

# Accessory Dwelling Unit 1 Bedroom Encinitas, CA

## PLAN SELECTION INFORMATION

### fire rated details:

- SELECTION
- ROOF EAVE DETAIL 11/A6.1 & 14/A6.1
- WALL FINISH DETAIL 5A/A6.1, 6A/A6.1 & 7A/A6.1
- WINDOW NOTES #12&13 AND DOOR NOTE #10 PER SCHEDULES ON SHEET A6.1

FIRE RATED DETAILS ABOVE ARE TO BE USED WHEN WALLS ARE LESS THAN 10 FT FROM PROPERTY LINE, WHEN ROOF EAVES ARE LESS THAN 5 FT FROM PROPERTY LINE, AND WHEN THE PROJECT IS LOCATED WITHIN THE VERY HIGH FIRE HAZARD SEVERITY ZONE. STRUCTURES SHALL COMPLY WITH THE CURRENT CBC CHAPTER 7A

### roof material:

- MATERIAL
- STANDING SEAM METAL ROOF - AEP SPAN INC - IAPMO-UES ER 0309 - OAE
- TORCH APPLIED MODIFIED BITUMEN ROOFING - GAF INC - ICC ESR 1274 - OAE

### exterior wall material:

- MATERIAL
- STUCCO
- STONE SIDING
- FIBER CEMENT - LAP SIDING

## NOTES

### FIRE GENERAL NOTES

- F-1. AUTOMATIC FIRE SPRINKLER SYSTEM - WHEN REQUIRED, FIRE SPRINKLER SYSTEM SHALL BE INSTALLED AS PER N.F.P.A. 13D, THE MOST CURRENT EDITION SHALL BE USED AND THE ENCINITAS FIRE DEPARTMENT POLICIES. DETAILED SPRINKLER PLANS SHALL BE SUBMITTED TO THE FIRE PREVENTION BUREAU AND APPROVED PRIOR TO INSTALLATION. PLANS AND INSTALLATION MUST BE BY A C16 LICENSED SPRINKLER CONTRACTOR.
- SECTION 903.2.1 GROUP R** - AN AUTOMATIC SPRINKLER SYSTEM INSTALLED IN ACCORDANCE WITH SECTION 903.3 SHALL BE PROVIDED THROUGHOUT ALL BUILDINGS WITH A GROUP R FIRE AREA. THIS INCLUDES SINGLE FAMILY DWELLINGS, MULTI-FAMILY DWELLINGS AND ALL RESIDENTIAL CARE FACILITIES REGARDLESS OF OCCUPANT LOAD.
  - SECTION 903.2.1.1 ADDITION** - AN AUTOMATIC SPRINKLER SYSTEM INSTALLED IN ACCORDANCE WITH 903.3 MAY BE REQUIRED TO BE INSTALLED THROUGHOUT STRUCTURES WHEN THE ADDITION IS MORE THAN 50% OF THE EXISTING BUILDING OR WHEN THE ALTERED BUILDING WILL EXCEED A FIRE FLOW OF 1,500 GALLONS PER MINUTE AS CALCULATED PER SECTION 507.3. THE FIRE CODE OFFICIAL MAY REQUIRE AN AUTOMATIC SPRINKLER SYSTEM BE INSTALLED IN BUILDINGS WHERE NO WATER MAIN EXISTS TO PROVIDE THE REQUIRED FIRE FLOW OR WHERE A SPECIAL HAZARD EXISTS SUCH AS: POOR ACCESS ROADS, GRADE, BLUFFS AND CANYON RIMS, HAZARDOUS BRUSH AND RESPONSE TIMES GREATER THAN 5 MINUTES BY A FIRE DEPARTMENT.
  - SECTION 903.2.1.2 REMODELS OR RECONSTRUCTION** - AN AUTOMATIC SPRINKLER SYSTEM INSTALLED IN ACCORDANCE WITH SECTION 903.3 MAY BE REQUIRED IF THE SCOPE OF WORK INCLUDES SIGNIFICANT MODIFICATION TO THE INTERIOR AND/OR ROOF OF THE BUILDING, AND THE COST OF THE INSTALLATION DOES NOT EXCEED 15 PERCENT OF THE CONSTRUCTION COSTS OF THE REMODEL.
- F-2. LOCATION AND SIZE OF WATER SERVICE UNDERGROUND SHALL BE INSTALLED AS SHOWN ON APPROVED FIRE SPRINKLER PLANS. A MINIMUM 1 INCH WATER SHALL BE INSTALLED.
- F-3. A FIRE UNDERGROUND FLUSH CERTIFICATE SHALL BE REQUIRED AT FINAL INSPECTION.
- F-4. A HYDRO INSPECTION OF THE FIRE SPRINKLER SYSTEM IS REQUIRED PRIOR TO FRAME INSPECTION. ONLY NEW PIPING SHALL BE TESTED.
- F-5. STRUCTURES IN THE VERY HIGH FIRE HAZARD SEVERITY ZONE SHALL PROVIDE AND MAINTAIN A FUEL MODIFICATION ZONE.
- FUEL MODIFICATION ZONES:** THE APPLICANT SHALL PROVIDE AND MAINTAIN FIRE/FUEL BREAKS TO THE SATISFACTION OF THE ENCINITAS FIRE DEPARTMENT. FIRE/FUEL BREAKS SIZE (MINIMUM 100 FEET FROM STRUCTURE) AND COMPOSITION SHALL BE DETERMINED BY THE FIRE DEPARTMENT AND SHOWN ON THE IMPROVEMENT/GRADING PLANS, FINAL MAP AND BUILDING PLANS.

BY USING THESE PERMIT READY CONSTRUCTION DOCUMENTS, THE RECIPIENT IS ACKNOWLEDGING ACCEPTANCE OF THE FOLLOWING CONDITIONS:

1. THE USE OF THIS INFORMATION IS RESTRICTED TO THE ORIGINAL PROJECT FOR WHICH IT WAS PREPARED FOR THE PRADU PROGRAM FOR THE CITY OF ENCINITAS. THIS DOES NOT ELIMINATE OR REDUCE THE RECIPIENT'S RESPONSIBILITY TO VERIFY ANY AND ALL INFORMATION RELEVANT TO THE RECIPIENT'S WORK AND RESPONSIBILITY ON THIS PROJECT. DESIGN PATH STUDIO SHALL NOT BE RESPONSIBLE FOR TRANSLATION ERRORS.
2. THE RECIPIENT RECOGNIZES AND ACKNOWLEDGES THAT THE USE OF THIS INFORMATION WILL BE AT THEIR SOLE RISK AND WITHOUT ANY LIABILITY OR LEGAL EXPOSURE TO DESIGN PATH STUDIO. NO WARRANTIES OF ANY NATURE, WHETHER EXPRESS OR IMPLIED, SHALL ATTACH TO THESE DOCUMENTS AND THE INFORMATION CONTAINED THEREON. ANY USE, REUSE, OR ALTERATION OF THESE DOCUMENTS BY THE RECIPIENT OR BY OTHERS WILL BE AT THE RECIPIENT'S RISK AND FULL LEGAL RESPONSIBILITY. FURTHERMORE, THE RECIPIENT WILL, TO THE FULLEST EXTENT PERMITTED BY LAW, INDEMNIFY AND HOLD DESIGN PATH STUDIO HARMLESS FROM ANY AND ALL CLAIMS, SUITS, LIABILITY, DEMANDS, JUDGMENTS, OR COSTS ARISING OUT OF OR RESULTING THERE FROM ON ACCOUNT OF ANY INJURY, DEATH, DAMAGE OR LOSS TO PERSONS OR PROPERTY.
3. THE DESIGNS REPRESENTED BY THESE PLANS ARE COPYRIGHTED AND ARE SUBJECT TO COPYRIGHT PROTECTION. IF THE RECIPIENT DOES NOT AGREE WITH THE ABOVE CONDITIONS, DO NOT PROCEED BEYOND THIS DISCLAIMER.

### ARCHITECTUAL GENERAL NOTES

- A-1. DO NOT SCALE THE DRAWING. USE THE DIMENSIONS ONLY. IF A DISCREPANCY IS FOUND TO EXIST, NOTIFY THE OWNER.
- A-2. THESE PLANS/SPECIFICATIONS AND ALL WORK SHALL COMPLY WITH CURRENT EDITION OF STATE OF CALIFORNIA TITLE 24 CCR AND CURRENT UPC, UMC AND NEC CODES.
- A-3. DETAILS ARE INTENDED TO SHOW METHOD AND MANNER OF ACCOMPLISHING WORK. MINOR MODIFICATIONS MAY BE REQUIRED TO SUIT THE JOB DIMENSIONS OR CONDITIONS AND IS TO BE REVIEWED AND APPROVED BY THE CITY OF ENCINITAS.
- A-4. VERIFY ALL DIMENSIONS AND CONDITIONS AT THE SITE AND STAKE OUT STRUCTURE FOR OWNER'S APPROVAL PRIOR TO STARTING ANY WORK.
- A-5. NOT USED
- A-6. ALL WEATHER-EXPOSED SURFACES IS TO HAVE A WEATHER-RESISTIVE BARRIER TO PROTECT THE INTERIOR WALL COVERING AND THAT EXTERIOR OPENINGS ARE TO BE FLASHED IN SUCH A MANNER AS TO MAKE THEM WEATHERPROOF.
- A-7. SAFETY GLAZING (TEMPERED) IS REQUIRED FOR:
- A. WINDOWS ADJACENT TO HOT TUBS, SWIMMING POOLS, WHIRLPOOL, SAUNAS, STEAM ROOMS, BATHTUBS OR SHOWERS, STAIR ENCLOSURES AND WITHIN 60 INCHES OF THE FLOOR.
  - B. WINDOWS WITHIN A 24 INCH ARC OF EITHER VERTICAL EDGE OF DOORS IN THE CLOSED POSITION AND WITHIN 60 INCHES OF FLOOR.
  - C. WINDOWS WITHIN 18 INCHES OF WALKING SURFACE.
- A-8. ALL NAILING IS TO BE IN COMPLIANCE WITH CODE, COMMON NAILS ONLY.
- A-9. INFILTRATION/ EXFILTRATION CONTROL (2-5317 A - C) AT ALL NEW DOORS & WINDOWS
- A. DOORS AND WINDOWS ARE TO BE DESIGNED TO IMIT AIR LEAKAGE
  - B. DOOR AND WINDOWS ARE TO BE CERTIFIED
  - C. DOORS AND WINDOWS ARE TO BE FULLY WEATHER STRIPPED AT ALL JOINTS AND PENETRATIONS CAULKED AND SEALED.
  - D. ALL NEW GLAZING WILL BE INSTALLED WITH A CERTIFYING LABEL ATTACHED, SHOWING THE U-VALUE.
- A-10. NOT USED
- A-11. PROVIDE ALL THE NECESSARY BACKING AND FRAMING FOR ALL MOUNTED ITEMS. LIGHTS AND ALL OTHER ITEMS REQUIRING SAME.

project

PRADU  
City Of Encinitas

description

Title Sheet  
1 Bedroom

date March 27 2019

project no. 2018 PRADU

drawn by ysp

sheet no. **T1.1**

DESIGN PATH STUDIO

architecture + design

DESIGNPATHSTUDIO.COM

P.O. BOX 230165 ENCINITAS CA 92023

## SHEET INDEX

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AS.1	SITE INFORMATION
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A2.1	MECHANICAL/PLUMBING/ELECTRICAL PLANS
A3.1	EXTERIOR ELEVATIONS
A4.1	BUILDING SECTIONS
A5.1	EXTERIOR FINISH DETAILS
A6.1	FIRE RATED DETAILS
S.1	STRUCTURAL NOTES
S.2	FOUNDATION PLANS/ FRAMING PLAN
S.3	STRUCTURAL DETAILS
T24.1	ENERGY CALC.
T24.2	ENERGY CALC.

## ZONING INFORMATION

ZONING : CITY OF ENCINITAS TO PROVIDE THE FOLLOWING INFORMATION

OVERLAY :

ALLOWABLE BUILDING HEIGHT: 12'-0" / 14'-0"  
ALLOWABLE HEIGHT IS FROM THE LOWER OF EXISTING OR FINISHED GRADE

LOT SIZE :

EXISTING HABITABLE SQ. FT. :

EXISTING FAR :

MAX. ALLOWABLE FAR :

PROPOSED FAR :

FLOOR AREA OF GARAGE:

EXISTING LOT COVERAGE:

ALLOWABLE LOT COVERAGE :

PROPOSED LOT COVERAGE :

LOT SLOPE :

SETBACKS : FRONT-  
REAR-  
SIDE-  
STREET SIDE-

OFF STREET PARKING :

## DIRECTORY

MODIFICATION TO PLANS MADE BY:

COMPANY  
CONTACT PERSON  
ADDRESS  
CITY, STATE ZIP  
PHONE: (---)-----  
EMAIL

PROPERTY OWNER:

NAME  
ADDRESS  
CITY, STATE ZIP  
PHONE: (---)-----  
EMAIL

BUILDING DEPARTMENT:

CITY OF ENCINITAS  
505 S VULCAN AVE  
ENCINITAS, CA 92024  
P. 760-633-2710

## VICINITY MAP

PROVIDED BY OWNER

## BUILDING INFORMATION

GOVERNING CODES: APPROVAL OF THIS PROJECT SHALL COMPLY WITH THE 2016 CALIFORNIA RESIDENTIAL CODE, WHICH ADOPTS THE 2015 IRC, 2015 UMC, 2015 UPC AND THE 2014 NEC.

SITE ADDRESS: PROVIDED BY OWNER  
PROVIDED BY OWNER  
PROVIDED BY OWNER

GOVERNING AGENCY: CITY OF ENCINITAS, CA.  
OCCUPANCY GROUP: R3  
STORIES: 1  
BUILDING HEIGHT: 12'  
TYPE OF CONSTRUCTION: VB  
FIRE SPRINKLERES REQUIRED:  YES  NO  
FIRE SPRINKLERES IN EX'G RESIDENCE:  YES  NO  
VERY HIGH FIRE HAZARD SEVERITY ZONE:  YES  NO  
FIRE RATED DOORS AND WINDOWS REQ:  YES  NO  
(SEE DOOR AND WINDOW SCHEDULE)

## PROJECT DESCRIPTION

NEW CONSTRUCTION OF A ONE STORY DETACHED 555 S.F. ACCESSORY DWELLING UNIT

## LEGAL DESCRIPTION

PROVIDED BY OWNER

## APN

PROVIDED BY OWNER

## WINDOW SCHEDULE

WINDOW	WINDOW SIZE		OPER.	QNTY	FRAME	HEAD HEIGHT	REMARKS
	WIDTH	HEIGHT					
A	6'-0"	2'-0"	SLIDER	1	VINYL	6'-8"	LIVING ROOM WINDOWS
B	2'-0"	2'-0"	SLIDER	1	VINYL	6'-8"	BATHROOM WINDOWS
C	6'-0"	4'-0"	SLIDER	1	VINYL	6'-8"	BEDROOM WINDOWS

## DOOR SCHEDULE

DOOR	DOOR TYPE	DOOR SIZE			CORE	MATERIAL	FRAME	REMARKS
		WIDTH	HEIGHT	THICK.				
1	DOUBLE DOOR	6'-0"	6'-8"	1-3/4"	GL	VNL/GLASS	VINYL	FRONT - ENTRY HINGED DOOR WITH GLAZING
2	SINGLE DOOR	2'-6"	6'-8"	1-3/4"	HLW	WD	WD	BATHROOM DOOR
3	SLIDER	6'-0"	6'-8"	1-3/4"	GL	VNL/GLASS	VINYL	SIDE - ENTRY DOOR WITH GLAZING
4	SINGLE DOOR	2'-6"	6'-8"	1-3/4"	HLW	WD	WD	BEDROOM INTERIOR DOOR
5	SINGLE DOOR	2'-6"	6'-8"	1-3/4"	HLW	WD	WD	CLOSET DOOR
6	SLIDER	13'-0"	6'-8"	1-3/4"	HLW	WD	WD	SLIDING CLOSET DOOR
7	SLIDER	6'-0"	6'-8"	1-3/4"	GL	VNL/GLASS	VINYL	BEDROOM EXTERIOR DOOR WITH GLAZING

## WINDOW NOTES

1. SEE EXTERIOR ELEVATION FOR DIRECTION OF OPERATION OF WINDOWS (ALL OPERABLE WINDOWS TO HAVE SCREENS).
2. ALL WINDOW DIMENSIONS PERTAIN TO ROUGH OPENINGS (R.O.), CONTRACTOR TO FIELD VERIFY ACTUAL DIMENSIONS FOR WINDOWS
3. ALL GLAZING WILL BE INSTALLED WITH A CERTIFYING LABEL ATTACHED, SHOWING THE NFRC LABEL.
4. ALL GLAZING SHALL BE SPECTRALLY SELECTIVE LOW E COATED TO MEET TITLE 24 ENERGY REQUIREMENTS.
5. WINDOWS SHALL MEET THE MINIMUM INFILTRATION REQUIREMENTS PER SECTION 116 E.E.S.D
6. VENTILATION SHALL COMPLY WITH C.B.C. 1203.4 AND R303
7. EVERY SLEEPING ROOM SHALL HAVE ONE OPERABLE WINDOW FOR EMERGENCY ESCAPE OR RESCUE WITH A MIN. NET CLEAR OPENABLE AREA OF 5.7 SQ. FT. MIN. NET CLEAR OPENABLE HEIGHT OF 24" MIN., NET CLEAR WIDTH OF 20" AND A FIN. SILL HEIGHT OF NOT MORE THAN 44" A.F.F. PER CRC SECTION 3101
8. NOT USED
9. ALL EXTERIOR WINDOW AND EXTERIOR DOOR ASSEMBLIES TO HAVE AN STC RATING OF 36 OR GREATER.
10. TEMPERED GLASS SHALL BE PERMANENTLY IDENTIFIED AND VISIBLE WHEN THE UNIT IS GLAZED.
11. EVERY SPACE INTENDED FOR HUMAN OCCUPANCY SHALL BE PROVIDED WITH NATURAL VENTILATION AND NATURAL LIGHT BY MEANS OF VENTILATION / ARTIFICIAL LIGHT. CBC SECTIONS 1203.4 AND 1205.1 AND R303
- A) THE MINIMUM NET GLAZED AREA FOR NATURAL LIGHT SHALL NOT BE LESS THAN 8% OF THE FLOOR AREA OF THE ROOM SERVED. CBC SECTION 1205.2
- B) THE MINIMUM OPENABLE AREA TO THE OUTDOORS FOR NATURAL VENTILATION SHALL BE 4% OF THE FLOOR AREA BEING VENTILATED. SECTION 1203.4

## DOOR NOTES

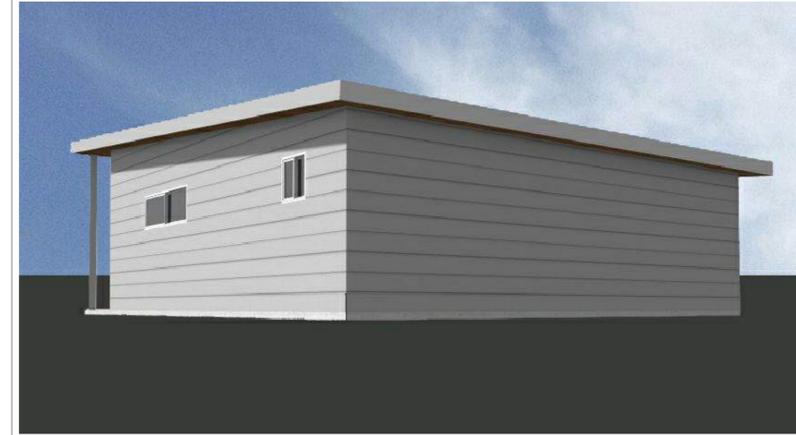
1. ALL GLASS IN DOORS SHALL BE TEMPERED. TEMPERED GLASS SHALL BE PERMANENTLY IDENTIFIED AND VISIBLE WHEN THE UNIT IS GLAZED.
2. ALL GLAZING WILL BE INSTALLED WITH A CERTIFYING LABEL ATTACHED, SHOWING THE "U" VALUE.
3. REFER TO FLOOR PLANS FOR DIRECTION OF DOOR SWING.
4. DOORS SHALL MEET THE MINIMUM INFILTRATION REQUIREMENTS PER SECTION 116 E.E.S.
5. VENTILATION SHALL COMPLY WITH C.B.C. 1203.4 AND R303.
6. NOT USED
7. ALL EXTERIOR WINDOW AND EXTERIOR DOOR ASSEMBLIES TO HAVE AN STC RATING OF 36 OR GREATER.
8. DOORS MAY OPEN TO THE EXTERIOR ONLY IF THE FLOOR OR LANDING IS NOT MORE THAN 1-1/2" INCH LOWER THAN THE DOOR THRESHOLD. SECTION R311.3.1 CRC
9. GLAZED OPENINGS WITHIN EXTERIOR DOORS SHALL BE INSULATING-GLASS UNITS WITH A MINIMUM OF ONE TEMPERED PANE.



1 Bedroom -SIDING view #1



1 Bedroom -SIDING view #2



1 Bedroom -SIDING view #3



1 Bedroom -STUCCO view #1



1 Bedroom -STUCCO view #2



1 Bedroom -STUCCO view #3



1 Bedroom -STONE VENEER view #1



1 Bedroom -STONE VENEER view #2



1 Bedroom -STONE VENEER view #3

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project

PRADU  
City Of Encinitas

description

Exterior  
Material  
Options  
1 Bedrooms

date March 27 2019

project no. 2018 PRADU

drawn by YSP

sheet no. T1.2

**Stormwater Pollution Control BMP Notes  
Relative to Construction Activities**

- Concrete Washout**
  - Contractor shall establish and use an adequately sized concrete washout area to contain washout wastes on site. It is illegal to wash concrete, slurry, mortar, stucco, plaster and the like into the stormwater conveyance system or any receiving water. Contractor shall post a sign designating the washout location.
- Construction Site Access**
  - A stabilized construction site access shall be provided for vehicles egress and ingress to prevent tracking dirt off site. This shall include using material such as gravel and corrugated steel panels/mats.
- Construction Vehicles**
  - A specific area away from gutters and stormdrain shall be designated for construction vehicles parking, vehicle refueling, and routine equipment maintenance. All major repairs shall be made off-site.
- Erosion Control**
  - Erosion control must be provided for all erodible surfaces. Sloped surfaces especially shall be protected against erosion by installing erosion resistant surfaces such as erosion control mats, adequate ground cover vegetation, and bonded fiber matrix.
  - No excavation and grading activities are allowed during wet weather.
  - Diversion dikes shall be constructed to channel runoff around the construction site. Contractor shall protect channels against erosion using permanent and temporary erosion control measures.
  - Remove existing vegetation only when absolutely necessary. Large projects shall be conducted in phases to avoid unnecessary removal of the natural ground cover. Do not remove trees or shrubs unnecessarily; they help decrease erosion.
  - Temporary vegetation must be planted on slopes or where construction is not immediately planned for erosion control purposes. Erosion shall be prevented by planting fast-growing annual and perennial grasses to shield and bind the soil.
  - Plant permanent vegetation as soon as possible, once excavation and grading activities are complete.
  - Water usage for dust control shall be minimized.
- On-site Construction Material Storage**
  - Stored materials shall be contained in a secure place to prevent seepage and spillage. Contractor shall store these products where they will stay dry out of the rain. Contractor shall provide secondary containment for all fuel stored on-site.
- Eliminate or reduce pollution of stormwater from stockpiles kept on-site. Stockpiles may include soil, piling materials, asphalt concrete, aggregate base, etc. Stockpiles shall be located away from concentrated stormwater flows and stormdrain inlets. Stockpiles shall be covered or protected with soil stabilization measures and provided with a temporary sediment barrier around the perimeter at all times.
- Training**
  - Contractors' employees who perform construction in the City of Encinitas shall be trained to be familiar with the City of Encinitas stormwater pollution control requirements. These BMP notes shall be available to everyone working on site. The property owner(s) and the prime contractor must inform subcontractors about stormwater requirements and their own responsibilities.
- Waste Management**
  - Contractor shall be responsible for properly disposing of all waste and unused construction materials. Dumping of unused or waste products on the ground, where water can carry them into the conveyance system is strictly prohibited.
  - No seepage from dumpsters shall be discharged into stormwater. Berms/dikes shall be placed around dumpsters to divert the natural storm runoff. Dumpsters shall be checked frequently for leaks. Dumpster lids shall remain closed at all times. Dumpsters without lids shall be placed within structures with impervious roofing or covered with tarps in order to avoid rain contact with any trash material.
  - Many construction materials, including solvents, water-based paints, vehicle fluids, broken asphalt and concrete, wood, and cleared vegetation can be recycled. Non-recyclable materials must be taken to an appropriate landfill or disposed of as hazardous waste. Call the **Hazardous Waste Hotline** toll free at (800) 714-1195. For information on landfills and to order dumpsters call **EDCO** at (760) 439-4151.
  - Pollutants shall be kept off exposed surfaces. Place trash cans and recycling receptacles around the site.
  - Portable toilets must be in good working order and checked frequently for leaks. Contractor shall provide secondary containment and locate portable toilets away from stormdrain inlets on pervious surfaces.
  - All construction debris shall be kept away from the street, gutter, and stormdrain. Contractor must routinely check and clean up material that may have traveled away from construction site.

**Right-of-Way Note**  
Owner is to obtain a construction permit from the Engineering Department at least 48 hours prior to working in the public right of way. Failure to do so will result in an issuance of a stop work notice and double permit fees. It is the responsibility of the owner to know the location of the property line.

**Utility Note**  
All utilities serving this site shall be installed underground.

**Drainage Note**  
No concentrated drainage flows are permitted over adjacent property lines. Water is to drain away from structures for a minimum of 5 feet at 2 percent and be conveyed to an approved drainage facility.

**Earthwork Note**  
Earthwork, cut or fill, which is over 50 cubic yards, requires an additional Engineering Grading Permit.  
Provide earthwork quantities:  
\_\_\_\_\_ cubic yards cut, \_\_\_\_\_ cubic yards fill, \_\_\_\_\_ cubic yards import/export  
\_\_\_\_\_ cubic yards over-excavation and re-compaction

**Construction Best Management Practices (BMP) Note**  
Erosion control measures (e.g. bonded fiber matrix, vegetative cover, jute matting) must be implemented where applicable to prevent soil erosion on site. Sediment control measures (e.g. silt fencing, fiber rolls, detention basins) must be in place to prevent eroded soil from leaving site. Materials management BMP must also be followed to ensure no contact of rainwater with materials that may contribute to water quality degradation downstream (e.g. concrete or stucco washout areas, covered storage areas for hazardous materials, placement of portable toilets over a pervious surface).

**Post-Construction Best Management Practices (BMP) Note**  
No directly connected impervious areas (DCIA) shall be allowed. DCIA means storm runoff generated and conveyed via impervious areas, such as roof, roof drain, driveway, and street. BMP measures shall be identified on the site plan. Most common measures are designated turf areas, which receive roof drains and runoff from impervious areas. Turf and landscape areas that are designed for BMP's shall be delineated on plans and a note placed on plans prohibiting modification or removal of the BMP landscape areas without a City permit.

**Grading/Improvement Plans/Permits**  
If a grading/improvement plan/permit is approved for the project site, it shall supersede all grading, drainage, onsite, offsite, and storm water Best Management Practice improvements contained in these plans in the event of conflict.

**Total Area of New Impervious Surfaces = \_\_\_\_\_**  
(Increase to building footprint, patios, decks, hardscape, etc.)

**Total Area of Replaced Impervious Surfaces = \_\_\_\_\_**  
(Replacement to building footprint, patios, decks, hardscape, etc.)

**EXISTING SWIMMING POOL REQUIREMENTS**

WHEN A BUILDING PERMIT IS ISSUED FOR THE CONSTRUCTION OF A NEW SWIMMING POOL OR SPA OR THE REMODELING OF AN EXISTING SWIMMING POOL OR SPA AT A PRIVATE SINGLE-FAMILY HOME, THE RESIDENTIAL SWIMMING POOL OR SPA SHALL BE EQUIPPED WITH AT LEAST TWO OF THE FOLLOWING SEVEN DROWNING PREVENTION SAFETY FEATURES:  
 (1) AN ENCLOSURE THAT MEETS THE REQUIREMENTS OF SECTION 115923 AND ISOLATES THE SWIMMING POOL OR SPA FROM THE PRIVATE SINGLE-FAMILY HOME.  
 (2) REMOVABLE MESH FENCING THAT MEETS AMERICAN SOCIETY FOR TESTING AND MATERIALS (ASTM) SPECIFICATIONS F2286 STANDARDS IN CONJUNCTION WITH A GATE THAT IS SELF-CLOSING AND SELF-LATCHING AND CAN ACCOMMODATE A KEY LOCKABLE DEVICE.  
 (3) AN APPROVED SAFETY POOL COVER, AS DEFINED IN SUBDIVISION (D) OF SECTION 115921.  
 (4) EXIT ALARMS ON THE PRIVATE SINGLE-FAMILY HOME'S DOORS THAT PROVIDE DIRECT ACCESS TO THE SWIMMING POOL OR SPA. THE EXIT ALARM MAY CAUSE EITHER AN ALARM NOISE OR A VERBAL WARNING, SUCH AS A REPEATING NOTIFICATION THAT "THE DOOR TO THE POOL IS OPEN."  
 (5) A SELF-CLOSING, SELF-LATCHING DEVICE WITH A RELEASE MECHANISM PLACED NO LOWER THAN 54 INCHES ABOVE THE FLOOR ON THE PRIVATE SINGLE-FAMILY HOME'S DOORS PROVIDING DIRECT ACCESS TO THE SWIMMING POOL OR SPA.  
 (6) AN ALARM THAT, WHEN PLACED IN A SWIMMING POOL OR SPA, WILL SOUND UPON DETECTION OF ACCIDENTAL OR UNAUTHORIZED ENTRANCE INTO THE WATER. THE ALARM SHALL MEET AND BE INDEPENDENTLY CERTIFIED TO THE ASTM STANDARD F2208 "STANDARD SAFETY SPECIFICATION FOR RESIDENTIAL POOL ALARMS," WHICH INCLUDES SURFACE MOTION, PRESSURE, SONAR, LASER, AND INFRARED TYPE ALARMS. A SWIMMING PROTECTION ALARM FEATURE DESIGNED FOR INDIVIDUAL USE, INCLUDING ANY AND ALL CHAIRS, TABLES, AND OTHER FURNITURE, IS NOT A QUALIFYING DROWNING PREVENTION SAFETY FEATURE.  
 (7) OTHER MEANS OF PROTECTION, IF THE DEGREE OF PROTECTION AFFORDED IS EQUAL TO OR GREATER THAN THAT AFFORDED BY ANY OF THE FEATURES SET FORTH ABOVE AND HAS BEEN INDEPENDENTLY VERIFIED BY AN APPROVED TESTING LABORATORY AS MEETING STANDARDS FOR THOSE FEATURES ESTABLISHED BY THE ASTM OR THE AMERICAN SOCIETY OF MECHANICAL ENGINEERS (ASME).  
 (8) BEFORE THE ISSUANCE OF A FINAL APPROVAL FOR THE COMPLETION OF PERMITTED CONSTRUCTION OR REMODELING WORK, THE LOCAL BUILDING CODE OFFICIAL SHALL INSPECT THE DROWNING SAFETY PREVENTION FEATURES REQUIRED BY THIS SECTION AND, IF NO VIOLATIONS ARE FOUND, SHALL GIVE FINAL APPROVAL.

**FIRE NOTES**

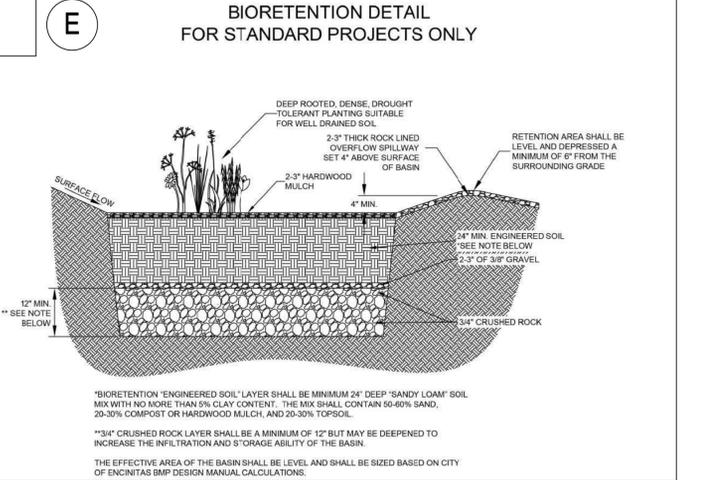
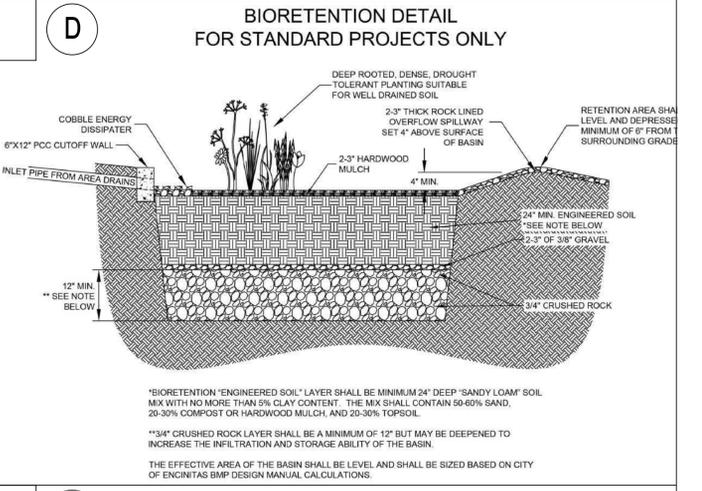
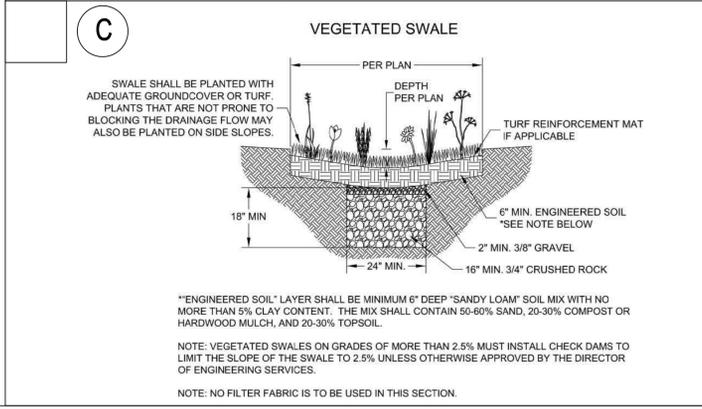
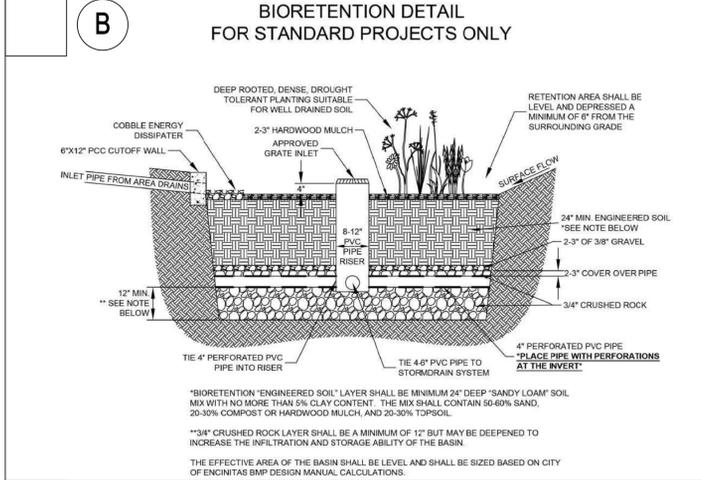
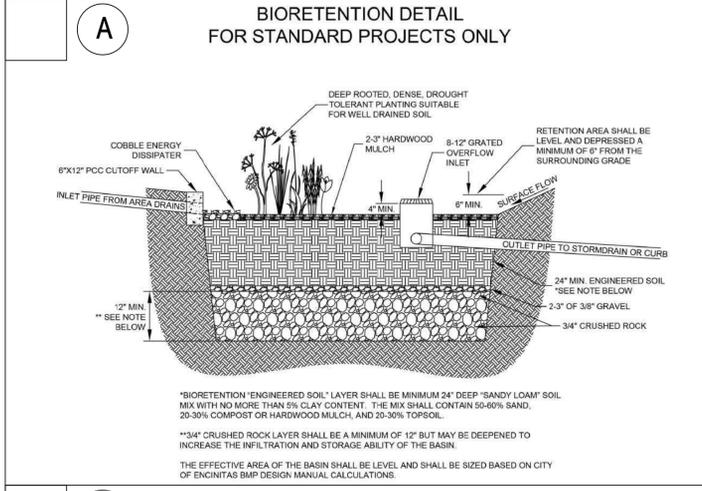
- NEW AND EXISTING BUILDINGS SHALL HAVE APPROVED ADDRESS NUMBERS OR APPROVED BUILDING IDENTIFICATION PLACED IN A POSITION THAT IS PLAINLY LEGIBLE AND VISIBLE FROM THE STREET OR ROAD FRONTING THE PROPERTY. THESE NUMBERS SHALL BE A MINIMUM OF 4 INCHES HIGH WITH A MINIMUM STROKE OF .5 INCHES. WHERE ACCESS IS BY MEANS OF A PRIVATE ROAD AND THE BUILDING CANNOT BE VIEWED FROM THE PUBLIC WAY, A MONUMENT, POLE OR OTHER SIGN OR MEANS SHALL BE USED TO IDENTIFY THE STRUCTURE. CFC SECTION 505.1
- ALL FIRE APPARATUS ROADS ACCESS ROADS SHALL HAVE AN UNOBSTRUCTED VERTICAL CLEARANCE OF NO LESS THAN 13 FEET 6 INCHES.
- SITE PLAN SHALL PROVIDE DIMENSIONS SHOWING REQUIRED FIRE APPARATUS ACCESS ROADS. FIRE ACCESS ROADWAYS SHALL HAVE AN UNOBSTRUCTED IMPROVED WIDTH OF NOT LESS THAN 24 FEET.  
EXCEPTIONS: 1. RESIDENTIAL DWELLINGS NOT IN THE VERY HIGH FIRE HAZARD SEVERITY ZONE SHALL HAVE MINIMUM OF 20 FEET OF UNOBSTRUCTED IMPROVED WIDTH. 2. SINGLE-FAMILY RESIDENTIAL DRIVEWAYS SERVING NO MORE THAN TWO SINGLE-FAMILY DWELLING SHALL HAVE A MINIMUM OF 16 FEET OF UNOBSTRUCTED IMPROVED WIDTH.
- FIRE ACCESS ROADWAYS
  - SURFACE FIRE APPARATUS ACCESS ROADS SHALL BE DESIGNED AND MAINTAINED TO SUPPORT THE IMPOSED LOADS OF FIRE APPARATUS NOT LESS THAN 75,000 LBS AND SHALL BE PROVIDED WITH AN APPROVED PACED SURFACE TO PROVIDE ALL-WEATHER DRIVING CAPABILITIES.
  - GATED ENTRANCES WITH CARD READERS, GUARD STATIONS OR CENTER MEDIANS, WHICH WILL HAVE SEPARATED LANES OF ONE-WAY TRAFFIC, SHALL BE NOT LESS THAN 14 FEET WIDE PER LANE.
- EXISTING LEGAL LOTS THAT HAVE EASEMENTS ACCESS ROADWAYS LESS THAN 20 FEET WIDE THAT PROVIDE PRIMARY ACCESS TO OTHER LOTS SHALL RECORD A COVENANT GRANTING EASEMENT RIGHTS FOR EMERGENCY VEHICLE INGRESS AND EGRESS PURPOSES AND SHALL RELINQUISH RIGHTS TO BUILD ANY BUILDING, WALL, FENCE, OR OTHER STRUCTURE WITHIN 5 FEET OF THE EXISTING ACCESS EASEMENT.
- ALL DEAD END FIRE APPARATUS ACCESS ROADWAY IN EXCESS OF 150 FEET IN LENGTH SHALL BE PROVIDED WITH AND APPROVED AREA FOR TURNING AROUND FIRE APPARATUS. ACCESS ROADS SERVING MORE THAN (4) FOUR DWELLING UNITS SHALL BE PROVIDED WITH A CUL-DE-SAC. THE MINIMUM UNOBSTRUCTED PAVED RADIUS WIDTH FOR A CUL-DE-SAC SHALL BE 36 FEET CURB LINE TO CURB LINE WITH NO PARKING. ALTERNATE TYPES OF TURN-AROUND (HAMMERHEADS, ETC.) MAY BE CONSIDERED BY THE FIRE MARSHAL AS NEEDED TO ACCOMPLISH THE INTENT OF THE FIRE CODE.
- SECURITY GATES: AN AUTOMATIC GATE ACROSS A FIRE ACCESS ROADWAY OR DRIVEWAY SHALL BE EQUIPPED WITH AN APPROVED EMERGENCY KEY-OPERATED SWITCH OVERRIDING ALL COMMAND FUNCTIONS AND OPENING THE GATE. WHERE THIS SECTION REQUIRES AN APPROVED KEY-OPERATED SWITCH, IT MAY BE DUAL-KEYED OR EQUIPPED WITH DUAL SWITCHES PROVIDED TO FACILITATE ACCESS BY LAW ENFORCEMENT PERSONNEL. (CFC SECTION 503.6 AMENDMENT)

**GENERAL NOTES**

- SEE BUILDING PLANS FOR ALL OTHER DIMENSIONS AND NOTES NOT SHOWN.
- SEE BUILDING PLANS AND SCHEDULES FOR ALL EXTERIOR DOOR AND WINDOW REFERENCES AND LOCATIONS.
- YARD SETBACKS ARE TO BE MEASURED FROM THE EXTERIOR WALL FINISH TO THE PROPERTY LINE AND NOT FROM THE OUTSIDE OF THE FOOTING (OR FACE OF STUDS). THE PLANS MUST BE DESIGNED WITH THE WALL FINISH THICKNESS (I.E. 7/8" STUCCO, ETC.) ADDED TO THE PLAN FOR THE SETBACK MEASUREMENT. THE FIELD INSPECTOR WILL ADD THE PLANNED WALL FINISH THICKNESS TO THE FOUNDATION SETBACK.
- NEW ELECTRICAL SERVICE IS TO BE LOCATED - POOLS, SPAS, WALLS, FENCES, PATIO COVERS AND OTHER FREESTANDING STRUCTURES REQUIRE SEPARATE REVIEWS AND PERMITS.
- LANDSCAPE AND IRRIGATION WATER USE SHALL HAVE WEATHER OR SOIL BASED CONTROLLERS. ADU WILL BE CONNECTED TO THE PUBLIC SEWER SYSTEM OR WILL PROVIDE A COMPLYING SEPTIC SYSTEM.
- CAL-OSHA PERMIT IS REQUIRED FOR EXCAVATIONS DEEPER THAN 5' AND SHORING AND UNDERPINNING. A DIMENSIONED SITE PLAN DRAWN TO SCALE SHALL BE PROVIDED SHOWING THE FOLLOWING: NORTH ARROW, PROPERTY LINES, EASEMENTS, STREETS, EXISTING AND PROPOSED BUILDINGS, AND STRUCTURES. LOCATION OF YARDS USED FOR ALLOWABLE INCREASE OF BUILDING AREA, DIMENSIONED SETBACKS, MINIMUM SEPARATION FROM EXISTING STRUCTURES AND FUEL MODIFICATION ZONES PER UNIFORM ADMINISTRATIVE CODE SECTION 302.
- IF A GRADING PLAN IS REQUIRED, INCORPORATE THE ENTIRE APPROVED GRADING PLAN/IMPROVEMENT PLAN (ALL SHEETS) WITH THE BUILDING PLANS. PROJECTIONS, INCLUDING EAVES, MUST BE AT LEAST 24" FROM PROPERTY LINES.

**GREEN BUILDING CODE NOTES**

- SITE SHALL BE PLANNED AND DEVELOPED TO KEEP SURFACE WATER AWAY FROM BUILDINGS. PLANS SHALL BE PROVIDED AND APPROVED BY THE CITY ENGINEER THAT SHOW SITE GRADING AND PROVIDE FOR STORM WATER RETENTION AND DRAINAGE DURING CONSTRUCTION. BMP'S THAT ARE CURRENTLY ENFORCED BY THE CITY ENGINEER MUST BE IMPLEMENTED PRIOR TO INITIAL INSPECTION BY THE BUILDING DEPT.
- 65 % OF CONSTRUCTION WASTE IS TO BE RECYCLED.
- VOC'S MUST COMPLY WITH THE LIMITATION LISTED IN SECTION 4.504.3 AND TABLES 4.504.1, 4.504.2, 4.504.3, AND 4.504.4 FOR UNIFORM MODIFICATION ZONES PER UNIFORM ADMINISTRATIVE CODE SECTION 302.
- INTERIOR MOISTURE CONTROL AT SLAB ON GRADE FLOORS SHALL BE PROVIDED BY THE SOIL ENGINEER. IF A SOIL ENGINEER HAS NOT PREPARED A SOIL REPORT FOR THIS PROJECT, THE FOLLOWING IS REQUIRED: A 4" THICK BASE OF 1/2" OR LARGER CLEAN AGGREGATE SHALL BE PROVIDED WITH A VAPOR BARRIER IN DIRECT CONTACT WITH CONCRETE, WITH A CONCRETE MIX DESIGN WHICH WILL ADDRESS BLEEDING, SHRINKAGE AND CURLING SHALL BE USED.
- MOISTURE CONTENT OF WOOD SHALL NOT EXCEED 19% BEFORE IT IS ENCLOSED IN CONSTRUCTION. THE MOISTURE CONTENT NEEDS TO BE CERTIFIED BY ONE OF 3 METHODS SPECIFIED. BUILDING MATERIAL WITH VISIBLE SIGNS OF WATER DAMAGE SHOULD NOT BE USED IN CONSTRUCTION. THE MOISTURE CONTENT MUST BE DETERMINED BY THE CONTRACTOR BY ONE OF THE LISTED METHODS LISTED IN CCG SECTION 4.503.3
- PRIOR TO FINAL APPROVAL OF THE BUILDING THE LICENSED CONTRACTOR, ARCHITECT OR ENGINEER IN RESPONSIBLE CHARGE OF THE OVERALL CONSTRUCTION MUST COMPLETE AND SIGN THE GREEN BUILDING STANDARDS CERTIFICATION FORM AND GIVEN TO THE BUILDING DEPT OFFICIAL TO BE FILED WITH THE APPROVED PLANS
- LANDSCAPE IRRIGATION WATER USE SHALL HAVE WEATHER BASED CONTROLLERS.
- BATHROOM FANS SHALL BE ENERGY STAR RATED, VENTED DIRECTLY TO THE OUTSIDE AND CONTROLLED BY A HUMIDISTAT.



**THE APPLICANT SHALL USE ONE OF THE BMP BIORETENTION OR VEGETATED SWALE DETAILS PROVIDED (OPTIONS A, B, C, D OR E). PLEASE CHECK THE BOX ADJACENT TO THE CORRESPONDING DETAIL LETTER FOR THE DETAIL TO BE USED ON THE PROJECT.**

**A SIZING CALCULATION IS REQUIRED FOR THE NEW BMP AREA.**

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 2. THE RECIPIENT RECOGNIZES AND ACKNOWLEDGES THAT THE USE OF THIS INFORMATION WILL BE AT THEIR SOLE RISK AND WITHOUT ANY LIABILITY OR LEGAL EXPOSURE TO DESIGN PATH STUDIO. NO WARRANTIES OF ANY NATURE, WHETHER EXPRESS OR IMPLIED, SHALL ATTACH TO THESE DOCUMENTS AND THE INFORMATION CONTAINED THEREON. ANY USE, REUSE, OR ALTERATION OF THESE DOCUMENTS BY THE RECIPIENT OR BY OTHERS WILL BE AT THE RECIPIENT'S RISK AND FULL LEGAL RESPONSIBILITY. FURTHERMORE, THE RECIPIENT WILL, TO THE FULLEST EXTENT PERMITTED BY LAW, INDEMNIFY AND HOLD DESIGN PATH STUDIO HARMLESS FROM ANY AND ALL CLAIMS, SUITS, LIABILITY, DEMANDS, JUDGMENTS, OR COSTS ARISING OUT OF OR RESULTING THERE FROM ON ACCOUNT OF ANY INJURY, DEATH, DAMAGE OR LOSS TO PERSONS OR PROPERTY.  
 3. THE DESIGNS REPRESENTED BY THESE PLANS ARE COPYRIGHTED AND ARE SUBJECT TO COPYRIGHT PROTECTION.  
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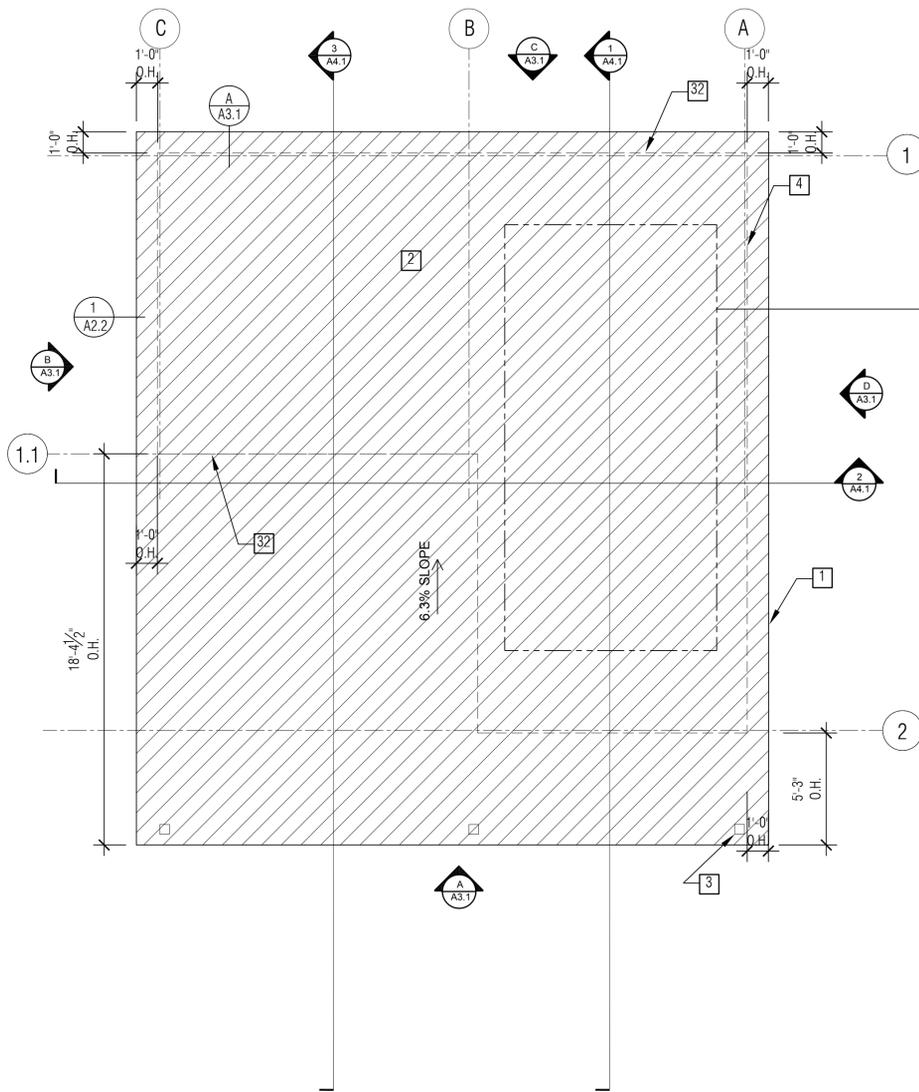
project  
PRADU  
City Of Encinitas

description

**Site Information**  
**1 Bedroom**  
date March 27 2019  
project no. 2018 PRADU  
drawn by ysp  
sheet no. **AS.1**

**DIVISION 2 - SITEWORK**

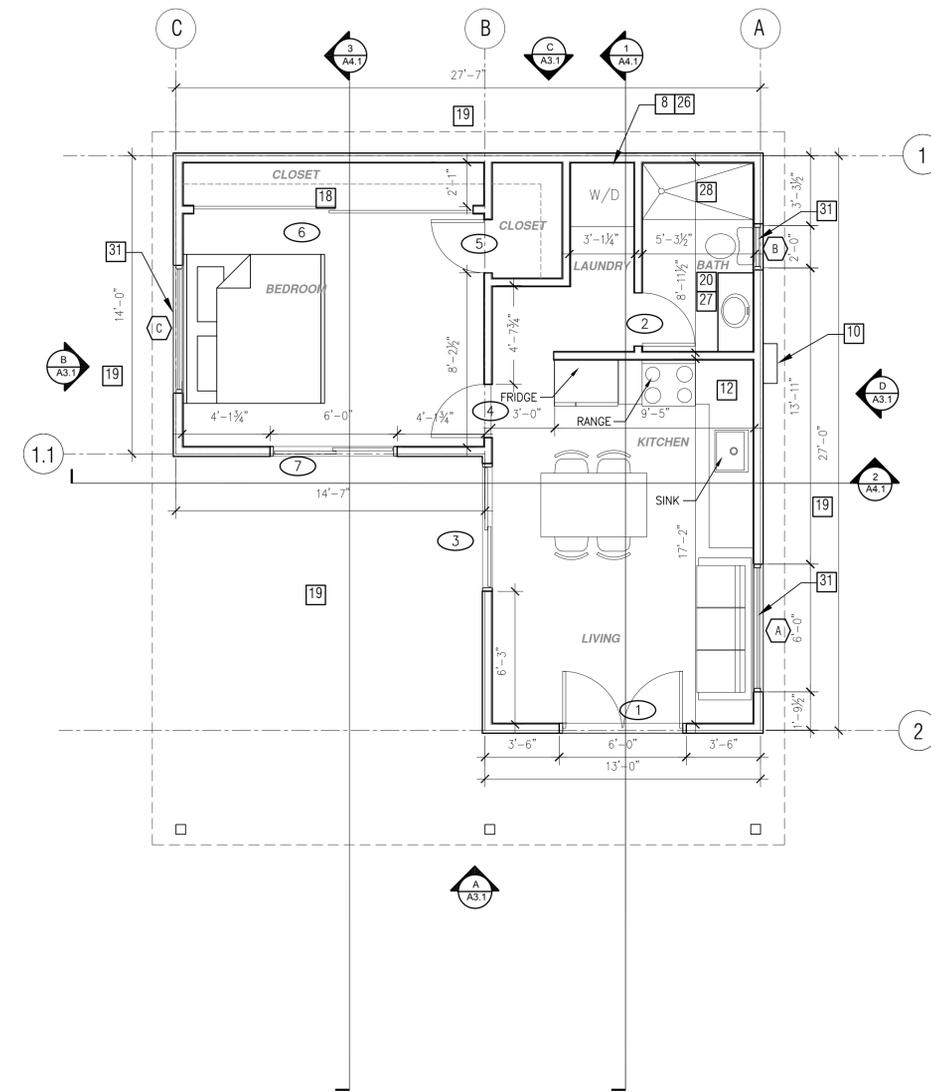
- SITE PREPARATION PROJECT IS TO BE STAKED OUT FOR OWNER APPROVAL BEFORE FOR EARTHWORKS TO BEGIN.
- SITE CLEARING CONTRACTOR WILL VERIFY WITH OWNER ALL PLANTING TO BE REMOVED PRIOR TO STARTING WORK.
- LINE AND LEVELS THE CONTRACTOR WILL VISIT THE SITE AND EVALUATE GRADE CONDITION FOR BIDDING PURPOSES. THE CONTRACTOR WILL CALCULATE HIS OWN CUT AND FILL QUANTITIES BASED ON THE SITE PLAN.
- SHORING IS TO BE PROVIDED AS REQUIRED
- EARTH WORK
  - REMOVE AND RECOMPACT LOOSE TOPSOIL AND SLIGHTLY ALTER THE EXISTING TOPOGRAPHY. ALL GRADING SHOULD BE PERFORMED IN ACCORDANCE WITH THE CITY OF ENCINITAS GRADING ORDINANCE
  - THE CONTRACTOR IS TO VERIFY THE LOCATION OF UTILITY SERVICE IN THE AREA PRIOR TO EXCAVATION.
  - UNLESS OTHERWISE INDICATED ON THE DRAWINGS, ALL FINISH GRADES ARE TO SLOPE AWAY FROM THE BUILDING AND EXTERIOR PAVING 1/4" PER FOOT MINIMUM FOR A MINIMUM DISTANCE OF 5'-0". LOT DRAINAGE TO AVOID POOLING AT BUILDING.



Roof Plan - 1 Bedrooms

1/4" = 1'-0"

- CLASS A ROOF ASSEMBLY**  
 A CLASS A ROOF ASSEMBLY SHALL BE INSTALLED. IF THE APPLICANT DEVIATES FROM THE ROOF SPECIFICATIONS ON SHEET T1.1 THE APPLICANT SHALL PROVIDE A COPY OF THE ICC/UL LISTING  
 ICC NUMBER \_\_\_\_\_ UL NUMBER \_\_\_\_\_
- SOLAR READY ROOF AREA**  
 MIN. DIMENSION > 5FT. MIN. SF > 180SF  
 PER CALIFORNIA ENERGY CODE  
 200SF PROVIDED  
 ROOF 1,000 SQFT/ 15% = 150 SQFT
- ROOF VENTING AREA - NON RATED EAVE**  
 1 SF OF ROOF VENTING PER 150 SF OF ENCLOSED AREA OR ENCLOSED RAFTER AREA  
 FLOOR ENCLOSED RAFTER AREA = 555 SF  
 VENTILATION AREA REQUIRED: 3.7 SF  
 555 SF/150 SF = 3.7 SF  
 VENTILATION AREA PROVIDED: 6.75 SF  
 3" DIA HOLE X 2 PER RAFTER BAY
- NON VENTED - FIRE RATED EAVE**  
 PER SECTION R806.5/EM3.9.6:  
 a. IF INSULATION IS AIR-PERMEABLE AND IT IS INSTALLED DIRECTLY BELOW THE ROOF SHEATHING WITH RIGID BOARD OR SHEET INSULATION WITH A MINIMUM R-4 VALUE INSTALLED ABOVE THE ROOF SHEATHING. (OR)  
 b. IF THE INSULATION IS AIR-IMPERMEABLE AND IS IN DIRECT CONTACT WITH THE UNDERSIDE OF THE ROOF SHEATHING. (OR)  
 c. IF TWO LAYERS OF INSULATION ARE INSTALLED BELOW THE ROOF SHEATHING:  
 AN AIR-IMPERMEABLE LAYER IN DIRECT CONTACT WITH THE UNDERSIDE OF THE ROOF SHEATHING AND AN ADDITIONAL LAYER OF AIR PERMEABLE INSULATION INSTALLED DIRECTLY UNDER THE AIR IMPERMEABLE INSULATION.
- PROJECTIONS**  
 PROJECTIONS, INCLUDING EAVES, MUST BE AT LEAST 24" FROM PROPERTY LINE



Floor Plan - 1 Bedroom

1/4" = 1'-0" 555 S.F.

**KEYNOTES**

- |                              |                              |  |   |   |
|------------------------------|------------------------------|--|---|---|
| 1 LINE OF ROOF OVERHANG      | 10 NEW TANKLESS WATER HEATER | 20 PER SECTION 301.1.1 CALGREEN AND CIVIL CODE 1101.3(c). ALL PLUMBING FIXTURES SHALL BE COMPLIANT WATER-CONSERVING PLUMBING FIXTURES. | 27 WATER CONSERVING FIXTURES: NEW WATER CLOSETS SHALL USE NO MORE THAN 1.28 GALLONS OF WATER PER FLUSH. LAVATORIES MAY NOT EXCEED 1.2 GPM. KITCHEN FAUCETS MAY NOT EXCEED 1.8 GPM. AND SHOWERS MAY NOT EXCEED 1.8 GPM. OF FLOW. | 30 NOT USED   |
| 2 CLASS A ROOFING MATERIAL   | 12 36" HIGH COUNTER          | 21 MECHANICAL DUCT CHASE   | 28 WALL COVERING SHALL BE CEMENT PLASTER, TILE OR APPROVED EQUAL TO 72" ABOVE DRAIN AT SHOWERS OR TUB WITH SHOWERS. MATERIALS OTHER THAN STRUCTURAL ELEMENTS ARE TO BE MOISTURE RESISTANT. CRC R307.2                           | 31 VINYL WINDOW MUST HAVE A FRAME AND SASH COMPRISED OF VINYL MATERIAL WITH WELDED CORNERS, METAL REINFORCEMENT IN THE INTERLOCK AREA, AND CONSTRUCTED OF MULTIPANE GLAZING WITH A MINIMUM OF ONE TEMPERED PANE.  |
| 3 SUPPORT POST BELOW         | 13 NOT USED                  | 22 CLOSET TO BE SIZED PER HOMEOWNER REQUIREMENTS OR PER CURRENT MECHANICAL CODE WHEN USED FOR HVAC                                     | 29 NOT USED   | 32 RAFTER VENTS TO MEET REQUIRED VENTILATION TO ENCLOSED RAFTER SPACES. MAX 1/2". MIN 1/4" OPENING SIZE ON VENT SCREEN WITH CORROSION-RESISTANT WIRE SCREEN MATERIAL. 1 SF OF VENTING PER 150 SF OF ENCLOSED RAFTER AREA IN NON-FIRE RATED CONSTRUCTION |
| 4 LINE OF WALLS BELOW        | 14 NOT USED                  | 23 NOT USED  | 24 NOT USED   |   |
| 5 BEAMS PER STRUCTURAL DRWG. | 15 NOT USED                  | 25 NOT USED  | 26 DRYER VENT TERMINATION ON EXTERIOR WALL TO BE A MINIMUM OF 3 FT FROM ANY OPENING   |   |
| 6 NOT USED                   | 16 NOT USED                  | 17 NOT USED  |   |   |
| 7 NOT USED                   | 18 CLOSET SHELF AND POLE     | 19 SLOPE SURFACE AWAY FROM BUILDING  |   |   |
| 8 VENT DRYER THROUGH WALL    |                              |  |   |   |
| 9 NOT USED                   |                              |  |   |   |

**GENERAL NOTES**

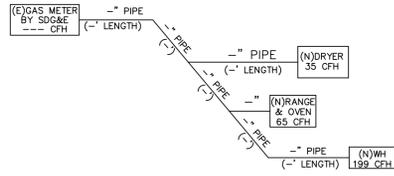
- ALL DIMENSIONS TO FACE OF STUD, U.N.O.
- ALL DOORS SHOULD BE 3 1/2" FROM NEAREST INTERSECTING WALL AT HINGED SIDE, U.N.O.
- WRITTEN DIMENSIONS TO PREVAIL OVER SCALING OF DRAWINGS. CONTRACTOR TO VERIFY ALL DIM. PRIOR TO CONSTRUCTION AND IMMEDIATELY NOTIFY OWNER OF ANY DISCREPANCIES.
- REFER TO FRAMING PLANS AND SECTIONS FOR CLARIFICATION AND DIM. NOT SHOWN.
- ALL ROOF DRAIN PIPES TO BE MIN. 2" STORM DRAINAGE SYSTEM ROOF GUTTERS: STYLE A, INSTALLED AND DESIGNED IN ACCORDANCE WITH SMACNA MANUAL, PLATE #1, #2 & #3, GUTTER, PAGE 6 - 11, WIDTH AS REQUIRED TO HANDLE THE AMOUNT OF ROOF WATER FOR MAXIMUM STORMS, SMACNA CHART #2, PAGE #2.
- GUTTER SIZE: PAGES 1, 2, 3, 4, 5 & 6, CHARTS #1, #2, #3, #4, #5, #6 & #7. STYLE: PLATE #2, STYLE A, PAGE 9 EXPANSION PLATE #6, PAGE 16 & 17 HANGING; PLATE #19, FIG. C, PAGE 43.
- DOWN SPOUTS: PLAIN RECTANGULAR AS REQUIRED BY SMACNA MANUAL CHART #3, PAGE #3. SEE ARCHITECT FOR LOCATIONS OF DOWN SPOUTS. ALL DOWN SPOUTS ARE TO BE DESIGNED TO HANDLE THE AMOUNT OF ROOF WATER FOR MAXIMUM STORMS, SMACNA CHART #2, PAGE #2. DOWN SPOUTS ARE TO DEPOSIT DIRECTLY OVER A NDS 6 INCH SQUARE, MODEL 641 OR APPROVED EQUAL (SEE SECTION 02710 MORE INFORMATION)
- TRANSITION OF FLOOR MATERIALS OCCURRING IN OPENINGS WITH DOORS TO BE LOCATED UNDER THE CENTER OF THE DOOR IN THE CLOSED POSITION.
- TRANSITION OF FLOOR MATERIAL OCCURRING WITH NO DOOR TO BE LOCATED TO ALIGN WITH THE FACE OF THE PARTITION, U.O.N
- DIFFUSERS AND GRILLS TO MATCH COLOR OF SURFACE AT WHICH THEY ARE MOUNTED, U.O.N.
- FLOOR FINISH TO CONTINUE UNDER MILLWORK WHERE FLOOR IS VISIBLE (I.E. TRASH, RECYCLING, ECT) & SILICON SEALANT AT GLAZING TO BE CLEAR, U.O.N.
- PLUMBING, ELECTRICAL, AND SPRINKLER EQUIPMENT IF REQUIRED TO BE PAINTED TO MATCH COLOR OF ADJACENT SURFACE.
- NOT USED
- ALL FINISH MATERIAL MUST MEET ALL APPLICATION FIRE, LIFE SAFETY, AND BUILDING CODES.
- OPERATION AND MAINTENANCE MANUAL: THE BUILDER IS TO PROVIDE AN OPERATION MANUAL (CONTAINING INFORMATION FOR MAINTAINING APPLIANCES, ETC.) FOR THE OWNER AT THE TIME OF FINAL INSPECTION.
- WEEP SCREED FOR STUCCO AT THE FOUNDATION PLATE LINE SHALL BE A MIN. OF 4" ABOVE THE EARTH OR 2" ABOVE PAVED AREAS. CRC R703.7.2.1, CBC 2512.1.2
- FASTENERS AND CONNECTIONS (NAILS, ANCHORS BOLTS ECT) IN CONTACT WITH PRESERVATIVE-TREATED WOOD SHALL BE OF HOT-DIPPED ZINC-COATED GALVANIZED STEEL, STAINLESS STEEL, SILICON BRONZE OR COPPER. (CRC R317.3, CBC 2304.10.5.1)
- ANCHOR BOLTS SHALL INCLUDE STEEL PLATE WASHERS A MIN. OF 0.229" X 3" X 3" IN SIZE, BETWEEN SILL PLATE AND NUT. (CRC R602.11.1, CBC 2308.3.2 ACCEPTANCE ALTERNATIVE SDPWs 4.3.6.4.3)
- FUTURE WATER HEATERS AND PLUMBING FIXTURES SHALL MEET THE REQUIREMENTS OF SECTION 2-5314 AND TABLE 2-53G, TITLE 24, C.A.C.
- 15, 20 AND 30 AMP RECEPTACLE OUTLETS SHALL BE INSTALLED WITH CENTERS NOT LESS THAN 15" ABOVE THE FLOOR.

**LEGEND**

- |  |                     |  |                |
|--|---------------------|--|----------------|
|  | SECTION CUT         |  | KEYNOTE        |
|  | ELEVATION CALLOUT   |  | DOOR SYMBOL    |
|  | DETAIL DRAWING REF. |  | WINDOW SYMBOL  |
|  | ELEVATION MARKER    |  | TEMPERED GLASS |
|  | ROOFING             |  |                |

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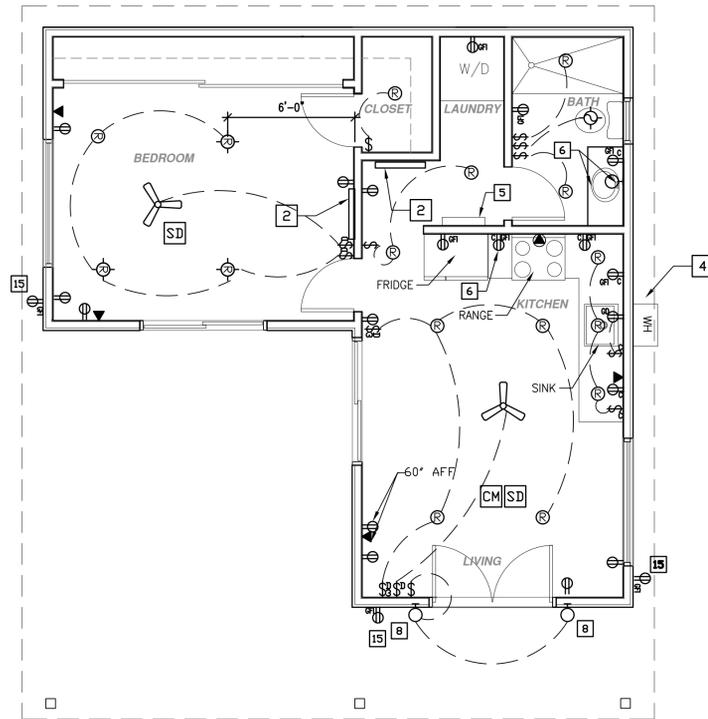
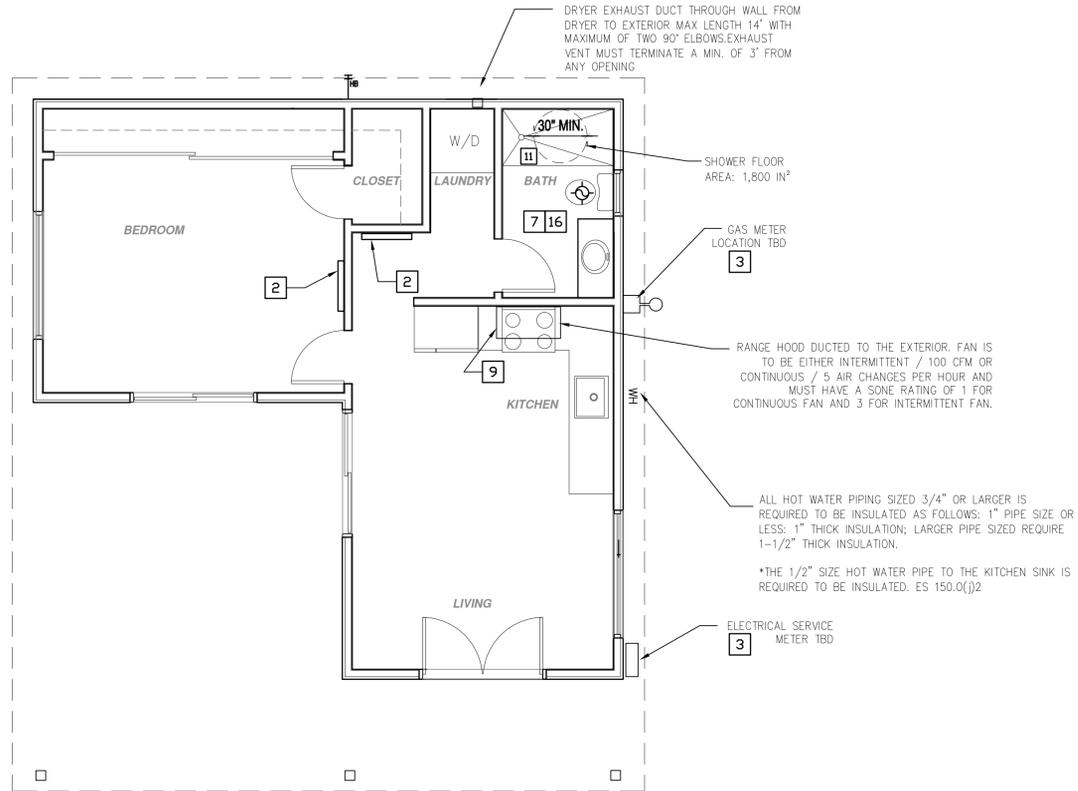
NOTE: EXISTING GAS SERVICE AND METER SIZE TO BE PROVIDED BY HOMEOWNER AND UPDATED ISOMETRIC LAYOUT PROVIDED BY DESIGNER OF CHOICE. CFH & BTUS PROVIDED AS SUGGESTED LOADS. OWNER/DESIGNER IS TO PROVIDE ACCURATE INFORMATION.



GAS PIPE ISOMETRIC LAYOUT

GAS CALCULATIONS			
APPLIANCE	QTY	CFH	TOTAL CFH
(NEW) DRYER	1	35	35
(NEW) OVEN & RANGE	1	65	65
(NEW) WATER HEATER	1	199	199
TOTAL GAS LOAD FOR HOUSEHOLD APPLIANCES = 299,000 BTU/h 299 CFH			

PIPE SIZE SCHEDULE 40 METALLIC PIPE 125' LENGTH PER TABLE 1216.2(1) CALIFORNIA PLUMBING CODE						
SIZE	1/2"	3/4"	1"	1 1/4"	1 1/2"	2"
CFH	44	92	173	355	532	1,020



MECHANICAL / PLUMBING PLAN

1/4" = 1'-0"

ELECTRICAL PLAN

1/4" = 1'-0"

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KEYNOTES

- 1 NOT USED
- 2 WALL HEATER
- 3 NEW ELECTRICAL SERVICE AND GAS METER LOCATED AS NEEDED
- 4 120 V OUTLET FOR NEW TANKLESS WATER HEATER WITHIN 3' OF WATER HEATER.
- 5 SUB PANEL LOCATION
- 6 OUTLET AT COUNTER HEIGHT - SHALL COMPLY WITH CEC ARTICLE 210.52(C); IN KITCHENS A RECEPTACLE OUTLET SHALL BE INSTALLED AT EACH COUNTER SPACE 12" OR WIDER, SHALL BE INSTALLED SO THAT NO POINT ALONG THE WALL IS MORE THAN 24"; ISLAND IN PENINSULAR COUNTERTOPS 12' X 24" LONG (OR GREATER) SHALL HAVE AT LEAST ONCE RECEPTACLE
- 7 WATER CONSERVING FIXTURES: NEW WATER CLOSETS SHALL USE NO MORE THAN 1.28 GAL. OF WATER PER FLUSH. LAVATORIES LIMITED TO 1.2 GPM. KITCHEN FAUCETS NOT TO EXCEED 1.8 GPM, AND SHOWERS NOT EXCEED 1.8 GPM
- 8 OUTDOOR LIGHTING FIXTURES ARE REQUIRED TO BE HIGH EFFICACY OR CONTROLLED BY A COMBINATION PHOTOCONTROL / MOTION SENSOR.
- 9 EXHAUST HOOD ABOVE/ TO BE SMOOTH METALLIC INTERIOR SURFACE (CMC 504.3)
- 10 NOT USED
- 11 CONTROL VALVES IN SHOWERS, BATHTUBS, AND BIDETS MUST BE PRESSURE BALANCED OR THERMOSTATIC MIX VALVES
- 12 SPECIAL PURPOSE OUTLET FOR HEATER
- 13 NOT USED
- 14 WATER METER CONNECTION
- 15 WEATHER RESISTANT TYPE RECEPTACLES
- 16 CLEARANCE FOR WATER CLOSET TO BE A MIN. OF 24" IN FRONT, AND 15" FROM ITS CENTER TO ANY SIDE WALL OR OBSTRUCTION. (CPC 402.5)

GENERAL NOTES:

- 1. RECEPTACLE OUTLET LOCATIONS WILL COMPLY WITH CEC ARTICLE 210.52. TAMPER RESISTANT RECEPTACLE OUTLET LOCATIONS SHALL COMPLY W/ NEC ART. 210-52(a).
- 2. ALL BRANCH CIRCUITS WILL BE ARC FAULT CIRCUIT PROTECTED PER NEC ART. 210-12(b).
- 3. BATHROOM CIRCUITING SHALL BE EITHER: a) A 20 AMPERE CIRCUIT DEDICATED TO EACH BATHROOM. b) AT LEAST ONE 20 AMPERE CIRCUIT SUPPLYING ONLY BATHROOM RECEPTACLE OUTLETS PER NEC ART. 210-11(c)(3).
- 4. ALL 125-VOLT, SINGLE-PHASE, 15- AND 20- AMPERE RECEPTACLES INSTALLED IN BATHROOMS, GARAGES, BASEMENTS, OUTDOORS, KITCHEN COUNTERS AND AT WET BAR SINKS SHALL BE GFCI PROTECTED PER NEC ART. 210-8.
- 5. SMOKE DETECTORS MUST BE PERMANENTLY WIRED
- 6. MECHANICAL SUB-CONTRACTOR SHALL SIZE A.C./FAU AND SUBMIT SPECS WITH BID PER CMC 303.1.
- 7. PER LIGHTING MEASURES 150(K4) N-24, THE BEDROOMS, HALLWAY, LIVING ROOM AND OFFICE ARE REQUIRED TO HAVE ANY INSTALLED FIXTURE TO BE ON A DIMMER SWITCH OR THE FIXTURE NEEDS TO BE HIGH EFFICACY.
- 8. OUTDOOR LIGHTING FIXTURES ARE REQUIRED TO BE HIGH EFFICACY OR CONTROLLED BY A COMBINATION PHOTOCONTROL / MOTION SENSOR.
- 9. NOT USED
- 10. IN NEW CONSTRUCTION, REQUIRED SMOKE 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. SMOKE ALARMS SHALL EMIT A SIGNAL WHEN THE BATTERIES ARE LOW. WIRING SHALL BE PERMANENT AND WITHOUT A DISCONNECTING SWITCH OTHER THAN AS REQUIRED FOR OVERCURRENT PROTECTION.
- 11. WHERE MORE THAN ONE SMOKE ALARM IS REQUIRED TO BE INSTALLED, THE SMOKE ALARMS SHALL BE INTERCONNECTED IN SUCH A MANNER THAT THE ACTIVATION OF ONE ALARM WILL ACTIVATE ALL THE ALARMS IN THE INDIVIDUAL DWELLING UNIT. THE ALARM SHALL BE CLEARLY AUDIBLE IN ALL BEDROOMS OVER BACKGROUND NOISE LEVELS WITH ALL INTERVENING DOORS CLOSED.
- 12. WHERE WATER CLOSET COMPARTMENT IS INDEPENDENT OF THE BATHROOM OR SHOWER AREA, A FAN WILL BE REQ. IN EACH AREA. BATHROOMS SHALL HAVE AN EXHAUST FAN WITH HUMIDITY CONTROL SENSOR, MIN. 50 CFM CAPACITY. (CRCR303.3)
- 13. ROOMS CONTAINING BATHTUBS, SHOWERS, SPAS AND SIMILAR FIXTURES SHALL BE PROVIDED WITH AN EXHAUST FAN WITH HUMIDITY CONTROL SENSOR HAVING A MIN. CAPACITY OF 50 CFM DUCTED TO TERMINATE OUTSIDE THE BLDG. (CRC R303.3, CAL GREEN 4.505.1, CBC 1203.5.2.1, CMC 402.5)
- 14. SUPPLY AND RETURN AIRDUCTS TO BE INSULATED AT A MIN. OF R-6. (CAL ENERGY CODE TABLE 150.1-A)
- 15. WHERE WHOLE HOUSE FANS ARE USED IN BATHROOM AREAS, THE FAN MUST RUN CONTINUOUSLY AND SHALL NOT BE TIED TO HUMIDITY CONTROL SENSOR. (CAL ENERGY CODE 4.506.1)
- 16. ENVIRONMENTAL AIR DUCTS SHALL TERMINATE MIN. 3 FEET FROM PROPERTY LINE OR OPENINGS INTO BLDG., AND 10' FROM A FORCED AIR INLET. (CMC 502.2.1)
- 17. ABS AND PVC DRAIN WASTE AND VENT PIPING MATERIAL IS LIMITED TO 2 STORIES MAX. (CPC 701.2)(2) (A) AND 903.1.1)
- 18. ABS AND PVC ROOF AND DECK DRAIN MATERIAL IS LIMITED TO 2 STORIES MAX. (CPC 1101.4)
- 19. ALL HOSE BIBBS ARE TO HAVE VACUUM BREAKERS. (CPC603.5.7)
- 20. THE MAX. AMOUNT OF WATER CLOSETS ON A 3" HORIZONTAL DRAINAGE SYSTEM LINE IS 3 (CPC TABLE 703.2)
- 21. THE MAX. AMOUNT OF WATER CLOSETS ON A 3" VERTICAL DRAINAGE LINE IS 4. (CPC TABLE 703.2)
- 22. PROVIDE GAS LINES WITH A MN. CAPACITY OF 200,000BTU FOR WATER HEATER. (CAL ENERGY CODE 150.0(N)).
- 23. PROVIDE A CONDENSATE DRAIN NO MORE THAN 2" ABOVE THE BASE OF THE WATER HEATER SPACE. (CAL ENERGY CODE 150.0 (N)).
- 24. INSULATE ALL HOT WATER PIPES. CAL ENERGY CODE 150.0(j) (2), and CPC 609.11)
- 25. ISOLATION VALVES ARE REQ. FOR TANKLESS WATER HEATERS ON THE HOT AND COLD SUPPLY LINES WITH HOSE BIBBS ON EACH VALVE, TO FLUSH THE HEAT EXCHANGER. (CAL ENERGY CODE 110.3(7)).

LEGEND

LIGHTING

- Ⓢ CEILING, RECESSED, ZERO CLEARANCE IC RATED LED BULB
- Ⓣ WALL MOUNTED LIGHT
- Ⓝ JUNCTION BOX FLUSH CEILING MOUNTED

MECHANICAL

- Ⓢ EXHAUST FAN: MINIMUM 50 CFM TO BE DUCTED TO THE EXTERIOR AND SHALL PROVIDE FIVE AIR CHANGES PER HOUR, SECTION 1203.3. CFM AND NOISE RATING MAXIMUM. 3 SONE FOR INTERMITTENT USE. SHALL BE ENERGY STAR RATED AND CONTROLLED BY A HUMIDISTAT CAPABLE OF AN ADJUSTMENT BETWEEN 50-80% HUMIDITY.

FIRE DETECTION

- Ⓢ SMOKE DETECTORS PER SECTION R314 DETECTORS SHALL BE PERMANENTLY WIRED WITH BATTERY BACKUP. SOUND AN ALARM AUDIBLE IN ALL SLEEPING AREAS. ALARM DEVICES SHALL BE INTERCONNECTED IN SUCH A MANNER THAT THE ACTIVATION OF ONE ALARM WILL ACTIVATE ALL OF THE ALARMS IN THE UNIT.

- SHALL BE COMPLY WITH THE FOLLOWING:
  - AT LEAST 3' FROM THE TIP OF THE BLADE OF A CEILING-MOUNTED FAN
  - NOT LESS THAN 3' FROM THE DOOR OPENING OF A BATHROOM
  - AT LEAS 20' FROM A COOKING APPLIANCE
  - AT LEAST 3' FROM SUPPLY REGISTERS OF A HEATING /COOLING SYSTEM
- Ⓢ CARBON MONOXIDE ALARM PERMANENTLY WIRED WITH BATTERY BACKUP PER SECTION R315. ALARMS SHALL BE INTERCONNECTED IN SUCH A MANNER THAT THE ACTIVATION OF ONE ALARM WILL ACTIVATE ALL OF THE ALARMS IN THE UNIT.

POWER/DATA

- Ⓢ TAMPER RESISTANT RECEPTACLE WALL MOUNTED, 110 V DUPLEX U.O.N.
- GFI = WATER PROOF GFCI
- CT = COOKTOP/ GRILL 220 V
- O = OVEN 220 V
- MW = MICROWAVE 110 V
- GD = GARBAGE DISPOSAL 110 V
- R = RANGE 220V
- C = COUNTER HEIGHT 6" ABV COUNTER PHONE / DATA / MEDIA
- Ⓢ CEILING, WATERPROOF OUTLET
- Ⓢ FLOOR MOUNTED DUPLEX RECEPTACLE, VERIFY LOCATION IN FIELD.
- Ⓢ SPECIAL PURPOSE CONNECTION (VOLTAGE SHALL MATCH APPLIANCE REQ.)
- Ⓢ SUB PANEL

SWITCHING

- Ⓢ SWITCH, MOUNT AT 43" AFF
- Ⓢ₃ THREE-WAY SWITCH
- Ⓢ₄ FOUR-WAY SWITCH
- Ⓢₒ DIMMER SWITCH
- Ⓢₒ MOUNT 6" ABV COUNTER

MISC.

- Ⓢ CEILING FAN/LIGHT COMBO
- Ⓢ CIRCUIT WIRING
- Ⓢ HOSE BIB
- Ⓢ GAS STUB OUT

project

PRADU  
City Of Encinitas

description

Mechanical/  
Plumbing/  
Electrical

date March 27 2019

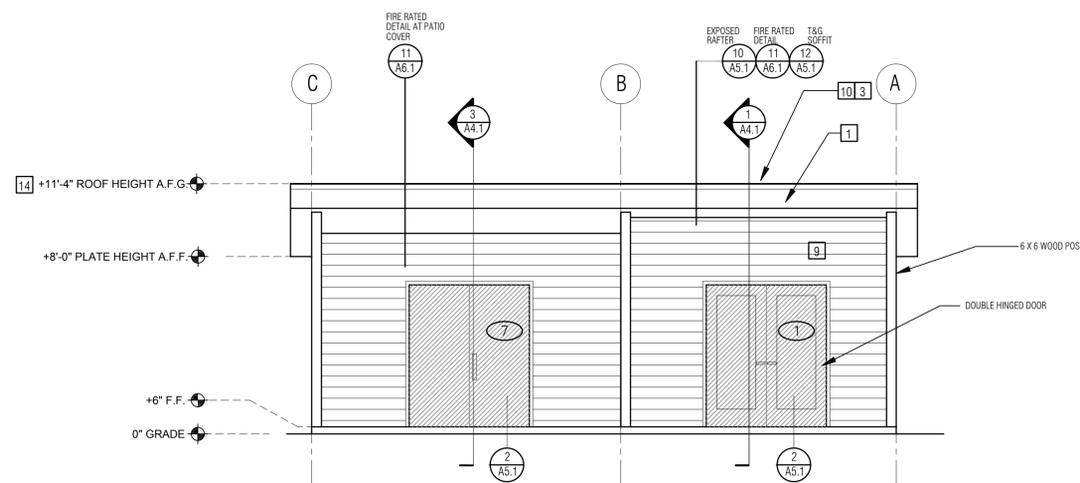
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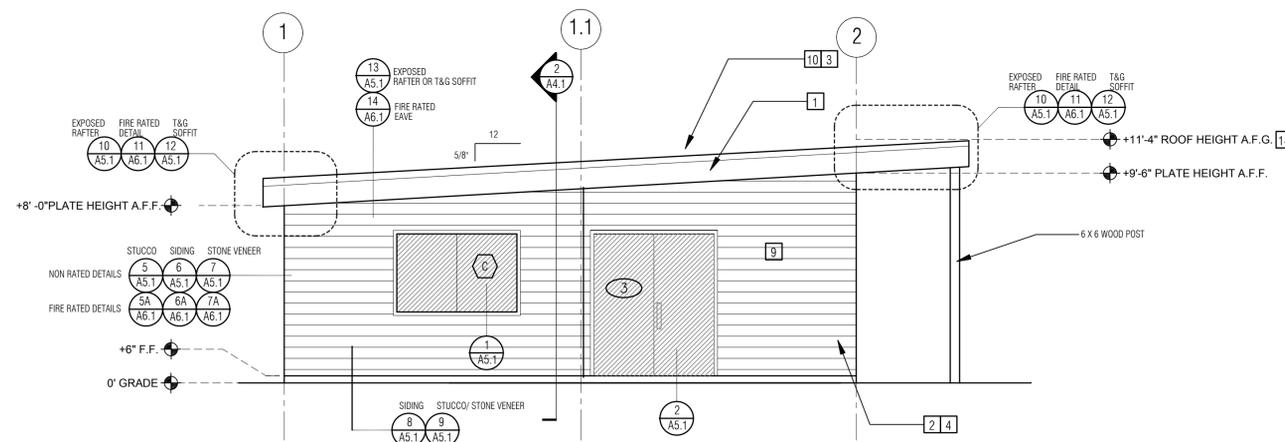
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A2.1

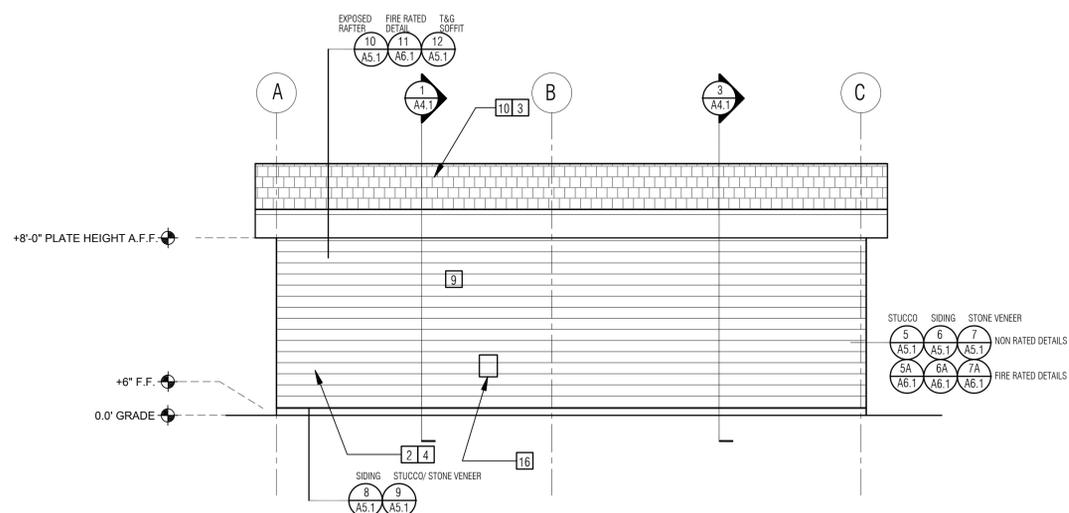
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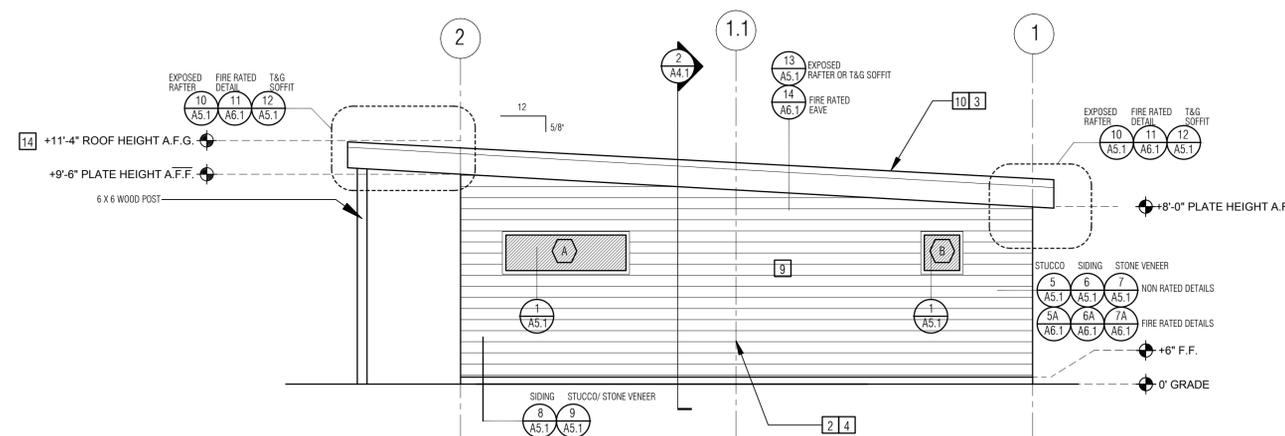
**A** 1 Bedroom - Front Elevation  
1/4" = 1'-0"



**B** 1 Bedroom - Side Elevation  
1/4" = 1'-0"



**C** 1 Bedroom - Rear Elevation  
1/4" = 1'-0"



**D** 1 Bedroom - Side Elevation  
1/4" = 1'-0"

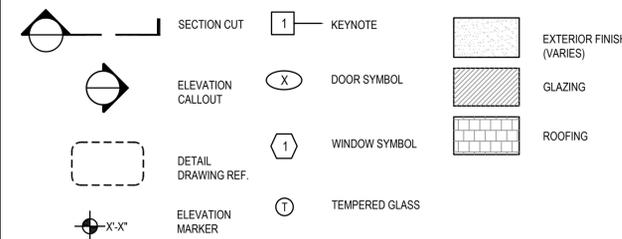
**KEYNOTES**

- |                                       |   |   |
|---------------------------------------|---|---|
| 1 FASCIA/RAFTERS PER PLAN SEE FRAMING | 9 SIDING/ STUCCO/ STONE VENEER. SEE DETAILS ON SHEET A5.1 OR SHEET A6.1 FOR FIRE RATED DETAILS            | 15 NOT USED   |
| 2 2x4 STUDS @ 16" O.C.                | 10 CLASS A ROOFING. STANDING SEAM METAL OR TORCH DOWN PER MANUFACTURERS DETAILS                           | 16 DRYER VENT TERMINATION (MINIMUM OF 3 FT FROM ANY OPENING) SEE A2.1 MECHANICAL PLAN |
| 3 R30 CEILING INSULATION              | 11 NOT USED   |   |
| 4 R15 WALL INSULATION                 | 12 NOT USED   |   |
| 5 NOT USED                            | 13 IGNITION-RESISTANT MATERIAL TO BE 3/8" NON-COMBUSTIBLE CEMENTITIOUS MATERIAL                           |   |
| 6 NOT USED                            | 14 HEIGHT IS MEASURED AT FINISH ROOF LINE. FROM EXISTING OR PROPOSED FINISHED GRADES (WHICHEVER IS LOWER) |   |
| 7 NOT USED                            |   |   |
| 8 2x6 STUDS @ 16" O.C.                |   |   |

**GENERAL NOTES**

- ALL TOP OF ROOF ELEVATIONS TO FINISH FACE, U.N.O.
- ALL DOORS SHOULD BE 3 1/2" FROM NEAREST INTERSECTING WALL AT HINGED SIDE, U.N.O.
- WRITTEN DIMENSIONS TO PREVAIL OVER SCALING OF DRAWINGS. CONTRACTOR TO VERIFY ALL DIM. PRIOR TO CONSTRUCTION AND IMMEDIATELY NOTIFY OWNER OF ANY DISCREPANCIES.
- REFER TO FRAMING PLANS AND SECTIONS FOR CLARIFICATION AND DIM.
- SEE SCHEDULE FOR DOOR AND WINDOW INFORMATION AND HEIGHTS

**LEGEND**



project

PRADU  
City Of Encinitas

description

Exterior Elevations  
1 Bedrooms

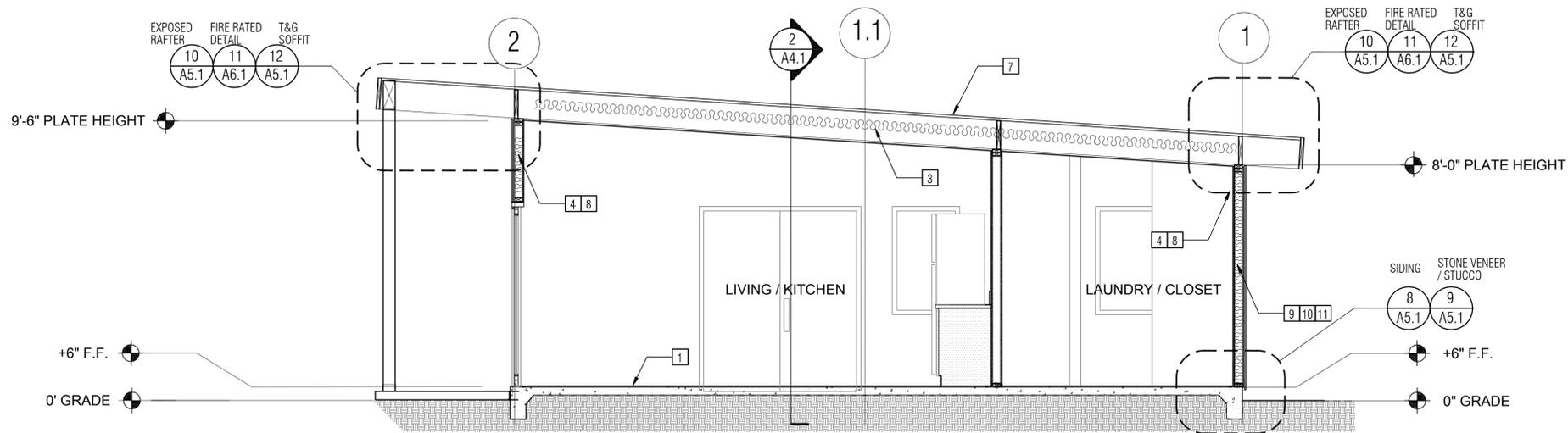
date March 27 2019

project no. 2018 PRADU

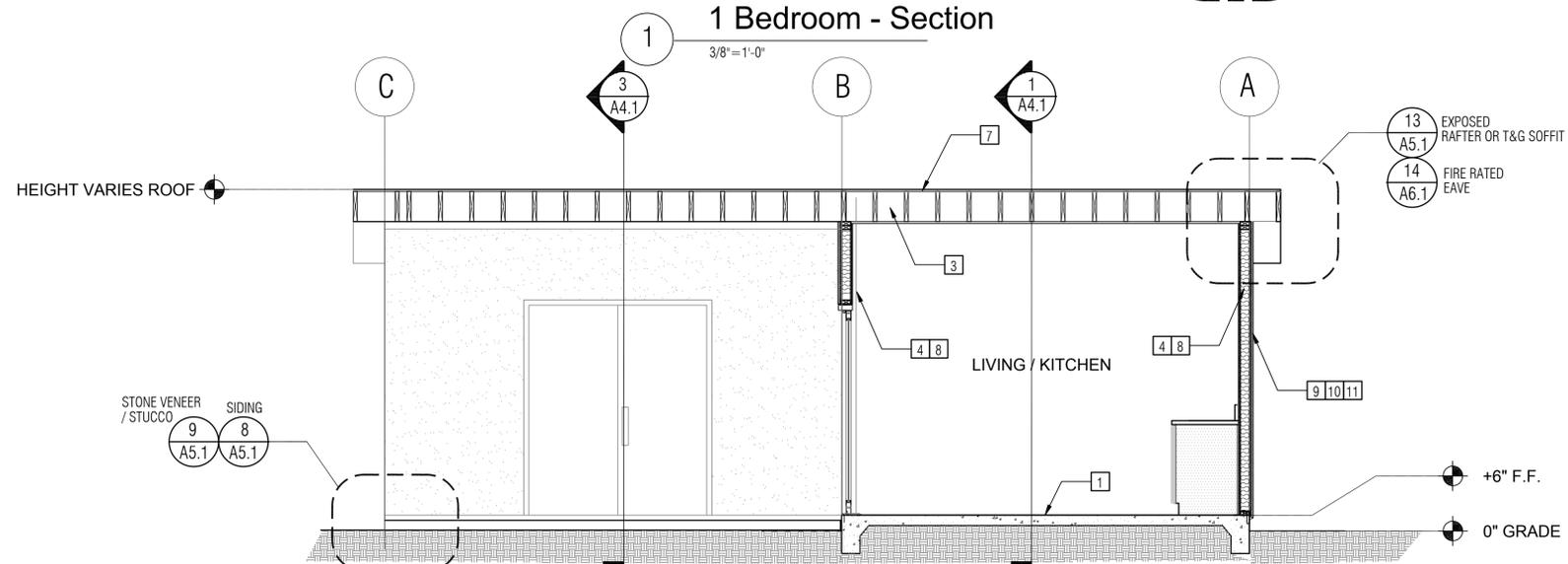
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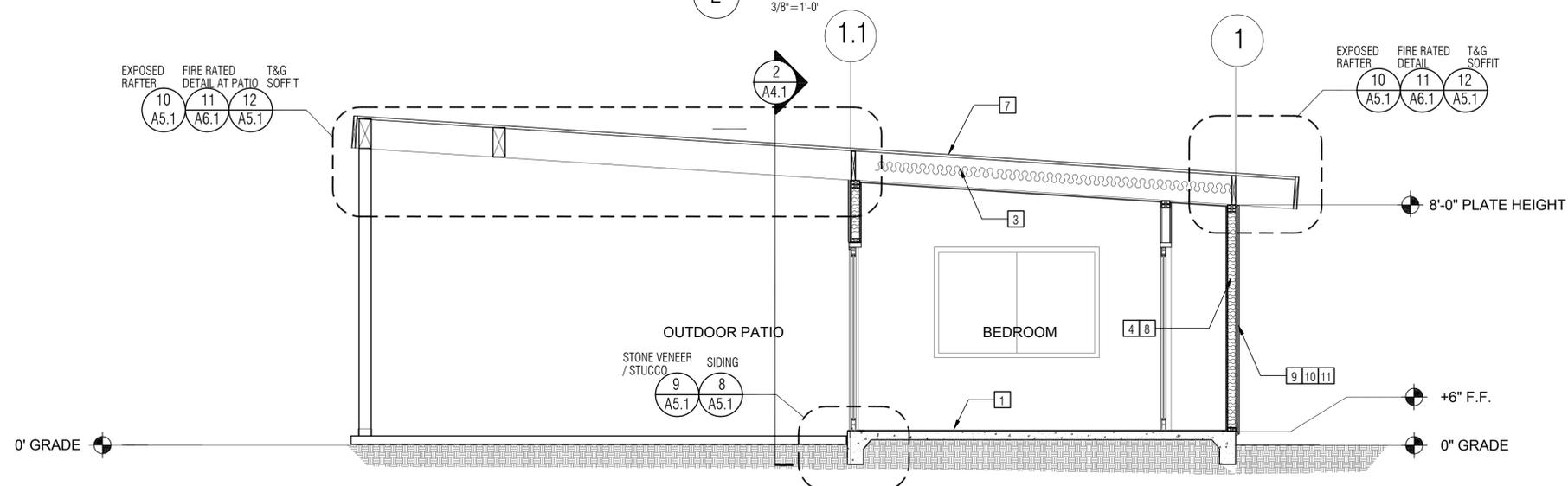
**A3.1**



1 Bedroom - Section  
3/8" = 1'-0"



1 Bedroom - Section  
3/8" = 1'-0"



1 Bedroom - Section  
3/8" = 1'-0"

KEYNOTES	
1	CONC. SLAB ON GRADE SEE STRUCTURAL
2	NOT USED
3	R30 CEILING INSULATION
4	R15 WALL INSULATION
5	NOT USED
6	NOT USED
7	MINIMUM CLASS A ROOF ASSEMBLY
8	2x STUDS @ 16" O.C.
9	SIDING - OWNER SPECIFY (FOR FIRE RATED DETAIL 6A/A6.1)
10	STUCCO - OWNER SPECIFY (FOR FIRE RATED DETAIL 5A/A6.1)
11	STONE VENEER (FOR FIRE RATED DETAIL 7A/A6.1)
12	NOT USED
13	IGNITION-RESISTANT MATERIAL TO BE 3/4" NON-COMBUSTIBLE CEMENTITIOUS MATERIAL
14	NOT USED
15	NOT USED
16	DRYER VENT TERMINATION (MINIMUM OF 3 FT FROM ANY OPENING)

GENERAL NOTES	
1.	ALL DIMENSIONS TO FACE OF FRAMING, U.N.O.
2.	ALL DOORS SHOULD BE 3 1/2" FROM NEAREST INTERSECTING WALL AT HINGED SIDE, U.N.O.
3.	WRITTEN DIMENSIONS TO PREVAIL OVER SCALING OF DRAWINGS. SUBCONTRACTOR TO VERIFY ALL DIM. PRIOR TO CONSTRUCTION
4.	REFER TO PLANS FOR CLARIFICATION OF DIM.
5.	SEE SCHEDULE FOR DOOR AND WINDOW INFORMATION AND HEIGHTS
6.	METALS SEE PLANS AND DETAILS FOR LOCATIONS, QUANTITY AND CONFIGURATION OF MISCELLANEOUS IRON AND STEEL WORK INCLUDING ASSORTED CLIPS, BRACKETS ANGLES, STRAPS, POST ANCHORS AND LIKE ITEMS. FURNISH AND INSTALL ALL SUCH ITEMS NECESSARY TO MAKE A COMPLETE INSTALLATION WHETHER OR NOT SPECIFICALLY DETAILED OR NOTED ON THE DRAWINGS. ALL EXTERIOR METAL AND HARDWARE IS TO BE GALVANIZED. STEEL IS TO BE ASTM A3.
7.	ALL VENTS ARE TO BE STAINLESS STEEL MESH SIZED AS TO NOT ALLOW ANY INSECTS TO PENETRATE THROUGH.
8.	FRAMER IS TO LAYOUT CEILING JOISTS/ROOF RAFTERS TO ACCOMMODATE RECESSED LIGHTS EXHAUST FANS OR OTHER ELECTRICAL/MECHANICAL FIXTURES.
9.	WOOD SOFFIT/CEILING, SIDING & TRIM ALL NAILS, FASTENERS AND HARDWARE MUST BE STAINLESS STEEL. NUMBER OR TOP-QUALITY, HOT-DIPPED GALVANIZED. STAPLES ARE NOT PERMITTED
10.	INSULATION THERMAL INSULATION IS TO BE FOIL BACKED BATT INSULATION WITH AN R FACTOR NOT LESS THAN R-15 FOR WALLS AND AN R-30 FOR CEILINGS @ BATHROOMS, LAUNDRY ROOM AND MASTER BED/BATHROOMS ARE TO BE PROVIDED WITH SOUND INSULATION FLOOR, WALLS AND CEILING LOCATIONS AS MANUFACTURED BY JOHNS-MANVILLE FORMALDEHYDE FREE OR APPROVED EQUAL.
11.	FLASHING AND SHEET METAL ALL FLASHING AND COUNTER FLASHING IS TO BE GALVANIZED AND INSTALLED AS PER SMACNA STANDARDS. ALL PROPOSED FLASHING AND SHEET METAL MATERIALS, GAUGE AND INSTALLATION IS TO BE IN ACCORDANCE WITH SMACNA MANUAL STANDARDS.
12.	LATH & PLASTER A. MATERIALS FOR PLASTER IS TO BE THE STANDARD PRODUCTS OF RECOGNIZED MANUFACTURES, AND SHALL BE AS MANUFACTURED BY US GYPSUM CO. AND APPROVED BY THE LATH AND PLASTER INSTIGAT OR APPROVED EQUAL. B. ALL PLASTER CORNER BEADS, CASING BEADS, CONTROL JOINTS, EXPANSION SCREEDS AND ACCESSORIES ARE TO BE GALVANIZED. PROVIDE CASING BEADS AT ALL JOINTS OF STUCCO TO DISSIMILAR SURFACES UNLESS OTHERWISE NOTED C. WHERE INDICATED ON THE DRAWINGS PORTLAND CEMENT PLASTER IS TO BE HAND APPLIED (3) THREE COAT WORK, 7/8" THICK ON EXTERIOR SURFACES. THE COATS ARE TO CONSIST OF A SCRATCH (3/8" AND A TWO COAT FINISH (1/8" MIN.) COAT PROPORTIONED AND MIXED AS RECOMMENDED BY THE CALIFORNIA LATHING AND PLASTERING CONTRACTORS ASSOCIATION.

LEGEND	
	SECTION CUT
	ELEVATION CALLOUT
	DETAIL DRAWING REF.
	ELEVATION MARKER
	KEYNOTE
	DOOR SYMBOL
	WINDOW SYMBOL
	TEMPERED GLASS

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project  
PRADU  
City Of Encinitas

description  
**Sections  
1 Bedrooms**

date March 27 2019  
project no. 2018 PRADU  
drawn by YSP  
sheet no.



**WINDOW SCHEDULE**

WINDOW	WINDOW SIZE		OPER.	FIRE RATED	QNTY	FRAME	HEAD HEIGHT	REMARKS
	WIDTH	HEIGHT						
A	6'-0"	2'-0"	SLIDER	NOTE #12 & 13	1	VINYL	6'-8"	LIVING ROOM WINDOWS
B	2'-0"	2'-0"	SLIDER	NOTE #12 & 13	1	VINYL	6'-8"	BATHROOM WINDOWS
C	6'-0"	4'-0"	SLIDER	NOTE #12 & 13	1	VINYL	6'-8"	BEDROOM WINDOWS

**DOOR SCHEDULE**

DOOR	DOOR TYPE	DOOR SIZE			CORE	MATERIAL	FRAME	FIRE RATING (WHEN REQ'D)	REMARKS
		WIDTH	HEIGHT	THICK.					
1	DOUBLE DOOR	6'-0"	6'-8"	1-3/4"	GL	VNL/GLASS	VINYL	NOTE #10	FRONT - ENTRY HINGED DOOR WITH GLAZING
2	SINGLE DOOR	2'-0"	6'-8"	1-3/4"	HLW	WD	WD	NR	BATHROOM DOOR
3	SLIDER	6'-0"	6'-8"	1-3/4"	GL	VNL/GLASS	VINYL	NOTE #10	SIDE - ENTRY DOOR WITH GLAZING
4	SINGLE DOOR	2'-0"	6'-8"	1-3/4"	HLW	WD	WD	NR	BEDROOM INTERIOR DOOR
5	SINGLE DOOR	2'-0"	6'-8"	1-3/4"	HLW	WD	WD	NR	CLOSET DOOR
6	SLIDER	13'-0"	6'-8"	1-3/4"	HLW	WD	WD	NR	SLIDING CLOSET DOOR
7	SLIDER	6'-0"	6'-8"	1-3/4"	GL	VNL/GLASS	VINYL	NOTE #10	BEDROOM EXTERIOR DOOR WITH GLAZING

**WINDOW NOTES**

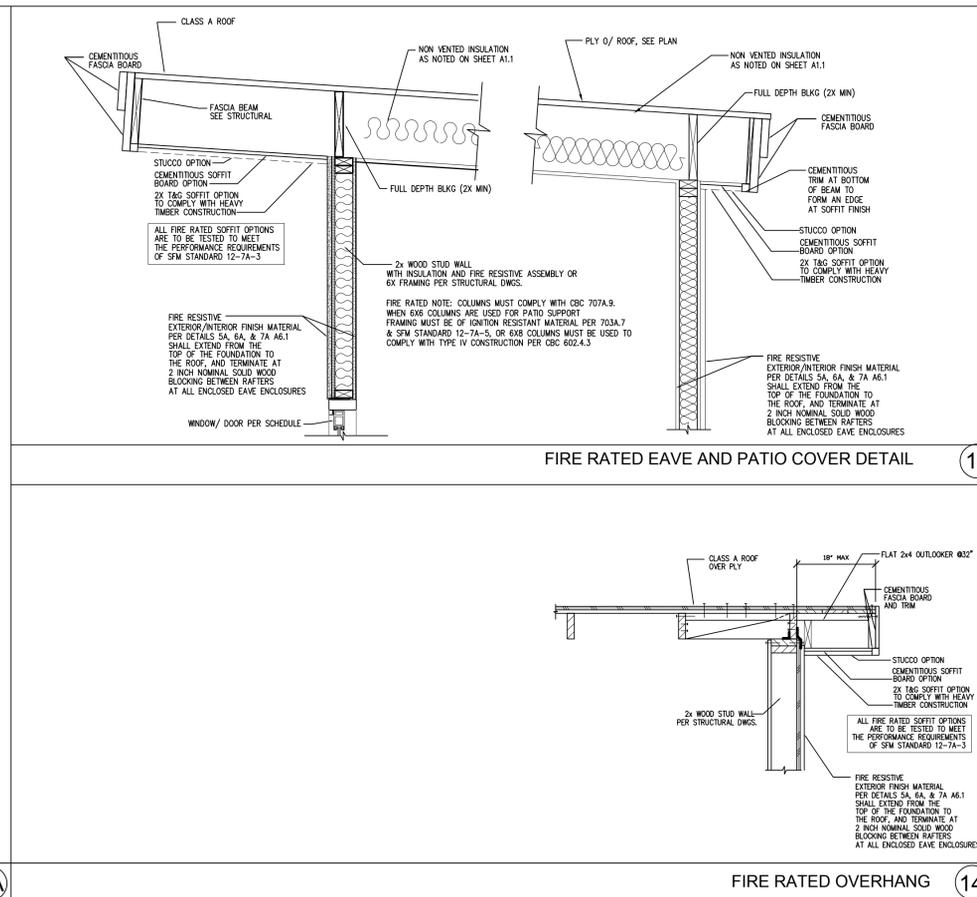
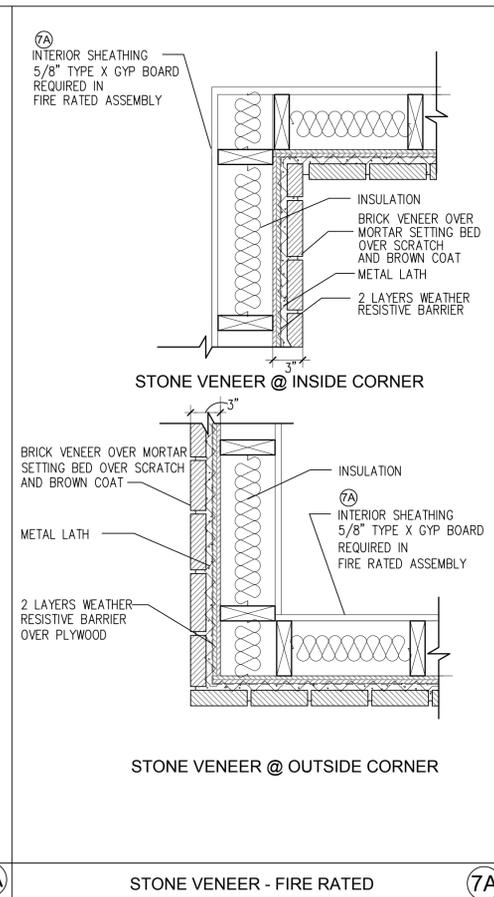
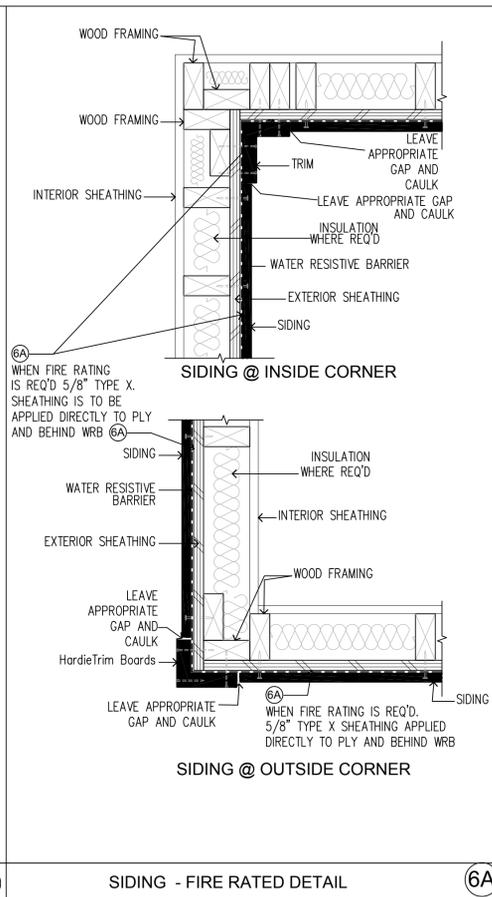
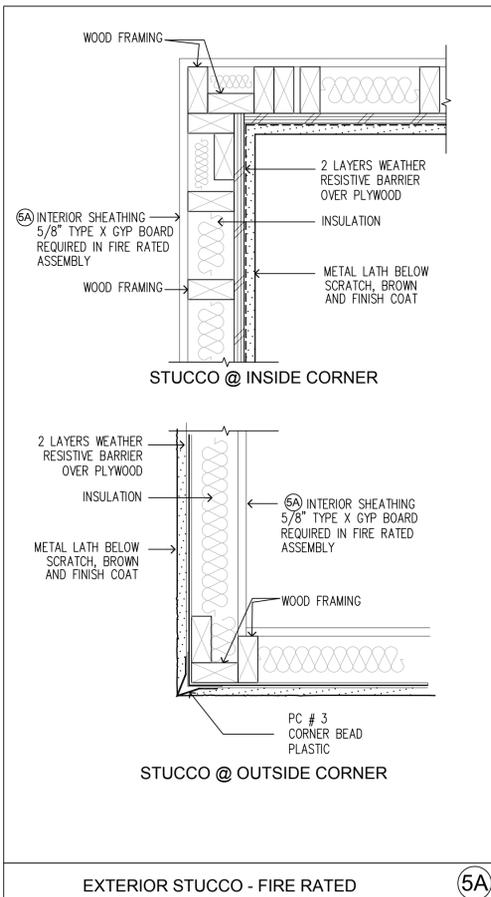
- SEE EXTERIOR ELEVATION FOR DIRECTION OF OPERATION OF WINDOWS (ALL OPERABLE WINDOWS TO HAVE SCREENS).
- ALL WINDOW DIMENSIONS PERTAIN TO ROUGH OPENINGS (R.O.), CONTRACTOR TO FIELD VERIFY ACTUAL DIMENSIONS FOR WINDOWS
- ALL GLAZING WILL BE INSTALLED WITH A CERTIFYING LABEL ATTACHED, SHOWING THE NFRC LABEL.
- ALL GLAZING SHALL BE SPECTRALLY SELECTIVE LOW E COATED TO MEET TITLE 24 ENERGY REQUIREMENTS.
- WINDOWS SHALL MEET THE MINIMUM INFILTRATION REQUIREMENTS PER SECTION 116 E.E.S.D
- VENTILATION SHALL COMPLY WITH C.B.C. 1203.4 AND R303
- EVERY SLEEPING ROOM SHALL HAVE ONE OPERABLE WINDOW FOR EMERGENCY ESCAPE OR RESCUE WITH A MIN. NET CLEAR OPENABLE AREA OF 5.7 SQ. FT, MIN. NET CLEAR OPENABLE HEIGHT OF 24" MIN., NET CLEAR WIDTH OF 20" AND A FIN. SILL HEIGHT OF NOT MORE THAN 44" A.F.F. PER CRC SECTION 3101
- NOT USED
- ALL EXTERIOR WINDOW AND EXTERIOR DOOR ASSEMBLIES TO HAVE AN STC RATING OF 36 OR GREATER.
- TEMPERED GLASS SHALL BE PERMANENTLY IDENTIFIED AND VISIBLE WHEN THE UNIT IS GLAZED.
- EVERY SPACE INTENDED FOR HUMAN OCCUPANCY SHALL BE PROVIDED WITH NATURAL VENTILATION AND NATURAL LIGHT BY MEANS OF VENTILATION / ARTIFICIAL LIGHT. CBC SECTIONS 1203.4 AND 1205.1 AND R303
- THE MINIMUM NET GLAZED AREA FOR NATURAL LIGHT SHALL NOT BE LESS THAN 8% OF THE FLOOR AREA OF THE ROOM SERVED. CBC SECTION 1205.2
- THE MINIMUM OPENABLE AREA TO THE OUTDOORS FOR NATURAL VENTILATION SHALL BE 4% OF THE FLOOR AREA BEING VENTILATED. SECTION 1203.4
- EXTERIOR WINDOWS, WINDOW WALLS, GLAZED DOORS, AND GLAZED OPENINGS WITHIN EXTERIOR DOORS SHALL BE INSULATING-GLASS UNITS WITH A MINIMUM OF ONE TEMPERED PANE
- FIRE-RESISTANCE RATED GLAZING TESTED AS PART OF A FIRE-RESISTANCE-RATED WALL ASSEMBLY IN ACCORDANCE WITH ASTM E 119 OR UL 263 TO BE CONSTRUCTED OF MULTIPANE GLAZING WITH A MINIMUM OF ONE TEMPERED PANE MEETING THE REQUIREMENT OF SECTION 2406, CONSTRUCTED OF GLASS BLOCK UNITS, OR HAVE A FIRE-RESISTIVE RATING OF NOT LESS THAN 20 MINUTES WHEN TESTED ACCORDING TO NFPA 257.

**DOOR NOTES**

- ALL GLASS IN DOORS SHALL BE TEMPERED. TEMPERED GLASS SHALL BE PERMANENTLY IDENTIFIED AND VISIBLE WHEN THE UNIT IS GLAZED.
- ALL GLAZING WILL BE INSTALLED WITH A CERTIFYING LABEL ATTACHED, SHOWING THE "U" VALUE.
- REFER TO FLOOR PLANS FOR DIRECTION OF DOOR SWING.
- DOORS SHALL MEET THE MINIMUM INFILTRATION REQUIREMENTS PER SECTION 116 E.E.S.
- VENTILATION SHALL COMPLY WITH C.B.C. 1203.4 AND R303.
- NOT USED
- ALL EXTERIOR WINDOW AND EXTERIOR DOOR ASSEMBLIES TO HAVE AN STC RATING OF 36 OR GREATER.
- DOORS MAY OPEN TO THE EXTERIOR ONLY IF THE FLOOR OR LANDING IS NOT MORE THAN 1-1/2" INCH LOWER THAN THE DOOR THRESHOLD. SECTION R311.3.1 CRC
- GLAZED OPENINGS WITHIN EXTERIOR DOORS SHALL BE INSULATING-GLASS UNITS WITH A MINIMUM OF ONE TEMPERED PANE.
- EXTERIOR DOOR ASSEMBLIES SHALL CONFORM TO THE PERFORMANCE REQUIREMENTS OF STANDARD SFM 12-7A-1 OR SHALL BE OF APPROVED NONCOMBUSTIBLE CONSTRUCTION OR IGNITION-RESISTANT MATERIAL, OR SOLID CORE WOOD HAVING STILES AND RAILS NOT LESS THAN 1 3/8 INCHES THICK WITH INTERIOR FIELD PANEL THICKNESS NO LESS THAN 1 1/4 INCHES THICK, OR SHALL HAVE A FIRE-RESISTANCE RATING OF NOT LESS THAN 20 MINUTES WHEN TESTED ACCORDING TO NFPA 257.

BY USING THESE PERMIT READY CONSTRUCTION DOCUMENTS, THE RECIPIENT IS ACKNOWLEDGING ACCEPTANCE OF THE FOLLOWING CONDITIONS.

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- THE RECIPIENT RECOGNIZES AND ACKNOWLEDGES THAT THE USE OF THIS INFORMATION WILL BE AT THEIR SOLE RISK AND WITHOUT ANY LIABILITY OR LEGAL EXPOSURE TO DESIGN PATH STUDIO. NO WARRANTIES OF ANY NATURE, WHETHER EXPRESS OR IMPLIED, SHALL ATTACH TO THESE DOCUMENTS AND THE INFORMATION CONTAINED THEREON. ANY USE, REUSE, OR ALTERATION OF THESE DOCUMENTS BY THE RECIPIENT OR BY OTHERS WILL BE AT THE RECIPIENT'S RISK AND FULL LEGAL RESPONSIBILITY. FURTHERMORE, THE RECIPIENT WILL, TO THE FULLEST EXTENT PERMITTED BY LAW, INDEMNIFY AND HOLD DESIGN PATH STUDIO HARMLESS FROM ANY AND ALL CLAIMS, SUITS, LIABILITY, DEMANDS, JUDGMENTS, OR COSTS ARISING OUT OF OR RESULTING THEREFROM ON ACCOUNT OF ANY INJURY, DEATH, DAMAGE OR LOSS TO PERSONS OR PROPERTY.
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2. CONCRETE FOUNDATION CONSTRUCTION			
200.	THE FIELD INSPECTOR SHALL VERIFY FOUNDATION REQUIREMENTS DURING FOUNDATION INSPECTION.		
201.	CONCRETE STRENGTH SHALL BE NO LESS THAN 2,500 PSI @ 28 DAYS, OR HIGHER STRENGTH IF NOTED ON THE PLANS.		
202.	SLAB REINFORCEMENT SHALL BE PER STRUCTURAL DETAILS ON SHEET S3, CENTERED IN SLAB.		
203.	REINFORCING BARS TO BE GRADE 40 FOR #3 BARS, GRADE 60 FOR #4 BARS & LARGER		
204.	PROVIDE WEAKENED PLANE JOINTS FOR CRACK CONTROL (SAWCUT OR TOOLED JOINT) AT 14'-0" O/C MAX.		
205.	FOOTINGS SHALL BE PER STRUCTURAL DETAILS ON SHEET S3, TYPICAL.		
206.	SILL ANCHORAGE AT ALL SHEARWALL LOCATIONS SHALL BE PER THE SHEARWALL SCHEDULE. ALL SHEARWALL ANCHOR BOLTS SHALL RECEIVE A 3" SQUARE X 0.229" THICK WASHER. THE WASHER MAY BE DIAGONALLY SLOTTED (WIDTH >= BOLT DIAMETER + 1/8", LENGTH<=1") PROVIDED THAT A STANDARD CUT WASHER IS USED ON TOP OF THE SQUARE WASHER. SHEARWALL ANCHORS SHALL BE PLACED A MIN. OF 1" FROM THE EDGE OF CONCRETE.		
207.	EMBEDDED SILL ANCHOR BOLTS AT TYPICAL NON-SHEARWALL CONDITIONS SHALL BE "X12" MIN. ANCHOR BOLTS WITH A STANDARD CUT WASHER. SPACING SHALL NOT EXCEED 48 INCHES O/C. LOCATE AN ANCHOR BOLT NOT MORE THAN 9 INCHES, OR LESS THAN 4" FROM ENDS AND SPLICES. EACH SILL SHALL HAVE (2) SILL BOLTS MIN.		
208.	ANCHOR BOLTS SHALL BE EMBEDDED A MIN. OF 7 INCHES INTO CONCRETE. IN A TWO-POUR SYSTEM, ANCHOR BOLTS TO BE EMBEDDED 5 INCHES MIN. INTO FIRST POUR.		
209.	SEE WOOD FRAMING CONSTRUCTION NOTES FOR ALTERNATE SILL ANCHORAGE.		
210.	ALL HOLD-DOWNS SHALL BE PLACED A MINIMUM DIM AS SHOWN IN DETAIL S/33 FROM EXTERIOR CORNER OF SLAB.		
211.	VERIFY ALL DIMENSIONS WITH ARCHITECTURAL DRAWINGS. SUBCONTRACTOR TO VERIFY ALL DIMENSIONS PRIOR TO CONSTRUCTION. IMMEDIATELY NOTIFY HOMEOWNER AND CITY OF ENCINITAS OF ANY DISCREPANCY, TYPICAL.		
212.	PROVIDE A UFER GROUND FOR ELECTRICAL SYSTEM PER ARTICLE 250.52 N.E.C.		
213.	ALL SURROUNDING FLAT WORK SHALL BE VERIFIED WITH HOMEOWNER FOR LOCATION AND AMOUNT TO BE POURED.		
214.	RETROFIT MISPLACED HOLD-DOWNS AS NOTED BELOW. AT EPOXY ANCHORS USE SIMPSON SET-XP EPOXY PER MANUFACTURERS INSTALLATION REQUIREMENTS AS FOLLOWS:		
	MISPLACED HOLDDOWN	RETROFIT BOLT	REPLACEMENT HARDWARE
	LSTHD8, HTT4	1" ALL-THREAD, EMBED 9"	HTT4
	STHD10, STHD14, HTT5	1" ALL-THREAD, EMBED 9"	HTT5
	LTT20B	1" ALL-THREAD, EMBED 7"	LTT20B
	LTT20B	ATTACH TO EXISTING A.B.	LTT20B
	HOU8	1/2" ALL-THREAD, EMBED 15"	HOU8
215.	RETROFIT * & † EMBEDDED ANCHOR BOLTS AS NOTED BELOW. AT EPOXY ANCHORS USE SIMPSON SET-XP EPOXY PER SIMPSON'S INSTALLATION REQUIREMENTS.		
	LOCATION	TYPE	REPLACEMENT
	SLAB EDGE, 1,3/4" DIST.	SHEARWALL	1" ALL-THREAD, EPOXY, EMBED 3" OR 1" TITEN HD, EMBED 3" MIN.
	INTERIOR > 6" EDGE DIST.	SHEARWALL OR NON-SHEAR	1" TITEN HD, EMBED 3" MIN.
	ANY OTHER	NON-SHEAR	0.145 DIA. SHOT PINS SPACED 4 INCHES APART ON SILL. (2) FOR EACH MISSING ANCHOR BOLT. MAX. OF (6) SHOT PINS EVERY 6 FT.
216.	WHEN REQUESTING A BUILDING DEPARTMENT FOUNDATION INSPECTION, HAVE CONTRACTOR DOCUMENTATION IN WRITING FOR THE FOLLOWING: A) THE PAD WAS PREPARED IN ACCORDANCE WITH THE SITE REQUIREMENTS AND CITY OF ENCINITAS APPROVAL. B) THE UTILITY TRENCHES HAVE BEEN PROPERLY BACKFILLED & COMPACTED. C) THE FOUNDATION EXCAVATIONS, EXPANSIVE CHARACTERISTICS AND BEARING CAPACITY COMPLIES WITH THE CITY OF ENCINITAS RECOMMENDATIONS .		
217.	ALL HOLD-DOWN ANCHORS & HARDWARE MUST BE TIED IN PLACE PRIOR TO CALLING FOR A FOUNDATION INSPECTION.		

3. WOOD FRAMING CONSTRUCTION		
300.	ROOFING MATERIALS SHALL BE PER ARCHITECTURAL DRAWINGS.	
301.	ROOF SHEATHING SHALL BE —" OR " C-D GRADE, INTERIOR TYPE PLYWOOD WITH EXTERIOR GLUE, OR OSB PANELS. IDENTIFICATION INDEX (24/0) W/ 8D COMMON NAILS @ 6" O/C @ ALL PERIMETER EDGES AND ALL INTERIOR SUPPORTED EDGES AND @ 12" O/C @ ALL INTERMEDIATE SUPPORTS. SEE DETAILS FOR SHEAR AND DRAG NAILING.	
302.	FLOOR SHEATHING : NOT USED	
303.	TYPICAL WALL SHEATHING: INTERIOR SURFACES: WHERE DRYWALL IS SPECIFIED, PROVIDE MIN. " GYPSUM WALLBOARD W/ 5D COOLER NAILS OR EQUAL @ 7" O/C TO ALL STUDS AND TO TOP & BOTTOM PLATES (UNBLOCKED) AT INTERIOR SIDE OF EXTERIOR WALLS AND AT BOTH SIDES OF ALL INTERIOR WALLS.  EXTERIOR SURFACES: SEE PLANS. WHERE "STUCCO" IS SPECIFIED PROVIDE † EXTERIOR CEMENT PLASTER OVER WIRE LATH OVER TYPE 15 BUILDING PAPER. LATH ATTACHED TO ALL STUDS AND TOP AND BOTTOM PLATES (OR BLOCKING AS OCCURS) W/ 16 GAGE X1" STAPLES @ 6" O/C OR NO. 11 GAGE X 1-1/2" FURRING NAILS WHERE INDICATED ON ELEVATIONS.	
304.	STRUCTURAL SHEATHING MAY BE EITHER OSB OR PLYWOOD. ANY NOTES REFERRING TO PLYWOOD ALSO APPLIES TO OSB.	

3. WOOD FRAMING CONSTRUCTION (CONT.)		
305.	TOP PLATES SHALL BE DOUBLE 2X W/ WIDTH EQUAL TO STUDS BELOW, W/ (21)16D NAILS MIN. @ MINIMUM 4'-0" LAP SPLICES. USE SIMPSON RPS OR CS16 STRAP EACH SIDE OR ONE SIDE AND TOP WHERE LAP SPICE IS NOT POSSIBLE. SEE DETAILS FOR NOTCHES, CUT-OUTS AND COMPLETE PLATE BREAKS AT HEATING, VENTING, AND PLUMBING.	
306.	TYPICAL SHEAR TRANSFER: ROOF TO WALL: CONNECT ROOF FRAMING TO TOP PLATE W/ SIMPSON H1 @ 24" O/C OR A35 OR RBC @ 24" O/C OR PER SHEAR TRANSFER DETAILS.  FLOOR TO WALL: PER DETAILS ON SHEET S3	
307.	SILL PLATE ANCHORS:  GROUND FLOOR / SLAB ON GRADE WALLS: PROVIDE 2X (MIN.) PTFD SILL PLATES. SEE CONCRETE FOUNDATION CONSTRUCTION NOTES 206, 207 & 208 FOR ANCHOR BOLTS. AT INTERIOR NON-SHEAR CONDITIONS, 0.145 SHOT PIN ANCHORS @ 32" O/C MAY BE USED TO CONNECT PARTITIONS AND BEARING WALLS TO SLAB.	
308.	ALL WOOD SILL PLATES AND ALL WOOD MEMBERS DIRECTLY AGAINST CONCRETE OR MASONRY SHALL BE FOUNDATION GRADE REDWOOD SILLS OR PTFD SILLS, TREATED WITH SODIUM BORATE (SBX/DO) WHEN INSTALLED IN A DRY OR ENCLOSED ENVIRONMENT. (SODIUM BORATE TREATMENT DOES NOT REQUIRE CORROSION RESISTANT CONNECTORS.) IF OTHER TREATMENTS ARE USED, SEE NOTE 309.	
309.	FASTENERS IN CONTACT WITH PRESSURE TREATED WOOD: ALL NAILS AND FASTENERS IN CONTACT WITH PRESSURE TREATED LUMBER TREATED WITH ACQ-C, ACQ-D, CA-B, AND CBA-A WITHOUT AMMONIA SHALL BE GALVANIZED PER ASTM A153.  ALL NAILS AND FASTENERS IN CONTACT WITH PRESSURE TREATED LUMBER TREATED WITH ACQ-C, ACQ-D, CA-B, AND CBA-A WITH AMMONIA SHALL BE TYPE 303, 304, 305, OR 316 STAINLESS STEEL.  WHERE PRESSURE TREATED LUMBER IS INSTALLED IN AN EXTERIOR WET ENVIRONMENT, ALL NAILS AND FASTENERS IN CONTACT WITH THE PRESSURE TREATED LUMBER SHALL BE TYPE 303, 304, 305, OR 316 STAINLESS STEEL.	
310.	RE-TIGHTEN ALL HOLD-DOWN ANCHORS JUST PRIOR TO COVERING THE WALL FRAMING.	
311.	NOT USED	
312.	ENGINEERED BEAMS ARE AS FOLLOWS: *PSL" REFERS TO PARALLEL STRAND LUMBER (E=2.0, FB=2900). *LSL" REFERS TO LAMINATED STRAND LUMBER (E=1.55, FB=2325). (E=1.3 & FB=1700 AT LSL CONDITIONS WITH D (DEPTH) < 9") *LVL" REFERS TO LAMINATED VENEER LUMBER (E=1.9, FB=2600). *GLB" REFERS TO 24F-1.8E GLU-LAM WITH STANDARD CAMBER, U.N.O. *IJC" ENGINEERED GLU-LAM BEAM MAY BE USED UPON ENGINEER APPROVALS. AN A.I.T.C CERTIFICATE OF COMPLIANCE ISSUED BY A CURRENT ICC APPROVED QUALITY CONTROL AGENCY FOR GLUED LAMINATED WOOD MEMBERS SHALL BE GIVEN TO THE BUILDING INSPECTOR PRIOR TO INSTALLATION.	
313.	LUMBER SPECIFICATIONS: ALL FRAMING LUMBER SHALL BE DOUGLAS FIR-LARCH, STUDS, PLATES & BLOCKING: 2X4 FRAMING LUMBER NOT LISTED BELOW STANDARD GRADE OR BETTER 92-1/4", 104-1/4" & 116-1/4" 2X4 STUDS STUD GRADE OR BETTER 2X4 STUDS OVER 10' #2 OR BETTER 2X4 SILLS & PLATES STANDARD OR BETTER 2X6 STUDS, SILLS, & PLATES #2 OR BETTER 4X4 STUDS & POSTS STANDARD OR BETTER OR #1 4X6, 6X6, & LARGER STUDS & POSTS #1 OR BETTER 4X4, 4X6, 4X8, 4X10 BEAMS & HEADERS #2 OR BETTER 4X12, 4X14 BEAMS & HEADERS #1 OR BETTER 6X4 BEAMS & HEADERS #2 OR BETTER 6X6 & LARGER BEAM & HEADERS #1 OR BETTER 2X6 AND LARGER RAFTERS AND JOISTS #2 OR BETTER	
314.	HOLES, CUTOUTS, AND NOTCHES IN FRAMING MEMBERS: BY VIRTUE OF CODE COMPLIANCE WITH ELECTRICAL AND PLUMBING CODES, HOLES AND NOTCHES WILL INEVITABLY BE MADE IN FRAMING MEMBERS. THE CODE RECOGNIZES AND APPROVES VARIOUS HOLES AND NOTCHES WITHOUT ENGINEERING JUSTIFICATION IN CBC SECTION 2308.8.2. ENGINEERED (PSL, LSL) RECTANGULAR LUMBER BEAMS BEHAVE LIKE ANY OTHER RECTANGULAR SHAPE WHEN NOTCHED OR BORED, SO THE ENGINEER OR ARCHITECT MAY SPECIFY LIMITS WITHOUT MANUFACTURER APPROVAL OTHER HOLES AND NOTCHES ARE ALLOWED AS NOTED BELOW:  PSL AND LVL BEAMS: A HOLE 1 INCH IN DIAMETER CAN BE DRILLED ANYWHERE, AND A 2 INCH DIA. HOLE CAN BE DRILLED IN THE MIDDLE THIRD OF THE SPAN IN THE MIDDLE THIRD OF THE DEPTH OF THE BEAM FOR ANY PSL OR LVL BEAM, EXCEPT CANTILEVERED BEAMS AND BEAMS SUPPORTING CONCENTRATED LOADS. HOLES IN THOSE CONDITIONS REQUIRE APPROVAL IN WRITING FROM THE ENGINEER.  PSL AND LVL BEAMS: A RAKE CUT (TAPER) AT THE TOP OF THE BEAM AT THE END OF THE SUPPORT IS ALLOWED IF NOTED ON PLANS, TO A MINIMUM OF 4-3/8" AT INSIDE FACE OF SUPPORT. RAKE CUT (TAPER) THAT RESULTS IN A DEPTH AT THE INSIDE FACE OF THE SUPPORT OF 2/3RDS THE BEAM DEPTH IS ALLOWED AT CONDITIONS NOT SPECIFIED. OTHER TAPERED ENDS AND SQUARE NOTCHES IN TOP OR BOTTOM FACE REQUIRE APPROVAL IN WRITING FROM THE ENGINEER OR ARCHITECT.  STUDS AND PLATES: SEE STRUCTURAL DETAILS 8 & 11 ON SHEET S3 FOR NOTCHING AND BORING.	
315.	PROVIDE 2X4 TRIMMER & 2X4 KING STUD EACH END OF EACH 4X DROPPED BEAM OR HEADER. PROVIDE DOUBLE TRIMMERS AT EACH 4X10 OR LARGER. PROVIDE DOUBLE TRIMMERS AT EACH 3-1/2 X 7-1/2 PSL OR LSL OR LARGER.	
316.	PROVIDE 2X6 TRIMMER & 2X6 KING STUD EACH END OF EACH 6X DROPPED BEAM OR HEADER. PROVIDE DOUBLE TRIMMERS AT EACH 6X8 OR LARGER. PROVIDE DOUBLE TRIMMERS AT EACH 5-1/4 X 7-1/2 PSL OR LSL OR LARGER.	
317.	PROVIDE DOUBLE KING STUDS AT ALL OPENINGS 8'-1" WIDE AND WIDER OR PER PLAN.	
318.	PROVIDE MINIMUM 2-1/4" BEARING @ EACH END OF EACH FLUSH BEAM OR HEADER WHERE BEARING IS ON TOP PLATE. PROVIDE 2X4 STUD WITHIN 3" OF BEARING POINT. PROVIDE (2) 2X STUDS @ 6X OR LSL OR PSL BEAMS.	

3. WOOD FRAMING CONSTRUCTION (CONT.)		
323.	ROOF RAFTERS SHALL BE 2X RAFTERS AS NOTED ON STRUCTURAL DRAWINGS	
324.	EAVES SHALL BE PER ARCHITECTURAL PLANS W/ APPLIED TAILS PER ARCHITECTURAL PLANS. OVERHANG DETAILS ARE NOT SHOWN ON STRUCTURAL PLANS.	
325.	SEE THE ARCHITECTURAL ROOF PLANS FOR ROOF PITCH AND ADDITIONAL INFORMATION.	
326.	COMBINE AND GROUP PLUMBING VENTS WHENEVER POSSIBLE TO MINIMIZE ROOF PENETRATIONS.	
327.	WOOD TO WOOD CONNECTORS SHALL BE SIMPSON STRONG TIE OR USP STRUCTURAL CONNECTORS. ALL SPECIFIED CONNECTOR CALL-OUTS ARE SIMPSON CATALOG CALL-OUTS. USP SUBSTITUTIONS SHALL HAVE A CAPACITY EQUAL TO OR GREATER THAN THE SIMPSON CATALOG VALUES. ANY OTHER ICC APPROVED METAL CONNECTOR MAY BE USED UPON APPROVAL BY THE ENGINEER OR ARCHITECT.	
328.	ICC APPROVED CONNECTORS SHALL BE USED WHERE CONNECTORS ARE SPECIFIED. UNLESS OTHERWISE NOTED, THE FOLLOWING BEAM AND JOIST HANGERS SHALL BE USED:  BEAM OR JOIST SIMPSON/USP HANGER I-JOIST FLOOR JOISTS IUS, IJT, OR ITT HANGERS 1.75 X LSL AND LVL HU, HUS, OR WPU 2.89 X PSL AND LVL HU OR HWU 3.5 X PSL AND LVL HHUS OR HWU 5.25 X PSL AND LVL HHUS OR HWU 7 X PSL AND LVL HHUS OR HWU  AT BEAM HANGER CALLOUTS, IE HGUS OR HU BEAMS, THE CALLOUT IS ABBREVIATED. THE HANGER WIDTH MAY BE OMITTED TO ALLOW FLEXIBILITY IN ORDERING. EXAMPLE: 2.69 PSL THE CALLOUT MAY READ HGUS12. AN HGUS2.75/12 OR HGUS412 (WITH FILLERS) ARE APPLICABLE. WHERE HANGERS OFFER (MIN) OR (MAX), NAIL TO APPLY (MAX) LOADS.	
329.	CS16 COIL STRAPS MAY BE USED AS AN ACCEPTABLE ALTERNATIVE TO THE FOLLOWING DETAILED CONDITIONS: ST22 = CS16 X 28" LONG ST824 = (2) CS16 X 28" LONG HTS24 = CS16 X 28" LONG WB106 = CS16 X106" LONG W/ 10D @ 2-1/2" O/C	
330.	WHERE SHEARWALL LENGTHS ARE SPECIFIED ON THE PLANS, THE LENGTH SHOWN IS A MINIMUM DIMENSION. THE SHEARWALL MAY BE LENGTHENED FOR CONSTRUCTION PURPOSES, BUT SHALL NOT BE REDUCED UNLESS OTHERWISE NOTED. ALL ENGINEERED WOOD PANEL SHEAR (PLYWOOD OR OSB) SHALL BE BLOCKED.	
331.	THE FOLLOWING HOLES IN SHEARWALLS ARE ALLOWED: A) APPROXIMATELY SQUARE HOLES NOTCHED, PUNCHED, OR CUT THAT ARE LESS THAN 25 SQ. INCHES B) APPROXIMATELY SQUARE HOLES CLEAN CUT OR BORED IN SHEARWALLS THAT ARE LESS THAN 64 SQ. INCHES (ONE HOLE PER 4' OF SHEARWALL.) C) APPROXIMATELY SQUARE HOLES, LESS THAN 64 SQ. INCHES (ONE HOLE PER 8' OF SHEARWALL) WITH ALL EDGES BLOCKED & EDGE NAILED. D) HOLES INDIVIDUALLY APPROVED BY THE ENGINEER OR ARCHITECT OF RECORD.	
332.	CS16 NAILING: A) 2X WALL BLOCKING & I-JOIST BLOCKING, NAIL EVERY OTHER HOLE, OR NAIL 2 & SKIP 2 B) AT PLATES, BEAMS & COLUMNS PROVIDE ANY LENGTH NECESSARY FOR FULL NAILING: —(22) 8D (0.131)—(22) 16D BOX (0.135) — (20) 10D (0.148) LONGER LENGTHS OR GREATER NAIL SPACING IS ACCEPTABLE PROVIDED ALL REQUIRED NAILS ARE INSTALLED.	
333.	STUDS SHALL BE SPACED @ 16" O/C MAX. UNLESS OTHERWISE SPECIFIED.	
334.	NAILS FOR SHEAR TRANSFER MAY NOT BE DRIVEN PARALLEL WITH THE FLANGES OF I-JOISTS. (PERPENDICULAR TO THE FLANGE IS ALLOWED.)	
335.	ALL FINISHES, WATERPROOFING, DRAINAGE, AND FIRE-RELATED ELEMENTS ARE BY THE ARCHITECT OF RECORD AND ARE REQUIRED EVEN THOUGH THEY MAY NOT BE SHOWN ON THE STRUCTURAL PLANS AND DETAILS.	
336.	EACH CONTRACTOR RESPONSIBLE FOR THE CONSTRUCTION OF A MAIN WIND-OR SEISMIC-FORCE-RESISTING SYSTEM, DESIGNATED SEISMIC SYSTEM OR A WIND- OR SEISMIC-RESISTING COMPONENT LISTED IN THE STATEMENT OF SPECIAL INSPECTIONS SHALL SUBMIT A WRITTEN STATEMENT OF RESPONSIBILITY TO THE BUILDING OFFICIAL AND THE OWNER PRIOR TO THE COMMENCEMENT OF WORK ON THE SYSTEM OR COMPONENT. THE CONTRACTOR'S STATEMENT OF RESPONSIBILITY SHALL CONTAIN ACKNOWLEDGEMENT OF AWARENESS OF THE SPECIAL REQUIREMENTS CONTAINED IN THE STATEMENT OF SPECIAL INSPECTION.	

4. ICC-ES AND NER APPROVALS		
400.	PLYWOOD AND OSB PANELS: APA PLYWOOD & OSB-ESR-2586	FULL REPORTS FOUND AT: HTTP://WWW.ICC-ES.ORG
401.	JOISTS AND RAFTERS AND BEAMS: TRUS-JOIST TJI JOISTS AND PSL, LSL, & LVL-ICC-ES ESR-1387, 1153, BOISE CASCADE BCI JOISTS, VERSA-LAM, & VERSA-STRAND-ICC-ESR-1040, 1336 LOUISIANA PACIFIC JOISTS & BEAMS-ESR-1305, 2403 ROSEBURG JOISTS & BEAMS-ESR-1210, 1251 GLU-LAM BEAMS- ESR-1940	
402.	WOOD CONNECTORS: SIMPSON CONNECTORS-ICC-ES ESR #S 1161, 1622, 1866, 2105, 2203, 2236, 2320, 2549, 2551, 2552, 2553, 2330, 2554, 2555, 2604, 2605, 2606, 2607, 2608, 2611, 2613, 2614, 2615, 2616, 2877, 2820, 3046 IAPMO ER-112, 130, 143, 192, 282 USP LUMBER CONNECTORS-ICC-ES ESR #S 1178, 1280, 1575, 1702, 1781, 1881, 1970, 2104, 2685, 1831, 1465, 2761, 2787, IAPMO ER-200 QUICK DRIVE WOOD SCREWS-ICC-ES ESR-1472	
403.	PREFABRICATED SHEAR PANELS: SIMPSON STRONG-WALL SHEAR PANELS-ICC-ES ESR-1267 SIMPSON STEEL STRONG WALL-ICC-ES ESR-1679 SIMPSON STRONG-WALL SB SHEAR BRACES-ICC-ES ESR-2652 HARDY FRAME BY HARDY FRAMES INC.-ICC-ES ESR-2069	

4. ICC-ES AND NER APPROVALS (CONT.)				
404. ADHESIVES & ANCHORS: SIMPSON EPOXY-TIE HIGH STRENGTH EPOXY (SET-XP)-ICC-ES ESR-1772, 2508. SIMPSON WEDGE-ALL (WA) WEDGE ANCHORS-ICC-ES ESR-1771 SIMPSON TITEN HD-ICC-ESR-1056, 2713 SIMPSON SHOT PINS ICC-ES ESR-2138 HILTI X-DN, X-ZF, X-CF SHOT PINS-ICC-ES ER-1663, 1752, 2269				
5. NAILING & FASTENING				
500. 16D NAILS AS SHOWN ON THE DETAILS MAY BE COMMON, BOX, OR SINKER NAILS (0.135" MIN. DIAMETER)				
501. AS AN ALTERNATE TO THE COMMON AND BOX NAILS SPECIFIED IN THE STRUCTURAL PLANS, THE FOLLOWING "CUTLER" GUN NAILS (OR EQUAL) ARE ACCEPTABLE ALTERNATIVES.				
502. ALTERNATE NAILING FOR ROOF SHEATHING: 8D 2..." X 0.135 WIRE BARBED NAILS BY CUTLER OR EQUAL.				
503. ALTERNATE NAILING FOR FLOOR SHEATHING: #8 X 2" SELF SETTING WOOD SCREWS, OR 8D 2..." X 0.135 OR 0.148 SCREW SHANK FLOOR NAILS BY CUTLER OR EQUAL				
504. SHEAR PANELS WHERE 8D COMMON NAILS ARE SPECIFIED: 10D 2..." X 0.148" WIRE BARBED NAILS BY CUTLER OR EQUAL				

NAIL SIZES				
SIZE OF NAIL/STANDARD WIRE				
LENGTH GAUGE SIZE (INCHES) PENETRATION REQUIRED				
BOX NAILS				
6D	2"	12	0.099	1"
8D	2"	11	0.113	1"
10D	3"	10	0.128	1"
12D	3"	10	0.128	1"
16D	3"	10	0.135	1"
16D SINKER	3"	9	0.148	1"
COMMON NAILS				
6D	2"	11	0.113	1"
8D	2"	10	0.131	1"
10D	3"	9	0.148	1"
12D	3"	9	0.148	1"
16D	3"	8	0.162	1"

NAILING SCHEDULE, MINIMUMS (CBC CHAPTER 23, TABLE 2304.9.1)	
CONNECTION	NAILING 1-3
1. JOIST TO SILL OR GIRDER	3-8d T.N.
2. BRIDGE TO JOIST	2-8d T.N. EA END
3. 1" x 6" SUBFLOOR TO EACH JOIST	2-8d F.N.
4. WIDER THAN 1" x 6" SUBFLOOR TO EACH JOIST	3-8d F.N.
5. 2" SUBFLOOR TO JOIST OR GIRDER	2-16d BLIND & F.N.
6. SOLE PLATE TO JOIST OR BLOCKING	16d @ 16" O.C.
7. SOLE PLATE TO JOIST OR BLOCKING, AT BRACED WALL PANELS	3-16d PER 16"
8. TOP PLATE TO STUD	2-16d END NAIL
9. STUD TO SOLE PLATE	4-8d TOENAIL OR 2-16d END NAIL
10. DOUBLE STUDS	16d @ 24" O.C. F.N.
11. DOUBLED TOP PLATES	16d @ 16" O.C. F.N.
12. DOUBLE TOP PLATES, LAP SPLICE	8-16d
13. BLOCKING BETWEEN JOISTS OF RAFTERS TO TOP PLATE	3-8d T.N.
14. RIM JOISTS TO TOP PLATE, TOENAIL	8d @ 6" O.C. T.N.
15. TOP PLATES, LAPS AND INTERSECTIONS	2-16d F.N.
16. CONTINUOUS HEADER, TWO PIECES	16d @ 16" O.C. ALONG EACH EDGE
17. CEILING JOISTS TO PLATE	3-8d T.N.
18. CONTINUOUS HEADER TO STUD	4-8d T.N.
19. CEILING JOISTS, LAPS OVER PARTITIONS	3-16d F.N.
20. CEILING JOISTS TO PARALLEL RAFTERS	3-16d F.N.
21. RAFTER TO PLATE	3-8d T.N.
22. 1" BRACE TO EACH STUD AND PLATE	2-8d F.N.
23. 1" x 8" SHEATHING OR LESS TO EACH BEARING	2-8d F.N.
24. WIDER THAN 1" x 8" SHEATHING TO EACH BEARING	3-8d F.N.
25. BUILT-UP CORNER STUDS	16d @ 24" O.C.
26. BUILT-UP GIRDER & BMS	20d @ 32" O.C. STAGRD T&B, 2-20d @ ENDS & EA. SPLICE
27. 2" PLANKS	2-16d @ EACH BEARING
28. COLLAR TIE TO RAFTER	3-10d F.N.
29. JACK RAFTER TO HIF	3-10d T.N. OR 2-16d F.N.
30. ROOF RAFTER TO 2x RIDGE BEAM	2-16d T.N. OR 2-16d F.N.
31. JOIST TO BAND JOIST	3-16d F.N.
32. LEDGER STRIP	3-16d F.N.
33. WOOD STRUCTURAL PANELS*	SEE SHEAR PANEL SCHEDULE
34. ROOF AND WALL SHEATHING (TO FRAMING)	

FOR ADDITIONAL FASTENING MINIMUMS, SEE CBC TABLE 2304.9.1, FASTENING SCHEDULE.

\*COMMON WIRE NAILS ARE TO BE USED, U.N.O. WHEN USING 16d BOX NAILS # OF NAILS MUST BE INCREASED BY 37% ( MULTIPLY BY 1.37). FOR OTHER NAIL SUBSTITUTIONS CONSULT THE ENGINEER FOR INCREASED # OF NAILS.

\*NAILS SPACED AT 6 INCHES ON CENTER AT EDGES, 12 INCHES AT INTERMEDIATE SUPPORTS EXCEPT 6 INCHES AT ALL SUPPORTS WHERE SPANS ARE 48 INCHES OR MORE. FOR NAILING OF WOOD STRUCTURAL DIAPHRAGMS AND SHEAR WALLS, SEE SHEAR PANEL SCHEDULE AND DIAPHRAGM SCHEDULE.

\*WHERE 2" MEMBER IS DETAILED USE THE NUMBER OF 16d SHOWN, U.N.O.:  
MEANS 3-16d COMMON WIRE NAILS



1. GENERAL DESIGN CRITERIA	
700. BUILDING CODE: 2016 CALIFORNIA BUILDING CODE AND 2016 CALIFORNIA RESIDENTIAL CODE (AS APPLICABLE)	
701. SEISMIC DESIGN CRITERIA:	
SOIL BEARING VALUE	1,500 psf
SITE CLASS	C
RISK DESIGN CATEGORY	D
RISK CATEGORY	II
SEISMIC IMPORTANCE FACTOR	1
Ss	1.245
S1	0.442
BASIC SEISMIC FORCE RESISTING SYSTEM: BEARING WALL ANALYSIS METHOD: EQUIVALENT LATERAL FORCE PROCEDURE SEE STRUCTURAL CALCULATIONS FOR SD1, SDS, DESIGN BASE SHEAR, Cs, & R FACTORS.	
702. WIND DESIGN CRITERIA :	
WIND SPEED (V-ult)	110 mph
RISK CATEGORY	II
EXPOSURE	C
INTERNAL PRESSURE COEF	0.18
EXTERNAL CLADDFBG (0.6W)	13 psf
704. SEE DETAIL SHEETS FOR REFERENCE DETAILS. SOME TYPICAL DETAILS WHICH APPLY THROUGHOUT MAY NOT BE REFERENCED, BUT STILL APPLY.	
705. DESIGN LOADING:	
ROOF DL	18 psf
ROOF LL	20 psf
FLOOR DL	N/A psf
FLOOR LL	N/A psf
GROUND SNOW LOAD	0 psf

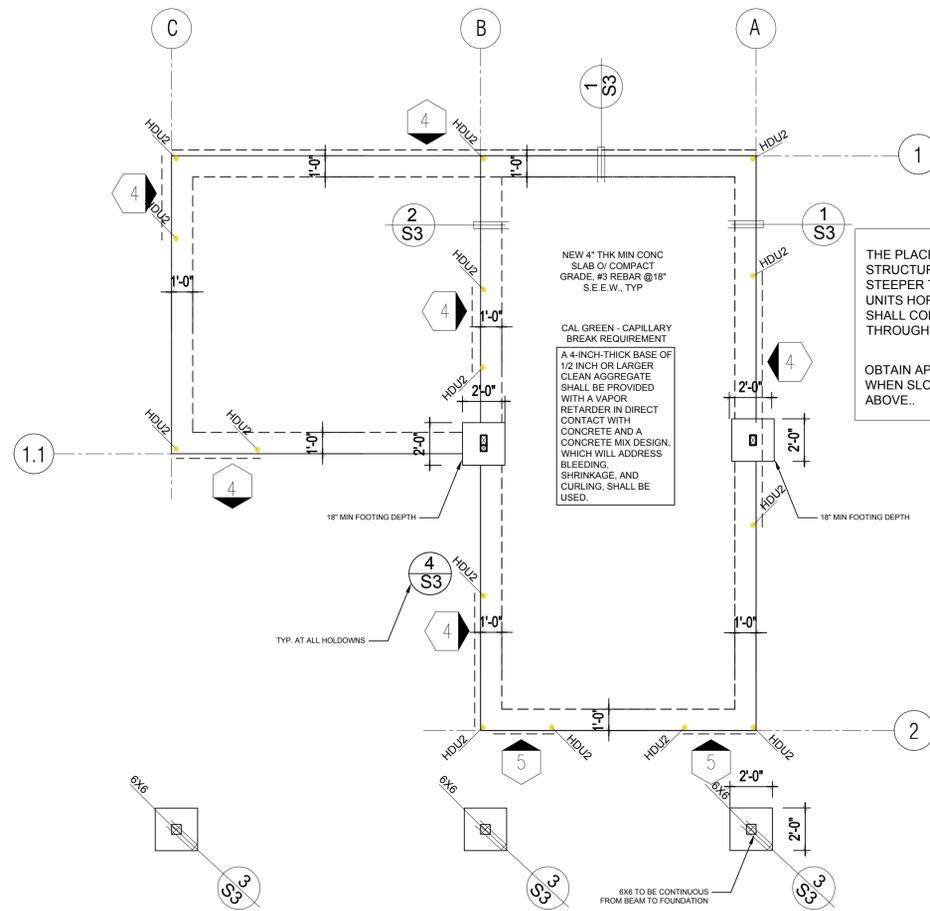
2. STATEMENT OF SPECIAL INSPECTIONS	
800. RETROFIT ANCHOR BOLTS FOR MISPLACED HOLD-DOWNS WITH ALL-THREAD ROD AND SIMPSON SET-XP EPOXY REQUIRE SPECIAL INSPECTION. (NO SPECIAL INSPECTION IS REQUIRED FOR RETROFIT ANCHOR BOLTS OR TITEN HD'S WITHOUT A HOLD-DOWN ATTACHED.)	
801. PER CBC 1705.3 SPECIAL INSPECTION IS NOT REQUIRED FOR NON-STRUCTURAL SLABS ON GRADE NOR FOR CONCRETE FOOTINGS THAT SUPPORT 3 STORIES ABOVE GRADE OR LESS.	
802. PER CBC 1705.11-3 SPECIAL INSPECTION IS NOT REQUIRED FOR SEISMIC COMPONENTS FOR DETACHED ONE- AND TWO-FAMILY DWELLINGS NOT EXCEEDING 2 STORIES ABOVE GRADE.	
SOILS REPORT	
A SOILS REPORT MAY BE REQUIRED BY THE BUILDING OFFICIAL. IN-LUE OF THE SOILS REPORT A CONSERVATIVE VALUE FOR THE SOIL BEARING ALLOWABLE OF 1500 PSF HAS BEEN USED IN DESIGN OF THE BUILDING.	

BY USING THESE PERMIT READY CONSTRUCTION DOCUMENTS, THE RECIPIENT IS ACKNOWLEDGING ACCEPTANCE OF THE FOLLOWING CONDITIONS.

- THE USE OF THIS INFORMATION IS RESTRICTED TO THE ORIGINAL PROJECT FOR WHICH IT WAS PREPARED FOR THE PRADU PROGRAM FOR THE CITY OF ENCINITAS. THIS DOES NOT ELIMINATE OR REDUCE THE RECIPIENT'S RESPONSIBILITY TO VERIFY ANY AND ALL INFORMATION RELEVANT TO THE RECIPIENT'S WORK AND RESPONSIBILITY ON THIS PROJECT. DESIGN PATH STUDIO SHALL NOT BE RESPONSIBLE FOR TRANSLATION ERRORS.
- THE RECIPIENT RECOGNIZES AND ACKNOWLEDGES THAT THE USE OF THIS INFORMATION WILL BE AT THEIR SOLE RISK AND WITHOUT ANY LIABILITY OR LEGAL EXPOSURE TO DESIGN PATH STUDIO. NO WARRANTIES OF ANY NATURE, WHETHER EXPRESS OR IMPLIED, SHALL ATTACH TO THESE DOCUMENTS AND THE INFORMATION CONTAINED THEREON. ANY USE, REUSE, OR ALTERATION OF THESE DOCUMENTS BY THE RECIPIENT OR BY OTHERS WILL BE AT THE RECIPIENT'S RISK AND FULL LEGAL RESPONSIBILITY. FURTHERMORE, THE RECIPIENT WILL, TO THE FULLEST EXTENT PERMITTED BY LAW, INDEMNIFY AND HOLD DESIGN PATH STUDIO HARMLESS FROM ANY AND ALL CLAIMS, SUITS, LIABILITY, DEMANDS, JUDGMENTS, OR COSTS ARISING OUT OF OR RESULTING THERE FROM ON ACCOUNT OF ANY INJURY, DEATH, DAMAGE OR LOSS TO PERSONS OR PROPERTY.
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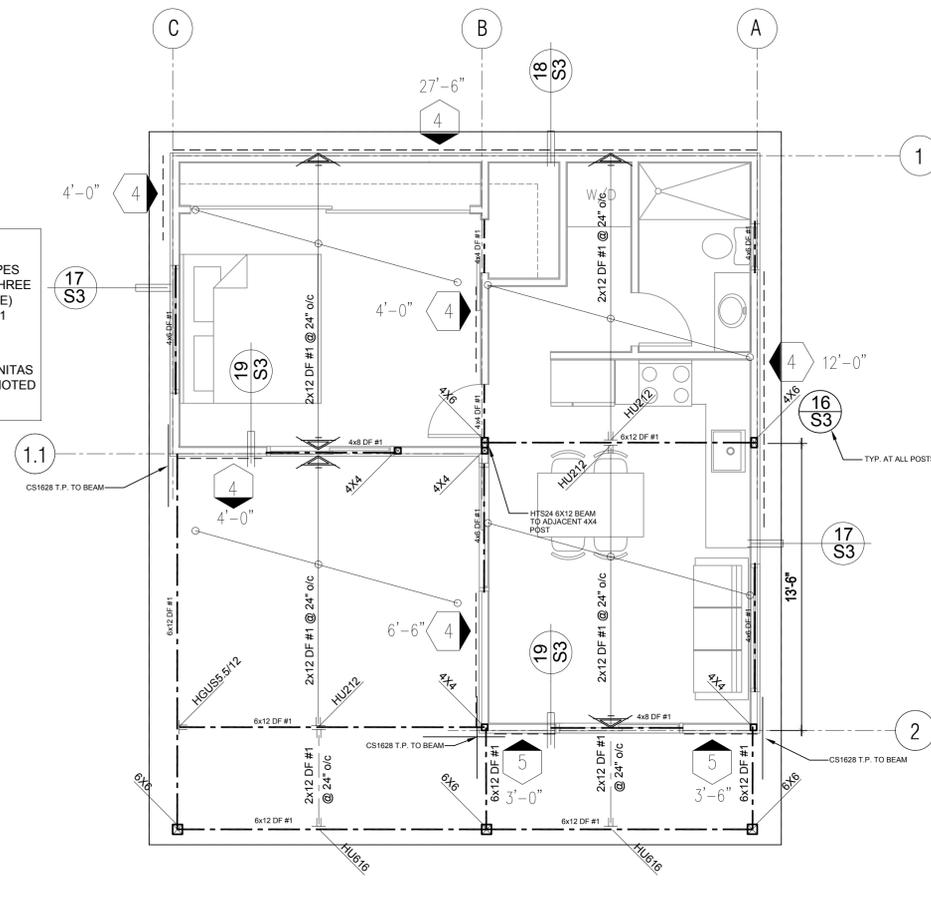
project	PRADU City Of Encintas
description	
date	March 27 2019
project no.	2018 PRADU
drawn by	YSP
sheet no.	S1

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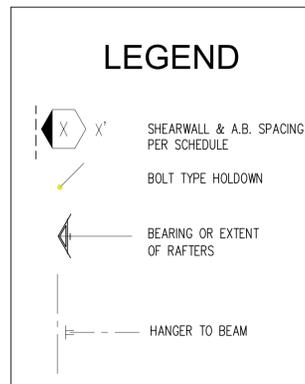
## FOUNDATION PLAN - 1 Bedrooms

1/4" = 1'-0"



## FRAMING PLAN - 1 Bedrooms

1/4" = 1'-0"

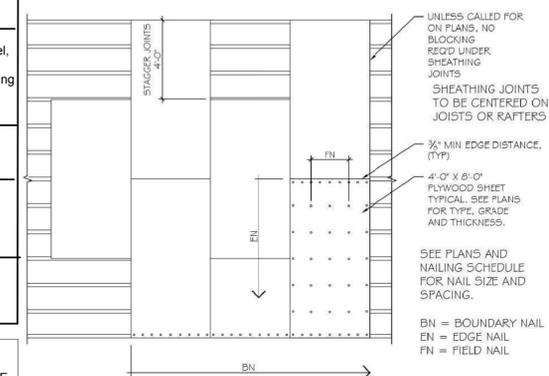


### SHEAR WALL SCHEDULE (ASD VALUES)

	1	2	3	4	5	6	7	8	9
SHEARWALL DESCRIPTION (See footnotes 1 & 4)	1/2" gypsum wallboard, unblocked w/ 5d cooler or wallboard @ 7" o/c (See footnote 2)	3/8" gypsum wallboard, unblocked w/ 6d cooler or wallboard @ 4" o/c (See footnote 2)	3/8" stucco & 18ga. mesh, unblocked 0.120x1 1/2" nails (1/4" heads) @ 6" o/c	3/8" ply. C-D or C-C sheathing, (1) side w/ 8d @ 6" o/c edge, 12" o/c field, blocked (See footnote 3 & 5)	3/8" ply. C-D or C-C sheathing, (1) side w/ 8d @ 4 1/2" o/c edge, 12" o/c field, blocked (See footnote 3 & 5)	3/8" ply. C-D or C-C sheathing, (1) side w/ 8d @ 3" o/c edge, 12" o/c field 3x abutting panel studs blocked (See footnote 3, 5, & 6)	3/8" rated STRUCT 1 panel, (1) side w/ 8d @ 3" o/c edge, 12" o/c field 3x abutting panel studs blocked (See footnote 3, 5, & 6)	1 1/2" rated STRUCT 1 panel, (1) side w/ 10d @ 3" o/c edge, 12" o/c field 3x abutting panel studs blocked (See footnote 3, 5, 6, & 7)	1 1/2" rated STRUCT 1 panel, (1) side w/ 10d @ 2" o/c edge, 12" o/c field 3x abutting panel studs blocked (See footnotes 3, 5, 6, & 7)
SHEAR VALUE	100	145	180	260*	350*	490*	550*	665*	870*
ANCHOR BOLT SPACING	5/8" @ 48" or 1/2" @ 48"	5/8" @ 48" or 1/2" @ 48"	5/8" @ 48" or 1/2" @ 48"	5/8" @ 48" or 1/2" @ 32"	5/8" @ 32" or 1/2" @ 24"	5/8" @ 24" or 1/2" @ 16"	5/8" @ 24" or 1/2" @ 16"	5/8" @ 16" or 1/2" @ 24"	5/8" @ 12" or 1/2" @ 8"
16d (0.148") SILL NAILING	12" or (2) @ 16"	8" or (2) @ 16"	8" or (2) @ 16"	6"	4 1/2"	3 1/2"	3"	1/4"x4 1/2" SDS screws @ 8"	1/4"x4 1/2" SDS screws @ 8"

- AT PLYWOOD OR OSB PS-1 OR PS-2 RATED PANELS USE COMMON NAILS OR GALVANIZED BOX NAILS (2) LAYERS OF PAPER EXTERIOR PLYWOOD REQUIRED. SHEARWALL SHALL BE APPLIED OVER STUDS @ 16" O/C. GALVANIZED NAILS SHALL NOT BE HOT-DIPPED OR TUMBLED.
- WHEN GYPSUM WALLBOARD SHEAR IS SPECIFIED ON BOTH SIDES OF A WALL, ANCHOR BOLT SPACING SHALL BE 5/8" @ O/C OR 1/2" @ 42" O/C.
- WHEN PLYWOOD SHEAR IS SPECIFIED ON BOTH SIDES OF A WALL, PANEL JOINTS SHALL BE OFFSET TO FALL ON DIFFERENT FRAMING MEMBERS, OR FRAMING SHALL BE 3" NOMINAL OR THICKER AND NAILS ON EACH SIDE SHALL BE STAGGERED. STILL PLATES SHALL BE 3" NOMINAL OR THICKER WITH ANCHOR BOLTS STAGGERED TO ACHIEVE THE 1/2" MAX. EDGE DISTANCE FROM ALTERNATING SILL PLATE EDGES. ANCHOR BOLT SPACING TO BE REDUCED BY 50% OR AS NOTED ON THE PLANS.
- SILL PLATES & WASHERS SHALL COMPLY WITH THE CONCRETE FOUNDATION CONSTRUCTION AND WOOD FRAMING CONSTRUCTION NOTES. (SEE NOTES #206, 208, 209, 307, 308, 309, ETC.)
- IN PLYWOOD SHEARWALLS, THE EDGE OF THE 3" SQUARE WASHERS (SEE NOTE #206) SHALL BE 1/2" OR LESS FROM THE EDGE OF THE SILL PLATE ON THE SIDE OF THE SHEATHING. ALL NAILING SHALL BE 3/8" MIN. FROM THE EDGE OF SHEATHING.
- WHERE ALLOWABLE SHEAR VALUES EXCEED 350 PLF (SHEARWALL TYPES 6, 7, 8, & 9) ALL FRAMING RECEIVING NAILING FROM ABUTTING PANEL EDGES SHALL NOT BE LESS THAN A SINGLE 3" NOMINAL MEMBER OR (2) 2X MEMBERS NAILED WITH 10D, SPACING EQUAL TO THE E.N. SPACING. PLYWOOD JOINT AND SILL NAILING SHALL BE STAGGERED.
- IN SHEARWALL TYPES 8 & 9, SILL PLATE NAILING SHALL BE STAGGERED. AT SECOND FLOOR CONDITIONS, PROVIDE ADEQUATE RIM OR BLOCKING TO PREVENT SPLITTING.
- ALLOWABLE SHEAR VALUES FOR PLYWOOD SHEARWALLS MAY BE INCREASED BY 40% UNDER WIND LOADING.

**SHEAR WALL NAILING**  
NAILS CALLED OUT IN THESE PLANS & DETAILS ARE COMMON NAILS.  
8d COMMON NAILS ARE 2 1/2" LONG W/ 0.131" SHANK DIAM,  
10d COMMON NAILS ARE 3" LONG W/ 0.148" SHANK DIAM,  
16d COMMON NAILS ARE 3 1/2" LONG W/ 0.162" SHANK DIAM.  
8d, 10d, & 16d GUN OR BOX NAIL IS NOT AS LONG AND HAS LESSER SHANK DIAM, HENCE HAS A REDUCED LOAD CAPACITY OF APPROX. 19%  
SEE DETAIL 13/S3 FOR TYP. SHEAR WALL DETAIL



**NOTE:**  
WOOD STRUCTURAL PANEL DIAPHRAGMS SHALL BE CONSTRUCTED WITH WOOD STRUCTURAL PANEL SHEETS NOT LESS THAN 4 FEET BY 8 FEET, EXCEPT AT BOUNDARIES AND CHANGES IN FRAMING WHERE MINIMUM SHEET DIMENSION SHALL BE 24 INCHES UNLESS ALL EDGES OF THE UNDERSIZED SHEETS ARE SUPPORTED BY FRAMING MEMBERS OR BLOCKING.  
IF STRUCTURAL PANEL SHEETS ARE LESS THAN 24 INCHES, BLOCK UNSUPPORTED EDGES WITH FLAT 2x4'S AND EDGE NAIL ALSO, EDGE NAIL ADJOINING SHEETS.

**ROOF PLY:**  
5/8" (40s) A.P.A. RATED SHEATHING, EXTERIOR PLY, 10d NAILS @ 6" B.N., 6" E.N., 12" F.N., TYPICAL

**DIAPHRAGM NAILING**  
USE 10d NAILS, U.N.O. ON PLAN

B.N. - BOUNDARY, CONT. PANEL EDGES, STRUTS OR DRAGS	6"
E.N. - ALL OTHER PANEL EDGES	6"
F.N. - IN THE PANEL FIELD	12"
BLOCKING OF UNSUPPORTED EDGES OF PANELS W/ FLAT 2x4'S	NOT REQD. U.N.O.
ALLOWABLE SHEAR LOADS (LB/FT) FOR C-D, C-C, SHING, UBC STD. 23-2 & 23-3	285 / 215

project

PRADU  
City of Encinitas

description

Foundation/  
Framing Plan  
1 Bedroom

date March 27 2019

project no. 2018 PRADU

drawn by YSP

sheet no.

S2



## PRADU 1 BED

CERTIFICATE OF COMPLIANCE - RESIDENTIAL PERFORMANCE COMPLIANCE METHOD  
Project Name: PRADU 1 Bed Calculation Date/Time: 13:56, Wed, Dec 05, 2018 Page 1 of 7  
Calculation Description: Title 24 Analysis Input File Name: PRADU1Bed.rbd16x

GENERAL INFORMATION						
01	Project Name	PRADU 1 Bed				
02	Calculation Description	Title 24 Analysis				
03	Project Location					
04	City	Encinitas	05	Standards Version	Compliance 2017	
06	Zip Code	92024	07	Compliance Manager Version	BEMComp 2018.3.1 (1149)	
08	Climate Zone	CZ7	09	Software Version	EnergyPro 7.2	
10	Building Type	Single Family	11	Front Orientation (deg/Cardinal)	Cardinal	
12	Project Scope	Newly Constructed	13	Number of Dwelling Units	1	
14	Total Cond. Floor Area (ft²)	555	15	Number of Zones	1	
16	Slab Area (ft²)	555	17	Number of Stories	1	
18	Addition Cond. Floor Area (ft²)	n/a	19	Natural Gas Available	Yes	
20	Addition Slab Area (ft²)	n/a	21	Glazing Percentage (%)	28.8%	

COMPLIANCE RESULTS	
01	Building Complies with Computer Performance
02	This building incorporates features that require field testing and/or verification by a certified HERS rater under the supervision of a CEC-approved HERS provider.
03	This building incorporates one or more Special Features as follows:

Registration Number: 218-F010322487A-000-000-000000-0000 Registration Date/Time: 2018-12-05 15:43:24 HERS Provider: CaCERTS Inc.  
CA Building Energy Efficiency Standards - 2016 Residential Compliance Report Version - CF1R-11302018-1149 Report Generated at: 2018-12-05 13:56:35

CERTIFICATE OF COMPLIANCE - RESIDENTIAL PERFORMANCE COMPLIANCE METHOD  
Project Name: PRADU 1 Bed Calculation Date/Time: 13:56, Wed, Dec 05, 2018 Page 4 of 7  
Calculation Description: Title 24 Analysis Input File Name: PRADU1Bed.rbd16x

BUILDING - FEATURES INFORMATION						
01	02	03	04	05	06	07
Project Name	Conditioned Floor Area (ft²)	Number of Dwelling Units	Number of Bedrooms	Number of Zones	Number of Ventilation Cooling Systems	Number of Water Heating Systems
PRADU 1 Bed	555	1	1	1	0	1

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	Water Heating System 2
1 Bed	Conditioned	New Wall Furnace1	555	8.9	DHW Sys 1	n/a

OPAQUE SURFACES							
01	02	03	04	05	06	07	08
Name	Zone	Construction	Azimuth	Orientation	Gross Area (ft²)	Window & Door Area (ft²)	Tilt (deg)
Front Wall 1 Bed	1 Bed	R-15 Wall	0	Front	255	60.24	90
Right Wall 1 Bed	1 Bed	R-15 Wall	270	Right	240	18	90
Back Wall 1 Bed	1 Bed	R-15 Wall	180	Back	221	0	90
Left Wall 1 Bed	1 Bed	R-15 Wall	90	Left	240	64	90

OPAQUE SURFACES - Cathedral Ceilings									
01	02	03	04	05	06	07	08	09	10
Name	Zone	Type	Orientation	Area (ft²)	Skylight Area (ft²)	Roof Rise (x in 12)	Roof Reflectance	Roof Emittance	Cool Roof
Roof 1 Bed	1 Bed	R-30 Roof Cathedral	Front	555	0	0.8	0.1	0.85	No

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CERTIFICATE OF COMPLIANCE - RESIDENTIAL PERFORMANCE COMPLIANCE METHOD  
Project Name: PRADU 1 Bed Calculation Date/Time: 13:56, Wed, Dec 05, 2018 Page 7 of 7  
Calculation Description: Title 24 Analysis Input File Name: PRADU1Bed.rbd16x

DOCUMENTATION AUTHOR'S DECLARATION STATEMENT	
I, I certify that this Certificate of Compliance documentation is accurate and complete.	
Documentation Author Name: Diane Mendoza	Documentation Author Signature: <i>Diane Mendoza</i>
Company: D & R Calcs	Signature Date: 2018-12-05 14:27:24
Address: 14107 Ipava Drive	CEA/HERS Certification Identification (if applicable): n/a
City/State/Zip: Poway, CA 92064	Phone: 658-486-9506
RESPONSIBLE PERSON'S DECLARATION STATEMENT	
I certify the following under penalty of perjury, under the laws of the State of California:	
1. I am eligible under Division 3 of the Business and Professions Code to accept responsibility for the building design identified on this Certificate of Compliance.	
2. I certify that the energy features and performance specifications identified on this Certificate of Compliance conform to the requirements of Title 24, Part 1 and Part 6 of the California Code of Regulations.	
3. The building design features or system 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 approval with this building permit application.	
Responsible Designer Name: Yvonne St Pierre	Responsible Designer Signature: <i>Yvonne St Pierre</i>
Company: Design Path Studio	Date Signed: 2018-12-05 15:43:24
Address: 364 Second St Suite 2	License: C 34799
City/State/Zip: Encinitas, CA 92024	Phone: 760-944-1443

Digitally signed by CaCERTS. This digital signature is provided in order to secure the content of this registered document, and in no way implies Registration Provider responsibility for the accuracy of the information.



Registration Number: 218-F010322487A-000-000-000000-0000 Registration Date/Time: 2018-12-05 15:43:24 HERS Provider: CaCERTS Inc.  
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CERTIFICATE OF COMPLIANCE - RESIDENTIAL PERFORMANCE COMPLIANCE METHOD  
Project Name: PRADU 1 Bed Calculation Date/Time: 13:56, Wed, Dec 05, 2018 Page 2 of 7  
Calculation Description: Title 24 Analysis Input File Name: PRADU1Bed.rbd16x

ENERGY USE SUMMARY					
Energy Use (kTDW/yr)	Standard Design	Proposed Design	Compliance Margin	Percent Improvement	
Space Heating	0.89	6.86	-5.97	670.8%	
Space Cooling	9.16	2.62	6.54	71.4%	
IAQ Ventilation	1.78	1.78	0.00	0.0%	
Water Heating	21.18	21.18	0.00	0.0%	
PV Credit	---	0.00	0.00	---	
North Facing Compliance Total	33.01	32.44	0.57	1.7%	
Space Heating	0.89	3.83	-2.94	-330.3%	
Space Cooling	9.16	3.19	5.97	65.2%	
IAQ Ventilation	1.78	1.78	0.00	0.0%	
Water Heating	21.18	21.18	0.00	0.0%	
PV Credit	---	0.00	0.00	---	
East Facing Compliance Total	33.01	29.88	3.03	9.2%	
Space Heating	0.89	3.98	-3.09	-347.2%	
Space Cooling	9.16	5.12	4.04	44.1%	
IAQ Ventilation	1.78	1.78	0.00	0.0%	
Water Heating	21.18	21.18	0.00	0.0%	
PV Credit	---	0.00	0.00	---	
South Facing Compliance Total	33.01	32.06	0.95	2.9%	
Space Heating	0.89	6.58	-5.69	-639.3%	
Space Cooling	9.16	3.19	5.97	65.2%	
IAQ Ventilation	1.78	1.78	0.00	0.0%	
Water Heating	21.18	21.18	0.00	0.0%	
PV Credit	---	0.00	0.00	---	
West Facing Compliance Total	33.01	32.73	0.28	0.8%	

Registration Number: 218-F010322487A-000-000-000000-0000 Registration Date/Time: 2018-12-05 15:43:24 HERS Provider: CaCERTS Inc.  
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CERTIFICATE OF COMPLIANCE - RESIDENTIAL PERFORMANCE COMPLIANCE METHOD  
Project Name: PRADU 1 Bed Calculation Date/Time: 13:56, Wed, Dec 05, 2018 Page 5 of 7  
Calculation Description: Title 24 Analysis Input File Name: PRADU1Bed.rbd16x

FENESTRATION / GLAZING									
01	02	03	04	05	06	07	08	09	10
Name	Type	Surface (Orientation-Azimuth)	Width (ft)	Height (ft)	Multiplier	Area (ft²)	U-factor	SHGC	Exterior Shading
SI Door #1	Window	Front Wall 1 Bed (Front-0)	6.0	6.7	1	40.0	0.32	0.23	Insect Screen (default)
SI Door #7	Window	Front Wall 1 Bed (Front-0)	6.0	6.7	1	40.0	0.32	0.23	Insect Screen (default)
Window RA	Window	Right Wall 1 Bed (Right-270)	---	---	1	12.0	0.32	0.23	Insect Screen (default)
Window RB	Window	Right Wall 1 Bed (Right-270)	---	---	1	4.0	0.32	0.23	Insect Screen (default)
Window RC	Window	Left Wall 1 Bed (Left-90)	---	---	1	24.0	0.32	0.23	Insect Screen (default)
SI Door #3	Window	Left Wall 1 Bed (Left-90)	---	---	1	40.0	0.32	0.23	Insect Screen (default)

OVERHANGS AND FINS													
01	02	03	04	05	06	07	08	09	10	11	12	13	14
Overhang							Left Fin						
Window	Depth	Dist Up	Left Extent	Right Extent	Flap Ht.	Depth	Top Up	Dist L	Bot Up	Depth	Top Up	Dist R	Bot Up
SI Door #1	5.25	3.17	2	2	0	0	0	0	0	0	0	0	0
SI Door #7	18	2.5	2	2	0	0	0	0	0	0	0	0	0

OPAQUE SURFACE CONSTRUCTIONS						
01	02	03	04	05	06	07
Construction Name	Surface Type	Construction Type	Framing	Total Cavity R-value	Winter Design U-factor	Assembly Layers
R-15 Wall	Exterior Walls	Wood Framed Wall	2x4 @ 16 in. O.C.	R 15	0.065	• Inside Finish: Gypsum Board • Cavity / Frame: R-15 2x4 • Exterior Finish: 3 Coat Stucco
R-30 Roof Cathedral	Cathedral Ceilings	Wood Framed Ceiling	2x10 @ 24 in. O.C.	R 30	0.035	• Inside Finish: Gypsum Board • Cavity / Frame: R-30 2x10 • Roof Deck: Wood Siding/Sheathing/Insulation • Roofing: Light Roof (Asphalt Shingle)

SLAB FLOORS						
01	02	03	04	05	06	07
Name	Zone	Area (ft²)	Perimeter (ft)	Edge Insul. R-value & Depth	Carpeted Fraction	Heated
Slab-on-Grade 1 Bed	1 Bed	555	109	None	0	No

Registration Number: 218-F010322487A-000-000-000000-0000 Registration Date/Time: 2018-12-05 15:43:24 HERS Provider: CaCERTS Inc.  
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CERTIFICATE OF COMPLIANCE - RESIDENTIAL PERFORMANCE COMPLIANCE METHOD  
Project Name: PRADU 1 Bed Calculation Date/Time: 13:56, Wed, Dec 05, 2018 Page 3 of 7  
Calculation Description: Title 24 Analysis Input File Name: PRADU1Bed.rbd16x

ENERGY DESIGN RATING			
Energy Design Rating (EDR) is an alternate way to express the energy performance of a building using a scoring system where 100 represents the energy performance of the Residential Energy Services (RESNET) reference home characterization of the 2008 International Energy Conservation Code (IECC) with California modeling assumptions. A score of zero represents the energy performance of a building that combines high levels of energy efficiency with renewable generation to zero out its TDW energy. Because EDR includes consideration of components not regulated by Title 24, Part 6 (such as domestic appliances and consumer electronics), it is not used to show compliance with Part 6 but may instead be used by local jurisdictions pursuing local ordinances under Title 24, Part 11 (CALGreen).			
As a Standard Design building under the 2018 Building Energy Efficiency Standards is significantly more efficient than the baseline EDR building, the EDR of the Standard Design building is provided for information. Similarly, the EDR score of the Proposed Design is provided separately from the EDR value of installed PV so that the effects of efficiency and renewable energy can both be seen.			
	EDR of Standard Efficiency	EDR of Proposed Efficiency	EDR Value of Proposed PV + Battery
North	63.6	63.1	63.1
East	63.6	62.1	62.1
South	63.6	63.0	63.0
West	63.6	63.2	63.2

REQUIRED SPECIAL FEATURES			
The following are features that must be installed as a condition for meeting the modeled energy performance for this computer analysis.			
• Window overhang and/or fins			
• Exposed slab floor in conditioned zone			

HERS FEATURE SUMMARY			
The following is a summary of the features that must be field-verified by a certified HERS Rater as a condition for meeting the modeled energy performance for this computer analysis. Additional detail is provided in the building components tables below.			
Building-Level Verifications:			
• IAQ mechanical ventilation			
Cooling System Verifications:			
• None			
HVAC Distribution System Verifications:			
• None			
Domestic Hot Water System Verifications:			
• None			

Registration Number: 218-F010322487A-000-000-000000-0000 Registration Date/Time: 2018-12-05 15:43:24 HERS Provider: CaCERTS Inc.  
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CERTIFICATE OF COMPLIANCE - RESIDENTIAL PERFORMANCE COMPLIANCE METHOD  
Project Name: PRADU 1 Bed Calculation Date/Time: 13:56, Wed, Dec 05, 2018 Page 6 of 7  
Calculation Description: Title 24 Analysis Input File Name: PRADU1Bed.rbd16x

BUILDING ENVELOPE - HERS VERIFICATION			
01	02	03	04
Quality Insulation Installation (QII)	Quality Installation of Spray Foam Insulation	Building Envelope-Air Leakage	CFM50
Not Required	Not Required	Not Required	n/a

WATER HEATING SYSTEMS					
01	02	03	04	05	06
Name	System Type	Distribution Type	Water Heater	Number of Heaters	Solar Fraction (%)
DHW Sys 1	DHW	Standard	DHW Heater 1 (1)	1	0%

WATER HEATERS											
01	02	03	04	05	06	07	08	09	10	11	12
Name	Heater Element Type	Tank Type	Number of Units	Tank Volume (gal)	Uniform Energy Factor / Efficiency	Input Rating / Pilot / Thermal Efficiency	Tank Insulation R-value (Int/Ext)	Standby Loss / Recovery Eff	First Hour Rating / Flow Rate	NEEA Heat Pump Brand / Model / Other	Tank Location or Ambient Condition
DHW Heater 1	Gas	Small Instantaneous	1	0	0.82 EF	<= 200 kBtu/hr	R-0/R-0	0	n/a	n/a	n/a

SPACE CONDITIONING SYSTEMS					
01	02	03	04	05	06
SC Sys Name	System Type	Heating Unit Name	Cooling Unit Name	Fan Name	Distribution Name
New Wall Furnace1	Other Heating and Cooling System	Heating Component 1	Cooling Component 1	HVAC Fan 1	-none-

HVAC - HEATING UNIT TYPES			
01	02	03	04
Name	System Type	Number of Units	Efficiency
Heating Component 1	WallFurnaceGravity	1	68 AFUE

IAQ (Indoor Air Quality) FANS					
01	02	03	04	05	06
Dwelling Unit	IAQ CFM	IAQ Watts/CFM	IAQ Fan Type	IAQ Recovery Effectiveness(%)	HERS Verification
SFam IAQ/rr/rt	21	0.25	Default	0	Required

Registration Number: 218-F010322487A-000-000-000000-0000 Registration Date/Time: 2018-12-05 15:43:24 HERS Provider: CaCERTS Inc.  
CA Building Energy Efficiency Standards - 2016 Residential Compliance Report Version - CF1R-11302018-1149 Report Generated at: 2018-12-05 13:56:35

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project

PRADU  
City of Encinitas

description

Energy  
Calculations  
1 Bedrooms



### 2016 Low-Rise Residential Mandatory Measures Summary

**NOTE:** Low-rise residential buildings subject to the Energy Standards must comply with all applicable mandatory measures, regardless of the compliance approach used. Review the respective section for more information. \*Optional measures.

Building Envelope Measures	
§ 110.0a(1)	<b>Air Leakage.</b> Manufacture foundation, exterior doors, and exterior port doors must limit air leakage to 0.3 cfm/ft <sup>2</sup> or less when tested per ASTM E283 or ASTM E2907 or ANSI/ASHRAE 90.1-2013 Table A5.1.
§ 110.0a(2)	<b>Labeling.</b> Fenestration products must have a label meeting the requirements of § 110.11(5).
§ 110.0a(3)	<b>Field Fabricated exterior doors and fenestration products</b> must use U-factors and solar heat gain coefficient (SHGC) values from TABLE 110.0A or 110.0B in compliance and must be labeled and/or weatherstripped.
§ 110.7	<b>Air Leakage.</b> All joints, penetrations, and other openings in the building envelope that are potential sources of air leakage must be caulked, gasketed, or weatherstripped.
§ 110.0a(4)	<b>Insulation Certification by Manufacturers.</b> Insulation specified or installed must be certified to the Insulating Material Certification Requirements for Heated Slab Floors. Heated slab floors must be installed per the requirements of § 110.0g(1).
§ 110.0g(1)	<b>Insulation Protection.</b> Insulation must be protected from damage, including that due to sunlight, moisture, equipment maintenance, and wind.
§ 110.0g(2)	<b>Insulation Protection.</b> Insulation exposed to weather must be installed with a cover suitable for outdoor service. For example, protected by aluminum, sheet metal, painted canvas, or plastic cover. The cover must be water resistant and provide shading from solar radiation that can cause degradation of the material.
§ 110.0g(3)	<b>Insulation Protection.</b> Insulation covering chilled water piping and refrigerant suction piping located outside the conditioned space must have a Class I or Class II vapor retarder.
§ 110.0g(4)	<b>Gas or Propane Systems.</b> Systems using gas or propane water heaters to serve individual dwelling units must include all of the following: a 20% efficiency water heater, a 1/2 inch of water heater insulation, a condensate drain that is no less than 2 inches higher than the base of the water heater, and allows natural draining without pump assistance, and a gas supply line with a capacity of at least 200,000 Btu/hr.
§ 110.0b(1)	<b>Loose-Fill Insulation.</b> Loose-fill insulation must meet the manufacturer's required density for the labeled R-value.
§ 110.0b(2)	<b>Wall Insulation.</b> Minimum R-13 insulation in 2x4 inch wood framing walls or have a U-factor of 0.02 or less (R-19 in 2x6 or U-factor of 0.074 or less). Open-up framed assemblies must have an overall assembly U-factor not exceeding 0.02, equivalent to an installed value of R-19 in a wood framed assembly.
§ 110.0b(3)	<b>Raised-Floor Insulation.</b> Minimum R-19 insulation in raised wood framed floor or 0.027 maximum U-factor.
§ 110.0b(4)	<b>Sub-Edge Insulation.</b> Sub-edge insulation must meet all of the following: have a water absorption rate, for the insulation material alone without facing, no greater than 0.3%, have a water vapor permeance no greater than 2.0 permits, be protected from physical damage and UV light degradation, and when installed as part of a finished slab floor, meet the requirements of § 110.0g(1).
§ 110.0g(1)	<b>Vapor Retarder.</b> In Climate Zones 1-16, the earth floor or elevated crawl space must be covered with a Class I or Class II vapor retarder. This requirement also applies to conditioned ventilation spaces for buildings complying with the exception to § 110.0g(1).
§ 110.0g(2)	<b>Vapor Retarder.</b> In Climate Zones 14 and 16, a Class I or Class II vapor retarder must be installed on the conditioned space side of all insulation in all exterior walls, ventilation, and unvented attic with an permeable exception.
§ 110.0g(3)	<b>Fenestration Products.</b> Fenestration, including skylights, separating conditioned space from unconditioned space or outdoors must have a minimum U-factor of 0.30 or the weighted average U-factor of all fenestration must not exceed 0.30.
Fenestration, Decorative Gas Appliances, and Gas Log Measures	
§ 110.0a(1)	<b>Closable Doors.</b> Masonry or factory-built fireplaces must have a closable metal or glass door covering the entire opening of the firebox.
§ 110.0a(1)	<b>Combustion Intake.</b> Masonry or factory-built fireplaces must have a combustion outside air intake, which is at least six square inches in area and is equipped with a readily accessible, operable, and self-closing damper or control at ceiling height.
§ 110.0a(1)	<b>Flue Damper.</b> Masonry or factory-built fireplaces must have a flue damper with a readily accessible cover.
§ 110.0a(2)	<b>Pilot Light.</b> Continuous burning pilot lights and the use of indoor air for cooling a flueless pellet, when that indoor air is vented to the outside of the building, are prohibited.
Space Conditioning, Water Heating, and Plumbing System Measures	
§ 110.0-g 110.3	<b>Certification.</b> Heating, ventilation and air conditioning (HVAC) equipment, water heaters, showheats, faucets, and all other required appliances must be certified by the manufacturer to the Energy Commission.
§ 110.2a(1)	<b>HVAC Efficiency.</b> Equipment must meet the applicable efficiency requirements in TABLE 110.2A through TABLE 110.2.K.
§ 110.2b(1)	<b>Controls for Heat Pumps with Supplementary Electric Resistance Heaters.</b> Heat pumps with supplementary electric resistance heaters must have controls that prevent supplementary heater operation when the heating load can be met by the heat pump alone, and in which the outdoor temperature for compression heating is higher than the outdoor temperature for supplementary heating, and the cutoff temperature for compression heating is higher than the cutoff temperature for supplementary heating.
§ 110.2c(1)	<b>Thermostat.</b> All heating or cooling systems not controlled by a central energy management control system (EMCS) must have a setback thermostat.
§ 110.3a(2)	<b>Water Heating Restriction Loops Serving Multiple Dwelling Units.</b> Water heating restriction loops serving multiple dwelling units must meet the air release valve, backflow prevention, pump priming, pump inhibitor valve, and recirculation loop connection requirements of § 110.3a(3).
§ 110.3a(3)	<b>Isolation Valves.</b> Instantaneous water heaters with an input rating greater than 6.8 BBTU/hr (2.0 kW) must have isolation valves with hose bibbs or other fittings on both cold water and hot water lines of water heating systems to allow the water tank heating when the valves are closed.
§ 110.5	<b>Pilot Lights.</b> Continuously burning pilot lights are prohibited for natural gas, fan-type central furnaces, household cooking appliances (appliances without an electrical safety cutoff connection with pilot lights) and gas stoves. Gas stoves, and pool and spa heaters.
§ 110.0a(1)	<b>Building Cooling and Heating Loads.</b> Heating and/or cooling loads are calculated in accordance with ASHRAE Handbook, Equipment Volume, Applications Volume, and Fundamentals Volume. (BACOMA Residential Comfort System Installation Standards Manual, or ACCA Manual J, using design conditions specified in § 110.0a(2).



### 2016 Low-Rise Residential Mandatory Measures Summary

§ 110.0a(3)	<b>Clearances.</b> Installed air conditioner and heat pump outdoor condensing units must have a clearance of at least 6 feet from the outside of any other wall.
§ 110.0a(3)	<b>Liquid Clear.</b> Installed air conditioner and heat pump systems must be equipped with liquid line filter driers (required, as specified by manufacturer's instructions).
§ 110.0g(1)	<b>Storage Tank Insulation.</b> Unvented hot water tanks, such as storage tanks and tankless storage tanks for solar water-heating systems, must have R-2 external insulation or R-16 internal insulation where the internal insulation R-value is indicated on the interior of the tank.
§ 110.0a(4)	<b>Water piping and cooling system line insulation.</b> For cooling system lines must be installed as specified in § 110.0g(4). Distribution piping for direct air systems, heating systems or hot water systems must meet the requirements in TABLE 102.3.A.
§ 110.0a(4)	<b>Water piping and cooling system line insulation.</b> All domestic hot water pipes that are buried below grade must be installed in a water proof and non-saline casing or sleeve.
§ 110.0a(4)	<b>Water piping and cooling system line insulation.</b> For cooling system lines must be installed as specified in § 110.0g(4). Distribution piping for direct air systems, heating systems or hot water systems must meet the requirements in TABLE 102.3.A.
§ 110.0g(1)	<b>Insulation Protection.</b> Insulation must be protected from damage, including that due to sunlight, moisture, equipment maintenance, and wind.
§ 110.0g(2)	<b>Insulation Protection.</b> Insulation exposed to weather must be installed with a cover suitable for outdoor service. For example, protected by aluminum, sheet metal, painted canvas, or plastic cover. The cover must be water resistant and provide shading from solar radiation that can cause degradation of the material.
§ 110.0g(3)	<b>Insulation Protection.</b> Insulation covering chilled water piping and refrigerant suction piping located outside the conditioned space must have a Class I or Class II vapor retarder.
§ 110.0g(4)	<b>Gas or Propane Systems.</b> Systems using gas or propane water heaters to serve individual dwelling units must include all of the following: a 20% efficiency water heater, a 1/2 inch of water heater insulation, a condensate drain that is no less than 2 inches higher than the base of the water heater, and allows natural draining without pump assistance, and a gas supply line with a capacity of at least 200,000 Btu/hr.
§ 110.0b(2)	<b>Recirculating Loops.</b> Recirculating loops serving multiple dwelling units must meet the requirements of § 110.3a(2).
§ 110.0g(3)	<b>Solar Water-heating Systems.</b> Solar water-heating systems and outdoors must be verified and rated by the Solar Rating and Certification Corporation (SRCC) or by a listing agency that is approved by the Executive Director.
Ducts and Fans Measures	
§ 110.0b(2)	<b>Ducts.</b> Insulation installed on an existing space-conditioning duct must comply with § 604 of the California Mechanical Code (CMC). If a contractor installs the insulation, the contractor must verify to the customer, in writing, that the insulation meets the requirement.
§ 110.0b(2)	<b>CMC Compliance.</b> If an air distribution system ducts and plenums must be installed, sealed, and insulated to meet the requirements of CMC §§ 601.1, 602.8, 603.0, 604.0, 605.0 and ANSI/SMACNA-008-2008 HVAC Duct Construction Standards Metal and Flexible 3rd Edition. Purposes of supply air and return air ducts and plenums must be installed to the minimum installed level of R-6.0 (or higher if required by CMC § 605.0) or a minimum installed level of R-4.2 when entirely in conditioned space as confirmed through field verification and diagnostic testing (FV) 4.2.3. Connections of metal ducts and inner core flexible ducts must be mechanically fastened. Coverings must be sealed with mastic, tape, or other duct-closure systems that meet the applicable requirements of UL 911, UL 181A, or UL 181B or aerosol sealed that meets the requirements of UL 722. If mastic or tape is used for sealing purposes greater than 1/4 inch, the combination of mastic and other seal or tape must be used. Sealing surfaces, support structures for air handlers, and plenums designed or constructed with materials other than sealed metal, duct board or flexible duct must not be used for conveying conditioned air. Sealing cavities and support structures may contain ducts. Ducts installed in cavities and support structures must be compressed to close reductions in the cross-sectional area of the ducts.
§ 110.0b(1)	<b>Factory-Fabricated Duct Systems.</b> Factory fabricated duct systems must comply with applicable requirements 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 tape unless such tape is used in combination with mastic and draw bands.
§ 110.0b(2)	<b>Field-Fabricated Duct Systems.</b> Field-fabricated duct systems must comply with applicable requirements for pressure-sensitive tapes, mastics, and other requirements specified for duct construction.
§ 110.0b(3)	<b>Backdraft Damper.</b> All fan systems that exchange air between the conditioned space and the outside of the building must have backdraft or automatic dampers.
§ 110.0b(7)	<b>Control Ventilation Damper.</b> Control ventilation systems serving conditioned spaces must have either automatic or manually accessible, manually operated dampers in all openings to the outside, except combustion inlet and outlet air openings and exhaust shaft vents.
§ 110.0b(8)	<b>Protection of Insulation.</b> Insulation must be protected from damage, including that due to sunlight, moisture, equipment maintenance, and wind. Insulation exposed to weather must be suitable for outdoor service. For example, protected by aluminum, sheet metal, painted canvas, or plastic cover. Cellular foam insulation must be protected as above or painted with a coating that is water resistant and provides shading from solar radiation.
§ 110.0b(10)	<b>Pressure Resistor Core Plug Duct.</b> Pressure resistor core plug duct must have a non-porous layer between the inner core and outer vapor barrier.
§ 110.0b(11)	<b>Duct System Sealing and Leakage Test.</b> When space conditioning systems use forced air duct systems to supply conditioned air to an occupied space, the ducts must be sealed and duct leakage tested, as confirmed through field verification and diagnostic testing, in accordance with § 110.0b(1) and Reference Appendix A6.3.
§ 110.0b(12)	<b>Air Filtration.</b> Mechanical systems that supply air to an occupied space through ductwork exceeding 10 feet in length and through a thermal conditioning panel, except residential controls, must be provided with air filter devices that meet the design, installation, efficiency, pressure drop, and labeling requirements of § 110.0a(2).



### 2016 Low-Rise Residential Mandatory Measures Summary

§ 110.0b(1)	<b>Duct System Sealing and Air Filter grille Sealing.</b> Space conditioning systems that use forced air ducts to supply cooling to an occupied space must have a test for the measurement of static pressure drop (SPD) or, alternatively, installed static pressure probe (ISPP) or the supply pressure. The space conditioning system must demonstrate an average SPD (in percent of nominal cooling capacity) through the return grille, and an air-handling unit fan efficiency of 0.38 WCFM as confirmed by field verification and diagnostic testing, in accordance with Reference Appendix A6.3.2. The system to both single zone control forced air systems and every zone for zonally controlled control forced air systems.
§ 110.0b(1)	<b>Verification for Indoor Air Quality.</b> All dwelling units must meet the requirements of ASHRAE Standard 62.2. Further indoor operation or continuous operation of central forced air system or handover unit in central fan integrated ventilation systems are permitted methods of providing whole-building ventilation.
§ 110.0b(1)	<b>Field Verification and Diagnostic Testing.</b> Whole-building ventilation airflow must be confirmed through field verification and diagnostic testing, in accordance with Reference Appendix A6.3.7.
Pool and Spa Systems and Equipment Measures	
§ 110.4a(1)	<b>Certification by Manufacturers.</b> Any pool or spa heating system or equipment must be certified to have all of the following: a thermal efficiency test compliant with the Appliance Efficiency Regulations, an on/off switch mounted outside of the heater that allows shading of the heater without adjusting the thermostat setting, a permanent weatherproof plate or card with operating instructions, and must not use electric resistance heating.
§ 110.4b(1)	<b>Piping.</b> Any pool or spa heating equipment must be installed with at least 30 inches of pipe between the filter and the heater, or dedicated suction and return lines, or built-in or built-up connections to allow for future spa heating.
§ 110.4b(2)	<b>Covers.</b> Outdoor pools or spas that have a heat pump or gas heater must have a cover.
§ 110.4b(3)	<b>Directional vents and time switches for pools.</b> Pools must have directional vents that adequately drain the pool water, and a time switch that will allow all pumps to be set or programmed to run only during off-peak electric demand periods.
§ 110.5	<b>Pilot Light.</b> Natural gas pool and spa heaters must not have a continuously burning pilot light.
§ 110.0g(2)	<b>Pool Systems and Equipment Installation.</b> Residential pool systems or equipment must meet the specified requirements for pump sizing, flow rate, piping, filters, and valves.
Lighting Measures	
§ 110.9	<b>Lighting Controls and Components.</b> All lighting control devices and systems, ballasts, and luminaires must meet the applicable requirements of § 110.9.
§ 110.9a(1)	<b>Light Efficacy Light Sources.</b> The quality of a JAB high efficacy light source for compliance with § 110.9(d), a residential light source must be certified by the Energy Commission according to Reference Joint Appendix A8.
§ 110.9a(1)	<b>Luminaire Efficacy.</b> All installed luminaires must be high efficacy in accordance with TABLE 110.9.A.
§ 110.9a(1)	<b>Blank Electrical Boxes.</b> The number of electrical boxes that are more than 5 feet above the finished floor and do not contain a luminaire or other device must be no greater than the number of bedrooms. These electrical boxes must be sealed by a diemeter, vacancy sensor control, or fan speed control.
§ 110.0a(1)	<b>Recessed Downlight Luminaires in Ceilings.</b> Luminaires recessed into ceilings must meet all of the requirements for insulation contact (IC) labeling, air leakage, sealing, maintenance, and outlet and light sources as described in § 110.0a(1). A JAB-2016-E light source used in elevated temperature must be installed by field inspection in a recessed downlight luminaire in ceilings.
§ 110.0a(1)	<b>Electronic Ballasts.</b> Ballasts for fluorescent lamps rated 13 watts or greater must be electronic and must have an output frequency no less than 20 kHz.
§ 110.0a(1)	<b>Night Lights.</b> Internally installed night lights and night lights recessed to install luminaires or exhaust fans must be related to consume no more than 0.5 watts per luminaire or exhaust fan as determined in accordance with § 110.0a(1). Night lights do not need to be controlled by vacancy sensors.
§ 110.0a(1)	<b>Lighting Integral to Exhaust Fans.</b> Lighting integral to exhaust fans (except when installed by the manufacturer in kitchen exhaust hoods) must meet the applicable requirements of § 110.0a(1).
§ 110.0a(1)	<b>Some Recessed Luminaires.</b> Some recessed luminaires must not be recessed downward luminaires in ceilings and must contain lamps that comply with Reference Joint Appendix A8. Installed lamps must be marked with "JAB-2016" or "JAB-2016-E" as specified in Reference Joint Appendix A8.C.
§ 110.0a(1)	<b>Enclosed Luminaires.</b> Light sources installed in enclosed luminaires must be JAB compliant and must be marked with "JAB-2016-E."
§ 110.0a(2)	<b>Interior Switches and Controls.</b> All forward phase out dimmers used with LED light sources must comply with NEMA SSL 7A.
§ 110.0a(2)	<b>Interior Switches and Controls.</b> Cabinet fans must be switched separately from lighting systems.
§ 110.0a(2)	<b>Interior Switches and Controls.</b> Luminaires must be switched with readily accessible controls that meet the requirements in Reference Joint Appendix A8.C and C17.
§ 110.0a(2)	<b>Interior Switches and Controls.</b> Controls and equipment must be installed in accordance with manufacturer's instructions.
§ 110.0a(2)	<b>Interior Switches and Controls.</b> No control must bypass a dimmer or vacancy sensor function if the control is installed to comply with § 110.0a(1).
§ 110.0a(2)	<b>Interior Switches and Controls.</b> Lighting controls must comply with the applicable requirements of § 110.9.
§ 110.0a(2)	<b>Interior Switches and Controls.</b> An energy management control system (EMCS) may be used to comply with dimmer requirements if it functions as a dimmer according to § 110.9; meets the installation Certificate requirements of § 110.4; meets the EMC3 requirements of § 110.5a; and meets all other requirements of § 110.0a(2).
§ 110.0a(2)	<b>Interior Switches and Controls.</b> An EMCS may be used to comply with vacancy sensor requirements of § 110.5a if it meets all of the following: it functions as a vacancy sensor according to § 110.9; the installation Certificate requirements of § 110.4; the EMC3 requirements of § 110.5a; and all other requirements of § 110.0a(2).
§ 110.0a(2)	<b>Interior Switches and Controls.</b> A multistep programmable controller may be used to comply with dimmer requirements in § 110.0a(1) if it provides the functionality of a dimmer according to § 110.9, and complies with all other applicable requirements in § 110.0a(2).



### 2016 Low-Rise Residential Mandatory Measures Summary

§ 110.0a(2)	<b>Interior Switches and Controls.</b> In bathrooms, garages, laundry rooms, and utility rooms, at least one luminaire in each of these spaces must be controlled by a vacancy sensor.
§ 110.0a(2)	<b>Interior Switches and Controls.</b> Dimmer or vacancy sensors must control all luminaires except in listed spaces compliant with Reference Joint Appendix A8, except luminaires in closets less than 75 square feet and luminaires in hallways.
§ 110.0a(2)	<b>Interior Switches and Controls.</b> Uncontrolled lighting must be switched separately from other lighting systems.
§ 110.0a(3)	<b>Residential Outdoor Lighting.</b> For single-family residential buildings, outdoor lighting permanently installed to a residential building, or to other buildings on the same lot, must meet the requirements in Table 110.0A(3)(A) and (B) and (C) and (D) and (E) and (F) and (G) and (H) and (I) and (J) and (K) and (L) and (M) and (N) and (O) and (P) and (Q) and (R) and (S) and (T) and (U) and (V) and (W) and (X) and (Y) and (Z).
§ 110.0a(3)	<b>Residential Outdoor Lighting.</b> For low-rise multifamily residential buildings, outdoor lighting for private patios, entrances, balconies, and porches, and outdoor lighting for residential parking lots and residential streets with less than eight vehicles per site must comply with other § 110.0A(3)(A) or with the applicable requirements in §§ 110.9, 110.9.1, 110.9.2, 110.9.3, 110.9.4, 110.9.5, 110.9.6, 110.9.7, and 110.9.8.
§ 110.0a(3)	<b>Residential Outdoor Lighting.</b> For low-rise residential buildings with four or more dwelling units, outdoor lighting not regulated by § 110.0A(3) and § 110.0a(2) must comply with the applicable requirements in §§ 110.9, 110.9.1, 110.9.2, 110.9.3, 110.9.4, 110.9.5, 110.9.6, 110.9.7, and 110.9.8.
§ 110.0a(3)	<b>Residential Outdoor Lighting.</b> Outdoor lighting for residential parking lots and residential streets with a total weight or more vehicles per site must comply with the applicable requirements in §§ 110.9, 110.9.1, 110.9.2, 110.9.3, 110.9.4, 110.9.5, 110.9.6, 110.9.7, and 110.9.8.
§ 110.0a(4)	<b>Internally Illuminated Address Signs.</b> Internally illuminated address signs must comply with § 110.9; must consume no more than 5 watts of power as determined according to § 110.0a(2).
§ 110.0a(5)	<b>Residential Garages for Eight or More Vehicles.</b> Lighting for residential parking garages for eight or more vehicles must comply with the applicable requirements in §§ 110.9, 110.9.1, 110.9.2, 110.9.3, 110.9.4, 110.9.5, 110.9.6, 110.9.7, and 110.9.8.
§ 110.0a(6)	<b>Interior Common Areas of Low-Rise Multi-Family Residential Buildings.</b> In a low-rise multifamily residential building where the total interior common area in a single building equals 20 percent or less of the floor area, permanently installed lighting for the interior common areas in that building must be high efficacy luminaires and controlled by an occupant sensor.
§ 110.0a(6)	<b>Interior Common Areas of Multi-Family Residential Buildings.</b> In a low-rise multifamily residential building where the total interior common area in a single building equals more than 20 percent of the floor area, permanently installed lighting for that building must: 1. Comply with the applicable requirements in §§ 110.9, 110.9.1, 110.9.2, 110.9.3, 110.9.4, 110.9.5, 110.9.6, 110.9.7, and 110.9.8; and 2. Lighting installed in corridors and stairwells must be controlled by occupant sensors that reduce the lighting power in each space by at least 50 percent. The occupant sensors must be capable of turning the light fully on and off from all designated paths of egress and signs.
Solar Ready Buildings	
§ 110.10a(1)	<b>Single Family Residential.</b> Single family residences located in subdivisions with ten or more single family residences and where the application for a building subdivision map for the residences has been deemed complete by the enforcement agency must comply with the requirements of § 110.10b(1) through § 110.10e(1).
§ 110.10a(2)	<b>Low-Rise Multi-Family Buildings.</b> Low-rise multi-family buildings must comply with the requirements of § 110.10b(1) through § 110.10e(1).
§ 110.10a(3)	<b>Minimum Area.</b> The solar zone must have a minimum solar area as described below. The solar zone must comply with access, egress, smoke ventilation, and spacing requirements as specified in Title 24, Part 9 or other Parts of Title 24 on any requirements adopted by a local jurisdiction. The solar zone total area must be composed of areas that have no dimension less than 3 feet and are no less than 10 square feet each for buildings with roof areas less than 10,000 square feet or no less than 100 square feet each for buildings with roof areas greater than 10,000 square feet.
§ 110.10b(1)	For single family residences the solar zone must be located on the roof or overhang of the building and have a total area no less than 250 square feet. For low-rise multi-family buildings the solar zone must be located on the roof or overhang of the building, or on the roof or overhang of another structure located within 250 feet of the building, or on covered parking installed with the building project, and have a total area no less than 15 percent of the total roof area of the building excluding any straight flights.
§ 110.10b(2)	<b>Orientation.</b> All sections of the solar zone located on steep-sloped roofs must be oriented between 10 degrees and 270 degrees of true north (rounded up).
§ 110.10b(3)	<b>Shading.</b> The solar zone must not contain any obstructions, including but not limited to vents, chimneys, architecture features, and roof-mounted equipment.
§ 110.10b(3)	<b>Shading.</b> Any obstruction located on the roof or any other part of the building that projects above the solar zone must be located at least twice the distance, measured in the horizontal plane, of the height difference between the highest point of the obstruction and the horizontal projection of the nearest point of the solar zone, measured in the horizontal plane.
§ 110.10b(4)	<b>Structural Design Loads on Construction Documents.</b> For areas of the roof designated as solar zone, the structural design loads for roof dead load and live load must be clearly indicated on the construction documents.
§ 110.10b(5)	<b>Interconnection Pathways.</b> The construction documents must indicate a location for inverters and racking equipment and a pathway for routing of conductors from the solar zone to the point of interconnection with the electrical service for single family residences and the interconnection will be the main service panel, and a pathway for routing of plumbing from the solar zone to the water-heating system.
§ 110.10b(6)	<b>Orientation.</b> A copy of the construction documents or a comparable document indicating the information from § 110.10b(1) through § 110.10b(6) must be provided to the occupant.
§ 110.10b(7)	<b>Main Electrical Service Panel.</b> The main electrical service panel must have a minimum busbar rating of 200 amperes.
§ 110.10b(8)	<b>Main Electrical Service Panel.</b> The main electrical service panel must have a reserved space to allow for the installation of a double pole circuit breaker for a future solar electric installation. The reserved space must be positioned at the opposite (opposite) end from the input feeder location or main circuit location, and permanently marked as "For Future Solar Electric."

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project

PRADU  
City Of Encinitas

description

Energy  
Calculations  
1 Bedrooms

date March 27 2019

project no. 2018 PRADU

drawn by YSP

sheet no.

T24.2