

REMODEL / ADDITION FOR :

Marcus Residence

8582 Sugarman Dr.
La jolla, CA 92037

BUILDING PERMIT
1ST SUBMITTAL

GENERAL NOTES

1. ALL CONTRACTORS SHALL REMOVE TRASH AND DEBRIS STEMMING FROM THEIR WORK ON A DAILY BASIS. PROJECT SITE SHALL BE MAINTAINED IN A CLEAN AND ORDERLY CONDITION AT ALL TIMES.
2. DO NOT SCALE DRAWINGS. ALL DRAWINGS ARE TO FACE OF STUD, CONCRETE OR MASONRY, UNLESS OTHERWISE NOTED ON DRAWINGS. NOTIFY ARCHITECT IMMEDIATELY IN CASE OF CONFLICTS. CONTRACTOR SHALL FIELD VERIFY DIMENSIONS AND CONDITIONS FOR WORK TO BE FITTED TO WORK IN PLACE.
3. ALL CONTRACTORS SHALL THOROUGHLY REVIEW CONTRACT DOCUMENTS AND SITE CONDITIONS PRIOR TO PROCEEDING WITH THE WORK. PRIOR TO BIDDING, CONTRACTOR SHALL NOTIFY ARCHITECT OF ANY CONDITIONS WHICH ARE NOT COVERED IN THE CONTRACT DOCUMENTS. DURING CONSTRUCTION, CONTRACTORS SHALL NOTIFY THE ARCHITECT AND SEEK CLARIFICATION IF ANY DISCREPANCIES ARE FOUND. CONTRACTOR SHALL BE RESPONSIBLE FOR REMEDIAL WORK IF RELATED WORK IS CONTINUED AFTER A DISCREPANCY IS IDENTIFIED.
4. CONTRACTORS SHALL BE RESPONSIBLE FOR VERIFYING THAT MATERIALS, LABOR, INSTALLATION, ETC., CONFORMS TO THE CODES AND REQUIREMENTS OF LOCAL GOVERNING AGENCIES.
5. CONSTRUCTION MATERIALS STORED ON THE SITE SHALL BE PROPERLY STACKED AND PROTECTED SO AS TO PREVENT DAMAGE OR DETERIORATION UNTIL USED. FAILURE IN THIS REGARD MAY BE CAUSE FOR REJECTION OF MATERIAL AND/OR WORK.
6. NEW/EXISTING FINISHES AND CONSTRUCTION SHALL BE PROTECTED BY THE CONTRACTOR FROM POTENTIAL DAMAGE CAUSED BY CONSTRUCTION ACTIVITY. DAMAGE TO FINISHES OR CONSTRUCTION CAUSED IN THIS MANNER SHALL BE REPAIRED OR REPLACED (OWNER'S DECISION) BY THE CONTRACTOR WITH IDENTICAL MATERIAL AND/OR FINISHES. CONTRACTOR SHALL MAKE AND MAINTAIN A PHOTOGRAPHIC RECORD NOTEBOOK WITH DATED/INDEXED PHOTOGRAPHS.
7. CONSTRUCTION SITE SHALL BE ENCLOSED BY A 6'-0" OPAQUE FENCE AT ALL TIMES DURING CONSTRUCTION. NO CONSTRUCTION MATERIAL, EQUIPMENT, PORTABLE TOILETS, TRASH CONTAINERS, OR DEBRIS SHALL BE PLACED IN THE PUBLIC RIGHT-OF-WAY.
8. TRASH AND RECYCLING CONTAINERS SHALL BE MAINTAINED ON SITE AT ALL TIMES AND DEBRIS ON SITE WHICH COULD OTHERWISE BLOW AWAY, SHALL BE REGULARLY COLLECTED AND PLACED IN CONTAINERS. CONTACT CITY FOR RECYCLING CENTER LOCATION.
9. THE PROJECT SHALL HAVE A SIGNAGE VIEWABLE FROM THE PUBLIC STREET THAT INDICATES THE HOURS OF CONSTRUCTION AS: M THRU F 7:30AM - 6PM, SATURDAYS 9AM - 5PM.
10. TEMPERED GLASS SHALL BE PERMANENTLY IDENTIFIED AND VISIBLE WHEN THE UNIT IS GLAZED.
11. MANUFACTURED WINDOWS SHALL HAVE LABEL ATTACHED CERTIFIED BY THE NATIONAL FENESTRATION RATING COUNCIL (NFRC) AND SHOWING COMPLIANCE WITH THE ENERGY CALCS.
12. CONTRACTOR SHALL COMPLY WITH ALL OSHA REQUIREMENTS.
13. PRIOR TO FINAL INSPECTION, THE LICENSED CONTRACTOR, ARCHITECT OR ENGINEER IN RESPONSIBLE CHARGE OF THE OVERALL CONSTRUCTION MUST PROVIDE TO THE BUILDING DEPARTMENT OFFICIAL WRITTEN VERIFICATION THAT ALL APPLICABLE PROVISIONS FROM THE GREEN BUILDING STANDARDS CODE HAVE BEEN IMPLEMENTED AS PART OF THE CONSTRUCTION. CGC 102.3
14. EXTERIOR BATHROOM VENTS TO BE PROTECTED W/ CORROSION-RESISTANT SCREENS LOUVERS OR GRILLES WITH OPENINGS 1 /4" TO 1 /2" IN SIZE, CMC 504.1, 504.5, CRC R303.5.
15. ADDRESS IDENTIFICATION SHALL BE PROVIDED FOR ALL NEW AND EXISTING BUILDINGS IN A LOCATION THAT IS PLAINLY VISIBLE AND LEGIBLE FROM THE STREET OR ROAD FRONTING THE PROPERTY. WHERE ACCESS IS BY WAY OF A PRIVATE ROAD AND THE BUILDING ADDRESS CANNOT BE VIEWED FROM THE PUBLIC WAY, AN APPROVED SIGN OR MEANS SHALL BE USED TO IDENTIFY THE STRUCTURE. PREMISES IDENTIFICATION SHALL CONFORM TO CBC SECTION 501.2
16. WALL, FLOOR AND CEILING FINISHES AND MATERIALS SHALL NOT EXCEED THE INTERIOR FINISH CLASSIFICATIONS IN CBC TABLE 803.9 AND SHALL MEET THE FLAME PROPAGATION PERFORMANCE CRITERIA OF THE CALIFORNIA CODE OF REGULATIONS, TITLE 19, DIVISION 1. DECORATIVE MATERIALS SHALL BE PROPERLY TREATED BY A PRODUCT OR PROCESS APPROVED BY THE STATE FIRE MARSHAL WITH APPROPRIATE DOCUMENTATION PROVIDED TO THE CITY OF SAN DIEGO.
17. DUMPSTERS AND TRASH CONTAINERS EXCEEDING A 5 CUBIC YARDS SHALL NOT BE STORED IN BUILDINGS OR PLACED WITHIN 5 FEET OF COMBUSTIBLE WALLS, OPENINGS OR COMBUSTIBLE ROOF EAVE LINES UNLESS PROTECTED BY AN APPROVED SPRINKLER SYSTEM OR LOCATED IN A TYPE I OR IIA STRUCTURE SEPARATED BY 10 FEET FROM OTHER STRUCTURES. CONTAINERS LARGER THAN 1 CUBIC YARD SHALL BE OF NON - OR LIMITED-COMBUSTIBLE MATERIALS OR SIMILARLY PROTECTED OR SEPARATED. CFC 304.3
18. OPEN FLAMES, FIRE, AND BURNING ON ALL PREMISES IS PROHIBITED EXCEPT AS SPECIFICALLY PERMITTED Y THE CITY OD SAN DIEGO AND CFC 308
19. THE EGRESS PATH SHALL REMAIN FREE AND CLEAR OF ALL OBSTRUCTIONS AT ALL TIMES. NO STORAGE IS PERMITTED IN ANY EGRESS PATHS.
20. DURING CONSTRUCTION, AT LEAST ONE EXTINGUISHER SHALL BE PROVIDED ON EACH FLOOR LEVEL AT EACH STAIRWAY, IN ALL STORAGE AND CONSTRUCTION SHEDS, IN LOCATIONS WHERE FLAMMABLE OR COMBUSTIBLE LIQUIDS ARE STORED OR USED, AND WHERE OTHER SPECIAL HAZARDS ARE PRESENT PER CFC SECTION 3315.1
21. BUILDINGS UNDERGOING CONSTRUCTION, ALTERATION, OR DEMOLITION SHALL CONFORM TO CFC CHAPTER 33. WELDING, CUTTING, AND OTHER HOT WORK SHALL BE IN CONFORMANCE WITH CFC CHAPTER 35.

SYMBOLS LEGEND

- SECTION NO. / DWG. NO.
- LEVEL LINE CONTROL POINT ON DATUM
- ROOM ELEVATION DWG. NO.
- DIMENSIONS TO FACE OF STUD OR WALL
- DETAIL NO. / DWG. NO.
- DIMENSION TO CENTERLINE
- DOOR NO.
- REVISION
- WINDOW TYPE

PROJECT NOTES

1. THE PROJECT SITE IS IN THE MODERATE-RISK PALEONTOLOGICAL SENSITIVITY AREA. THEREFORE, SECTION 142.0151 OF THE SDMC SHALL APPLY IF PALEONTOLOGICAL RESOURCES ARE DISCOVERED. PALEONTOLOGICAL RESOURCES, AS DEFINED IN THE GENERAL GRADING GUIDELINES FOR PALEONTOLOGICAL RESOURCES, IF DISCOVERED DURING GRADING, NOTWITHSTANDING SECTION 142.0151(A), ALL GRADING IN THE AREA OF DISCOVERY SHALL CEASE UNTIL A QUALIFIED PALEONTOLOGICAL MONITOR HAS OBSERVED THE DISCOVERY AND THE DISCOVERY HAS BEEN RECOVERED IN ACCORDANCE WITH THE GENERAL GRADING GUIDELINES FOR PALEONTOLOGICAL RESOURCES.
2.

PROJECT MEMBERS

OWNER :	TITLE 24 :	STRUCTURAL ENGINEER :	GEN. CONTRACTOR :
BRIAN MARCUS	AUSTIN MURDOCK ABC ENERGY CONSULTING	LOVELACE ENGINEERING ATTN: CHRIS KERN	HERN ORE, INC. ATTN: COLIN HERNSTAD
8582 SUGARMAN DR. LA JOLLA, CA 92037	8062 DONZEE ST. SAN DIEGO, CA 92123	12509 VISTA SORRENTO PKW. STE. 100 SAN DIEGO, CA 92121	9515 LA JOLLA SCENIC DR. N. LA JOLLA, CA 92037
PH: (858) 245-7867	(858) 401-0230	(858) 535-9111 x 108	PH: (619) 921-0114
EMAIL: brinnimarcus@gmail.com	EMAIL : austin@title24energycalcs.com	EMAIL: ckern@lovelaceeng.com	EMAIL: colinhernstad@gmail.com

DEFERRED SUBMITTALS

PLANS FOR THE DEFERRED SUBMITTAL ITEMS SHALL BE SUBMITTED IN A TIMELY MANNER BUT NOT LESS THAN 30 BUSINESS DAYS PRIOR TO INSTALLATION FOR CITY REVIEW AND APPROVAL

THE REGISTERED AND RESPONSIBLE DESIGN PROFESSIONAL SHALL REVIEW THE DEFERRED SUBMITTAL DOCUMENTS AND SUBMIT THEM TO THE BUILDING OFFICIAL, WITH ANNOTATION INDICATING THAT THE DEFERRED SUBMITTAL DOCUMENTS HAVE BEEN REVIEWED AND FOUND TO BE IN GENERAL CONFORMANCE TO THE DESIGN OF THE BUILDING. (SDMC ~SS129.0205)

1. FIRE SPRINKLER NFPA 13D

PROJECT DATA

SCOPE OF WORK :

COMPLETE INTERIOR REMODEL TO EXISTING SINGLE-STORY, SINGLE-FAMILY RESIDENCE. W/ ADDITION OF NEW 2ND FLOOR TO INCLUDE: ADDITION OF NEW HABITABLE SPACE FOR SINGLE FAMILY DWELLING; NEW ADU; WITH STRUCTURAL, ELECTRICAL, MECHANICAL & PLUMBING.

EXISTING FLOOR AREA :

SINGLE-STORY RESIDENCE :	2,352 S.F.

PROPOSED FLOOR AREA :

2-STORY RESIDENCE :	3,333 S.F.
SINGLE-CAR GARAGE :	269 S.F.
ADU :	1,103 S.F.
TOTAL PROPOSED :	4,705 S.F.

PROPOSED SCOPE OF WORK :

REMODEL :	
RESIDENCE :	2,083 S.F.
SINGLE-CAR GARAGE :	269 S.F.
TOTAL REMODEL :	2,352 S.F.
ADDITION :	
1ST FLOOR - SFD :	583 S.F.
2ND FLOOR - SFD :	667 S.F.
2ND FLOOR - ADU :	1,103 S.F.
TOTAL ADDITION :	2,353 S.F.

ALLOWABLE FAR :	0.54 x 10,362 = 5,595 S.F.
EXISTING FAR :	
2,352 S.F. (RES) / 10,362 S.F. (LOT) :	0.23
PROPOSED FAR :	
4,705 S.F. (RES) / 10,362 S.F. (LOT) :	0.45

DWELLING UNIT MATRIX :

UNIT	SQ. FT.	BEDROOMS
EXISTING SDU :	3,333 S.F.	3
PROPOSED SDU :	269 S.F.	2
ADU :	1,103 S.F.	2

LOT COVERAGE :

4,088 S.F. (RES) / 10,362 S.F. (LOT) :	39.4%

LEGAL DESCRIPTION :

LOT 89, IN LA JOLLA SCENIC HEIGHTS SUB-DIVISION, CITY OF LA JOLLA, COUNTY OF SAN DIEGO, STATE OF CALIFORNIA, ACCORDING TO MAP THEREOF NO. 4382, FILED IN THE OFFICE OF THE COUNTY RECORDER OF SAN DIEGO COUNTY.

APPLICABLE CODES:

2025 CALIFORNIA BUILDING CODE;
2025 CALIFORNIA RESIDENTIAL CODE;
2025 CALIFORNIA MECHANICAL CODE;
2025 CALIFORNIA PLUMING CODE;
2025 CALIFORNIA ELECTRICAL CODE;
2025 CALIFORNIA FIRE CODE;
2025 CALIFORNIA GREEN BUILDING STANDARDS CODE;
2025 CALIFORNIA ENERGY CODE

TECHNICAL DATA:

NUMBER OF STORIES :	1 INTO 2	APN :	346-771-22-00
FIRE SPRINKLER SYSTEM :	NO	YEAR CONSTRUCTED :	CIRCA 1961
TYPE OF CONSTRUCTION :	TYPE VB	OCCUPANCY :	R-3/U
TRANSIT PRIORITY AREA OVERLAY ZONE (TPAOZ) :	—	ZONING :	LJSPD-SF
TRANSIT AREA OVERLAY ZONE (TAOZ) :	—	LOT AREA :	10,362 S.F. / 0.24 AC

TITLE 24 INFO

DRAWING INDEX

GENERAL

TS	TITLE SHEET
SP1	MINIMUM CONSTRUCTION SPECIFICATIONS
SP2	2022 CALIFORNIA GREEN BUILDING STANDARDS CODE
SP3	2022 CALIFORNIA GREEN BUILDING STANDARDS CODE

ARCHITECTURAL

A1.0	SITE PLAN / STORMWATER NOTES
A1.1	SURVEY PLAN
A2.0	(E) FLOOR PLAN - DEMOLITION PLAN
A2.1	(E) ROOF PLAN - DEMOLITION PLAN
A2.2	(N) 1ST FLOOR PLAN - PROPOSED PLAN
A2.3	(N) 2ND FLOOR PLAN - PROPOSED PLAN
A2.4	(N) ROOF PLAN - PROPOSED PLAN
A3.0	(E) EXTERIOR ELEVATIONS / FRONT & REAR - DEMOLITION PLAN
A3.1	(E) EXTERIOR ELEVATIONS / SIDES - DEMOLITION PLAN
A3.2	(N) EXTERIOR ELEVATIONS / FRONT & REAR - PROPOSED PLAN
A3.3	(N) EXTERIOR ELEVATIONS / SIDES - PROPOSED PLAN
A4.0	1ST FLOOR REFLECTED CEILING PLAN
A4.1	2ND FLOOR REFLECTED CEILING PLAN
A5.0	BUILDING SECTIONS
A5.1	BUILDING SECTIONS
A6.0	DOOR SCHEDULE
A6.1	WINDOW SCHEDULE

MECHANICAL, ELECTRICAL & ENERGY

EM1.0	TITLE 24 - SFD
EM1.2	TITLE 24 - ADU
EM2.0	ELECTRICAL - MECHANICAL 1ST FLOOR PLAN / NOTES
EM2.1	ELECTRICAL - MECHANICAL 2ND FLOOR PLANS

VICINITY MAP



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5252 waring rd.
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PROJECT

Addition for:

Marcus Residence

8582 Sugarman Dr.
La Jolla, CA, 92037

SHEET TITLE

TITLE SHEET

REVISIONS

No.	Date	Notes
1	4/??/2026	PLAN CHECK - 1

BUILDING DEPT. PROJECT #: —

PROJECT #: 22504

DATE: 03 April 2026

SHEET #: TS



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Marcus Residence

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1ST SUBMITTAL

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SYMBOLS LEGEND

- SECTION NO. / DWG. NO.
- ROOM ELEVATION / DWG. NO.
- DETAIL NO. / DWG. NO.
- DOOR NO.
- WINDOW TYPE
- LEVEL LINE CONTROL / POINT ON DATUM
- DIMENSIONS TO FACE OF STUD OR WALL
- DIMENSION TO CENTERLINE
- REVISION

PROJECT NOTES

1. THE PROJECT SITE IS IN THE MODERATE-RISK PALEONTOLOGICAL SENSITIVITY AREA. THEREFORE, SECTION 142.0151 OF THE SDMC SHALL APPLY IF PALEONTOLOGICAL RESOURCES ARE DISCOVERED. PALEONTOLOGICAL RESOURCES, AS DEFINED IN THE GENERAL GRADING GUIDELINES FOR PALEONTOLOGICAL RESOURCES, IF DISCOVERED DURING GRADING, NOTWITHSTANDING SECTION 142.0151(A), ALL GRADING IN THE AREA OF DISCOVERY SHALL CEASE UNTIL A QUALIFIED PALEONTOLOGICAL MONITOR HAS OBSERVED THE DISCOVERY AND THE DISCOVERY HAS BEEN RECOVERED IN ACCORDANCE WITH THE GENERAL GRADING GUIDELINES FOR PALEONTOLOGICAL RESOURCES.
2. 1

PROJECT MEMBERS

OWNER :
BRIAN MARCUS

8582 SUGARMAN DR.
LA JOLLA, CA 92037

PH: (858) 245-7867

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STRUCTURAL ENGINEER :
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GEN. CONTRACTOR :
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LA JOLLA, CA 92037

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EMAIL: colinhernstad@gmail.com

DEFERRED SUBMITTALS

PLANS FOR THE DEFERRED SUBMITTAL ITEMS SHALL BE SUBMITTED IN A TIMELY MANNER BUT NOT LESS THAN 30 BUSINESS DAYS PRIOR TO INSTALLATION FOR CITY REVIEW AND APPROVAL

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1. FIRE SPRINKLER NFPA 13D

PROJECT DATA

SCOPE OF WORK :

COMPLETE INTERIOR REMODEL TO EXISTING SINGLE-STORY, SINGLE-FAMILY RESIDENCE. W/ ADDITION OF NEW 2ND FLOOR TO INCLUDE: ADDITION OF NEW HABITABLE SPACE FOR SINGLE FAMILY DWELLING; NEW ADU; WITH STRUCTURAL, ELECTRICAL, MECHANICAL & PLUMBING.

EXISTING FLOOR AREA :

SINGLE-STORY RESIDENCE :	2,352 S.F.

PROPOSED FLOOR AREA :

2-STORY RESIDENCE :	3,333 S.F.
SINGLE-CAR GARAGE :	269 S.F.
ADU :	1,103 S.F.
TOTAL PROPOSED :	4,705 S.F.

PROPOSED SCOPE OF WORK :

REMODEL :	
RESIDENCE :	2,083 S.F.
SINGLE-CAR GARAGE :	269 S.F.
TOTAL REMODEL :	2,352 S.F.
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1ST FLOOR - SFD :	583 S.F.
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TOTAL ADDITION :	2,353 S.F.

ALLOWABLE FAR :	0.54 x 10,362 = 5,595 S.F.
EXISTING FAR :	
2,352 S.F. (RES) / 10,362 S.F. (LOT) :	0.23
PROPOSED FAR :	
4,705 S.F. (RES) / 10,362 S.F. (LOT) :	0.45

DWELLING UNIT MATRIX :

UNIT	SQ. FT.	BEDROOMS
EXISTING SDU :	3,333 S.F.	3
PROPOSED SDU :	269 S.F.	2
ADU :	1,103 S.F.	2

LOT COVERAGE :

4,088 S.F. (RES) / 10,362 S.F. (LOT) :	39.4%

LEGAL DESCRIPTION :

LOT 89, IN LA JOLLA SCENIC HEIGHTS SUB-DIVISION, CITY OF LA JOLLA, COUNTY OF SAN DIEGO, STATE OF CALIFORNIA, ACCORDING TO MAP THEREOF NO. 4382, FILED IN THE OFFICE OF THE COUNTY RECORDER OF SAN DIEGO COUNTY.

APPLICABLE CODES:

2025 CALIFORNIA BUILDING CODE;
2025 CALIFORNIA RESIDENTIAL CODE;
2025 CALIFORNIA MECHANICAL CODE;
2025 CALIFORNIA PLUMING CODE;
2025 CALIFORNIA ELECTRICAL CODE;
2025 CALIFORNIA FIRE CODE;
2025 CALIFORNIA GREEN BUILDING STANDARDS CODE;
2025 CALIFORNIA ENERGY CODE

TECHNICAL DATA:

NUMBER OF STORIES :	1 INTO 2	APN :	346-771-22-00
FIRE SPRINKLER SYSTEM :	NO	YEAR CONSTRUCTED :	CIRCA 1961
TYPE OF CONSTRUCTION :	TYPE VB	OCCUPANCY :	R-3/U
TRANSIT PRIORITY AREA OVERLAY ZONE (TPAOZ) :	—	ZONING :	LJSPD-SF
TRANSIT AREA OVERLAY ZONE (TAOZ) :	—	LOT AREA :	10,362 S.F. / 0.24 AC

TITLE 24 INFO

DRAWING INDEX

GENERAL

TS	TITLE SHEET
SP1	MINIMUM CONSTRUCTION SPECIFICATIONS
SP2	2022 CALIFORNIA GREEN BUILDING STANDARDS CODE
SP3	2022 CALIFORNIA GREEN BUILDING STANDARDS CODE

ARCHITECTURAL

A1.0	SITE PLAN / STORMWATER NOTES
A1.1	SURVEY PLAN
A2.0	(E) FLOOR PLAN - DEMOLITION PLAN
A2.1	(E) ROOF PLAN - DEMOLITION PLAN
A2.2	(N) 1ST FLOOR PLAN - PROPOSED PLAN
A2.3	(N) 2ND FLOOR PLAN - PROPOSED PLAN
A2.4	(N) ROOF PLAN - PROPOSED PLAN
A3.0	(E) EXTERIOR ELEVATIONS / FRONT & REAR - DEMOLITION PLAN
A3.1	(E) EXTERIOR ELEVATIONS / SIDES - DEMOLITION PLAN
A3.2	(N) EXTERIOR ELEVATIONS / FRONT & REAR - PROPOSED PLAN
A3.3	(N) EXTERIOR ELEVATIONS / SIDES - PROPOSED PLAN
A4.0	1ST FLOOR REFLECTED CEILING PLAN
A4.1	2ND FLOOR REFLECTED CEILING PLAN
A5.0	BUILDING SECTIONS
A5.1	BUILDING SECTIONS
A6.0	DOOR SCHEDULE
A6.1	WINDOW SCHEDULE

MECHANICAL, ELECTRICAL & ENERGY

EM1.0	TITLE 24 - SFD
EM1.2	TITLE 24 - ADU
EM2.0	ELECTRICAL - MECHANICAL 1ST FLOOR PLAN / NOTES
EM2.1	ELECTRICAL - MECHANICAL 2ND FLOOR PLANS

VICINITY MAP


8582 SUGARMAN DR.
NORTH
La Jolla Village Dr
Nobel Dr
Torrey Pines Rd
Scripps Institution of Oceanography
UC San Diego School of Medicine
La Jolla Shores Dr
Camino del Oro
Calle Del Oro
Cliffridge Park
Pottery Canyon Natural Open Space Pk
Villa La Jolla Dr
Governor Dr
Gilman Dr
Genesee Ave
Regents Rd
Miramar Rd
Mount Soledad Memorial
Mount Soledad Natural Park
Soledad Mountain Rd
Via Capri
Via Casoria
Via Alicante
Via Valmonte
Via Mallorca
Via Rosa
Via Siena
Via Vera Cruz
Via Ventana
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2022 CALIFORNIA GREEN BUILDING STANDARDS CODE

RESIDENTIAL MANDATORY MEASURES, SHEET 1 (January 2023)

AIA California

Y = YES
N/A = NOT APPLICABLE
RESPON. PARTY = RESPONSIBLE PARTY (ie: ARCHITECT, ENGINEER, OWNER, CONTRACTOR, INSPECTOR ETC.)

CHAPTER 3
GREEN BUILDING
SECTION 301 GENERAL

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

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

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

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

SECTION 302 MIXED OCCUPANCY BUILDINGS

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

ABBREVIATION DEFINITIONS:

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

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

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

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

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

4.106 SITE DEVELOPMENT

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

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

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

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

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

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

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

Exception : Additions and alterations not altering the drainage path.

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

Exceptions:

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

Notes:

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

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

TABLE 4.106.4.3.1

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

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

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

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

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

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

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

DIVISION 4.2 ENERGY EFFICIENCY
4.201 GENERAL

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

DIVISION 4.3 WATER EFFICIENCY AND CONSERVATION
4.303 INDOOR WATER USE

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

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

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

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

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

4.303.1.3 Showerheads.

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

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

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

4.303.1.4 Faucets.

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

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

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

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

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

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

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

TABLE - MAXIMUM FIXTURE WATER USE

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

4.304 OUTDOOR WATER USE

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

NOTES:

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

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

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

4.408 CONSTRUCTION WASTE REDUCTION, DISPOSAL AND RECYCLING

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

Exceptions:

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

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

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

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

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

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

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

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

Notes:

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

4.410 BUILDING MAINTENANCE AND OPERATION

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

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

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

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

DIVISION 4.5 ENVIRONMENTAL QUALITY
SECTION 4.501 GENERAL

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

SECTION 4.502 DEFINITIONS

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

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

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

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

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Not For Construction

PROJECT

Addition for:

Marcus Residence

85822 Sugarman Dr.
La Jolla, CA, 92037

SHEET TITLE

2022 CALIFORNIA GREEN BUILDING STANDARDS CODE

REVISIONS

No.	Date	Notes

BUILDING DEPT. PROJECT #: —

PROJECT #: 22504

DATE: 10 September 2025

SHEET #: SP2

2022 CALIFORNIA GREEN BUILDING STANDARDS CODE
RESIDENTIAL MANDATORY MEASURES, SHEET 1 (January 2023)

AIA California

Y = YES
N/A = NOT APPLICABLE
RESPON. PARTY = RESPONSIBLE PARTY (ie: ARCHITECT, ENGINEER, OWNER, CONTRACTOR, INSPECTOR ETC.)

MAXIMUM INCREMENTAL REACTIVITY (MIR). The maximum change in weight of ozone formed by adding a compound to the "Base Reactive Organic Gas (ROG) Mixture" per weight of compound added, expressed to hundredths of a gram (g O^3/g ROC).

Note: MIR values for individual compounds and hydrocarbon solvents are specified in CCR, Title 17, Sections 94700 and 94701.

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

PRODUCT-WEIGHTED MIR (PWMIR). The sum of all weighted-MIR for all ingredients in a product subject to this article. The PWMIR is the total product reactivity expressed to hundredths of a gram of ozone formed per gram of product (excluding container and packaging).

Note: PWMIR is calculated according to equations found in CCR, Title 17, Section 94521 (a).

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

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

4.503 FIREPLACES

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

4.504 POLLUTANT CONTROL

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

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

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

1. Adhesives, adhesive bonding primers, adhesive primers, sealants, sealant primers and caulks shall comply with local or regional air pollution control or air quality management district rules where applicable or SCAQMD Rule 1168 VOC limits, as shown in Table 4.504.1 or 4.504.2, as applicable. Such products also shall comply with the Rule 1168 prohibition on the use of certain toxic compounds (chloroform, ethylene dichloride, methylene chloride, perchloroethylene and trichloroethylene), except for aerosol products, as specified in Subsection 2 below.
2. Aerosol adhesives, and smaller unit sizes of adhesives, and sealant or caulking compounds (in units of product, less packaging, which do not weigh more than 1 pound and do not consist of more than 16 fluid ounces) shall comply with statewide VOC standards and other requirements, including prohibitions on use of certain toxic compounds, of *California Code of Regulations*, Title 17, commencing with section 94507.

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

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

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

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

TABLE 4.504.1 - ADHESIVE VOC LIMIT[1,2]

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

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

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

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

TABLE 4.504.2 - SEALANT VOC LIMIT

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

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

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

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

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

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

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

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

TABLE 4.504.5 - FORMALDEHYDE LIMITS[1]

MAXIMUM FORMALDEHYDE EMISSIONS IN PARTS PER MILLION

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

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

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

DIVISION 4.5 ENVIRONMENTAL QUALITY (continued)

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

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

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

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

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

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

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

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

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

4.505 INTERIOR MOISTURE CONTROL

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

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

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

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

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

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

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

4.506 INDOOR AIR QUALITY AND EXHAUST

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

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

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

4.507 ENVIRONMENTAL COMFORT

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

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

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

CHAPTER 7
INSTALLER & SPECIAL INSPECTOR QUALIFICATIONS
702 QUALIFICATIONS

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

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

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

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

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

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

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

703 VERIFICATIONS

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

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Not For Construction

PROJECT

Addition for:

Marcus Residence

85822 Sugarman Dr.
La Jolla, CA, 92037

SHEET TITLE

2022 CALIFORNIA GREEN BUILDING STANDARDS CODE

REVISIONS

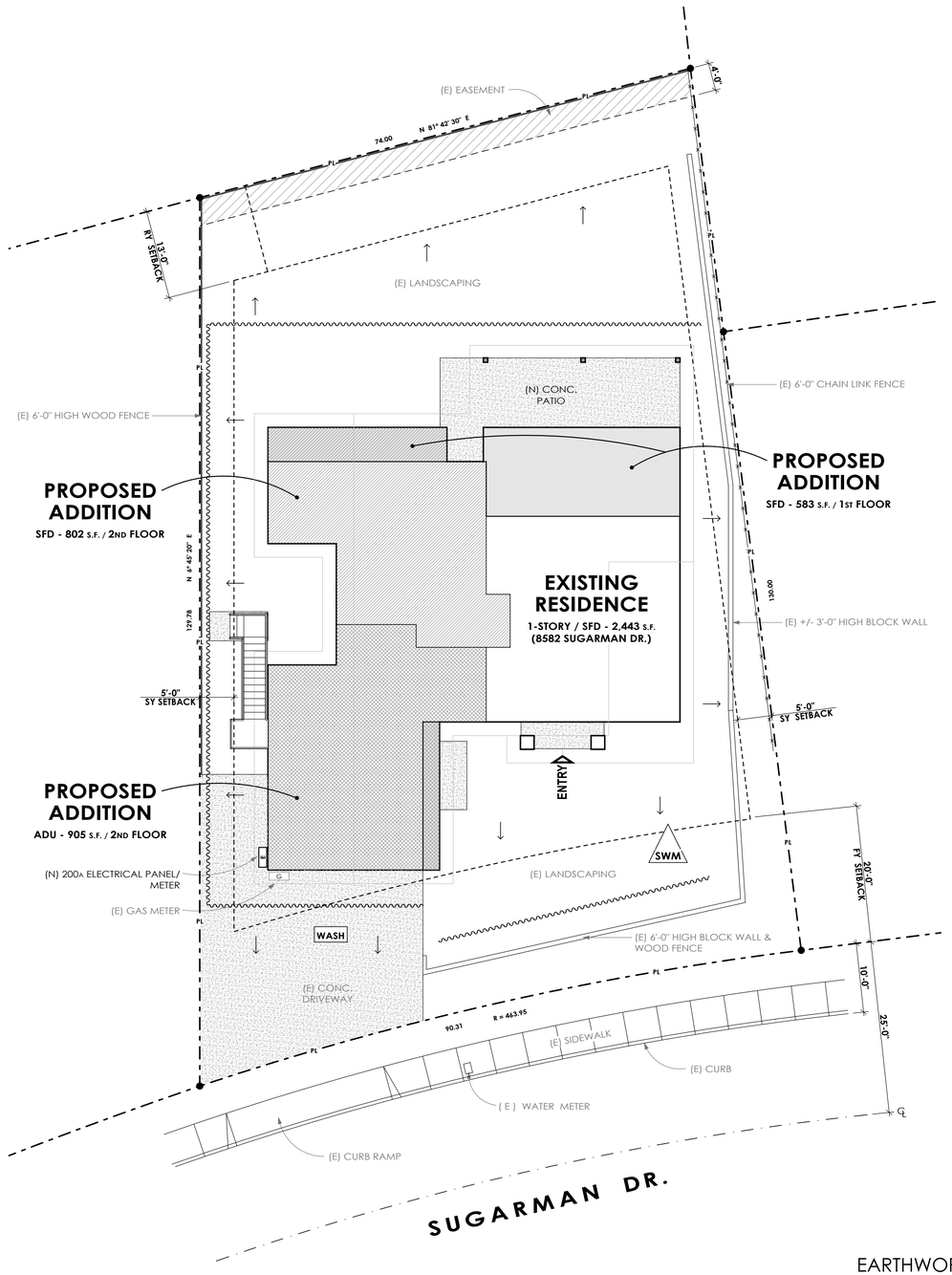
No.	Date	Notes

BUILDING DEPT. PROJECT #: —

PROJECT #: 22504

DATE: 10 September 2025

SHEET #: SP3



SITE PLAN

1" = 10'

EARTHWORK QUATITIES

CUT QUANTITIES :	25.39 CY
FILL QUANTITIES :	0 CY
IMPORT / EXPORT :	0 CY
MAX CUT DEPTH :	3 LF
MAX FILL DEPTH :	0 LF
A. TOTAL DISTURBANCE AREA :	677 SF
B. EXISTING AMOUNT OF IMPERVIOUS AREA :	3,442 SF
C. THE AMOUNT OF CREATED IMPERVIOUS AREA :	+ 307 SF
D. THE AMOUNT OF REPLACED IMPERVIOUS AREA :	370 SF
E. TOTAL PROPOSED IMPERVIOUS AREA :	3,749 SF
A. IMPERVIOUS % INCREASE :	+ 9 %

CONSTRUCTION BMP'S

THIS PROJECT SHALL COMPLY WITH ALL CURRENT REQUIREMENTS OF THE STATE PERMIT; CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD (SDRWQCB) , SAN DIEGO MUNICIPAL STORM WATER PERMIT, THE CITY OF SAN DIEGO LAND DEVELOPMENT CONE, AND THE STORM WATER STANDARDS MANUAL.

PRIOR TO ANY SOIL DISTURBANCE, TEMPORARY SEDIMENT CONTROLS SHALL BE INSTALLED BY THE CONTRACTOR OR QUALIFIED PERSON (S) AS INDICATED BELOW :

1. ALL REQUIREMENTS OF THE CITY OF SAN DIEGO " STORM WATER STANDARDS MANUAL " MUST BE INCORPORATED INTO THE DESIGN AND CONSTRUCTION OF THE PROPOSED GRADING / IMPROVEMENTS CONSISTENT W/ THE APPROVED STORM WATER POLLUTION PREVENTION PLAN (SWPPP) AND / OR WATER POLLUTION CONTROL PLAN (WPCP) FOR CONSTRUCTION LEVEL BMP s AND , IF APPLICABLE , TH ESTORM WATER QUALITY MANAGEMENT PLAN (SWQMP) FOR POST - CONSTRUCTION BMP s.
2. THE CONTRACTOR SHALL INSTALL AND MAINTAIN ALL STORM DRAIN INLET PROTECTION. INLET PROTECTION IN THE PUBLIC RIGHT - OF - WAY ,UST BE TEMOPRARILY REMOVED PRIOR TO RAIN EVENT TO ENSURE NO FLOODING OCCURS AND REINSTALLED AFTER RAIN IS OVER.
3. ALL CONSTRUCTION BMP s SHALL BE INSTALLED AND PROPERLY MAINTAINED THROUGHOUT THE DURATION OF THE CONSTRUCTION.
4. THE CONTRACTOR SHALL ONLY GRADE, INCLUDING CLEARING AND GRUBBING, AREAS FOR WHICH THE CONTRACTOR OR QUALIFIED CONTACT PERSON CAN PROVIDE EROSION AND SEDIMENT CONTROL MEASURES.
5. THE CONTRACTOR IS RESPONSIBLE FOR ENSURING THAT ALL SUB - CONTRACTORS AND SUPPLIERS ARE AWARE OF ALL STORM WATER BMP s AND IMPLEMENT SUCH MEASURES. FAILURE TO COMPLY W/ THE APPROVED SWPPP / WPCP WILL RESULT IN THE ISSUANCE OF CORRECTION NOTICES, CITATIONS, CIVIL PENALTIES, AND / OR STOP WORK NOTICES.
6. THE CONTRACTOR OR QUALIFIED PERSON SHALL BE RESPONSIBLE FOR CLEANUP OF ALL SILT, DEBRIS, AND MUD ON AFFECTED AND ADJACENT STREETS (S) AND WITHIN STORM DRAIN SYSTEM DUE TO CONSTRUCTION VEHICLES / EQUIPMENT AND CONSTRUCTION ACTIVITY AT THE END OF EACH WORK DAY.
7. THE CONTRACTOR SHALL PROTECT NEW AND EXISTING STORM WATER CONVEYANCE SYSTEMS FROM SEDIMENTATION, CONCRETE RINSE, OR OTHE CONSTRUCTION - RELATED DEBRIS AND DISCHARGES W/ THE APPROPRIATE BMP s THAT ARE ACCEPTABLE TO THE CITY RESIDENT ENGINEER AND AS INDICATED IN THE SWPPP / WPCP.
8. THE CONTRACTOR OR QUALIFIED CONTACT PERSON SHALL CLEAR DEBRIS, SILT, AND MUD FROM ALL DITCHES AND SWALES PRIOR TO AND WITHIN 3 BUSINESS DAYS AFTER EACH RAIN EVENT OR PRIOR TO THE NEXT RAIN EVENT, WHCIH EVER IS SOONER.
9. IF A NON - STORM WATER DISCHARGE LEAVES THE SITE, THE CONTRACTOR SHALL IMMEDIATELY STOP THE ACTIVITY AND REPAIR THE DAMAGES. THE CONTRACTOR SHALL NOTIFY THE CITY RESIDENT ENGINEER OF THE DISCHARGE, PRIOR TO RESUMING CONSTRUCTION ACTIVITY, ANY AND ALL WASTE MATERIAL, SEDIMENT, AND DEBRIS FROM EACH NON - STORM WATER DISCHARGE SHALL BE REMOVED FROM THE STORM DRAIN CONVEYANCE SYSTEM AND PROPERLY DISPOSED OF BY THE CONTRACTOR.
10. EQUIPMENT AND WORKERS FOR EMERGENCY WORK SHALL BE MADE AVAILABLE AT ALL TIMES. ALL NECESSARY MATERIALS SHALL BE STOCKPILED ONSITE AT CONVENIENT LOCATIONS TO FACILITATE RAPID DEVELOPMENT OF CONSTRUCTION BMP s WHEN RAIN IS IMMINENT.
11. THE CONTRACTOR SHALL RESTORE AND MAINTAIN ALL EROSION AND SEDIMENT CONTROL BMP s TO WORKING ORDER YEAR - ROUND.
12. THE CONTRACTOR SHALL INSTALL ADDITIONAL EROSION AND SEDIMENT CONTROL MEASURES DUE TO UNFORESEEN CIRCUMSTANCES TO PREVENT NON - STORM WATER AND SEDIMENT - LADEN DISCHARGES.
13. THE CONTRACTOR SHALL BE RESPONSIBLE AND SHALL TAKE NECESSARY PRECAUTIONS TO PREVENT PUBLIC TRESPASS ONTO AREAS WHERE IMPOUNDED WATERS CREATE A HAZARDOUS CONDITION.
14. ALL EROSION AND SEDIMENT CONTROL MEASURES PROVIDED PER THE APPROVED SWPP / WPCP SHALL BE INSTALLED AND MAINTAINED. ALL EROSION AND SEDIMENT CONTROLS FOR INTERIM CONDITIONS SHALL BE PROPERLY DOCUMENTED AND INSTALLED TO THE SATISFACTION OF THE CITY RESIDENT ENGINEER.
15. AS NECESSARY, THE CITY RESIDENT ENGINEER SHALL SCHEDULE MEETINGS FOR THE PROJECT TEAM (GENERAL CONTRACTOR, QUALIFIED CONTACT PERSON, EROSION CONTROL SUBCONTRACTOR IF ANY, ENGINEER OF WORK, OWNER / DEVELOPER, AND THE CITY RESIDENT ENGINEER) TO EVALUATE THE ADEQUACY OF THE EROSION AND SEDIMENT CONTROL MEASURES AND OTHER BMP s RELATIVE TO ANTICIPATED CONSTRUCTION ACTIVITIES.
16. THE CONTRACTOR OR QUALIFIED CONTACT PERSON SHALL CONDUCT VISUAL INSPECTIONS AND MAINTAIN ALL BMP s DAILY AND AS NEEDED. VISUAL INSPECTIONS AND MAINTENANCE OF ALL BMP s SHALL BE CONDUCTED BEFORE, DURING, AND AFTER EVERY RAIN EVENT AND EVERY 24 HOURS DURING ANY PROLONGED RAIN EVENT. THE CONTRACTOR SHALL MAINTAIN AND REPAIR ALL BMP s AS SOON AS POSSIBLE AS SAFETY SLOWS.
17. CONSTRUCTION ENTRANCE AND EXIT AREA. TEMPORARY CONSTRUCTION ENTRANCE AND EXITS SHALL BE CONSTRUCTED IN ACCORDANCE W/ CASQA FACT SHEET TC - 10 R CALTRANS FACT SHEET TC - 01 TO PREVENT TRACKING OF SEDIMENT AND OTHER POTENTIAL POLLUTANTS ONTO PAVED SURFACES AND TRAVELED WAYS. WIDTH SHALL BE 10' OR THE MINIMUN NECESSARY TO ACCOMODATE VEHICLES AND EQUIPMENT WITHOUT BY - PASSING THE ENTRANCE. (a) NON - STORM WATER DISCHARGES SHALL BE EFFECTIVELY MANAGED PER THE SAN DIEGO MUNICIPAL CODE CHAPTER 4 , ARTICLE 3 , DIVISION 3 " STORM WATER MANAGEMENT AND DISCHARGE CONTROL ".

PLAN NOTES

1. NO WORK WILL BE PERFORMED IN THE RIGHT OF WAY.
2. NO GRADING PROPOSED / EXISTING GRADE TO **NOT** BE MODIFIED
3. THE CONTRACTOR SHALL VERIFY THE LOCATIONS OF ALL UNDER GROUND UTILITIES PRIOR TO COMMENCING WITH CONSTRUCTION OR DEMOLITION.
4. THE STRUCTURE(S) WILL BE LOCATED ENTIRELY ON UNDISTURBED NATIVE SOIL. IF THE BUILDING INSPECTOR SUSPECTS FILL, EXPANSIVE SOLS OR ANY GEOLOGIC INSTABILITY BASED UPON OBSERVATION OF THE FOUNDATION EXCAVATION, A SOILS OR GEOLOGICAL REPORT, AND RE-SUBMITTAL OF PLANS TO PLAN CHECK TO VERIFY THAT REPORT RECOMMENDATIONS HAVE BEEN INCORPORATED, MAY BE REQUIRED.
5. PER CITY OF SAN DIEGO MUNICIPAL CODE SECTIONS 12.0104, 43.0310, 129.0104(A)(4), AND 142.0220, PERMITS ARE REQUIRED TO BE INSPECTED BY CITY INSPECTION STAFF TO ENSURE COMPLIANCE WITH ISSUED CONSTRUCTION PERMIT. THIS INCLUDES, BUT NOT LIMITED TO, STORMWATER COMPLIANCE INSPECTION REQUIREMENTS ASSOCIATED WITH EACH PERMIT.
6. ALL STORM WATER RUNOFF FROM PROPOSED AND/OR REPLACED IMPERVIOUS AREAS SHALL BE ROUTED TO PERVIOUS SURFACES OR LANDSCAPING PRIOR TO REACHING THE PUBLIC DRAIN SYSTEM.

LEGEND

- SWM — **WM - 5** - SOLID WASTE MANAGEMENT
- WASH — **WM - 8** - TEMPORARY CONCRETE WASHOUT
- **SC - 5** - FIBER ROLLS (STRAW WATTLES)
- (E) DIRECTION OF SOIL DRAINAGE (SLOPE DOWN / NO CHANGE)

0 5 15 30

GRAPHIC SCALE 1" = 10'

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PROJECT

Addition for:

Marcus Residence

8582 Sugarman Dr.
La Jolla, CA, 92037

SHEET TITLE

SITE PLAN / STORMWATER NOTES

REVISIONS

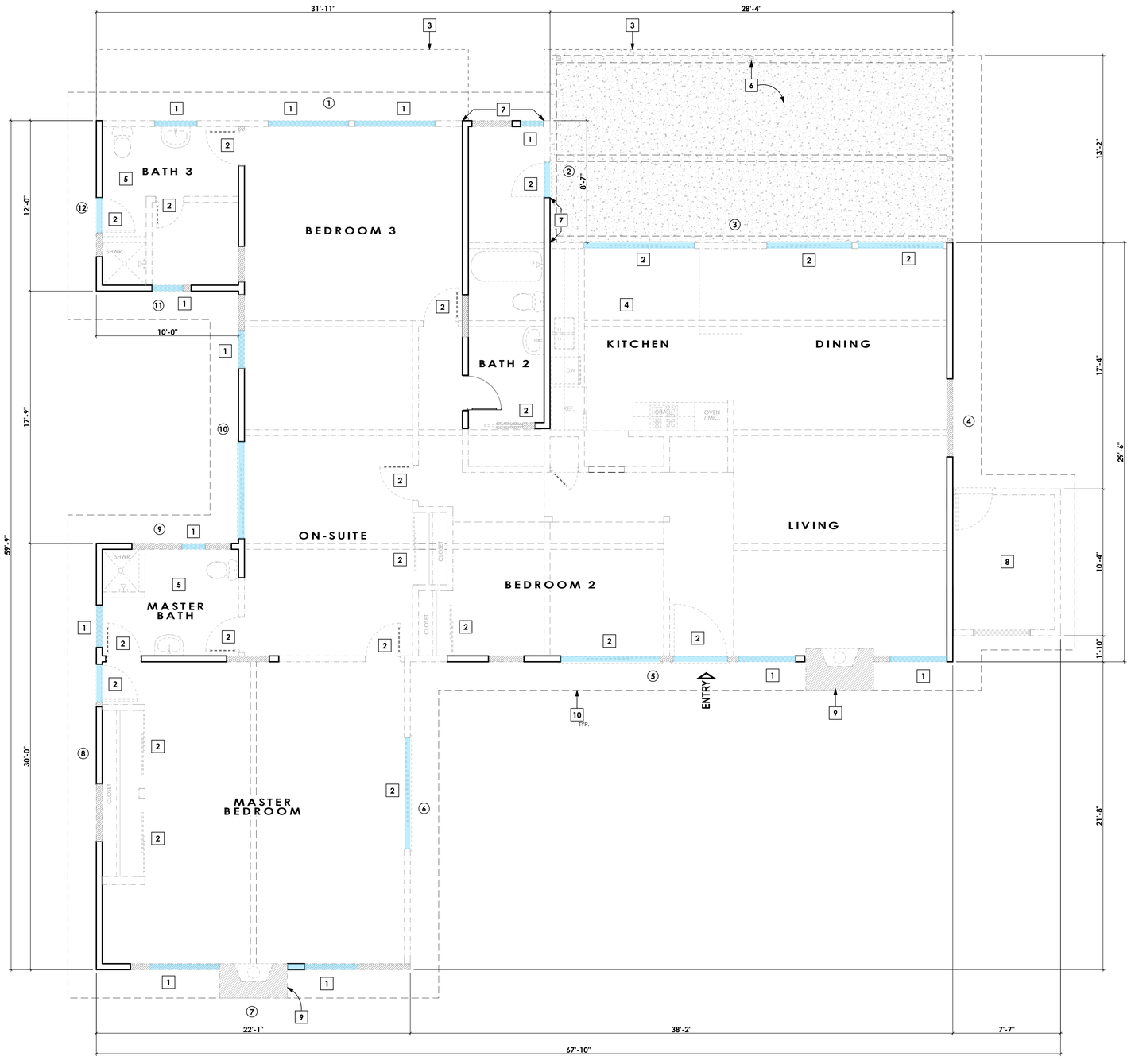
No.	Date	Notes
1	4/??/2026	PLAN CHECK - 1

BUILDING DEPT. PROJECT #: —

PROJECT #: 22504

DATE: 03 April 2026

SHEET #: A1.0



(E) FLOOR PLAN
(DEMOLITION PLAN)

1/4" = 1'-0"

KEYNOTES

1. REMOVE (E) WINDOW - FRAME & HARDWARE, COMPLETE.
2. REMOVE (E) DOOR - FRAME & HARDWARE, COMPLETE.
3. LINE OF PROPOSED ADDITION, TYP.
4. REMOVE ALL (E) KITCHEN FIXTURES, CABINETRY & COUNTER TOPS, COMPLETE
5. REMOVE ALL (E) BATHROOM FIXTURES, CABINETRY & COUNTER TOPS, COMPLETE
6. REMOVE (E) PATIO COVER; POSTS, BEAMS, ROOF, FOOTINGS, & PATIO SLAB, COMPLETE
7. REMOVE (E) STUCCO & BUILDING PAPER, TOP TO BOT., COMPLETE.
8. REMOVE (E) EXTERIOR STORAGE SHED, COMPLETE.
9. REMOVE (E) CHIMNEY & HEARTH, COMPLETE
10. LINE OF ROOF ABOVE, TYP.
11.
12.

PLAN NOTES

1. DIMENSIONS ARE TO THE FACE OF THE FINISHED SURFACE, U.O.N.
2. ALL DEMOLITION MUST MEET LOCAL CODES AND ORDINANCE.
3.

LEGEND

- EXISTING WALL TO BE REMOVED
- PORTION OF (E) WALL TO BE REMOVED WHERE (N) DOOR OR WINDOW TO BE LOCATED.
- (E) WALL TO REMAIN

0 2 6 12

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

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PROJECT

Addition for:

Marcus Residence

8582 Sugarman Dr.
La Jolla, CA, 92037

SHEET TITLE

(E) FLOOR PLAN -
DEMOLITION PLAN

REVISIONS

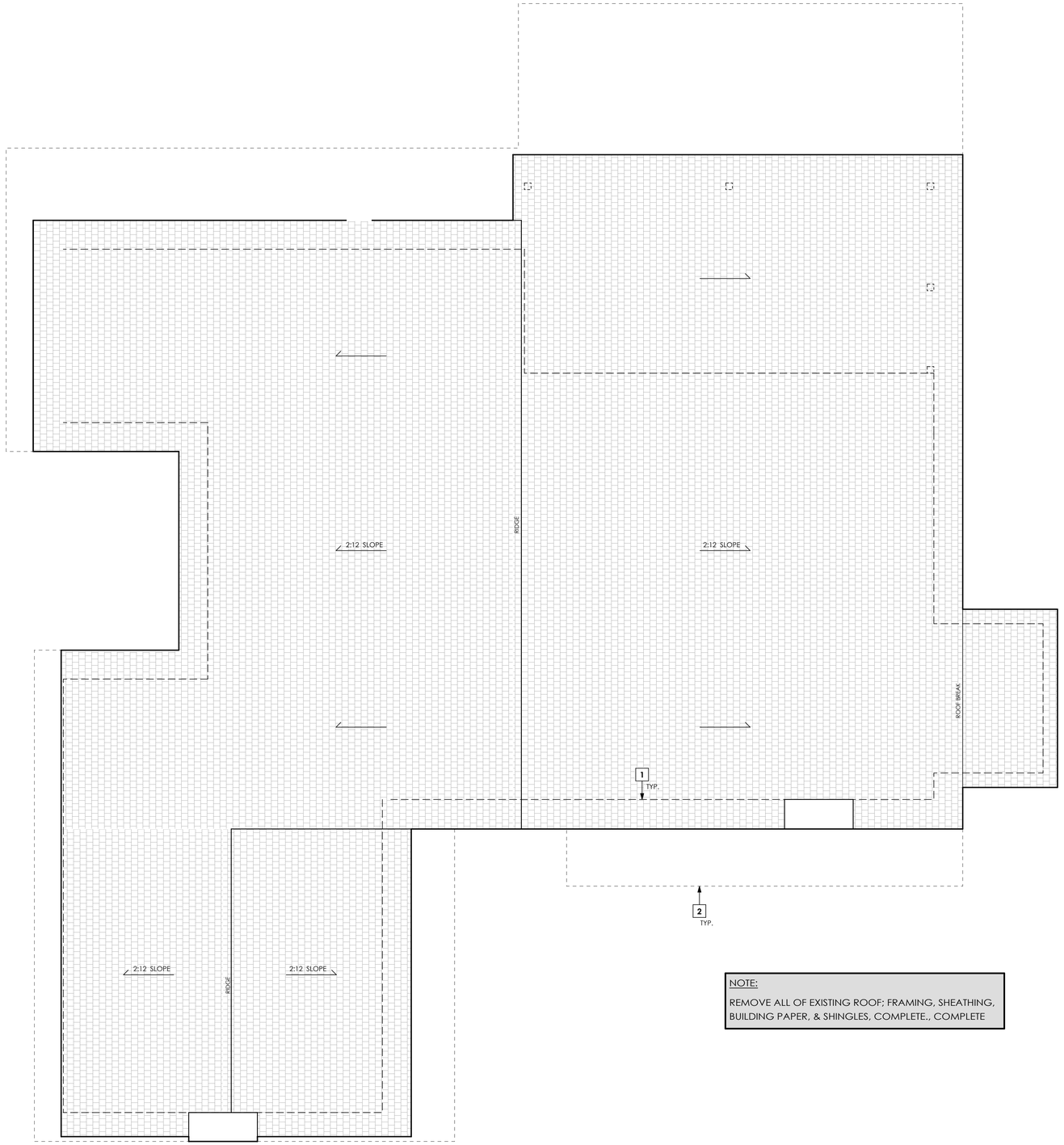
No.	Date	Notes
1	4/??/2026	PLAN CHECK - 1

BUILDING DEPT. PROJECT #: —

PROJECT #: 22504

DATE: 03 April 2026

SHEET #: A2.0



NOTE:

REMOVE ALL OF EXISTING ROOF; FRAMING, SHEATHING, BUILDING PAPER, & SHINGLES, COMPLETE., COMPLETE

ROOOF PLAN

(DEMOLITION PLAN)

1/4" = 1'-0"

NORTH

KEYNOTES

1	LINE OF STRUCTURE BELOW (TYP.)
2	LINE OF PROPOSED ADDITION (TYP.)
3	
4	
5	

PLAN NOTES

1. ALL DEMOLITION MUST MEET LOCAL CODES AND ORDINANCE.
2.

0 2 6 12

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

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PROJECT

Addition for:

Marcus Residence

85822 Sugarman Dr.
La Jolla, CA, 92037

SHEET TITLE

(E) ROOF PLAN -
DEMOLITION PLAN

REVISIONS

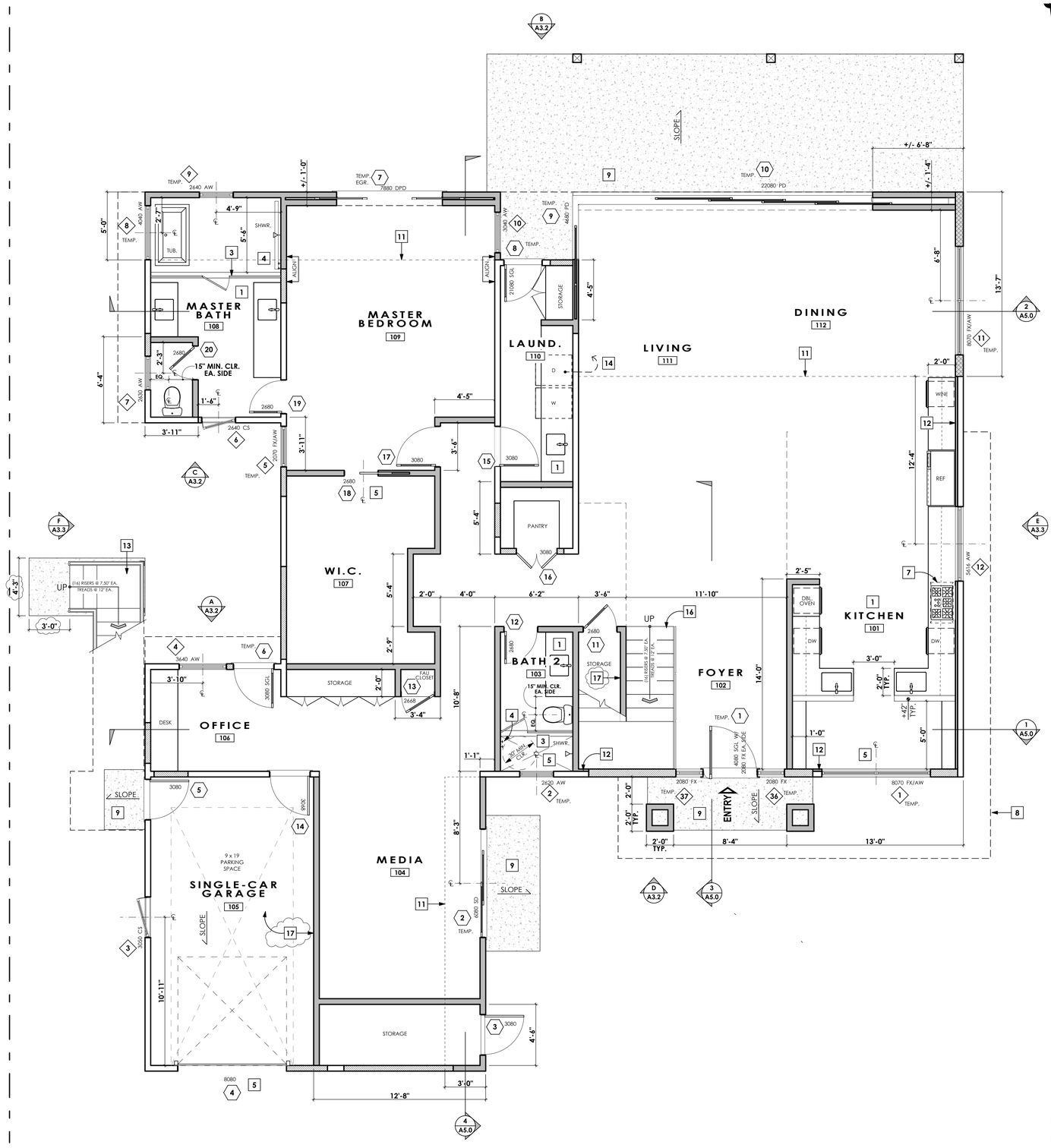
No.	Date	Notes

BUILDING DEPT. PROJECT #: —

PROJECT #: 22504

DATE: 28 January 2026

SHEET #: A2.1



1ST FLOOR PLAN
(PROPOSED PLAN)

1/4" = 1'-0"

KEYNOTES

1. ALL (N) FIXTURES, APPLIANCES, CABINETRY & COUTER TOPS.
2. (N) DRYER VENT W/ BACK DRAFT DAMPER.
3. TEMPERED SAFETY GLASS SHOWER ENCLOSURE
4. LOCATION OF SHOWER CONTROLS
5. CENTER DOOR/WINDOW IN SPACE
6. CLOSET SHELF W/ POLE OR BUILT-IN CABINETRY, TBD
7. (N) RANGE HOOD
8. LINE OF ROOF ABOVE, TYP.
9. CONCRETE LANDING - SEE PLAN **NOTE 3**
10. CLASS "A" METAL SEEM ROOFING SYSTEM, OVER (2) LAYERS OF 30 LB. FELT W/ METAL EDGE FLASHING.
11. LINE OF EXISTING RESIDENCE PRIOR TO REMODEL
12. FUR OUT (E) WALL TO **2x6** WIDTH
13. METAL & CONCRETE STAIR
14. (N) DRYER VENT W/ BACK DRAFT DAMPER. / TO BE RUN UP WALL & OUT ROOF / TO BE **14'-0"** MAX. IN LENGTH.
15. SOFFIT ABOVE @ 9'-0" FOR FAU DUCTING
16. OPEN TREAD STAIR UP TO LANDING W/ +42" TEMPERED GLASS RAILING
17. (1) LAYER 1/2" (MIN.) GYP. BD. @ ALL SEPARATION WALLS & CEILINGS BETWEEN GARAGE @ HABITABLE SPACE. / & UNDER STAIR.
18.

PLAN NOTES

1. DIMENSIONS ARE TO THE FACE OF THE FINISH SURFACE. U. O. N.
2. ALL CONSTRUCTION MUST MEET LOCAL CODES AND ORDINANCE.
3. LANDINGS TO BE NOT LESS THAN **36"** IN. LENGTH IN DIR. OF TRAVEL & NOT MORE THAN **1-1/2"** BELOW TOP OF DOOR THRESHOLDS AT EGRESS DOORS.

LEGEND

- (E) WALL TO REMAIN
- (N) WOOD STUD WALL / 2x4 U.O.N.
- (N) WOOD STUD WALL / 2x6 U.O.N.
- (E) WALL INFILL - AT AREAS WHERE DOOR OR WINDOW HAS BEEN REMOVED.
- (N) WOOD STUD WALL / 1-HOUR FIRE RATED (SEE DETAIL 1/—)
- (1) DOOR NUMBER - SEE SCHEDULE ON **A6.0**
- (1) WINDOW NUMBER - SEE SCHEDULE ON **A6.1**

GLAZING LEGEND :

FX = FIXED
SL = SLIDER
PD = POCKET DOOR
DPD = POCKET DOOR - DOUBLE
SGL = SINGLE LITE
AW = AWNING
CS = CASEMENT
DC = CASEMENT - DOUBLE
SD = SLIDING DOOR

0 2 6 12
GRAPHIC SCALE 1/4" = 1'-0"

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PROJECT

Addition for:

Marcus Residence

8582 Sugarman Dr.
La Jolla, CA, 92037

SHEET TITLE

(N) 1st FLOOR PLAN - PROPOSED PLAN

REVISIONS

No.	Date	Notes
1	4/??/2026	PLAN CHECK - 1

BUILDING DEPT. PROJECT #: —

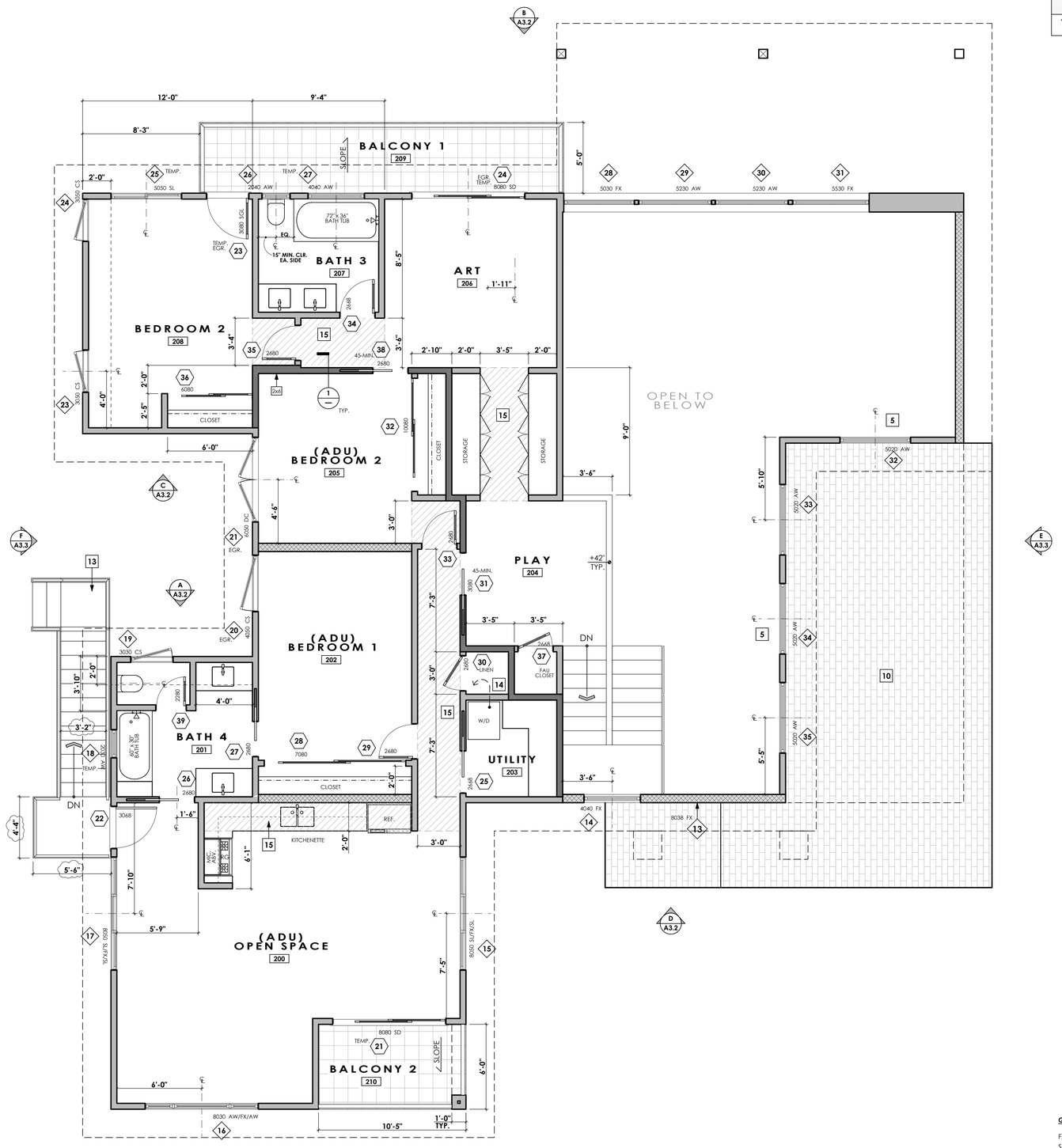
PROJECT #: 22504

DATE: 06 April 2026

SHEET #: A2.2

Leadbearing		Acoustical Performance		Fire Performance		Reference	
Construction Detail	Description	STC	Test Number	Rating	Test Number	ARL	Index
wt. 7  5½"	+ 5/8" SHEETROCK BRAND FIRECODE C CORE Gypsum Panels – 2x4 wood stud 16" or 24" o.c. – 3" THERMAFIBER SAFB – RC-1 channel or equivalent one side – joints finished	50	BBN-760903	1 hour	UL Des U327		A-26

1-HOUR FIRE/ACOUSTIC WALL DETAIL (1)



2ND FLOOR PLAN (PROPOSED PLAN) 1/4" = 1'-0"

KEYNOTES

1. ALL (N) FIXTURES, APPLIANCES, CABINETRY & COUTER TOPS.
2. (N) DRYER VENT W/ BACK DRAFT DAMPER.
3. TEMPERED SAFETY GLASS SHOWER ENCLOSURE
4. LOCATION OF SHOWER CONTROLS
5. CENTER DOOR/WINDOW IN SPACE
6. CLOSET SHELF W/ POLE OR BUILT-IN CABINETRY, TBD
7. (N) RANGE HOOD
8. LINE OF ROOF ABOVE, TYP.
9. CONCRETE LANDING - SEE PLAN **NOTE 3**
10. CLASS "A" METAL SEEM ROOFING SYSTEM, OVER (2) LAYERS OF 30 LB. FELT W/ METAL EDGE FLASHING.
11. LINE OF EXISTING RESIDENCE PRIOR TO REMODEL
12. FUR OUT (E) WALL TO **2x6** WIDTH
13. METAL & CONCRETE STAIR
14. (N) DRYER VENT W/ BACK DRAFT DAMPER. / TO BE RUN UP WALL & OUT ROOF / TO BE **14'-0"** MAX. IN LENGTH.
15. SOFFIT ABOVE @ 9'-0" FOR FAU DUCTING
16. OPEN TREAD STAIR UP TO LANDING W/ +42" TEMPERED GLASS RAILING
17. (1) LAYER 1/2" (MIN.) GYP. BD. @ ALL SEPARATION WALLS & CEILINGS BETWEEN GARAGE @ HABITABLE SPACE. / & UNDER STAIR.
18.

PLAN NOTES

1. DIMENSIONS ARE TO THE FACE OF THE FINISH SURFACE. U. O. N.
2. ALL CONSTRUCTION MUST MEET LOCAL CODES AND ORDINANCE.
3. LANDINGS TO BE NOT LESS THAN **36"** IN. LENGTH IN DIR. OF TRAVEL & NOT MORE THAN **1-1/2"** BELOW TOP OF DOOR THRESHOLDS AT EGRESS DOORS.

LEGEND

- (E) WALL TO REMAIN
- (N) WOOD STUD WALL / 2x4 U.O.N.
- (N) WOOD STUD WALL / 2x6 U.O.N.
- (E) WALL INFILL - AT AREAS WHERE DOOR OR WINDOW HAS BEEN REMOVED.
- (N) WOOD STUD WALL / 1-HOUR FIRE RATED (SEE DETAIL 1/—)
- (1) DOOR NUMBER - SEE SCHEDULE ON **A6.0**
- (1) WINDOW NUMBER - SEE SCHEDULE ON **A6.1**

GLAZING LEGEND :

FX = FIXED
SL = SLIDER
PD = POCKET DOOR
DPD = POCKET DOOR - DOUBLE
SGL = SINGLE LITE
AW = AWNING
CS = CASEMENT
DC = CASEMENT - DOUBLE
SD = SLIDING DOOR

0 2 6 12
GRAPHIC SCALE 1/4" = 1'-0"

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PROJECT

Addition for:

Marcus Residence

8582 Sugarman Dr.
La Jolla, CA, 92037

SHEET TITLE

(N) 2nd FLOOR PLAN - PROPOSED PLAN

REVISIONS

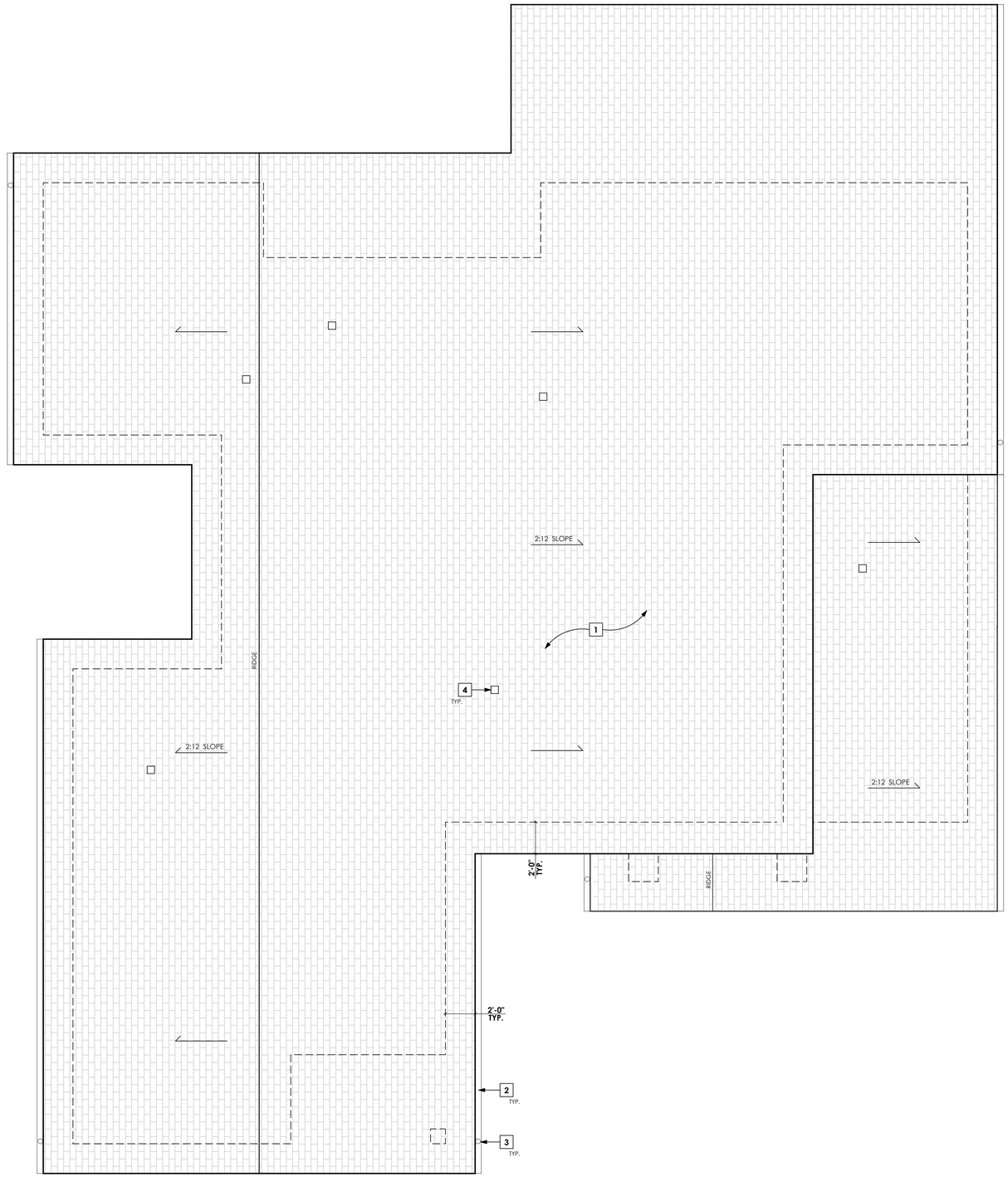
No.	Date	Notes
1	4/??/2026	PLAN CHECK - 1

BUILDING DEPT. PROJECT #: —

PROJECT #: 22504

DATE: 03 April 2026

SHEET #: A2.3



ROOF PLAN
(PROPOSED PLAN)

1/4" = 1'-0"

NORTH

KEYNOTES

1	(N) CLASS "A" COMPOSITION SHINGLES OVER (2) LAYERS OF 30 LB. FELT W/ METAL EDGE FLASHING.
2	LINE OF GUTTERS, TYP. MUST BE DESIGNED TO PREVENT THE ACCUMULATION OF DEBRIS
3	3" ROUND DOWN SPOUT, TYP.
4	EXTERIOR EXHAUST VENT W/ BACK DRAFT DAMPER, TYP.
5	
6	
7	

PLAN NOTES

1. DIMENSIONS ARE TO THE FACE OF THE FINISH SURFACE, U. O. N.
2. ALL CONSTRUCTION MUST MEET LOCAL CODES AND ORDINANCE.
3.

0 2 6 12

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

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PROJECT

Addition for:

Marcus Residence

8582 Sugarman Dr.
La Jolla, CA, 92037

SHEET TITLE

(N) ROOF PLAN - PROPOSED PLAN

REVISIONS

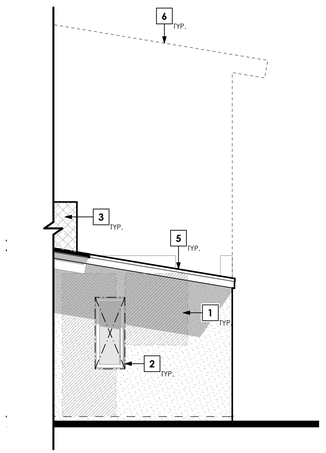
No.	Date	Notes
1	4/??/2026	PLAN CHECK - 1

BUILDING DEPT. PROJECT #: —

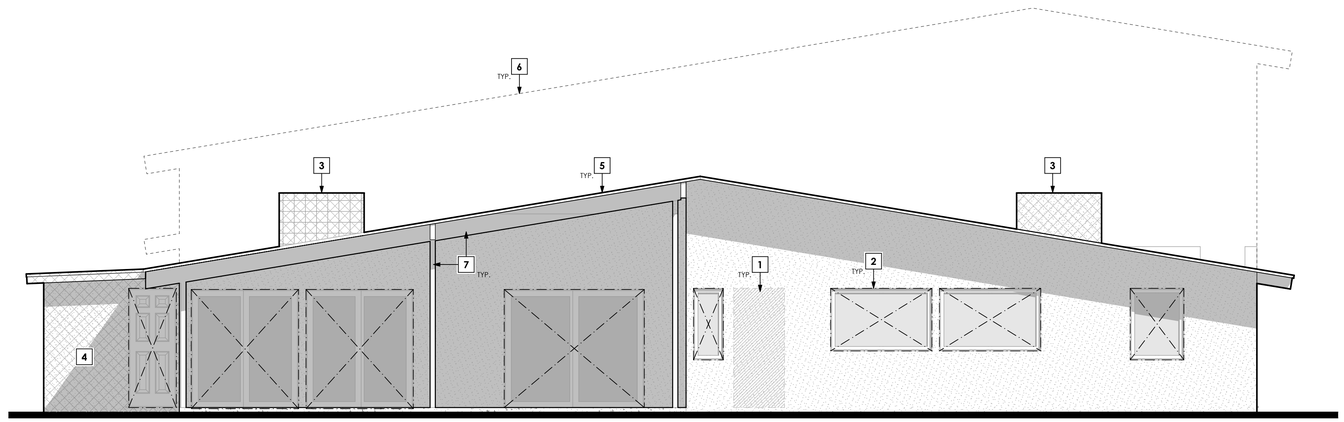
PROJECT #: 22504

DATE: 03 April 2026

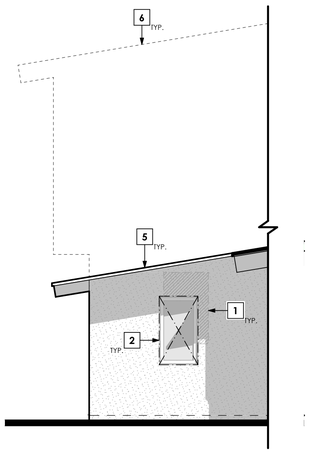
SHEET #: A2.4



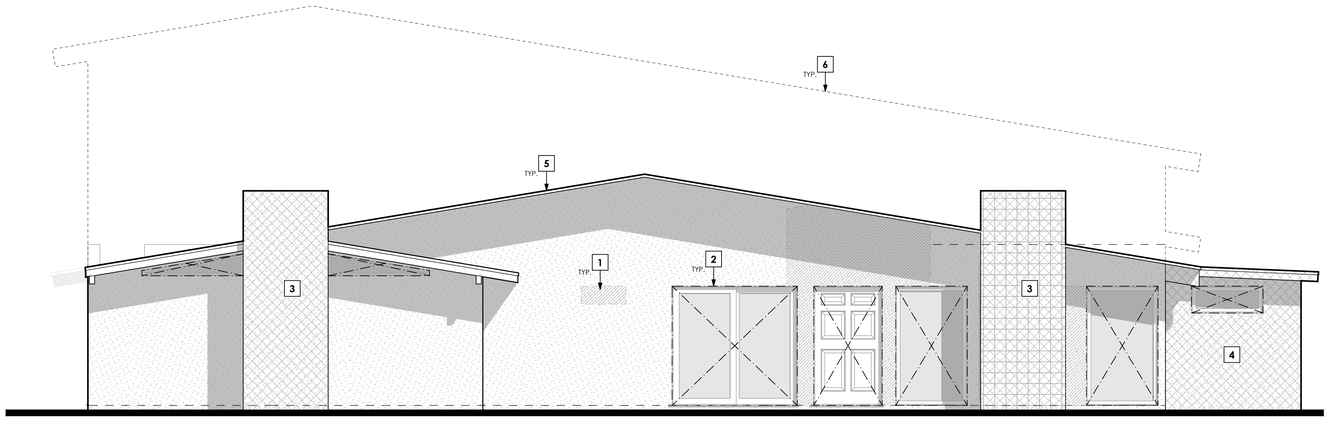
B ELEVATION
(NORTH-EAST)
1/4" = 1'-0"



B REAR ELEVATION
(NORTH-EAST)
1/4" = 1'-0"



B ELEVATION
(NORTH-EAST)
1/4" = 1'-0"



B FRONT ELEVATION
(NORTH-EAST)
1/4" = 1'-0"

KEYNOTES

1. PORTION OF (E) WALL TO BE REMOVED FOR LOCATION OF (N) WINDOW OR DOOR.
2. (E) WINDOW OR DOOR TO BE REMOVED & FILLED IN, OR REPLACED W/ DIF. SIZE (SEE PLAN SHEETS FOR INFO)
3. HATCH = REMOVE (E) BLOCK CMU BLOCK CHIMNEY, COMPLETE
4. HATCH = REMOVE (E) EXTERIOR STORAGE SHED, COMPLETE
5. REMOVE (E) ROOF; SHINGLES, BUILDING PAPER, SHEATHING & FRAMING, COMPLETE
6. LINE OF (E) PROPOSED ADDITION
7. REMOVE (E) PATIO COVER; POSTS, BEAMS FOOTINGS, & ROOF, COMPLETE
8.
9.

PLAN NOTES

1. DIMENSIONS ARE TO THE FACE OF THE FINISHED SURFACE, U.O.N.
2. ALL DEMOLITION MUST MEET LOCAL CODES AND ORDINANCE.
3.

0 2 6 12
GRAPHIC SCALE 1/4" = 1'-0"

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PROJECT

Addition for:

Marcus Residence

85822 Sugarman Dr.
La Jolla, CA, 92037

SHEET TITLE

(E) EXTERIOR ELEVATIONS / FRONT & REAR - DEMOLITION PLANS

REVISIONS

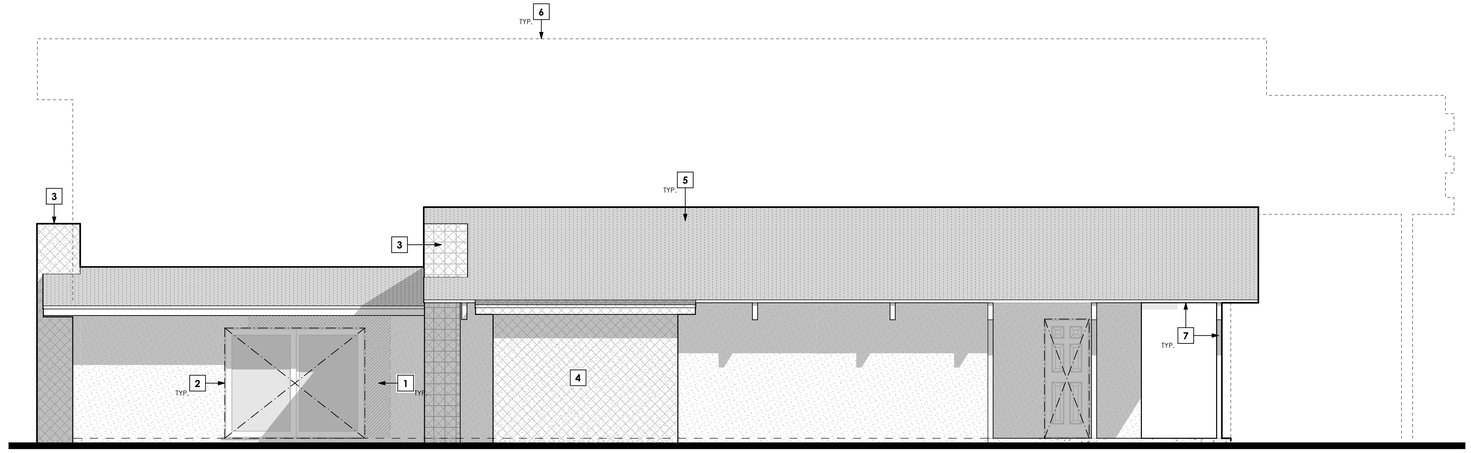
No.	Date	Notes

BUILDING DEPT. PROJECT #: —

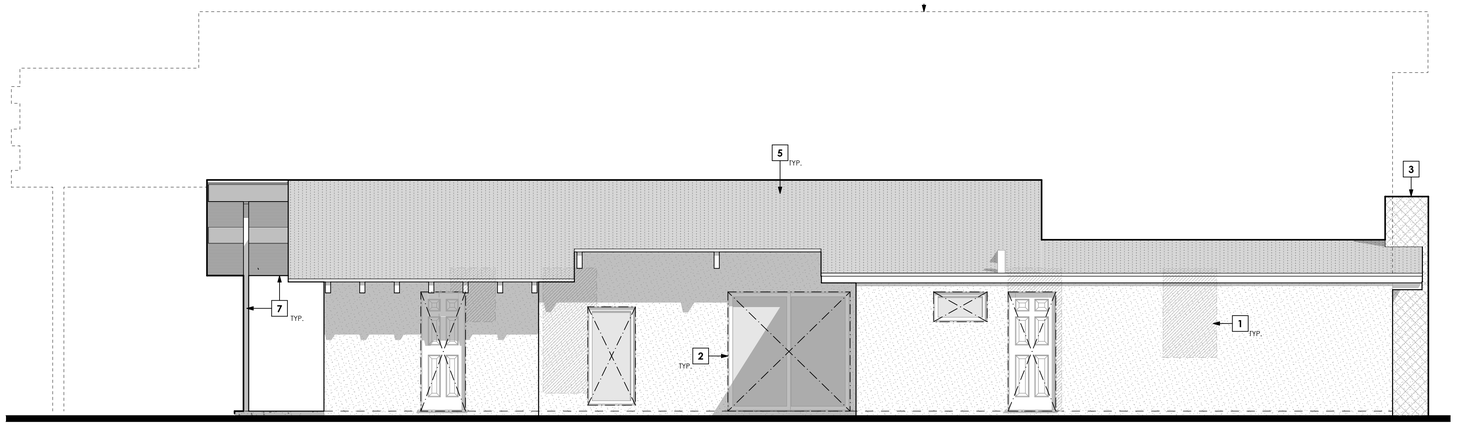
PROJECT #: 22504

DATE: 28 January 2026

SHEET #: A3.0



C SIDE ELEVATION (R) 1/4" = 1'-0"
(RIGHT / NORTH-WEST)



A SIDE ELEVATION (L) 1/4" = 1'-0"
(RIGHT / SOUTH-WEST)

4 AREA OF INFILL WHERE (E) WINDOW OR DOOR IS TO BE REMOVED (SEE PLAN SHEETS FOR INFO)

5 METAL & CONCRETE STAIR (SEE PLAN SHEETS FOR INFO)

6

KEYNOTES

1 PORTION OF (E) WALL TO BE REMOVED FOR LOCATION OF (N) WINDOW OR DOOR.

2 (E) WINDOW OR DOOR TO BE REMOVED & FILLED IN, OR REPLACED W/ DIF. SIZE (SEE PLAN SHEETS FOR INFO)

3 HATCH = REMOVE (E) BLOCK CMU BLOCK CHIMNEY, COMPLETE

4 HATCH = REMOVE (E) EXTERIOR STORAGE SHED, COMPLETE

5 REMOVE (E) ROOF; SHINGLES, BUILDING PAPER, SHEATHING & FRAMING, COMPLETE

6 LINE OF (E) PROPOSED ADDITION

7 REMOVE (E) PATIO COVER; POSTS, BEAMS FOOTINGS, & ROOF, COMPLETE

8

9

PLAN NOTES

1. DIMENSIONS ARE TO THE FACE OF THE FINISHED SURFACE, U.O.N.
2. ALL DEMOLITION MUST MEET LOCAL CODES AND ORDINANCE.
3.

0 2 6 12
GRAPHIC SCALE 1/4" = 1'-0"

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PROJECT

Addition for:

Marcus Residence

85822 Sugarman Dr.
La Jolla, CA, 92037

SHEET TITLE

(E) EXTERIOR ELEVATIONS / SIDES - DEMOLITION PLANS

REVISIONS

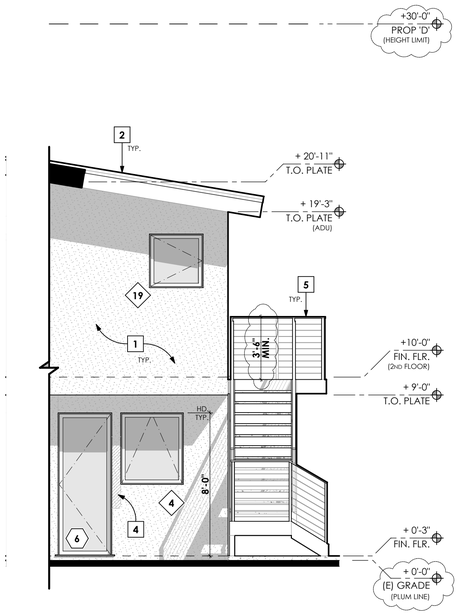
No.	Date	Notes

BUILDING DEPT. PROJECT #: —

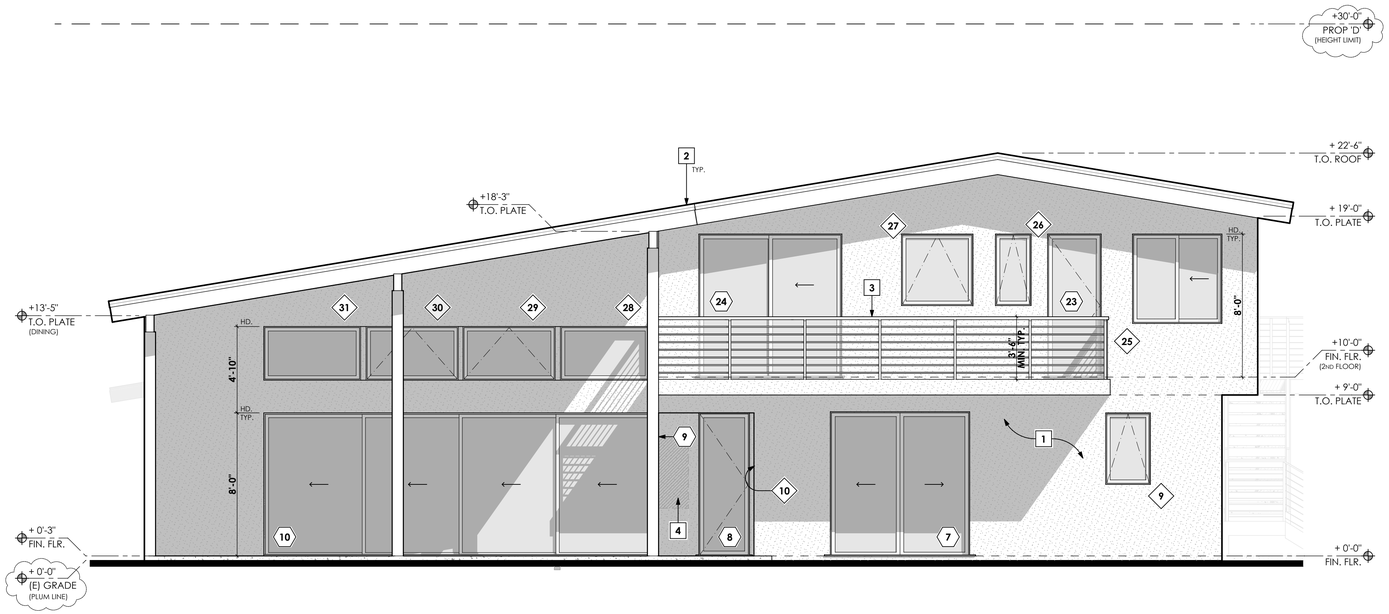
PROJECT #: 22504

DATE: 28 January 2026

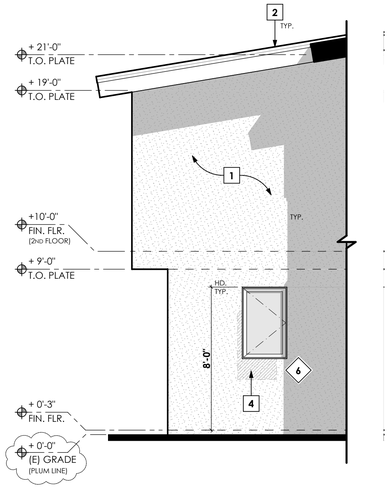
SHEET #: A3.1



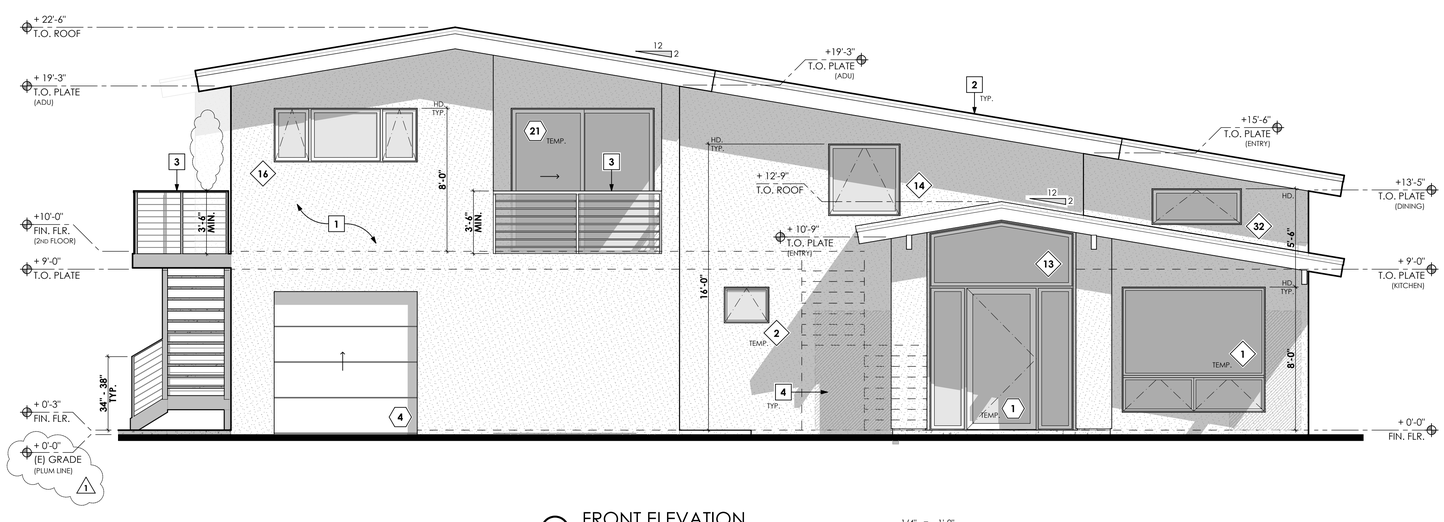
A ELEVATION
(NORTH-EAST)
1/4" = 1'-0"



B REAR ELEVATION
(NORTH-EAST)
1/4" = 1'-0"



C ELEVATION
(NORTH-EAST)
1/4" = 1'-0"



D FRONT ELEVATION
(NORTH-EAST)
1/4" = 1'-0"

KEYNOTES

1. (N) STUCCO EXTERIOR / SANTA BARBARA FINISH / DESERT EARTH TONE (OR SIMILAR)
2. CLASS "A" METAL SEEM ROOFING SYSTEM, OVER (2) LAYERS OF 30 LB. FELT W/ METAL EDGE FLASHING.
3. METAL RAILING @ **+42"** A.F.F. MIN., TYP.
4. AREA OF INFILL WHERE (E) WINDOW OR DOOR IS TO BE REMOVED (SEE PLAN SHEETS FOR INFO)
5. METAL & CONCRETE STAIR (SEE PLAN SHEETS FOR INFO)
6.

PLAN NOTES

1. **NO** GRADING PROPOSED / EXISTING GRADE SHALL **NOT** BE MODIFIED
2.

0 2 6 12
GRAPHIC SCALE 1/4" = 1'-0"

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PROJECT

Addition for:

Marcus Residence

8582 Sugarman Dr.
La Jolla, CA, 92037

SHEET TITLE

(N) EXTERIOR ELEVATIONS / FRONT & REAR - DEMOLITION PLANS

REVISIONS

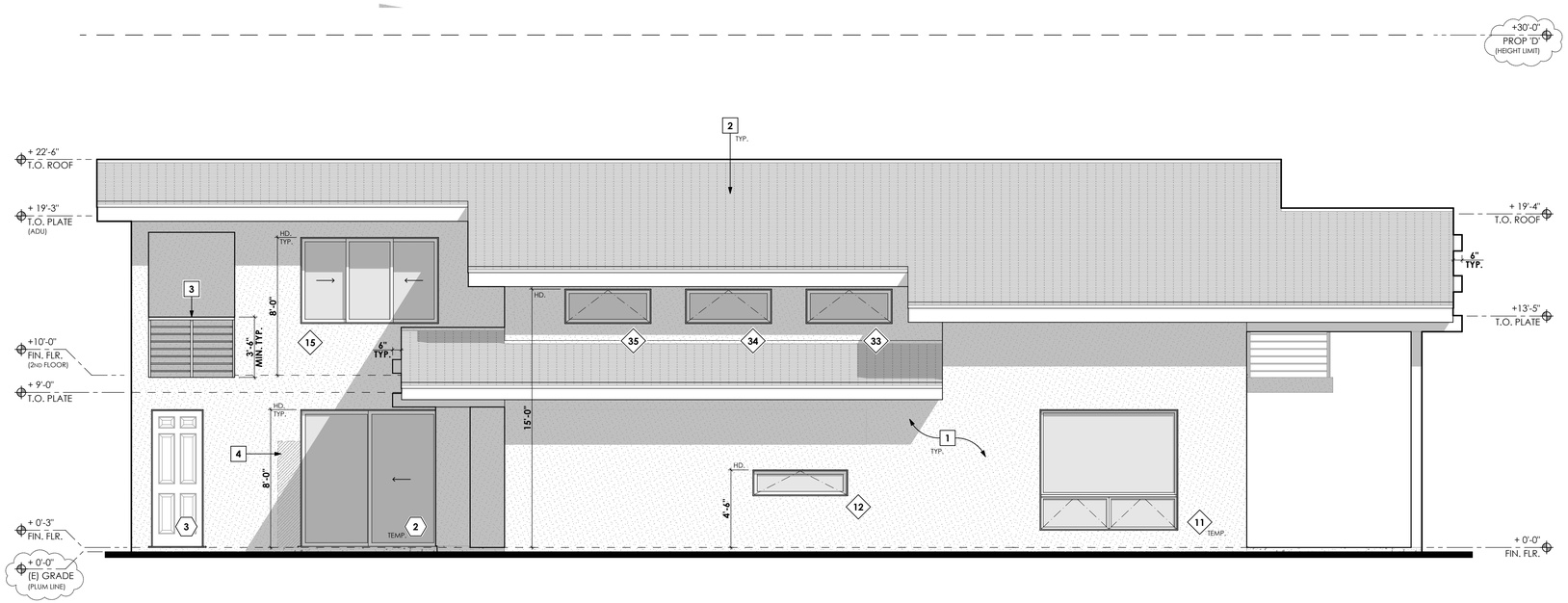
No.	Date	Notes
1	4/??/2026	PLAN CHECK - 1

BUILDING DEPT. PROJECT #: —

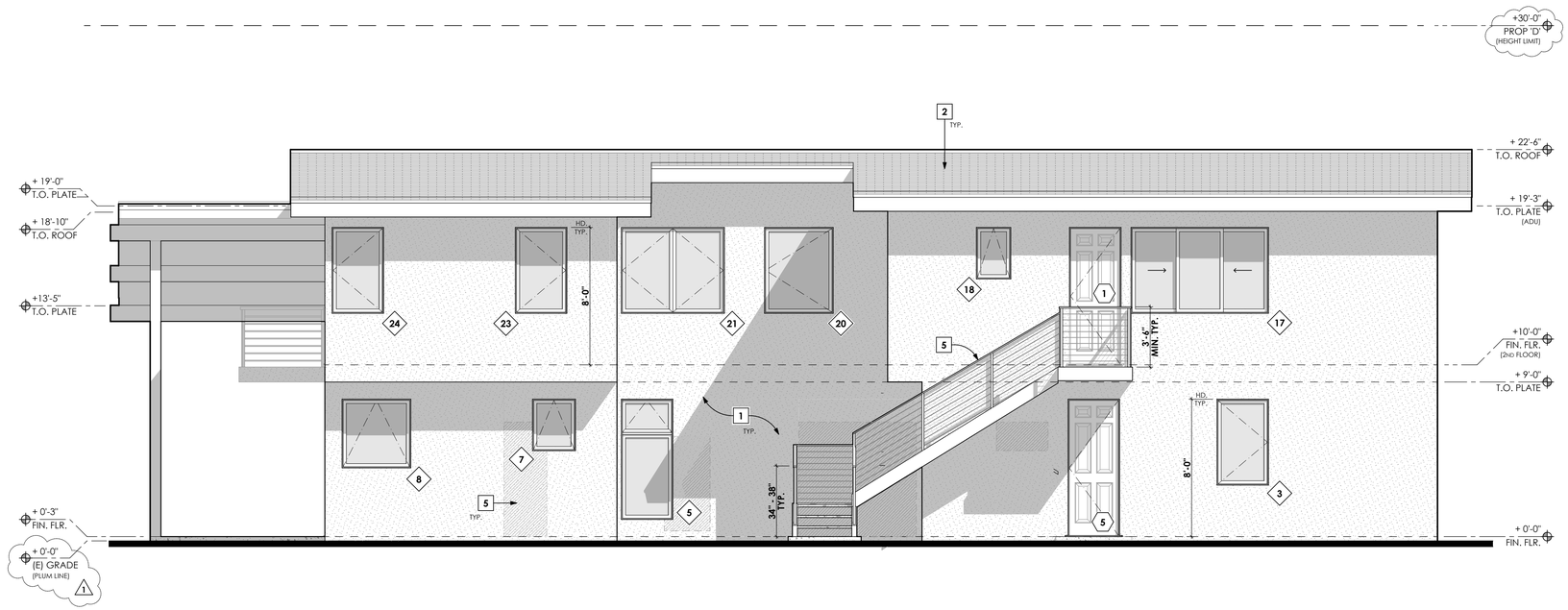
PROJECT #: 22504

DATE: 06 April 2026

SHEET #: A3.2



E SIDE ELEVATION (R) 1/4" = 1'-0"
(NORTH-EAST)



F SIDE ELEVATION (L) 1/4" = 1'-0"
(NORTH-EAST)

KEYNOTES

1. (N) STUCCO EXTERIOR / SANTA BARBARA FINISH / DESERT EARTH TONE (OR SIMILAR)
2. CLASS "A" METAL SEEM ROOFING SYSTEM, OVER (2) LAYERS OF 30 LB. FELT W/ METAL EDGE FLASHING.
3. METAL RAILING @ **+42"** A.F.F. MIN., TYP.
4. AREA OF INFILL WHERE (E) WINDOW OR DOOR IS TO BE REMOVED (SEE PLAN SHEETS FOR INFO)
5. METAL & CONCRETE STAIR (SEE PLAN SHEETS FOR INFO)
6.

PLAN NOTES

1. DIMENSIONS ARE TO THE FACE OF THE FINISHED SURFACE, U.O.N.
2. ALL DEMOLITION MUST MEET LOCAL CODES AND ORDINANCE.
3.

0 2 6 12
GRAPHIC SCALE 1/4" = 1'-0"

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PROJECT

Addition for:

Marcus Residence

8582 Sugarman Dr.
La Jolla, CA, 92037

SHEET TITLE

(N) EXTERIOR ELEVATIONS / SIDES - DEMOLITION PLANS

REVISIONS

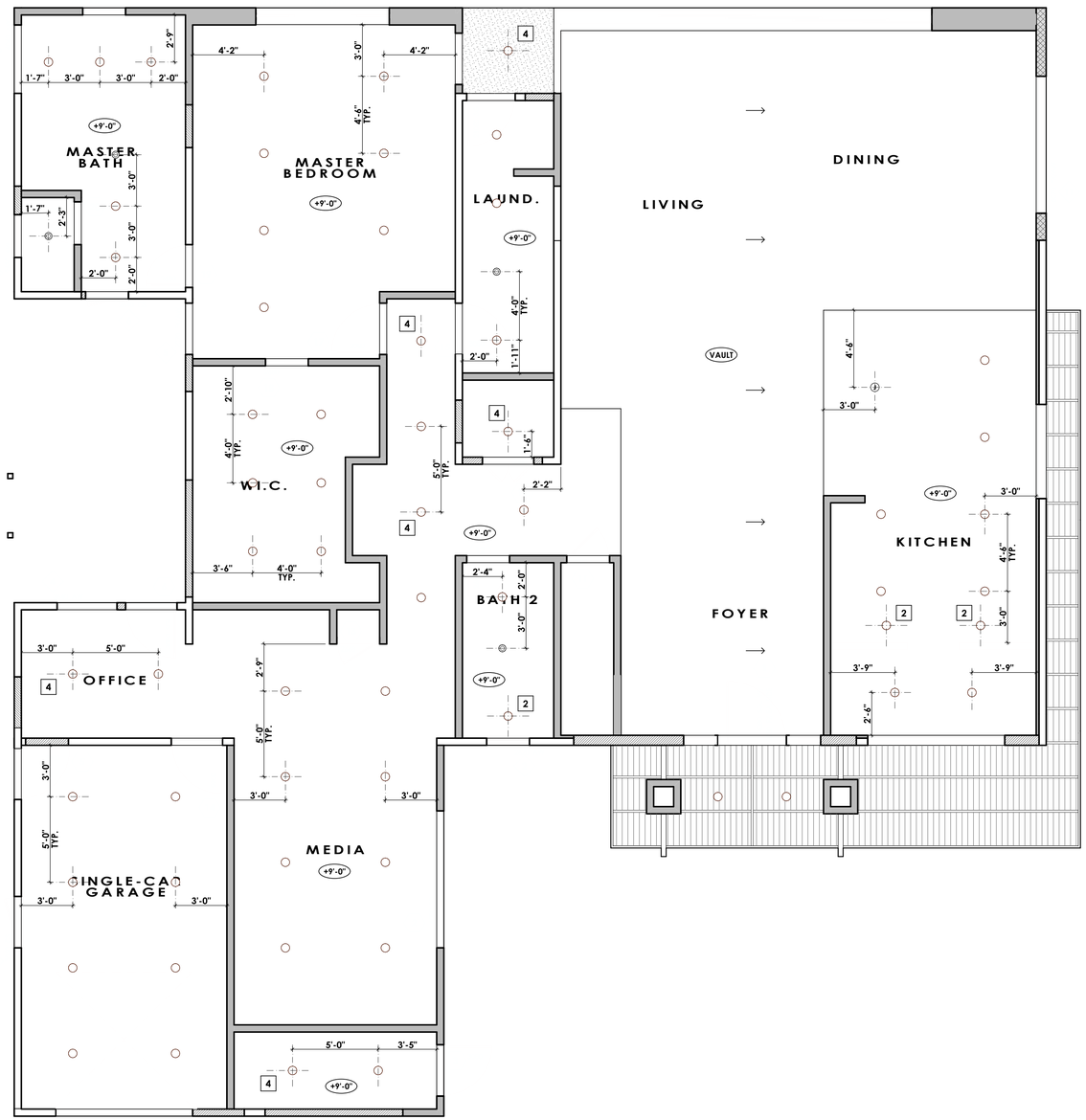
No.	Date	Notes
1	4/??/2026	PLAN CHECK - 1

BUILDING DEPT. PROJECT #: —

PROJECT #: 22504

DATE: 06 April 2026

SHEET #: A3.3



RCP 1st FLOOR PLAN

(REFELCTED CEILING PLAN)

1/4" = 1'-0"

KEYNOTES

1	22" x 30" MIN. ATTIC ACCESS
2	CENTER LIGHT IN EA. DIRECTION OVER TUB / SHOWER / SINK
3	CENTER LIGHTS OVER ISLAND
4	CENTER LIGHT IN SPACE, U.O.N.
5	
6	

PLAN NOTES

1. DIMENSIONS ARE TO THE FACE OF THE FINISH SURFACE, U. O. N.
2. (N) GYP. BD. CEILING IN ALL AREAS, PAINT
3. ⟶ INDICATES SLOPE "DOWN"

LEGEND

- ○ RECESSED LED LIGHT FIXTURE
- ⓙ J-BOX FOR HANGING CEILING MOUNTED FIXTURE.
- ◎ VENT / LIGHT COMBO (SEE **EM** SHEETS FOR INFO.)
- CENTER LINE

0 2 6 12

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

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PROJECT

Addition for:

Marcus Residence

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La Jolla, CA, 92037

SHEET TITLE

1st FLOOR REFLECTED CEILING PLANS

REVISIONS

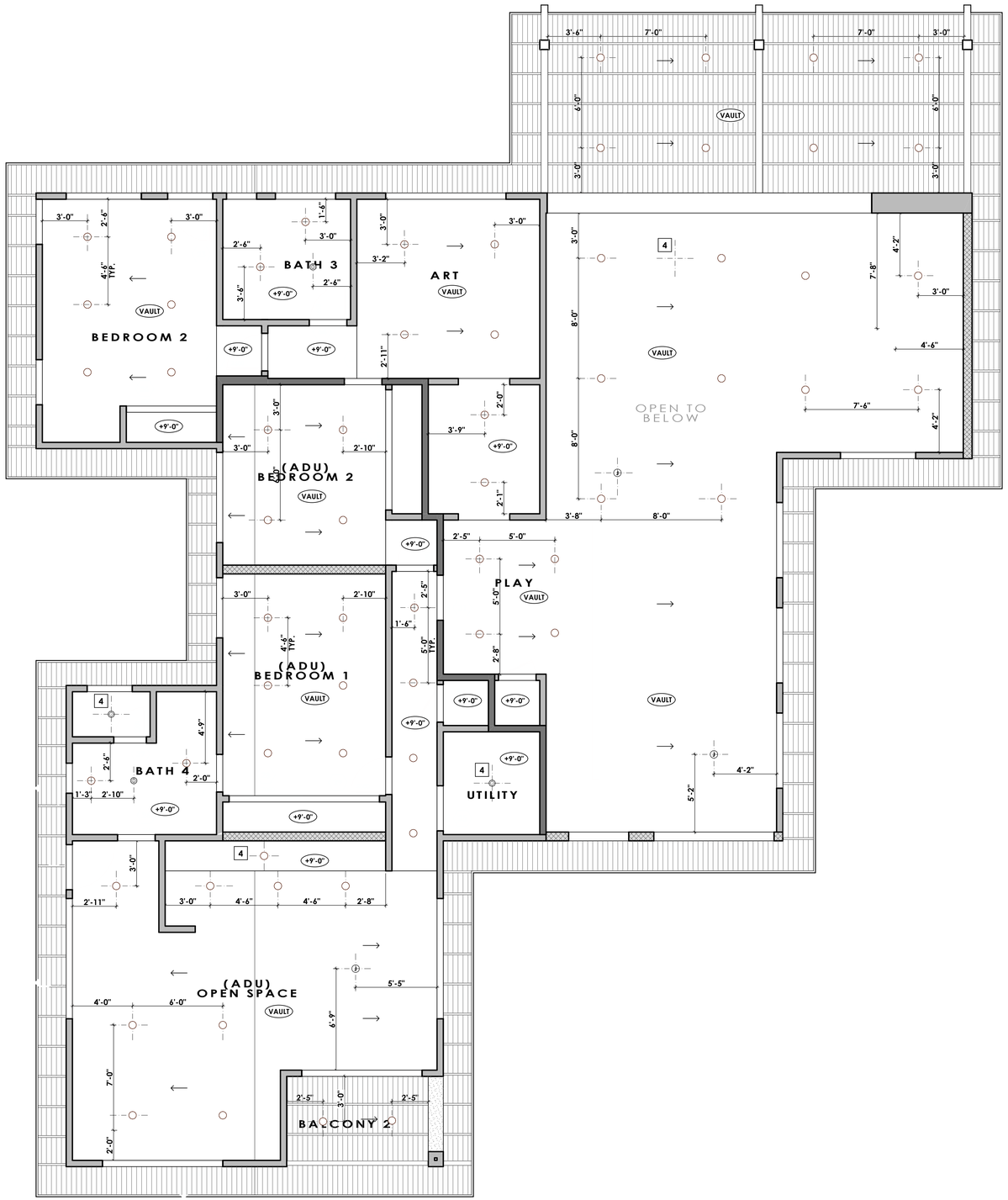
No.	Date	Notes
1	4/??/2026	PLAN CHECK - 1

BUILDING DEPT. PROJECT #: —

PROJECT #: 22504

DATE: 06 April 2026

SHEET #: A4.0



RCP 2nd FLOOR PLAN

(REFELCTED CEILING PLAN)

1/4" = 1'-0"

KEYNOTES

1	22" x 30" MIN. ATTIC ACCESS
2	CENTER LIGHT IN EA. DIRECTION OVER TUB / SHOWER / SINK
3	CENTER LIGHTS OVER ISLAND
4	CENTER LIGHT IN SPACE, U.O.N.
5	
6	

PLAN NOTES

1. DIMENSIONS ARE TO THE FACE OF THE FINISH SURFACE, U. O. N.
2. (N) GYP. BD. CEILING IN ALL AREAS, PAINT
3. ⟶ INDICATES SLOPE "DOWN"

LEGEND

- ○ RECESSED LED LIGHT FIXTURE
- (J) J-BOX FOR HANGING CEILING MOUNTED FIXTURE.
- ◎ VENT / LIGHT COMBO (SEE **EM** SHEETS FOR INFO.)
- — — — — CENTER LINE

0 2 6 12

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

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Addition for:

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SHEET TITLE

2nd FLOOR REFLECTED CEILING PLANS

REVISIONS

No.	Date	Notes
1	4/??/2026	PLAN CHECK - 1

BUILDING DEPT. PROJECT #: —

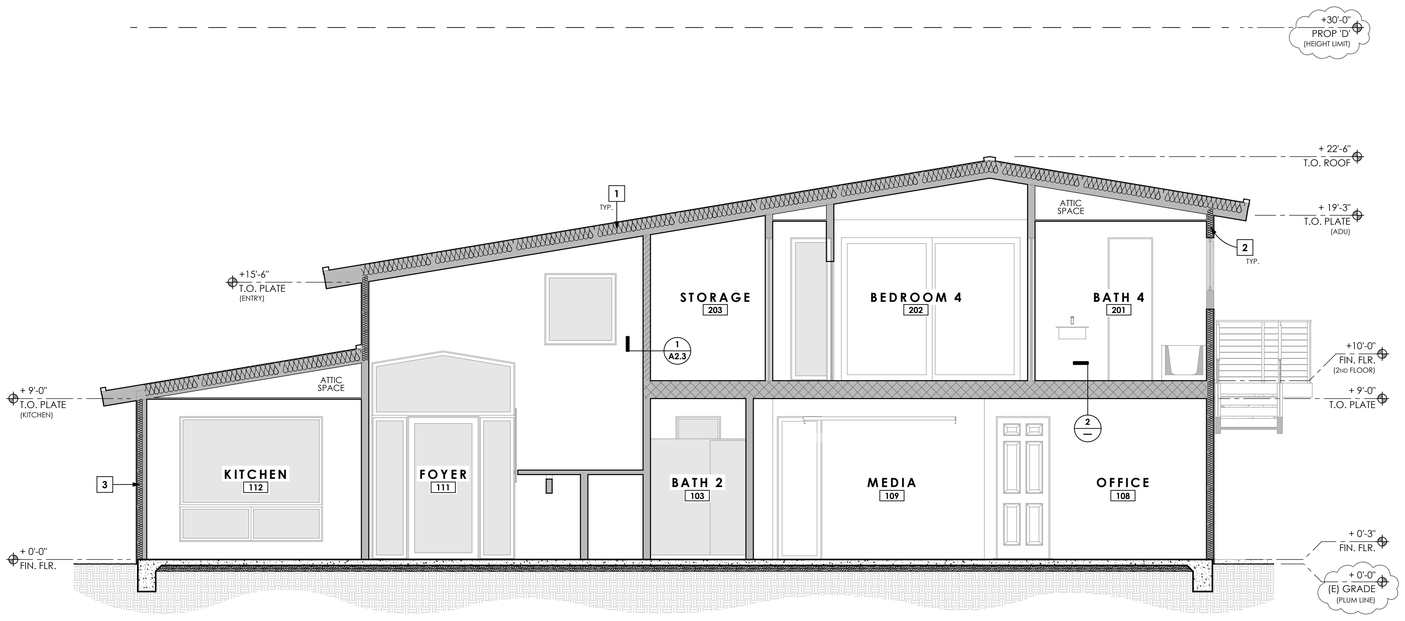
PROJECT #: 22504

DATE: 03 April 2026

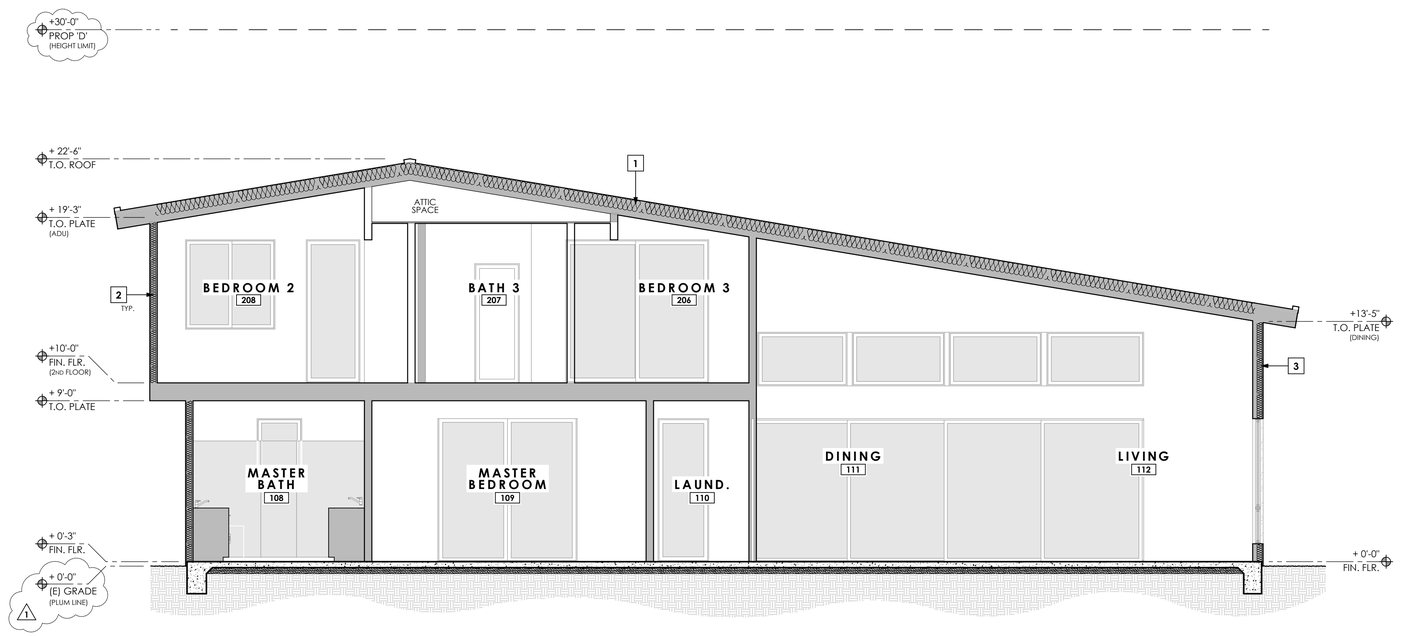
SHEET #: A4.1

Dimensional Lumber		Acoustical Performance			Fire Performance		Reference	
Construction Detail	Description	STC	IIC	Test Number	Rating	Test Number	ARL	Index
clg. wt. 3 11 ¼"	• 5/8" Sheetrock Brand Firecode C Core Gypsum Panels – 2x10" wood joist 16" o.c. – RC-1 channel or equivalent 16" o.c. – Insulation held up under subfloor by lightning clips – 19/32" T&G wood subfloor • 3/4" Levelrock Brand Floor Underlayment	59	54	**RAL-IN04-006/TL04-033** Cushioned vinyl floor, SRM-25, 1" Levelrock	1 hour		SA305	**B-8**
		58	55	**RAL-IN04-007/TL04-034** Engineered wood-laminate floor SRM-25, 1" Levelrock				
		59	77	**RAL-IN04-005/TL04-032** Carpet with SRM-25, 1" Levelrock				
		59	52	**RAL-IN04-009/TL04-067** Ceramic tile with crack-isolation membrane, SRM-25, 1" Levelrock				
		58	50	**RAL-IN04-013/TL04-100** Cushioned vinyl floor, SRB board				
		58	51	**RAL-IN04-012/TL04-099** Engineered wood-laminate floor, SRB board				
		58	73	**RAL-IN04-010/TL04-097** Carpet with SRB board				

1-HOUR FIRE FLOOR DETAIL (2)



1 BUILDING SECTION (EAST-WEST) 1/4" = 1'-0"



2 BUILDING SECTION (EAST-WEST) 1/4" = 1'-0"

KEYNOTES

1. **R-30** INSULATION AT ALL (N) 2x ROOF AREAS.
2. **R-15** INSULATION AT ALL (N) 1ST & 2ND FLOOR EXTERIOR WALLS.
3. **R-21** INSULATION AT (E) 2x FRONT & RIGHT SIDE (NORTH & WEST) EXTE WALLS.
4.
5.

PLAN NOTES

1. **NO** GRADING PROPOSED / EXISTING GRADE SHALL **NOT** BE MODIFIED
2.

0 2 6 12

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

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PROJECT

Addition for:

Marcus Residence

8582 Sugarman Dr.
La Jolla, CA, 92037

SHEET TITLE

BUILDING SECTIONS

REVISIONS

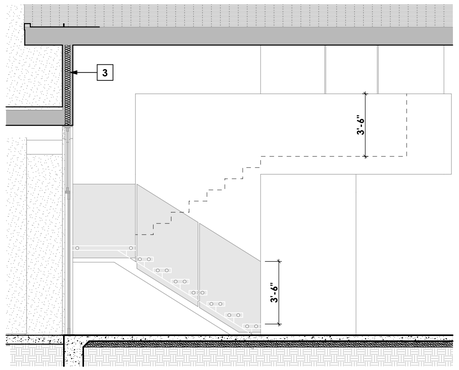
No.	Date	Notes
1	4/??/2026	PLAN CHECK - 1

BUILDING DEPT. PROJECT #: —

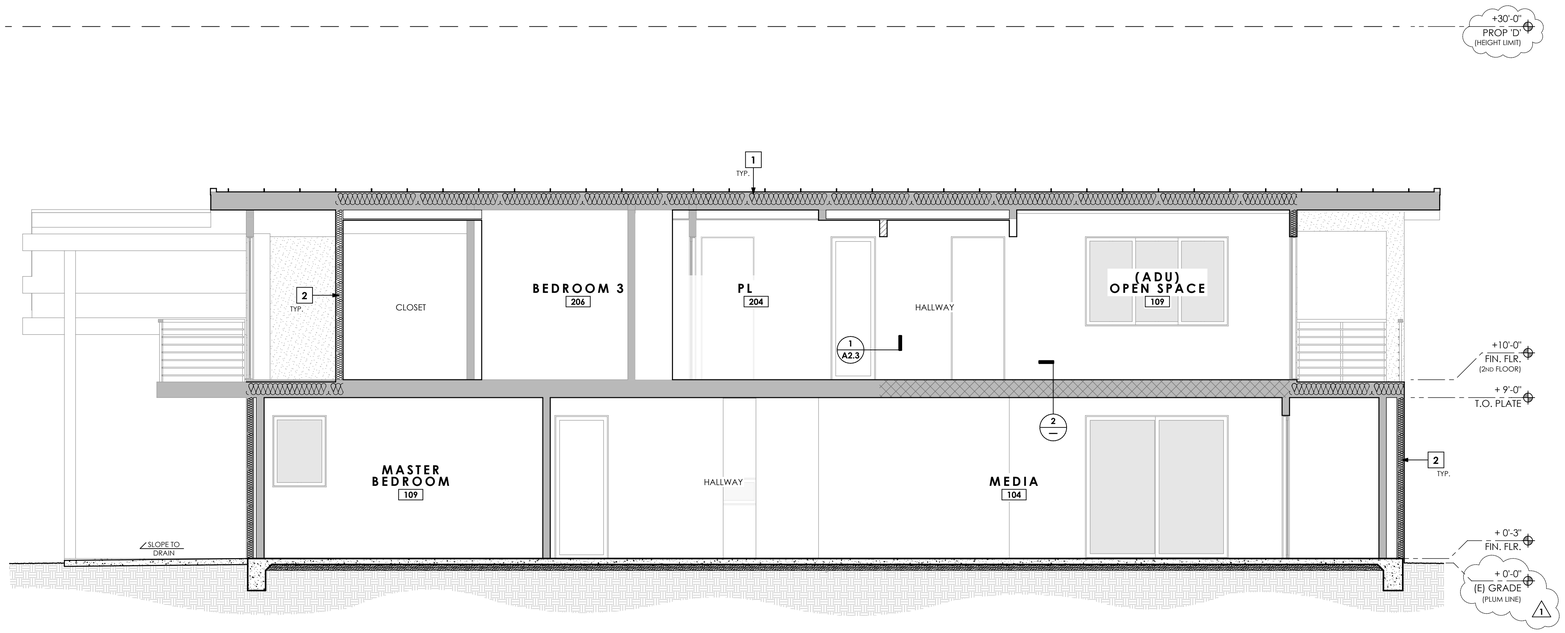
PROJECT #: 22504

DATE: 03 April 2026

SHEET #: A5.0



3 BUILDING SECTION 1/4" = 1'-0"
(NORTH-SOUTH / PARTIAL)



4 BUILDING SECTION 1/4" = 1'-0"
(NORTH-SOUTH)

KEYNOTES

1	**R-30** INSULATION AT ALL (N) 2x ROOF AREAS.
2	**R-15** INSULATION AT ALL (N) 1ST & 2ND FLOOR EXTERIOR WALLS.
3	**R-21** INSULATION AT (E) 2x FRONT & RIGHT SIDE (NORTH & WEST) EXTE WALLS.
4	
5	

PLAN NOTES

1. **NO** GRADING PROPOSED / EXISTING GRADE SHALL **NOT** BE MODIFIED
2.

0 2 6 12
GRAPHIC SCALE 1/4" = 1'-0"

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PROJECT

Addition for:

Marcus Residence

8582 Sugarman Dr.
La Jolla, CA, 92037

SHEET TITLE

BUILDING SECTIONS

REVISIONS

No.	Date	Notes
1	4/??/2026	PLAN CHECK - 1

BUILDING DEPT. PROJECT #: —

PROJECT #: 22504

DATE: 03 April 2026

SHEET #: A5.1 1

DOOR SCHEDULE

NO.	SIZE		DOOR			ENERGY		NOTES :
	W	HT	TYPE	HDWR. GROUP	MATERIAL / FINISH	U-FACTOR	SGHC	
1	4'-0"	8'-0"	A	3	ALUMINUM / FACTORY	0.29	0.23	TEMPERED
2	8'-0"	8'-0"	B	3	↓	0.29	0.21	TEMPERED
3	8'-0"	8'-0"	H	--	↓			
4	8'-0"	8'-0"	H	--	↓			
5	3'-0"	8'-0"	G	3	WOOD / PAINT			
6	3'-0"	8'-0"	D	3	ALUMINUM / FACTORY	0.00	0.00	TEMPERED
7	7'-8"	8'-0"	C	3	↓	0.29	0.21	TEMPERED / EGRESS
8	2'-10"	8'-0"	D	3	↓	0.29	0.23	TEMPERED
9	4'-6"	8'-0"	F	3	↓	0.29	0.21	TEMPERED
10	22'-0"	8'-0"	E	3	↓	0.29	0.21	TEMPERED
11	2'-6"	8'-0"	I	1	WOOD / PAINT			
12	2'-6"	8'-0"	I	2	↓			
13	2'-6"	8'-0"	I	1	↓			
14	3'-0"	8'-0"	G	3	↓			SEE DOOR NOTE 2
15	3'-0"	8'-0"	I	2	↓			
16	3'-0"	8'-0"	K	1	↓			
17	3'-0"	8'-0"	I	2	↓			
18	2'-6"	8'-0"	J	1	↓			
19	2'-6"	8'-0"	I	2	↓			
20	2'-6"	8'-0"	I	2	↓			
21	8'-0"	8'-0"	B	3	ALUMINUM / FACTORY	0.00	0.00	TEMPERED
22	3'-0"	8'-0"	G	3	WOOD / PAINT			
23	3'-0"	8'-0"	D	3	ALUMINUM / FACTORY	0.00	0.00	TEMPERED
24	8'-0"	8'-0"	B	3	ALUMINUM / FACTORY	0.00	0.00	TEMPERED
25	3'-0"	8'-0"	J	1	WOOD / PAINT			
26	2'-6"	8'-0"	J	1	WOOD / PAINT			
27	2'-6"	8'-0"	J	1	WOOD / PAINT			
28	10'-0"	8'-0"	L	--	↓			
29	2'-6"	8'-0"	I	2	↓			
30	2'-6"	8'-0"	I	1	↓			
31	3'-0"	8'-0"	J	3	↓			45-MIN. FIRE RATED
32	8'-0"	8'-0"	L	--	↓			
33	2'-6"	8'-0"	I	2	↓			
34	2'-6"	6'-8"	I	2	↓			
35	2'-6"	8'-0"	I	2	↓			
36	6'-0"	8'-0"	L	--	↓			
37	2'-6"	6'-8"	I	1	↓			
38	2'-6"	8'-0"	J	3	↓			45-MIN. FIRE RATED
39	2'-2"	8'-0"	I	2	↓			

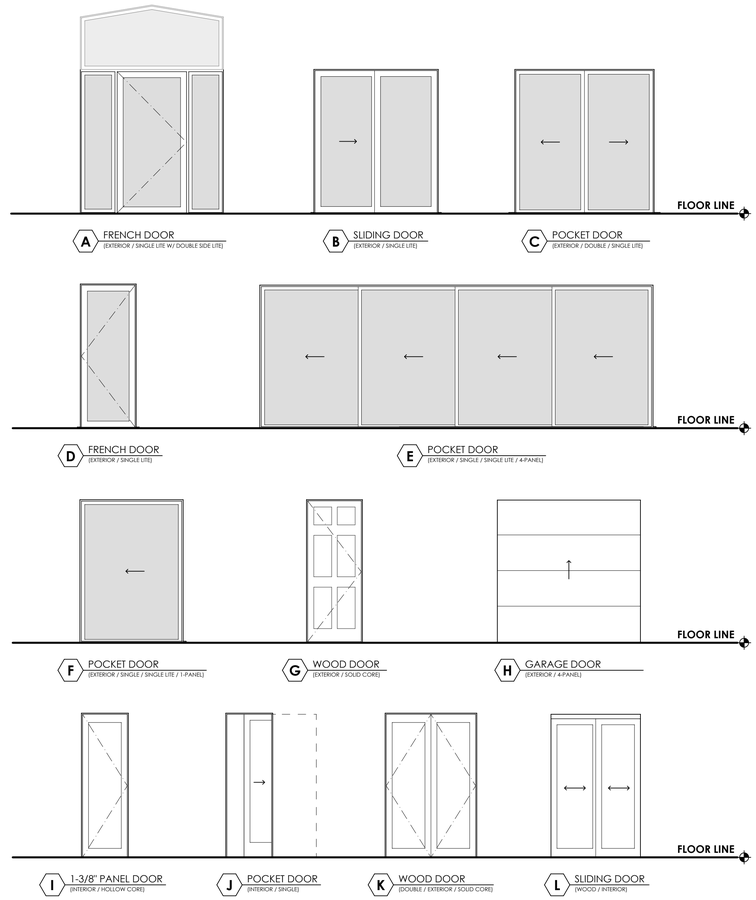
DOOR NOTES :

1. ALL DOOR GLAZING TO BE DUAL-CLEAR, LOW-E, & HAVE A U-VALUE AND SHGC AS SPECIFIED ABOVE, OR BETTER.
2. PROVIDE A SELF-CLOSING AND SELF-LATCHING DOOR AT THE OPENING BETWEEN THE GARAGE AND SPRINKLERED DWELLING UNIT. [CRC R302.5.1, EXCEPTION].

1

HARDWARE GROUPS :

1. LATCH
2. LATCH WITH PRIVACY LOCK
3. LATCH WITH KEYED DEAD BOLT



NOTE:

CONTRACTOR TO VERIFY ALL WINDOW & DOOR SIZES, STYLE, OPERATION, & EGRESS PRIOR TO ORDERING

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PROJECT

Addition for:

Marcus Residence

8582 Sugarman Dr.
La Jolla, CA, 92037

SHEET TITLE

DOOR SCHEDULE

REVISIONS

No.	Date	Notes
1	4/??/2026	PLAN CHECK - 1

BUILDING DEPT. PROJECT #: —

PROJECT #: 22504

DATE: 03 April 2026

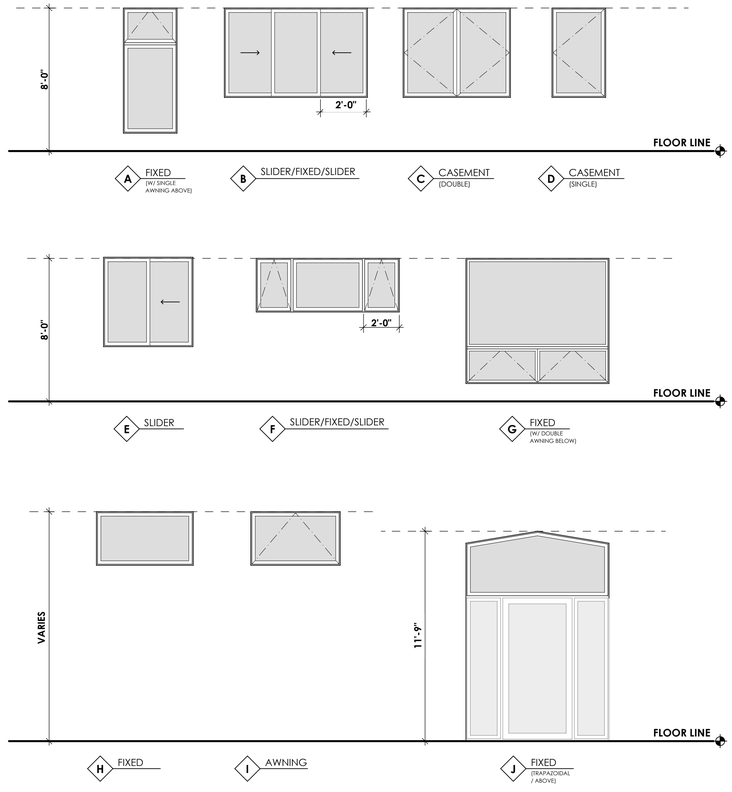
SHEET #: A6.0

WINDOW SCHEDULE

NO.	SIZE W	SIZE H	TYPE	MATERIAL	FINISH INTERIOR	FINISH EXTERIOR	ENERGY U - FACTOR	ENERGY SHGC	NOTES
1	8'-0"	7'-0"	G	ALUMINUM	FACTORY	FACTORY	0.28	0.19	TEMPERED
2	2'-6"	2'-0"	I				0.28	0.19	TEMPERED
3	3'-0"	5'-0"	D				0.00	0.00	
4	3'-6"	4'-0"	I				0.00	0.00	
5	3'-0"	7'-0"	A				0.28	0.19	TEMPERED
6	2'-6"	4'-0"	D				0.28	0.18	
7	2'-6"	3'-0"	I				0.28	0.19	
8	4'-0"	4'-0"	I				0.28	0.19	TEMPERED
9	2'-6"	4'-0"	I				0.28	0.19	TEMPERED
10	3'-0"	4'-0"	I				0.28	0.19	
11	8'-0"	7'-0"	G				0.28	0.19	TEMPERED
12	5'-6"	1'-6"	I				0.28	0.19	
13	8'-0"	3'-8"	J				0.28	0.22	
14	4'-0"	4'-0"	I				0.28	0.22	
15	8'-0"	5'-0"	B				0.30	0.20	
16	8'-0"	3'-0"	F				0.28	0.19	
17	8'-0"	5'-0"	B				0.30	0.20	
18	2'-0"	3'-0"	I				0.28	0.19	TEMPERED
19	3'-0"	3'-0"	D				0.28	0.18	
20	4'-0"	5'-0"	D				0.28	0.18	EGRESS
21	6'-0"	5'-0"	C				0.28	0.22	EGRESS
22	NOT USED								
23	3'-0"	5'-0"	D				0.28	0.22	
24	3'-0"	5'-0"	D				0.28	0.22	
25	5'-0"	5'-0"	E				0.30	0.20	TEMPERED
26	2'-0"	4'-0"	I				0.00	0.00	
27	4'-0"	4'-0"	I				0.00	0.00	TEMPERED
28	5'-0"	3'-0"	I				0.28	0.22	
29	5'-2"	3'-0"	H				0.28	0.19	
30	5'-2"	3'-0"	H				0.28	0.19	
31	5'-5"	3'-0"	I				0.28	0.22	
32	5'-0"	2'-0"	I				0.28	0.19	
33	5'-0"	2'-0"	I				0.28	0.19	
34	5'-0"	2'-0"	I				0.28	0.19	
35	5'-0"	2'-0"	I				0.28	0.19	
36	2'-0"	8'-0"	H				0.00	0.00	TEMPERED
37	2'-0"	8'-0"	H	↓	↓	↓	0.00	0.00	TEMPERED

WINDOW NOTES :

1. ALL WINDOW GLAZING TO BE DUAL-CLEAR, LOW-E, AND HAVE A U-VALUE AND SHGC AS SPECIFIED ABOVE OR BETTER.
2. EGRESS WINDOWS SHALL BE :
   - 20" WIDTH X 24" HIGH NET CLEAR OPENING.
   - 44" MAX. ABOVE FLOOR.
   - 5.0 SF. MIN. OPERABLE AREA.



NOTE:

CONTRACTOR TO VERIFY ALL WINDOW & DOOR SIZES, STYLE, OPERATION, & EGRESS PRIOR TO ORDERING

ryan Honnet
DRAFTsense
get.projects **done.**
619.618.1715 ph.
www.rhdraftsense.com
5252 waring rd.
san diego, ca 92120

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PROJECT

Addition for:

Marcus Residence

8582 Sugarman Dr.
La Jolla, CA, 92037

SHEET TITLE

WINDOW SCHEDULE

REVISIONS

No.	Date	Notes
1	4/??/2026	PLAN CHECK - 1

BUILDING DEPT. PROJECT #: —

PROJECT #: 22504

DATE: 03 April 2026

SHEET #: A6.1

CERTIFICATE OF COMPLIANCE - RESIDENTIAL PERFORMANCE COMPLIANCE METHOD

Project Name: Marcus Remodel
Calculation Description: Title 24 Analysis

Calculation Date/Time: 2026-01-19T19:05:21-08:00
Input File Name: Marcus Remodel.ribd25x

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GENERAL INFORMATION	
01	**Project Name** Marcus Remodel
02	**Run Title** Title 24 Analysis
03	**Project Location** 85822 Sugarmanh Dr
04	**Zip code** 92037
05	**Climate Zone** 7
06	**Building Type** Single family
07	**Project Scope** Addition and/or Alteration
14	**Addition Conditioned Floor Area (ft²)** 1081
15	**Existing Conditioned Floor Area (ft²)** 1081
16	**Total Cond. Floor Area (ft²)** 1464
17	**ADU Bedroom Count** n/a
18	**Fuel Type** Natural gas
19	**Glazing Percentage (%)** 23.51%
20	**ADU Conditioned Floor Area** n/a
21	**ADU Unconditioned Floor Area** n/a
22	**No Dwelling Units** No

COMPLIANCE RESULTS
Building Complies with Computer Performance
This building incorporates features that require field testing and/or verification by a certified ECC rater under the supervision of a CEC-approved ECC provider.
Building does not complies with Duct Leakage

REQUIRED SPECIAL FEATURES
The following special features must be installed as condition for meeting the modeled energy performance for this compliance analysis.
• Indoor air quality ventilation
• Minimum Airflow
• Duct Sealing - HERS VERIFIED
• Duct leakage testing

Compliance Summary			
	Long Term System Cost (LSC)	Source Energy Use	Peak Cooling**
	Efficiency* (kBtu/ft²-yr)	Total* (kBtu/ft²-yr)	Electricity (kWh)
Standard Design	10.53		
Proposed Design	8.43		
Compliance Margins	2.1		
	Pass		
		TDV/LSTI* - Complies	

*Long-term System Cost (LSC) is a 30-year present value cost is California's energy system. LSCs is not a predicted utility bill.
**Efficiency measures include energy efficient improvements such as insulation, window, envelope and more efficient mechanical equipment
• Building complies when Proposed Designs is equal or less than Standard Design in all applicable compliance categories
• Building complies when Proposed Designs is equal or less than Standard Design in TDV/LSTI

Standard Design PV Capacity: 0.00 kWdc

For: Ryan Honnet (DRAFTsense)
Report Prepared By: Kristin Murdock
Software Version: 2025.0.000
CA Building Energy Efficiency Standards - 2025 Single-Family Compliance
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OPAQUE SURFACE CONSTRUCTIONS												
01	02	03	04	05	06	07	08	09	10	11	12	13
Construction Name	Surface Type	Construction Type	Framing	Total Cavity R-value	Interior / Exterior Continuous R-value	U-factor	Assembly Layers	Non-Std Spray Foam	Status	Verified Existing Condition	Gross Area (ft²)	Azimuth
R-0 Wall	Interior Walls	Wood Framed Wall	2x4 @ 16 in. O.C.	R-0	None / None	0.277	Inside Finish; Gypsum Board; Cavity / Frame: no insul. / 2x4; Gypsum Board;	☐	Existing	No	897	n/a
									New	n/a	583	n/a
									Total		802	n/a
OPAQUE SURFACES												
01	02	03	04	05	06	07	08	09	10	11	12	13
Name	Surface Type	Orientation	Azimuth	Gross Area (ft²)	Window or Door Area (ft²)	Skylight Area (ft²)	Roof Tint (+ or -)	SHGC	Exterior Shade	Interior Shade	Status	Verified Existing Condition
Front Wall	Exterior Walls	Front	0	95	0	0	0.1	0.85	None	None	New	n/a
Front Wall	Exterior Walls	Front	0	802	0	2	0.1	0.85	None	None	Existing	No
WINDOWS												
01	02	03	04	05	06	07	08	09	10	11	12	13
Name	Orientation	Area (ft²)	Multi.	U-factor	SHGC	Rating Source	Status	Verified Existing Condition	Overhang	Left Fin	Right Fin	Interior Shade
Window 1	Front	5	1	0.28	0.19	NFRC	Altered	No	None	None	None	None
Window 2	Front	10	1	0.28	0.18	NFRC	Altered	No	None	None	None	None
Window 3	Front	4	1	0.29	0.23	NFRC	Altered	No	None	None	None	None
Window 4	Front	16	1	0.28	0.19	NFRC	Altered	No	None	None	None	None
Window 5	Front	14	1	0.28	0.19	NFRC	Altered	No	None	None	None	None
Window 6	Front	13.5	1	0.28	0.19	NFRC	Altered	No	None	None	None	None
Window 7	Front	16	1	0.28	0.22	NFRC	New	NA	None	None	None	None
Window 8	Front	29	1	0.28	0.22	NFRC	New	NA	None	None	None	None
Window 9	Front	20	1	0.28	0.18	NFRC	New	NA	None	None	None	None
Door 1 w/Sidelites	Front	15	1	0.28	0.18	NFRC	New	NA	None	None	None	None
Door 2	Front	48	1	0.29	0.2	NFRC	New	NA	None	None	None	None
Window 10	Front	12	1	0.28	0.19	NFRC	New	NA	None	None	None	None
Door 9	Front	36	1	0.29	0.21	NFRC	New	NA	None	None	None	None

For: Ryan Honnet (DRAFTsense)
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OPAQUE SURFACES												
01	02	03	04	05	06	07	08	09	10	11	12	13
Name	Surface Type	Orientation	Azimuth	Gross Area (ft²)	Window or Door Area (ft²)	Skylight Area (ft²)	Roof Tint (+ or -)	SHGC	Exterior Shade	Interior Shade	Status	Verified Existing Condition
Front Wall	Exterior Walls	Front	0	95	0	0	0.1	0.85	None	None	New	n/a
Front Wall	Exterior Walls	Front	0	802	0	2	0.1	0.85	None	None	Existing	No
Left Wall	Exterior Walls	Left	90	1464	0	0	0.1	0.85	None	None	New	n/a
Left Wall	Exterior Walls	Left	90	1464	0	0	0.1	0.85	None	None	Existing	No
Rear Wall	Exterior Walls	Back	180	1464	0	0	0.1	0.85	None	None	New	n/a
Rear Wall	Exterior Walls	Back	180	1464	0	0	0.1	0.85	None	None	Existing	No
Right Wall	Exterior Walls	Right	270	1464	0	0	0.1	0.85	None	None	New	n/a
Right Wall	Exterior Walls	Right	270	1464	0	0	0.1	0.85	None	None	Existing	No
2x4 Front Wall	Exterior Walls	Front	0	1464	0	0	0.1	0.85	None	None	New	n/a
2x4 Front Wall	Exterior Walls	Front	0	1464	0	0	0.1	0.85	None	None	Existing	No
2x4 Left Wall	Exterior Walls	Left	90	1464	0	0	0.1	0.85	None	None	New	n/a
2x4 Left Wall	Exterior Walls	Left	90	1464	0	0	0.1	0.85	None	None	Existing	No
2x4 Rear Wall	Exterior Walls	Back	180	1464	0	0	0.1	0.85	None	None	New	n/a
2x4 Rear Wall	Exterior Walls	Back	180	1464	0	0	0.1	0.85	None	None	Existing	No
2x4 Right Wall	Exterior Walls	Right	270	1464	0	0	0.1	0.85	None	None	New	n/a
2x4 Right Wall	Exterior Walls	Right	270	1464	0	0	0.1	0.85	None	None	Existing	No
Interior Surface	Floor/Ceiling	1st Floor	n/a	n/a	1	0	n/a					

For: Ryan Honnet (DRAFTsense)
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OPAQUE SURFACES SUMMARY												
01	02	03	04	05	06	07	08	09	10	11	12	13
Name	Surface Type	Orientation	Azimuth	Gross Area (ft²)	Window or Door Area (ft²)	Skylight Area (ft²)	Roof Tint (+ or -)	SHGC	Exterior Shade	Interior Shade	Status	Verified Existing Condition
Attered 2x4 Front Wall	Exterior Walls	Front	0	1464	127	0	0.1	0.85	None	None	Altered	No
Attered 2x4 Front Wall	Exterior Walls	Front	0	Front	212	200	0.1	0.85	None	None	Altered	No
Attered Left Wall	Exterior Walls	Left	90	Left	154	16	0.1	0.85	None	None	Existing	No
Attered Left Wall	Exterior Walls	Left	90	Left	166	2.15	0.1	0.85	None	None	Altered	No
Rear Wall	Exterior Walls	Back	180	Back	324	54	0.1	0.85	None	None	Altered	No
Right Wall	Exterior Walls	Right	270	Right	295	68.25	0.1	0.85	None	None	Existing	No
Attered 2x4 Front Wall	Exterior Walls	Front	0	Front	237	0	0.1	0.85	None	None	Altered	No
New Right Wall	Exterior Walls	Right	270	Right	48	0	0.1	0.85	None	None	New	n/a
Left Wall	Exterior Walls	Left	90	Left	48	36	0.1	0.85	Extension	None	New	n/a
Rear Wall 2	New 1st Floor	R-15 Wall	180	Back	287	176	0.1	0.85	Extension	None	New	n/a
Right Wall 2	New 1st Floor	R-21 Wall	270	Right	136	56	0.1	0.85	Extension	None	New	n/a
2x4 Front Wall	New 2nd Floor	R-15 Wall	0	Front	246	25	0.1	0.85	Extension	None	New	n/a
2x4 Left Wall	New 2nd Floor	R-15 Wall	90	Left	143	60	0.1	0.85	Extension	None	New	n/a
Rear Wall 3	New 2nd Floor	R-15 Wall	180	Back	623	155.92	0.1	0.85	Extension	None	New	n/a
2x4 Right Wall	New 2nd Floor	R-15 Wall	270	Right	304	30	0.1	0.85	Extension	None	New	n/a
2x4 Right Wall	New 2nd Floor	R-15 Wall	270	Right	177	0	0.1	0.85	Extension	None	New	n/a
Interior Surface	Floor/Ceiling	2nd Floor	n/a	n/a	1	0	n/a					

For: Ryan Honnet (DRAFTsense)
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OPAQUE SURFACES SUMMARY												
01	02	03	04	05	06	07	08	09	10	11	12	13
Name	Surface Type	Orientation	Azimuth	Gross Area (ft²)	Window or Door Area (ft²)	Skylight Area (ft²)	Roof Tint (+ or -)	SHGC	Exterior Shade	Interior Shade	Status	Verified Existing Condition
Attered 2x4 Front Wall	Exterior Walls	Front	0	1464	127	0	0.1	0.85	None	None	Altered	No
Attered 2x4 Front Wall	Exterior Walls	Front	0	Front	212	200	0.1	0.85	None	None	Altered	No
Attered Left Wall	Exterior Walls	Left	90	Left	154	16	0.1	0.85	None	None	Existing	No
Attered Left Wall	Exterior Walls	Left	90	Left	166	2.15	0.1	0.85	None	None	Altered	No
Rear Wall	Exterior Walls	Back	180	Back	324	54	0.1	0.85	None	None	Altered	No
Right Wall	Exterior Walls	Right	270	Right	295	68.25	0.1	0.85	None	None	Existing	No
Attered 2x4 Front Wall	Exterior Walls	Front	0	Front	237	0	0.1	0.85	None	None	Altered	No
New Right Wall	Exterior Walls	Right	270	Right	48	0	0.1	0.85	None	None	New	n/a
Left Wall	Exterior Walls	Left	90	Left	48	36	0.1	0.85	Extension	None	New	n/a
Rear Wall 2	New 1st Floor	R-15 Wall	180	Back	287	176	0.1	0.85	Extension	None	New	n/a
Right Wall 2	New 1st Floor	R-21 Wall	270	Right	136	56	0.1	0.85	Extension	None	New	n/a
2x4 Front Wall	New 2nd Floor	R-15 Wall	0	Front	246	25	0.1	0.85	Extension	None	New	n/a
2x4 Left Wall	New 2nd Floor	R-15 Wall	90	Left	143	60	0.1	0.85	Extension	None	New	n/a
Rear Wall 3	New 2nd Floor	R-15 Wall	180	Back	623	155.92	0.1	0.85	Extension	None	New	n/a
2x4 Right Wall	New 2nd Floor	R-15 Wall	270	Right	304	30	0.1	0.85	Extension	None	New	n/a
2x4 Right Wall	New 2nd Floor	R-15 Wall	270	Right	177	0	0.1	0.85	Extension	None	New	n/a
Interior Surface	Floor/Ceiling	2nd Floor	n/a	n/a	1	0	n/a					

For: Ryan Honnet (DRAFTsense)
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OPAQUE SURFACES SUMMARY												
01	02	03	04	05	06	07	08	09	10	11	12	13
Name	Surface Type	Orientation	Azimuth	Gross Area (ft²)	Window or Door Area (ft²)	Skylight Area (ft²)	Roof Tint (+ or -)	SHGC	Exterior Shade	Interior Shade	Status	Verified Existing Condition
Attered 2x4 Front Wall	Exterior Walls	Front	0	1464	127	0	0.1	0.85	None	None	Altered	No
Attered 2x4 Front Wall	Exterior Walls	Front	0	Front	212	200	0.1	0.85	None	None	Altered	No
Attered Left Wall	Exterior Walls	Left	90	Left	154	16	0.1	0.85	None	None	Existing	No
Attered Left Wall	Exterior Walls	Left	90	Left	166	2.15	0.1	0.85	None	None	Altered	No
Rear Wall	Exterior Walls	Back	180	Back	324	54	0.1	0.85	None	None	Altered	No
Right Wall	Exterior Walls	Right	270	Right	295	68.25	0.1	0.85	None	None	Existing	No
Attered 2x4 Front Wall	Exterior Walls	Front	0	Front	237	0	0.1	0.85	None	None	Altered	No
New Right Wall	Exterior Walls	Right	270	Right	48	0	0.1	0.85	None	None	New	n/a
Left Wall	Exterior Walls	Left	90	Left	48	36	0.1	0.85	Extension	None	New	n/a
Rear Wall 2	New 1st Floor	R-15 Wall	180	Back	287	176	0.1	0.85	Extension	None	New	n/a
Right Wall 2	New 1st Floor	R-21 Wall	270	Right	136	56	0.1	0.85	Extension	None	New	n/a
2x4 Front Wall	New 2nd Floor	R-15 Wall	0	Front	246	25	0.1	0.85	Extension	None	New	n/a
2x4 Left Wall	New 2nd Floor	R-15 Wall	90	Left	143	60	0.1	0.85	Extension	None	New	n/a
Rear Wall 3	New 2nd Floor	R-15 Wall	180	Back	623	155.92	0.1	0.85	Extension	None	New	n/a
2x4 Right Wall	New 2nd Floor	R-15 Wall	270	Right	304	30	0.1	0.85	Extension	None	New	n/a
2x4 Right Wall	New 2nd Floor	R-15 Wall	270	Right	177	0	0.1	0.85	Extension	None	New	n/a
Interior Surface	Floor/Ceiling	2nd Floor	n/a	n/a	1	0	n/a					

For: Ryan Honnet (DRAFTsense)
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ROOF TYPES												
01	02	03	04	05	06	07	08	09	10	11	12	13
Name	Type	Area (ft²)	Multi.	U-factor	SHGC	Rating Source	Status	Verified Existing Condition	Gross Area (ft²)	Azimuth	Tilt	Roof Tint (+ or -)
Roof 2	Existing 1st Floor	1464	1	0.28	0.19	NFRC	Altered	No	1464	n/a	20	0.1
Roof 3	New 1st Floor	1464	1	0.28	0.19	NFRC	New	n/a	1464	n/a	20	0.1
1st Floor Ceiling	New 2nd Floor	1464	1	0.28	0.19	NFRC	New	n/a	1464	n/a	20	0.1
ATTIC												
01	02	03	04	05	06	07	08	09	10	11	12	13
Name	Construction	Type	Area (ft²)	Roof Tint (+ or -)	Status	Verified Existing Condition	Gross Area (ft²)	Azimuth	Tilt	Roof Tint (+ or -)	Status	Verified Existing Condition
Attic Existing 1st Floor	Attic Roof/Living Space	Ventilated	1464	0.1	Existing	No	1464	n/a	0	0.1	Existing	No
Attic New 1st Floor	Attic Roof/Living Space	Ventilated	1464	0.1	New	n/a	1464	n/a	0	0.1	New	n/a

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OPAQUE SURFACES SUMMARY												
01	02	03	04	05	06	07	08	09	10	11	12	13
Name	Surface Type	Orientation	Azimuth	Gross Area (ft²)	Window or Door Area (ft²)	Skylight Area (ft²)	Roof Tint (+ or -)	SHGC	Exterior Shade	Interior Shade	Status	Verified Existing Condition
Attered 2x4 Front Wall	Exterior Walls	Front	0	1464	127	0	0.1	0.85	None	None	Altered	No
Attered 2x4 Front Wall	Exterior Walls	Front	0	Front	212	200	0.1	0.85	None	None	Altered	No
Attered Left Wall	Exterior Walls	Left	90	Left	154	16	0.1	0.85	None	None	Existing	No
Attered Left Wall	Exterior Walls	Left	90	Left	166	2.15	0.1	0.85	None	None	Altered	No
Rear Wall	Exterior Walls	Back	180	Back	324	54	0.1	0.85	None	None	Altered	No
Right Wall	Exterior Walls	Right	270	Right	295	68.25	0.1	0.85	None	None	Existing	No
Attered 2x4 Front Wall	Exterior Walls	Front	0	Front	237	0	0.1	0.85	None	None	Altered	No
New Right Wall	Exterior Walls	Right	270	Right	48	0	0.1	0.85	None	None	New	n/a
Left Wall	Exterior Walls	Left	90	Left	48	36	0.1	0.85	Extension	None	New	n/a
Rear Wall 2	New 1st Floor	R-15 Wall	180	Back	287	176	0.1	0.85	Extension	None	New	n/a
Right Wall 2	New 1st Floor	R-21 Wall	270	Right	136	56	0.1	0.85	Extension	None	New	n/a
2x4 Front Wall	New 2nd Floor	R-15 Wall	0	Front	246	25	0.1	0.85	Extension	None	New	n/a
2x4 Left Wall	New 2nd Floor	R-15 Wall	90	Left	143	60	0.1	0.85	Extension	None	New	n/a
Rear Wall 3	New 2nd Floor	R-15 Wall	180	Back	623	155.92	0.1	0.85	Extension	None	New	n/a
2x4 Right Wall	New 2nd Floor	R-15 Wall	270	Right	304	30	0.1	0.85	Extension	None	New	n/a
2x4 Right Wall	New 2nd Floor	R-15 Wall	270	Right	177	0	0.1	0.85	Extension	None	New	n/a
Interior Surface	Floor/Ceiling	2nd Floor	n/a	n/a	1	0	n/a					

For: Ryan Honnet (DRAFTsense)
Report Prepared By: Kristin Murdock
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OPAQUE SURFACES SUMMARY												
01	02	03	04	05	06	07	08	09	10	11	12	13
Name	Surface Type	Orientation	Azimuth	Gross Area (ft²)	Window or Door Area (ft²)	Skylight Area (ft²)	Roof Tint (+ or -)	SHGC	Exterior Shade	Interior Shade	Status	Verified Existing Condition
Attered 2x4 Front Wall	Exterior Walls	Front	0	1464	127	0	0.1	0.85	None	None	Altered	No
Attered 2x4 Front Wall	Exterior Walls	Front	0	Front	212	200	0.1	0.85	None	None	Altered	No
Attered Left Wall	Exterior Walls	Left	90	Left	154	16	0.1	0.85	None	None	Existing	No
Attered Left Wall	Exterior Walls	Left	90	Left	166	2.15	0.1	0.85	None	None	Altered	No
Rear Wall	Exterior Walls	Back	180	Back	324	54	0.1	0.85	None	None	Altered	No
Right Wall	Exterior Walls	Right	270	Right	295	68.25	0.1	0.85	None	None	Existing	No
Attered 2x4 Front Wall	Exterior Walls	Front	0	Front	237	0	0.1	0.85	None	None	Altered	No
New Right Wall	Exterior Walls	Right	270	Right	48	0	0.1	0.85	None	None	New	n/a
Left Wall	Exterior Walls	Left	90	Left	48	36	0.1	0.85	Extension	None	New	n/a
Rear Wall 2	New 1st Floor	R-15 Wall	180	Back	287	176	0.1	0.85	Extension	None	New	n/a
Right Wall 2	New 1st Floor	R-21 Wall	270	Right	136	56	0.1	0.85	Extension	None	New	n/a
2x4 Front Wall	New 2nd Floor	R-15 Wall	0	Front	246	25	0.1	0.85	Extension	None	New	n/a
2x4 Left Wall	New 2nd Floor	R-15 Wall	90	Left	143	60	0.1	0.85	Extension	None	New	n/a
Rear Wall 3	New 2nd Floor	R-15 Wall	180	Back	623	155.92	0.1	0.85	Extension	None	New	n/a
2x4 Right Wall	New 2nd Floor	R-15 Wall	270	Right	304	30	0.1	0.85	Extension	None	New	n/a
2x4 Right Wall	New 2nd Floor	R-15 Wall	270	Right	177	0	0.1	0.85	Extension	None	New	n/a
Interior Surface	Floor/Ceiling	2nd Floor	n/a	n/a	1	0	n/a					

For: Ryan Honnet (DRAFTsense)
Report Prepared By: Kristin Murdock
Software Version: 2025.0.000
CA Building Energy Efficiency Standards - 2025 Single-Family Compliance
Report Version: 2025.0.000
Schema Version: rev.20250101

CERTIFICATE OF COMPLIANCE - RESIDENTIAL PERFORMANCE COMPLIANCE METHOD

Project Name: Marcus Remodel
Calculation Description: Title 24 Analysis

Calculation Date/Time: 2026-01-19T19:05:21-08:00
Input File Name: Marcus Remodel.ribd25x

CF1R-PRF-01-E
(Page 10 of 15)

OPAQUE SURFACES SUMMARY												
01	02	03	04	05	06	07	08	09	10	11	12	13
Name	Surface Type	Orientation	Azimuth	Gross Area (ft²)	Window or Door Area (ft²)	Skylight Area (ft²)	Roof Tint (+ or -)	SHGC	Exterior Shade	Interior Shade	Status	Verified Existing Condition
Attered 2x4 Front Wall	Exterior Walls	Front	0	1464	127	0	0.1	0.85	None	None	Altered	No
Attered 2x4 Front Wall	Exterior Walls	Front	0	Front	212	200	0.1	0.85	None	None	Altered	No
Attered Left Wall	Exterior Walls	Left	90	Left	154	16	0.1	0.85	None	None	Existing	No
Attered Left Wall	Exterior Walls	Left	90	Left	166	2.15	0.1	0.85	None	None	Altered	No
Rear Wall	Exterior Walls	Back	180	Back	324	54	0.1	0.85	None	None	Altered	No
Right Wall	Exterior Walls	Right	270	Right	295	68.25	0.1	0.85	None	None	Existing	No
Attered 2x4 Front Wall	Exterior Walls	Front	0	Front	237	0	0.1	0.85	None	None	Altered	No
New Right Wall	Exterior Walls	Right	270	Right	48	0	0.1	0.85	None	None	New	n/a
Left Wall	Exterior Walls	Left	90	Left	48	36	0.1	0.85	Extension	None	New	n/a
Rear Wall 2	New 1st Floor	R-15 Wall	180	Back	287	176	0.1	0.85	Extension	None	New	n/a
Right Wall 2	New 1st Floor	R-21 Wall	270	Right	136	56	0.1	0.85	Extension	None	New	n/a
2x4 Front Wall	New 2nd Floor	R-15 Wall	0	Front	246	25	0.1	0.85	Extension	None	New	n/a
2x4 Left Wall	New 2nd Floor	R-15 Wall	90	Left	143	60	0.1	0.85	Extension	None	New	n/a
Rear Wall 3	New 2nd Floor	R-15 Wall	180	Back	623	155.92	0.1	0.85	Extension	None	New	n/a
2x4 Right Wall	New 2nd Floor	R-15 Wall	270	Right	304	30	0.1	0.85	Extension	None	New	n/a
2x4 Right Wall	New 2nd Floor	R-15 Wall	270	Right	177	0	0.1	0.85	Extension	None	New	n/a
Interior Surface	Floor/Ceiling	2nd Floor	n/a	n/a	1

OPAQUE SURFACES - CATHEDRAL CEILING

01	02	03	04	05	06	07	08	09	10
Name	Zone	Construction	Orientation	Azimuth	Area (ft²)	SkylightArea (ft²)	Roof Rise (x in 12)	CRRC Rated Roof Reflectance	CRRC Rated Roof Emittance
Roof	2nd Floor	Cathedral Ceiling	Flat	0	905	0	2	0.1	0.85

FENESTRATION / GLAZING

01	02	03	04	05	06	07	08	09	10
Name	Type	Surface	Orientation	Azimuth	Multi.	Area (ft²)	U-factor	SHGC	Rating Source
Window 18	Window	Front Wall	Front	180	1	16	0.28	0.19	NFRC
Window 20	Window	Front Wall	Front	180	1	20	0.28	0.18	NFRC
Window 17	Window	Left Wall	Left	90	1	40	0.3	0.2	NFRC
Window 19	Window	Left Wall	Left	90	1	9	0.28	0.18	NFRC
Window 16	Window	Rear Wall	Back	270	1	40	0.3	0.2	NFRC
Door 21	Window	Right Wall	Right	0	1	24	0.28	0.19	NFRC
		Right Wall	Right	0	1	66	0.29	0.21	NFRC
		Total North Facing Fenestration				66			
		Total East Facing Fenestration				88			
		Total South Facing Fenestration				40			
		Total West Facing Fenestration				9			

OPAQUE SURFACES

01	02	03	04	05	06	07	08	09
Name	Surface Type	Construction Type	Framing	Interior / Exterior Continuous R-value	U-factor	Assembly Layers		Non-Rated Spray Foam
Front Wall	Exterior Walls	Wood Framed Wall	2x4 @ 16 in. O.C.	None / None	0.085	Inside Finish: Gypsum Board Cavity / Frame: R-15 / 2x4 Exterior Finish: Stucco		☐
Left Wall	Exterior Walls	Wood Framed Wall	2x4 @ 16 in. O.C.	None / None	0.085	Inside Finish: Gypsum Board Cavity / Frame: R-15 / 2x4 Exterior Finish: Stucco		☐
Rear Wall	Exterior Walls	Wood Framed Wall	2x4 @ 16 in. O.C.	None / None	0.085	Inside Finish: Gypsum Board Cavity / Frame: R-15 / 2x4 Exterior Finish: Stucco		☐
Right Wall	Exterior Walls	Wood Framed Wall	2x4 @ 16 in. O.C.	None / None	0.085	Inside Finish: Gypsum Board Cavity / Frame: R-15 / 2x4 Exterior Finish: Stucco		☐
Interior Surface	Interior Walls	Wood Framed Wall	2x4 @ 16 in. O.C.	None / None	0.069	Inside Finish: Gypsum Board Siding/Sheathing:Gen. Cavity / Frame: R-13 in 5 1/2 in. (R-18) / Gypsum Board		☐
Interior Floor	Interior Floors	Wood Framed Floor				Floor Surface: Carpeted Finish: Hardwood Siding/Sheathing:Gen. Cavity / Frame: R-19 in 9 1/2 in. (R-18) / Gypsum Board		☐
Front Wall	Exterior Walls	Wood Framed Wall	2x4 @ 16 in. O.C.	None / None	0.085	Inside Finish: Gypsum Board Cavity / Frame: R-15 / 2x4 Exterior Finish: Stucco		☐

OPAQUE DOORS

01	02	03	04	05	06	07	08	09	10
Name	Side of Building	Interior Floors	Area (ft²)	Orientation	Azimuth	U-factor	Assembly Layers		Non-Rated Spray Foam
Door 21	Front	Wood Framed Floor	24	Front	180	0.28	Inside Finish: Gypsum Board Cavity / Frame: R-15 / Door Exterior Finish: Fiberglass		☐

OPAQUE SURFACE CONSTRUCTIONS

01	02	03	04	05	06	07	08	09	10	11	12	13
Construction Name	Surface Type	Construction Type	Framing	Interior / Exterior Continuous R-value	Compact Construction	ECC Verification	Water Heater Name	Solar Heating System	Rated Input Heat Pump	Efficiency	Tank Insulation R-value (hr/ft²F)	Shutoffs (yes / no)	Tank Location
R-15 Wall	Exterior Walls	Wood Framed Wall	Cavity	None / None	None	n/a	DHW Heater 1						
R-30 Roof	Roofs	Cathedral Ceiling	Cavity	None / None	None	n/a							
R-30 Floor No Crawlspace	Interior Floors	Wood Framed Floor	Cavity	None / None	None	n/a							

WATER HEATING SYSTEMS

01	02	03	04	05	06	07	08	09	10	11	12	13
Name	System Type	Distribution Type	Water Heater Name	Heating Efficiency Type	Rated Input (kBtu/hr)	Efficiency	Tank Insulation R-value (hr/ft²F)	Shutoffs (yes / no)	Parasitic Loss (Btu/hr)	Tank Location	Standby Loss (Btu/hr)	Solar Fraction
DHW Heater 1	Domestic Hot Water (DHW)	Standard	DHW Heater 1	EF	0.95	Btu/hr	20000	0	n/a			

WATER HEATERS

01	02	03	04	05	06	07	08	09	10	11	12	13
Name	Heating Element Type	Tank Type	# of Units	Heating Efficiency Type	Rated Input (kBtu/hr)	Efficiency	Tank Insulation R-value (hr/ft²F)	Shutoffs (yes / no)	Parasitic Loss (Btu/hr)	Tank Location	Standby Loss (Btu/hr)	Solar Fraction
DHW Heater 1	Gas	Consumer-storage	1	EF	0.95	Btu/hr	20000	0	n/a			

WATER HEATER - HEAT PUMP

01	02	03	04	05	06	07	08	09	10
Name	# of Units	Tank (gal)	NEEA Heat Pump Model	Tank Location	Duct Heat Source	Duct Outdoor Air Source	UEF	AO.S Compliant
DHW Heater 1	1	Generic					0.95	☐

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GENERAL INFORMATION

01	Project Name: Marcus ADU
02	Run Title: Title 24 Analysis
03	Project Location (CEC): Escondido (SDGE)
04	Zip code: 92037
05	Climate Zone: 7
06	Building Type: Single family
07	Project Scope: Newly Constructed Addition
08	Addition Conditioned Floor Area (ft²): 1083
09	Existing Conditioned Floor Area (ft²): 1083
10	Total Cond. Floor Area (ft²): 1988
11	ADU Bedroom Count: 1
12	Fuel Type: Natural gas

ADDITION ALONE - Project Analysis Parameters

01	02	03	04
Existing Area (excl. new addition)	Addition Area (excl. existing)	Total Area (ft²)	Total Area (ft²)
2083	905	2988	2988

ADDITION ALONE - ACCESSORY DWELLING UNIT (ADU) PROJECT ANALYSIS PARAMETERS

01	02	03	04	05	06	07	08
Zone Name	Existing Area (excl. new ADU) (ft²)	ADU Area (excl. existing) (ft²)	Total Area (ft²)	Existing Bedrooms	Addition Bedrooms	Total Bedrooms	Attached vs. Detached
2nd Floor	2083	905	2988	0	1	1	Attached

ENERGY USE INTENSITY

01	02	03	04	05	06	07	08	09	10
	Existing	Addition	Total	Existing Bedrooms	Addition Bedrooms	Total Bedrooms	Addition Bedrooms	Total Bedrooms	Attached vs. Detached
	0	1	1						

COMPLIANCE REQUESTS

This building incorporates Computer Performance
This building incorporates features that require field testing and/or verification by a certified ECC rater under the supervision of a HERS-approved ECC provider.
Building does not incorporate Special Features

REQUIRED SPECIAL FEATURES

The following are features that must be installed as conditions for meeting the modeled energy performance for this computer analysis.

- NO SPECIAL FEATURES REQUIRED

ECC FEATURE SUMMARY

The following is a summary of the features that must be field-verified by a certified ECC Rater as a condition for meeting the modeled energy performance for this computer analysis. Additional details regarding these features can be found in the Certificate of Compliance under the sections indicated for each ECC Rater Feature.

- Indoor air quality ventilation
- Kitchen range hood
- Whole-house fan
- Verified HSPF2
- Verified heat pump rated heating capacity

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Compliance Summary

	Long Term System Cost (LSC)*		Source Energy Use		Peak Cooling**
	Efficiency² (yr/¢ per yr)	Total³ (¢/ft² yr)	Total⁴ (kBtu/ft² yr)		Electricity (kWh)
Standard Design	13.68				
Proposed Design	12.52				
Compliance Margins	1.16				
	Pass		RESULT* Complies		

*Long-term System Cost (LSC) is a 30-year present value cost to California's energy system. LSCs not a predicted utility bill.
**Peak cooling is the maximum hourly cooling load for the building, including the cooling load for the largest space conditioning equipment
¹Total includes the sum of efficiency measures, solar photovoltaic (PV) measures and battery storage measures
²Efficiency includes efficiency measures and battery storage measures but excludes solar photovoltaic (PV) measures
³ Source Energy Use is the energy used at the power plant to deliver the electricity consumed by the building for all compliance categories
⁴ Total existing target reduces LSCs of the standard design building peak cooling energy use.

Standard Design PV Capacity: 0.00 kWdc

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ESC ADU SOURCE ENERGY COMPLIANCE RESULTS FOR PERFORMANCE COMPONENTS

Energy Use	Standard Design Source Energy (kBtu/ft² yr)	Standard Design LSC (¢/ft² yr)	Proposed Design Source Energy (kBtu/ft² yr)	Proposed Design LSC (¢/ft² yr)	Compliance Margin Source Energy (kBtu/ft² yr)	Compliance Margin LSC (¢/ft² yr)
Space Heating	0	0.34	0	0	0.78	0	-0.44
Space Cooling	0	1.74	0	0	1.34	0	0.4
IAQ Ventilation	0	0.95	0	0	0.95	0	0
Water Heating	0	10.65	0	0	9.45	0	1.2
Self Utilization/Flexibility Credit	n/a	n/a	n/a	n/a		n/a	0
Efficiency Compliance Total	0	13.68	0	0	12.52	0	1.16
Photovoltaic/On-Site Battery	n/a	n/a	n/a	n/a	0	n/a	0
Flexibility	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Indoor Lighting	0	1.54	0	1.54	1.58	n/a	0
Appl. & Cooking	0	9.57	0	9.5	9.5	n/a	0.07
Plug Loads	0	10.28	0	10.28	10.28	n/a	0
Outdoor Lighting	0	1.34	0	1.34	1.34	n/a	0
TOTAL COMPLIANCE	0	36.45	0	34.22	33.22	1.23	

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HVAC - HEAT PUMPS

01	02	03	04	05	06	07	08	09	10
Name	System Type	Number of Units	Heating Efficiency Type	HSPF2/HSPF2 (COP)	Cap 47	Cap 17	Backup	Ducting	Verified
Heat Pump 1	Ductless	1	HSPF2	9	18000	12000	Electric	Ducted	No

INDOOR AIR QUALITY (IAQ) FANS

01	02	03	04	05	06	07	08	09
Name	Dwelling Unit	Airflow (CFM)	Fan Efficacy (W/CFM)	IAQ Fan Type	Heat Recovery Effectiveness: ASRE	Includes Fault Indicator Display?	Status	
SFam ADU HEnvelope	SFam ADU	42	0.35	Exhaust	No			

ENERGY USE INTENSITY

	Standard Design (kBtu/ft² · yr)	Proposed Design (kBtu/ft² · yr)	Margin (kBtu/ft² · yr)	Margin Percentage
Energy Use	22.84	21.85	0.99	4.33
Net Use	22.84	21.85	0.99	4.33

Notes
1. Includes ECO's Energy Use Total (not including PV) / Total Building Area.
2. Net ECO's Energy Use Total (including PV) / Total Building Area.

ZONE INFORMATION

01	02	03	04	05	06	07
Zone Name	Zone Type	HVAC System Name	Zone Floor Area (ft²)	Avg. Ceiling Height	Water Heating System 1	Status
2nd Floor	Conditioned	Mini-Split1	905	9	DHW Sys 1	New

OPAQUE SURFACES SUMMARY

01	02	03	04	05	06	07	08	09	10
Name	Zone	Construction	Azimuth	Orientation	Gross Area (ft²)	Window and Door Area (ft²)	TDV (kbtu)	Wall Exceptions	Status
Front Wall	2nd Floor	R-15 Wall	90	Front	180	36	90	Extension	New
Left Wall	2nd Floor	R-15 Wall	180	Left	100	9	90	Extension	New
Rear Wall	2nd Floor	R-15 Wall	270	Back	217	40	90	Extension	New
Right Wall	2nd Floor	R-15 Wall	0	Right	251	88	90	Extension	New
Interior Surface	2nd Floor	R-30 Floor No Crawlspace	n/a	n/a	905	n/a	n/a		New

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DOCUMENTATION AUTHOR'S DECLARATION STATEMENT

I, I certify that this Certificate of Compliance documentation is accurate and complete.

Documentation Author Name: Austin Murdock	Documentation Author Signature: Austin Murdock	
Company: IAC Title 24 Reporting	Date Signed: 01/19/2026	
Address: 6000 Rancho Mission Rd.	City/State/Zip: San Diego, CA 92108	Phone: (858) 401-0230

RESPONSIBLE PERSON'S DECLARATION STATEMENT

I certify the following under penalty of perjury, under the laws of the State of California:

1. The information provided on this Certificate of Compliance is true and correct.
2. I am the responsible person for the design of the building envelope features identified on this Certificate of Compliance (responsible designer).
3. The energy features and performance specifications, materials, components, and manufactured devices for the building envelope features identified on this Certificate of Compliance conform to the requirements of Title 24, Part 6 of the California Code of Regulations.
4. The building envelope features and systems design features identified on this Certificate of Compliance conform to the requirements for mandatory features and devices identified on the applicable checklists.
5. The building design features and systems design features identified on this Certificate of Compliance are consistent with the information provided on other applicable compliance documents, worksheets, calculations, plans and specifications submitted to the enforcement agency for this building permit application.
6. I understand that a registered copy of this Certificate of Compliance shall be made available to the enforcement agency for all applicable inspections. I understand that it is the responsibility of the builder to provide a copy of this Certificate of Compliance to the building owner at occupancy.
7. I understand that a registered copy of this Certificate of Compliance is required to be included with the documentation the builder provides to the building owner at occupancy.

Responsible Designer Name: Austin Murdock	Responsible Designer Signature: Austin Murdock	
Company: IAC Title 24 Reporting	Date Signed: 01/19/2026	
Address: 6000 Rancho Mission Rd.	City/State/Zip: San Diego, CA 92108	Phone: (858) 401-0230

REGISTERED PROFESSIONAL OF RECORD (IF APPLICABLE)

Registered Professional Name: Ryan Honnet	Registered Professional Signature: Ryan Honnet	
Company: RH DRAFTsense	Date Signed: 01/20/2026	
Address: 5252 Waring Rd.	City/State/Zip: SAN DIEGO, CA 92110	Phone: (619) 618-1715

ICN# 3375

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2025 Single-Family Residential Mandatory Requirements Summary

NOTE: Single-family residential buildings subject to the Energy Code must comply with all applicable mandatory measures, regardless of the compliance approach used. Review the respective sections for more information.

Space Conditioning, Water Heating, and Plumbing System:

§ 110.0-110.3: **Certification.** Heating, ventilation, and air conditioning (HVAC) equipment, water heaters, and all other regulated appliances must be certified by the manufacturer to the California Energy Commission.

§ 110.2(a): **HVAC Efficiency.** Equipment must meet the applicable efficiency requirements in Tables 110.2-A through -L.*

§ 110.2(b): **Controls for Heat Pumps with Supplementary Heaters.** Heat pumps with supplementary heaters must have control requirements as specified in § 150.0(h)7 and § 150.0(q).2.*

§ 110.2(c): **Thermostats.** All heating or cooling systems not controlled by a central energy management control system (EMCS) must have a setback thermostat.

§ 110.3(c)1: **Insulation.** Unfired service water heater storage tanks and solar water-heating backup tanks must have adequate insulation, or tank surface heat loss rating.

§ 110.3(c)6: **Isolation Valves.** Instantaneous water heaters with an input rating greater than 6.8 kBtu per hour (2 kW) must have isolation valves with hose bibbs or other fittings on both cold and hot water lines to allow for flushing the water heater when the valves are closed.

§ 110.3(c)7: **Heat Trap and Ventilation.** Air-source heat pump water heaters must have backup heat (internal or external) if inlet air is unconditioned, unless compressor cut-off temperature is below Heating Winter Median of Extremes from Reference Appendix JA2. Heat pump water heater installation space and/or communicating space(s) must meet minimum volume, ducting, and/or grille net free area by altitude of compressor capacity.

§ 110.5: **Pilot Lights.** Continuously burning pilot lights are prohibited for natural gas: fan-type central furnaces; household cooking appliances (except appliances without electrical supply voltage connection with pilot lights that consume less than 150 Btu/h); pool and spa heaters.*

§ 150.0(h)1: **Building Cooling and Heating Loads.** Heating and/or cooling loads are calculated in accordance with the ASHRAE Handbook, Equipment Volume, Applications Volume, and Fundamentals Volume; the SMACNA Residential Comfort System Installation Standards Manual; or the ACCA Manual J using design conditions specified in § 150.0(h)2.*

§ 150.0(h)3A: **Clearances.** Air conditioner and heat pump outdoor condensing units must have a clearance of at least five feet from any dryer outlet or vent.

§ 150.0(h)3B: **Liquid Line Drier.** Air conditioners and heat pump systems must be equipped with liquid line filter driers if required, as specified by the manufacturer's instructions.

§ 150.0(h)5: **System Selection.** Equipment sizing and selection must meet the cooling and heating loads of § 150.0(h)1 & 2, and systems must be sized per ACCA Manual S-2023 with no minimum cooling capacity. Furnace heating capacity must meet ACCA Manual S. Heat pump heating capacity must meet minimum CBC requirements without including supplementary heat with no limit on maximum heating capacity.

§ 150.0(h)6: **Defrost.** Installed-adjustable defrost delay timers must be set to greater than or equal to 90 minutes. CF2R certification required.*

§ 150.0(h)7: **Supplementary Heat Control Operation.** Heat pumps with supplementary heaters must have controls to lock supplementary heating above outside air temperature no greater than 70°F, allowed during defrost or emergency operation. CF2R certification required.*

§ 150.0(h)8: **Sizing of Electric Resistance Supplementary Heat.** When heat pumps have electric resistance heat, the capacity of electric resistance heat must not exceed the heat pump nominal cooling capacity (at 95°F ambient conditions) multiplied by 2.7 kW per ton, minus 3.41 kBtu/h.

§ 150.0(h)9: **Capacity Variation Thermostats.** For variable-capacity systems, the space conditioning system and thermostat must be capable of responding to heating and cooling loads by modulating system compressor speed and must meet thermostat requirements of § 150.0(i)2. CF2R certification required.

§ 150.0(i): **Thermostat.** All heating or cooling systems including heat pumps which are not controlled by energy management control system (EMCS) must have a setback thermostat. Additional requirements for thermostats that control heat pumps with supplemental heating: the thermostat must display outdoor air temperature, must lock out supplementary heat when outdoor air temperature is above 35°F, and must notify when supplemental heat is in use.

§ 150.0(j)1: **Water Piping, Solar Water-heating System Piping, and Space Conditioning System Line Insulation.** All domestic hot water piping must be insulated as specified in § 609.12 of the California Plumbing Code.

§ 150.0(j)2: **Insulation Protection.** Piping insulation must be protected from damage, including from sunlight, moisture, equipment maintenance, and wind, as required by §120.3(b). Insulation exposed to weather must be water retardant and protected from UV light (no adhesive tapes). Insulation covering chilled water piping and refrigerant suction piping located outside the conditioned space must include, or be protected by, a Class I or II vapor retarder. Pipe insulation buried below grade must be installed in a waterproof and non-compressible casing or sleeve.

§ 150.0(n)1: **Gas or Propane Water Heating Systems.** Systems using gas or propane water heaters to serve individual dwelling units must designate a space at least 2.5' x 2.5' x 7' suitable for the future installation of a heat pump water heater, and must install electrical and plumbing requirements, based on the distance between this designated space and the water heater location; and a condensate drain no more than 2" higher than the base of the water heater.

§ 150.0(n)2: **Solar Water Heating Systems.** Solar water heating systems and collectors must be certified and rated by the Solar Rating and Certification Corporation (SRCC), the International Association of Plumbing and Mechanical Officials, Research and Testing (IAPMO R&T), or by a listing agency that is approved by the Executive Director.

Ducts and Fans

§110.8(d)3: **Ducts.** Insulation installed on an existing space-conditioning duct must comply with § 604.0 of the California Mechanical Code (CMC). If a contractor installs the insulation, the contractor must certify to the customer, in writing, that the insulation meets this requirement.

§ 150.0(m)1: **CMC Compliance.** All air-distribution system ducts and plenums must meet CMC §§ 601.0-605.0 and ANSI/SMACNA-006-2006 HVAC Duct Construction Standards Metal and Flexible 3rd Edition. Portions of supply- and return-air ducts and plenums must be insulated to R-6.0 or higher. Ducts located entirely in conditioned space as confirmed via field verification and diagnostic testing (RA3.1.4.3.8) do not require insulation; in dwelling units with attics, the ducts must be below the ceiling separating occupiable space from the attic. Connections of metal ducts and inner core of flexible ducts must be mechanically fastened. Openings must be sealed with mastic, tape, or other duct-closure system that meets applicable UL requirements, or aerosol sealant that meets UL 723. The combination of mastic and either mesh or tape must be used to seal openings greater than ¼", if mastic or tape is used. Building cavities, air handler support platforms, and plenums designed or constructed with materials other than sealed sheet metal, duct board or flexible duct must not be used to convey conditioned air. Building cavities and support platforms may contain ducts; ducts installed in these spaces must not be compressed.*

§ 150.0(m)2: **Factory-Fabricated Duct Systems** must comply with applicable requirements of UL 181 for duct construction; connections; and closures; joints and seams of duct systems and their components must not be sealed with cloth back rubber adhesive duct tapes unless such tape is used in combination with mastic and draw bands.

§ 150.0(m)3: **Field-Fabricated Duct Systems** must comply with applicable requirements for pressure-sensitive tapes, mastics, sealants, and other requirements specified for duct construction.*

§ 150.0(m)7: **Backdraft Dampers.** Fan systems that exchange air between conditioned space and outdoors must have backdraft or automatic dampers.

§ 150.0(m)8: **Gravity Ventilation Dampers.** Gravity ventilating systems serving conditioned space must have either automatic or readily accessible, manually operated dampers in all openings to the outside, except combustion inlet and outlet air openings and elevator shaft vents.

§ 150.0(m)9: **Protection of Insulation.** Insulation must be protected from damage due to sunlight, moisture, equipment maintenance, and wind. Insulation exposed to weather must be suitable for outdoor service (e.g., protected by aluminum, sheet metal, painted canvas, or plastic cover). Cellular foam insulation must be protected as above or painted with a water retardant and solar radiation-resistant coating.

§ 150.0(m)10: **Porous Inner Core Flex Duct.** Flex ducts with porous inner cores must have a non-porous layer or air barrier between the inner core and outer vapor barrier.

§ 150.0(m)11: **Duct System Sealing and Leakage Test.** When space conditioning systems use forced air duct systems to supply conditioned air to an occupiable space, the ducts must be sealed and duct leakage tested, as confirmed through field verification and diagnostic testing, in accordance with Reference Residential Appendix RA3.1.*

§ 150.0(m)12: **Air Filtration.** Space conditioning systems with ducts exceeding 10 feet and that supply side of ventilation systems must have MERV 13 or equivalent filters. Filters for space conditioning systems must have a tight fit and be sized for low pressure drop. Per Equation 150.0-A, Clean-filter pressure drop and labeling must meet the requirements in §150.0(m)12. Filters must be accessible for regular service. Filter racks or grilles must use gaskets, sealing, or other means to close gaps around the installed filters and prevent air from bypassing the filter.*

§ 150.0(m)13: **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.*

Ventilation and Indoor Air Quality:

§ 150.0(o)1: **Requirements for Ventilation and Indoor Air Quality.** All dwelling units shall 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(o)1.*

§ 150.0(o)1B: **Central Fan Integrated (CFI) Ventilation Systems.** Continuous operation of CFI air handlers used in CFI systems is not a permissible method for providing whole

ELEC. / MECH. NOTES

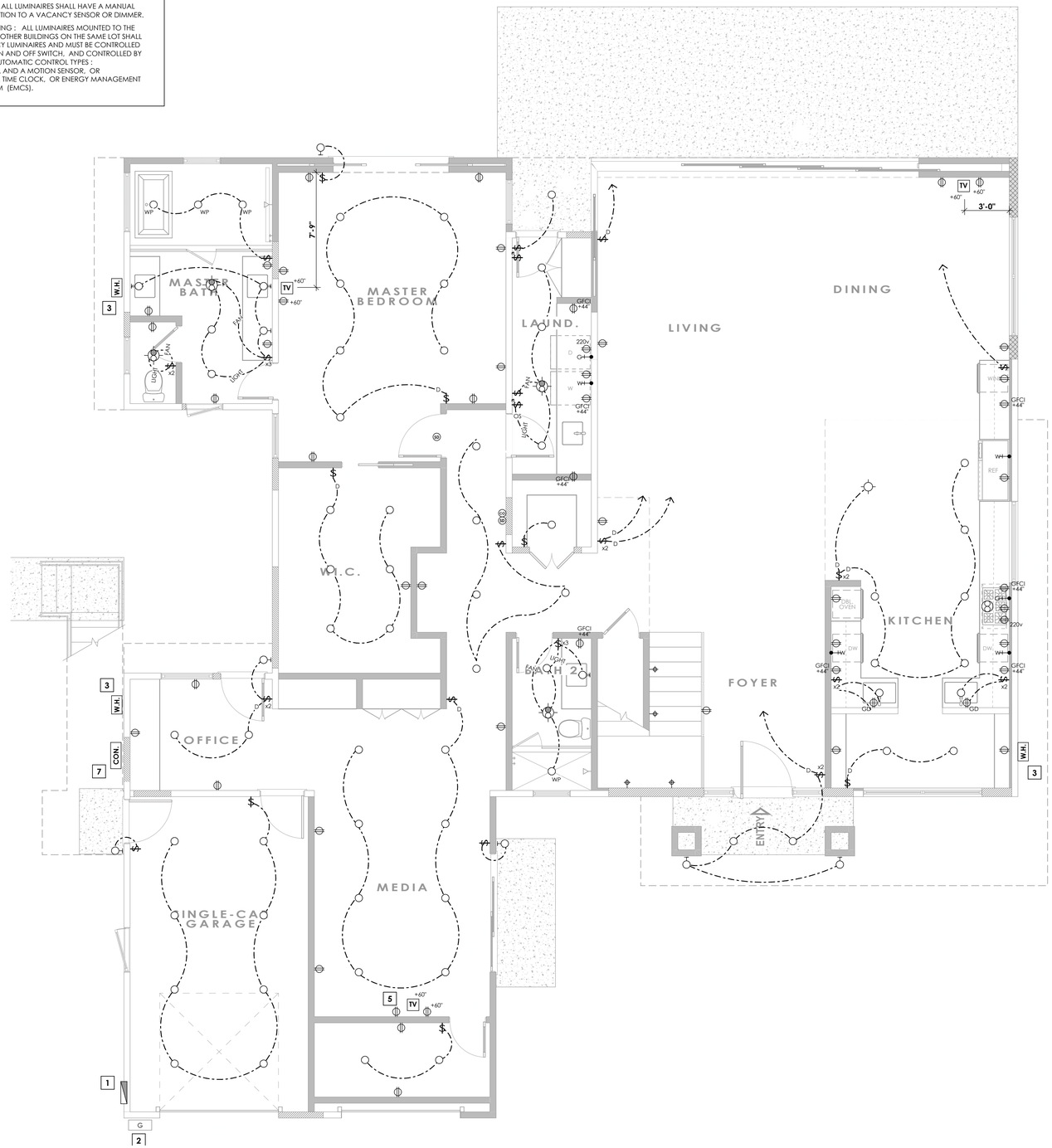
1. ELECTRICAL & MECHANICAL TO BE DESIGN - BUILD. THIS DRAWING IS FOR DESIGN INTENT ONLY. AND CONFORMANCE TO TITLE-24 REQUIREMENTS. ELECTRICAL CONTRACTOR TO OBTAIN ELECTRICAL PERMIT.
2. EXISTING TELEPHONE SERVICE SHALL REMAIN.
3. INSTALLATION INSTRUCTIONS FOR ALL LISTED EQUIPMENT SHALL BE PROVIDED TO THE FIELD INSPECTOR AT THE TIME OF INSPECTION.
4. ALL BATHROOMS TO HAVE A DEDICATED 20 AMP. CIRCUIT SEPARATE FROM ALL OTHER RECEPTACLES, LIGHTS, FANS, ETC.
5. SMOKE DETECTORS ARE TO BE HARDWIRED TO 110 VOLT CIRCUIT W/ A BATTERY BACK-UP AND SHALL BE INTERCONNECTED.
6. "ARS-FAULT CIRCUIT INTERRUPTER" PROTECTION ID REQUIRED FOR ALL 15-AMP AND 20-AMP BRANCH CIRCUITS SUPPLYING POWER TO ALL OUTLETS IN BEDROOMS.
7. ALL KITCHEN DUPLEX RECEPTACLES WITHIN 6' OF SINK OR WATER SOURCE (BATHROOMS AND EXTERIOR INCLUDED) TO BE GFCI. (TYP.).
8. GANG ALL SWITCHES WHERE THERE ARE MORE THAN ONE SWITCH (TYP.).
9. ALL EXTERIOR OUTLETS ARE TO BE WATERPROOF.
10. ALL EXHAUST FANS TO PROVIDE 5 AIR CHANGES PER HOUR.
11. SWITCHES IN BATHROOMS TO BE MOTION SENSOR TYPE.
12. ALL EXTERIOR LIGHT FIXTURES TO BE MOTION SENSOR/PHOTOCELL TYPE.
13. IN EVERY KITCHEN, FAMILY ROOM, DINING ROOM, LIVING ROOM, PARLOR, LIBRARY, DEN, SUNROOM, BEDROOM, RECREATION ROOM, BATHROOM, GARAGE, BASEMENT, LAUNDRY AND OUTDOOR AREA, ALL 125 - VOLT, 15 - AND 20 - AMPERE RECEPTACLES SHALL BE LISTED TAMPER RESISTANT RECEPTACLES. (PER CEC ARTICLE 210 & 406)
14. LIGHT FIXTURES IN WET LOCATIONS TO BE DAMP RATED
15. ALL NEW OUTLETS AND RECEPTACLES IN FAMILY, LIVING, BEDROOMS, DINING @ HALLS TO HAVE ARC FAULT PROTECTION PER NEC 210.12 (B).
16. TAMPER RESISTANT RECEPTACLES REQUIRED FOR ALL NEW LOCATIONS.
17. LIVING, BEDROOMS, HALLWAY, & WALK-IN-CLOSET TO BE HIGH EFFICACY, OR HAVE DIMMER SWITCHING OR VACANCY SENSOR SWITCHING SERVING LIGHTING IN THESE PLACES, EES 150.0 (k) 11.
18. ALIGHTING IN BATHROOMS SHALL HAVE ALL HIGH EFFICACY LUMINAIRE AND AT LEAST ONE LUMINAIRE MUST BE CONTROLLED BY A VACANCY SENSOR.
19. LIGHTING IN LAUNDRY CLOSET & GARAGE TO BE HIGH-EFFICACY CONTROLLED BY VACANCY SENSOR SWITCHING, EES 150.0 (k) 7 & 10.
20. EXTERIOR LIGHTING TO BE HIGH-EFFICACY W/ MANUAL SWITCHING, OR LOW EFFICACY LIGHTING MUST HAVE MANUAL SWITCHING WITH A) AN EXTERIOR MOTION SENSOR AND EITHER: B) AN EXTERIOR PHOTOCONTROL; C) AN ASTRONOMICAL TIME LOCK, OR; D) AN ENERGY MANAGEMENT CONTROL SYSTEM, SERVING EXTERIOR LIGHTING, EES 150.0 (k) 9.
21. HIGH-EFFICACY LIGHTING FIXTURES TO BE BAYONET TYPE, EES 110.9, 130.0 (c), 150.0 (k) 1. A.
22. RECESSED LIGHTING IN INSULATED CEILINGS TO BE IC (INSULATION CONTACT) UL LISTED AND LABELED. EES 150.0(k)8.A.
23. OPENINGS FOR RECESSED CEILING LIGHTING HOUSINGS TO BE SEALED / CAULKED, 150.0 (k) 8. C.
24. LIGHTING BETWEEN CONDITIONED & UNCONDITIONED SPACES TO BE AT (AIR TIGHT) LABELED, EES 150.0 (k) 8. B.
25. PROVIDE COPY OF SDG&E WORK ORDER FOR ANY MODIFICATIONS TO ELECTRICAL SERVICE.
26. ALARMS SHALL BE INTERCONNECTED WHERE MORE THAN ONE ALARM IS TO BE INSTALLED, EXCEPT WHERE NO CONSTRUCTION IS TAKING PLACE AND/OR WHERE ALTERATIONS DO NOT RESULT IN REMOVAL OF WALL AND/OR CEILING FINISHES, CRC R314.6.3. R315.2.5.
27. ALARMS SHALL BE PERMANENTLY WIRED TO BUILDING POWER SYSTEM AT NEW CONSTRUCTION, WHERE ALTERATIONS RESULT IN REMOVAL OF WALL AND/OR CEILING FINISHES, AND/OR WHERE AN ATTIC OR CRAWLSPACE IS AVAILABLE FOR WIRING, CRC R314.6.3, R315.2.4 EXCEPTION 2.
28. EACH OUTLET IN ALL ROOMS OTHER THAN KITCHEN, BATHROOMS, LAUNDRY ROOM, & GARAGE SHALL BE " AFCI " (ARCH FAULT CIRCUIT INTERRUPTER) CEC 90.2 (A) (1), 100.2 10. 12 (B).
29. SUPPLEMENTAL BONDING TO COLD WATER PIPING IS REQUIRED. CEC 250. 52. 250. 104 (A).
30. DUCTWORK TO BE EXTENDED; EXTENDED LENGTH TO BE LESS THAT 40' IN LENGTH
31. PER **2022** GREEN CODE, MECHANICAL EXHAUST FANS WHICH EXHAUST DIRECTLY FROM BATHROOMS 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 AWHOLE HOUSE VENTILATION SYSTEM, FANS MUST BE CONTROLLED BY A HUMIDISTAT WHICH SHALL BE READILY ACCESSIBLE. HUMIDISTAT CONTROLS SHALL BE CAPABLE OF ADJUSTMENT BETWEEN A RELATIVE HUMIDITY RANGE OF 50 TO 80 PERCENT.
32. AN ELECTRONICALLY SIGNED AND REGISTERED INSTALLATION CERTIFICATE(S) (CF2R) POSTED BY THE INSTALLING CONTRACTOR SHALL BE SUBMITTED TO THE FIELD INSPECTOR DURING CONSTRUCTION AT THE BUILDING SITE. A REGISTERED CF2R WILL HAVE A UNIQUE 21 - DIGIT REGISTRATION NUMBER FOLLOWED BY FOUR ZEROS LOCATED AT THE BOTTOM OF EACH PAGE. THE FIRST 12 DIGITS OF THE NUMBER WILL MATCH THE REGISTRATION NUMBER OF THE ASSOCIATED CF1R. CERTIFICATE OF OCCUPANCY WILL NOT BE ISSUED UNTIL FORMS CF2R IS REVIEWED AND APPROVED.
33. AN ELECTRONICALLY SIGNED AND REGISTERED CERTIFICATE(S) OF FIELD VERIFICATION AND DIAGNOSTIC TESTING (CF3R) SHALL BE POSTED AT THE BUILDING SIGNED AND REGISTERED CERTIFICATE(S) OF FIELD VERIFICATION AND DIAGNOSTIC TESTING (CF3R) SHALL BE POSTED AT THE BUILDING SITE BY A CERTIFIED HERS RATER. A REGISTERED CF3R WILL HAVE A UNIQUE 25 - DIGIT REGISTRATION NUMBER LOCATED AT THE BOTTOM OF EACH PAGE. THE FIRST 20 DIGITS OF THE NUMBER WILL MATCH THE REGISTRATION NUMBER OF THE ASSOCIATED CF2R. CERTIFICATE OF OCCUPANCY WILL NOT BE ISSUED UNTIL CF3R IS REVIEWED AND APPROVED.

SMOKE & Co2 DETECTOR NOTES

1. ALL SMOKE ALARMS SHALL BE LISTED IN ACCORDANCE WITH UL 217 AND INSTALLED IN ACCORDANCE WITH THE PROVISIONS OF THE GOVERNING CRC AND THE HOUSEHOLD FIRE WARNING EQUIPMENT PROVISIONS OF NFPA 72, SYSTEMS AND COMPONENTS SHALL BE CALIFORNIA STATE FIRE MARSHALL LISTED AND APPROVED IN ACCORDANCE WITH CCR, TITLE 19, DIVISION 1 FOR THE PURPOSE FOR WHICH THEY ARE INSTALLED. [SEC. R314.1].
2. SMOKE ALARMS SHALL RECEIVE THEIR PRIMARY POWER FROM THE BUILDING WIRING PROVIDED THAT SUCH WIRING IS SERVED FROM A COMMERCIAL SOURCE AND SHALL BE EQUIPPED WITH A BATTERY BACK-UP. SMOKE ALARMS WITH INTEGRAL STROBES THAT ARENOT EQUIPPED WITH BATTERY BACK-UP SHALL BE CONNECTED TO AN EMERGENCY ELECTRICAL SYSTEM. SMOKE ALARMS SHALL EMIT A SIGNAL WHEN THE BATERIES ARE LOW. WIRING SHALL BE PERMANENT AND WITHOUT A DISCONNECTING SWITCH OTHER THAN AS REQUIRED FOR OVER CURRENT PROTECTION. [SEC. R314.4].
3. WHERE MORE THAN ONE SMOKE ALARM IS REQUIRED TO BE INSTALLED WITHIN AN INDIVIDUAL DWELLING UNIT, THE ALARM DEVICES SHALL BE INTERCONNECTED IN SUCH A MANNER THAT THE ACTIVATION OF ONE ALARM WILL ACTIVATE ALL OF THE ALARMS IN THE IN THE INDIVIDUAL UNIT. [SEC. R314.3].
4. SINGLE- AND MULTIPLE-STATION CARBON MONOXIDE ALARMS SHALL BE LISTED AS COMPLYING WITH THE REQUIREMENTS OF UL 2034. CARBON MONOXIDE DETECTORS SHALL BE LISTED AS COMPLYING WITH THE REQUIREMENTS OF UL 207 5.
5. CARBON MONOXIDE ALARMS SHALL RECEIVE THEIR PRIMARY POWER FROM THE BUILDING WIRING WHERE SUCH WIRING IS SERVED FROM A COMMERCIAL SOURCE AND SHALL BE EQUIPPED WITH A BATTERY BACK-UP. ALARM WIRING SHALL BE DIRECTLY CONNECTED TO THE PERMANENT BUILDING WIRING WITHOUT A DISCONNECTING SWITCH OTHER THAN AS REQUIRED FOR OVER CURRENT PROTECTION. [SEC. R315.1.1].
6. WHERE MORE THAN ONE CARBON MONOXIDE ALARM IS REQUIRED TO BE INSTALLED WITHIN AN INDIVIDUAL DWELLING UNIT, THE ALARM DEVICES SHALL BE INTERCONNECTED IN SUCH A MANNER THAT THE ACTIVATION OF ONE ALARM WILL ACTIVATE ALL OF THE ALARMS IN THE IN THE INDIVIDUAL UNIT. [SEC. R315.2.2].
7. REPLACE EXISTING SMOKE DETECTORS MORE THAN 10 YEARS OLD.

TITLE 24 LIGHTING NOTES

1. **ALL** LIGHTING TO BE HIGH EFFICACY. CENERGYC 150.0(K)1(A).
2. KITCHENS: ALL LUMINAIRES IN KITCHENS SHALL HAVE A MANUAL ON/OFF IN ADDITION TO A VACANCY SENSOR OR DIMMER. UNDER CABINET LIGHTING SHALL BE SWITCHED SEPARATELY.
3. LIGHTING IN BATHROOMS: SHALL HAVE AT LEAST ONE LUMINAIRE CONTROLLED BY A VACANCY SENSOR.
4. OTHER ROOMS: ALL LUMINAIRES SHALL HAVE A MANUAL ON/OFF IN ADDITION TO A VACANCY SENSOR OR DIMMER.
5. OUTDOOR LIGHTING : ALL LUMINAIRES MOUNTED TO THE BUILDING OR TO OTHER BUILDINGS ON THE SAME LOT SHALL BE HIGH EFFICACY LUMINAIRES AND MUST BE CONTROLLED BY A MANUAL ON AND OFF SWITCH, AND CONTROLLED BY ONE OF THESE AUTOMATIC CONTROL TYPES : PHOTOCONTROL AND A MOTION SENSOR, OR ASTRONOMICAL TIME CLOCK, OR ENERGY MANAGEMENT CONTROL SYSTEM (EMCS).



MEP FLOOR PLAN 1/4" = 1'-0"

(MECHANICAL/ELECRICAL/PLUMBING)

PLUMBING NOTES

1. SANITARY WASTE PIPING TO BE SLOPED NOT SHALLOWER THAN 1/4 : 12. CPC 708.0.
2. SHOWER DRAINS MUST BE LISTED AND MARKED PRODUCT(S) FOR SPECIFIC USE. CPC 301.1.2, 411.6, 411.8.
3. POTABLE WATER PLUMBING PIPING, FITTINGS, DEVICES, FIXTURES, SOLDER AND FLUX MUST BE "LEAD FREE" IN COMPLIANCE WITH CALIFORNIA HEALTH AND SAFETY CODE SECTIONS 116875 - 80. CPC 301.0
4. SHOWER AND SHOWER/TUB COMBINATIONS SHALL BE PROVIDED WITH INDIVIDUAL CONTROL VALVES OF THE THERMOSTATIC MIXING OR PRESSURE BALANCE TYPE. (PER UBC SEC.420.0).
5. WATER PIPING CONNECTIONS SHALL USE LEAD-FREE SOLDER
6. ALL NEW WATER CLOSETS SHALL BE **1.28** GAL. / FLUSH MAX. ALL SHOWER HEADS SHALL BE **1.8** GPM. MAX. KITCHEN FAUCETS SHALL BE **1.8** GPM. MAX., LAVATORY FAUCETS **1.2** GPM. MAX.
7. PER CALIFORNIA CIVIL CODE ARTICLE **1101.4** AND CA LGREEN SECTION **301.1**, ALL BUILDING ALTERATIONS TO A SINGLE-FAMILY HOME, EXISTING PLUMBING FIXTURES IN THE ENTIRE HOUSE THAT DO NOT MEET COMPLIANT FLOW RATES NEED TO BE UPGRADED. WATER CLOSETS WITH A FLOW RATE IN EXCESS OF **1.6** GPF WILL NEED TO BE REPLACED WITH WATER CLOSETS WITH A MAXIMUM FLOW RATE OF **1.28** GPF. SHOWERS WITH A FLOW RATE IN EXCESS OF **2.5** GPM WILL NEED TO BE REPLACED WITH SHOWERHEADS WITH A MAXIMUM FLOW RATE OF **1.8** GPM. LAVATORY WITH A FLOW RATE IN EXCESS OF **2.2** GPM WILL NEED TO BE REPLACED WITH LAVATORY WITH A MAXIMUM FLOW RATE OF **1.2** GPM **1.8** GPM FOR KITCHEN FAUCETS).
8. ALL PLUMBING FIXTURES AND FITTINGS WILL BE WATER CONSERVING & WILL COMPLY WITH THE **2022** CGBSC.
9. PER **2022** CGBSC SEC 1.303.2, PLUMBING FIXTURES (WATER CLOSETS AND URINALS) AND FITTINGS (FAUCETS AND SHOWER HEADS) SHALL BE INSTALLED IN ACCORDANCE WITH THE CALIFORNIA PLUMBING CODE (CPC) AND TABLE 1401.1 OF THE CPC.
10. PER **2022** CGBSC SEC 4.506. 1, MECHANICAL EXHAUST FANS WHICH EXHAUST DIRECTLY FROM BATHROOMS SHALL COMPLY WITH THE FOLLOWING :
11. FANS SHALL BE ENERGY STAR COMPLIANT AND BE DUCTED TO TERMITE OUTSIDE THE BUILDING.
12. UNLESS FUNCTIONING AS A COMPONENT OF A WHOLE HOUSE VENTILATION SYSTEM, FANS MUST BE CONTROLLED BY A HUMIDISTAT WHICH SHALL BE READILY ACCESSIBLE. HUMIDISTAT CONTROLS SHALL BE CAPABLE OF ADJUSTMENT BETWEEN A RELATIVE HUMIDITY RANGE OF 50 - 80 %.
13. PERMANENT VACUUM BREAKERS SHALL BE INCLUDED WITH ALL NEW HOSE BIBS.
14. PER **2022** CGBSC, PLUMBING FIXTURES (WATER CLOSETS AND URINALS) AND FITTINGS (FAUCETS AND SHOWERHEADS) SHALL BE INSTALLED IN ACCORDANCE WITH THE CALIFORNIA PLUMBING CODE (CPC).
15. 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
16. GYPSUM BOARD SHALL NOT BE USED WHERE THERE WILL BE DIRECT EXPOSURE TO WATER, OR IN AREAS SUBJECT TO CONTINUOUS HIGH HUMIDITY. CRC R702.3.7.1
17. WATER HEATER SHALL BE SEISMIC STRAPPED OR ANCHORED IN ACCORDANCE WITH CPC 507.2 AS FOLLOWS: **A)** STRAPPING SHALL BE AT POINTS WITHIN THE UPPER ONE THIRD AND LOWER ONE-THIRD OF THE WATER HEATER. **B)** AT THE LOWER POINT, A MINIMUM DISTANCE OF FOUR INCHES SHALL BE MAINTAINED ABOVE THE CONTROLS WITH THE STRAPPING.

LEGEND

- RECESSED LED LIGHT FIXTURE
- WALL MOUNTED LED LIGHT FIXTURE
- WALL MOUNTED MOTION ACTIVATED LED STEP LIGHT FIXTURE
- DUPLEX RECEPTACLE **+15"** (U.O.N.)
- DUPLEX RECEPTACLE 220V
- DUPLEX RECEPTACLE W/ GROUND FAULT INTERRUPTER
- DUPLEX RECEPTACLE W/ GROUND FAULT INTERRUPTOR / WATER PROOF
- SINGLE POLE WALL SWITCH **+48"** (U.O.N.)
- SMOKE DETECTOR
- CARBON MONOXIDE DETECTOR
- CABLE TV JACK
- EXHAUST FAN / LIGHT COMBO
- EXHAUST FAN
- ELECTRICAL SUB-PANEL
- GAS SUPPLY W/ SHUT OFF VALVE
- WATER SUPPLY

PLAN NOTES

1. ALL EXAUST FANS :
   - TO PROVIDE **(5)** AIR CHANGES PER HR. MIN.
   - TO BE **50** CFM MIN. (LAUNDRY & BATHROOMS)
   - TO BE **160** CFM MIN. (KITCHENS - ELECTRIC RANGE)
   - TO BE **280** CFM MIN. (KITCHENS - GAS RANGE)

KEYNOTES

1. RELOCATE (E) 200a ELECTRICAL METER/PANEL
2. (E) GAS METER W/ SHUT OFF VALVE
3. (N) TANKLESS GAS WATER HEATER / 200,000 BTUH / 0.95 UEF / MODEL # NAVIEN - NPE-240A (OR EQUAL)
4. (N) GAS FAU / 100,000 BTUH / 0.80 AFUE / MODEL # LENNOX - SL280UH1100NV60C
5. CENTER +60" OUTLET & TV CONNECTION ON WALL, U.O.N.
6. (N) ELECTRIC MINI SPLIT SYSTEM (2) / 18,000 BTUH / 180 SEER2 / MODEL # DAIKIN - FTXC18AXVJU (OR EQUAL)
7. (N) CONDENSING UNIT FOR MINI SPLIT SYSTEM (1) MODEL # DAIKIN - RXC18AXVJU (OR EQUAL)

0 2 6 12

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

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PROJECT

Addition for:

Marcus Residence

8582 Sugarman Dr.
La Jolla, CA, 92037

SHEET TITLE

ELECTRICAL-MECHANICAL
1st FLOOR PLAN

REVISIONS

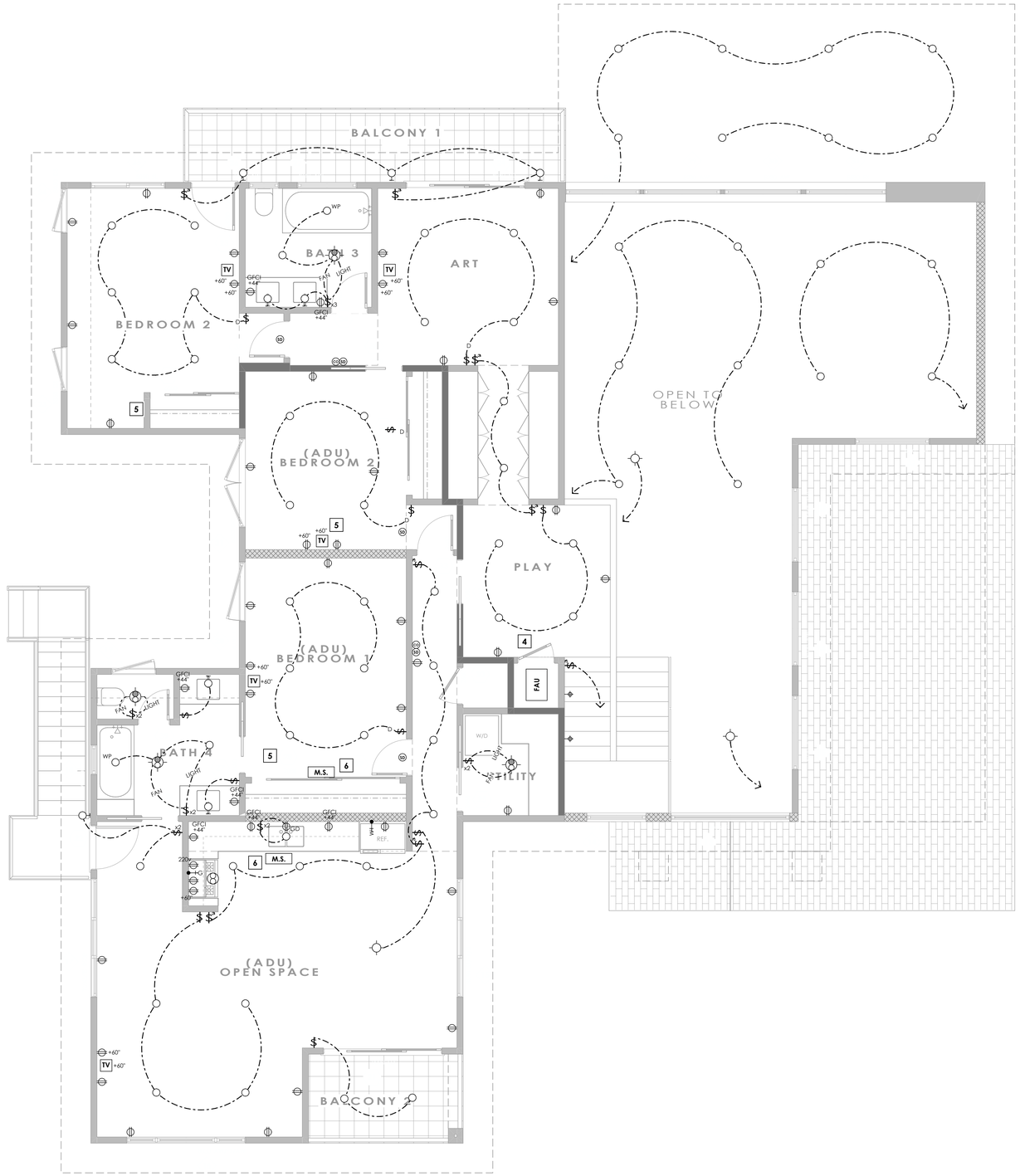
No.	Date	Notes
1	4/??/2026	PLAN CHECK - 1

BUILDING DEPT. PROJECT #: —

PROJECT #: 22504

DATE: 03 April 2026

SHEET #: EM2.0



MEP FLOOR PLAN

1/4" = 1'-0"

(MECHANICAL/ELECRICAL/PLUMBING)

LEGEND

- RECESSED LED LIGHT FIXTURE
- WALL MOUNTED LED LIGHT FIXTURE
- WALL MOUNTED MOTION ACTIVATED LED STEP LIGHT FIXTUR
- DUPLEX RECEPTACLE **+15"** (U.O.N.)
- 220 V DUPLEX RECEPTACLE 220V
- GFCI DUPLEX RECEPTACLE W/ GROUND FAULT INTERRUPTER
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- SINGLE POLE WALL SWITCH **+48"** (U.O.N.)
- SMOKE DETECTOR
- CO CARBON MONOXIDE DETECTOR
- TV CABLE TV JACK
- EXHAUST FAN / LIGHT COMBO
- EXHAUST FAN
- ELECTRICAL SUB-PANEL
- G GAS SUPPLY W/ SHUT OFF VALVE
- HW HEATED SUPPLY

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0 2 6 12

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PROJECT

Addition for:

Marcus Residence

8582 Sugarman Dr.
La Jolla, CA, 92037

SHEET TITLE

ELECTRICAL-MECHANICAL
2nd FLOOR PLAN

REVISIONS

No.	Date	Notes
1	4/??/2026	PLAN CHECK - 1

BUILDING DEPT. PROJECT #: —

PROJECT #: 22504

DATE: 03 April 2026

SHEET #: EM2.1

GENERAL NOTES

1. ALL CONSTRUCTION, INCLUDING MATERIAL AND WORKMANSHIP, SHALL CONFORM TO THE PROVISIONS OF THE **2022 EDITION OF THE "CALIFORNIA BUILDING CODE" (CBC)** WITH THE GOVERNING AGENCY AMENDMENTS, AND STANDARDS REFERENCED THEREIN. WHEREVER CODE OR CALIFORNIA BUILDING CODE (CBC) IS REFERENCED IN THE FOLLOWING GENERAL NOTES OR OTHER NOTE SECTIONS, IT SHALL IMPLY THE CBC CODE WITH GOVERNING AGENCY AMENDMENTS.
2. ALL ASTM STANDARDS LISTED HEREIN, SHALL BE AS REFERENCED IN THE LATEST ISSUE OF THE ANNUAL BOOK OF STANDARDS OF THE AMERICAN SOCIETY FOR TESTING AND MATERIALS.
3. THE CONTRACTOR SHALL VERIFY ALL DIMENSIONS, ELEVATIONS AND SITE CONDITIONS BEFORE STARTING WORK. THE DESIGNER AND STRUCTURAL ENGINEER SHALL IMMEDIATELY BE NOTIFIED, IN WRITING, OF ANY DISCREPANCIES.
4. ALL OMISSIONS AND/OR CONFLICTS BETWEEN THE VARIOUS ELEMENTS OF THE WORKING DRAWINGS AND SPECIFICATIONS SHALL BE BROUGHT TO THE ATTENTION OF THE FIELD INSPECTOR, AND A SOLUTION GIVEN BY, THE DESIGNER AND STRUCTURAL ENGINEER PRIOR TO PROCEEDING WITH ANY WORK AFFECTED BY THE CONFLICT OR OMISSION.
5. IN CASE OF CONFLICT, NOTES AND DETAILS OF THESE STRUCTURAL DRAWINGS SHALL TAKE PRECEDENCE OVER THE "GENERAL NOTES" AND/OR "STANDARD DETAILS". TYPICAL DETAILS SHALL BE USED WHENEVER APPLICABLE.
6. IF A SPECIFIC DETAIL IS NOT SHOWN FOR ANY PART OF THE WORK, THE CONSTRUCTION SHALL BE THE SAME AS FOR SIMILAR WORK.
7. WORKING DIMENSIONS SHALL NOT BE SCALED FROM PLANS, SECTIONS OR DETAILS ON THESE STRUCTURAL DRAWINGS.
8. THE CONTRACTOR SHALL PROVIDE AND MAINTAIN ADEQUATE ERECTION SHORING AND BRACING AS REQUIRED FOR STABILITY OF THE STRUCTURE DURING ALL PHASES OF CONSTRUCTION. THESE DRAWINGS REPRESENT THE FINISHED STRUCTURE AND DO NOT INDICATE THE METHOD OF CONSTRUCTION.
9. PIPES, DUCTS, SLEEVES, OPENINGS, POCKETS, CHASES, BLOCK-OUTS, ETC., SHALL NOT BE PLACED IN SLABS, BEAMS, GIRDERS, COLUMNS, WALLS, FOUNDATIONS, ETC., NOR SHALL ANY STRUCTURAL MEMBER BE CUT FOR SUCH ITEMS, UNLESS SPECIFICALLY DETAILED ON THESE STRUCTURAL DRAWINGS. (IF ANY PIPES, DUCTS, ETC., DO OCCUR, THAT ARE NOT SHOWN ON THESE STRUCTURAL DRAWINGS, THE DESIGNER AND STRUCTURAL ENGINEER SHALL BE NOTIFIED.) SEE PARAGRAPH 4, ABOVE.
10. ANCHOR BOLTS OR INSERTS FOR EQUIPMENT ANCHORAGE OR INSTALLATION SHALL BE DESIGNED FOR SEISMIC CATEGORY D BY A CIVIL ENGINEER OR STRUCTURAL ENGINEER REGISTERED IN THE STATE OF CALIFORNIA AND SHALL BE SHOWN ON THE MECHANICAL OR ELECTRICAL SHOP DRAWINGS.
11. THE CONTRACTOR SHALL ASSUME SOLE AND COMPLETE RESPONSIBILITY FOR JOB SITE CONDITIONS DURING THE COURSE OF CONSTRUCTION OF THIS PROJECT, INCLUDING SAFETY OF ALL PERSONS AND PROPERTY. THIS REQUIREMENT SHALL APPLY CONTINUOUSLY AND NOT BE LIMITED TO NORMAL WORKING HOURS. THE CONTRACTOR SHALL DEFEND, INDEMNIFY, AND HOLD THE STRUCTURAL ENGINEER FREE AND HARMLESS FROM ALL CLAIMS, DEMANDS AND ALL LIABILITY, REAL OR ALLEGED, IN CONNECTION WITH THE PERFORMANCE OF WORK ON THIS PROJECT, EXCEPT FOR LIABILITY ARISING FROM THE SOLE NEGLIGENCE OF THE STRUCTURAL ENGINEER.
12. IF ANY SUBSTITUTION IS PROPOSED BY THE CONTRACTOR, NEW CALCULATIONS MAY HAVE TO BE PREPARED, THE DETAILS MAY HAVE TO BE ALTERED, AND NEW DRAWINGS MAY HAVE TO BE SUBMITTED TO THE BUILDING DEPARTMENT. THE CONTRACTOR SHALL PAY THE STRUCTURAL ENGINEER'S FEES TO ALTER THE APPROVED PLANS. THE CONTRACTOR SHALL ALSO PROCESS THE REVISED PLANS REFLECTING ALL SUBSTITUTIONS THROUGH THE APPROPRIATE OFFICE OF ALL GOVERNING AGENCIES.

WOOD NOTES

1. SAWN WOOD MEMBERS SHALL BE DOUGLAS FIR-LARCH (U.N.O.), CONFORM TO THE "2022 CALIFORNIA BUILDING CODE" (CBC) SEC. 2303, AND SHALL BE GRADE MARKED BY AN ACCREDITATION BODY THAT COMPLIES WITH DOC PS 20 OR EQUIVALENT.
2. WOOD GRADES, U.N.O., SHALL BE AS FOLLOWS:

MEMBERS	GRADE
WALLS 2 X 4 (8'-0")	CONSTRUCTION
WALLS 2 X 4 (9'-1" TO 12'-0")	#2
WALLS 2 X 6 (12'-0" TO 16'-0")	#2
STRUCTURAL JOISTS AND PLANKS (2x)	#1
BEAMS AND STRINGERS (4x8 & WIDER)	#1
POSTS AND TIMBERS	#1
TOP PLATE & BOTTOM PLATE	MATCH WALL MEMBERS

3. ALL WOOD THAT REST ON EXTERIOR FOUNDATION WALLS AND ARE LESS THAN 8" FROM EXPOSED EARTH, ALL WOOD ATTACHED DIRECTLY TO INTERIOR OR EXTERIOR MASONRY OR CONCRETE WALLS BELOW GRADE, AND ALL WOOD SLEEPERS AND SILLS ON CONCRETE THAT IS IN DIRECT CONTACT WITH EARTH SHALL BE PRESERVATIVE-TREATED DOUGLAS FIR.
4. ALL SILLS OR PLATES BEARING ON CONCRETE OR MASONRY SHALL HAVE ANCHOR BOLTS:
   A. NOT LESS THAN ½" Ø.
   B. EMBEDDED AT LEAST 7" INTO CONCRETE OR MASONRY.
   C. SPACED NOT MORE THAN 6' APART.
   D. PLACED A MIN. OF 5" AND A MAX. OF 12" FROM EACH END.
   E. A MINIMUM OF TWO BOLTS PER PIECE.
   F. SIZE AND SPACED AS SHOWN ON THE DRAWINGS.
5. WOOD STRUCTURAL PANELS SHALL CONFORM TO THE "2022 CALIFORNIA BUILDING CODE" (CBC) SEC. 2303, AND SHALL CONFORM TO THE REQUIREMENTS FOR THEIR TYPE IN DOC PS 1 OR PS2. EACH PANEL SHALL BE IDENTIFIED FOR GRADE AND GLUE TYPE BY THE TRADEMARKS OF AN APPROVED TESTING AND GRADING AGENCY. WOOD STRUCTURAL PANELS THAT ARE PERMANENTLY EXPOSED IN OUTDOOR APPLICATIONS SHALL BE OF EXTERIOR TYPE (U.N.O.).

   ALL WOOD STRUCTURAL PANELS SHALL BE OF THE FOLLOWING GRADES AND PANEL IDENTIFICATION INDEXES (U.N.O. ON DRAWINGS):

USE	GRADE	PANEL IDENTIFICATION INDEX
ROOF SHEATHING	CDX	24/0
FLOOR SHEATHING	APA	48/24
SHEAR PANELS	CDX (U.N.O.)	24/0

6. GLU TIMBERS SHALL BE MANUFACTURED AND IDENTIFIED AS REQUIRED IN AITC A190.1 AND ASTM D 3737, USING DOUGLAS FIR INDUSTRIAL APPEARANCE GRADE WOOD AND EXTERIOR GLUE WITH INTENDED DRY USE CONDITION AND USE SHALL BE AS FOLLOWS:

COMBINATION NO.	USE
24F-V4	SIMPLE SPAN
24F-V8	CANTILEVERS

7. FRAMING ANCHORS, POST CAPS, COLUMN BASES, AND OTHER CONNECTORS SPECIFIED ON DRAWINGS SHALL BE AS MANUFACTURED BY "SIMPSON COMPANY" OR AN ENGINEER-APPROVED EQUAL.
8. BARS, PLATES, UNHEADED BOLTS, WASHERS AND DRIFT BOLTS SHALL CONFORM TO THE REQUIREMENTS OF ASTM A36.
9. BOLTS SHALL CONFORM TO ASTM A307. BOLTS IN PRESSURE TREATED WOOD SHALL BE HOT DIPPED ZINC-COATED GALVANIZED STEEL PER ASTM A 153 OR MECHANICALLY DEPOSITED ZINC COATING WITH WEIGHTS PER ASTM B 695, CLASS 55.
10. NUTS SHALL CONFORM TO THE REQUIREMENTS OF ASTM A563, GRADE A.

WOOD NOTES (cont.)

11. ALL BOLT HEADS, NUTS, AND LAG SCREWS BEARING ON WOOD SHALL HAVE CUT WASHERS UNLESS NOTED.
12. BOLT HOLES SHALL BE DRILLED A MAXIMUM OF 1/16" LARGER THAN THE NOMINAL BOLT DIAMETER. BOLT HOLES SHALL BE ACCURATELY ALIGNED AND NOT FORCIBLY DRIVEN.
13. SPECIAL CONNECTORS FOR CONNECTING WOOD OR GLUED LAMINATED TIMBER SHALL BE FABRICATED FROM STEEL CONFORMING TO ASTM A36. WELDS SHALL CONFORM TO THE REQUIREMENTS OF AWS D1.1-85.
14. DIAPHRAGM NAILING SHALL CONFORM TO CBC TABLE 2306.2.1 AND 2306.2.2, AND TABLE 2306.3.1 AND 2306.3.2 WITH NOMENCLATURE DEFINED AS FOLLOWS:

    BN = NAILING AT DIAPHRAGM BOUNDARIES, CONTINUOUS PANEL EDGES, AND AT EDGES OF OPENINGS.
    EN = EDGE NAILING
    FN = FIELD NAILING
15. WHERE DIAPHRAGM BLOCKING IS SPECIFIED, USE 2 X 4 FLAT BLOCKING (WITH "Z" CLIPS). (U.N.O.)
16. SIMPLE SPAN WOOD MEMBERS, NOT SHOP CAMBERED, SHALL BE ERECTED WITH THE NATURAL CAMBER UP. FOR CANTILEVERED WOOD MEMBERS, CONSULT WITH ENGINEER.
17. LEAD HOLES FOR LAG SCREWS IN WOOD SHALL BE BORED AS FOLLOWS: FOR SHANK: SAME DIAMETER AND LENGTH AS UNTHREADED SHANK. FOR THREADED PORTION: 60% TO 75% OF SHANK DIAMETER & LENGTH EQUAL TO THE THREADED PORTION.
18. SPECIAL PROVISIONS FOR SHEAR WALLS WITH PLYWOOD ON BOTH SIDES; WHERE SPECIFICALLY INDICATED ON PLANS
    A. SILL PLATE SHALL BE 3x6 P.T. D.F.
    B. ALL STUDS AND BLOCKING AT PANEL EDGES SHALL BE 4x6.
    C. ALL OTHER INTERMEDIATE STUDS SHALL BE 3x6 @ 16"O.C.
    D. END POSTS SHALL BE AS SPECIFIED ON THE DRAWINGS.
    E. BOTH VERTICAL AND HORIZONTAL INTERIOR PANEL JOINTS ON OPPOSITE SIDES OF THE WALL SHALL BE STAGGERED.
    F. THE PLYWOOD ON ONE SIDE MUST BE NAILED BEFORE THE FRAME INSPECTION. THE PLYWOOD ON THE OTHER SIDE MUST BE INSTALLED AND INSPECTED PRIOR TO INSTALLATION OF WALL SURFACE COVERING.
    G. NO PENETRATIONS OR NOTCHES ARE PERMITTED OTHER THAN THOSE SHOWN ON THE STRUCTURAL DRAWINGS.
19. PROVIDE DOUBLE STUD TO SUPPORT ALL BEAMS UNLESS POSTS ARE SPECIFIED.
20. DOUBLE BLOCK UNDER ALL POSTS.
21. DOUBLE JOIST UNDER ALL PARALLEL PARTITIONS UNLESS OTHERWISE SPECIFIED.
22. TOP PLATES OF ALL WOOD STUD WALLS SHALL BE 2-2 X (SAME WIDTH AS STUDS), LAP 48" (MIN.) WITH AT LEAST 12-16d NAILS AT EACH SIDE OF LAP AND NOT MORE THAN 12" BETWEEN.
23. CUTTING, NOTCHING, OR DRILLING OF BEAMS OR JOISTS SHALL BE PERMITTED ONLY AS DETAILED OR APPROVED BY THE ENGINEER.
24. MOISTURE CONTENT OF WOOD AT TIME OF PLACEMENT SHALL NOT EXCEED 19%.
25. PROVIDE ST6224 STRAPS ACROSS ALL DISCONTINUOUS TOP PLATES.
26. THE NUMBER AND SIZE OF FASTENERS CONNECTING WOOD MEMBERS SHALL NOT BE LESS THAN THE FOLLOWING TABLE.

* ALL NAILS TO BE COMMONS (U.N.O.). ALL NAILS IN PRESSURE TREATED WOOD SHALL BE HOT DIPPED ZINC-COATED GALVANIZED STEEL PER ASTM A 153.

* WHENEVER POSSIBLE NAILS DRIVEN PERPENDICULAR TO THE GRAIN SHALL BE USED INSTEAD OF TOENAILS.

* DIAPHRAGM SHEATHING NAILS OR OTHER APPROVED SHEATHING CONNECTORS SHALL BE DRIVEN SO THAT THEIR HEAD OR CROWN IS FLUSH WITH THE SURFACE OF THE SHEATHING.

CONCRETE NOTES

1. CONCRETE SHALL CONFORM TO THE REQUIREMENTS OF ACI 318-19 CHAPTER 19. THE MINIMUM 28-DAY CYLINDER STRENGTH SHALL BE AS FOLLOWS:

FOUNDATIONS:	STRENGTH:
SLAB ON GRADE & RAISED WOOD FLOOR	2500 PSI
CAISSONS / GRADE BEAMS	3000 PSI
ALL OTHER CONC. (U.N.O.)	2500 PSI

2. WHERE CONCRETE STRENGTH IS 3000 PSI OR GREATER, CYLINDER TESTS ARE REQUIRED PER ACI 318-19 26.12.3.
3. PORTLAND CEMENT SHALL CONFORM TO THE REQUIREMENTS OF ASTM C150, TYPE II.
4. AGGREGATES SHALL CONFORM TO THE REQUIREMENTS OF ASTM C33 FOR NORMAL WEIGHT CONCRETE AND ASTM C330 FOR LIGHTWEIGHT CONCRETE.
5. ADMIXTURES SHALL BE USED IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS AND APPROVED BY THE ENGINEER OF RECORD.
6. READY-MIX CONCRETE SHALL BE MIXED AND DELIVERED IN ACCORDANCE WITH THE REQUIREMENTS OF "STANDARD SPECIFICATION FOR READY-MIXED CONCRETE" ASTM C94.
7. MINIMUM CONCRETE COVER (IN INCHES) FOR REINFORCING STEEL IN NONPRESTRESSED CAST-IN-PLACE CONCRETE SHALL BE AS FOLLOWS, U.N.O:

LOCATION	MIN. COVER (INCHES)
A. CAST AGAINST AND PERMANENTLY EXPOSED TO EARTH	3"
B. FORMED SURFACES EXPOSED TO EARTH OR WEATHER:	
#6 AND LARGER BAR	2"
#5 BARS, 5/8 INCH WIRE, AND SMALLER	1 1/2"

8. ALL SLEEVES THROUGH BEAMS, GIRDERS AND FOUNDATION WALLS SHALL BE INSTALLED AND SECURED IN POSITION PRIOR TO PLACING CONCRETE. EXCEPT AS SHOWN ON STRUCTURAL DRAWINGS, SLEEVING SHALL NOT BE PERMITTED UNLESS APPROVED BY THE DESIGNER AND STRUCTURAL ENGINEER.
9. SLEEVES, PIPES, OR CONDUITS SHALL NOT BE PLACED THROUGH CONTINUOUS OR SPREAD FOOTINGS, GRADE BEAMS, PILE CAPS, OR TIE BEAMS, UNLESS SPECIFICALLY DETAILED BY THE ENGINEER.
10. CONDUIT SHALL NOT BE PLACED IN ANY CONCRETE SLAB LESS THAN 3-1/2 INCHES THICK. IF CONDUIT IS PLACED IN CONCRETE SLAB, ITS OUTSIDE DIAMETER SHALL NOT BE GREATER THAN 1/3 OF THE SLAB THICKNESS. THE MINIMUM CLEAR DISTANCE BETWEEN CONDUITS SHALL BE 3 INCHES.
11. ALL EXPOSED CORNERS SHALL BE CHAMFERED 3/4 INCH U.N.O.
12. REFER TO ARCHITECTURAL DRAWINGS FOR MOLDS, GROOVES, ORNAMENTS, CLIPS, OR GROUNDS REQUIRED TO BE CAST IN THE CONCRETE AND FOR EXTENT OF DEPRESSIONS, CURBS, AND RAMPS.
13. ALL VERTICAL SURFACES OF CONCRETE ABOVE FINISHED GRADE SHALL BE FORMED.
14. REFERENCE ARCH. DRAWINGS AND SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS DUE TO ARCHITECTURAL C.I.P. CONCRETE.

NAILING SCHEDULE

2022 CBC TBL. 2304.10.2

1. BLK'G BTWN. CEILING JOISTS, RAFTERS OR TRUSSES TO TOP PLATE OR OTHER FRAMING BELOW, EACH END-TOENAIL — 3-8d
2. BLK'G BTWN. RAFTERS OR TRUSS NOT AT THE WALL TOP PLATE, TO RAFTER OR TRUSS, EACH END-TOENAIL — 2-8d
3. FLAT BLK'G TO TRUSS AND WEB FILLER, FACE NAIL — 16d @ 6" O.C.
2. CEILING JOISTS TO TOP PLATE, TOENAIL — 3-8d
3. CEILING JOIST NOT ATTACHED TO PARALLEL RAFTER, LAPS OVER PARTITIONS (NO THRUST), FACE NAIL — 3-16d
4. CEILING JOIST ATTACHED TO PARALLEL RAFTER (HEEL JOINT), FACE NAIL — PER TABLE 2308.7.3.1
5. COLLAR TIE TO RAFTER, FACE NAIL — 3-10d
6. RAFTER OR ROOF TRUSS TO TOP PLATE, TOENAIL — 3-10d
7. ROOF RAFTERS TO RIDGE, VALLEY OR HIP RAFTERS OR ROOF RAFTER TO 2-INCH RIDGE BEAM, TOENAIL — 3-10d
8. STUD TO STUD (NOT AT BRACED WALL PANELS), FACE NAIL — 16d @ 24"O.C.
9. STUD TO STUD AND ABUTTING STUDS AT INTERSECTING WALL CORNERS (AT BRACED WALL PANELS), FACE NAIL — 16d @ 16" O.C.
10. BUILT-UP HEADER (2" TO 2" HEADER), FACE NAIL — 16d @ 16"O.C.
11. CONTINUOUS HEADER TO STUD, TOE NAIL — 4-8d
12. TOP PLATE TO TOP PLATE, FACE NAIL — 16d @ 16" O.C.
13. TOP PLATE TO TOP PLATE, AT END JOINTS, EACH SIDE OF END JOINT, FACE NAIL (MINIMUM 24" LAP SPLICE LENGTH EACH SIDE OF END JOINT) — 8-16d
14. BOTTOM PLATE TO JOIST, RIM JOIST, BAND JOIST OR BLOCKING (NOT AT BRACED WALL PANELS), FACE NAIL — 16d @ 16" O.C.
15. BOTTOM PLATE TO JOIST, RIM JOIST, BAND JOIST OR BLOCKING AT BRACED WALL PANELS, FACE NAIL — 2-16d @ 16" O.C.
16. STUD TO TOP OR BOTTOM PLATE, TOENAIL — 4-8d
17. TOP PLATES, LAPS AT CORNERS AND INTERSECTIONS, FACE NAIL — 2-16d
18. 1" BRACE TO EACH STUD AND PLATE, FACE NAIL — 2-8d
19. 1" x 6" SHEATHING TO EACH BEARING, FACE NAIL — 2-8d
20. 1" x 8" AND WIDER SHEATHING TO EACH BEARING, FACE NAIL — 3-8d
21. JOIST TO SILL, TOP PLATE, OR GIRDER, TOENAIL — 3-8d
22. RIM JOIST, BAND JOIST, OR BLOCKING TO TOP PLATE, SILL OR OTHER FRAMING BELOW, TOENAIL — 8d @ 6" O.C.
23. 1" x 6" SUBFLOOR OR LESS TO EACH JOIST, FACE NAIL — 2-8d
24. 2" SUBFLOOR TO JOIST OR GIRDER, FACE NAIL — 2-16d
25. 2" PLANKS (PLANK & BEAM - FLOOR & ROOF), EACH BEARING, FACE NAIL — 2-16d
26. BUILT-UP GIRDERS AND BEAMS, 2" LUMBER LAYERS, FACE NAIL AT TOP AND BOTTOM STAGGERED ON OPPOSITE SIDES — 20d @ 32" O.C.
27. LEDGER STRIP SUPPORTING JOISTS OR RAFTERS, FACE NAIL AT EACH JOIST OR RAFTER — 3-16d
28. JOIST TO BAND JOIST OR RIM JOIST, END NAIL — 3-16d
29. BRIDGING OR BLOCKING TO JOIST, RAFTER OR TRUSS, TOENAIL AT EACH END — 2-8d

WOOD STRUCTURAL PANELS, SUBFLOOR, ROOF AND INTERIOR WALL SHEATHING TO FRAMING AND PARTICLEBOARD WALL SHEATHING TO FRAMING

30. 3/8"-1/2", 6" SPACING AT EDGES, 12" AT INTERMEDIATE SUPPORTS — 6d
31. 15/32"-3/4", 6" SPACING AT EDGES, 12" AT INTERMEDIATE SUPPORTS — 8d
32. 7/8"-1 1/4", 6" SPACING AT EDGES, 12" AT INTERMEDIATE SUPPORTS — 10d

OTHER EXTERIOR WALL SHEATHING

33. ½" FIBERBOARD SHEATHING, 3" SPACING AT EDGES, 6" SPACING AT INTERMEDIATE SUPPORTS — 1 ½" x 0.120" GALV. ROOFING NAIL
34. 25/32" FIBERBOARD SHEATHING, 3" SPACING AT EDGES, 6" SPACING AT INTERMEDIATE SUPPORTS — 1 ¾" x 0.120" GALV. ROOFING NAIL

WOOD STRUCTURAL PANELS, COMBINATION SUBFLOOR UNDERLAYMENT TO FRAMING

35. ¾" AND LESS, 6" SPACING AT EDGES, 12" SPACING AT INTERMEDIATE SUPPORTS — 8d
36. 7/8"-1", 6" SPACING AT EDGES, 12" SPACING AT INTERMEDIATE SUPPORTS — 8d
37. 1 1/8"-1 1/4", 6" SPACING AT EDGES, 12" SPACING AT INTERMEDIATE SUPPORTS — 10d

PANEL SIDING TO FRAMING

38. ½" OR LESS, 6" SPACING AT EDGES, 12" SPACING AT INTERMEDIATE SUPPORTS — 6d
39. 5/8", 6" SPACING AT EDGES, 12" SPACING AT INTERMEDIATE SUPPORTS — 8d
40. ¼", 6" SPACING AT EDGES, 12" SPACING AT INTERMEDIATE SUPPORTS — 4d (FINISH)
41. 3/8", 6" SPACING AT EDGES, 12" SPACING AT INTERMEDIATE SUPPORTS — 6d (FINISH)

REINFORCING STEEL NOTES

1. BAR REINFORCEMENT SHALL CONFORM TO THE REQUIREMENTS OF ASTM A615. THE FOLLOWING GRADES SHALL BE USED:
   GRADE 40 - #4 AND SMALLER
   GRADE 60 - #5 AND LARGER
2. DETAILS OF REINFORCEMENT SHALL CONFORM TO THE REQUIREMENTS OF ACI 318-19 CHAPTER 25 AND OTHER SECTIONS ACCORDING TO APPLICATION.
3. LAPS AT BAR SPLICES IN CONCRETE CONSTRUCTION SHALL BE AS FOLLOWS:

BAR SIZE	TOP BARS (CLASS B)		OTHER THAN TOP BARS (CLASS B)	
	f'c = 2500 PSI	f'c = 3000 PSI	f'c = 2500 PSI	f'c = 3000 PSI
# 5	30	27	24	21
# 6	35	33	28	25
# 7	40	38	32	29
# 8	45	43	36	33

4. LAPS AT BAR SPLICES IN MASONRY CONSTRUCTION SHALL BE 48 BAR DIAMETERS BUT NOT LESS THAN 2'-0".
5. VERTICAL REINFORCEMENT SHALL BE TIED OR OTHERWISE FIXED IN POSITION AT THE TOP AND BOTTOM AND AT INTERMEDIATE LOCATIONS, SPACED NOT GREATER THAN 192 BAR DIAMETERS.
6. WELDED STEEL WIRE FABRIC REINFORCEMENT SHALL CONFORM TO ASTM A185. LAPS OF WELDED STEEL WIRE FABRIC AT SPLICES SHALL BE NOT LESS THAN 1.2 INCHES.
7. WALLS, PILASTERS, AND COLUMNS SHALL BE DOWELED TO THE SUPPORTING FOOTINGS WITH REINFORCEMENT OF THE SAME SIZE, GRADE AND AT THE SAME SPACING AS THE VERTICAL REINFORCEMENT IN THE WALLS, PILASTERS, OR COLUMNS (U.N.O.).
8. BAR SUPPORTS SHALL BE PROVIDED IN ACCORDANCE WITH THE PROVISIONS OF "BAR SUPPORT SPECIFICATIONS" AS CONTAINED IN THE LATEST EDITION OF THE "MANUAL OF STANDARD PRACTICE" BY THE CONCRETE REINFORCING STEEL INSTITUTE (CRSI).
9. REINFORCING STEEL DETAILING, BENDING AND PLACING SHALL BE IN ACCORDANCE WITH THE CONCRETE REINFORCING STEEL INSTITUTE "MANUAL OF STANDARD PRACTICE", LATEST EDITION.
10. ALL REINFORCEMENT SHALL BE SECURELY TIED IN PLACE BEFORE PLACING CONCRETE OR GROUT.
11. WELDING OF REINFORCING BARS SHALL CONFORM TO "STRUCTURAL WELDING CODE-REINFORCING STEEL," ANSI/AWS D1.4 OF THE AMERICAN WELDING SOCIETY.
12. WELDING OF ALL REINFORCING STEEL TO STRUCTURAL STEEL SHALL BE LIMITED TO THOSE AREAS SPECIFICALLY SHOWN ON THE PLANS. ANY OTHER WELDING SHALL REQUIRE THE APPROVAL OF THE GOVERNING AGENCY, FIELD INSPECTOR, AND STRUCTURAL ENGINEER.
13. WELDING OF CROSSING BARS AND TACK WELDING OF REINFORCEMENT SHALL NOT BE PERMITTED.
14. ALL WELDS SHALL, IN ADDITION, TO ALL THE SPECIFICATIONS LISTED ABOVE, COMPLY WITH THE REQUIREMENTS OF THE 15TH EDITION OF THE "MANUAL OF STEEL CONSTRUCTION - ALLOWABLE STRESS DESIGN" AS PUBLISHED BY THE AMERICAN INSTITUTE OF STEEL CONSTRUCTION.

MASONRY NOTES

1. MASONRY UNITS SHALL CONFORM TO ASTM C90 HOLLOW CORE, NORMAL WEIGHT, f'm= 1500 psi (U.N.O.).
   ALL UNITS SHALL BE SAMPLED AND TESTED IN ACCORDANCE WITH ASTM C140.
2. MORTAR SHALL BE TYPE S AND SHALL CONFORM TO ASTM C270 AND ARTICLES 2.1 & 2.6A OF TMS 602 / ACI 530.1. THE THICKNESS OF THE BED JOINTS SHALL NOT EXCEED ⅝".
3. GROUT SHALL CONFORM TO ASTM C476, OR CONFORM TO THE REQUIREMENTS OF ARTICLE 2.2 OF TMS 602 / ACI 530.1 AND THE COMPRESSIVE STRENGTH OF GROUT SHALL BE DETERMINED IN ACCORDANCE WITH ASTM C1019. WHEN GROUT CONFORMS TO ASTM C476, THE GROUT SHALL BE SPECIFIED BY PROPORTION REQUIREMENTS OR PROPERTY REQUIREMENTS. THE MINIMUM COMPRESSIVE STRENGTH OF GROUT SHALL BE 2,000 PSI.
4. PORTLAND CEMENT SHALL CONFORM TO THE REQUIREMENTS OF ASTM C150. BLENDED CEMENT SHALL CONFORM TO THE REQUIREMENTS OF ASTM C595. MASONRY CEMENT SHALL CONFORM TO THE REQUIREMENTS OF ASTM C91. MORTAR CEMENT SHALL CONFORM TO THE REQUIREMENTS OF ASTM C1329.
5. COARSE AGGREGATE SHALL CONFORM TO ASTM C404. COARSE AGGREGATE SHALL BE PEA GRAVEL.
6. FINE AGGREGATE SHALL CONFORM TO ASTM C144.
7. LIME SHALL BE HYDRATED LIME AND CONFORM TO ASTM C207, TYPE S.
8. ADMIXTURES SHALL BE USED IN ACCORDANCES WITH THE MANUFACTURER'S RECOMMENDATIONS AND APPROVED BY THE ENGINEER OF RECORD.

STRUCTURAL STEEL NOTES

1. THE DESIGN, FABRICATION AND ERECTION OF STRUCTURAL STEEL SHALL BE IN ACCORDANCE WITH AISC 360-16 (15TH EDITION).
2. ALL STRUCTURAL STEEL TO BE THE FOLLOWING (U.N.O.):
   W SHAPES: ASTM A992, Fy= 50ksi
   HSS SHAPES (RECTANGULAR): ASTM A500, GRADE B, Fy= 46ksi
   HSS SHAPES (ROUND): ASTM A500, GRADE B, Fy= 42ksi
   PIPE SHAPES: ASTM A53, GRADE B, Fy= 35ksi
   ALL OTHER STEEL: ASTM A36, Fy= 36ksi
3. ALL STRUCTURAL WELDS TO BE THE FOLLOWING:
   E70 SERIES-TYP.
   E90 SERIES FOR A615 GRADE 60 REINFORCING BARS

   SHOP WELDING TO BE DONE IN AN APPROVED FABRICATOR'S SHOP.
   FIELD WELDING TO HAVE CONTINUOUS SPECIAL INSPECTION.

DESIGN CRITERIA

DESIGN LOADS

ROOF
METAL+SOLAR, 5 psf MAX.
TOTAL DEAD LOAD: 15.0 psf
LIVE LOAD: 20.0 psf
TOTAL LOAD: 35.0 psf

DECK
DEX-O-TEX OR 2x, 14 psf MAX. W/ STUCCO: 14.0 psf
TOTAL DEAD LOAD: 60.0 psf
LIVE LOAD: 14.0 psf
TOTAL LOAD:

FLOOR
WOOD, 4 psf MAX.
TOTAL DEAD LOAD: 14.0 psf
LIVE LOAD: 40.0 psf
TOTAL LOAD: 54.0 psf

EXTERIOR WALL (STUCCO) 16.0 psf
INTERIOR WALL 7.0 psf

LATERAL DESIGN COEFFICIENTS

SEISMIC LOAD: CHAPTER 12.8 OF ASCE 7-16 EQUIVALENT LATERAL FORCE PROCEDURE
RISK CATEGORY: II
I_e = 1.0 SEISMIC IMPORTANCE FACTOR
SEISMIC DESIGN CATEGORY: D-DEFAULT
SITE CLASS: D
S_s = 1.37 S_1 = 0.479
S_{DS} = 1.096 S_{D1} = 0.576
R= 6.5 - WOOD SHEARWALLS
SEISMIC BASE SHEAR $V = \frac{S_{DS}}{R} * I W$

WIND LOAD: CHAPTER 28 OF ASCE 7-16: ENVELOPE PROCEDURE
EXPOSURE CATEGORY: C
I_W = 1.0 WIND IMPORTANCE FACTOR
V_{3s} = 96 MPH
K_{zt} = 1.0 TOPOGRAPHIC FACTOR
K_d = 0.85 DIRECTIONALITY FACTOR
K_h = 0.85 @ 15 MEAN HEIGHT

SOIL DESIGN PROPERTIES

ALLOWABLE BEARING PRESSURE, q= 1500 psf
EXISTING NATURAL SOIL PER 2022 CBC TABLE 1806.2

SHEARWALL SCHEDULE - 2022 CBC (SEE NOTES 1-13)

SYMBOL	SHEAR (PLF)	MATERIAL AND NAILING DESCRIPTION	ANCHOR BOLT SCHED. & SILL PLATE SIZE (SEE NOTES 9-12)	BOTTOM PLATE SIZE & NAILING	SHEAR TRANSFER @ RIM JOIST/BLK'G (SEE NOTE 15)
1	260	3/8" CDX PLYWOOD W/ 8d @ 6"o.c. E.N. / 12"o.c. F.N.	2x P.T. SILL ₵ W/ ½"Ø A.B. @ 36" O/C OR ⅝"Ø A.B. @ 48" O/C	2x PLATE W/ 16d @ 6" O/C (SEE NOTE 16)	A35 OR LTP4 @ 24" O/C
2	350	3/8" CDX PLYWOOD W/ 8d @ 4"o.c. E.N. / 12"o.c. F.N.	2x P.T. SILL ₵ W/ ½"Ø A.B. @ 24" O/C OR ⅝"Ø A.B. @ 32" O/C	2x PLATE W/ 16d @ 4" O/C (SEE NOTE 16)	A35 OR LTP4 @ 16" O/C
3	490	3/8" CDX PLYWOOD W/ 8d @ 3"o.c. E.N. / 12"o.c. F.N. (SEE NOTE 14)	2x P.T. SILL ₵ W/ ½"Ø A.B. @ 16" O/C OR ⅝"Ø A.B. @ 24" O/C	2x PLATE W/ 16d @ 3" O/C (SEE NOTE 16)	A35 OR LTP4 @ 12" O/C
4	640	3/8" CDX PLYWOOD W/ 8d @ 2"o.c. E.N. / 12"o.c. F.N. (SEE NOTE 14)	2x P.T. SILL ₵ W/ ½"Ø A.B. @ 12" O/C OR ⅝"Ø A.B. @ 20" O/C	2x ₣. W/ ½"Ø x 8" LONG LAG SCREWS @ 10" O/C INTO 4x RIM JOIST/BLK'G	A35 OR LTP4 @ 10" O/C
5	730	3/8" STRUCT I PLYWOOD W/ 8d @ 2"o.c. E.N. / 12"o.c. F.N. (SEE NOTE 14)	2x P.T. SILL ₵ W/ ½"Ø x 8" LONG LAG SCREWS @ 8" O/C OR ⅝"Ø A.B. @ 16" O/C	2x ₣. W/ ½"Ø x 8" LONG LAG SCREWS @ 8" O/C INTO 4x RIM JOIST/BLK'G	A35 OR LTP4 @ 9" O/C
6	860	15/32" STRUCT I PLYWOOD W/ 10d @ 2"o.c. E.N. / 12"o.c. F.N. (SEE NOTE 14)	3x P.T. SILL ₵ W/ ½"Ø A.B. @ 12" O/C OR ⅝"Ø A.B. @ 20" O/C	3x ₣. W/ ½"Ø x 8" LONG LAG SCREWS @ 6" O/C INTO 4x RIM JOIST/BLK'G	A35 OR LTP4 @ 8" O/C
7	1100	3/8" STRUCT I PLYWOOD (BOTH SIDES) W/ 10d @ 3"o.c. E.N. / 12"o.c. F.N. (SEE NOTE 11 AND DETAIL 9/S01)	3x P.T. SILL ₵ W/ ½"Ø A.B. @ 8" O/C OR ⅝"Ø A.B. @ 12" O/C	3x ₣. W/ ½"Ø x 8" LONG LAG SCREWS @ 5" O/C INTO 4x RIM JOIST/BLK'G	A35 OR LTP4 @ 6" O/

A. General

1. **Applicable codes.** All projects shall comply with the 2022 California Building Code (CBC) and/or California Residential Code (CRC), 2022 California Green Building Standards Code (CalGreen), 2022 California Electrical Code (CEC), 2022 California Mechanical Code (CMC), 2022 California Plumbing Code (CPC), 2022 California Fire Code (CFC), 2022 California Building Energy Efficiency Standards (CBEES), and all County of San Diego amendments.

B. Electrical, Plumbing, and Mechanical

1. **Exterior lighting.** All projects shall comply with the County of San Diego lighting ordinance.
2. **GFCI outlets.** Ground Fault Circuit Interrupter (GFCI) outlets are required in bathrooms, at kitchen countertops, at laundry and wet bar sinks, in garages, in crawlspaces, in unfinished basements, and outdoors. (CEC 210.8)
3. **AFCI outlets.** Electrical circuits in bedrooms, living rooms, dining rooms, dens, closets, hallways, or similar rooms must be protected by Arc Fault Circuit Interrupters (AFCI). (CEC 210.12)
4. **Luminaire requirements.** Installed luminaires shall meet the efficacy and fixture requirements of CBEES 150.0(k).
5. **Smoke detectors in building remodels.** Smoke detectors are required in each existing sleeping room, outside each separate sleeping area in the immediate vicinity of sleeping rooms, and on eachstoryofadwellingincludingbasements. Battery-operated detectors are acceptable in existing areas with no construction taking place and in alterations not resulting in removal of interior wall or ceiling finishes and without access via an attic, crawl space, or basement. (CRC R314.3)
6. **Carbon monoxide detectors in building remodels**. Carbon monoxide detectors are required outside each separate sleeping area in the immediate vicinity of sleeping rooms and on each story of a dwelling including basements. Battery-operated detectors are acceptable in existing areas with no construction taking place and in alterations not resulting in removal of interior wall or ceiling finishes and without access via an attic, crawl space, or basement. (CRC R315.3)
7. **Water heater seismic strapping.** Minimum two 3/4-inch-by-24- gauge straps required around water heaters, with 1/4-inch-by-3- inch lag bolts attached directly to framing. Straps shall be at points within upper third and lower third of water heater vertical dimension. Lower connection shall occur minimum 4 inches above controls. (CPC 507.2)
8. **Gas appliances in garages.** Water heaters and heating/cooling equipment capable of igniting flammable vapors shall be placed on minimum 18-inch-high platform unless listing report number provided showing ignition-resistant appliance. (CPC 507.13 and CMC 305.1)
9. **Impact protection of appliances.** Water heaters and heating/cooling equipment subject to vehicular impact shall be protected by bollards or an equivalent measure. (CPC 507.13.1 and CMC 305.11)
10. **Water closet clearance.** Minimum 30-inch-wide by 24-inch- deep clearance required at front of water closets. (CPC 402.5)
11. **Shower size.** Shower compartments shall have minimum area of 1024 square inches and be able to encompass a 30-inch- diameter circle. Shower doors shall have a minimum 22-inch unobstructed width. (CPC 408.5 and CPC 408.6)
12. **Fireplace appliances.** Fireplaces with gas appliances are required to have the flue damper permanently fixed in the open position and fireplaces with LPG appliances are to have no 'pit' or 'sump' configurations. (CMC 303.7.1)
13. **Chimney clearance.** Minimum 2-foot chimney clearance required above building within 10-foot horizontally of chimney. The chimney shall extend minimum 3 feet above highest point where chimney passes through roof. (CRC R1003.9)

C. Mechanical Ventilation and Indoor Air Quality (ASHRAE 62.2- 2010)

1. **Transfer air.** Ventilation air shall be provided directly from the outdoors and not as transfer air from adjacent dwelling units or other spaces, such as garages, unconditioned crawlspaces, or unconditioned attics. (CBEES 150.0(o))
2. **Instructions and labeling.** Ventilation system controls shall be labeled and the home owner shall be provided with instructions on how to operate the system. (CBEES 150.0(o))
3. **Combustion and solid-fuel burning appliances.** Combustion appliances shall be properly vented and air systems shall be designed to prevent back drafting. (CBEES 150.0(o))
4. **Garages.** The wall and openings between occupiable spaces and the garage shall be sealed. HVAC systems that include air handlers or return ducts located in garages shall have total air leakage of no more than 6% of total fan flow when measured at 0.1 in. w.c. using California Title 24 or equivalents. (CBEES 150.0(o))
5. **Minimum filtration.** Mechanical systems supplying air to occupiable space through ductwork shall be provided with a filter having a minimum efficiency of MERV 6 or better. (CBEES 150.0(o))
6. **Air inlets.** Air inlets (not exhaust) shall be located away from known contaminants. (CBEES 150.0(o))
7. **Air moving equipment.** Air moving equipment used to meet either the whole-building ventilation requirement or the local ventilation exhaust requirement shall be rated in terms of airflow and sound. (CBEES 150.0(o))
   a. All continuously operating fans shall be rated at a maximum of 1.0 sone.
   b. Intermittently operated whole-building ventilation fans shall be rated at a maximum of 1.0 sone.
   c. Intermittently operated local exhaust fans shall be rated at maximum of 3.0 sone, unless their maximum rated airflow exceeds 400 cfm
   d. Remotely located air-moving equipment (mounted outside of habitable spaces) need not meet sound requirements if at least 4 feet of ductwork between fan and intake grill.

D. Foundation and Underfloor

1. **Foundation reinforcement.** Continuous footings and stem walls shall be provided with a minimum two longitudinal No. 4 bars, one at the top and one at the bottom of the footing. (CRC R403.1.3.3)
2. **Shear wall foundation support.** Shear walls shall be supported by continuous foundations. (CRC 403.1.2)
3. **Concrete slabs-on-grade.** Slabs-on-grade shall be minimum 3- 1/2-inches thick. (CRC R506.1)
4. **Vapor retarder.** A 6-mil polyethylene or approved vapor retarder with joints lapped minimum 6 inches shall be placed between a concrete slab-on-grade and the base course or subgrade. (CRC 506.2.3)
5. **Anchor bolts and sills.** Foundation plates or sills shall be bolted or anchored to the foundation or foundation wall per the following (CRC R403.1.6 and CRC R602.11.1):
   a. Minimum 1/2-inch-diameter steel bolts
   b. Bolts embedded at least 7 inches into concrete or masonry
   c. Bolts spaced maximum 6 feet on center.
   d. Minimum two bolts per plate/sill piece with one bolt located maximum 12 inches and minimum 7 bolt diameters from each end of each sill plate/piece
   e. Minimum 3-inch by 3-inch by 0.299-inch steel plate washer between sill and nut on each bolt
6. **Hold-downs.** All hold-downs must be tied in place prior to foundation inspection.
7. **Protection of wood against decay**. Naturally durable or preservative-treated wood shall be provided in the following locations (CRC R317.1):
   a. All wood in contact with ground, embedded in concrete in direct contact with ground, or embedded in concrete exposed to weather.
   b. Wood joists within 18 inches and wood girders within 12 inches of the exposed ground in crawl spaces shall be of naturally durable or preservative-treated wood
   c. Wood framing members that rest on concrete or masonry exterior foundation walls and are less than 8 inches from exposed earth shall be of naturally durable or preservative- treated wood
   d. Wood framing, sheathing, and siding on the exterior of the building and having clearance less than 6 inches from the exposed ground or less than 2 inches vertically from concrete steps, porch slabs, patio slabs, and similar horizontal surface exposed to weather
   e. Sills and sleepers on concrete or masonry slab in direct contact with ground unless separated from such slab by impervious moisture barrier
   f. Ends of wood girders entering masonry or concrete walls with clearances less than 1/2 inch on tops, sides, and ends
   g. Wood structural members supporting moisture-permeable floors or roofs exposed to weather, such as concrete or masonry slabs, unless separated from such floors or roofs by an impervious moisture barrier
   h. Wood furring strips or other wood framing members attached directly to interior of exterior concrete or masonry walls below grade except where vapor retarder applied between wall and furring strips or framing members
8. **Underfloor ventilation.** Underfloor areas shall have ventilation openings through foundation walls or exterior walls, with minimum net area of ventilation openings of 1 square foot for each 150 square feet of underfloor area. On such ventilating opening shall be within 3 feet of each corner of the building. (CRC R408.1)
9. **Underfloor access.** Underfloor areas shall be provided with a minimum 18-inch by 24-inch access opening. (CRC R408.4)

E. Wood Framing

1. **Fastener requirements.** The number, size, and spacing of fasteners connecting wood members/elements shall not be less than that set forth in CRC Table R602.3(1). (CRC R502.9, CRC R602.3, and CRC R802.2)
2. **Stud size, height, and spacing.** The size, height, and spacing of studs shall be in accordance with CRC Table R602.3(5). (CRC R602.3.1)
3. **Sill plate.** Studs shall have full bearing on nominal 2-inch thick or larger sill plate with width at least equal to stud width. (CRC R602.3.4)
4. **Bearing studs.** Where joists, trusses, or rafters are spaced more than 16 inches on center and the bearing studs below are spaced 24 inches on center, such members shall bear within 5 inches of the studs beneath. (CRC R602.3.3)
5. **Drilling and notching of studs.** Any stud in an exterior wall or bearing partition may be cut or notched to a depth not exceeding 25% of its width. Studs in non bearing partitions may be notched to a depth not to exceed 40% of a single stud width. Any stud may be bored or drilled, provided the diameter of the resulting hole is no more than 60% of the stud width, the edge of the hole is no more than 5/8 inch to the edge of the stud, and the hole is not located in the same section as a cut or notch. Studs located in exterior wall or bearing partitions drilled over 40% and up to 60% shall also be doubled with no more than two successive studs bored. (CRC R602.6)
6. **Top plate.** Wood stud walls shall be capped with a double top plate installed to provide overlapping at corners and at intersections with other partitions. End joints in double top plates shall be offset at least 24 inches. Joints in plates need not occur over studs. Plates shall be minimum nominal 2 inches thick and have width at least equal to width of studs. (CRC R602.3.2)
7. **Top plate splices.** Top plate lap splices shall be face-nailed with minimum 8 16d nails on each side of splice. (CRC R602.10.8.1)
8. **Drilling and notching of top plate.** When piping or ductwork is placed in or partly in an exterior wall or interior load-bearing wall, necessitating cutting, drilling, or notching of the top plate by more than 50% of its width, a galvanized metal tie not less than 0.054- inch thick and 1-1/2-inches wide shall be fastened across and to the plate at each side of the opening with not less than 8 10d nails having a minimum length of 1-1/2 inches at each side or equivalent. The metal tie must extend minimum 6 inches past the opening. (CRC R602.6.1)
9. **Cripple walls.** Foundation cripple walls shall be framed of studs not less in size than the studding above. Cripple walls more than 4 feet in height shall have studs sized as required for an additional story. Cripple walls with stud height less than 14 inches shall be sheathed on at least one side with a wood structural panel fastened to both the top and bottom plates in accordance with Table R602.3(1), or the cripple walls shall be constructed of solid blocking. Cripple walls shall be supported on continuous foundations. (CRC R602.9)
10. **Wall bracing.** Buildings shall be braced in accordance with the methods allowed per CRC R602.10.2, CRC R602.10.4, and/or CRC R602.10.5.
11. **Braced wall line spacing.** Spacing between braced wall lines shall not exceed 20 feet or alternate provisions of CRC R602.10.1.3.
12. **Shear wall cumulative length.** The cumulative length of shear walls within each braced wall line shall meet the provisions of CRC Table R602.10.1.3(1) for wind loads and CRC Table R602.10.1.3(2) for seismic loads. (CRC R602.10.1.1)
13. **Shear wall spacing.** Shear walls shall be located not more than 25 feet on center. (CRC R602.10.2.2)
14. **Shear wall offset.** Shear walls may be offset out-of-plan not more than 4 feet from the designated braced wall line and not more than 8 feet from any other offset wall considered part of the same braced wall line. (CRC R602.10.1.2)
15. **Shear wall location.** Shear walls shall be located at the ends of each braced wall line or meet the alternate provisions of CRC R602.10.2.2.
16. **Individual shear wall length.** Shear walls shall meet minimum length requirements of CRC R602.10.6.5.1.
17. **Cripple wall bracing.** Cripple walls shall be braced per CRC R602.10.11.
18. **Shear wall and diaphragm nailing.** All shear walls, roof diaphragms, and floor diaphragms shall be nailed to supporting construction per CRC Table R602.3(1). (CRC R604.3)
19. **Shear wall joints.** All vertical joints in shear wall sheathing shall occur over, and be fastened to, common studs. Horizontal joints in shear walls shall occur over, and be fastened to, minimum 1- 1/2-inch-thick blocking. (CRC R602.10.10)
20. **Framing over openings.** Headers, double joists, or trusses of adequate size to transfer loads to vertical members shall be provided over window and door openings in load-bearing walls and partitions. (CBC 2304.3.2)
21. **Joists under bearing partitions.** Joists under parallel bearing partitions shall be of adequate size to support the load. Double joists, sized to adequately support the load, that are separated to permit the installation of piping or vents shall be full-depth solid- blocked with minimum 2-inch nominal lumber spaced at maximum 4 feet on center. Bearing partitions perpendicular to joists shall not be offset from supporting girders, walls, or partitions more than the joist depth unless such joists are of sufficient size to carry the additional load. (CRC R502.4)
22. **Joists above or below shear walls.** Where joists are perpendicular to a shear wall above or below, a rim joist, band joist, or blocking shall be provided along the entire length of the shear wall. Where joists are parallel to a shear wall above or below, a rim joist, end joist, or other parallel framing shall be provided directly above and/or below the shear wall. Where a parallel framing member cannot be located directly above and/or below the shear wall, full-depth blocking at 16-inch spacing shall be provided between the parallel framing members to each side of the shear wall. (CRC R602.10.8)
23. **Floor member bearing.** The ends of each floor joist, beam, or girder shall have minimum 1-1/2 inches of bearing on wood or metal and minimum 3 inches of bearing on masonry or concrete except where supported on a 1-inch-by-4-inch ribbon strip and nailed to the adjoining stud or by the use of approved joist hangers. (CRC R502.6)
24. **Floor joist lap.** Floor joists framing opposite sides over a bearing support shall lap minimum 3 inches and shall be nailed together within minimum 3 10d face nails. A wood or metal splice with strength equal to or greater than that provided by the lap is permitted. (CRC R502.6.1)
25. **Floor joist-to-girder support.** Floor joists framing into the side of a wood girder shall be supported by approved framing anchors or on ledger strips minimum nominal 2 inches by 2 inches. (CRC R502.6.2)
26. **Floor joist lateral restraint.** Floor joists shall be supported laterally at ends and each intermediate support by minimum 2- inch full-depth blocking, by attachment to full-depth header, band joist, or rim joist, to an adjoining stud, or shall be otherwise provided with lateral support to prevent rotation. (CRC R502.7)
27. **Floor joist bridging.** Floor joists exceeding nominal 2 inches by 12 inches shall be supported laterally by solid blocking, diagonal bridging (wood or metal), or a continuous 1-inch-by-3-inch strip nailed across the bottom of joists perpendicular to joists at maximum 8-foot intervals. (CRC R502.7.1)
28. **Framing of floor openings.** Openings in floor framing shall be framed with a header and trimmer joists. When the header joist span does not exceed 4 feet, the header joist may be a single member the same size as the floor joist. Single trimmer joists may be used to carry a single header joist located within 3 feet of the trimmer joist bearing. When the header joist span exceeds 4 feet, the trimmer joists and header joist shall be doubled and of sufficient cross section to support the floor joists framing into the header. Approved hangers shall be used for the header-joist-to- trimmer-joist connections when the header joist span exceeds 6 feet. Tail joists over 12 feet long shall be supported at the header by framing anchors or on ledger strips minimum 2 inches by 2 inches. (CRC R502.10)
29. **Girders.** Girders for single-story construction or girders supporting loads from a single floor shall not be less than 4 inches by 6 inches for spans 6 feet or less, provided that girders arespacednotmorethan8feetoncenter. Othergirdersshallbe designed to support the loads specified in the CBC. Girder end joints shall occur over supports. When a girder is spliced over a support, an adequate tie shall be provided. The ends of beams or girders supported on masonry or concrete shall not have less than 3 inches of bearing. (CBC 2308.7)
30. **Ridges, hips, and valleys**. Rafters shall be framed to a ridge board or to each other with a gusset plate as a tie. Ridge boards shall be minimum 1-inch nominal thickness and not less in depth than the cut end of the rafter. At all valley and hips, there shall be a valley or hip rafter not less than 2-inch nominal thickness and not less in depth than the cut end of the rafter. Hip and valley rafters shall be supported at the ridge by a brace to a bearing partition or be designed to carry and distribute the specific load at that point. Where the roof pitch is less than 3:12 slope (25% gradient), structural members that support rafters and ceilings joists, such as ridges, hips, and valleys, shall be designed as beams. (CRC R802.3)
31. **Ceiling joist and rafter connections.** Ceiling joists and rafters shall be nailed to each other per CRC Table R802.5.1(9), and the rafter shall be nailed to the wall top plate per CRC Table R602.3(1). Ceiling joists shall be continuous or securely joined per CRC Table R802.5.1(9) where they meet over interior partitions and are nailed to adjacent rafters to provide a continuous tie across the building when such joists are parallel to rafters. Where ceiling joists are not connected to the rafters at the wall top plate, joists connected higher in the attic shall be installed as rafter ties, or rafter ties shall be installed to provide a continuous tie. Where ceiling joists are not parallel to rafters, rafter ties shall be installed. Rafter ties shall be minimum 2 inches by 4 inches nominal, installed per CRC Table R802.5.1(9), or connections of equivalent capacities shall be provided. Where ceilings joists or rafter ties are not provided, the ridge formed by these rafters shall be supported by a wall or engineer-designed girder. (CRC R802.3.1)
32. **Ceiling joists lapped.** Ends of ceiling joists shall be lapped minimum 3 inches or butted over bearing partitions or beams and toenailed to the bearing element. Where ceiling joists provide resistance to rafter thrust, lapped joists shall be nailed together per CRC Table R602.3(1) and butted joists shall be tied together in a manner to resist such thrust. (CRC R802.3.2)
33. **Collar ties.** Collar ties or ridge straps to resist wind uplift shall be connected in the upper third of the attics pace. Collar ties shall be a minimum 1 inch by 4 inches nominal and spaced at maximum 4 feet on center. (CRC R802.3.1)
34. **Purlins.** Purlins installed to reduce the span of rafters shall be sized not less than the required size of the rafters they support. Purlins shall be continuous and shall be supported by 2-inch-by- 4-inch minimum braces installed to bearing walls at a minimum 45- degree slope from horizontal. The braces shall be spaced maximum 4 feet on center with a maximum 8-foot unbraced length. (CRC R802.5.1)
35. **Roof/ceiling member bearing.** The ends of each rafter or ceiling joist shall have not less than 1-1/2 inches of bearing on wood or metal and not less than 3 inches of bearing on masonry or concrete. (CRC R802.6)
36. **Roof/ceiling member lateral support.** Roof framing members and ceiling joists with a nominal depth-to-thickness ratio exceeding 5:1 shall be provided with lateral support at points of bearing to prevent rotation. (CRC R802.8)
37. **Roof/ceiling bridging.** Rafters and ceiling joists with a nominal depth-to-thickness ratio exceeding 6:1 shall be supported laterally by solid blocking, diagonal bridging (wood or metal), or a continuous 1-inch-by-3-inch wood strip nailed across the rafters or ceiling joists at maximum 8-foot intervals. (CRC R802.8.1)
38. **Framing of roof/ceiling openings.** Openings in roof and ceiling framing shall be framed with a header and trimmer joists. When the header joist span does not exceed 4 feet, the header joist may be a single member the same size as the ceiling joist or rafter. Single trimmer joists may be used to carry a single header joist located within 3 feet of the trimmer joist bearing. When the header joist span exceeds 4 feet, the trimmer joists and header joist shall be doubled and of sufficient cross section to support the roof joists framing into the header. Approved hangers shall be used for the header-joist-to-trimmer-joist connections when the header joist span exceeds 6 feet. Tail joists over 12 feet long shall be supported at the header by framing anchors or on ledger strips minimum 2 inches by 2 inches. (CRC R502.7.1)
39. **Roof framing above shear walls.** Rafters or roof trusses shall be connected to top plates of shear walls with blocking between the rafters or trusses. (CRC R602.10.8)
40. **Roof diaphragm under fill framing.** Roof plywood shall be continuous under California fill framing.
41. **Roof diaphragm at ridges.** Minimum 2-inch nominal blocking required for roof diaphragm nailing at ridges.
42. **Blocking of roof trusses.** Minimum 2-inch nominal blocking required between trusses at ridge lines and at points of bearing at exterior walls.
43. **Truss clearance**. Minimum 1/2-inch clearance required between top plates of interior non-bearing partitions and bottom chords of trusses.
44. **Drilling, cutting, and notching of roof/floor framing.** Notches in solid lumber joists, rafters, blocking, and beams shall not exceed one-sixth the member depth, shall be not longer than one-third the member depth, and shall not be located in the middle one-third of the span. Notches at member ends shall not exceed one-fourth the member depth. The tension side of members 4 inches or greater in nominal thickness shall not be notched except at member ends. The diameter of holes bored or cut into members shall not exceed one-third the member depth. Holes shall not be closer than 2 inches to the top or bottom of the member or to any other hole located in the member. Where the member is also notched, the hole shall not be closer than 2 inches to the notch. (CRC R502.8.1)
45. **Exterior landings, decks, balconies, and stairs.** Such elements shall be positively anchored to the primary structure to resist both vertical and lateral forces or shall be designed to be self-supporting. Attachment shall not be accomplished by use of toe nails or nails subject to withdrawal. (CRCR311.3)
46. **Fireblocking.** Fireblocking shall be provided in the following locations (CRC R302.11 and CRC R1003.19):
   a. In concealed spaces of stud walls and partitions, including furred spaces, and parallel rows of studs or staggered studs, as follows:
      1. Vertically at the ceiling and floor levels
      2. Horizontally at intervals not exceeding 10 feet
   b. At all interconnections between concealed vertical and horizontal spaces such as occur at soffits, drop ceilings, and cove ceilings
   c. In concealed spaces between stair stringers at the top and bottom of the run
   d. At openings around vents, pipes, ducts, cables and wires at ceiling and floor level, with an approved material to resist the free passage of flame and products of combustion
   e. At chimneys and fireplaces per item E.49
   f. Cornices of a two-family dwelling at the line of dwelling-unit separation
47. **Fireblocking materials.** Except as otherwise specified in items E.48 and E.49, fireblocking shall consist of the following materials with the integrity maintained (CRC R302.11.1):
   a. Two-inch nominal lumber
   b. Two thicknesses of one-inch nominal lumber with broken lap joints
   c. One thickness of 23/32-inch wood structural panel with joints backed by 23/32-inch wood structural panel
   d. One thickness of 3/4-inch particleboard with joints backed by 3/4-inch particleboard
   e. 1/2-inch gypsum board
   f. 1/4-inch cement-based millboard
   g. Batts or blankets of mineral or glass fiber of other approved materials installed in such a manner as to be securely retained in place. Batts or blankets of mineral or glass fiber or other approved non-rigid materials shall be permitted for compliance with the 10-foot horizontal fireblocking in walls constructed using parallel rows of studs or staggered studs. Unfaced fiberglass batt insulation used as fireblocking shall fill the entire cross-section of the wall cavity to a minimum height of 16 inches measured vertically. When piping, conduit, or similar obstructions are encountered, the insulation shall be packed tightly around the obstruction. Loose-fill insulation material shall not be used as a fireblock unless specifically tested in the form and manner intended for use to demonstrate its ability to remain in place and to retard the spread of fire and hot gases.
48. **Fireblocking at openings around vents, pipes, ducts, cables, and wires at ceiling and floor level.** Such openings shall be fireblocked with an approved material to resist the free passage of flame and products of combustion. (CRC R302.11)
49. **Fireblocking of chimneys and fireplaces.** All spaces between chimneys and floors and ceilings through which chimneys pass shall be fireblocked with noncombustible material securely fastened in place. The fireblocking of spaces between chimneys and wood joists, beams, or headers shall be self-supporting or be placed on strips of metal or metal lath laid across the spaces between combustible material and the chimney. (CRC R1003.19)
50. **Draftstopping.** In combustible construction where there is usable space both above and below the concealed space of a floor/ceiling assembly, draftstops shall be installed so that the area of the concealed space does not exceed 1000 square feet. Draftstopping shall divide the concealed space into approximately equal areas. Where the assembly is enclosed by a floor membrane above and a ceiling membrane below, draftstopping shall be provided in floor/ceiling assemblies under the following circumstances (CRC R302.12):
   a. Ceiling is suspended under the floor framing
   b. Floor framing is constructed of truss-type open-web or perforated members
51. **Draftstopping materials.** Draftstopping shall not be less than 1/2-inch gypsum board, 3/8-inch wood structural panels, or other approved materials adequately supported. Draftstopping shall be installed parallel to the floor framing members unless otherwise approved by the building official. The integrity of draftstops shall be maintained. (CRC R302.12.1)
52. **Combustible insulation clearance.** Combustible insulation shall be separated minimum 3 inches from recessed luminaires, fan motors, and other heat-producing devices. (CRC R302.14)

F. General Material Specifications

1. **Lumber.** All joists, rafters, beams, and posts 2-inches to 4-inches thick shall be No. 2 grade Douglas Fir-Larch or better. All posts and beams 5 inches and thicker shall be No. 1 grade Douglas Fir-Larch or better. Studs not more than 8 feet long shall be stud- grade Douglas Fir-Larch or better when supporting not more than one floor, roof, and ceiling. Studs longer than 8 feet shall be No. 2 grade Douglas Fir-Larch or better.
2. **Concrete.** Concrete shall have a minimum compressive strength of 2,500 psi at 28 days and shall consist of 1 part cement, 3 parts sand, 4 parts 1-inch maximum size rock, and not more than 7-1/2 gallons of water per sack of cement. (CRC R402.2)
3. **Mortar.** Mortar used in construction of masonry walls, foundation walls, and retaining walls shall conform to ASTM C 270 and shall consist of 1 part portland cement, 2-1/4 to 3 parts sand, and 1/4 to 1/2 part hydrated lime. (CBC 2103.2)
4. **Grout**. Grout shall conform to ASTM C 476 and shall consist of 1 part portland cement, 1/10 part hydrated lime, 2-1/4 to 3 parts sand, and 1 to 2 parts gravel. Grout shall attain a minimum compressive strength of 2,000 psi at 28 days. (CBC 2103.3)
5. **Masonry.** Masonry units shall comply with ASTM C 90 for load- bearing concrete masonry units. (CBC 2103.1)
6. **Reinforcing steel.** Reinforcing steel used in construction of reinforced masonry or concrete structures shall be deformed and comply with ASTM A 615. (CBC 2103.4)
7. **Structural steel.** Steel used as structural shapes such as wide- flange sections, channels, plates, and angles shall comply with ASTM A36. Pipe columns shall comply with ASTM A53. Structural tubes shall comply with ASTM A500, Grade B.
8. **Fasteners for preservative-treated wood.** Fasteners for preservative-treated and fire-retardant-treated wood – including nuts and washers – shall be of hot dipped zinc-coated galvanized steel, stainless steel, silicon bronze, or copper. (CRC R317.3.1)

   Exception: 1/2-inch diameter or greater steel bolts
   Exception: Fasteners other than nails and timber rivets may be of mechanically deposited zinc-coated steel with coating weights in accordance with ASTM B 695, Class 55 minimum
   Exception: Plain carbon steel fasteners acceptable in SBX/DOT and zinc borate preservative-treated wood in an interior, dry environment
9. **Fasteners for fire-retardant-treated wood.** Fasteners for fire- retardant-treated wood used in exterior applications or wet or damp locations shall be of hot dipped zinc-coated galvanized steel, stainless steel, silicon bronze, or copper. (CRC R317.3.3)

G. Roofing and Weatherproofing

1. **Roof covering.** All roof covering shall be installed per applicable requirements of CBC 1507. Roof coverings shall be at least Class A rated in accordance with ASTM E 108 or UL 790, which shall include coverings of slate, clay or concrete roof tile, exposed concrete roof deck, ferrous or copper shingles or sheets. (County Building Code 92.1.1505.1)
2. **Roof flashing.** Flashing shall be installed at wall and roof intersections, at gutters, wherever there is a change in roof slope or direction, and around roof openings. Where flashing is of metal, the metal shall be corrosion-resistant with a thickness of not less than 0.019 inch (No. 26 galvanized sheet). (CRC R903.2.1)
3. **Crickets and saddles.** A cricket or saddle shall be installed on the ridge side of any chimney or penetration more than 30 inches wide as measured perpendicular to the slope. Cricket or saddle covering shall be sheet metal or the same material as the roof covering. (CRC R903.2.2)
4. **Water-resistive barrier.** A minimum of one layer of No. 15 asphalt felt shall be attached to studs or sheathing of all exterior walls. Such felt or material shall be applied horizontally, with the upper layer lapped over the lower layer minimum 2 inches. Where joints occur, felt shall be lapped minimum 6 inches. The felt shall be continuous to the top of walls and terminated at penetrations and building appendages in a manner to maintain a weather-resistant exterior wall envelope. (CRC R703.2)
5. **Wall flashing.** Approved corrosion-resistant flashing shall be applied shingle fashion at the following locations to prevent entry of water into the wall cavity or penetration of water to the building structural framing components (CRC R703.4):
   a. Exterior door and window openings, extending to the surface of the exterior wall finish or to the water-resistive barrier for subsequent drainage
   b. At the intersection of chimneys or other masonry construction with frame or stucco walls, with projecting lips on both sides under stucco copings
   c. Under and at the ends of masonry, wood, or metal copings and sills
   d. Continuously above all projecting wood trim
   e. Where exterior porches, decks, or stairs attach to a wall or floor assembly of wood-frame construction
   f. At wall and roof intersections
   g. At built-in gutters
6. **Dampproofing.** Dampproofing materials for foundation walls enclosing usable space below grade shall be installed on the exterior surface of the wall, and shall extend from the top of the footing to finished grade. (CRC R406.1)
7. **Weep screed.** A minimum 0.019-inch (No. 26 galvanized sheet gage), corrosion-resistant weep screed or plastic weep screed with a minimum vertical attachment flange of 3-1/2 inches shall be provided at or below the foundation plate line on exterior stud walls in accordance with ASTM C 92. The weep screed shall be placed a minimum 4 inches above the earth or 2 inches above paved areas and shall be of a type allowing trapped water to drain to the exterior of the building. (CRC R703.7.2.1)

H. Grading and soils

1. **Grading permit**. Grading permit required if volume of earth moved exceeds 200 cubic yards or if any cuts or fills exceed 8 feet in height/depth. (County Grading Ordinance 202)
2. **Compaction report.** Compaction report required for fill material 12 inches or more in depth. (CBC 1803.5.8)

I. Green Building Standards Code (CALGreen) Requirements

1. **Applicability.** CalGreen residential mandatory measures shall apply to every newly constructed building or structure and within any addition or alteration increasing a building's conditioned area, volume, or size. (CalGreen 101.3, CalGreen 301.1.1) **Exception:** All residential buildings undergoing permitted alterations, additions, or improvements shall replace noncompliant plumbing fixtures with water-conserving plumbing fixtures per CalGreen 301.1.1 and CalGreen 4.303.1
2. **Water conserving plumbing fixtures and fittings.** Plumbing fixtures and fittings shall comply with the following per CalGreen 4.303.1:
   a. Waterclosets: Maximum 1.28g allons per flush
   b. Urinals: Maximum 0.5 gallons per flush
   c. Single shower heads: Maximum flow rate of 1.8 gallons per minute at 80 psi
   d. Multiple shower heads serving one shower: Maximum combined flow rate of 1.8 gallons per minute at 80 psi
   e. Lavatory faucets: Maximum flow rate of 1.2 gallons per minute at 60 psi, minimum flow rate of 0.8 gallons per minute at 20 psi
   f. Kitchen faucets: Maximum flow rate of 1.8 gallons per minute at 60 psi **Exception:** Temporary increase allowed to maximum 2.2 gallons per minute at 60 psi if faucet defaults back to maximum 1.8 gallons per minute at 60 psi
3. **Irrigation controllers.** Automatic irrigation system controllers for landscaping shall comply with the following (CalGreen 4.304.1):
   a. Controllers shall be weather- or soil moisture-based controllers that automatically adjust irrigation in response to changes in plants' needs as weather conditions change.
   b. Weather-based controllers without integral rain sensors or communication systems that account for local rainfall shall have a separate wired or wireless rain sensor which connects or communicates with the controller(s). Soil moisture-based controllers are not required to have rain sensor input.
4. **Joints and openings.** Openings in the building envelope separating conditioned space from unconditioned space needed to accommodate utility and other penetrations must be sealed in compliance with the California Energy Code. (CalGreen 4.406.1) **Exception:** Annular spaces around pipes, electric cables, conduits or other openings in plates at exterior walls shall be protected against the passage of rodents by closing such opening with cement mortar, concrete masonry or a similar method acceptable to the enforcing agency.
5. **Construction waste reduction, disposal, and recycling.** Reduce and/or salvage for reuse a minimum of 65 percent of the nonhazardous construction and demolition debris. (CalGreen 4.408.1)

   Exception: Excavated soil and land-clearing debris
   Exception: Alternate waste reduction methods developed by working with local agencies if diversion or recycle facilities capable of compliance with this item do not exist or are not located reasonably close to the job site The County of San Diego, Department of Public Works, Construction & Demolition (C&D) Facilities Guide is online at: http://www.sdcounty.ca.gov/dpw/recycling/Files/Construction_Guide_SJB_Pgs_1-27.pdf.
   Exception: The enforcing agency may make exceptions to the requirements of this section when isolated job sites are located in areas beyond the haul boundaries of the diversion facility.
6. **Construction waste management plan.** A construction waste management plan shall be prepared and available on site during construction. Documentation demonstrating compliance with the plan shall be accessible during construction for the enforcing agency. (CalGreen 4.408.2) The plan:
   a. Identify the construction and demolition waste materials to be diverted from disposal by recycling, reuse on the project or salvage for future use or sale
   b. Specify if construction and demolition waste materials will be sorted on-site (source-separated) or bulk mixed (single stream)
   c. Identify diversion facilities where the construction and demolition waste materials will be taken
   d. Identify construction methods employed to reduce the amount of construction and demolition waste generated
   e. Specify that the amount of construction and demolition waste materials diverted shall be calculated by weight or volume, but not by both
7. **Operation and maintenance manual.** Prior to final inspection, a manual, compact disc, web-based reference, or other acceptable media which includes all of the following shall be placed in the building (CalGreen 4.410.1):
   a. Directions to owner or occupant that manual shall remain with the building throughout the life cycle of the structure.
   b. Operation and maintenance instructions for the following:
      1. Equipment and appliances, including water-saving devices and systems, HVAC system, photovoltaic systems, water-heating systems and other major appliances and equipment.
      2. Roof and yard drainage, including gutters and downspouts.
      3. Space conditioning systems, including condensers and air filters.
      4. Landscape irrigation systems.
      5. Water reuse systems.
   c. Information from local utility, water, and waste recovery providers on methods to further reduce resource consumption, including recycle programs and locations.
   d. Public transportation and/or carpool options available in the area.
   e. Educational material on the positive impacts of an interior relative humidity between 30-60 percent and what methods an occupant may use to maintain the relative humidity level in that range.
   f. Information about water-conserving landscape and irrigation design and controllers which conserve water.
   g. Instructions for maintaining gutters and downspouts and the importance of diverting water at least 5 feet away from the foundation.
   h. Information on required routine maintenance measures, including, but not limited to, caulking, painting, grading around the building, etc.
   i. Information about state solar energy and incentive programs available.
   j. A copy of all special inspection verifications required by the enforcing agency or code.
8. **Covering of duct openings and protection of mechanical equipment during construction.** At the time of rough installation or during storage on the construction site and until final startup of the heating and cooling equipment, all duct and other related air distribution component openings shall be covered with tape, plastic, sheetmetal or other methods acceptable to the enforcing agency to reduce the amount of dust or debris which may collect in the system. (CalGreen 4.504.1)
9. **Adhesives, sealants, caulks, paints, and coatings pollutant control.** Adhesives (including carpet adhesives), sealants, caulks, paints, and coatings shall comply with VOC limits per CalGreen 4.504.2. Verification of compliance shall be provided at the request of the enforcing agency. (CalGreen 4.504.2.1)
10. **Carpet systems.** All carpet installed in the building interior shall meet the testing and product requirements of one of the following (CalGreen 4.504.3):
    a. Carpet and Rug Institute's Green Label Plus Program (all carpet cushion must meet the requirements of this program).
    b. California Department of Public Health Standard Practice for the testing of VOCs (Specification 01350).
    c. NSF/ANSI 140 at the Gold level.
    d. Scientific Certifications Systems Indoor Advantage™ Gold.
11. **Resilient flooring systems.** At least 80 percent of the floor area receiving resilient flooring shall comply with one of or more of the following (CalGreen 4.504.4):
    a. VOC emission limits defined in the Collaborative for High Performance Schools (CHPS) High Performance Products Database
    b. Products compliant with CHPS criteria certified under the Greenguard Children & Schools program
    c. Certification under the Resilient Floor Covering Institute (RFCI) FloorScore program
    d. Meet the California Department of Public Health, "Standard Method for the Testing and Evaluation of Volatile Organic Chemical Emissions from Indoor Sources Using Environmental Chambers," Version 1.1, February 2010 (also known as Specification 01350)
12. **Composite wood products.** Hardwood plywood, particleboard and medium density fiberboard composite wood products used on the interior or exterior of the building shall meet the requirements for formaldehyde as specified in ARB's Air Toxics Control Measure for Composite Wood (17 CCR 93120 et seq.) by or before the dates specified in those sections, as shown in CalGreen Table 4.504.5. The following limits are in parts per million (CalGreen 4.504.5):

a.	Hardwood plywood veneer core	0.05
b.	Hardwood plywood composite core	0.05
b.	Particle board	0.09
c.	Medium-density fiberboard (MDF)	0.11
d.	Thin MDF (5/16 inch or less)	0.13

13. **Moisture content of building materials.** Building materials with visible signs of water damage shall not be installed. Wall and floor framing shall not be enclosed when the framing members exceed 19 percent moisture content. Moisture content shall be verified in compliance with the following (CalGreen 4.505.3):
    a. Moisture content shall be determined with either a probe- type or contact-type moisture meter.
    b. Moisture readings sh

HOLDOWN SCHEDULE

TYPE		MIN. POST SIZE 2x4 WALL	MIN. POST SIZE 2x6 WALL	HOLDOWN	HOLDOWN ANCHOR BOLT: NEW FOUNDATION	HOLDOWN ANCHOR BOLT: EXISTING FOUNDATION (SEE NOTE J)	HOLDOWN ANCHOR BOLT: NEW UNDERPINNED PAD FOOTING (SEE NOTES K, L, M & N)
POST TO FOUNDATION	1	(2)-2x4	(2)-2x6	HDUE3-SDS3	SABR5/8x24 (18" MIN. EMB.)	5/8"Φ THREADED ROD W/ 10" EMBED.	5/8"Φ STANDARD STEEL THREADED ROD (6½" MIN. EMBED., 10" MIN. CLR.)
	2	(2)-2x4	(2)-2x6	HDUE5-SDS3	SABR5/8x24 (18" MIN. EMB.)	5/8"Φ THREADED ROD W/ 10" EMBED.	5/8"Φ STANDARD STEEL THREADED ROD (6½" MIN. EMBED., 10" MIN. CLR.)
	3	4x4	4x6	HDUE7-SDS3	SABR5/8x24 (18" MIN. EMB.)	5/8"Φ THREADED ROD W/ 12" EMBED.	5/8"Φ STANDARD STEEL THREADED ROD (6½" MIN. EMBED., 10" MIN. CLR.)
	4	4x4	4x6	HDUE9-SDS3.5	SABR7/8x28 (22" MIN. EMB.)	N/A (NEW UNDERPINNED PAD REQ'D)	7/8"Φ STANDARD STEEL THREADED ROD (9" MIN. EMBED., 13½" MIN. CLR.)
	5	4x6 (8' MAX HT.) 4x8 (< THAN 8' HT.)	6x6	HDUE13-SDS3.5	SABR1x30 (24" MIN. EMB.)	N/A (NEW UNDERPINNED PAD REQ'D)	1"Φ STANDARD STEEL THREADED ROD (11" MIN. EMBED., 16½" MIN. CLR.)
	6	4x10 (8' MAX HT.) 4x12 (< THAN 8' HT.)	6x6	HDUE17-SDS4.5	SABR1x30 (24" MIN. EMB.)	N/A (NEW UNDERPINNED PAD REQ'D)	1"Φ HIGH STRENGTH STEEL THREADED ROD (17" MIN. EMBED., 25½" MIN. CLR.)
	7	PREFABRICATED SHEARWALL HOLDOWN PER DETAILS					
POST TO POST	8	DBL. 2x STUDS W/ MSTC40 (V) TO DBL. STUDS BELOW (14-16d SINKER NAILS INTO STUDS)					
	9	DBL. 2x STUDS W/ MSTC52 (V) TO DBL. STUDS BELOW (22-16d SINKER NAILS INTO STUDS)					
	10	4x POST W/ MSTC66 (V) TO 4x POST BELOW (32-16d SINKER NAILS INTO POSTS)					
	11	4x6 POST MIN. W/ CMSTI4 (V) TO 4x6 POST MIN. BELOW (33-16d SINKER NAILS INTO POSTS)					
	12	4x6 POST MIN. W/ CMSTI2 (V) TO 4x6 POST MIN. BELOW (43-16d SINKER NAILS INTO POSTS)					
POST TO BEAM	13	DBL. 2X STUDS W/ MSTC40 (V) TO BEAM BELOW (14-16d SINKER NAILS INTO STUDS & BEAM)					
	14	4x POST W/ MSTC48B3 (V) TO BEAM BELOW (16-10d NAILS MIN. TOTAL INTO BEAM & 38-10d NAILS MIN. TO POST)					
	15	4x POST W/ MSTC66B3Z (V) TO BEAM BELOW (18-10d NAILS MIN. TOTAL INTO BEAM & 38-10d NAILS MIN. TO POST)					
	16	4x10 POST MIN. W/ (2)-MSTC48B3Z (V) TO BEAM BELOW (1½" CLR. BTWN. STRAPS) (16-10d NAILS MIN. TOTAL INTO BEAM & 38-10d NAILS MIN. TO POST @ EA. STRAP)					
	17	4x10 POST MIN. W/ (2)-MSTC66B3Z (V) TO BEAM BELOW (1½" CLR. BTWN. STRAPS) (18-10d NAILS MIN. TOTAL INTO BEAM & 38-10d NAILS MIN. TO POST @ EA. STRAP)					

NOTES:

A. REFER TO SIMPSON CATALOG FOR PROPER INSTALLATION PROCEDURES.

B. HOLDOWN CONNECTORS INTO WOOD FRAMING REQUIRE APPROVED PLATE WASHER, AND HOLDOWNS SHALL BE TIGHTENED JUST PRIOR TO COVERING THE WALL FRAMING.

C. HOLDOWN HARDWARE MUST BE SECURED IN PLACE PRIOR TO FOUNDATION INSPECTION.

D. USE APPROPRIATE SIMPSON 'CNW' COUPLER & THREADED ROD AS REQUIRED FOR RAISED WOOD FLOOR FOUNDATION.

E. INCREASE FOUNDATION DEPTH FOR ENTIRE SHEARWALL LENGTH & EXTEND 12" BEYOND HOLDOWN ANCHOR BOLT AS NECESSARY TO ACCOMMODATE THE REQUIRED CONCRETE EMBEDMENT PLUS 3" (MIN.) COVER.

F. REINFORCEMENT SHALL HAVE 3" COVER FROM SOIL.

G. USE 10D NAILS @ 8"O.C. STAGGERED ALONG ENTIRE LENGTH OF DBL. STUDS (U.N.O.)

H. WHERE SPECIFIED, USE POST SIZE CALLED OUT ON PLANS.

I. INSTALL SHEARWALLS PRIOR TO INSTALLING POP-OUTS.

J. RETROFIT ANCHOR BOLTS INTO EXISTING FOOTINGS SHALL USE SIMPSON 'SET-3G' EPOXY (ESR-4057) SPECIAL INSPECTION IS REQUIRED

K. THREADED RODS ARE TO GO THROUGH EXISTING FOOTING AND INTO NEW UNDERPINNED PAD FOOTING PER PLAN. SEE REFERENCED DETAIL ON PLAN FOR MORE INFO.

L. STANDARD STEEL THREADED RODS SHALL BE ASTM F1554 GRADE 36, A36, OR A307; Fu = 58 ksi.

M. HIGH STRENGTH STEEL THREADED RODS SHALL BE ASTM A449; Fu = 120 ksi.

N. SIMPSON 'PAB' ANCHOR BOLTS MAY BE USED AS AN ALTERNATIVE IN LIEU OF THE THREADED RODS.

PAD FOOTING SCHEDULE

- A 24" SQR. x 18" DEEP W/ # 4 @ 8" ∅ EA. WAY
- B 30" SQR. x 18" DEEP W/ # 4 @ 8" ∅ EA. WAY
- C 36" SQR. x 18" DEEP W/ # 4 @ 8" ∅ EA. WAY
- D 42" SQR. x 18" DEEP W/ # 4 @ 8" ∅ EA. WAY
- E 48" SQR. x 18" DEEP W/ # 4 @ 8" ∅ EA. WAY
- F 52" SQR. x 36" DEEP W/ # 5 @ 8" ∅ EA. WAY

NOTES:

A. REINFORCEMENT SHALL BE 3" CLEAR FROM SOIL.

B. WHERE SPECIFIED, USE DEPTH OF FOOTING CALLED OUT ON PLANS.

THE STRUCTURE WILL BE LOCATED ENTIRELY ON UNDISTURBED NATIVE SOIL. IF THE BUILDING INSPECTOR SUSPECTS FILL, EXPANSIVE SOILS OR ANY GEOLOGIC INSTABILITY BASED UPON OBSERVATION OF THE FOUNDATION EXCAVATION, A SOILS OR GEOLOGICAL REPORT, AND RESUBMITTAL OF PLANS TO PLAN CHECK TO VERIFY THAT THE REPORT RECOMMENDATIONS HAVE BEEN INCORPORATED, MAY BE REQUIRED.

SIGNATURE OF OWNER,
LICENSED ENGINEER OR ARCHITECT

CEILING JOIST SCHEDULE

CEILING JOIST SIZE & SPACING	MAX. SPAN
2 x 4 C-J @ 24"o.c.	7'-0"
2 x 6 C-J @ 24"o.c.	12'-0"
2 x 8 C-J @ 24"o.c.	16'-0"
2 x 10 C-J @ 24"o.c.	20'-0"
2 x 12 C-J @ 24"o.c.	24'-0"
2 x 12 C-J @ 12"o.c.	30'-0"

FRAMING NOTES

1. ROOF SHEATHING SHALL BE:
   15/32" PERFORMANCE CATEGORY APA RATED PLYWOOD 32/16 EXPOSURE 1.
   8d COMMON NAILS @ 6" o.c. B.N. & E.N.
   8d COMMON NAILS @ 12" o.c. F.N.
   B.N. APPLIES TO ALL SUPPORTED PLYWOOD EDGES AT:
   DIAPHRAGM EDGES, PERIMETER WALLS, & SHEARWALLS
2. ALL FASTENERS IN PRESSURE TREATED WOOD SHALL BE HOT DIPPED ZINC-COATED GALVANIZED STEEL PER ASTM A 153.
3. ALL RAFTERS, JOISTS & HEADERS SHALL BE DOUGLAS FIR LARCH #2 GRADE.
4. ALL BEAMS SHALL BE DOUGLAS FIR LARCH #1 GRADE (U.N.O.).
5. ALL POSTS SHALL BE DOUGLAS FIR LARCH #1 (U.N.O.).
6. ALL ROOF HEADERS SHALL BE 4x4 (U.N.O.).
7. PROVIDE DOUBLE JOISTS @ SIDES & ENDS OF ALL OPENINGS (U.N.O.). SISTER TOGETHER WITH 16d @ 12"O.C. STAGGERED TYPICAL.
8. ALL POSTS TO TOP PLATE & SILL PLATE CONNECTIONS SHALL HAVE SIMPSON 'A34' EACH SIDE (U.N.O.).
9. ALL BEAM TO TOP PLATE CONNECTIONS SHALL HAVE SIMPSON 'A34' EACH SIDE (U.N.O.).
10. USE 2x4 D.F. # 2 STUDS @ 16"O.C. FOR ALL BEARING WALLS 10'-0" OR LESS IN HEIGHT. (14'-0" MAX. FOR NON-BEARING). FOR BEARING STUD WALL HEIGHTS IN EXCESS OF 10'-0", USE 2x6 D.F. # 2 STUDS @ 16"O.C. (16'-0" MAX. HEIGHT) (20'-0" MAX. FOR NON-BEARING). ALL BEARING SLOPING RAKE WALLS SHALL BE CONTINUOUS BETWEEN FLOOR / FOUNDATION AND ROOF FRAMING.
11. TJI JOISTS, MICROLLAMS (LVL), TIMBERSTRANDS (LSL), AND PARALLAMS (PSL) MANUFACTURER SHALL BE WEYERHAEUSER' (ESR-1153, -1387), OR EQUIVALENT. EQUIVALENT BEAMS INCLUDE ANY MANUFACTURER WITH A CURRENT (IBC 2021) APPROVED ICC-ES EVALUATION REPORT WITH THE FOLLOWING PROPERTIES:
    PSL: Fb = 2400 PSI (MIN.), Fv = 285 (MIN.), E = 2.0 x 10^6 PSI (MIN.)
    LVL: Fb = 2600 PSI (MIN.), Fv = 285 (MIN.), E = 1.9 x 10^6 PSI (MIN.)
    LSL: Fb = 2325 PSI (MIN.), Fv = 310 (MIN.), E = 1.55 x 10^6 PSI (MIN.)
    VSL: Fb = 3100 PSI (MIN.), Fv = 285 (MIN.), E = 2.0 x 10^6 PSI (MIN.)
12. A CERTIFICATE OF CONFORMANCE IS REQUIRED PRIOR TO FRAMING INSPECTION FOR ALL PARALLEL STRANDED LUMBER.
13. PROVIDE MSTC28 STRAP ACROSS ALL DISCONTINUOUS DBL. TOP PLATES (U.N.O.).
14. PROVIDE DBL. JOISTS BELOW ALL INTERIOR WALLS 8'-0" OR GREATER IN LENGTH. PROVIDE BLOCKING @ 1/3 SPANS.
15. EACH TRUSS SHALL BE LEGIBLY BRANDED, MARKED OR OTHERWISE HAVE PERMANENTLY AFFIXED THERETO THE FOLLOWING INFORMATION LOCATED WITHIN 2 FEET OF THE CENTER OF THE SPAN ON THE FACE OF THE BOTTOM CHORD.
    A) IDENTITY OF THE COMPANY MANUFACTURING THE TRUSS.
    B) THE DESIGN LOADS
    C) THE SPACING OF THE TRUSSES.
16. FRAMING MEMBERS OR BLOCKING SHALL BE PROVIDED AT THE EDGES OF ALL SHEETS IN PLYWOOD SHEARWALLS.
17. BEAMS BEARING ON TOP PLATE SHALL BE SUPPORTED BY DBL 2x STUDS SISTER TOGETHER W/ 16d @ 16"O.C. (U.N.O.).
18. ALL SHEARWALLS SHALL EXTEND TO THE ROOF SHEATHING (U.N.O.).
19. ALL SHEAR PANELS SHALL BE APPLIED DIRECTLY TO STUDS PRIOR TO INSTALLATION OF DECORATIVE POP-OUTS AND TRIM.
20. DO NOT CUT, NOTCH, DRILL, BORE, SHAVE, TAPER OR FOR ANY REASONS MODIFY PRE-ENGINEERED / MANUFACTURED STRUCTURAL ELEMENTS SUCH AS GLUED-LAMINATED MEMBERS, PARALLAMS, MICROLLAMS, I-JOISTS, LIGHT GAUGE METAL MEMBERS AND OTHER SIMILAR TIMBER OR STEEL PRODUCTS UNLESS SUCH MODIFICATIONS ARE WITHIN THE WRITTEN PARAMETERS SET FORTH BY THE MANUFACTURER OF THAT PRODUCT OR A LETTER OF CERTIFICATION FROM THE MANUFACTURER'S ENGINEER WITH DETAIL SIGNED AND STAMPED IS ISSUED AND AUTHORIZED BY THE PROJECT ENGINEER OF RECORD AND APPROVED BY THE CITY OF GOVERNING BUILDING OFFICIAL.

FOUNDATION NOTES

1. ALL CONCRETE SHALL HAVE A MINIMUM COMPRESSIVE STRENGTH OF 2500 PSI (U.N.O.).
2. CONTINUOUS EXTERIOR PERIMETER AND CONTINUOUS INTERIOR BEARING WALL FOOTINGS SHALL BE AS FOLLOWS (U.N.O.):

   ONE STORY:
   12" WIDE x 12" DEEP INTO NATIVE SOIL OR 90% COMPACTED FILL
   W/ (2) #4 REINFORCING BAR 3" FROM THE TOP & BOT. OF FOOTING
   TWO STORY:
   15" WIDE x 18" DEEP INTO NATIVE SOIL OR 90% COMPACTED FILL
   W/ (2) #4 REINFORCING BAR 3" FROM THE TOP & BOT. OF FOOTING.
3. BOTTOM OF ALL FOOTINGS SHALL MAINTAIN 1'-0" MIN. TO DAYLIGHT WHERE SLOPES OCCUR. HORIZONTAL DISTANCE SHALL BE MEASURED FROM THE BOTTOM LEADING EDGE OF FOOTING TO DAYLIGHT.
4. CONCRETE SLABS SHALL BE A MINIMUM OF 4" THICK WITH #3 REBAR @ 18" O.C. EACH WAY IN THE CENTER. UNDERLAY WITH 2" CLEAN SAND OVERLYING 10 MIL. VISQUEEN MOISTURE BARRIER OVERLAYING ADDITIONAL 2" CLEAN SAND.
5. THE VISQUEEN MOISTURE BARRIER SHOULD BE PROPERLY LAPPED AND SEALED AT JOINTS AND AROUND ANY BREAKS SUCH AS OPENINGS FOR UTILITY CONDUITS.
6. ANCHOR BOLTS SHALL BE ⅝"Φ WITH 7" MIN. EMBEDMENT @ 72" O.C. MAX. REFER TO SHEARWALL SCHEDULE FOR ANCHOR BOLT SIZE AND SPACING.
7. THERE SHALL BE A MINIMUM OF TWO ANCHOR BOLTS PER SILL PLATE PIECE WITH ONE BOLT LOCATED NOT MORE THAN 12" OR LESS THAN 5" FROM EACH END OF THE SILL PLATE PIECE.
8. ALL ANCHOR BOLTS SHALL HAVE A MINIMUM OF 3" x 3" x 3 GUAGE (¼" THICK) PLATE WASHER.
9. ALL ANCHOR BOLTS & NAILS IN PRESSURE TREATED SILL PLATES SHALL BE HOT DIPPED ZINC-COATED GALVANIZED STEEL PER ASTM A 153. ANCHOR BOLTS MAY HAVE A MECHANICALLY DEPOSITED ZINC COATING WITH WEIGHTS PER ASTM B 695, CLASS 55.
10. ALL ANCHOR BOLTS, HOLDOWN ANCHORS & DOWELS MUST BE TIED IN PLACE PRIOR TO CALLING FOR FOUNDATION INSPECTION.
11. SILL PLATES SHALL BE DOUGLAS FIR #2 PRESSURE TREATED.
12. ALL NON-BEARING WALLS SHALL USE 2x P.T. SILL W/ "HILTI" SHOTPIN FASTENERS @ 32" O.C., 6" FROM ENDS (ESR-1663). PROVIDE A SHOVEL FTG. FOR RAMSET EMBEDMENT.
13. ALL DIMENSIONS SHALL BE VERIFIED WITH THE ARCHITECTURAL DRAWINGS. ANY DISCREPANCIES SHALL BE RESOLVED WITH THE ARCHITECT/DESIGNER.

ABBREVIATIONS

AB	ANCHOR BOLT	HOR (H)	HORIZONTAL
CLR	CLEAR	(N)	NEW
CVR	COVER	NTS	NOT TO SCALE
d	PENNY (NAILS)	OC	ON CENTER
DF	DOUGLAS FIR	PERP	PERPENDICULAR
DIA (Φ)	DIAMETER	PL (PL.)	PLATE
EA	EACH	PT	PRESSURE TREATED
EMB	EMBED(MENT)	SCH	SCHEDULE
EN	EDGE NAILING	SW	SHEARWALL
ES	EACH SIDE	T & B	TOP AND BOTTOM
EW	EACH WAY	THR'D	THREADED
(E)	EXISTING	TN	TOE NAIL
FN	FIELD NAILING	TYP	TYPICAL
FTG	FOOTING	UNO	UNLESS NOTED OTHERWISE
HD	HOLD DOWN	VIF	VERIFY IN FIELD
HHS	HOLLOW STRUCTURAL SHAPE		

REVISIONS:

1	1/21/26

REGISTERED PROFESSIONAL ENGINEER — MILES T. LOVELACE — No. C 39734 — Exp. 12/31/27 — STATE OF CALIFORNIA

Digitally signed by Miles Lovelace
on January 27, 2026

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Project Name:

MARCUS RESIDENCE

85822 SUGARMAN DRIVE
LA JOLLA, CA
92037

Designer:

RH DRAFT SENSE

5426 RILEY STREET, STE 4
SAN DIEGO, CA
92110

Job No.	J25730
Cad Ref. No:	-
Date Drawn:	10/20/25
Date Issued:	-
Proj. Engineer:	C.K.
Drawn By:	C.K.
Checked By:	M.T.L.
Scale:	N/A

Drawing Status:

- ☐ INFORMATION DWGS. (NOT FOR CONSTRUCTION)
- ☐ PRELIMINARY DWGS. (NOT FOR CONSTRUCTION)
- ☐ DESIGN DEVELOPMENT DWGS. (NOT FOR CONSTRUCTION)
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- ☐ PLAN CHECK DRAWINGS
- ☐ BID SET DRAWINGS
- ☐ CONSTRUCTION DOCUMENTS
- ☐ OTHER_____

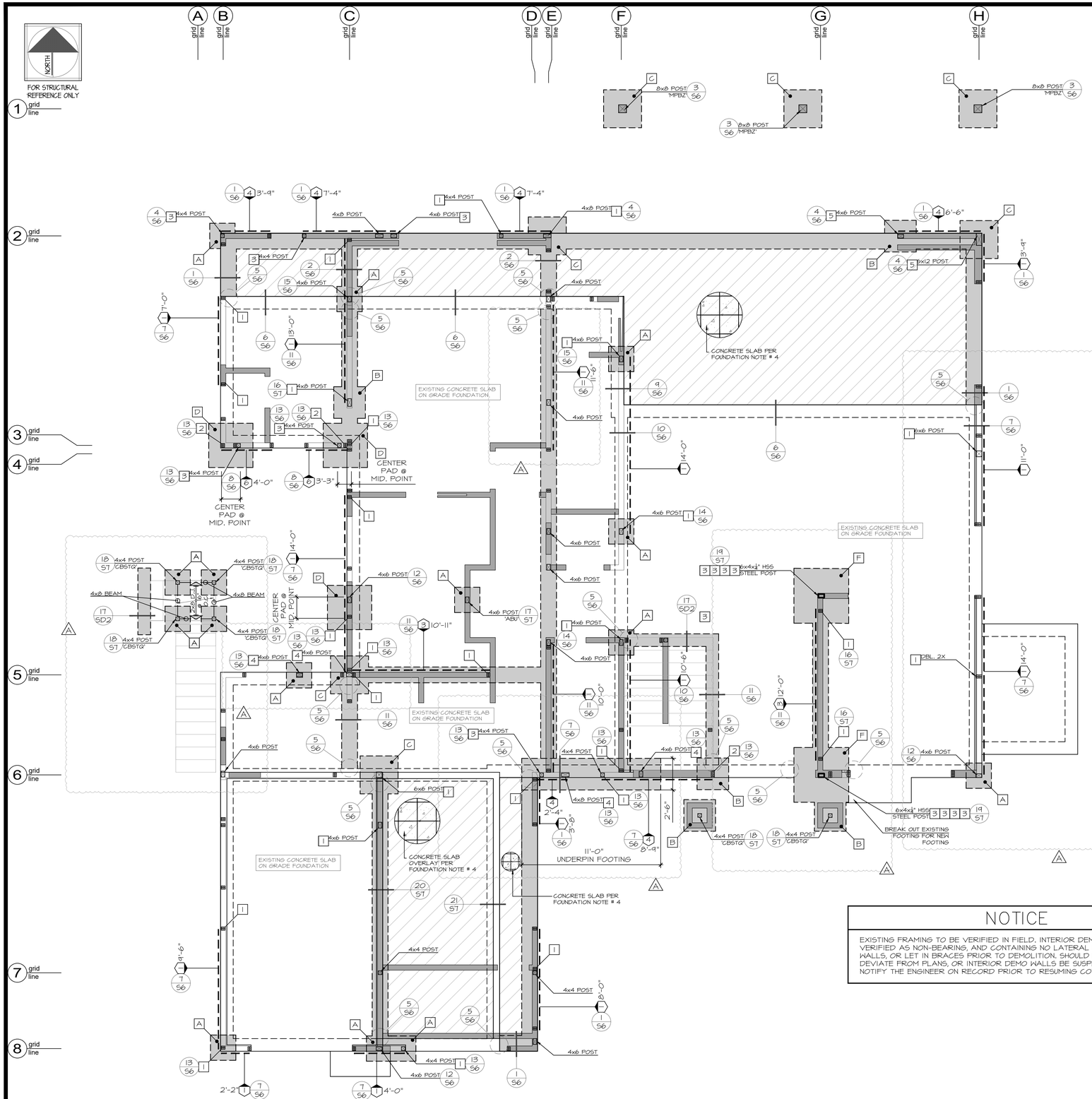
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SHEET TITLE :

FOUNDATION/ FRAMING NOTES & SCHEDULES

SHEET NUMBER :

S2



ABBREVIATIONS

AB	ANCHOR BOLT	HOR (H)	HORIZONTAL
CLR	CLEAR	(N)	NEW
CVR	COVER	NTS	NOT TO SCALE
d	PENNY (NAILS)	OC	ON CENTER
DF	DOUGLAS FIR	PERP	PERPENDICULAR
DIA (Ø)	DIAMETER	PL (¶)	PLATE
EA	EACH	PT	PRESSURE TREATED
EMB	EMBED(MENT)	SCH	SCHEDULE
EN	EDGE NAILING	SW	SHEARWALL
ES	EACH SIDE	T & B	TOP AND BOTTOM
EW	EACH WAY	THR'D	THREADED
(E)	EXISTING	TN	TOE NAIL
FN	FIELD NAILING	TYP	TYPICAL
FTG	FOOTING	UNO	UNLESS NOTED OTHERWISE
HD	HOLD DOWN	VIF	VERIFY IN FIELD
HHS	HOLLOW STRUCTURAL SHAPE		

NOTE:
1. (1/5D1) SEE DETAIL FOR TYP. HOLDOWN PLACEMENT
2. (13/5D1) SEE DETAIL FOR TYP. STEPPED FOOTING
3. (14/5D1) SEE DETAIL FOR TYP. BAR LAPS AT WALLS
4. (15/5D1) SEE DETAIL FOR TYP. REBAR HOOKS
5. (17/5D2) SEE DETAIL FOR TYP. STAIR DETAILS
6. SEE SHEET S1 FOR ALL WORK REQUIRING SPECIAL INSPECTION
7. VERIFY ALL EXISTING FRAMING SPAN AND ORIENTATION.

NOTICE

EXISTING FRAMING TO BE VERIFIED IN FIELD. INTERIOR DEMO-WALLS TO BE VERIFIED AS NON-BEARING, AND CONTAINING NO LATERAL ELEMENT SUCH AS SHEAR WALLS, OR LET IN BRACES PRIOR TO DEMOLITION. SHOULD EXISTING FRAMING DEVIATE FROM PLANS, OR INTERIOR DEMO WALLS BE SUSPECTED AS BEARING, NOTIFY THE ENGINEER ON RECORD PRIOR TO RESUMING CONSTRUCTION.

FRAMING LEGEND

- SHEAR WALL PER PLAN (MIN. X)
- EXISTING WALL PER PLAN
- NEW WALL PER PLAN
- HOLD-DOWN PER PLAN (X)
- DOUBLE 2x STUD OR KING W/ TRIMMER
- EXISTING FOOTING
- NEW FOOTING PER PLAN
- 'HU' HANGER (U.N.O.)
- 'HUC' HANGER (U.N.O.)
- POST ABOVE
- ALIGN POST W/ B.N. & HOLD-DOWN ABOVE (#)

REVISIONS:

1	1/27/26

REGISTERED PROFESSIONAL ENGINEER — MILES T. LOVELACE — No. C 39734 — Exp. 12/31/27 — STATE OF CALIFORNIA

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Project Name:

MARCUS RESIDENCE

85822 SUGARMAN DRIVE
LA JOLLA, CA
92037

Designer:

RH DRAFT SENSE

5426 RILEY STREET, STE 4
SAN DIEGO, CA
92110

Job No.	J25130
Cad Ref. No:	-
Date Drawn:	10/20/25
Date Issued:	-
Proj. Engineer:	C.K.
Drawn By:	C.K.
Checked By:	M.T.L.
Scale:	¼" = 1'-0"

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- ☐ BID SET DRAWINGS
- ☐ CONSTRUCTION DOCUMENTS
- ☐ OTHER_____

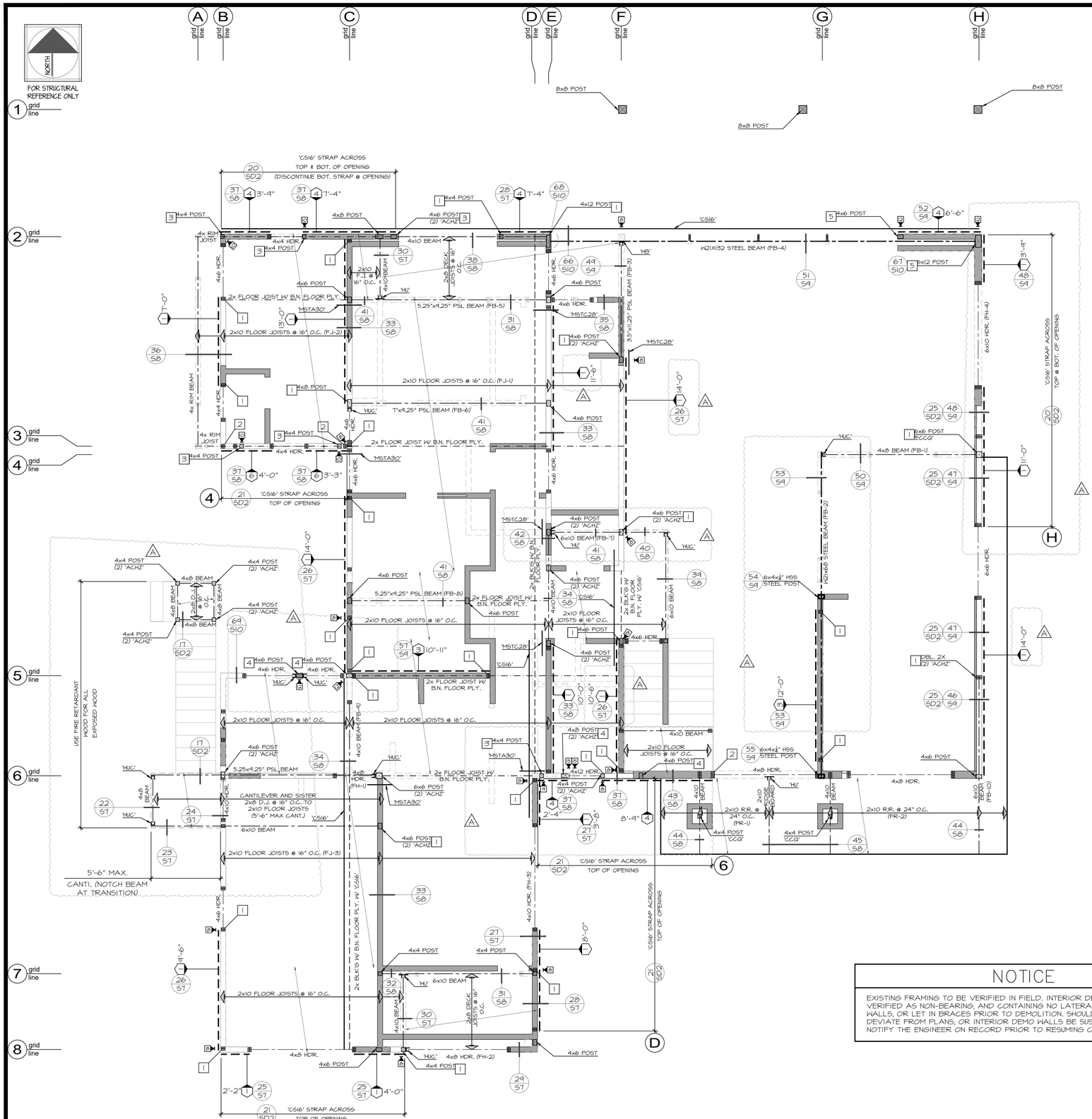
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SHEET TITLE :

FOUNDATION PLAN/NOTES

SHEET NUMBER :

S3



ABBREVIATIONS

AB	ANCHOR BOLT	HOR (H)	HORIZONTAL
CLR	CLEAR	(N)	NEW
CVR	COVER	NTS	NOT TO SCALE
d	PENNY (NAILS)	OC	ON CENTER
DF	DOUGLAS FIR	PERP	PERPENDICULAR
DIA (Ø)	DIAMETER	PL (PL)	PLATE
EA	EACH	PT	PRESSURE TREATED
EMB	EMBED(MENT)	SCH	SCHEDULE
EN	EDGE NAILING	SW	SHEARWALL
ES	EACH SIDE	T & B	TOP AND BOTTOM
EW	EACH WAY	THR'D	THREADED
(E)	EXISTING	TN	TOE NAIL
FN	FIELD NAILING	TYP	TYPICAL
FTG	FOOTING	UNO	UNLESS NOTED OTHERWISE
HD	HOLD DOWN	VIF	VERIFY IN FIELD
HHS	HOLLOW STRUCTURAL SHAPE		

NOTE:
1. (1/5D1) SEE DETAIL FOR TYP. HOLDOWN PLACEMENT
2. (2/5D1) SEE DETAIL FOR TYP. PLATE SPLICE
3. (3/5D1) SEE DETAIL FOR TYP. NON-BEARING WALL CONN.
4. (4/5D1) SEE DETAIL FOR TYP. CAL. FILL FRAMING
5. (13/5D1) SEE DETAIL FOR TYP. STEPPED FOOTING
6. (14/5D1) SEE DETAIL FOR TYP. BAR LAPS AT WALLS
7. (15/5D1) SEE DETAIL FOR TYP. REBAR HOOKS
8. (16/5D2) SEE DETAIL FOR TYP. GUARDRAIL ATTACHMENT
9. (17/5D2) SEE DETAIL FOR TYP. STAIR DETAILS
10. SEE SHEET S1 FOR ALL WORK REQUIRING SPECIAL INSPECTION
11. VERIFY ALL EXISTING FRAMING SPAN AND ORIENTATION.

FRAMING LEGEND

- MIN. (X) — SHEAR WALL PER PLAN
- EXISTING WALL PER PLAN
- NEW WALL PER PLAN
- (X) — HOLD-DOWN PER PLAN
- DOUBLE 2x STUD OR KING W/ TRIMMER
- EXISTING FOOTING
- NEW FOOTING PER PLAN
- 'HU' HANGER (U.N.O.)
- 'HUC' HANGER (U.N.O.)
- POST ABOVE
- (#) — ALIGN POST W/ B.N. & HOLD-DOWN ABOVE

REVISIONS:

1	1/27/26

REGISTERED PROFESSIONAL ENGINEER — MILES T. LOVELACE — No. C 39734 — Exp. 12/31/27 — STATE OF CALIFORNIA

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Designer:

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Job No.	J25130
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Date Drawn:	10/20/25
Date Issued:	-
Proj. Engineer:	C.K.
Drawn By:	C.K.
Checked By:	M.T.L.
Scale:	¼" = 1'-0"

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- ☐ CONSTRUCTION DOCUMENTS
- ☐ OTHER

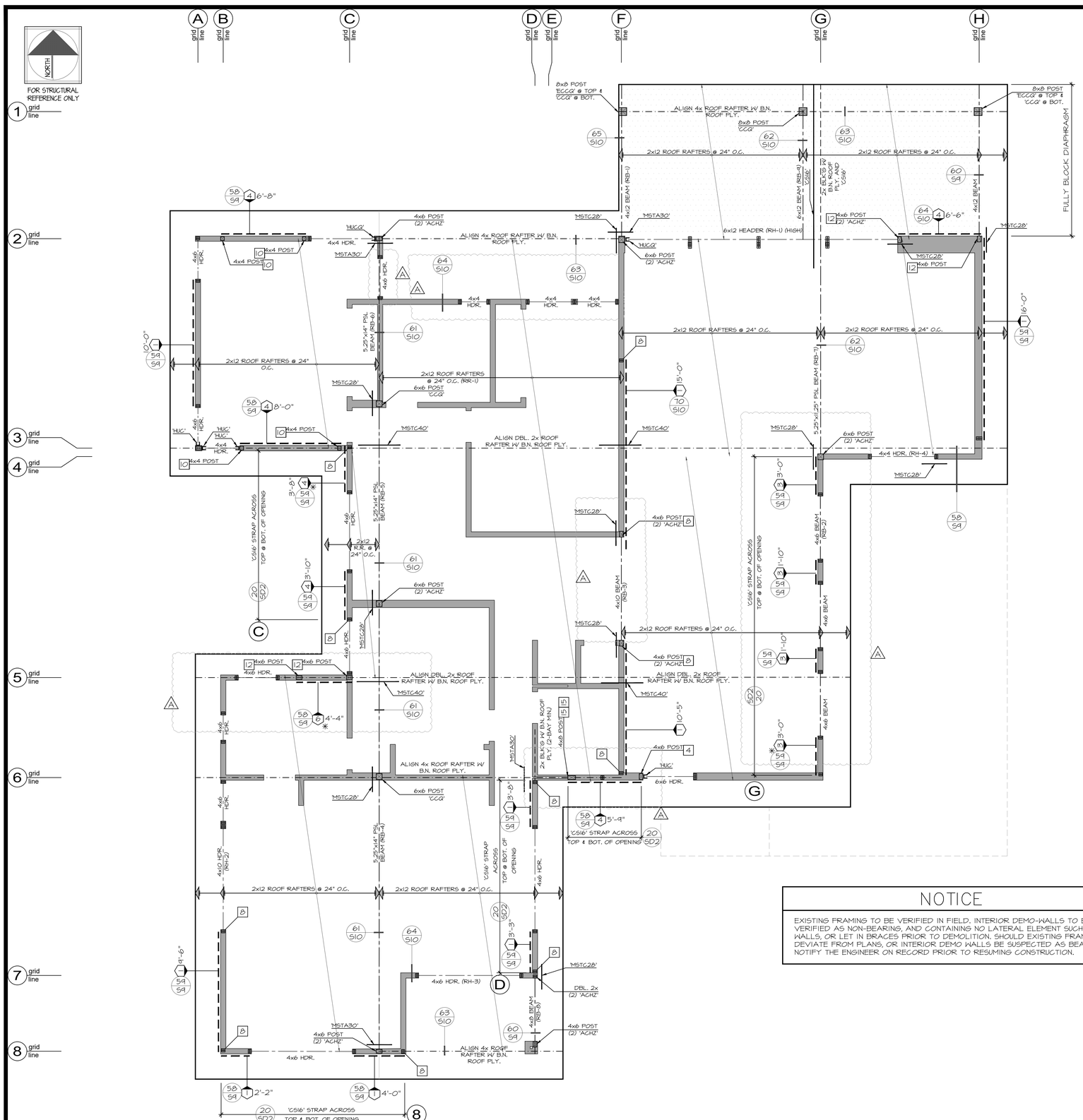
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SHEET TITLE :

FLOOR FRAMING PLAN/NOTES

SHEET NUMBER :

S4



ABBREVIATIONS

AB	ANCHOR BOLT	HOR (H)	HORIZONTAL
CLR	CLEAR	(N)	NEW
CVR	COVER	NTS	NOT TO SCALE
d	PENNY (NAILS)	OC	ON CENTER
DF	DOUGLAS FIR	PERP	PERPENDICULAR
DIA (Ø)	DIAMETER	PL (₱)	PLATE
EA	EACH	PT	PRESSURE TREATED
EMB	EMBED(MENT)	SCH	SCHEDULE
EN	EDGE NAILING	SW	SHEARWALL
ES	EACH SIDE	T & B	TOP AND BOTTOM
EW	EACH WAY	THR'D	THREADED
(E)	EXISTING	TN	TOE NAIL
FN	FIELD NAILING	TYP	TYPICAL
FTG	FOOTING	UNO	UNLESS NOTED OTHERWISE
HD	HOLD DOWN	VIF	VERIFY IN FIELD
HHS	HOLLOW STRUCTURAL SHAPE		

NOTE:
1. (1/SD1) SEE DETAIL FOR TYP. HOLDOWN PLACEMENT
2. (2/SD1) SEE DETAIL FOR TYP. PLATE SPLICE
3. (3/SD1) SEE DETAIL FOR TYP. NON-BEARING WALL CONN.
4. (4/SD1) SEE DETAIL FOR TYP. CAL. FILL FRAMING
5. (13/SD1) SEE DETAIL FOR TYP. STEPPED FOOTING
6. (14/SD1) SEE DETAIL FOR TYP. BAR LAPS AT WALLS
7. (15/SD1) SEE DETAIL FOR TYP. REBAR HOOKS
8. (16/SD2) SEE DETAIL FOR TYP. GUARDRAIL ATTACHMENT
9. (17/SD2) SEE DETAIL FOR TYP. STAIR DETAILS
10. SEE SHEET S1 FOR ALL WORK REQUIRING SPECIAL INSPECTION
11. VERIFY ALL EXISTING FRAMING SPAN AND ORIENTATION.

FRAMING LEGEND

- SHEAR WALL PER PLAN
- EXISTING WALL PER PLAN
- NEW WALL PER PLAN
- HOLD-DOWN PER PLAN
- DOUBLE 2x STUD OR KING W/ TRIMMER
- EXISTING FOOTING
- NEW FOOTING PER PLAN
- 'HU' HANGER (U.N.O.)
- 'HUC' HANGER (U.N.O.)
- POST ABOVE
- ALIGN POST W/ B.N. & HOLD-DOWN ABOVE

NOTICE

EXISTING FRAMING TO BE VERIFIED IN FIELD. INTERIOR DEMO-WALLS TO BE VERIFIED AS NON-BEARING, AND CONTAINING NO LATERAL ELEMENT SUCH AS SHEAR WALLS, OR LET IN BRACES PRIOR TO DEMOLITION. SHOULD EXISTING FRAMING DEVIATE FROM PLANS, OR INTERIOR DEMO WALLS BE SUSPECTED AS BEARING, NOTIFY THE ENGINEER ON RECORD PRIOR TO RESUMING CONSTRUCTION.

REVISIONS:

1	1/27/26

REGISTERED PROFESSIONAL ENGINEER — MILES T. LOVELACE — No. C 39734 — Exp. 12/31/27 — STATE OF CALIFORNIA

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Designer:

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Job No.	J25130
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Date Drawn:	10/20/25
Date Issued:	-
Proj. Engineer:	C.K.
Drawn By:	C.K.
Checked By:	M.T.L.
Scale:	1/4" = 1'-0"

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- ☐ PLAN CHECK DRAWINGS
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- ☐ CONSTRUCTION DOCUMENTS
- ☐ OTHER_____

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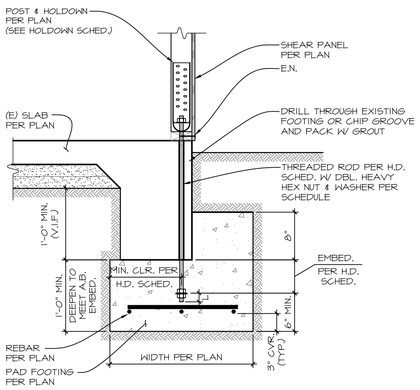
SHEET TITLE :

ROOF FRAMING PLAN/NOTES

SHEET NUMBER :

S5

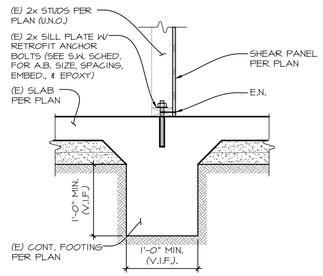
WASHER PLATE SCHEDULE		
A.B. DIAMETER	WASHER PLATE	L
⅝" ø	1¾" SQ. x ½" THK.	1⅝"
⅞" ø	2½" SQ. x ½" THK.	1⅝"
1" ø	3" SQ. x ⅝" THK.	1⅞"



RETROFIT PAD FOOTING 13

RE FN SL GO EX

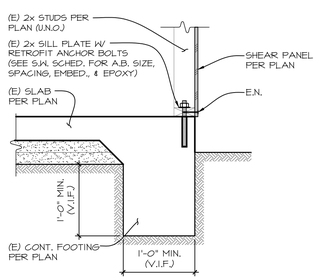
NOTE:
1¾" MIN. EDGE DISTANCE FOR RETROFIT A.B.
• • SPECIAL INSPECTION REQUIRED • •



SHEARWALL TO (E) FTG. 10

RE FN SL GO EX

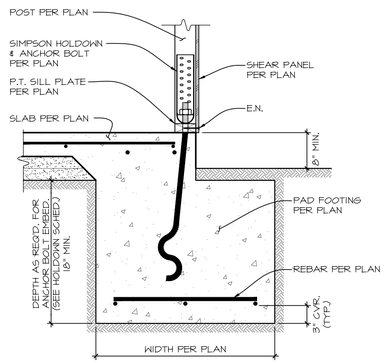
NOTE:
1¾" MIN. EDGE DISTANCE FOR RETROFIT A.B.
• • SPECIAL INSPECTION REQUIRED • •



SHEARWALL TO (E) FTG. 7

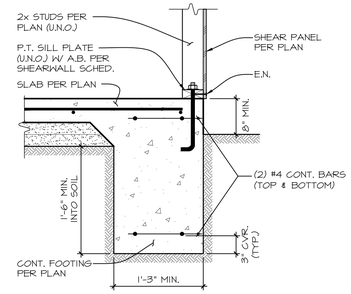
RE FN SL GO EX

NOTE: DEEPENED FOOTING SHALL EXTEND 12" MIN. BEYOND HOLDOWN (BOTH SIDES)



PAD FTG. AT HOLDOWN 4

FN N SL 2ST PD EX 3



CONT. EXT. FOOTING 1

N FN SL 2ST GO EX

WASHER PLATE SCHEDULE		
A.B. DIAMETER	WASHER PLATE	L
⅝" ø	1¾" SQ. x ½" THK.	1⅝"
⅞" ø	2½" SQ. x ½" THK.	1⅝"
1" ø	3" SQ. x ⅝" THK.	1⅞"

RETROFIT PAD FOOTING 14

RE FN SL PD IN

FOOTING TO (E) SLAB 11

RE FN SL GO EX

NOTE:
1¾" MIN. EDGE DISTANCE FOR RETROFIT A.B.
• • SPECIAL INSPECTION REQUIRED • •

SHEARWALL TO (E) FTG. 8

RE FN SL GO EX

FOOTING TO (E) FTG. 5

RE FN SL GO NE

CONT. INT. FOOTING 2

FN N SL 2ST GO IN

WASHER PLATE SCHEDULE		
A.B. DIAMETER	WASHER PLATE	L
⅝" ø	1¾" SQ. x ½" THK.	1⅝"
⅞" ø	2½" SQ. x ½" THK.	1⅝"
1" ø	3" SQ. x ⅝" THK.	1⅞"

RETROFIT PAD FOOTING 15

RE FN SL GO EX

RETROFIT PAD FOOTING 12

RE FN SL GO EX

NOTE:
1¾" MIN. EDGE DISTANCE FOR RETROFIT A.B.
• • SPECIAL INSPECTION REQUIRED • •

SHEARWALL TO (E) FTG. 9

RE FN SL GO EX

SLAB TO (E) FTG. 6

RE FN SL GO EX

8x8 'MPBZ' POST BASE 3

N FN SL 1ST PD EX

REVISIONS:

1	1/27/26

REGISTERED PROFESSIONAL ENGINEER
MILES T. LOVELACE
No. C 39734
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STATE OF CALIFORNIA

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Scale:	N.T.S.

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- ☐ OTHER

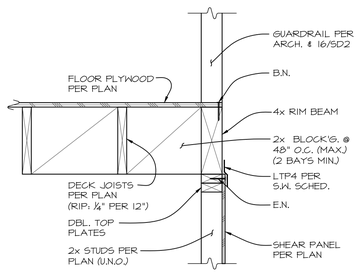
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SHEET TITLE :

STRUCTURAL DETAILS

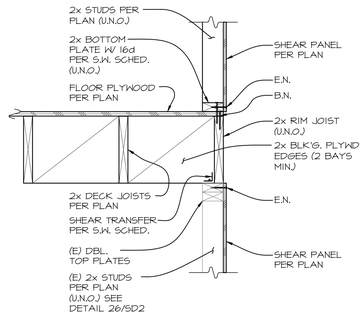
SHEET NUMBER :

S6



SHEAR TRANSFER DETAIL 28

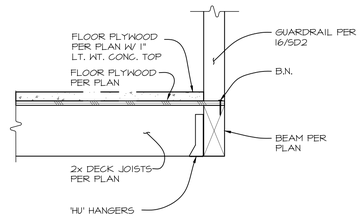
N WD FL 2x DK EX PA



SHEAR TRANSFER DETAIL 25

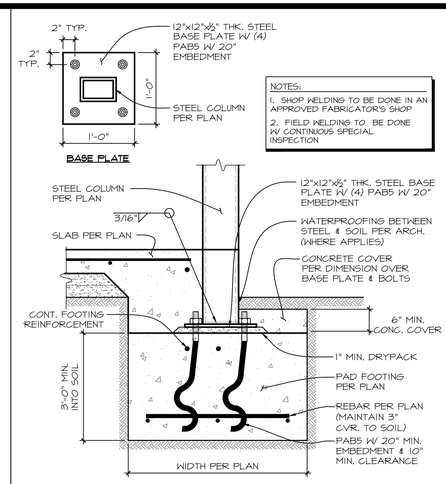
N WD FL 2x EX PE

NOTE:
BUILD UP SLOPE PER ARCH.,
DO NOT RIP DECK JOISTS.



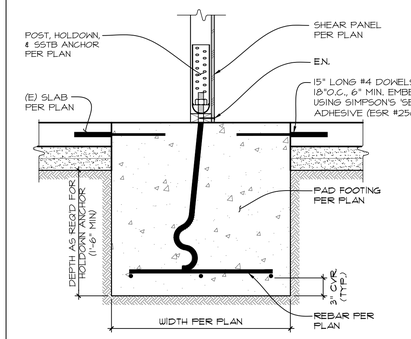
SHEAR TRANSFER DETAIL 22

N WD FL 2x DK EX PE



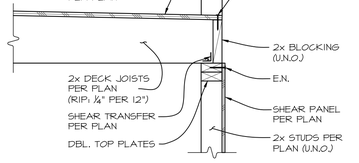
PAD FOOTING 19

N FN SL 25T PD EX T



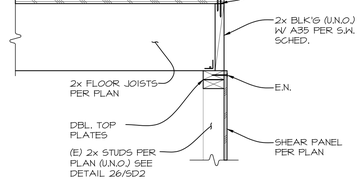
RETROFIT PAD FOOTING 16

RE FN SL GO EX



SHEAR TRANSFER DETAIL 29

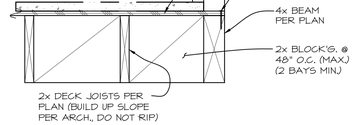
N WD FL 2x DK EX PE



SHEAR TRANSFER DETAIL 26

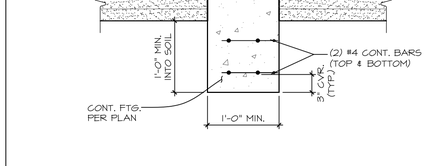
RE WD FL 2x EX PE

NOTE:
CONNECTION TO SPIRAL STAIR CASE PER MANUFACTURER SPECIFICATIONS / DETAILS



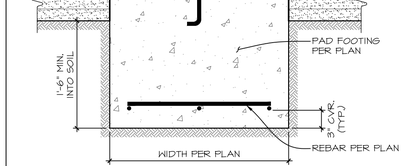
SHEAR TRANSFER DETAIL 23

N WD FL 2x DK EX PA



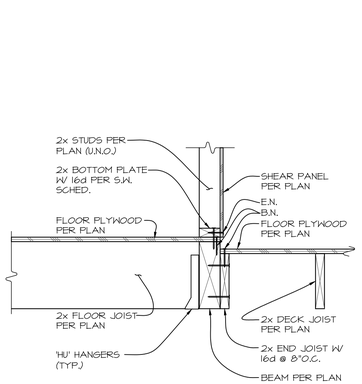
FOOTING TO (E) SLAB 20

RE FN SL GO EX



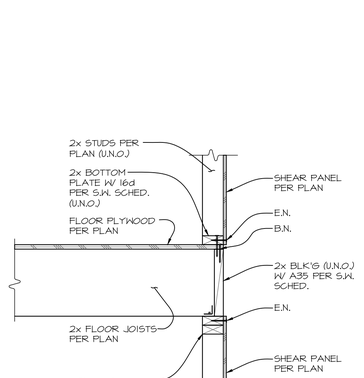
RETROFIT PAD FOOTING 17

RE FN SL GO EX



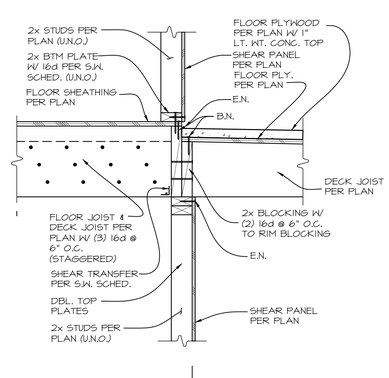
SHEAR TRANSFER DETAIL 30

N WD FL 2x DK IN PP



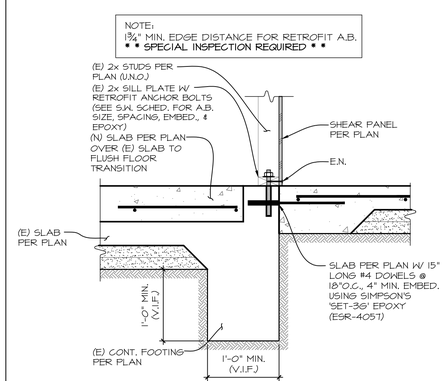
SHEAR TRANSFER DETAIL 27

N WD FL 2x EX PE 1



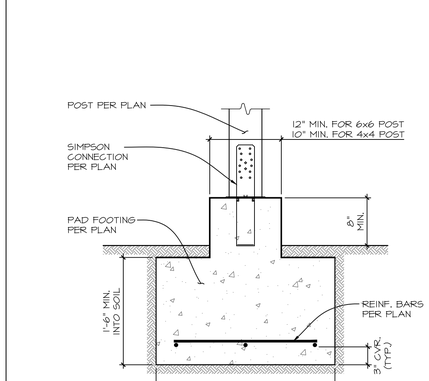
CONNECTION DETAIL 24

N WD FL TJI IN PP



SHEARWALL TO (E) FTG. 21

RE FN SL GO EX



ISOLATED PAD FOOTING 18

FN N SL 25T PD EX 1

REVISIONS:

1	1/27/26

REGISTERED PROFESSIONAL ENGINEER — MILES T. LOVELACE — No. C 39734 — Exp. 12/31/27 — STATE OF CALIFORNIA

Digitally signed by Miles Lovelace
on January 27, 2026

LOVELACE ENGINEERING
STRUCTURAL ENGINEERING SERVICES
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www.lovelaceeng.com

Project Name:

MARCUS RESIDENCE

85822 SUGARMAN DRIVE
LA JOLLA, CA
92037

Designer:

RH DRAFT SENSE

5426 RILEY STREET, STE 4
SAN DIEGO, CA
92110

Job No.	J25130
Cad Ref. No:	-
Date Drawn:	10/20/25
Date Issued:	-
Proj. Engineer:	C.K.
Drawn By:	C.K.
Checked By:	M.T.L.
Scale:	N.T.S.

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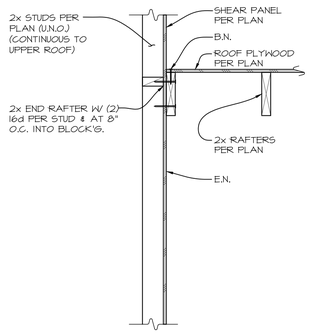
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SHEET TITLE :

STRUCTURAL DETAILS

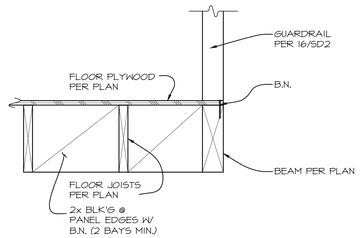
SHEET NUMBER :

S7



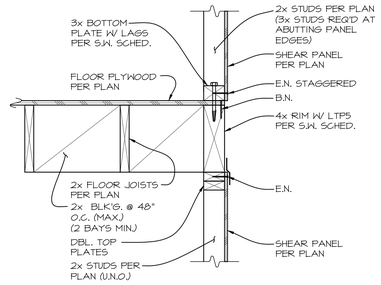
SHEAR TRANSFER DETAIL 43

N WD F-R 2-2



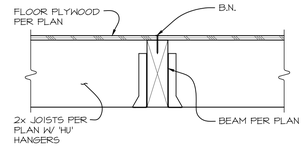
SHEAR TRANSFER DETAIL 40

N WD FL 2x EX PA



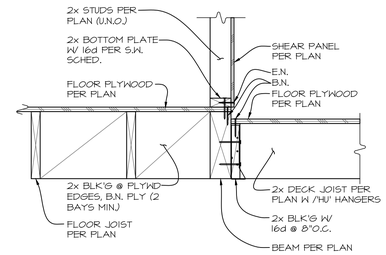
SHEAR TRANSFER DETAIL 37

N WD FL 2x EX PA



SHEAR TRANSFER DETAIL 34

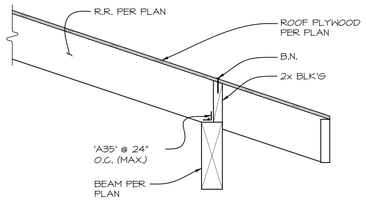
N WD FL 2x IN PE



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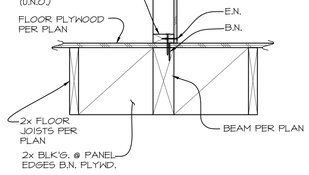
N WD FL 2x DK IN PP

NOTE:
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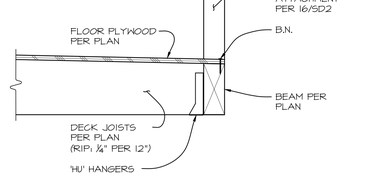
SHEAR TRANSFER DETAIL 44

N WD RF 2x EX PE



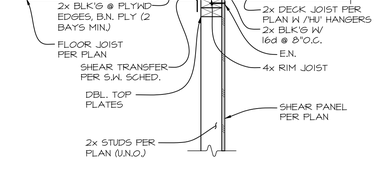
SHEAR TRANSFER DETAIL 41

N WD FL 2x IN PA



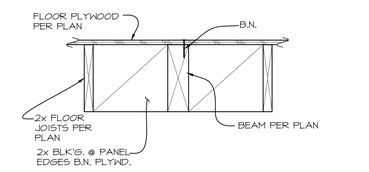
SHEAR TRANSFER DETAIL 38

N WD FL 2x DK EX PE



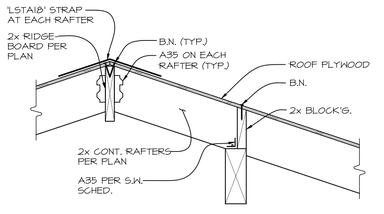
SHEAR TRANSFER DETAIL 35

N WD FL 2x DK IN PP



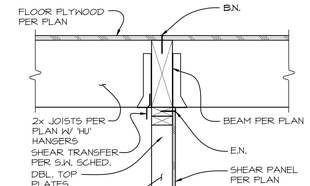
SHEAR TRANSFER DETAIL 32

N WD FL 2x IN PA



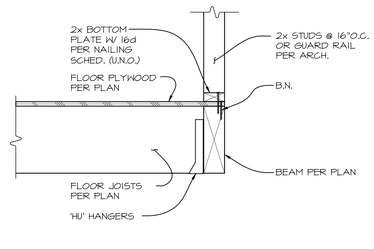
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N WD RF 2x IN PE



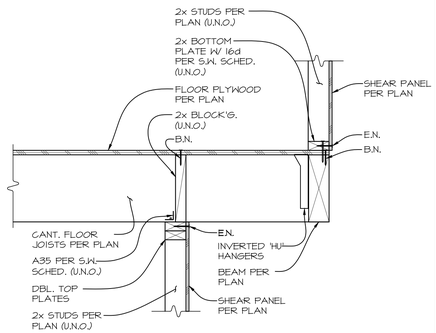
SHEAR TRANSFER DETAIL 42

N WD FL 2x IN PE



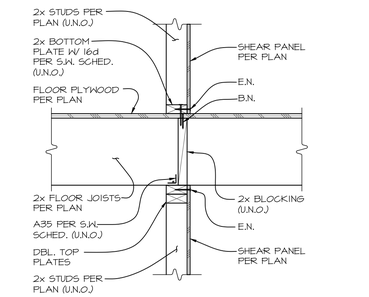
SHEAR TRANSFER DETAIL 39

N WD FL 2x EX PE 6



SHEAR TRANSFER DETAIL 36

N WD FL 2x EX PE 8



SHEAR TRANSFER DETAIL 33

N WD FL 2x IN PE

REVISIONS:

1	1/27/26

REGISTERED PROFESSIONAL ENGINEER MILES T. LOVELACE No. C 39734 Exp. 12/31/27 STATE OF CALIFORNIA

Digitally signed by Miles Lovelace on January 27, 2026

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Project Name:

MARCUS RESIDENCE

85822 SUGARMAN DRIVE
LA JOLLA, CA
92037

Designer:

RH DRAFT SENSE

5426 RILEY STREET, STE 4
SAN DIEGO, CA
92110

Job No.	J25730
Cad Ref. No:	-
Date Drawn:	10/20/25
Date Issued:	-
Proj. Engineer:	C.K.
Drawn By:	C.K.
Checked By:	M.T.L.
Scale:	N.T.S.

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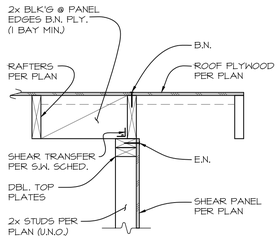
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STRUCTURAL DETAILS

SHEET NUMBER :

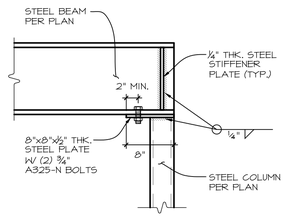
S8

NOTE:
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FOR EAVE DETAIL, SEE ARCHITECTURAL PLANS.

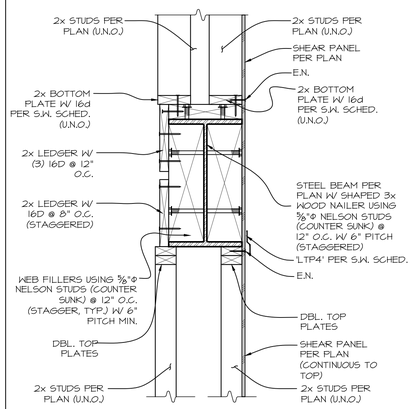


SHEAR TRANSFER DETAIL 58
N WD RF 2x EX PA

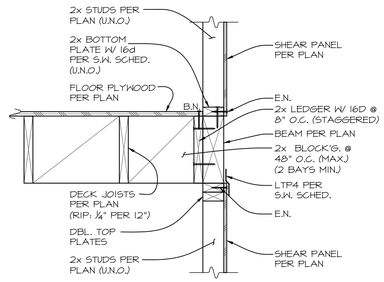
NOTES:
1. SHOP WELDING TO BE DONE IN AN APPROVED FABRICATOR'S SHOP
2. FIELD WELDING TO BE DONE W/ CONTINUOUS SPECIAL INSPECTION



CONNECTION DETAIL 55
N ST CO

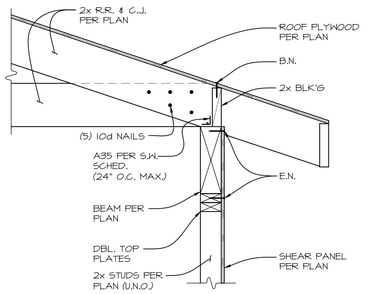


SHEAR TRANSFER DETAIL 52
N WD RF 2x EX PA



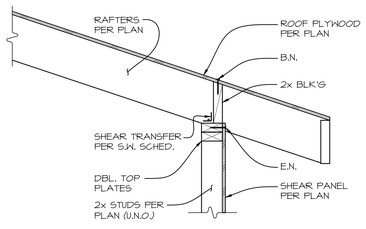
SHEAR TRANSFER DETAIL 49
N WD FL 2x DK EX PA

NOTE:
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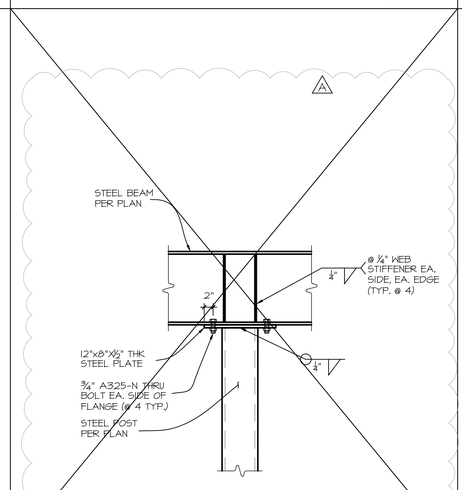


SHEAR TRANSFER DETAIL 46
N WD RF 2x EX PE

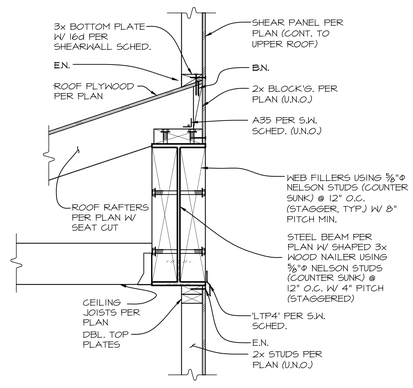
NOTE:
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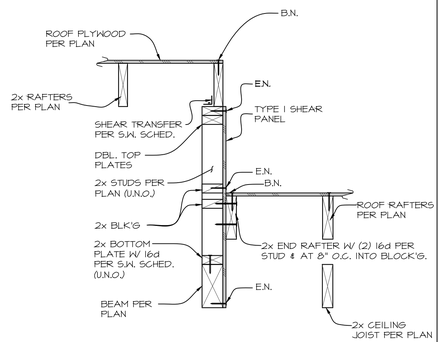
SHEAR TRANSFER DETAIL 59
N WD RF 2x EX PE



CONNECTION DETAIL 56
N WD RF 2x EX PE

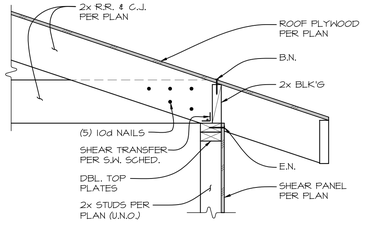


SHEAR TRANSFER DETAIL 53
N WD RF 2x IN PE



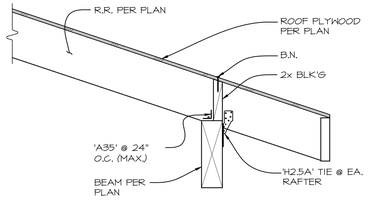
SHEAR TRANSFER DETAIL 50
N WD RF 2x EX PA

NOTE:
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FOR EAVE DETAIL, SEE ARCHITECTURAL PLANS.

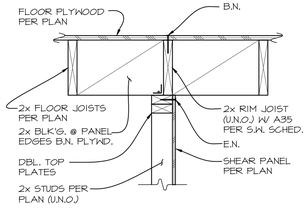


SHEAR TRANSFER DETAIL 47
N WD RF 2x EX PE

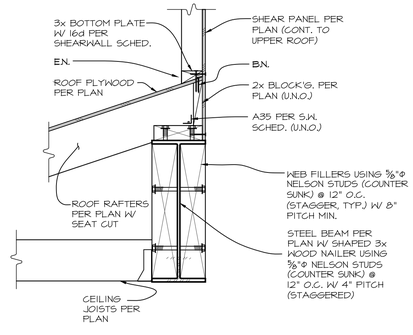
NOTE:
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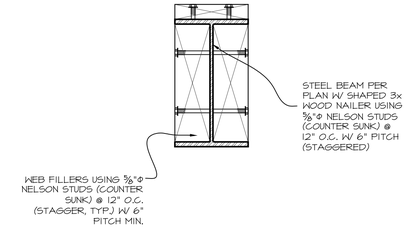
SHEAR TRANSFER DETAIL 60
N WD RF 2x EX PE



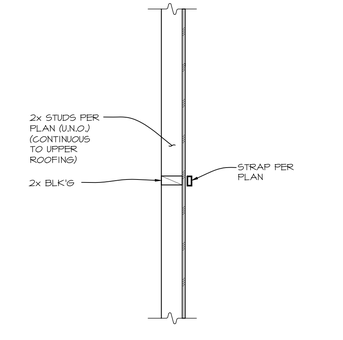
SHEAR TRANSFER DETAIL 57
N WD FL 2x IN PA



SHEAR TRANSFER DETAIL 54
N WD RF 2x IN PE



SHEAR TRANSFER DETAIL 51
N WD RF 2x EX PA



SHEAR TRANSFER DETAIL 48
N WD F-R 2-2

REVISIONS:	
1	1/27/26

REGISTERED PROFESSIONAL ENGINEER
MILES T. LOVELACE
No. C 39734
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RH DRAFT SENSE
5426 RILEY STREET, STE 4
SAN DIEGO, CA
92110

Job No.	J25130
Cad Ref. No:	-
Date Drawn:	10/20/25
Date Issued:	-
Proj. Engineer:	C.K.
Drawn By:	C.K.
Checked By:	M.T.L.
Scale:	N.T.S.

Drawing Status:
- ☐ INFORMATION DWGS. (NOT FOR CONSTRUCTION)
- ☐ PRELIMINARY DWGS. (NOT FOR CONSTRUCTION)
- ☐ DESIGN DEVELOPMENT DWGS. (NOT FOR CONSTRUCTION)
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SHEET TITLE :
STRUCTURAL DETAILS

SHEET NUMBER :
S9

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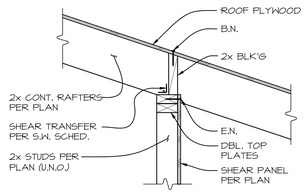
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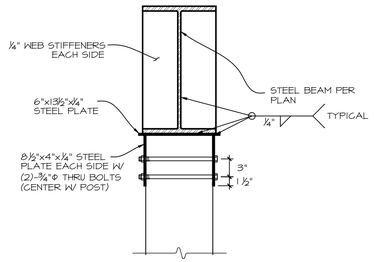
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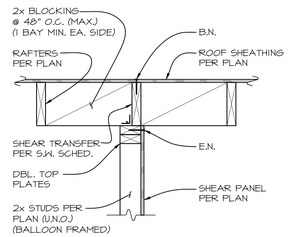
SHEAR TRANSFER DETAIL 70

N WD RF 2x IN PE



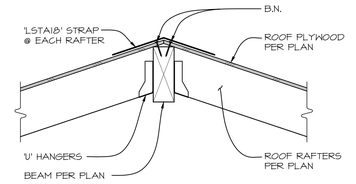
CONNECTION DETAIL 67

N WD RF 2x EX PE



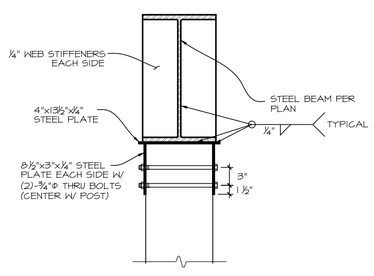
SHEAR TRANSFER DETAIL 64

N WD RF 2x IN PA



RIDGE CONNECTION 61

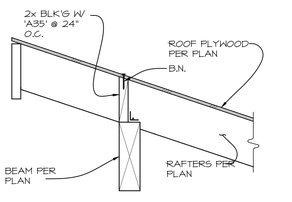
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CONNECTION DETAIL 68

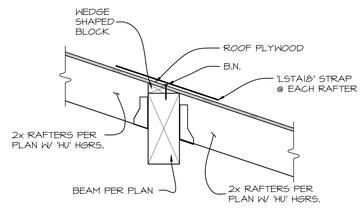
N WD RF 2x EX PE

NOTE:
THIS DETAIL IS FOR SHEAR TRANSFER ONLY. FOR EAVE DETAIL, SEE ARCHITECTURAL PLANS.



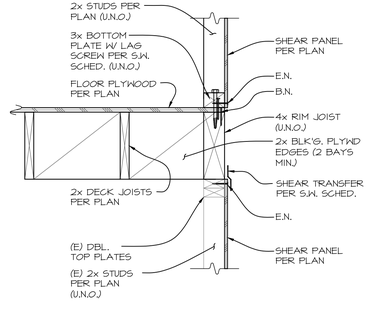
SHEAR TRANSFER DETAIL 65

N WD RF 2x EX PE



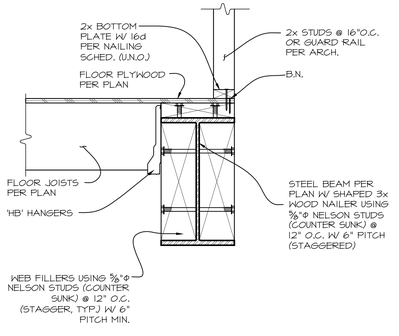
SHEAR TRANSFER DETAIL 62

N WD RF 2x IN PE



SHEAR TRANSFER DETAIL 69

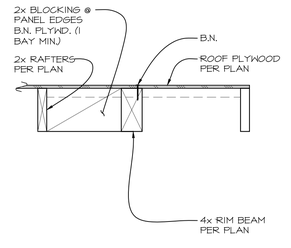
N WD FL 2x EX PE



SHEAR TRANSFER DETAIL 66

N WD RF 2x EX PE

NOTE:
THIS DETAIL IS FOR SHEAR TRANSFER ONLY. FOR EAVE DETAIL, SEE ARCHITECTURAL PLANS.



SHEAR TRANSFER DETAIL 63

N WD RF 2x EX PA

REVISIONS:

1	1/27/26

REGISTERED PROFESSIONAL ENGINEER MILES T. LOVELACE No. C 39734 Exp. 12/31/27 STATE OF CALIFORNIA

Digitally signed by Miles Lovelace on January 27, 2026

LOVELACE ENGINEERING
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www.lovelaceeng.com

Project Name:

MARCUS RESIDENCE

85822 SUGARMAN DRIVE
LA JOLLA, CA
92037

Designer:

RH DRAFT SENSE

5426 RILEY STREET, STE 4
SAN DIEGO, CA
92110

Job No.	J25730
Cad Ref. No:	-
Date Drawn:	10/20/25
Date Issued:	-
Proj. Engineer:	C.K.
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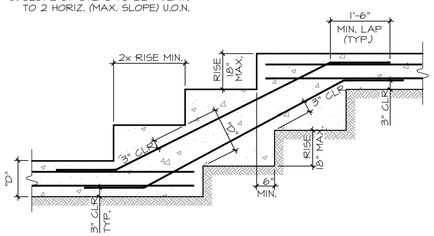
STRUCTURAL DETAILS

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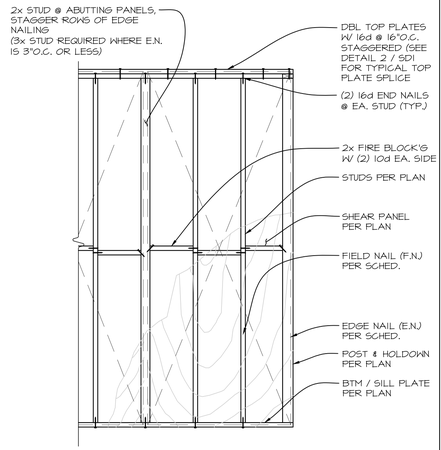
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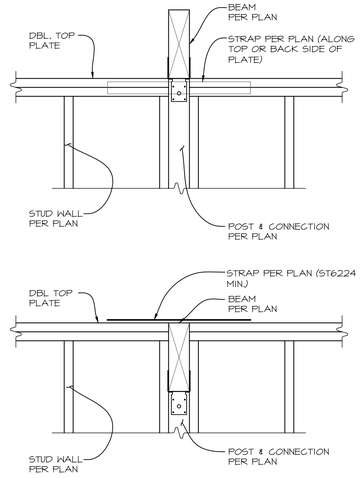
1. "D" EQUALS DEPTH OF FOOTINGS PER PLANS & DETAILS.
2. REINFORCING TO MATCH SIZE & SPACING OF FOOTING REINF.
3. SLOPE OF STEPS TO BE 1 VERT. TO 2 HORIZ. (MAX. SLOPE) U.O.N.



TYPICAL STEPPED FOOTING 13

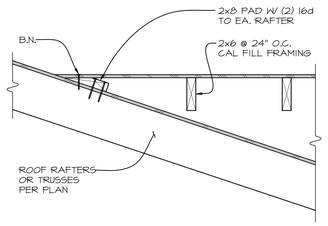


TYPICAL SHEARWALL DETAIL 10

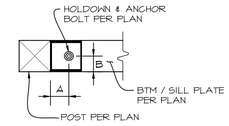


TYPICAL BEAM CONN. 7

NOTE:
INTERMEDIATE SUPPORT FOR 2x6 CAL FILL TO BE PROVIDED @ 6'-0" O.C. MAX.



TYPICAL CAL FILL FRAMING 4



TOP VIEW

HOLDOWN	A	B	ANCHOR BOLT (U.N.O.)
HDU2	1¼"	1¾"	SSTB20 (16⅜" MIN. EMB.)
HDU4	1¼"	1¾"	SB7⅛x24 (18" MIN. EMB.)
HDU5	1¼"	1¾"	SB7⅛x24 (18" MIN. EMB.)
HDU8	1¼"	1¾"	SB7⅛x24 (18" MIN. EMB.)
HDQ8	1¼"	1¾"	SB7⅛x24 (18" MIN. EMB.)
HDU14	1⅜"	1¾"	SB1x30 (24" MIN. EMB.)

NOTES:

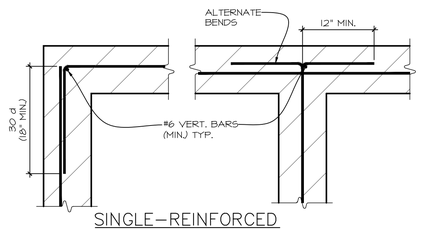
A. HOLDOWN CONNECTORS INTO WOOD FRAMING REQUIRE APPROVED PLATE WASHER, AND HOLDOWNS SHALL BE TIGHTENED JUST PRIOR TO COVERING THE WALL FRAMING.

B. INCREASE FOUNDATION DEPTH FOR ENTIRE SHEAR WALL LENGTH WHERE NECESSARY TO ACCOMMODATE THE REQUIRED ANCHOR BOLT EMBEDMENT & CLEARANCE. ANCHOR BOLTS SHALL BE 3" CLEAR FROM SOIL

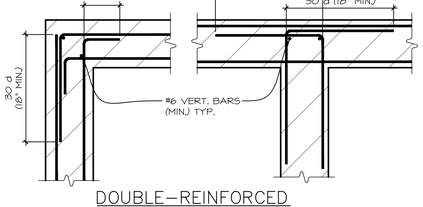
C. USE SIMPSON 'CNK' COUPLER NUT & THRD'D ROD FOR RAISED WOOD FLOOR APPLICATIONS, PROVIDE 4x BLK'G UNDER POST.

D. REFER TO SIMPSON CATALOG FOR PROPER INSTALLATION REQUIREMENTS.

TYP. HOLDOWN PLACEMENT 1

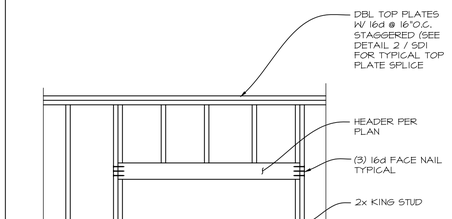


SINGLE-REINFORCED

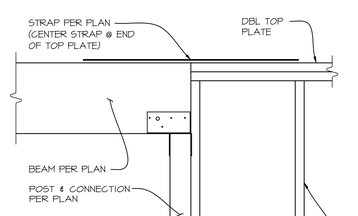


DOUBLE-REINFORCED

TYP. REBAR LAPS @ WALLS 14



TYPICAL OPENING IN WALL 11

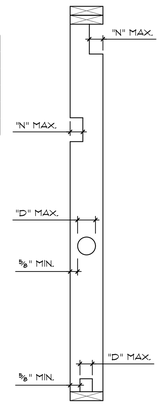


TYPICAL BEAM CONN. 8

STUD	BEARING & EXT. WALL		NON-BEARING	
	"N"	"D"	"N"	"D"
2x4	⅞"	1⅜"	1⅜"	2"
2x6	1⅜"	2⅛"	2⅛"	3¼"
2x8	1⅞"	3"	3"	4½"
2x10	2⅜"	3¾"	3¾"	5⅝"

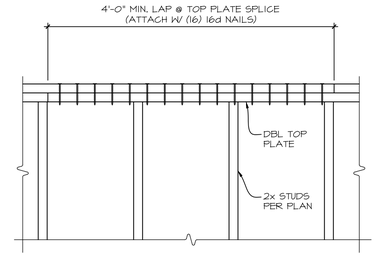
NOTES:

1. ONLY ONE MAX. SIZE NOTCH OR BORED HOLE IS ALLOWED PER STUD
2. BORED HOLES SHALL NOT BE LOCATED IN THE SAME SECTION OF STUD AS A CUT OR NOTCH.
3. NON-BEARING WALL IS DEFINED AS A WALL SUPPORTING NO LOAD OTHER THAN ITS OWN WEIGHT.



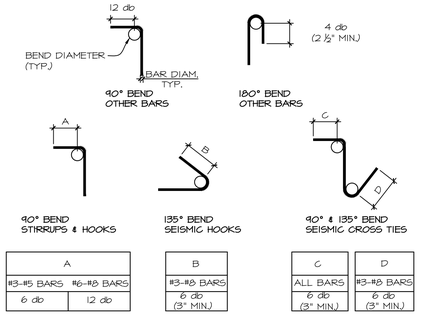
TYPICAL STUD NOTCH 5

NOTE:
PROVIDE MSTC28 OR 2-CS16x26" STRAPS ACROSS ALL DISCONTINUOUS TOP PLATES.



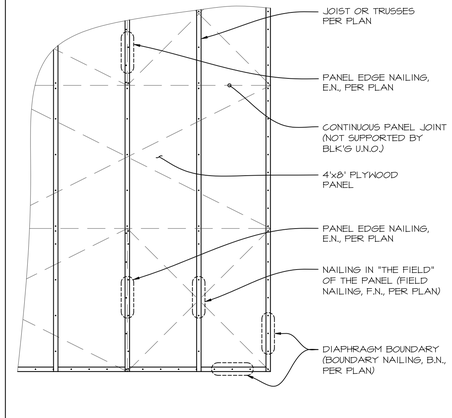
TYP. TOP PLATE SPLICE 2

BEND DIAMETERS				
STIRRUPS AND TIES		ALL OTHERS		
#3-#5 BARS	#6-#8 BARS	#3-#8 BARS	#9-#11 BARS	#14-#18 BARS
4 db	6 db	6 db	8 db	10 db

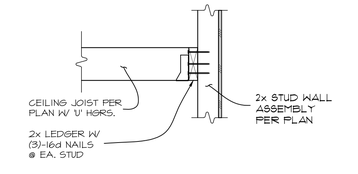


A		B	C	D
#3-#5 BARS	#6-#8 BARS	#3-#8 BARS	ALL BARS	#3-#8 BARS
6 db	12 db	6 db (3" MIN.)	6 db (3" MIN.)	6 db (3" MIN.)

STANDARD HOOKS & BENDS 15



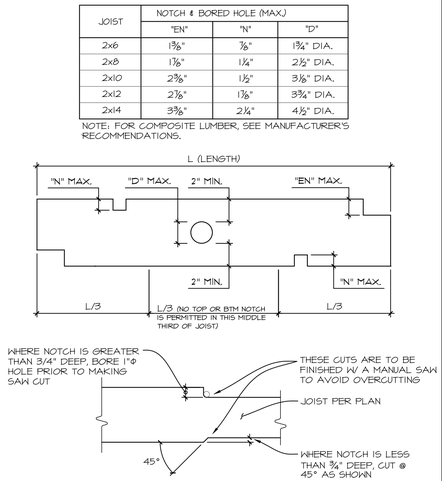
TYP. PLYWOOD DIAPHRAGM 12



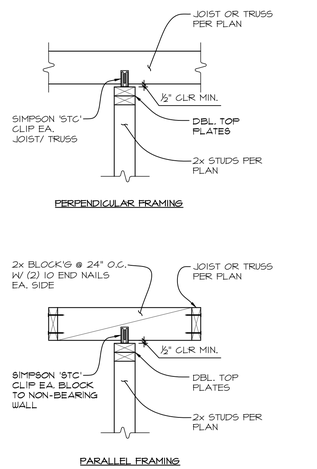
CEILING JOIST DETAIL 9

JOIST	NOTCH & BORED HOLE (MAX.)		
	"EN"	"N"	"D"
2x6	1⅜"	⅞"	1¾" DIA.
2x8	1⅞"	1¼"	2½" DIA.
2x10	2⅜"	1½"	3⅛" DIA.
2x12	2⅞"	1⅞"	3¾" DIA.
2x14	3⅜"	2¼"	4½" DIA.

NOTE: FOR COMPOSITE LUMBER, SEE MANUFACTURER'S RECOMMENDATIONS.



TYPICAL JOIST NOTCH 6



NON-BEARING WALL CONN. 3

N WD FL 2x EX PE 1

REVISIONS:

1	1/27/26

REGISTERED PROFESSIONAL ENGINEER MILES T. LOVELACE No. C 39734 Exp. 12/31/27 STATE OF CALIFORNIA

Digitally signed by Miles Lovelace on January 27, 2026

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Project Name:

MARCUS RESIDENCE

85822 SUGARMAN DRIVE
LA JOLLA, CA
92037

Designer:

RH DRAFT SENSE

5426 RILEY STREET, STE 4
SAN DIEGO, CA
92110

Job No.	J25730
Cad Ref. No:	-
Date Drawn:	10/20/25
Date Issued:	-
Proj. Engineer:	C.K.
Drawn By:	C.K.
Checked By:	M.T.L.
Scale:	N.T.S.

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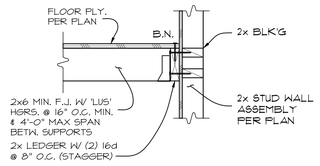
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SHEET TITLE :

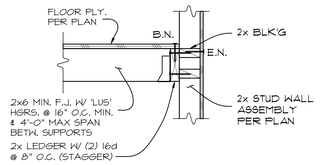
STANDARD STRUCTURAL DETAILS

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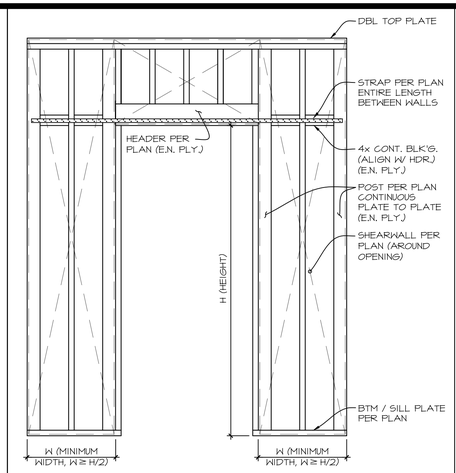


ALTERNATE



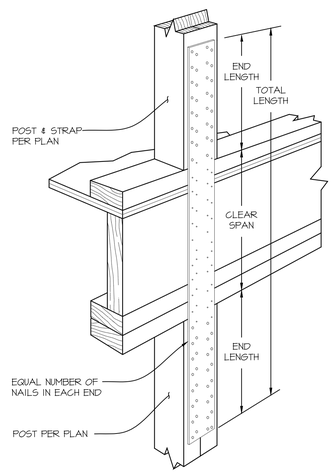
STAIR LANDING DETAIL 24

N WD FL 2x EX PE 1



SHEARWALL STRAP DETAIL 21

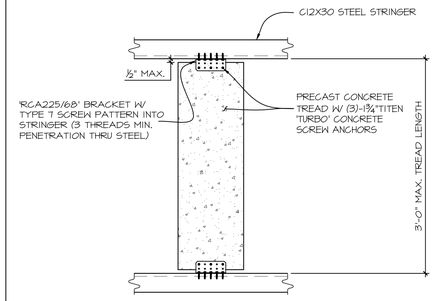
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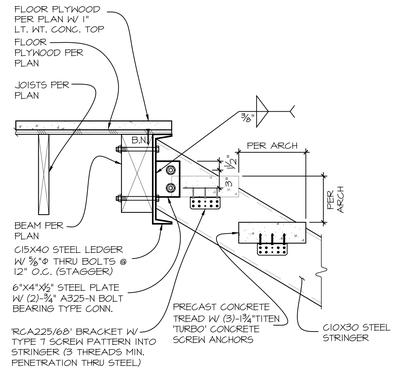


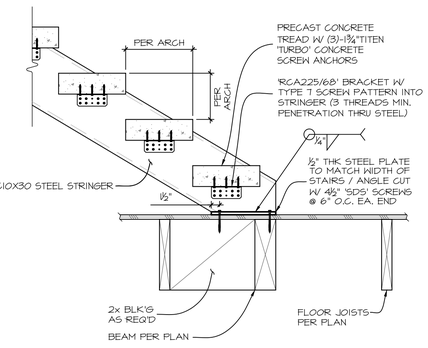
VERTICAL STRAP DETAIL 18

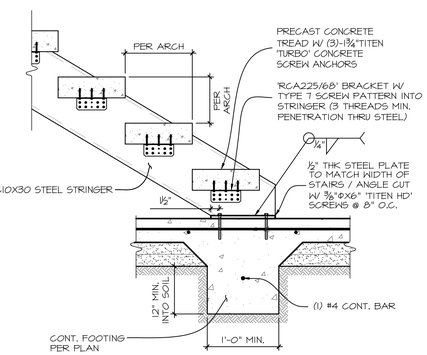
N WD WL DR

NOTICE:
USE PRECAST CONCRETE TREAD "OPEN OR CLOSED" RISER PER ARCHITECTURAL. DETAILS SHOW OPEN RISER FOR SIMPLICITY.

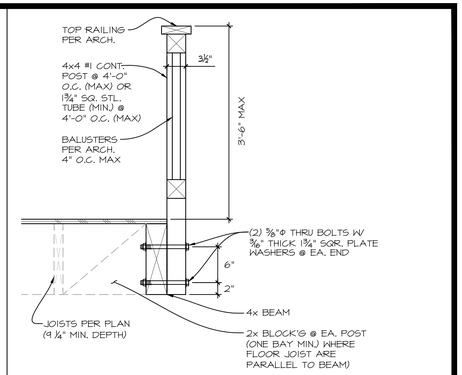


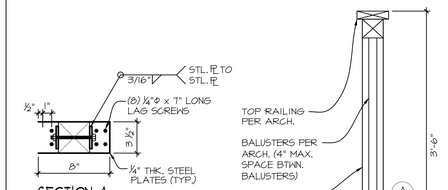


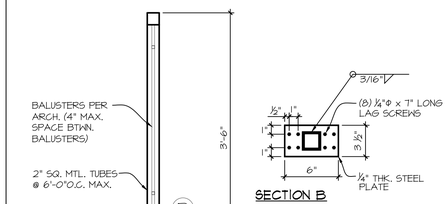




STEEL STAIR DETAILS 17

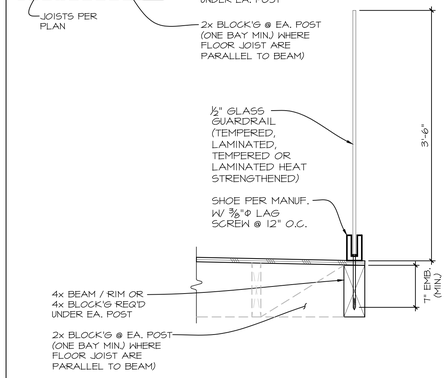


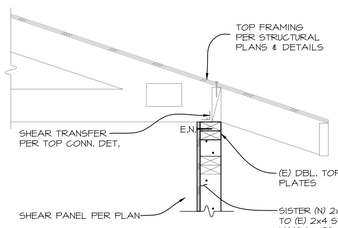




NOTE: OPEN GUARDS SHALL HAVE BALUSTERS OR ORNAMENTAL PATTERNS SUCH THAT A 4"Ø SPHERE CAN NOT PASS THROUGH ANY OPENING.

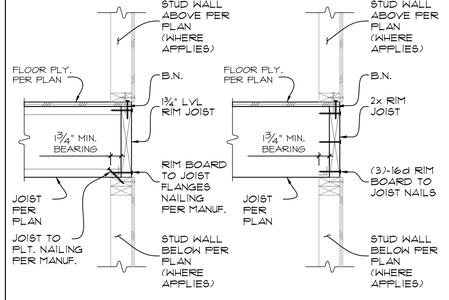
TYP. GUARDRAIL DETAILS 16





SHEAR TRANSFER DETAIL 26

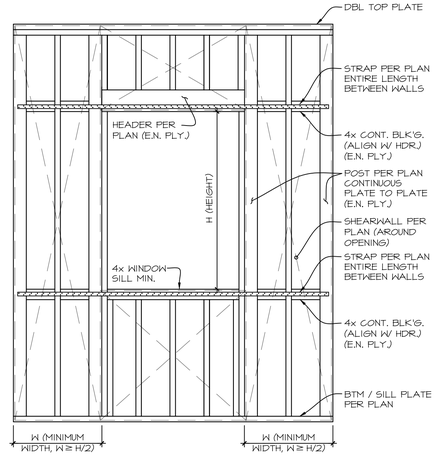
RE WD RF 2x EX PE



ALT. JOIST BEARING COND. 23

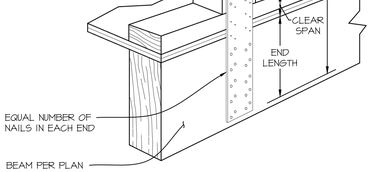
N WD RF 2x EX PE

NOTICE: CONNECTION DETAILS ONLY. REFER TO PLANS / DETAILS FOR SHEAR TRANSFER



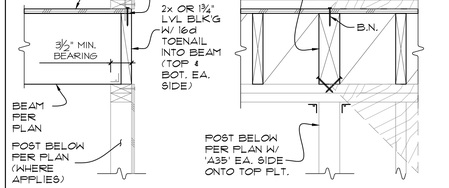
SHEARWALL STRAP DETAIL 20

N WD WL DR



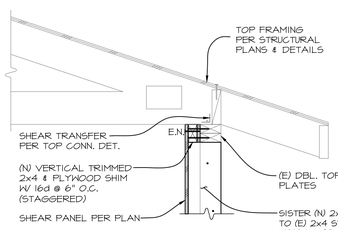
VERTICAL STRAP DETAIL 19

N WD RF 2x EX PE



ALT. BEAM BEARING COND. 22

N WD RF 2x EX PE



SHEAR TRANSFER DETAIL 25

RE WD RF 2x EX PE

REGISTERED PROFESSIONAL ENGINEER MILES T. LOVELACE No. C 39734 Exp. 12/31/27 STATE OF CALIFORNIA
Digitally signed by Miles Lovelace
on January 27, 2026

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1	1/27/26

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Designer:

RH DRAFT SENSE

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SAN DIEGO, CA
92110

Job No.	J25730
Cad Ref. No:	-
Date Drawn:	10/20/25
Date Issued:	-
Proj. Engineer:	C.K.
Drawn By:	C.K.
Checked By:	M.T.L.
Scale:	N.T.S.

Drawing Status:

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- ☐ OTHER_____

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STANDARD STRUCTURAL DETAILS

SHEET NUMBER :

SD2