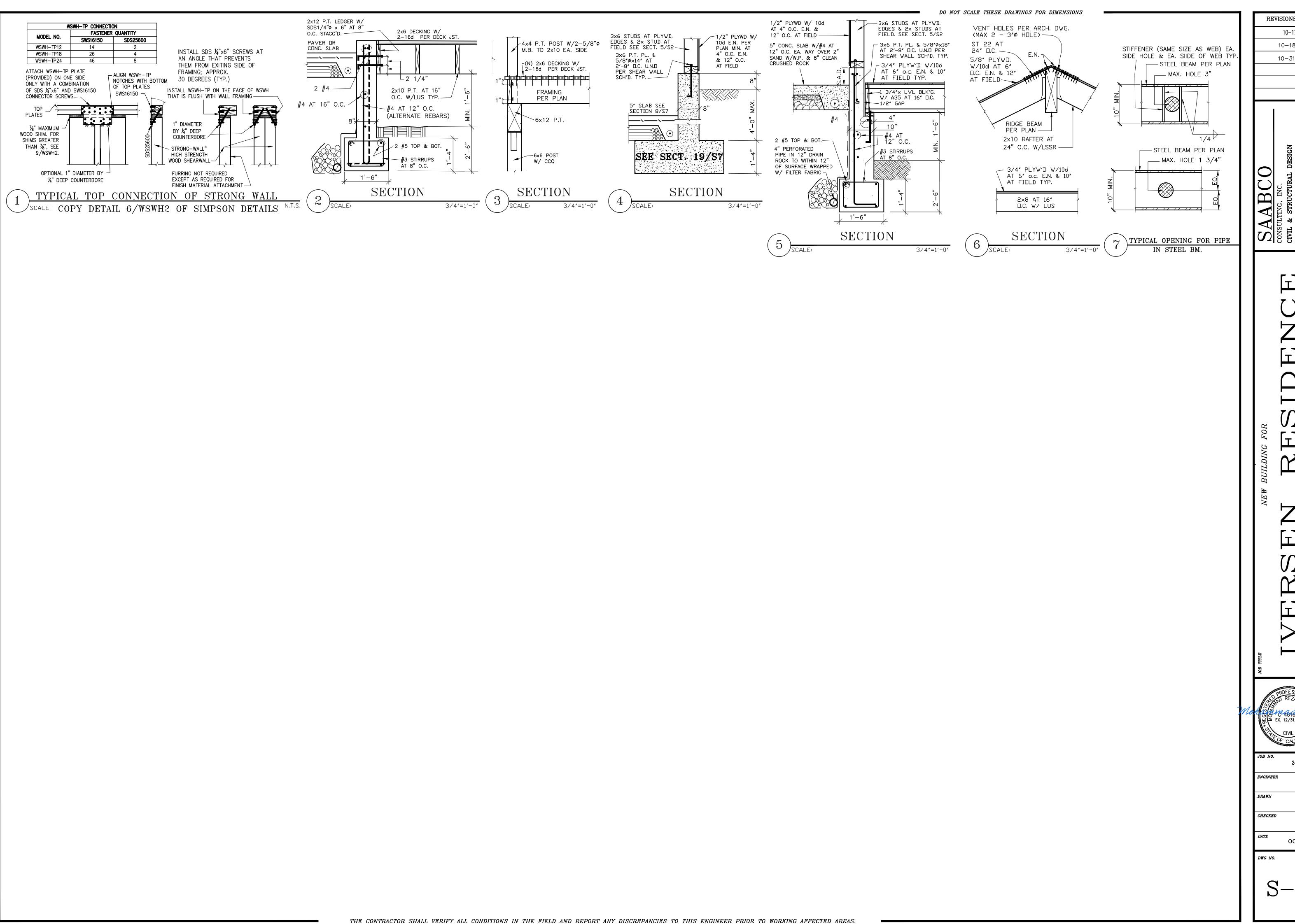
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