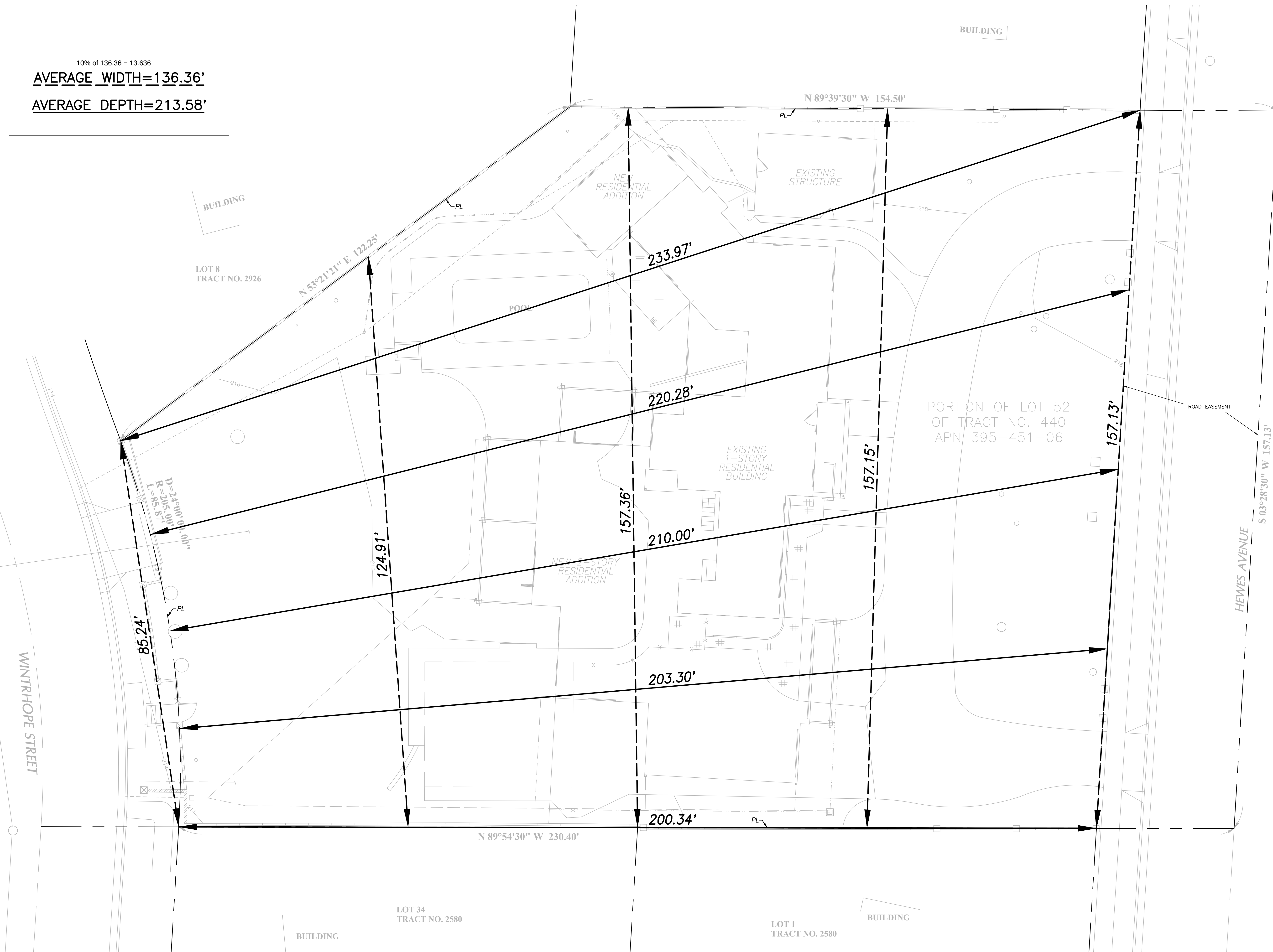
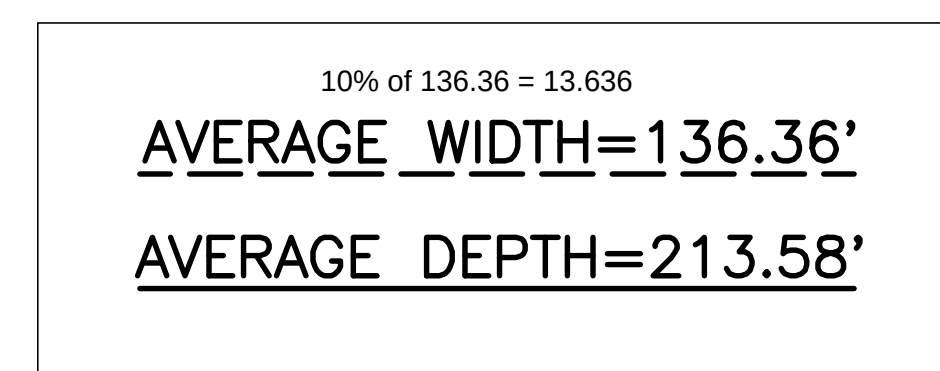




SITE WIDTH & DEPTH RIETH RESIDENCE 13661 HEWES AVE, SANTA ANA CA 92705		NO.	DATE	REVISIONS
SHEET <u>1</u> OF <u>1</u>		T		

[illegible][illegible]

Y	SEALANT	Y	SEALANT	Y	SEALANT
MAXIMUM INCREMENTAL REACTIVITY (MIR). The maximum change in weight of ozone formed by adding a compound to the "Base Reactive Organic Gas (ROG) Mixture" per weight of compound added, expressed as hundredths of a gram (0.01) ROG.					
MOISTURE CONTENT. The weight of the water in wood expressed in percentage of the weight of the oven-dry wood.					
PRODUCT-WEIGHTED MIR (PWIR). The sum of all weighted MIR for ingredients in a product subject to this article. The PWIR is the total product reactivity expressed to hundredths of a gram of ozone formed per gram of product including container and packaging.					
REACTIVE ORGANIC COMPOUND (ROC). Any compound that has the potential, once emitted, to contribute to ozone formation in the atmosphere.					
VOC. A volatile organic compound (VOC) broadly defined as a chemical compound based on carbon chains or rings with vapor pressures greater than 0.1 mmHg at room temperature. These compounds typically contain hydrogen and may contain oxygen, nitrogen and other elements. See COR Title 17, Section 45506(a).					
4.503 FIREPLACES					
4.504 GENERAL. Any installed gas fireplace shall be a direct-vented sealed combustion type. Any installed woodstove or pellet stove shall comply with U.S. EPA New Source Performance Standards (NSPS) emissions limits as applicable, and shall have a permanent label indicating they are certified to meet the emissions limits. Woodstoves, pellet stoves and fireplaces shall also comply with applicable local ordinances.					
4.504 POLLUTANT CONTROL					
4.504.1 CONTROLS OF DUST OPENINGS & PROTECTION OF MECHANICAL EQUIPMENT DURING CONSTRUCTION. At the time of rough installation, during storage on the construction site and until final startup of the heating, cooling and ventilation equipment, all dust and other related air distribution component openings shall be covered with tape, plastic, sheet metal or other methods acceptable to the enforcing agency to reduce the amount of water, dust or debris which may enter the system.					
4.504.2 FINISH MATERIAL POLLUTANT CONTROL. Finish materials shall comply with this section.					
4.504.3 Adhesives, Sealants and Coatings. Adhesives, sealants and coatings used on the project shall meet the requirements of the following standards unless more stringent local or regional air pollution or air quality management district rules exist:					
1. Adhesives, adhesive bonding products, adhesive primers, sealants, sealant primers and caulks shall comply with local or regional air pollution control or air quality management district rules where applicable or SCQM/D Rule 1168 VOC limits, as shown in Table 4.504.1 or 4.504.2, as applicable. Such products also shall comply with the Rule 1168 prohibition on the use of certain toxic compounds (carbamate, carbamate derivatives, methylene chloride, perfluorobenzene and tributyltin) unless for exempt products, as specified in Subsection 4.504.4.					
2. Aerosol adhesives, and smaller unit sizes of adhesives, and sealant or caulking compounds in units of product, less packaging, which do not weigh more than 1 pound and do not consist of more than 100 ml of contents, shall comply with statewide VOC standards and other requirements, including perfluorobenzene, as specified in Subsection 4.504.4.					
4.504.2 Paints and Coatings. Architectural paints and coatings shall comply with VOC limits in Table 1 of the AIA 2012 Architectural Supplemental Control Measures, as shown in Table 4.504.3, unless more stringent local rules apply. The VOC content for the coatings that do not meet the requirements for the specialty coating category listed in Table 4.504.3 shall be determined by dissolving the coating in a Flat, Nonflat or Nonflat High Gloss solvent, based on the gloss, as defined in subsections 4.504.4, 4.504.5 and 4.504.6 of the California Air Resources Board, Supplemental Control Measures, and the corresponding Flat, Nonflat or Nonflat High Gloss VOC limits in Table 4.504.4 shall apply.					
4.504.3 Aerosol Paints and Coatings. Aerosol paints and coatings shall meet the Product-Weighted MIR (PWIR) for VOCs in Section 45506(a)(2) and other requirements, including prohibitions on use of certain toxic compounds and ozone depleting substances, in Sections 94522(a)(1) and (1)(1) of the California Code of Regulations. This 17, commencing with Section 94522 and the 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, Sub 45.					
4.504.4 Verification. Verification of compliance with this section shall be provided at the request of the enforcing agency. Documentation may include, but is not limited to, the following:					
1. Manufacturer's product specifications.					
2. Field verification of on-site product containers.					
TABLE 4.504.1 - ADHESIVE VOC LIMIT (2)					
(Less Water and Less Exempt Compounds in Grams per Liter)					
ADHESIVE VOC LIMIT					
ARCHITECTURAL APPLICATIONS					
INDOOR CARPET ADHESIVES					
CARPET PAD ADHESIVES					
OUTDOOR CARPET ADHESIVES					
WOOD FLOORING ADHESIVES					
RUBBER FLOOR ADHESIVES					
SUBFLOOR ADHESIVES					
CERAMIC TILE ADHESIVES					
VOC & ASPHALT TILE ADHESIVES					
DRYWALL & PANEL ADHESIVES					
COVE BASE ADHESIVES					
MULTIPURPOSE CONSTRUCTION ADHESIVE					
STRUCTURAL GLAZING ADHESIVES					
SINGLE-PLY ROOF MEMBRANE ADHESIVES					
OTHER ADHESIVES NOT LISTED					
SPECIALTY APPLICATIONS					
PVC WELDING					
CPVC WELDING					
ABS WELDING					
PLASTIC CEMENT WELDING					
ADHESIVE PRIMER FOR PLASTIC					
CONTACT ADHESIVE					
SPECIAL PURPOSE CONTACT ADHESIVE					
STRUCTURAL WOOD MEMBER ADHESIVE					
TOP & TIE ADHESIVE					
SUBSTRATE SPECIFIC APPLICATIONS					
METAL TO METAL					
PLASTIC FOAMS					
POROUS MATERIAL (EXCEPT WOOD)					
WOOD					
FIBERGLASS					
1. IF AN ADHESIVE IS USED TO BOND DISSIMILAR SUBSTRATES TOGETHER, THE ADHESIVE WITH THE HIGHEST VOC CONTENT SHALL BE ALLOWED.					
2. FOR ADDITIONAL INFORMATION REGARDING METHODS TO MEASURE THE VOC CONTENT SPECIFIED IN THIS TABLE, SEE SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT RULE 1168.					

TABLE 4.504.2 - SEALANT VOC LIMIT	
(Less Water and Less Exempt Compounds in Grams per Liter)	
SEALANTS	VOC LIMIT
ARCHITECTURAL	250
MAHINE DECK	750
NONMEMBRANE ROOF	300
ROADWAY	250
SINGLE-PLY ROOF MEMBRANE	450
OTHER	420
SEALANT PRIMERS	
ARCHITECTURAL	
NONPOROUS	250
POROUS	775
MODIFIED BITUMINOUS	500
MAHINE DECK	750
OTHER	750

TABLE 4.504.3 - VOC CONTENT LIMITS FOR ARCHITECTURAL COATINGS (2)	
GRAMS OF VOC PER LITER OF COATING, LESS WATER & 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	60
BITUMINOUS ROOF PRIMERS	350
BOND BREAKERS	350
CONCRETE CURE COMPOUNDS	350
CONCRETE/MASSONRY SEALERS	100
CRACK/SEALERS	50
DRY FOG COATINGS	150
FAUX FINISHING COATINGS	350
FIRE RESISTIVE COATINGS	350
FLOOR COATINGS	100
FORMRELEASE COMPOUNDS	250
GRAVING ARTS COATINGS (GON PAINTS)	500
HIGH TEMPERATURE COATINGS	400
INDUSTRIAL MAINTENANCE COATINGS	250
LOW SOLIDS COATINGS	120
MAGNETITE CEMENT COATINGS	450
MASTIC TEXTURE COATINGS	100
METALLIC PIGMENTED COATINGS	500
MULTICOLOR COATINGS	250
PRETREATMENT WASH PRIMERS	400
PRIMERS, SEALERS, & UNDERCOATERS	100
REACTIVE PENETRATING SEALERS	350
RECYCLED COATINGS	250
ROOF COATINGS	50
RUST PREVENTATIVE COATINGS	250
SHELLACS	
CLEAR	750
OPAQUE	550
SPECIALTY PRIMERS, SEALERS & UNDERCOATERS	100
STAINS	250
STONE CONSOLIDANTS	450
SWIMMING POOL COATINGS	340
TRAFFIC MARKING COATINGS	100
TUB & TILE REFINISH COATINGS	420
WATERPROOFING MEMBRANES	250
WOOD COATINGS	275
WOOD PRESERVATIVES	350
ZINC-RICH PRIMERS	340

TABLE 4.504.4 - VOC CONTENT LIMITS FOR ARCHITECTURAL COATINGS (2)	
GRAMS OF VOC PER LITER OF COATING, LESS WATER & 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	60
BITUMINOUS ROOF PRIMERS	350
BOND BREAKERS	350
CONCRETE CURE COMPOUNDS	350
CONCRETE/MASSONRY SEALERS	100
CRACK/SEALERS	50
DRY FOG COATINGS	150
FAUX FINISHING COATINGS	350
FIRE RESISTIVE COATINGS	350
FLOOR COATINGS	100
FORMRELEASE COMPOUNDS	250
GRAVING ARTS COATINGS (GON PAINTS)	500
HIGH TEMPERATURE COATINGS	400
INDUSTRIAL MAINTENANCE COATINGS	250
LOW SOLIDS COATINGS	120
MAGNETITE CEMENT COATINGS	450
MASTIC TEXTURE COATINGS	100
METALLIC PIGMENTED COATINGS	500
MULTICOLOR COATINGS	250
PRETREATMENT WASH PRIMERS	400
PRIMERS, SEALERS, & UNDERCOATERS	100
REACTIVE PENETRATING SEALERS	350
RECYCLED COATINGS	250
ROOF COATINGS	50
RUST PREVENTATIVE COATINGS	250
SHELLACS	
CLEAR	750
OPAQUE	550
SPECIALTY PRIMERS, SEALERS & UNDERCOATERS	100
STAINS	250
STONE CONSOLIDANTS	450
SWIMMING POOL COATINGS	340
TRAFFIC MARKING COATINGS	100
TUB & TILE REFINISH COATINGS	420
WATERPROOFING MEMBRANES	250
WOOD COATINGS	275
WOOD PRESERVATIVES	350
ZINC-RICH PRIMERS	340

TABLE 4.504.4 - VOC CONTENT LIMITS FOR ARCHITECTURAL COATINGS (2)	
GRAMS OF VOC PER LITER OF COATING, LESS WATER & 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	60
BITUMINOUS ROOF PRIMERS	350
BOND BREAKERS	350
CONCRETE CURE COMPOUNDS	350
CONCRETE/MASSONRY SEALERS	100
CRACK/SEALERS	50
DRY FOG COATINGS	150
FAUX FINISHING COATINGS	350
FIRE RESISTIVE COATINGS	350
FLOOR COATINGS	100
FORMRELEASE COMPOUNDS	250
GRAVING ARTS COATINGS (GON PAINTS)	500
HIGH TEMPERATURE COATINGS	400
INDUSTRIAL MAINTENANCE COATINGS	250
LOW SOLIDS COATINGS	120
MAGNETITE CEMENT COATINGS	450
MASTIC TEXTURE COATINGS	100
METALLIC PIGMENTED COATINGS	500
MULTICOLOR COATINGS	250
PRETREATMENT WASH PRIMERS	400
PRIMERS, SEALERS, & UNDERCOATERS	100
REACTIVE PENETRATING SEALERS	350
RECYCLED COATINGS	250
ROOF COATINGS	50
RUST PREVENTATIVE COATINGS	250
SHELLACS	
CLEAR	750
OPAQUE	550
SPECIALTY PRIMERS, SEALERS & UNDERCOATERS	100
STAINS	250
STONE CONSOLIDANTS	450
SWIMMING POOL COATINGS	340
TRAFFIC MARKING COATINGS	100
TUB & TILE REFINISH COATINGS	420
WATERPROOFING MEMBRANES	250
WOOD COATINGS	275
WOOD PRESERVATIVES	350
ZINC-RICH PRIMERS	340

Y	SEALANT	Y	SEALANT	Y	SEALANT
TABLE 4.504.5 - FORMALDEHYDE LIMITS					
MAXIMUM FORMALDEHYDE EMISSIONS IN PARTS PER MILLION					
PRODUCT					
HARDWOOD PLYWOOD MEMBER CORE			CURRENT LIMIT		
HARDWOOD PLYWOOD COMPOSITE CORE			0.26		
PARTICLE BOARD			0.09		
MEDIUM DENSITY FIBERBOARD			0.11		
THIN MEDIUM DENSITY FIBERBOARD			0.13		
1. VALUES IN THIS TABLE ARE DERIVED FROM THOSE SPECIFIED BY THE CALIF. AIR RESOURCES BOARD, AIR TOXICS CONTROL MEASURE FOR COMPOSITE WOOD AS TESTED IN ACCORDANCE WITH ASTM E 1333, FOR ADDITIONAL INFORMATION, SEE CALIF. CODE OF REGULATIONS, TITLE 17, SECTIONS 93120 THROUGH 93121.12.					
2. THE MEDIUM DENSITY FIBERBOARD HAS A MAXIMUM THICKNESS OF 5/16" (8 MM).					
DIVISION 4.5 ENVIRONMENTAL QUALITY (continued)					
4.504.1 CARPET SYSTEMS. All carpet systems installed in the building interior 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 01550).					
See California Department of Public Health's website for certification programs and testing labs, https://www.cdph.ca.gov/Programs/CID/DCDC/PID/DCDC/DEH/ID/ID/Pages/VOC.aspx .					
4.504.2 Carpet cushion. All carpet cushion installed in the building interior 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 01550).					
See California Department of Public Health's website for certification programs and testing labs, https://www.cdph.ca.gov/Programs/CID/DCDC/PID/DCDC/DEH/ID/ID/Pages/VOC.aspx .					
4.504.3 Carpet adhesive. All carpet adhesive shall meet the requirements of Table 4.504.1.					
4.504.4 RESILIENT FLOORING SYSTEMS. When resilient flooring is installed, at least 80% 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 01550).					
See California Department of Public Health's website for certification programs and testing labs, https://www.cdph.ca.gov/Programs/CID/DCDC/PID/DCDC/DEH/ID/ID/Pages/VOC.aspx .					
4.504.5 COMPOSITE WOOD PRODUCTS. Hardwood, laminated, particleboard and medium density fiberboard composite wood products used on the interior or exterior of the building shall meet the requirements for formaldehyde emissions as specified in ASHRAE 62.1-2010 and the California Building Code (17 CCR 93120 et seq.), or by or before the dates specified in those sections, as shown in Table 4.504.5.					
4.504.5.1 Documentation. Verification of compliance with this section shall be provided as requested by the enforcing agency. Documentation shall include at least one of the following:					
1. Product certifications and specifications.					
2. Chain of custody documentation.					
3. Product label and included as meeting the Composite Wood Products regulation (see COR Title 17, Section 93121 et seq.).					
4. Exterior grade products marked as meeting the PS1 or PS2 standards of the Engineered Wood Association, the Australian AS/NZS 2209, European EN 338 standards, and Canadian CSA 0121, CSA 0151, CSA 0153 and CSA 0308 standards.					
5. Other methods acceptable to the enforcing agency.					
4.505 INTERIOR MOISTURE CONTROL					
4.505.1 General. Buildings shall meet or exceed the provisions of the California Building Standards Code.					
4.505.2 CONCRETE SLAB FOUNDATIONS. Concrete slab foundations required to have a vapor retarder by California Building Code, Chapter 18, or concrete foundation walls shall have a vapor retarder by the California Residential Code, Chapter 5, shall also comply with this section.					
4.505.2.1 Cracking/breaks. A cracking/break shall be limited in compliance with at least one of the following:					
1. A crack (10/16 inch) thick base of 1/8 inch (12.7mm) or larger does not aggregate when provided with a vapor barrier in direct contact with concrete and a concrete slab design, which will address bleeding, shrinkage, and curing, shall be used. For void-filled formations, see American Concrete Institute, ACI 308.2R-06.					
2. Other equivalent methods approved by the enforcing agency.					
3. A slab design specified by a licensed design professional.					
4.505.3 MOISTURE CONTENT OF BUILDING MATERIALS. Building materials with moisture signs of water damage shall not be installed. Wall and floor framing shall not be enclosed when the framing members exceed 19 percent moisture content. Moisture content shall be verified in compliance with the following:					
1. Moisture content shall be determined with either a probe-type or contact-type moisture meter. Equivalent moisture verification methods may be approved by the enforcing agency and shall satisfy requirements found in Section 101.0 of this code.					
2. Moisture readings shall be taken at a point 1 foot (305 mm) to 4 feet (1219 mm) from the grade stamped end of each piece installed.					
3. At least three random moisture readings shall be performed on wall and floor framing with documentation acceptable to the enforcing agency provided at the time of approval to install the wall and floor framing.					
4. Installation products which are fully wet or have a high moisture content shall be installed or allowed to dry prior to enclosure in wall or floor cavities. Unenclosed installation products shall follow the manufacturer's drying recommendations prior to enclosure.					
4.506 INDOOR AIR QUALITY AND EXHAUST					
4.506.1 Bathroom exhaust fans. Each bathroom shall be mechanically ventilated and shall comply with the following:					
1. Fans shall be ENERGY STAR compliant and be ducted to terminate outside the building.					
2. Unless functioning as a component of a whole house ventilation system, fans must be controlled by a humidity control.					
a. Humidity controls shall be capable of adjustment between a relative humidity range less than or equal to 50% to a maximum of 80%. A humidity control may be manual or automatic means of adjustment.					
b. A humidity control may be a separate component to the exhaust fan and is not required to be integral to the fan.					
Notes:					
1. For the purposes of this section, a bathroom is a room which contains a bathtub, shower or tub/shower combination.					
2. Lighting integral to bathroom exhaust fans shall comply with the California Energy Code.					
4.507 ENVIRONMENTAL COMFORT					
4.507.1 HEATING AND AIR-CONDITIONING SYSTEM DESIGN. Heating and air conditioning systems shall be sized, designed and have their equipment selected using the following methods:					
1. The heat loss and heat gain shall be calculated according to ANSI/ACCA 2 Manual J + 2011 (Residential Load Calculation), ASHRAE handbooks or other equivalent design software or methods.					
2. Duct systems are sized according to ANSI/ACCA 2 Manual J + 2011 (Residential Duct Systems), ASHRAE handbooks or other equivalent design software or methods.					
3. Select heating and cooling equipment according to ANSI/ACCA 3 Manual S + 2014 (Residential Equipment Selection), or other equivalent design software or methods.					
Exception: Use of climate design temperatures necessary to ensure the system functions are acceptable.					

CHAPTER 7
INSTALLER & SPECIAL IN
702 QUALIFICATIONS
702.1 INSTALLER TRAINING. The installer of HVAC systems including ducts or conditioning programs. Untrained persons may be responsible of a person trained and certified. Examples of acceptable HVAC training and ce

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

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

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

Notes:

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

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

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

703 VERIFICATIONS

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

3JK DESIGN		
ORANGE, CA 92661 PHONE 714-707-7334 EMAIL: INFO@3JKDESIGN.COM WWW.3JKDESIGN.COM		
NO.	DATE	REVISION
1	01/24/25	1.0
2	01/24/25	1.1
3	01/24/25	1.2
4	01/24/25	1.3
5	01/24/25	1.4
6	01/24/25	1.5
7	01/24/25	1.6
8	01/24/25	1.7
9	01/24/25	1.8
10	01/24/25	1.9
11	01/24/25	1.10
12	01/24/25	1.11
13	01/24/25	1.12
14	01/24/25	1.13
15	01/24/25	1.14
16	01/24/25	1.15
17	01/24/25	1.16
18	01/24/25	1.17
19	01/24/25	1.18
20	01/24/25	1.19
21	01/24/25	1.20
22	01/24/25	1.21
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49	01/24/25	1.48
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54	01/24/25	1.53
55	01/24/25	1.54
56	01/24/25	1.55
57	01/24/25	1.56
58	01/24/25	1.57
59	01/24/25	1.58
60	01/24/25	1.59
61	01/24/25	1.60
62		

CERTIFICATE OF COMPLIANCE - RESIDENTIAL PERFORMANCE COMPLIANCE METHOD

Project Name: SINGLE HOUSE ADDITION
Calculation Description: Title 24 Analysis

Calculation Date/Time: 2025-10-06T13:34:27-07:00
Input File Name: Y25-5528-rb422x

CFR-998-01.4
(Page 3 of 16)

GENERAL INFORMATION									
01	Project Name	SINGLE HOUSE ADDITION							
02	Run Title	Title 24 Analysis							
03	Project Location	13851 HEWES AVE							
04	City	SANTA ANA							
05	Zip Code	92705							
06	Climate Zone	09							
07	Building Type	Single Family							
08	Project Scope	Addition and/or Alteration							
09	Front Orientation (East/Coefficient)	00							
10	Number of Bedrooms	1							
11	Number of Bathrooms	1							
12	Number of Stories	2							
13	Foundation Average U-factor	0.3							
14	Attic Cond. Floor Area (ft²)	120							
15	Attic Insulation R-value	19.0							
16	Attic Ventilation	No							
17	Attic Conditioned Floor Area (ft²)	120							
18	Attic Insulation R-value	19.0							
19	Attic Ventilation	No							
20	Attic Conditioned Floor Area (ft²)	120							
21	Attic Insulation R-value	19.0							
22	Attic Ventilation	No							
23	Attic Conditioned Floor Area (ft²)	120							
24	Attic Insulation R-value	19.0							
25	Attic Ventilation	No							
26	Attic Conditioned Floor Area (ft²)	120							
27	Attic Insulation R-value	19.0							
28	Attic Ventilation	No							
29	Attic Conditioned Floor Area (ft²)	120							
30	Attic Insulation R-value	19.0							
31	Attic Ventilation	No							
32	Attic Conditioned Floor Area (ft²)	120							
33	Attic Insulation R-value	19.0							
34	Attic Ventilation	No							
35	Attic Conditioned Floor Area (ft²)	120							
36	Attic Insulation R-value	19.0							
37	Attic Ventilation	No							
38	Attic Conditioned Floor Area (ft²)	120							
39	Attic Insulation R-value	19.0							
40	Attic Ventilation	No							
41	Attic Conditioned Floor Area (ft²)	120							
42	Attic Insulation R-value	19.0							
43	Attic Ventilation	No							
44	Attic Conditioned Floor Area (ft²)	120							
45	Attic Insulation R-value	19.0							
46	Attic Ventilation	No							
47	Attic Conditioned Floor Area (ft²)	120							
48	Attic Insulation R-value	19.0							
49	Attic Ventilation	No							
50	Attic Conditioned Floor Area (ft²)	120							
51	Attic Insulation R-value	19.0							
52	Attic Ventilation	No							
53	Attic Conditioned Floor Area (ft²)	120							
54	Attic Insulation R-value	19.0							
55	Attic Ventilation	No							
56	Attic Conditioned Floor Area (ft²)	120							
57	Attic Insulation R-value	19.0							
58	Attic Ventilation	No							
59	Attic Conditioned Floor Area (ft²)	120							
60	Attic Insulation R-value	19.0							
61	Attic Ventilation	No							
62	Attic Conditioned Floor Area (ft²)	120							
63	Attic Insulation R-value	19.0							
64	Attic Ventilation	No							
65	Attic Conditioned Floor Area (ft²)	120							
66	Attic Insulation R-value	19.0							
67	Attic Ventilation	No							
68	Attic Conditioned Floor Area (ft²)	120							
69	Attic Insulation R-value	19.0							
70	Attic Ventilation	No							
71	Attic Conditioned Floor Area (ft²)	120							
72	Attic Insulation R-value	19.0							
73	Attic Ventilation	No							
74	Attic Conditioned Floor Area (ft²)	120							
75	Attic Insulation R-value	19.0							
76	Attic Ventilation	No							
77	Attic Conditioned Floor Area (ft²)	120							
78	Attic Insulation R-value	19.0							
79	Attic Ventilation	No							
80	Attic Conditioned Floor Area (ft²)	120							
81	Attic Insulation R-value	19.0							
82	Attic Ventilation	No							
83	Attic Conditioned Floor Area (ft²)	120							
84	Attic Insulation R-value	19.0							
85	Attic Ventilation	No							
86	Attic Conditioned Floor Area (ft²)	120							
87	Attic Insulation R-value	19.0							
88	Attic Ventilation	No							
89	Attic Conditioned Floor Area (ft²)	120							
90	Attic Insulation R-value	19.0							
91	Attic Ventilation	No							
92	Attic Conditioned Floor Area (ft²)	120							
93	Attic Insulation R-value	19.0							
94	Attic Ventilation	No							
95	Attic Conditioned Floor Area (ft²)	120							
96	Attic Insulation R-value	19.0							
97	Attic Ventilation	No							
98	Attic Conditioned Floor Area (ft²)	120							
99	Attic Insulation R-value	19.0							
100	Attic Ventilation	No							

01	Building Envelope with Computer Performance	
02	This building incorporates features that optimize building envelope performance by a certified HERS rater under the supervision of a CEC-approved HERS provider.	
03	This building incorporates one or more special features shown below	

Registration Number: 425-P1002288 (A-000-000-0000000000)
Report Version: 2023.0.000
Scheme Version: rev 2022001

Registration Date/Time: 19050225 12:37
Report Version: 2023.0.000
Scheme Version: rev 2022001

HERS Provider: CHEERS
Report Generated: 2025-10-06 12:35:04

CERTIFICATE OF COMPLIANCE - RESIDENTIAL PERFORMANCE COMPLIANCE METHOD

Project Name: SINGLE HOUSE ADDITION
Calculation Description: Title 24 Analysis

Calculation Date/Time: 2025-10-06T13:34:27-07:00
Input File Name: Y25-5528-rb422x

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(Page 3 of 16)

ENERGY USE SUMMARY									
Energy Use	Thermal Design Source Energy (Btu/h) (Btu/h) (°F)⁻¹	Standard Design Thermal Energy (Btu/h) (Btu/h) (°F)⁻¹	Prescribed Design Thermal Energy (Btu/h) (Btu/h) (°F)⁻¹	Margin (Btu/h)	Margin (%)				
Space Heating	0	20.4	0	20.4	-1.46				
Space Cooling	0	65.37	0	65.37	0				
Hot Water Heating	0	0	0	0	0				
Water Heating	0	0.8	0	0.8	0				
Net Load/Unavailability	0	0	0	0	0				
Efficiency Compliance	0	75.82	0	75.82	0				
Photovoltaics	0	0	0	0	0				
Battery	0	0	0	0	0				
Flexibility	0	0	0	0	0				
Indoor Lighting	0	5.11	0	5.11	0				
Appl. & Cooking	0	7.93	0	7.93	0				
Plug Loads	0	13.09	0	13.09	0				
Outdoor Lighting	0	1.43	0	1.43	0				
TOTAL COMPLIANCE	0	101.04	0	101.04	0				

Registration Number: 425-P1002288 (A-000-000-0000000000)
Report Version: 2023

Project Name: SINGLE HOUSE ADDITION
Calculation Description: Title 24 Analysis

Calculation Date/Time: 2025-10-06T12:34:27-07:00
Input File Name: Y25_5528.rib22x

CS1R-PHF-01-E
(Page 7 of 16)

PENetration / BLAZING															
01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16
Name	Type	Location	Orientation	Access	Width (m)	Height (m)	Area (m ²)	U factor	U-factor Score	QIGW	SHR Score	Exterior Shading	Status	Verified	Unaided
WINDOWS 5	Window	WEST WALL	Back	270	2	1.40	0.5	NFRC	0.23	NFRC	Reg Screen	New	NA	NA	NA
WINDOWS 6	Window	EAST WALL	Front	90	2	5.2	0.3	NFRC	0.23	NFRC	Reg Screen	New	NA	NA	NA
WINDOWS 5	Window	NORTH WALL	Right	0	2	80	0.5	NFRC	0.23	NFRC	Reg Screen	New	NA	NA	NA
WINDOWS 5	Window	SOUTH/WEST WALL		310	1	1.3	0.5	NFRC	0.23	NFRC	Reg Screen	New	NA	NA	NA
WINDOWS 5	Window	SOUTH/EAST WALL		225	1	1.3	0.5	NFRC	0.23	NFRC	Reg Screen	New	NA	NA	NA
WINDOWS 6	Window	WEST WALL	Back	170	1	1	0.3	NFRC	0.23	NFRC	Reg Screen	Altered	NA	NA	NA
WINDOWS 5	Window	EAST WALL	Front	90	1	1.14	0.09	NFRC	0.23	NFRC	Reg Screen	Altered	NA	NA	NA
WINDOWS 5	Window	NORTH WALL	Right	0	1	9	0.03	NFRC	0.23	NFRC	Bus Screen	Planned	NA	NA	NA
WINDOWS 5	Window	SOUTH/WEST WALL		215	1	1.16	0.1	NFRC	0.23	NFRC	Reg Screen	Altered	NA	NA	NA
WINDOWS 5	Window	WEST WALL	Back	170	1	1	0.3	NFRC	0.23	NFRC	Reg Screen	New	NA	NA	NA
WINDOWS 11	Window	EAST WALL	Front	90	1	16	0.1	NFRC	0.19	NFRC	Reg Screen	New	NA	NA	NA
WINDOWS 12	Window	NORTH WALL	Right	0	1	15	0.3	NFRC	0.23	NFRC	Reg Screen	New	NA	NA	NA

Registration Number: 429-P00202916-A-000-000-000000-00-00 Registration Date/Time: 10/06/2025 12:17 HERS Provider: CHEERS
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 CA Building Energy Efficiency Standards - 2022 Residential Compliance Report Version: 2022.0.000 Report Generated: 2025-10-06 12:35:04
 Ghaema Maclean nsa 20250801

Project Name: SINGLE HOUSE ADDITION
Calculation Description: Title 24 Analysis

Calculation Date/Time: 2025-10-06T12:34:27-07:00
Input File Name: Y25_5528.r3d22x

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(Page 8 of 16)

WALLS - S1																
ID	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16
Name	Type	Surface	Description	Area (sq ft)	Width (ft)	Length (ft)	Height (ft)	Area (sq ft)	Volume (cu ft)	U-Value	Insulation	R-Value	Sound Rating	Exterior Finishing	Status	Special Handling Conditions
WALLS - S1	WINDOW	SOUTH WALL 3	LIFT	240	10	10	1	53	0.3	NFRC	0.23	NFRC	Bug Screens	New	N/A	
FLOOR FINISHES																
ID	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16
Name	Zone	Area (sq ft)	Perimeter (ft)	Substrate Condition	Moisture Content (%)	Slip Resistance	Carpeted / Hardwood	Hatched	Status	Notes / Special Conditions						
Covered Deck	ADDITION 1ST FLOOR	1205	327.0	None	0	None	None	None	n/c							
Concrete Slab 2	EASTING 1ST FLOOR	550	250.0	None	0	None	None	None	n/c							
CEILING & INTERIOR CONSTRUCTIONS																
ID	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16
Construction Name	Surface Type	Construction Type	Finishing	Total Ceiling Height	Insulation / Exterior Exposure	Acoustic	Fire Rating	Assembly Layers								
R-15 Wall	Interior Walls	Wood Framed Wall	3-4 @ 16 O.C.	R-15	None / None	0.055		Inside Finish: Gypsum Board Garter / Plaster 1/2" Jamb Exterior Finish: 1 Coat Stucco								
Default Walls	Exterior Walls	Wood Framed Wall	3-4 @ 16 O.C.	R-0	None / None	0.365		Inside Finish: Gypsum Board Garter / Plaster no Studs / Ins Exterior Finish: 1 Coat Stucco								

Registration Number: 425-P010302951A-050-000-0000000-0000 Registration Date/Time: 1/10/2025 12:37 HHS Provider: CHEERS
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 CA Building Energy Efficiency Standards - 2022 Residential Compliance Report Version: 2022.0.000 Report generated: 2025-10-06 12:35:04
 Shweta Vasani / rev 20220901

Project Name: SINGLE HOUSE ADDITION
Calculation Description: Title 24 Analysis

Calculation Date/Time: 2025-10-06T12:24:27-07:00
Input File Name: Y25-5528.ribd22x

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D1	D2	D3	D4	D5	D6	D7
ID	IS	IS	IS	IS	IS	IS
Construction Name	Surface Type	Construction Type	Framing	Total Glazing Surface	Insulator / Exterior Condition	U-Factor
R-05 (RIGID) Roof Ceiling	Cathedral Ceilings	Wood Framed Ceiling	2x10 @ 16" o.c.	750	Nomex / Membrane	0.037
R-05 (RIGID) Roof Ceiling	Cathedral Ceilings	Wood Framed Ceiling	2x10 @ 16" o.c.	750	Nomex / Membrane	0.037
R-05 (RIGID) Roof Ceiling	Cathedral Ceilings	Wood Framed Ceiling	2x10 @ 16" o.c.	750	Nomex / Membrane	0.037
Default Wall	Interior Walls	Wood Framed Walls	2x4 @ 16" o.c.	8-0	Nomex / Membrane	0.077
AIR-05 (AIRBORNE) INSULATION	Air Boats	Wood Framed Ceiling	2x4 @ 16" o.c.	8-19	Nomex / F	0.055
AIR-05 (AIRBORNE) INSULATION	Air Boats	Wood Framed Ceiling	2x4 @ 16" o.c.	8-0	Nomex / F	0.044
AIR-05 (AIRBORNE) INSULATION	Air Boats	Wood Framed Ceiling	2x4 @ 16" o.c.	8-19	Nomex / F	0.055
AIR-05 (AIRBORNE) INSULATION	Air Boats	Wood Framed Ceiling	2x4 @ 16" o.c.	8-19	Nomex / F	0.055

Registration Number: 420-P015022814-000-000-000-000-00000
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CA Building Energy Efficiency Standards - 2022 Residential Compliance
Report Version: 2022.0.0.000
CNEURS User: user 381250001
HERS Provider: CHEERS
Report Generated: 2025-10-06 12:35:04

Project Name: SINGLE HOUSE ADDITION
Calculation Description: Title 24 Analysis

Calculation Date/Time: 2025-10-06T12:34:27-07:00
Input File Name: V25-5528_rhd23-

CFIR-PRF-01-E
(Page 10 of 16)

OPAQUE SURFACE CONSTRUCTIONS							
04	05	06	07	08	09	10	11
Construction Name	Surface Type	Construction Type	Framing	Total Glazing Area	Minimum of Exterior Convective R-value	U-factor	Assembly Details
0.1% Roof Overhang	Roofs Over Canopies	Wood Framed Roof	2x6 @ 16" O.C. G.C.	R-12	None / None	0.05	Flashed Surface, Gypsum Board Sheat Self-sealing/Sealing Caulk / Flame R-3.5 @ 2x12 @ 16" O.C. / 2x6
Default Roof Canopies	Roofs Over Canopies	Wood Framed Roof	2x12 @ 16" O.C. G.C.	R-40	None / None	0.018	Flashed Surface, Gypsum Board Sheat Self-sealing/Sealing Caulk / Flame R-3.5 @ 2x12 @ 16" O.C. / 2x6
R-30 Roof Deck	Cellings Below Deck	Wood Framed Deck	2x6 @ 16" O.C. G.C.	R-30	None / None	0.033	Over Ceiling Insulate R-3.5 @ 2x12 @ 16" O.C. / 2x6
Default Roof	Celling (Interior Deck)	Wood Framed Deck	2x6 @ 16" O.C. G.C.	R-5	None / None	0.472	Ceiling Insulate R-3.5 @ 2x12 @ 16" O.C. / 2x6
Default Roof No Overhang	Roofs Over	Wood Framed Roof	2x12 @ 16" O.C. G.C.	R-40	None / None	0.036	Flashed Surface, Gypsum Board Sheat Self-sealing/Sealing Caulk / Flame R-3.5 @ 2x12 @ 16" O.C. / 2x6

Registration Number: 423-P1032951A-030-000-0000000000 NOTE: This document has been generated by California Energy Efficiency Rating Services (CEERS) using information supplied by third parties not affiliated with or related to CEERS. Therefore, CEERS is not responsible for, and cannot guarantee, the accuracy or completeness of the information contained in this document. CA Building Energy Efficiency Standards - 2022 Residential Compliance	Registration Date/Time: 10/09/2025 12:17 Report Version: 2022.0.000 Schema Version: new.20220901	HEPS Provider: CEERS Report Generated: 2025-10-08 12:35:04
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Project Name: SINGLE HOUSE ADDITION
Calculation Description: Title 24 Analysis

Calculation Date/Time: 2025-10-06T12:34:27-07:00
Input File Name: V35-5538-08-023-

CFIR-PRF-01-E
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POWER PLANT SYSTEMS												
01	02	03	04	05	06	07	08	09	10	11	12	
Name	System Type	Classification	Water Header Name	Number of Loops	Solar Heating System	Connect / Disconnect	Flow Direction	Water Header Name (S)	Status	Verified Existing Condition	Existing Water Header Condition	
Drift Ss 1	Drumless Hot Water (DHW)	Standard	DHW Header 1	2	N/A	None	N/A	DHW TRIP 1207	Now	NA		
WATER HEATER												
01	02	03	04	05	06	07	08	09	10	11	12	
Heating Element Type	Task Type	# of Units	Heating Efficiency Type	Efficiency	Water Meter Name	Input Ratio (g/s)	Task Location	Stability Limit or (g/s)	Task Location	Status	Verified Existing Condition	
Drum	Gas	Consumer Intermediate	2	B	WTR	0.57	200/05	3	Task Location	Now	N/A	
WATER HEATING - PRESS VENTILATION												
01	02	03	04	05	06	07						
Name	PIPE INFORMATION	Function Name	Component Distribution	Component Distribution	Reclamation Control	Flow Control Water Meter Recovery						
SPRINK 1207 - 122	Not Required	Not Required	Not Required	Not Required	Not Required	Not Required						
SPLASH CONDENSING SYSTEMS												
01	02	03	04	05	06	07	08	09	10	11	12	
Name	System Type	Heating Unit Name	Water Equipment Component	Control Unit Name	Water Equipment Component	Fan Name	Classification Name	Status	Verified Existing Condition	Existing Water Header System		
1207 FAN AIR	Heating and cooling system other	Heating Component 1	2	Control Component 1	2	FANVC Fan 1	Air Lightening System 1	Now	NA			

Registration Number: 425-P01030290-1A-000-000-000000-0000
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 CA Building Energy Efficiency Standards - 2022 Residential Compliance
 Report Version: 2022.0.000
 Subarea Version: nrc.20220001
 Registration Date/Time: 10/06/2025 12:37
 HERS Provider: CHERS
 Report Generated: 2025-10-06 12:35:04

Project Name: SINGLE HOUSE ADDITION

Calculation Date/Time: 2025-10-06T12:34:27.070
Input File Name: Y25-5528-8-022-

CF18-PHF-01-
(Page 12 of 16)

SPACE CONDITIONING SYSTEMS										
01	02	03	04	05	06	07	08	09	10	11
Name	System Type	Heating Unit Name	Heating Component	Cooling Unit Name	Cooling Component	Room Name	Substation Name	Station	Verified Design Condition	Existing Unit Name
2ND FLOOR HALL	Heating and Cooling system other	Heating Component 2	1	Cooling Component 2	1	PTSC FLOOR 2	UT/STATION System 2	75W	No	
HEAT - HEATING UNIT TYPES										
Name		System Type	Number of Units	Heating Efficiency	Heating Unit Thermal					
Heating Component 1		Carrier gas furnace	2	AT 81 - 81	n/a					
Heating Component 2		Carrier gas furnace	1	AT 81 - 81	n/a					
HEAT - COOLING UNIT TYPES										
Name	System Type	Number of Units	Efficiency Metric	Efficiency EER/ESEER	Efficiency SEER/SCSEER	Min/Max Controlled	Multi-speed Compressor	HEAT Validation		
Cooling Component 1	GE/DAI Split AC	2	E13X34SL	12.7	13	Not Zonal	Single Speed	Cooling Component 1 heat-cool		
Cooling Component 2	Cervical unit JAC	1	EEN/SEER	12.2	13	Not Zonal	Single Speed	Cooling Component 2 heat-cool		

Registration Number: 429-P0100220614-000-000-000000-0000 NOTICE: This document has been generated by California Energy Agency Services (CEAS) using information submitted by third parties not affiliated with or related to CEAS. Therefore, CEAS is not responsible for any errors or omissions or for any consequences or damages arising from the use of this document. CA Building Energy Efficiency Standards - 2022 Residential Compliance	Registration Date/Time: 10/09/2025 12:37 using information submitted by third parties not affiliated with or related to CEAS. Therefore, CEAS is not responsible for any errors or omissions or for any consequences or damages arising from the use of this document. Report Version: 2022.0.0.0 California Decisions rev. 2023/09/05	HES Provider: CHERS Report Generated: 2025-10-06 12:35:04
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SINGLE HOUSE ADDITION 13861 HEWES AVE. SANTA ANA, CA 92705		REVISIONS BY	
Date	10/6/2023		
Scale			
Job #	Y25-5528		
Sheet	2		
	RESIDENTIAL 724 SHEET		
Of	4	Sheets	

SINGLE HOUSE ADDITION
13661 HEWES AVE.
SANTA ANA, CA 92705

CERTIFICATE OF COMPLIANCE - RESIDENTIAL PERFORMANCE COMPLIANCE METHOD Project Name: SUMMIT HILLSIDE ADDITION Calculation Description: Title 24 Analysis		Calculation Date/Time: 2025/10/25 13:37:07 EDT Input File Name: T25-5283-r622x		CFR 906.01-6 (Page 16 of 16)	
DECLARATION AUTHORITY CHAIRMAN STATEMENT I, <u>Charles Chen</u> , the Chairman of Compliance Documentation is accurate and complete.					
Documentation Author Name: Raymond Zhong					
Designer: Perfect Design					
2418 W. Valley Boulevard Glendale, CA 91203					
Phone: (626) 299-5823					
RESPONSIBLE PERSON'S DECLARATION STATEMENT I certify the following under penalty of perjury, under this seal of the State of California: 1. I am eligible to be the Architect for this business and intend to do so in compliance with the building energy code set forth in the California Code of Regulations. 2. I certify that the energy ratings and performance calculations described on the Certificate of Compliance are the calculations of Title 24, Part 6 and Part 6 of the California Code of Regulations. 3. The building design, structure or system design, identify in the Certificate of Compliance and comments and/or descriptions listed on other applicable compliance documents, worksheets, calculations, plans and specifications identified in the attachment appear to accurately reflect the building project described in the building permit application.					
Personnel Design Name: TJ LARSEN		Personnel Design Signature: 			
3.3K DESIGN		10-7-2025			
Address: 1907 N WOODSIDE ST		City: Glendale			
State/Zip: ORANGE CA 92865		Phone: 714-709-7934			

[illegible][illegible]

Perfect Design & Consulting
Air-Conditioning, Plumbing, Fire Sprinkler System,
Electrical, Title 24 Energy Calculation.
2416 W. Valley Blvd.
Alhambra, CA 91803
Tel: (626) 289-8808
E-Mail: perfectdesign@gmail.com Fax: (626) 289-4913

SINGLE HOUSE ADDITION
13661 HEWES AVE.
SANTA ANA, CA 92705

Date	10/6/2021
Scale	
Drawn	
Job #	Y25-5528
Sheet	3
Residential	T24 SHEET
Of	4 Sheets

LEGEND

- EXISTING WALLS TO REMAIN
EXISTING WALLS TO BE REMOVED
EXISTING DOOR TO BE REMOVED
EXISTING WINDOW TO BE REMOVED
EXISTING WATER CLOSET TO BE REMOVED
EXISTING VANITY WITH SINK TO BE REMOVED
EXISTING TUB TO BE REMOVED

PEDESTRIAN PROTECTION

PROVIDE PEDESTRIAN PROTECTION ADJACENT TO PUBLIC WAY AS FOLLOWS:

HEIGHT OF CONSTRUCTION	DISTANCE FROM CONSTRUCTION TO LOT LINE	TYPE OF PROTECTION REQUIRED
MORE THAN 8 FEET	LESS THAN 5 FEET	BARRIER AND COVERED WALKWAY
	5 FEET OR MORE, BUT NOT MORE THAN ONE-FOURTH THE HEIGHT OF CONSTRUCTION	BARRIER AND COVERED WALKWAY
	5 FEET OR MORE, BUT BETWEEN ONE-FOURTH AND ONE-HALF THE HEIGHT OF CONSTRUCTION	BARRIER
	5 FEET OR MORE, BUT EXCEEDING ONE-HALF THE HEIGHT OF CONSTRUCTION	6 FEET CONSTRUCTION FENCING

1. WHEN REQUIRED, FENCE BARRIER AND WALKWAY COVER TO BE CONSTRUCTED PER CBC 9306.3, 9306.6 AND 9306.7.

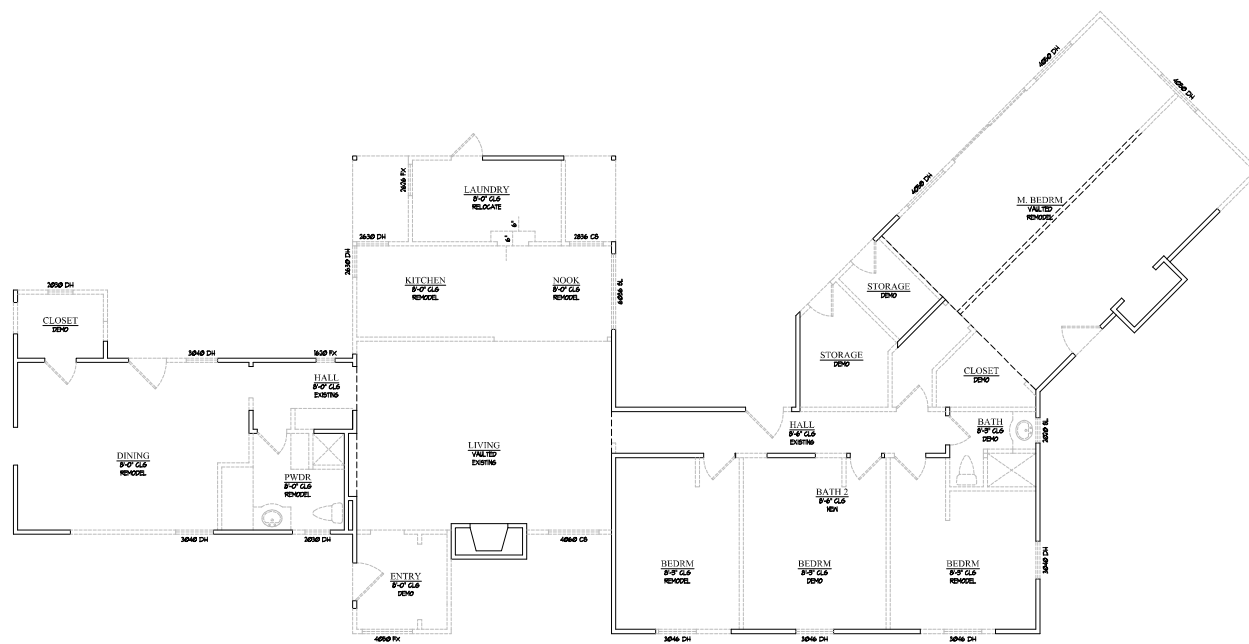
2. IN ADDITION TO PROTECTION OF PEDESTRIAN, PROVIDE CONSTRUCTION FENCING FOR NEW CONSTRUCTION AND ADDITION PLUS REMODEL EXCEEDING 50% OF THE AREA OF PROPOSED STRUCTURE. FENCE HEIGHT TO BE BETWEEN 12" AND 84" HIGH.

JOB CONDITIONS

THE GENERAL CONTRACTOR AND/OR SUB-CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND JOB CONDITIONS AT THE JOB SITE SUFFICIENTLY IN ADVANCE OF WORK TO BE PERFORMED TO ASSURE THE ORDERLY PROGRESS OF THE WORK. THE GENERAL CONTRACTOR SHALL BE RESPONSIBLE FOR ASSURING THAT EACH SUBCONTRACTOR PERFORMS THE WORK IN ACCORDANCE WITH ALL CODES IN A TIMELY MANNER TO FACILITATE COORDINATION WITH OTHER SUBCONTRACTORS.

CLEAN UPS AND PROTECTION

A. PROTECTION: ADEQUATELY PROTECT ALL WORK FROM DAMAGE BY SUBSEQUENT CONSTRUCTION OPERATIONS. DAMAGED WORK SHALL BE REFINISHED OR REPLACED. B. CLEANING: GENERAL CONTRACTOR AND/OR SUB-CONTRACTOR SHALL MAINTAIN THE PREMISES CLEAN AND FREE OF ALL TRASH, DEBRIS AND SHALL PROTECT ALL ADJACENT WORK FROM DAMAGE, SOILING, PAINT OVERSPRAY, ETC. ALL FIXTURES, EQUIPMENT, GLAZING, FLOORS, ETC. SHALL BE LEFT CLEAN AND READY FOR OCCUPANCY UPON COMPLETION OF THE PROJECT.



1ST FLOOR DEMO PLAN

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



ORANGE, CA 92665
PHONE: 714-709-7934
EMAIL: 3JKDESIGN@GMAIL.COM
WWW.3JKDESIGN.COM

[illegible]

PROJECT TITLE

PROPOSED 1ST FLOOR
ADDITION / REMODEL
AND 2ND FLOOR
ADDITION

PRIVATE
RESIDENCE

13661 HEWES AVENUE
UNINCORPORATED
ORANGE COUNTY
CALIFORNIA
92705

PROJECT NO. 23-157

SHEET TITLE

1ST FLOOR
DEMO PLAN



DESIGNER'S SIGNATURE

[Signature]

DRAWN BY TL

CHECKED BY TL

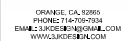
SCALE AS NOTED

PRINT DATE 8-24-25

SHEET NO.

A-1



[illegible]

PROJECT TITLE

PROPOSED 1ST FLOOR
ADDITION / REMODEL
AND 2ND FLOOR
ADDITION

PRIVATE
RESIDENCE

13661 HEWES AVENUE
UNINCORPORATED
ORANGE COUNTY
CALIFORNIA
92705

PROJECT NO. 23-157

SHEET TITLE

PROPOSED
ELEVATIONS A & B

STAMP



DESIGNER'S SIGNATURE _____

W. J. J. J.

DRAWN BY TL

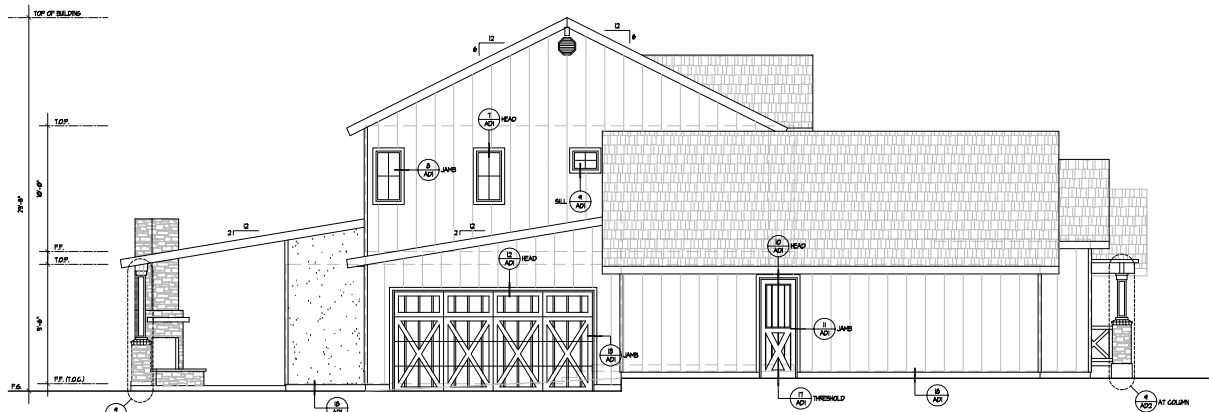
CHECKED BY T1

SCALE AS NOTED

PRINT DATE 8-24-05

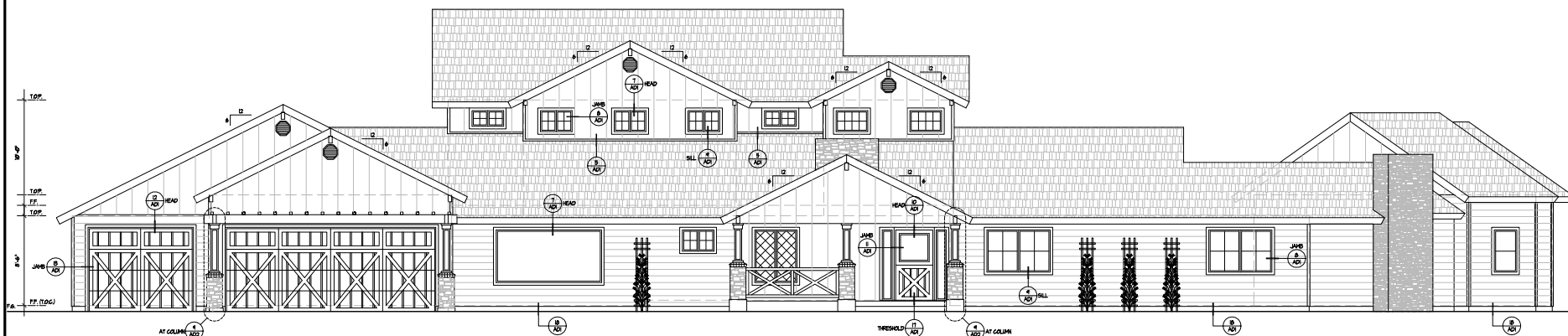
SHEET NO.

A-5



SOUTH ELEVATION (SIDE) B

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



EAST ELEVATION (FRONT) A

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

TYPICAL EXTERIOR MATERIALS

STUCCO EXTERIOR STUCCO OVER LATH AND BUILDING PAPER, INSTALLED PER
C.B.C. SECTIONS HQ02, HQ03, HQ08, PROVIDE 2 - LAYERS OF
GRADE D PAPER OVER ALL HOOD BASE SHEATHING HQ02.85

LATH SCHED. HARDYPLANK 3/2" THK. x 8'25" SPACING

VERTICAL SCHED. HARDYPLANK 3/2" THK. x 4'6" SPACING

STUCCO REIN. BOARD. REINFORCED FIBERGLASS MESH OVER 1/2" BOARD

HOOD TIE RODS. HARDWIRE TIE 1/2" x 3/8" x 36" H

GLASS A BOARDING. CERTAINTED PRESIDENTIAL ASPHALT SHINGLES ESPR-BD-2500

STONE VENEER. CORONADO STONE VENEER - ESPR-2500

THE OWNER/BUILDER IS SOLELY RESPONSIBLE FOR ALL EXTERIOR MATERIALS AND THEIR INSTALLERS; IT IS EXCLUSIVELY THE OWNER/BUILDERS RESPONSIBILITY TO VERIFY, APPROVE, AND SUPERVISE INSTALLATION OF ALL EXTERIOR MATERIALS PER MANUFACTURERS' SPECIFICATIONS, G.I.C. AND LOCAL CODE.

BUILDING PAPER NOTES

(15 LB FELT MIN). FEDERAL SPECIFICATION W-8-740. INSTALL UNDER EXTERIOR SIDE AND TRIM AND CAREFULLY APPLY SO AS TO FORM A WATERTIGHT MEMBRANE. EACH COURSE OF PAPER SHALL OVERLAP THE COURSE BENEATH IT 6" MINIMUM. WHERE PAPER MEETS ANY OPENING THE PAPER SHALL BE CAREFULLY LAPPED OVER THE FRAME TO PREVENT THE PASSAGE OF WATER BEHIND THE FRAME. INSTALL SINK/GRATE PAPER AT EXTERIOR DOOR AND WINDOW FRAMES PER WINDOW AND DOOR MANUFACTURER'S PRINTED INSTALLATION INSTRUCTIONS.

PANTING NOTES

APPLICATION:

1. APPLICATION OF PAINT, STAIN OR OTHER COATINGS SHALL BE IN STRICT ACCORDANCE WITH THE PAINTING AND DECORATING CONTRACTORS OF AMERICA (PDCA) "PAINTING SPECIFICATION MANUAL," AND PER THE MANUFACTURERS PRINTED INSTRUCTIONS. READY-MIXED PAINT SHALL NOT BE THINNED, EXCEPT AS PERMITTED THE APPLICATION PRINTED INSTRUCTIONS.

2. ALL EXTERIOR AND INTERIOR SURFACES SHALL RECEIVE A PAINTED FINISH EXCEPT COLOR COORDINATED FACTORY FINISH SURFACES.

3. ALL SURFACES TO BE FINISHED SHALL BE CLEAN AND FREE OF FOREIGN MATERIAL (DIRT, GREASE, ASPHALT, RUST, ETC.)

4. APPLICATION SHALL BE IN A PORSMAN LIKE MANNER PROVIDING A SMOOTH FINISH. APPLICATION SHALL BE DONE BY BRUSH OR ROLLER OR BY SPRAY IF PAINT IS FORMULATED FOR SPRAY APPLICATION.

MATERIALS:
1. EXTERIOR WOOD: TWO COATS STAIN PER (PDC) AND THE MANUFACTURER'S PRINTED INSTRUCTIONS.
2. EXTERIOR METAL: ONE COAT SEMI-GLOSS ENAMEL OVER ONE COAT METAL PRIMER PER (PDC) AND MANUFACTURER'S PRINTED INSTRUCTIONS.
3. INTERIOR FINISHES: REFER TO FINISH SCHEDULE FOR DETAILS.

[illegible]

PROJECT TITLE

PROPOSED 1ST FLOOR
ADDITION / REMODEL
AND 2ND FLOOR
ADDITION

PRIVATE
RESIDENCE

13661 HEWES AVENUE
UNINCORPORATED
ORANGE COUNTY
CALIFORNIA
92705

PROJECT NO. 23-157

SHEET TITLE

PROPOSED
ELEVATIONS C & D



DESIGNER'S SIGNATURE _____

W. J. Farn

DRAWN BY TL

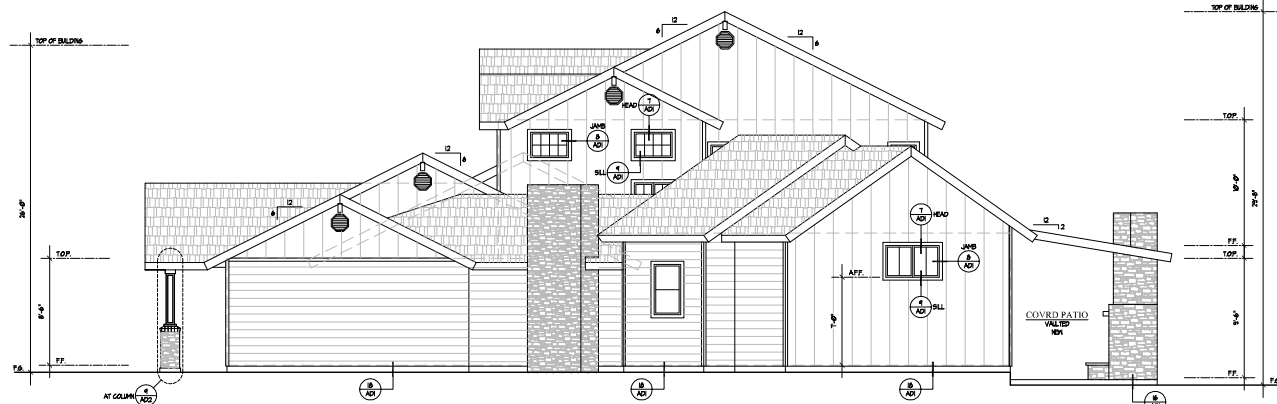
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SCALE AS NOTED

PRINT DATE 8-24-05

SHEET NO.

A-6



NORTH ELEVATION (SIDE) D

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



WEST ELEVATION (REAR)

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

TYPICAL EXTERIOR MATERIALS

STUCCO: INTERIOR STUCCO OVER LATH AND BUILDING PAPER. INSTALL PER C.B.G. SECTIONS 1402.2006.2008. PROVIDE 2 - LAYERS OF GRADE D PAPER OVER ALL WOOD BASE SHEATHING. R1008-8

LAP SIDING: HANDPLANED, 3/2" THK. x 8.25' NOD. HIDE.

VERTICAL SIDING: HANDPLANED, 3/2" THK. x 48" NOD. HIDE.

STUCCO TRIM BOARDS: REINFORCED FIBERGLASS MESH OVER 1/2" NOD.

WOOD TRIM BOARDS: HANDRETMED 1" THK. x 33" x 55" NOD. HIDE.

GLASS A ROOFING: CERTAINTED PRESIDENTIAL ASPHALT SHINGLES 15 YEAR.

STONE VENEER: CORONADO STONE VENEER - 1259-2548.

THE OWNER/BUILDER IS SOLELY RESPONSIBLE FOR ALL EXTERIOR MATERIALS AND THEIR INSTALLERS. IT IS EXCLUSIVELY THE OWNER/BUILDER'S RESPONSIBILITY TO VERIFY, APPROVE AND SUPERVISE INSTALLATION OF ALL EXTERIOR MATERIALS PER MANUFACTURER'S SPECIFICATIONS, C.B.C. AND LOCAL CODE.

BUILDING PAPER NOTES

(5 LB TEST MIN.) FEDERAL SPECIFICATION W-5-MO. INSTALL UNDER EXTERIOR SIDING AND TRIM AND CAREFULLY APPLY SO AS TO FORM A WATERBIGHT MEMBRANE. EACH COURSE OF PAPER SHALL OVERLAP THE COURSE BENEATH IT 6" MINIMUM. WHERE PAPER MEETS ANY OPENING THE PAPER SHALL BE CAREFULLY LAPPED OVER THE FRAME TO PREVENT THE PASSAGE OF WATER BEHIND THE FRAME. INSTALL SISKRAFT PAPER AT EXTERIOR DOOR AND WINDOW FRAMES PER WINDOW AND DOOR MANUFACTURERS PRINTED INSTALLATION INSTRUCTIONS.

PAINTING NOTES

APPLICATION:

1. APPLICATION OF PAINT, STAIN OR OTHER COATING SHALL BE IN STRICT ACCORDANCE WITH THE PAINTING AND DECORATING CONTRACTORS OF AMERICA (PDCA) "PAINTING SPECIFICATION MANUAL," AND PER THE MANUFACTURERS PRINTED INSTRUCTIONS. READY-MIXED PAINT SHALL NOT BE THINNED, EXCEPT AS PERMITTED IN THE APPLICATION PRINTED INSTRUCTIONS.
2. EXTERIOR AND INTERIOR SURFACES SHALL RECEIVE A PAINTED FINISH EXCEPT COLOR COORDINATED FACTORY FINISH SURFACES.
3. ALL SURFACES TO BE FINISHED SHALL BE CLEAN AND FREE OF FOREIGN MATERIALS (DIRT, GREASE, ASPHALT, RUST ETC.).
4. APPLICATION SHALL BE IN A WORKMAN-LIKE MANNER PROVIDING A SMOOTH SURFACE. APPLICATION SHALL BE PER THE MANUFACTURERS PRINTED INSTRUCTIONS. APPLICATION MAY BE BRUSH OR ROLLER OR SPRAY IF PAINT IS FORMULATED FOR SPRAY APPLICATION.

MATERIALS:
1. EXTERIOR WOOD: TWO COATS STAIN PER (PDA) AND THE MANUFACTURER'S PRINTED INSTRUCTIONS.
2. EXTERIOR METAL: ONE COAT SEMI-GLOSS ENAMEL OVER ONE COAT METAL PRIMER PER (PDA) AND MANUFACTURER'S PRINTED INSTRUCTIONS.
3. INTERIOR FINISHES: REFER TO FINISH SCHEDULE ON DRAWINGS.

[illegible]

PROJECT TITLE

PROPOSED 1ST FLOOR
ADDITION / REMODEL
AND 2ND FLOOR
ADDITION

PRIVATE
RESIDENCE

13661 HEWES AVENUE
UNINCORPORATED
ORANGE COUNTY
CALIFORNIA
92705

PROJECT NO. 23-157

SHEET TITLE

PROPOSED
SECTIONS

STAMP



DESIGNER'S SIGNATURE _____

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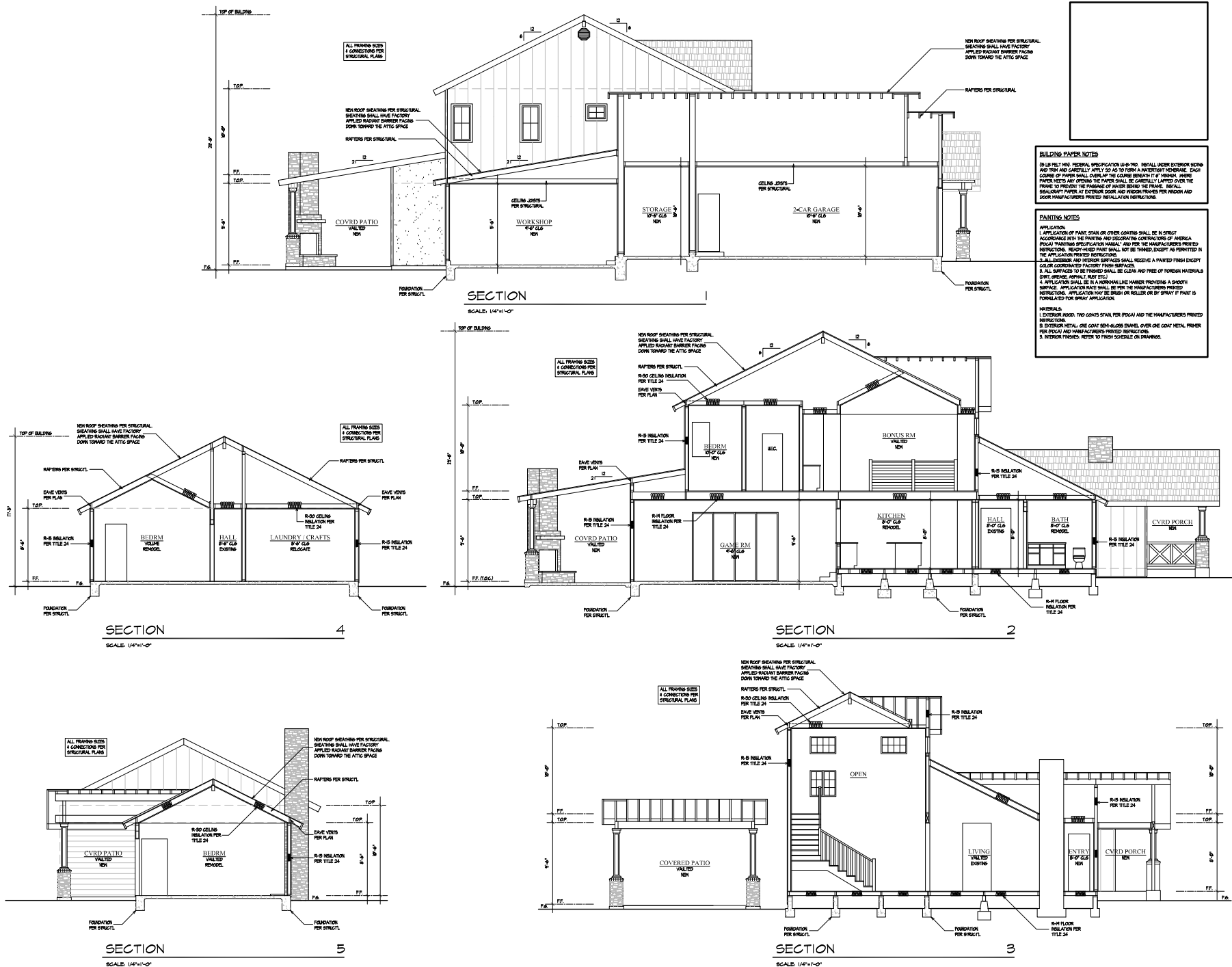
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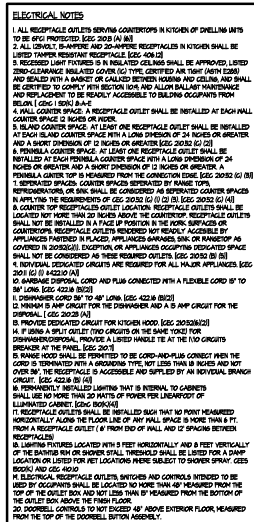
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PRINT DATE 8-24-25

SHEET NO. A 1

A-7





SMOKE DETECTORS

- SMOKE DETECTORS (APCI PROTECTED) (§ 21.21)

PROVIDE SMOKE DETECTORS IN EACH HALLWAY LEADING TO SLEEPING ROOMS AND EACH SLEEPING ROOM OF NEW OR EXISTING CONSTRUCTION. IN NEW CONSTRUCTION SMOKE DETECTORS SHALL BE "HARD WIRE" AND SHALL BE EQUIPPED WITH A BATTERY BACKUP. SMOKE DETECTORS SHALL BE INTERCONNECTED TO SOUND AT THE SAME TIME.

CARBON MONOXIDE DETECTORS

- CARBON MONOXIDE DETECTORS (APCI PROTECTED) (§ 2024.2027E)

PROVIDE CARBON MONOXIDE DETECTORS IN EACH HALLWAY LEADING TO SLEEPING ROOMS OF NEW OR EXISTING CONSTRUCTION. IN NEW CONSTRUCTION CARBON MONOXIDE DETECTORS SHALL BE "HARD WIRE" AND SHALL BE EQUIPPED WITH A BATTERY BACKUP. CARBON MONOXIDE DETECTORS SHALL BE INTERCONNECTED TO SOUND AT THE SAME TIME.



USE 2x4 STUDS @ 16" o/c PLUMBING WALLS

B. DOUBLE WALLS ARE USING PLUMBING ARE TO BE A MINIMUM OF 8" MADE AND NO "FLAT" STUDS PERMITTED.

C. PERMISSIBLE NOTCHING AND BORING OF JOISTS ARE TO BE SHOWN ON PLAN. NOTCHES ARE NOT TO EXCEED CROSS SECTION 2008.10.2.4 ALLOWANCE

D. NOTCHING OF EXTERIOR AND BEARING/NEARING WALLS SHALL NOT EXCEED 28% & 40% RESPECTIVELY. BORED HOLES IN BEARING/NEARING WALLS SHALL NOT EXCEED 12" IN DIAMETER. NOTCHES IN BEARING/NEARING WALLS SHALL NOT BE DEEPER THAN 1 1/2" TO THE EDGE OF THE STUD.

E. FIREPROOFING IS REQUIRED IN CONCEALED SPACES 10" o/c HORIZONTAL, VERTICAL, AND AT KNEE AND FLOOR LEVELS. CONNECTIONS BETWEEN EXISTING ELECTRICAL, MECHANICAL, PLUMBING, AND OTHER SERVICES, DUCTS, CABLES AND WIRES (CROSSING) SHALL BE PROTECTED.

F. FOUNDATION FOOTING SHALL BE SECURED IN PLACE PRIOR TO CONSTRUCTION.

G. HOLD-DOWN CONNECTOR BOLTS INTO WOOD FRAMING REQUIRE 0.22x3"x33" PLATE OR 0.22x3"x33" PLATE WITH 1/2" DIA. ANCHOR BOLT FROM STUD TURN

H. HOLD-DOWNS SHALL BE TIGHTENED TO FINGER TIGHT PLUS ONE-HALF WHIRL TURN JUST PRIOR TO COVERING THE WALL FRAMING.

I. THERE SHALL BE NO TRENCHES OR EXCAVATIONS 5' OR MORE IN DEPTH INTO EXISTING OR NEW FOUNDATION. EXCAVATIONS SHALL BE PERMITTED BY THE CALIFORNIA, DIVISION OF OCCUPATIONAL SAFETY AND HEALTH (COSH/OSHA).

J. ALL EXISTING OR NEW SAFETY PERMIT SHALL BE OBTAIN PRIOR TO COMMENCEMENT OF ANY WORK.

K. WORKMANSHIP & MATERIALS SHALL CONFORM TO THE 2022 CBC & ASCE 341-10

L. BALCONY FRAME WALLS AT ALL VAULTED CUBE END ROOF

M. SKYLIGHT AND SKYLIGHT FRAMING DESIGN SHALL BE A DEFERRED ITEM. FRAMING SHALL BE OPENING SHALL BE 12" O.C. MAXIMUM.

- A. THE CONTRACTOR SHALL NOTIFY INSPECTOR PRIOR TO STARTING EXCAVATIONS OR ANY GRADING WORK.
- B. EXTEND ALL EXCAVATIONS FOR THE FOOTINGS BELOW NATURAL GRADE AS SHOWN ON STRUCTURAL DRAWING.
- C. ALL EXCAVATIONS FOR THE FOOTINGS MUST BE INSPECTED AND APPROVED BY INSPECTOR PRIOR TO POURING OF CONCRETE.
- D. ALL FILL SHALL BE PLACED IN MAXIMUM 2" LAYERS AND COMPACTED TO 90% DENSITY TO SUPPORT FOOTINGS.
- E. SILL PLATES SHALL BE 6" MINIMUM ABOVE GRADE, REMINDER: ALTERNATE DETAIL OF 36" WIDE, 2" TALL CURB CAN BE ADDED ON TO MEET THE REQUIREMENT.
- F. THE ROOF SHEATHING TO BE APPROVED BY THE BUILDING INSPECTOR BEFORE APPLICATION OF ROOFING.

- A. SPECIAL INSPECTION REQUIRED FOR SHEAR WALLS WITH 4" OR LESS NAIL SPACING (PERIODIC) INCLUDES NAILING, BOLTING, AND ANCHORING AND OTHER FASTENERS TO OTHER ELEMENTS OF THE SEISMIC/MAN WIND FORCE-RESISTING SYSTEM. (CBC 2022, SECTION 1705.11.1.1 & 1705.12.2)
- B. SPECIAL INSPECTION REQUIRED FOR EPOXY BOLTS – SIMPSON SET-3G EPOXY; ICC®: ESR-4057 (CONTINUOUS)
- C. SPECIAL INSPECTION REQUIRED FOR CONCRETE WITH $F'_c = 4500$ PSI; TYPE V (NO SPECIAL INSPECTION REQUIRED IF CONCRETE TRUCK MIX TICKET IS PROVIDED)
- D. SPECIAL INSPECTION REQUIRED FOR INSTALLATION OF HARDY FRAMES – ICC®: ESR-2089

- A. FLOOR LIVE LOAD = 60 PSF
- DECK LIVE LOAD = 60 PSF
- B. ROOF LIVE LOAD = 20 PSF
- C. WIND DESIGN DATA:
 - a) BASIC WIND SPEED = 110 MPH
 - b) WIND IMPORTANCE FACTOR = 1.0; RISK CATEGORY = II
 - c) WIND EXPOSURE = C
 - d) INTERNAL PRESSURE COEFFICIENT = 0.55
- D. EARTHQUAKE DESIGN DATA:
 - a) SEISMIC IMPORTANCE FACTOR = 1.0; RISK CATEGORY = II
 - b) DESIGN SPECTRAL RESPONSE ACCELERATION, $S_a = 1.259$; $S_1 = 0.47$
 - c) SITE CLASS = C
 - d) RESPONSE COEFFICIENT, $S_D = 1.084$; $S_0 = 1.481$
 - e) SEISMIC DESIGN CATEGORY = D
 - f) BASIC "PSYS" = LIGHT STEEL WALLS SHEATHED WITH WOOD STRUCTURAL PANELS FASTENED TO STEEL SHEATHING
 - g) BASIC "PSYS" = CANTILEVERED COLUMN SYSTEM (1P)
 - h) DESIGN BASE SHEAR = 0.709 (78T)
 - i) DESIGN BASE SHEAR = 0.497 (76T)
- E) SEISMIC RESPONSE COEFFICIENT, $C_s = 0.164$
- F) SEISMIC RESPONSE COEFFICIENT, $C_s = 0.709$ (78T)
- G) RESPONSE MODIFICATION FACTOR = 6.5
- H) RESPONSE MODIFICATION FACTOR = 1.5 (7T)
- I. ANALYSIS PROCEDURE = EQUIVALENT LATERAL FORCE PROCEDURE
- J. REDUNDANCY FACTOR USED = 1.3
- K. OVERSTRENGTH FACTOR USED = 1.5
- L. OVERSTRENGTH FACTOR USED = 1.5 (7T)

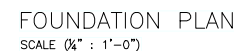
- A. GLULAM (24F-V4) ICC#: ESR-1940
- B. PARALLAM - PSL(2.0E); ICC#: ESR-1387
- C. TRUS JOIST T/J; ICC#: ESR-1153
- D. MICROLLAM - LVL(1.9E); ICC#: ESR-1387

A. SOILS REPORT BY: DUCO ENGINEERING
JOB NO: 24-147
DATE: FEBRUARY 3, 2025

B. ALLOWABLE SOIL BEARING PRESSURE = 1800 PSF

C. SOILS ENGINEER TO REVIEW AND APPROVE FINAL FOUNDATION PLAN, FOUNDATION DETAILS, SHORING PLAN, PRECISE GRADING, DRAINAGE PLAN AND EROSION PLAN.

D. GEOTECHNICAL ENGINEER TO REVIEW AND APPROVE THE FOUNDATION AND SLAB EXCAVATIONS PRIOR TO STEEL AND CONCRETE PLACEMENT. GEOTECHNICAL OBSERVATION IS REQUIRED.



NEW FOOTING:  NEW SLAB: 

EXISTING FOOTING:  (E)12" W x 12" D
MIN. (1-STORY)

ADDITIONAL NOTES #1:

- USE 2x6 STUDS @ 16" O.C. AT PLUMBING WALLS.
- DOUBLE WALLS USED AS PLUMBING ARE TO BE A MINIMUM OF 8" WIDE AND NO "FLAT" STUDS PERMITTED.
- PERMISSIBLE NOTCHING AND BORING OF JOISTS ARE TO BE SHOWN ON THE PLANS AND SHALL NOT EXCEED CBC SECTION 2308.10.4.2 ALLOWANCES.
- NOTCHING OF EXTERIOR AND BEARING/NONBEARING WALLS SHALL NOT EXCEED 25% & 40% RESPECTIVELY. BORED HOLES IN BEARING/NONBEARING WALLS SHALL NOT EXCEED 40% & 60% RESPECTIVELY. IN NO CASE SHALL THE EDGE OF THE BORED HOLE BE NEARER THAN 1/4" TO THE EDGE OF THE STUD.
- FIREBLOCKING IS REQUIRED IN CONCEALED SPACES 10" O.C. HORIZONTAL, VERTICALLY AT THE CEILING AND FLOOR LEVELS. CONNECTIONS BETWEEN HORIZONTAL & VERTICAL SPACES, OPENINGS AROUND VENTS, PPES, DUCTS, CABLES AND WIRES (CIRC 4302.1.1).
- HOLD-DOWN HARDWARE MUST BE SECURED IN PLACE PRIOR TO FOUNDATION INSPECTION.
- HOLD-DOWN CONNECTOR BOLTS INTO WOOD FRAMING REQUIRE 0.229"x3"x3" PLATE WASHERS ON THE POST OPPOSITE THE HOLD-DOWN.
- HOLD-DOWNS SHALL BE TIGHTENED TO FINGER TIGHT PLUS ONE-HALF WRENCH TURN JUST PRIOR TO COVERING THE WALL FRAMING.
- THERE SHALL BE NO TRENCHES OR EXCAVATIONS 5' OR MORE IN DEPTH INTO WHICH A PERSON IS REQUIRED TO DESCEND, OR OBTAIN PERMIT FROM STATE OF CALIFORNIA, DIVISION OF OCCUPATIONAL SAFETY AND HEALTH (CD/OSHA). THIS PERMIT AND ANY OTHER SAFETY PERMIT SHALL BE OBTAIN PRIOR TO COMMENCEMENT OF ANY WORK.
- WORKMANSHIP & MATERIALS SHALL CONFORM TO THE 2022 CBC & ASC 341-10.
- BALLOON FRAME WALLS AT ALL VAULTED GABLE END ROOF.
- SKYLIGHT AND SKYLIGHT FRAMING DESIGN SHALL BE A DEFERRED ITEM. FRAMING AROUND THE OPENING SHALL BE PER TRUSS MANUFACTURER.

ADDITIONAL NOTES #2:

- THE CONTRACTOR SHALL NOTIFY INSPECTOR PRIOR TO STARTING EXCAVATIONS OR ANY GRADING WORK.
- EXTEND ALL EXCAVATIONS FOR THE FOOTINGS BELOW NATURAL GRADE AS SHOWN ON STRUCTURAL DRAWING.
- ALL EXCAVATIONS FOR THE FOOTINGS MUST BE INSPECTED AND APPROVED BY INSPECTOR PRIOR TO POURING OF CONCRETE.
- ALL FILL SHALL BE PLACED IN MAXIMUM 2" LAYERS AND COMPACTED TO 90% DENSITY TO SUPPORT FOOTINGS.
- SILL PLATES SHALL BE 8" MINIMUM ABOVE GRADE, REMINDER: ALTERNATE DETAIL OF 36" WIDE, 2" TALL CURB CAN BE ADDED ON TO MEET THE REQUIREMENT.
- THE ROOF SHEATHING TO BE APPROVED BY THE BUILDING INSPECTOR BEFORE APPLICATION OF ROOFING.

STATEMENT OF SPECIAL INSPECTIONS:

- SPECIAL INSPECTION REQUIRED FOR SHEAR WALLS WITH 4" OR LESS NAIL SPACING (PERIODIC), INCLUDES NAILING, BOLTING, ANCHORING AND OTHER FASTENERS TO OTHER ELEMENTS OF THE SEISMIC/MAN WIND FORCE-RESISTING SYSTEM. (CBC 2022, SECTION 1705.11.1 & 1705.12.2)
- SPECIAL INSPECTION REQUIRED FOR EPOXY BOLTS - SIMPSON SET-3G EPOXY; ICCF: ESR-4057 (CONTINUOUS)
- SPECIAL INSPECTION REQUIRED FOR CONCRETE WITH $f'_c = 4500$ PSI; TYPE V (NO SPECIAL INSPECTION REQUIRED IF CONCRETE TRUCK MIX TICKET IS PROVIDED)
- SPECIAL INSPECTION REQUIRED FOR INSTALLATION OF HARDY FRAMES- ICCF: ESR-2089

DESIGN DATA:

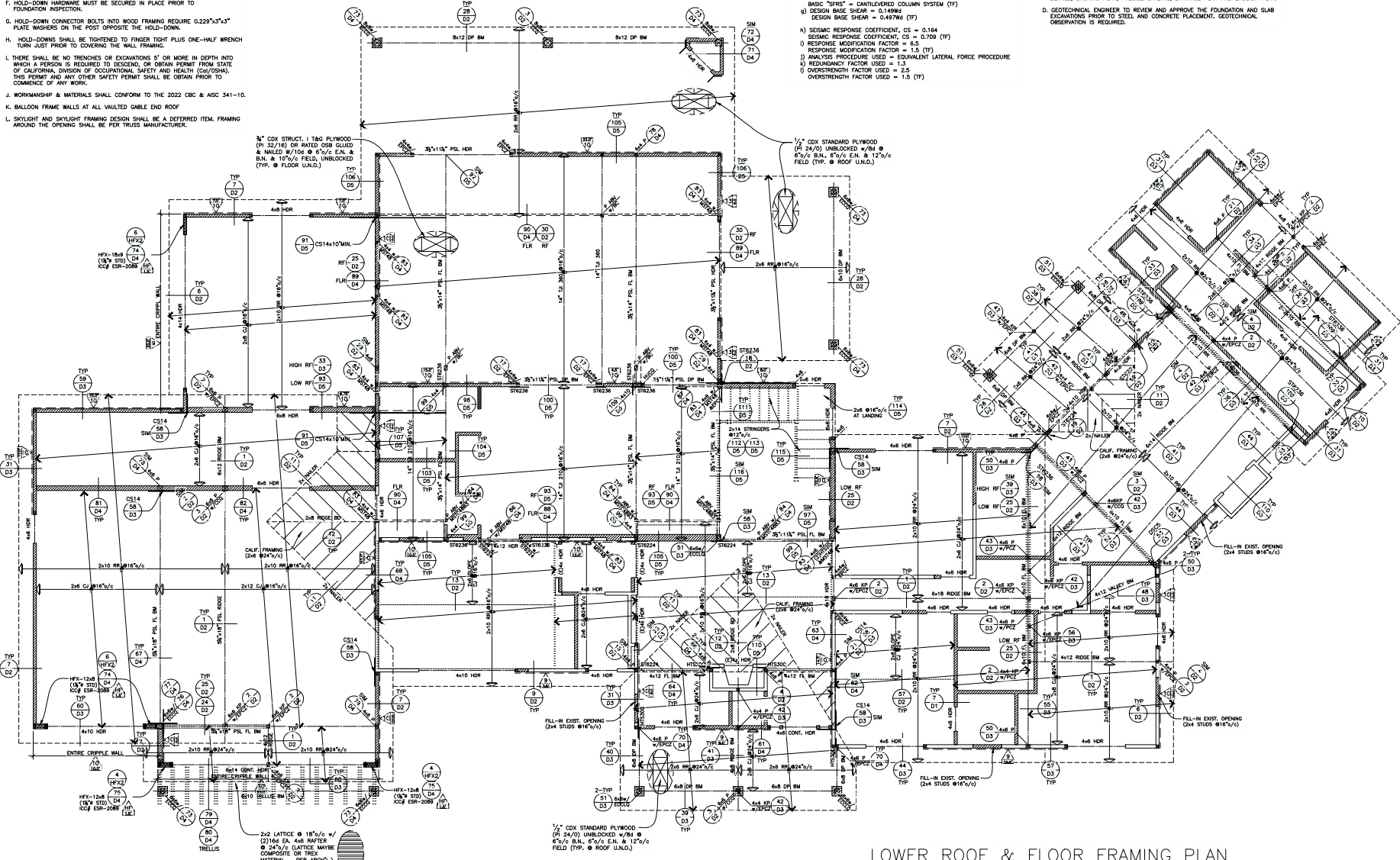
- FLOOR LIVE LOAD = 40 PSF
DECK LIVE LOAD = 60 PSF
- ROOF LIVE LOAD = 20 PSF
- WIND DESIGN DATA:
a) BASIC WIND SPEED = 110 MPH
b) WIND IMPORTANCE FACTOR = 1.0; RISK CATEGORY = II
c) WIND EXPOSURE = C
d) INTERNAL PRESSURE COEFFICIENT = 0.55
- EARTHQUAKE DESIGN DATA:
a) SEISMIC IMPORTANCE FACTOR = 1.0; RISK CATEGORY = II
b) MAPPED SPECTRAL RESPONSE ACCELERATION, $S_a = 1.328$; $S_1 = 0.474$
c) SITE CLASS = D
d) SPECTRAL RESPONSE COEFFICIENT, $S_d = 1.064$; $S_0 = 1/4$
e) SEISMIC DESIGN CATEGORY = D
f) BASIC "RISK" = LIGHT-FRAMED WALLS SHEATHED WITH WOOD STRUCTURAL PANELS RATED FOR SHEAR RESISTANCE OR STEEL SHEETS
g) BASIC "RISK" = CANTILEVERED COLUMN SYSTEM (TF)
h) DESIGN BASE SHEAR = 0.497W_E (TF)
i) SEISMIC RESPONSE COEFFICIENT, $C_S = 0.164$
j) SEISMIC RESPONSE COEFFICIENT, $C_S = 0.159$ (TF)
k) RESPONSE MODIFICATION FACTOR = 6.5
l) RESPONSE MODIFICATION FACTOR = 1.5 (TF)
m) ANALYSIS PROCEDURE USED = EQUIVALENT LATERAL FORCE PROCEDURE
n) REDUNDANCY FACTOR USED = 1.3
o) OVERSTRENGTH FACTOR USED = 2.5
p) OVERSTRENGTH FACTOR USED = 1.5 (TF)

MATERIAL SPECS:

- GLULAM (24P-14) ICCF: ESR-1940
- PARALLAM - PSL2002; ICCF: ESR-1387
- TRUS JOIST 12; ICCF: ESR-1153
- MICROLAM - LV1.96; ICCF: ESR-1387

FOUNDATION NOTES:

- SOILS REPORT BY: DUCO ENGINEERING
JOB NO: 24-147
DATE: FEBRUARY 3, 2025
- ALLOWABLE SOIL BEARING PRESSURE = 1800 PSF
- SOILS ENGINEER TO REVIEW AND APPROVE FINAL FOUNDATION PLAN, FOUNDATION DETAILS, SHORING PLAN, PRECISE GRADING, DRAINAGE PLAN AND EROSION PLAN.
- GEOTECHNICAL ENGINEER TO REVIEW AND APPROVE THE FOUNDATION AND SLAB EXCAVATIONS PRIOR TO STEEL AND CONCRETE PLACEMENT. GEOTECHNICAL OBSERVATION IS REQUIRED.



LOWER ROOF & FLOOR FRAMING PLAN
SCALE (1/4" = 1'-0")

LEGEND:

- NEW WALL: 2x4 STUDS @ 16" O.C. OR 2x6 STUDS @ 16" O.C.
- EXISTING WALL: 2x4 STUDS @ 16" O.C. (PLUMBING WALL)

SHUCRI (CHUCK) YAGHI
STRUCTURAL ENGINEERING
11111 CHAPMAN AVE SUITE D
ORANGE, CA 92668 PH: 979 5120



CONTRACTOR

PROJECT

RIETH RESIDENCE
13661 Hewes Avenue
Santa Ana, CA 92705

Revision	Date	By
1	04/02/25	AS
2	AS NOTED	
3	Drawn By: W. MANUEL	
4	Auto: 24488	
5	File:	

S2
SHEET NO.

- USE 2x6 STUDS @ 16"o/c PLUMBING WALLS
- B. DOUBLE WALLS USED AS PLUMBING ARE TO BE A MINIMUM OF 8" WIDE AND 10' TALL. NOT EXCEEDED.
- C. FLOOR JOISTS AND BORE OF JOISTS ARE TO BE SHOWN ON THE PLANS AND SHALL NOT EXCEED SECTION 2308.10.4.2 ALLOWANCES.
- D. NOTCHING OF EXTERIOR AND BEARING/NO-BEARING WALLS SHALL NOT EXCEED:
 - 1. 10% OF THE WALL CROSS SECTION
 - 2. 4" DEEP
 - 3. NOT EXCEED 40% ROBERTSIVELY, IN NO CASE SHALL THE EDGE OF THE WALL BE NOTCHED MORE THAN 1" TO THE EDGE OF THE STUD.
 - 4. (2308.10.4.2 2308.11.1)
- E. FIRE-RESISTANT IS REQUIRED IN CONCEALED SPACES 10" o/c HORIZONTAL, 16" o/c VERTICAL, AND 16" o/c DIAGONAL. CONCEALED SPACES SHALL BE HORIZONTAL & VERTICAL SPACES, OPENINGS ABOVE DOORS, PIPES, DUCTS, ETC. SHALL BE COVERED WITH FIRE-RESISTANT MATERIAL.
- F. HOLD-DOWN HARDWARE MUST BE SECURED PLACE FROM TOP TO FOUNDATION ISPLACEMENT.
- G. HOLD-DOWN CONNECTOR BOLTS INTO WOOD FRAMING REQUIRE 0.2225"x3"x3" MINIMUM. SEE SECTION 2308.10.4.2 FOR HOLD-DOWN.
- H. HOLD-DOWNS SHALL BE TIGHTENED TO FINGER TIGHT PLUS ONE-HALF WRENCH TURN JUST TO COVERING THE WALL FRAMING.
- I. THERE SHALL BE NO TRENCHES OR EXCAVATIONS 5' OR MORE IN DEPTH INTO EXISTING FOUNDATION. ANY EXCAVATION SHALL BE APPROVED BY THE DIVISION OF CALIFORNIA, DIVISION OF OCCUPATIONAL SAFETY AND HEALTH (COSH/OSHA).
- J. ANY OTHER SAFETY PERMIT SHALL BE OBTAINED PRIOR TO COMMENCEMENT OF ANY WORK.
- K. WORKMANSHIP & MATERIALS SHALL CONFORM TO THE 2022 CBC & ASCE 341-10
- L. BALCONY FRAMING SHALL AT VALUED GROUND LEVEL.
- M. SKYLIGHT AND SKYLIGHT REPLACEMENT DESIGN SHALL BE A DIFFERET ITEM, FRAMING SHALL BE THE OPENING SHALL BE THE SKYLIGHT.

- A. THE CONTRACTOR SHALL NOTIFY INSPECTOR PRIOR TO STARTING EXCAVATIONS OR ANY GRADING WORK.
- B. EXTEND ALL EXCAVATIONS FOR THE FOOTINGS BELOW NATURAL GRADE AS SHOWN ON STRUCTURAL DRAWING.
- C. ALL EXCAVATIONS FOR THE FOOTINGS MUST BE INSPECTED AND APPROVED BY INSPECTOR PRIOR TO POURING OF CONCRETE.
- D. ALL FILL SHALL BE PLACED IN MAXIMUM 2" LAYERS AND COMPACTED TO 90% DENSITY TO SUPPORT FOOTINGS.
- E. SILL PLATES SHALL BE 6" MINIMUM ABOVE GRADE. REMINDER: ALTERNATE DETAIL OF 3"X6" WIDE, 2" TALL CURB CAN BE ADDED ON TO MEET THE REQUIREMENT.
- F. THE ROOF SHEATHING TO BE APPROVED BY THE BUILDING INSPECTOR BEFORE APPLICATION OF ROOFING.

- A. SPECIAL INSULATION REQUIRED FOR SHEAR WALLS WITH 4" OR LESS NAIL SPACING (PERIODIC), INCLUDES NAILING, BOLTING, ANCHORING AND OTHER FASTENERS TO OTHER ELEMENTS OF THE SEISMIC/MAN WIND FORCE-RESISTING SYSTEM. (CBC 2022, SECTION 1705.11.1.1 & 1705.12.2)
- B. SPECIAL INSULATION REQUIRED FOR EPOXY BOLTS – SIMPSON SET-3G EPOXY; ICC® ESR-4057 (CONTINUOUS)
- C. SPECIAL INSULATION REQUIRED FOR CONCRETE WITH $f'_c = 4500$ PSI; TYPE V (NO SPECIAL INSULATION REQUIRED IF CONCRETE TRUCK MIX TICKET IS PROVIDED)
- D. SPECIAL INSULATION REQUIRED FOR INSTALLATION OF HARDY FRAMES- ICC® ESR-2089

- A. FLOOR LIVE LOAD = 40 PSF
- DECK LIVE LOAD = 60 PSF
- B. ROOF LIVE LOAD = 20 PSF

C. WIND DESIGN DATA:

- a) BASIC WIND SPEED = 110 MPH
- b) WIND IMPORTANCE FACTOR = 1.0 ; Risk CATEGORY = II
- c) WIND EXPOSURE = C
- d) INTERNAL PRESSURE COEFFICIENT = 0.55

D. EARTHQUAKE DESIGN DATA:

- a) SEISMIC IMPORTANCE FACTOR = 1.0 ; Risk CATEGORY = I
- b) LIMITED SPECTRAL RESPONSE ACCELERATION, $S_a = 1.329 \cdot S_1 = 0.471$
- c) SITE CLASS = D
- d) SEISMIC RESPONSE COEFFICIENT, $S_n = 1.044$; $S_1 / S_n = 1.4$
- e) SEISMIC DESIGN CATEGORY = D
- f) DESIGN "SOFT" = LIGHT STEEL WALLS SHEARED WITH WOOD STRUCTURE
- g) DESIGN "HARD" = PANELS RATED FOR STEEL RESISTANCE OR STEEL SHEAR
- h) BASIC BASE SHEAR = CANTILEVERED COLUMN SYSTEM (TF)
- i) DESIGN BASE SHEAR = 0.0496E
- j) DESIGN BASE SHEAR = 0.04976E

E. SEISMIC RESPONSE COEFFICIENT, $C_s = 0.164$

F. SEISMIC RESPONSE COEFFICIENT, $C_s = 0.709$ (TF)

G. RESPONSE MODIFICATION FACTOR = 6.5

H. RESPONSE MODIFICATION FACTOR = 1.5 (TF)

I. ANAL. PROCEDURE = EQUIVALENT LATERAL FORCE PROCEDURE

J. OVERSTRENGTH FACTOR USED = 1.3

K. OVERSTRENGTH FACTOR USED = 1.5 (TF)

L. REDUNDANCY FACTOR USED = 1.5 (TF)

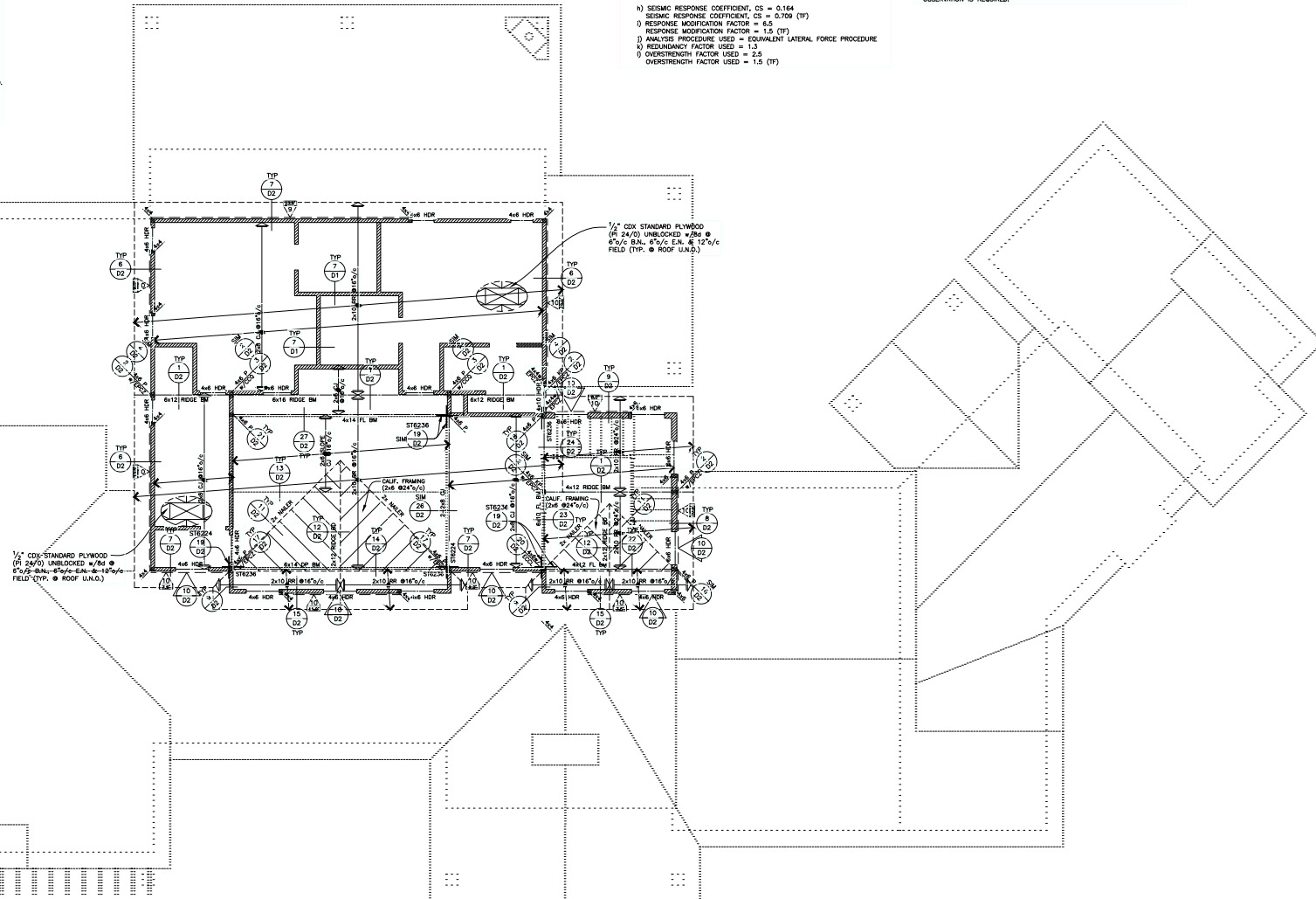
- A. GLULAM (24F-V4); ICC#: ESR-1940
- B. PARALLAM - PSL(2.0E); ICC#: ESR-1387
- C. TRUS JOIST TJI; ICC#: ESR-1153
- D. MICROLAM - LVL(1.9E); ICC#: ESR-1387

A. SOILS REPORT BY: DUCO ENGINEERING
JOB NO: 24-147
DATE: FEBRUARY 3, 2025

B. ALLOWABLE SOIL BEARING PRESSURE = 1800 PSF

C. SOILS ENGINEER TO REVIEW AND APPROVE FINAL FOUNDATION PLAN, FOUNDATION DETAILS, SHORING PLAN, PRECISE GRADING, DRAINAGE PLAN AND EROSION PLAN.

D. GEOTECHNICAL ENGINEER TO REVIEW AND APPROVE THE FOUNDATION AND SLAB EXCAVATIONS PRIOR TO STEEL AND CONCRETE PLACEMENT. GEOTECHNICAL OBSERVATION IS REQUIRED.



SCALE ($\frac{1}{4}" : 1'-0"$)

NEW WALL: 2x4 STUDS @16"o/c OR 2x6 STUDS @16"o/c
2x6 STUDS @16"o/c (PLUMBING WALL)

EXISTING WALL: 2x4 STUDS @16"o/c

(71) FIELD (TABLE 4.3A-SDPS-10) WITH 1, 3, 5, 6, 8, & 10, 11
 15/32" STRUCTURAL 1 PLYWOOD ON O.S.W. WITH WALLS 5'
 15/32" STRUCTURAL 1 PLYWOOD ON O.S.W. WITH WALLS 5'
 FIELD (TABLE 4.3A-SDPS-10) WITH 1, 3, 5, 6, 8, & 10, 11
 15/32" STRUCTURAL 1 PLYWOOD ON O.S.W. WITH WALLS 5'
 FIELD OF 3K STUDS (TABLE 4.3A-SDPS-10) WITH 1, 3, 5, 6, 8, & 10, 11

NOTES:
 1. ALL EDGES OF PLYWOOD SHEATHINGS MUST BE BLOCKED WITH 2X SOLID BLOCKING FOR WALL TYPES 11, 12, 13, & 14.
 2. WHERE SHEAR WALL SHEATHING IS TO BE APPLIED TO BOTH SIDES OF WALL, DOUBLE THE NUMBER OF SHEATHING PANELS ON EACH SPACING.
 3. USE 3X PRESSURE TREATED DOUGLAS FIR SILL PLATES AT FOUNDATION (CONC. SLAB ON GRADE ONLY. NOT REQ'D ON RAISED FLOOR FOUNDATION).
 4. PAPER BACKED SELF FURRING DEPENDENT METAL LATH WITH ACJ APPROVAL.
 5. FRAMING AT ADJ. 3-INCH NOMINAL WALLS.
 6. WHERE PLYWOOD WALL AND NAIL SP. 16" MAX. ON DIFFERENT WALLS 3" - 6" INCHES NOM. MAX. WALL THICKNESS.
 7. ALL CONTINUOUS PLYWOOD WALLS 10" X 6" MIN. STUDS.
 8. AT 3K SILL PLATE STUD TO STUD SPACING.

LOW					
8 IN & 12" O.C.	500 PLF	5/8"WH/12"	5/8"WH/6"	Ø 3/4"	Ø 12"
8 IN & 12" O.C.	730 PLF	5/8"WH/12"	5/8"WH/6"	Ø 3/4"	Ø 8"
8 IN & 12" O.C.	870 PLF	5/8"WH/12"	5/8"WH/6"	Ø 3/4"	Ø 8"
11, 12 & 13 BW					
EDGES SHALL BE SMOOTH SHALL BE	10. USE 3' X 3' X 0.23" PLATE WASHERS.				
ON BOTH FACES OF	11. ALL PLYWOOD SHALL BE DOUGLAS FIR-LARCH				
ON THIN 6" O.C. ON	12. ALL EXISTING FOOTINGS USE SIMPSON "BETI-IMP"				
ON THIN 6" O.C. ON	13. EPOXY BOLTS FOR SCHEDULED SLAB TIEING, EMBEDDED				
ON THIN 6" O.C. ON	8" PER CODE ESR-2508 WITH SPECIAL INSPECTION.				
ON THIN 6" O.C. ON	14. PERIODIC SPECIAL INSPECTION REQUIRED ON WOOD				
ON THIN 6" O.C. ON	CREST WALLS WITH MAX. SPACING LESS THAN OR EQUAL				
ON THIN 6" O.C. ON	TO 4' O.C.				
ON THIN 6" O.C. ON	15. GALVANIZED WALLS SHALL BE HOT-DIPPED				
ON THIN 6" O.C. ON	15. FASTENERS IN CONTACT WITH PRESERVATIVE-				
ON THIN 6" O.C. ON	OR WOOD SHALL NOT BE HOT DIPPED zinc COATED				
ON THIN 6" O.C. ON	GALVANIZED STEEL.				

NOTES:

1. ALL EDGES OF PLYWOOD SHEATHINGS MUST BE BLENDED WITH AN EDGE BANDING FOR WALL TYPES #1, #2, #3, #4, #5, #6, #7, #8, #9, #10, #11, #12, #13, #14, #15, #16, #17, #18, #19, #20, #21, #22, #23, #24, #25, #26, #27, #28, #29, #30, #31, #32, #33, #34, #35, #36, #37, #38, #39, #40, #41, #42, #43, #44, #45, #46, #47, #48, #49, #50, #51, #52, #53, #54, #55, #56, #57, #58, #59, #60, #61, #62, #63, #64, #65, #66, #67, #68, #69, #70, #71, #72, #73, #74, #75, #76, #77, #78, #79, #80, #81, #82, #83, #84, #85, #86, #87, #88, #89, #90, #91, #92, #93, #94, #95, #96, #97, #98, #99, #100, #101, #102, #103, #104, #105, #106, #107, #108, #109, #110, #111, #112, #113, #114, #115, #116, #117, #118, #119, #120, #121, #122, #123, #124, #125, #126, #127, #128, #129, #130, #131, #132, #133, #134, #135, #136, #137, #138, #139, #140, #141, #142, #143, #144, #145, #146, #147, #148, #149, #150, #151, #152, #153, #154, #155, #156, #157, #158, #159, #160, #161, #162, #163, #164, #165, #166, #167, #168, #169, #170, #171, #172, #173, #174, #175, #176, #177, #178, #179, #180, #181, #182, #183, #184, #185, #186, #187, #188, #189, #190, #191, #192, #193, #194, #195, #196, #197, #198, #199, #200, #201, #202, #203, #204, #205, #206, #207, #208, #209, #210, #211, #212, #213, #214, #215, #216, #217, #218, #219, #220, #221, #222, #223, #224, #225, #226, #227, #228, #229, #230, #231, #232, #233, #234, #235, #236, #237, #238, #239, #240, #241, #242, #243, #244, #245, #246, #247, #248, #249, #250, #251, #252, #253, #254, #255, #256, #257, #258, #259, #260, #261, #262, #263, #264, #265, #266, #267, #268, #269, #270, #271, #272, #273, #274, #275, #276, #277, #278, #279, #280, #281, #282, #283, #284, #285, #286, #287, #288, #289, #290, #291, #292, #293, #294, #295, #296, #297, #298, #299, #300, #301, #302, #303, #304, #305, #306, #307, #308, #309, #310, #311, #312, #313, #314, #315, #316, #317, #318, #319, #320, #321, #322, #323, #324, #325, #326, #327, #328, #329, #330, #331, #332, #333, #334, #335, #336, #337, #338, #339, #340, #341, #342, #343, #344, #345, #346, #347, #348, #349, #350, #351, #352, #353, #354, #355, #356, #357, #358, #359, #360, #361, #362, #363, #364, #365, #366, #367, #368, #369, #370, #371, #372, #373, #374, #375, #376, #377, #378, #379, #380, #381, #382, #383, #384, #385, #386, #387, #388, #389, #390, #391, #392, #393, #394, #395, #396, #397, #398, #399, #400, #401, #402, #403, #404, #405, #406, #407, #408, #409, #410, #411, #412, #413, #414, #415, #416, #417, #418, #419, #420, #421, #422, #423, #424, #425, #426, #427, #428, #429, #430, #431, #432, #433, #434, #435, #436, #437, #438, #439, #440, #441, #442, #443, #444, #445, #446, #447, #448, #449, #450, #451, #452, #453, #454, #455, #456, #457, #458, #459, #460, #461, #462, #463, #464, #465, #466, #467, #468, #469, #470, #471, #472, #473, #474, #475, #476, #477, #478, #479, #480, #481, #482, #483, #484, #485, #486, #487, #488, #489, #490, #491, #492, #493, #494, #495, #496, #497, #498, #499, #500, #501, #502, #503, #504, #505, #506, #507, #508, #509, #510, #511, #512, #513, #514, #515, #516, #517, #518, #519, #520, #521, #522, #523, #524, #525, #526, #527, #528, #529, #530, #531, #532, #533, #534, #535, #536, #537, #538, #539, #540, #541, #542, #543, #544, #545, #546, #547, #548, #549, #550, #551, #552, #553, #554, #555, #556, #557, #558, #559, #560, #561, #562, #563, #564, #565, #566, #567, #568, #569, #570, #571, #572, #573, #574, #575, #576, #577, #578, #579, #580, #581, #582, #583, #584, #585, #586, #587, #588, #589, #590, #591, #592, #593, #594, #595, #596, #597, #598, #599, #600, #601, #602, #603, #604, #605, #606, #607, #608, #609, #610, #611, #612, #613, #614, #615, #616, #617, #618, #619, #620, #621, #622, #623, #624, #625, #626, #627, #628, #629, #630, #631, #632, #633, #634, #635, #636, #637, #638, #639, #640, #641, #642, #643, #644, #645, #646, #647, #648, #649, #650, #651, #652, #653, #654, #655, #656, #657, #658, #659, #660, #661, #662, #663, #664, #665, #666, #667, #668, #669, #670, #671, #672, #673, #674, #675, #676, #677, #678, #679, #680, #681, #682, #683, #684, #685, #686, #687, #688, #689, #690, #691, #692, #693, #694, #695, #696, #697, #698, #699, #700, #701, #702, #703, #704, #705, #706, #707, #708, #709, #710, #711, #712, #713, #714, #715, #716, #717, #718, #719, #720, #721, #722, #723, #724, #725, #726, #727, #728, #729, #730, #731, #732, #733, #734, #735, #736, #737, #738, #739, #740, #741, #742, #743, #744, #745, #746, #747, #748, #749, #750, #751, #752, #753, #754, #755, #756, #757, #758, #759, #760, #761, #762, #763, #764, #765, #766, #767, #768, #769, #770, #771, #772, #773, #774, #775, #776, #777, #778, #779, #780, #781, #782, #783, #784, #785, #786, #787, #788, #789, #790, #791, #792, #793, #794, #795, #796, #797, #798, #799, #800, #801, #802, #803, #804, #805, #806, #807, #808, #809, #810, #811, #812, #813, #814, #815, #816, #817, #818, #819, #820, #821, #822, #823, #824, #825, #826, #827, #828, #829, #830, #831, #832, #833, #83

NEW PLYWOOD PER PLAN NEW RAFTER PER PLAN 102.5A @ 48°/c 2x LEDGER w/ (2) 3/4"x48" LONG SCS SCREWS @ 16"/c EACH STUD CENTER (ICC ESR-2236) 2x STUDS @ 16"/c w/ PLYWD. SHTG. PER PLAN & S.W. SCHEDULE	E.N. @ EA. BLK. NEW ROOF PLYWOOD NEW RAFTERS PER PLAN 102.5A @ 48°/c 2x LEDGER w/ (2) 3/4"x48" LONG SCS SCREWS @ 16"/c EACH STUD CENTER (ICC ESR-2236) 2x STUDS @ 16"/c w/ PLYWD. SHTG. PER PLAN & S.W. SCHEDULE	BEAM PER PLAN SIMP. "TOD" POST CAP AS REQUIRED POST PER PLAN	1x TAG STARTER (EQ. PER ARCH'L) 2x FLAT @ 32°/c ROOF SHTG. PER PLAN (2) 16d 2x RAFTER PER PLAN 2x BLK'G. @ 48°/c SIMP. A35 @ 24°/c OR BM 2x STUDS @ 16"/c w/ SHTG. PER PLAN & S.W. SCHEDULE 2x LEDGER w/ (2) 16d @ 16"/c EA. STUD CENTER 2x BLK'G. @ 48°/c	OR CONT. TO END OF SHEAR WALL EQ. EQ. 2x SOLID BLK'G. @ 48°/c EA. END EA. SIDE (TYP. TAB @ WINDOW OPNG. - TOP ONLY @ DOOR OPNG.) CONT. SIMP. CS16 STRAP - NAIL TO BLK'G. (TYP. TAB @ WINDOW OPNG. - TOP ONLY @ DOOR OPNG.) E.N. FULL HT. STUDS EA. SIDE OPNG. E.N. TO SHEAR WALL C.S. OF STRAP CS16 STRAP 2x SILL E @ WINDOW OPNG. ONLY SHEAR WALL PER PLAN BLK'G.	SHUCRI (CHUCK) YAGHI STRUCTURAL ENGINEERING 11212 CHAPMAN AVENUE SUITE D ORANGE, CA 92668 PH. 951 5120
SHEAR TRANSFER AT ROOF 30 POST PER PLAN 2x RAFTER PER PLAN FULL WIDTH OF SOLID BLK. w/ A35 EA. END SIMP. A35 EA. SIDE POST POST TO ALIGN w/ POST ABOVE 2x SILL E	SHEAR TRANSFER AT ROOF 25 NOTE: FOR MORE INFO, SEE (23) (22) 1x TAG STARTER (EQ. PER ARCH'L) ROOF SHTG. PER PLAN 3-16d PER BLK. (2) 16d 2x RAFTER PER PLAN 2x BLK'G. @ 48°/c SIMP. A35 @ 24°/c 2x STUDS @ 16"/c w/ PLYWD. SHTG. PER PLAN & S.W. SCHEDULE 2x CJ PER PLAN	POST TO BEAM DETAIL 20 NOTE: ALTERNATE DETAIL (202) (25) SIMP. STRAP PER PLAN EQ. EQ. TOP VIEW SIMP. STRAP PER PLAN 2x BLK. w/ (2) LTP4 @ EACH END TO RR DROP BM AS OCCURS	SHEAR TRANSFER AT ROOF 15 2x RAFTER PER PLAN ROOF SHTG. PER PLAN 2x SOLID BLK'G. w/ A35 @ 24°/c OR PER S.W. SCHEDULE B.N. 2x STUDS @ 16"/c w/ SHTG. PER PLAN & S.W. SCHEDULE 2x LEDGER 2x BLK'G. @ 48°/c	TYP. STRAP @ S.W. OPNG. 10 2x RAFTER PER PLAN ROOF SHTG. PER PLAN 2x SOLID BLK'G. w/ A35 @ 24°/c OR PER S.W. SCHEDULE B.N. 2x STUDS @ 16"/c w/ SHTG. PER PLAN & S.W. SCHEDULE SIMP. "12.5A" @ 4'-0"/c	POST IN WALL 5 OLD JST. PER PLAN (AS OCCURS) POST PER PLAN 2x STUDS @ 16"/c w/ SHTG. PER PLAN & S.W. SCHEDULE SIMP. A35 EA. SIDE POST POST TO ALIGN w/ POST ABOVE 2x SILL E
POST IN WALL 29 2x RAFTER PER PLAN ROOF SHTG. PER PLAN 2x SOLID BLK'G. w/ A35 @ 24°/c B.N. SIMP. "12.5A" @ 4'-0"/c BEAM PER PLAN	SHEAR TRANSFER AT ROOF 24 3-16d EA. BLK. E.N. PLYWOOD PER PLAN 2x RAFTERS PER PLAN 2x BLK'G. @ 48°/c 2x TOP PL 2x STUDS @ 16"/c w/ SHTG. PER PLAN & S.W. SCHEDULE 2x CJ PER PLAN ENTIRE CRIPPLE WALL CONT. BEAM	TYP. DRAG STRAP DETAIL 19 EQ. EQ. SIMP. "TPC2" OR (2) HTS20 BEAM WHERE CONT. 2x TOP E SIMP. ST6236 STRAP UNLD. ON PLANS BEAM PER PLAN POST PER PLAN	TYP. RAFTER AT BEAM 14 PLYWOOD PER PLAN 2x RAFTER PER PLAN 2x CJ w/ (3) 16d EACH LVL	SHEAR TRANSFER AT ROOF 9 1x TAG STARTER (EQ. PER ARCH'L) 2x FLAT @ 32°/c ROOF SHTG. PER PLAN 3-16d PER BLK. (2) 16d 2x RAFTER PER PLAN 2x BLK'G. @ 48°/c SIMP. A35 @ 24°/c 2x STUDS @ 16"/c w/ SHTG. PER PLAN & S.W. SCHEDULE	POST IN WALL 4 POST & SPLICE WHERE OCCURS SIMP. ST6236 STRAP (UNLD.) REQ'D WHERE SPLICE OCCURS ONLY (MAY BE PLACED ON TOP OF BEAMS) SIMP. "TOD" POST CAP AS REQUIRED (SEE NOTE) PROVIDE SHAPED SOLID BLOCK AT SPLICE WHERE BEAMS ARE NOT THE SAME DEPTH OR WIDTH POST PER PLAN
TYP. RAFTER AT BEAM 28 2x SLOPE CJ PER PLAN 2x BLK'G. w/ A35 @ 32°/c 2x RAFTER PER PLAN 2x STUDS @ 16"/c 2x LEDGER w/ 3-16d @ 15"/c (EA. STUD CENTER) 2x STUDS @ 16"/c	SHEAR TRANSFER AT ROOF 23 ROOF SHTG. PER PLAN 2x RAFTERS PER PLAN 2x BLK'G. @ 48°/c 2x TOP PL 2x STUDS @ 16"/c w/ SHTG. PER PLAN & S.W. SCHEDULE 2x CJ PER PLAN	FLUSH BM. DRAG CONN. 18 SIMP. ST6236 STRAP UNLD. ON PLANS 2-2x TOP E EQ. EQ. A35 BEAM WHERE CONT. 6-16d TO BEAM 2x STUDS @ 16"/c w/ SHTG. PER PLAN & S.W. SCHEDULE POST PER PLAN	TYP. SLOPED CJ AT RAFTER 13 PLYWOOD PER PLAN 2x RIDGE PER PLAN ADD ST2115 @ 4'-0"/c EA. 2x RAFTER PER PLAN ADD A35 EA. SIDE	SHEAR TRANSFER AT ROOF 8 2x RAFTER PER PLAN ROOF SHTG. PER PLAN 2x SOLID BLK'G. w/ A35 @ 24°/c OR PER S.W. SCHEDULE B.N. 2x STUDS @ 16"/c w/ SHTG. PER PLAN & S.W. SCHEDULE 2x TOP PL 2x RAFTER PER PLAN (AS OCCURS) CEILING JOIST PER PLAN (AS OCCURS) SIMP. "12.5A" @ 4'-0"/c	POST TO BEAM DETAIL 3 NOTE: FOR MORE INFO, SEE (2) SIMP. ST6236 ROOF RAFTERS PER PLAN 2x SOLID BLK'G. w/ TOP EA. SIDE TO BM. ROOF SHTG. 2-2x TOP E RIDGE BM PER PLAN 16d @ 2"/c TO BM. SIMP. "TPC2" OR "TPC2" BM WIDTH POST PER PLAN FULL HT. STUD EA. SIDE w/ 16d @ 12"/c TO POST
TYP. CEILING AT BEAM 27 3-16d EA. BLK. E.N. PLYWOOD PER PLAN 2x RAFTERS PER PLAN 2x BLK'G. @ 48°/c 2-2x TOP PL 2x STUDS @ 16"/c 2x SILL E w/ 16d @ 8"/c 2x CJ PER PLAN CONT. BEAM	SHEAR TRANSFER AT ROOF 22 HTS20 BOTH SIDES OR A35 BOTH SIDES FLUSH BEAM PER PLAN 2-2x TOP E SIMP. A35 EA. SIDE POST 2x SILL E 4x POSTS MATCH BM WIDTH 2x SILL E TOP OF SLAB OR FLOOR	DROPPED BM. DRAG CONN. 17 NOTE: RAFTER CUTS AT THE ENDS OF THE CEILING JOISTS SHALL NOT EXCEED ONE-FOURTH THE DEPTH OF THE MEMBER PER CHC REQ'D 7.1.2 16d OR RAFTER FRAMING BEYOND ROOF SHTG. PER PLAN HEEL CUT HEEL CUT AS REQ'D. BEAM PER PLAN SIMP. "TPC2" OR (2) HTS20 DBL. TOP E HEADER OR K. POST PER PLAN	CALIF. RIDGE DETAIL 12 PLYWOOD PER PLAN 2x CONT. "SHAPED" PLATE w/ 16d @ 16"/c EA. STUD 2x CAUF. FRAME RAFTER RAFTER TO E 3-8d TOP NAIL NOTE: IN LIEU OF 2x BLOCKING, NAIL 2x "SHAPED" w/ 2-16d EACH RAFTER	SHEAR TRANSFER AT ROOF 7 ROOF SHTG. 2x FLAT OUTLOOKERS @ 32°/c E.N. EQ. EQ. (2) 16d EA. END 2x R.J.R. PER PLANS 2x BLK'G. @ 48°/c 2x CRIPPLE STUDS @ 16"/c NOTCH STUD RM/RAFTER 2x SILL E w/ NLG. PER S.W. SCHEDULE (16d @ 4"/c MIN.) WALL FINISH PER PLAN 2x BLK'G./RM w/ SIMP. A35 @ 24"/c UNLD. ON PLANS (E.N. LTP4) 2x STUDS PER PLAN & S.W. SCHEDULE 2x CJ AS OCCURS 2-2x TOP PL	TYP. RIDGE BEAM TO POST 2 2x BUTT RAFTERS @ RM E ST2115 STRAP @ 48°/c (UNLD.) B.N. 2x SOLID BLK'G. ROOF RAFTERS PER PLAN ROOF SHTG. 2-2x TOP E 16d TN. @ 12"/c EA. SIDE (3 MIN. PER BLK.) NOTCH RAFTERS FOR FULL BRG. (TYP.)
SHEAR TRANSFER AT ROOF 26 3-16d EA. BLK. E.N. PLYWOOD PER PLAN 2x RAFTERS PER PLAN 2x BLK'G. @ 48°/c 2-2x TOP PL 2x STUDS @ 16"/c 2x SILL E w/ 16d @ 8"/c 2x CJ PER PLAN CONT. BEAM	FLUSH BM. TO POST IN WALL 21 HTS20 BOTH SIDES OR A35 BOTH SIDES FLUSH BEAM PER PLAN 2-2x TOP E SIMP. A35 EA. SIDE POST 2x SILL E 4x POSTS MATCH BM WIDTH 2x SILL E TOP OF SLAB OR FLOOR	TYP. BEAM HEEL CUT DETAIL 16 16d OR RAFTER FRAMING BEYOND ROOF SHTG. PER PLAN HEEL CUT HEEL CUT AS REQ'D. BEAM PER PLAN SIMP. "TPC2" OR (2) HTS20 DBL. TOP E HEADER OR K. POST PER PLAN	TYP. CALIF. FRAME DETAIL 11 PLYWOOD PER PLAN 2x CONT. "SHAPED" PLATE w/ 16d @ 16"/c EA. STUD 2x CAUF. FRAME RAFTER RAFTER TO E 3-8d TOP NAIL NOTE: IN LIEU OF 2x BLOCKING, NAIL 2x "SHAPED" w/ 2-16d EACH RAFTER	SHEAR TRANSFER AT ROOF 6 ROOF SHTG. 2x FLAT OUTLOOKERS @ 32°/c E.N. EQ. EQ. (2) 16d EA. END 2x R.J.R. PER PLANS 2x BLK'G. @ 48°/c 2x CRIPPLE STUDS @ 16"/c NOTCH STUD RM/RAFTER 2x SILL E w/ NLG. PER S.W. SCHEDULE (16d @ 4"/c MIN.) WALL FINISH PER PLAN 2x BLK'G./RM w/ SIMP. A35 @ 24"/c UNLD. ON PLANS (E.N. LTP4) 2x STUDS PER PLAN & S.W. SCHEDULE 2x CJ AS OCCURS 2-2x TOP PL	DROPPED RIDGE BEAM DETAIL 1 2x BUTT RAFTERS @ RM E ST2115 STRAP @ 48°/c (UNLD.) B.N. 2x SOLID BLK'G. ROOF RAFTERS PER PLAN ROOF SHTG. 2-2x TOP E 16d TN. @ 12"/c EA. SIDE (3 MIN. PER BLK.) NOTCH RAFTERS FOR FULL BRG. (TYP.)

RIETH RESIDENCE
13661 Heves Avenue
Santa Ana, CA 92705

Revision	Date	By
1	04/02/25	
2	AS NOTED	
3	Drawn By: M. MANUEL	
4	Auto: 24488	
5	File:	

D2
SHEET NO.

	NOTE: ALTERNATE H012 IN LIEU OF MISC4883 PER DETAIL					SHUCHI (CHUCK) YAGHI STRUCTURAL ENGINEERING 11111 CHAPMAN AVENUE SUITE D ORANGE, CA 92668 PH: 949.512.0120
S.W. PERP. TO JOISTS 90	HOLDOWN @ BEAM 85	SHEAR TRANSFER 80	HARDY PANEL 75	DRAG STRAP DETAIL 70		CONTRACTOR
	STRAP AT FLOOR BEAM 84		HARDY PANEL 74	TYP. TOP PL. EXTENSION DETAIL 69		PROJECT
SHEAR TRANSFER @ FLOOR 88	STRAP BETWEEN FLOORS 83	FLUSH BM. TO POST IN WALL 78	POST TO BEAM DETAIL 73	SHEAR TRANSFER AT ROOF 68	SHEAR TRANSFER AT ROOF 63	RIETH RESIDENCE 13661 Heves Avenue Santa Ana, CA 92705
	CEILING TO WALL DETAIL 82	DRAG STRAP DETAIL 77	CHIMNEY STRAPPING DETAIL 72	TYP. CEILING AT BEAM 67	SHEAR TRANSFER AT ROOF 62	Revision Date: 04/02/25 Scale: AS NOTED Drawn By: M. MANUEL Date: 24-08 File: D4 SHEET NO.
OFFSET STRAPS BETW. FLOORS 86	CEILING TO WALL DETAIL 81	DRAG STRAP DETAIL 76	TYP. CHIMNEY SECTION 71	DRAG STRAP DETAIL 66	SHEAR TRANSFER AT ROOF 61	

						SHUCRI (CHUCK) YAGHI STRUCTURAL ENGINEERING 112 E. CHAPMAN AVE. SUITE D ORANGE, CA 92668 PH. 949.5120
FOUNDATION ACCESS	GUARDRAIL/HANDRAIL DETAILS	FIREPLACE EXTENSION	SHEAR TRANSFER @ ROOF	SHEAR TRANSFER @ FLOOR	95	CONTRACTOR
TYP. EXTR. RAISED FLR. FDN.	FLOOR FRAMING @ LANDING	DRAG STRAP DETAIL	NON-BRG. PARTITION DETAIL	FLUSH BM. TO POST IN WALL	TYP. JOIST TO BM. DETAILS	PROJECT
TYP. EXTR. RAISED FLR. FDN.	STAIR STRINGER @ LANDING	SHEAR TRANSFER AT ROOF	NON-BRG. PARTITION PERP. TO JST.	SHEAR TRANSFER @ FLOOR	SHEAR TRANSFER AT ROOF	93
TYP. NON-BRG. WALL SILL R.	STAIR STRINGER @ LANDING	SHEAR TRANSFER @ FLOOR	DRAG STRAP DETAIL	SHEAR TRANSFER @ FLOOR	STRAPS AT BEAM	92
GUARDRAIL/HANDRAIL DETAILS	STAIR STRINGER @ LANDING	SHEAR TRANSFER @ ROOF	ALTERNATE DETAIL	SHEAR TRANSFER @ FLOOR	DRAG STRAP DETAIL	91

RIETH RESIDENCE
13661 Heves Avenue
Santa Ana, CA 92705

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D5
SHEET NO.

NOTE: HARDY FRAME WITH ITS BOLTS SHALL BE INSTALLED DIRECTLY ON TOP OF CONC. SLAB OR CURB "HARDY FRAME" SEE PLAN FOR MODEL NO. (CCE: ESR-2088) 15# FELT MOISTURE BARRIER OR EQUIV. HARDENED ROUNDO (2) 5/8" OR (2) FLAT WIDERS AND NUTS 1-1/8" x 1/2" HOLD-DOWN ANCHORS PER ASTM F 1554 GRADE 36 HARDY FRAME BOLT BRACE (HFB8) PER PLAN (4) 1/4" x 1/2" LIPS OR 2x2 SCHED. USE 1-1/4" LONG @ 2x FRAMING & 3" LONG @ 4x FRAMING (OPTIONAL) #3 TIE @ TOP TOP OF CONC. SLAB OR CURB CONC. FTG. OR CONC. GRADE BEAM AS OCCURS #4 DOWELS @ 12" O.C. EA. WAY						SHUCHI (CHUCK) YAGHI STRUCTURAL ENGINEERING 112 E. CHAPMAN AVE. SUITE D ORANGE, CA 92668 PH: 951 51120 CONTRACTOR PROJECT RIETH RESIDENCE 13661 Hewes Avenue Santa Ana, CA 92705
HARDY PANEL @ FTG.	175	174	170	165	160	155
						159
						153
						152
	176	171	166	161	156	151

SHUCHI (CHUCK) YAGHI
STRUCTURAL ENGINEERING
112 E. CHAPMAN AVE. SUITE D
ORANGE, CA 92668 PH: 951 51120



CONTRACTOR

PROJECT

RIETH RESIDENCE
13661 Hewes Avenue
Santa Ana, CA 92705

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Date: 04/02/25
Scale: AS NOTED
Drawn By: E. MANUEL
Auto: 24488
File:

D7
SHEET NO.