SCOPE OF WORK

2-STORY ADDITION TO INCLUDE 3 BEDROOMS AND 2 TWO BATHS.
THE RENOVATION OF AN EXISTING BEDROOM INTO A MASTER BEDROOM.
THE RENOVATION OF THE EXISTING BATHROOM INTO A POWDER ROOM.
THE RENOVATION OF THE LAUNDRY ROOM

PROJECT ANALYSIS

ASSESSORS PARCEL NUMBER: 202-0-030-410
PROJECT ADDRESS: 121 S. G STREET

ZONING: R-1

SETBACKS:	REQUIRED	PROPOSED
HEIGHT	25'	24'-8"
FRONT	20'	20'
SIDE	10% WIDE 5' MAX	5'
REAR	25% LOT DEPTH 15' MIN ABUTTING AN ALLEY	15'
INTERIOR YARD SPACE	15% OF LOT OR 900 SF	1,396.0 SF

SITE AREA: (0.16 AC) 7,000.0 S.F.
ORIGINALLY CONSTRUCTED: 1925

EXISTING USE: RESIDENTIAL
PROPOSED USE: RESIDENTIAL

EXISTING CONSTRUCTION TYPE: V-B
PROPOSED CONSTRUCTION TYPE: V-B
EXISTING OCCUPANCY GROUP: R-3
PROPOSED OCCUPANCY GROUP: R-3

FIRE SPRINKLER SYSTEM YES

AREA OF BUILDING
EXISTING MAIN RESIDENCE 910.0 S.F.
EXISTING PORCH 131.0 S.F.

EXISTING DETACHED BUILDING
ADU 270.3 S.F.
1946 GARAGE 402.5 S.F.
1925 (ORIGINAL) GARAGE 151.3 S.F.
ATTACHED STORAGE 66.0 S.F.

PROPOSED
MAIN RESIDENCE RENOVATED 274.9 S.F.
MAIN ADDITION 1ST FLOOR 497.6 S.F.
MAIN ADDITION 2ND FLOOR 521.4 S.F.
TOTAL ADDITION 1,019.0 S.F.
TOTAL RESIDENCE 1,929.0 S.F.

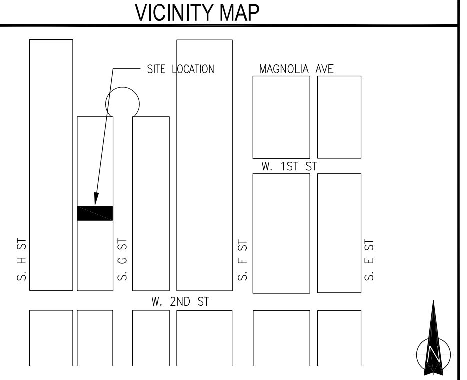
TITLE-24 ENERGY SUMMARY:
ATTIC SPACE: R-30
EXTERIOR WALLS: R-15
SUB-FLOOR: R-19

APPLICABLE CODES

ALL WORK SHALL CONFORM TO:

2019 BUILDING STANDARDS ADMINISTRATIVE CODE, PT. 1, TITLE 24 C.C.R.
2019 CA BUILDING CODE, PT. 2, TILE 24 C.C.R.
2019 CA ELECTRICAL CODE, PT. 3, TILE 24 C.C.R.
2019 CA MECHANICAL CODE, PT. 4, TITLE 24 C.C.R.
2019 CA PLUMBING CODE, PT. 5, TITLE 24 C.C.R.
2019 CA FIRE CODE, PT. 9 TITLE 24 C.C.R.
2019 CA ENERGY CODE, (CEnC) TITLE 24 C.C.R.
2019 CA REFERENCED STANDARDS CODE, PT. 12, TITLE 24 C.C.R.
2019 NFPA 72, NATIONAL FIRE ALARM CODES

VICINITY MAP



PROJECT DIRECTORY

OWNER
JOSE & CINDY HERNANDEZ
121 G STREET
OXNARD CA

DESIGNER
SANCHEZ PLANNING & DESIGN
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ENERGY CONSULTANT
TITLE24NOW
INFO@TITLE24NOW.COM
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STRUCTURAL ENGINEER
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THOUSAND OAKS, CA 91360
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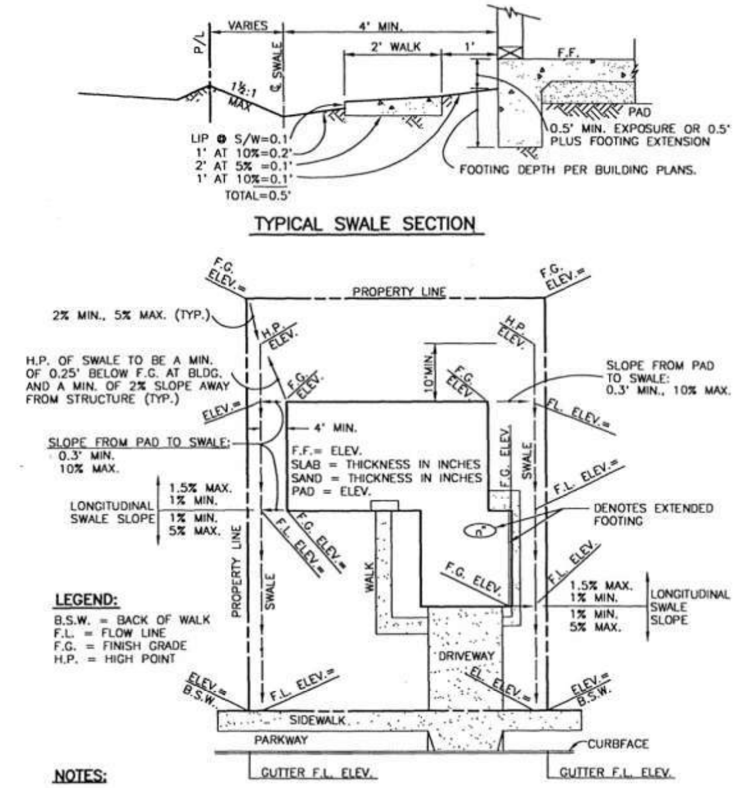
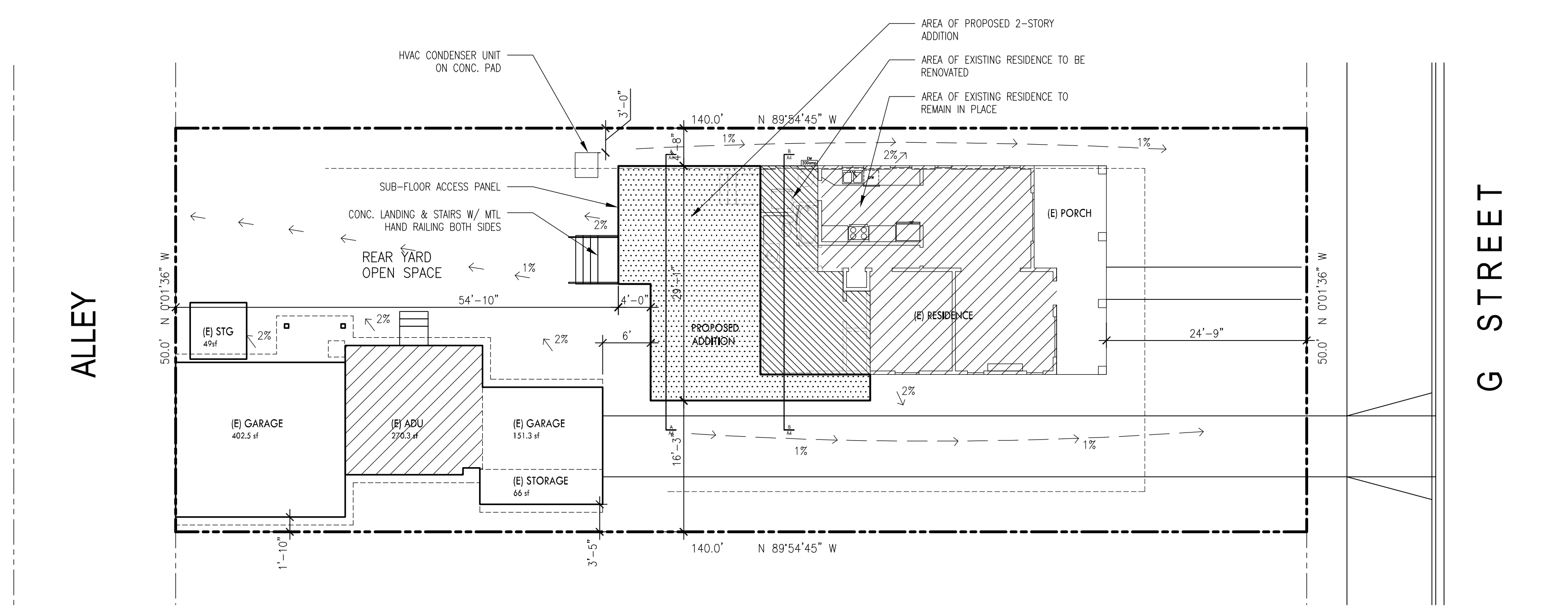
PERSPECTIVE 1



NOTES:

1. THE (n) DENOTES AN EXTENDED FOOTING WHERE "n" EQUALS THE EXTENDED FOOTING DEPTH.
2. DEVIATION FROM THIS CRITERIA WILL REQUIRE PRIOR APPROVAL OF THE CITY OF OXNARD.
3. CALL OUT ALL ELEVATIONS AS SHOWN.
4. THIS PLATE PRIMARILY APPLIES TO SINGLE FAMILY RESIDENTIAL DEVELOPMENT. FINISH FLOOR ELEV. SHALL BE 25" ABOVE THE LOWEST ADJACENT STREET GUTTER OR BE PROTECTED FROM A 100 YEAR STORM STORM, WHICHEVER IS GREATER.
5. SIDEWALK DRAINS SHALL NOT BE USED IN RESIDENTIAL CONSTRUCTION.

OXNARD STANDARD PLATE 601 1



0 5' 10' 20'
SCALE: 1" = 10'-0"

SITE PLAN 1

SHEET INDEX

ARCHITECTURAL

SHT	REV	DATE	DESCRIPTION
A1			SITE PLAN
G1			GENERAL NOTES
G2			GREEN BUILDING NOTES
A1			DEMOLITION / ROOF PLAN
A2			FLOOR PLAN
A3			ROOF PLAN
A4			SECTIONS A, B, C
A5			EXTERIOR ELEVATIONS
A6			ARCHITECTURAL DETAILS
A7			ARCHITECTURAL DETAILS
EC1			T-24 ENERGY CERT
EC2			T-24 ENERGY CERT

STRUCTURAL

SHT	REV	DATE	DESCRIPTION
SN-1			STRUCTURAL GENERAL NOTES
SN-2			STRUCTURAL GENERAL NOTES
S-1			FOUNDATION PLAN
S-2			FIRST FLOOR FRAMING PLAN
S-3			SECOND FLOOR ROOF FRAMING
SD-1			STRUCTURAL DETAILS
SD-2			STRUCTURAL DETAILS
SD-3			STRUCTURAL DETAILS

GENERAL NOTES

A. DOWN SPOUTS AND AREA DRAINS TO BE ROUTED TO NON- EROSIVE AREAS OR APPROVED WATER COARSE.
B. SOILS PREPARATION IS TO CONFORM TO UBC MIN. REQUIREMENTS.
C. FINISH GRADING FOR RESIDENTIAL ADDITIONS SHALL HAVE NO UNDRAINED AREAS AND ALL WATER RUNOFF SHALL DRAIN TO THE STREET AND ALLEY. SEE DETAIL 13/D2.
D. THE ADDITION SHALL BE CONSTRUCTED AS TO HAVE A FINISH FLOOR AT LEAST 25" (2.08') ABOVE THE ELEVATION OF THE LOWEST ADJACENT STREET GUTTER.
E. "NO GRADING PERMIT REQUIRED" - LESS THEN 50 CUBIC YARDS OF EARTH MOVED WILL NOT REQUIRE A GRADING PERMIT.
F. ALL HOLDOWNS SHALL BE SET IN PLACE BY TEMPLATE PRIOR TO FOUNDATION INSPECTION.

Sanchez Planning & Design
505 S. A Street, Ste 200 Oxnard CA 93030
Tel 805.512.6476 email - out4mike@gmail.com

No.	REVISIONS	DATE
	PLAN CHECK REVISIONS RES# 5404000	06/ 00 /2021

RESIDENTIAL ADDITION

HERNANDEZ Residence
121 S. G Street Oxnard CA 93030
APN 202-0-030-410

	No.	DATE
Project No:	2102	2021.04.05

COVER / SITE PLAN

A0

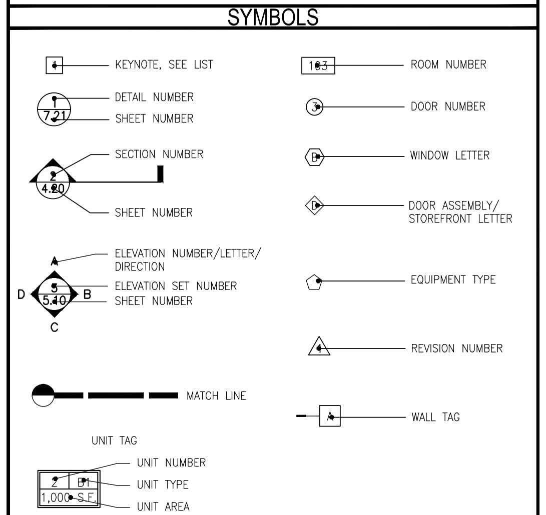
SHEET OF

County of Ventura
May 9, 2022
Cultural Heritage Board Meeting
Item 7a
Exhibit 1 – Proposed Plans

ABBREVIATIONS

L	ANGLE
#	NUMBER
AB	ANCHOR BOLT
ABV	ABOVE
AC	ACOUSTIC
ACP	ASPHALTIC CONCRETE PAVING
ADJ	ADJUSTABLE
AFF	ABOVE FINISH FLOOR
AL	ALUMINUM
BD	BOARD
BLDG	BUILDING
BLKG	BLOCKING
BM	BEAM
BTWN	BETWEEN
BUR	BUILT-UP ROOFING
C	CHANNEL or CONDUIT
CAB	CABINET
CB	CATCH BASIN
CEM	CEMENT
CI	CAST IRON
CJ	CONSTRUCTION JOINT
CL	CENTERLINE
CLG	CEILING
CLO	CLOSET
CLR	CLEAR
CMU	CONCRETE MASONRY UNIT
CONC	CONCRETE
COND	CONDITION
CONT	CONTINUOUS
CPT	CARPET
CT	CERAMIC TILE
CTR	COUNTER
CTSK	COUNTERSINK
D	DEEP
DBL	DOUBLE
DF	DOUGLAS FIR or DRINKING FOUNTAIN
DET	DETAIL
DIM	DIMENSION
DN	DOWN
DR	DOOR
DS	DOWNSPOUT
DWR	DRAWER
E	EAST
(E)	EXISTING
EA	EACH
EJ	EXPANSION JOINT
EL	ELECTRICAL
ELEV	ELEVATION
EPB	ELECTRICAL PANELBOARD
EQ	EQUAL
EW	EACH WAY
EXT	EXTERIOR
FAU	FORCED-AIR UNIT
FD	FLOOR DRAIN
FDN	FOUNDATION
FFL	FINISH FLOOR LINE
FG	FINISH GRADE or FIXED GLASS
FHWS	FLAT HEAD WOOD SCREW
FIXT	FIXTURE
FIN	FINISH
FLR	FLOOR
FLUOR	FLUORESCENT
FO	FACE OF
FOC	FACE OF CONCRETE
FOM	FACE OF MASONRY
FOS	FACE OF STUD
FP	FIREPLACE
FRM	FRAME
FTG	FOOTING
GA	GAUGE
GALV	GALVANIZED
GFI	GROUND FAULT INTERRUPT
GI	GALVANIZED IRON
GL	GLASS or GLAZING
GND	GROUND
GR	GRADE
GWB	GYPSUM WALLBOARD
H	HIGH
HB	HOSE BIBB
H/C	HANDICAPPED
HDWE	HARDWARE
HM	HOLLOW METAL
HR	HOUR
HT	HEIGHT
HWD	HARDWOOD
HWH	HOT WATER HEATER
ID	INSIDE DIMENSION
INSUL	INSULATION
INT	INTERIOR
JT	JOINT
LAM	LAMINATE
LH	LEFT HAND
LKG	LOOKING
L/S	LAZY SUSAN
LT	LIGHT
LVR	LOUVER
MAS	MASONRY
MATL	MATERIAL
MAX	MAXIMUM
MB	MACHINE BOLT
MC	MEDICINE CABINET
(ME)	MATCH EXISTING
MFR	MANUFACTURER
MIN	MINIMUM
MISC	MISCELLANEOUS
MO	MASONRY OPENING
MTD	MOUNTED
MTL	METAL
N	NORTH
(N)	NEW
NG	NATURAL GRADE
NIC	NOT IN CONTRACT
NTS	NOT TO SCALE
O/	OVER
OBS	OBSCURE
OC	ON CENTER
OD	OUTSIDE
OH	OVERHEAD
OPG	OPENING
OPP	OPPOSITE
OTO	OUT TO OUT
P	POST
PC	PRECAST
PDF	POWDER-DRIVEN FASTENER
PL	PLATE LINE
PLAM	PLASTIC LAMINATE
PLAS	PLASTER
PNL	PANEL
PR	PAIR
PT	POINT
PTDF	PRESSURE TREATED DOUGLAS FIR
PTN	PARTITION
PWD	PLYWOOD
QT	QUARRY TILE
QTY	QUANTITY
R	RISER or RADIUS
(R)	RELOCATE EXISTING
RC	RESILIENT CHANNEL
RD	ROOF DRAIN
REFR	REFRIGERATOR
REINF	REINFORCING
REQD	REQUIRED
RH	RIGHT HAND
RM	ROOM
RO	ROUGH OPENING
RS	ROUGH SAWN
RWD	REDWOOD
RWL	RAINWATER LEADER
S	SOUTH
SC	SOLID CORE
SHT	SHEET
SHTG	SHEATHING
SHWR	SHOWER
SHV	SHELF
SIM	SIMILAR
SPEC	SPECIFICATION
SMS	SHEET METAL SCREW
SOV	SHUT-OFF VALVE
SQ	SQUARE
SS	STAINLESS STEEL
STD	STANDARD
STL	STEEL
STRL	STRUCTURAL
SUSP	SUSPENDED
T	TREAD
TB	TOWEL BAR
TBR	TO BE REMOVED
TC	TOP OF CURB
TEL	TELEPHONE
TEMP	TEMPERED
TEN	TYPICAL EDGE NAILING
T&G	TONGUE & GROOVE
THK	THICK
TP	TOP OF PAVING
TS	TOP OF SLAB
TSR	TOP-SET RUBBER
TV	TELEVISION CABLE
TW	TOP OF WALL
TYP	TYPICAL
T'HOLD	THRESHOLD
UG	UNDERGROUND
UNF	UNFINISHED
UON	UNLESS OTHERWISE NOTED
VERT	VERTICAL
VG	VERTICAL GRAIN
VIN	VINYL
VT	VINYL TILE
VTR	VENT THROUGH ROOF
W	WIDE or WEST
W/	WITH
WC	WATER CLOSET
WD	WOOD
WDW	WINDOW
WI	WROUGHT IRON
WP	WEATHERPROOF
WPM	WATERPROOF MEMBRANE
WT	WEIGHT
WWM	WELDED WIRE MESH

SYMBOLS



ELECTRICAL

ONE 15 AMP. CIRCUIT SHALL FEED NO MORE THAN 600 SQ. FT. AREA OR 10 RECEPTACLES

ONE 20 AMP. CIRCUIT SHALL FEED NO MORE THAN 800 SQ. FT. AREA OR 13 RECEPTACLES

TWO 20 AMP. CIRCUITS PER SEC. 220-4(b) FOR SMALL APPLIANCE CIRCUITS FOR EA. 1500 VA (1500 WATTS, PER SEC. 220-16(a) TO SERVE ALL RECEPTACLE OUTLETS INCLUDING REFRIGERATION EQUIPMENT, IN THE KITCHEN, BREAKFAST ROOM, DINING ROOM, OR SIMILAR AREA

D. ONE 15 AMP. LAUNDRY CIRCUIT FOR EACH 1500 VA (OR 1500 WATTS, PER SEC. 220-16(b).

E. PLACE RECEPTACLES AT 15" MINIMUM FROM FINISHED FLOORS TO CENTER OF RECEPTACLE

F. ONE 15 AMP. CIRCUIT SHALL FEED NO MORE THAN 600 SQ. FT. AREA OR 10 RECEPTACLES

G. ONE 15 AMP. CIRCUIT SHALL FEED NO MORE THAN 600 SQ. FT. AREA OR 10 RECEPTACLES

H. HORIZONTAL SPACE BETWEEN RECEPTACLES IN BEDROOMS, LIVING ROOMS, DEN, SUN ROOMS, RECREATIONAL ROOMS ETC; NO POINT ALONG THE FLOOR LINE IN ANY WALL SPACE (2 ft. OR WIDER) SHALL BE MORE THAN 6 FT. FROM AN OUTLET IN THAT SPACE

I. PROVIDE GROUND FAULT CIRCUIT INTERRUPTION (GFIC) FOR RECEPTACLES INSTALLED IN BATHROOMS, GARAGES, OUTDOORS WITHIN 6'-6" ABOVE GRADE OR ACCESS LEVEL, CRAWL SPACES IN UNFINISHED (NOT HABITABLE) BASEMENTS, IN WET AREAS WITHIN 6' OF A SINK IN A BATHROOM, KITCHEN, WET BAR OR SIMILAR SITUATIONS

J. INTERIOR LIGHTING- ICANDESCENT LIGHTING MAY BE USED IN BATH, STORAGE, GAME ROOMS PROVIDED THAT THE LIGHT(S) ARE CONTROLLED BY A "MANUAL-ON" SENSOR; OR SPECIFY FLUORESCENT LIGHT (PINBASE SOCKET FIXTURE) ON THE LIGHTING PLAN.
EXTERIOR LIGHTING- FLUORESCENT LIGHT (PINBASE SOCKET FIXTURE) OR ICANDESCENT LIGHT SHAL BE BY A PHOTOCONTROL/MOTION SENSOR TYPE.

K. THE LIGHTING FIXTURES THAT ARE RECESSED INTO INSULATED CEILINGS ARE REQUIRED TO BE RATED FOR INSULATION CONTACT (IC RATED) SO THAT INSULATION CA BE PLACED OVER THEM. tHE HOUSING OF THE FIXTURE SHALL BE AIRTIGHT TO PREVENT CONDITIONED AIR FROM ESCAPING INTO THE CEILING CAVITY OR ATTIC SPACE OR PREVENT UNCONDITIONED AIR FROM INFILTERATING INTO CONDITIONED SPACE.

PLUMBING

ALL LABOR MATERIALS AND EXCECUTION REQUIRED FOR PLUMBING WORK, WHICH INCLUDES WASTE AND VENT PIPING, HOT AND COLD WATER SUPPLY, GAS PIPING OR OTHER PLUMBING WORK AS INDICATED IN THE DRAWINGS SHALL CONFORM TO THE UNIFORM PLUMBING CODE AS AMENDED AND ADOPTED BY THE GOBERNING AGENCIES.

PLUMBING FIXTURES WITH THE FOLLOWING MAX WATER USAGE SHALL BE INSTALL IN THE ADDITION WHERE APPLICABLE AND IN (E) BATHROOMS, WASHROOMS, KITCHEN, LAUNDRY, ETC.

1. TANK-TYPE TOILETS SHALL HAVE A MAXIMUM FLUSH OF 1.6 GALLONS
2. WATER SAVING SHOWERHEADS SHALL HAVE A MAXIMUM FLOW OF 2.5 GALLONS PER MIN.
   SHALL BE INSTALLED AT A HEIGHT OF 70" ABOVE THE DRAIN INLET AND SHALL HAVE A SMOOTH, HARD, NON-ABSORBENT SURFACE
3. WATER SAVING SINK AND LAVATORY FAUCETS SHALL HAVE A MAXIMUM FLOW OF 2.2 GALLONS PER MIN.

SHOWER AND SHOWER-TUB CONBINATIONS SHALL BE PROVIDED WITH INDIVIDUAL VALVES OF THE PRESSURE BALANCE OR THERMOSTATIC MIXING VALVE TYPE

USE TYPE "L" OR HARDER COPPER SUPPLY LINES WITHIN STRUCTURE. NO LINES IN OR UNDER SLAB

ALL HOSE BIBS SHALL BE PROTECTED BY AN APPROVED NON-REMOVAL TYPE BACK FLOW PREVENTER DEVICE

GENERAL

1. CONTRACTOR SHALL REVIEW ALL OF THE CONTRACT DOCUMENTS, THE PROJECT SITE AND BECOME FAMILIAR WITH THE SCOPE OF WORK AND INTENT OF THE CONTRACT DOCUMENTS. IT IS INCUMBENT UPON THE CONTRACTOR TO NOTIFY THE ARCHITECT IMMEDIATELY UPON DISCOVERING DISCREPANCIES OR CONFLICTS IN THE CONTRACT DOCUMENTS. DURING BIDDING, OBTAIN PROPER, WRITTEN CLARIFICATION OF THE DISCREPANCY, CONFLICT, OR UNCLEAR ITEM PRIOR TO SUBMISSION OF BIDS. DURING CONSTRUCTION, DO NOT PROCEED WITH INSTALLATIONS OR APPLICATION OF CONSTRUCTION THAT MAY BE AFFECTED THEREBY, UNTIL THE DISCREPANCY OR CONFLICT IS RESOLVED.
2. IT IS REQUIRED THAT ALL CONTRACTORS AND THEIR PERSONNEL ARE PROPERLY TRAINED AND COMPETENT TO CONSTRUCT AND OTHERWISE CARRY OUT THE INTENT OF THE WORK INCORPORATED INTO THE CONTRACT DOCUMENTS.
3. THE CONTRACT DOCUMENTS CONSIST OF THE COMPLETE PLANS, SPECIFICATIONS, REPORTS, BIDDING INFORMATION AND OTHER INFORMATION PREPARED BY THE ARCHITECT, ITS CONSULTANTS OR THE CONSULTANTS HIRED BY THE OWNER. IN THE EVENT OF DISCREPANCIES OR CONFLICTS IN THE DOCUMENTS, INFORMATION IN THE SPECIFICATIONS SHALL TAKE PRECEDENCE OVER THE DRAWINGS, AND LARGE SCALE DRAWINGS SHALL TAKE PRECEDENCE OVER SMALLER SCALE DRAWINGS.
4. EACH CONTRACTOR SHALL BE RESPONSIBLE FOR REVIEWING ALL OF THE CONTRACT DOCUMENTS AS THEY RELATE TO THE CONTRACTOR'S WORK. IN ADDITION, EACH CONTRACTOR IS RESPONSIBLE TO COORDINATE THEIR OWN WORK WITH THE WORK OF OTHER TRADES.
5. ALL WORK SHALL CONFORM TO THE REQUIREMENTS OF THE 2001 EDITION OF THE CALIFORNIA BUILDING CODE, AND ALL APPLICABLE STATE AND LOCAL CODES AND ORDINANCES.
6. ONLY APPROVED WORKING DRAWINGS, WITH THE STATEMENT "ISSUED FOR CONSTRUCTION" ON THE COVER SHEET, SHALL BE USED FOR CONSTRUCTION OF THIS PROJECT.
7. ALL DIMENSIONS ARE TO FACE OF STUD WALL OR FACE OF CONCRETE, UNLESS OTHERWISE NOTED.
8. DO NOT SCALE DRAWINGS. VERIFY ALL DIMENSIONS AND CONDITIONS IN FIELD. IMMEDIATELY REPORT ANY DISCREPANCIES OR VARIATIONS TO THE OWNER'S REPRESENTATIVE.
9. ALL GLAZING INSTALLED IN HAZARDOUS LOCATIONS, AS DEFINED BY CBC CHAPTER 24, SHALL BE TEMPERED GLASS.
10. CONTRACTOR SHALL VERIFY ELECTRICAL AND MECHANICAL LOADS GENERATED BY TENANT'S EQUIPMENT PRIOR TO ORDERING. ITEMS AFFECTING THE ARCHITECTURAL NATURE OR STRUCTURE OF THE PROJECT OR EXISTING CONSTRUCTION SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT IMMEDIATELY.
11. FLASH AND SEAL ALL ROOF PENETRATIONS AND ROOF MOUNTED EQUIPMENT CURBS IN ACCORDANCE WITH ROOFING MANUFACTURER'S SPECIFICATIONS AND CURRENT S.M.A.C.N.A. STANDARDS.
12. PENETRATIONS OF FIRE RESISTIVE WALLS AND ROOF/CEILINGS SHALL BE PROTECTED AS REQUIRED BY UBC SECTIONS 710.
13. WALL AND CEILING MATERIALS SHALL NOT EXCEED THE FLAME SPREAD CLASSIFICATIONS IN UBC TABLE 8-B.
14. ALL WEATHER EXPOSED SURFACES SHALL HAVE A WEATHER RESISTIVE BARRIER TO PROTECT INTERIOR WALL SURFACES, AND EXTERIOR OPENINGS SHALL BE FLASHED IN SUCH A MANNER AS TO MAKE THEM WEATHERPROOF.
15. SUSPENDED CEILING SYSTEMS, WHERE USED, SHALL BE DESIGNED AND INSTALLED TO RESIST LATERAL FORCES AS REQUIRED BY CODE, INCLUDING ALL LIGHT FIXTURES AND MECHANICAL SYSTEM COMPONENTS.
16. ALL HOLD-DOWNS SHALL BE SET IN PLACE BY USE OF TEMPLATE, PRIOR TO FOUNDATION INSPECTION. SEE SHEAR SCHEDULE FOR SIZE AND SPACING OF ANCHOR BOLTS.
17. STRUCTURAL OBSERVATIONS BY THE STRUCTURAL ENGINEER SHALL BE PERFORMED AS REQUIRED BY THE BUILDING AUTHORITY.
18. ALL FIRE RESISTIVE CONSTRUCTION SHALL MEET THE REQUIREMENTS OF UBC CHAPTER 7 AND BE CONSTRUCTED OF LISTED WALL, CEILING OR FLOOR ASSEMBLIES PER TABLE 7-C AND ADDITIONAL APPROVED ASSEMBLIES LISTED BY THE GYPSUM ASSOCIATION 1983 DESIGN MANUAL, 12TH EDITION.
19. ALL PENETRATIONS OF FIRE RESISTIVE WALL AND/OR CEILING ASSEMBLIES SHALL BE MADE IN ACCORDANCE WITH UBC CHAPTER 7, INCLUDING LIMITATION OF SIZE, TYPE AND INDIVIDUAL FIRE RATING OF THE PENETRATING ITEM OR ASSEMBLY. ADDITIONAL THROUGH WALL AND MEMBRANE PENETRATIONS SHALL BE PROVIDED WITH "F" OR "T" FIRE BLOCKING AS SPECIFIED AND APPROPRIATE IN UBC SECTION 709.6, 709.7 AND 714 FOR THE METHOD OF PENETRATION BEING USED.
20. SPECIAL INSPECTION, IN ACCORDANCE WITH CBC SECTION 106.18 AND CHAPTER 17 IS REQUIRED FOR TYPES OF CONSTRUCTION NOTED BELOW:
    - ☐ GREATER THAN 2500 PSI CONCRETE STRENGTH
    - ☐ SOIL COMPLIANCE PRIOR TO FOUNDATION INSPECTION
    - ☐ MASONRY CONSTRUCTION
    - ☐ FIELD WELDING AND/OR HIGH STRENGTH BOLTS
    - ☐ CAISSON OR PILING FOUNDATIONS
    - ☐ SHOTCRETE OR GUNNITE CONSTRUCTION
    - ☐ POST-TENSIONED CONCRETE
    - ☐ SPECIAL CONSTRUCTION
    - ☒ ___
    - ☐ **NO SPECIAL INSPECTION REQUIRED**

SAFETY

1. CONTRACTOR SHALL ASSUME SOLE AND COMPLETE RESPONSIBILITY FOR JOB SITE CONDITIONS DURING THE COURSE OF CONSTRUCTION, INCLUDING SAFETY OF ALL PERSONS AND PROPERTY. THIS REQUIREMENT SHALL APPLY CONTINUOUSLY, AND SHALL NOT BE LIMITED TO NORMAL WORKING HOURS.
2. HAZARDOUS MATERIALS SHALL NOT BE STORED IN THE BUILDING, NOR USED IN CONSTRUCTION IN QUANTITIES EXCEEDING THOSE SPECIFIED IN UBC TABLE 3-D, OR APPLICABLE SECTIONS OF THE UNIFORM FIRE CODE.
3. GLAZING WITHIN 18" OF ANY WALKING SURFACE, AND GLAZING WITHIN 12" OF ANY EXTERIOR DOOR OPENING SHALL BE TEMPERED GLASS IN ACCORDANCE WITH UBC SECTION 2406.4.

MOISTURE AND THERMAL PROTECTION

1. ALL ROOFING AND FLASHING MATERIALS SHALL BE INSTALLED IN STRICT CONFORMANCE WITH THE MANUFACTURERS SPECIFICATIONS AND IN ACCORDANCE WITH CHAPTER 15 OF THE LATETST EDITION OF THE UNIFORM BUILDING CODE
2. ALL ROOFING AND FLASHING MATERIALS SHALL BE INSTALL TO FORM A WATER-PROOF SYSTEM. AND THE ROOFING CONTRACTOR SHALL ISSUE A WRITTEN GUARANTEE TO THE OWNER TO MAINTAIN THE ROOFING AND ALL FLASHING IN A WATER-TIGHT CONDITION FOR A PERIOD OF TEN YEARS AFTER ACCEPTANCE OF THE PROJECT, UNLESS NOTED OTHERWISE
3. ALL SHEET METAL WORK SHALL BE ACCURATELY FORMED AND SET, INSTALLED AND SET WHERE REQUIRED FOR A WATER-TIGHT JOB. ALL METAL SHALL BE THOROUGHLY SHOP PRIMED PRIOR TO INSTALLATION, WITH GALV-V-A-GRIP OR EQUAL. SHEET METAL SHALL BE 26 GA. OR THICKER

THERMAL INSULATION

1. ALL HEATED PIPES OUTSIDE INSULATION ENVELOPE TO BE INSULATED WITH 1" ARMAFLEX OR EQUAL
2. ALL DUCT-WORK OUTSIDE INSULATION ENVELOPE TO BE INSULATED WITH 1-1/2" SKRIMRAFT OR EQUAL
3. STUFF ALL CRACKS 1" OR LARGER BETWEEN ROUGH FRAMING, WINDOWS AND DOORS WITH INSULATION, PER CHAPTER 1402.1-1402.4
4. ALL EXTERIOR DOORS AND WINDOWS TO BE WEATHER STRIPPED PER CHAPTER 1402.1-1402.4

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Tel 805.512.6476 email - out4mike@gmail.com

No.	REVISIONS	DATE
△	PLAN CHECK REVISIONS RES-1 0-00-0000	06/ 00 /2021

RESIDENTIAL ADDITION

HERNANDEZ Residence
121 S. G Street Oxnard CA 93030
APN 202-0-030-410

	No.	DATE
Project No :	2102	2021.04.05

GENERAL NOTES ABBREVIATIONS

G1

SHEET OF ..

SECTION 4.101
GENERAL

4.101.1 Scope. The provisions of this division outline planning, design and development methods that include environmentally responsible site selection, building design, building siting and development to protect, restore and enhance the environmental quality of the site and respect the integrity of adjacent properties.

SECTION 4.102
DEFINITIONS

4.102.1 Definitions. The following terms are defined in Chapter 2.

FRENCH DRAIN.

WATTLES.

SECTION 4.103
SITE SELECTION
(Reserved)

SECTION 4.104
SITE PRESERVATION
(Reserved)

SECTION 4.105
DECONSTRUCTION AND REUSE OF EXISTING STRUCTURES
(Reserved)

SECTION 4.106
SITE DEVELOPMENT

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

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

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

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

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

Exceptions: Additions and alterations not altering the drainage path.

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

Exceptions: On a case-by-case basis, where the local enforcing agency has determined EV charging and infrastructure are not feasible based upon one or more of the following conditions:

1. Where there is no commercial power supply.
2. Where there is evidence substantiating that meeting the requirements will alter the local utility infrastructure design requirements on the utility side of the meter so as to increase the utility side cost to the homeowner or the developer by more than $400.00 per dwelling unit.

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

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

4.106.4.2 New multifamily dwellings. Where 17 or more multifamily dwelling units are constructed on a building site, 3 percent of the total number of parking spaces provided for all types of parking facilities, but in no case less than one, shall be electric vehicle charging spaces (EV spaces) capable of supporting future EVSE. Calculations for the required number of EV spaces shall be rounded up to the nearest whole number.

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

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

When EV chargers are installed, EV spaces required by Section 4.106.4.2.2, Item 3, shall comply with at least one of the following options:

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

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

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

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

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

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

Notes:

1. The California Department of Transportation adopts and publishes the "California Manual on Uniform Traffic Control Devices (California MUTCD)" to provide uniform standards and specifications for all official traffic control devices in California. Zero Emission Vehicle Signs and Pavement Markings can be found in the New Policies & Directives Number 13-01. Website: *http://www.dot.ca.gov/hq/traffops/policy/13-01.pdf*
2. See Vehicle Code Section 22511 for EV charging space signage in off-street parking facilities and for use of EV charging spaces.
3. The Governor's Office of Planning and Research (OPR) published a "Zero-Emission Vehicle Community Readiness Guidebook" which provides helpful information for local governments, residents and businesses. Website: *https://opr.ca.gov/docs/ZEV_Guidebook.pdf*.
4. The Governor's Interagency Working Group on Zero-Emission Vehicles, 2016, "2016 ZEV Action Plan, An Updated Roadmap toward 1.5 Million Zero-Emission Vehicles on California Roadways by 2025," *https://www.gov.ca.gov/docs/2016_ZEV_Action_Plan.pdf*.

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

Notes:

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

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

Calculations for the required number of EV spaces shall be rounded up to the nearest whole number.

TABLE 4.106.4.3.1

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

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

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

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

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

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

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

Notes:

1. The California Department of Transportation adopts and publishes the "California Manual on Uniform Traffic Control Devices (California MUTCD)" to provide uniform standards and specifications for all official traffic control devices in California. Zero Emission Vehicle Signs and Pavement Markings can be found in the New Policies & Directives Number 13-01. Website: *http://www.dot.ca.gov/hq/traffops/policy.html*.
2. See Vehicle Code Section 22511 for EV charging space signage in off-street parking facilities and for use of EV charging spaces.

SECTION 4.403
FOUNDATION SYSTEMS
(Reserved)

SECTION 4.404
EFFICIENT FRAMING TECHNIQUES
(Reserved)

SECTION 4.405
MATERIAL SOURCES
(Reserved)

SECTION 4.406
ENHANCED DURABILITY AND REDUCED MAINTENANCE

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

SECTION 4.407
WATER RESISTANCE AND MOISTURE MANAGEMENT
(Reserved)

SECTION 4.408
CONSTRUCTION WASTE REDUCTION, DISPOSAL AND RECYCLING

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

Exceptions:

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

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

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

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

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

4.408.4 Waste stream reduction alternative [LR]. Projects that generate a total combined weight of construction and demolition waste disposed of in landfills, which do not exceed 3.4 pounds per square foot of the building area shall meet the minimum 65 percent construction waste reduction requirement in Section 4.408.1.

4.408.4.1 Waste stream reduction alternative. Projects that generate a total combined weight of construction and demolition waste disposed of in landfills, which do not exceed 2 pounds per square foot of the building area, shall meet the minimum 65-percent construction waste reduction requirement in Section 4.408.1.

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

Notes:

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

SECTION 4.409
LIFE CYCLE ASSESSMENT
(Reserved)

SECTION 4.410
BUILDING MAINTENANCE AND OPERATION

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

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

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

Exception: Rural jurisdictions that meet and apply for the exemption in Public Resources Code Section 42649.82 (a)(2)(A) et seq. are not required to comply with the organic waste portion of this section.

SECTION 4.501
GENERAL

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

SECTION 4.502
DEFINITIONS

4.502.1 Definitions. The following terms are defined in Chapter 2.

AGRIFIBER PRODUCTS.

COMPOSITE WOOD PRODUCTS.

DIRECT-VENT APPLIANCE.

MAXIMUM INCREMENTAL REACTIVITY (MIR).

MOISTURE CONTENT.

PRODUCT-WEIGHTED MIR (PWMIR).

REACTIVE ORGANIC COMPOUND (ROC).

VOC.

SECTION 4.503
FIREPLACES

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

SECTION 4.504
POLLUTANT CONTROL

4.504.1 Covering of duct openings and protection of mechanical equipment during construction. At the time of rough installation, during storage on the construction site and until final startup of the heating, cooling and ventilating equipment, all duct and other related air distribution component openings shall be covered with tape, plastic, sheetmetal or other methods acceptable to the enforcing agency to reduce the amount of water, dust and debris, which may enter the system.

4.504.2 Finish material pollutant control. Finish materials shall comply with this section.

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

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

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

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

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

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

TABLE 4.504.1
ADH BSHR VOC LIMIT[1]
Less Water and Less Exempt Compounds in Grams per Liter

ARCHITECTURAL APPLICATIONS	VOC LIMIT
Indoor carpet adhesives	50
Carpet pad adhesives	50
Outdoor carpet adhesives	150
Wood flooring adhesive	100
Rubber floor adhesives	60
Subfloor adhesives	50
Ceramic tile adhesives	65
VCT and asphalt tile adhesives	50
Drywall and panel adhesives	50
Cove base adhesives	50

TABLE CONTINUED →

CONTINUED →

TABLE 4.504.1
ADHESIVE VOC LIMIT[1,2]
Less Water and Less Exempt Compounds in Grams per Liter

ARCHITECTURAL APPLICATIONS	VOC LIMIT
Multipurpose construction adhesives	70
Structural glazing adhesives	100
Single-ply roof membrane adhesives	250
Other adhesives not specifically listed	50
SPECIALTY APPLICATIONS	
PVC welding	510
CPVC welding	490
ABS welding	325
Plastic cement welding	250
Adhesive primer for plastic	550
Contact adhesive	80
Special purpose contact adhesive	250
Structural wood member adhesive	140
Top and trim adhesive	250
SUBSTRATE SPECIFIC APPLICATIONS	
Metal to metal	30
Plastic foams	50
Porous material (except wood)	50
Wood	30
Fiberglass	80

1. If an adhesive is used to bond dissimilar substrates together, the adhesive with the highest VOC content shall be allowed.
2. For additional information regarding methods to measure the VOC content specified in this table, see South Coast Air Quality Management District Rule 1168.

TABLE 4.504.2
SEALANT VOC LIMIT
Less Water and Less Exempt Compounds in Grams per Liter

SEALANTS	VOC LIMIT
Architectural	250
Nonporous	250
Porous	775
Modified bituminous	300
Marine deck	760
Other	750
SEALANT PRIMERS	
Architectural	
Nonporous	250
Porous	775
Modified bituminous	500
Marine deck	760
Other	750

TABLE 4.504.3
VOC CONTENT LIMITS FOR ARCHITECTURAL COATINGS[1,2]
Grams of VOC per Liter of Coating,
Less Water and Less Exempt Compounds

COATING CATEGORY	VOC LIMIT
Flat coatings	50
Nonflat coatings	100
Nonflat-high gloss coatings	150
SPECIALTY COATINGS	
Aluminum roof coatings	400
Basement specialty coatings	400
Bituminous roof coatings	50
Bituminous roof primers	350
Bond breakers	350
Concrete curing compounds	350
Concrete/masonry sealers	100
Driveway sealers	50
Dry fog coatings	150
Faux finishing coatings	350
Fire resistive coatings	350
Floor coatings	100
Form release compounds	250
Graphic arts coatings (sign paints)	500
High temperature coatings	420
Industrial maintenance coatings	250
Low solids coatings[3]	120
Magnesite cement coatings	450
Mastic texture coatings	100
Metallic pigmented coatings	500
Multicolor coatings	250
Pretreatment wash primers	420
Primers, sealers, and undercoaters	100
Reactive penetrating sealers	350
Recycled coatings	250
Roof coatings	50
Rust preventive coatings	250
Shellacs	
Clear	730
Opaque	550
Specialty primers, sealers and undercoaters	100
Stains	250
Stone consolidants	450
Swimming pool coatings	340
Traffic marking coatings	100
Tub and tile refinish coatings	420
Waterproofing membranes	250
Wood coatings	275
Wood preservatives	350
Zinc-rich primers	340

1. Grams of VOC per liter of coating, including water and including exempt compounds.
2. The specified limits remain in effect unless revised limits are listed in subsequent columns in the table.
3. Values in this table are derived from those specified by the California Air Resources Board, Architectural Coatings Suggested Control Measure, February 1, 2008. Most restrictive limit is listed in the Air Resources Board.

4.504.3 Carpet systems. All carpet installed in the building interior shall meet the testing and product requirements of one of the following:

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

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

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

4.504.4 Resilient flooring systems. Where resilient flooring is installed, at least 80 percent of floor area receiving resilient flooring shall comply with one or more of the following:

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

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

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

1. Product certifications and specifications.
2. Chain of custody certifications.
3. Product labeled and invoiced as meeting the Composite Wood Products regulation (see CCR, Title 17, Section 93120, *et seq.*).
4. Exterior grade products marked as meeting the PS-1 or PS-2 standards of the Engineered Wood Association, the American PLYWOOD 2260, European 636 3S, and Canadian CSA O121, CSA O151, CSA O153 and CSA O325 standards.
5. Other methods acceptable to the enforcing agency.

TABLE 4.504.5
FORMALDEHYDE LIMITS[1]
Maximum Formaldehyde Emissions in Parts per Million

PRODUCT	CURRENT LIMIT
Hardwood plywood veneer core	0.05
Hardwood plywood composite core	0.05
Particleboard	0.09
Medium density fiberboard	0.11
Thin medium density fiberboard[2]	0.13

1. Values in this table are derived from those specified by the California Air Resources Board, Air Toxics Control Measure for Composite Wood as tested in accordance with ASTM E1333. For additional information, see *California Code of Regulations*, Title 17, Section 93120 through 93120.12.
2. Thin medium density fiberboard has a maximum thickness of 5/32 inch (8 mm).

SECTION 4.505
INTERIOR MOISTURE CONTROL

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

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

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

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

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

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

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

SECTION 4.506
INDOOR AIR QUALITY AND EXHAUST

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

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

Notes:

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

SECTION 4.507
ENVIRONMENTAL COMFORT

4.507.1 Reserved.

4.507.2 Heating and air-conditioning system design. Heating and air-conditioning systems shall be sized, designed and have their equipment selected using the following methods:

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

Exception: Use of alternate design temperatures necessary to ensure the systems function are acceptable.

SECTION 4.508
OUTDOOR AIR QUALITY
(Reserved)

Sinclair Planning & Design
505 S. A Street, Ste 200 Oxnard CA 93030
Tel 805.512.6476 email - outdmike@gmail.com

No.	REVISIONS	DATE
	PLAN CHECK REVISIONS RESX 000000	08/05/2021

RESIDENTIAL ADDITION

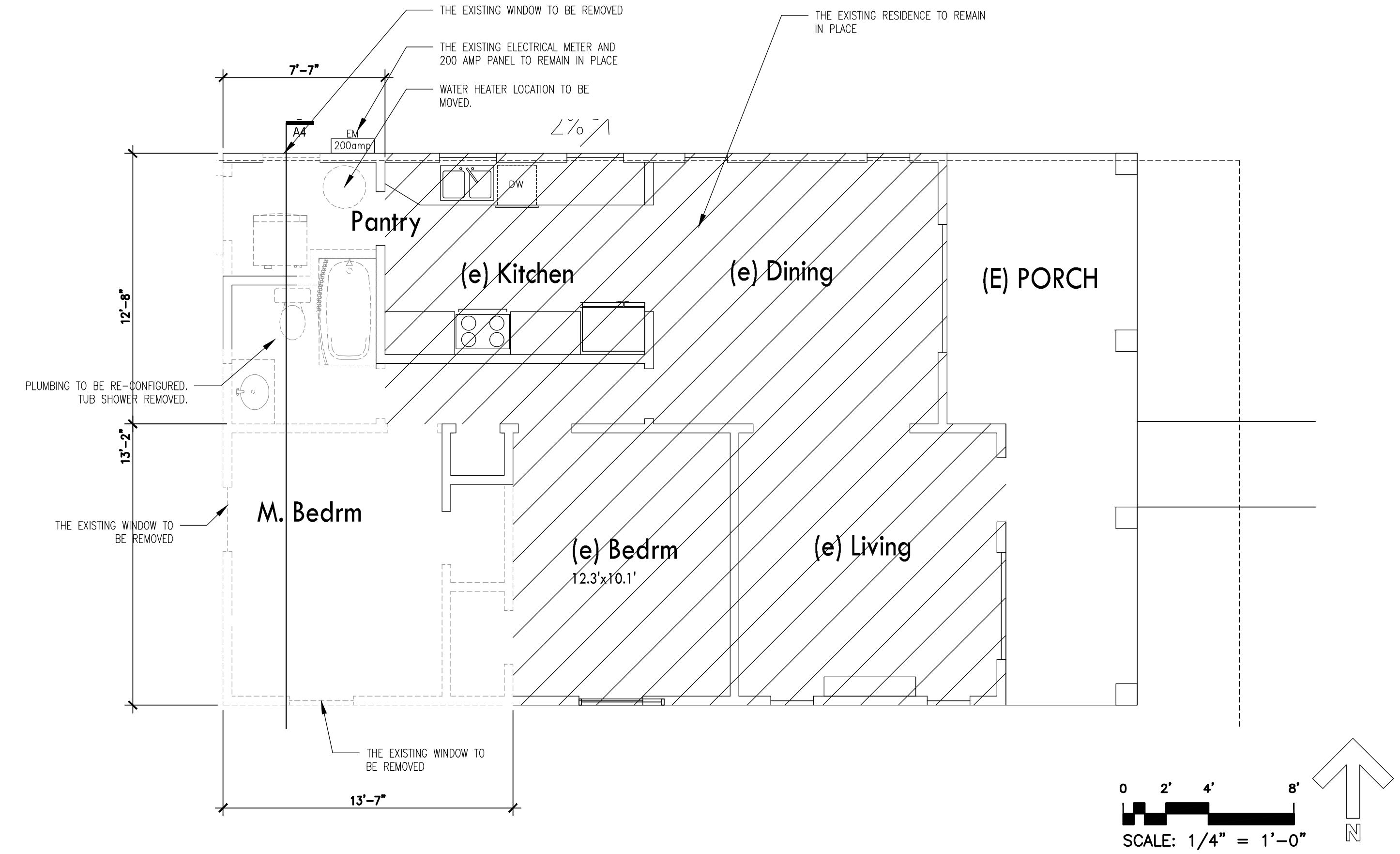
HERNANDEZ Residence
121 S. G Street Oxnard CA 93030
APN 202-0-030-410

No.	DATE
Project No: 2102	2021.04.05

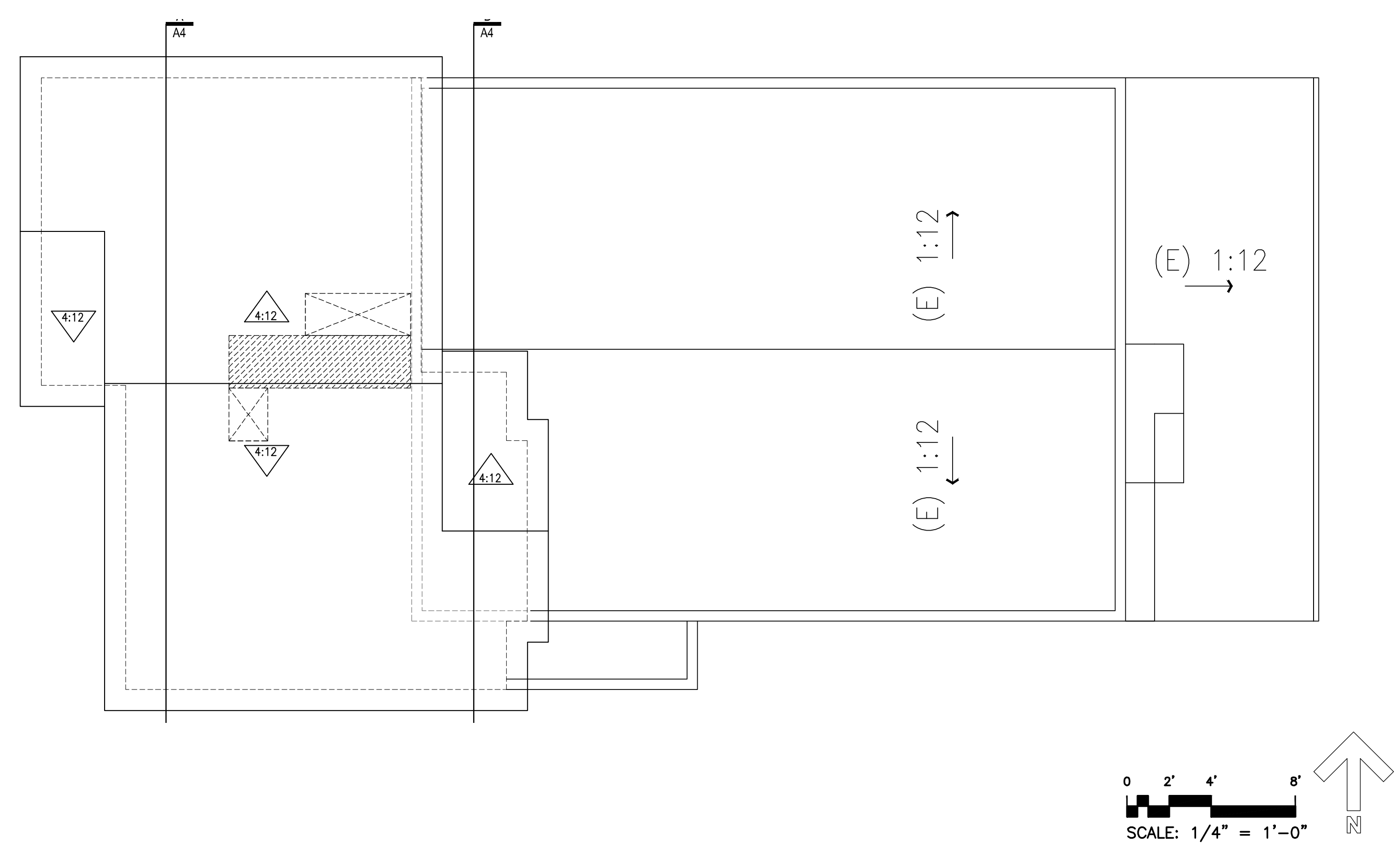
GREEN BUILDING STANDARDS

G2

SHEET OF



DEMOLITION PLAN | 1



ROOF PLAN | 2

GENERAL NOTES

WALL LEGEND

- 2X 6 STUDS @ 16" O.C. W/ GYP BOARD AT INTERIOR SIDES. EXTERIOR WALLS TO HAVE R-19 INSULATION, EXT. STUCCO.
- 2X 4 STUDS @ 16" O.C. W/ GYP. BOARD AT BOTH SIDES
- (E) 2x 4 D.F. STUDS @ 16" O.C.
- (E) 2x 4 WD STUDS TO BE REMOVED

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Tel 805.512.6476 email - out4mike@gmail.com

No.	REVISIONS	DATE
1	PLAN CHECK REVISIONS RES-1 0-00-0000	06/00/2021

RESIDENTIAL ADDITION

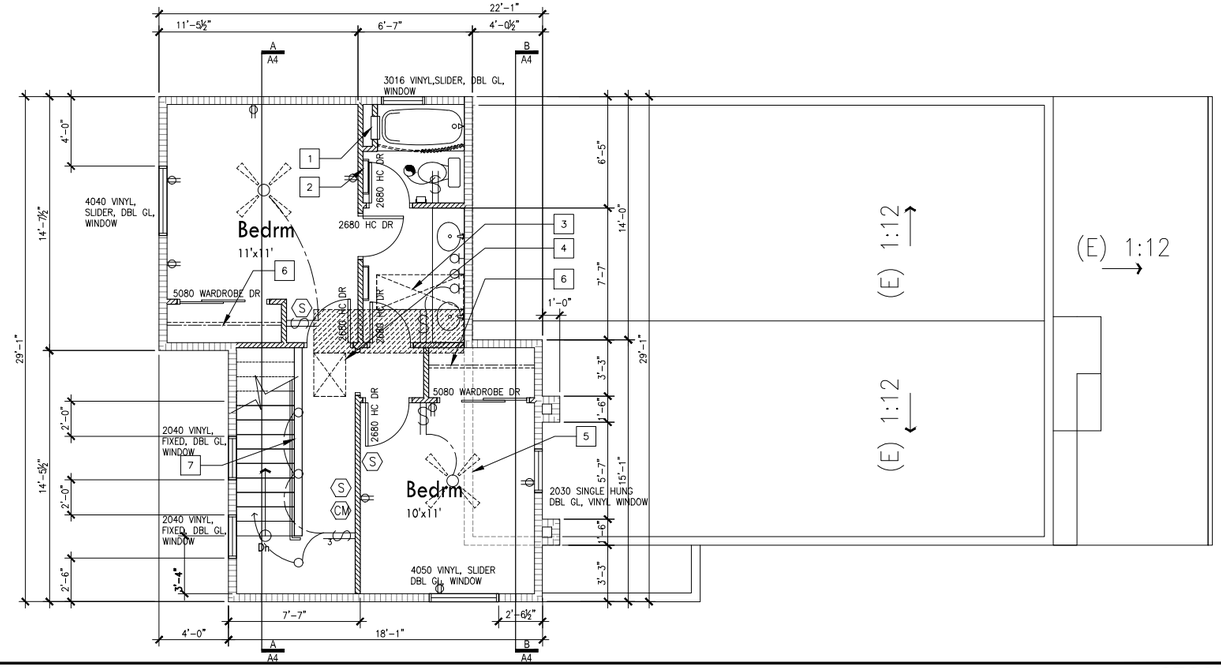
HERNANDEZ Residence
121 S. G Street Oxnard CA 93030
APN 202-0-030-410

	No.	DATE
Project No :	2102	2021.04.05

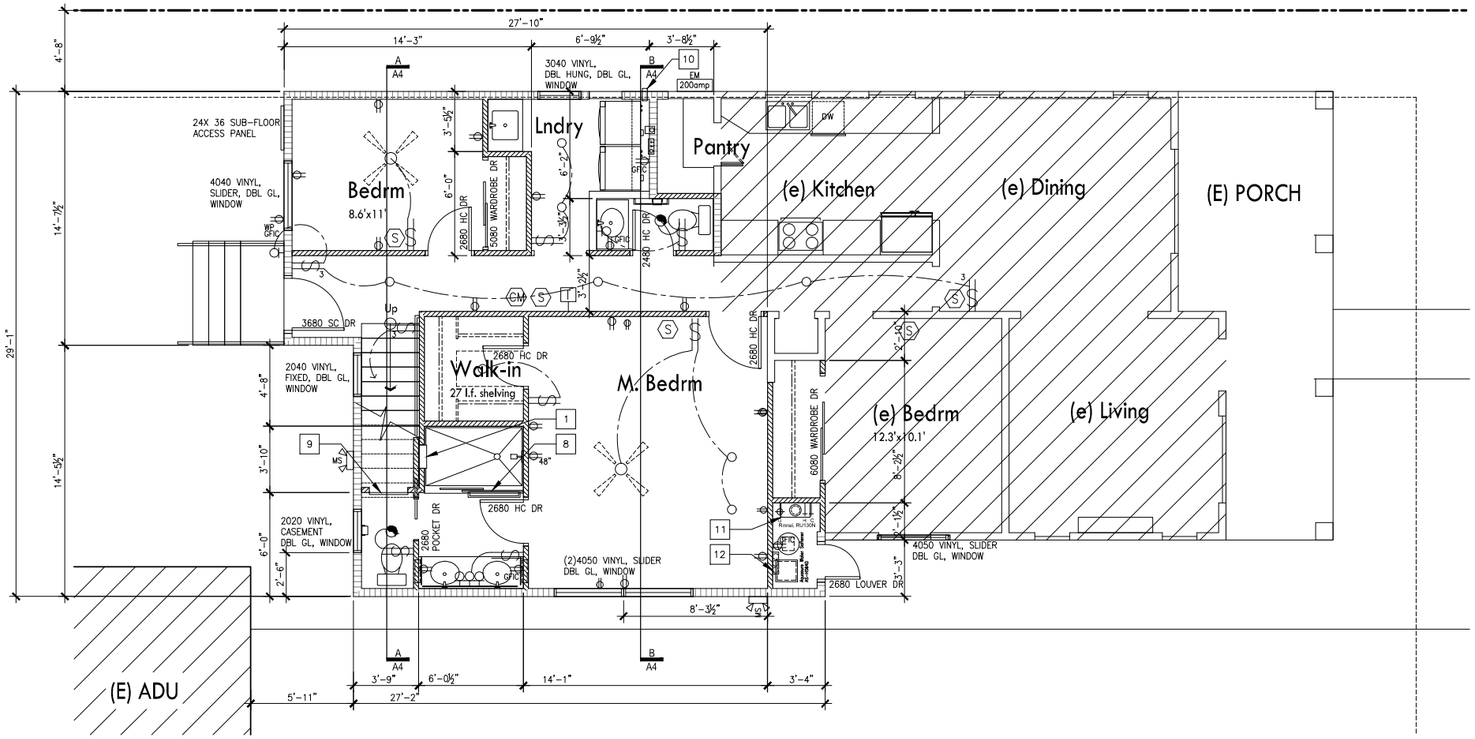
DEMO PLAN
ROOF PLAN

A1

SHEET OF



SECOND FLOOR PLAN | 2



FIRST FLOOR PLAN | 1

KEY NOTES

1. CERAMIC TILE 70" HIGH MIN. SURROUND W/ WALL NICHE 12"x 12".
2. SOLID BLOCKING AT WALL TOWEL BAR.
3. HVAC UNIT IN ATTIC W/ PLYWD ACCESS WAY TO ATTIC ACCESS. SEE SHT A6
4. 22" X 36" ATTIC ACCESS
5. LINE OF EXISTING ROOF PARAPET TO BE REMOVED
6. DOUBLE HUNG SHELF AND POLE
7. 42" HIGH PARTITION WALL
8. TEMP. GLASS SHOWER ENCLOSURE
9. 24"X 80" ACCESS PANEL BELOW STAIRS
10. DRYER VENT TO EXTERIOR WALL
11. WALL MOUNTED ON DEMAND WATER HEATER – RINNAI RU130N
12. WATER SOFTENER UNIT– PER OWNER SPECS.

WALL LEGEND

- 2X 6 STUDS @ 16" O.C. W/ GYP BOARD AT INTERIOR SIDES. EXTERIOR WALLS TO HAVE R-19 INSULATION, EXT. STUCCO.
- 2X 4 STUDS @ 16" O.C. W/ GYP. BOARD AT BOTH SIDES
- (E) 2x 4 D.F. STUDS @ 16" O.C.
- (E) 2x 4 WD STUDS TO BE REMOVED

0 2' 4' 8'
SCALE: 1/4" = 1'-0"

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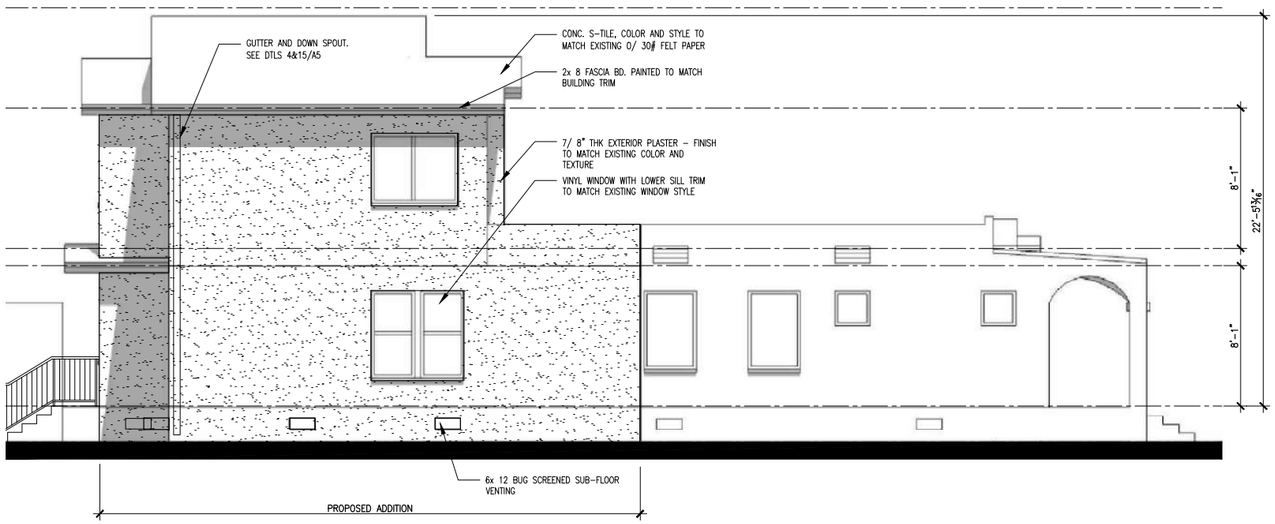
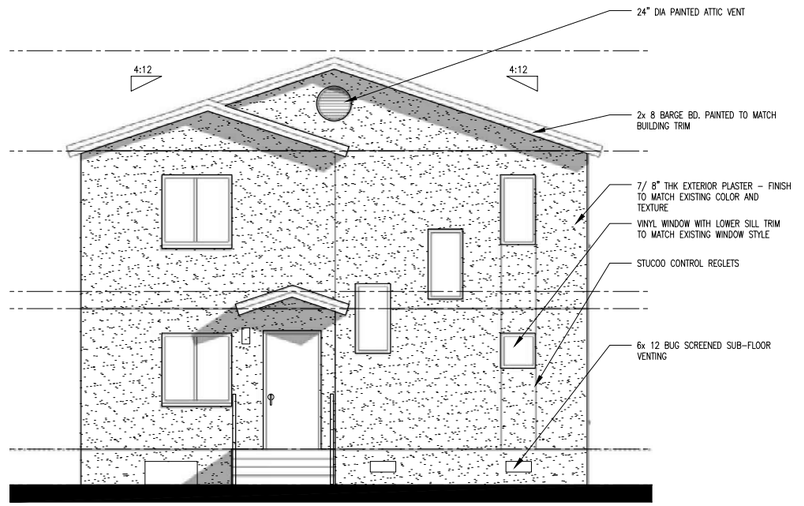
FLOOR PLAN

A2

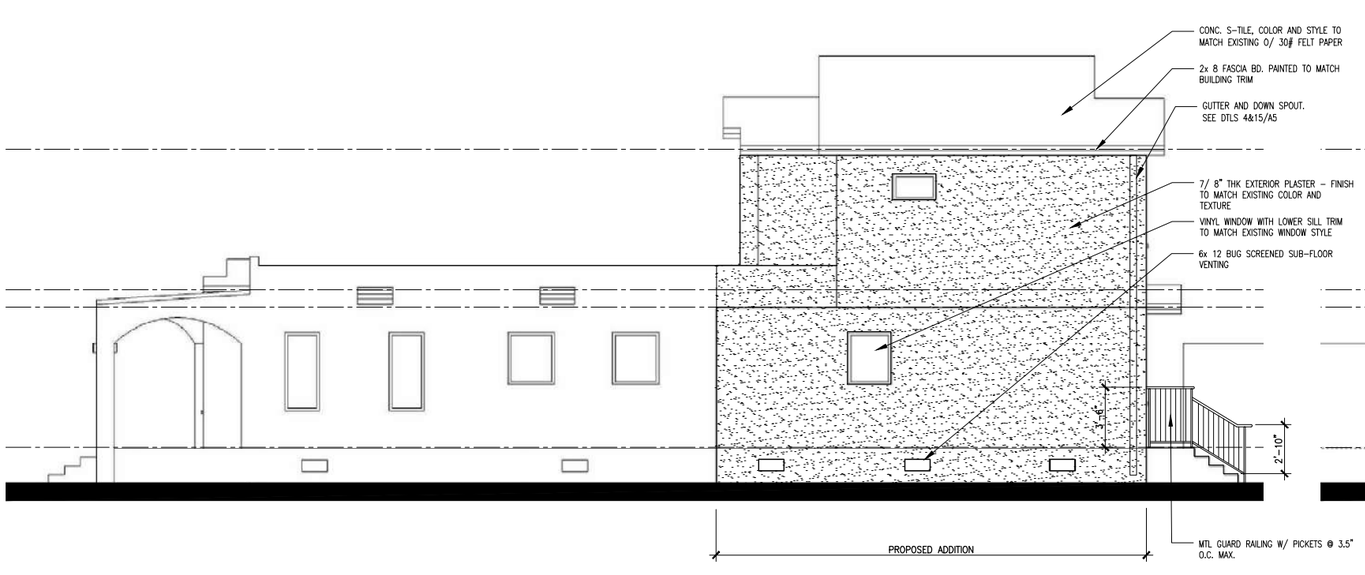
SHEET OF ..



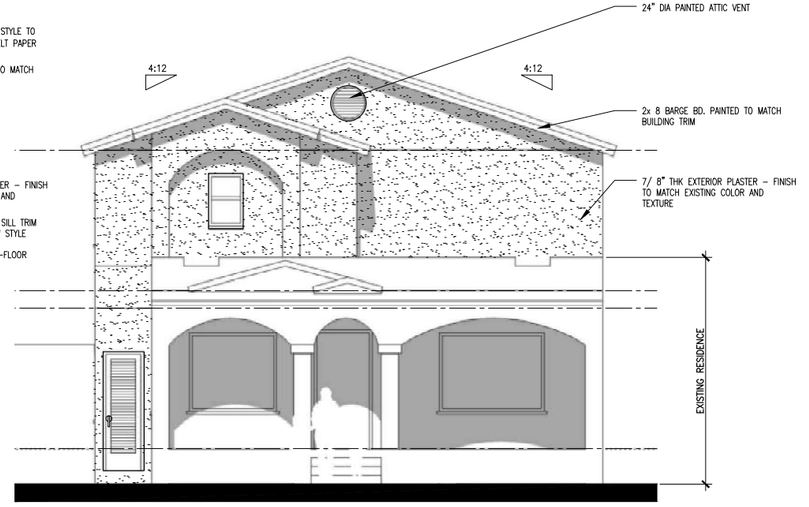
SOUTH ELEVATION | 2



WEST ELEVATION | 1



NORTH ELEVATION | 4



EAST ELEVATION | 3

0 2' 4' 8'
SCALE: 1/4" = 1'-0"

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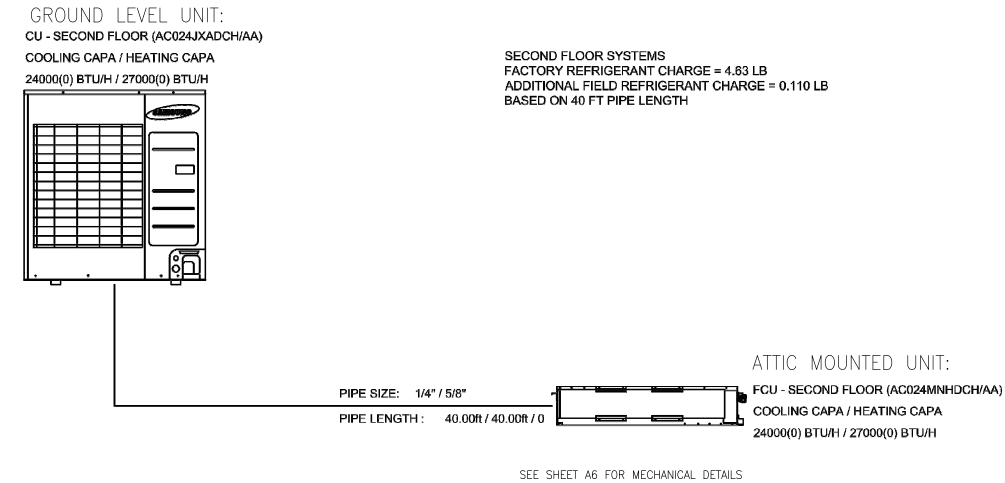
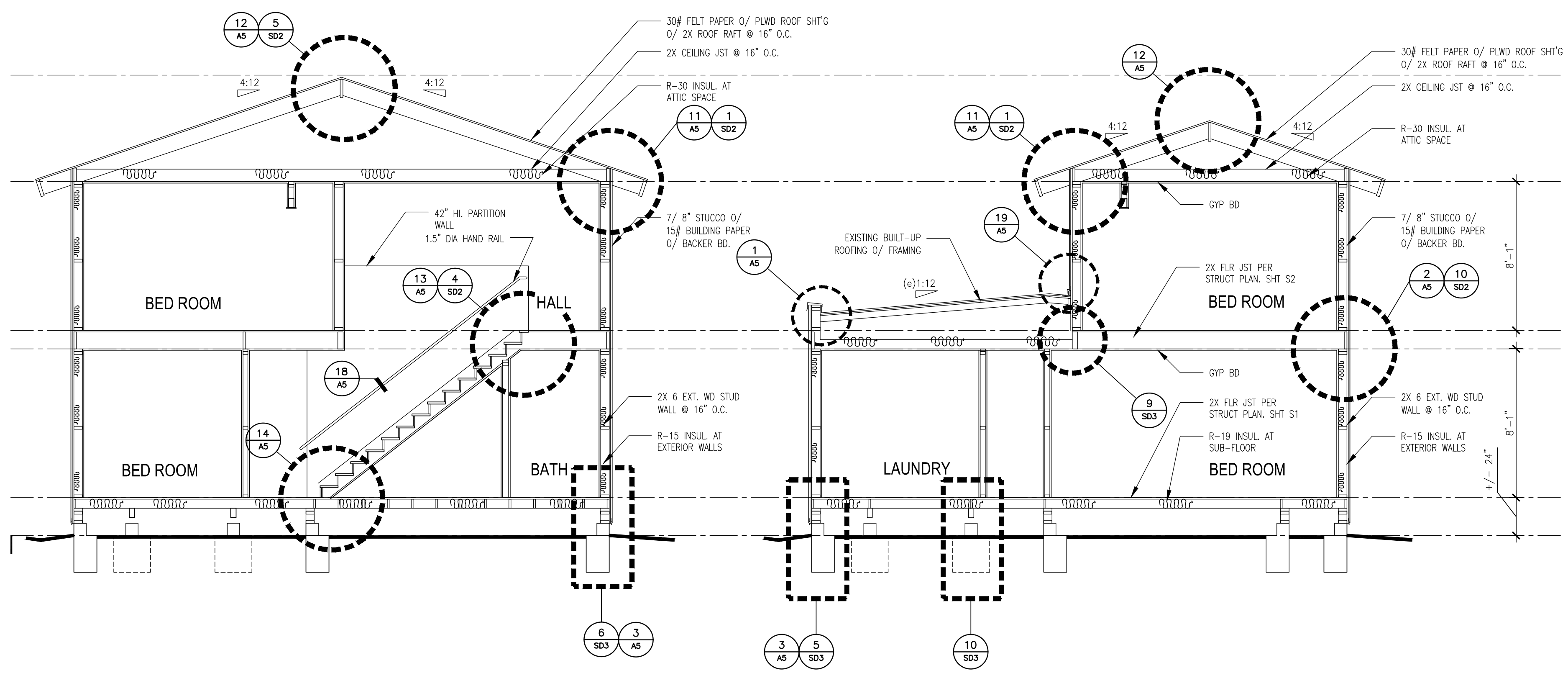
EXTERIOR ELEVATION

A3

SHEET OF ..



2 MECHANICAL SECOND FLOOR UNIT PIPING DIAGRAM - TYPICAL FOR ALL BUILDINGS
SCALE: NONE



0 2' 4' 8'
SCALE: 1/4" = 1'-0"

SECTION A - A | A

SECTION B - B | B

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RESIDENTIAL ADDITION
HERNANDEZ Residence
121 S. G Street Oxnard CA 93030
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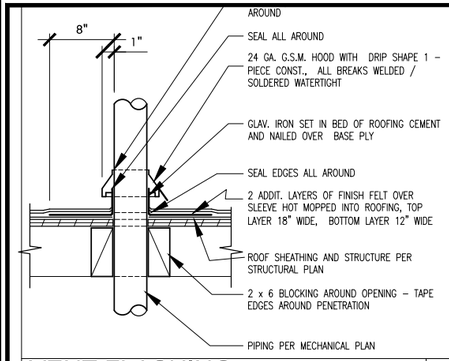
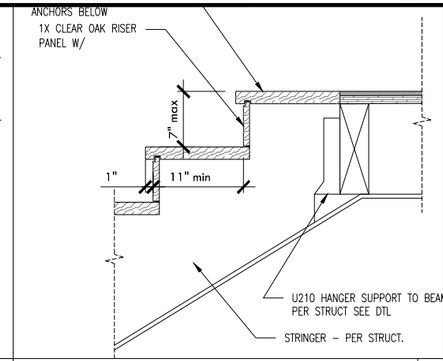
SECTIONS

A4

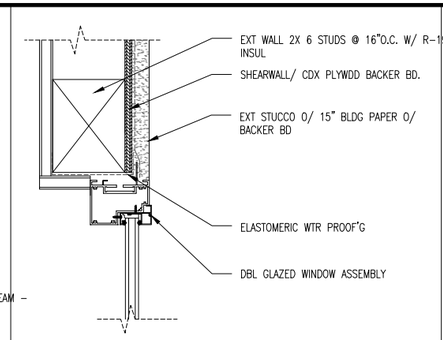
SHEET OF ..



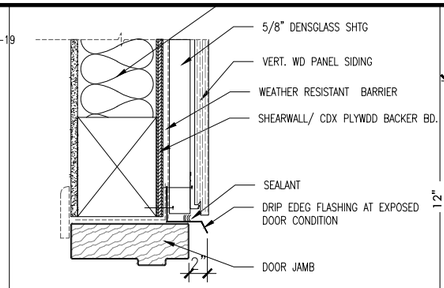
VENT FLASHING | 17



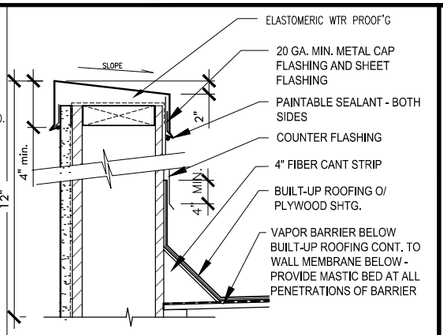
STAIR UPPER LANDING | 13



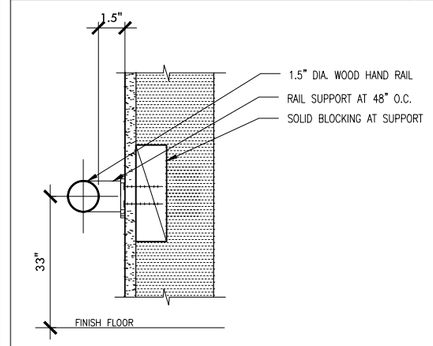
STUCCO / WINDOW HEADER | 9



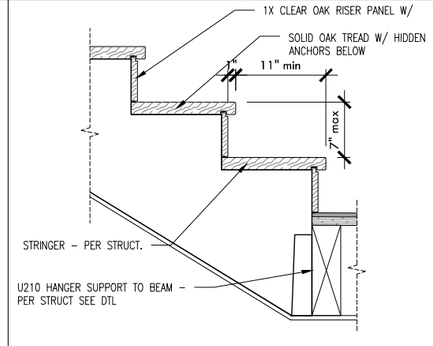
EXT. DOOR HEAD - WD SID'G | 5



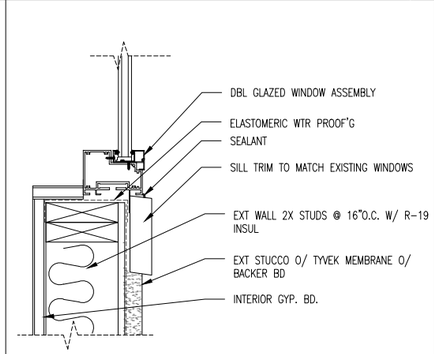
PARAPET FLASHING | 1



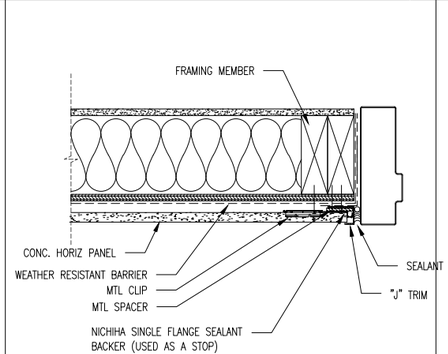
STAIR HAND RAILING | 18



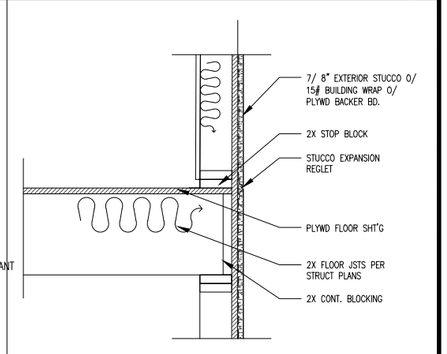
STAIR LOWER LANDING | 14



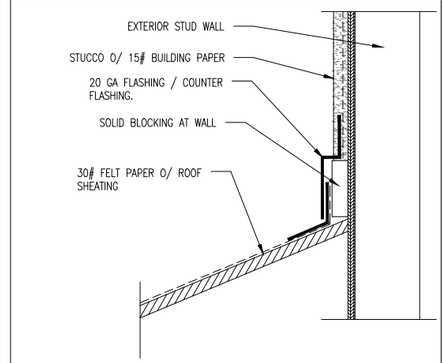
STUCCO - WINDOW SILL | 10



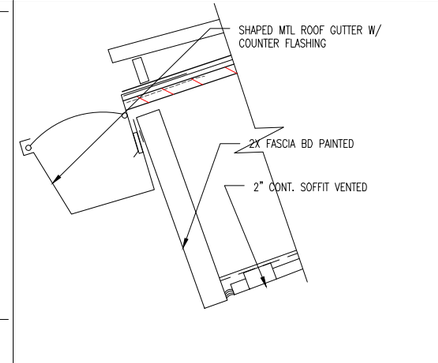
DOOR JAMB "J" TRIM | 6



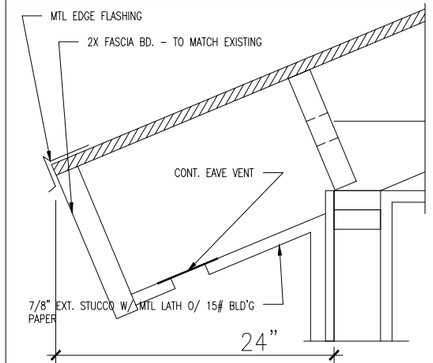
WALL AT FLOOR | 2



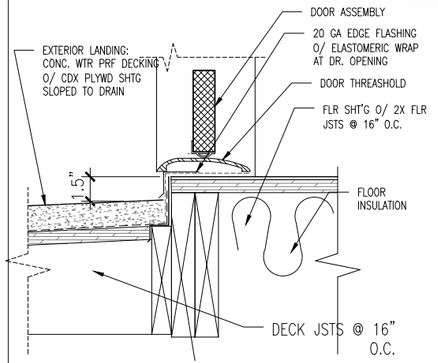
FLASHING AT ROOF TO WALL | 19



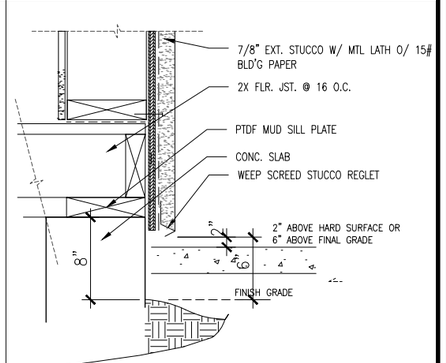
EAVE GUTTER DETAIL | 15



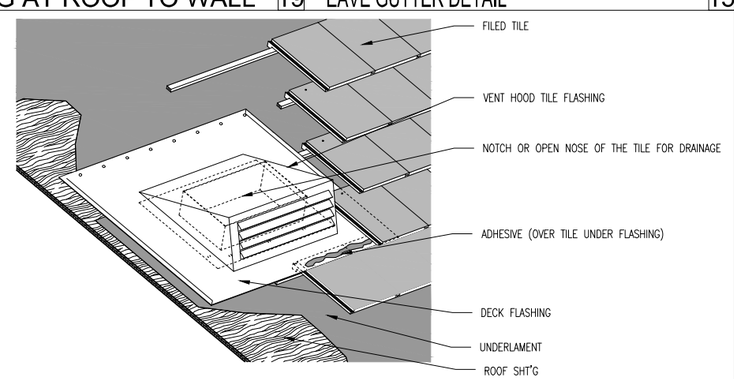
EAVE DETAIL | 11



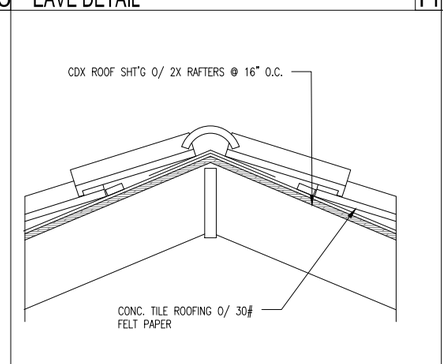
DOOR THRESHOLD AT EXTERIOR | 7



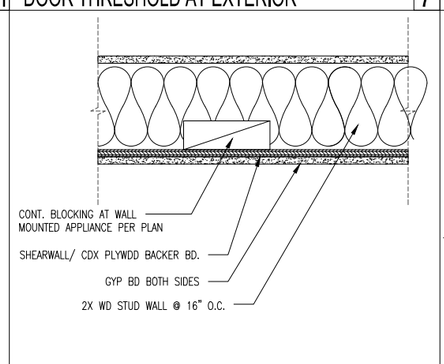
STUCCO TYP. WALL | 3



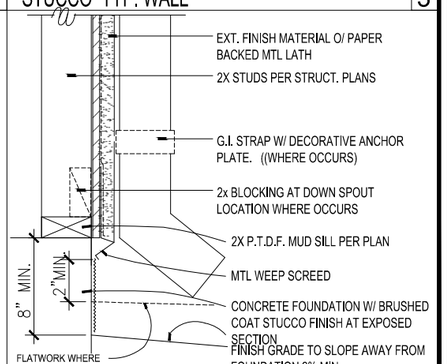
ROOF VENT | 16



RIDGE | 12



BLOCKING AT BATHROOMS | 8



DOWN SPOUT | 4

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RESIDENTIAL ADDITION

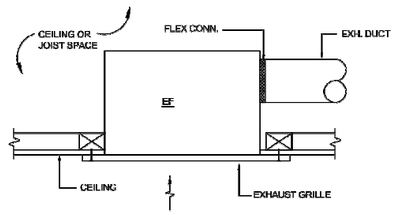
HERNANDEZ Residence
121 S. G Street Oxnard CA 93030
APN 202-0-030-410

No.	DATE
Project No.: 2102	2021.04.05

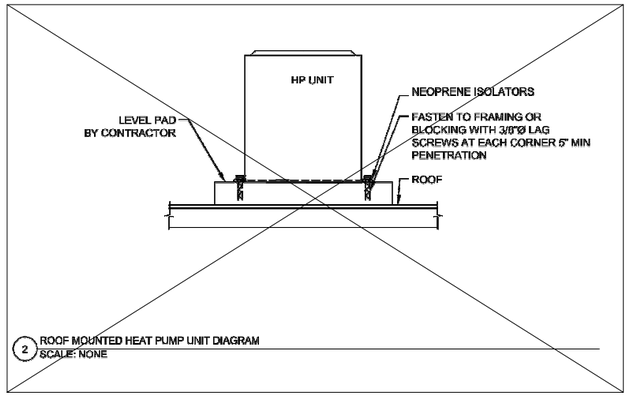
DETAILS

A5

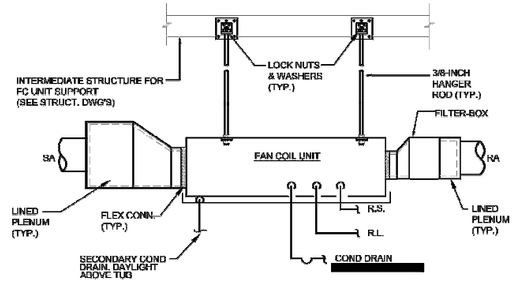
SHEET OF ..



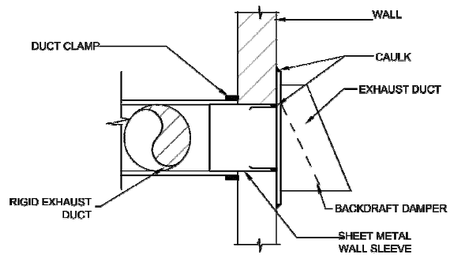
3 CEILING MOUNTED EXHAUST FAN
SCALE: NONE



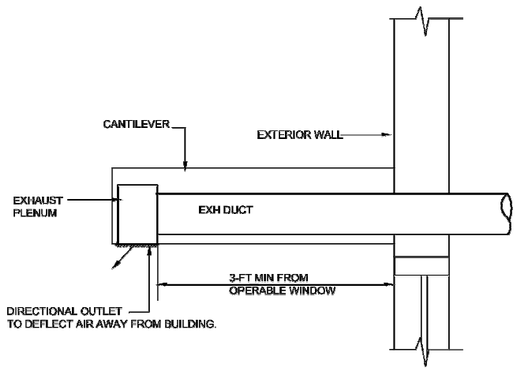
2 ROOF MOUNTED HEAT PUMP UNIT DIAGRAM
SCALE: NONE



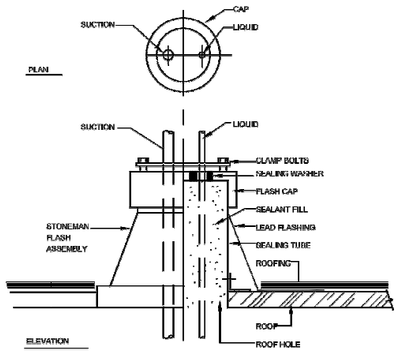
1 FAN COIL UNIT MOUNTING DIAGRAM
SCALE: NONE



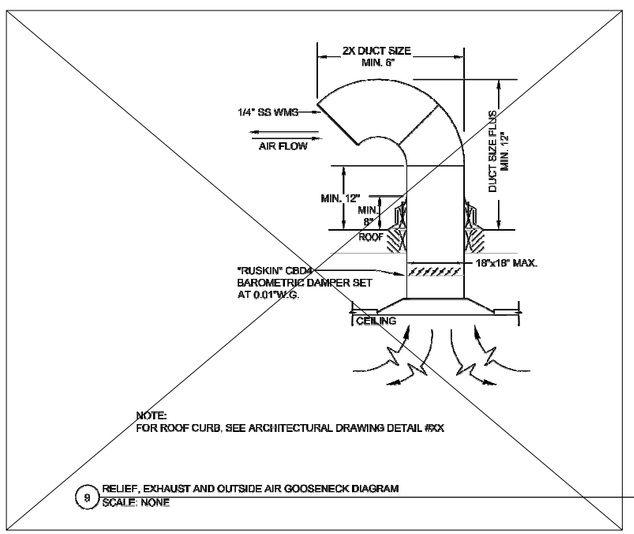
6 TOILET EXHAUST VENTING REQUIREMENTS
SCALE: NONE



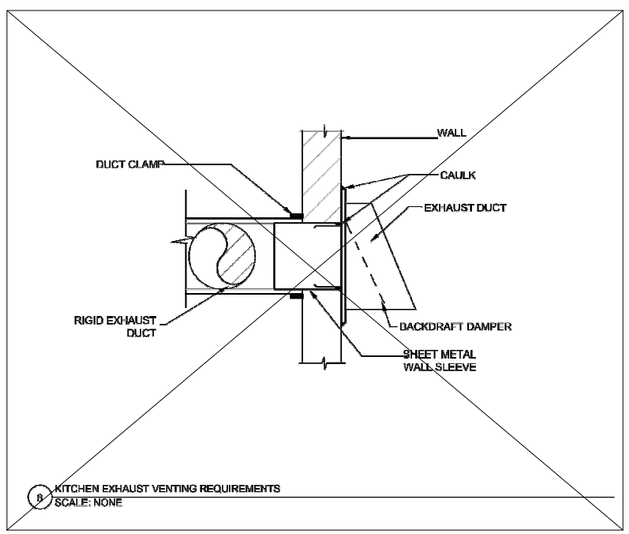
5 DISCHARGE OUTLET/INTAKE DIAGRAM
SCALE: NONE



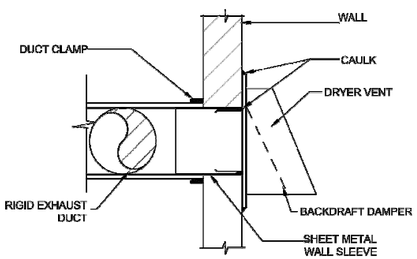
4 PIPE FLASHING DIAGRAM
SCALE: NONE



9 RELIEF, EXHAUST AND OUTSIDE AIR GOOSENECK DIAGRAM
SCALE: NONE



8 KITCHEN EXHAUST VENTING REQUIREMENTS
SCALE: NONE



DOMESTIC CLOTHES DRYER EXHAUST VENT SHALL BE AMINIMUM 6-INCH DIAMETER AND TOTAL 14-FEET COMBINATION HORIZONTAL, VERTICAL INCLUDED 2-90° ELBOWS. CMS 504.4.2.1 UNLESS PERMITTED OR REQUIRED BY DRYER MANUFACTURER.

CLOTHES DRYER SPECIFICATION (FURNISHED BY OWNER)

7 CLOTHES DRYER VENTING REQUIREMENTS
SCALE: NONE

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RESIDENTIAL ADDITION

HERNANDEZ Residence
121 S. G Street Oxnard CA 93030
APN 202-0-030-410

No.	DATE
Project No.: 2102	2021.04.05

DETAILS

A6

SHEET OF ..

GENERAL INFORMATION

01	Project Name	Hernandez Addition/Alteration			
02	Run Title	Hernandez Addition/Alteration			
03	Project Location	121 S. G St			
04	City	Oxnard, CA	05	Standards Version	2019
06	Zip code	93030	07	Software Version	CBECC-Res 2019.1.3
08	Climate Zone	6	09	Front Orientation (deg/ Cardinal)	90
10	Building Type	Single family	11	Number of Dwelling Units	1
12	Project Scope	AdditionAlteration	13	Number of Bedrooms	5
14	Addition Cond. Floor Area (ft^2)	1273	15	Number of Stories	2
16	Existing Cond. Floor Area (ft^2)	669	17	Fenestration Average U-factor	0.3
18	Total Cond. Floor Area (ft^2)	1942	19	Glazing Percentage (%)	11.16%
20	ADU Bedroom Count	n/a	21	ADU Conditioned Floor Area	n/a
22	Is Natural Gas Available?	Yes			

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 shown below

ENERGY USE SUMMARY

Energy Use (kTDV/ft^2-yr)	Standard Design	Proposed Design	Compliance Margin	Percent Improvement
Space Heating	24.37	20.67	3.7	15.2
Space Cooling	11.69	13.37	-1.68	-14.4
IAQ Ventilation	8.18	8.18	0	0
Water Heating	20.44	20.44	0	0
Self Utilization/Flexibility Credit	n/a	0	0	n/a
Compliance Energy Total	**64.68**	**62.66**	**2.02**	**3.1**

REQUIRED SPECIAL FEATURES

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

- Indoor air quality, balanced fan
- New ductwork added is less than 40 ft. in length

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 buildng tables below. Registered CF2Rs and CF3Rs are required to be completed in the HERS Registry

Building-level Verifications:
- Indoor air quality ventilation

Cooling System Verifications:
- -- None --

Heating System Verifications:
- -- None --

HVAC Distribution System Verifications:
- Duct Sealing required if a duct system component, plenum, or air handling unit is altered

Domestic Hot Water System Verifications:
- -- None --

BUILDING - FEATURES INFORMATION

01 Project Name	02 Conditioned Floor Area (ft^2)	03 Number of Dwelling Units	04 Number of Bedrooms	05 Number of Zones	06 Number of Ventilation Cooling Systems	07 Number of Water Heating Systems
Hernandez Addition/Alteration	1942	1	5	3	0	1

ZONE INFORMATION

01 Zone Name	02 Zone Type	03 HVAC System Name	04 Zone Floor Area (ft^2)	05 Avg. Ceiling Height	06 Water Heating System 1	07 Water Heating System 2
Existing 1st	Conditioned	Ex System	669	8.08	Ex DHW System	N/A
Addition 1st	Conditioned	Ex System	744	8.08	Ex DHW System	N/A
Addition 2nd	Conditioned	Ex System	529	8.08	Ex DHW System	N/A

OPAQUE SURFACES

01 Name	02 Zone	03 Construction	04 Azimuth	05 Orientation	06 Gross Area (ft^2)	07 Window and Door Area (ft2)	08 Tilt (deg)	09 Wall Exceptions	10 Status	11 Verified Existing Condition
Ex Front Wall	Existing 1st	Default Wall Prior to 1978	90	Front	209	69.5	90	none	Existing	No
Ex Left Wall	Existing 1st	Default Wall Prior to 1978	180	Left	186.5	8	90	none	Existing	No
Ex Right Wall	Existing 1st	Default Wall Prior to 1978	0	Right	265	36.69	90	none	Existing	No
Add Front Wall	Addition 1st	R-15 Wall Stucco	90	Front	26.26	0	90	none	New	n/a
Add Left Wall	Addition 1st	R-15 Wall Stucco	180	Left	252	20	90	none	New	n/a
Add Back Wall	Addition 1st	R-15 Wall Stucco	270	Back	235	48	90	none	New	n/a
Add Right Wall	Addition 1st	R-15 Wall Stucco	0	Right	174	12	90	none	New	n/a
Add Front Wall-2	Addition 2nd	R-15 Wall Stucco	90	Front	235	6	90	none	New	n/a
Add Left Wall-2	Addition 2nd	R-15 Wall Stucco	180	Left	178	20	90	none	New	n/a
Add Back Wall-2	Addition 2nd	R-15 Wall Stucco	270	Back	235	32	90	none	New	n/a
Add Right Wall-2	Addition 2nd	R-15 Wall Stucco	0	Right	178	4.5	90	none	New	n/a
Interior Wall to Existing	Addition 1st>>Existing 1st	R-0 Interior Wall	n/a	n/a	189	0	n/a		New	n/a
Ex Ceiling (below attic)	Existing 1st	Default Ceiling Prior to 1978	n/a	n/a	669	n/a	n/a		Existing	No
Add Ceiling (below attic) 1st	Addition 1st	R-30 Ceiling	n/a	n/a	215	n/a	n/a		New	n/a
Add Ceiling (below attic) 2nd	Addition 2nd	R-30 Ceiling	n/a	n/a	529	n/a	n/a		New	n/a
Ex Floor Over Crawlspace	Existing 1st	Default Floor Crawlspace Prior to 1991	n/a	n/a	669	n/a	n/a		Existing	No
Floor Over Crawlspace	Addition 1st	R-19 Raised Crawlspace	n/a	n/a	744	n/a	n/a		New	n/a

OPAQUE SURFACES

01 Name	02 Zone	03 Construction	04 Azimuth	05 Orientation	06 Gross Area (ft^2)	07 Window and Door Area (ft2)	08 Tilt (deg)	09 Wall Exceptions	10 Status	11 Verified Existing Condition
Interior Floor Above 1st Fl Add	Addition 2nd	R-0 Interior Floor	n/a	n/a	259	n/a	n/a		New	n/a

ATTIC

01 Name	02 Construction	03 Type	04 Roof Rise (x in 12)	05 Roof Reflectance	06 Roof Emittance	07 Radiant Barrier	08 Cool Roof	09 Status	10 Verified Existing Condition
Attic	Shingle Roof	Ventilated	1	0.1	0.85	No	No	Existing	No
Attic Addition 1st	Shingle Roof	Ventilated	4	0.1	0.85	No	No	New	n/a
Attic Addition 2nd	Shingle Roof	Ventilated	4	0.1	0.85	No	No	New	n/a

FENESTRATION / GLAZING

01 Name	02 Type	03 Surface	04 Orientation	05 Azimuth	06 Width (ft)	07 Height (ft)	08 Mult.	09 Area (ft^2)	10 U-factor	11 U-factor Source	12 SHGC	13 SHGC Source	14 Exterior Shading	15 Status	16 Verified Existing Condition
(E) Window	Window	Ex Front Wall	Front	90	5	4.5	1	22.5	0.99	Table 110.6-A	0.74	Table 110.6-B	Bug Screen	Existing	No
(E) Window-2	Window	Ex Front Wall	Front	90	6	4.5	1	27	0.99	Table 110.6-A	0.74	Table 110.6-B	Bug Screen	Existing	No
(E) Window-3	Window	Ex Left Wall	Left	180	2	2	2	8	0.99	Table 110.6-A	0.74	Table 110.6-B	Bug Screen	Existing	No
(E) Window-4	Window	Ex Right Wall	Right	0	2	4.5	2	18	0.99	Table 110.6-A	0.74	Table 110.6-B	Bug Screen	Existing	No
(E) Window-5	Window	Ex Right Wall	Right	0	2.67	3.5	2	18.69	0.99	Table 110.6-A	0.74	Table 110.6-B	Bug Screen	Existing	No
Window	Window	Add Left Wall	Left	180	4	5	1	20	0.3	NFRC	0.23	NFRC	Bug Screen	New	n/a
Window -2	Window	Add Back Wall	Back	270	2	2	1	4	0.3	NFRC	0.23	NFRC	Bug Screen	New	n/a

FENESTRATION / GLAZING

01 Name	02 Type	03 Surface	04 Orientation	05 Azimuth	06 Width (ft)	07 Height (ft)	08 Mult.	09 Area (ft^2)	10 U-factor	11 U-factor Source	12 SHGC	13 SHGC Source	14 Exterior Shading	15 Status	16 Verified Existing Condition
Window -3	Window	Add Back Wall	Back	270	2	4	1	8	0.3	NFRC	0.23	NFRC	Bug Screen	New	n/a
Window -4	Window	Add Back Wall	Back	270	4	4	1	16	0.3	NFRC	0.23	NFRC	Bug Screen	New	n/a
Window -5	Window	Add Right Wall	Right	0	3	4	1	12	0.3	NFRC	0.23	NFRC	Bug Screen	New	n/a
Window -6	Window	Add Front Wall-2	Front	90	2	3	1	6	0.3	NFRC	0.23	NFRC	Bug Screen	New	n/a
Window -7	Window	Add Left Wall-2	Left	180	4	5	1	20	0.3	NFRC	0.23	NFRC	Bug Screen	New	n/a
Window -8	Window	Add Back Wall-2	Back	270	2	4	2	16	0.3	NFRC	0.23	NFRC	Bug Screen	New	n/a
Window -9	Window	Add Back Wall-2	Back	270	4	4	1	16	0.3	NFRC	0.23	NFRC	Bug Screen	New	n/a
Window -10	Window	Add Right Wall-2	Right	0	3	1.5	1	4.5	0.3	NFRC	0.23	NFRC	Bug Screen	New	n/a

OPAQUE DOORS

01 Name	02 Side of Building	03 Area (ft^2)	04 U-factor	05 Status	06 Verified Existing Condition
Front Door	Ex Front Wall	20	0.2	Existing	No
Back Door	Add Back Wall	20	0.2	New	n/a

OPAQUE SURFACE CONSTRUCTIONS

01 Construction Name	02 Surface Type	03 Construction Type	04 Framing	05 Total Cavity R-value	06 Interior / Exterior Continuous R-value	07 U-factor	08 Assembly Layers
R-15 Wall Stucco	Exterior Walls	Wood Framed Wall	2x4 @ 16 in. O. C.	R-15	None / None	0.087	Inside Finish: Gypsum Board Cavity / Frame: R-15 / 2x4 Sheathing / Insulation: Wood Siding/sheathing/decking Exterior Finish: 3 Coat Stucco
Default Wall Prior to 1978	Exterior Walls	Wood Framed Wall	2x4 @ 16 in. O. C.	R-0	None / None	0.361	Inside Finish: Gypsum Board Cavity / Frame: no insul. / 2x4 Exterior Finish: 3 Coat Stucco
R-0 Interior Wall	Interior Walls	Wood Framed Wall	2x4 @ 16 in. O. C.	R-0	None / None	0.277	Inside Finish: Gypsum Board Cavity / Frame: no insul. / 2x4 Other Side Finish: Gypsum Board
Shingle Roof	Attic Roofs	Wood Framed Ceiling	2x4 Top Chord of Roof Truss @ 24 in. O. C.	R-0	None / None	0.644	Roofing: Light Roof (Asphalt Shingle) Roof Deck: Wood Siding/sheathing/decking Cavity / Frame: no insul. / 2x4 Top Chrd
R-19 Raised Crawlspace	Floors Over Crawlspace	Wood Framed Floor	2x6 @ 16 in. O. C.	R-19	None / None	0.055	Floor Surface: Hardwood Floor Deck: Wood Siding/sheathing/decking Cavity / Frame: R-19 in 5-1/2 in. (R-18) / 2x6
Default Floor Crawlspace Prior to 1991	Floors Over Crawlspace	Wood Framed Floor	2x6 @ 16 in. O. C.	R-0	None / None	0.323	Floor Surface: Hardwood Floor Deck: Wood Siding/sheathing/decking Cavity / Frame: no insul. / 2x6
R-30 Ceiling	Ceilings (below attic)	Wood Framed Ceiling	2x10 @ 16 in. O. C.	R-30	None / None	0.034	Over Ceiling Joists: R-6.0 insul. Cavity / Frame: R-24.1 / 2x10 Inside Finish: Gypsum Board

5/26/2021
JN

SCOPE OF WORK:
Single Family Dwelling -Remodel/Addition

PROJECT:
Hernandez Residence
121 So. G Street
Oxnard, CA 93030

title24now.com
1969 SINALOA AVE. ALTADENA, CA 91001
Phone: 323-701-9927 info@title24now.com

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OPAQUE SURFACE CONSTRUCTIONS

01	02	03	04	05	06	07	08
Construction Name	Surface Type	Construction Type	Framing	Total Cavity R-value	Interior / Exterior Continuous R-value	U-factor	Assembly Layers
Default Ceiling Prior to 1978	Ceilings (below attic)	Wood Framed Ceiling	2x4 @ 16 in. O. C.	R-11	None / None	0.083	Over Ceiling Joists: R-1.9 insul. Cavity / Frame: R-9.1 / 2x4 Inside Finish: Gypsum Board
R-0 Interior Floor	Interior Floors	Wood Framed Floor	2x12 @ 16 in. O. C.	R-0	None / None	0.196	Floor Surface: Carpeted Floor Deck: Wood Siding/sheathing/decking Cavity / Frame: no insul. / 2x12 Ceiling Below Finish: Gypsum Board

BUILDING ENVELOPE - HERS VERIFICATION

01	02	03	04
Quality Insulation Installation (QII)	High R-value 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	07	08	09	10
Name	System Type	Distribution Type	Water Heater Name (#)	Solar Heating System	Compact Distribution	HERS Verification	Status	Verified Existing Condition	Existing Water Heating System
Ex DHW System	Domestic Hot Water (DHW)	Standard Distribution System	50gal Gas Storage (1)	n/a	None	n/a	Existing	No	

WATER HEATERS

01	02	03	04	05	06	07	08	09	10	11	12	13	14
Name	Heating Element Type	Tank Type	# of Units	Tank Vol. (gal)	Energy Factor or Efficiency	Input Rating or Pilot	Tank Insulation R-value (Int/Ext)	Standby Loss or Recovery Eff	1st Hr. Rating or Flow Rate	NEEA Heat Pump Brand or Model	Tank Location or Ambient Condition	Status	Verified Existing Condition
50gal Gas Storage	Gas	Large Storage	1	50	0.8-TE	> 40 kBtu/hr	0	0.028669	n/a	n/a	n/a	Existing	No

WATER HEATING - HERS VERIFICATION

01	02	03	04	05	06	07	08
Name	Pipe Insulation	Parallel Piping	Compact Distribution	Compact Distribution Type	Recirculation Control	Central DHW Distribution	Shower Drain Water Heat Recovery
Ex DHW System - 1/1	Not Required	Not Required	Not Required	None	Not Required	Not Required	Not Required

SPACE CONDITIONING SYSTEMS

01	02	03	04	05	06	07	08	09	10	11
Name	System Type	Heating Unit Name	Cooling Unit Name	Fan Name	Distribution Name	Required Thermostat Type	Status	Verified Existing Condition	Heating Equipment Count	Cooling Equipment Count
Ex System	Heating and cooling system other	Ex Furnace	Ex Cooling	HVAC Fan	Ducts	n/a	Existing	No	1	1

HVAC - HEATING UNIT TYPES

01	02	03	04
Name	System Type	Number of Units	Heating Efficiency
Ex Furnace	Central gas furnace	1	AFUE-80

HVAC - COOLING UNIT TYPES

01	02	03	04	05	06	07	08
Name	System Type	Number of Units	Efficiency EER/CEER	Efficiency SEER	Zonally Controlled	Multi-speed Compressor	HERS Verification
Ex Cooling	Central split AC	1	11.7	14	Not Zonal	Single Speed	Ex Cooling-hers-cool

HVAC - DISTRIBUTION SYSTEMS

01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16
			Duct Ins. R-value		Duct Location		Surface Area								
Name	Type	Design Type	Supply	Return	Supply	Return	Supply	Return	Bypass Duct	Duct Leakage	HERS Verification	Status	Verified Existing Condition	Existing Distribution system	New Ducts 40 ft
Ducts	Unconditioned attic	Non-Verified	R-6	R-6	Attic	Attic	n/a	n/a	No Bypass Duct	Existing (not specified)	Ducts-hers-dist	Existing + New	No	n/a	n/a

HVAC - FAN SYSTEMS

01	02	03	04
Name	Type	Fan Power (Watts/CFM)	Name
HVAC Fan	HVAC Fan	0.45	HVAC Fan-hers-fan

HVAC FAN SYSTEMS - HERS VERIFICATION

01	02	03
Name	Verified Fan Watt Draw	Required Fan Efficacy (Watts/CFM)
HVAC Fan-hers-fan	Not Required	0

IAQ (INDOOR AIR QUALITY) FANS

01	02	03	04	05	06
Dwelling Unit	IAQ CFM	IAQ Watts/CFM	IAQ Fan Type	IAQ Recovery Effectiveness (%)	IAQ Recovery Effectiveness - SREIAQ Recovery Effectiveness - SRE
SFam IAQVentRpt 1-1	100	0.67	Balanced HRV	72	n/a

DOCUMENTATION AUTHOR'S DECLARATION STATEMENT

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

Documentation Author Name: Joe Nunez	Documentation Author Signature: Joe Nunez
Company: Title 24 Now	Signature Date: 05/26/2021
Address: 1955 Sinaloa Avenue	CEA/ HERS Certification Identification (If applicable): RCN13768
City/State/Zip: Altadena, CA 91001	Phone: 626-755-7847

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: michael sanchez	Responsible Designer Signature: michael sanchez
Company: Sanchez Planning & Design	Date Signed: 05/26/2021
Address: 1130 Osa Ct	License:
City/State/Zip: Oxnard, CA 93035	Phone: 8055126476

Digitally signed by CONSOL Home Energy Efficiency Rating System Services, Inc. (CHEERS). 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.

5/26/2021
JN

SCOPE OF WORK:
Single Family Dwelling -Remodel/Addition

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Hernandez Residence
121 So. G Street
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RESIDENTIAL
T-24 SHEET
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2019 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. "Exceptions may apply.
(Original 08/2019)

Building Envelope Measures:	
§ 110.6(a)1:	**Air Leakage.** Manufactured fenestration, exterior doors, and exterior pet doors must limit air leakage to 0.3 cfm per square foot or less when tested per NFRC-400, ASTM E283 or AAMA/WDMA/CSA 101/I.S.2/A440-2011.'
§ 110.6(a)5:	**Labeling.** Fenestration products and exterior doors must have a label meeting the requirements of Section 10-111(a).
§ 110.6(b):	**Field fabricated exterior doors and fenestration** products must use U-factors and solar heat gain coefficient (SHGC) values from Tables 110.6-A, 110.6-B, or JA4.5 for exterior doors. They must be caulked and/or weather stripped.'
§ 110.7:	**Air Leakage.** All joints, penetrations, and other openings in the building envelope that are potential sources of air leakage must be caulked, gasketed, or weather stripped..
§ 110.8(a):	**Insulation Certification by Manufacturers.** Insulation must be certified by the Department of Consumer Affairs, Bureau of Household Goods and Services (BHGS).
§ 110.8(g):	**Insulation Requirements for Heated Slab Floors.** Heated slab floors must be insulated per the requirements of Section 110.8(g).
§ 110.8(i):	**Roofing Products Solar Reflectance and Thermal Emittance.** The thermal emittance and aged solar reflectance values of the roofing material must meet the requirements of § 110.8(i) and be labeled per §10-113 when the installation of a cool roof is specified on the CF1R.
§ 110.8(j):	**Radiant Barrier.** When required, radiant barriers must have an emittance of 0.05 or less and be certified to the Department of Consumer Affairs.
§ 150.0(a):	**Ceiling and Rafter Roof Insulation.** Minimum R-22 insulation in wood-frame ceiling; or the weighted average U-factor must not exceed 0.043. Minimum R-19 or weighted average U-factor of 0.054 or less in a rafter roof alteration. Attic access doors must have permanently attached insulation using adhesive or mechanical fasteners. The attic access must be gasketed to prevent air leakage. Insulation must be installed in direct contact with a continuous roof or ceiling which is sealed to limit infiltration and exfiltration as specified in § 110.7, including but not limited to placing insulation either above or below the roof deck or on top of a drywall ceiling.'
§ 150.0(b):	**Loose-fill Insulation.** Loose fill insulation must meet the manufacturer's required density for the labeled R-value.
§ 150.0(c):	**Wall Insulation.** Minimum R-13 insulation in 2x4 inch wood framing wall or have a U-factor of 0.102 or less, or R-20 in 2x6 inch wood framing or have a U-factor of 0.071 or less, (R-19 in 2x6 or U-factor of 0.074 or less). Opaque non-framed assemblies must have an overall assembly U-factor not exceeding 0.102, equivalent to an installed value of R-13 in a wood framed assembly. Masonry walls must meet Table 150.1-A or B.'
§ 150.0(d):	**Raised-floor Insulation.** Minimum R-19 insulation in raised wood framed floor or 0.037 maximum U-factor.
§ 150.0(f):	**Slab Edge Insulation.** Slab edge insulation must meet all of the following: have a water absorption rate, for the insulation material alone without facings no greater than 0.3%; have a water vapor permeance no greater than 2.0 perm per inch; be protected from physical damage and UV light deterioration; and, when installed as part of a heated slab floor, meet the requirements of § 110.8(g).
§ 150.0(g)1:	**Vapor Retarder.** In climate zones 1 through 16, the earth floor of unvented crawl space must be covered with a Class I or Class II vapor retarder. This requirement also applies to controlled ventilation crawl space for buildings complying with the exception to § 150.0(d).
§ 150.0(g)2:	**Vapor Retarder.** 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, vented attics, and unvented attics with air-permeable insulation..
§ 150.0(q):	**Fenestration Products.** Fenestration, including skylights, separating conditioned space from unconditioned space or outdoors must have a maximum U-factor of 0.58; or the weighted average U-factor of all fenestration must not exceed 0.58.'
Fireplaces, Decorative Gas Appliances, and Gas Log Measures:	
§ 110.5(e)	**Pilot Light.** Continuously burning pilot lights are not allowed for indoor and outdoor fireplaces.
§ 150.0(e)1:	**Closable Doors.** Masonry or factory-built fireplaces must have a closable metal or glass door covering the entire opening of the firebox.
§ 150.0(e)2:	**Combustion Intake.** 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 tight-fitting damper or combustion-air control device.'
§ 150.0(e)3:	**Flue Damper.** Masonry or factory-built fireplaces must have a flue damper with a readily accessible control.'
Space Conditioning, Water Heating, and Plumbing System Measures:	
§ 110.0-§ 110.3:	**Certification.** Heating, ventilation and air conditioning (HVAC) equipment, water heaters, showerheads, faucets, and all other regulated appliances must be certified by the manufacturer to the Energy Commission.'
§ 110.2(a):	**HVAC Efficiency.** Equipment must meet the applicable efficiency requirements in Table 110.2-A through Table 110.2-K.'
§ 110.2(b):	**Controls for Heat Pumps with Supplementary Electric Resistance Heaters.** 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 cut-on temperature for compression heating is higher than the cut-on temperature for supplementary heating, and the cut-off temperature for compression heating is higher than the cut-off temperature for supplementary heating.'
§ 110.2(c):	**Thermostats.** All heating or cooling systems not controlled by a central energy management control system (EMCS) must have a setback thermostat.'
§ 110.3(c)4:	**Water Heating Recirculation Loops Serving Multiple Dwelling Units.** Water heating recirculation loops serving multiple dwelling units must meet the air release valve, backflow prevention, pump priming, pump isolation valve, and recirculation loop connection requirements of § 110.3(c)4..
§ 110.3(c)6:	**Isolation Valves.** Instantaneous water heaters with an input rating greater than 6.8 kBTU per hour (2 kW) must have isolation valves with hose bibbs or other fittings on both cold and hot water lines to allow for flushing the water heater when the valves are closed..
§ 110.5:	**Pilot Lights.** Continuously burning pilot lights are prohibited for natural gas fan-type central furnaces; household cooking appliances (appliances without an electrical supply voltage connection with pilot lights that consume less than 150 Btu/hr are exempt); and pool and spa heaters.'
§ 150.0(h)1:	**Building Cooling and Heating Loads.** Heating and/or cooling loads are calculated in accordance with the ASHRAE Handbook, Equipment Volume, Applications Volume, and Fundamentals Volume; the SMACNA Residential Comfort System Installation Standards Manual; or the ACCA Manual J using design conditions specified in § 150.0(h)2.

2019 Low-Rise Residential Mandatory Measures Summary

§ 150.0(h)3A:	**Clearances.** Air conditioner and heat pump outdoor condensing units must have a clearance of at least 5 feet from the outlet of any dryer vent.
§ 150.0(h)3B:	**Liquid Line Drier.** Air conditioners and heat pump systems must be equipped with liquid line filter driers if required, as specified by the manufacturer's instructions.
§ 150.0(j)1:	**Storage Tank Insulation.** Unfired hot water tanks, such as storage tanks and backup storage tanks for solar water-heating systems, must have a minimum of R-12 external insulation or R-16 internal insulation where the internal insulation R-value is indicated on the exterior of the tank.
§ 150.0(j)2A:	**Water Piping, Solar Water-heating System Piping, and Space Conditioning System Line Insulation.** All domestic hot water piping must be insulated as specified in Section 609.11 of the California Plumbing Code. In addition, the following piping conditions must have a minimum insulation wall thickness of 1 inch or a minimum insulation R-value of 7.7: the first 5 feet of cold water pipes from the storage tank; all hot water piping with a nominal diameter equal to or greater than 3/4 inch and less than 1 inch; all hot water piping with a nominal diameter less than 3/4 inch that is associated with a domestic hot water recirculation system, from the heating source to storage tank or between tanks, buried below grade, and from the heating source to kitchen fixtures."
§ 150.0(j)3:	**Insulation Protection.** Piping insulation must be protected from damage, including that due to sunlight, moisture, equipment maintenance, and wind as required by Section 120.3(b). Insulation exposed to weather must be water retardant and protected from UV light (no adhesive tapes). Insulation covering chilled water piping and refrigerant suction piping located outside the conditioned space must include, or be protected by, a Class I or Class II vapor retarder. Pipe insulation buried below grade must be installed in a waterproof and non-crushable casing or sleeve.
§ 150.0(n)1:	**Gas or Propane Water Heating Systems.** Systems using gas or propane water heaters to serve individual dwelling units must include all of the following: A dedicated 125 volt, 20 amp electrical receptacle that is connected to the electric panel with a 120/240 volt 3 conductor, 10 AWG copper branch circuit, within 3 feet from the water heater without obstruction. Both ends of the unused conductor must be labeled with the word "spare" and be electrically isolated. Have a reserved single pole circuit breaker space in the electrical panel adjacent to the circuit breaker for the branch circuit and labeled with the words "Future 240V Use"; a Category III or IV vent, or a Type B vent with straight pipe between the outside termination and the space where the water heater is installed; a condensate drain that is no more 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 per hour..
§ 150.0(n)2:	**Recirculating Loops.** Recirculating loops serving multiple dwelling units must meet the requirements of § 110.3(c)5.
§ 150.0(n)3:	**Solar Water-heating Systems.** Solar water-heating systems and collectors must be certified and rated by the Solar Rating and Certification Corporation (SRCC), the International Association of Plumbing and Mechanical Officials, Research and Testing (IAPMO R&T), or by a listing agency that is approved by the Executive Director.
Ducts and Fans Measures:	
§ 110.8(d)3:	**Ducts.** Insulation installed on an existing space-conditioning duct must comply with California Mechanical Code (CMC) Section 604.0; if a contractor installs the insulation, the contractor must certify to the customer in writing, that the insulation meets this requirement.
§ 150.0(m)1:	**CMC Compliance.** All air-distribution system ducts and plenums must meet the requirements of the CMC Section 601.0, 602.0, 603.0, 604.0, 605.0 and ANSI/SMACNA-006-2006 HVAC Duct Construction Standards Metal and Flexible 3rd Edition. Portions of supply-air and return-air ducts and plenums must be insulated to a minimum installed level of R-6.0 or a minimum installed level of R-4.2 when ducts are entirely in conditioned space as confirmed through field verification and diagnostic testing (RA3.1.4.3.6). Portions of the duct system completely exposed and surrounded by directly conditioned space are not required to be insulated. Connections of metal ducts and inner core of flexible ducts must be mechanically fastened. Openings must be sealed with mastic, tape, or other duct-closure system that meets the applicable requirements of UL 181, UL 181A, or UL 181B or aerosol sealant that meets the requirements of UL 723. If mastic or tape is used to seal openings greater than ¼ inch, the combination of mastic and either mesh or tape must be used. Building cavities, support platforms for air handlers, and plenums designed or constructed with materials other than sealed sheet metal, duct board or flexible duct must not be used to convey conditioned air. Building cavities and support platforms may contain ducts. Ducts installed in cavities and support platforms must not be compressed to cause reductions in the cross-sectional area..
§ 150.0(m)2:	**Factory-Fabricated Duct Systems.** 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 tapes unless such tape is used in combination with mastic and draw bands..
§ 150.0(m)3:	**Field-Fabricated Duct Systems.** Field-fabricated duct systems must comply with applicable requirements for: pressure-sensitive tapes, mastics, sealants, and other requirements specified for duct construction.
§ 150.0(m)7:	**Backdraft Damper.** Fan systems that exchange air between the conditioned space and outdoors must have backdraft or automatic dampers.
§ 150.0(m)8:	**Gravity Ventilation Dampers.** Gravity ventilating systems serving conditioned space must have either automatic or readily accessible, manually operated dampers in all openings to the outside, except combustion inlet and outlet air openings and elevator shaft vents.
§ 150.0(m)9:	**Protection of Insulation.** Insulation must be protected from damage, 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 retardant and provides shielding from solar radiation.
§ 150.0(m)10:	**Porous Inner Core Flex Duct.** Porous inner core flex ducts must have a non-porous layer between the inner core and outer vapor barrier.
§ 150.0(m)11:	**Duct System Sealing and Leakage Test.** When space conditioning systems use forced air duct systems to supply conditioned air to an occupiable space, the ducts must be sealed and duct leakage tested, as confirmed through field verification and diagnostic testing, in accordance with § 150.0(m)11 and Reference Residential Appendix RA3.
§ 150.0(m)12:	**Air Filtration.** Space conditioning systems with ducts exceeding 10 feet and the supply side of ventilation systems must have MERV 13 or equivalent filters. Filters for space conditioning systems must have a 2 inch depth or can be 1 inch if sized per Equation 150.0-A. Pressure drops and labeling must meet the requirements in §150.0(m)12.. Filters must be accessible for regular service."
§ 150.0(m)13:	**Space Conditioning System Airflow Rate and Fan Efficacy.** Space conditioning systems that use ducts to supply cooling must have a hole for the placement of a static pressure probe, or a permanently installed static pressure probe in the supply plenum. Airflow must be ≥ 350 CFM per ton of nominal cooling capacity, and an air-handling unit fan efficacy ≤ 0.45 watts per CFM for gas furnace air handlers and ≤ 0.58 watts per CFM for all others. Small duct high velocity systems must provide an airflow ≥ 250 CFM per ton of nominal cooling capacity, and an air-handling unit fan efficacy ≤ 0.62 watts per CFM. Field verification testing is required in accordance with Reference Residential Appendix RA3.3."

2019 Low-Rise Residential Mandatory Measures Summary

Requirements for Ventilation and Indoor Air Quality:	
§ 150.0(o)1:	**Requirements for Ventilation and Indoor Air Quality.** All dwelling units must meet the requirements of ASHRAE Standard 62.2, Ventilation and Acceptable Indoor Air Quality in Residential Buildings subject to the amendments specified in § 150.0(o)1.
§ 150.0(o)1C:	**Single Family Detached Dwelling Units.** Single family detached dwelling units, and attached dwelling units not sharing ceilings or floors with other dwelling units, occupiable spaces, public garages, or commercial spaces must have mechanical ventilation airflow provided at rates determined by ASHRAE 62.2 Sections 4.1.1 and 4.1.2 and as specified in § 150.0(o)1C.
§ 150.0(o)1E:	**Multifamily Attached Dwelling Units.** Multifamily attached dwelling units must have mechanical ventilation airflow provided at rates in accordance with Equation 150.0-B and must be either a balanced system or continuous supply or continuous exhaust system. If a balanced system is not used, all units in the building must use the same system type and the dwelling-unit envelope leakage must be ≤ 0.3 CFM at 50 Pa (0.2 inch water) per square foot of dwelling unit envelope surface area and verified in accordance with Reference Residential Appendix RA3.8.
§ 150.0(o)1F:	**Multifamily Building Central Ventilation Systems.** Central ventilation systems that serve multiple dwelling units must be balanced to provide ventilation airflow for each dwelling unit served at a rate equal to or greater than the rate specified by Equation 150.0-B. All unit airflows must be within 20% of the unit with the lowest airflow as it relates to the individual unit's minimum required airflow rate needed for compliance..
§ 150.0(o)1G:	**Kitchen Range Hoods.** Kitchen range hoods must be rated for sound in accordance with Section 7.2 of ASHRAE 62.2.
§ 150.0(o)2:	**Field Verification and Diagnostic Testing.** Dwelling unit ventilation airflow must be verified in accordance with Reference Residential Appendix RA3.7. Kitchen range hoods must be verified in accordance with Reference Residential Appendix RA3.7.4.3 to confirm it is rated by HVI to comply with the airflow rates and sound requirements as specified in Section 5 and 7.2 of ASHRAE 62.2.
Pool and Spa Systems and Equipment Measures:	
§ 110.4(a):	**Certification by Manufacturers.** Any pool or spa heating system or equipment must be certified to have all of the following: a thermal efficiency that complies with the Appliance Efficiency Regulations; an on-off switch mounted outside of the heater that allows shutting off the heater without adjusting the thermostat setting; a permanent weatherproof plate or card with operating instructions; and must not use electric resistance heating.'
§ 110.4(b)1:	**Piping.** Any pool or spa heating system or equipment must be installed with at least 36 inches of pipe between the filter and the heater, or dedicated suction and return lines, or built-in or built-up connections to allow for future solar heating.
§ 110.4(b)2:	**Covers.** Outdoor pools or spas that have a heat pump or gas heater must have a cover.
§ 110.4(b)3:	**Directional Inlets and Time Switches for Pools.** Pools must have directional inlets that adequately mix the pool water, and a time switch that will allow all pumps to be set or programmed to run only during off-peak electric demand periods.
§ 110.5:	**Pilot Light.** Natural gas pool and spa heaters must not have a continuously burning pilot light.
§ 150.0(p):	**Pool Systems and Equipment Installation.** Residential pool systems or equipment must meet the specified requirements for pump sizing, flow rate, piping, filters, and valves.'
Lighting Measures:	
§ 110.9:	**Lighting Controls and Components.** All lighting control devices and systems, ballasts, and luminaires must meet the applicable requirements of § 110.9.'
§ 150.0(k)1A:	**Luminaire Efficacy.** All installed luminaires must meet the requirements in Table 150.0-A.
§ 150.0(k)1B:	**Blank Electrical Boxes.** 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 served by a dimmer, vacancy sensor control, or fan speed control.
§ 150.0(k)1C:	**Recessed Downlight Luminaires in Ceilings.** Luminaires recessed into ceilings must meet all of the requirements for: insulation contact (IC) labeling; air leakage, sealing; maintenance; and socket and light source as described in § 150.0(k)1C.
§ 150.0(k)1D:	**Electronic Ballasts for Fluorescent Lamps.** Ballasts for fluorescent lamps rated 13 watts or greater must be electronic and must have an output frequency no less than 20 kHz.
§ 150.0(k)1E:	**Night Lights, Step Lights, and Path Lights.** Night lights, step lights and path lights are not required to comply with Table 150.0-A or be controlled by vacancy sensors provided they are rated to consume no more than 5 watts of power and emit no more than 150 lumens.
§ 150.0(k)1F:	**Lighting Integral to Exhaust Fans.** Lighting integral to exhaust fans (except when installed by the manufacturer in kitchen exhaust hoods) must meet the applicable requirements of § 150.0(k).
§ 150.0(k)1G:	**Screw based luminaires.** Screw based luminaires must contain lamps that comply with Reference Joint Appendix JA8.'
§ 150.0(k)1H:	**Light Sources in Enclosed or Recessed Luminaires.** Lamps and other separable light sources that are not compliant with the JA8 elevated temperature requirements, including marking requirements, must not be installed in enclosed or recessed luminaires.
§ 150.0(k)1I:	**Light Sources in Drawers, Cabinets, and Linen Closets.** Light sources internal to drawers, cabinetry or linen closets are not required to comply with Table 150.0-A or be controlled by vacancy sensors provided that they are rated to consume no more than 5 watts of power, emit no more than 150 lumens, and are equipped with controls that automatically turn the lighting off when the drawer, cabinet or linen closet is closed.
§ 150.0(k)2A:	**Interior Switches and Controls.** All forward phase cut dimmers used with LED light sources must comply with NEMA SSL 7A.
§ 150.0(k)2B:	**Interior Switches and Controls.** Exhaust fans must be controlled separately from lighting systems.'
§ 150.0(k)2C:	**Interior Switches and Controls.** Lighting must have readily accessible wall-mounted controls that allow the lighting to be manually turned ON and OFF."
§ 150.0(k)2D:	**Interior Switches and Controls.** Controls and equipment must be installed in accordance with manufacturer's instructions.
§ 150.0(k)2E:	**Interior Switches and Controls.** Controls must not bypass a dimmer, occupant sensor, or vacancy sensor function if the control is installed to comply with § 150.0(k).
§ 150.0(k)2F:	**Interior Switches and Controls.** Lighting controls must comply with the applicable requirements of § 110.9.

2019 Low-Rise Residential Mandatory Measures Summary

§ 150.0(k)2G:	**Interior Switches and Controls.** An energy management control system (EMCS) may be used to comply with control requirements if it: provides functionality of the specified control according to § 110.9; meets the Installation Certificate requirements of § 130.4; meets the EMCS requirements of § 130.0(e); and meets all other requirements in § 150.0(k)2.
§ 150.0(k)2H:	**Interior Switches and Controls.** A multiscene programmable controller may be used to comply with dimmer requirements in § 150.0(k) if it provides the functionality of a dimmer according to § 110.9, and complies with all other applicable requirements in § 150.0(k)2.
§ 150.0(k)2I:	**Interior Switches and Controls.** In bathrooms, garages, laundry rooms, and utility rooms, at least one luminaire in each of these spaces must be controlled by an occupant sensor or a vacancy sensor providing automatic-off functionality. If an occupant sensor is installed, it must be initially configured to manual-on operation using the manual control required under Section 150.0(k)2C.
§ 150.0(k)2J:	**Interior Switches and Controls.** Luminaires that are or contain light sources that meet Reference Joint Appendix JA8 requirements for dimming, and that are not controlled by occupancy or vacancy sensors, must have dimming controls."
§ 150.0(k)2K:	**Interior Switches and Controls.** Under cabinet lighting must be controlled separately from ceiling-installed lighting systems.
§ 150.0(k)3A:	**Residential Outdoor Lighting.** For single-family residential buildings, outdoor lighting permanently mounted to a residential building, or to other buildings on the same lot, must meet the requirement in item § 150.0(k)3Ai (ON and OFF switch) and the requirements in either § 150.0(k)3Aii (photocell and either a motion sensor or automatic time switch control) or § 150.0(k)3Aiii (astronomical time clock), or an EMCS.
§ 150.0(k)3B:	**Residential Outdoor Lighting.** For low-rise residential buildings with four or more dwelling units, outdoor lighting for private patios, entrances, balconies, and porches; and residential parking lots and carports with less than eight vehicles per site must comply with either Section 150.0(k)3A or with the applicable requirements in Sections 110.9, 130.0, 130.2, 130.4, 140.7 and 141.0.
§ 150.0(k)3C:	**Residential Outdoor Lighting.** For low-rise residential buildings with four or more dwelling units, any outdoor lighting for residential parking lots or carports with a total of eight or more vehicles per site and any outdoor lighting not regulated by Section 150.0(k)3B or Section 150.0(k)3D must comply with the applicable requirements in Sections 110.9, 130.0, 130.2, 130.4, 140.7 and 141.0.
§ 150.0(k)4:	**Internally illuminated address signs.** Internally illuminated address signs must comply with § 140.8; or must consume no more than 5 watts of power as determined according to § 130.0(c).
§ 150.0(k)5:	**Residential Garages for Eight or More Vehicles.** Lighting for residential parking garages for eight or more vehicles must comply with the applicable requirements for nonresidential garages in Sections 110.9, 130.0, 130.1, 130.4, 140.6, and 141.0.
§ 150.0(k)6A:	**Interior Common Areas of Low-rise Multifamily Residential Buildings.** 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 comply with Table 150.0-A and be controlled by an occupant sensor.
§ 150.0(k)6B:	**Interior Common Areas of Low-rise Multifamily Residential Buildings.** 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 the interior common areas in that building must: i. Comply with the applicable requirements in Sections 110.9, 130.0, 130.1, 140.6 and 141.0; and ii. 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 designed paths of ingress and egress.
Solar Ready Buildings:	
§ 110.10(a)1:	**Single Family Residences.** Single family residences located in subdivisions with ten or more single family residences and where the application for a tentative subdivision map for the residences has been deemed complete and approved by the enforcement agency, which do not have a photovoltaic system installed, must comply with the requirements of § 110.10(b) through § 110.10(e)..
§ 110.10(a)2:	**Low-rise Multifamily Buildings.** Low-rise multi-family buildings that do not have a photovoltaic system installed must comply with the requirements of § 110.10(b) through § 110.10(d).
§ 110.10(b)1:	**Minimum Solar Zone Area.** The solar zone must have a minimum total area as described below. The solar zone must comply with access, pathway, smoke ventilation, and spacing requirements as specified in Title 24, Part 9 or other Parts of Title 24 or in any requirements adopted by a local jurisdiction. The solar zone total area must be comprised of areas that have no dimension less than 5 feet and are no less than 80 square feet each for buildings with roof areas less than or equal to 10,000 square feet or no less than 160 square feet each for buildings with roof areas greater than 10,000 square feet. For single family residences, the solar zone must be located on the roof or overhang of the building and have a total area no less than 250 square feet. 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 skylight area. The solar zone requirement is applicable to the entire building, including mixed occupancy.'
§ 110.10(b)2:	**Azimuth.** All sections of the solar zone located on steep-sloped roofs must be oriented between 90 degrees and 300 degrees of true north.
§ 110.10(b)3A:	**Shading.** The solar zone must not contain any obstructions, including but not limited to: vents, chimneys, architectural features, and roof mounted equipment.'
§ 110.10(b)3B:	**Shading.** Any obstruction located on the roof or any other part of the building that projects above a solar zone must be located at least twice the 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 vertical plane.'
§ 110.10(b)4:	**Structural Design Loads on Construction Documents.** For areas of the roof designated as a solar zone, the structural design loads for roof dead load and roof live load must be clearly indicated on the construction documents.
§ 110.10(c):	**Interconnection Pathways.** The construction documents must indicate: a location reserved for inverters and metering equipment and a pathway reserved for routing of conduit from the solar zone to the point of interconnection with the electrical service; and for single family residences and central water-heating systems, a pathway reserved for routing plumbing from the solar zone to the water-heating system.
§ 110.10(d):	**Documentation.** A copy of the construction documents or a comparable document indicating the information from § 110.10(b) through § 110.10(c) must be provided to the occupant.
§ 110.10(e)1:	**Main Electrical Service Panel.** The main electrical service panel must have a minimum busbar rating of 200 amps.
§ 110.10(e)2:	**Main Electrical Service Panel.** The main electrical service panel must have a reserved space to allow for the installation of a double pole circuit breaker for a future solar electric installation. The reserved space must be permanently marked as "For Future Solar Electric".

5/26/2021
JN

SCOPE OF WORK:
Single Family Dwelling -Remodel/Addition

PROJECT:
Hernandez Residence
121 So. G Street
Oxnard, CA 93030

title24now.com
1999 SINALOA AVE. ALTADENA, CA 91001
Phone: 626-701-9927 info@title24now.com

RESIDENTIAL
T24 SHEET
3 of 3

WOOD

1. SAWN LUMBER SHALL BE DOUGLAS FIR- LARCH (DOC PS20) CONFORMING TO THE 2019 CBC SECTION 2303 AND AFPA/AWC NDS-18 NATIONAL DESIGN SPECIFICATION FOR WOOD CONSTRUCTION (AND SUPPLEMENT) REVISED 2018, AND SHALL BE GRADE MARKED BY EITHER WCLIB OR WWPA.

2. SAWN STRUCTURAL FRAMING MEMBERS SHALL BE AS FOLLOWS (U.N.O.):

MEMBERS	GRADE
2x WALL STUDS @ 16"	D.F. #2
2x FLOOR JOISTS & ROOF RAFTERS	D.F. #2
BEAMS & HEADERS (4x, 6x, 8x)	D.F. #1
POSTS (4x, 6x, 8x)	D.F. #1

3. ALL SILL PLATES BEARING ON CONCRETE OR MASONRY SHALL BE PRESSURE TREATED DOUGLAS FIR.

4. ALL SILLS PLATES BEARING ON CONCRETE OR MASONRY SHALL HAVE ANCHOR BOLTS PER SHEARWALL SCHEDULE. ELSEWHERE, INSTALL 5/8"ø x 10" LONG L-BOLTS PLACED WITHIN 12" MAX. (4-1/2" MIN.) FROM EACH END OR SPLICE, WITH 60" MAX. SPACING, MIN. 2 ANCHOR BOLTS PER EACH PANEL.

5. SILL PLATES OF INTERIOR, NON-BEARING, NON-SHEAR WALLS MAY BE FASTENED TO A CONCRETE SLAB USING HILTI "X-JF72" LOW VELOCITY POWDER-ACTUATED FASTENERS (ICC-ESR-1663). CONCRETE SLAB IS TO BE NORMAL WEIGHT CONCRETE AND CURED AT LEAST 7 DAYS. PLACE FASTENERS 6" FROM ENDS OF SILL AND AT 36" (MAX.) SPACING BETWEEN.

6. ORIENTED STRAND BOARD AND PLYWOOD SHEATHING SHALL CONFORM TO: U.S. PRODUCT STANDARDS PS1-09 OR PS2-10, APA PERFORMANCE STANDARD PRP 108, AND 2019 CBC 2303.1.4 U.N.O., THE MINIMUM GRADES AND SPAN INDEXES SHALL BE AS FOLLOWS:

USE	MIN. GRADE	SPAN RATING
ROOF SHEATHING	APA RATED SHEATHING, EXP. 1	24" MIN.
FLOOR SHEATHING	APA-RATED STURD-I-FLOOR T&G	24" MIN.
WALL SHEATHING	PER SHEARWALL SCHEDULE, MIN. APA RATED SHEATHING, EXP. 1	(N/A)

7. GLUED LAMINATED TIMBERS SHALL BE FABRICATED IN ACCORDANCE WITH ANSI/AITC A190.1-1992 "STRUCTURAL GLUED LAMINATED TIMBER', AITC 117 OR APA-EWS 117, AND ASTM D3737-89a. EXTERIOR GLUE TO BE USED WITH INTENDED DRY USE CONDITION PER 2018 NDS SECT 5.1.4.1. COMBINATIONS AND USES SHALL BE AS FOLLOWS:

KEY	COMBINATION NO.	USE
24F-V4	EWS 24F-V4 DF/DF	SIMPLE SPAN
24F-V8	EWS 24F-V8 DF/DF	CONTINUOUS 4 CANTILEVERS

8. FOR STRUCTURAL GLUE-LAMINATED TIMBER MEMBERS, AN AITC CERTIFICATION OF CONFORMANCE OR A CERTIFICATE OF CONFORMANCE ISSUED BY A CURRENT ICBO APPROVED QUALITY CONTROL AGENCY, MUST BE SUBMITTED TO THE BUILDING INSPECTOR PRIOR TO INSTALLATION. THE MAXIMUM MOISTURE CONTENT OF THE LAMINATIONS AT TIME OF MANUFACTURE SHALL NOT EXCEED 16% FOR DRY CONDITIONS OF USE.

9. LVL, PSL, AND LSL ENGINEERED WOOD MEMBERS SHALL BE PER TRUSJOIST MACMILLAN & ICC-ESR-1153. MICROLLAMS, PARALLAMS, AND TIMBERSTRAND RESPECTIVELY. ALTERNATE MUST BE ICC-APPROVED AND REVIEWED BY STRUCTURAL ENGINEER.

10. WOOD I-JOISTS SHALL BE IN COMPLIANCE WITH THE FOLLOWING STANDARDS:

I-JOIST MANUF.	STANDARDS
I-LEVEL	ICC-ESR-1387 (TJI, TJI/PRO MEMBERS)
ALL OTHERS	ASTM D5055, APA FORM QM-3005

11. FRAMING ANCHORS, POST CAPS, COLUMN BASES, AND OTHER CONNECTORS SPECIFIED ON DRAWINGS SHALL BE AS MANUFACTURED BY 'SIMPSON STRONG-TIE' OR AN ENGINEER-APPROVED EQUAL. ALL CONNECTORS TO BE FULLY NAILED OR BOLTED AS SPECIFIED PER MANUF.

12. BARS AND PLATES SHALL CONFORM TO ASTM A36. BOLTS, UNLEADED BOLTS, WASHERS AND DRIFT BOLTS SHALL CONFORM TO ASTM A 307.

13. NUTS SHALL CONFORM TO THE REQUIREMENTS OF ASTM A 563, GRADE A.

14. ALL BOLT HEADS (MACHINE AND LAG) AND NUTS BEARING ON WOOD SHALL HAVE STANDARD CUT WASHERS, U.N.O.

15. MACHINE BOLT (THRU-BOLT) HOLES IN WOOD SHALL BE DRILLED A MINIMUM 1/32" & MAXIMUM 1/16" LARGER THAN THE NOMINAL BOLT DIAMETER

16. LEAD HOLES FOR LAG SCREWS GREATER THAN 3/8"ø SHALL BE BORED AS FOLLOWS: 40% - 70% OF THE SHANK DIAMETER AND A LENGTH EQUAL TO AT LEAST THE LENGTH OF THE THREADED PORTION. CLEARANCE HOLES FOR THE SHANK SHALL HAVE THE SAME DIAMETER AS THE SHANK, AND THE SAME DEPTH OF PENETRATION AS THE LENGTH OF UNTHREADED SHANK. LAG SCREWS SHALL BE INSERTED BY TURNING WITH A WRENCH, NOT BY DRIVING WITH A HAMMER.

17. NAILING OF SAWN MEMBERS SHALL CONFORM TO THE CBC TABLE 2304.10.1, U.N.O. ON THE STRUCTURAL DETAILS.

18. NAILS HOLES SHALL BE PRE-DRILLED WHEN NECESSARY TO PREVENT SPLITTING.

19. CUSTOM STEEL HARDWARE CONNECTORS FOR WOOD OR GLUED LAMINATED TIMBER SHALL BE FABRICATED FROM STEEL CONFORMING TO ASTM A 36. WELDS SHALL CONFORM TO THE REQUIREMENTS OF AWS D1.1-2000.

20. HORIZONTAL DIAPHRAGM NAILING SHALL CONFORM TO SDPWS TABLE 4.2 STRUCTURAL PANEL SHEARWALLS SHALL CONFORM TO SDPWS TABLE 4.3 NOMENCLATURE IS DEFINED AS FOLLOWS (PER DETAILS):

BN = BOUNDARY NAILING AT DIAPHRAGM BOUNDARIES, AND AT EDGES OF OPENINGS
EN = EDGE NAILING, AT CONTINUOUS PANEL EDGES
FN = FIELD NAILING, AT INTERMEDIATE FRAMING MEMBERS

21. WHERE DIAPHRAGM BLOCKING IS SPECIFIED FOR ROOFS OR FLOORS, USE 2x4 FLAT BLOCKING WITH 'Z' CLIPS, U.N.O.

22. HORIZONTAL SHEATHING SHALL BE CONTINUOUS OVER TWO OR MORE SPANS, AND THE FACE GRAIN (LONG DIRECTION) OF SHEATHING SHALL BE PERPENDICULAR TO SUPPORT MEMBERS.

23. SIMPLE SPAN WOOD MEMBERS, NOT SHOP CAMBERED, SHALL BE ERECTED WITH THE NATURAL CAMBER UP. FOR CANTILEVERED WOOD MEMBERS, CONSULT WITH PROJECT STRUCTURAL ENGINEER.

WOOD CONT.

24. SPECIAL PROVISIONS FOR SHEAR WALLS WITH SHEATHING ON BOTH SIDES (WHERE SPECIFICALLY INDICATED ON PLANS):
   A. SILL PLATE SHALL BE 3x P.T.D.F.
   B. ALL STUDS AND BLOCKING AT PANEL EDGES SHALL BE 3x MIN.
   C. ALL OTHER INTERMEDIATE STUDS SHALL BE 2x @ 16"
   D. END POSTS (OR COLUMNS) SHALL BE AS SPECIFIED ON THE DRAWINGS.
   E. BOTH VERTICAL AND HORIZONTAL INTERIOR PANEL JOINTS ON OPPOSITE SIDES OF THE WALL SHALL BE STAGGERED.
   F. THE SHEATHING ON THE FIRST SIDE MUST BE NAILED BEFORE THE FRAMING INSPECTION. THE SHEATHING ON THE OTHER SIDE MUST BE INSTALLED AND INSPECTED PRIOR TO INSTALLATION OF WALL SURFACE COVERING.
   G. NO PENETRATIONS OR NOTCHES ARE PERMITTED OTHER THAN THOSE SHOWN ON THE STRUCTURAL DRAWINGS.

25. PROVIDE DOUBLE 2x STUDS TO SUPPORT ALL BEAMS, UNLESS POSTS ARE SPECIFIED ON THE PLANS.

26. DOUBLE BLOCK UNDER ALL POSTS. DOUBLE JOISTS UNDER ALL PARALLEL PARTITIONS, UNLESS OTHERWISE SPECIFIED.

27. TOP PLATES OF ALL WOOD STUD WALLS SHALL BE 2-2x (3.6MIE WIDTH AS STUDS), LAP 48" (MIN.) WITH AT LEAST 12-16d NAILS AT EACH SIDE OF LAP AND NOT MORE THAN 6" BETWEEN NAILS (SEE PLANS IF STRAPS ARE REQUIRED).

28. NOTCHING OF BEAMS OR JOISTS SHALL BE PERMITTED ONLY PER 2018 NDS SECTION 3.2.3.2, DETAILED AND APPROVED BY THE ENGINEER. HOLES DRILLED IN JOISTS SHALL NOT BE WITHIN 2 INCHES OF THE TOP OR BOTTOM OF THE JOIST, AND THE DIAMETER SHALL NOT EXCEED ONE THIRD THE DEPTH OF THE JOIST.

29. MOISTURE CONTENT OF SAWN LUMBER AT TIME OF PLACEMENT SHALL NOT EXCEED 19%

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

31. ALL FASTENERS IN PRESERVATIVE-TREATED & FIRE-RETARDANT-TREATED WOOD SHALL BE OF HOT DIPPED ZINC-COATED GALVANIZED STEEL, STAINLESS STEEL, SILICON BRONZE OR COPPER. THE COATING WEIGHTS FOR ZINC-COATED FASTENERS SHALL BE IN ACCORDANCE WITH ASTM A 153. FASTENERS OTHER THAN NAILS, TIMBER RIVETS, WOOD SCREWS AND LAG SCREWS SHALL BE PERMITTED TO BE OF MECHANICALLY DEPOSITED ZINC COATED STEEL WITH COATING WEIGHTS IN ACCORDANCE WITH ASTM B 695, CLASS 55 MINIMUM.

ABBREVIATIONS

AITC	AMERICAN INSTITUTE OF TIMBER CONSTRUCTION
ANSI	AMERICAN NATIONAL STANDARDS INSTITUTE
APA	AMERICAN PLYWOOD ASSOCIATION
ASTM	AMERICAN SOCIETY FOR TESTING & MATERIALS
AWS	AMERICAN WELDING SOCIETY
CBC	CALIFORNIA BUILDING CODE
UBC	UNIFORM BUILDING CODE
WCLIB	WEST COAST LUMBER INSPECTION BUREAU
WWPA	WESTERN WOOD PRODUCTS ASSOCIATION

AB	ANCHOR BOLT	lb (#)	POUND(S)
ABV	ABOVE	LDGR	LEDGER
ADJ	ADJACENT	LG	LONG(ITUDINAL)
ALT	ALTERNATE	LTWT	LIGHT WEIGHT
AFF	ABOVE FINISHED FLOOR	MAS	MASONRY
APPROX	APPROXIMATE(LY)	MAT'L	MATERIAL
ARCH	ARCHITECTURAL	MAX	MAXIMUM
@	AT	MB	MACHINE BOLT
BLDG	BUILDING	MECH	MECHANICAL
BLK	BLOCKING	MEZZ	MEZZANINE
BM	BEAM	MF	MOMENT FRAME
BN	BOUNDARY NAILING	MFR	MANUFACTURER
BRG	BEARING	MIN	MINIMUM
BTM (B)	BOTTOM	MISC	MISCELLANEOUS
BTWN	BETWEEN	MTL	METAL
C	CAMBER(ED)	(N)	NEW
CANT	CANTILEVER	NO. (#)	NUMBER
CIP	CAST-IN-PLACE	NTS	NOT TO SCALE
CL	CENTERLINE	OC	ON CENTER
CLG	CEILING	OWJ	OPEN WEB JOISTS
CLR	CLEAR	P/C	PRECAST CONCRETE
COL	COLUMN	PERP (⊥)	PERPENDICULAR
CONC	CONCRETE	PCF	POUNDS PER CUBIC FT.
CONN	CONNECTION	PL	PLATE
CONST	CONSTRUCTION	PLY	PLYWOOD
CTR	CENTER (ED)	PSF	POUNDS PER SQUARE FOOT
d	PENNY (NAILS)	PSI	POUNDS PER SQUARE INCH
DBL	DOUBLE	PT	PRESSURE TREATED
DEPT	DEPARTMENT	P/T	POST-TENSIONED (PRESTRESSED)
DF	DOUGLAS FIR	QTY	QUANTITY
DIA (ø)	DIAMETER	REF	REFERENCE
DIAG	DIAGONAL	REINF	REINFORCEMENT
DIAPH	DIAPHRAGM	REQ'D	REQUIRED
DIM	DIMENSION	RJ	ROOF JOIST
DN	DOWN	RO	ROUGH OPENING
do	DITTO (REPEAT)	RR	ROOF RAFTER
DP	DEEP (DEPTH)	SCH	SCHEDULE
DWG	DRAWING	SW	SHEARWALL
EA	EACH	SHT	SHEET
EF	EACH FACE	SIM	SIMILAR
ELEV	ELEVATION	SIMP	SIMPSON
EMBD	EMBED(MENT)	SKWD	SKEW(ED)
EN	EDGE NAILING	SPEC	SPECIFICATIONS
EW	EACH WAY	SQ	SQUARE
EXSTG (E)	EXISTING	SS	SELECT STRUCTURAL
EXT	EXTERIOR	STD	STANDARD
FF	FINISHED FLOOR	STGR	STAGGER(ED)
FIN	FINISH(ED)	STRUCT	STRUCTURAL
FLG	FLANGE	T&B	TOP AND BOTTOM
FLR	FLOOR	T&G	TONGUE AND GROOVE
FN	FIELD NAILING	THK	THICK
FND	FOUNDATION	THRD	THREAD(ED)
FR'MG	FRAME(ING)	TN	TOE NAIL
FT	FEET	TOF	TOP OF FOOTING
FTG	FOOTING	TOW	TOP OF WALL
GA	GAUGE	TOP	TOP OF PARAPET
GALV	GALV GALVANIZE(D)	TS	TUBE STEEL
GB	GRADE BEAM	TYP	TYPICAL
GLB	GLUE LAMINATED BEAM	UNO	UNLESS NOTED OTHERWISE
HD	HOLD DOWN	VERT (V)	VERTICAL
HDR	HEADER	VIF	VERIFY IN FIELD
HGR	HANGER	W	STEEL WIDE FLANGE
HORZ (H)	HORIZONTAL	W/	WITH
HT	HEIGHT	WD	WOOD
IN (")	INCHES	WT	WEIGHT
INT	INTERIOR	WWF	WELDED WIRE FABRIC
JST	JOIST		
K	KIPS (1000)		
KSI	KIPS PER SQUARE INCH		
L	ANGLE		
LB	LAG BOLT		

REINFORCING STEEL

1. DEFORMED BAR REINFORCEMENT SHALL CONFORM TO THE FOLLOWING GRADES OF ASTM A 615-94:
   GRADE 40 - #3 AND SMALLER
   GRADE 60 - #4 AND LARGER

2. DETAILS OF REINFORCEMENT SHALL BE IN ACCORDANCE WITH IBC SEC. 1907 & OTHER SECTIONS ACCORDING TO APPLICATION.

3. LAPS AT BAR SPLICES IN CONCRETE CONSTRUCTION SHALL BE AS SHOWN ON SHEET SD-1, 'CONCRETE LAP SPLICE TABLE', AND NOT LESS THAN 12".

4. LAPS AT BAR SPLICES IN MASONRY CONSTRUCTION SHALL BE AS SHOWN ON SHEET SD-1, 'MASONRY LAP SPLICE TABLE', AND NOT LESS THAN 48 db.

5. VERTICAL REINFORCEMENT SHALL BE TIED OR OTHERWISE FIXED IN POSITION AT THE TOP AND BOTTOM AND AT INTERMEDIATE LOCATIONS, SPACED NOT GREATER THAN 192 BAR DIAMETERS (SEE DETAILS FOR OTHER REQ'TS.).

6. WALLS, PILASTERS AND COLUMNS SHALL BE DOWELED TO THEIR SUPPORTING FOOTINGS WITH REINFORCEMENT OF THE SAME SIZE, GRADE AND SPACING AS THE VERTICAL REINFORCEMENT IN THE WALLS, PILASTERS, OR COLUMNS (U.N.O.)

7. BAR SUPPORTS SHALL BE PROVIDED IN ACCORDANCE WITH THE PROVISIONS OF 'BAR SUPPORT SPECIFICATIONS' AS CONTAINED IN THE LATEST EDITION OF THE 'MANUAL OF STANDARD PRACTICE' BY THE CONCRETE REINFORCING STEEL INSTITUTE (CRSI).

8. REINFORCING STEEL DETAILING, BENDING, AND PLACING SHALL BE IN ACCORDANCE WITH THE CRSI 'MANUAL OF STANDARD PRACTICE', LATEST EDITION.

9. ALL REINFORCEMENT SHALL BE SECURELY TIED IN PLACE BEFORE PLACING CONCRETE OR GROUT.

10. WELDING OF CROSSING BARS AND TACK WELDING OF REINFORCEMENT SHALL NOT BE PERMITTED.

11. CONTRACTOR SHALL SUBMIT REINFORCING STEEL SHOP DRAWINGS FOR REVIEW BEFORE FABRICATION AND INSTALLATION

12. WELDING OF ALL REINFORCING STEEL TO STRUCTURAL STEEL SHALL BE LIMITED TO THOSE AREAS SPECIFICALLY SHOWN ON THE PLANS. ANY OTHER WELDING SHALL REQUIRE THE APPROVAL OF THE GOVERNING AGENCY, FIELD INSPECTOR, AND STRUCTURAL ENGINEER.

13. FLARE GROOVE WELDS SHALL, IN ADDITION TO ALL SPECIFICATIONS LISTED ABOVE, COMPLY WITH THE REQUIREMENTS OF THE THIRTEENTH EDITION OF THE 'MANUAL OF STEEL CONSTRUCTION - ALLOWABLE STRESS DESIGN' AS PUBLISHED BY THE AMERICAN INSTITUTE OF STEEL CONSTRUCTION, INC.

REINFORCED CONCRETE FOUNDATIONS

1. THE MINIMUM 28-DAY CYLINDER STRENGTH SHALL BE PER 2019 CBC TABLE 1904.2.2, AS FOLLOWS, (U.N.O.):

CONCRETE ELEMENT	f'c
SLAB ON GRADE	2500 PSI
CONTINUOUS FOOTINGS	2500 PSI
SPREAD PAD FOOTINGS	2500 PSI
PILES & CAISSONS	3000 PSI
GRADE BEAMS	3000 PSI

ALL CONCRETE REQUIRED TO BE GREATER THAN 2500 PSI SHALL HAVE SPECIAL INSPECTION PER 2019 CBC 1704.4.2.3.

2. PORTLAND CEMENT SHALL CONFORM TO ASTM C 150-94, TYPE I OR II.

3. AGGREGATES FOR NORMAL WEIGHT CONCRETE SHALL CONFORM TO ASTM C33/C33M-13 AND SHALL BE AS DEFINED IN ACI 318-14 CHAPTER 3. 'A' AGGREGATES FOR LIGHT WEIGHT CONCRETE SHALL CONFORM TO ASTM CC330/C330M-14. STRUCTURAL LIGHT WEIGHT CONCRETE SHALL HAVE A DENSITY RANGE OF 110 TO 115 PCF.

4. ADMIXTURES PER ACI 318-14 CHAPTER 3 MAY BE USED WITH PRIOR APPROVAL OF THE STRUCTURAL ENGINEER.

5. READY-MIX CONCRETE SHALL BE MIXED AND DELIVERED IN ACCORDANCE WITH ASTM C 94-94 AND PER SECT. 1903.9 - MIXING & PLACING OF CONCRETE.

6. MINIMUM CONCRETE COVER (IN INCHES) FOR REINFORCING STEEL IN NONPRESTRESSED CAST-IN-PLACE CONCRETE SHALL BE AS FOLLOWS:

LOCATION	MIN. COVER (IN.)
A. CAST AGAINST AND PERMANENTLY EXPOSED TO EARTH	3
B. FORMED SURFACES EXPOSED TO EARTH OR WEATHER:	
#6 THROUGH #18 BARS	2
#5 BARS, 5/8 INCH WIRE, AND SMALLER	1½
C. NOT EXPOSED TO WEATHER OR IN CONTACT WITH THE GROUND:	
#14 AND #18 BARS	1½
#11 AND SMALLER (SLABS, WALLS, JOISTS):	¾
PRIMARY REINFORCEMENT, STIRRUPS, TIES OR SPIRALS (BEAMS, GIRDERS, COLUMNS)	1½

7. SLEEVES, PIPES AND CONDUITS SHALL NOT BE PLACED THROUGH CONTINUOUS OR SPREAD FOOTINGS, GRADE BEAMS, PILE CAPS OR TIE BEAMS UNLESS SHOWN IN APPROVED BY STRUCTURAL ENGINEER AND SHOWN IN STRUCTURAL DETAILS.

8. ALL SLEEVES THROUGH BEAMS, GIRDERS AND FOUNDATION WALLS SHALL BE INSTALLED AND SECURED IN POSITION PRIOR TO PLACING CONCRETE. EXCEPT AS SHOWN ON STRUCTURAL DRAWINGS, SLEEVING SHALL NOT BE PERMITTED UNLESS APPROVED BY THE ARCHITECT AND STRUCTURAL ENGINEER.

9. CONDUIT SHALL NOT BE PLACED IN ANY CONCRETE SLAB LESS THAN 3-1/2 " THICK. IF CONDUIT IS PLACED IN CONCRETE SLAB, ITS OUTSIDE DIAMETER SHALL NOT BE GREATER THAN ONE THIRD OF THE SLAB THICKNESS.

10. ALL EXPOSED CORNERS SHALL BE CHAMFERED 3/4 INCH (U.N.O.)

11. FRAMING CONTRACTOR TO VERIFY LOCATION OF HOLDOWNS PRIOR TO POURING OF CONCRETE FOUNDATIONS.

12. REFER TO ARCHITECTURAL DRAWINGS FOR MOLDS, GROOVES, ORNAMENTS, CLIPS, OR GROUNDS REQUIRED TO BE CAST IN THE CONCRETE AND FOR EXTENT OF DEPRESSIONS, CURBS, AND RAMPS.

13. ALL VERTICAL SURFACES OF CONCRETE ABOVE FINISHED GRADE SHALL BE FORMED.

14. REFER TO ARCHITECTURAL DRAWINGS AND SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS DUE TO ARCHITECTURAL C.I.P. CONCRETE.

15. SLAB ON GRADE IS NOT DESIGNED AS A STRUCTURAL DIAPHRAGM (U.N.O.).

16. ☐ ALL FOUNDATION CONSTRUCTION SHALL FOLLOW RECOMMENDATIONS FOUND IN THE PROJECT SOILS REPORT BY OTHER.

-OR-

☒ NO SOILS REPORT PROVIDED FOR THIS PROJECT. MINIMUM SOILS DESIGN VALUES SHALL BE PER CBC TABLE 1806.2 ASSP = 1500 psf.

SOILS DESIGN VALUES ARE SUMMARIZED ON SHEET SN-2, 'STRUCTURAL DESIGN BASIS'.

GENERAL NOTES

1. ALL CONSTRUCTION, INCLUDING MATERIAL AND WORKMANSHIP, SHALL CONFORM TO THE PROVISIONS OF THE 2019 CALIFORNIA BUILDING CODE (CBC.) WITH THE GOVERNING AGENCY AMENDMENTS AND STANDARDS REFERENCED THEREIN.

2. ALL ASTM STANDARDS LISTED HEREIN SHALL BE AS REFERENCED IN THE LATEST ISSUE OF THE ANNUAL BOOK OF STANDARDS OF THE AMERICAN SOCIETY FOR TESTING AND MATERIALS (ASTM).

3. THE CONTRACTORS SHALL VERIFY ALL DIMENSIONS, ELEVATIONS AND SITE CONDITIONS PRIOR TO STARTING WORK. THE ARCHITECT AND STRUCTURAL ENGINEER SHALL IMMEDIATELY BE NOTIFIED IN WRITING OF DISCREPANCIES.

4. ALL OMISSIONS AND/OR CONFLICTS BETWEEN THE VARIOUS ELEMENTS OF THE WORKING DRAWINGS AND SPECIFICATIONS SHALL BE BROUGHT TO THE ATTENTION OF THE STRUCTURAL ENGINEER, ARCHITECT, AND FIELD INSPECTOR. THE ARCHITECT OR STRUCTURAL ENGINEER SHALL PROVIDE A SOLUTION PRIOR TO PROCEEDING WITH ANY WORK AFFECTED BY THE CONFLICT OR OMISSION.

5. IN CASE OF CONFLICT, NOTES AND DETAILS OF THESE STRUCTURAL DRAWINGS SHALL TAKE PRECEDENCE OVER THESE GENERAL NOTES AND/OR STANDARD DETAILS SHOWN ON SHEET SD-1. TYPICAL DETAILS SHALL BE USED WHENEVER APPLICABLE.

6. IF A SPECIFIC DETAIL IS NOT SHOWN FOR ANY PART OF THE WORK, THE CONSTRUCTION SHALL BE THE SAME AS FOR SIMILAR WORK.

7. WORKING DIMENSIONS SHALL NOT BE SCALED FROM PLANS, SECTIONS OR DETAILS ON THESE STRUCTURAL DRAWINGS.

8. THE CONTRACTORS SHALL PROVIDE AND MAINTAIN ADEQUATE SHORING AND BRACING AS REQUIRED FOR STABILITY OF THE STRUCTURE DURING ALL PHASES OF CONSTRUCTION. THESE DRAWINGS REPRESENT THE FINISHED STRUCTURE AND DO NOT INDICATE THE METHOD OF CONSTRUCTION.

9. PIPES, DUCTS, SLEEVES, OPENINGS, POCKETS, BLOCK-OUTS, ETC. SHALL NOT BE PLACED IN SLABS, BEAMS, GIRDERS, COLUMNS, WALLS, FOUNDATIONS, ETC. NOR SHALL ANY STRUCTURAL MEMBER BE CUT FOR SUCH ITEMS, UNLESS SPECIFICALLY DETAILED ON THESE STRUCTURAL DRAWINGS. IF ANY PIPES, DUCTS, CONDUIT, ETC. ARE PLACED THAT ARE NOT SHOWN ON THESE STRUCTURAL DRAWINGS, THE ARCHITECT AND STRUCTURAL ENGINEER SHALL BE NOTIFIED (SEE PARAGRAPH 4 ABOVE.)

10. ANCHOR BOLTS OR INSERTS FOR EQUIPMENT ANCHORAGE OR INSTALLATION SHALL BE DESIGNED FOR SEISMIC ZONE D BY A CIVIL ENGINEER OR STRUCTURAL ENGINEER REGISTERED IN THE STATE OF CALIFORNIA AND SHALL BE IDENTIFIED ON THE MECHANICAL OR ELECTRICAL SHOP DRAWINGS.

11. THE CONTRACTORS SHALL ASSUME SOLE AND COMPLETE RESPONSIBILITY FOR JOB SITE CONDITIONS DURING THE COURSE OF CONSTRUCTION OF THIS PROJECT, INCLUDING SAFETY OF ALL PERSONS AND PROPERTY. THIS REQUIREMENT SHALL APPLY CONTINUOUSLY AND NOT BE LIMITED TO NORMAL WORKING HOURS. THE CONTRACTORS SHALL DEFEND, INDEMNIFY, AND HOLD THE STRUCTURAL ENGINEER FREE AND HARMLESS FROM ALL CLAIMS, DEMANDS AND ALL LIABILITY, REAL OR ALLEGED, IN CONNECTION WITH THE PERFORMANCE OF WORK ON THIS PROJECT, EXCEPT FOR LIABILITY ARISING FROM THE SOLE NEGLIGENCE OF THE STRUCTURAL ENGINEER.

12. IF THE CONTRACTOR PROPOSES ANY SUBSTITUTION, NEW CALCULATIONS AND DETAILS MAY HAVE TO BE PREPARED, EXISTING DETAILS MAY HAVE TO BE ALTERED, AND NEW DRAWINGS MAY HAVE TO BE SUBMITTED TO THE BUILDING DEPT. THE CONTRACTOR SHALL PAY THE STRUCTURAL ENGINEER'S FEES TO ALTER THE APPROVED PLANS. THE CONTRACTOR SHALL ALSO PROCESS THE REVISED PLANS REFLECTING ALL SUBSTITUTIONS THROUGH THE APPROPRIATE OFFICE OF ALL GOVERNING AGENCIES.

STRUCTURAL OBSERVATION SCHEDULE

- IF REQUIRED, ALL STRUCTURAL OBSERVATIONS MUST BE SCHEDULED 72 HOURS IN ADVANCE WITH DAVID REITH & ASSOCIATES AT (805) 418-7424.

DAVID REITH AND ASSOCIATES, INC.
1319 FEATHER AVENUE
THOUSAND OAKS, CA 91360
PHONE # (805) 418-7924 CELL # (619) 706-3596 FAX # (805) 418-7925
E-MAIL : davidreithandassociates@gmail.com

REITH
DAVID REITH & ASSOCIATES, INC.
Structural Design Services
Residential • Commercial • Industrial

REGISTERED PROFESSIONAL ENGINEER DAVID L. REITH No. 072122 EXP. 06-30-2022 STATE OF CALIFORNIA

NEW TWO-STORY ADDITION & REMODEL

HERNANDEZ RESIDENCE

1215 G STREET
OCNARD, CALIFORNIA 93030

Issue Dates:
1 5-14-2021 Plan Check Submittal
2
3
4
5

Sheet Title: Structural Notes

Scale:

Job # 21197

Sheet: SN-1

FASTENING SCHEDULE (TABLE 2304.10.1, 2019 CBC)

	ELEMENT/ CONNECTION ON	FASTENING	LOCATION
	ROOF		
1.	BLOCKING BETWEEN CEILING JOISTS, RAFTERS, OR TRUSSES TO TOP PLATE OR OTHER FRAMING BELOW	3 - 8d COMMON (2.5" X 0.131") 3 - 10d BOX (3"x0.128") 3 - 3"x 0.131" NAILS 3 - 3" 14 GAGE STAPLES, 7/16" CROWN	TOENAIL EACH END
	BLOCKING BETWEEN RAFTERS OR TRUSSES NOT AT THE WALL TOP PLATE, TO RAFTER OR TRUSS	2 - 8d COMMON (2.5" X 0.131") 2 - 3" 14 GAUGE SCAILS 2 - 3"x 0.131" NAILS 2 - 16d COMMON (3.5" x 0.162") 3 - 3"x 0.131" NAILS 3 - 3" 14 GAUGE STAPLES	TOENAIL EACH END
	FLAT BLOCKING TO TRUSS AND WEB FILLER	4 - 16d COMMON (3.5" X 0.162") @ 6" OC. 3 - 3"x 0.131" NAILS 3 - 3" 14 GAGE STAPLES	END NAIL
2.	CEILING JOIST TO TOP PLATE	3 - 8d COMMON (2.5" X 0.131") 3 - 10d BOX (3"x0.128") 3 - 3"x 0.131" NAILS 3 - 3" 14 GAGE STAPLES, 7/16" CROWN	TOENAIL EACH END
3.	CEILING JOIST NOT ATTACHED TO PARALLEL RAFTER, LAPS OVER PARTITIONS (NO THRUST) (TABLE AND SECTION 2308.13.1)	3 - 16d COMMON 4 - 10d BOX 4 - 3"x 0.131" NAILS 3 - 3" 14 GAGE STAPLES, 7/16" CROWN	FACE NAIL
4.	CEILING JOIST ATTACHED TO PARALLEL ROOF RAFTER (HEEL JOINT) (TABLE AND SECTION 2308.13.1)	TABLE 2308.13.1	FACE NAIL
5.	COLLAR TIE TO RAFTER	3 - 10d COMMON 4 - 10d BOX 4 - 3"x 0.131" NAILS 3 - 3" 14 GAGE STAPLES, 7/16" CROWN	FACE NAIL
6.	RAFTER OR ROOF TRUSS TO TOP PLATE (TABLE AND SECTION 2308.13)	3 - 10d COMMON 3 - 16d BOX 4 - 10d BOX 4 - 3"x 0.131" NAILS 3 - 3" 14 GAGE STAPLES, 7/16" CROWN	TOENAIL [G]
7.	ROOF RAFTERS TO RIDGE, VALLEY OR HIP RAFTER TO 2" RIDGE BEAM	2 - 16d COMMON 3 - 10d BOX 3 - 3"x 0.131" NAILS 3 - 3" 14 GAGE STAPLES, 7/16" CROWN	END NAIL
		3 - 10d COMMON 3 - 16d BOX 4 - 10d BOX 4 - 3"x 0.131" NAILS 4 - 3" 14 GAGE STAPLES, 7/16" CROWN	TOENAIL
	WALL		
8.	STUD TO STUD (NOT AT BRACED WALL PANELS)	16d COMMON	24" O.C. FACE NAIL
		10d BOX 3"x 0.131" NAILS 3" 14 GAGE STAPLES, 7/16" CROWN	16" O.C. FACE NAIL
9.	STUD TO STUD AND ABUTTING STUDS AT INTERSECTING WALL CORNERS (AT BRACED WALL PANELS)	16d COMMON	16" O.C. FACE NAIL
		16d COMMON	12" O.C. FACE NAIL
		3"x 0.131" NAILS 3" 14 GAGE STAPLES, 7/16" CROWN	12" O.C. FACE NAIL
10.	BUILT UP HEADER	16d COMMON	16" O.C. EACH EDGE, FACE NAIL
		16d BOX	12" O.C. EACH EDGE, FACE NAIL
11.	CONTINUOUS HEADER TO STUD	4 - 8d COMMON 4 - 10d BOX	TOENAIL
12.	TOP PLATE TO TOP PLATE	16d COMMON	16" O.C. FACE NAIL
		10d BOX 3"x 0.131" NAILS 3" 14 GAGE STAPLES, 7/16" CROWN	16" O.C. FACE NAIL
13.	TOP PLATE TO TOP PLATE AT END JOINTS	8 - 16d COMMON 12 - 10d BOX 12 - 3"x 0.131" NAILS 12 - 3" 14 GAGE STAPLES, 7/16" CROWN	EACH SIDE OF END JOINT, FACE NAIL (MIN. 24" LAP SPLICE LENGTH EACH SIDE OF END JOINT
14.	BOTTOM PLATE TO JOIST, RIM JOIST, BAND JOIST OR BLOCKING (NOT AT BRACED WALL PANELS)	16d COMMON	16" O.C. FACE NAIL
		16d BOX 3"x 0.131" NAILS 3" 14 GAGE STAPLES, 7/16" CROWN	12" O.C. FACE NAIL
15.	BOTTOM PLATE TO JOIST, RIM JOIST, BAND JOIST OR BLOCKING AT BRACED WALL PANELS	2 - 16d COMMON 3 - 16d BOX 4 - 3"x 0.131" NAILS 4 - 3" 14 GAGE STAPLES, 7/16" CROWN	16" O.C. FACE NAIL
16.	STUD TO TOP OR BOTTOM PLATE	4 - 8d COMMON 4 - 10d BOX 4 - 3"x 0.131" NAILS 4 - 3" 14 GAGE STAPLES, 7/16" CROWN	TOENAIL
		2 - 16d COMMON 3 - 16d BOX 3 - 3"x 0.131" NAILS 3 - 3" 14 GAGE STAPLES, 7/16" CROWN	END NAIL
17.	TOP OR BOTTOM PLATE TO STUD	3 - 16d COMMON 4 - 10d BOX 4 - 3"x 0.131" NAILS 3 - 3" 14 GAGE STAPLES, 7/16" CROWN	END NAIL
18.	TOP PLATES, LAPS AT CORNERS AND INTERSECTION	2 - 16d COMMON 3 - 10d BOX 3 - 3"x 0.131" NAILS 3 - 3" 14 GAGE STAPLES, 7/16" CROWN	FACE NAIL
19.	1" BRACE TO EACH STUD AND PLATE	2 - 8d COMMON 3 - 10d BOX 3 - 3"x 0.131" NAILS 3 - 3" 14 GAGE STAPLES, 7/16" CROWN	FACE NAIL
20.	1"x6" SHEATHING TO EACH BEARING	2 - 8d COMMON 2 - 10d BOX	FACE NAIL
21.	1"x8" AND WIDER SHEATHING TO EACH BEARING	3 - 8d COMMON 3 - 10d BOX	FACE NAIL
	FLOOR		
22.	JOIST TO SILL, TOP PLATE, OR GIRDER	3 - 8d COMMON 3 - 10d BOX 3 - 3"x 0.131" NAILS 3 - 3" 14 GAGE STAPLES, 7/16" CROWN	TOENAIL
23.	RIM JOIST, BAND JOIST, OR BLOCKING TO TOP PLATE, SILL OR OTHER FRAMING BELOW	8d COMMON 10d BOX 3"x 0.131" NAILS 3" 14 GAGE STAPLES, 7/16" CROWN	6" O.C. TOENAIL
24.	1"x8" SHEATHING TO EACH BEARING	2 - 8d COMMON 2 - 10d BOX	FACE NAIL
25.	2" SUBFLOOR TO JOIST OR GIRDER	2 - 16d COMMON	FACE NAIL
26.	2" PLANK	2 - 16d COMMON	EACH BEARING, FACE NAIL
27.	BUILT UP GIRDERS AND BEAMS, 2" LUMBER LAYERS	20d COMMON	32" O.C. FACE NAIL AT TOP AND BOTTOM STAGGERED ON OPPOSITE SIDES
		10d BOX 3"x 0.131" NAILS 3" 14 GAGE STAPLES, 7/16" CROWN	24" O.C. FACE NAIL AT TOP AND BOTTOM STAGGERED ON OPPOSITE SIDES
		AND 2 - 20d COMMON 3 - 10d BOX 4 - 3"x 0.131" NAILS 4 - 3" 14 GAGE STAPLES, 7/16" CROWN	ENDS AND AT EACH SPLICE, FACE NAIL
28.	LEDGER STRIP SUPPORTING JOISTS OR RAFTERS	3 - 16d COMMON 4 - 10d BOX 4 - 3"x 0.131" NAILS 4 - 3" 14 GAGE STAPLES, 7/16" CROWN	EACH JOIST OR RAFTER, FACE NAIL
29.	JOIST TO BAND JOIST OR RIM JOIST	3 - 16d COMMON 4 - 10d BOX 4 - 3"x 0.131" NAILS 4 - 3" 14 GAGE STAPLES, 7/16" CROWN	END NAIL
30.	BRIDGING OR BLOCKING TO JOIST, RAFTER OR TRUSS	2 - 8d COMMON 2 - 10d BOX 2 - 3"x 0.131" NAILS 2 - 3" 14 GAGE STAPLES, 7/16" CROWN	EACH END, TOENAIL
	WOOD STRUCTURE PANS, SUB FLOOR, ROOF AND INTERIOR WALL SHEATHING TO FRAMING AND PARTICLEBOARD WALL SHEATHING TO FRAMING [H]		
31.	7/16" - 1/2"	6d COMMON OR DEFORMED (2"x 0.113" OVER FLOOR AND WALL) 8d BOX OR DEFORMED (ROOF) 2 3/8"x 0.131" NAIL OVER FLOOR AND WALL)	6" EDGE 12" INTERMEDIATE SUPPORT
		1 1/2" 16 GAGE STAPLE, 7/16" CROWN	4" EDGE
		2 3/8"x 0.131" NAIL (ROOF)	6" INTERMEDIATE SUPPORT
		1 3/4" 16 GAGE STAPLE, 7/16" CROWN (ROOF)	3" EDGE 6" INTERMEDIATE SUPPORT
32.	15/32" - 3/4"	8d COMMON 6d DEFORMED	6" EDGE 12" INTERMEDIATE SUPPORT
		2 3/8"x 0.131" NAIL 2 16" GAGE STAPLE 7/16" CROWN	4" EDGE 8" INTERMEDIATE SUPPORT
33.	7/16" - 1/2"	10d COMMON 8d DEFORMED	6" EDGE 12" INTERMEDIATE SUPPORT
	OTHER EXTERIOR WALL SHEATHING		
34.	1/2" FIBERBOARD SHEATHING [I]	1 1/2" GALVANIZED ROOF NAIL 1 1/2" 16-GAGE STAPLE WITH 7/16" CR'T. CROWN	3" EDGE 6" INTERMEDIATE SUPPORT
35.	25/32" FIBERBOARD SHEATHING [I]	1 3/4" GALVANIZED ROOF NAIL 1 3/4" 16-GAGE STAPLE WITH 7/16" CR'T. CROWN	3" EDGE 6" INTERMEDIATE SUPPORT
	WOOD STRUCTURAL PANELS, COMBINATION SUBFLOOR UNDERLAYMENT TO FRAMING		
36.	7/16" AND LESS	1 1/2" GALVANIZED ROOF NAIL 1 1/4" 16-GAGE STAPLE WITH 7/16" CR'T. CROWN	3" EDGE 6" INTERMEDIATE SUPPORT
37.	1/2" - 1"	8d COMMON 6d DEFORMED	6" EDGE 12" INTERMEDIATE SUPPORT
38.	1 1/8" - 1 1/4"	10d COMMON 8d DEFORMED	6" EDGE 12" INTERMEDIATE SUPPORT
	PANEL SIDING TO FRAMING		
39.	3/8" OR LESS	6d CORROSION-RESISTANT SIDING 6d CORROSION-RESISTANT CASING	6" EDGE 12" INTERMEDIATE SUPPORT
40.	7/8"	6d CORROSION-RESISTANT SIDING 6d CORROSION-RESISTANT CASING	6" EDGE 12" INTERMEDIATE SUPPORT
	INTERIOR PANELING		
41.	1/4"	4d CASING 4d FINISH	6" EDGE 12" INTERMEDIATE SUPPORT
41.	3/8"	6d CASING 6d FINISH	6" EDGE 12" INTERMEDIATE SUPPORT

FOR SI: 1" = 25.4mm

A. NAIL SPACING AT 6" AT INTERMEDIATE SUPPORTS WHERE SPANS ARE 48" OR MORE. FOR NAILING OF WOOD STRUCTURAL PANEL DIAPHRAGMS AND SHEAR WALLS, REFER TO SECTION 2305. NAILS FOR WALL SHEATHING ARE PERMITTED TO COMMON, BOX OR CASING.

B. SPACING SHALL BE 6" ON CENTER ON THE EDGE AND 12" ON CENTER AT INTERMEDIATE SUPPORTS FOR NONSTRUCTURAL APPLICATIONS. PANEL SUPPORTS AT 16" (20" IF STRENGTH AXIS IN THE LONG DIRECTION OF THE PANEL, UNLESS OTHERWISE MARKED).

SHEARWALL SCHEDULE (75% OF 2019 CBC VALUES)

TAG	VALUE (PLF)	MATERIAL	3x FRAMING REQUIRED	NAIL SIZE	B.N. & E.N.	F.N.	SILL ATTACHMENT 5/8" A.B. SPACING	BOTTOM PLATE NAILS & LAGS	TOP PLATE CLIPS
A	255	1/2" STRUCTURAL I RATED SHEATHING	NO	10d	6"	12"	32" O.C.	16d @ 6" O.C.	A35 @ 16" O.C.
B	382	1/2" STRUCTURAL I RATED SHEATHING	YES	10d	4"	12"	24" O.C.	1/4" x 8" SDS SCREWS @ 8" O.C. (STAGGERED TO 4x BLK'G.)	A35 @ 12" O.C.
C	499	1/2" STRUCTURAL I RATED SHEATHING	YES	10d	3"	12"	16" O.C.	1/4" x 8" SDS SCREWS @ 6" O.C. (STAGGERED TO 4x BLK'G.)	A35 @ 8" O.C.
D	652	1/2" STRUCTURAL I RATED SHEATHING	YES	10d	2"	12"	12" O.C.	1/4" x 8" SDS SCREWS @ 4" O.C. (STAGGERED TO 4x BLK'G.)	LTP4 @ 12" O.C.
E	764	1/2" STRUCTURAL I RATED SHEATHING (APPLIED TO BOTH SIDES OF WALL)	YES	10d	4" (BOTH SIDES)	12"	12" O.C.	5/8" x 8" LAG SCREWS @ 8" O.C. (STAGGERED TO 4x BLK'G.)	LTP4 @ 8" O.C.
F	998	1/2" STRUCTURAL I RATED SHEATHING (APPLIED TO BOTH SIDES OF WALL)	YES	10d	3" (BOTH SIDES)	12"	12" O.C.	5/8" x 8" LAG SCREWS @ 8" O.C. (STAGGERED TO 4x BLK'G.)	LTP4 @ 6" O.C.

NOTES:

1) USE COMMON NAILS AT SHEARWALLS AND DIAPHRAGM.
2) ALL SHEARWALLS TO PENETRATE THROUGH CEILING JOIST AND ATTIC TO SHEAR CONNECT TO UPPER HORIZONTAL DIAPHRAGM. (FLOOR TO ROOF PLYWOOD)
3) AT SHEARWALLS WHERE OPENINGS OCCUR SUCH AS WINDOW AND DOOR APPLY PLYWOOD ABOVE OPENING.
4) PROVIDE "5" PLY AT 15/32" THICKNESS "4" PLY AT 3/8".
5) FLOOR PLYWOOD TO BE GLUED AS WELL AS NAILED TO JOISTS.
6) WHEN BOTH SIDES OF WALL RECEIVE PLYWOOD, STAGGER THE PLYWOOD JOINTS SO THAT THE VERTICAL JOINTS FROM TWO SIDES DO NOT FALL ON THE SAME STUD.
7) PROVIDE AT LEAST MINIMUM 1/2" EDGE DISTANCE FOR PLYWOOD B.N.
8) WHERE ALLOWABLE SHEAR VALUES EXCEED 300 PLF, FOUNDATION SILL PLATES & ALL FRAMING MEMBERS RECEIVING EDGE NAILING FROM ABUTTING PANELS SHALL NOT BE LESS THAN A 3x NOMINAL MEMBER, NAILS SHALL BE STAGGERED.
9) MINIMUM 3"x3"x0.229 SQUARE PLATE WASHERS SHALL BE USED WITH ALL ANCHOR BOLTS IN SHEARWALL SILL PLATE.
10) ANCHOR BOLTS TO BE EMBEDDED 10" MINIMUM INTO FOUNDATION.
11) WOOD STRUCTURAL PANELS SHALL COMPLY WITH DOC PS1 OR DOC PS2.
12) SILL PLATE SHALL COMPLY WITH NDS 2018.
13) MINIMUM EDGE DISTANCE AND CONCRETE PROTECTION SHALL COMPLY WITH CBC 1912 & ACI 318-14.
14) PERIODIC SPECIAL INSPECTION FOR SHEARWALL TYPES "B" THRU "F". PER CHAPTER 17.

STRUCTURAL DESIGN BASIS

VERTICAL DESIGN	CASE 1	CASE 2
ROOF DEAD LOAD	= 20 PSF	= -- PSF
ROOF LIVE LOAD	= 20 PSF	= -- PSF
FLOOR DEAD LOAD	= 15 PSF	= -- PSF
FLOOR LIVE LOAD	= 40 PSF	= -- PSF
EXT. WALL WEIGHT	= 16 PSF	= -- PSF
INT. WALL WEIGHT	= 7 PSF	= -- PSF
ROOF SNOW LOAD	= -- PSF	= -- PSF
Pf = --	Ce = --	I = --	Ct = --

LATERAL DESIGN

ANALYSIS PROCEDURE USED = **EQUIVALENT LATERAL FORCE PROCEDURE**
BASIC SEISMIC FORCE RESISTING SYSTEM = **WOOD SHEAR WALLS**
SITE CLASS = D
OCCUPANCY CATEGORY = II
SEISMIC DESIGN CATEGORY = D
MAPPED SPECTRAL RESPONSE ACCELERATIONS: Ss = 1.155 S1 = 0.647
SPECTRAL RESPONSE COEFFICIENTS: Sds = 1.424 Sd1 = 0.74
SEISMIC IMPORTANCE FACTOR: I = 1.0
LATERAL RESISTING SYSTEM FACTOR: R = 6.5 (SW's)
SEISMIC RESPONSE COEFFICIENT: Cs = 0.196
DESIGN BASE SHEAR: V = 15.000 lbs
RISK CATEGORY = II

WIND DESIGN METHOD 2 = **ANALYTICAL PROCEDURE**
CBC CHP. 1609
ASCE 7-16, CHP. 26-30
EXPOSURE = C
ULTIMATE DESIGN WIND = 110
NOMINAL DESIGN WIND = 85
RISK CATEGORY = II

FOUNDATION DESIGN

☒ SOIL - UNCLASSIFIED (PER 2019 CBC 1613.2.2 & TABLE 1804.2)
ALLOWABLE SOIL BEARING PRESSURE - 1,500 PSF
SOIL PROFILE TYPE D USED FOR LATERAL DESIGN
☐ SOILS REPORT BY: _____
REF #: _____ ISSUED: _____
SEISMIC SOIL PROFILE TYPE = _____
ALLOWABLE BEARING PRESSURE = _____ PSF
ACTIVE SOIL PRESSURE (CANT.) = _____ PCF
ACTIVE SOIL PRESSURE (RESTR.) = _____ PCF
PASSIVE SOIL PRESSURE = _____ PCF
MAXIMUM PASSIVE PRESSURE = _____ PCF
COEFFICIENT OF FRICTION = _____

CEILING JOIST SCHEDULE

CEILING JOIST	SPAN
2x6 @ 16" O.C.	15'-0" MAX.
2x6 @ 24" O.C.	12'-0" MAX.
2x8 @ 16" O.C.	20'-0" MAX.
2x8 @ 24" O.C.	16'-0" MAX.
2x10 @ 16" O.C.	24'-0" MAX.
2x10 @ 24" O.C.	19'-6" MAX.
2x10 @ 12" O.C.	26'-0" MAX.

HOLD-DOWN SCHEDULE (75% OF DESIGN CAPACITY)

1	4x POST w/ "MSTC40" FLR-TO-FLR HOLD-DOWN MIN. (32) 16d SINKERS SPACED EVENLY (ALLOWABLE TENSION LOAD = 2,301 LBS)	ICC# ER-2105 (LARR# 25113)
2	4x POST w/ "MSTC52" FLR-TO-FLR HOLD-DOWN MIN. (48) 16d SINKERS SPACED EVENLY (ALLOWABLE TENSION LOAD = 3,465 LBS)	ICC# ER-2105 (LARR# 25113)
3	4x POST w/ "MSTC66" FLR-TO-FLR HOLD-DOWN MIN. (68) 16d SINKERS SPACED EVENLY (ALLOWABLE TENSION LOAD = 4,345 LBS)	ICC# ER-2105 (LARR# 25113)
4	4x POST w/ "MSTC66B3" FLR-TO-FLR HOLD-DOWN MIN. (38) 0.148x3 NAILS TO POST, (14) 0.148x3 NAILS TO FACE OF BEAM, & (4) 0.148x3 NAILS TO BOTTOM OF BEAM (ALLOWABLE TENSION LOAD = 3,367 LBS)	ICC# ER-2105 (LARR# 25113)
5	4x POST w/ "CMST14" FLR-TO-FLR HOLD-DOWN (14" END LENGTH & (33) 16d TO EA. POST) (ALLOWABLE TENSION LOAD = 4,868 LBS)	ICC# ER-2105 (LARR# 25113)
6	4x POST w/ "CMST12" FLR-TO-FLR HOLD-DOWN (45" END LENGTH & (43) 16d TO EA. POST) (ALLOWABLE TENSION LOAD = 6,926 LBS)	ICC# ER-2105 (LARR# 25113)
7	4x POST w/ "HDU2" ON S6TEN16 A.B. (ALLOWABLE TENSION LOAD = 2,306 LBS)	ICC# ESR-2330 (LARR# 25120)
8	4x POST w/ "HDU4" ON S6TB20 A.B. (ALLOWABLE TENSION LOAD = 3,423 LBS)	ICC# ESR-2330 (LARR# 25120)
9	4x POST w/ "HDU5" ON S6TB24 A.B. (ALLOWABLE TENSION LOAD = 4,233 LBS)	ICC# ESR-2330 (LARR# 25120)
10	4x POST w/ "HDU8" ON S6TB28 A.B. (ALLOWABLE TENSION LOAD = 5,227 LBS - (4x4 POST), 5,902 LBS - (4x6 POST))	ICC# ESR-2330 (LARR# 25120)
11	4x POST w/ "HDU11" ON 1"ø ALL THREADED ROD (ALLOWABLE TENSION LOAD = 7,151 LBS)	ICC# ESR-2330 (LARR# 25120)
12	4x POST w/ "HDU14" ON 1"ø ALL THREADED ROD (ALLOWABLE TENSION LOAD = 10,782 LBS)	ICC# ESR-2330 (LARR# 25120)

NOTES:

1) HOLD-DOWN ANCHORS MUST BE TIED IN PLACE PRIOR TO FOUNDATION INSPECTION.
2) DEEPEN FOOTINGS TO PROVIDE 3" MINIMUM CONCRETE COVER WHERE HOLD-DOWN ANCHORS ARE LONGER THAN THE FOOTING DEPTH.
3) USE (R.U) OPTION ON STHD HOLD-DOWNS FOR RAISED WOOD SUB-FLOOR CONDITION.
4) SPECIFY THAT HOLD-DOWN CONNECTION BOLTS & NUTS SHALL BE TORQUED 1/2" TURN BEYOND FINGER TIGHT OR AS REQUIRED BY THE MANUFACTURER. INSPECTOR SHALL VERIFY BY RANDOM INSPECTION PRIOR TO COVERING WALLS).
5) HD CONNECTOR BOLTS INTO WOOD FRAMING REQUIRE APPROVED PLATE WASHERS.
6) STRAP LOADS FOR FLOOR JOISTS UP TO 14" MAX IN DEPTH.
7) PLATE WASHERS ARE REQUIRED FOR ALL HOLD-DOWNS.

CONCRETE SLAB REQUIREMENTS

(*NO SOILS REPORT)

USE MINIMUM 4" THICK CONCRETE SLAB ON GRADE WITH #4 BARS @ 16" O.C. (EA. WAY) (CENTERED IN SLAB) OVER CAPILLARY BREAK 4" THICK OF 1/2" CLEAN AGGREGATE W/ 10 MIL. VISQUEEN VAPOR BARRIER IN DIRECT CONTACT WITH CONCRETE SLAB.

SPREAD FOOTING SCHEDULE

SYMBOL	SIZE AND REIFORCEMENT (f'c=2,500 psi & fy=60ksi)
P-1	24" SQUARE X 24" DEEP w/ (2) #4 EACH WAY (Pallow = 6,000 lbs)
P-2	30" SQUARE X 24" DEEP w/ (3) #4 EACH WAY (Pallow = 9,375 lbs)
P-3	36" SQUARE X 24" DEEP w/ (4) #4 EACH WAY (Pallow = 13,500 lbs)
P-4	42" SQUARE X 24" DEEP w/ (5) #4 EACH WAY (Pallow = 18,375 lbs)
P-5	48" SQUARE X 24" DEEP w/ (6) #4 EACH WAY (Pallow = 24,000 lbs)

INTERIOR HEADERS

INTERIOR NON-BEARING SPANS USE:
2 x 4 FLAT FOR SPANS UP TO 3'-0"
4 x 4 DF #2 FOR SPANS UP TO 5'-0"
4 x 6 DF #2 FOR SPANS UP TO 8'-0"

SPECIAL INSPECTION SUMMARY:

CONTINUOUS INSPECTION (U.N.O.) SHALL BE PERFORMED BY QUALIFIED SPECIAL INSPECTORS RETAINED BY OWNER AND APPROVED BY THE BUILDING OFFICIAL TO ACT AS A SPECIAL INSPECTOR FOR THE FOLLOWING:

1	CONCRETE
2	BOLTS INSTALLED IN CONCRETE
3	SPECIAL MOMENT-RESISTING CONCRETE FRAME
4	REINFORCING STEEL + PRESTRESSING STEEL TENDONS
5.1	ALL STRUCTURAL WELDING
5.2	SPECIAL MOMENT-RESISTING STEEL FRAME
5.3	WELDING REINFORCING STEEL
6	HIGH-STRENGTH BOLTING
7	STRUCTURAL MASONRY
8	REINFORCED GYPSUM CONCRETE
9	NAILING CONCRETE FILL
10	SPRAY-APPLIED FIRE-RESISTIVE MATERIALS
11	PILING, DRILLED PIERS + CAISSONS
12	SHOTCRETE
13.1	VERIFY SOILS CONDITIONS ARE SUBSTANTIALLY IN CONFORMANCE WITH THE SOIL INVESTIGATION REPORT
13.2	VERIFY THAT FOUNDATION EXCAVATIONS EXTEND TO PROPER DEPTH AND BEARING STRATA
13.3	PROVIDE SOILS COMPACTION TEST RESULTS, DEPTH OF FILL, RELATIVE DENSITY, BEARING VALUES
13.4	PROVIDE SOIL EXPANSION TEST RESULTS, EXPANSION INDEX, RECOMMENDATIONS FOR FOUNDATION, ON-GRADE FLOOR SLAB DESIGN FOR EACH BUILDING SITE
14	SMOKE-CONTROL SYSTEM
15	SPECIAL CASES (SPECIFIED BY THE BUILDING OFFICIAL)
16	OFF-SITE FABRICATION OF BUILDING COMPONENTS
17	OTHER SPECIAL CASES (SPECIFIED BY DESIGNER OF RECORD)

NO.	DESCRIPTION OF TYPE OF INSPECTION REQUIRED, LOCATION, REMARKS, ETC.	DESIGN STRENGTH
11	EPHOXY SET-UP EPOXY & ALL NEW ANCHOR BOLTS (HOLD-DOWN LOCATIONS. (ICC ESR-3568)	LARR #25144
11	SHEARWALL NAILING LESS THAN OR EQUAL TO 4" O.C.	CHPT. 17

1. THE CONSTRUCTION INSPECTIONS LISTED ARE IN ADDITION TO THE CALLED INSPECTIONS REQUIRED BY CHAPTER 17 OF THE CALIFORNIA BUILDING CODE. SPECIAL INSPECTION IS NOT A SUBSTITUTE FOR INSPECTION BY A CITY INSPECTOR. SPECIALLY INSPECTED WORK WHICH IS INSTALLED OR COVERED WITHOUT THE APPROVAL OF THE CITY INSPECTOR IS SUBJECT TO REMOVAL OR EXPOSURE.
2. SPECIAL INSPECTION TO BE PROVIDED BY: TBD
   NOTE: CONTRACTOR TO VERIFY THAT THE SPECIAL INSPECTOR IS CERTIFIED BY THE LOCAL JURISDICTION'S BUILDING DEPARTMENT, TO PERFORM THE TYPES OF INSPECTION SPECIFIED, PRIOR TO PERFORMING INSPECTIONS.
3. A CERTIFICATE OF SATISFACTORY COMPLETION OF WORK WITH SPECIAL INSPECTION MUST BE COMPLETED AND SUBMITTED TO THE FIELD INSPECTION DIVISION OF THE LOCAL BUILDING JURISDICTION.
4. WHEN WELDING IS DONE IN AN APPROVED FABRICATORS SHOP, SPECIAL INSPECTION IS NOT REQUIRED. SEE NOTES 5 & 6 BELOW. PERIODIC INSPECTION MAY BE USED FOR SINGLE PASS FILLET WELDS NOT EXCEEDING 5/16". THE SPECIAL INSPECTOR NEED NOT BE CONTINUOUSLY PRESENT DURING WELDING OF THE ABOVE ITEMS PROVIDED THAT THE MATERIAL, QUALIFICATIONS OF WELDING PROCEDURES AND WELDERS ARE VERIFIED PRIOR TO THE START OF WORK. PERIODIC INSPECTIONS ARE MADE OF WORK IN PROGRESS AND A VISUAL INSPECTION OF ALL WELDS IS MADE PRIOR TO SHIPMENT OF SHOP WELDING.
5. AN APPLICATION FOR OFF-SITE FABRICATION MUST BE SUBMITTED TO THE FIELD INSPECTION DIVISION OF THE LOCAL BUILDING JURISDICTION FOR APPROVAL PRIOR TO FABRICATION.
6. A CERTIFICATE OF COMPLIANCE FOR OFF-SITE FABRICATION MUST BE COMPLETED AND SUBMITTED TO THE FIELD INSPECTION DIVISION OF THE LOCAL BUILDING JURISDICTION PRIOR TO ERECTION OF PREFABRICATED COMPONENTS.
7. HIGH-STRENGTH BOLT, NUTS AND WASHERS MAY BE REQUIRED TO BE SAMPLED, TESTED AND APPROVED BY THE INSPECTION SERVICES DIVISION OF THE LOCAL BUILDING JURISDICTION PRIOR TO THE INSTALLATION. (IN THE CITY OF OXNARD SEE ENL 11-6).
8. SPECIAL INSPECTION IS REQUIRED FOR BOLTED CONNECTIONS UTILIZING HIGH-STRENGTH A325 AND A490 BOLTS. SUCH INSPECTIONS SHALL BE IN ACCORDANCE WITH APPROVED NATIONALLY RECOGNIZED STANDARDS AND THE REQUIREMENTS OF CHAPTER 17. WHILE THE WORK IS IN PROGRESS, THE SPECIAL INSPECTOR SHALL DETERMINE THAT THE REQUIREMENTS FOR BOLT, NUTS, WASHERS AND PAINT, BOLTED PARTS, AND THE INSTALLATION AND TIGHTENING IN SUCH STANDARDS ARE MET. SUCH INSPECTIONS MAY BE PERFORMED ON A PERIODIC BASIS IN ACCORDANCE WITH THE REQUIREMENTS OF SECTION 1704.3.3. INSPECTOR SHALL OBSERVE THE CALIBRATION PROCEDURES WHEN SUCH PROCEDURES ARE REQUIRED BY THE PLANS OR SPECIFICATIONS AND SHALL MONITOR THE INSTALLATION OF BOLTS TO DETERMINE THAT PLIES OF CONNECTED MATERIALS HAVE BEEN DRAWN TOGETHER AND THAT THE SELECTED PROCEDURE IS PROPERLY USED TO TIGHTEN ALL BOLTS.
9. FOR WELDED, FULLY RESTRAINED CONNECTIONS BETWEEN PRIMARY MEMBERS OF ORDINARY MOMENT RESISTING FRAMES (OMRF), AND SPECIAL MOMENT RESISTING FRAMES (SMRF), NONDESTRUCTIVE TESTS PER APPROVED NATIONAL STANDARDS, SHALL BE CONDUCTED. ALL COMPLETE PENETRATION GROOVE WELDS CONTAINED IN JOINTS AND SPLICES SHALL BE TESTED 100% EITHER BY ULTRASONIC TESTING OR RADIOGRAPHY. FOR WELDED, FULLY RESTRAINED CONNECTIONS BETWEEN PRIMARY MEMBERS OF OMRF WHICH ARE FABRICATED IN AN APPROVED FABRICATORS SHOP, NONDESTRUCTIVE TESTS SHALL BE CONDUCTED BY A SPECIAL INSPECTION AGENCY APPROVED BY THE LOCAL BUILDING JURISDICTION.

FLOOR SHEATHING

23/32" STRUCT I APA-RATED T&G SHEATHING, EXPOSURE 1, w/ 24" MINIMUM SPAN RATING, 3" PENTL SCREWS @ 6" O.C. B.N., 6" O.C. E.N., & 12" O.C. F.N.
GLUE FRAMING PRIOR TO INSTALLATION

ROOF SHEATHING

15/32" APA-RATED SHEATHING, EXPOSURE 1, 24" MINIMUM SPAN RATING, 10d COMMON NAILS @ 6" O.C. B.N. & E.N., 10d COMMON NAILS @ 12" O.C. INT. FRAMING
SEE TITLE 24 SHEETS FOR RADIANT BARRIER REQUIREMENTS.

DAVID REITH AND ASSOCIATES, INC.
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E-MAIL : davidreithandassociates@gmail.com

DAVID REITH & ASSOCIATES, INC.
Structural Design Services
Residential • Commercial • Industrial

REGISTERED PROFESSIONAL ENGINEER
DAVID L. REITH
No. 072122
EXP. 09-30-2022
CIVIL
STATE OF CALIFORNIA

NEW TWO-STORY ADDITION & REMODEL

HERNANDEZ RESIDENCE

1215 S. G STREET
OCNARD, CALIFORNIA 93030

Issue Dates:
1 5-14-2021 Plan Check Submittal
2
3
4
5

Sheet Title: Structural Notes

Scale:

Job # 21197

Sheet: SN-2

STRUCTURAL OBSERVATION SCHEDULE

- IF REQUIRED, ALL STRUCTURAL OBSERVATIONS MUST BE SCHEDULED 72 HOURS IN ADVANCE WITH DAVID REITH & ASSOCIATES AT (805) 418-7924.

FLOOR SHEATHING

23/32" STRUCT I APA-RATED T&G SHEATHING, EXPOSURE 1, w/ 24" MINIMUM SPAN RATING, 3" MGNTL. SCREWS @ 6" O.C. B.N., 6" O.C. E.N., & 12" O.C. F.N. GLUE FRAMING PRIOR TO INSTALLATION

SPREAD FOOTING SCHEDULE

SYMBOL	SIZE AND REIFORCEMENT (f'c=2,500 psi & fy=60ksi)
*P-1	24" SQUARE X 24" DEEP w/ (2) #4 EACH WAY (Pallow = 6,000 lbs)
*P-2	30" SQUARE X 24" DEEP w/ (3) #4 EACH WAY (Pallow = 9,375 lbs)
P-3	36" SQUARE X 24" DEEP w/ (4) #4 EACH WAY (Pallow = 13,500 lbs)
P-4	42" SQUARE X 24" DEEP w/ (5) #4 EACH WAY (Pallow = 18,375 lbs)
P-5	48" SQUARE X 24" DEEP w/ (6) #4 EACH WAY (Pallow = 24,000 lbs)

*SEE DETAIL 12/5D3 & 14/5D3 FOR UNDERPIN CONDITION

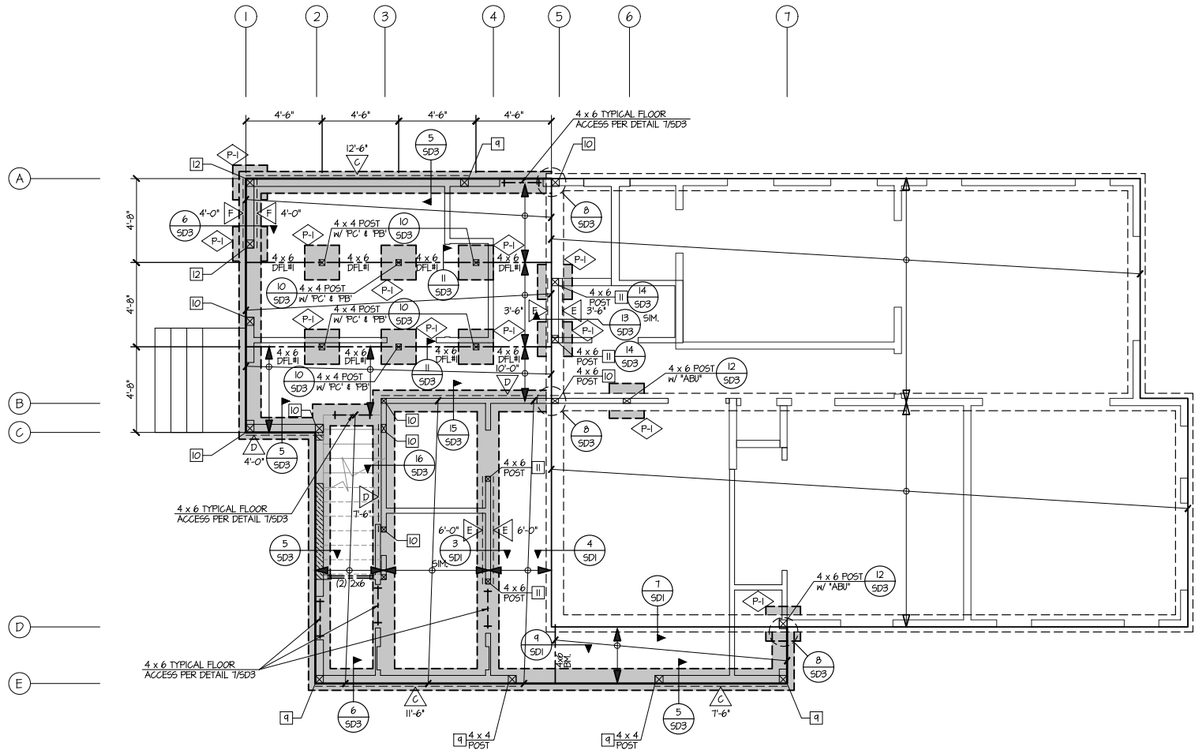
SHEARWALL SCHEDULE (75% OF 2019 CBC VALUES)

TAG	VALUE (PLF)	MATERIAL	3x FRAMING REQUIRED	NAIL SIZE	B.N. & E.N.	F.N.	SILL ATTACHMENT 5/8" A.B. SPACING	BOTTOM PLATE NAILS & LAGS	TOP PLATE CLIPS
* A	255	1/2" STRUCTURAL I RATED SHEATHING	NO	10d	6"	12"	32" O.C.	16d @ 6" O.C.	A35 @ 16" O.C.
* B	382	1/2" STRUCTURAL I RATED SHEATHING	YES	10d	4"	12"	24" O.C.	1/4" x 8" SDS SCREWS @ 8" O.C. (STAGGERED TO 4x BLK'G.)	A35 @ 12" O.C.
* C	499	1/2" STRUCTURAL I RATED SHEATHING	YES	10d	3"	12"	16" O.C.	1/4" x 8" SDS SCREWS @ 6" O.C. (STAGGERED TO 4x BLK'G.)	A35 @ 8" O.C.
* D	652	1/2" STRUCTURAL I RATED SHEATHING	YES	10d	2"	12"	12" O.C.	1/4" x 8" SDS SCREWS @ 4" O.C. (STAGGERED TO 4x BLK'G.)	LTP4 @ 12" O.C.
E	764	1/2" STRUCTURAL I RATED SHEATHING (APPLIED TO BOTH SIDES OF WALL)	YES	10d	4" (BOTH SIDES)	12"	12" O.C.	5/8" x 8" LAG SCREWS @ 8" O.C. (STAGGERED TO 4x BLK'G.)	LTP4 @ 8" O.C.
F	998	1/2" STRUCTURAL I RATED SHEATHING (APPLIED TO BOTH SIDES OF WALL)	YES	10d	3" (BOTH SIDES)	12"	12" O.C.	5/8" x 8" LAG SCREWS @ 8" O.C. (STAGGERED TO 4x BLK'G.)	LTP4 @ 6" O.C.

NOTES:

1) USE COMMON NAILS AT SHEARWALLS AND DIAPHRAGM.
2) ALL SHEARWALLS TO PENETRATE THROUGH CEILING JOIST AND ATTIC TO SHEAR CONNECT TO UPPER HORIZONTAL DIAPHRAGM. (FLOOR TO ROOF PLYWOOD)
3) AT SHEARWALLS WHERE OPENINGS OCCUR SUCH AS WINDOW AND DOOR APPLY PLYWOOD ABOVE OPENING.
4) PROVIDE "5" PLY AT 15/32" THICKNESS "4" PLY AT 3/8".
5) FLOOR PLYWOOD TO BE GLUED AS WELL AS NAILED TO JOISTS.
6) WHEN BOTH SIDES OF WALL RECEIVE PLYWOOD, STAGGER THE PLYWOOD JOINTS SO THAT THE VERTICAL JOINTS FROM TWO SIDES DO NOT FALL ON THE SAME STUD.
7) PROVIDE AT LEAST MINIMUM 1/2" EDGE DISTANCE FOR PLYWOOD B.N.
8) WHERE ALLOWABLE SHEAR VALUES EXCEED 300 PLF, FOUNDATION SILL PLATES & ALL FRAMING MEMBERS RECEIVING EDGE NAILING FROM ABUTTING PANELS SHALL NOT BE LESS THAN A 3x NOMINAL MEMBER, NAILS SHALL BE STAGGERED.
9) MINIMUM 3"x3"x0.224 SQUARE PLATE WASHERS SHALL BE USED WITH ALL ANCHOR BOLTS IN SHEARWALL SILL PLATE.
10) ANCHOR BOLTS TO BE EMBEDDED 10" MINIMUM INTO FOUNDATION.
11) WOOD STRUCTURAL PANELS SHALL COMPLY WITH DOC PS1 OR DOC PS2.
12) SILL PLATE SHALL COMPLY WITH NDS 2018.
13) MINIMUM EDGE DISTANCE AND CONCRETE PROTECTION SHALL COMPLY WITH CBC 1912 & ACI 318-14.
14) PERIODIC SPECIAL INSPECTION FOR SHEARWALL TYPES "B" THRU "F". PER CHAPTER 17.

*SEE DETAIL 13/5D3 FOR ANCHOR BOLT RETROFIT



FOUNDATION PLAN

VERIFY DIMENSIONS WITH ARCHITECTURAL PLANS

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

FOUNDATION LEGEND

- ex. A — SHEARWALL PER PLAN
- ex. 1 — HOLD DOWN PER PLAN
- ⊠ — 4 x 4 POST (U.N.O.)
- WOOD BEAM OR HEADER PER PLAN
- 2 x 6 DFL#1 FLOOR JOIST @ 16" O.C.
- (E) FLOOR JOIST TO REMAIN (TYP.)
- (N) 15" (W) x 24" (D) CONT. FOOTING w/ (2) #4 TOP & BTM.
- (E) CONT. FOOTING TO REMAIN
- 12" (W) x 12" (D) (MIN.) (*CONTRACTOR TO VERIFY)

HOLD-DOWN SCHEDULE (75% OF DESIGN CAPACITY)

1	4x POST w/ "MSTC40" FLR-TO-FLR HOLD-DOWN MIN. (32) 16d SINKERS SPACED EVENLY (ALLOWABLE TENSION LOAD = 2,301 LBS)	ICC# ER-2105 (LARR# 25113)
2	4x POST w/ "MSTC52" FLR-TO-FLR HOLD-DOWN MIN. (46) 16d SINKERS SPACED EVENLY (ALLOWABLE TENSION LOAD = 3,465 LBS)	ICC# ER-2105 (LARR# 25113)
3	4x POST w/ "MSTC66" FLR-TO-FLR HOLD-DOWN MIN. (68) 16d SINKERS SPACED EVENLY (ALLOWABLE TENSION LOAD = 4,995 LBS)	ICC# ER-2105 (LARR# 25113)
4	4x POST w/ "MSTC66B3" FLR-TO-FLR HOLD-DOWN MIN. (36) 0.148x3 NAILS TO POST, (14) 0.148x3 NAILS TO FACE OF BEAM & (4) 0.148x3 NAILS TO BOTTOM OF BEAM (ALLOWABLE TENSION LOAD = 3,361 LBS)	ICC# ER-2105 (LARR# 25113)
5	4x POST w/ "CMST14" FLR-TO-FLR HOLD-DOWN (34" END LENGTH & (33) 16d TO EA. POST) (ALLOWABLE TENSION LOAD = 4,866 LBS)	ICC# ER-2105 (LARR# 25113)
6	4x POST w/ "CMST12" FLR-TO-FLR HOLD-DOWN (45" END LENGTH & (43) 16d TO EA. POST) (ALLOWABLE TENSION LOAD = 6,926 LBS)	ICC# ER-2105 (LARR# 25113)
*7	4x POST w/ "HDU2" ON SSTB16 A.B. (ALLOWABLE TENSION LOAD = 2,306 LBS)	ICC# ESR-2330 (LARR# 25120)
*8	4x POST w/ "HDU4" ON SSTB20 A.B. (ALLOWABLE TENSION LOAD = 3,423 LBS)	ICC# ESR-2330 (LARR# 25120)
*9	4x POST w/ "HDU5" ON SSTB24 A.B. (ALLOWABLE TENSION LOAD = 4,233 LBS)	ICC# ESR-2330 (LARR# 25120)
*10	4x POST w/ "HDU8" ON SSTB28 A.B. (ALLOWABLE TENSION LOAD = 5,227 LBS - (4x4 POST), 5,902 LBS - (4x6 POST))	ICC# ESR-2330 (LARR# 25120)
11	4x POST w/ "HDU11" ON 1"ø ALL THREADED ROD (ALLOWABLE TENSION LOAD = 7,151 LBS)	ICC# ESR-2330 (LARR# 25120)
12	4x POST w/ "HDU14" ON 1"ø ALL THREADED ROD (ALLOWABLE TENSION LOAD = 10,742 LBS)	ICC# ESR-2330 (LARR# 25120)

NOTES:

1) HOLD-DOWN ANCHORS MUST BE TIED IN PLACE PRIOR TO FOUNDATION INSPECTION.
2) DEEPEN FOOTINGS TO PROVIDE 3" MINIMUM CONCRETE COVER WHERE HOLD-DOWN ANCHORS ARE LONGER THAN THE FOOTING DEPTH.
3) USE (R.U) OPTION ON STHD HOLD-DOWNS FOR RAISED WOOD SUB-FLOOR CONDITION.
4) SPECIFY THAT HOLD-DOWN CONNECTION BOLTS & NUTS SHALL BE TORQUED 1/2" TURN BEYOND FINGER TIGHT OR AS REQUIRED BY THE MANUFACTURER. INSPECTOR SHALL VERIFY BY RANDOM INSPECTION PRIOR TO COVERING WALLS).
5) HD CONNECTOR BOLTS INTO WOOD FRAMING REQUIRE APPROVED PLATE WASHERS.
6) STRAP LOADS FOR FLOOR JOISTS UP TO 14" MAX IN DEPTH.
7) PLATE WASHERS ARE REQUIRED FOR ALL HOLD-DOWNS.

*SEE DETAIL 14/5D3 FOR HOLD-DOWN RETROFIT

FOUNDATION NOTES:

- CONTRACTOR TO VERIFY (E) FOUNDATION PRIOR TO CONSTRUCTION.

DAVID REITH AND ASSOCIATES, INC.
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E-MAIL : davereithandassociates@gmail.com

REITH
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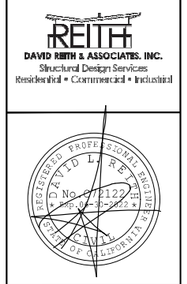
Structural Design Services
Residential • Commercial • Industrial



NEW TWO-STORY ADDITION & REMODEL

HERNANDEZ RESIDENCE

121 S. G STREET
OCNARD, CALIFORNIA 93030

Issue Dates:

1 5-14-2021 Plan Check Submittal
2
3
4
5

Sheet Title: Foundation Plan

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

Job # 21197

Sheet: S-1

STRUCTURAL OBSERVATION SCHEDULE

- IF REQUIRED, ALL STRUCTURAL OBSERVATIONS MUST BE SCHEDULED 72 HOURS IN ADVANCE WITH DAVID REITH & ASSOCIATES AT (805) 418-7924.

INTERIOR HEADERS

INTERIOR NON-BEARING SPANS USE:
2 x 4 FLAT FOR SPANS UP TO 3'-0"
4 x 4 DF #2 FOR SPANS UP TO 5'-0"
4 x 6 DF #2 FOR SPANS UP TO 8'-0"

ROOF SHEATHING

15/32" APA-RATED SHEATHING, EXPOSURE 1,
24" MINIMUM SPAN RATING,
10d COMMON NAILS @ 6" O.C. B.N. & E.N.,
10d COMMON NAILS @ 12" O.C. INT. FRAMING
SEE TITLE 24 SHEETS FOR RADIANT BARRIER REQUIREMENTS.

SHEARWALL SCHEDULE (75% OF 2019 CBC VALUES)

TAG	VALUE (PLF)	MATERIAL	3x FRAMING REQUIRED	NAIL SIZE	B.N. & E.N.	F.N.	SILL ATTACHMENT 5/8" A.B. SPACING	BOTTOM PLATE NAILS & LAGS	TOP PLATE CLIPS
A	255	1/2" STRUCTURAL I RATED SHEATHING	NO	10d	6"	12"	32" O.C.	16d @ 6" O.C.	A35 @ 16" O.C.
B	382	1/2" STRUCTURAL I RATED SHEATHING	YES	10d	4"	12"	24" O.C.	1/4" x 8" SDS SCREWS @ 8" O.C. (STAGGERED TO 4x BLK'G.)	A35 @ 12" O.C.
C	499	1/2" STRUCTURAL I RATED SHEATHING	YES	10d	3"	12"	16" O.C.	1/4" x 8" SDS SCREWS @ 6" O.C. (STAGGERED TO 4x BLK'G.)	A35 @ 8" O.C.
D	652	1/2" STRUCTURAL I RATED SHEATHING	YES	10d	2"	12"	12" O.C.	1/4" x 8" SDS SCREWS @ 4" O.C. (STAGGERED TO 4x BLK'G.)	LTP4 @ 12" O.C.
E	764	1/2" STRUCTURAL I RATED SHEATHING (APPLIED TO BOTH SIDES OF WALL)	YES	10d	4" (BOTH SIDES)	12"	12" O.C.	5/8" x 8" LAG SCREWS @ 8" O.C. (STAGGERED TO 4x BLK'G.)	LTP4 @ 8" O.C.
F	998	1/2" STRUCTURAL I RATED SHEATHING (APPLIED TO BOTH SIDES OF WALL)	YES	10d	3" (BOTH SIDES)	12"	12" O.C.	5/8" x 8" LAG SCREWS @ 8" O.C. (STAGGERED TO 4x BLK'G.)	LTP4 @ 6" O.C.

NOTES:

1) USE COMMON NAILS AT SHEARWALLS AND DIAPHRAGM.
2) ALL SHEARWALLS TO PENETRATE THROUGH CEILING JOIST AND ATTIC TO SHEAR CONNECT TO UPPER HORIZONTAL DIAPHRAGM. (FLOOR TO ROOF PLYWOOD)
3) AT SHEARWALLS WHERE OPENINGS OCCUR SUCH AS WINDOW AND DOOR APPLY PLYWOOD ABOVE OPENING.
4) PROVIDE "5" PLY AT 15/32" THICKNESS "4" PLY AT 3/8".
5) FLOOR PLYWOOD TO BE GLUED AS WELL AS NAILED TO JOISTS.
6) WHEN BOTH SIDES OF WALL RECEIVE PLYWOOD, STAGGER THE PLYWOOD JOINTS SO THAT THE VERTICAL JOINTS FROM TWO SIDES DO NOT FALL ON THE SAME STUD.
7) PROVIDE AT LEAST MINIMUM 1/2" EDGE DISTANCE FOR PLYWOOD B.N.
8) WHERE ALLOWABLE SHEAR VALUES EXCEED 300 PLF, FOUNDATION SILL PLATES & ALL FRAMING MEMBERS RECEIVING EDGE NAILING FROM ABUTTING PANELS SHALL NOT BE LESS THAN A 3x NOMINAL MEMBER, NAILS SHALL BE STAGGERED.
9) MINIMUM 3"x3"x0.229 SQUARE PLATE WASHERS SHALL BE USED WITH ALL ANCHOR BOLTS IN SHEARWALL SILL PLATE.
10) ANCHOR BOLTS TO BE EMBEDDED 10" MINIMUM INTO FOUNDATION.
11) WOOD STRUCTURAL PANELS SHALL COMPLY WITH DOC PS1 OR DOC PS2.
12) SILL PLATE SHALL COMPLY WITH NDS 2018.
13) MINIMUM EDGE DISTANCE AND CONCRETE PROTECTION SHALL COMPLY WITH CBC 1912 & ACI 318-14.
14) PERIODIC SPECIAL INSPECTION FOR SHEARWALL TYPES "B" THRU "F". PER CHAPTER 17.

FRAMING LEGEND

ex. A	SHEARWALL PER PLAN
	2 x 6 DFL#1 BALLOON FRAME @ 16" O.C. (Hmax=17'-0")
ex. 1	HOLD DOWN PER PLAN
⊠	4 x 4 POST (U.N.O.)
□	POST ABOVE
	WOOD BEAM OR HEADER PER PLAN
	HANGER PER PLAN
	11-7/8" TJI 210 FLOOR JOIST @ 16" O.C. (Lmax=16'-0")
	2 x 8 ROOF JOIST @ 16" O.C.
	(E) ROOF JOIST TO REMAIN (TYP.)
	(E) ROOF RAFTERS TO REMAIN (TYP.)

HOLD-DOWN SCHEDULE (75% OF DESIGN CAPACITY)

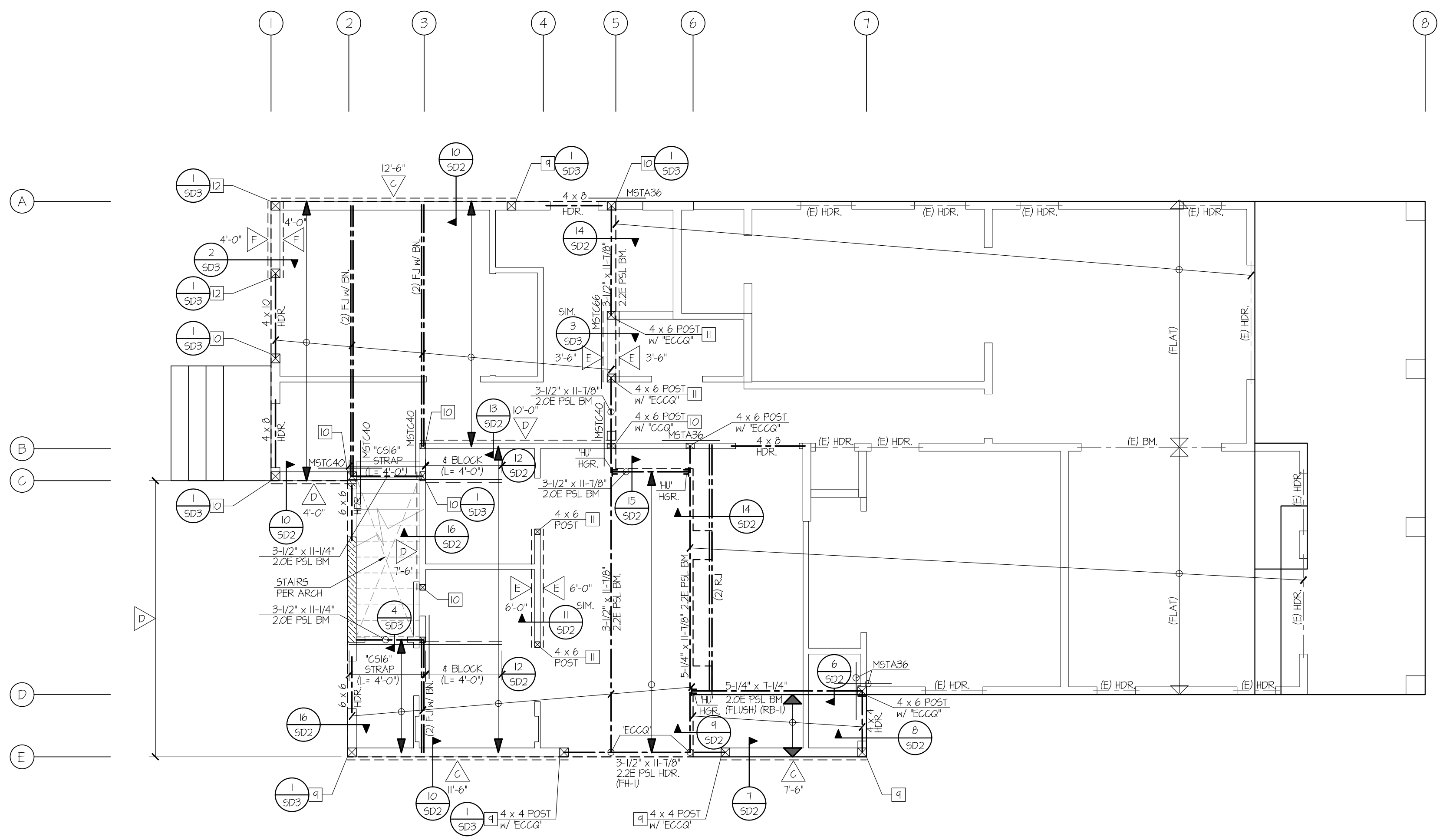
1	4x POST w/ "MSTC40" FLR-TO-FLR HOLD-DOWN MIN. (32) 16d SINKERS SPACED EVENLY (ALLOWABLE TENSION LOAD = 2,301 LBS)	ICC# ER-2105 (LARR# 25713)
2	4x POST w/ "MSTC52" FLR-TO-FLR HOLD-DOWN MIN. (48) 16d SINKERS SPACED EVENLY (ALLOWABLE TENSION LOAD = 3,465 LBS)	ICC# ER-2105 (LARR# 25713)
3	4x POST w/ "MSTC66" FLR-TO-FLR HOLD-DOWN MIN. (68) 16d SINKERS SPACED EVENLY (ALLOWABLE TENSION LOAD = 4,395 LBS)	ICC# ER-2105 (LARR# 25713)
4	4x POST w/ "MSTC66B3" FLR-TO-FLR HOLD-DOWN MIN. (38) 0.148x3 NAILS TO POST, (14) 0.148x3 NAILS TO FACE OF BEAM, & (4) 0.148x3 NAILS TO BOTTOM OF BEAM (ALLOWABLE TENSION LOAD = 3,367 LBS)	ICC# ER-2105 (LARR# 25713)
5	4x POST w/ "CMST14" FLR-TO-FLR HOLD-DOWN (34" END LENGTH & (33) 16d TO EA. POST) (ALLOWABLE TENSION LOAD = 4,868 LBS)	ICC# ER-2105 (LARR# 25713)
6	4x POST w/ "CMST12" FLR-TO-FLR HOLD-DOWN (45" END LENGTH & (43) 16d TO EA. POST) (ALLOWABLE TENSION LOAD = 6,926 LBS)	ICC# ER-2105 (LARR# 25713)
7	4x POST w/ "HDU2" ON SSTB16 A.B. (ALLOWABLE TENSION LOAD = 2,306 LBS)	ICC# ESR-2330 (LARR# 25720)
8	4x POST w/ "HDU4" ON SSTB20 A.B. (ALLOWABLE TENSION LOAD = 3,423 LBS)	ICC# ESR-2330 (LARR# 25720)
9	4x POST w/ "HDU5" ON SSTB24 A.B. (ALLOWABLE TENSION LOAD = 4,233 LBS)	ICC# ESR-2330 (LARR# 25720)
10	4x POST w/ "HDU8" ON SSTB28 A.B. (ALLOWABLE TENSION LOAD = 5,227 LBS - (4x4 POST), 5,902 LBS - (4x6 POST))	ICC# ESR-2330 (LARR# 25720)
11	4x POST w/ "HDU11" ON 1"Φ ALL THREADED ROD (ALLOWABLE TENSION LOAD = 7,151 LBS)	ICC# ESR-2330 (LARR# 25720)
12	4x POST w/ "HDU14" ON 1"Φ ALL THREADED ROD (ALLOWABLE TENSION LOAD = 10,792 LBS)	ICC# ESR-2330 (LARR# 25720)

NOTES:

1) HOLD-DOWN ANCHORS MUST BE TIED IN PLACE PRIOR TO FOUNDATION INSPECTION.
2) DEEPEN FOOTINGS TO PROVIDE 3" MINIMUM CONCRETE COVER WHERE HOLD-DOWN ANCHORS ARE LONGER THAN THE FOOTING DEPTH.
3) USE (RJ) OPTION ON STHD HOLD-DOWNS FOR RAISED WOOD SUB-FLOOR CONDITION.
4) SPECIFY THAT HOLD-DOWN CONNECTION BOLTS & NUTS SHALL BE TORQUED 1/2" TURN BEYOND FINGER TIGHT OR AS REQUIRED BY THE MANUFACTURER. INSPECTOR SHALL VERIFY BY RANDOM INSPECTION PRIOR TO COVERING WALLS).
5) HD CONNECTOR BOLTS INTO WOOD FRAMING REQUIRE APPROVED PLATE WASHERS.
6) STRAP LOADS FOR FLOOR JOISTS UP TO 14" MAX IN DEPTH.
7) PLATE WASHERS ARE REQUIRED FOR ALL HOLD-DOWNS.

FRAMING NOTES:

- FOR PLATE HEIGHTS > 10'-0", USE 2 x 6 STUDS @ 16" O.C., FOR PLATE HEIGHTS < 10'-0" USE 2 x 4 STUDS @ 16" O.C.
- USE "EPC" OR "PC" @ ALL POST-TO-BEAM CONNECTIONS (U.N.O.)
- USE "ST6224" @ ALL (N) TO (E) DBL. TOP PLATE CONNECTION.
- **CONTRACTOR TO VERIFY EXISTING FRAMING PRIOR TO CONSTRUCTION.**



LOWER ROOF/FIRST FLOOR FRAMING PLAN

VERIFY DIMENSIONS WITH ARCHITECTURAL PLANS

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

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REITH
DAVID REITH & ASSOCIATES, INC.
Structural Design Services
Residential • Commercial • Industrial

REGISTERED PROFESSIONAL ENGINEER
DAVID L. REITH
No. C72122
Exp. 06-30-2022
CIVIL
STATE OF CALIFORNIA

NEW TWO-STORY ADDITION & REMODEL

HERNANDEZ RESIDENCE

121 S. G STREET
OCNARD, CALIFORNIA 93030

Issue Dates:
1 5-14-2021 Plan Check Submittal
2
3
4
5

Sheet Title: Roof Framing Plan

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

Job # 21197

Sheet: S-2

STRUCTURAL OBSERVATION SCHEDULE

- IF REQUIRED, ALL STRUCTURAL OBSERVATIONS MUST BE SCHEDULED 72 HOURS IN ADVANCE WITH DAVID REITH & ASSOCIATES AT (805) 418-7924.

INTERIOR HEADERS

INTERIOR NON-BEARING SPANS USE:
2 x 4 FLAT FOR SPANS UP TO 3'-0"
4 x 4 DF #2 FOR SPANS UP TO 5'-0"
4 x 6 DF #2 FOR SPANS UP TO 8'-0"

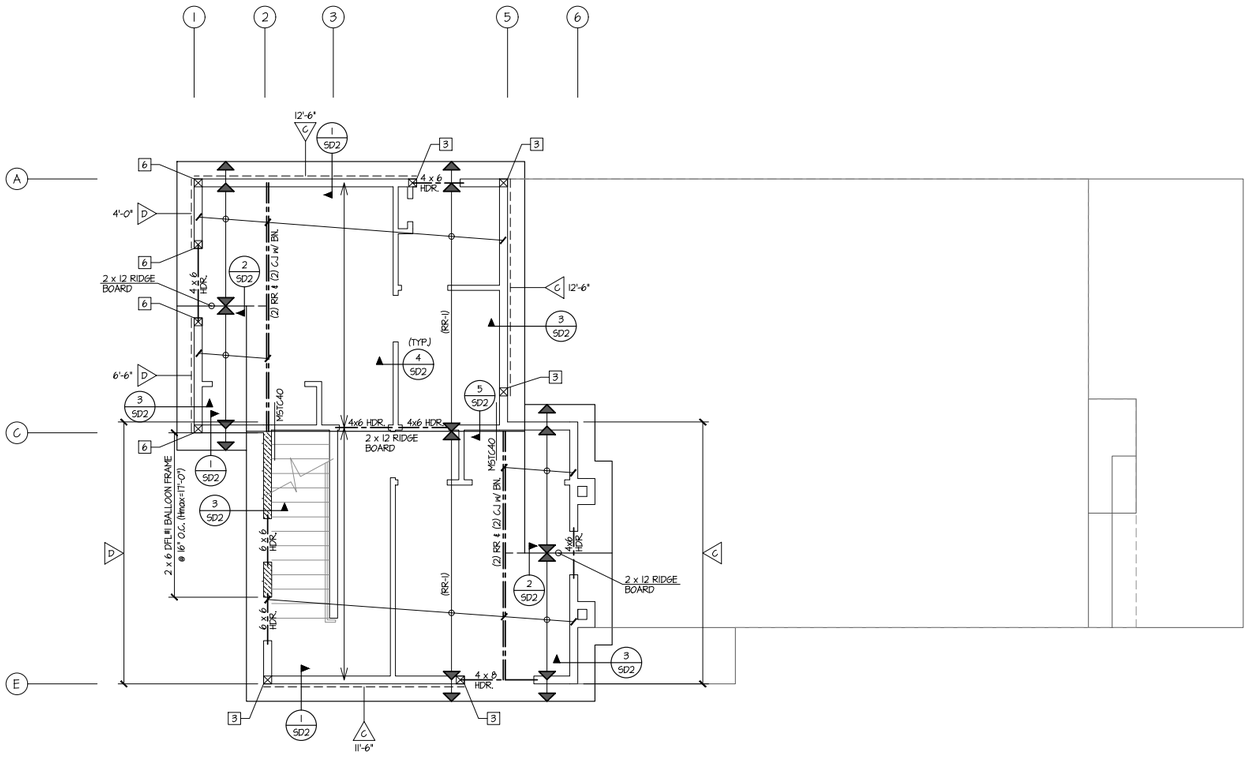
ROOF SHEATHING

15/32" APA-RATED SHEATHING, EXPOSURE 1, 24" MINIMUM SPAN RATING, 10d COMMON NAILS @ 6" O.C. B.N. & E.N., 10d COMMON NAILS @ 12" O.C. INT. FRAMING SEE TITLE 24 SHEETS FOR RADIANT BARRIER REQUIREMENTS.

SHEARWALL SCHEDULE (75% OF 2019 CBC VALUES)

TAG	VALUE (PLF)	MATERIAL	3x FRAMING REQUIRED	NAIL SIZE	B.N. & E.N.	F.N.	SILL ATTACHMENT 5/8" A.B. SPACING	BOTTOM PLATE NAILS & LAGS	TOP PLATE CLIPS
A	255	1/2" STRUCTURAL I RATED SHEATHING	NO	10d	6"	12"	32" O.C.	16d @ 6" O.C.	A35 @ 16" O.C.
B	382	1/2" STRUCTURAL I RATED SHEATHING	YES	10d	4"	12"	24" O.C.	1/4" x 8" SDS SCREWS @ 8" O.C. (STAGGERED TO 4x BLK'G.)	A35 @ 12" O.C.
C	499	1/2" STRUCTURAL I RATED SHEATHING	YES	10d	3"	12"	16" O.C.	1/4" x 8" SDS SCREWS @ 6" O.C. (STAGGERED TO 4x BLK'G.)	A35 @ 8" O.C.
D	652	1/2" STRUCTURAL I RATED SHEATHING	YES	10d	2"	12"	12" O.C.	1/4" x 8" SDS SCREWS @ 4" O.C. (STAGGERED TO 4x BLK'G.)	LTP4 @ 12" O.C.
E	764	1/2" STRUCTURAL I RATED SHEATHING (APPLIED TO BOTH SIDES OF WALL)	YES	10d	4" (BOTH SIDES)	12"	12" O.C.	5/8" x 8" LAG SCREWS @ 8" O.C. (STAGGERED TO 4x BLK'G.)	LTP4 @ 8" O.C.
F	998	1/2" STRUCTURAL I RATED SHEATHING (APPLIED TO BOTH SIDES OF WALL)	YES	10d	3" (BOTH SIDES)	12"	12" O.C.	5/8" x 8" LAG SCREWS @ 8" O.C. (STAGGERED TO 4x BLK'G.)	LTP4 @ 6" O.C.

NOTES:
1) USE COMMON NAILS AT SHEARWALLS AND DIAPHRAGM.
2) ALL SHEARWALLS TO PENETRATE THROUGH CEILING JOIST AND ATTIC TO SHEAR CONNECT TO UPPER HORIZONTAL DIAPHRAGM. (FLOOR TO ROOF PLYWOOD)
3) AT SHEARWALLS WHERE OPENINGS OCCUR SUCH AS WINDOW AND DOOR APPLY PLYWOOD ABOVE OPENING.
4) PROVIDE "5" PLY AT 15/32" THICKNESS "4" PLY AT 3/8".
5) FLOOR PLYWOOD TO BE GLUED AS WELL AS NAILED TO JOISTS.
6) WHEN BOTH SIDES OF WALL RECEIVE PLYWOOD, STAGGER THE PLYWOOD JOINTS SO THAT THE VERTICAL JOINTS FROM TWO SIDES DO NOT FALL ON THE SAME STUD.
7) PROVIDE AT LEAST MINIMUM 1/2" EDGE DISTANCE FOR PLYWOOD B.N.
8) WHERE ALLOWABLE SHEAR VALUES EXCEED 300 PLF, FOUNDATION SILL PLATES & ALL FRAMING MEMBERS RECEIVING EDGE NAILING FROM ABUTTING PANELS SHALL NOT BE LESS THAN A 3x NOMINAL MEMBER, NAILS SHALL BE STAGGERED.
9) MINIMUM 3"x3"x0.229 SQUARE PLATE WASHERS SHALL BE USED WITH ALL ANCHOR BOLTS IN SHEARWALL SILL PLATE.
10) ANCHOR BOLTS TO BE EMBEDDED 10" MINIMUM INTO FOUNDATION.
11) WOOD STRUCTURAL PANELS SHALL COMPLY WITH DOC PS1 OR DOC PS2.
12) SILL PLATE SHALL COMPLY WITH NDS 2018.
13) MINIMUM EDGE DISTANCE AND CONCRETE PROTECTION SHALL COMPLY WITH CBC 1912 & ACI 318-14.
14) PERIODIC SPECIAL INSPECTION FOR SHEARWALL TYPES "B" THRU "F". PER CHAPTER 17.



UPPER ROOF FRAMING PLAN

VERIFY DIMENSIONS WITH ARCHITECTURAL PLANS

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

FRAMING LEGEND

- ex. A — SHEARWALL PER PLAN
- 2 x 6 DFLIR BALLOON FRAME @ 16" O.C. (Hmax=11'-0")
- ex. 1 — HOLD DOWN PER PLAN
- 4 x 4 POST (U.N.O.)
- WOOD BEAM OR HEADER PER PLAN
- 2 x 8 CEILING JOIST @ 16" O.C.
- 2 x 10 ROOF RAFTERS @ 16" O.C.

HOLD-DOWN SCHEDULE (75% OF DESIGN CAPACITY)

1	4x POST w/ "MSTC40" FLR-TO-FLR HOLD-DOWN MIN. (32) 16d SINKERS SPACED EVENLY (ALLOWABLE TENSION LOAD = 2,301 LBS)	ICC# ER-2105 (LARR# 25113)
2	4x POST w/ "MSTC52" FLR-TO-FLR HOLD-DOWN MIN. (48) 16d SINKERS SPACED EVENLY (ALLOWABLE TENSION LOAD = 3,465 LBS)	ICC# ER-2105 (LARR# 25113)
3	4x POST w/ "MSTC66" FLR-TO-FLR HOLD-DOWN MIN. (68) 16d SINKERS SPACED EVENLY (ALLOWABLE TENSION LOAD = 4,945 LBS)	ICC# ER-2105 (LARR# 25113)
4	4x POST w/ "MSTCA66B" FLR-TO-FLR HOLD-DOWN MIN. (58) 0.148x3 NAILS TO POST, (14) 0.148x3 NAILS TO FACE OF BEAM & (4) 0.148x3 NAILS TO BOTTOM OF BEAM (ALLOWABLE TENSION LOAD = 3,361 LBS)	ICC# ER-2105 (LARR# 25113)
5	4x POST w/ "CMST14" FLR-TO-FLR HOLD-DOWN (34" END LENGTH & (33) 16d TO EA. POST) (ALLOWABLE TENSION LOAD = 4,866 LBS)	ICC# ER-2105 (LARR# 25113)
6	4x POST w/ "CMST12" FLR-TO-FLR HOLD-DOWN (45" END LENGTH & (43) 16d TO EA. POST) (ALLOWABLE TENSION LOAD = 6,426 LBS)	ICC# ER-2105 (LARR# 25113)
7	4x POST w/ "HDU2" ON S5TB16 A.B. (ALLOWABLE TENSION LOAD = 2,306 LBS)	ICC# ESR-2330 (LARR# 25120)
8	4x POST w/ "HDU4" ON S5TB20 A.B. (ALLOWABLE TENSION LOAD = 3,423 LBS)	ICC# ESR-2330 (LARR# 25120)
9	4x POST w/ "HDU5" ON S5TB24 A.B. (ALLOWABLE TENSION LOAD = 4,233 LBS)	ICC# ESR-2330 (LARR# 25120)
10	4x POST w/ "HDU8" ON S5TB28 A.B. (ALLOWABLE TENSION LOAD = 5,221 LBS - (4x4 POST), 5,902 LBS - (4x6 POST))	ICC# ESR-2330 (LARR# 25120)
11	4x POST w/ "HDU11" ON 1"ø ALL THREADED ROD (ALLOWABLE TENSION LOAD = 7,151 LBS)	ICC# ESR-2330 (LARR# 25120)
12	4x POST w/ "HDU14" ON 1"ø ALL THREADED ROD (ALLOWABLE TENSION LOAD = 10,742 LBS)	ICC# ESR-2330 (LARR# 25120)

NOTES:
1) HOLD-DOWN ANCHORS MUST BE TIED IN PLACE PRIOR TO FOUNDATION INSPECTION.
2) DEEPEN FOOTINGS TO PROVIDE 3" MINIMUM CONCRETE COVER WHERE HOLD-DOWN ANCHORS ARE LONGER THAN THE FOOTING DEPTH.
3) USE (RU) OPTION ON STHD HOLD-DOWNS FOR RAISED WOOD SUB-FLOOR CONDITION.
4) SPECIFY THAT HOLD-DOWN CONNECTION BOLTS & NUTS SHALL BE TORQUED 1/2" TURN BEYOND FINGER TIGHT OR AS REQUIRED BY THE MANUFACTURER. INSPECTOR SHALL VERIFY BY RANDOM INSPECTION PRIOR TO COVERING WALLS).
5) HD CONNECTOR BOLTS INTO WOOD FRAMING REQUIRE APPROVED PLATE WASHERS.
6) STRAP LOADS FOR FLOOR JOISTS UP TO 14" MAX IN DEPTH.
7) PLATE WASHERS ARE REQUIRED FOR ALL HOLD-DOWNS.

FRAMING NOTES:

- FOR PLATE HEIGHTS > 10'-0", USE 2 x 6 STUDS @ 16" O.C., FOR PLATE HEIGHTS < 10'-0" USE 2 x 4 STUDS @ 16" O.C.
- USE "EPC" OR "PC" @ ALL POST-TO-BEAM CONNECTIONS (U.N.O.)

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Structural Design Services
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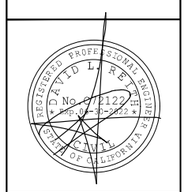


NEW TWO-STORY ADDITION & REMODEL

HERNANDEZ RESIDENCE

121 S. G STREET
OCNARD, CALIFORNIA 93030

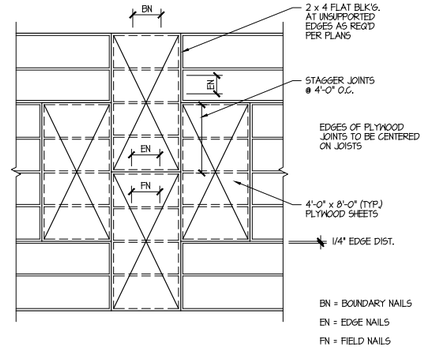
Issue Dates:
1 5-14-2021 Plan Check Submittal
2
3
4
5

Sheet Title: Upper Roof Framing Plan

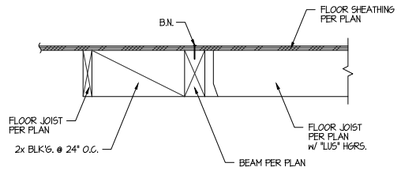
Scale: 1/4"= 1'-0"

Job # 21197

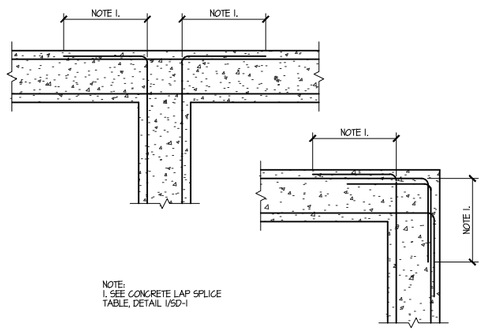
Sheet: S-3



SHEATHING LAYOUT AT JOIST / RAFTERS 13



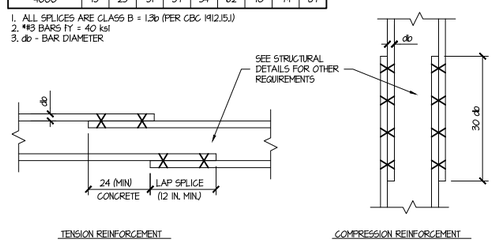
CONNECTION DETAIL 9



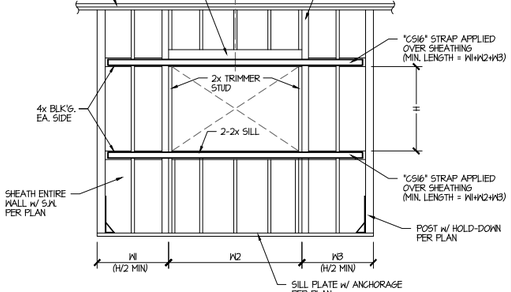
CORNER AND INTERSECTION 5

CONCRETE REINFORCING - Fy = 60 ksi									
f'm = 1500psi (MIN.)	LAP SPLICE (IN.) - DEFORMED BARS								
	#3*	#4	#5	#6	#7	#8	#9	#10	#11
2500	16	32	39	47	69	78	88	100	110
3000	15	29	36	43	63	72	81	91	101
4000	13	25	31	37	54	62	70	79	87

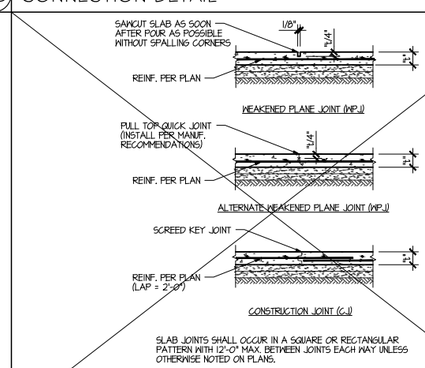
1. ALL SPLICES ARE CLASS B = 1.3ℓd (PER CBC 1912.15.1)
2. *#3 BARS fy = 40 ksi
3. db - BAR DIAMETER



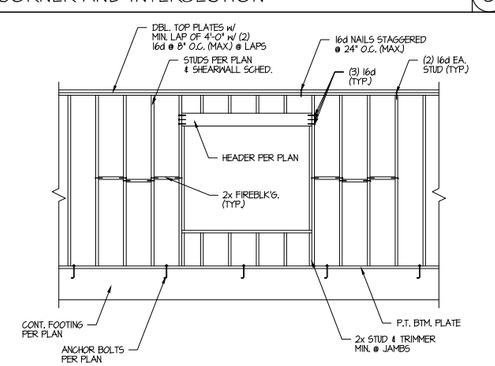
CONCRETE LAP SPLICE TABLE 1



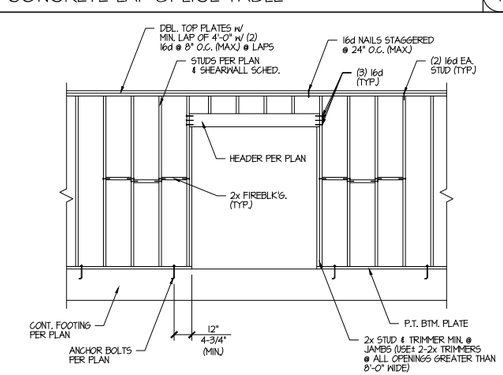
ELEVATION OF TYPICAL PLATE SPLICE 14



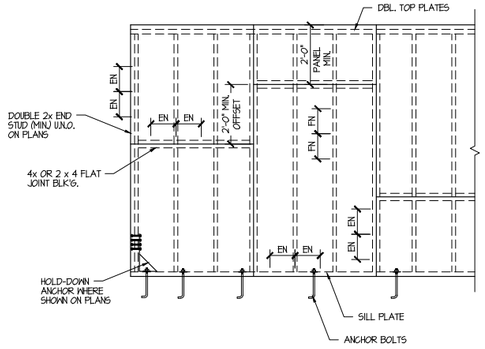
CONSTRUCTION JOINT 10



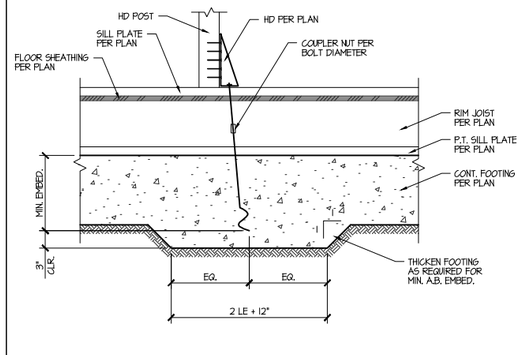
TYPICAL WINDOW FRAMING ELEVATION 6



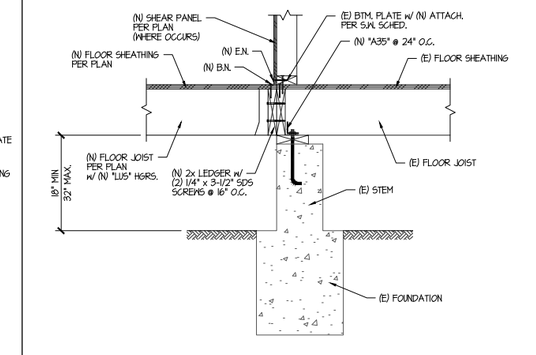
TYPICAL DOOR FRAMING ELEVATION 2



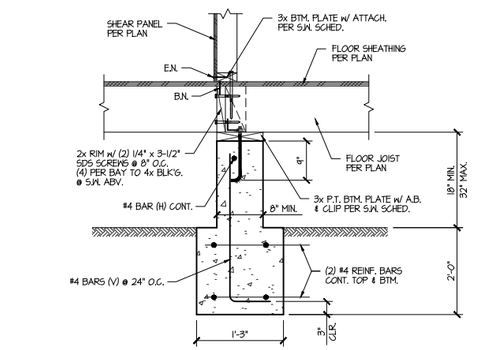
TYPICAL SHEARWALL ELEVATION 15



HOLD-DOWN AT RAISED FLOOR DETAIL 11

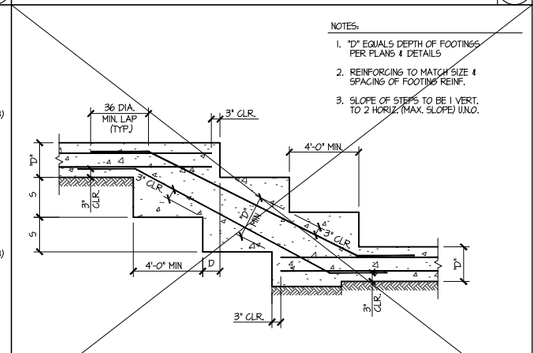


CONNECTION DETAIL 7

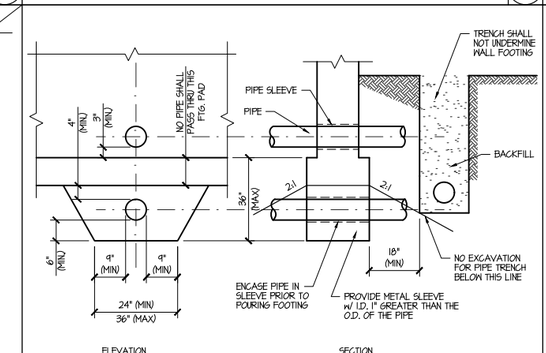


CONT. FOOTING DETAIL 3

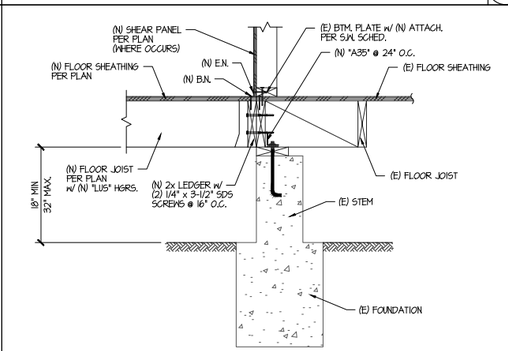
TYPICAL OPENING IN SHEARWALL 16



TYPICAL STEPPED FOOTING 12



PIPE AND TRENCH LOCATION 8



CONNECTION DETAIL 4

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Structural Design Services
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REGISTERED PROFESSIONAL ENGINEER DAVID L. REITH No. 072122 Exp. 06-30-2022 STATE OF CALIFORNIA CIVIL

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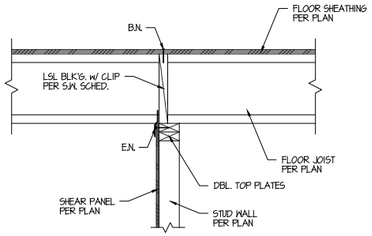
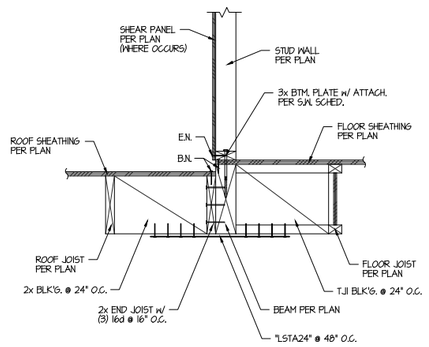
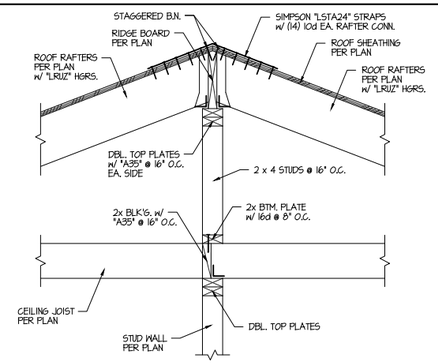


SHEAR TRANSFER DETAIL 13



CONNECTION DETAIL 9



CONNECTION DETAIL 5

NOTE:
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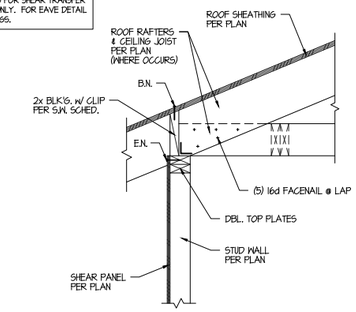
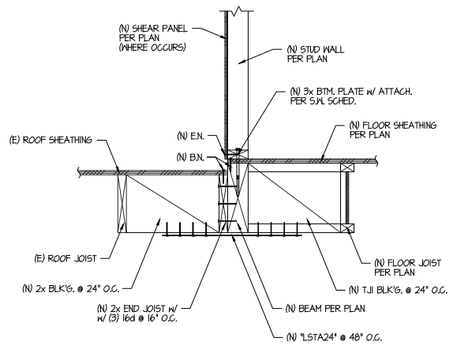
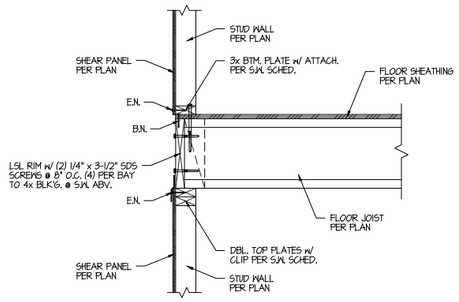


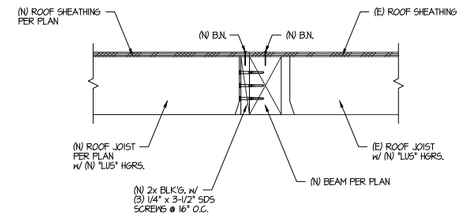
SHEAR TRANSFER DETAIL 1



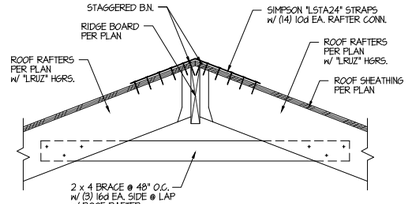
CONNECTION DETAIL 14



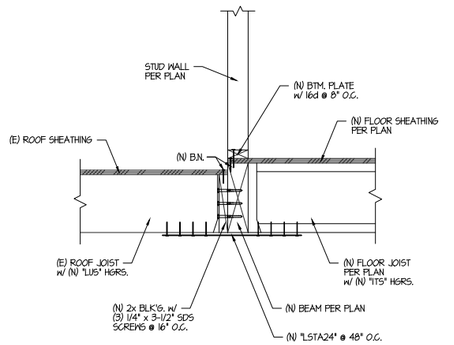
SHEAR TRANSFER DETAIL 10



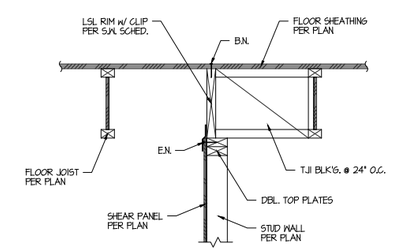
CONNECTION DETAIL 6



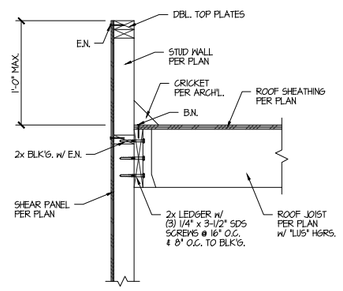
CONNECTION DETAIL 2



CONNECTION DETAIL 15



SHEAR TRANSFER DETAIL 11



SHEAR TRANSFER DETAIL 7

NOTE:
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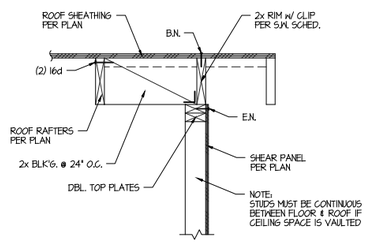

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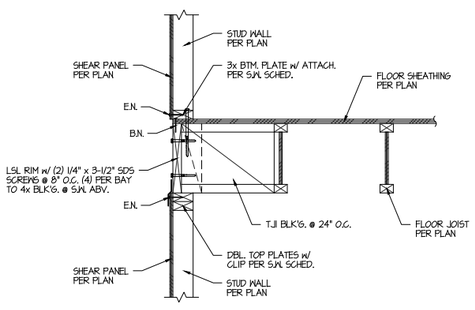
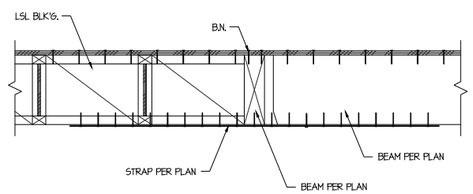
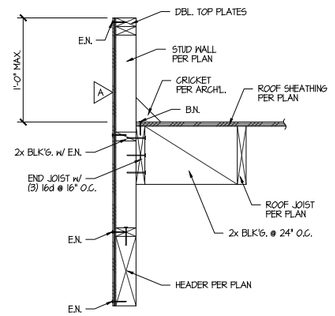


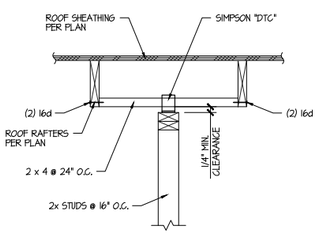
SHEAR TRANSFER DETAIL 16



DRAG STRAP DETAIL 12



CONNECTION DETAIL 8



TYPICAL NON-BEARING WALL DETAIL 4

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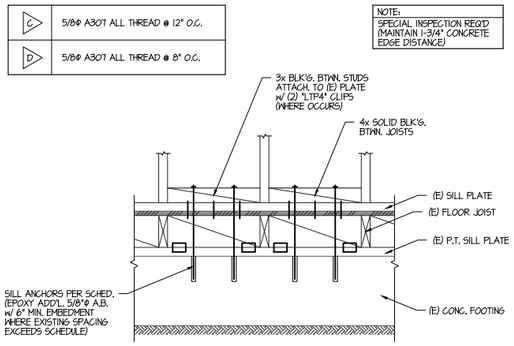
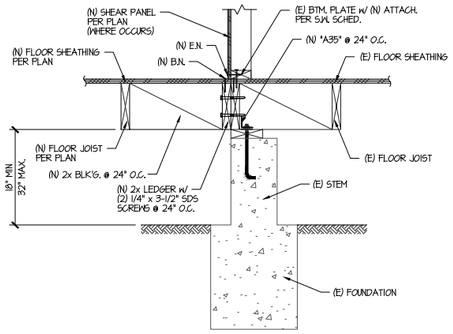
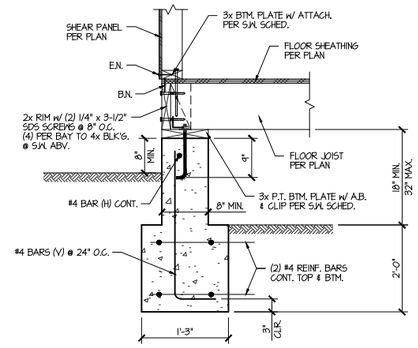


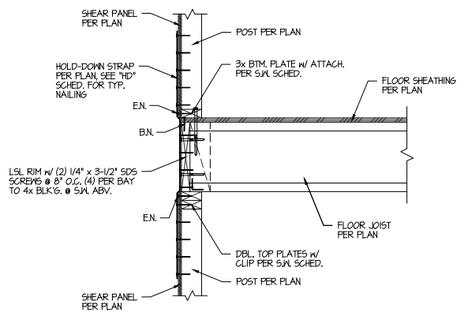
ANCHOR BOLT RETROFIT | 13



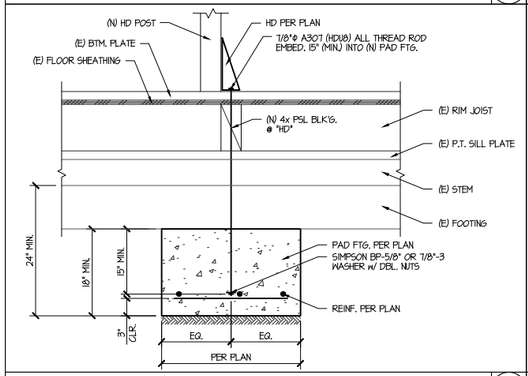
CONNECTION DETAIL | 9



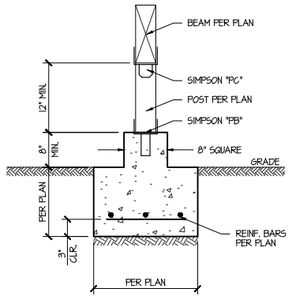
CONT. FOOTING DETAIL | 5



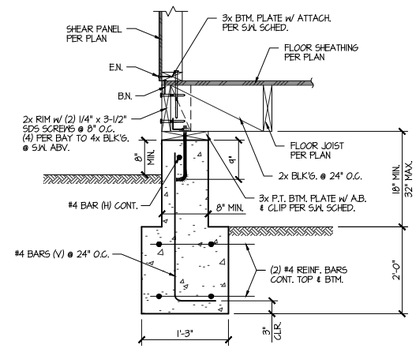
TYPICAL HOLD-DOWN AT FLOOR DETAIL | 1



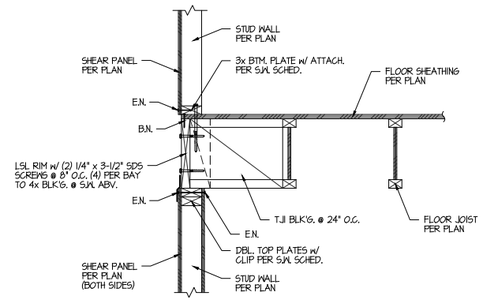
HOLD-DOWN RETROFIT | 14



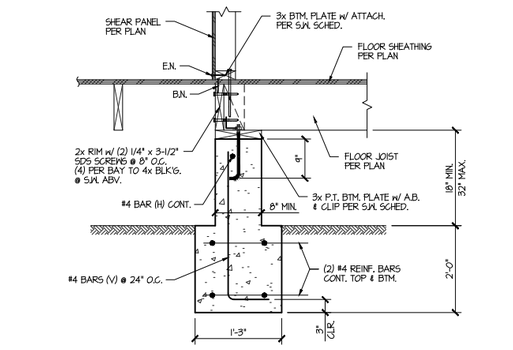
CONNECTION DETAIL | 10



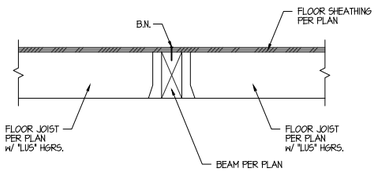
CONT. FOOTING DETAIL | 6



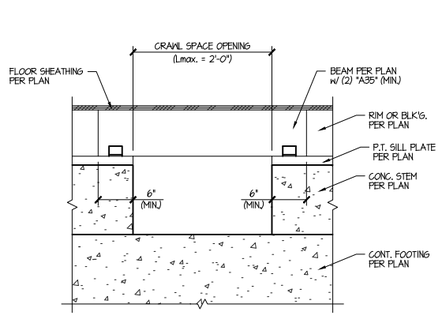
SHEAR TRANSFER DETAIL | 2



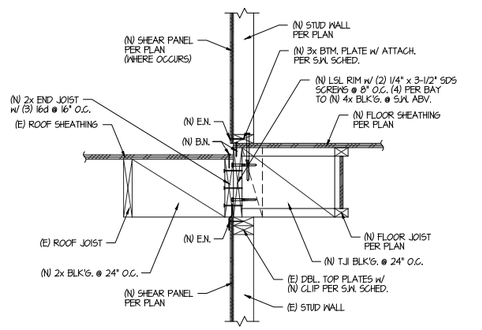
CONT. FOOTING DETAIL | 15



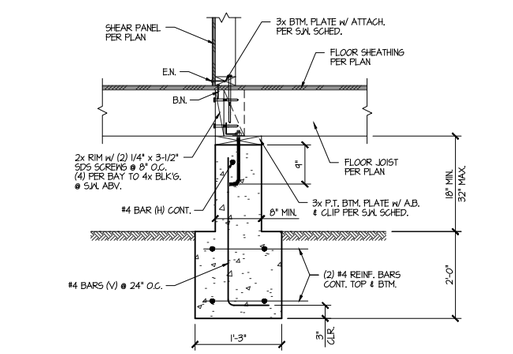
CONNECTION DETAIL | 11



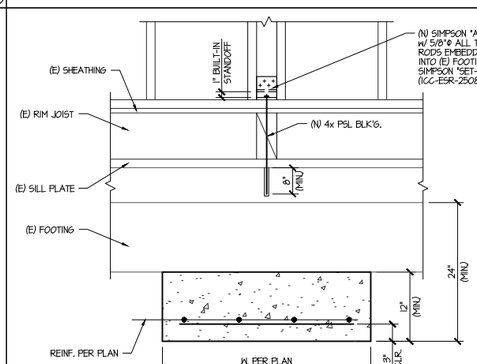
TYPICAL UNDERFLOOR ACCESS DETAIL | 7



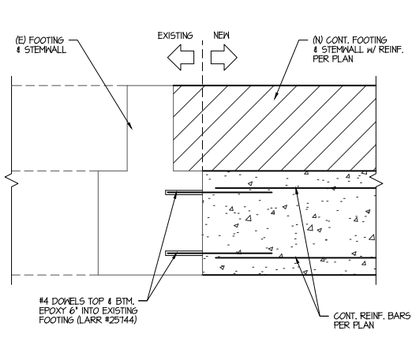
SHEAR TRANSFER DETAIL | 3



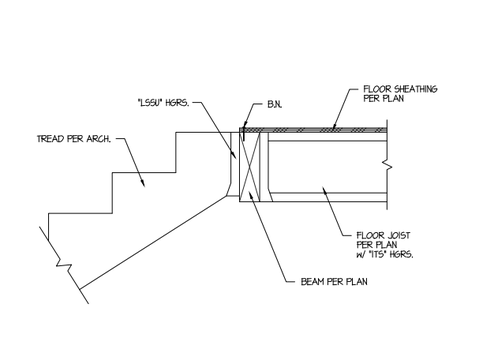
CONT. FOOTING DETAIL | 16



SPREAD FOOTING DETAIL | 12



NEW TO EXISTING CONNECTION DETAIL | 8



STAIR STRINGERS CONNECTION DETAIL | 4

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