PROPERTY OF MANUAL LABOR & SHALL NOT BE DISTRIBUTED OR USED FOR ANY WORK OTHER THAN THE PROJECT FOR WHICH THEY WERE PREPARED WITHOUT WRITTEN CONSENT
INCLUDED DRAWINGS, SPECIFICATIONS, IDEAS & DESIGNS SHALL REMAIN THE PROPERTY OF MANUAL LABOR
PRINTED: 8/30/2026 11:11:04 AM PROJECT NUMBER: 24029

ENERGY ANALYSIS/INSPECTION REQUIREMENTS

UNIT B:

SPECIAL FEATURES MUST BE INSTALLED TO MEET ENERGY PERFORMANCE:
- NO SPECIAL FEATURES REQUIRED

FEATURES MUST BE FIELD-VERIFIED BY A CERTIFIED HERS RATER:
- KITCHEN RANGE HOOD
- MINIMUM AIRFLOW
- FAN EFFICACY WATTS/CFM
- VERIFIED HEAT PUMP RATED HEATING CAPACITY
- DUCT LEAKAGE TESTING

THE OWNER OR CONTRACTOR IS RESPONSIBLE TO HIRE THE HERS RATER.

UNIT C:

SPECIAL FEATURES MUST BE INSTALLED TO MEET ENERGY PERFORMANCE:
- NO COOLING SYSTEM INCLUDED

FEATURES MUST BE FIELD-VERIFIED BY A CERTIFIED HERS RATER:
- BUILDING DOES NOT REQUIRE FIELD TESTING OR ECCVERIFICATION

UNIT & OCCUPANCY SEPARATIONS

PER CRC R302.3.2, WALLS SEPARATING RESIDENTIAL DWELLING UNITS FROM EACH OTHER SHALL BE CONSTRUCTED WITH 1-HOUR FIRE RESISTANCE RATING. UNITS EQUIPPED WITH AN AUTOMATIC SPRINKLER SYSTEM SHALL BE RATED FOR 1/2-HR.

PER CRC R302.3.3, FIRE PARTITIONS SHALL EXTEND FROM THE FLOOR ASSEMBLY BELOW TO THE UNDERSIDE OF THE ROOF SHEATHING.

PER CRC R302.4, PENTRATIONS OF WALL OR FLOOR-CEILING ASSEMBLIES REQUIRED TO BE FIRE-RESISTANCE RATED.

PER CRC R302.6, PRIVATE GARAGES AND CARPORTS BENEATH HABITABLE ROOMS SHALL BE SEPARATED BY NOT LESS THAN A 5/8" TYPE X GYP BOARD OR EQUIVALENT AND 1/2" GYP APPLIED TO STRUCTURES SUPPORTING THE SEPARATION FROM FROM HABITABLE ROOMS ABOVE THE GARAGE OR CARPORT. ANY DUCTS PENETRATING THIS ASSEMBLY SHALL BE SHEET METAL. 0.019" MIN THICKNESS (CRC R302.5.2).

1-HR FIRE RATED CONSTRUCTION TO BE PROVIDED UNDER STAIRS AT LOCATION OF PROPOSED TRASH ENCLOSURE.

EXTERIOR FIRE SEPARATIONS

CRC TABLE R302.1(2) SPRINKLED.

ALL SEPARATIONS ARE GREATER THAN 3 FEET, SO WALLS, PROJECTIONS, OPENINGS AND PENETRATIONS DO NOT NEED TO BE RATED.

ALLOWABLE OPENINGS

WALL OPENING LIMITATIONS (SPRINKLERED) [CRC TABLE R302.1(2)]
COMPLIANT: PROPOSED OPENINGS LESS THAN ALLOWED TOTALS:

ALLOWED OPENINGS

SEPARATION DISTANCE (FT)	ALLOWABLE AREA (SPRINKLERED)
0 TO LESS THAN 3	NONE
3 TO LESS THAN 5	UNLIMITED

LIFE SAFETY ANALYSIS OVERVIEW

CODE BASIS:
2025 CALIFORNIA RESIDENTIAL BUILDING CODE

CONSTRUCTION DATE OF (E) STRUCTURE
BUILT 1949

CONSTRUCTION TYPE [CBC CH.6]
EXISTING: TYPE V-B UNSPRINKLERED
PROPOSED: TYPE V-B SPRINKLERED NFPA13D

OCCUPANCY CLASSIFICATION(S) [CBC 302.1]
EXSTING: GROUP R-3 RESIDENTIAL
PROPOSED: GROUP R-3 RESIDENTIAL TOWNHOUSES

SPRINKLER SYSTEM REQUIREMENT [CBC CH.9]
REQUIRED: NFPA 13D
EXISTING: NONE
PROPOSED: NFPA 13D

REQ'S FOR SPECIFIC BUILDING ELEMENTS [CRC R302]
COMPLIANT: 0 HOURS FIRE RESISTANCE RATING REQ'D FOR ALL ELEMENTS

EXTERIOR FIRE-RESISTANCE RATINGS FOR SEPARATION DISTANCE [CRC R302.1]
COMPLIANT: SEE "EXTERIOR FIRE SEPARATIONS," THIS SHEET

SEPARATION REQUIREMENTS FOR PROJECTIONS [CRC R302.1]
COMPLIANT: ALL PROJECTIONS HAVE SUFFICIENT FIRE SEPARATION DISTANCE

INTERIOR FIRE-RESISTANCE RATINGS FOR SEPARATION OF OCCUPANCIES [R302.3]
COMPLIANT: 1-HOUR OCCUPANCY SEPARATIONS REQUIRED BETWEEN UNITS
SEE "UNIT & OCCUPANCY SEPARATIONS," THIS SHEET

WALL OPENING LIMITATIONS [CRC R302.1]
COMPLIANT: SEE "ALLOWABLE OPENINGS," THIS SHEET

ARCHAEOLOGICAL CONSIDERATIONS

PRIOR TO THE START OF ANY VEGETATION OR PAVING REMOVAL, DEMOLITION, TRENCHING OR GRADING, CONTRACTORS AND CONSTRUCTION PERSONNEL SHALL BE ALERTED TO THE POSSIBILITY OF UNCOVERING UNANTICIPATED SUBSURFACE ARCHAEOLOGICAL FEATURES OR ARTIFACTS ASSOCIATED WITH PAST HUMAN OCCUPATION OF THE PARCEL.

IF SUCH ARCHAEOLOGICAL RESOURCES ARE ENCOUNTERED OR SUSPECTED, WORK SHALL BE HALTED IMMEDIATELY, THE CITY ENVIRONMENTAL ANALYST SHALL BE NOTIFIED AND AN ARCHAEOLOGIST FROM THE MOST CURRENT CITY QUALIFIED ARCHAEOLOGISTS LIST SHALL BE RETAINED BY THE APPLICANT. THE LATTER SHALL BE EMPLOYED TO ASSESS THE NATURE, EXTENT AND SIGNIFICANCE OF ANY DISCOVERIES AND TO DEVELOP APPROPRIATE MANAGEMENT RECOMMENDATIONS FOR ARCHAEOLOGICAL RESOURCE TREATMENT WHICH MAY INCLUDE, BUT ARE NOT LIMITED TO, REDIRECTION OF GRADING AND/OR EXCAVATION ACTIVITIES, CONSULTATION AND/OR MONITORING WITH A BARBAREÑO CHUMASH REPRESENTATIVE FROM THE MOST CURRENT CITY QUALIFIED BARBAREÑO CHUMASH SITE MONITORS LIST, ETC.

IF A DISCOVERY CONSISTS OF POSSIBLE HUMAN REMAINS, THE SANTA BARBARA COUNTY CORONER SHALL BE CONTACTED IMMEDIATELY. IF THE CORONER DETERMINES THAT THE REMAINS ARE NATIVE AMERICAN, THE CORONER SHALL CONTACT THE CALIFORNIA NATIVE AMERICAN HERITAGE COMMISSION. A BARBAREÑO CHUMASH REPRESENTATIVE FROM THE MOST CURRENT CITY QUALIFIED BARBAREÑO CHUMASH SITE MONITORS LIST SHALL BE RETAINED TO MONITOR ALL FURTHER SUBSURFACE DISTURBANCE IN THE AREA OF THE FIND. WORK IN THE AREA MAY ONLY PROCEED AFTER THE ENVIRONMENTAL ANALYST GRANTS AUTHORIZATION.

IF A DISCOVERY CONSISTS OF POSSIBLE PREHISTORIC OR NATIVE AMERICAN ARTIFACTS OR MATERIALS, A BARBAREÑO CHUMASH REPRESENTATIVE FROM THE MOST CURRENT CITY QUALIFIED BARBAREÑO CHUMASH SITE MONITORS LIST SHALL BE RETAINED TO MONITOR ALL FURTHER SUBSURFACE DISTURBANCE IN THE AREA OF THE FIND. WORK IN THE AREA MAY ONLY PROCEED AFTER THE ENVIRONMENTAL ANALYST GRANTS AUTHORIZATION.

TRASH ENCLOSURE CALCS

Step 1: List each business type in the enclosure. Input business size based on the units that appear when you choose a business type. See Business Type Definitions tab to ensure you choose the correct business type.

	Business Type	Business Size		Food (yd3/week)	Green (yd3/week)	Recycle (yd3/week)	Trash (yd3/week)
Enclosure 1	Large Residential (5+ Units)	7	bedrooms	0.00	0.21	1.06	0.85
	-			0.00	0.00	0.00	0.00
	-			0.00	0.00	0.00	0.00
	-			0.00	0.00	0.00	0.00
	-			0.00	0.00	0.00	0.00
	-			0.00	0.00	0.00	0.00
	-			0.00	0.00	0.00	0.00
	-			0.00	0.00	0.00	0.00
	-			0.00	0.00	0.00	0.00
	-			0.00	0.00	0.00	0.00

Step 2: Propose container sizes and quantities appropriate for the total generation of each material.

		Food	Green	Recycle	Trash
Total Generation	(cyd3/week)	0.0	0.2	1.1	0.9
	(gallons)	0	42	214	172
Container Size		- 65 gallon cart	- 95 gallon cart	- 95 gallon cart	- 95 gallon cart
Quantity		0	1	2	2
Frequency (pickups per week)		0	1	1	1

TRASH ENCLOSURE WAIVER

WAIVER IS REQUESTED TO ALLOW FOR A PARTIALLY-ENCLOSED TRASH ENCLOSURE WHERE PROPOSED, AS CONTAINERS WOULD NOT BE VISIBLE FROM PUBLIC OR ADJACENT PROPERTIES.

STORMWATER REQUIREMENTS

THIS PROJECT REQUIRES COMPLIANCE W/ TIER 2 BEST MANAGEMENT PRACTICES. DOWNSPOUTS ARE DISCONNECTED TO LANDSCAPING.

SEE SHEET a1.01 and a1.02 FOR DETAILS.

STORMWATER DECLARATION

Required Maintenance Statement

The proposed storm water BMPs, which include Disconnected Downspout, Permeable Pavers and landscaped water retention areas shall be maintained as described in Santa Barbara Municipal Code 22.87.030 in accordance with their approved specifications.

Owner (Name and Title): Michael Gilson - Owner
Signature:
Date:

STORMWATER INSPECTIONS

- INSPECTION TO CONFIRM SUBGRADE SOIL IS UNCOMPACTED OR COMPACTED TO MAXIMUM OF 90%
- INSPECTION TO CONFIRM NO WEED/FILTER FABRIC IS INSTALLED ALONG SUBGRADE SOIL OR BETWEEN AGGREGATE LAYERS
- INSPECTION OF ALL AGGREGATE LAYERS
- INSPECTION OF FINAL PERMEABLE PAVER INSTALLATION
- INSPECTION TO CONFIRM DOWNSPOUTS ARE DISCONNECTED TO APPROPRIATELY SIZED LANDSCAPING, AS DESIGNED
- INSPECTION TO CONFIRM IMPERVIOUS AREA IDENTIFIED ON SITE PLAN WAS REMOVED

INSPECTIONS SHALL BE SCHEDULED ONLINE VIA ACCELA CITIZENS ACCESS. THE CITY WILL THEN ROUTE THE REQUEST TO THE QSP INSPECTOR OR THIRD-PARTY COMPANY.

AB 2097 MAP



SYMBOL LEGEND

- # KEYNOTE
- # WINDOW
- X DOOR
- # EQUIPMENT
- X LIGHTING
- # PLUMBING
- ROOM / # ROOM NAME ROOM NUMBER
- ALIGN ELEMENT ALIGNMENT NOTE
- MOVEMENT DIRECTION
- CHANGE IN FINISH
- REVISION CLOUD REVISION #
- PROPERTY LINE
- CENTER LINE
- NAME / XX'-XX" ELEVATION LABEL ELEVATION VALUE
- TRUE NORTH PLAN NORTH
- X / aX.XX SECTION LOCATION/PAGE
- X / aX.XX DETAIL LOCATION/PAGE
- X GRID LINE
- X / aX.XX PHOTO LOCATION/PAGE
- aX.XX / # ELEVATION LOCATION/PAGE

ABBREVIATIONS - NOT ALL USED

~	APPROXIMATELY	(N)	NEW
AFF	ABOVE FINISHED FLOOR	NIC	NOT IN CONTRACT
APN	ASSESSOR PARCEL NUMBER	NTS	NOT TO SCALE
ASF	ABOVE STRUCTURAL FLOOR	OC	ON CENTER
BTWN	BETWEEN	OFCI	OWNER-FURNISHED, CONTRACTOR-INSTALLED
BLDG	BUILDING	OY	OPEN YARD
CBC	CALIFORNIA BUILDING CODE	PG	PAINT GRADE
CEC	CALIFORNIA ELECTRICAL CODE	PL	PROPERTY LINE
CL	CENTERLINE	PLN	PLAN
CLG	CEILING	PLT	PLATE
CLR	CLEAR	PLY	PLYWOOD
CMC	CALIFORNIA MECHANICAL CODE	PT	PRESSURE TREATED
CONC	CONCRETE	PV	PHOTOVOLTAIC(S)
CPC	CALIFORNIA PLUMBING CODE	POY	PRIVATE YARD
CRC	CALIFORNIA RESIDENTIAL CODE	REQ	REQUIRE(D) / REQUIREMENT(S)
D	CLOTHES DRYER	RO	ROUGH OPENING
DEMO	DEMOLISH / DEMOLITION	SAF	SELF-ADHERED FLASHING
DIM	DIMENSION	SB	SETBACK
DW	DISHWASHER	SEP	SEPARATE / SEPARATION
(E)	EXISTING	SF	SQUARE FOOT / SQUARE FEET
EGR	EGRESS	SFL	STRUCTURAL FLOOR LEVEL
EL	ELEVATION	SG	STAIN GRADE
ELEC	ELECTRICAL	SHT	SHEET
EQ	EQUAL / EQUIVALENT	SIM	SIMILAR
EXT	EXTERIOR	SPEC	SPECIFY / SPECIFICATION(S)
FAU	FORCED AIR UNIT	SSD	SEE STRUCTURAL DRAWINGS
FFL	FINISHED FLOOR LEVEL	ST	STREET
FG	FINISHED GRADE	STD	STANDARD(S)
FLR	FLOOR	TBD	TO BE DETERMINED
GR	GROSS	TYP	TYPICAL
GYP	GYPSUM BOARD	UON	UNLESS OTHERWISE NOTED
HVAC	HEATING, VENTILATION, A/C	VIF	VERIFY IN FIELD
INT	INTERIOR	V	VERSION
MAX	MAXIMUM	W	CLOTHES WASHER
MECH	MECHANICAL	WD	WOOD
MEP	MECHANICAL, ELEC, PLUMBING	WRB	WATER-RESISTIVE BARRIER
MFR	MANUFACTURER	W/	WITH
MIN	MINIMUM	W/OUT	WITHOUT

CODE COMPLIANCE

ALL WORK SHALL BE PERFORMED AND ALL MATERIALS INSTALLED IN COMPLIANCE WITH THE CURRENT EDITIONS OF THE FOLLOWING CODES, AS ADOPTED BY THE LOCAL GOVERNING AUTHORITIES.

NOTHING IN THESE PLANS IS TO BE CONSTRUED TO PERMIT WORK NOT CONFORMING TO THESE CODES. CODE REQUIREMENTS TAKE PRECEDENCE OVER THE DRAWINGS.

IT SHALL BE THE RESPONSIBILITY OF ANYONE PROVIDING LABOR OR MATERIALS TO CONFORM WITH THE CODE AND TO BRING TO THE ATTENTION OF THE ARCHITECT ANY DISCREPANCIES OR CONFLICTS BETWEEN THE CODES AND THE DRAWINGS.

APPLICABLE CODES:
SANTA BARBARA CITY TITLE 30 ZONING ORDINANCE
SANTA BARBARA CITY MUNICIPAL CODE (SBMC)
SANTA BARBARA CITY DESIGN GUIDELINES
2025 CALIFORNIA ADMINISTRATIVE CODE
2025 CALIFORNIA BUILDING CODE (CBC)
2025 CALIFORNIA RESIDENTIAL CODE (CRC)
2025 CALIFORNIA ENERGY CODE
2025 CALIFORNIA ELECTRICAL CODE (CEC)
2025 CALIFORNIA PLUMBING CODE (CPC)
2025 CALIFORNIA MECHANICAL CODE (CMC)
2025 CALIFORNIA FIRE CODE (CFC)
2025 CALIFORNIA WILDLAND URBAN INTERFACE CODE (WUI)
2025 CALIFORNIA GREEN BUILDING CODE (CGBC)
2025 CALIFORNIA BUILDING CODE AMENDMENTS PER ORD. 5919
2025 SANTA BARBARA ELECTRICAL CODE AMENDMENTS
2025 SANTA BARBARA MECHANICAL CODE AMENDMENTS
2025 SANTA BARBARA PLUMBING CODE AMENDMENTS
2025 SANTA BARBARA GREEN BUILDING CODE AMENDMENTS
2025 SANTA BARBARA HOUSING CODE
FEDERAL - OSHA
FEDERAL - AMERICANS WITH DISABILITIES ACT

ACCESSIBILITY SUMMARY

CODE: R-3 CONSTRUCTION IS EXEMPT FROM ACCESSIBILITY COMPLIANCE

UNDERGROUND DIG ALERT

CONTRACTOR TO CALL 811 PRIOR TO COMMENCEMENT OF CONSTRUCTION OR EXTERIOR SITE WORK.

WORK IN THE RIGHT-OF-WAY

ANY WORK IN THE PUBLIC RIGHT-OF-WAY REQUIRES A SEPARATE PERMIT FROM PUBLIC WORKS.

ACCESS EASEMENT

ACCESS TO THE GARAGE AND PARKING AREA IS PROVIDED VIA AN EXISTING RECIPROCAL ACCESS EASEMENT WITH THE ADJACENT PARCEL.

ELECTRICAL SERVICE UPGRADE

THIS PROJECT INCLUDES UPGRADING THE (E) ELECTRICAL SERVICE TO 400A, EACH UNIT WILL THEN BE SERVED BY A SEPARATE 100A METER.

DRAWING INDEX

SHEET	DESCRIPTION
a0.00	TITLE SHEET
a0.10	GENERAL NOTES
a0.11	GENERAL NOTES
a0.20	CAL GREEN
a0.21	CAL GREEN
a0.30	ENERGY ANALYSIS
a0.31	ENERGY ANALYSIS
a0.32	ENERGY ANALYSIS
a0.40	SITE SURVEY
a1.00	(E)/(N) SITE PLAN
a1.01	STORMWATER BMPs
a2.00	(E)/DEMO 1ST FLOOR
a2.01	(N) 1ST FLOOR PLANS
a2.02	(E)/DEMO & (N) 2ND FLOOR PLANS
a2.03	(N) 1ST/2ND FLOOR DIMENSION PLANS
a2.20	(E)/(N) ROOF PLAN
a3.00	(E) EXTERIOR ELEVATIONS
a3.10	(N) EXTERIOR ELEVATIONS
a3.11	(N) EXTERIOR ELEVATIONS
a4.10	(N) SECTIONS
a4.11	(N) SECTIONS
a6.00	DETAILS
a6.01	DETAILS
a6.02	FIRE PENETRATION DETAILS
a6.03	SPECIFICATIONS
S-1.1	STRUCTURAL TITLE SHEET
S-1.2	STRUCTURAL SPECIFICATIONS
S-1.3	SPECIAL INSPECTIONS
S-2.1	FOUNDATION PLAN
S-2.2	ROOF FRAMING PLAN
S-3.1	STRUCTURAL DETAILS
S-3.2	STRUCTURAL DETAILS
L1.1	LANDSCAPE PLANS
L2.1	LANDSCAPE PLANS
L2.2	LANDSCAPE PLANS
L2.3	LANDSCAPE PLANS
L1.5	LANDSCAPE PLANS
L1.6	LANDSCAPE PLANS
L1.7	LANDSCAPE PLANS
L1.8	LANDSCAPE PLANS
L1.9	LANDSCAPE PLANS
L1.10	LANDSCAPE PLANS
L1.11	LANDSCAPE PLANS
L1.12	LANDSCAPE PLANS
e1.00	MEP PLANS

CONTACT LIST

OWNER
MICHAEL GILSON
2409 CALLE LINARES
SANTA BARBARA, CA 93109

ARCHITECT
NOAH GREER, LIC. C-38435
MANUAL LABOR
973 E FRONT STREET
VENTURA, CA 93001
805 451 2134

AGENT
DREW SLAUGHTER
MANUAL LABOR
973 E FRONT STREET
VENTURA, CA 93001
805 628 3382

STRUCTURAL ENGINEER
PAUL BELMONT
ASHLEY & VANCE ENGINEERING
210 E. COTA STREET
SANTA BARBARA, CA 93101
805 962 9966

SPRINKLERS
IVAN CARDONA
805 FIRE
6048 JACARANDA WAY #D
CARPINTERIA CA 93013
805 708 0049

VICINITY MAP



LOCAL DEVELOPMENT STANDARDS

	PROPOSED	REQ	REQ NOTES
HEIGHT	25'	45'	
SETBACK - FRT	10'	10'	
SETBACK - INT	6'	6'	
SETBACK - RR	6'	6'	
NON-CONFORMING OPEN YARD			
MIN 10' X 10' DIMS	441 SF		
MIN 6' X 6' DIMS	403 SF		
TOTAL	844 SF	825 SF	15% NET LOT AREA
PRIVATE OPEN YARDS			
(E) UNIT A	191 SF	160 SF	
(N) UNIT B	160 SF	160 SF	
(E) UNIT C	0 SF	0 SF	UNIT SIZE OR BEDROOM COUNT NOT INCREASING

NON-CONFORMING OPEN YARD

(E) OPEN YARD IS NON-CONFORMING. TOTAL AREA OF PROPOSED OPEN YARD CONFORMS TO CURRENT STANDARDS (15% OF LOT, 825 SF). A PORTION OF THE PROPOSED OPEN YARD DOES NOT SATISFY THE 10'-0" MIN DIMENSION.

UTILITY UPGRADES

ELEC SERVICE:	(E) SO CAL EDISON 200 AMP SERVICE NO UPGRADE NEC'Y
WATER:	(E) [1] CITY WATER 1" SERVICE LINE NO UPGRADE NEC'Y
SANITARY:	(E) CITY SEWER NO UPGRADE NEC'Y
NATURAL GAS:	(E) [3] SO CAL GAS 3/4" SERVICE LINE NO UPGRADE NEC'Y

SITE INFORMATION

ADDRESS:	230 WEST SOLA STREET SANTA BARBARA, CA 93101
APN:	039-061-019
LOT SIZE:	5,500 SF = 0.13 AC. (GROSS & NET)
LOT SLOPE:	+/- 5%
JURISDICTION:	CITY OF SANTA BARBARA
ZONE DISTRICT:	R-MH
ZONE ORDINANCE:	TITLE 30 ZONING, INLAND
CONSTR. TYPE:	V-B EXISTING V-B PROPOSED
YEAR BUILT:	1949
EXISTING USE:	CRC R-3: RESIDENTIAL APARTMENTS
PROPOSED USE:	CRC R-3: RESIDENTIAL TOWNHOUSES
PROPOSED STORIES:	2 (NO CHANGE TO EXISTING)
CLIMATE ZONE:	6
HIGH FIRE AREA:	NO
FLOOD HAZARD:	NO
EXISTING UTILITIES:	ELECTRICAL: (E) SO CAL EDISON WATER: (E) CITY WATER METER (NO CHANGE) SANITARY: (E) CITY SEWER CONNECTION (NO CHANGE) NATURAL GAS: (E) SO CAL GAS METERS (NO CHANGE)

PROJECT DESCRIPTION

(E) UNIT A: PERMIT AS-BUILT UNIT A SIDE YARD STAIRS.

(E) UNIT B: CONVERT AND ENLARGE (E) UNIT B FROM 1-BEDROOM/1-BATH TO 3-BEDROOMS/2-BATH. WORK INCLUDES THE DEMOLITION OF (E) WOOD WINDOWS AND THE INSTALLATION OF (N) VINYL WINDOWS IN (N) EXTERIOR WALLS.

(E) UNIT C: RENOVATE UNIT C TO ADD A BALCONY, REPLACEMENT OF WINDOWS FOR BALCONY DOOR, REPLACEMENT OF WINDOW FOR SMALLER WINDOW AND REPLACEMENT OF ENTRY STAIR FOR WIDER STAIRS AND A LARGER LANDING.

(E) GARAGE: ENLARGE (E) GARAGE.

SITE: (N) LONG-TERM COVERED BICYCLE PARKING SPACES RELOCATED FROM LOCATION APPROVED IN BLD2023-01617. (N) PRIVATE OPEN YARDS. (N) TRASH AREA. (N) LAUNDRY CLOSET. GUTTER DOWNSPOUTS TO BE DISCONNECTED AND DIRECTED INTO LANDSCAPED WATER RETENTION AREAS TO MEET TIER 2 STORMWATER REQUIREMENTS. PERMEABLE PAVERS ADDED TO NORTH SIDE OF UNIT C STAIRWELL.

REQUEST FOR PARKING DESIGN WAIVER - INTERIOR CLEAR AREA (BICYCLE LOCKER) TO PERMIT BIKE LOCKER WITHIN THE PROPOSED GARAGE

UNIT DATA & FLOOR AREA CALCS

FAR RESTRICTIONS DO NOT APPLY TO ZONE R-MH PER SBMC TABLE 30.20.020

	EXISTING	PROPOSED
UNIT A	745 SF NET (792 GR) - 3BR/1BA	745 SF NET (792 GR) - 3BR/1BA
UNIT B	685 SF NET (728 GR) - 1BR/1BA	1,012 SF NET (1,086 GR) - 3BR/2BA
UNIT C	452 SF NET (493 GR) - 1BR/1BA	452 SF NET (493 GR) - 1BR/1BA
SUB-TOTAL	1,882 SF NET (2,013 GR)	2,234 SF NET (2,396 GR)
GARAGE	393 SF NET (431 GR)	463 SF NET (509 GR)
WH ENCLOSERS	0 SF	15 SF NET (25 GR)
TOTAL:	2,275 SF NET (2,444 GR)	2,697 SF NET (2,905 GR)

AFFORDABILITY: THREE (3) UNITS HAVE EXISTED ON THE SITE OVER THE PAST 5 YEARS AND ALL UNITS ARE RENTED AT MARKET RATE

PARKING

	EXISTING	PROPOSED	ALLOWED/REQ
COVERED (GARAGE)	2	2	NO VEHICLE SPACES REQ'D
UNCOVERED	0	0	FOR DEVELOPMENT NEAR PUBLIC
TOTAL	2	2	TRANSIT PER AB-2097

NOTE: EXISTING GARAGE TO REMAIN, NO PROPOSED CHANGES TO THE EXISTING PARKING CONFIRGURATION.

BIKE PARKING

	EXISTING	PROPOSED	ALLOWED/REQ
COVERED	3	3	3
UNCOVERED	0	0	0
TOTAL	3	3	3

NOTE: THREE (3)(E) COVERED BIKE PARKING SPACES WERE APPROVED UNDER BLD2023-01617. (P) TO BE RELOCATED PER THE (N) SITE PLAN.

HEATING/COOLING

	EXISTING	PROPOSED
HEATING:	YES - GAS	YES - (N) ELEC HEAT PUMP SPLIT SYSTEM
COOLING:	NO	YES - (N) ELEC HEAT PUMP SPLIT SYSTEM

PHOTOVOLTAIC SYSTEM

	EXISTING	PROPOSED
PV SYSTEM:	NO	NO
JUSTIFICATION:	PV NOT REQ'D FOR RESIDENTIAL ADDITIONS OF THIS SCALE PER 2025 CA ENERGY CODE & 2023 CA SOLAR MANDATE	

GRADING

GRADING:	CUT/FILL	IMPORT/EXPORT
	3 CY / 3 CY	NONE

FIRE SPRINKLERS

SPRINKLERS:	EXISTING	PROPOSED
	NO	YES - NFPA 13D

SPRINKLERS TO BE DESIGN-BUILT UNDER SEPARATE PERMIT

MANUAL LABOR
375 EAST MAIN STREET
VENTURA, CA, 93001
805 628 3382

PROJECT NAME

230 WEST SOLA REMODEL

230 WEST SOLA STREET
SANTA BARBARA, CA 93101

#	DRAWING ISSUED	DATE
	PC #1	06.23.26
1	PC #2	08.14.26

SHEET NAME

TITLE SHEET

SHEET INFORMATION

DRAWN BY: AS
SCALE: AS NOTED
PLAN NORTH:
TRUE NORTH:

SHEET NUMBER

a0.00

INCLUDED DRAWINGS, SPECIFICATIONS, IDEAS & DESIGNS SHALL REMAIN THE PROPERTY OF MANUAL LABOR & SHALL NOT BE DISTRIBUTED OR USED FOR ANY WORK OTHER THAN THE PROJECT FOR WHICH THEY WERE PREPARED WITHOUT WRITTEN CONSENT.

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1. CONTRACTOR RESPONSIBILITIES

A. THE CONTRACT DOCUMENTS CONSIST OF THE AGREEMENT BETWEEN THE OWNER & CONTRACTOR, CONDITIONS OF THE CONTRACT (GENERAL, SUPPLEMENTARY & OTHER CONDITIONS), DRAWINGS, GENERAL NOTES, SPECIFICATIONS, ADDENDA & MODIFICATIONS ISSUED PRIOR TO OR AFTER EXECUTION OF THE CONTRACT, & OTHER DOCUMENTS LISTED IN THE AGREEMENT.

B. AIA DOCUMENT 201 GENERAL CONDITIONS FOR THE PERFORMANCE OF A CONTRACT ARE HEREBY INCORPORATED INTO THESE DRAWINGS & SHALL BE CONSIDERED AS PART OF THE REQ'S FOR THE COMPLETION OF WORK.

C. THE WORK INCLUDED UNDER THIS CONTRACT CONSISTS OF ALL LABOR, MATERIALS, TRANSPORTATION, TOOLS, & EQUIPMENT NECESSARY FOR THE CONSTRUCTION OF THE PROJECT LEAVING ALL WORK READY FOR USE.

D. OWNER'S AGENT OR CONTRACTOR SHALL APPLY & PAY FOR THE BUILDING PERMIT(S).

E. THE CONTRACTOR IS RESPONSIBLE FOR CHECKING CONTRACT DOCUMENTS, FIELD CONDITIONS & DIMENSIONS FOR ACCURACY & CONFIRMING THAT THE WORK IS BUILDABLE AS SHOWN BEFORE PROCEEDING W/ CONSTRUCTION. IF THERE ARE ANY QUESTIONS REGARDING THESE, OR OTHER COORDINATION QUESTIONS, THE CONTRACTOR SHALL SUBMIT THEM TO THE ARCHITECT. THE CONTRACTOR IS RESPONSIBLE FOR OBTAINING CLARIFICATION FROM THE ARCHITECT BEFORE PROCEEDING W/ WORK IN QUESTION. ANY DISCREPANCIES IN DRAWINGS SHALL BE BROUGHT TO THE ARCHITECT'S ATTENTION IMMEDIATELY.

F. THE CONTRACTOR SHALL NOT PROCEED W/ ANY WORK REQUIRING ADDITIONAL COMPENSATION BEYOND THE CONTRACT AMOUNT W/OUT WRITTEN AUTHORIZATION FROM THE BUILDING OWNER OR OWNER'S' AGENT. FAILURE TO OBTAIN AUTHORIZATION SHALL INVALIDATE ANY CLAIM FOR ADDITIONAL COMPENSATION.

G. RECURRING FEES (E.G., PROJECT MANAGEMENT, SITE SUPERVISION, ETC) BILLED MONTHLY OR ON ANY OTHER BASIS SHALL NOT INCREASE THE CONTRACT AMOUNT BEYOND ANY PREVIOUSLY-AGREED TOTAL, UNLESS A WRITTEN REQUEST FROM THE CONTRACTOR IS RECEIVED & APPROVED BY THE OWNER. SUCH AN APPROVAL MUST BE APPROVED PRIOR TO THE ACCUMULATION OF SUCH FEES.

H. UNLESS OTHERWISE SPECIFIED, ALL MATERIALS SHALL BE NEW. BOTH WORKMANSHIP & MATERIALS SHALL BE THE BEST OF THEIR RESPECTIVE KINDS. THE CONTRACTOR SHALL, IF REQ'D, FURNISH SATISFACTORY EVIDENCE AS TO THE KIND & QUALITY OF MATERIALS.

I. UPON COMPLETION OF THE WORK, OR SHORTLY BEFORE, THE CONTRACTOR SHALL DIRECT THE ARCHITECT TO PREPARE A "PUNCH LIST' OF REQ'D CORRECTIONS, REMEDYING UNSATISFACTORY &/OR INCOMPLETE WORK. FINAL PAYMENT WILL BE CONTINGENT UPON THE COMPLETION OF THESE ITEMS UNDER THE TERMS OF THE OWNER/CONTRACTOR AGREEMENT.

J. CHANGES IN FLOOR GRADE GREATER THAN 1/4" OVER ANY MEASURABLE DISTANCE TO BE THE RESPONSIBILITY OF THE GENERAL CONTRACTOR. LESSER CHANGES IN FLOOR GRADE TO THE RESPONSIBILITY OF FLOORING CONTRACTOR.

K. IT IS SOLELY THE GENERAL CONTRACTOR & TRADE CONTRACTORS' RESPONSIBILITY TO RESOLVE ANY POTENTIAL CONFLICTS PRIOR TO SUBMITTAL OF BID(S). ADDITIONAL POTENTIAL CONFLICTS DURING CONSTRUCTION SHALL BE RESOLVED & COSTS ABSORBED BY THE CONTRACTOR.

L. THE CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATION BETWEEN & AMONG TRADES, SUBCONTRACTORS, & ALL CONSULTANTS (E.G., A/V, DATA, MEDIA, LIGHTING, MEP, ETC.).

M. IT SHALL BE THE DUTY OF THE GENERAL CONTRACTOR TO SEE THAT ALL SUBCONTRACTORS ARE FULLY INFORMED IN REGARD TO THE PROJECT REQ, CONSTRUCTION DOCUMENTS, GENERAL CONDITIONS & PRELIMINARY AND/OR FINAL SPECIFICATIONS.

N. CONTRACTOR SHALL BE RESPONSIBLE FOR FULL COMPLIANCE W/ CODE CITATIONS REFERENCED ON PLANS, IN NOTES OR PROVIDED IN BRACKETS.

O. THE CONTRACTOR SHALL OBSERVE ALL MANDATORY LOCAL, STATE, & FEDERAL GUIDELINES, INCLUDING OSHA, TO PROVIDE A SAFE WORK ENVIRONMENT.

P. NO WORK DEFECTIVE IN CONSTRUCTION OR QUALITY OR DEFICIENT IN ANY REQ'S OF DRAWINGS & SPECIFICATIONS WILL BE ACCEPTABLE IN CONSEQUENCE OF OWNER'S OR ARCHITECT'S FAILURE TO DISCOVER OR TO POINT OUT DEFECTS OR DEFICIENCIES DURING CONSTRUCTION, NOR WILL THE PRESENCE OF INSPECTORS ON WORK SITE RELIEVE CONTRACTOR FROM RESPONSIBILITY FOR SECURING QUALITY & PROGRESS OF WORK AS REQ'D BY CONTRACT. DEFECTIVE WORK REVEALED W/IN THE TIME REQ'D BY GUARANTEE SHALL BE REPLACED BY WORK CONFORMING W/ INTENT OF CONTRACT. NO PAYMENT, WHETHER PARTIAL OR FINAL, SHALL BE CONSTRUED AS AN ACCEPTANCE OF DEFECTIVE WORK OR IMPROPER MATERIALS.

Q. THE CONTRACTOR SHALL ENSURE THE SITE IS SECURED AT ALL TIMES. UPON COMPLETION OF THE WORK DAY, THE SITE SHALL BE SECURED AND SEALED FROM ENTRY.

2. SUPERVISION

A. THE CONTRACTOR SHALL GIVE PERSONAL SUPERVISION TO THE WORK & SHALL KEEP A COMPETENT FOREMAN & NECESSARY ASSISTANTS CONSTANTLY ON SITE.

B. THE FOREMAN SHALL BE THE PERSONAL REPRESENTATIVE OF THE CONTRACTOR & ALL DIRECTIONS GIVEN TO/BY HIM SHALL BE AS BINDING AS IF GIVEN TO/BY THE CONTRACTOR.

3. CHANGES IN WORK

A. THE OWNER, W/OUT INVALIDATING THE CONTRACT, MAY ALTER IT BY ADDING TO OR DEDUCTING FROM THE WORK COVERED IN THE CONTRACT. ALL SUCH WORK SHALL BE EXECUTED UNDER THE CONDITIONS OF THE ORIGINAL CONTRACT EXCEPT THAT NO EXTRA WORK OR CHANGES SHALL BE DONE W/OUT WRITTEN ORDER FROM THE OWNER OR ARCHITECT. SUCH ORDERS SHALL COVER THE AGREED PRICE & TERMS OF EXTRA WORK OR CHANGES. IF WORK IS TO BE OMITTED, THEN PROPER CREDIT FOR SUCH OMITTED WORK SHALL BE GIVEN TO THE OWNER.

4. CLEANUP

A. THE GENERAL CONTRACTOR SHALL REMOVE ALL RUBBISH & WASTE MATERIALS OF ALL SUBCONTRACTORS & TRADES ON A REGULAR BASIS, & SHALL EXERCISE STRICT CONTROL OVER JOB SITE CLEANING TO PREVENT ANY DEBRIS OR DUST FROM AFFECTING FINISHED AREAS IN OR OUTSIDE OF THE JOB SITE.

B. THE CONTRACTOR SHALL LEAVE PREMISES & ALL AFFECTED AREAS CLEAN & ORDERLY, READY FOR OCCUPANCY. THIS INCLUDES CLEANING OF ALL MATERIALS, BOTH NEW & EXISTING.

5. COPYRIGHT

A. MANUAL LABOR RETAINS COPYRIGHT OWNERSHIP OVER THESE PLANS & THE DESIGNS HEREIN. MANUAL LABOR MAY PUBLISH, RECREATE, LICENSE & COMMERCIALLY PRODUCE DESIGNS CREATED UNDER THIS CONTRACT. NO LICENSE IS GRANTED OR IMPLIED TO PERMIT THE REPRODUCTION OF THESE DRAWINGS OR DESIGNS W/OUT PRIOR WRITTEN APPROVAL.

B. MANUAL LABOR ASSERTS MORAL RIGHTS & REQUIRES ATTRIBUTION OF AUTHORSHIP W/ ANY PUBLISHED PLANS IMAGES OR PHOTOGRAPHS OF THE BUILT WORK.

6. SUBCONTRACTORS

A. SUBCONTRACTOR(S) SHALL BE RESPONSIBLE FOR ALL TRADE-RELATED ITEMS AS WELL AS NOTES W/IN FULL CONSTRUCTION DOCUMENTS & ITEMS REQ TO MEET THE INTENT OF THE CONTRACT DOCUMENTS & APPLICABLE CODES.

B. PRIOR TO BIDDING, SUBCONTRACTORS SHALL BE WHOLLY RESPONSIBLE FOR VERIFICATION OF AVAILABILITY & COMPATIBILITY OF ANY PRODUCT SPECIFIED. CONTRACTOR SHALL NOTIFY ARCHITECT & OWNER IMMEDIATELY W/ REQUESTED ALTERNATIVES OR SPACE CONFLICTS.

C. CONTRACTORS TO FOLLOW MFR RECOMMENDED SPECIFICATIONS & INSTALLATION PROCEDURES. IF THESE ARE CONTRARY TO THE CONTRACT DOCUMENTS, CONTRACTOR SHALL NOTIFY THE ARCHITECT IN WRITING IMMEDIATELY TO RESOLVE DISCREPANCIES BEFORE PROCEEDING.

D. ALL FIREBLOCKING & DRAFTSTOPPING SHALL BE INSTALLED & INSPECTED PRIOR TO TO ROUGH-IN OF PLUMBING & MECHANICAL.

E. MECHANICAL & FRAMING CONTRACTOR SHALL COORDINATE & AGREE UPON SIZE & LOCATIONS FOR DUCTING PENETRATIONS & LAYOUTS W/IN FRAMED WALLS & FLOOR PRIOR TO CONSTRUCTION. ARCHITECT MAY IDENTIFY PROBABLE AREAS W/IN FRAMING PLANS AS A REFERENCE ONLY. IT IS THE CONTRACTOR'S FULL RESPONSIBILITY TO RESOLVE ANY CONFLICTS PRIOR TO CONSTRUCTION.

F. VENTING FOR GAS FIRED EQUIPMENT SHALL BE IN COMPLIANCE W/ CBC, CRC, CMC & MFR SPECS. SUBCONTRACTOR SHALL BE WHOLLY RESPONSIBLE TO VERIFY GAS FIRED EQUIPMENT LOCATIONS DO NOT CONFLICT W/ BUILDING OR STRUCTURAL DESIGN PRIOR TO SUBMITTAL OF BID.

G. PLUMBING & FRAMING CONTRACTOR SHALL COORDINATE & AGREE UPON LOCATIONS FOR PLUMBING PENETRATIONS & LAYOUTS W/IN FRAMED WALLS & FLOOR PRIOR TO CONSTRUCTION. ARCHITECT MAY IDENTIFY PROBABLE AREAS W/IN FRAMING PLANS WHICH ARE INTENDED TO BE USED AS A REFERENCE ONLY. IT IS THE CONTRACTORS' FULL RESPONSIBILITY TO RESOLVE ANY CONFLICTS PRIOR TO CONSTRUCTION.

H. WATER FIXTURES SHALL COMPLY W/ CPC, CALGREEN, & LOCAL ORDINANCES. PRIOR TO PURCHASING FIXTURES, PLUMBING CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING FIXTURE COMPLIANCE.

I. FIRE SPRINKLER DESIGNER SHALL COORDINATE W/ ARCHITECT FOR PLACEMENT &/OR REPLACEMENT OF SPRINKLER HEADS PRIOR TO CONSTRUCTION.

J. WATERPROOFING, SEALANT, CAULKING, FLASHING, FIREPROOFING, ETC, LOCATIONS SHOWN ON DRAWINGS ARE NOT INTENDED TO BE INCLUSIVE. FOLLOW MFR INSTALLATION REQ & STANDARD INDUSTRY BUILDING PRACTICES.

7. PLANS & LAYOUT

A. DO NOT SCALE DRAWINGS; WRITTEN DIMENSIONS SHALL GOVERN.

B. ALL PLAN DIMENSIONS TAKEN FROM EDGE OF STRUCTURAL COMPONENTS (E.G., WALL SHEATHING, STUDS, SLAB, ETC.), UON.

C. EXTERIOR WALLS DIMENSIONED TO OUTSIDE OF SHEATHING, UON. INTERIOR WALLS DIMENSIONED TO SIDE OF STUD, UON.

D. DETAILS SHALL GOVERN OVER PLANS, ELEVATIONS & SMALLER SCALE DRAWINGS.

E. THE PLANS INDICATE THE GENERAL EXTENT OF NEW CONSTRUCTION NECESSARY FOR THE WORK, BUT ARE NOT INTENDED TO BE ALL-INCLUSIVE. ALL DEMOLITION & NEW WORK NECESSARY TO ALLOW FOR A FINISHED JOB IN ACCORDANCE W/ THE INTENTION OF THE DRAWING IS INCLUDED REGARDLESS OF WHETHER SHOWN ON THE DRAWINGS OR MENTIONED IN THE NOTES.

F. THE GENERAL CONTRACTOR (& SUBCONTRACTORS) SHALL IMMEDIATELY EXAMINE THE SITE & PORTIONS THEREOF WHICH WILL AFFECT HIS WORK. CONTRACTORS SHALL COMPARE IT W/ THE DRAWINGS & SATISFY THEMSELVES AS TO CONDITIONS UNDER WHICH WORK IS TO BE PERFORMED.

G. ALL DIMENSIONS NOTED "VERIFY" & "VIF" ARE TO BE CHECKED BY CONTRACTOR PRIOR TO CONSTRUCTION. IMMEDIATELY REPORT ANY DISCREPANCIES TO THE ARCHITECT.

H. THE CONTRACTOR SHALL CONTINUOUSLY CHECK ARCHITECTURAL & STRUCTURAL CLEARANCES FOR ACCESSIBILITY OF EQUIPMENT & MECHANICAL & ELECTRICAL SYSTEMS. CONTRACTORS SHALL VERIFY NO CONFLICTS EXIST IN LOCATIONS OF ANY & ALL MECHANICAL, TELEPHONE, ELECTRICAL, LIGHTING, PLUMBING, & SPRINKLER EQUIPMENT (TO INCLUDE ALL PIPING, DUCT WORK, VENTING, CONDUIT, ETC) & THAT ALL REQ'D CLEARANCES FOR INSTALLATION & MAINTENANCE OF EQUIPMENT ARE PROVIDED. NO ALLOWANCES WILL BE MADE FOR THE CONTRACTOR'S NEGLIGENCE TO FORESEE MEANS OF INSTALLING EQUIPMENT INTO POSITION INSIDE STRUCTURE.

I. CONTRACTOR TO COORDINATE ALL WORK W/ EXISTING CONDITIONS, INCLUDING BUT NOT LIMITED TO: IRRIGATION PIPES, ELECTRICAL CONDUIT, WATERLINES, GAS LINES, DRAINAGE LINES, ETC.

J. CONTRACTOR TO VERIFY ALL EQUIPMENT SIZES & INSTALLATION/OPERATIONAL REQ'S BEFORE BEGINNING WORK.

K. CONTRACTOR TO VERIFY ALL ARCHITECTURAL DETAILS W/ KITCHEN EQUIPMENT DRAWINGS, IF APPLICABLE, BEFORE ORDERING OR INSTALLING ANY ITEM OF WORK.

L. GENERAL CONTRACTOR & SUBCONTRACTORS SHALL COORDINATE THE LAYOUT & EXACT LOCATIONS OF POWER & DATA, ELECTRICAL OUTLETS, LIGHT SWITCHES & THERMOSTATS BEFORE PROCEEDING W/ THAT PORTION OF THE CONSTRUCTION.

M. NEW WALL SURFACES SHALL ALIGN W/ EXISTING, ADJACENT OR ADJOINING SURFACES, UON. JOINTS SHALL BE TAPED & SANDED SMOOTH W/ NO VISIBLE JOINTS.

N. FURR OUT EXISTING BASE BUILDING WALLS AS NECESSARY TO ACCOMMODATE NEW ELECTRICAL OUTLETS, PLUMBING LINES & ALIGNMENT W/ NEW WALLS, ETC.

O. ALL FURRED WALLS SHALL EXTEND VERTICALLY TO THE CLG WHERE INDICATED ON THE DRAWINGS OR TO THE STRUCTURE ABOVE WHERE NO CLG OCCURS, UON.

8. VERIFICATION OF UTILITIES

A. CONTRACTOR TO FIELD-VERIFY LOCATIONS, AVAILABILITY & CAPACITY OF ALL UTILITIES TO SERVE THE COMPLETED PROJECT, (INCLUDING ANY EXISTING REQ'S). CONTRACTOR SHALL SUBMIT ANY QUESTIONS OR CONCERNS TO THE ARCHITECT.

B. THE SCOPE OF WORK INCLUDES THE COMPLETION OF ALL UTILITY CONNECTIONS. UTILITY NOTES & DRAWINGS (IF PROVIDED) ARE GENERAL IN NATURE. UTILITY COMPANY APPROVALS & CONNECTIONS ARE THE RESPONSIBILITY OF THE GENERAL CONTRACTOR, UON.

C. THE GENERAL CONTRACTOR SHALL PROVIDE THE OWNER WITH AS-BUILT DRAWING LOCATING & DESCRIBING ALL UNDERGROUND UTILITIES LOCATED ON THE SITE, INCLUDING BUT NOT LIMITED TO GAS LINES, WATER LINES, SANITARY SEWERS, TELEPHONE LINES & ELECTRIC LINES.

9. PERMITS, REGULATIONS & PROCESS

A. THE OWNER, OWNER'S AGENT OR CONTRACTOR SHALL APPLY & PAY FOR THE BUILDING PERMIT(S).

B. EACH CONTRACTOR SHALL PAY FOR & OBTAIN ALL PERMITS REQ'D BY LOCAL AUTHORITIES BEFORE PROCEEDING W/ HIS OR HER RESPECTIVE INSTALLATION & SHALL ARRANGE & PAY FOR ANY INSPECTIONS & EXAMINATIONS REQ'D BY THOSE AUTHORITIES.

C. ALL WORKMANSHIP & MATERIALS SHALL CONFORM TO THE CURRENT EDITION OF THE APPLICABLE BUILDING CODES & LAWS, ORDINANCES & REGULATIONS OF ALL GOVERNMENTAL BODIES W/ JURISDICTION OVER THE PROJECT.

D. IF THE DRAWINGS & SPECIFICATIONS ARE AT VARIANCE W/ ANY FEDERAL, STATE & LOCAL OR MUNICIPAL LAW, ORDINANCE, RULES OR DEPARTMENTAL REGULATIONS, THE CONTRACTOR SHALL NOTIFY THE ARCHITECT IN WRITING BEFORE PROCEEDING W/ THAT WORK. IF ANY OF THE CONTRACTOR'S WORK SHALL BE DONE CONTRARY THERETO W/OUT SUCH NOTICE, THE CONTRACTOR SHALL BEAR ALL COSTS ARISING THEREFROM.

10. SEPARATE SUB-PERMITS

A. THE ELECTRICAL CONSTRUCTION SHALL BE DESIGN-BUILT UNDER SEP SUB-PERMIT. THE ELECTRICAL SUB-CONTRACTOR SHALL PREPARE & PROVIDE WORKING DRAWINGS TO THE BUILDING DEPARTMENT FOR PLAN CHECK.

B. PLUMBING CONSTRUCTION SHALL BE DESIGN-BUILT UNDER SEP SUB-PERMIT. PLUMBING SUBCONTRACTOR RESPONSIBLE FOR OBTAINING ALL NEC'Y PERMITS.

C. THE MECHANICAL CONSTRUCTION SHALL BE DESIGED & BUILT UNDER SEP SUB-PERMIT. THE MECHANICAL SUBCONTRACTOR SHALL PREPARE TITLE 24 FORMS & WORKING DRAWINGS TO THE BUILDING DEPARTMENT FOR PLAN CHECK, IF REQ. DESIGN-BUILD HVAC SUBCONTRACTOR SHALL PROVIDE ROOF SUPPORT DESIGN & CALCULATIONS FOR NEW EQUIPMENT, & VERIFY ROOF SCREEN REQ'S.

D. FIRE SUPPRESSION SYSTEM CONSTRUCTION SHALL BE DESIGNED & BUILT UNDER SEP SUB-PERMIT. ARCHITECT & BUILDING OWNERS' AGENT TO REVIEW & APPROVE PRIOR TO SUBMITTING FOR PERMIT & CONSTRUCTION. THE FIRE SPRINKLER SUBCONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS. ALL WORK SHOULD CONFORM TO NFPA PAMPHLET 1980.

11. GRADING

A. THE REQ'S OF THE GEOTECHNICAL REPORT, WHERE APPLICABLE, SHALL SUPERCEDE ANY DIRECTION GIVEN IN THESE GRADING NOTES.

B. THE CONTRACTOR SHALL BE RESPONSIBLE TO MAINTAIN THE CURRENT DIGALERT NUMBER ONSITE AT ALL TIMES & SHALL CONTACT DIGALERT AS NEEDED.

C. ALL GRADING SHALL CONFORM W/ APPLICABLE FEDERAL, STATE, & LOCAL REQ'S, THESE CONSTRUCTION DRAWINGS, & THE RECOMMENDATIONS OF THE SOILS ENGINEER & ENGINEERING GEOLOGIST, AS APPLICABLE.

D. THE CONTRACTOR SHALL EMPLOY ALL LABOR, EQUIPMENT & METHODS REQ'D TO PREVENT THE OPERATIONS FROM PRODUCING DUST IN AMOUNTS DAMAGING TO ADJACENT PROPERTY, CULTIVATED VEGETATION & DOMESTIC ANIMALS OR CAUSING A NUISANCE TO PERSONS OCCUPYING BUILDINGS IN THE VICINITY OF THE JOB SITE. THE CONTRACTOR SHALL BE RESPONSIBLE FOR DAMAGE CAUSED BY DUST FROM THE GRADING OPERATION.

E. THE GEOTECHNICAL ENGINEER SHALL PROVIDE OBSERVATION & TESTING DURING GRADING OPERATIONS IN THE FIELD & SHALL SUBMIT A FINAL REPORT STATING THAT ALL EARTH WORK WAS PROPERLY COMPLETED & IS IN SUBSTANTIAL CONFORMANCE W/ THE REQ'S OF THE SOILS REPORT.

F. AREAS TO BE GRADED SHALL BE CLEARED OF ALL VEGETATION INCLUDING ROOTS & OTHER UNSUITABLE MATERIAL FOR A STRUCTURAL FILL, THEN SCARIFIED TO A DEPTH OF 6" PRIOR TO PLACING OF ANY FILL (OR AS SPECIFIED IN THE SOILS REPORT).

G. A THOROUGH SEARCH SHALL BE MADE FOR ALL ABANDONED MAN-MADE FACILITIES SUCH AS SEPTIC TANK SYSTEMS, FUEL OR WATER STORAGE TANKS, & PIPELINES OR CONDUITS. ANY SUCH FACILITIES ENCOUNTERED SHALL BE REMOVED & THE DEPRESSION PROPERLY FILLED & COMPACTED UNDER OBSERVATION OF THE GEOTECHNICAL ENGINEER.

H. AREAS W/ EXISTING SLOPES WHICH ARE TO RECEIVE FILL MATERIAL SHALL BE KEYED & BENCHED. DESIGN & INSTALLATION OF THE KEYWAY SHALL BE PER GEOTECHNICAL ENGINEER'S RECOMMENDATION OR PER RELEVANT GOVERNING ORDINANCE.

I. FILL MATERIAL SHALL BE SPREAD IN LIFTS NOT EXCEEDING 6" IN COMPACTED THICKNESS, MOISTENED OR DRIED AS NECESSARY TO NEAR OPTIMUM MOISTURE CONTENT & COMPACTED BY AN APPROVED METHOD. FILL MATERIAL SHALL BE COMPACTED TO A MIN OF 90% MAX DENSITY AS DETERMINED BY 1957 ASTM D - 1557 - 91 MODIFIED PROCTOR (AASHO) TEST OR SIM APPROVED METHODS. SOME FILL AREAS MAY REQUIRE COMPACTION TO A GREATER DENSITY IF CALLED FOR IN THE CONSTRUCTION DOCUMENTS. SOIL TESTS SHALL BE CONDUCTED AT NOT LESS THAN ONE TEST FOR EACH 18" OF FILL &/OR FOR EACH 500 CUBIC YARDS OF FILL PLACED.

J. CUT SLOPES SHALL NOT EXCEED A GRADE OF 1½-HORIZONTAL TO 1-VERTICAL. FILL & COMBINATION FILL & CUT SLOPES SHALL NOT EXCEED 2-HORIZONTAL TO 1-VERTICAL. SLOPES OVER 3'-0" IN VERTICAL HEIGHT SHALL BE PLANTED W/ APPROVED PERENNIAL VEGETATION OR TREATED W/ EQUALLY APPROVED EROSION CONTROL MEASURES PRIOR TO FINAL INSPECTION.

K. SURFACE DRAINAGE SHALL BE PROVIDED AT A MIN OF 6" W/IN FIRST 10 FEET AWAY FROM THE FOUNDATION LINE OF ANY STRUCTURE.

L. ALL TREES IN THE VICINITY OF THE WORK NOT IDENTIFIED TO BE REMOVED SHALL BE FENCED & PROTECTED AROUND THE DRIP LINE DURING CONSTRUCTION.

M. STORM WATER DRAINAGE & RETENTION: PER CALGREEN 4.106.2, PROJECTS WHICH DISTURB LESS THAN ONE ACRE OF SOIL & NOT PART OF A LARGER COMMON PLAN OF DEVELOPMENT WHICH IN TOTAL DISTURBS ONE ACRE OR MORE, SHALL MANAGE STORM WATER DRAINAGE DURING CONSTRUCTION. ONE OR MORE OF THE FOLLOWING MEASURES SHALL BE IMPLEMENTED TO PREVENT FLOODING OF ADJACENT PROPERTY, PREVENT EROSION & 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 SIM DISPOSAL METHOD, WATER SHALL BE FILTERED BY USE OF A BARRIER SYSTEM, WATTLE OR OTHER METHOD APPROVED BY THE ENFORCING AGENCY
3. COMPLIANCE W/ LAWFULLY ENACTED STORM WATER MANAGEMENT ORDINANCES

N. SURFACE DRAINAGE: THE SITE SHALL BE PLANNED & DEVELOPED TO KEEP SURFACE WATER FROM ENTERING BUILDINGS PER CALGREEN § 4.106.3. METHODS TO MANAGE SURFACE WATER INCLUDE, BUT ARE NOT LIMITED TO THE FOLLOWING:
1. SWALES
2. WATER COLLECTION & DISPOSAL SYSTEMS
3. FRENCH DRAINS
4. WATER RETENTION GARDENS
5. OTHER WATER MEASURES WHICH KEEP SURFACE WATER AWAY FROM BUILDING & AID IN GROUNDWATER RECHARGE. EXCEPTION: ADDITIONS & ALTERATIONS NOT ALTERING THE DRAINAGE PATH

12. VEGETATION MANAGEMENT

A. [WUI 106.4] VEGETATION MANAGEMENT COMPLIANCE: PRIOR TO THE BUILDING PERMIT FINAL APPROVAL, THE PROPERTY SHALL BE IN COMPLIANCE WITH THE VEGETATION MANAGEMENT REQUIREMENTS PRESCRIBED IN SECTION 603, INCLUDING CALIFORNIA PUBLIC RESOURCES CODE 4291 OR CALIFORNIA GOVERNMENT CODE SECTION 51182. ACCEPTABLE METHODS OF COMPLIANCE INSPECTION AND DOCUMENTATION SHALL BE DETERMINED BY THE ENFORCING AGENCY AND SHALL BE PERMITTED TO INCLUDE ANY OF THE FOLLOWING:
1. LOCAL, STATE, OR FEDERAL FIRE AUTHORITY OR DESIGNEE AUTHORIZED TO ENFORCE VEGETATION MANAGEMENT REQ'S
2. ENFORCING AGENCY
3. THIRD PARTY INSPECTION & CERTIFICATION AUTHORIZED TO ENFORCE VEGETATION MANAGEMENT REQ'S
4. PROPERTY OWNER CERTIFICATION AUTHORIZED BY THE ENFORCING AGENCY

13. PROTECTION & EXISTING BUILDING

A. GENERAL CONTRACTOR SHALL REVIEW THE EXISTING CONDITIONS PRIOR TO PRICING & CONSTRUCTING THE JOB.

B. CONTRACTOR SHALL PROTECT ALL AREAS (INCLUDING NEW OR EXISTING MATERIAL & FINISHES) FROM DAMAGE THAT MAY RESULT FROM CONSTRUCTION, DEMOLITION, DUST, WATER, ETC. DAMAGE TO NEW & EXISTING MATERIALS, FINISHES, STRUCTURES & EQUIPMENT SHALL BE REPLACED OR REPAIRED AT THE EXPENSE OF THE GENERAL CONTRACTOR.

C. THE CONTRACTOR SHALL NOTIFY THE OWNER IN WRITING OF ANY DEFICIENCIES IN BASE BUILDING WORK PRIOR TO THE COMMENCEMENT OF HIS WORK. ANY UNREPORTED DEFICIENCIES WILL BECOME THE RESPONSIBILITY OF THE CONTRACTOR TO CORRECT.

D. CUT & FIT COMPONENTS FOR ALTERATION OF EXISTING WORK & INSTALLATION OF NEW WORK. PATCH DISTURBED AREAS TO MATCH EXISTING MATERIALS, UON.

E. THE CONTRACTOR SHALL PROVIDE ALL BARRICADES, SHORING & BRACING REQ'D TO PROTECT THE PUBLIC, PERSONNEL, ADJACENT PROPERTY, & TO INSURE SAFETY OF THE PROJECT WORK.

F. IN THE COURSE OF DEMOLITION, SHOULD ANY UNFORESEEN ISSUES BECOME APPARENT CONTRARY TO THE APPROVED PLANS, THE CONTRACTOR SHALL IMMEDIATELY SUBMIT THIS INFORMATION TO THE ARCHITECT.

G. INSTALL SMOKE DETECTORS & CARBON MONOXIDE DETECTORS IN EXISTING BUILDING SPACES AS REQ'D BY CODE (WHETHER OR NOT SHOWN ON PLANS).

14. DEMOLITION

A. DEMOLITION WORK IS INTENDED TO COMPLETE REMOVALS NECESSARY TO CONSTRUCT THE NEW WORK. THE REMOVAL NOTES ARE GENERAL IN NATURE. IT IS NOT FEASIBLE TO SHOW EVERY SPECIFIC REMOVAL. DEMOLITION DRAWINGS SHOULD BE USED IN CONJUNCTION W/ THE OTHER DRAWINGS. SEE STRUCTURAL DRAWINGS FOR CERTAIN ADDITIONAL WORK TO BE REMOVED, RE-USED, AND/OR REVISED. THE SCOPE OF DEMOLITION WORK OUTLINED HEREIN IS THE RESPONSIBILITY OF THE GENERAL CONTRACTOR, UON.

B. CONTRACTORS SHALL VISIT PROJECT SITE TO BECOME FAMILIAR W/ COMPLETE SCOPE OF REMOVALS/DEMOLITIONS AND TO FIELD-VERIFY CONDITIONS.

C. STRUCTURAL ITEMS SHOWN AS 'TO BE REMOVED' ARE FOR REFERENCE ONLY. VERIFY APPROPRIATE SHORING OR REINFORCEMENT CONDITION W/ STRUCTURAL DRAWINGS. THE CONTRACTOR IS RESPONSIBLE FOR SHORING DESIGN, IMPLEMENTATION, SAFETY & CODE COMPLIANCE.

D. CONTRACTOR SHALL PATCH AND REPAIR ALL FIREPROOFING DAMAGE INCURRED DURING DEMOLITION AND/OR CONSTRUCTION.

E. THE CONTRACTOR SHALL MAINTAIN A CURRENT DIG ALERT NUMBER AT ALL TIMES.

F. PRIOR TO ANY DISCONNECTION OF ANY SHARED UTILITIES, THE OWNER AND/OR FACILITY DIRECTOR SHALL BE NOTIFIED.

G. ALL CONSTRUCTION DEBRIS SHALL BE CONTAINED ONSITE. DEMOLISHED MATERIAL OR ITEMS REMOVED AND NOT SCHEDULED TO BE TURNED OVER TO THE OWNER SHALL BE REMOVED FROM THE SITE.

H. DEMOLITION SHALL ONLY OCCUR BETWEEN THE HOURS OF 8 AM TO 5 PM M-F, UNLESS AUTHORIZED OTHERWISE.

I. RESPECTIVE CONTRACTORS SHALL REMOVE PLUMBING, MECHANICAL, ELECTRICAL, OR MISCELLANEOUS AS REASONABLY INFERRED. CAP OR RECONNECT ALL EXISTING LINES AS REQ'D.

J. THROUGHOUT DEMOLITION AND CONSTRUCTION, PROTECT ITEMS SCHEDULED TO REMAIN AND/OR ALL ADJACENT MATERIALS AND EQUIPMENT, ETC., INDICATED TO REMAIN. COORDINATE REMOVAL AND PROTECTIONS W/ OWNER.

K. SHOULD THE CONTRACTOR UNCOVER STRUCTURAL DEFECTS, MOLD, OR ANY OTHER ISSUE WHICH IS NOT STANDARD, THE ARCHITECT OR PROJECT ENGINEER SHALL BE NOTIFIED.

L. CONTRACTOR TO PROVIDE REMOVAL / ABATEMENT AT LOCATIONS NECESSARY. IN THE EVENT TOXIC MATERIALS ARE UNCOVERED, GENERAL CONTRACTOR IS TO NOTIFY HEALTH & SAFETY AGENCIES OF THE GOVERNING JURISDICTION.

M. GENERAL CONTRACTOR SHALL RECYCLE DEMOLITION CONSTRUCTION DEBRIS IN ACCORDANCE W/ NATIONAL, STATE, AND/OR LOCAL REQ'S, AS APPROPRIATE.

15. INSULATION

A. ALL NEW EXTERIOR WALLS TO HAVE MIN R-20 INSULATION (2X6 TYP). EXISTING 2X4 EXTERIOR WALLS SHALL HAVE MIN R-13 INSULATION [CA ENERGY CODE 150.0(C)6]. SEE ENERGY DOCUMENTATION, WHERE APPLICABLE, TO DETERMINE REQ'S.

B. CEILINGS & RAFTER ROOFS SHALL BE INSULATED BTWN WOOD FRAMING MEMBERS W/ INSULATION RESULTING IN AN INSTALLED THERMAL RESISTANCE OF R-22 OR GREATER FOR THE INSULATION ALONE [CA ENERGY CODE 150.0(A)1].
EXCEPTION 1: INSULATION OF RAFTER ROOFS IN AN ALTERATION SHALL BE INSULATED BTWN WOOD FRAMING MEMBERS W/ INSULATION RESULTING IN AN INSULATED THERMAL RESISTANCE OF R-19 MIN [CA ENERGY CODE 150.0(A)1]. SEE ENERGY DOCUMENTATION, WHERE APPLICABLE, TO CONFIRM COMPLIANCE.

C. RIM JOISTS BTWN FLOORS OF A MULTISTORY BUILDING TO HAVE MIN R-13 INSULATION INSTALLED ON THE INSIDE OF THE RIM JOIST.

D. PROVIDE BAFFLES TO PREVENT INSULATION FROM BLOCKING EAVE VENTS [CBC 1505.3].

E. INSULATION SHALL COMPLY W/ THE FLAME SPREAD & SMOKE-DEVELOPED INDEX AS DESCRIBED IN CRC R302.10 OR R316, AS APPLICABLE.

F. MOIST INSULATION PRODUCTS SHALL BE REPLACED OR ALLOWED TO THOROUGHLY DRY PRIOR TO ENCLOSURE IN WALL OR FLOOR CAVITIES [CALGREEN 4.5-5.3].

G. ATTIC ACESS DOORS SHALL BE GASKETED W/ PERMANENTLY ATTACHED INSULATION [CA ENERGY CODE 150.0(A)2].

16. GAS LINES

A. EXPOSED GAS PIPING SHALL BE KEPT AT LEAST 6" ABOVE GRADE OR STRUCTURE.

B. WHERE GAS PIPING IS INSTALLED UNDERGROUND BENEATH BUILDINGS, THE PIPING SHALL BE A PIPING/ENCASEMENT SYSTEM LISTED FOR INSTALLATION BENEATH BUILDINGS PER NFPA 54:7.1.6. [CMC 1310.16].

C. CONDUIT FOR UNDERGROUND GAS SLEEVES SHALL BE OF MATERIAL APPROVED FOR INSTALLATION UNDERGROUND BENEATH BUILDINGS & NOT LESS THAN SCHEDULE 40 PIPE. THE INTERIOR DIAMETER OF THE CONDUIT SHALL NOT BE LESS THAN 1/2" LARGER THAN THE OUTSIDE DIAMETER OF THE GAS PIPING. THE CONDUIT SHALL EXTEND TO A POINT AT LEAST 12" BEYOND ANY AREA WHERE IT IS REQ'D TO BE INSTALLED OR TO THE OUTSIDE WALL OF A BUILDING, & THE OUTER ENDS SHALL NOT BE SEALED. WHERE THE CONDUIT TERMINATES W/IN A BUILDING, IT SHALL BE READILY ACCESSIBLE & THE SPACE BTWN THE CONDUIT & THE GAS PIPING SHALL BE SEALED TO PREVENT LEAKAGE OF GAS INTO THE BUILDING. SLEEVING SHALL BE ARRANGED SO THAT PIPING SYSTEM CAN BE REMOVED & REPLACED.

D. GAS LINE AIR TEST REQ'D IF NEW GAS LINE PIPING IS ADDED. GAS TEST CRITERIA: 10 PSI FOR 15 MINUTES WITH NO PERCEPTIBLE DROP IN PRESSURE. IF ONLY MINOR PIPING OR FITTINGS ARE ADDED (NOT TO EXCEED 6'-0" TOTAL PIPING), LEAK DETECTION FLUID MAY BE USED W/ WORKING PRESSURE) [CPC 1213.3].

E. GAS SHUT-OFF REQ'D W/IN 6'-0" OF GAS FAU [CMC 1312.6].

17. FRAMING & WALLS

A. SEE NOTES ON SHEETS TO DETERMINE HOW DIMENSIONS ARE ESTABLISHED.

B. ALL PARTITIONS ARE TO BE BRACED IN ACCORDANCE W/ SEISMIC CODE REQ'S.

C. TRADE CONTRACTOR SHALL PROVIDE FURRING STRIPS AT FRAMED WALLS PRIOR TO GYP INSTALLATION TO MEET FINISH TOLERANCES (FRAMING TOLERANCES ± ⅛" PER 8'-0" VERTICAL & HORIZONTAL).

D. PROVIDE MIN 2X8 BLOCKING, BACKING &/OR REINFORCEMENTS IN PARTITIONS FOR ALL CABINETS, COUNTERTOPS. TELEVISIONS, A/V EQUIPMENT, LIGHTING, SINKS, TOILETS, TOILET ROLL HOLDER, GRAB RAILS, SHELVING & ANY OTHER WALL-MOUNTED ITEMS. PROVIDE MIN 2X8 BLOCKING/BACKING FOR POTENTIAL FUTURE GRAB RAILS AT ALL TOILETS. REFER TO PLANS, ELEVATIONS, INTERIOR ELEVATIONS & DETAILS, AS NEEDED, FOR LOCATIONS.

E. PROTECTION OF WOOD & WOOD-BASED PRODUCTS FROM DECAY SHALL BE PROVIDED W/ THE USE OF NATURALLY DURABLE WOOD OR WOOD THAT IS PRESERVATIVE-TREATED IN ACCORDANCE W/ AWPA UI FOR THE SPECIES, PRODUCT, PRESERVATIVE & END USE. PRESERVATIVES SHALL BE LISTED IN SECTION 4 OF AWPA UI. THIS REQ APPLIES IN THE FOLLOWING LOCATIONS:
1. WOOD JOISTS OR THE BOTTOM OF A WOOD STRUCTURAL FLOOR WHEN CLOSER THAN 18" INCHES TO THE EXPOSED GROUND
2. WOOD GIRDERS WHEN CLOSER THAN 12" INCHES TO THE EXPOSED GROUND IN CRAWL SPACES OR UNEXCAVATED AREA LOCATED W/IN THE PERIPHERY OF THE BUILDING FOUNDATION [CRC R304.1]

F. ALL FOUNDATION SILLS, PLATES, SLEEPERS, POSTS, & COLUMNS THAT REST ON CONC OR MASONRY IN DIRECT CONTACT W/ THE GROUND MUST BE NATURALLY DURABLE OR PRESERVATIVE TREATED [CRC R304.1] [CBC 2304.12]

G. FIREBLOCKING & DRAFTSTOPPING SHALL BE PROVIDED IN COMBUSTIBLE CONSTRUCTION [CRC R302.11 & R302.12] [CBC 708.4.2]. PROVIDE DRAFTSTOPPING BTWN TOP PLATE & ROOF OF ALL DEMISING WALLS. PROVIDE HORIZONTAL/VERTICAL FIREBLOCKING/DRAFTSTOPPING PER CRC/CBC AT ALL DOUBLE STUD WALLS. ALL FIREBLOCKING & DRAFTSTOPPING SHALL BE INSTALLED & INSPECTED PRIOR TO ROUGH-IN OF PLUMBING & MECHANICAL.

H. CONTRACTOR SHALL FIREPROOF ALL NEW PENETRATIONS IN RATED WALL ASSEMBLIES PER CRC & CBC.

I. AT RATED PENETRATIONS PROVIDE MEANS OF FIRE PROTECTION (E.G., LOWERY WRAP PADS, FIRE CAULK, ETC.). INCLUDE FIRE RATED ASSEMBLIES FOR THE FOLLOWING: GAS LINE, ELECTRICAL, CATV, A/V, TELECOMMUNICATIONS WIRES, LOW VOLTAGE. ACOUSTIC SEALANT INSTALLED IN A FIRE-RATED ASSEMBLY MUST BE FIRE RATED AS WELL AS PACKING MATERIAL TO BE USED AT PIPE PENETRATIONS.

J. CONTRACTOR SHALL PATCH & REPAIR ALL FIREPROOFING DAMAGE INCURRED DURING DEMOLITION &/OR CONSTRUCTION.

K. AT RATED WALL ASSEMBLIES, ENSURE LAYER OF TYPE X DRYWALL EXTENDS FROM FLOOR TO ROOF.

L. ALL SHARED WALLS BTWN UNITS (IF APPLICABLE) TO HAVE DOUBLE LAYER OF GYP., INCL. ONE LAYER QUIETROCK.

M. PROVIDE ONE-HOUR FIRE-RESISTIVE SEP BTWN DWELLING UNIT & GARAGE/CARPORT [CBC 406.3.2], OR SEPARATE PER TABLE R302.6, AS APPLICABLE.

N. AREAS TYPICALLY PRONE TO MOISTURE, E.G. BATHROOMS, LAUNDRY ROOMS, KITCHENS, BASEMENTS, GARAGES, & UTILITY ROOMS, SHALL USE MOLD & MOISTURE-RESISTANT TYPE GYPSUM BOARD.

O. IN AREAS TYPICALLY PRONE TO MOISTURE, WHERE TILE OCCURS, USE NONASBESTOS FIBER-CEMENT COMPOSITION BACKER BOARD COMPLIANT W/ R702.4.2 IN COMBINATION W/ A CLASS I OR II VAPOR RETARDER.

P. IF THE ATTIC & ROOF IS CONVENTIONALLY FRAMED, CLG JOIST UNDER THE LOCATION OF AN FAU UNIT SHALL BE DOUBLED W/ MIN 2X6 JOISTS. IF THE ATTIC & ROOF FRAMING IS A PREFABRICATED ENGINEERED TRUSS SYSTEM, AN ENGINEERING REPORT (WET STAMPED & SIGNED BY A LICENSED ENGINEER) SHALL BE REQ.

Q. AT ACOUSTIC TREATED WALLS, CAULK & SEAL ALL PENETRATIONS & TRANSITION AREAS PER NATIONAL GYPSUM & GYPSUM ASSOCIATION SOUND ISOLATION STANDARDS.

R. THE FRAMING CONTRACTOR SHALL COORDINATE TIMING & PLACEMENT OF SHEAR PANELS, INCL INTERIOR SHEAR PANELS, W/ THE GENERAL CONTRACTOR.

S. FASTENING: FLOOR FRAMING SHALL BE NAILED IN ACCORDANCE W/ CRC TABLE R602.3(1) (OR CBC TABLE 2304.10.2, AS APPLICABLE). WHERE POSTS & BEAMS OR GIRDER CONSTRUCTION IS USED TO SUPPORT FLOOR FRAMING, POSITIVE CONNECTION SHALL BE PROVIDED TO ENSURE AGAINST UPLIFT & LATERAL DISPLACEMENT.

T. WOOD FRAMED STUDS SHALL BE DIMENSIONED PER CRC TABLE R602.3(5) (OR CBC TABLE 2308.5.1, AS APPLICABLE) FOR SIZE, HEIGHT & SPACING.

U. DRILLING & NOTCHING OF STUDS: DRILLING & NOTCHING OF STUDS SHALL BE IN ACCORDANCE W/ CRC R602.6 / CBC 2308.6:
1. NOTCHING: ANY STUD IN AN EXTERIOR WALL OR BEARING PARTITION SHALL BE PERMITTED TO BE CUT OR NOTCHED TO A DEPTH NOT EXCEEDING 25 PERCENT OF ITS WIDTH. STUDS IN NONBEARING PARTITIONS SHALL BE PERMITTED TO BE NOTCHED TO A DEPTH NOT TO EXCEED 40 PERCENT OF A SINGLE STUD WIDTH.
2. DRILLING: ANY STUD SHALL BE PERMITTED TO BE BORED OR DRILLED, PROVIDED THAT THE DIAMETER OF THE RESULTING HOLE IS NOT MORE THAN 60 PERCENT OF THE STUD WIDTH, THE EDGE OF THE HOLE IS NOT MORE THAN 5/8 INCH TO THE EDGE OF THE STUD, & THE HOLE IS NOT LOCATED IN THE SAME SECTION AS A CUT OR NOTCH. STUDS LOCATED IN EXTERIOR WALLS OR BEARING PARTITIONS DRILLED OVER 40 PERCENT & UP TO 60 PERCENT SHALL BE DOUBLED W/ NOT MORE 2 SUCCESSIVE DOUBLED STUDS BORED.
3. EXCEPTION: USE OF APPROVED STUD SHOES IS PERMITTED WHERE THEY ARE INSTALLED IN ACCORDANCE W/ THE MFR'S RECOMMENDATIONS.

V. ALL EXTERIOR WALLS (& HABITABLE TO NON HABITABLE WALLS) & CEILINGS SHALL BE INSULATED AT A MIN PER CA ENERGY CODE SPECS (& AT ADDITIONAL LOCATIONS AS NOTED ON CONSTRUCTION DOCUMENTS).

18. GARAGES

A. PROVIDE A SELF-CLOSING, TIGHT-FITTING SOLID WOOD DOOR, 1-3/8" THICKNESS, OR 20-MINUTE TIGHT-FITTING, SELF-CLOSING DOOR BETWEEN GARAGE & DWELLING [CRC 302.5.1] [CBC 406.3.2.1].

B. THE GARAGE SHALL BE SEP'D FROM THE DWELLING & ITS ATTIC AREA [CRC TABLE R302.6] [CBC 406.3.2.1].

C. DUCTS PENETRATING THE WALLS OR CEILINGS SEPARATING THE DWELLING FROM THE GARAGE SHALL BE CONSTRUCTED OF A MIN NO. 26 GAGE SHEET STEEL OR OTHER APPROVED MATERIAL & SHALL NOT HAVE OPENINGS INTO THE GARAGE [CRC R302.5.2] [CBC 406.3.2.2].

D. OTHER PENETRATIONS OF GARAGE/DWELLING CEILINGS & WALLS SHALL BE PROTECTED AS REQ'D BY SECTION R302.11, ITEM 4 [CRC R302.5.3] [CBC 406.3.2.2].

E. GARAGE FLOOR SURFACES SHALL BE OF AN APPROVED NONCOMBUSTIBLE MATERIAL, & THE AREA USED TO PARK VEHICLES SHALL BE SLOPED TO A DRAIN OR TOWARD THE MAIN VEHICLE ENTRY DOORWAY [CRC R317.1] [CBC 406.2.4].

F. PROVIDE PLATFORM FOR GAS APPLIANCES INSTALLED IN A GARAGE WHEN A GLOW, SPARK OR FLAME IS GENERATED. THE GLOW, SPARK OR FLAME IS TO BE LOCATED 18" MIN ABOVE FLOOR [CPC 507.13].

G. ONE-HOUR SINGLE-LAYER (OR TWO-LAYER IF JOISTS ARE 24" OC) 5/8" TYPE X GYP SHALL BE PROVIDED ON GARAGE CLG LOCATED UNDER HABITABLE AREA.

H. SLOPE GARAGE FLOOR 1/8" PER FOOT TO 1/4" PER FOOT TO ENSURE DRAINAGE.

9. PROVIDE BELT-DRIVE GARAGE DOOR OPENER ("CHAMBERLIN WHISPER DRIVE" -OR EQUAL) -CONFIRM COMPATIBILITY WITH SELECTED GARAGE DOOR PRIOR TO PURCHASE. INCLUDE: (2) THREE-FUNCTION REMOTE CONTROLS, OUTSIDE KEYLESS ENTRY PAD, ROLLING CODE SECURITY

MANUAL LABOR

375 EAST MAIN STREET
VENTURA, CA, 93001

805 628 3382

PROJECT NAME

230 WEST SOLA REMODEL

230 WEST SOLA STREET
SANTA BARBARA, CA 93101

#	DRAWING ISSUED	DATE
	PC #1	06.23.26

SHEET NAME

GENERAL NOTES

SHEET INFORMATION

DRAWN BY: AS

SCALE: AS NOTED

PLAN NORTH:

TRUE NORTH:

SHEET NUMBER

a0.10

INCLUDED DRAWINGS, SPECIFICATIONS, IDEAS & DESIGNS SHALL REMAIN THE PROPERTY OF MANUAL LABOR & SHALL NOT BE DISTRIBUTED OR USED FOR ANY WORK OTHER THAN THE PROJECT FOR WHICH THEY WERE PREPARED WITHOUT WRITTEN CONSENT.

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19. FAU & AIR CONDITIONING

A. MFR SPEC'S & RECOMMENDATIONS SUPERCEDE ANY TYPICAL NOTES GIVEN ON THIS PLAN. REVIEW MFR INSTRUCTIONS PRIOR TO INSTALLATION. CONTRACTOR SHALL BRING ANY CONFLICTS TO THE ATTENTION OF THE OWNER.

B. HEATING & AIR-CONDITIONING SYSTEMS SHALL BE SIZED, DESIGNED & SELECTED IN COMPLIANCE W/ CALGREEN 4.507.2.

C. ATTIC ACCESS SHALL BE LOCATED W/IN 20'-0" OF EQUIPMENT & SHALL INCLUDE AN OPENING NOT LESS THAN THE SIZE OF THE LARGEST EQUIPMENT (20" X 30" MIN). ATTIC SHALL HAVE MIN OF 30" UNOBSTRUCTED OVERHEAD CLEARANCE [CBC 1209.2, CRC R807.1]. FAU ACCESS FLOORING SHALL PROVIDE A MIN 24" WIDE SOLID SURFACE TO A LEVEL WORKING PLATFORM 30"W X 30"D X 30"H MIN AT THE SERVICE SIDE(S) OF UNIT [CMC 304.4.3, CRC R807.1]. ATTIC ACESS DOORS SHALL BE GASKETED W/ PERMANENTLY ATTACHED INSULATION [CA ENERGY CODE 150.0(a)3].

D. ALL VENTING FOR GAS FIRED EQUIPMENT SHALL BE IN COMPLIANCE W/ CPC. CRC. CBC. CMC & MFR SPECS.

E. GRAVITY VENTING SYSTEMS TO BE DOUBLE WALL TYPE "B" VENT MATERIAL & HORIZONTAL SECTIONS (46-60 DEGREES FROM VERTICAL) NOT TO EXCEED 75% OF THE OVERALL HEIGHT OF THE VENT LENGTH. ONLY (1) 60 DEGREE OFFSET IS PERMITTED. VENT OFFSETS MORE THAN 60 DEGREES ARE NOT PERMITTED. [CMC 802.6.1].

F. GRAVITY VENT TERMINATION TO BE 1'-0" ABOVE ROOF IF SLOPE OF ROOF NOT GREATER THAN 6/12, STEEPER ROOFS REQ ADDITIONAL HEIGHT. TERMINATION TO BE 8' FROM VERTICAL SURFACES ABOVE ROOF LINE. ALL COMBUSTIBLES TO BE AT LEAST 1" FROM DOUBLE WALL VENT OR IN ACCORDANCE W/ THE PRODUCT 'S LISTING, WHICHEVER IS GREATER. OVERALL VENT HEIGHT TO BE 5' MIN ABOVE VENT COLLAR OF THE FAU IN THE ATTIC [CMC 802.6.1].

G. THE EXIT TERMINALS OF MECHANICAL DRAFT SYSTEMS SHALL BE NOT LESS THAN 7 FEET (2134 MM) ABOVE FINISHED GROUND LEVEL WHERE LOCATED ADJACENT TO PUBLIC WALKWAYS & SHALL BE LOCATED AS SPECIFIED IN SECTION CMC 802.8.1-3.

H. ADEQUATE COMBUSTION AIR SHALL BE PROVIDED TO THE ATTIC AREA, AS NEEDED [CMC 701].

I. ALL HEATING & COOLING DUCTING TO BE FLEXIBLE PIPING, SIZED PER MECHANICAL SUB-CONTRACTOR.

J. INSULATED DUCTWORK SHALL BE PROPERLY SUPPORTED & JOINTS PROPERLY SECURED [CMC 605, SMACNA].

K. ON EXISTING FAU SYSTEMS IF MORE THAN 25'-0" OF NEW DUCTING IS INSTALLED DURING A REPLACEMENT OR EXTENSION PROJECT, A MIN INSULATION VALUE OF R-6 IS REQ'D ON THE NEW DUCTING & A DUCT LEAKAGE TEST IS REQ'D [CA ENERGY CODE 150.2(b)(1)(D)].

L. WHEN AN FAU IS NEW OR REPLACED, THE DUCTS (EXISTING & NEW), REQ R-6 DUCT INSULATION & A DUCT LEAKAGE TEST IS REQ'D ON THE ENTIRE SYSTEM [CA ENERGY CODE T150.1-A].

M. GAS SHUT-OFF REQ'D W/IN 6'-0" OF GAS FAU [CMC 1312.6].

N. AN APPROVED, INDEPENDENT MEANS OF DISCONNECT FOR THE ELECTRICAL SUPPLY TO EACH PIECE OF EQUIPMENT SHALL BE PROVIDED IN SIGHT OF THE EQUIPMENT SERVED WHEN THE SUPPLY VOLTAGE EXCEEDS 50 VOLTS [CMC301.4, CEC 422.31(B), CEC 422.33(A)].

O. A DEDICATED CIRCUIT SHALL BE PROVIDED FOR THE FURNACE [CEC 422.12].

P. A 120-VOLT SERVICE RECEPTACLE SHALL BE LOCATED W/IN 25'-0" OF, & ON THE SAME LEVEL AS, THE EQUIPMENT FOR MAINTENANCE. THE RECEPTACLE SHALL NOT BE CONNECTED ON THE LOAD SIDE OF THE REQ'D MEANS OF DISCONNECT.

Q. A PERMANENT ACCESSIBLE SWITCH-CONTROLLED LIGHTING FIXTURE SHALL BE INSTALLED FOR MAINTENANCE OF EQUIPMENT. SUCH FIXTURE SHALL PROVIDE SUFFICIENT ILLUMINATION TO SAFELY APPROACH THE EQUIPMENT & PERFORM THE TASKS FOR WHICH ACCESS IS PROVIDED. CONTROL OF THE LIGHTING SHALL BE PROVIDED AT THE ACCESS ENTRANCE [CEC 210.70(C)].

R. THE CLEAR SPACE & DISTANCE TO COMBUSTIBLE MATERIALS AROUND THE FURNACE UNIT SHALL COMPLY W/ MFR INSTALLATION INSTRUCTIONS [CMC 904.3].

S. FURNACES LOCATED IN A GARAGE MUST BE ELEVATED SO THE PILOT LIGHT & CONTROLS ARE AT LEAST 18" ABOVE THE GARAGE FLOOR SURFACE (UNLESS THE UNIT IS LISTED AS FLAMMABLE VAPOR IGNITION RESISTANT). IF SUBJECT TO VEHICULAR DAMAGE, ADEQUATE BARRIERS MUST BE INSTALLED (E.G. 4" DIAMETER STEEL PIPE FILLED W/ CONC INSTALLED IN A FOOTING MEASURING 12" IN DIAMETER & 3'-0" DEEP & A MIN OF 2'-9" ABOVE THE FINISHED FLOOR).

T. IF THE ATTIC & ROOF IS CONVENTIONALLY FRAMED, CLG JOIST UNDER THE LOCATION OF THE FAU UNIT SHALL BE DOUBLED W/ MIN 2X6 JOISTS. IF THE ATTIC & ROOF FRAMING IS A PREFABRICATED ENGINEERED TRUSS SYSTEM, AN ENGINEERING REPORT (WET STAMPED & SIGNED BY A LICENSED ENGINEER) SHALL BE REQ'D.

U. CONDENSERS, HEAT PUMPS AND OTHER GROUND-MOUNTED EQUIPMENT TO PROVIDE SEISMIC ANCHORING TO 4" MIN SLAB (OR OTHER APPROVED PAD), 3" MIN ABOVE GROUND, TYP.

V. CONDENSATION DRIP LINES TO EXIT OVER WINDOW/PLANTING AREAS ONLY. A/C CONDENSATE DRAIN & SECONDARY DRAIN SHALL HAVE 1/8" PER FT MIN SLOPE W/ SUPPORTS EVERY 4'-0". RETROFIT UNIT DRAINS MAY RUN TO THE EXTERIOR [CPC 814.1].

W. CONTRACTORS ENGAGED IN WORK IN THE BUILDING ARE REQ'D TO PROVIDE AN AIR BALANCE REPORT TO THE BUILDING OWNER'S' AGENT UPON COMPLETION OF JOB.

20. CLOTHES DRYER

A. WHERE A COMPARTMENT OR SPACE FOR A TYPE 1 CLOTHES DRYER IS PROVIDED, NOT LESS THAN A 4" DIAMETER EXHAUST DUCT OF APPROVED MATERIAL SHALL BE INSTALLED IN ACCORDANCE W/ SECTION 504.0. TYPE 1 CLOTHES DRYER EXHAUST DUCTS SHALL BE OF RIDGED METAL & SHALL HAVE SMOOTH INTERIOR SURFACES. THE DIAMETER SHALL NOT BE LESS THAN 4" NOMINAL & THE THICKNESS SHALL BE NOT LESS THAN 0.016 OF AN INCH [CMC 504.4.2].

B. A CLOTHES DRYER EXHAUST DUCT SHALL NOT BE CONNECTED TO A VENT CONNECTOR, GAS VENT, CHIMNEY, & SHALL NOT TERMINATE INTO A CRAWL SPACE, ATTIC, OR OTHER CONCEALED SPACE. EXHAUST DUCTS SHALL NOT BE ASSEMBLED W/ SCREWS OR OTHER FASTENING MEANS THAT EXTEND INTO THE DUCT & THAT ARE CAPABLE OF CATCHING LINT, & THAT REDUCE THE EFFICIENCY OF THE EXHAUST SYSTEM. EXHAUST DUCTS SHALL BE CONSTRUCTED OF RIGID METALLIC MATERIAL_ TRANSITION DUCTS USED TO CONNECT THE DRYER TO THE EXHAUST DUCT SHALL BE LISTED FOR THAT APPLICATION OR INSTALLED IN ACCORDANCE W/ THE CLOTHES DRYER MANUFACTURES INSTALLATION INSTRUCTIONS. CLOTHES DRYER EXHAUST DUCTS SHALL TERMINATE TO THE OUTSIDE OF THE BUILDING IN ACCORDANCE W/ SECTION 502.2.1 & SHALL BE EQUIPPED W/ A BACKDRAFT DAMPER [CMC 504.4].

C. UNLESS OTHERWISE PERMITTED OR REQ BY THE DRYER MFR INSTRUCTIONS & APPROVED BY THE AUTHORITY HAVING JURISDICTION, DOMESTIC DRYER MOISTURE EXHAUST DUCTS SHALL NOT EXCEED A TOTAL COMBINED HORIZONTAL & VERTICAL LENGTH OF 14'-0", INCLUDING TWO 90 DEGREE ELBOWS. 2'-0" LENGTH SHALL BE DEDUCTED FOR EACH 90 DEGREE ELBOW IN EXCESS OF TWO [CMC 504.4.2.1].

D. AIR DUCT EXHAUSTS SHALL TERMINATE NOT LESS THAN 3'-0" FROM A PROPERTY LINE, 10'-0" FROM A FORCED AIR INLET, & 3'-0" FROM OPENINGS INTO THE BUILDING, OR ONTO A PUBLIC WALKWAY [CMC 502.2.1].

E. MAKEUP AIR SHALL BE PROVIDED FOR TYPE 1 CLOTHES DRYERS IN ACCORDANCE W/ THE MFR INSTRUCTIONS. [NFPA 54: 10.4.3.1]. WHERE A CLOSET IS DESIGNED FOR THE INSTALLATION OF A CLOTHES DRYER, AN OPENING OF NOT LESS THAN 100 SQUARE INCHES FOR MAKEUP AIR SHALL BE PROVIDED IN THE DOOR OR BY OTHER APPROVED MEANS [CMC 504.4.1(1)].

21. WEATHER PROTECTION

A. EXTERIOR WALLS SHALL PROVIDE THE BUILDING W/ A WEATHER RESISTANT EXTERIOR WALL ENVELOPE IN ACCORDANCE W/ CRC R703 AND CBC 1404.2.

B. ALL EXTERIOR WALL OPENINGS, FLASHINGS, COPINGS, & EXPANSION JOINTS SHALL BE WATERPROOF.

C. WATERPROOFING, SEALANT, CAULKING, FLASHING, ETC, LOCATIONS SHOWN ON DRAWINGS ARE NOT INTENDED TO BE INCLUSIVE. FOLLOW MFR INSTALLATION REQ & STANDARD INDUSTRY BUILDING PRACTICES.

D. PROVIDE TWO LAYERS GRADE D PAPER OVER ALL WOOD BASE SHEATHING. THE INDIVIDUAL LAYERS SHALL BE INSTALLED INDEPENDENTLY SUCH THAT EACH LAYER PROVIDES A SEPARATE CONTINUOUS PLANE & ANY FLASHING (IN ACCORDANCE W/ CBC & CRC REQ) INTENDED TO DRAIN TO THE WATER RESISTIVE BARRIER IS DIRECTED BTWN LAYERS.

E. FLASHINGS SHALL BE INSTALLED IN A MANNER THAT PREVENTS MOISTURE FROM ENTERING THE WALL & ROOF THROUGH JOINTS IN COPINGS, THROUGH MOISTURE PERMEABLE MATERIALS & AT INTERSECTIONS W/ PARAPET WALLS & OTHER PENETRATIONS THROUGH THE THE ROOF PLANE.

F. FLASHINGS SHALL BE INSTALLED AT WALL & ROOF INTERSECTIONS, WHEREVER THERE IS A CHANGE IN ROOF SLOPE OR DIRECTION & AROUND ROOF OPENINGS. A FLASHING SHALL BE INSTALLED TO DIVERT THE WATER AWAY FROM WHERE THE EAVE OF A SLOPED ROOF INTERSECTS A VERTICAL SIDEWALL. WHERE FLASHING IS OF METAL, THE METAL SHALL BE CORROSION RESISTANT W/ THICKNESS NOT LESS THAN 0.019".

G. A CRICKET OR SADDLE SHALL BE INSTALLED ON THE RIDGE SIDE OF ANY CHIMNEY OR PENETRATION MORE THAN 30" WIDE AS MEASURED PERPENDICULAR TO THE SLOPE. CRICKET OR SADDLE COVERINGS SHALL BE SHEET METAL OR OF THE SAME MATERIAL AS THE ROOF COVERING. EXCEPTION: UNIT SKYLIGHTS INSTALLED IN ACCORDANCE W/ CRC R903.2.2 AND CBC 1503.5 & FLASHED W/ MFR INSTRUCTIONS SHALL BE PERMITTED TO BE INSTALLED WITHOUT CRICKET OR SADDLE.

H. PARAPET WALLS SHALL BE PROPERLY COPED W/ NONCOMBUSTIBLE , WEATHERPROOF MATERIALS OF A WIDTH NO LESS THAN THE THICKNESS OF THE PARAPET WALL. ROOF MATERIALS & UNDERLAYMENT SHALL COMPLY W/ CRC R903.3 AND CBC 1503.3.

I. ROOF VALLEY FLASHING SYSTEMS: .26 GAGE GAVANIZED METAL OVER MIN 72# (POUND) MINERAL-SURFACED CAP SHEET AT LEAST 36" WIDE.

J. ROOF COVERING ASSEMBLIES SHALL BE AN ICC-ES OR UL LISTED CLASS 'A' FIRE RESISTIVE ROOF ASSEMBLY COMPLYING W/ ASTM E108 OR UL 790 & ATTACHMENT SHALL BE ADEQUATE FOR 85 M.P.H. WIND LOADS. [CRC R902 & R905] [CBC 1504 & 1505.6].

22. STAIRS

A. UNDER-STAIR PROTECTION: ENCLOSED ACCESSIBLE SPACE UNDER STAIRS SHALL HAVE WALLS, UNDER-STAIR SURFACES & SOFFITS PROTECTED ON THE ENCLOSED SIDE W/ MIN 1/2" GYP [CRC R302.7].

B. RISE/RUN/NOSING: PRIVATE STAIRWAYS & STEPS MAY BE CONSTRUCTED W/ A 7 ¾" MAX RISE, A 10" MIN RUN, & A 36" MIN WIDTH. THE LARGEST TREAD RUN & THE GREATEST RISER HEIGHT W/IN ANY FLIGHT OF STAIRS SHALL NOT EXCEED THE SMALLEST BY MORE THAN 3/8". A NOSING OF NOT LESS THAN ¾" & NOT MORE THAN 1 ¼" SHALL BE PROVIDED ON STAIRWAYS W/ SOLID RISERS [CRC R318.7] [CBC 1011].

C. HANDRAILS: STAIRWAYS W/IN DWELLING UNITS MUST HAVE A HANDRAIL ON AT LEAST ONE SIDE UNLESS THERE ARE LESS THAN 4 RISERS, WHERE NO HANDRAIL IS REQ. THE HANDGRIP PORTION OF HANDRAILS SHALL BE NOT LESS THAN 1 ¼" OR MORE THAN 2" IN CROSS-SECTIONAL DIM & PLACED BTWN 34" & 38" ABOVE THE NOSING OF THE TREADS. NON-CIRCULAR HANDRAILS SHALL HAVE DIMS NOT TO EXCEED 2 ¼" IN CROSS SECTIONAL AREA & A PERIMETER DIM OF AT LEAST 4" BUT NOT TO EXCEED 6 ¼" [CRC R318.7.8].

D. HEADROOM: STAIRWELLS MUST MAINTAIN 80" MIN OF HEADROOM CLEARANCE [CRC R318.7.2] [CBC 1011.3].

E. LANDINGS: THERE SHALL BE A FLOOR OR LANDING AT THE TOP & BOTTOM OF EACH STAIRWAY. THE WIDTH PERPENDICULAR TO THE DIRECTION OF TRAVEL SHALL NOT BE LESS THAN THE WIDTH OF THE FLIGHT SERVED. LANDINGS OF SHAPE OTHER THAN SQUARE OR RECTANGULAR SHALL BE PERMITTED PROVIDED THAT THE DEPTH AT THE WALK LINE & THE TOTAL AREA IS NOT LESS THAN THAT OF A QUARTER CIRCLES, W/ A RADIUS EQUAL TO THE REQ'D LANDING WIDTH. WHERE THE STAIRWAY HAS A STRAIGHT RUN, THE DEPTH IN THE DIRECTION OF TRAVEL SHALL BE NOT LESS THAN 36" [CRC R318.7.6].

F. GUARDS & WINDOW FALL PROTECTION: GUARDS SHALL BE LOCATED ALONG OPEN-SIDED WALKING SURFACES, INCLUDING STAIRS, RAMPS & LANDINGS, THAT ARE LOCATED MORE THAN 30" MEASURED VERTICALLY TO THE FLOOR OR GRADE BELOW AT ANY POINT W/IN 36" HORIZONTALLY TO THE EDGE OF THE OPEN SIDE [CRC R321.1.1] [CBC 1015.2].

G. HEIGHT: REQ'D GUARDS AT OPEN-SIDED WALKING SURFACES, INCLUDING STAIRS, PORCHES, BALCONIES OR LANDINGS, SHALL BE NOT LESS THAN 42" IN HEIGHT AS MEASURED VERTICALLY ABOVE THE ADJACENT WALKING SURFACE OR THE LINE CONNECTING THE LEADING EDGES OF THE TREADS [CRC R321.1.2].

H. OPENING LIMITATIONS: REQ'D GUARDS SHALL NOT HAVE OPENINGS FROM THE WALKING SURFACE TO THE REQ'D GUARD HEIGHT THAT ALLOWS PASSAGE OF A SPHERE 4" IN DIAMETER. EXCEPTION 2: GUARDS ON THE OPEN SIDE OF STAIRS SHALL NOT HAVE OPENINGS THAT ALLOW PASSAGE OF A SPHERE 4 3/8" IN DIAMETER [CRC R321.1.3].

23. LIGHTING

A. PENDANT LIGHTS, CLG FANS & TRACK LIGHTING ARE PROHIBITED ABOVE THE BATHTUB AREA IN THE BATHROOM.

B. ALL INSTALLED LUMINAIRES SHALL MEET THE REQUIREMENTS OF CA ENERGY CODE TABLE 150.0-A EXCEPT IN INTEGRATED DEVICE LIGHTING, NAVIGATION LIGHTING, AND CABINET LIGHTING AS DETAILED IN CA ENERGY CODE 150(K)1.A.

C. IN BATHROOMS, GARAGES, LAUNDRY ROOMS, UTILITY ROOMS AND WALK-IN CLOSETS, AT LEAST ONE INSTALLED LUMINAIRE SHALL BE CONTROLLED BY AN OCCUPANCY OR VACANCY SENSOR PROVIDING AUTOMATIC-OFF FUNCTIONALITY. [CA ENERGY CODE 150(K)2.E.i].

D. LUMINAIRES RECESSED INTO INSULATED CEILINGS SHALL MEET ALL OF THE REQUIREMENTS OF CA ENERGY CODE 150(K)1.C.

E. SCREW BASED LUMINAIRES SHALL CONTAIN LAMPS THAT COMPLY WITH REFERENCE JOINT APPENDIX JA8.

F. RESIDENTIAL OUTDOOR LIGHTING SHALL MEET THE REQUIREMENTS OF SECTION 160.5(a)1 AND SECTION 160.5(a)3.

24. DOORS

A. REFER TO PLAN DRAWINGS FOR SWINGS OF DOORS.

B. FIELD VERIFY ALL CONDITIONS FOR PLACEMENT, SIZE, DETAILS.

C. ALL GLAZING INSTALLED IN HAZARDOUS LOCATIONS TO BE SAFETY GLASS (INCLUDING ALL GLAZING IN DOORS), EXCLUDING EXCEPTIONS 1-4 [CRC R308] [CBC 2406].

D. ALL GLAZING IN DOORS SHALL BE DUAL GLAZED - TEMPERED.

E. DOORS BTWN GARAGE & DWELLING TO BE 20 MIN RATED SELF-CLOSING [CRC R302.5.1] [CBC 406.3.2.1].

F. SLIDING GLASS DOORS SHALL BE 20 MIN FIRE RATED.

G. ONLY PROJECTS THAT MUST COMPLY W/ CBC CH. 7A FOR WILDLAND-URBAN INTERFACE FIRE AREA: PER CRC R327.8.2.1 GLASS IN DOORS TO BE MULTI-PANE W/ MIN ONE TEMPERED PANE PER CBC 2406. DOORS TO COMPLY W/ [CRC R327.8.2 & R327.8.3.] [CBC 2406].

H. SIZES ARE NOMINAL. CONTRACTOR TO FIELD VERIFY ALL ROUGH OPENINGS. VERIFY DIMS W/ HEAD, JAMB, SILL & OTHER RELEVANT DETAILS.

I. CONTRACTOR TO VERIFY WALL THICKNESS & COORDINATE JAMB WIDTH ACCORDINGLY.

J. SEE DETAILS & MFR SPEC'S FOR INSTALLATION REQ'S OF ALL DOORS.

K. CONTRACTOR TO UNDERCUT WOOD DOORS AS REQ'D TO CLEAR FINISH FLOOR &/OR THRESHOLD W/ SEAL OF 1/4", UON. CONTRACTOR TO UNDERCUT DOORS FOR ADDITIONAL CLEARANCE IF/AS SPECIFIED IN PLANS FOR VENTILATION.

L. ALL GLAZING SHALL BE SPECIFIED TO MATCH REQ'S OF THE ENERGY CODE.

M. WEATHERSTRIP ALL EXTERIOR DOORS PER TITLE 24. WEATHERSTRIP / THRESHOLD UNDER ALL EXTERIOR & OTHER NOTED DOORS.

N. ALL EXTERIOR DOORS SHALL BE PROVIDED W/ A THRESHOLD PAN ("JAMSILL" OR EQ).

O. HIGH/LOW VENTING IN DOORS (E.G., AT DRYER, WATER HTR, FAU) SHALL MEET CBC & MFR REQ'S FOR COMBUSTION AIR.

P. PROVIDE BELT-DRIVE GARAGE DOOR OPENER ("CHAMBERLIN WHISPER DRIVE" - OR EQUAL). CONFIRM COMPATIBILITY W/ SELECTED GARAGE DOOR PRIOR TO PURCHASE. INCLUDE: (2) THREE-FUNCTION REMOTE CONTROLS, OUTSIDE KEYLESS ENTRY PAD, ROLLING CODE SECURITY.

Q. NFRC LABELS SHALL REMAIN ON EXTERIOR GLASS DOORS THROUGH FINAL INSPECTION.

25. DOOR HARDWARE

A. THE DOOR HARDWARE SPEC, IF INCLUDED IN THE CONTRACT DOCUMENTS, SUPERCEDES THE GENERAL NOTES GIVEN HERE.

B. THE CONTRACTOR SHALL PROVIDE & INSTALL DOORS AS SPECIFIED ON ARCHITECTURAL DRAWINGS, UON. DOOR HARDWARE, LATCHING, LOCKING DEVICES, ETC. SHALL BE CONSISTENT W/ CBC REQ'S.

C. USE MFR LOCKSET ASSEMBLY TO MATCH DOOR ASSEMBLY.

D. ALL LOCKSETS SHALL BE CODED &/OR KEYED IN ACCORDANCE W/ BUILDING REQ'S. CODES &/OR KEYS TO BE DELIVERED TO OWNER PROPERLY TESTED &/OR TAGGED. THE NUMBER OF MASTER & PASS KEYS SHALL BE COORDINATED W/ OWNER.

E. THE CONTRACTOR SHALL SUBMIT A DETAILED HARDWARE LIST WHICH INDICATES THE QUANTITIES, TYPES, MFR, CATALOG NUMBERS & LOCATIONS OF THE VARIOUS ARTICLES OF HARDWARE REQ'D. HARDWARE LIST SHALL BE SUBMITTED NO LATER THAN (30) DAYS BEFORE THE DATE THE SUPPLIER MUST PLACE THE ORDER TO MEET THE PROJECT SCHEDULE. REVIEW OF THE HARDWARE LIST BY ARCHITECT SHALL NOT BE CONSTRUED AS CERTIFYING THAT THE LIST IS COMPLETE & DOES NOT RELIEVE THE CONTRACTOR FROM PROVIDING A COMPLETE PROJECT. THE HARDWARE SCHEDULE (IF APPLICABLE) IS INTENDED TO ESTABLISH A TYPE & STANDARD OF QUALITY.

F. EACH ARTICLE OF HARDWARE SHALL BE INDIVIDUALLY PACKAGED IN THE MFR CONTAINER, PROPERLY MARKED OR LABELED IN CONFORMITY W/ THE APPROVED HARDWARE LIST.

G. ALL HARDWARE APPLIED TO METAL DOORS OR JAMBS SHALL BE MADE TO TEMPLATE & SHALL BE SECURED BY MACHINE SCREWS.

H. ALL FASTENERS SHALL MATCH THE HARDWARE MATERIAL & FINISH.

I. FURNISH TWO BUTT HINGES FOR DOORS UP TO 5 FT HIGH & ONE ADDITIONAL BUTT FOR EACH ADDITIONAL 2'-6", OR AS SPECIFIED IN DOOR HARDWARE SPEC.

J. CONTRACTOR SHALL FURNISH STANDARD STRIKE PLATES W/ EXTENDED LIPS WHERE REQ'D TO PROTECT TRIM FROM BEING MARRED BY THE LATCH BOLT.

K. THE CONTRACTOR SHALL PROVIDE DUST COVERS AT ALL STRIKE PLATES.

L. HARDWARE SUPPLIER SHALL PROVIDE GRANDMASTER KEY, MASTER KEY, KEY-ALIKE, &/OR KEY-DIFFERENT ALL LOCKS IN ACCORDANCE W/ KEYING SCHEDULE PROVIDED BY THE OWNER.

M. HAND ACTIVATED DOOR OPENING HARDWARE SHALL BE CENTERED NOT LESS THAN 34" NOR MORE THAN 44" ABOVE THE FLOOR.

N. DOOR HANDLES, PULLS, LATCHES, LOCKS, & OTHER OPERATING DEVICES ON DOORS REQ'D TO BE ACCESSIBLE SHALL NOT REQ TIGHT GRASPING, TIGHT PINCHING OR TWISTING OF THE WRIST TO OPERATE. MANUALLY OPERATED BOLTS OR SURFACE BOLTS ARE NOT PERMITTED. THE UNLATCHING OF ANY DOOR OR LEAF SHALL NOT REQ MORE THAN ONE OPERATION.

O. WHEN THE DOOR HAS A CLOSER, THEN THE SWEEP PERIOD OF THE CLOSER SHALL BE ADJUSTED SO THE TIME REQ'D TO MOVE THE DOOR FROM AN OPEN POSITION OF 90 DEGREES TO A POSITION OF 12 DEGREES FROM THE LATCH IS 5 SECONDS MIN.

P. REFER TO RESPECTIVE DOOR SCHEDULES FOR ADDITIONAL NOTES ON DOORS, FRAMES & HARDWARE.

Q. REFER TO PROJECT MANUAL &/OR SPEC'S FOR HARDWARE GROUPS, IF APPLICABLE.

26. WINDOWS

A. CONTRACTOR TO VERIFY WALL THICKNESSES & COORDINATE JAMB WIDTHS ACCORDINGLY.

B. SIZES ARE NOMINAL. FIELD-VERIFY DIMS W/ HEAD, JAMB, SILL & OTHER DETAILS. ALL OPENINGS SHALL BE FIELD MEASURED PRIOR TO ORDERING.

C. ALL GLAZING SHALL BE SPECIFIED TO MATCH REQ'S OF THE ENERGY CODE.

D. PROVIDE EMERGENCY ESCAPE & RESCUE FROM BASEMENTS, HABITABLE ATTICS, & SLEEPING ROOM(S). NET CLEAR WINDOW OPENING AREA SHALL BE NOT LESS THAN 5.7 SF (5.0 SF @ GRADE LEVEL FLOOR). MIN NET WINDOW OPENING HEIGHT 24" CLEAR. MIN NET WINDOW OPENING WIDTH 20" CLEAR. BOTTOM OF CLEAR OPENING MAX 44" ABOVE FLOOR [CRC R319.1] [CBC 1031].

E. WINDOW FALL PROTECTION SHALL BE PROVIDED IN ACCORDANCE W/ CRC R321.2.1 & R321.2.2. PROTECTION IS REQUIRED FOR CBC 1015.8 GROUP R-1, R-2, AND R-3, WHERE THE BOTTOM OF AN OPERABLE WINDOW OPENING IS LESS THAN 36" FROM THE FLOOR AND MORE THAN 72" ABOVE THE SURFACE BELOW THE EXTERIOR.

F. ONLY PROJECTS THAT MUST COMPLY W/ 2025 WILDLAND-URBAN INTERFACE CODE: PER WUI 504.8 GLASS IN WINDOWS MUST BE MULTI-PANE W/ MIN ONE TEMPERED PANE MEETING REQ'S OF CBC 2406.

G. ALL OPERABLE WINDOWS TO HAVE INSECT SCREENS.

H. SEE DETAILS SHEET FOR WINDOW DETAILS. ALL INSTALLATION DETAILS SHALL CONFORM TO MFR SPECS.

I. NFRC LABELS SHALL REMAIN ON NEW WINDOWS THROUGH FINAL INSPECTION.

27. SAFETY GLAZING

ALL WINDOW & GLASS DOOR LITES AT THE FOLLOWING HAZARDOUS LOCATIONS SHALL BE SAFETY GLASS PER CRC R324.4:

A. GLAZING IN FIXED AND OPERABLE PANELS OF SWINGING, SLIDING & BIFOLD DOORS.

B. FIXED OR OPERABLE PANELS ADJACENT TO A DOOR WHERE THE NEAREST EXPOSED EDGE OF THE GLAZING IS W/IN A 24" ARC OF EITHER VERTICAL EDGE OF THE DOOR IN A CLOSED POSITION & WHERE THE BOTTOM EDGE OF THE GLAZING IS LESS THAN 60'-0" ABOVE THE WALKING SURFACE.

C. GLAZING IN INDIVIDUAL FIXED OR OPERABLE PANELS THAT MEET ALL OF THE FOLLOWING CONDITIONS:
   a. EXPOSED AREA OF INDIVIDUAL PANE GREATER THAN 9 SF
   b. EXPOSED BOTTOM EDGE LESS THAN 18" ABOVE THE FLOOR
   c. EXPOSED TOP EDGE GREATER THAN 36" ABOVE THE FLOOR
   d. ONE OR MORE WALKING SURFACES W/IN 36" HORIZONTALLY OF THE PLANE OF THE GLAZING

D. GLAZING IN RAILINGS REGARDLESS OF HEIGHT ABOVE A WALKING SURFACE. INCLUDED ARE STRUCTURAL BALUSTER PANELS & NONSTRUCTURAL IN-FILL PANELS.

E. GLAZING IN WALLS, ENCLOSURES OR FENCES FOR HOT TUBS, SPAS, WHIRLPOOLS. SAUNAS, STEAM ROOMS, POOLS, BATHTUBS & SHOWERS. GLAZING IN ANY PORTION OF A BUILDING WALL ENCLOSING THESE COMPARTMENTS WHERE THE BOTTOM EXPOSED EDGE OF THE GLAZING IS LESS THAN 60' ABOVE A STANDING SURFACE.

F. GLAZING WHERE THE BOTTOM EXPOSED EDGE IS LESS THAN 36" ABOVE THE WALKING SURFACE OF STAIRWAYS, LANDINGS BETWEEN FLIGHTS OF STAIRS AND RAMPS.

G. GLAZING ADJACENT TO STAIRWAY LANDINGS OR W/IN 60" OF THE BOTTOM & TOP OF STAIRWAYS WHERE BOTTOM EDGE OF GLASS IS LESS THAN 36" THE LANDING.

28. SKYLIGHTS

A. SKYLIGHTS SHALL BE INSTALLED IN ACCORDANCE W/ MFR REQ'S [CBC 102.4, CRC R102.4].

B. TUBULAR SKYLIGHTS W/ A MAX OF 3 SQUARE FEET IN AREA & CONTAINING DUAL-PANEL DIFFUSERS ARE NOT REQ'D TO MEET U-FACTOR & SHGC VALUES [CA ENERGY CODE 150.2(b)].

C. SKYLIGHTS SHALL BE A MIN OF 6'-0" FROM THE WALL WHERE OPENINGS IN EXTERIOR/COMMON WALLS ARE REQ'D TO BE FIRE-RATED (TYPICALLY FOR CONDO/APARTMENT, SHARED WALLS OF TOWNHOUSES, & SINGLE-FAMILY/DUPLEX BUILDING LESS THAN 5'-0" TO THE PROPERTY LINE) [CBC 2610.7].

D. SKYLIGHTS INSTALLED ON A ROOF SLOPE OF LESS THAN 3:12 (25%) SHALL BE MOUNTED ON A CURB A MIN OF 4" ABOVE THE ROOF (UNLESS OTHERWISE SPECIFIED BY THE MFR) [CBC 2610.2, CRC R324.6.8].

E. OPERABLE SKYLIGHTS SHALL BE LOCATED 10'-0" MIN FROM ALL PLUMBING VENTS OR THE VENT SHALL TERMINATE 3'-0" MIN ABOVE THE SKYLIGHT. OPERABLE SKYLIGHTS SHALL BE 3'-0" MIN FROM ANY ENVIRONMENTAL AIR VENT (STOVE HOOD, BATHROOM FAN, ETC) [CPC 906.2].

29. MILLWORK

A. ALL MILLWORK TO BE FABRICATED PER WOODWORK INSTITUTE CERTIFIED (WIC) CUSTOM STANDARDS, UON.

B. THE GENERAL CONTRACTOR SHALL SUBMIT A REPRODUCIBLE COPY OF SHOP DRAWINGS OF ALL MILLWORK TO THE ARCHITECT FOR APPROVAL PRIOR TO FABRICATION.

C. ALL CABINET DOORS TO HAVE CONCEALED EUROPEAN-STYLE SELF-CLOSING HINGES, UON.

D. ALL DRAWERS TO HAVE MEDIUM-DUTY ACCURIDE FULL EXTENSION SLIDES OR EQUIVALENT, UON.

E. REFER TO INTERIOR ELEVATIONS &/OR CABINET ELEVATIONS FOR FINISHES & ADDITIONAL DETAILS.

F. ALL WOODWORK FINISHES TO MATCH ARCHITECTS SAMPLE & BE SUBMITTED TO ARCHITECT FOR APPROVAL.

G. SCRIBE ALL MILLWORK TO WALL WHERE APPLICABLE.

30. FINISHES

A. GENERAL

1. THE FINISHES NOTED ON THE PLANS INDICATE THE TYPES & EXTENT OF PRIMARY FINISHES. ADDITIONAL SECONDARY OR ACCENT MATERIALS MAY BE SPECIFIED ON PLANS, INTERIOR ELEVATIONS, OR IN THE SPEC'S. REFER TO OTHER CONTRACT DOCUMENTS, AS NEEDED, FOR ADDITIONAL INFORMATION.
2. SUBMIT SAMPLES IN ACCORDANCE W/ SPEC'S OF EACH FINISH & FLOOR COVERING TO THE ARCHITECT FOR REVIEW & APPROVAL BEFORE BEGINNING WORK. THE ARCHITECT HAS TEN (10) WORKING DAYS TO PROCESS FINISH & MATERIAL REVIEWS.
3. SUBSTITUTIONS, REVISIONS, OR CHANGES MUST HAVE APPROVAL OF THE ARCHITECT PRIOR TO PURCHASE & INSTALLATION.
4. WALLS TO BE FURRED AS NEEDED FOR FINISH TOLERANCES MAX ± 1/8" PER 8'-0" VERTICAL & HORIZONTAL.
5. PROVIDE PRE-FORMED INSIDE & OUTSIDE CORNERS OF RESILIENT BASE AT ALL RESILIENT FLOOR COVERING LOCATIONS. RESILIENT BASE TO BE FROM A CONTINUOUS ROLL, UON.
6. SILICONE SEALANT/GASKET AT GLAZING TO BE BLACK, TYP - VERIFY TO MATCH EXISTING, UON.
7. BATHTUB & SHOWER AREAS SHALL BE FINISHED W/ NON-ABSORBENT MATERIAL TO A HEIGHT OF NOT LESS THAN 6 FT [CRC R307.2] [CBC 1210.2.3].
8. WALL & CLG FINISHES SHALL HAVE A FLAME SPREAD INDEX & SMOKE-DEVELOPED INDEX OF LESS THAN 200 & 450, RESPECTIVELY, EXCEPT AS NOTED IN [CRC R302.9.1 & R302.9.2] AND [CBC TABLE 803.13]

B. GYSPUM FINISHES

1. USE TYPE 'X' GYP BOARD WHERE REQ'D FOR FIRE RESISTIVE CONSTRUCTION.
2. ALL GYP CONSTRUCTION TO BE FINISHED TO MATCH EXISTING OR ADJACENT EXISTING W/IN AN EXISTING ROOM OR PORTION(S) OF EXISTING ROOM/AREAS, OUN.
3. ALL GYP WALLS, CLG, BULKHEADS, & SOFFITS IN NEW CONSTRUCTION TO BE SMOOTH FINISHED, TYP.
4. EXPOSED & SEMI-EXPOSED GYP TO BE FINISHED W/ LATEX. NO GYP SURFACES EXPOSED TO VIEW SHALL BE LEFT UNFINISHED OR UNPAINTED.
5. PROVIDE METAL TRIM OR CASING AT ALL EDGES OF PLASTER OR GYP WHERE IT TERMINATES OR MEETS ANY OTHER MATERIAL, EXCEPT FLOORS, UON.

C. PAINT/STAIN FINISHES

1. VERIFY W/ ARCHITECT AT BEGINNING OF PROJECT ELEMENTS TO BE PAINTED.
2. WALL SURFACES TO MATCH EXISTING FINISH & COLOR, TYP, UON.
3. DO NOT ORDER PAINT/STAIN QUANTITIES UNTIL COLOR IS APPROVED BY THE ARCHITECT. ALLOW ADEQUATE APPROVAL TIME & LEAD-TIME BEFORE ORDERING.
4. PAINTED DOORS & FRAMES TO BE SEMI-GLOSS FINISH ON COLOR TO MATCH ADJACENT WALLS, UON.
5. COLORS ARE TO BE SELECTED BY THE ARCHITECT. CONTRACTOR SHALL PROVIDE THREE 8" X 10" BRUSH-OUTS OF EACH OPAQUE FINISH COLOR & OBTAIN ARCHITECT'S APPROVAL OF SAMPLES. FOR TRANSPARENT FINISHES, PROVIDE THREE 8" X 10" SAMPLES OF EACH FINISHED IN THE SPECIES OF WOOD SPECIFIED & OBTAIN ARCHITECT'S APPROVAL OF SAMPLES PRIOR TO COMMENCING WORK .
6. SCHEDULING FOR COLOR APPROVALS: NOTIFY ARCHITECT AT LEAST THREE (3) DAYS IN ADVANCE WHEN SAMPLE AREAS WILL BE READY. THE ARCHITECT WILL APPROVE THE SAMPLE AREAS OR DIRECT CHANGE. BE PREPARED TO MAKE THREE (3) SAMPLES OF EACH COLOR, AS DIRECTED BY ARCHITECT OR OWNER.
7. ELEMENTS TO BE PAINTED & FINAL LIGHTING SHOULD BE PERMANENTLY IN PLACE PRIOR TO SCHEDULING COLOR APPROVALS.
8. BACK PRIME ALL EXTERIOR WOOD TRIM
9. ALL PAINT FINISHES TO HAVE UNDERCOAT & ONE OR MORE COLOR COATS AS REQ'D BY SPEC'S FOR COMPLETE & CONSISTENT COVERAGE.
10. NO PAINTING OR INTERIOR FINISHING SHALL BE DONE UNDER CONDITIONS WHICH JEOPARDIZE THE QUALITY OF APPEARANCE OF SUCH WORK.
11. ALL INTERIOR & EXPOSED TO VIEW SURFACES OF ALL PLASTIC LAMINATE MILLWORK & CABINETS TO BE FINISHED W/ LOW-PRESSURE DECORATIVE LAMINATE, PANEL COLOR PER DRAWINGS OR AS DETERMINED BY THE ARCHITECT.
12. ALL EXTERIOR EXPOSED METAL (TRIMS, RAILINGS, FRAMES, MOULDINGS, ETC.) SHALL BE PAINTED, UON.
13. IN ALL CASES, PROVIDE ISOLATION OF ALUMINUM FROM ADJACENT STEEL OR COAT SURFACES IN CONTACT W/ BITUMINOUS PAINTS.
14. EXAMINE ALL SURFACES TO BE FINISHED UNDER THIS CONTRACT & SEE THAT THE WORK OF OTHER TRADES HAS BEEN LEFT OR INSTALLED IN SATISFACTORY CONDITION TO RECEIVE PAINT, STAIN OR SPECIFIED FINISH. THE APPLICATION OF THE FIRST COAT SHALL INDICATE ACCEPTANCE OF THE SURFACE.
15. AT COMPLETION OF PAINTING, ALL PAINTING MATERIALS & EQUIPMENT SHALL BE REMOVED, ALL PAINT SPOTS REMOVED & ALL AREAS THOROUGHLY CLEANED. ANY DIRT OR DEBRIS CAUSED BY WORK SHALL BE CLEANED UP AS WORK PROGRESSES.
16. RETOUCH OR REFINISH PAINTED SURFACES DAMAGED BY SUBSEQUENT WORK. THE COST OF SUCH WORK SHALL BE BORNE BY EITHER THE TRADE RESPONSIBLE FOR THE DAMAGE, OR BY THE GENERAL CONTRACTOR.

D. FLOOR & BASE FINISHES

1. VERIFY SUB-SURFACE IS SMOOTH, LEVEL, & FREE FROM DEFECTS WHICH WOULD AFFECT INSTALLATION. DO NOT PROCEED UNTIL DEFECTS ARE CORRECTED. THOROUGHLY CLEAN SUB-FLOOR PRIOR TO APPLICATION OF ADHESIVE.
2. EXISTING CONC SLAB SHALL BE PREPARED & SEALED FROM MOISTURE.
3. VINYL COMPOSITION TILE SHALL LAY SYMMETRICALLY ABOUT CENTERLINES OF SPACES W/ EITHER JOINT OR CENTERLINE OCCURRING IN CENTER. CUTTING OF FIELD TILES IS NOT PERMITTED. ALIGN EXACTLY PARALLEL TO RESPECTIVE WALLS NEATLY. TRIM MATERIAL ABUTTING OTHER WORK TO FORM TRUE CLEAN JOINTS. PATTERN SHALL RUN IN ONE DIRECTION ONLY.
4. PAINTED OR OTHERWISE FINISHED SURFACES SHALL BE PROTECTED FROM DAMAGE DURING FLOORING INSTALLATION.
5. CARPET & FLOORING SHALL BE PROTECTED FROM DAMAGE AFTER INSTALLATION.
6. CARPET VENDOR TO SUBMIT A MIN OF (3) 12" X 12" SAMPLES OF CARPET & SEAMING DIAGRAM TO ARCHITECT FOR REVIEW PRIOR TO PURCHASING.
7. INSTALL CARPET IN ACCORDANCE W/ MFR RECOMMENDATIONS & CRI STANDARD 104 FOR INSTALLATION OF TEXTILE FLOOR COVERING MATERIALS.
8. ONLY ONE DYE LOT SHALL BE USED PER CORRIDOR OR SUITE OF OFFICES, UON.
9. TREAT CARPET SEAMS W/ SEALER, USING METHODS RECOMMENDED BY CARPET MFR INSTALLATION INSTRUCTIONS.
10. ALL SHEET GOOD FLOORING SEAMS TO BE HEAT-WELDED, UON.
11. ALL FLOORING FINISHES TO TERMINATE AT CENTER OF DOOR, UON.
12. ALL FINISHES TO CONTINUE BEHIND AND UNDERNEATH ALL EQUIPMENT, ACCESSORIES AND MOVEABLE CASEWORK.

MANUAL LABOR

375 EAST MAIN STREET
VENTURA, CA, 93001

805 628 3382

PROJECT NAME

230 WEST SOLA REMODEL

230 WEST SOLA STREET
SANTA BARBARA, CA 93101

#	DRAWING ISSUED	DATE
	PC #1	06.23.26

SHEET NAME

GENERAL NOTES

SHEET INFORMATION

DRAWN BY: AS

SCALE: AS NOTED

PLAN NORTH:

TRUE NORTH:

SHEET NUMBER

a0.11

PRINTED: 8/30/2026 11:11:07 AM PROJECT NUMBER: 24029 INCLUDED DRAWINGS, SPECIFICATIONS, IDEAS & DESIGNS SHALL REMAIN THE PROPERTY OF MANUAL LABOR & SHALL NOT BE DISTRIBUTED OR USED FOR ANY WORK OTHER THAN THE PROJECT FOR WHICH THEY WERE PREPARED WITHOUT WRITTEN CONSENT

2025 CALIFORNIA GREEN BUILDING STANDARDS CODE
RESIDENTIAL MANDATORY MEASURES, SHEET 1

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

CHAPTER 3
GREEN BUILDING
SECTION 301 GENERAL

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

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

The mandatory provision of Section 4.106.4.2 may apply to additions or alterations of existing parking facilities or the addition of new parking facilities serving existing multifamily buildings. See Section 4.106.4.3 for application.

Note: Repairs including, but not limited to, resurfacing, restriping and repairing or maintaining existing lighting fixtures are not considered alterations for the purpose of this section.

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

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

SECTION 302 MIXED OCCUPANCY BUILDINGS

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

Exceptions:
1. [HCD] Accessory structures and accessory occupancies serving residential buildings shall comply with Chapter 4 and Appendix A4, as applicable.
2. [HCD] For purposes of *CALGreen*, live/work units, complying with Section 419 of the *California Building Code*, shall not be considered mixed occupancies. Live/Work units shall comply with Chapter 4 and Appendix A4, as applicable.

DIVISION 4.1 PLANNING AND DESIGN

ABBREVIATION DEFINITIONS:

HCD	Department of Housing and Community Development	GC	GENERAL CONTRACTOR
BSC	California Building Standards Commission	O	OWNER
DSA-SS	Division of the State Architect, Structural Safety	A	ARCHITECT
OSHPD	Office of Statewide Health Planning and Development	L	LANDSCAPE ARCHITECT
LR	Low Rise	C	CIVIL ENGINEER
HR	High Rise	S	STRUCTURAL ENGINEER
AA	Additions and Alterations	M	MECHANICAL ENGINEER
N	New	E	ELECTRICAL ENGINEER
		P	PLUMBING ENGINEER

CHAPTER 4
RESIDENTIAL MANDATORY MEASURES

SECTION 4.102 DEFINITIONS

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

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

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

4.106 SITE DEVELOPMENT

X GC — **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.

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

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

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

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

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

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

Exception: Additions and alterations not altering the drainage path.

X GC — **4.106.4 Electric vehicle (EV) charging for new construction.** New construction shall comply with Section 4.106.4.1 or 4.106.4.2. Electric vehicle supply equipment (EVSE) shall comply with the *California Electrical Code*.

Exceptions:
1. On a case-by-case basis, where the local enforcing agency has determined EV charging and infrastructure are not feasible based upon one or more of the following conditions:
   1.1 Where there is no local utility power supply or the local utility is unable to supply adequate power.
   1.2 Where there is evidence suitable to the local enforcing agency substantiating that additional local utility infrastructure design requirements, directly related to the implementation of Section 4.106.4, may adversely impact the construction cost of the project.
2. Accessory Dwelling Units (ADU) and Junior Accessory Dwelling Units (JADU) without additional parking facilities.

X GC — **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 208/240-volt minimum dedicated branch circuit and space(s) reserved to permit installation of a branch circuit overcurrent protective device.

Exemption: A raceway is not required if a minimum 40-ampere 208/240-volt dedicated EV branch circuit is installed in close proximity to the proposed location of an EV charger at the time of original construction in accordance with the *California Electrical Code.*

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, hotels and motels and new residential parking facilities.
When parking is provided, parking spaces for new multifamily dwellings, hotels and motels shall meet the requirements of Section 4.106.4.2.2. Calculations for spaces shall be rounded up to the nearest whole number. A parking space served by electric vehicle supply equipment or designed as an EV charging space shall count as at least one standard automobile parking space only for the purpose of complying with any applicable minimum parking space requirements established by a local jurisdiction. See Vehicle Code Section 22511.2 for further details.

4.106.4.2.1 Reserved.

4.106.4.2.2 Multifamily dwellings, hotels and motels

1. EV ready parking spaces with receptacles.

a. Multifamily parking facilities with assigned parking. Where dwelling units are provided with assigned parking spaces equal to or greater than the number of dwelling units, at least one low power Level 2 EV charging receptacle shall be provided at an assigned parking space for each dwelling unit.

1. Where the total number of dwelling units exceeds the number of assigned parking spaces, all assigned parking spaces shall be provided with one low power Level 2 EV charging receptacle.

Exception: Areas of parking facilities served by parking lifts, including but not limited to, automated mechanical-access open parking garages as defined in the California Building Code; or parking facilities otherwise incapable of supporting electric vehicle charging.

b. Multifamily parking facilities with unassigned parking. Where dwelling units are provided with unassigned parking spaces equal to or greater than the number of dwelling units, at least one low power Level 2 EV charging receptacle shall be provided at an unassigned parking space for each dwelling unit.

1. Where the total number of dwelling units exceeds the number of unassigned parking spaces, all unassigned parking spaces shall be provided with one low power Level 2 EV charging receptacle.

Exception: Areas of parking facilities served by parking lifts, including but not limited to, automated mechanical-access open parking garages as defined in the California Building Code; or parking facilities otherwise incapable of supporting electric vehicle charging.

3. Multifamily parking facilities with assigned and unassigned parking. Where multifamily buildings are provided with both assigned and unassigned parking spaces equal to or greater than the number of dwelling units, at least one low power Level 2 EV charging receptacle shall be provided for each dwelling unit at either the assigned or unassigned parking space, but not both.

d. Receptacle power source. EV charging receptacles in multifamily parking facilities at assigned parking spaces shall be provided with a dedicated branch circuit connected to the dwelling unit's electrical panel, unless determined as infeasible by the project builder or designer and subject to concurrence of the local enforcing agency.

Exception: Areas of parking facilities served by parking lifts, including but not limited to, automated mechanical-access open parking garages as defined in the California Building Code; or parking facilities otherwise incapable of supporting electric vehicle charging.

e. Receptacle configurations. 208/240V EV charging receptacles shall comply with one of the following configurations:
1. For 20-ampere receptacles, NEMA 6-20R
2. For 30-ampere receptacles, NEMA 14-30R
3. For 50-ampere receptacles, NEMA 14-50R

2. EV ready parking spaces with EV chargers

X GC — **a .Multifamily parking facilities with unassigned or common use parking.** In addition to the low power Level 2 EV charging receptacle requirements of Section 4.106.4.2.2 (1), twenty-five (25) percent of unassigned or common use parking spaces not already provided with low power Level 2 EV charging receptacles, pursuant to Section 4.106.4.2.2 (1), shall be equipped with Level 2 EV chargers and shall be made available for use by all residents or guests.

b. EV charger connectors. EV chargers shall be equipped with J1772 or J3400 connectors.

X GC — **c. An automatic load management system (ALMS) may be used to reduce the maximum required electrical capacity to each space served by the ALMS**. The electrical system and any on-site distribution transformers shall have sufficient capacity to deliver at least 3.3 kW simultaneously to each EV charging station (EVCS) served by the ALMS. The branch circuit shall have a minimum capacity of 40 amperes, and installed EV chargers shall have a capacity of not less than 30 amperes.

X GC — **4.106.4.2.2.1 Electric vehicle charging stations (EVCS).**
Electric vehicle charging stations required by Section 4.106.4.2.2, Item 2, with EV chargers installed shall comply with Section 4.106.4.2.2.1.1.

Exception: Electric vehicle charging stations serving public accommodations, public housing, motels and hotels shall not be required to comply with this section. See *California Building Code*, Chapter 11B, for applicable requirements.

4.106.4.2.2.1.1 Electric vehicle charging stations (EVCS) spaces with EV chargers installed; dimensions and location.

EVCS spaces shall be designed to comply with the following:

1. The minimum length of each EVCS space shall be 18 feet (5486 mm).
2. The minimum width of each EVCS space shall be 9 feet (2743 mm).
3. One in every 25 EVCS 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 EVCS space is 12 feet (3658 mm). Surface slope for this EVCS space and the aisle shall not exceed 1 unit vertical in 48 units horizontal (2.083 percent slope) in any direction. These EVCS spaces shall also comply with at least one of the following:

a. The EVCS 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.

b. The EVCS space shall be located on an accessible route, as defined in the *California Building Code*, Chapter 2, to the building.

Exception: Electric vehicle charging stations designed and constructed in compliance with the *California Building Code*, Chapter 11B, are not required to comply with Section 4.106.4.2.2.1.1.

4.106.4.2.2.1.2 Accessible electric vehicle charging station spaces.
In addition to the requirements in Section 4.106.4.2.2.1.1, all EV chargers, where installed, shall comply with the accessibility provisions for EV chargers in the *California Building Code*, Chapter 11B. EV ready spaces and EVCS in multifamily developments shall comply with *California Building Code*, Chapter 11A, Section 1109A.

4.106.4.2.3 Reserved.

4.106.4.2.4 Reserved.

4.106.4.2.5 Electric vehicle ready space signage.
Electric vehicle ready spaces shall be identified by signage or pavement markings, in compliance with Caltrans Traffic Operations Policy Directive 13-01 (Zero Emission Vehicle Signs and Pavement Markings) or its successor(s).

4.106.4.2.6 Hotels and motels.

1. EV ready parking spaces with receptacles.

a. Hotels and motels. Forty (40) percent of the total number of parking spaces shall be equipped with low power Level 2 EV charging receptacles.

Exception: Areas of parking facilities served by parking lifts, including but not limited to automated mechanical-access open parking garages as defined in the California Building Code; or parking facilities otherwise incapable of supporting electric vehicle charging.

b. Receptacle configurations. 208/240V EV charging receptacles shall comply with one of the following configurations:
1.For 20- ampere receptacles, NEMA 6-20R
2.For 30- ampere receptacles, NEMA 14-30R
3.For 50- ampere receptacles, NEMA 14-50R2.

2. EV Ready parking spaces with EV chargers.

a. Hotels and motels. Twenty-five (25) percent of the total number of parking spaces shall be equipped with Level 2 EV chargers.

b. EV charger connectors. EV chargers shall be equipped with J1772 or J3400 connectors.

Exception: Areas of parking facilities served by parking lifts, including but not limited to, automated mechanical-access open parking garages as defined in the California Building Code; or parking facilities otherwise incapable of supporting electric vehicle charging.

c. An automatic load management system (ALMS) may be used to reduce the maximum required electrical capacity to each space served by the ALMS. The electrical system and any on-site distribution transformers shall have sufficient capacity to deliver at least 3.3 kW simultaneously to each EV charging station (EVCS) served by the ALMS. The branch circuit shall have a minimum capacity of 40 amperes, and installed EV chargers shall have a capacity of not less than 30 amperes.

4.106.4.3 Electric vehicle charging for additions and alterations of parking facilities serving existing multi-family buildings, hotels and motels.
When existing parking facilities are altered or new parking spaces are added to existing parking facilities, and the work requires a building permit, each parking space added or altered shall have access to either a low power Level 2 EV charging receptacle or Level 2 EV charger, unless determined as infeasible by the project builder or designer and subject to concurrence of the local enforcing agency.

Exception: Where work requiring a permit is being performed for the installation of 120-volt electrical receptacle(s) for level 1 EV charging.

4.106.4.4 Bicycle parking. Bicycle parking shall comply with Sections 4.106.4.4.1 through 4.106.4.4.3.

4.106.4.4.1 Short-term bicycle parking for multifamily buildings, hotels and motels. Provide on-site bicycle parking at a ratio of one parking space for every 10,000 square feet, but not less than two spaces. Short-term bicycle parking shall be located within 200 feet of building entrances, and readily visible to passers-by. Acceptable parking facilities shall be conveniently accessed from the street and may include, but not be limited to:

1.Permanently anchored bicycle parking devices, racks, or lockers in an unsheltered, open area.
2.Covered or uncovered enclosures with permanently anchored bicycle parking devices or racks.

4.106.4.4.2 Long-term bicycle parking for multifamily buildings.
Provide on-site bicycle parking at a ratio of one parking space for every two dwelling units. Acceptable parking facilities shall be conveniently accessed from the street and may include, but not be limited to:
1. Covered, lockable enclosures with permanently anchored bicycle parking devices or racks.
2. Lockable bicycle storage rooms with permanently anchored bicycle parking devices or racks.
3. Lockable, weatherproof, permanently anchored bicycle lockers.

4.106.4.4.3 Long-term bicycle parking for hotel and motel buildings.
Provide one on-site long-term bicycle parking space for every 25,000 square feet, but not less than two. Acceptable parking facilities shall be conveniently accessed from the street and may include, but not be limited to:
1. Covered, lockable enclosures with permanently anchored bicycle parking devices or racks.
2. Lockable bicycle storage rooms with permanently anchored bicycle parking devices or racks.
3. Lockable, weatherproof, permanently anchored bicycle lockers.

DIVISION 4.2 ENERGY EFFICIENCY

4.201 GENERAL

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

DIVISION 4.3 WATER EFFICIENCY AND CONSERVATION

4.303 INDOOR WATER USE

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

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

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

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

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

4.303.1.3 Showerheads.

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

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

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

4.303.1.4 Faucets.

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

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

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

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

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

4.303.1.4.5 Pre-rinse spray valves.
When installed, commercial pre-rinse spray valves shall meet the requirements in the California Plumbing Code, Section 420.3.

X GC — **4.303.2 Submeters for multifamily buildings and dwelling units in mixed-used residential/commercial buildings.**
Submeters shall be installed to measure water usage of individual rental dwelling units in accordance with the *California Plumbing Code*.

4.303.3 Standards for plumbing fixtures and fittings. Plumbing fixtures and fittings shall be installed in accordance with the *California Plumbing Code*, and shall meet the applicable standards referenced in Table 1701.1 of the *California Plumbing Code*.

4.304 OUTDOOR WATER USE

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

NOTES:

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

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

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

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

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

DIVISION 4.5 ENVIRONMENTAL QUALITY

SECTION 4.501 GENERAL

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

SECTION 4.502 DEFINITIONS

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

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

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

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

DIVISION 4.4 MATERIAL CONSERVATION AND RESOURCE EFFICIENCY

4.406 ENHANCED DURABILITY AND REDUCED MAINTENANCE

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

4.408 CONSTRUCTION WASTE REDUCTION, DISPOSAL AND RECYCLING

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

Exceptions:

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

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

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

X GC — **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.

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

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

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

Notes:

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

4.410 BUILDING MAINTENANCE AND OPERATION

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

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

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

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

DIVISION 4.5 ENVIRONMENTAL QUALITY

SECTION 4.501 GENERAL

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

SECTION 4.502 DEFINITIONS

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

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

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

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

DISCLAIMER: *THIS DOCUMENT IS PROVIDED AND INTENDED TO BE USED AS A MEANS TO INDICATE AREAS OF COMPLIANCE WITH THE CALIFORNIA GREEN BUILDING STANDARDS (CALGREEN) CODE. DUE TO THE VARIABLES BETWEEN BUILDING DEPARTMENT JURISDICTIONS, THIS CHECKLIST IS TO BE USED ON AN INDIVIDUAL PROJECT BASIS AND MAY BE MODIFIED BY THE END USER TO MEET THOSE INDIVIDUAL NEEDS. THE END USER ASSUMES ALL RESPONSIBILITY ASSOCIATED WITH THE USE OF THIS DOCUMENT, INCLUDING VERIFICATION WITH THE FULL CODE.*

MANUAL LABOR
375 EAST MAIN STREET
VENTURA, CA, 93001
805 628 3382

PROJECT NAME

230 WEST SOLA REMODEL

230 WEST SOLA STREET
SANTA BARBARA, CA 93101

#	DRAWING ISSUED	DATE
	PC #1	06.23.26

SHEET NAME

CAL GREEN

SHEET INFORMATION

DRAWN BY: AS
SCALE: AS NOTED
PLAN NORTH:
TRUE NORTH:

SHEET NUMBER

a0.20

2025 CALIFORNIA GREEN BUILDING STANDARDS CODE
RESIDENTIAL MANDATORY MEASURES, SHEET 2

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

MAXIMUM INCREMENTAL REACTIVITY (MIR). The maximum change in weight of ozone formed by adding a compound to the "Base Reactive Organic Gas (ROG) Mixture" per weight of compound added, expressed to hundredths of a gram (g O^3/g ROC).
Note: MIR values for individual compounds and hydrocarbon solvents are specified in CCR, Title 17, Sections 94700 and 94701.

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

PRODUCT-WEIGHTED MIR (PWMIR). The sum of all weighted-MIR for all ingredients in a product subject to this article. The PWMIR is the total product reactivity expressed to hundredths of a gram of ozone formed per gram of product (excluding container and packaging).
Note: PWMIR is calculated according to equations found in CCR, Title 17, Section 94521 (a).

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

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

4.503 FIREPLACES

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

4.504 POLLUTANT CONTROL

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

X ☐ GC **4.504.2 FINISH MATERIAL POLLUTANT CONTROL.** Finish materials shall comply with this section.

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

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

X ☐ GC **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.

X ☐ GC **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.

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

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

TABLE 4.504.1 - ADHESIVE VOC LIMIT[1,2]

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

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

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

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

TABLE 4.504.2 - SEALANT VOC LIMIT

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

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

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

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

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

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

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

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

TABLE 4.504.5 - FORMALDEHYDE LIMITS[1]

MAXIMUM FORMALDEHYDE EMISSIONS IN PARTS PER MILLION

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

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

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

DIVISION 4.5 ENVIRONMENTAL QUALITY (continued)

X ☐ GC **4.504.3 CARPET SYSTEMS.** All carpet installed in the building interior shall meet the requirements of the California Department of Public Health, "Standard Method for the Testing and Evaluation of Volatile Organic Chemical Emissions from Indoor Sources Using Environmental Chambers," Version 1.2, January 2017 (Emission testing method for California Specification 01350)

See California Department of Public Health's website for certification programs and testing labs.

https://www.cdph.ca.gov/Programs/CCDPHP/DEODC/EHLB/IAQ/Pages/VOC.aspx.

X ☐ GC **4.504.3.1 Carpet cushion.** All carpet cushion installed in the building interior shall meet the requirements of the California Department of Public Health, "Standard Method for the Testing and Evaluation of Volatile Organic Chemical Emissions from Indoor Sources Using Environmental Chambers," Version 1.2, January 2017 (Emission testing method for California Specification 01350)

See California Department of Public Health's website for certification programs and testing labs.

https://www.cdph.ca.gov/Programs/CCDPHP/DEODC/EHLB/IAQ/Pages/VOC.aspx.

X ☐ GC **4.504.3.2 Carpet adhesive.** All carpet adhesive shall meet the requirements of Table 4.504.1.

X ☐ GC **4.504.4 RESILIENT FLOORING SYSTEMS.** Where resilient flooring is installed , at least 80% of floor area receiving resilient flooring shall meet the requirements of the California Department of Public Health, "Standard Method for the Testing and Evaluation of Volatile Organic Chemical Emissions from Indoor Sources Using Environmental Chambers," Version 1.2, January 2017 (Emission testing method for California Specification 01350)

See California Department of Public Health's website for certification programs and testing labs.

hhttps://www.cdph.ca.gov/Programs/CCDPHP/DEODC/EHLB/IAQ/Pages/VOC.aspx.

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

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

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

4.505 INTERIOR MOISTURE CONTROL

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

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

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

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

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

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

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

4.506 INDOOR AIR QUALITY AND EXHAUST

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

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

Notes:

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

4.507 ENVIRONMENTAL COMFORT

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

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

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

X ☐ GC

CHAPTER 7
INSTALLER & SPECIAL INSPECTOR QUALIFICATIONS

702 QUALIFICATIONS

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

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

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

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

Notes:

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

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

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

703 VERIFICATIONS

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

MANUAL LABOR

375 EAST MAIN STREET
VENTURA, CA, 93001

805 628 3382

PROJECT NAME

230 WEST SOLA REMODEL

230 WEST SOLA STREET
SANTA BARBARA, CA 93101

#	DRAWING ISSUED	DATE
	PC #1	06.23.26

SHEET NAME

CAL GREEN

SHEET INFORMATION

DRAWN BY: AS

SCALE: AS NOTED

PLAN NORTH:

TRUE NORTH:

SHEET NUMBER

a0.21

PRINTED: 8/30/2026 11:11:09 AM PROJECT NUMBER: 24029 INCLUDED DRAWINGS, SPECIFICATIONS, IDEAS & DESIGNS SHALL REMAIN THE PROPERTY OF MANUAL LABOR & SHALL NOT BE DISTRIBUTED OR USED FOR ANY WORK OTHER THAN THE PROJECT FOR WHICH THEY WERE PREPARED WITHOUT WRITTEN CONSENT

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GENERAL INFORMATION					
01	Project Name	230 W. Sola Unit B Residence			
02	Run Title	Title 24 Analysis			
03	Project Location	230 W. Sola St			
04	City	Santa Barbara	05	Standards Version	2025
06	Zip code	93101	07	Software Version	CBECC 2025.2.1
08	Climate Zone	6	09	Front Orientation (deg/ Cardinal)	130
10	Building Type	Single family	11	Number of Dwelling Units	1
12	Project Scope	Addition and/or Alteration	13	Number of Bedrooms	3
14	Addition Cond. Floor Area (ft²)	327	15	Number of Stories	1
16	Existing Cond. Floor Area (ft²)	685	17	Fenestration Average U-factor	0.4
18	Total Cond. Floor Area (ft²)	1012	19	Glazing Percentage (%)	20.05%
20	ADU Bedroom Count	n/a	21	ADU Conditioned Floor Area	n/a
22	Fuel Type	Natural gas	23	No Dwelling Unit:	No

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

REQUIRED SPECIAL FEATURES
The following are features that must be installed as condition for meeting the modeled energy performance for this computer analysis.
• NO SPECIAL FEATURES REQUIRED

ECC FEATURE SUMMARY

The following is a summary of the features that must be field-verified by a certified ECC Rater as a condition for meeting the modeled energy performance for this computer analysis. Additional detail is provided in the building tables below. Registered CF2Rs and CF3Rs are required to be completed in the ECC Registry

- Kitchen range hood
- Minimum Airflow
- Fan Efficacy Watts/CFM
- Verified heat pump rated heating capacity
- Duct leakage testing

Compliance Summary

	Long Term System Cost (LSC)[1]		Source Energy Use	Peak Cooling**
	Efficiency[2] ($/ft²-yr)	Total[3] ($/ft²-yr)	Total[3] (kBtu/ft²-yr)	Electricity (kWh)
Standard Design	24.77	n/a	n/a	n/a
Proposed Design	22.23	n/a	n/a	n/a
Compliance Margins	2.54	n/a	n/a	n/a
	Pass			

RESULT*: Complies

[1]Long-term System Cost (LSC) is a 30-year present value cost to California's energy system. LSC is not a predicted utility bill.
[2]Efficiency measures include energy efficient improvements such as better building envelope and more efficient mechanical equipment
[3]Total includes the sum of efficiency measures, solar photovoltaic (PV) measures and battery storage measures
* Building complies when Proposed Design is equal to or less than Standard Design in all applicable compliance categories
** Peak cooling target represents 120% of the standard design building peak cooling energy use.

Standard Design PV Capacity: 0.00 kWdc

LSC AND SOURCE ENERGY COMPLIANCE RESULTS FOR PERFORMANCE COMPONENTS

Energy Use	Standard Design Source Energy (kBtu/ft²-yr)	Standard Design LSC[1] ($/ft²-yr)	Proposed Design Source Energy (kBtu/ft²-yr)	Proposed Design LSC[1] ($/ft²-yr)	Compliance Margin Source (kBtu/ft²-yr)	Compliance Margin LSC[1] ($/ft²-yr)
Space Heating	0	1.07	0	1.21	0	-0.14
Space Cooling	0	1.57	0	2.69	0	-1.12
IAQ Ventilation	0	0	0	0	0	0
Water Heating	0	22.13	0	18.33	0	3.8
Self Utilization/Flexibility Credit	n/a	n/a	n/a	0	n/a	0
Efficiency Compliance Total	**0**	**24.77**	**0**	**22.23**	**0**	**2.54**
Photovoltaics And Battery	n/a	n/a	n/a	0	n/a	0
Flexibility	n/a	n/a	n/a	n/a	n/a	n/a
Indoor Lighting	0	1.99	0	1.99	n/a	0
Appl. & Cooking	0	11.96	0	11.99	n/a	-0.03
Plug Loads	0	13.81	0	13.81	n/a	0
Outdoor Lighting	0	0.45	0	0.45	n/a	0
TOTAL COMPLIANCE	**0**	**52.98**	**0**	**50.47**	**2.51**	

ENERGY USE INTENSITY

	Standard Design (kBtu/ft² - yr)	Proposed Design (kBtu/ft² - yr)	Margin (kBtu/ft² - yr)	Margin Percentage
Gross EUI[1]	33.95	31.53	2.42	7.13
Net EUI[2]	33.95	31.53	2.42	7.13

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

BUILDING - FEATURES INFORMATION

01	02	03	04	05	06	07
Project Name	Conditioned Floor Area (ft²)	Number of Dwelling Units	Number of Bedrooms	Number of Zones	Number of Ventilation Cooling Systems	Number of Water Heating Systems
230 W. Sola Unit B Residence	1012	1	3	2	0	1

ZONE INFORMATION

01	02	03	04	05	06	07
Zone Name	Zone Type	HVAC System Name	Zone Floor Area (ft²)	Avg. Ceiling Height	Water Heating System 1	Status
House	Conditioned	HVAC new	685	8	DHW alt	Existing Unchanged
Addition	Conditioned	HVAC new	327	8	DHW alt	New

OPAQUE SURFACES SUMMARY

01	02	03	04	05	06	07	08	09	10	11
Name	Zone	Construction	Azimuth	Orientation	Gross Area (ft²)	Window and Door Area (ft2)	Tilt (deg)	Wall Exceptions	Status	Verified Existing Condition
Ex Wall F	House	Wall ex	130	Front	42	20	90	none	Existing	No
Ex Wall L	House	Wall ex	220	Left	120	34.1	90	none	Existing	No
Ex Wall R	House	Wall ex	40	Right	18	0	90	none	Existing	No
Alt Wall F	House	Wall alt	130	Front	28	15	90	none	Altered	No

OPAQUE SURFACES SUMMARY

01	02	03	04	05	06	07	08	09	10	11
Name	Zone	Construction	Azimuth	Orientation	Gross Area (ft²)	Window and Door Area (ft2)	Tilt (deg)	Wall Exceptions	Status	Verified Existing Condition
Add Wall F	Addition	Wall new 2x6	130	Front	44	15	90	Extension	New	n/a
Add Wall L	Addition	Wall new 2x6	220	Left	146	30	90	none	New	n/a
Add Wall B	Addition	Wall new 2x6	310	Back	149	28.8	90	none	New	n/a
Add Wall R	Addition	Wall new 2x6	40	Right	266	80	90	none	New	n/a
Add Wall F-2	Addition	Wall new 2x6	130	Front	69	0	90	none	New	n/a
Interior WallToAdd	House>>Additio n	Wall Int ex	n/a	n/a	544	0	n/a	n/a	New	n/a
Interior WallToOther-ex	House	Wall Int ex	n/a	n/a	159	0	n/a	n/a	Existing	No
Interior WallToOther-n	Addition	Wall Int R0	n/a	n/a	174	0	n/a	n/a	New	n/a
Ceiling alt	House	Ceiling attic alt	n/a	n/a	685	n/a	n/a	n/a	Altered	No
Ceiling n	Addition	Ceiling attic new	n/a	n/a	352	n/a	n/a	n/a	New	n/a
Floor Over Crawlspace ex	House	Floor crawl ex	n/a	n/a	685	n/a	n/a	n/a	Existing	No
Floor Over Crawlspace n	Addition	Floor crawl new	n/a	n/a	327	n/a	n/a	n/a	New	n/a

ATTIC

01	02	03	04	05	06	07	08a	09	10
Name	Construction	Type	Roof Rise (x in 12)	CRRC Rated Roof Reflectance	CRRC Rated Roof Emittance	Radiant Barrier	Above Roof Deck Air Gap	Status	Verified Existing Condition
Attic alt	Roof alt	Ventilated	3.5	0.1	0.85	No	No	Altered	No
Attic n	Roof n	Ventilated	3.5	0.1	0.85	No	No	New	n/a

FENESTRATION / GLAZING

01	02	03	04	05	06	07	08	09	10	11	12	13
Name	Type	Surface	Orientation	Azimuth	Mult.	Area (ft²)	U-factor	SHGC	Rating Source	Exception to 150.0 (q)*	Status	Verified Existing Condition
11-Wind-alt	Window	Ex Wall L	Left	220	1	9	0.4	0.43	NFRC	☐	Altered	No
12-Wind-alt	Window	Ex Wall L	Left	220	1	5	0.4	0.43	NFRC	☐	Altered	No
O-GlDoor-n	Window	Ex Wall L	Left	220	1	20.1	0.4	0.43	NFRC	☐	New	NA
24-Wind-n	Window	Alt Wall F	Front	130	1	15	0.4	0.43	NFRC	☐	New	NA
23-Wind-n	Window	Add Wall F	Front	130	1	15	0.4	0.43	NFRC	☐	New	NA
13-Wind-n	Window	Add Wall L	Left	220	1	15	0.4	0.43	NFRC	☐	New	NA
14-Wind-n	Window	Add Wall L	Left	220	1	15	0.4	0.43	NFRC	☐	New	NA
15-Wind-n	Window	Add Wall B	Back	310	1	13.8	0.4	0.43	NFRC	☐	New	NA
17-Wind-n	Window	Add Wall B	Back	310	1	15	0.4	0.43	NFRC	☐	New	NA
16-Wind-n	Window	Add Wall R	Right	40	1	15	0.4	0.43	NFRC	☐	New	NA
18-Wind-n	Window	Add Wall R	Right	40	1	15	0.4	0.43	NFRC	☐	New	NA
19-Wind-n	Window	Add Wall R	Right	40	1	15	0.4	0.43	NFRC	☐	New	NA
20-Wind-n	Window	Add Wall R	Right	40	1	5	0.4	0.43	NFRC	☐	New	NA
21-Wind-n	Window	Add Wall R	Right	40	1	15	0.4	0.43	NFRC	☐	New	NA
22-Wind-n	Window	Add Wall R	Right	40	1	15	0.4	0.43	NFRC	☐	New	NA

*Project includes fenestration not subject to maximum U-factor requirement per Exception 1 / Exception 2 / Exception 3 to Section 150.0(q).

Total North Facing Fenestration	80

FENESTRATION / GLAZING

01	02	03	04	05	06	07	08	09	10	11	12	13
Name	Type	Surface	Orientation	Azimuth	Mult.	Area (ft²)	U-factor	SHGC	Rating Source	Exception to 150.0 (q)*	Status	Verified Existing Condition
Total East Facing Fenestration						30						
Total South Facing Fenestration						64.1						
Total West Facing Fenestration						28.8						

OPAQUE DOORS

01	02	03	04	05	06	07
Name	Side of Building	Area (ft²)	U-factor	Status	Verified Existing Condition	NFRC Rating Req.
Entry-ex	Ex Wall F	20	0.5	Existing	No	No

OPAQUE SURFACE CONSTRUCTIONS

01	02	03	04	05	06	07	08	09
Construction Name	Surface Type	Construction Type	Framing	Total Cavity R-value	Interior / Exterior Continuous R-value	U-factor	Assembly Layers	Non-Std Spray Foam
Wall ex	Exterior Walls	Wood Framed Wall	2x4 @ 16 in. O. C.	R-0	None / None	0.387	Inside Finish: Gypsum Board Cavity / Frame: no insul. / 2x4	☐

OPAQUE SURFACE CONSTRUCTIONS

01	02	03	04	05	06	07	08	09
Construction Name	Surface Type	Construction Type	Framing	Total Cavity R-value	Interior / Exterior Continuous R-value	U-factor	Assembly Layers	Non-Std Spray Foam
Wall new 2x6	Exterior Walls	Wood Framed Wall	2x6 @ 16 in. O. C.	R-21	None / None	0.065	Inside Finish: Gypsum Board Cavity / Frame: R-21 / 2x6 Sheathing / Insulation: Wood Siding/sheathing/decking Exterior Finish: 3 Coat Stucco	☐
Wall alt	Exterior Walls	Wood Framed Wall	2x6 @ 16 in. O. C.	R-21	None / None	0.065	Inside Finish: Gypsum Board Cavity / Frame: R-21 / 2x6 Sheathing / Insulation: Wood Siding/sheathing/decking Exterior Finish: 3 Coat Stucco	☐
Wall Int ex	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	☐
Wall Int R0	Interior Walls	Wood Framed Wall	2x6 @ 16 in. O. C.	R-0	None / None	0.266	Inside Finish: Gypsum Board Cavity / Frame: no insul. / 2x6 Other Side Finish: Gypsum Board	☐

OPAQUE SURFACE CONSTRUCTIONS

01	02	03	04	05	06	07	08	09
Construction Name	Surface Type	Construction Type	Framing	Total Cavity R-value	Interior / Exterior Continuous R-value	U-factor	Assembly Layers	Non-Std Spray Foam
Roof alt	Attic Roofs	Wood Framed Ceiling	2x4 @ 16 in. O. C.	R-0	None / None	0.629	Roofing: Light Roof (Asphalt Shingle) Roof Deck: Wood Siding/sheathing/decking Cavity / Frame: no insul. / 2x4	☐
Roof n	Attic Roofs	Wood Framed Ceiling	2x4 @ 16 in. O. C.	R-0	None / None	0.629	Roofing: Light Roof (Asphalt Shingle) Roof Deck: Wood Siding/sheathing/decking Cavity / Frame: no insul. / 2x4	☐
Floor crawl ex	Floors Over Crawlspace	Wood Framed Floor	2x6 @ 16 in. O. C.	R-0	None / None	0.22	Floor Surface: Carpeted Floor Deck: Wood Siding/sheathing/decking Cavity / Frame: no insul. / 2x6	☐
Floor crawl new	Floors Over Crawlspace	Wood Framed Floor	2x6 @ 16 in. O. C.	R-19	None / None	0.049	Floor Surface: Carpeted Floor Deck: Wood Siding/sheathing/decking Cavity / Frame: R-19 / 2x6	☐

MANUAL LABOR
375 EAST MAIN STREET
VENTURA, CA, 93001
805 628 3382

PROJECT NAME

230 WEST SOLA REMODEL

230 WEST SOLA STREET
SANTA BARBARA, CA 93101

#	DRAWING ISSUED	DATE
	PC #1	06.23.26
1	PC #2	08.14.26

SHEET NAME

ENERGY ANALYSIS

SHEET INFORMATION

DRAWN BY: AS
SCALE: AS NOTED
PLAN NORTH:
TRUE NORTH:

SHEET NUMBER

a0.30

PRINTED: 8/30/2026 11:11:12 AM PROJECT NUMBER: 24029
INCLUDED DRAWINGS, SPECIFICATIONS, IDEAS & DESIGNS SHALL REMAIN THE PROPERTY OF MANUAL LABOR & SHALL NOT BE DISTRIBUTED OR USED FOR ANY WORK OTHER THAN THE PROJECT FOR WHICH THEY WERE PREPARED WITHOUT WRITTEN CONSENT

OPAQUE SURFACE CONSTRUCTIONS

01	02	03	04	05	06	07	08	09
Construction Name	Surface Type	Construction Type	Framing	Total Cavity R-value	Interior / Exterior Continuous R-value	U-factor	Assembly Layers	Non-Std Spray Foam
Ceiling attic new	Ceilings (below attic)	Wood Framed Ceiling	2x4 @ 16 in. O. C.	R-30	None / None	0.032	Over Ceiling Joists: R-20.9 insul. Cavity / Frame: R-9.1 / 2x4 Inside Finish: Gypsum Board	☐
Ceiling attic alt	Ceilings (below attic)	Wood Framed Ceiling	2x4 @ 16 in. O. C.	R-30	None / None	0.032	Over Ceiling Joists: R-20.9 insul. Cavity / Frame: R-9.1 / 2x4 Inside Finish: Gypsum Board	☐

WATER HEATING SYSTEMS

01	02	03	04	05	06	07	08	09	10	11	12
Name	System Type	Distribution Type	Water Heater Name	Number of Units	Solar Heating System	Compact Distribution	ECC Verification	Water Heater Name (#)	Status	Verified Existing Condition	Existing Water Heating System
DHW alt	Domestic Hot Water (DHW)	Standard	Gas Storage	1	n/a	None	n/a	Gas Storage (1)	Altered	No	n/a

WATER HEATERS

01	02	03	04	05	06	07	08	09	10	11	12	13	14	15
Name	Heating Element Type	Tank Type	# of Units	Tank Vol. (gal)	Heating Efficiency Type	Efficiency	Rated Input Type	Input Rating or Pilot	Tank Insulation R-value (Int/Ext)	Standby Loss or Recovery Eff	1st Hr. Rating or Flow Rate	Tank Location	Status	Verified Existing Condition
Gas Storage	Gas	Consumer Storage	1	55	UEF	0.62	Btu/Hr	75000	0	80	97	n/a	Altered	No

HVAC - HEAT PUMPS

01	02	03	04	05	06	06b	07	08	09	10	11	12	13	14	15
			Heating					Cooling							
Name	System Type	Number of Units	Heating Efficiency Type	HSPF/HSP F2/COP	Cap 47	Cap 17	Backup	Cooling Efficiency Type	SEER/SEE R2	EER/EER2/ CEER	Airflow Target	Fan Power (Watts/CF M)	Variable Speed	Status	Verified Existing Condition
Heat Pump System 1	Central split HP	1	HSPF2	7.5	24000	18000		EER2/SEER 2	14.3	11.7	350	0.45	☐	New	No

HVAC - DISTRIBUTION SYSTEMS

01	02	03	04	05	06	07	08	09	10	11
			Duct Ins. R-value		Duct Location					
Name	Type	Design Type	Supply/Return		Supply	Return	Status	Verified Existing Condition	Existing Distribution system	New Ducts >= 25 ft
Duct new	Unconditioned attic	Non-Verified	R-6		Attic	Attic	New	n/a	n/a	n/a

DOCUMENTATION AUTHOR'S DECLARATION STATEMENT

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

Documentation Author Name: Igor Pichko	Documentation Author Signature: Igor Pichko
Company: Energy Consult LLC	Signature Date: 08/14/2026
Address: 905 Paseo Pacifico	CEA/AEA/ECC Certification Identification (if applicable): R22-14-40027
City/State/Zip: Atascadero, CA 93422	Phone: (310) 356-8144

RESPONSIBLE PERSON'S DECLARATION STATEMENT

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

1. The information provided on this Certificate of Compliance is true and correct.
2. I am eligible under Division 3 of the Business and Professions Code to accept responsibility for the building design or system design identified on this Certificate of Compliance (responsible designer).
3. The energy features and performance specifications, materials, components, and manufactured devices for the building design or system design identified on this Certificate of Compliance conform to the requirements of Title 24, Part 1 and Part 6 of the California Code of Regulations.
4. 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.
5. I understand that a registered copy of this Certificate of Compliance shall be made available with the building permit(s) issued for the building and shall be made available to the enforcement agency for all applicable inspections. I will take the necessary steps to fulfill this requirement.
6. I understand that a registered copy of this Certificate of Compliance is required to be included with the documentation the builder provides to the building owner at occupancy. I will take the necessary steps to fulfill this requirement.

Responsible Designer Name: Noah Greer	Responsible Designer Signature: Noah Greer
Company: Manual Labor	Date Signed: 08/14/2026
Address: 1326 Ninth Street	License: C-38435
City/State/Zip: Berkeley, CA 94710	Phone: (805) 451-2134

Digitally signed by California Home Energy Efficiency Rating Services (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.

GENERAL INFORMATION

01	Project Name	230 W. Sola Unit C Residence			
02	Run Title	Title 24 Analysis			
03	Project Location	230 W. Sola St			
04	City	Santa Barbara	05	Standards Version	2025
06	Zip code	93101	07	Software Version	CBECC 2025.2.1
08	Climate Zone	6	09	Front Orientation (deg/ Cardinal)	310
10	Building Type	Single family	11	Number of Dwelling Units	1
12	Project Scope	Addition and/or Alteration	13	Number of Bedrooms	1
14	Addition Cond. Floor Area (ft²)	0	15	Number of Stories	1
16	Existing Cond. Floor Area (ft²)	493	17	Fenestration Average U-factor	0.4
18	Total Cond. Floor Area (ft²)	493	19	Glazing Percentage (%)	26.66%
20	ADU Bedroom Count	n/a	21	ADU Conditioned Floor Area	n/a
22	Fuel Type	Natural gas	23	No Dwelling Unit:	No

COMPLIANCE RESULTS

Building Complies with Computer Performance
Building does not require field testing or ECC verification
This building incorporates one or more Special Features shown below

REQUIRED SPECIAL FEATURES

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

- No cooling system included

ECC FEATURE SUMMARY

The following is a summary of the features that must be field-verified by a certified ECC Rater as a condition for meeting the modeled energy performance for this computer analysis. Additional detail is provided in the building tables below. Registered CF2Rs and CF3Rs are required to be completed in the ECC Registry

Compliance Summary

	Long Term System Cost (LSC)[1]		Source Energy Use	Peak Cooling**
	Efficiency[2] ($/ft²-yr)	Total[3] ($/ft²-yr)	Total[3] (kBtu/ft²-yr)	Electricity (kWh)
Standard Design	52.35	n/a	n/a	n/a
Proposed Design	44.76	n/a	n/a	n/a
Compliance Margins	7.59	n/a	n/a	n/a
	Pass			

RESULT*: Complies

[1]Long-term System Cost (LSC) is a 30-year present value cost to California's energy system. LSC is not a predicted utility bill.
[2]Efficiency measures include energy efficient improvements such as better building envelope and more efficient mechanical equipment
[3]Total includes the sum of efficiency measures, solar photovoltaic (PV) measures and battery storage measures
* Building complies when Proposed Design is equal to or less than Standard Design in all applicable compliance categories
** Peak cooling target represents 120% of the standard design building peak cooling energy use.

Standard Design PV Capacity: 0.00 kWdc

LSC AND SOURCE ENERGY COMPLIANCE RESULTS FOR PERFORMANCE COMPONENTS

Energy Use	Standard Design Source Energy (kBtu/ft² -yr)	Standard Design LSC[1] ($/ft² -yr)	Proposed Design Source Energy (kBtu/ft² -yr)	Proposed Design LSC[1] ($/ft² -yr)	Compliance Margin Source (kBtu/ft² -yr)	Compliance Margin LSC[1] ($/ft² -yr)
Space Heating	0	6.81	0	6.8	0	0.01
Space Cooling	0	5.89	0	6.47	0	-0.58
IAQ Ventilation	0	0	0	0	0	0
Water Heating	0	39.65	0	31.49	0	8.16
Self Utilization/Flexibility Credit	n/a	n/a	n/a	0	n/a	0
Efficiency Compliance Total	**0**	**52.35**	**0**	**44.76**	**0**	**7.59**
Photovoltaics And Battery	n/a	n/a	n/a	0	n/a	0
Flexibility	n/a	n/a	n/a	n/a	n/a	n/a
Indoor Lighting	0	2.74	0	2.74	n/a	0
Appl. & Cooking	0	17.81	0	17.82	n/a	-0.01
Plug Loads	0	18.7	0	18.7	n/a	0
Outdoor Lighting	0	0.51	0	0.51	n/a	0
TOTAL COMPLIANCE	**0**	**92.11**	**0**	**84.53**	**7.58**	

ENERGY USE INTENSITY

	Standard Design (kBtu/ft² - yr)	Proposed Design (kBtu/ft² - yr)	Margin (kBtu/ft² - yr)	Margin Percentage
Gross EUI[1]	64.79	58.36	6.43	9.92
Net EUI[2]	64.79	58.36	6.43	9.92

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

BUILDING - FEATURES INFORMATION

01	02	03	04	05	06	07
Project Name	Conditioned Floor Area (ft²)	Number of Dwelling Units	Number of Bedrooms	Number of Zones	Number of Ventilation Cooling Systems	Number of Water Heating Systems
230 W. Sola Unit C Residence	493	1	1	1	0	1

ZONE INFORMATION

01	02	03	04	05	06	07
Zone Name	Zone Type	HVAC System Name	Zone Floor Area (ft²)	Avg. Ceiling Height	Water Heating System 1	Status
House	Conditioned	HVAC ex	493	8	DHW alt	Existing Unchanged

OPAQUE SURFACES SUMMARY

01	02	03	04	05	06	07	08	09	10	11
Name	Zone	Construction	Azimuth	Orientation	Gross Area (ft²)	Window and Door Area (ft2)	Tilt (deg)	Wall Exceptions	Status	Verified Existing Condition
Ex Wall F	House	Wall ex	310	Front	176	44	90	none	Existing	No
Ex Wall L	House	Wall ex	40	Left	176	67.2	90	none	Existing	No
Ex Wall B	House	Wall ex	130	Back	176	7.5	90	none	Existing	No
Ex Wall R	House	Wall ex	220	Right	176	29.75	90	none	Existing	No
Ceiling ex	House	Ceiling attic ex	n/a	n/a	493	n/a	n/a	n/a	Existing	No

OPAQUE SURFACES SUMMARY

01	02	03	04	05	06	07	08	09	10	11
Name	Zone	Construction	Azimuth	Orientation	Gross Area (ft²)	Window and Door Area (ft2)	Tilt (deg)	Wall Exceptions	Status	Verified Existing Condition
Interior Floor to other-ex	House	Floor Int ex	n/a	n/a	493	n/a	n/a	n/a	Existing	No

ATTIC

01	02	03	04	05	06	07	08a	09	10
Name	Construction	Type	Roof Rise (x in 12)	CRRC Rated Roof Reflectance	CRRC Rated Roof Emittance	Radiant Barrier	Above Roof Deck Air Gap	Status	Verified Existing Condition
Attic ex	Roof ex	Ventilated	4	0.1	0.85	No	No	Existing	No

FENESTRATION / GLAZING

01	02	03	04	05	06	07	08	09	10	11	12	13
Name	Type	Surface	Orientation	Azimuth	Mult.	Area (ft²)	U-factor	SHGC	Rating Source	Exception to 150.0 (q)*	Status	Verified Existing Condition
32-Wind-ex	Window	Ex Wall F	Front	310	1	13.5	1.28	0.8	Table 110.6-B	☐	Existing	No
33-Wind-ex	Window	Ex Wall F	Front	310	1	13.5	1.28	0.8	Table 110.6-B	☐	Existing	No
27-Wind-ex	Window	Ex Wall L	Left	40	1	13.5	1.28	0.8	Table 110.6-B	☐	Existing	No
28-Wind-ex	Window	Ex Wall L	Left	40	1	13.5	1.28	0.8	Table 110.6-B	☐	Existing	No
FF-GlDoor-n	Window	Ex Wall L	Left	40	1	40.2	0.4	0.67	NFRC	☐	New	NA
35-Wind-alt	Window	Ex Wall B	Back	130	1	7.5	0.4	0.67	NFRC	☐	Altered	No

FENESTRATION / GLAZING

01	02	03	04	05	06	07	08	09	10	11	12	13
Name	Type	Surface	Orientation	Azimuth	Mult.	Area (ft²)	U-factor	SHGC	Rating Source	Exception to 150.0 (q)*	Status	Verified Existing Condition
29-Wind-ex	Window	Ex Wall R	Right	220	1	8.75	1.28	0.8	Table 110.6-B	☐	Existing	No
30-Wind-ex	Window	Ex Wall R	Right	220	1	7.5	1.28	0.8	Table 110.6-B	☐	Existing	No
31-Wind-ex	Window	Ex Wall R	Right	220	1	13.5	1.28	0.8	Table 110.6-B	☐	Existing	No

*Project includes fenestration not subject to maximum U-factor requirement per Exception 1 / Exception 2 / Exception 3 to Section 150.0(a).

Total North Facing Fenestration	67.2
Total East Facing Fenestration	7.5
Total South Facing Fenestration	29.75
Total West Facing Fenestration	27

OPAQUE DOORS

01	02	03	04	05	06	07
Name	Side of Building	Area (ft²)	U-factor	Status	Verified Existing Condition	NFRC Rating Req.
Entry-ex	Ex Wall F	17	0.5	Existing	No	No

MANUAL LABOR
375 EAST MAIN STREET
VENTURA, CA, 93001
805 628 3382

PROJECT NAME

230 WEST SOLA REMODEL

230 WEST SOLA STREET
SANTA BARBARA, CA 93101

#	DRAWING ISSUED	DATE
	PC #1	06.23.26
1	PC #2	08.14.26

SHEET NAME

ENERGY ANALYSIS

SHEET INFORMATION

DRAWN BY: AS
SCALE: AS NOTED
PLAN NORTH:
TRUE NORTH:

SHEET NUMBER

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OPAQUE SURFACE CONSTRUCTIONS

01	02	03	04	05	06	07	08	09
Construction Name	Surface Type	Construction Type	Framing	Total Cavity R-value	Interior / Exterior Continuous R-value	U-factor	Assembly Layers	Non-Std Spray Foam
Wall ex	Exterior Walls	Wood Framed Wall	2x4 @ 16 in. O. C.	R-0	None / None	0.387	Inside Finish: Gypsum Board Cavity / Frame: no insul. / 2x4	☐
Roof ex	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	☐
Ceiling attic ex	Ceilings (below attic)	Wood Framed Ceiling	2x4 Bottom Chord of Truss @ 24 in. O. C.	R-19	None / None	0.049	Over Ceiling Joists: R-9.9 insul. Cavity / Frame: R-9.1 / 2x4 Btm Chrd Inside Finish: Gypsum Board	☐
Floor Int ex	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	☐

WATER HEATING SYSTEMS

01	02	03	04	05	06	07	08	09	10	11	12
Name	System Type	Distribution Type	Water Heater Name	Number of Units	Solar Heating System	Compact Distribution	ECC Verification	Water Heater Name (#)	Status	Verified Existing Condition	Existing Water Heating System
DHW alt	Domestic Hot Water (DHW)	Standard	Gas Storage	1	n/a	None	n/a	Gas Storage (1)	Altered	No	n/a

WATER HEATERS

01	02	03	04	05	06	07	08	09	10	11	12	13	14	15
Name	Heating Element Type	Tank Type	# of Units	Tank Vol. (gal)	Heating Efficiency Type	Efficiency	Rated Input Type	Input Rating or Pilot	Tank Insulation R-value (Int/Ext)	Standby Loss or Recovery Eff	1st Hr. Rating or Flow Rate	Tank Location	Status	Verified Existing Condition
Gas Storage	Gas	Consumer Storage	1	55	UEF	0.62	Btu/Hr	75000	0	78	97	n/a	Altered	No

HVAC - HEATING UNIT TYPES

01	02	03	04	05	06
Name	System Type	Number of Units	Heating Efficiency	Status	Verified Existing Condition
Ex Furnace	Gas wall furnace	1	AFUE - 59	Existing	No

DOCUMENTATION AUTHOR'S DECLARATION STATEMENT

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

Documentation Author Name: Igor Pichko	Documentation Author Signature: Igor Pichko
Company: Energy Consult LLC	Signature Date: 08/14/2026
Address: 905 Paseo Pacifico	CEA/AEA/ECC Certification Identification (if applicable): R22-14-40027
City/State/Zip: Atascadero, CA 93422	Phone: (310) 356-8144

CABEC California Association of Building Energy Consultants CERTIFIED ENERGY ANALYST

RESPONSIBLE PERSON'S DECLARATION STATEMENT

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

1. The information provided on this Certificate of Compliance is true and correct.
2. I am eligible under Division 3 of the Business and Professions Code to accept responsibility for the building design or system design identified on this Certificate of Compliance (responsible designer).
3. The energy features and performance specifications, materials, components, and manufactured devices for the building design or system design identified on this Certificate of Compliance conform to the requirements of Title 24, Part 1 and Part 6 of the California Code of Regulations.
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Responsible Designer Name: Noah Greer	Responsible Designer Signature: Noah Greer
Company: Manual Labor	Date Signed: 08/14/2026
Address: 1326 Ninth Street	License: C-38435
City/State/Zip: Berkeley, CA 94710	Phone: (805) 451-2134

Digitally signed by California Home Energy Efficiency Rating Services (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.

MANUAL LABOR
375 EAST MAIN STREET
VENTURA, CA, 93001
805 628 3382

PROJECT NAME

230 WEST SOLA REMODEL

230 WEST SOLA STREET
SANTA BARBARA, CA 93101

#	DRAWING ISSUED	DATE
	PC #1	06.23.26
1	PC #2	08.14.26

SHEET NAME

ENERGY ANALYSIS

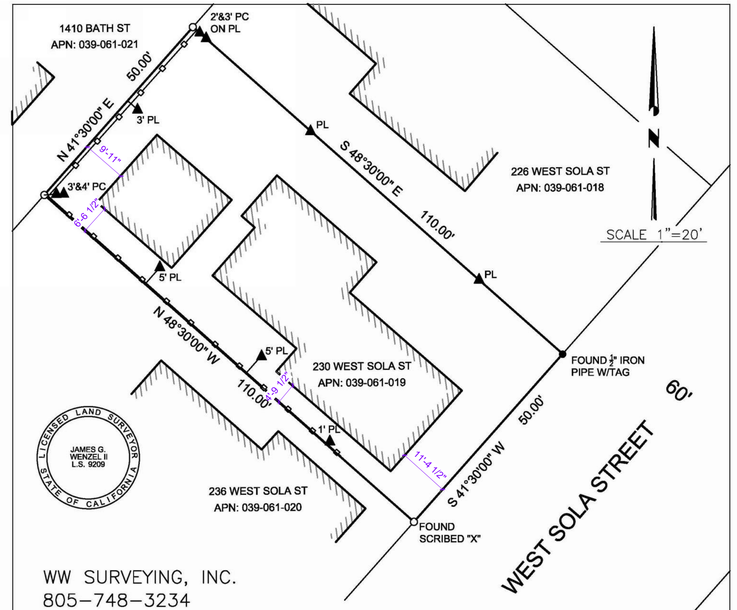
SHEET INFORMATION

DRAWN BY: AS
SCALE: AS NOTED
PLAN NORTH:
TRUE NORTH:

SHEET NUMBER

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WW SURVEYING, INC.
805-748-3234

LEGEND

R = BOOK 16 PAGE 137
M = MEASURED
● = FOUND MONUMENT PER R
○ = LOCATION OF MONUMENT PER R, NOT FOUND
▲ = SET POINT
=PROPERTY LINE
=FENCE
=BUILDING
PL =PROPERTY LINE
PC =PROPERTY CORNER

BASIS OF BEARINGS

THE BASIS OF BEARINGS FOR THIS SURVEY IS A LINE BETWEEN CITY MONUMENTS FOUND AT THE WESTERLY CORNERS OF SOLA/BATH STREETS AND SOLA/DE LA VINA STREETS, THE BEARING BEING N 41°30'00" E 522.46' R 522.99' M

LOCATION: 230 WEST SOLA STREET SANTA BARBARA, CA 93101 APN: 039-061-019	DRAWN BY: BS	CHECKED BY: JW
	SCALE: 1"=20'	
	DATE: OCTOBER 28, 2022	
	JOB NUMBER	SHEET
BOUNDARY SURVEY	S03981	1 OF 1

NOTE: DIMENSIONS ADDED BY ARCHITECT

1 SURVEY
1/16" = 1'-0"

MANUAL LABOR

375 EAST MAIN STREET
VENTURA, CA, 93001

805 628 3382

PROJECT NAME

230 WEST SOLA REMODEL

230 WEST SOLA STREET
SANTA BARBARA, CA 93101

#	DRAWING ISSUED	DATE
	PC #1	06.23.26
1	PC #2	08.14.26

SHEET NAME

SITE SURVEY

SHEET INFORMATION

DRAWN BY: AS
SCALE: AS NOTED
PLAN NORTH:
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SHEET NUMBER

a0.40

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DIMENSION PLAN NOTES

1. ONLY CORE LAYERS OF WALLS SHOWN. REFER TO WALL LEGEND AND SECTIONS FOR COMPLETE ASSEMBLIES.
2. ALL PLAN DIMENSIONS ARE TAKEN FROM EDGE OF STRUCTURAL COMPONENTS (E.G. STUDS, SHEATHING, SLAB, ETC.) UON.
3. "CLR" DIMENSIONS REFERENCE CLEAR DIMENSIONS TO FINISHES (NOT SHOWN).
4. EXTERIOR WALLS DIMENSIONED TO OUTSIDE OF SHEATHING, UON. INTERIOR WALLS DIMENSIONED TO SIDE OF STUD, UON.
5. SHEET a2.02, DIMENSION PLANS, OMITS WALL FINISHES

KEYNOTES

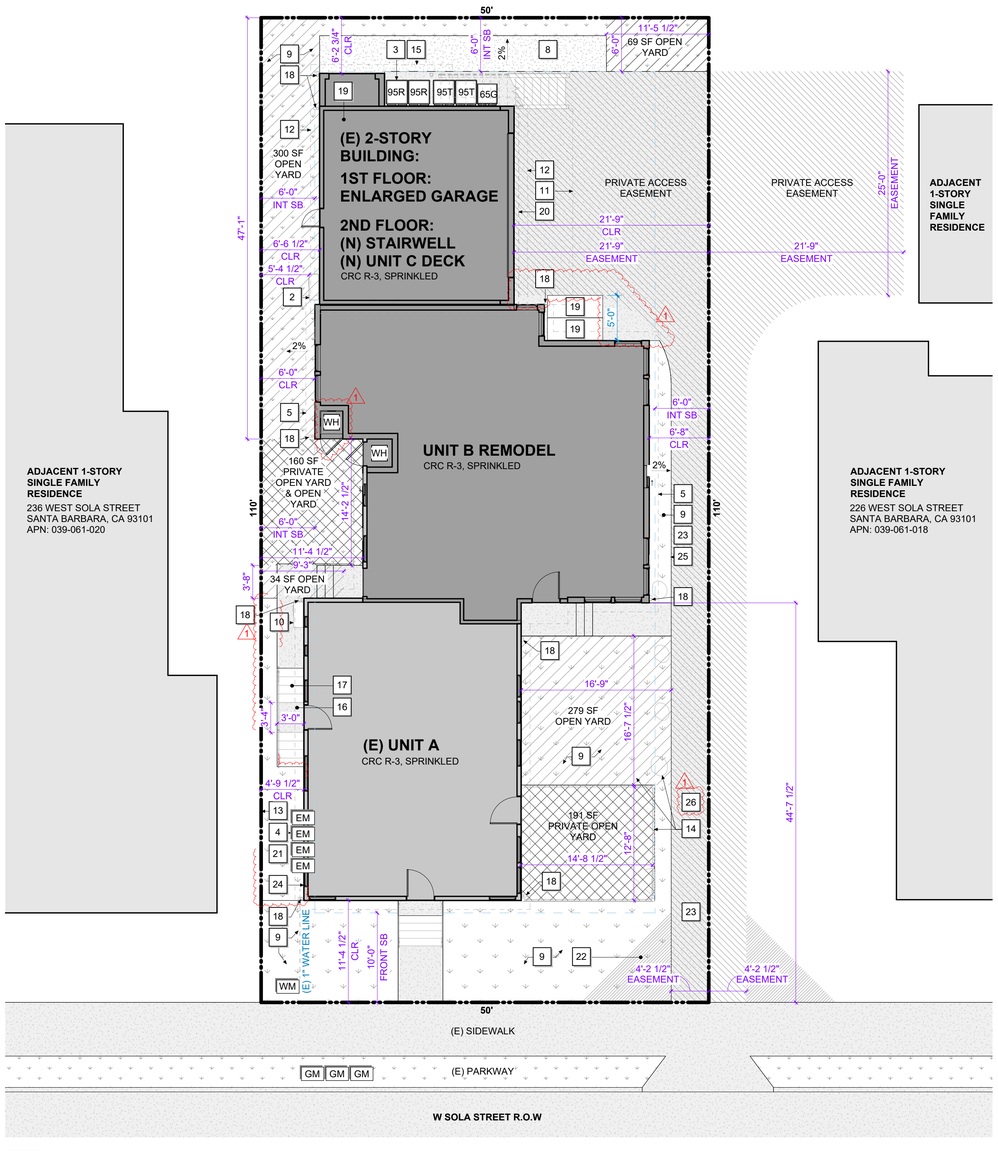
1	(E) ELECTRICAL METERS TO BE RELOCATED
2	(N) WALL MOUNTED MINI-SPLIT HEAT PUMP CONDENSOR TO SERVE UNIT B, EQUIPMENT IS MORE THAN 5FT FROM PROPERTY LINE AND OPERATES BETWEEN 51-54db
3	(N) TRASH, RECYCLE AND GREEN WASTE CONTAINER LOCATION
4	(N) ELECTRICAL METERS
5	(N) UNIT B ROOF OVERHANG ABOVE
6	(E) LANDING ABOVE
7	(E) BIKE PARKING TO BE DEMO'D & REPLACED
8	(N) PERMEABLE PAVERS
9	PLANTED AREA
10	(E) MINI-SPLIT HEAT PUMP CONDENSOR SERVING UNIT A TO REMAIN
11	(N) BALCONY ABOVE
12	(E) UNIT C ROOF OVERHANG ABOVE
13	(E) 6' WOOD FENCE
14	(E) FENCE, LANDSCAPING, AND BOULDERS PER BLD2023-01617
15	(N) UNIT C ROOF OVERHANG ABOVE
16	(E) LANDING IS 5 5/8" BELOW DOOR THRESHOLD
17	(E) STAIRS RISE: 5 1/2", RUN: 11 1/2"
18	DISCONNECTED DOWNSPOUT
19	(N) RELOCATED BIKE STORAGE - ONE COVERED BIKE STORAGE PER UNIT. 3RD BIKE PARKING IN GARAGE, SEE 1ST FLOOR PLAN.
20	FACE OF UNIT C ABOVE
21	(N) 9" DEEP DRYWELL (3/4" CRUSHED ROCK)
22	10'X10' SITE VISIBILITY TRIANGLE
23	ANY DAMAGE TO SHARED DRIVEWAY DURING CONSTRUCTION TO BE REPAIRED TO MATCH EXISTING. CLEAN SAWCUT JOINTS SHALL BE USED AT TRANSITIONS BTWN OLD AND NEW PAVING, AS NEEDED.
24	FIRE SPRINKLER SYSTEM EQUIPMENT AND RISER LOCATION
25	EDGE OF SHARED DRIVEWAY
26	(E) DRIVEWAY IS MADE OF CONCRETE

SITE PLAN LEGEND

- PROPERTY LINE
- SETBACK LINE
- TREE
- NEW CONSTRUCTION
- EXISTING BUILDINGS
- (E) NEIGHBORING BUILDINGS
- (N) IMPERMEABLE SURFACE
- (E) IMPERMEABLE SURFACE
- (N) DRYWELL
- WM WATER METER
- GM GAS METER
- EM ELECTRIC METER
- WH WATER HEATER
- FIRE HYDRANT
- SURFACE DRAINAGE DIRECTION
- PERMEABLE SURFACE
- OPEN YARD
- PRIVATE OPEN YARD OR POY+OY
- (E) LANDSCAPING
- (N) LANDSCAPING
- EASEMENT

SITE PLAN NOTES

1. PRESERVATION & USE OF AVAILABLE NATURAL RESOURCES SHALL BE ACCOMPLISHED THROUGH EVALUATION & CAREFUL PLANNING TO MIN NEGATIVE EFFECTS ON THE SITE & ADJACENT AREAS. PRESERVATION OF SLOPES, MANAGEMENT OF STORM WATER DRAINAGE & EROSION CONTROLS SHALL COMPLY W/ CALGREEN STANDARDS FOR SITE DEVELOPMENT.
2. DATUM ELEVATION OF +0'-0" SET AT PROPOSED STRUCTURAL FLOOR LEVEL (SFL) @ GROUND FLOOR. SEE FLOOR PLAN & ELEVATIONS FOR SFL, BUILDING DIMS & LAYOUT.
3. SURFACE DRAINAGE SHALL BE PROVIDED AT A MIN OF 6" W/IN FIRST 10 FEET AWAY FROM THE FOUNDATION LINE OF ANY STRUCTURE.
4. ALL TREES IN THE VICINITY OF THE WORK NOT IDENTIFIED TO BE REMOVED SHALL BE TEMPORARILY FENCED & PROTECTED AROUND THE DRIP LINE DURING GRADING & CONSTRUCTION OPERATIONS.



2 NEW SITE PLAN
1/8" = 1'-0"



1 EXISTING SITE PLAN
1/8" = 1'-0"

MANUAL LABOR
375 EAST MAIN STREET
VENTURA, CA, 93001
805 628 3382

PROJECT NAME

230 WEST SOLA REMODEL

230 WEST SOLA STREET
SANTA BARBARA, CA 93101

#	DRAWING ISSUED	DATE
	PC #1	06.23.26
1	PC #2	08.14.26

SHEET NAME

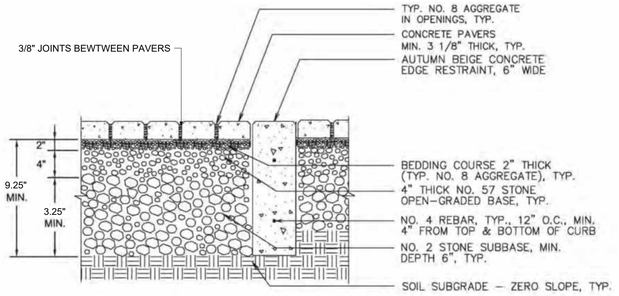
(E)/(N) SITE PLAN

SHEET INFORMATION

DRAWN BY: AS
SCALE: AS NOTED
PLAN NORTH:
TRUE NORTH:

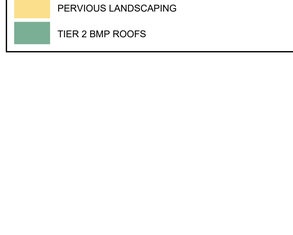
SHEET NUMBER

a1.00



NOTE:
- DEPTH OF NO. 2 STONE LAYER FOR HOLDING 1" OF RAIN IN 24 HOURS PER SQUARE FOOT IS 3.13 INCHES
- NO. 2 STONE LAYER SHOULD BE COMPACTED IN 4-6" LIFTS
- ALL BASE MATERIAL TO BE WASHED, OPEN-GRADED (NO SAND), CRUSHED (ANGULAR) AGGREGATE.
- SUBGRADE/NATIVE SOIL TO BE UNCOMPACTED
- NO FILTER FABRIC ALLOWED
- JOINTS BETWEEN PAVERS MUST BE 3/8". USE PAVERS WITH BUILT IN SPACING OR 3/8" SPACERS

5 PERMEABLE PAVERS
12" = 1'-0"



4 DISCONNECTED DOWNSPOUTS
1 1/2" = 1'-0"

SITE STORMWATER BMPs

STORMWATER BMPs (TIER 2):

DISCONNECTED DOWNSPOUTS TO LANDSCAPED AREAS. MIN 25% OF TRIBUTARY ROOF AREA IS REQUIRED.

ROOF "A":
319 SF
LANDSCAPE "A": 202 SF

ROOF "B":
584 SF
LANDSCAPE "B": 217 SF

ROOF "C":
369 SF
LANDSCAPE "C": 196 SF

TOTAL ROOF: 1250 SF
TOTAL ROOF DRAINED TO LANDSCAPED AREA: 615 SF

IMPERVIOUS & PERVIOUS AREAS

- REMOVED IMPERVIOUS
- REDEVELOPED IMPERVIOUS
- REDEVELOPED IMPERVIOUS (ROOF)
- NEW IMPERVIOUS (ROOF)
- IMPERVIOUS (H.SCAPE & STAIRS)
- PERVIOUS LANDSCAPING
- TIER 2 BMP ROOFS

SITE IMPERVIOUS & IMPERVIOUS

SITE COVERAGE:	EXISTING	PROPOSED
BUILDINGS (ROOFS)	2,470 SF	2,758 SF
IMPERMEABLE H.SCAPE & STAIRS	1,172 SF	1,057 SF
IMPERVIOUS SUBTOTAL	3,641 SF	3,815 SF
PERMEABLE (LANDSCAPING)	1,858 SF	1,572 SF
PERMEABLE H.SCAPE	0 SF	113 SF
PERVIOUS SUBTOTAL	1,858 SF	1,685 SF
TOTAL	5,500 SF	5,500 SF
% IMPERVIOUS / LOT AREA	66%	69%
(P) NEW IMPERVIOUS AREA (NOT INCL. ROOF)		0 SF
(P) NEW IMPERVIOUS AREA (ROOF)		273 SF
(P) REDEVELOPED IMPERVIOUS AREA (NOT INCL. ROOF) AND (AS BUILT) IMPERVIOUS AREA		64 SF
(P) REDEVELOPED IMPERVIOUS AREA (ROOF)		913 SF
TOTAL NEW/REDEVELOPED IMPERVIOUS AREA		**1250 SF**
(P) REMOVED IMPERVIOUS AREA		31 SF

SITE PLAN LEGEND

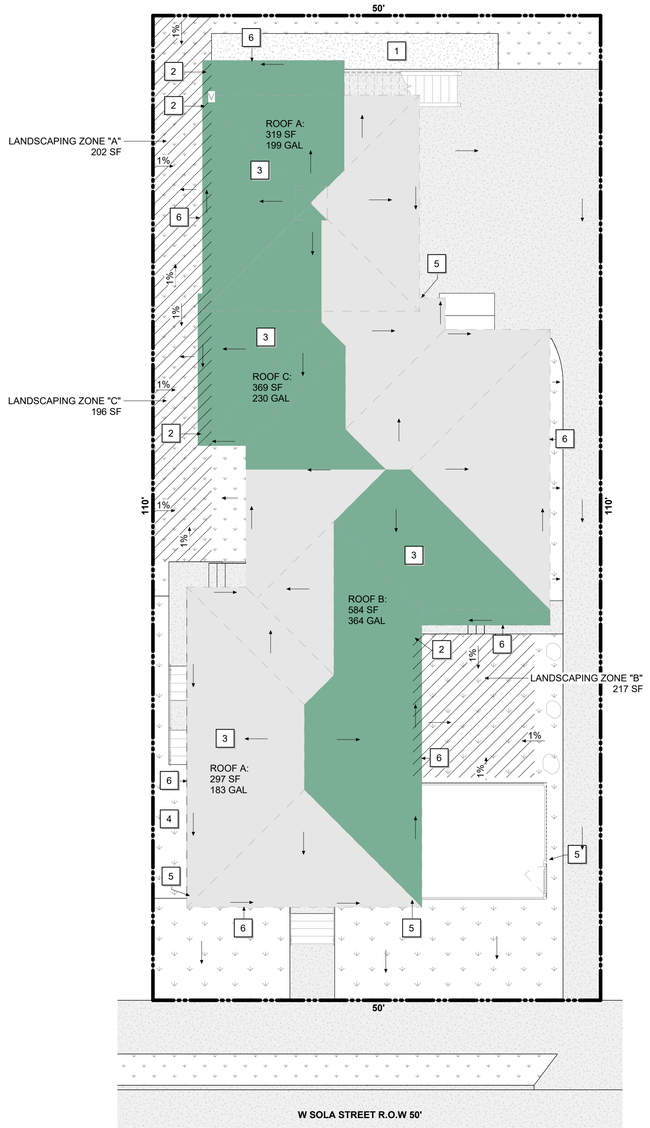
- PROPERTY LINE
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SITE PLAN NOTES

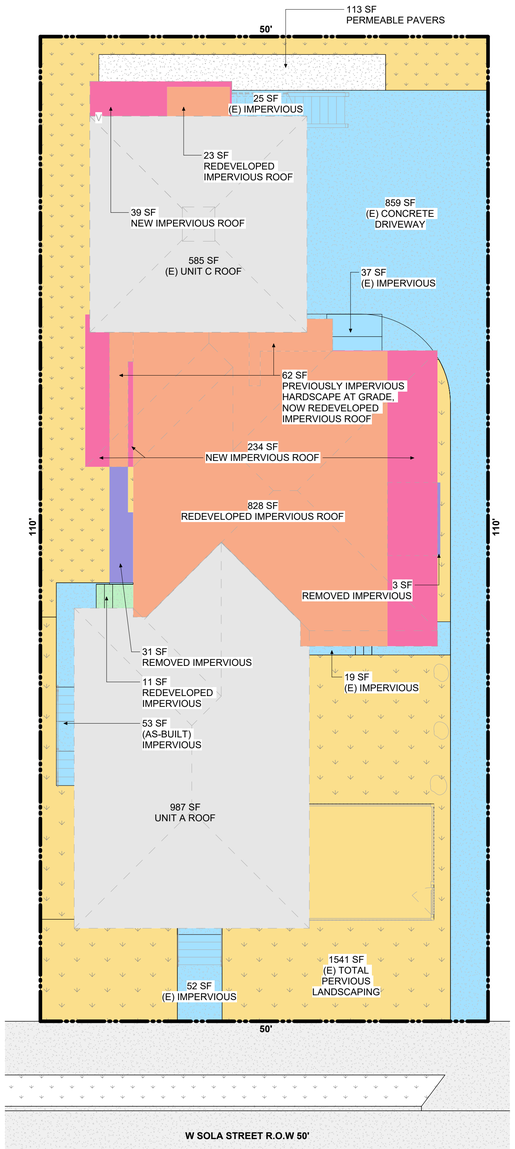
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KEYNOTES

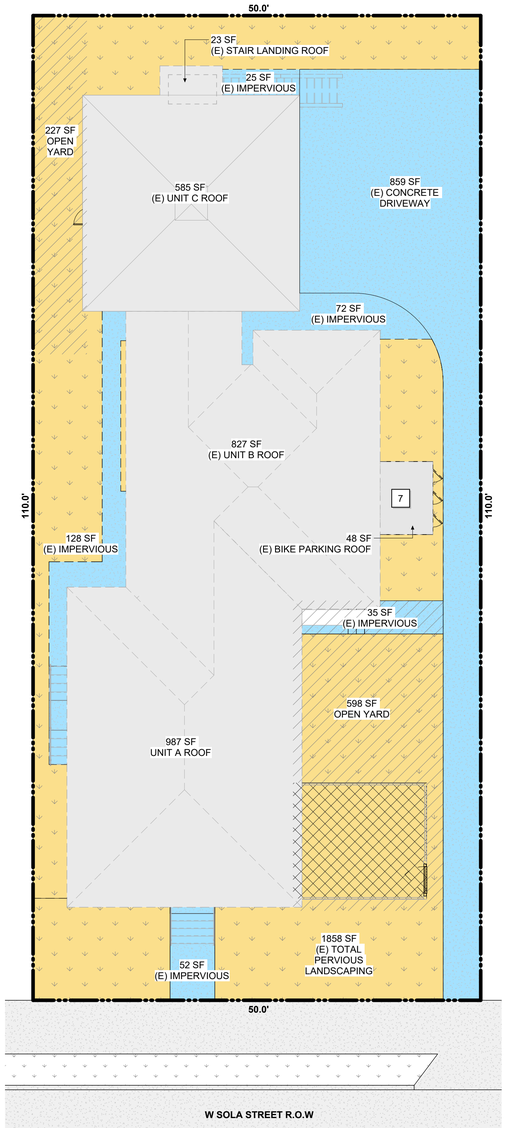
1	(N) PERMEABLE PAVERS
2	DOWNSPOUT CONNECTED TO LANDSCAPING
3	SHADED GREEN ROOF AREA DRAIN TO LANDSCAPING
4	(N) 9" DEEP DRYWELL (3/4" CRUSHED ROCK)
5	DISCONNECTED DOWNSPOUT
6	RAIN GUTTER
7	(E) BIKE PARKING TO BE DEMO'D & REPLACED



3 STORMWATER BMPs
1/8" = 1'-0"



2 (N) PERMEABILITY PLAN
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1 EXISTING PERMEABILITY PLAN
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SHEET NAME

STORMWATER BMPs

SHEET INFORMATION

DRAWN BY: AS
SCALE: AS NOTED
PLAN NORTH:
TRUE NORTH:

SHEET NUMBER

a1.01

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1. FIELD MEASUREMENTS TAKE PRECEDENCE OVER WRITTEN DIMS. WHERE THERE IS A DISCREPANCY, THE DESIGNER/ENGINEER OF RECORD SHALL BE NOTIFIED.
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3. SHOWER STALL SHALL COMPLY W/ CONSTRUCTION REQ'S OF CPC 408.
4. BATHROOMS, WATER CLOSET COMPARTMENTS, & OTHER SIM ROOMS SHALL HAVE AN AGGREGATE GLAZING AREA OF NOT LESS THAN 3.0 SF, ONE-HALF OF WHICH MUST BE OPENABLE, EXCEPT WHEN ARTIFICIAL LIGHT & LOCAL EXHAUST ARE PROVIDED [CRC R325.2].
5. WHEN THE WINTER DESIGN TEMPERATURE IS BELOW 60°F (16°C), EVERY DWELLING UNIT SHALL BE PROVIDED W/ HEATING FACILITIES CAPABLE OF MAINTAINING A MIN ROOM TEMPERATURE OF 68°F (20°C) AT A POINT 3'-0" (914 MM) ABOVE THE FLOOR & 2'-0" (610 MM) FROM EXTERIOR WALLS IN ALL HABITABLE ROOMS [CRC R325.8].
6. THERE SHALL BE A LANDING OR FLOOR ON EACH SIDE OF EACH EXTERIOR DOOR. THE WIDTH OF EACH LANDING SHALL NOT BE LESS THAN THE DOOR SERVED. EVERY LANDING SHALL HAVE A DIM OF NOT LESS THAN 36" MEASURED IN THE DIRECTION OF TRAVEL. THE SLOPE AT EXTERIOR LANDINGS SHALL NOT EXCEED ¼ UNITS VERTICAL IN 12 UNITS HORIZONTAL (2 PERCENT) [CRC R318.3].
7. FLOOR/CEILING & WALL ASSEMBLIES SHALL COMPLY W/ CODE REQ'S FOR FIRE-RATINGS, INCLUDING: MATERIALS, CONSTRUCTION, PENETRATIONS, OPENINGS, FIXTURES, DUCT CHASES, ETC. THIS MAY REQUIRE SPECIFIC RATED PRODUCTS. SEE NOTES AND DETAILS, WHERE APPLICABLE.

DIMENSION PLAN NOTES

1. ONLY CORE LAYERS OF WALLS SHOWN. REFER TO WALL LEGEND AND SECTIONS FOR COMPLETE ASSEMBLIES.
2. ALL PLAN DIMENSIONS ARE TAKEN FROM EDGE OF STRUCTURAL COMPONENTS (E.G. STUDS, SHEATHING, SLAB, ETC.) UON.
3. "CLR" DIMENSIONS REFERENCE CLEAR DIMENSIONS TO FINISHES (NOT SHOWN).
4. EXTERIOR WALLS DIMENSIONED TO OUTSIDE OF SHEATHING, UON. INTERIOR WALLS DIMENSIONED TO SIDE OF STUD, UON.
5. SHEET a2.02, DIMENSION PLANS, OMITS WALL FINISHES

DEMOLITION REMOVALS

THE FOLLOWING ITEMS ARE TO REMOVED:

1. ALL ITEMS DEPICTED ON THE PLANS AND SCHEDULES FOR DEMOLITION
2. (E) WATER HEATER TO BE DEMO'D

FIRE-RATED ASSEMBLIES

SYMBOL	DESCRIPTION
	FLOOR/CEILING & WALL ASSEMBLIES SHALL COMPLY W/ CODE REQ'S FOR FIRE-RATINGS, INCLUDING: MATERIALS, CONSTRUCTION, PENETRATIONS, OPENINGS, FIXTURES, DUCT CHASES, ETC. THIS MAY REQUIRE SPECIFIC RATED PRODUCTS. SEE NOTES AND DETAILS, WHERE APPLICABLE.

(E) DOOR SCHEDULE

SYM	LOCATION	WIDTH	HEIGHT	DESCRIPTION	MATERIAL/ MODEL	FINISH	NOTES
B	KITCHEN	2' - 6"	6' - 8"		HC WOOD	PAINTED	DEMO
C	LAUNDRY	2' - 6"	6' - 8"	EXTERIOR	HC WOOD	PAINTED	DEMO
D	BED	2' - 1"	6' - 8"		HC WOOD	PAINTED	DEMO
E	BED	2' - 1"	6' - 8"		HC WOOD	PAINTED	DEMO
F	BED	2' - 4"	6' - 8"		HC WOOD	PAINTED	DEMO
G	BED	2' - 6"	6' - 8"		HC WOOD	PAINTED	DEMO
H	GARAGE	8' - 0"	7' - 0"	EXTERIOR	METAL	PAINTED	DEMO
I	GARAGE	8' - 0"	7' - 0"	EXTERIOR	METAL	PAINTED	DEMO
J	GARAGE	2' - 6"	6' - 8"	EXTERIOR	HC WOOD	PAINTED	DEMO
K	GARAGE	2' - 0"	6' - 8"	VENTED UTILITY	METAL	PAINTED	DEMO
L	GARAGE	2' - 6"	6' - 8"	EXTERIOR	HC WOOD	PAINTED	DEMO
M	LIVING	3' - 0"	6' - 8"	EXTERIOR	SC WOOD	PAINTED	(E) TO REMAIN

(E) WINDOW SCHEDULE

SYM	LOCATION	WIDTH	HEIGHT	HEAD HT	DESCRIPTION	MATERIAL	U-FAC	SHGC	FINISH	NOTES
1	DINING	2' - 6"	4' - 6"	6' - 8"	SG DH	WOOD	N/A	N/A	PAINTED	DEMO
2	KIT	2' - 6"	2' - 6"	6' - 8"	SG DH	WOOD	N/A	N/A	PAINTED	DEMO
3	LAUNDRY	2' - 6"	3' - 0"	6' - 8"	SG DH	WOOD	N/A	N/A	PAINTED	DEMO
4	BATH	2' - 6"	3' - 0"	6' - 8"	SG DH	WOOD	N/A	N/A	PAINTED	DEMO
5	BED 1	2' - 6"	4' - 6"	6' - 8"	SG DH	WOOD	N/A	N/A	PAINTED	DEMO
6	BED 1	2' - 6"	4' - 4"	6' - 8"	SG DH	VINYL	N/A	N/A	PAINTED	DEMO
7	CLOSET	1' - 0"	2' - 0"	6' - 8"	FIXED	WOOD	N/A	N/A	PAINTED	DEMO
8	LIVING	3' - 0"	4' - 6"	6' - 8"	SG DH	WOOD	N/A	N/A	PAINTED	DEMO
9	LIVING	3' - 0"	4' - 6"	6' - 8"	SG DH	WOOD	N/A	N/A	PAINTED	DEMO
10	LIVING	3' - 0"	4' - 6"	6' - 8"	SG DH	WOOD	N/A	N/A	PAINTED	DEMO

NFRC THERMAL PERFORMANCE LABELS NOTE

NFRC LABELS TO REMAIN ON NEW WINDOWS & DOORS THROUGH FINAL INSPECTION.

KEYNOTES

1	(E) ELECTRICAL METERS TO BE RELOCATED
2	DEMO POST, BEAM, AND WALL. REINFORCE FLOOR-CEILING ASSEMBLY PER STRUCTURAL
3	DEMO AND REPLACE (E) DETERIORATED WOOD STAIRS, SECOND FLOOR LANDING, AND ROOF ABOVE.
4	(E) UNIT C GAS TANK WATER HEATER TO BE DEMO'D AND REPLACED WITH (N) GAS TANK WATER HEATER LOCATED ADJACENT TO UNIT B

WALL LEGEND

SYMBOL	DESCRIPTION	ASSEMBLY
	(E) WALL TO BE DEMO'D	REFER TO (E) PLANS
	(E) WALL TO REMAIN	REFER TO (E) PLANS
	(N) INTERIOR 2X4 WALL	2X4 DF STUDS @ 16" OC, 5/8" GYP EA. SIDE
	(N) INTERIOR 2X6 WALL	2X6 DF STUDS @ 16" OC, 5/8" GYP EA. SIDE
	(N) INTERIOR 2X6 WALL, COMBINED WITH EXISTING ADJACENT (E) 2X4 WALL; 1-HR FIRE-RATED, STC 53	2X DF STUDS @ 16" OC, 6 1/4" BATT FIBER GLASS, 5/8" TYPE X GYP EA. SIDE, PLUS 3/8" TYPE X GYP INT; 1" AIR GAP BETWEEN WALLS; GA WP 3370, SEE DETAIL ON PAGE a6.00
	(N) EXTERIOR 2X6 STUCCO WALL	2X6 DF STUDS @ 16" OC, 5/8" GYP INT, 7/8" STUCCO EXT

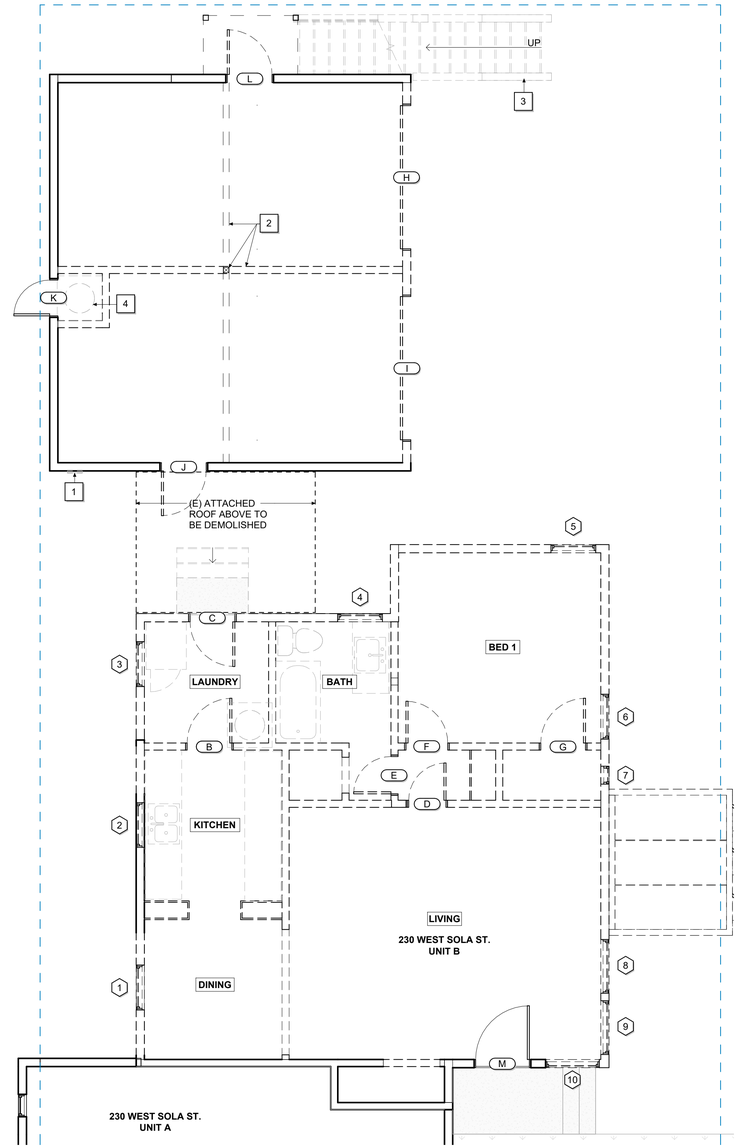
NOTES: INSULATION PER SECTIONS AND/OR GENERAL NOTES
SHEATHING PER STRUCTURAL RAWINGS/NOTES

DOOR/WINDOW ABBREVIATIONS

AL	ALUMINUM	O	FIXED WINDOW
A	AWNING	P	PAINT
B	BAY	PIC	PICTURE WINDOW
BF	BI-FOLD	PH	PANIC HARDWARE
BL	BED/BATH LOCK	PR	PAIR
C	CASEMENT	PF	PRE-FINISHED
CL	CLOSET	PL	PASSAGE LOCK
CLRA	CLEAR-ANNODIZED	R	RIGHT
CP	COPPER	RM	REMOVABLE MULLION
CMT	CASEMENT	RO	ROUGH OPENING
DG	DUAL GLAZED	SC	SOLID CORE
DH	DOUBLE-HUNG	SEC	SECURITY REQUIRED
DL	DUMMY LATCH	SH	SINGLE-HUNG
EGR	EGRESS	SL	SLIDER WINDOW
FX	FIXED	SS	SMOKE SEAL
GL	GLASS	ST	STAIN
H	HOPPER	STL	STEEL
HC	HOLLOW CORE	T	TEMPERED
HM	HOLLOW METAL	TR	TRANSOM WINDOW
J	JALOUSIE	V	VINYL
KE	KEYED ENTRY W/ DEADBOLT	V/G	VINYL / GLASS
LG	LAMINATED GLASS	VGDF	VERTICAL GRAIN DOUG FIR
L	LEFT	WD	WOOD
M	METAL SKIN, SOLID CORE	X	OPERABLE WINDOW
M/G	METAL / GLASS		

SYMBOL LEGEND

- KEYNOTE
- WINDOW
- DOOR
- EQUIPMENT
- LIGHTING
- PLUMBING
- ROOM NAME / ROOM NUMBER / AREA
- ELEMENT ALIGNMENT NOTE
- MOVEMENT DIRECTION
- CHANGE IN FINISH
- REVISION CLOUD REVISION #
- SMOKE/CO DETECTOR
- PROPERTY LINE
- CENTER LINE
- ELEVATION LABEL / ELEVATION VALUE
- TRUE NORTH / PLAN NORTH
- SECTION LOCATION/PAGE
- DETAIL LOCATION/PAGE
- GRID LINE
- PHOTO LOCATION/PAGE
- ELEVATION LOCATION/PAGE



1 EXISTING/DEMO FIRST FLOOR PLAN
1/4" = 1'-0"

MANUAL LABOR
375 EAST MAIN STREET
VENTURA, CA, 93001
805 628 3382

PROJECT NAME

230 WEST SOLA REMODEL

230 WEST SOLA STREET
SANTA BARBARA, CA 93101

#	DRAWING ISSUED	DATE
	PC #1	06.23.26
1	PC #2	08.14.26

SHEET NAME

(E)/DEMO 1ST FLOOR

SHEET INFORMATION

DRAWN BY: AS
SCALE: AS NOTED
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a2.00 1

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4. BATHROOMS, WATER CLOSET COMPARTMENTS, & OTHER SIM ROOMS SHALL HAVE AN AGGREGATE GLAZING AREA OF NOT LESS THAN 3.0 SF, ONE-HALF OF WHICH MUST BE OPENABLE, EXCEPT WHEN ARTIFICIAL LIGHT & LOCAL EXHAUST ARE PROVIDED [CRC R325.2].
5. WHEN THE WINTER DESIGN TEMPERATURE IS BELOW 60°F (16°C), EVERY DWELLING UNIT SHALL BE PROVIDED W/ HEATING FACILITIES CAPABLE OF MAINTAINING A MIN ROOM TEMPERATURE OF 68°F (20°C) AT A POINT 3'-0" (914 MM) ABOVE THE FLOOR & 2'-0" (610 MM) FROM EXTERIOR WALLS IN ALL HABITABLE ROOMS [CRC R325.8].
6. THERE SHALL BE A LANDING OR FLOOR ON EACH SIDE OF EACH EXTERIOR DOOR. THE WIDTH OF EACH LANDING SHALL NOT BE LESS THAN THE DOOR SERVED. EVERY LANDING SHALL HAVE A DIM OF NOT LESS THAN 36" MEASURED IN THE DIRECTION OF TRAVEL. THE SLOPE AT EXTERIOR LANDINGS SHALL NOT EXCEED ¼ UNITS VERTICAL IN 12 UNITS HORIZONTAL (2 PERCENT) [CRC R318.3].
7. FLOOR/CEILING & WALL ASSEMBLIES SHALL COMPLY W/ CODE REQ'S FOR FIRE-RATINGS, INCLUDING: MATERIALS, CONSTRUCTION, PENETRATIONS, OPENINGS, FIXTURES, DUCT CHASES, ETC. THIS MAY REQUIRE SPECIFIC RATED PRODUCTS. SEE NOTES AND DETAILS, WHERE APPLICABLE.

DIMENSION PLAN NOTES

1. ONLY CORE LAYERS OF WALLS SHOWN. REFER TO WALL LEGEND AND SECTIONS FOR COMPLETE ASSEMBLIES.
2. ALL PLAN DIMENSIONS ARE TAKEN FROM EDGE OF STRUCTURAL COMPONENTS (E.G. STUDS, SHEATHING, SLAB, ETC.) UON.
3. "CLR" DIMENSIONS REFERENCE CLEAR DIMENSIONS TO FINISHES (NOT SHOWN).
4. EXTERIOR WALLS DIMENSIONED TO OUTSIDE OF SHEATHING, UON. INTERIOR WALLS DIMENSIONED TO SIDE OF STUD, UON.
5. SHEET a2.02, DIMENSION PLANS, OMITS WALL FINISHES

DEMOLITION REMOVALS

THE FOLLOWING ITEMS ARE TO REMOVED:

1. ALL ITEMS DEPICTED ON THE PLANS AND SCHEDULES FOR DEMOLITION
2. (E) WATER HEATER TO BE DEMO'D

FIRE-RATED ASSEMBLIES

SYMBOL	DESCRIPTION
	FLOOR/CEILING & WALL ASSEMBLIES SHALL COMPLY W/ CODE REQ'S FOR FIRE-RATINGS, INCLUDING: MATERIALS, CONSTRUCTION, PENETRATIONS, OPENINGS, FIXTURES, DUCT CHASES, ETC. THIS MAY REQUIRE SPECIFIC RATED PRODUCTS. SEE NOTES AND DETAILS, WHERE APPLICABLE.

(N) DOOR SCHEDULE

SYM	LOCATION	WIDTH	HEIGHT	DESCRIPTION	MATERIAL/ MODEL	FINISH	NOTES
GG	GARAGE	16' - 0"	6' - 10"				
N	LIVING	3' - 0"	6' - 8"		HC WOOD	PAINTED	
O	KITCHEN	3' - 0"	6' - 8"	EXTERIOR		PAINTED	GLASS DOOR
P	BATH 1	2' - 8"	6' - 8"			PAINTED	
Q	UTILITY	2' - 8"	6' - 8"	VENTED	METAL	PAINTED	
R	BED 1	4' - 8"	6' - 8"	BYPASS	HC WOOD	PAINTED	
S	BED 1	2' - 8"	6' - 8"			PAINTED	
T	BED 2	2' - 8"	6' - 8"			PAINTED	
U	BED 2	4' - 8"	6' - 8"	BYPASS	HC WOOD	PAINTED	
V	BED 1	2' - 0"	6' - 8"	BYPASS	HC WOOD	PAINTED	
W	BED 2	3' - 0"	6' - 8"		HC WOOD	PAINTED	
X	BATH 2	3' - 0"	6' - 8"		HC WOOD	PAINTED	
Y	LAUNDRY	5' - 2"	6' - 8"	DOUBLE, EXTERIOR		PAINTED	
Z	UTILITY	2' - 6"	6' - 8"	VENTED	METAL	PAINTED	1

(N) WINDOW SCHEDULE

SYM	LOCATION	WIDTH	HEIGHT	HEAD HT	DESCRIPTION	MATERIAL	U-FAC	SHGC	FINISH	NOTES
11	KITCHEN	3' - 0"	3' - 0"	6' - 8"	DG DH	VINYL	.3	.23	PAINTED	
12	BATH1	2' - 6"	2' - 0"	6' - 8"	DG SL	VINYL	.3	.23	PAINTED	
13	BED 3	3' - 0"	5' - 0"	6' - 8"	DG SH	VINYL	.3	.23	PAINTED	EGRESS
14	BED 3	3' - 0"	5' - 0"	6' - 8"	DG SH	VINYL	.3	.23	PAINTED	
15	BED 2	2' - 4"	4' - 0"	5' - 8"	Casement		.3	.23	PAINTED	
16	BED 2	2' - 8"	5' - 0"	6' - 8"	DG SH	VINYL	.3	.23	PAINTED	EGRESS
17	BED 1	3' - 0"	5' - 0"	6' - 8"	DG SH	VINYL	.3	.23	PAINTED	
18	BED 1	3' - 0"	5' - 0"	6' - 8"	DG SH	VINYL	.3	.23	PAINTED	
19	BED 1	3' - 0"	5' - 0"	6' - 8"	DG SH	VINYL	.3	.23	PAINTED	EGRESS
20	BATH 2	2' - 6"	2' - 0"	6' - 8"	DG SL	VINYL	.3	.23	PAINTED	
21	LIVING	3' - 0"	5' - 0"	6' - 8"	DG SH	VINYL	.3	.23	PAINTED	
22	LIVING	3' - 0"	5' - 0"	6' - 8"	DG SH	VINYL	.3	.23	PAINTED	
23	LIVING	3' - 0"	5' - 0"	6' - 8"	DG SH	VINYL	.3	.23	PAINTED	
24	LIVING	3' - 0"	5' - 0"	6' - 8"	DG SH	VINYL	.3	.23	PAINTED	

NFRC THERMAL PERFORMANCE LABELS NOTE

NFRC LABELS TO REMAIN ON NEW WINDOWS & DOORS THROUGH FINAL INSPECTION.

DOOR/WINDOW ABBREVIATIONS

AL	ALUMINUM
A	AWNING
B	BAY
BF	BI-FOLD
BL	BED/BATH LOCK
C	CASEMENT
CL	CLOSET
CLRA	CLEAR-ANNODIZED
CP	COPPER
CMT	CASEMENT
DG	DUAL GLAZED
DH	DOUBLE-HUNG
DL	DUMMY LATCH
EGR	EGRESS
FX	FIXED
GL	GLASS
H	HOPPER
HC	HOLLOW CORE
HM	HOLLOW METAL
J	JALOUSIE
KE	KEYED ENTRY W/ DEADBOLT
LG	LAMINATED GLASS
L	LEFT
M	METAL SKIN, SOLID CORE
M/G	METAL / GLASS
O	FIXED WINDOW
P	PAINT
PIC	PICTURE WINDOW
PH	PANIC HARDWARE
PR	PAIR
PF	PRE-FINISHED
PL	PASSAGE LOCK
R	RIGHT
RM	REMOVABLE MULLION
RO	ROUGH OPENING
SC	SOLID CORE
SEC	SECURITY REQUIRED
SH	SINGLE-HUNG
SL	SLIDER WINDOW
SS	SMOKE SEAL
ST	STAIN
STL	STEEL
T	TEMPERED
TR	TRANSOM WINDOW
V	VINYL
V/G	VINYL / GLASS
VGDF	VERTICAL GRAIN DOUG FIR
WD	WOOD
X	OPERABLE WINDOW

AGE IN PLACE REQUIREMENTS [CRC R327]

1. MIN ONE BATHROOM ON ENTRY LEVEL SHALL PROVIDE REINFORCEMENT FOR GRAB BARS. IF NO BATH ON THE ENTRY LEVEL, MIN ONE BATH ON 2ND OR 3RD FLOOR SHALL COMPLY. MIN 2X8 SOLID LUMBER REINFORCEMENT SHALL BE PROVIDED & LOCATED 32" TO 39-1/4" AFF.
2. WATER CLOSET REINFORCEMENT REQ'D ON SIDES AND BACK WALL OF THE FIXTURE. SIDE REINFORCEMENT TO EXTEND 54" FROM BACK WALL. SHOWER REINFORCEMENT SHALL BE CONTINUOUS ON ALL SIDES OF SHOWER WALL FRAMING.
3. MIN ONE BATH & ONE BED DOOR SHALL HAVE A NET CLEAR OPENING OF MIN 32".
4. DOORBELLS SHALL NOT EXCEED 48" ABOVE EXTERIOR FLOOR OR LANDING.

SYMBOL LEGEND

- # KEYNOTE
- # WINDOW
- X DOOR
- # EQUIPMENT
- X LIGHTING
- # PLUMBING
- ROOM ROOM NAME
- # ROOM NUMBER
- SF AREA
- ALIGN ELEMENT ALIGNMENT NOTE
- MOVEMENT DIRECTION
- CHANGE IN FINISH
- REVISION CLOUD REVISION #
- SD/CO SD SMOKE/CO DETECTOR
- PROPERTY LINE
- CENTER LINE
- NAME XX'-XX" ELEVATION LABEL ELEVATION VALUE
- TRUE NORTH PLAN NORTH
- X aX.XX SECTION LOCATION/PAGE
- X aX.XX DETAIL LOCATION/PAGE
- X GRID LINE
- X aX.XX PHOTO LOCATION/PAGE
- aX.XX # ELEVATION LOCATION/PAGE

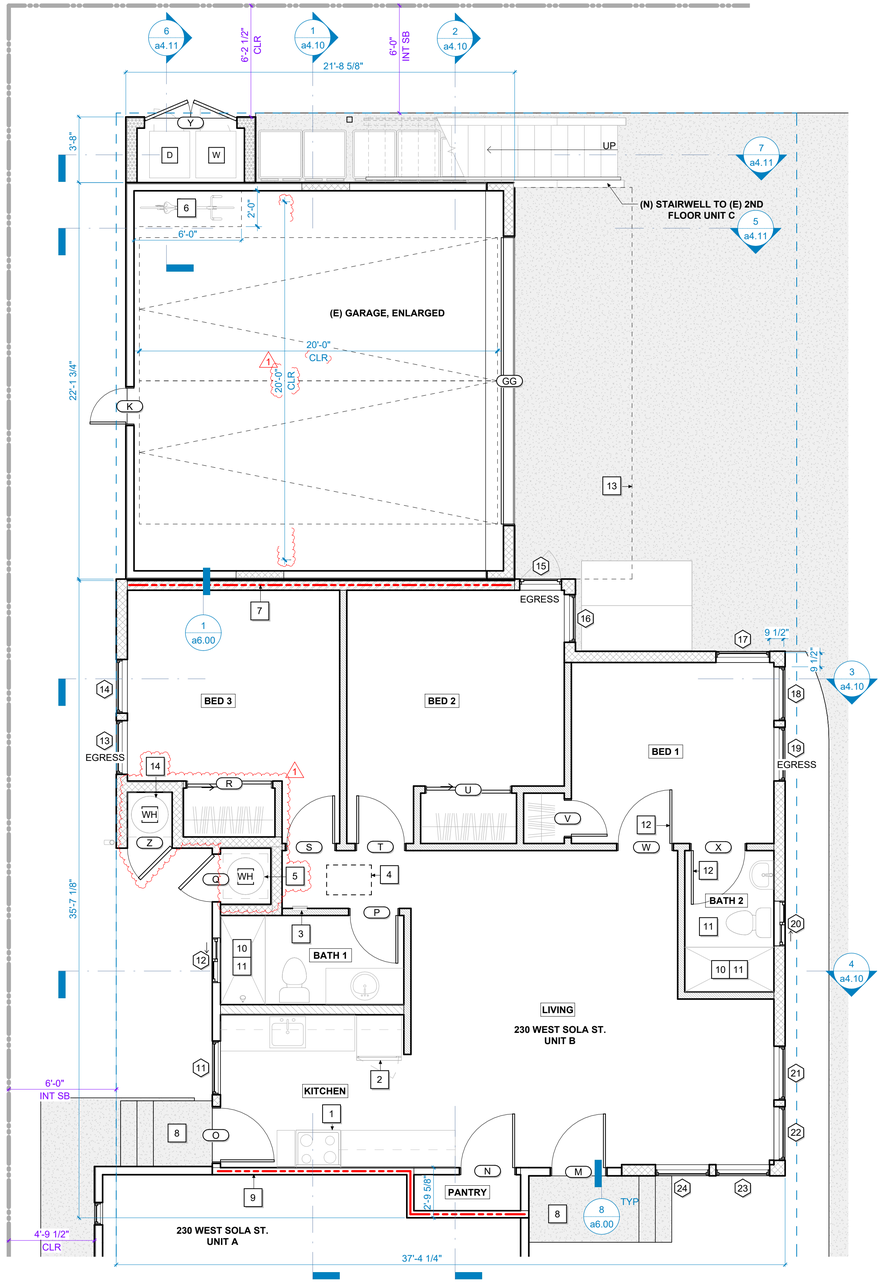
WALL LEGEND

SYMBOL	DESCRIPTION	ASSEMBLY
	(E) WALL TO BE DEMO'D	REFER TO (E) PLANS
	(E) WALL TO REMAIN	REFER TO (E) PLANS
	(N) INTERIOR 2X4 WALL	2X4 DF STUDS @ 16" OC, 5/8" GYP EA. SIDE
	(N) INTERIOR 2X6 WALL	2X6 DF STUDS @ 16" OC, 5/8" GYP EA. SIDE
	(N) INTERIOR 2X6 WALL, COMBINED WITH EXISTING ADJACENT (E) 2X4 WALL; 1-HR FIRE-RATED, STC 53	2X DF STUDS @ 16" OC, 6 1/4" BATT FIBER GLASS, 5/8" TYPE X GYP EA. SIDE, PLUS 3/8" TYPE X GYP INT; 1" AIR GAP BETWEEN WALLS; GA WP 3370, SEE DETAIL ON PAGE a6.00
	(N) EXTERIOR 2X6 STUCCO WALL	2X6 DF STUDS @ 16" OC, 5/8" GYP INT, 7/8" STUCCO EXT

NOTES: INSULATION PER SECTIONS AND/OR GENERAL NOTES
SHEATHING PER STRUCTURAL RAWINGS/NOTES

KEYNOTES

1	GAS STOVE & OVEN W/ HOOD
2	REFRIGERATOR - C.F.C.I.
3	(N) 100-AMP ELEC PANEL
4	PROVIDE MINIMUM 22x30 ATTIC ACCESS 1
5	(N) 55-GAL GAS TANK WATER HEATER TO SERVE UNIT B
6	(N) RELOCATED BIKE STORAGE - ONE COVERED BIKE STORAGE PER UNIT.
7	1-HR RATED WALL ASSEMBLY PER R302.2.2.1
8	GUARDRAILS NOT REQUIRED AS LANDING IS LESS THAN 30" ABOVE FINISH GRADE
9	1-HR UNIT SEPARATION ASSEMBLY AND ATTIC DRAFTSTOP BUILT IN BLD2023-01617 TO BE MAINTAINED
10	SHOWERS AND WALLS ABOVE BATHTUBS WITH SHOWER HEADS SHALL BE FINISHED WITH A NONABSORBENT SURFACE TO A HEIGHT NOT LESS THAN 6 FEET ABOVE THE FLOOR. (CBC 1210.2.3)
11	BATHROOM TO COMPLY WITH AGING IN PLACE REQUIREMENTS, SEE "AGE IN PLACE REQUIREMENTS," THIS SHEET
12	36" DOOR TO COMPLY WITH AGING IN PLACE REQUIREMENTS, SEE "AGE IN PLACE REQUIREMENTS," THIS SHEET
13	(N) BALCONY ABOVE 1
14	(N) 55-GAL GAS TANK WATER HEATER TO SERVE UNIT C



1 NEW FIRST FLOOR PLAN
1/4" = 1'-0"

MANUAL LABOR
375 EAST MAIN STREET
VENTURA, CA, 93001
805 628 3382

PROJECT NAME

230 WEST SOLA REMODEL

230 WEST SOLA STREET
SANTA BARBARA, CA 93101

#	DRAWING ISSUED	DATE
	PC #1	06.23.26
1	PC #2	08.14.26

SHEET NAME

(N) 1ST FLOOR PLANS

SHEET INFORMATION

DRAWN BY: AS
SCALE: AS NOTED
PLAN NORTH:
TRUE NORTH:

SHEET NUMBER

a2.01 1

PRINTED: 8/30/2026 11:11:17 AM PROJECT NUMBER: 24029
INCLUDED DRAWINGS, SPECIFICATIONS, IDEAS & DESIGNS SHALL REMAIN THE PROPERTY OF MANUAL LABOR & SHALL NOT BE DISTRIBUTED OR USED FOR ANY WORK OTHER THAN THE PROJECT FOR WHICH THEY WERE PREPARED WITHOUT WRITTEN CONSENT

FLOOR PLAN NOTES

1. FIELD MEASUREMENTS TAKE PRECEDENCE OVER WRITTEN DIMS. WHERE THERE IS A DISCREPANCY, THE DESIGNER/ENGINEER OF RECORD SHALL BE NOTIFIED.
2. THE CONTRACTOR SHALL PROVIDE GAS / ELECTRIC / WATER / DATA / WASTE / VENTING AS NECESSARY FOR PROPER APPLIANCE & FIXTURE FUNCTION.
3. SHOWER STALL SHALL COMPLY W/ CONSTRUCTION REQ'S OF CPC 408.
4. BATHROOMS, WATER CLOSET COMPARTMENTS, & OTHER SIM ROOMS SHALL HAVE AN AGGREGATE GLAZING AREA OF NOT LESS THAN 3.0 SF, ONE-HALF OF WHICH MUST BE OPENABLE, EXCEPT WHEN ARTIFICIAL LIGHT & LOCAL EXHAUST ARE PROVIDED [CRC R325.2].
5. WHEN THE WINTER DESIGN TEMPERATURE IS BELOW 60°F (16°C), EVERY DWELLING UNIT SHALL BE PROVIDED W/ HEATING FACILITIES CAPABLE OF MAINTAINING A MIN ROOM TEMPERATURE OF 68°F (20°C) AT A POINT 3'-0" (914 MM) ABOVE THE FLOOR & 2'-0" (610 MM) FROM EXTERIOR WALLS IN ALL HABITABLE ROOMS [CRC R325.8].
6. THERE SHALL BE A LANDING OR FLOOR ON EACH SIDE OF EACH EXTERIOR DOOR. THE WIDTH OF EACH LANDING SHALL NOT BE LESS THAN THE DOOR SERVED. EVERY LANDING SHALL HAVE A DIM OF NOT LESS THAN 36" MEASURED IN THE DIRECTION OF TRAVEL. THE SLOPE AT EXTERIOR LANDINGS SHALL NOT EXCEED ¼ UNITS VERTICAL IN 12 UNITS HORIZONTAL (2 PERCENT) [CRC R318.3].
7. FLOOR/CEILING & WALL ASSEMBLIES SHALL COMPLY W/ CODE REQ'S FOR FIRE-RATINGS, INCLUDING: MATERIALS, CONSTRUCTION, PENETRATIONS, OPENINGS, FIXTURES, DUCT CHASES, ETC. THIS MAY REQUIRE SPECIFIC RATED PRODUCTS. SEE NOTES AND DETAILS, WHERE APPLICABLE.

(E) UNIT C WINDOW SCHEDULE

SYM	LOCATION	WIDTH	HEIGHT	HEAD HT	DESCRIPTION	MATERIAL	U-FAC	SHGC	FINISH	NOTES
25	LIVING	3' - 0"	4' - 6"	6' - 8"	SG DH	WOOD	N/A	N/A	PAINTED	DEMO
26	LIVING	3' - 0"	4' - 6"	6' - 8"	SG DH	WOOD	N/A	N/A	PAINTED	DEMO
27	BEDROOM	3' - 0"	4' - 6"	6' - 8"	SG DH	WOOD	N/A	N/A	PAINTED	EGRESS
28	BEDROOM	3' - 0"	4' - 6"	6' - 8"	SG DH	WOOD	N/A	N/A	PAINTED	
29	BATH	2' - 6"	3' - 6"	7' - 4"	SG DH	WOOD	N/A	N/A	PAINTED	
30	KITCHEN	2' - 6"	3' - 0"	7' - 4"	SG DH	WOOD	N/A	N/A	PAINTED	
31	KITCHEN	3' - 0"	4' - 6"	7' - 4"	SG DH	WOOD	N/A	N/A	PAINTED	
32	KITCHEN	3' - 0"	4' - 6"	7' - 6"	SG DH	WOOD	N/A	N/A	PAINTED	
33	LIVING	3' - 0"	4' - 6"	7' - 6"	SG DH	WOOD	N/A	N/A	PAINTED	
34	BEDROOM	3' - 0"	4' - 6"	6' - 8"	SG DH	WOOD	N/A	N/A	PAINTED	DEMO

(E) UNIT C DOOR SCHEDULE

SYM	LOCATION	WIDTH	HEIGHT	DESCRIPTION	MATERIAL	FINISH	NOTES
AA	LIVING	2' - 6"	6' - 8"	EXTERIOR	HC WOOD	PAINTED	
BB	LIVING	2' - 6"	6' - 8"		HC WOOD	PAINTED	
CC	BEDROOM	2' - 0"	6' - 8"		HC WOOD	PAINTED	
DD	BATHROOM	2' - 6"	6' - 8"		HC WOOD	PAINTED	
EE	KTICHEN	2' - 6"	6' - 8"		HC WOOD	PAINTED	

(N) UNIT C WINDOW SCHEDULE

SYM	LOCATION	WIDTH	HEIGHT	HEAD HT	DESCRIPTION	MATERIAL	U-FAC	SHGC	FINISH	NOTES
35	BEDROOM	3' - 0"	2' - 6"	6' - 8"	DG DH	VINYL	.3	.23	PAINTED	

(N) UNIT C DOOR SCHEDULE

SYM	LOCATION	WIDTH	HEIGHT	DESCRIPTION	MATERIAL	FINISH	NOTES
FF	LIVING	6' - 0"	6' - 8"	DOUBLE, EXTERIOR		PAINTED	

DEMOLITION REMOVALS

THE FOLLOWING ITEMS ARE TO REMOVED:

1. ALL ITEMS DEPICTED ON THE PLANS AND SCHEDULES FOR DEMOLITION
2. (E) WATER HEATER TO BE DEMO'D

FIRE-RATED ASSEMBLIES

SYMBOL	DESCRIPTION
	FLOOR/CEILING & WALL ASSEMBLIES SHALL COMPLY W/ CODE REQ'S FOR FIRE-RATINGS, INCLUDING: MATERIALS, CONSTRUCTION, PENETRATIONS, OPENINGS, FIXTURES, DUCT CHASES, ETC. THIS MAY REQUIRE SPECIFIC RATED PRODUCTS. SEE NOTES AND DETAILS, WHERE APPLICABLE.

DIMENSION PLAN NOTES

1. ONLY CORE LAYERS OF WALLS SHOWN. REFER TO WALL LEGEND AND SECTIONS FOR COMPLETE ASSEMBLIES.
2. ALL PLAN DIMENSIONS ARE TAKEN FROM EDGE OF STRUCTURAL COMPONENTS (E.G. STUDS, SHEATHING, SLAB, ETC.) UON.
3. "CLR" DIMENSIONS REFERENCE CLEAR DIMENSIONS TO FINISHES (NOT SHOWN).
4. EXTERIOR WALLS DIMENSIONED TO OUTSIDE OF SHEATHING, UON. INTERIOR WALLS DIMENSIONED TO SIDE OF STUD, UON.
5. SHEET a2.02, DIMENSION PLANS, OMITS WALL FINISHES

WALL LEGEND

SYMBOL	DESCRIPTION	ASSEMBLY
	(E) WALL TO BE DEMO'D	REFER TO (E) PLANS
	(E) WALL TO REMAIN	REFER TO (E) PLANS
	(N) INTERIOR 2X4 WALL	2X4 DF STUDS @ 16" OC, 5/8" GYP EA. SIDE
	(N) INTERIOR 2X6 WALL	2X6 DF STUDS @ 16" OC, 5/8" GYP EA. SIDE
	(N) INTERIOR 2X6 WALL, COMBINED WITH EXISTING ADJACENT (E) 2X4 WALL; 1-HR FIRE-RATED, STC 53	2X DF STUDS @ 16" OC, 6 1/4" BATT FIBER GLASS, 5/8" TYPE X GYP EA. SIDE, PLUS 3/8" TYPE X GYP INT; 1" AIR GAP BETWEEN WALLS; GA WP 3370, SEE DETAIL ON PAGE a6.00
	(N) EXTERIOR 2X6 STUCCO WALL	2X6 DF STUDS @ 16" OC, 5/8" GYP INT, 7/8" STUCCO EXT

NOTES: INSULATION PER SECTIONS AND/OR GENERAL NOTES
SHEATHING PER STRUCTURAL RAWINGS/NOTES

KEYNOTES

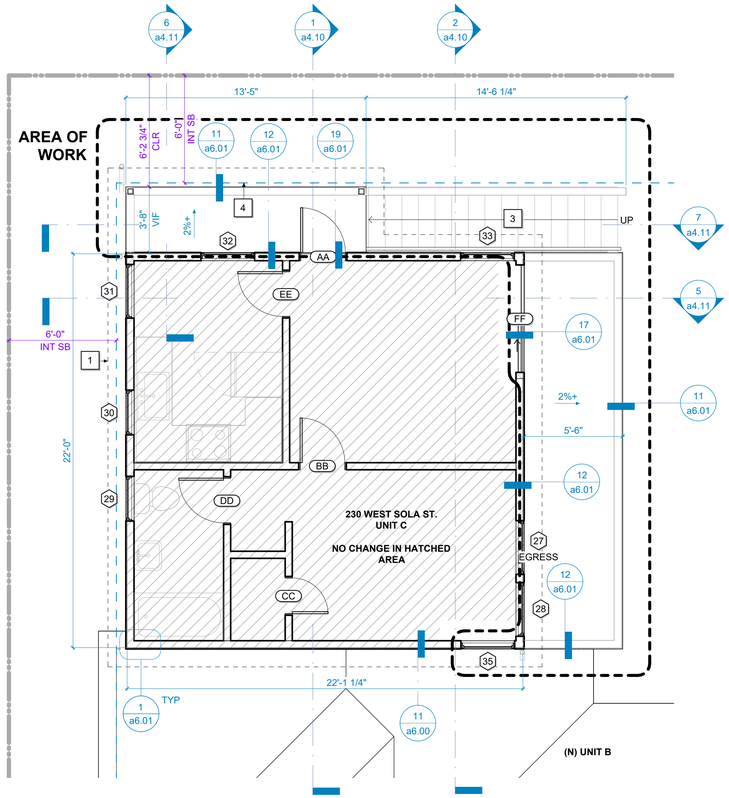
1	(E) UNIT C ROOF OVERHANG ABOVE
2	DEMO AND REPLACE (E) DETERIORATED WOOD STAIRS, SECOND FLOOR LANDING, AND ROOF ABOVE.
3	(N) STAIR RISE: 7 3/4" MAX, RUN: 11" MIN WITH 1" NOSING
4	SITE SETBACK

DOOR/WINDOW ABBREVIATIONS

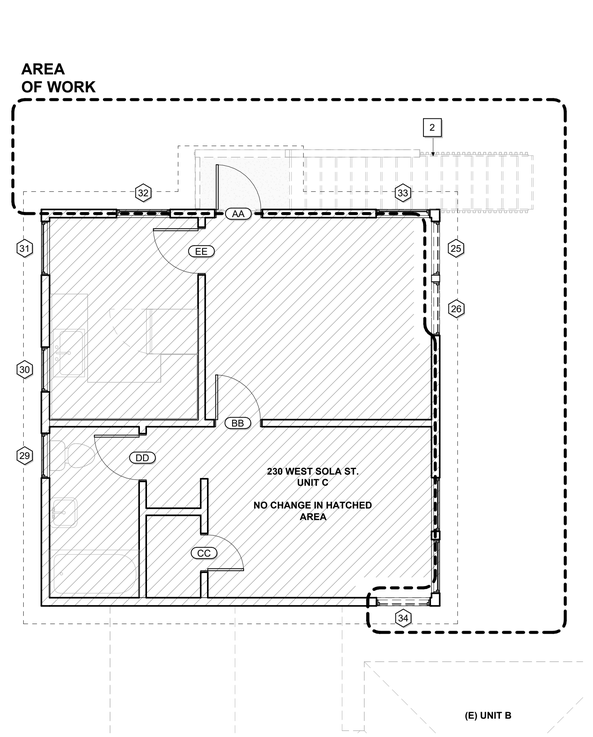
AL	ALUMINUM
A	AWNING
B	BAY
BF	BI-FOLD
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C	CASEMENT
CL	CLOSET
CLRA	CLEAR-ANNODIZED
CP	COPPER
CMT	CASEMENT
DG	DUAL GLAZED
DH	DOUBLE-HUNG
DL	DUMMY LATCH
EGR	EGRESS
FX	FIXED
GL	GLASS
H	HOPPER
HC	HOLLOW CORE
HM	HOLLOW METAL
J	JALOUSIE
KE	KEYED ENTRY W/ DEADBOLT
LG	LAMINATED GLASS
L	LEFT
M	METAL SKIN, SOLID CORE
M/G	METAL / GLASS
O	FIXED WINDOW
P	PAINT
PIC	PICTURE WINDOW
PH	PANIC HARDWARE
PR	PAIR
PF	PRE-FINISHED
PL	PASSAGE LOCK
R	RIGHT
RM	REMOVABLE MULLION
RO	ROUGH OPENING
SC	SOLID CORE
SEC	SECURITY REQUIRED
SH	SINGLE-HUNG
SL	SLIDER WINDOW
SS	SMOKE SEAL
ST	STAIN
STL	STEEL
T	TEMPERED
TR	TRANSOM WINDOW
V	VINYL
V/G	VINYL / GLASS
VGDF	VERTICAL GRAIN DOUG FIR
WD	WOOD
X	OPERABLE WINDOW

SYMBOL LEGEND

- KEYNOTE
- WINDOW
- DOOR
- EQUIPMENT
- LIGHTING
- PLUMBING
- ROOM NAME / ROOM NUMBER / AREA
- ELEMENT ALIGNMENT NOTE
- MOVEMENT DIRECTION
- CHANGE IN FINISH
- REVISION CLOUD REVISION #
- SMOKE/CO DETECTOR
- PROPERTY LINE
- CENTER LINE
- NAME XX'-XX" — ELEVATION LABEL / ELEVATION VALUE
- TRUE NORTH / PLAN NORTH
- SECTION LOCATION/PAGE
- DETAIL LOCATION/PAGE
- GRID LINE
- PHOTO LOCATION/PAGE
- ELEVATION LOCATION/PAGE



2 (N) SECOND FLOOR PLAN
1/4" = 1'-0"



1 (E)/DEMO SECOND FLOOR PLAN
1/4" = 1'-0"

MANUAL LABOR
375 EAST MAIN STREET
VENTURA, CA, 93001
805 628 3382

PROJECT NAME

230 WEST SOLA REMODEL

230 WEST SOLA STREET
SANTA BARBARA, CA 93101

#	DRAWING ISSUED	DATE
	PC #1	06.23.26

SHEET NAME

(E)/DEMO & (N) 2ND FLOOR PLANS

SHEET INFORMATION

DRAWN BY: AS
SCALE: AS NOTED
PLAN NORTH:
TRUE NORTH:

SHEET NUMBER

a2.02

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FIRE-RATED ASSEMBLIES

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DIMENSION PLAN NOTES

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4. EXTERIOR WALLS DIMENSIONED TO OUTSIDE OF SHEATHING, UON. INTERIOR WALLS DIMENSIONED TO SIDE OF STUD, UON.
5. SHEET a2.02, DIMENSION PLANS, OMITS WALL FINISHES

WALL LEGEND

SYMBOL	DESCRIPTION	ASSEMBLY
	(E) WALL TO BE DEMO'D	REFER TO (E) PLANS
	(E) WALL TO REMAIN	REFER TO (E) PLANS
	(N) INTERIOR 2X4 WALL	2X4 DF STUDS @ 16" OC, 5/8" GYP EA. SIDE
	(N) INTERIOR 2X6 WALL	2X6 DF STUDS @ 16" OC, 5/8" GYP EA. SIDE
	(N) INTERIOR 2X6 WALL, COMBINED WITH EXISTING ADJACENT (E) 2X4 WALL; 1-HR FIRE-RATED, STC 53	2X DF STUDS @ 16" OC, 6 1/4" BATT FIBER GLASS, 5/8" TYPE X GYP EA. SIDE, PLUS 3/8" TYPE X GYP INT; 1" AIR GAP BETWEEN WALLS; GA WP 3370, SEE DETAIL ON PAGE a6.00
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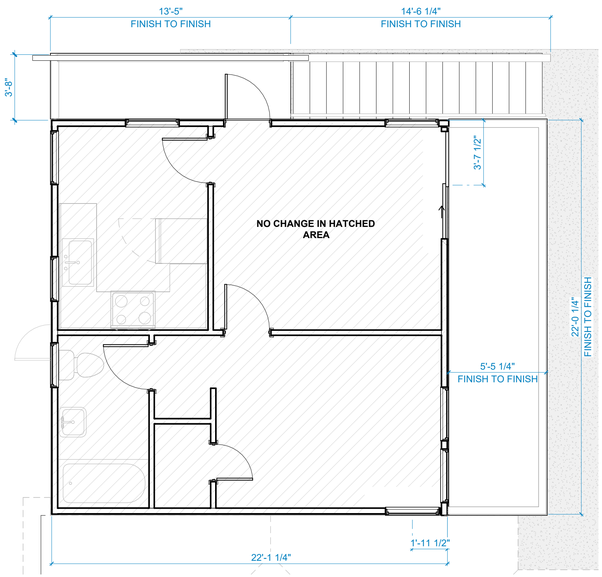
NOTES: INSULATION PER SECTIONS AND/OR GENERAL NOTES
SHEATHING PER STRUCTURAL RAWINGS/NOTES

DOOR/WINDOW ABBREVIATIONS

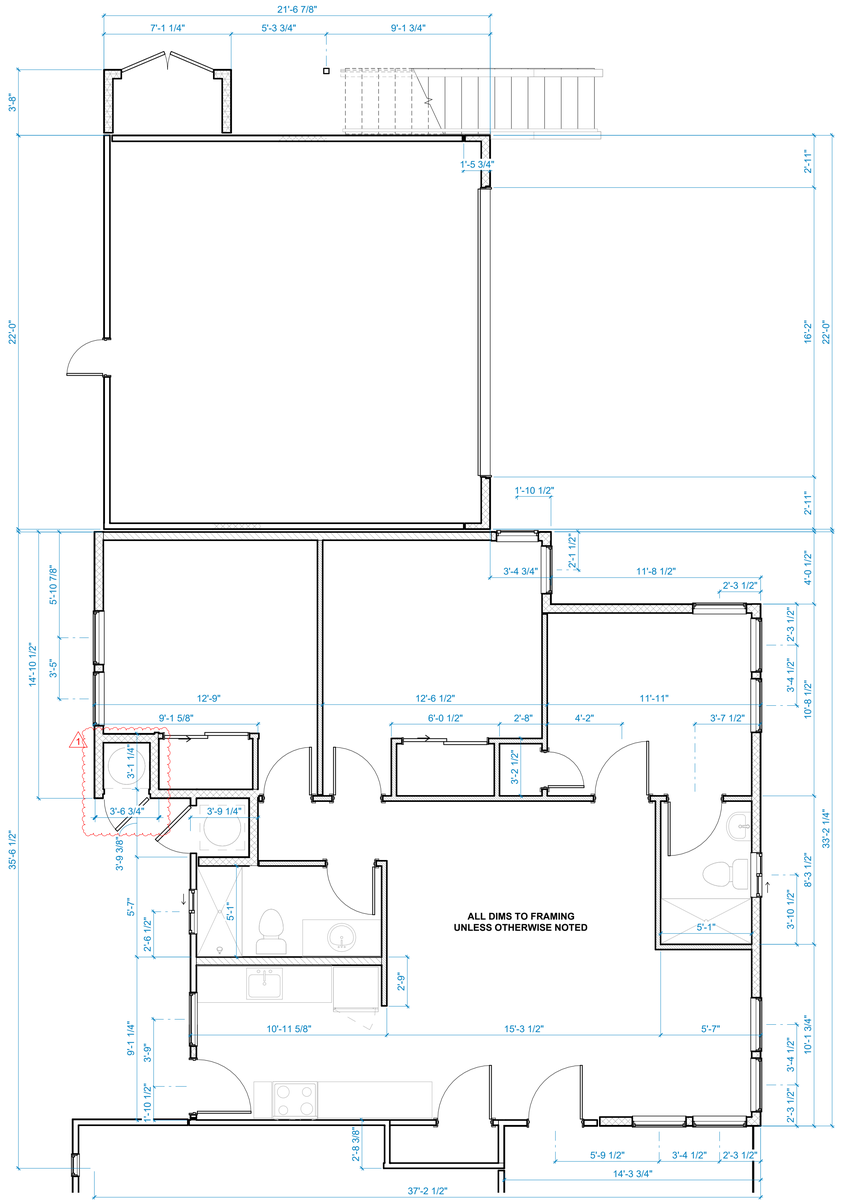
AL	ALUMINUM	O	FIXED WINDOW
A	AWNING	P	PAINT
B	BAY	PIC	PICTURE WINDOW
BF	BI-FOLD	PH	PANIC HARDWARE
BL	BED/BATH LOCK	PR	PAIR
C	CASEMENT	PF	PRE-FINISHED
CL	CLOSET	PL	PASSAGE LOCK
CLRA	CLEAR-ANNODIZED	R	RIGHT
CP	COPPER	RM	REMOVABLE MULLION
CMT	CASEMENT	RO	ROUGH OPENING
DG	DUAL GLAZED	SC	SOLID CORE
DH	DOUBLE-HUNG	SEC	SECURITY REQUIRED
DL	DUMMY LATCH	SH	SINGLE-HUNG
EGR	EGRESS	SL	SLIDER WINDOW
FX	FIXED	SS	SMOKE SEAL
GL	GLASS	ST	STAIN
H	HOPPER	STL	STEEL
HC	HOLLOW CORE	T	TEMPERED
HM	HOLLOW METAL	TR	TRANSOM WINDOW
J	JALOUSIE	V	VINYL
KE	KEYED ENTRY W/ DEADBOLT	V/G	VINYL / GLASS
LG	LAMINATED GLASS	VGDF	VERTICAL GRAIN DOUG FIR
L	LEFT	WD	WOOD
M	METAL SKIN, SOLID CORE	X	OPERABLE WINDOW
M/G	METAL / GLASS		

SYMBOL LEGEND

- # — KEYNOTE
- # — WINDOW
- X — DOOR
- # — EQUIPMENT
- X — LIGHTING
- # — PLUMBING
- ROOM — ROOM NAME
- # — ROOM NUMBER
- SF — AREA
- ALIGN — ELEMENT ALIGNMENT NOTE
- MOVEMENT DIRECTION
- CHANGE IN FINISH
- 1 — REVISION CLOUD REVISION #
- SD CO / SD — SMOKE/CO DETECTOR
- PROPERTY LINE
- CENTER LINE
- NAME XX'-XX" — ELEVATION LABEL ELEVATION VALUE
- TRUE NORTH PLAN NORTH
- X aX.XX — SECTION LOCATION/PAGE
- X aX.XX — DETAIL LOCATION/PAGE
- X — GRID LINE
- X aX.XX — PHOTO LOCATION/PAGE
- aX.XX # — ELEVATION LOCATION/PAGE



2 (N) SECOND FLOOR - DIMENSION PLAN
1/4" = 1'-0"



1 NEW FIRST FLOOR - DIMENSION PLAN
1/4" = 1'-0"

MANUAL LABOR
375 EAST MAIN STREET
VENTURA, CA, 93001
805 628 3382

PROJECT NAME

230 WEST SOLA REMODEL

230 WEST SOLA STREET
SANTA BARBARA, CA 93101

#	DRAWING ISSUED	DATE
	PC #1	06.23.26
1	PC #2	08.14.26

SHEET NAME

(N) 1ST/2ND FLOOR DIMENSION PLANS

SHEET INFORMATION

DRAWN BY: AS
SCALE: AS NOTED
PLAN NORTH:
TRUE NORTH:

SHEET NUMBER

a2.03 1

PRINTED: 8/30/2026 11:11:18 AM PROJECT NUMBER: 24029
THESE DRAWINGS, SPECIFICATIONS, IDEAS & DESIGNS SHALL REMAIN THE PROPERTY OF MANUAL LABOR & SHALL NOT BE DISTRIBUTED OR USED FOR ANY WORK OTHER THAN THE PROJECT FOR WHICH THEY WERE PREPARED WITHOUT WRITTEN CONSENT
INCLUDED DRAWINGS, SPECIFICATIONS, IDEAS & DESIGNS SHALL REMAIN THE PROPERTY OF MANUAL LABOR & SHALL NOT BE DISTRIBUTED OR USED FOR ANY WORK OTHER THAN THE PROJECT FOR WHICH THEY WERE PREPARED WITHOUT WRITTEN CONSENT

ROOF PLAN NOTES

1. UNLESS OTHERWISE NOTED, REQ'D UNDERLAYMENT FOR ASPHALT SHINGLES SHALL CONFORM TO ASTM D 226 TYPE I, ASTM D 4869 TYPE I-IV, OR ASTM D 6757.
2. SELF-ADHERING POLYMER MODIFIED BITUMEN SHEET SHALL COMPLY W/ ASTM D 1970.
3. ASPHALT SHINGLES SLOPE BETWEEN 2:12 - 4:12: UNDERLAYMENT SHALL BE TWO LAYERS & SHALL COMPLY W/ CRC R905.2.7 (APPLY A 19" STRIP OF UNDERLAYMENT FELT PARALLEL TO & STARTING AT THE EAVES, FASTENED SUFFICIENTLY TO HOLD IN PLACE. STARTING AT THE EAVE, APPLY 36" WIDE SHEETS OF UNDERLAYMENT, OVERLAPPING SUCCESSIVE SHEETS 19", & FASTENED SUFFICIENTLY TO HOLD IN PLACE) [CRC R905.2.4, CRC TABLES R905.1.1(1), R905.1.1(2)] [ATTACHMENTS PER CRC R905.1.1(3)][CBC TABLE 1507.1.1(2)].
4. ASPHALT SHINGLES SLOPE GREATER THAN 4:12: UNDERLAYMENT SHALL BE ONE LAYER APPLIED IN THE FOLLOWING MANNER: UNDERLAYMENT SHALL BE APPLIED SHINGLE FASHION, PARALLEL TO & STARTING FROM THE EAVE & LAPPED 2", DISTORTIONS IN THE UNDERLAYMENT SHALL NOT INTERFERE W/ THE ABILITY OF THE SHINGLES TO SEAL. END LAPS SHALL BE 4" & SHALL BE OFFSET BY 6'-0" [CRC R905.2.4, CRC TABLES R905.1.1(1), R905.1.1(2)] [ATTACHMENTS PER CRC R905.1.1(3)] [CBC TABLE 1507.1.1(2)].
5. ROOF SHEATHING SHALL BE STRUCTURAL "REFLECTIVE SHEATHING"
6. PROVIDE FLASHING (8" MIN LAP) AT ROOF JOINTS. COORDINATE FLASHING MATERIAL SELECTION W/ ARCHITECT, TYP.
7. COORDINATE LOCATION OF (N) VENT RISERS W/ ARCHITECT.
8. ALL VENTING EQUIPMENT ON ROOF TO BE PRIMED & PAINTED TO MATCH ROOF COLOR, ARCHITECT TO APPROVE COLOR IN WRITING.
9. ROOF DRAINS & OVERFLOW DRAINS, WHETHER OR NOT CONCEALED W/IN THE CONSTRUCTION OF THE BUILDING, SHALL BE INSTALLED PER CRC R903.4, CBC 1502, & THE CPC.
10. ENCLOSED ATTICS & ENCLOSED RAFTER SPACES FORMED WHERE CEILINGS ARE APPLIED DIRECTLY TO THE UNDERSIDE OF ROOF RAFTERS SHALL HAVE CROSS VENTILATION FOR EACH SEP SPACE BY VENTING OPENINGS PROTECTED AGAINST THE ENTRANCE OF RAIN & SNOW. THE NET FREE VENTILATION AREA SHALL NOT BE LESS THAN 1/300TH OF THE SPACE VENTILATED PROVIDED A VAPOR BARRIER NOT EXCEEDING (1) PERM IS INSTALLED ON THE WARM SIDE OF THE ATTIC INSULATION [CRC R806.2] [CBC 1202.2] (THIS NOTE N/A FOR CONDITIONS COMPLYING W/ CRC R806.5 OR CBC 1203.3 FOR UNVENTED ATTIC & UNVENTED ENCLOSED RAFTER ASSEMBLIES) PER CPC CH. 11.
11. A CHIMNEY FOR A RESIDENTIAL-TYPE OR LOW-HEAT APPLIANCE SHALL EXTEND NOT LESS THAN 3'-0" ABOVE THE HIGHEST POINT WHERE IT PASSES THROUGH A ROOF OF A BUILDING & NOT LESS THAN 2'-0" HIGHER THAN A PORTION OF A BUILDING W/IN A HORIZONTAL DISTANCE OF 10'-0". [CMC 802.5.4, NFPA 54:12.6.2.1].
12. SEE "GENERAL NOTES" SHEET(S) FOR ADDITIONAL STANDARDS/REQUIREMENTS.

ATTIC VENTING CALCULATIONS

ATTIC VENTING REQUIREMENTS
VENT EAVES AND RIDGES AS NEEDED TO COMPLY WITH CRC R806.1 - R806.3. PROVIDE ATTIC VENTING EQUAL TO 1 SF/300 SF MIN (1 SF/150 SF PREFERRED) OF ATTIC AREA. PROVIDE MAX 1/2 OF THE ATTIC VENTING AREA NEAR THE RIDGE AT LEAST 3'-0" ABOVE THE EAVE OR CORNICE VENTS AND THE REMAINDER OF THE VENTING AREA AT THE EAVE AND CORNICE VENTS [CBC 1202.2.1(2)]

PROVIDE BAFFLES TO PREVENT INSULATION FROM BLOCKING EAVE VENTS [CRC R806.3]

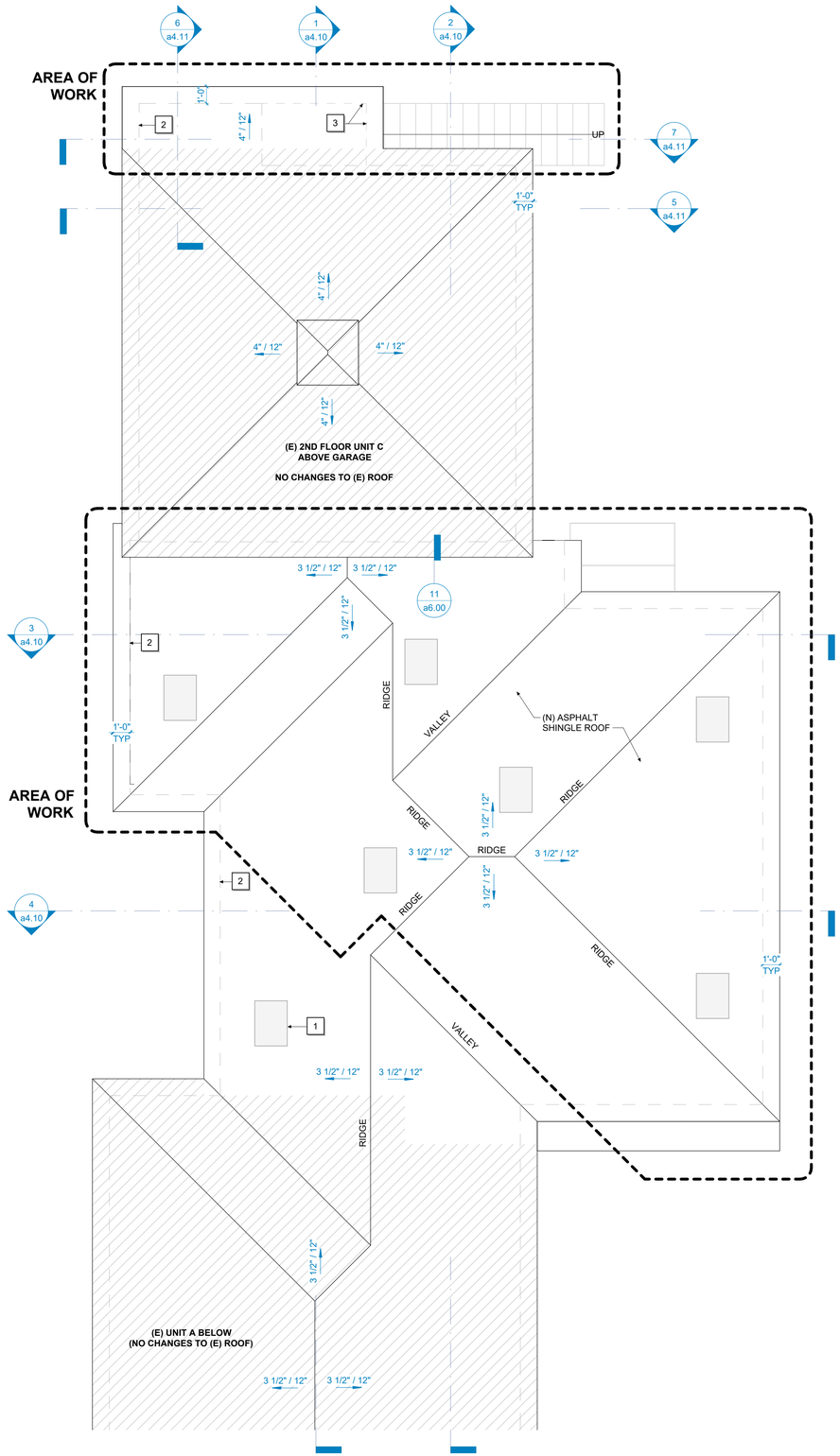
ATTIC VENTS ARE REQUIRED TO BE PROTECTED BY 1/8"-1/4" CORROSION RESISTANT METAL MESH OR SIMILAR [CRC R806.1]

VENTILATION CALCULATIONS
UNIT B AREA OF ATTIC: 1037 / 300 = 3.4 SF = 498.24 SI OF VENTING REQ.

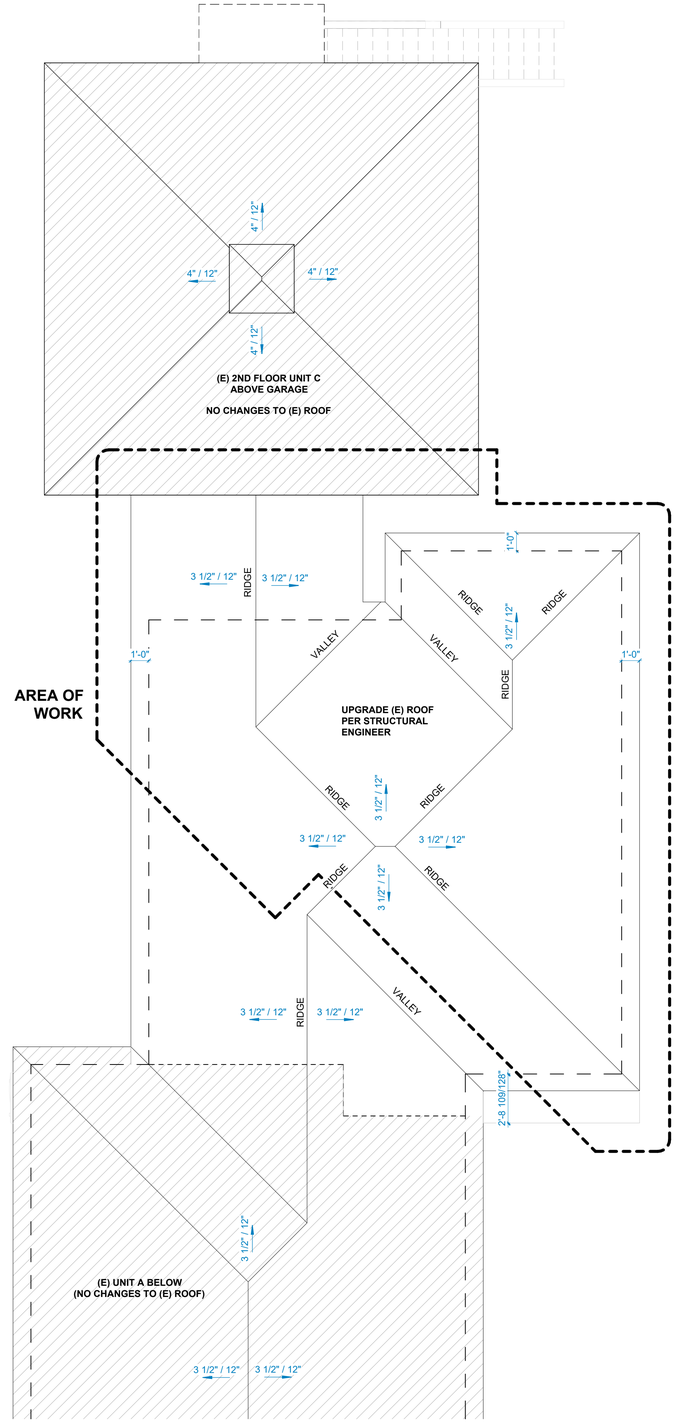
O'HAGIN LOW PROFILE TAPERED VENT: 72 SI/VENT
UNIT B: 498.24 SI / 72 SI = 6.92 = 7 ROOF VENTS

KEYNOTES

1	O'HAGIN - CLOAKED ROOF VENT - NET FREE VENT AREA = 72 SQ.IN. - VENT SHALL BE PROTECTED WITH CORROSION RESITANT WIRE CLOTH SCREENING, OPENING SHALL BE A MIN 1/16" AND SHALL NOT EXCEED 1/4" (R806.1 CRC)
2	EXTERIOR FACE OF WALL BELOW
3	FACE OF (N) STAIRS AND (N) LANDING BELOW



2 (N) ROOF PLAN
1/4" = 1'-0"



1 (E) ROOF PLN
1/4" = 1'-0"

MANUAL LABOR
375 EAST MAIN STREET
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805 628 3382

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#	DRAWING ISSUED	DATE
	PC #1	06.23.26

SHEET NAME

(E)/(N) ROOF PLAN

SHEET INFORMATION

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PLAN NORTH:
TRUE NORTH:

SHEET NUMBER

a2.20

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INCLUDED DRAWINGS, SPECIFICATIONS, IDEAS & DESIGNS SHALL REMAIN THE PROPERTY OF

KEYNOTES

1	(E) ASPHALT SHINGLE ROOF TO BE REPLACED W/ (N) ROOF
2	(E) STUCCO EXTERIOR
3	DEMO AND REPLACE (E) DETERIORATED WOOD STAIRS, SECOND FLOOR LANDING, AND ROOF ABOVE.
4	(E) BIKE PARKING TO BE DEMO'D & REPLACED
5	DEMO (E) GARAGE DOORS AND FRONT WALL OF GARAGE, REPLACE AND ENLARGE PER (N) FLOOR PLANS



8 SITE PHOTO - EAST ELEVATION 2
3" = 1'-0"



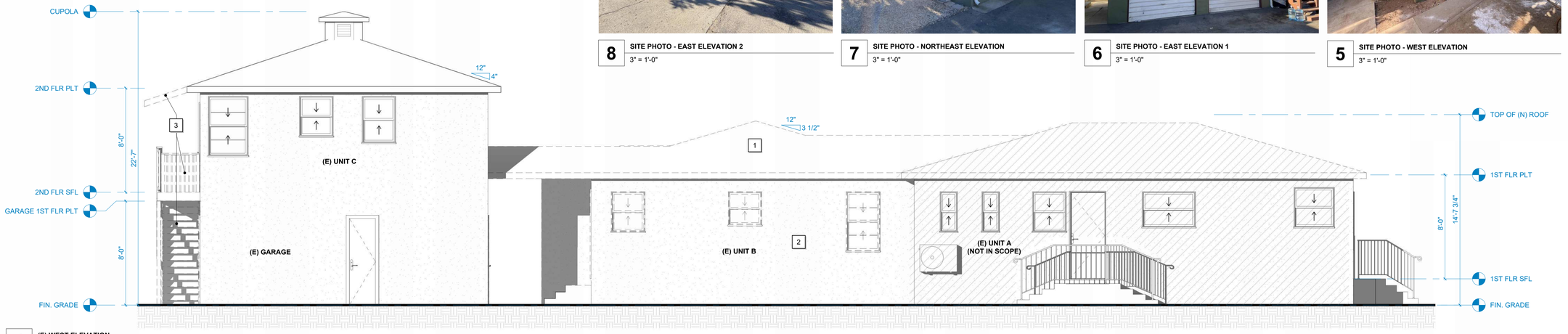
7 SITE PHOTO - NORTHEAST ELEVATION
3" = 1'-0"



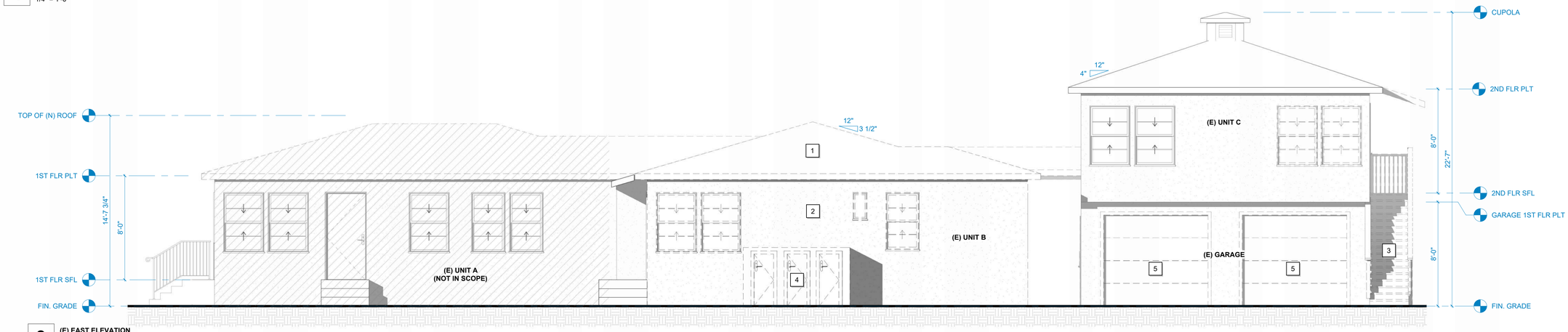
6 SITE PHOTO - EAST ELEVATION 1
3" = 1'-0"



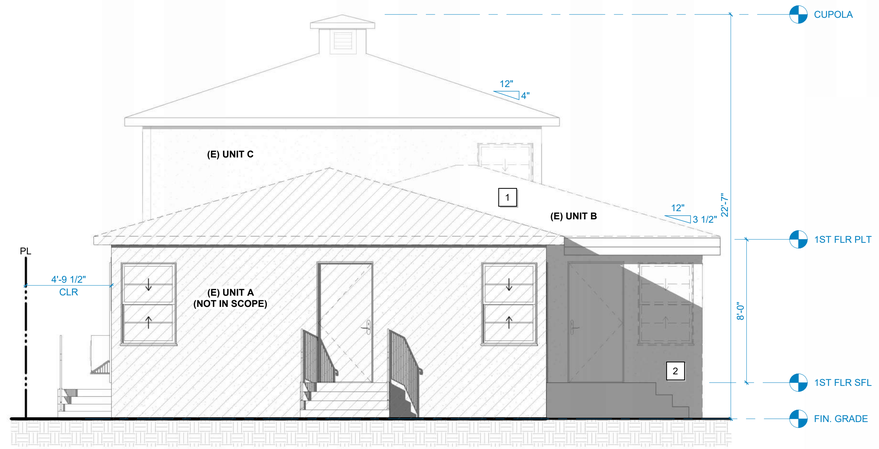
5 SITE PHOTO - WEST ELEVATION
3" = 1'-0"



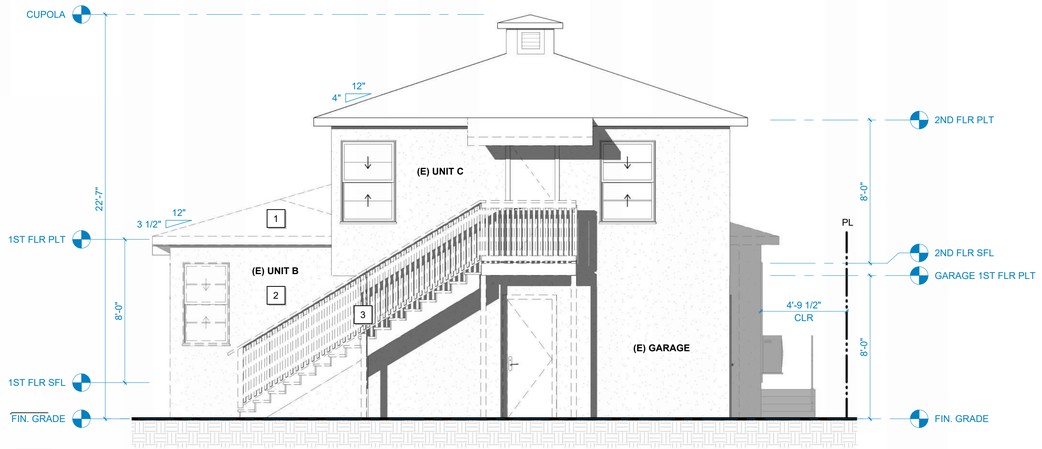
4 (E) WEST ELEVATION
1/4" = 1'-0"



3 (E) EAST ELEVATION
1/4" = 1'-0"



2 (E) SOUTH ELEVATION
1/4" = 1'-0"



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

MANUAL LABOR

375 EAST MAIN STREET
VENTURA, CA, 93001

805 628 3382

PROJECT NAME

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SANTA BARBARA, CA 93101

#	DRAWING ISSUED	DATE
	PC #1	06.23.26

SHEET NAME

(E) EXTERIOR ELEVATIONS

SHEET INFORMATION

DRAWN BY: AS

SCALE: AS NOTED

PLAN NORTH:

TRUE NORTH:

SHEET NUMBER

a3.00

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CRAWL SPACE VENTING CALCULATIONS

OPEN EARTH FLOORS: 1 SQUARE FOOT FOR EACH 150 SQUARE FEET
CRAWL SPACE AREA / 150 = VENTILATION SQFT X 144 = VENTILATION SQIN / SIZE OF OPENING IN SQIN = # OF OPENINGS

UNIT B CRAWL SPACE (OPEN EARTH): 1,111 SQFT
1111/150 = 6.35 X 144 = 914.4 SQIN - 240 (CRAWL SPACE DOOR VENT) / 73 (SIZE OF VENT) = 9.23 VENTS (9 VENTS)

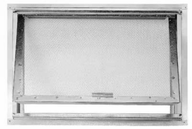
FOUNDATION VENT SPECIFICATION



MASTER FLOW 16" x 8"

73 SI NET FREE AREA

CRAWL SPACE DOOR AND VENT SPECIFICATION



GIBRALTER 18 in. x 24 in.

216 SI NET FREE AREA

COLOR AND MATERIALS PALETTE

PRIMARY EXTERIOR MATERIAL/COLOR:

STUCCO - BENJAMIN MOORE "IN THE GARDEN" GREEN

TRIM COLORS:

WOOD - BENJAMIN MOORE "ENGLISH MANOR" RUSTY RED

RAILING MATERIAL/COLOR:

METAL - BENJAMIN MOORE "BLACK IRON" GLOSS BLACK

ROOFING MATERIAL/COLOR:

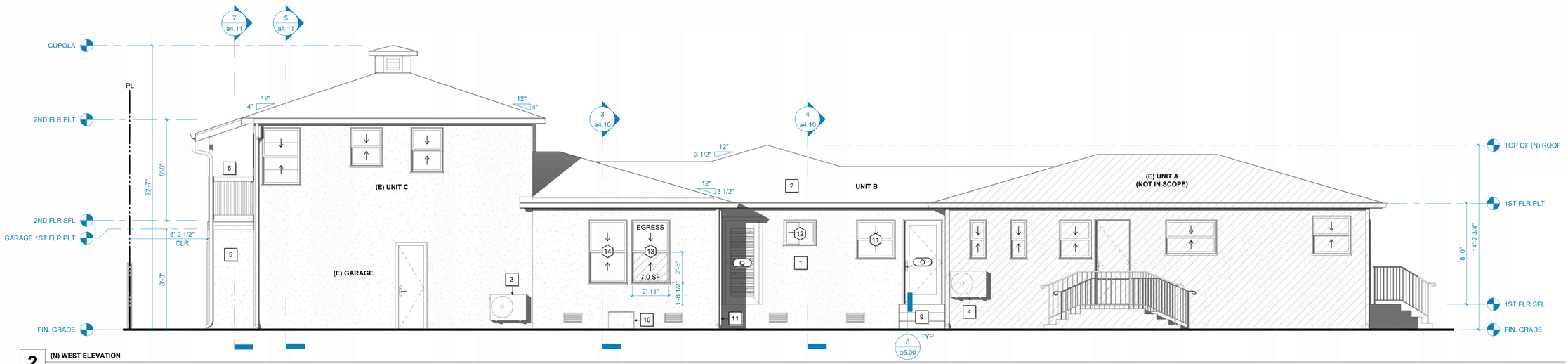
ASPHALT SHINGLES - OWENS CORNING OAKRIDGE DESERT TAN

KEYNOTES

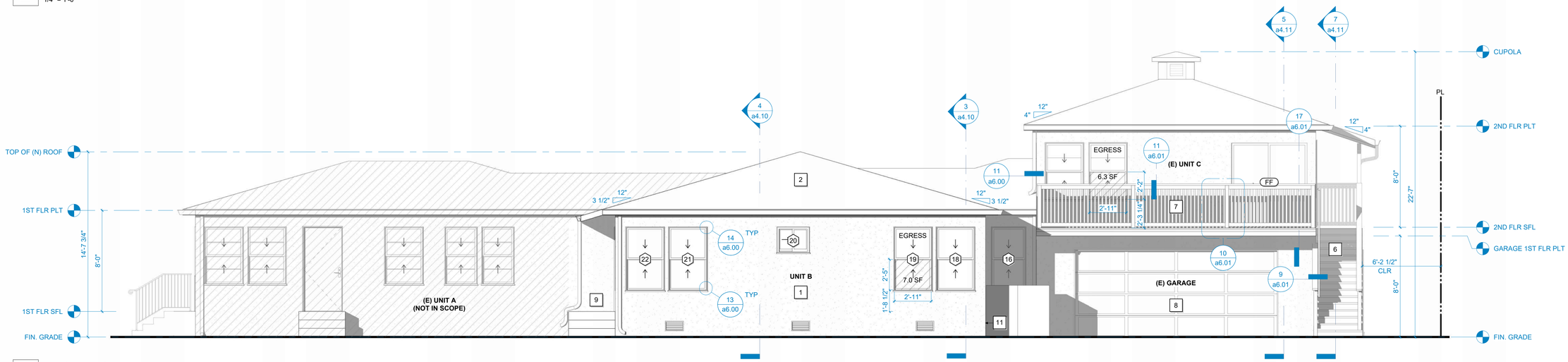
1	STUCCO EXTERIOR
2	(N) ASPHALT SHINGLE ROOF
3	(N) WALL MOUNTED MINI-SPLIT HEAT PUMP CONDENSOR TO SERVE UNIT B, EQUIPMENT IS MORE THAN 5FT FROM PROPERTY LINE AND OPERATES BETWEEN 51-54db
4	(E) MINI-SPLIT HEAT PUMP CONDENSOR SERVING UNIT A TO REMAIN
5	(N) LAUNDRY
6	(N) UNIT C ENTRY STAIRS, LANDING, AND ROOF
7	(N) BALCONY
8	(N) FACE OF GARAGE INCLUDING NEW GARAGE DOOR
9	GUARDRAILS NOT REQUIRED AS LANDING IS LESS THAN 30" ABOVE FINISH GRADE
10	CRAWL SPACE ACCESS, 18" X 24" CLEAR OPENING
11	ADD ONE FOUNDATION VENT IN STEM WALL NOT SHOWN IN ELEVATION

ELEVATION NOTES

1. ETCH/PREP, PRIME & PAINT ROOF PROTRUSIONS TO MATCH ROOF, TYP.
2. ROOF VENTS TO BE GROUPED TO THE EXTENT FEASIBLE.
3. FOR PENETRATIONS IN RATED WALL ASSEMBLIES, REFER TO CBC.
4. SUBCONTRACTOR(S) SHALL BE RESPONSIBLE FOR ALL TRADE-RELATED ITEMS AS CONTAINED W/IN FULL CONSTRUCTION DOCUMENTS.
5. ALL ELECTRICAL, GAS, PLUMBING & MECHANICAL PENETRATIONS IN EXTERIOR WALLS SHALL BE FLASHED W/ "QUICKFLASH" WATERPROOFING PRODUCTS (WWW.QUICKFLASHPRODUCTS.COM) OR EQUAL.
6. EXTERIOR OF BUILDING SHALL BE WRAPPED W/ MIN GRADE "D" PRIOR TO INSTALLING FINISH MATERIAL. INSTALL PER MFR INSTRUCTIONS.
7. FLASH/COUNTER FLASH AT ALL ROOF-TO-WALL CONDITIONS.
8. ALL FLASHING SHALL BE CONSISTENT W/ ROOF & WALL FINISH. DISSIMILAR METALS SHALL NOT BE IN CONTACT W/ EACH OTHER.
9. BACKPRIME ALL UNFINISHED TRIM EDGES PRIOR TO INSTALLATION, TYP.
10. WOOD FRAMING MEMBERS (INCLUDING WOOD SHEATHING) THAT REST ON FOUNDATION WALLS & ARE LESS THAN 8" FROM EXPOSED EARTH SHALL BE OF NATURALLY DURABLE OR PRESERVATIVE TREATED WOOD [CBC 2304.12.2.2] [CRC R304.1].
11. RAKED BOARDS & TRIM BEYOND THE RAKE SHALL BE CONTINUOUS.
12. ELEVATION VALUES REFER TO STRUCTURAL LEVELS. REFER TO INTERIOR ELEVATIONS FOR CRITICAL DIMS FROM FINISHED SURFACES.
13. ALL EXTERIOR WALL COVERINGS SHALL BE APPLIED PER CRC R703 AND CBC 1403.
14. APPROVED NUMBERS OR ADDRESSES SHALL BE POSTED, PLAINLY VISIBLE & LEGIBLE FROM THE STREET FRONTING THE PROPERTY [CFC 505.1].
15. ALL GUTTERS SHALL BE SIZED PER CPC CH. 11. ALL DRAINS & GUTTERS SHALL COMPLY W/ CPC CH. 11 REQ.
16. SEE MECHANICAL / ELECTRICAL / PLUMBING PLANS FOR ITEMS NOT SHOWN OR SPECIFIED ON ELEVATIONS.



2 (N) WEST ELEVATION
1/4" = 1'-0"



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

MANUAL LABOR

375 EAST MAIN STREET
VENTURA, CA, 93001

805 628 3382

PROJECT NAME

230 WEST SOLA REMODEL

230 WEST SOLA STREET
SANTA BARBARA, CA 93101

#	DRAWING ISSUED	DATE
	PC #1	06.23.26

SHEET NAME

(N) EXTERIOR ELEVATIONS

SHEET INFORMATION

DRAWN BY: AS

SCALE: AS NOTED

PLAN NORTH:

TRUE NORTH:

SHEET NUMBER

a3.10

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COLOR AND MATERIALS PALETTE

PRIMARY EXTERIOR MATERIAL/COLOR:

STUCCO - BENJAMIN MOORE "IN THE GARDEN" GREEN

TRIM COLORS:

WOOD - BENJAMIN MOORE "ENGLISH MANOR" RUSTY RED

RAILING MATERIAL/COLOR:

METAL - BENJAMIN MOORE "BLACK IRON" GLOSS BLACK

ROOFING MATERIAL/COLOR:

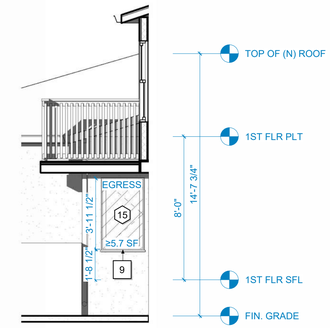
ASPHALT SHINGLES - OWENS CORNING OAKRIDGE DESERT TAN

KEYNOTES

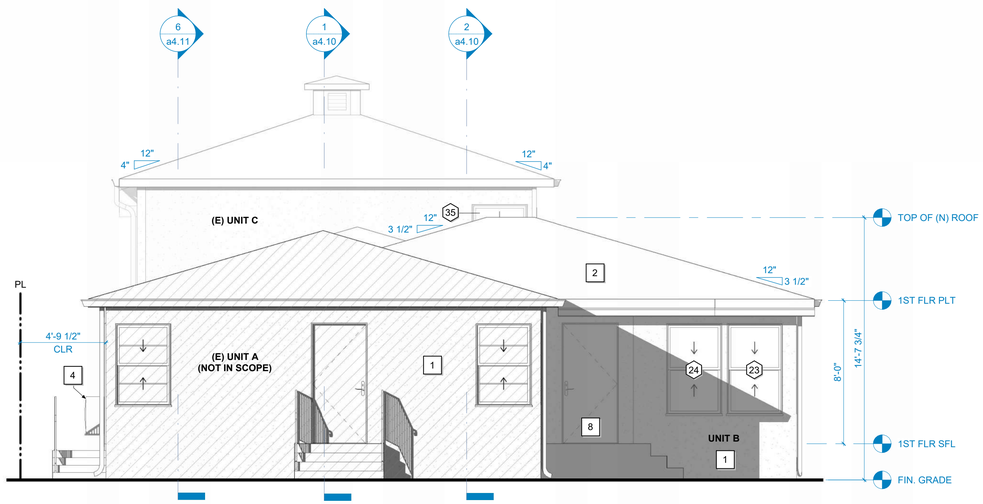
1	STUCCO EXTERIOR
2	(N) ASPHALT SHINGLE ROOF
3	(N) TRASH, RECYLCE AND GREEN WASTE CONTAINER LOCATION
4	(E) MINI-SPLIT HEAT PUMP CONDENSOR SERVING UNIT A TO REMAIN
5	(N) WALL MOUNTED MINI-SPLIT HEAT PUMP CONDENSOR TO SERVE UNIT B, EQUIPMENT IS MORE THAN 5FT FROM PROPERTY LINE AND OPERATES BETWEEN 51-54db
6	(N) BALCONY
7	(N) UNIT C ENTRY STAIRS, LANDING, AND ROOF
8	GUARDRAILS NOT REQUIRED AS LANDING IS LESS THAN 30" ABOVE FINISH GRADE
9	CONTRACTOR TO VERIFY THAT WINDOW MEETS EGRESS REQUIREMENTS

ELEVATION NOTES

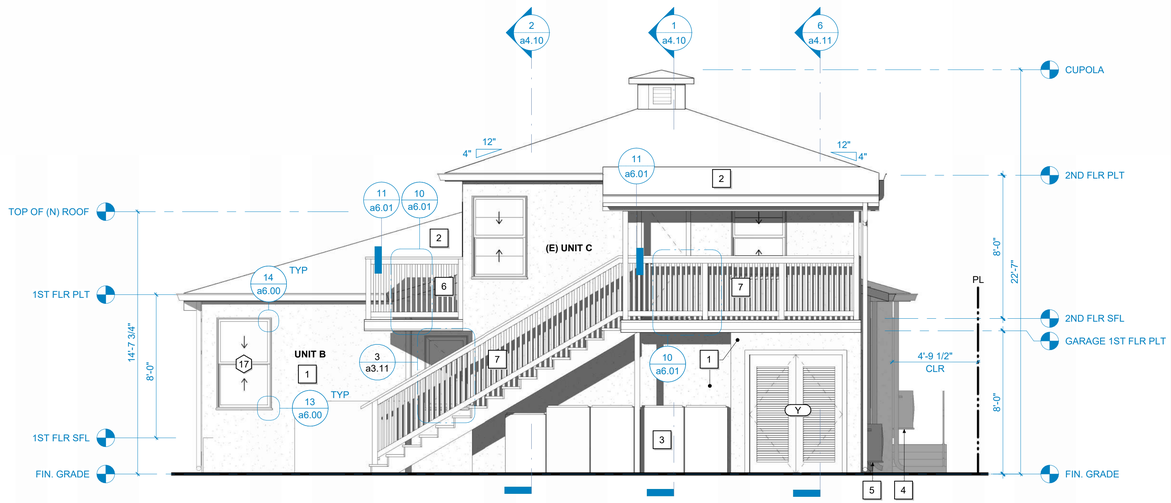
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13. ALL EXTERIOR WALL COVERINGS SHALL BE APPLIED PER CRC R703 AND CBC 1403.
14. APPROVED NUMBERS OR ADDRESSES SHALL BE POSTED, PLAINLY VISIBLE & LEGIBLE FROM THE STREET FRONTING THE PROPERTY [CFC 505.1].
15. ALL GUTTERS SHALL BE SIZED PER CPC CH. 11. ALL DRAINS & GUTTERS SHALL COMPLY W/ CPC CH. 11 REQ.
16. SEE MECHANICAL / ELECTRICAL / PLUMBING PLANS FOR ITEMS NOT SHOWN OR SPECIFIED ON ELEVATIONS.



3 WINDOW 15 NORTH ELEVATION
1/4" = 1'-0"



2 (N) SOUTH ELEVATION
1/4" = 1'-0"



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

MANUAL LABOR

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SCALE: AS NOTED

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TRUE NORTH:

SHEET NUMBER

a3.11

SECTIONS NOTES

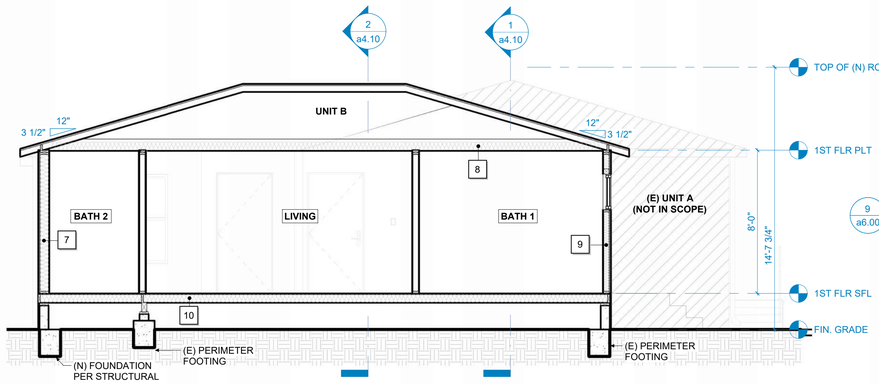
1. MIN 5/8" TYPE "X" GYP AT WALLS & CEILINGS UON.
2. MIN 2 LAYERS 5/8" TYPE "X" GYP AT GARAGE CEILINGS & USABLE SPACE BELOW STAIRS.
3. WALL CONSTRUCTION PER WALL LEGEND, DETAILS & FRAMING NOTES.
4. FLOOR SLAB PER STRUCTURAL PLANS.
5. MIN 6-MIL POLYETHYLENE OR APPROVED VAPOR RETARDER W/ JOINTS LAPPED NOT LESS THAN 6 INCHES SHALL BE PLACED BETWEEN THE CONC FLOOR SLAB & THE BASE COURSE OR THE PREPARED SUBGRADE WHERE NO BASE COURSE EXISTS [CRC R506.3.3].
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7. PROTECTION OF WOOD & WOOD-BASED PRODUCTS FROM DECAY SHALL BE PROVIDED W/ THE USE OF NATURALLY DURABLE WOOD OR WOOD THAT IS PRESERVATIVE-TREATED IN ACCORDANCE W/ AWPA UI FOR THE SPECIES, PRODUCT, PRESERVATIVE & END USE. PRESERVATIVES SHALL BE LISTED IN SECTION 4 OF AWPA UI. THIS REQ APPLIES IN THE FOLLOWING LOCATIONS:
   A. WOOD JOISTS OR THE BOTTOM OF A WOOD STRUCTURAL FLOOR WHEN CLOSER THAN 18" TO THE EXPOSED GROUND
   B. WOOD GIRDERS WHEN CLOSER THAN 12" TO THE EXPOSED GROUND IN CRAWL SPACES OR UNEXCAVATED AREA LOCATED W/IN THE PERIPHERY OF THE BUILDING FOUNDATION
   C. ALL FOUNDATION SILLS, PLATES, SLEEPERS, POSTS, & COLUMNS THAT REST ON CONC OR MASONRY MUST BE NATURALLY DURABLE OR PRESERVATIVE TREATED [CRC R304.1] [CBC 2304.12.2.2]
8. FLOOR/CEILING & WALL ASSEMBLIES SHALL COMPLY W/ CODE REQ'S FOR FIRE-RATINGS, INCLUDING: MATERIALS, CONSTRUCTION, PENETRATIONS, OPENINGS, FIXTURES, DUCT CHASES, ETC. THIS MAY REQUIRE SPECIFIC RATED PRODUCTS. SEE NOTES AND DETAILS, WHERE APPLICABLE.
9. SEE "GENERAL NOTES" SHEET(S) FOR ADDITIONAL STANDARDS/REQUIREMENTS.

FIRE-RATED ASSEMBLIES

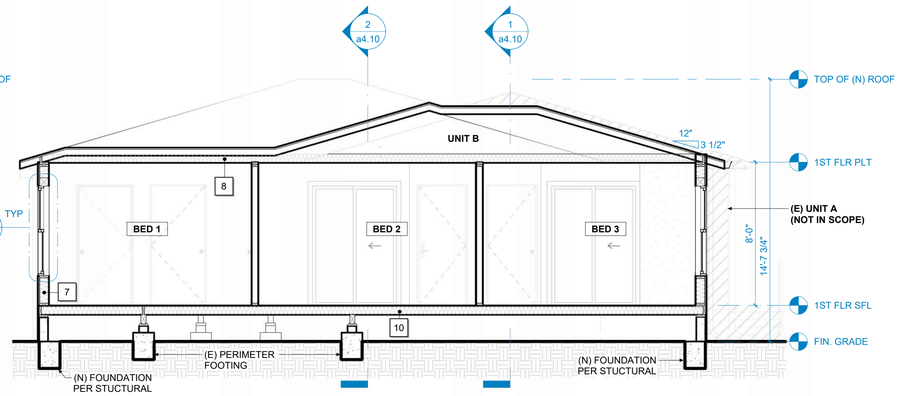
SYMBOL	DESCRIPTION
	FLOOR/CEILING & WALL ASSEMBLIES SHALL COMPLY W/ CODE REQ'S FOR FIRE-RATINGS, INCLUDING: MATERIALS, CONSTRUCTION, PENETRATIONS, OPENINGS, FIXTURES, DUCT CHASES, ETC. THIS MAY REQUIRE SPECIFIC RATED PRODUCTS. SEE NOTES AND DETAILS, WHERE APPLICABLE.

KEYNOTES

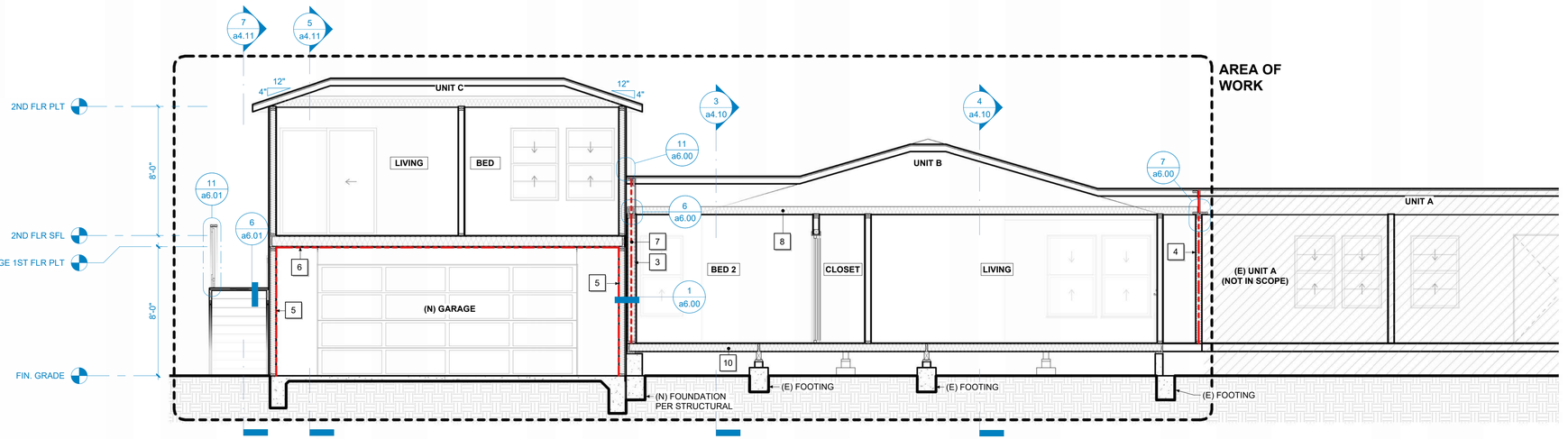
1	1-HR RATED EXTERIOR STAIR ASSEMBLY
2	SLOPE TO DRAIN, 2% MIN
3	1-HR RATED WALL ASSEMBLY PER R302.2.2.1
4	1-HR UNIT SEPARATION ASSEMBLY AND ATTIC DRAFTSTOP BUILT IN BLD2023-01617 TO BE MAINTAINED
5	1/2" GYP ON GARAGE WALLS WITH UNIT ABOVE
6	5/8" TYPE X GYP ON GARAGE CEILING WITH UNIT ABOVE
7	R-21 INSULATION IN (N) 2X6 WALLS, TYP.
8	R-30 INSULATION IN CEILINGS, TYP.
9	R-11 INSULATION IN (E) 2X4 WALLS, TYP.
10	R-19 INSULATION UNDER FLOORS



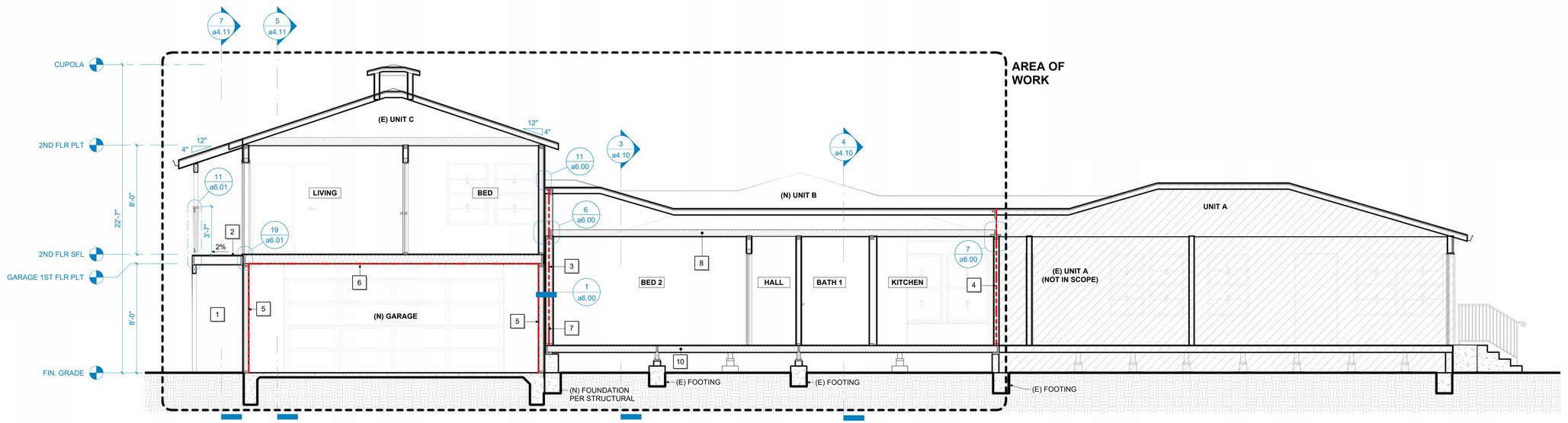
4 (N) SECTION 4
1/4" = 1'-0"



3 (N) SECTION 3
1/4" = 1'-0"



2 (N) SECTION 2
1/4" = 1'-0"



1 (N) SECTION 1
1/4" = 1'-0"

PRINTED: 8/30/2026 11:11:34 AM PROJECT NUMBER: 24029
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MANUAL LABOR
375 EAST MAIN STREET
VENTURA, CA, 93001
805 628 3382

PROJECT NAME

230 WEST SOLA REMODEL

230 WEST SOLA STREET
SANTA BARBARA, CA 93101

#	DRAWING ISSUED	DATE
	PC #1	06.23.26

SHEET NAME

(N) SECTIONS

SHEET INFORMATION

DRAWN BY: AS
SCALE: AS NOTED
PLAN NORTH:
TRUE NORTH:

SHEET NUMBER

a4.10

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FIRE-RATED ASSEMBLIES

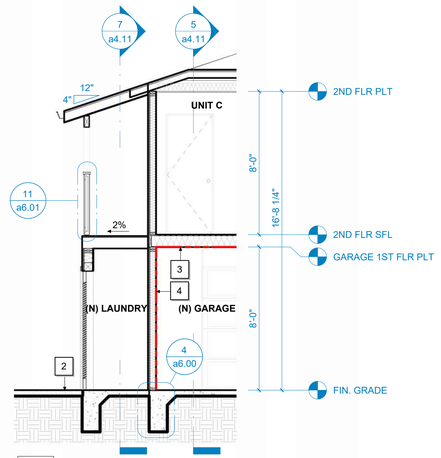
SYMBOL	DESCRIPTION
	FLOOR/CEILING & WALL ASSEMBLIES SHALL COMPLY W/ CODE REQ'S FOR FIRE-RATINGS, INCLUDING: MATERIALS, CONSTRUCTION, PENETRATIONS, OPENINGS, FIXTURES, DUCT CHASES, ETC. THIS MAY REQUIRE SPECIFIC RATED PRODUCTS. SEE NOTES AND DETAILS, WHERE APPLICABLE.

KEYNOTES

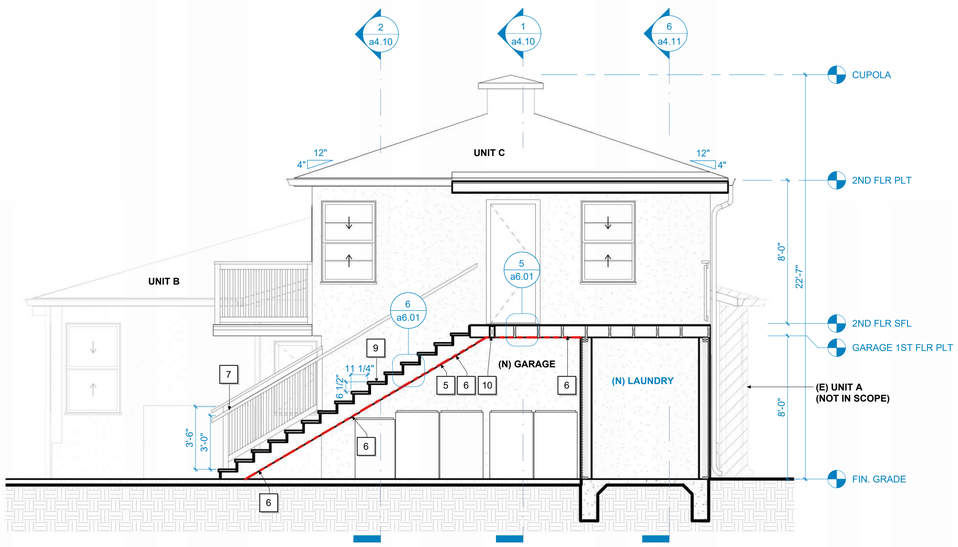
1	SLOPE TO DRAIN, 2% MIN
2	(N) PERMEABLE PAVERS
3	5/8" TYPE X GYP ON GARAGE CEILING WITH UNIT ABOVE
4	1/2" GYP ON GARAGE WALLS WITH UNIT ABOVE
5	1-HR RATING ON THE UNDERSIDE OF STAIRS AND LANDING ABOVE TRASH CANS, SEE DETAILS
6	VULCAN OR EQUIVALENT 1HR FIRE RATED LINEAR VENT
7	GRIP SIZE: HANDRAILS WITH A CIRCULAR CROSS SECTION SHALL HAVE AN OUTSIDE DIA OF AT LEAST 1-1/4" NOT GREATER THAN 2" DIA. NON-CIRCULAR HANDRAILS SHALL HAVE A PERIMETER DIMENSION OF AT LEAST 4" AND NOT GREATER THAN 6-1/4" WITH A MAX. CROSS SECTION DIMENSION OF 2-1/4". EDGES SHALL HAVE A MIN RADIUS OF 0.01." (C.R.C. R311.7.8.3) - HEIGHT: HANDRAILS MEASURED VERTICALLY FROM THE SLOPED PLANE ADJOINING THE TREAD NOSING SHALL BE NOT LESS THAN 34" AND NOT MORE THAN 38." (CRC R311.7.8.1) - CONTINUITY: HANDRAILS FOR STAIRWAYS SHALL BE CONTINIOUS FOR THE FULL LENGTH OF THE FLIGHT, FROM A POINT DIRECTLY ABOVE THE TOP RISER OF THE FLIGHT TO A POINT DIRECTLY ABOVE THE LOWEST RISER OF THE FLIGHT. HANDRAIL ENDS SHALL BE RETURNED OR SHALL TERMINATE IN NEWEL POSTS OR SAFETY TERMINALS. HANDRAIL ADJACENT TO WALL SHALL HAVE A SPACE NOT LESS THAN 1 1/2" BETWEEN THE WALL AND HANDRAILS (R311.7.8.2) - PROVIDE SOLID 2x8 BLOCKING FOR ATTACHMENT TO WALL. FINISH PER OWNER. (SIZE, ATTACHMENT, TERMINATION PER C.R.C.)
8	BEAM PER STRUCTURAL
9	(N) STAIR RISE: 7 3/4" MAX, RUN: 11" MIN WITH 1" NOSING
10	STAIR AND LANDING FRAMING AND CONNECTIONS PER STRUCTURAL

SECTIONS NOTES

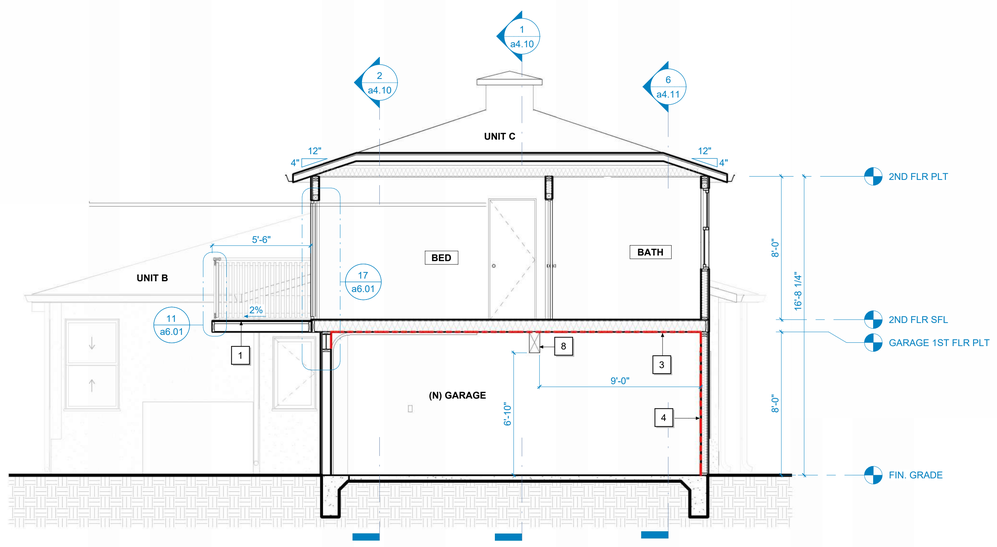
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9. SEE "GENERAL NOTES" SHEET(S) FOR ADDITIONAL STANDARDS/REQUIREMENTS.



6 SECTION 6
1/4" = 1'-0"



7 SECTION 7
1/4" = 1'-0"



5 SECTION 5
1/4" = 1'-0"

MANUAL LABOR
375 EAST MAIN STREET
VENTURA, CA, 93001
805 628 3382

PROJECT NAME

230 WEST SOLA REMODEL

230 WEST SOLA STREET
SANTA BARBARA, CA 93101

#	DRAWING ISSUED	DATE
	PC #1	06.23.26

SHEET NAME

(N) SECTIONS

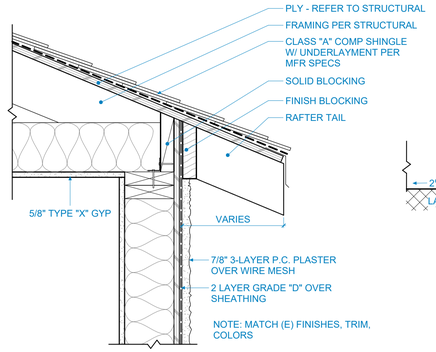
SHEET INFORMATION

DRAWN BY: AS
SCALE: AS NOTED
PLAN NORTH:
TRUE NORTH:

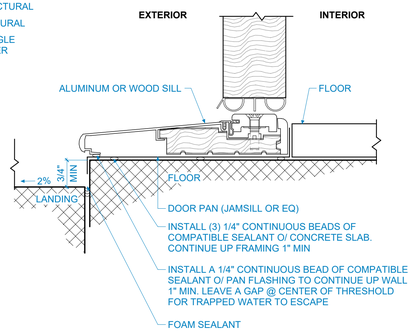
SHEET NUMBER

a4.11

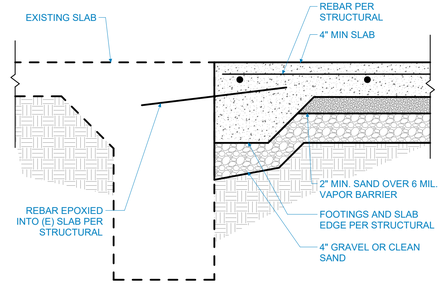
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12 **EAVE SECTION DETAIL**
1 1/2" = 1'-0"

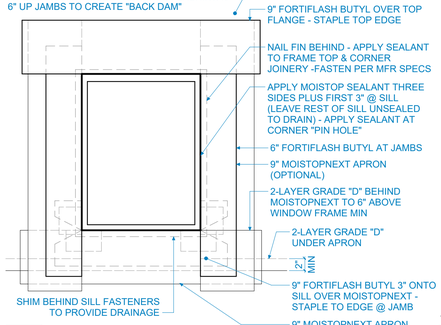


8 **DOOR SILL SECTION DETAIL**
6" = 1'-0"

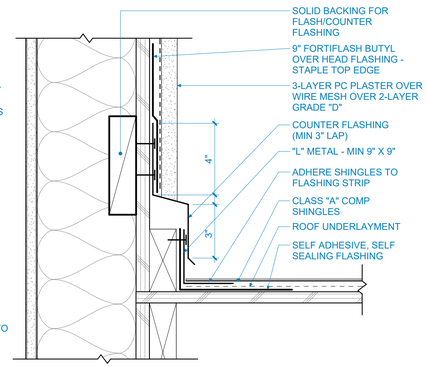


4 **ATTACHMENT BETWEEN (E) & (N) FOOTINGS/SLAB SECTION DETAIL**
1 1/2" = 1'-0"

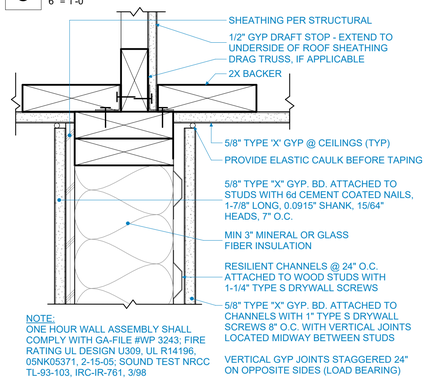
NOTE
INSIDE, APPLY MOISTOP SEALANT CONTINUOUS AT SILL FRAME TO SELF-ADHERED FLASHING & 6" UP JAMBS TO CREATE "BACK DAM"



17 **FLANGED WINDOW FLASHING ELEVATION DETAIL**
1" = 1'-0"



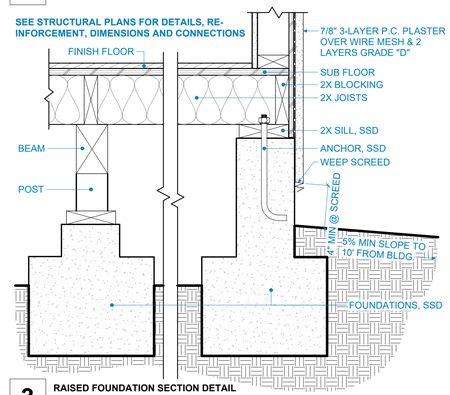
11 **ROOF TO WALL SECTION DETAIL**
3" = 1'-0"



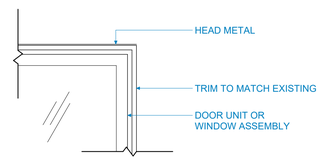
NOTE:
ONE HOUR WALL ASSEMBLY SHALL COMPLY WITH GA-FILE #WP 3243; FIRE RATING UL DESIGN U309, UL R14196, 05NK05371, 2-15-05; SOUND TEST NRCC TL-93-103, IRC-IR-761, 3/98

7 **1-HR UNIT SEPARATION DRAFT STOP ATTIC DETAIL**
3" = 1'-0"

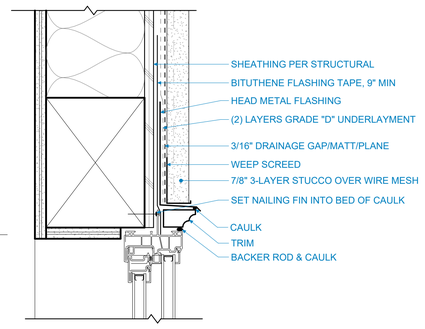
SEE STRUCTURAL PLANS FOR DETAILS, RE-INFORCEMENT, DIMENSIONS AND CONNECTIONS

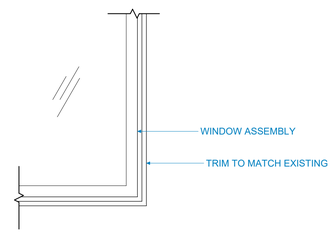


3 **RAISED FOUNDATION SECTION DETAIL**
1 1/2" = 1'-0"

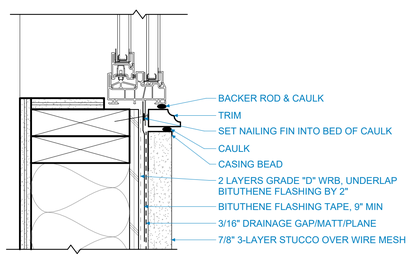


14 **WINDOW/DOOR HEAD ELEVATION DETAIL**
1 1/2" = 1'-0"



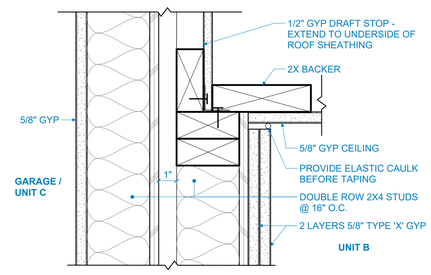


13 **WINDOW SILL ELEVATION DETAIL**
1 1/2" = 1'-0"

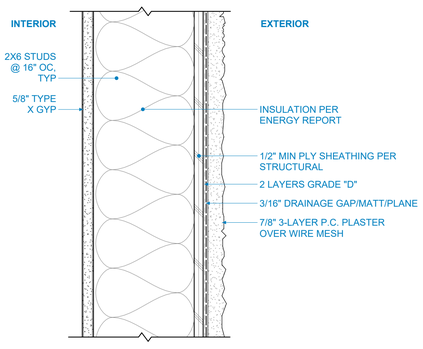


9 **WINDOW HEAD/SILL STUCCO WITH TRIM SECTION DETAIL**
3" = 1'-0"

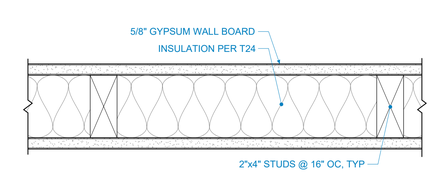
1-HR W/ STC 60 PER GA FILE NO. WP 3370



6 **1-HR UNIT SEPARATION WALL SECTION DETAIL**
3" = 1'-0"

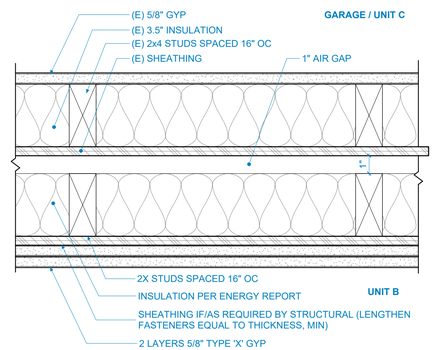


5 **2X6 STUCCO 1-HR FIRE-RATED SECTION DETAIL**
3" = 1'-0"



2 **(N) 2X4 INTERIOR WALL ASSEMBLY PLAN DETAIL**
3" = 1'-0"

1-HR W/ STC 60 PER GA FILE NO. WP 3370



1 **1-HR STC-53 DOUBLE ASSEMBLY PLAN DETAIL**
3" = 1'-0"

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805 628 3382

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SHEET NAME

DETAILS

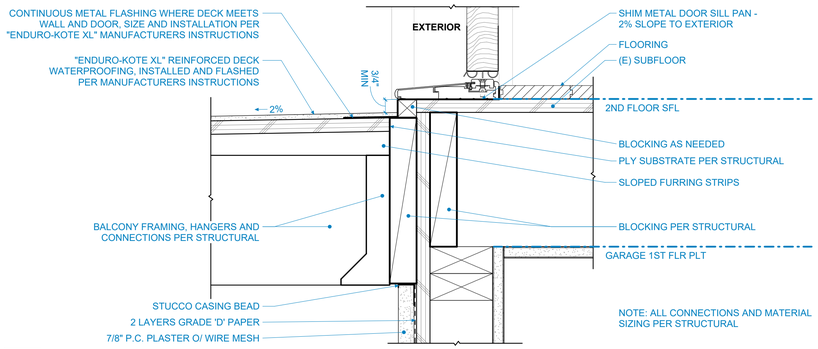
SHEET INFORMATION

DRAWN BY: AS
SCALE: AS NOTED
PLAN NORTH:
TRUE NORTH:

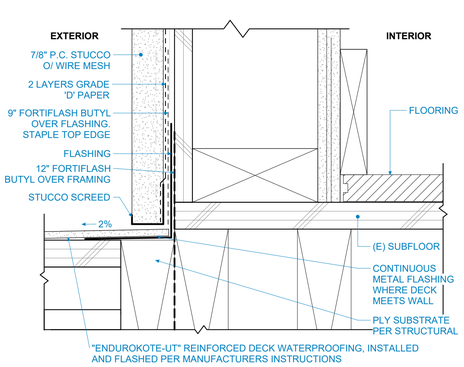
SHEET NUMBER

a6.00

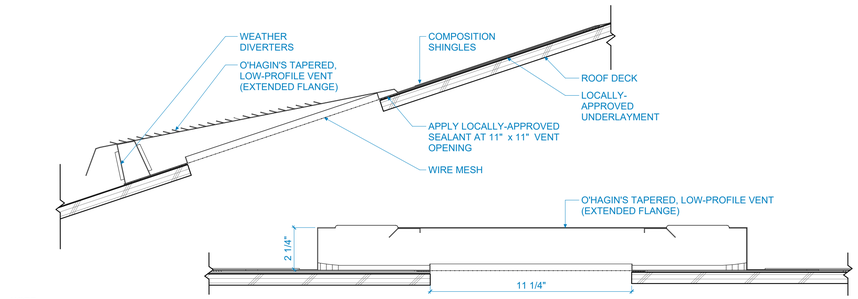
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19 BALCONY DOOR SILL
3" = 1'-0"

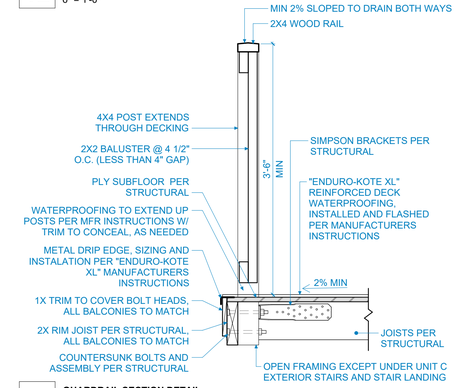


12 EXTERIOR WALL AT BALCONY DETAIL
6" = 1'-0"

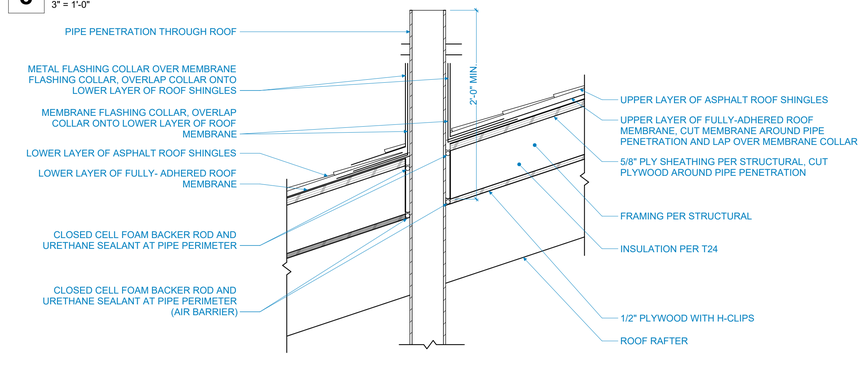


NOTE
MATERIAL AND FINISH TO BE: PRE-PAINTED GALVANIZED 26 GAUGE G90 - GALVANIZED 26 GAUGE G90 - ALUMINUM .032 - COPPER 16 OZ - STAINLESS-STEEL INTERIOR MATRIX (WEATHERMASTER , FIRE & ICE ONLY)

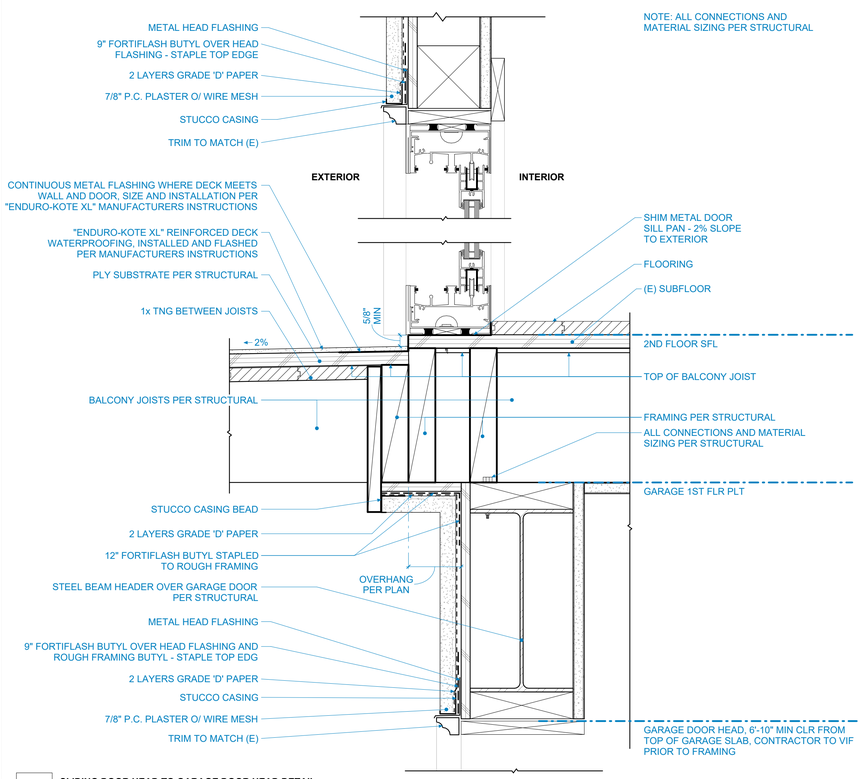
8 O'HAGIN ASPHALT SHINGLE ROOF VENT SECTION DETAIL
3" = 1'-0"



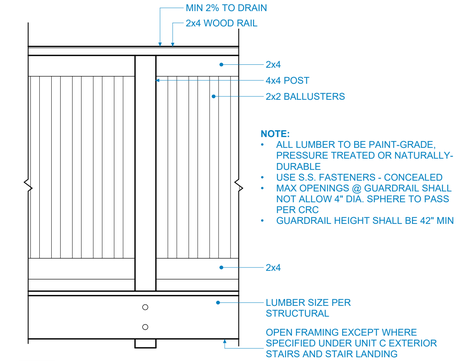
11 GUARDRAIL SECTION DETAIL
1" = 1'-0"



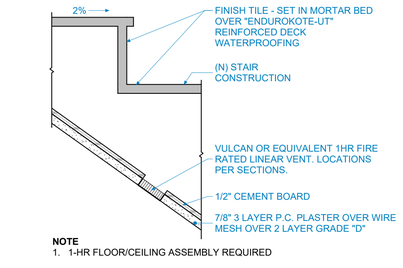
7 ROOF PENETRATION SECTION DETAIL
1 1/2" = 1'-0"



17 SLIDING DOOR HEAD TO GARAGE DOOR HEAD DETAIL
3" = 1'-0"

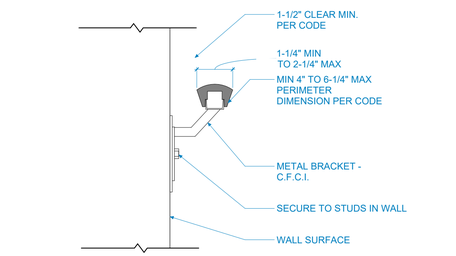


10 EXTERIOR GUARDRAIL ELEVATION DETAIL
1" = 1'-0"

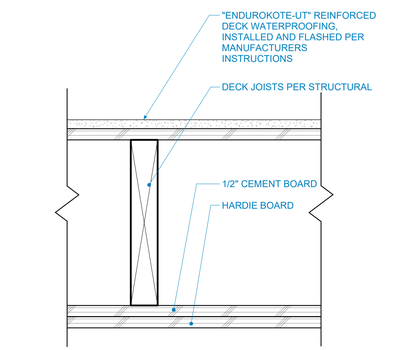


NOTE
1. 1-HR FLOOR/CEILING ASSEMBLY REQUIRED

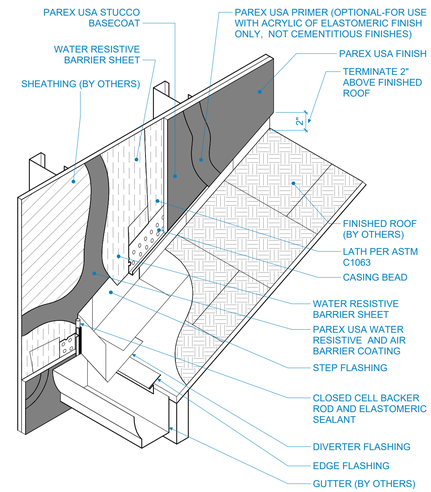
6 1-HR FLOOR ASSEMBLY SECTION DETAIL @ STAIR
1 1/2" = 1'-0"



9 WALL MOUNTED HANDRAIL SECTION DETAIL
3" = 1'-0"



5 1-HR FLOOR ASSEMBLY SECTION DETAIL @ BALCONY
3" = 1'-0"



PAREX ARMOURWALL 100 & 300, LAHABRA FASTWALL 100 & 300, EL REY FASTWALL & FIBER-47, TEIFS ONE COAT & SCRATCH & BROWN
☐ HE KRAK-SHIELD WATERMASTER

NOTE
1. TO ENSURE CONTINUOUS AIR BARRIER ACROSS THE BUILDING ENVELOPE, A CONTINUOUS AIR SEAL SHOULD BE MADE AT SUBSTRATE CHANGE, JOINTS/GAPS, PENETRATIONS AND DISSIMILAR TERMINATIONS.
2. STUCCO CLADDINGS AND ANY CLADDING USING A MORTAR BED REQ.S THE USE OF A SLIPSHEET INSTALLED OVER THE WATER-RESISTIVE & AIR BARRIER COATING TO PREVENT ADHESION TO THE STUCCO.
3. KRAK-SHIELD (NOT SHOWN) WHEN SPECIFIED SEE RELATED DETAILS.
4. REFER TO PAREX USA SPECIFICATIONS SPECIFIED BASECOAT PRODUCT & THICKNESS

1 KICK-OUT FLASHING AXON DETAIL
1 1/2" = 1'-0"

MANUAL LABOR
375 EAST MAIN STREET
VENTURA, CA, 93001
805 628 3382

PROJECT NAME

230 WEST SOLA REMODEL

230 WEST SOLA STREET
SANTA BARBARA, CA 93101

#	DRAWING ISSUED	DATE
	PC #1	06.23.26

SHEET NAME

DETAILS

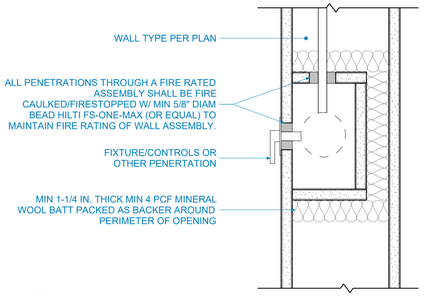
SHEET INFORMATION

DRAWN BY: AS
SCALE: AS NOTED
PLAN NORTH:
TRUE NORTH:

SHEET NUMBER

a6.01

PRINTED: 8/30/2026 11:11:38 AM PROJECT NUMBER: 24029
INCLUDED DRAWINGS, SPECIFICATIONS, IDEAS & DESIGNS SHALL REMAIN THE PROPERTY OF MANUAL LABOR & SHALL NOT BE DISTRIBUTED OR USED FOR ANY WORK OTHER THAN THE PROJECT FOR WHICH THEY WERE PREPARED WITHOUT WRITTEN CONSENT

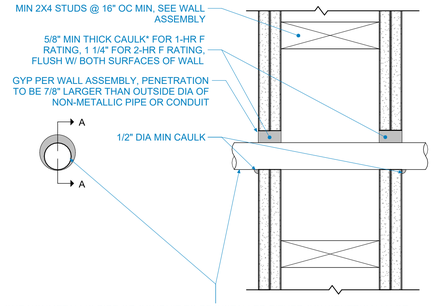


NOTE:
HILTI SYSTEM NO. W-L-8079.
HILTI FS-ONE-MAX ASTM G21, ASTM E 90, UL 1479, ASTM E814, ASTM E84

THROUGH-PENETRANTS ALLOWED:
- COPPER TUBING — NOM 3" DIA (OR SMALLER) TYPE L (OR HEAVIER) COPPER TUBE
- COPPER PIPE — NOM 3" DIA (OR SMALLER) REGULAR (OR HEAVIER) COPPER PIPE
- STEEL PIPE — NOM 4" DIA (OR SMALLER) SCHEDULE 10 (OR HEAVIER) STEEL PIPE
- IRON PIPE — NOM 4 IN DIA (OR SMALLER) CAST OR DUCTILE IRON PIPE
- CONDUIT — NOM 3" DIA (OR SMALLER) ELECTRIC METALLIC TUBING (EMT) OR RIGID STEEL CONDUIT
- PVC PIPE — NOM 2" DIA (OR SMALLER) SCHEDULE 40 CELLULAR OR SOLID CORE PVC PIPE FOR USE IN CLOSED (PROCESS OR SUPPLY) OR VENTED (DRAIN, WASTE OR VENT) PIPING SYSTEMS
- CPVC) PIPE — NOM 2" DIA (OR SMALLER) SDR 13.5 CPVC PIPE FOR USE IN CLOSED (PROCESS OR SUPPLY) PIPING SYSTEMS

NOTE
STEEL ELECTRICAL BOXES ON OPPOSITE SIDES OF THE WALL SHALL BE SEPARATED BY PROTECTING BOTH BOXES W/ LISTED PUTTY PADS, BY SOLID FIREBLOCKING, OR BY OTHER MEANS PER R302.4.2

7 **1 & 2-HR WALL FIXTURE PENETRATION FIRESTOP SECTION DETAIL**
3" = 1'-0"



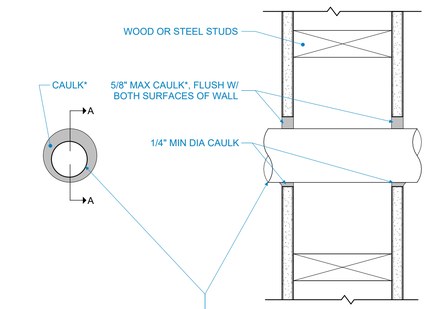
ONE NONMETALLIC PIPE OR CONDUIT TO BE INSTALLED EITHER CONCENTRICALLY OR ECCENTRICALLY W/IN THE FIRESTOP SYSTEM. THE ANNULAR SPACE FOR MAX 1-1/4" DIA PIPE OR CONDUIT SHALL BE MIN 0" (POINT CONTACT) TO MAX 7/8". THE ANNULAR SPACE FOR PIPE OR CONDUIT LARGER THAN NOM 1-1/4" DIA SHALL BE MIN 1/2" TO MAX 1". PIPE OR CONDUIT TO BE RIGIDLY SUPPORTED ON BOTH SIDES OF WALL ASSEMBLY.**

NOTES
* CP 25WB+, IC 15WB+ CAULK, FB-3000 WT SEALANT OR MP+ STIX PUTTY (NOTE: CP 25WB+ NOT SUITABLE FOR USE WITH CPVC PIPES.)
** OPTIONS INCLUDE:
- POLYVINYL CHLORIDE (PVC) PIPE - NOM 2" DIA (OR SMALLER) SCHEDULE 40 SOLID CORE OR CELLULAR CORE PVC PIPE FOR USE IN CLOSED (PROCESS OR SUPPLY) OR VENTED (DRAIN, WASTE OR VENT) PIPING SYSTEM
- POLYVINYL CHLORIDE (PVC) PIPE - NOM 3 IN. DIAM (OR SMALLER) SCHEDULE 40 SOLID CORE PVC PIPE FOR USE IN CLOSED (PROCESS OR SUPPLY) PIPING SYSTEM
- CHLORINATED POLYVINYL CHLORIDE (CPVC) PIPE - NOM 3" DIA (OR SMALLER) SDR 11 CPVC PIPE FOR USE IN CLOSED (PROCESS OR SUPPLY) PIPING SYSTEMS
- RIGID NONMETALLIC CONDUIT++ - NOM 3" DIA (OR SMALLER) SCHEDULE 40 PVC CONDUIT INSTALLED IN ACCORDANCE W/ ARTICLE 347 OF THE NATIONAL ELECTRICAL CODE (NFPA NO 70)
- ELECTRICAL NONMETALLIC TUBING (ENT)++ - NOM 1" DIA (OR SMALLER) ENT FORMED OF PVC, INSTALLED IN ACCORDANCE W/ ARTICLE 331 OF THE NATIONAL ELECTRICAL CODE (NFPA NO. 70) [SEE RIGID NONMETALLIC CONDUIT (DZXT) AND ELECTRICAL NONMETALLIC TUBING (FKHU) CATEGORIES IN THE UL ELECTRICAL CONSTRUCTION EQUIPMENT DIRECTORY FOR NAMES OF MANUFACTURERS
- ACRYLONITRILE BUTADIENE STYRENE (ABS) PIPE - NOM. 2" DIA (OR SMALLER) SCHEDULE 40 SOLID CORE OR CELLULAR CORE ABS PIPE FOR USE IN CLOSED (PROCESS OR SUPPLY) OR VENTED (DRAIN, WASTE OR VENT) PIPING SYSTEMS

SYSTEM NO. W-L-2088
F RATINGS: 1 & 2-HR (RATING TO BE EQUAL TO WALL ASSEMBLY RATING)
T RATINGS: 0, 1, AND 2-HR (SEE TABLE)

NOM PIPE DIAM (MM)	WALL ASSEMBLY RATING HR	CLOSED (C) OR VENTED (V)	T RATING HR
1/2 TO 3" (13 TO 76)	1	C	1
1/2 TO 1-1/4" (13 TO 32)	1	V	1
1/2 TO 1-1/4" (13 TO 32)	2	C	2
1/2 TO 1-1/4" (13 TO 32)	2	V	1
2" (51)	1	V	0
2" (51)	2	V	0

3 **1 & 2-HR WALL NON-METALLIC PENETRATION FIRESTOP**
3" = 1'-0"

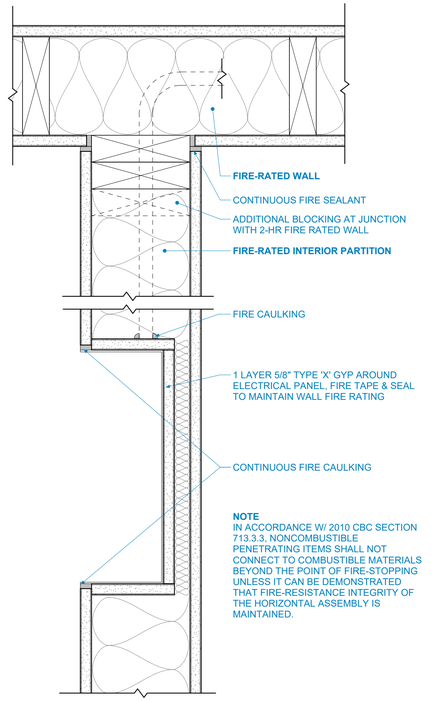


ONE METALLIC PIPE, CONDUIT, TUBING OR FLEXIBLE METAL PIPE INSTALLED CONCENTRICALLY OR ECCENTRICALLY WITHIN OPENING. ANNULAR SPACE BTWN PENETRANT & PERIPHERY OF OPENING TO BE MIN 0" (POINT CONTACT) TO MAX 2". PENETRANT TO BE RIGIDLY SUPPORTED ON BOTH SIDES OF WALL.**

NOTES
* 3M COMPANY - IC 15WB+, CP 25WB+ CAULK OR FB-3000 WT SEALANT
** OPTIONS INCLUDE:
- STEEL PIPE - NOM 8" DIA (OR SMALLER) SCHEDULE 5 (OR HEAVIER)
- IRON PIPE - NOM 8" DIA (OR SMALLER) CAST OR DUCTILE IRON PIPE
- CONDUIT - NOM 4" DIA (OR SMALLER) STEEL ELECTRICAL METALLIC TUBING (EMT) OR NOM 6" RIGID STEEL CONDUIT
- COPPER TUBING - NOM 4" DIA (OR SMALLER) TYPE L (OR HEAVIER)
- COPPER PIPE - NOM 4" DIA (OR SMALLER) REGULAR (OR HEAVIER)
- THROUGH PENETRATING PRODUCT - FLEXIBLE METAL PIPING. THE FOLLOWING TYPES OF STEEL FLEXIBLE METAL GAS PIPING MAY BE USED:
  - OMEGA FLEX INC NOM 2" DIAM (OR SMALLER) STEEL FLEXIBLE METAL GAS PIPING. PLASTIC COVERING ON PIPING MAY OR MAY NOT BE REMOVED ON BOTH SIDES OF FLOOR OR WALL ASSEMBLY.
  - TITEFLEX CORP (A BUNDY CO) NOM 1 IN. DIAM (OR SMALLER) STEEL FLEXIBLE METAL GAS PIPING. PLASTIC COVERING ON PIPING MAY OR MAY NOT BE REMOVED ON BOTH SIDES OF FLOOR OR WALL ASSEMBLY.
  - WARD MFG INC NOM 1 IN. DIAM (OR SMALLER) STEEL FLEXIBLE METAL GAS PIPING. PLASTIC COVERING ON PIPING MAY OR MAY NOT BE REMOVED ON BOTH SIDES OF FLOOR OR WALL ASSEMBLY.

F RATINGS: 1 & 2-HR (RATING TO BE EQUAL TO WALL ASSEMBLY RATING)
T RATINGS: 0 @ 1-HR RATED ASSEMBLIES & 1/4-HR @ 2-HR RATED ASSEMBLIES

5 **1 & 2-HR WALL METALLIC PENETRATION FIRESTOP**
3" = 1'-0"



NOTE
IN ACCORDANCE W/ 2010 CBC SECTION 713.3.3, NONCOMBUSTIBLE PENETRATING ITEMS SHALL NOT CONNECT TO COMBUSTIBLE MATERIALS BEYOND THE POINT OF FIRE-STOPPING UNLESS IT CAN BE DEMONSTRATED THAT FIRE-RESISTANCE INTEGRITY OF THE HORIZONTAL ASSEMBLY IS MAINTAINED.

1 **RATED WALL PENTRATION SECTION DETAIL**
3" = 1'-0"

MANUAL LABOR
375 EAST MAIN STREET
VENTURA, CA, 93001
805 628 3382

PROJECT NAME

230 WEST SOLA REMODEL

230 WEST SOLA STREET
SANTA BARBARA, CA 93101

#	DRAWING ISSUED	DATE
	PC #1	06.23.26

SHEET NAME

FIRE PENETRATION DETAILS

SHEET INFORMATION

DRAWN BY: AS
SCALE: AS NOTED
PLAN NORTH:
TRUE NORTH:

SHEET NUMBER

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PRINTED: 8/30/2026 11:11:39 AM PROJECT NUMBER: 24029 INCLUDED DRAWINGS, SPECIFICATIONS, IDEAS & DESIGNS SHALL REMAIN THE PROPERTY OF MANUAL LABOR & SHALL NOT BE DISTRIBUTED OR USED FOR ANY WORK OTHER THAN THE PROJECT FOR WHICH THEY WERE PREPARED WITHOUT WRITTEN CONSENT

O'HAGIN
THE TECHNOLOGICAL LEADER IN ATTIC VENTILATION

COMPOSITION SHINGLE
LOW PROFILE (TAPERED)

VENT DATA SHEET



PATENTED DESIGN INSTALLS BELOW SOLAR PANELS

MADE IN THE U.S.A.

CONTACT:
sales@ohagin.com

UPGRADES!

METAL UPGRADE OPTIONS
- .032" Aluminum, 50 Year Warranty
- 16 oz. Copper, 50 Year Warranty

FINISH UPGRADE OPTIONS

Pre-Painted Galvanized/Aluminum/Steel Finishes

BLACK | BRONZE | BROWN | CHARCOAL | GRAY | WHITE

Colors may vary between lots.
Subject to cut of state freight. Call for quote.

FLANGE UPGRADE OPTIONS
- 6" Extended Flange

NONCOMBUSTIBLE, CORROSION-RESISTANT WIRE MESH UPGRADE OPTIONS
- 1/4" Stainless Steel Wire Mesh
- 1/8" Galvanized Steel Wire Mesh
- 1/8" Stainless Steel Wire Mesh

CLIMATE-RESISTANT UPGRADE OPTIONS
- FIRE ✕ ICE — 1/8" noncombustible, corrosion-resistant wire mesh AND patented stainless steel fine/flexible wire filament.
- WEATHER WARRIOR — 1/4" noncombustible, corrosion-resistant wire mesh AND patented stainless steel fine/flexible wire filament.
- High Wind Diverter (Standard in Florida)
- Z-Baffles (Snow Load)
  Recommended in areas where Ice Barriers are required (IRC 905.1.2).

SELECT ROOFING MATERIAL MANUFACTURER

ATLAS | CertainTeed | GAF | IKO | Polarkyr | Owens Corning | PADCO Roofing | TAMKO BUILDING PRODUCTS

O'HAGIN IS PROUD TO WORK WITH THESE AND MANY OTHER QUALITY MANUFACTURERS

BUILD YOUR VENT

TRADITIONAL
26 Gauge G90 Galvanized Steel; 4" Flange with 1/4" noncombustible, corrosion-resistant wire mesh.

FIRE ✕ ICE
26 Gauge G90 Galvanized Steel; 4" Flange with 1/8" noncombustible, corrosion-resistant wire mesh AND patented stainless steel fine/flexible wire filament.

WEATHER WARRIOR
26 Gauge G90 Galvanized Steel; 4" Flange with 1/4" noncombustible, corrosion-resistant wire mesh AND patented stainless steel fine/flexible wire filament.

*Brands and Trademarks may vary by region.

DO I LIVE IN A HIGH FIRE ZONE?

WILDFIRE RISK TO COMMUNITIES

LOCAL AND NATIONAL APPROVALS
O'Hagin is a recognized leader in attic ventilation testing and design.

For additional info visit ohagin.com

NET FREE VENTILATION AREA

LOW PROFILE (TAPERED)	
1/4" Wire Mesh	72.00 sq. in.
1/8" Wire Mesh	64.80 sq. in.

Figures based on independent evaluation reports.

"HOW MANY ATTIC VENTS DO I NEED?"
FREE VENT CALCULATOR

"WHERE DO I PLACE VENTS?"
FREE VENT PLANS

QUESTIONS?
www.ohagin.com
210 Classic Court, Suite 100
Rohnert Park, CA 94928
Toll Free 877-324-0444 • Fax 707-588-9187

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5 OHAGIN VENT SPECIFICATION
NTS

PERFORMANCE®

Rheem

The PERFORMANCE® High Demand gas water heaters offer larger gallon capacities and exceed ANSI standards for flammable vapor ignition resistance

Performance
- Recovery Capacity: 72.8 gallons at a 100° F rise**

Low Emissions
- Eco-friendly burner, low NOx design
- Meets 40 ng/J NOx requirements

Maintenance Free Burner System
- Exclusive air/fuel shut-off device
- Maintenance free – no filter to clean
- Disables the heater in the presence of flammable vapor accumulation



Longer Life
- Premium grade anode rod provides long-lasting tank protection

High Altitude Compliant
- All models are certified for applications up to 8,500 feet above sea level

Plus...
- Easy to light – no matches required
- Temperature and pressure relief valve included
- Low lead compliant
- Standard replacement parts
- Standard 1" Water connections with Side Water connections for space heating applications for 75 & 98-gallon models

Warranty
- 6-Year limited warranty for tank and parts, 1-year full in-home labor warranty*

*See written warranty for complete details

Efficiency | All models tested according to ANSI test procedures, and meet or exceed the thermal efficiency and standby loss requirements of current ASHRAE standard (EPact). Also exceeds energy efficiency codes of all states including California Energy Commission (CEC).

Safety and Construction | Design certified by CSA; For operation at 160 degrees; meets all safety and construction requirements of ANSI Z21.10.3; as an automatic storage or instantaneous water heater; as an automatic circulating tank water heater; and for operation on combustible floors and in alcove installations. All models are North Carolina Code compliant. **Certified for 150 PSI maximum working pressure (160 PSI for ASME models).**



PERFORMANCE
High Demand
55, 75 and 98-Gallon Capacities
75,100 BTU/h
80% Thermal Efficient

See specifications chart on back.

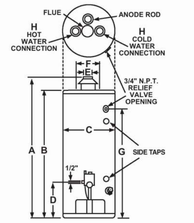
FORM NO. 07.25-THD-PER-ATM-HD-SS

Rheem

PERFORMANCE® High Demand Gas Specifications

Fuel Type	Description	Nominal Gallon Capacity	Rated Gallon Capacity	Model Number	Gas Input in Thous. Btu/h	Recovery in U.P.H. 100° F Rise**	First Hour Rating (Gallons)	Ht. to Vent A	Tank Height B	Diam. C	Ht. to Gas Conn. D	Vent Size E	Water Conn. Center F	Ht. to Side T&P Valve G	Water Conn. Size H	Ship Weight (LBS)	Uniform Energy Factor (UEF)
Natural Gas	Tall	98	93	XG98T06STX00	75.1	72.8	142	68	64	27-1/4	14-3/8	4	11	57-3/16	1	350	0.58
Natural Gas	Tall	75	73	XG75T06STX00	75.1	72.8	119	64-1/4	60-1/4	26-1/4	14-3/4	4	11	53-1/4	1	320	0.63
Natural Gas	Tall	55	55	XG55T06STX00	50		97	59-1/8	55-7/8	23-3/4	14-1/4	4	8	49-3/4	3/4	175	0.62
Liquid Propane	Tall	98	93	XP98T06STX00	75.1	72.8	142	68	64	27-1/4	14-3/8	4	11	57-3/16	1	350	0.58
Liquid Propane	Tall	75	73	XP75T06STX00	75.1	72.8	119	64-1/4	60-1/4	26-1/4	14-3/4	4	11	53-1/4	1	320	0.63

Uniform Energy Factor and rated gallon capacity based on Department of Energy (DOE) requirements.
**Recovery Capacity is based upon a 100° F water temperature rise and calculated per ANSI Z21.10.3 standards.



In keeping with its policy of continuous progress and product improvement, Rheem reserves the right to make changes without notice.

Rheem Water Heating • 1115 Northmeadow Parkway, Suite 100
Roswell, Georgia 30076 • www.rheem.com

FORM NO. 07.25-THD-PER-ATM-HD-SS

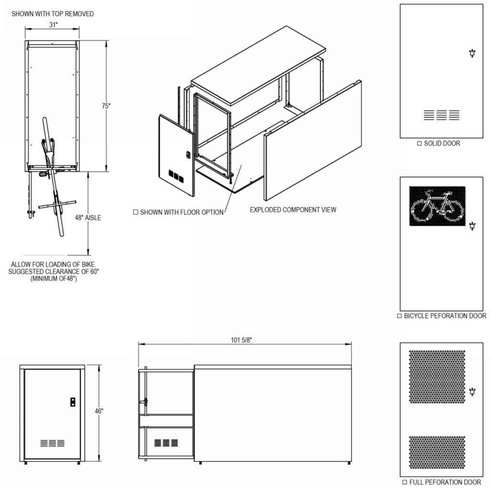
3 WATER HEATER SPECIFICATION
NTS



4 EXTERIOR WALL SCONCE SPECIFICATION
NTS

MADRAX

MADRAX DIVISION
GRABER MANUFACTURING, INC.
1080 UNIEK DRIVE
WAUNAKEE, WI 53597
P:(800) 448-7931, F:(608) 849-1080, F:(608) 849-1081
WWW.MADRAX.COM, E-MAIL: SALES@MADRAX.COM



PRODUCT: MLN-1
DESCRIPTION: MADLOCKER® NARROW BIKE LOCKER
1 UNIT, 1 BIKE CAPACITY

DATE: 10-2-18
ENG: SMC

CHECK LOCKING STYLE
- ☐ HEAVY DUTY 4266 POP-OUT "T" HANDLE WITH 2 USER KEYS (KEYED DIFFERENTLY)
- ☐ STEEL U-LOCK AND PADLOCK STYLE HANDLE (PADLOCK AND U-LOCK NOT INCLUDED)

OTHER AVAILABLE OPTIONS:
- NUMBER PLATES
- GRAFFITI RESISTANT ADDITIONAL COATING

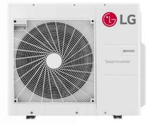
NOTES:
1. INSTALL BIKE RACKS ACCORDING TO MANUFACTURER'S SPECIFICATIONS.
2. CONSULTANT TO SELECT COLOR (FINISH). SEE MANUFACTURER'S SPECIFICATIONS.
3. SEE SITE PLAN FOR LOCATION OR CONSULT OWNER.

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2 BIKE LOCKER DETAILS
NTS

Job Name/Location: Tag No:
Date: For: ☐ File ☐ Resubmit ☐ Approval ☐ Other
PO No.:
Architect: GC:
Engr: Mech:
Rep: (Company) (Project Manager)



KUMXB301A
R32 Multi F Outdoor Unit
Outdoor Unit (ODU) - KUMXB301A

Performance:

Cooling Capacity (Min.-Rated-Max., Btu/h)	8,400~30,000~36,000
Heating Capacity (Min.-Rated-Max., Btu/h)	10,080~32,000~38,400
Max. Heating Capacity at 17°F (Btu/h)	27,200
Max. Heating Capacity at 5°F (Btu/h)	24,000
Max. Heating Capacity at -4°F (Btu/h)	20,400
Cooling COP @95°F (Rated)	3.81
Heating COP @47°F (Rated)	4.01

Cooling Nominal Test Conditions: Indoor: 80°F DB / 67°F WB Outdoor: 95°F DB / 75°F WB
Heating Nominal Test Conditions: Indoor: 70°F DB / 60°F WB Outdoor: 47°F DB / 43°F WB

Electrical:

Power Supply (V/Hz/Ø)[1,2]	208-230V, 60, 1
MOP (A)	25
MCA (A)	19.0
Cooling Rated Amps (A)	14.15
Heating Rated Amps (A)	14.15
Compressor (A)	13.5
Fan Motor (A)	0.65
Locked Rotor Amps (A)	19.0

MOP - Maximum Overcurrent Protection MCA - Minimum Circuit Ampacity

Piping:

Refrigerant Charge (lbs.)	4.85
Liquid Line Connection (in., O.D.)	1/4 x 4
Vapor Line Connection (in., O.D.)	3/8 x 4
Maximum Total Piping* (ft.)	246.1
Min. / Max. ODU to IDU Piping (ft.)	9.8 / 82.0
Piping Length (no add'l refrigerant, ft.)	123
Additional Refrigerant Charge (oz. / ft.)	0.22
Maximum Elevation between ODU and IDU (ft.)	49.2
Maximum Elevation between IDU and IDU (ft.)	24.6

ODU = Outdoor Unit IDU = Indoor Unit

Features:
- Auto operation / Auto restart
- Inverter (variable speed compressor)
- Integrated central control connection
- Defrost / Deicing
- Restart delay (three [3] minutes)
- Self diagnosis
- Soft start
- Low ambient cooling down to 14°F (-4°F with Wind Baffle Kit)

Optional Accessories:
- ☐ Power Distribution Indicator (PDI) Premium - PQNUD1541
- ☐ Mobile LGMV for Android™ Smartphones / Tablets or for iOS® Tablets - PLGMVW100
  (Android is a registered trademark of Google LLC. IOS is a registered trademark of Cisco Systems, Inc.)
- ☐ LG Monitoring View (LGMV) for Computers - PRCTBL0
- ☐ Drain Pan Heater -PQSH1200
- ☐ Low Ambient Wind Baffle Kit - ZLABGP0AA

Controller Options:
- ☐ MultiSITE Communication Mgr.
- ☐ AC Smart 5
- ☐ ACP 5
- ☐ ACP 5 BACnet® Gateway
- ☐ LonWorks® Gateway
  BACnet® is a registered trademark of ASHRAE. LonWorks is a registered trademark of Echelon Corp.

For a complete list of available accessories, contact your LG representative.
For continual product development, LG reserves the right to change specifications without notice.
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Operating Range:

Cooling (°F DB)	14 to 118
Heating (°F WB)	-4 to +64

Unit Data:

Refrigerant Type	R32
Refrigerant Control	EEV
Sound Pressure (Cool / Heat) ±1 dB(A)[4]	51 / 54
Net / Shipping Weight (lbs.)	140 / 156.5
Power Wiring from ODU to IDU (No x AWG)[3]	3 x 14
Communication Wiring from ODU to IDU (No x AWG)[3]	2 x 18
Heat Exchanger Coating	Gold Fin™
Minimum No. of Indoor Units	2
Maximum No. of Indoor Units	4

Compressor:

Type	Twin Rotary
Quantity	1
Oil / Type	FW68D

Fan:

Type	Axial
Quantity	1
Motor / Drive	Brushless Digitally Controlled/Direct
Max. Airflow Rate (CFM)	2,295

Notes:
1. Acceptable operating voltage: 187V ~ 253V.
2. All power supply wiring to the outdoor unit is field supplied, solid or stranded. The power wiring and the communication wiring from the outdoor unit to the indoor unit is field supplied and must be stranded, shielded or unshielded (if shielded, it must be grounded to the chassis of the outdoor unit only). All wiring must comply with applicable local and national codes.
3. Power Wiring and Communication Wiring from Outdoor Unit to Indoor Unit (No. x AWG): 3 x 14 for 18k and 24k; 3 x 12 for 30k and 36k.
   a. Power Wiring and Communication Wiring from Outdoor Unit to Indoor Unit (No. x AWG): 3 x 14 / 2 x 18.
3. Piping lengths are equivalent.
4. Sound pressure levels are tested in an anechoic chamber under ISO Standard 3745.
5. This data is rated 0 ft. above sea level, with 0 ft. level difference between outdoor and indoor units, and 25 ft. of refrigerant piping per the charge.
   KUMXB161A: 16.4 ft. x 3 = 49.2 ft.
   KUMXB241A: 16.4 ft. x 3 = 49.2 ft.
   KUMXB301A: 16.4 ft. x 4 = 65.6 ft.
   KUMXB361A: 16.4 ft. x 4 = 65.6 ft.
6. All capacities are net with a combination ratio between 95 - 105%.
7. Must follow installation instructions in the applicable LG installation manual.
8. Refer to the Combination Data Manual for combination capacity tables.
9. See the Performance Data Manual for sensible and latent capacities.

ENERGY STAR | CSA C US | ALDI CERTIFIED www.aldidirectory.org Unitary Small HP AHRI Standard 210/240 (continuous system only when the complete system is listed with AHRI)

Proper sizing and installation of equipment is critical to achieve optimal performance. Split system air conditioners and heat pumps (excluding ductless systems) must be matched with appropriate coil components to meet ENERGY STAR® criteria. Ask your contractor for details or visit www.energystar.gov.
ENERGY STAR and the ENERGY STAR mark are registered trademarks owned by the U.S. Environmental Protection Agency.)

SB_Multi_F_ODU_R32_KUMXB301A_2025_01_07_193346
Page 1 of 2

1 HVAC COMPRESSOR SPECIFICATION
NTS

MANUAL LABOR

375 EAST MAIN STREET
VENTURA, CA, 93001

805 628 3382

PROJECT NAME

230 WEST SOLA REMODEL

230 WEST SOLA STREET
SANTA BARBARA, CA 93101

#	DRAWING ISSUED	DATE
	PC #1	06.23.26
1	PC #2	08.14.26

SHEET NAME

SPECIFICATIONS

SHEET INFORMATION

DRAWN BY: AS
SCALE: AS NOTED
PLAN NORTH:
TRUE NORTH:

SHEET NUMBER

a6.03 1

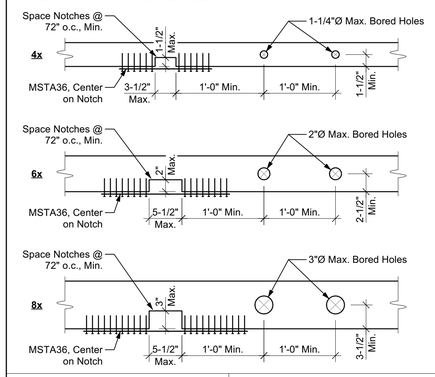
230 W Sola Unit B Remodel

230 West Sola Street
Santa Barbara, CA 93101

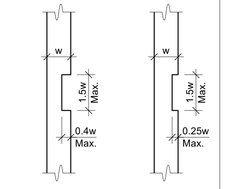
STANDARD DETAILS

9 TYPICAL NOTCHING & BORING

PENETRATIONS IN TOP PLATES & SILL PLATES

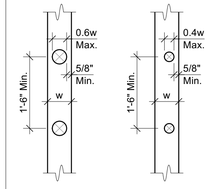


NOTCHING LIMITS FOR WOOD STUDS



Non-Bearing Interior Wall | Bearing &/or Exterior Wall

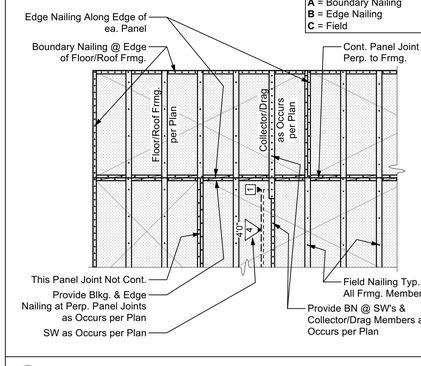
BORING LIMITS FOR WOOD STUDS



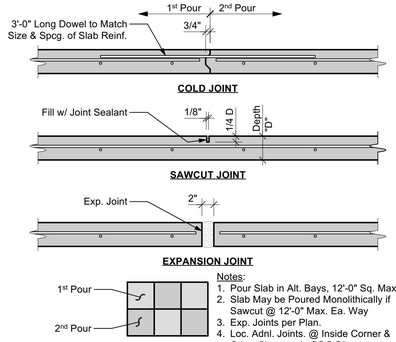
Non-Bearing Interior Wall | Bearing &/or Exterior Wall

6 TYPICAL FLOOR / ROOF NAILING

Nailing per Plan w/ Spcg. Denoted as **@ A", B", C"**
A = Boundary Nailing
B = Edge Nailing
C = Field

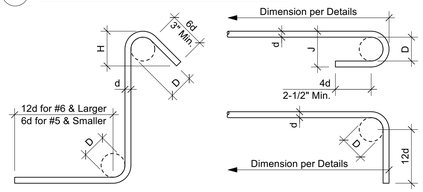


4 TYPICAL CONCRETE SLAB JOINTS



Notes:
1. Pour Slab in Alt. Bays, 12'-0" Sq. Max.
2. Slab May be Poured Monolithically if Sawcut @ 12'-0" Max. Ea. Way
3. Exp. Joints per Plan.
4. Loc. Adnl. Joints. @ Inside Corner & Other Changes in SOG Dims.

1 TYPICAL REINFORCING BAR BENDS



STANDARD TIES & STIRRUPS

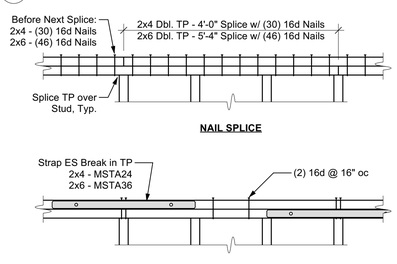
Bar Size	D	H (Approx.)
#3	1-1/2"	3"
#4	2"	3"
#5	2-1/2"	3-3/4"
#6	4-1/2"	4-1/2"
#7	5-1/4"	5-1/4"
#8	6"	6"

STANDARD END HOOKS

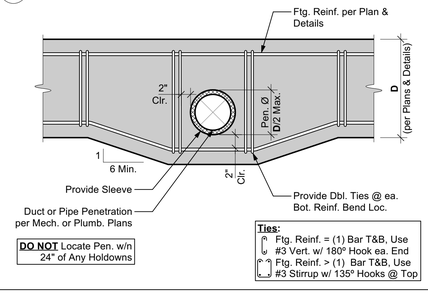
Bar Size	D	J
#3	2-1/4"	3"
#4	3"	4"
#5	3-3/4"	5"
#6	4-1/2"	6"
#7	5-1/4"	7"
#8	6"	8"

Note:
All Bar Bend Diameters & End Lengths Must Conform to the CRSI Manual of Standard Practice

7 TYPICAL 2x TOP PLATE SPLICE



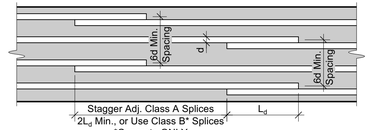
5 TYP. PENETRATION THROUGH FOUNDATION



DO NOT Locate Pen. w/n 24" of Any Holdowns

Ties:
- Ftg. Reinf. = (1) Bar T&B, Use #3 Vert. w/ 180° Hook ea. End
- Ftg. Reinf. > (1) Bar T&B, Use #3 Stirrup w/ 135° Hooks @ Top

2 STD. DEVELOPMENT LENGTHS & LAP SPLICES

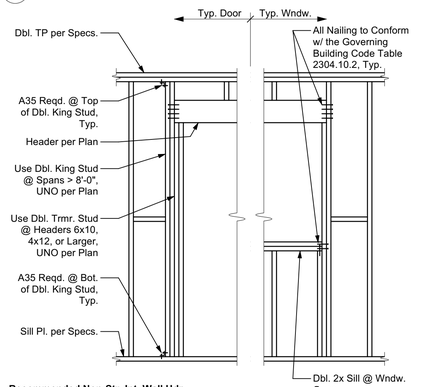


*Concrete ONLY

Bar Size	CONCRETE f'c = 2500 psi Length of Lap Ld & Class A	Class B	Hook Embed Ldh
#3	15 "	19 "	7"
#4	19 "	25 "	10"
#5	24 "	31 "	14"
#6	29 "	37 "	18"
#7	41 "	54 "	22"
#8	47 "	61 "	27"

Bar Size	MASONRY f'm = 2000 psi Length of Lap, Ld	Hook Embed Ldh
#3	13 "	5 "
#4	22 "	7 "
#5	35 "	9 "
#6	64 "	10 "
#7	87 "	12 "
#8	131 "	13 "

3 TYPICAL WOOD FRAMED OPENING



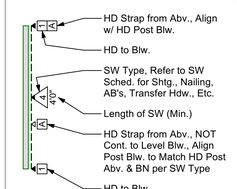
Recommended Non-Str. Int. Wall Hdr.

Span	2x4 Wall	2x6 Wall
< 4'-0"	Dbl. 2x4 Flat	Dbl. 2x6 Flat
< 6'-0"	4x4	4x6 Flat
< 8'-0"	4x6	6x6
> 8'-0"	Span in Feet Equals Beam Depth in Inches	

TYPICAL SHEAR WALL FRAMING NOTES:

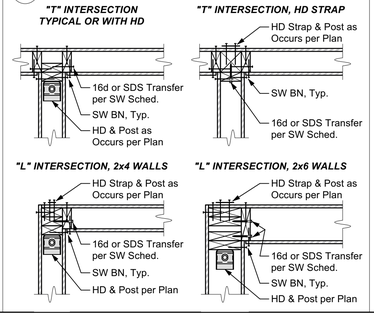
1. Single sided shear walls may be placed on EITHER side of the framed wall.
2. Sill plates on masonry or concrete to be pressure treated per Timber / Lumber specifications. Sill plate thickness per SW Sched.
3. Wall studs and blkg. are required at all adjoining panel edges. Thickness of wall studs and blkg. at panel edges per SW Sched.
4. Where plywood is applied on both faces of a wall, edge nails shall be staggered on adjacent panel edges OR panel joints shall be offset to fall on different framing members. Plywood joint and sill plate nailing shall be staggered in all cases.
5. Plywood panels shall butt along centerlines of framing members. Minimum plywood dimension for shearwall shall be 12".
6. Nails shall be located at least 3/8" from all panel edges.
7. The use of pneumatic nail guns for shear wall nailing is subject to continued satisfactory jobsite performance and subject to the review and approval by the Engineer of Record and/or Building Inspector. If the nail heads penetrate the outer ply more than would be normal for a hand held hammer, or if the minimum edge distances are not maintained, the performance will be deemed as unsatisfactory and the continued use of pneumatic nail for shear wall nailing will not be permitted.
8. At all bearing walls (both exterior and interior walls) not noted as shear walls, continuous full depth blocking shall be provided between joists and rafters with LTP4 or A35 to top plates @ 32" oc at floors and 48" oc at roofs, unless noted otherwise per plan.
9. Refer to material specifications for additional framing requirements.

SHEAR WALL LEGEND

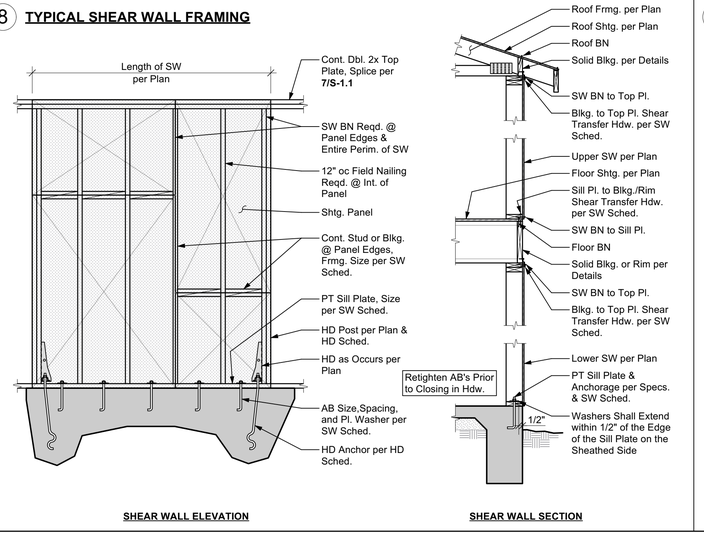


Refer to Plans for Specific Transfer & Connection Detail at each Shear Wall Location

10 TYPICAL SHEAR WALL INTERSECTIONS



8 TYPICAL SHEAR WALL FRAMING



ABBREVIATIONS

AB	Anchor Bolt	Mas.	Masonry
A&B	Above and Below	Max.	Maximum
Abv.	Above	MB	Machine Bolt
Adn.	Addition (al)	MF	Moment Frame
Adj.	Adjacent,Adjustable	Mfr.	Manufacture(r)
Alt.	Alternate (ive)	Min.	Minimum, Minute
Appd.	Approved	Mod.	Modif(y), (cation)
Arch.	Architect(ural)	Mtl.	Metal
Avg.	Average	(N)	New
Bdry.	Boundary	N/A	Not Applicable
Bldg.	Building	Nat.	Natural
Blk(g).	Block (ing)	NTS	Not to Scale
Bm.	Beam	o/	Over
BN	Boundary Nailing	oc	On Center
B-O	Bottom of	OD	Outside Diameter
BO	By Others	Opng.	Opening
Bot.	Bottom	Opp.	Opposite
Brg.	Bearing	Opt.	Optional
Btwn.	Between	Para.	Parallel
BW	Both Ways	PCF	Lbs per Cubic Ft.
Cant.	Cantilever(ed)	Pen.	Penetrate, (tion)
CIP	Cast in Place	Perf.	Perforated
CJ	Ceiling Joist	Perim.	Perimeter
CJP	Complete Joint Penetration	Perp.	Perpendicular
		Pl	Panel Index
CL	Center Line	PJP	Partial Joint Pen.
Clg.	Ceiling	PL	Plate
Clr.	Clear	PLF	Lbs per Linear Ft.
CMU	Conc. Masonry Unit	Ply.	Plywood
Col.	Column	Prep.	Prepare, (ation)
Com.	Common	Press.	Pressure
Comp.	Component	Proj.	Project
Conc.	Concrete	Prop.	Property
Conn.	Connection	PSF	Lbs per Square Ft.
Const.	Construction	PSI	Lbs per Square In.
Cont.	Continue (ous)	PT	Pressure-Treated
Ctr.	Center	PV	Photovoltaic (Solar Panels)
d	Penny		
Dbl.	Double	R	Radius
Defl.	Deflection	Rec(s).	Recommendation(s)
Deg.	Degree	Rect.	Rectangular
Demo.	Demolish(tion)	Ref.	Reference
Dep.	Depress(ed)	Reinf.	Reinforce(d, ment),(ing)
DF	Douglas Fir		
Dia.	Diameter	Req(d).	Require(d)
Diaph.	Diaphragm	Reqs.	Requirements
Dif.	Different	Retain.	Retain(ing)
Dim.	Dimension	RJ	Roof Joist
Dist.	Distance	RR	Roof Rafter
DJ	Deck Joist	RW	Redwood
DL	Dead Load	SAD	See Arch Dwg's
Dwg.	Drawing	Sched.	Schedule
(E)	Existing	Sgl.	Single
Ea.	Each	Shtg.	Sheathing
EF	Each Face	Sim.	Similar
EFP	Equivalent Fluid Pressure	SIP	Str. Insulated Panel
		SM	Sheet Metal
Elev.	Elevator, Elevation	SMS	Sheet Metal Screw
Embed.	Embed(ed), (ment)	SOG	Slab on Grade
Engr.	Engineer	Spec.	Specif(ied),(cations)
EOR	Engineer of Record	Sq.	Square
Eq.	Equal, Equivalent	SS	Structural Steel
ES	Each Side	Std.	Standard
EW	Each Way	Stgr.	Stagger(ed)
Exp.	Expand, Expansion	Stl.	Steel
Ext.	Exterior	Struc.	Structure, (al)
Fdn.	Foundation	SW	Shear Wall
FF	Finished Floor	Sym.	Symmet(ry), (rical)
FJ	Floor Joist	T&B	Top and Bottom
Flr(g).	Floor (ing)	T&G	Tongue and Groove
FOC	Face of Concrete	Temp.	Temporary
FOM	Face of Masonry	Thk.	Thick(ness)
FOS	Face of Studs	Thru	Through
FOW	Face of Wall	TN	Toe-Nail
Frmg.	Framing	TP	Top Plate
Ft.	Foot, Feet	T-O	Top of
Ftg.	Footing	TOB	Top of Beam
Ga.	Gage, Gauge	TOC	Top of Concrete
Galv.	Galvanized	TOG	Top of Grade
GB	Grade Beam	TOM	Top of Masonry
GC	General Contractor	TOS	Top of Steel
GLB	Glulam Beam	TOW	Top of Wall
Gyp.	Gypsum	TRU	To Remain Unchanged
HD	Holdown		
Hdr.	Header	Trmr.	Trimmer Stud
Hdw.	Hardware	Typ.	Typical
Hgr.	Hanger	UNO	Unless Noted Otherwise
Hor(iz).	Horizontal		
Ht.	Height	Vert.	Vertical
ID	Inside Diameter	VIF	Verify in Field
In.	Inch(es)	VWA	Verify with Arch
Insp.	Inspect(ion)	w/	With
Int.	Interior	w/n	Within
Inv.	Invert, Inverted	w/o	Without
Jst.	Joist	WS	Wood Screw
K	Kips (1,000 pounds)	Wndw.	Window
KLF	Kips per Linear Ft.	Wt.	Weight
King	King Stud	WWF	Welded Wire Fabric
KP	King Post	Yd.	Yard
KSF	Kips per Square Ft.		
KSI	Kips per Square In.	@	At
Lb(s).	Pound(s)	°	Degrees
LL	Live Load	Ø	Diameter
Loc.	Location	>	Greater Than
LW	Light Weight	<	Less Than
		#	Number, Pound(s)
		/	Per
		%	Percent(age)
		±	Plus or Minus

PROJECT INFORMATION

CLIENT:
Michael Gilson
c/o 2022 Michael Warren
Gilson Revocable Trust
2409 Calle Linares
Santa Barbara, CA 93109

ARCHITECT / DESIGNER:
Manual Labor
375 East Main Street
Ventura, CA 93001
(805) 628-3382

DESIGN PARAMETERS

GENERAL PARAMETERS

Building Code	2025 CBC*
Roof Loads	
Dead Loads (DL)	12 psf
Live Loads (LL)	20 psf
Floor Loads - Typ.	
Dead Loads (DL)	15 psf
Live Loads (LL)	40 psf
Deck Loads	
Dead Loads (DL)	12 psf
Live Loads (LL)	60 psf

SOILS VALUES (Table 1806.2)

Bearing Pressure	1000 psf

WIND DESIGN BASIS

Ultimate Wind Speed, V_{ULT}	95 mph
Nominal Wind Speed, V_{ASD}	74 mph
Risk Category	II
Exposure	B

SEISMIC DESIGN BASIS

Seismic Design Category	E
Site Class	D
Seismic Factors	
S_S / S_1	2.480 / 0.910
S_{DS} / S_{D1}	1.690 / 1.310
Risk Category	II
Importance Factor, I_e	1.00
Resisting System:	Wood Shear Walls
Response Mod. Coefficient, R	6.5
Design Base Shear	V = 0.260W
Analysis Procedure:	Eqv. Lateral Force (ASCE 7-16, T. 12.6-1)

* The 2025 California Building Code (CBC), based on the 2024 International Building Code (IBC), is the governing code in the State of California.

SHEET INDEX

S-1.1	Structural Title Sheet
S-1.2	Structural Specifications
S-1.3	Special Inspections
S-2.1	Foundation Plan
S-2.2	Roof Framing Plan
S-2.3	Upper Roof Framing Plan
S-3.1	Structural Details
S-3.2	Structural Details

ENGINEER OF RECORD:

230 W Sola Unit B Remodel
230 West Sola Street
Santa Barbara, CA 93101

REVISION:

PC	08.11.2026	PLAN CHECK

PROJECT ENGINEER:
David W.
(805) 962-9966 x220
dwebster@ashleyvance.com

DATE: 03/31/26 | SCALE: NTS
AV JOB: 241697 | SHEET SIZE: 24"x36"

STRUCTURAL TITLE SHEET

S-1.1

DO NOT SCALE THESE DRAWINGS. REFER TO ARCHITECTURAL PLANS FOR ALL DIMENSIONS

THESE PLANS AND SPECIFICATIONS ARE THE PROPERTY OF ASHLEY & VANCE ENGINEERING INC. AND ARE RESTRICTED FOR USE ON THE ORIGINAL SITE FOR WHICH THEY WERE PREPARED. REPRODUCTION OR PUBLICATION IN ANY FORM, WHOLE OR IN PART, IS PROHIBITED. VISUAL CONTACT WITH THESE DOCUMENTS CONSTITUTES ACCEPTANCE OF THESE RESTRICTIONS.

Aug 11, 2026
11:15:15 AM

GENERAL NOTES

1. The following notes, details, schedules & specifications shall apply to all phases of this project unless specifically noted otherwise. Notes and details on the structural plans shall take precedence over general notes and typical details. Where no details are given, construction shall be as shown for similar work.
2. All drawings are considered to be part of the contract documents. The Contractor shall be responsible for the review and coordination of all drawings and specifications prior to the start of construction. Any discrepancies shall be brought to the attention of the Engineer prior to the start of construction so that a clarification can be issued. Any work performed in conflict with the contract documents or any applicable code requirements shall be corrected by the Contractor at no expense to the Owner or Engineer.
3. All information on existing conditions shown on the structural plans are based on best present knowledge available, but without guarantee of accuracy. The Contractor shall be responsible for the verifications of all dimension and conditions at the site. Any discrepancies between actual site conditions and information shown on the drawings or in the specifications shall be brought to the attention of the EOR prior to the start of construction.
4. Refer to the Architectural plans for the following:
   (a) Dimensions
   (b) Size and location of all interior and exterior wall locations.
   (c) Size and location of all floor, roof and wall openings
   (d) Size and location of all drains, slopes, depressions, steps, etc.
   (e) Specification of all finishes & waterproofing
   (f) All other non-structural elements
5. Refer to the mechanical, electrical and plumbing plans for the following:
   (a) Size and location of all equipment
   (b) Pipe runs, sleeves, hangers and trenches
   (c) All other mechanical, electrical or plumbing related elements
6. **DO NOT** scale structural plans. Contractor shall use all written dimensions on Architectural plans.
7. Construction materials shall be uniformly spread out if placed on floor or roof so as to not overload the framing. Load shall not exceed the design live load per square foot. It is the Contractor's responsibility to provide adequate shoring and/or bracing as required.
8. Specifications and detailing of all waterproofing and drainage items, while sometimes shown on the structural plans for general information purposes only, are solely the design responsibility of others.
9. The Engineer will not be responsible for and will not have control or charge of construction means, methods, techniques, sequences or procedures, or for safety precautions and programs in connection with the construction delineated by these plans. It should be understood that the Contractor or his/her agent(s) shall supervise and direct all work and shall be solely and completely responsible for all construction means, methods, techniques, sequences, procedures and conditions on the job site, including safety of all persons and property during the entire period of construction. Periodic observations by the Engineer, his staff or representatives are not intended to include verification of dimensions or review the adequacy of the Contractor's safety measures on or near the construction site.
10. Modifications of the plans, notes, details and specifications shall not be permitted without prior approval from the Engineer.
11. All workmanship shall conform to the best practice prevailing in the various trades performing the work. The Contractor shall be responsible for coordinating the work of all trades.
12. It is the Contractor's responsibility to ensure that only approved structural plans are used during the course of construction. The use of unapproved documents shall be at the contractor's own risk. Corrections of all work based on such documents shall be performed at the Contractor's expense.
13. These plans and specifications represent the structural design only. No information nor warranty is provided for the work of any other Consultant (Architect, Mechanical, Electrical, etc.). This includes, but is not limited to, waterproofing, drainage, ventilation, accessibility, or dimensions.

MANUFACTURED SHEARWALLS

1. Simpson Strong-Walls:
   (a) shall be fabricated by Simpson Strong-Tie Co. No substitutions shall be permitted without prior approval of the Engineer.
   (b) shall be located per structural plans
   (c) shall be installed in accordance with applicable code approvals and manufacturer's specifications.
2. Hardy Frames:
   (a) shall be fabricated by Hardy Frames, Inc. No substitutions shall be permitted without prior approval of the Engineer.
   (b) shall be located per structural plans
   (c) shall be installed in accordance with applicable code approvals and manufacturer's specifications.

STRUCTURAL STEEL

1. All structural steel and connections shall be fabricated and erected in accordance with the Governing Building Code, AISC specifications, Seismic Provisions Supplements No. 1 and 2, and Code of Standard Practice as amended to date.
2. Steel fabrication shop drawings shall be submitted for review by the Architect and Engineer prior to fabrication.
3. Special Inspection: Refer to the schedule of special inspections for required inspections.
4. Materials:
   (a) Wideflange (W) sections shall conform to ASTM A992 (Fy = 50 ksi).
   (b) Hollow Steel Sections (HSS) shall conform to ASTM A500 Gr. B (Fy = 46 ksi).
   (c) Structural Pipe sections shall conform to ASTM A53 Gr. B (Fy = 35 ksi).
      i. STD indicates Standard Wall
      ii. EXT indicates Extra Strong
      iii. DBL indicates Double Extra Strong
   (d) Welded headed studs shall conform to ASTM A29
   (e) All other material (plate, bars, threaded rods, etc.) shall conform to ASTM A36, UNO specifically.
   (f) All plate material specified in steel moment frame connections shall conform to ASTM A572 Gr. 50.
5. Bolts:
   (a) All bolts shall be ASTM F3125 Grade A325-N, UNO specifically on the structural plans.
   (b) High strength bolts complying with ASTM F3125 Grades A325 and A490, when specified, shall require special inspection in accordance with the Governing Building Code, Section 1705.2.6.
   (c) Machine bolts when specified (MB) shall conform with ASTM A307 unless specifically noted otherwise on the structural plans.
   (d) Bolt holes for bolt diameters less than 1" shall be 1/16" larger in diameter than nominal size of bolt used. Bolt holes for bolt diameters equal to or greater than 1" shall be 1/8" larger in size than the nominal size of bolt, unless noted otherwise.
   (e) All high-strength bolts shall be tightened to the AISC snug tight condition unless specified as slip-critical.
   (f) Slip-critical bolts shall have class "A" faying surfaces. Slip-critical joint assemblies shall be fully pre-tensioned by turn-of-nut tightening, tension control calibrated wrench tightening, twist-off bolts conforming to ASTM F3125 grade F1852, or by direct tension indicator tightening conforming to ASTM F959.
   (g) Anchor bolts shall be heavy hex headed, UNO. Bent bar anchors shall not be used.
6. Welding:
   (a) All welding shall be performed using SMAW, GMAW or FCAW processes.
   (b) All welded connections to be in accordance with the latest edition of the AWS D1.1 and seismic supplement, AWS D1.8.
   (c) All welding shall be performed by certified welders. Project welding shall be performed in accordance with welding procedure specifications (WPS) submitted by the contractor and reviewed by the EOR and project welding inspector. The WPS shall be in accordance with the applicable laws.
   (d) All welding shall be performed with E70XX electrodes.
   (e) Weld lengths specified on the plans are the net effective length required. All weld lengths not specified shall be continuous.
   (f) All full penetration welds shall be ultra-sonic tested per AWS D1.1 and D1.8 requirements as applicable.
   (g) The filler metal for all welding shall have a notch toughness of net less than 20 ft-lbs at 0 degrees F, as measured by a standard Charpy V-Notch test, ASTM E-23, in accordance with the applicable filler metal specification referenced in AWS D1.1 and Seismic Supplement AWS D1.8.
7. No holes other than those specifically detailed shall be allowed through structural steel members. Burning or torching of holes is not permitted under any circumstances.
8. All structural steel shall be painted with one shop coat and touched-up in the field with red lead (or approved zinc chromate primer) as necessary.
9. Any steel member interfacing with wood framing shall have 5/8" diameter studs welded at 24" oc for attachment of wood nailers, UNO on plan. Thru-bolting of nailers shall not be permitted unless specifically noted on the plans or details.
10. All structural steel surfaces are to be painted or galvanized, UNO. Steel that is not exposed to weather and is to be encased in concrete or masonry may be left uncoated. Steel that is to receive spray-applied fireproofing shall be left uncoated. Areas within 3 inches of field welded joints shall be left uncoated until welding operations are completed. Provide hot dip galvanizing or 3" min. concrete cover around all structural steel below grade.
11. Beams detailed without specified camber shall be fabricated so that after erection any minor camber due to rolling or shop assembly shall be upward. Top of all members shall be clearly identified.

FOUNDATIONS

1. Refer to Structural Design Parameters section on sheet S-1.1 for all soil design values used in calculations.
2. Soils values per Table 1806.2 of the latest edition of the Governing Building Code.
3. Unexpected Soil Conditions: At the discretion of the engineer of record, or the local building department, a soils report may be required in the event that substandard material is discovered on site. If this occurs, contact Engineer of Record for further guidance.
4. All compaction, fill, backfilling and site preparation shall be performed in accordance with project soils report or the Governing Building Code Chapter 18 & Appendix J. All such work shall be performed under the supervision of the building official.
5. Excavate to required depths and dimensions (as indicated in the drawings), cut square and smooth with firm level bottoms. Care shall be taken not to over-excavate foundation at lower elevation and prevent disturbance of soils around high elevation.
6. Foundations forms and excavations shall be clean and free of debris, achieving all minimum dimesions noted. Enchroachment of soil at corners and reduced reinforcement clearances are not permitted.
7. Excavate all foundations to required depths into compacted fill or natural soil (as per plans and details) and as verified by the building official.
8. All foundations shall be inspected and approved by the appropriate building official prior to forming and placement of reinforcing or concrete.
9. Foundations shall not be poured until all required reinforcing steel, framing hardware, sleeves, inserts, conduits, pipes, etc. and formwork is properly placed and inspected by the appropriate building official/inspector(s).
10. It is the responsibility of the contractor in charge of framing to properly position all holdown bolts, anchor bolts, column bases, and all other cast-in-place hardware. Refer to typical details. All hardware to be secured prior to foundation inspections.
11. The sides and bottoms of dry excavations must be moistened to optimum moisture content or just above, just prior to placing concrete. Conversely, de-water footings as required to remove standing water and to maintain optimum working conditions.
12. The Contractor shall be solely responsible for all excavation procedures including lagging, shoring, and the protection of adjacent property, structures, streets, and utilities in accordance with all federal, state and local safety ordinances. The Contractor shall provide for the design and installation of all cribbing, bracing and shoring required.

ROD AND REBAR EPOXY INSTALLATION

1. Special inspection is required, unless specifically noted otherwise. Special inspection services shall conform to the Governing Building Code, Chapter 17 and shall be provided by an ICC certified inspector or Building Department approved engineer. The Building Department reserves the right to waive or require special inspections. Nothing in these plans waives the Building Department's right to require special inspection at any point and on any material.
2. Epoxy for anchoring bolts, rods, and reinforcing bars shall be as follows:
   (a) Concrete: Hilti HIT RE 500 v3 (ICC ESR-3814), Hilti HY 200v3 (ICC ESR-4868), or Simpson SET-3G (ICC ESR-4057).
   (b) Full Grouted Masonry: Hilti HY 200v3 (ICC ESR-4878), or Hilti HY 270 (ICC 4143), or Simpson SET-3G (ICC ESR-4844).
   (c) Hollow Cell Masonry Units and Unreinforced Masonry: Hilti HY 270 (ICC 4144), or Simpson ET-HP (ICC ESR 3638).
3. Anchors shall be installed in accordance with the manufacturer's printed installation instructions by qualified personnel trained to install epoxy anchors.
4. Holes for post-installed anchors shall be drilled with a carbide tipped concrete/masonry drill bit using an electro-pneumatic hammer drill bit set in "rotation and hammer" mode. Hole diameter shall be 1/8" larger than the anchor diameter specified, unless noted otherwise. For installation in brick or hollow cell masonry units with a screen tube, the hole diameter shall be 1/4" larger than the anchor diameter, unless noted otherwise.
5. DO NOT drill through existing reinforcing. A small diameter test hole shall be drilled at the installation location. If existing reinforcing is encountered, the installation location shall be relocated to avoid conflict and the abandoned hole shall be filled with non-shrink grout or drypack. For holes drilled into columns and beams, remove the rebar cover in order to positively identify the rebar location such that the holes avoid the rebar. Other non-destructive means may be used to identify the positions and depth of reinforcing.
6. Holes shall be cleaned of dust and debris by blowing with 90 psi oil-free compressed air, brushing with a wire brush two times, and blowing with compressed air again to achieve a relatively dust-free wall surface.
7. The base material shall be a minimum of 28 days old, within a temperature range of 50ºF - 100ºF, and dry at the time of epoxy installation. The base material shall have a minimum strength as follows:
   (a) Concrete: 2,500 psi
   (b) Full Grouted Masonry: 2,000 psi
8. Fill each hole 1/2 - 2/3 full with epoxy, starting from the bottom of the hole to prevent air pockets. Withdraw the nozzle as the hole fills up with epoxy. Insert clean, oil-free anchor, turning slowly until the anchor contacts the bottom of the hole. DO NOT disturb anchor until fully cured. Cure time shall be per the manufacturer's installation instructions.

CONCRETE

1. All portions of work pertaining to concrete construction shall conform to the Governing Building Code, Chapter 19, ACI Standard 318, and other referenced documents.
2. All concrete shall have:
   (a) an ultimate compressive strength (f'c) of 3,000 psi at 28 days (UNO).
   (b) a maximum slump of 5" at point of placement.
   (c) a W/C ratio of 0.55 or less for all slabs, walls, and columns, and 0.60 or less for all foundations, UNO.
   (d) a normal dry-weight density (UNO).
3. Special inspection is NOT required as the foundations have been *designed* with f'c = 2,500 psi in accordance with the Governing Building Code, section 1705.3, exceptions 1, 2.1, and 2.3, unless explicitly specified herein, on the structural plans, or by the Building Department. At a minimum, special inspection is always required on:
   (a) structural slabs, flat plates
   (b) walls, columns, beams
   (c) piles, caissons
   (d) welding of reinforcement, installation of mechanical bar splice devices, epoxy application

   When required or specified, special inspection services shall conform to the Governing Building Code, Chapter 17 and shall be provided by an ICC certified inspector or Building Department approved engineer. The Building Department reserves the right to waive or require special inspections. Nothing in these plans waives the Building Department's right to require special inspection at any point and on any material.
4. Testing of materials used in concrete construction must be performed as noted on structural plans or at the request of the Building Department to determine if materials are quality specified. Tests of materials and of concrete shall be made by an approved agency; such tests shall be made in accordance with the standards listed in the Governing Building Code, Table 1705.3. Copies of all test reports shall be provided to Engineer and Building Department for review in a timely manner.
5. The Contractor shall remove and replace any concrete which fails to attain specified 28 day compressive strength if so directed by the Engineer. Any defects in the hardened concrete shall be repaired to the satisfaction of the Engineer and/or Architect or the hardened concrete shall be replaced at the Contractor's expense.
6. All concrete shall be in accordance with ASTM C94. Placement of concrete shall be in accordance with ASTM C94 and ACI Standard 304.
7. All cement shall be Portland Cement Type I or II and shall conform to ASTM C150. Where concrete is placed against soil that contains high levels of sulfides, use Type V cement.
8. All aggregates shall conform to ASTM C33. Maximum aggregate sizes:
   (a) Footings: 1-1/2"
   (b) All other work: 3/4"
9. Where not specifically detailed, the minimum concrete cover on reinforcing steel shall be:
   (a) Permanently exposed to earth or weather
      i. Cast against earth: 3"
      ii. Cast against forms: 2"
   (b) Not exposed to earth or weather
      i. Slabs, walls, joists: 3/4"
      ii. Beams, girders, columns: 1-1/2"
10. The minimum lap splice length for all reinforcing steel shall be as noted in the typical details on sheet S-1.1. All lap splices to be staggered.
11. All reinforcing steel, anchor bolts, dowels, inserts, and any other hardware to be cast in concrete shall be well secured in position prior to foundation inspection. All hardware to be installed in accordance with respective manufacturer's specifications. Refer to architectural and structural plans for locations of embedded items.
12. Locations of all construction joints, other than specified on the structural plans, shall be approved by the Architect and Engineer prior to forming. Construction joints shall be thoroughly air and water cleaned and roughened to 1/4" amplitude, UNO. All surfaces to receive fresh concrete shall be maintained continuously wet at least three (3) hours in advance of concrete placement.
13. Control joints shall be provided in all concrete slabs-on-grade per typical detail on sheet S-1.1, UNO.
14. The Architect, Engineer and appropriate inspectors shall be notified in a timely manner for a reinforcement inspection prior to the placement of any concrete.
15. The Contractor shall obtain approval from the Architect and the Engineer prior to placing sleeves, pipes, ducts, chases, coring and opening on or through structural concrete beams, walls, floors, and roof slabs unless specifically detailed or noted on the plans. All pipes or conduits passing through concrete members shall be sleeved with standard steel pipe sections.
16. The Contractor is responsible for design, installation, maintenance and removal of all formwork. Forms shall be properly constructed, sufficiently tight to prevent leakage, sufficiently strong, and braced to maintain their shape and alignment until no longer needed for concrete support. Joints in formwork shall be tightly fitted and blocked, and shall produce a finished concrete surface that is true and free from blemishes. Forms for exposed concrete shall be pre-approved by the Architect to ensure conformance with design intent.
17. Remove formwork in accordance with the following schedule:
   (a) Forms at slab edge: 1 day
   (b) Side forms at footings: 2 days
   (c) All other vertical surfaces: 7 days
   (d) Beams, columns, girders: 15 days
   (e) Elevated slabs: 28 days

   Engineer reserves the right to modify removal schedule above based on field observations, concrete conditions, and/or concrete test results.
18. Retaining walls shall not be backfilled until concrete has set a minimum of 14 days. Refer to structural plans for slab and/or framing installation sequencing.
19. All concrete (except slabs-on-grade 6" or less) shall be mechanically vibrated as it is placed to properly consolidate the concrete.
20. Concrete shall be maintained in a moist condition and above 40 degrees fahrenheit for a min. of seven (7) days after placement unless otherwise accepted by EOR.
21. Concrete shall not be permitted to free fall more than six (6) feet. For heights greater than six (6) feet, use tremie, pump or other method consistent with applicable standards.
22. When specified ultimate compressive strength is greater than 2500 psi, Contractor shall submit mix designs to Architect and Engineer for approval seven (7) days prior to placement. Mix designs shall be prepared by an approved testing laboratory. Sufficient data must be provided for all admixtures.
23. Refer to Architectural plans for locations of all dimensions, slab depressions, slopes, drains, curbs, and control joints.
24. Provide continuous horizontal reinforcing through all wall intersections and corner. See details for additional information.
25. Drypack or non-shrink grout shall have a minimum 28 day compressive strength of 7000 psi unless noted otherwise. Provide under base plates, etc., as required for full bearing. Grout shall be in conformance with ASTM C1107.
26. Calcium chloride and concrete admixtures containing chloride salts shall not be used with steel pan decking.

REINFORCEMENT

1. All portions of work pertaining to concrete reinforcing construction shall conform to the Governing Building Code, Chapter 19, ACI Standard 318, and other referenced documents.
2. Fabrication, placement and installation of reinforcing steel shall conform to the Concrete Reinforcing Steel Institute (CRSI) Manual of Standard Practice and the Governing Building Code.
3. Reinforcing steel shall be deformed, clean, free of rust, grease or any other material likely to impair concrete bond.
4. All bars shall conform to ASTM A615, Grade 60 minimum (UNO on structural plans). All welded wire fabric (WWF) shall conform to ASTM A185 (flat sheets only).
5. Reinforcing steel that is to be welded shall conform to ASTM A706. All welding of reinforcement shall be subject to special inspection. Welding of reinforcement shall be with low hydrogen electrodes and shall conform to structural welding code - reinforcing steel, AWS D1.4, by the American Welding Society and ACI 318 Sec. 3.5.2. Welding rods used for the welding of reinforcing shall be E80XX. All welding shall be performed by certified welders.
6. Contractor shall take necessary steps (standard ties, anchorage devices, etc.) to secure all reinforcing steel in their true position and prevent displacement during concrete placement.
7. Shop drawings for fabrication of reinforcing steel shall be approved by the Contractor and submitted to the Architect and Engineer for review and approval prior to fabrication. Shop drawings are not required for slabs-on-grade or foundations unless specifically noted on the structural plans.
8. Heating of reinforcing steel to aid in bending and shaping of bars is not permitted. All bends in reinforcing steel are to be made cold. All bend radii shall conform to CRSI Manual of Standard Practice. Reinforcing bars shall not be pre-bent without approval of EOR.
9. Refer to Concrete and Masonry notes for specific minimum splice length and splice staggering requirements. Lap welded wire fabric (WWF) reinforcement a minimum of two (2) modules or 12", whichever is greater. All splices are to be staggered.
10. (Special lateral systems) The following reinforcement shall comply with ASTM A706, Grade 60, UNO:
    a. Vertical reinforcement at intersections and ends of concrete walls enclosed in ties or stirrups.
    b. Longitudinal moment frame reinforcement.
    c. Ties and stirrups providing lateral support of longitudinal bars or concrete confinement in columns and walls shall be ASTM A706, Grade 80.

ROUGH CARPENTRY

1. Refer to latest edition of the Governing Building Code, Table 2304.10.2. for all minimum nailing requirements.
2. Refer to individual sections for applicable material specifications.
3. Fabricate, size, install, connect, fasten, bore, notch, and cut wood and plywood with joints true, tight, and well-nailed, screwed or bolted as required, all members to have solid bearing without being shimmed, unless noted otherwise. Set horizontal members subject to bending with the crown up. Install framing plumb, square, true and cut for full bearing. Splices are not permitted between bearings. Use full lengths unless otherwise specified.
4. Metal framing angles, anchor, clips, straps, ties, holdowns, etc. shall be manufactured by Simpson Strong-Tie Co. No substitutions shall be permitted without prior approval of the Engineer.
5. All walls are to have continuous double 2x top plates spliced per Detail 7/S-1.1 unless specifically noted otherwise on the plans and details.
6. Wall Studs:
   (a) Unless specifically noted on the plan and details, use the following guidelines for wall framing:
      i. Use 2x4 studs at 16" oc for walls less than 9'-0" tall.
      ii. Walls 9'-0" to 16'-0" tall shall be constructed of 2x6 studs at 16" oc
      iii. Request specifically engineered wall details for walls greater than 16'-0" tall.
7. Blocking:
   (a) Provide min. one row of nominal 2" thick blocking of same width as stud, fitted snugly and spiked into studs at mid-height of partitions or walls over 8' high.
   (b) All foundation cripple walls (or "pony walls") less than 14" in height shall be solid blocking.
   (c) Rim blocking/rim board to be 1-1/4" minimum width x full depth at bearing walls, UNO per plans and details. Refer to shearwall section for additional rim/blocking requirements.
8. Notching:
   (a) Is not permitted of any structural member without prior approval
   (b) In exterior and bearing walls, notches shall not exceed 25% of the stud depth.
   (c) Non-bearing partition walls, notches shall not exceed 40% of the stud depth.
   (d) Successive notches in the same member shall be spaced a min of 18" apart.
9. Boring:
   (a) Is not permitted of any structural member without prior approval
   (b) In exterior and bearing walls, holes shall not exceed 40% of the stud depth.
   (c) Non-bearing partition walls, may be drilled not greater than 60% of stud depth.
   (d) Successive holes in the same member shall be spaced a minimum of 18" apart.
10. Bearing:
    (a) Provide a min. of 1-1/2" of bearing for all 2x joists and hdrs 4x10 / 6x8 & smaller.
    (b) Provide a min. of 3" of bearing for all beams and hdrs 4x12 / 6x10 & larger, UNO on plans.
    (c) Members bearing on prefabricated hangers are to have full bearing and nailing per manufacturer's specifications.
11. Posts:
    (a) Posts inside walls shall bear on sill plates and shall be continuous between top and bottom plates, unless specifically noted otherwise.
    (b) Provide posts under all beams, girders or double joists equal to the width of the supported member.
    (c) Posts on upper levels are to be stacked on posts of equal size at levels below, unless a larger post is specified on the plans.
    (d) Vertically oriented blocking ("squash blocking") shall be used to fully transfer the post area through floors to foundation. Vertical blocking shall be equal to floor thickness plus 1/16".
    (e) Headers framing into continuous posts without trimmer studs shall be supported in Simpson HUC hangers unless noted otherwise on the plans.
    (f) Isolated posts shall be seated in Simpson post or column bases, unless noted otherwise on the plans
12. Roof Framing:
    (a) Provide wood joists, as specified, laid with the crown up and spaced as indicated.
    (b) Provide a minimum of 1-1/2" end bearing unless otherwise shown.
    (c) Provide full depth solid 2x blkg or cross-bridging between the joists at 8' oc max.
    (d) Provide all cricket framing required to achieve positive drainage per Arch.
    (e) Install plywood panels with the face grain across the framing and close joints and nail at each support. Fully nail with common nails per the plans.
    (f) Plywood panels shall not be less than 4' x 8' except at boundaries and changes in framing direction, where the minimum panel dimension shall be no less than 24", unless all edges of undersized panels are supported by and fastened to framing members or blocking.
    (g) Provide Simpson "PSCL" clips at all plywood joints perpendicular to framing. Provide clips midway between framing members at the unsupported edges of plywood when members are spaced at 24" oc or greater. If clips are not used, provide solid blocking for joints perpendicular to framing.
13. Floor Framing:
    (a) Provide wood joists, as specified, laid with the crown up and spaced as indicated.
    (b) Provide a minimum of 1-1/2" end bearing unless otherwise shown.
    (c) Provide full depth solid 2x blkg or cross-bridging between the joists at 8' oc max. For floors framed with I joists, refer to the mfg's spec's for blkg requirements.
    (d) Provide full depth solid 2x blocking between the joists under all walls and partitions where the wall or partition is perpendicular to the floor framing (including floors framed with I joists)
    (e) Install plywood sheathing with the face grain across supports, end supports staggered, and the edges of sheets centered over supports. If T&G plywood is used, blocking need not be provided at all plywood edges (UNO per plan). If T&G plywood is not used, blocking shall be provided at all plywood edges. Glue plywood to joists and fully nail with common nails per the plans.
    (f) Plywood panels shall not be less than 4' x 8' except at boundaries and changes in framing direction, where the minimum panel dimension shall be no less than 24", unless all edges of undersized panels are supported by and fastened to framing members or blocking.
14. Shear Walls:
    (a) Refer to plans for all shearwall locations, length type and nailing.
    (b) Refer to Shearwall Schedule on title sheet for additional information.
    (c) Shear wall lengths specified on plans are minimum required.
    (d) Shear walls to be nailed with common nails. All nails to have minimum 3/8" edge distance to panel or framing member.
    (e) Where 3x framing is required per the shear wall schedule, stagger edge nailing.
    (f) Oriented Strand Board (OSB) may be used in lieu of plywood.
    (g) Typical Rim Board/Blocking at Shearwalls shall be 1-3/4" Min. LSL (refer to Engineered Lumber Section for Material Specifications). Refer to Shearwall Schedule per Plan for Min. Rim/Blkg Width Requirements per Transfer Fasteners.

TIMBER / LUMBER

1. All structural lumber shall be Douglas Fir-Larch, S4S and shall conform to the Governing Building Code, section 2303.1.1.
2. The minimum lumber grade of each member shall be as follows (unless specifically noted otherwise on plans and details) :
   (a) 2x studs, blocking, plates:Stud
   (b) 2x joists #2 or better
   (c) 4x4, 4x6, or 6x6 beams or posts #2 or better
   (d) 4x8, 6x8, or larger beams or posts #1 or better

   It is recommended (but not required) that all exposed members be Select Structural or better and free of heart center due to visual characteristics.
3. All lumber in contact with concrete or masonry shall be pressure treated Douglas Fir. Whenever it is necessary to cut, notch, bore or splice pressure treated material, all newly cut surfaces shall be thoroughly painted with the same preservative.
4. Maximum moisture content for all structural members shall not exceed 19%.
5. All plywood sheathing shall be CDX grade (or better) Douglas Fir with exterior glue. All sheathing shall conform to the Governing Building Code and grade-marked by the American Plywood Association (APA). Panel index to be 40/20 for floors and 24/0 for roofs unless specifically noted otherwise on the plans and details.

ENGINEERED LUMBER

1. Glu-laminated Beams (GLB):
   (a) shall have the following properties:

Use	EWS Combination Symbol	Species / Grade	Flexural Stress, Fb (psi)	Modulus of Elasticity, E (ksi)	Horiz. Shear Stress, Fv (psi)	Compression Fc para. (psi)	Compression Fc perp. (psi)
Simple Span Bm.	24F-V4	DF	+2,400/-1,850	1,800	265	1,650	650
Continuous or Cantilever Bm.	24F-V8	DF	+/- 2,400	1,800	265	1,650	650
Columns	2	DF / L2	+/- 1,800	1,300	265	1,600	560

   (b) shall not be notched, cut or drilled without prior approval from the Engineer
   (c) shall have exterior glue and weather-treatment prior to installation
   (d) shall be fabricated by an approved manufacturer & in accordance with ANSI A 190.1
   (e) shall have factory standard camber of 3,500-5,000 ft on beams UNO per Plan
2. Laminated Veneer Lumber (LVL) :
   (a) shall be 1-3/4" minimum thickness with the following minimum properties:
      i. E = 2000 ksi
      ii. Fb = 2600 psi
      iii. Fv = 285 psi
      iv. Fc (parallel) = 2500 psi
      v. Fc (perp.) = 750 psi
      vi. Ft (parallel) = 1500 psi
      vii. Specific Gravity = 0.50
   (b) shall be fabricated by an approved manufacturer
   (c) shall bear a minimum of 3-1/2" on specified supports. Provide full depth solid blocking at all bearing points
   (d) shall be nailed in accordance with mfg's specifications. Unless otherwise approved, nailing into the top edge shall not be spaced any closer than:
      i. 16d @ 6" oc, 10d @ 4" oc, and 8d @ 3" oc
      ii. When nailing must be reduced, stagger rows a minimum of 1/2" apart while maintaining proper edge distances.
   (e) shall be, when comprised of multiple members, connected with 16d nail, 1/2" bolts or 1/4" lag screws in accordance with manufacturer's specifications.
   (f) shall not be cut, notched or drilled without specific written approval of the EOR.
3. Laminated Strand Lumber (LSL) :
   (a) shall be 1-3/4" minimum thickness with the following minimum properties:
      i. E = 1550 ksi
      ii. Fb = 2325 psi
      iii. Fv = 310 psi
      iv. Fc (parallel) = 2170 psi
      v. Fc (perp.) = 900 psi
      vi. Ft (parallel) = 1070 psi
      vii. Specific Gravity = 0.50
   (b) shall be fabricated by an approved manufacturer
   (c) shall bear a minimum of 3-1/2" on specified supports. Provide full depth solid blocking at all bearing points
   (d) shall be nailed in accordance with mfg's specifications. Unless otherwise approved, nailing into the top edge shall not be spaced any closer than:
      i. 16d @ 6" oc, 10d @ 4" oc, and 8d @ 3" oc
      ii. When nailing must be reduced, stagger rows a minimum of 1/2" apart while maintaining proper edge distances.
   (e) shall be, when comprised of multiple members, connected with 16d nail, 1/2" bolts or 1/4" lag screws in accordance with manufacturer's specifications.
   (f) shall not be cut, notched or drilled without specific written approval of the EOR.
4. Parallel Strand Lumber (PSL) :
   (a) shall be 2-1/2" minimum thickness with the following minimum properties:
      i. E = 2200 ksi
      ii. Fb = 2900 psi
      iii. Fv = 290 psi
      iv. Fc (parallel) = 2900 psi
      v. Fc (perp.) = 625 psi
      vi. Ft (parallel) = 2300 psi
      vii. Specific Gravity = 0.50
   (b) shall be fabricated by an approved manufacturer
   (c) shall bear a minimum of 3-1/2" on specified supports. Provide full depth solid blocking at all bearing points
   (d) shall be nailed in accordance with manufacturer's specifications. Unless otherwise approved, nailing shall not be spaced any closer than:
      i. Narrow face: 16d @ 6" oc, 10d @ 4" oc, and 8d @ 3" oc
      ii. Wide Face: 16d @ 8" oc, and 10d & 8d @ 6" oc
      iii. When nailing must be reduced, stagger rows a minimum of 1/2" apart while maintaining proper edge distances
   (e) shall not be cut, notched or drilled without specific written approval of the EOR.
5. Plywood I Joists:
   (a) type and manufacturer shall be clearly noted on the plans. Substitutions shall not be permitted without prior approval of the Engineer.
   (b) shall be installed in accordance with applicable code approvals and mfg's spec's.
   (c) shall bear a minimum of 1-3/4" at all end supports, and 3-1/2" at intermediate supports. Provide full depth solid blocking at all bearing points.
   (d) shall be installed with intermediate blocking or bridging as specified by the Mfr. Only omit intermediate blocking when specifically allowed by the Mfr.
   (e) shall not be cut, notched or drilled without specific written approval of the EOR.

FASTENERS

1. Nails:
   (a) shall be with "common" nails unless noted otherwise.
   (b) shall not be driven closer than 1/2 their length nor closer than 1/4 of their length to the edge or end of a member, except for sheathing.
   (c) shall be installed in pre-drilled lead holes if necessary to avoid splitting.
   (d) shall be hot-dipped zinc-coated galvanized steel, stainless steel, silicon bronze, or copper when in contact with preservative-treated wood.
      i. When used in exterior applications, nails shall have coating types and weights in accordance with the treated wood or bolt manufacturer's requirements. A min.of ASTM A153, type G185 zinc-coated galvanized steel (or equiv.) shall be used.
      ii. When used in an interior, dry environment in SBX/DOT or zinc borate preservative-treated wood, plain carbon nails shall be permitted.
   (e) All nailing shall conform to the Governing Building Code, Table 2304.10.2.
2. Lag screws:
   (a) shall be installed into pre-drilled lead holes. Lubricant (or soap) shall be used to facilitate installation and prevent damage to the screws.
   (b) shall be hot-dipped zinc-coated galvanized steel or stainless steel when in contact with preservative-treated wood.
      i. When used in exterior applications, bolts shall have coating types and weights in accordance with the treated wood or bolt manufacturer's rec's. A minimum of ASTM A153, type G185 zinc-coated galvanized steel (or equal) shall be used.
      ii. When used in dry interior environments in SBX/DOT or zinc borate preservative-treated wood, plain carbon screws, nuts, and washers shall be permitted.
3. Bolts to Wood Framing:
   (a) shall conform to ASTM A307, UNO specifically on plans and details.
   (b) shall be installed in pre-drilled holes a max of 1/16" larger than the specified bolt dia.
   (c) when installed against wood surfaces, shall have standard washers under the heads and nuts.
   (d) shall be hot-dipped zinc-coated galvanized steel or stainless steel when in contact with preservative-treated wood.
      i. When used in exterior applications, bolts shall have coating types and weights in accordance with the treated wood or bolt manufacturer's rec's. A minimum of ASTM A153, type G185 zinc-coated galvanized steel (or equal) shall be used.
      ii. When used in dry interior environments in SBX/DOT or zinc borate preservative-treated wood, plain carbon screws, nuts, and washers shall be permitted.
4. Anchor Bolts:
   (a) shall be installed at all exterior walls and all interior shear and/or bearing walls.
   (b) shall be 5/8" diameter with 3x3x0.229" steel plate washers at shearwalls.
   (c) shall be 5/8" diameter with 2x2x3/16" steel plate washers at non-shearwalls.
   (d) shall have 7" minimum embedment. (Contractor to coordinate length of bolts with sill plate thicknesses).
   (e) shall conform to ASTM F1554, Grade 36, UNO.
   (f) shall be hot-dipped zinc-coated galvanized steel or stainless steel when in contact with preservative-treated wood.
      i. When used in exterior applications, bolts shall have coating types and weights in accordance with the treated wood or bolt manufacturer's rec's. A minimum of ASTM A153, type G185 zinc-coated galvanized steel (or equal) shall be used.
      ii. When used in dry interior environments in SBX/DOT or zinc borate preservative-treated wood, plain carbon screws, nuts, and washers shall be permitted.
   (g) shall not be spaced greater than 72" oc Refer to shearwall schedule for specific anchor bolt spacing requirements.
   (h) shall be placed a maximum of 12" from wall corners, wall ends, and sill plate splices (but not less than 7 dia.) , and a min. of two bolts per piece of sill plate is required.
   (i) shall be secured in place prior to foundation inspection.
   (j) shall have a minimum edge distance of 1-3/4".
5. Powder Actuated Shot Pins:
   (a) shall be installed at all interior non-bearing, non-shearwalls.
   (b) shall be 0.157x3" with 1.5" diameter steel washers, UNO.
   (c) shall not be spaced greater than 32" o.c.

Aug 11, 2026
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ENGINEER OF RECORD:

230 W Sola Unit B

230 West Sola St
Santa Barbara, CA

REVISION:

PC	08.11.2026	PLAN CHECK

PROJECT ENGINEER:
David W.
(805) 962-9966 x220
dwebster@ashleyvance.com

DATE: 03/31/26 | SCALE: NTS

AV JOB: 241697 | SHEET SIZE: 24"x36"

STRUCTURAL SPECIFICATIONS

S-1.2

DO NOT SCALE THESE DRAWINGS. REFER TO ARCHITECTURAL PLANS FOR ALL DIMENSIONS

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STATEMENT OF SPECIAL INSPECTIONS

1. This Statement of Special Inspection is submitted in fulfillment of the requirements of the Governing Building Code, section 1704 and 1705.
2. Special Inspections and Testings will be preformed in accordance with the approved plans and specifications, this statement and the Governing Building Code, Section 1704 , 1705 , 1707 , and 1708.
3. The schedule of Special Inspections summarizes the Special Inspections and tests required. Special Inspectors will refer to the approved plans and specifications for detailed special inspection requirements. Any additional tests and inspections required by the approved plans and specifications will also be performed.
4. Interim reports will be submitted to the Building Official and the Registered Design Professional in Responsible Charge in accordance with the Governing Building Code Section 1704.2.4.
5. A Final Report of Special Inspections documenting required Special Inspections, testing and correction of any discrepancies noted in the inspections shall be submitted prior to issuance of a Certificate of Use and Occupancy (Section 1704.2.4). The Final Report will document:
   (a) Required special inspections.
   (b) Correction of discrepancies noted in inspections.
6. The Owner recognizes his or her obligation to ensure that the construction complies with the approved permit documents and to implement this program of special inspections. In partial fulfillment of these obligations, the Owner will retain and directly pay for the Special Inspections as required in the Governing Building Code, Section 1704.2.
7. 1704.4 Contractor responsibility. Each contractor responsible for the construction of a main wind- or seismic force-resisting system, designated seismic system or a wind- or seismic force-resisting component listed in the statement of special inspections shall submit a written statement of responsibility to the building official and the owner or the owner's authorized agent prior to the commencement of work on the system or component. The contractor's statement of responsibility shall contain acknowledgement of awareness of the special requirements contained in the statement of special inspection.

SCHEDULE OF TESTING AGENCIES & SPECIAL INSPECTORS

The following are the testing agencies and special inspectors that will be retained to conduct tests and inspection on this project.

Responsibility	Firm	Address, Telephone, Email
1. Special Inspection (Except for Geotechnical)		
2. Materials Testing		
3. Geotechnical Inspection		
*		

* Additional inspections may be required at the discretion of the Building Official.

SEISMIC REQUIREMENTS (Section 1705.13)

Description of seismic-force-resisting system and designated seismic systems subject to special inspections per Section 1705.13:

Light-framed walls sheathed with wood structural panels rated for shear resistance or steel sheets (ASCE 7, Table 12.2-1, Line A.15)

The extent of the main seismic-force-resisting system is defined in more detail in the construction documents.

WIND REQUIREMENTS (Section 1705.12)

Description of main wind-force-resisting system and designated seismic systems subject to special inspections per Section 1705.12:

Not Applicable

The extent of the main wind-force-resisting system is defined in more detail in the construction documents.

SCHEDULE OF SPECIAL INSPECTIONS

Column Header Notation Used in Table:
- C Indicates continuous inspection is required.
- P Indicates periodic inspections are required. The notes and/or contract documents should clarify.

Box Entry Notation Used in Table:
- X Is placed in the appropriate column to denote either "C" continuous or "P" periodic inspections.
- -- Denotes a one-time activitiy or one whose frequency is defined in some other manner.

Additional details regarding inspections are provided in the project specifications or notes on the drawings.

Verification & Inspection	C	P	Notes
1704.2.5 - Inspect fabricator's fabrication and quality control procedures.	--	--	
1705.3 - Concrete			
4. Inspect anchors post-installed in hardened concrete			
b. Mechanical anchors[2] and adhesive anchors[1] not defined in 4.a		X	
FOOTNOTES: 1. Prior to epoxy placement, it must be verified that the hole is clean, dry, and free of loose debris 2. Periodic inspection shall take place such that the installation of a minimum of two (2) anchors per each shear wall are observed			
1705.13.2 - Seismic Resistance - Structural Wood			
2. Inspect nailing, bolting, anchoring, and other fastening of elements of the main seismic force-resisting system, including wood shear walls, wood diaphragms, collectors (drag struts), braces, shear panels, and hold-downs		X	Inspection of shear walls and diaphragms with fasteners spaced greater than 4" oc is not required
1705.2 - Steel			
1. Material verification of high-strength bolts, nuts, and washers		X	
a. Identification markings to conform to ASTM standards specified in the approved construction documents		X	
b. Manufacturer's certificate of compliance required		X	
2. Inspection of high-strength bolting:			
a. Bearing-type connections		X	
b. Slip-critical connections	X		
3. Material verification of structural steel:			
a. Identification markings to conform to ASTM standards specified in the approved construction documents	--	--	
b. Manufacturer's mill test reports	--	--	
4. Material verification of weld filler materials:			
a. Identification markings to conform to AWS designation listed in the WPS	--	--	
b. Manufacturer's certificate of compliance required	--	--	
5. Inspection of Welding: a. Structural Steel			
1) Complete and partial penetration groove welds	X		
2) Multi-pass fillet welds	X		
3) Single-pass fillet welds > 5/16"		X	
4) Single-pass fillet welds < 5/16"		X	
5) Floor and roof deck welds		X	
b. Reinforcing Steel			
1) Verification of weldability of reinforcing steel other than ASTM A706		X	
2) Reinforcing steel resisting flexural and axial forces in intermediate and special moment frames, and boundary elements of special reinforced concrete shear walls, and shear reinforcement	X		
3) Shear reinforcement	X		
4) Other reinforcing steel		X	
6. Inspection of steel frame joint details for compliance with approved construction documents (bracing & stiffening, member locations, application of joint details at each connection, etc.)		X	
7. Welded studs when used for structural diaphragms		X	
8. Welding of cold formed sheet steel framing members		X	
9. Welding of stairs and railing systems		X	

ENGINEER OF RECORD:

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230 West Sola St
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REVISION:

PC	08.11.2026	PLAN CHECK

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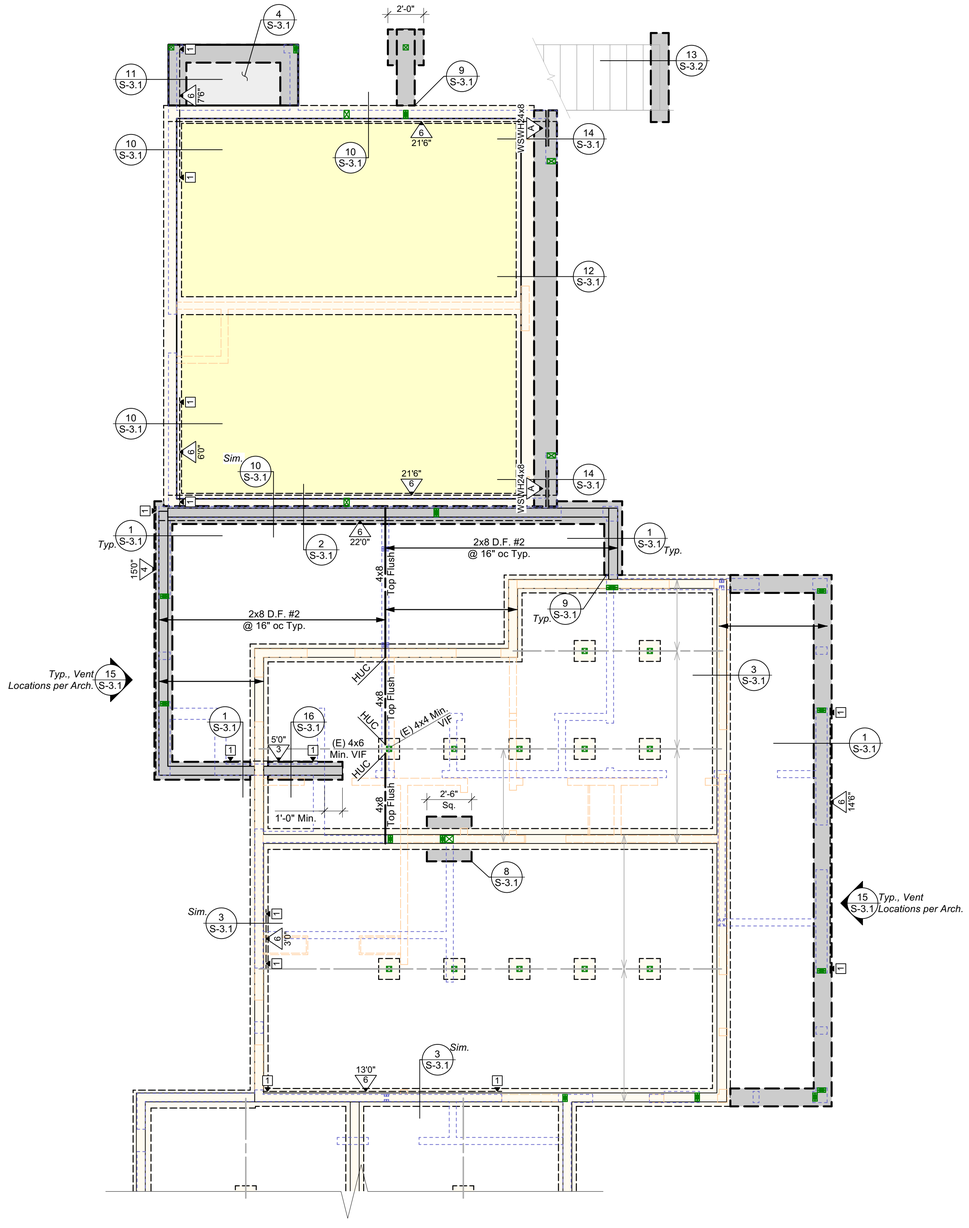
SPECIAL INSPECTIONS

S-1.3

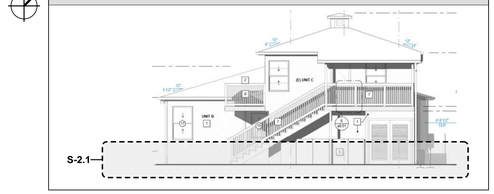
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Aug 11, 2026
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FRAMING LEVEL KEY



GENERAL FRAMING NOTES

(N) Beams (per Call-out)

(E) Beams (to Remain)

All Lumber 4x6, 6x6 and Smaller to be DF #2 UNO
All Lumber 4x8, 6x8 and Larger to be DF #1 UNO

All Beams to Bear on Plates w/ Indicated Post or Doubler Below UNO

All Hangers Shall be Installed w/ Max. Nailing per Mfr. & Sized for Full Width & Depth of Supported Members, UNO

Floor sheathing to be 3/4" plywood or OSB, T & G, PI 40/20, glued and nailed w/ 10d commons at 6", 6", 12"

Provide wall length continuous full depth solid blocking (where floor joists perpendicular) or double floor joist (where joists parallel) for all walls above.

(N) Floor Joists -- 2x8 D.F. #2 @ 16" oc in Simpson ITS Hangers, Typ. (UNO)

(E) Framing (to Remain)

Waterproofing, flashing, & finish details per Architecturals.

GENERAL FOUNDATION NOTES

Foundations per Governing Building Code, Table 1806.2
At the request of the client (or client's agent), Ashley & Vance Engineering has designed the foundations in conformance with Table 1806.2. If the building official determines that expansive soils are present, or other geologic issues of concern, then they may require that special provisions be made to the foundation design to safeguard against damage due to the expansiveness or due to other geologic issues. If this becomes the situation, all foundation construction must be halted and the client, at their own expense, shall: (a) obtain a soils report prepared by a Soils Engineer licensed in the state of the project; (b) commission Ashley & Vance Engineering to revise the foundation plans and details, and framing plans if necessary, to reflect the recommendations of the soils report; (c) submit the revised plans to the Building Department for approval.

See General Notes & Specifications for additional requirements and material specifications.

All dimensions per Architectural plans

Contractor to VERIFY all dimensions w/ Architectural plans PRIOR to commencement of construction.

Contractor shall verify all existing conditions prior to construction & contact Engineer and Architect regarding any discrepancies.

(E) Foundation & Stem Wall to Remain

(E) Pad Foundation to Remain

(E) Slab-on-Grade to Remain

(N) Foundation & Stem Wall per Details

12" Wide x 8" Deep x 21" Embedment w/ (2) #4 Cont. (UNO)

Foundation per Details

12" Wide x 21" Embedment w/ (2) #5 Top & Bot. (UNO)

(N) 4" Slab-on-Grade w/ #3 @ 18" oc EW, per Details

(N) Pad Foundation per Details
Dimensions per Plan
w/ #4 @ 12" oc EW, (3) Min.

Denotes Step in Slab-on-Grade or Framing, Step Ht. & Extent per Arch.

All Walls to have Continuous Double Top Plates, All Splices to be per Detail **7/S-1.1**

Wood Framed Wall Above, See S-2.2

(E) Wood-Framed Wall to be Removed

MANUFACTURED SHEAR WALLS

WSWH A — Simpson Strong-Wall Wood Shearwall
WSWH24x8 w/ WSWH-AB1 x 30
Install per Mfr. Specs. & ICC-ES ESR-2652

HOLDOWN SCHEDULE

TYPE	HOLDOWN[1]	MIN. POST	ANCHOR / EMBEDMENT	DETAILS
1	HDUE5	(2) 2x	SABR 5/8x24 / 18" Min.	**(E) Ftg.** 5/S-3.1
2	HDUE7	(2) 2x	SABR 5/8x24 / 18" Min.	**(N) Ftg.** 6 & 7/S-3.1

FOOTNOTES:
1. Shared holdowns to be installed per detail **10/S-1.1**, *Typical Shearwall Intersections,* (UNO)

SHEARWALL SCHEDULE

NO.	MATERIALS	DBL. SIDED	SILL PLATE	PANEL B'DRY	NAILING[1] SIZE	NAILING[1] SPC'G	TRANSFERS[2] 5/8"Ø[3] AB	SDS[4] Screw	SDWS[5] Screw	A35, LTP4,[6,8] or LTP5	RBC	16d[9]
6	15/32" CDX Plywood	N	2x	2x	10d	6"	41"	9"	11"	13"	11"	5"
4	15/32" CDX Plywood	N	2x	3x	10d	4"	27"	6"	7"	9"	8"	3"
3	15/32" CDX Plywood	N	2x	3x	10d	3"	21"	4"[10]	5"[10]	6"	6"	-
2	15/32" CDX Plywood	N	2x	3x	10d	2"	16"	3"[10]	4"[10]	5"	4"	-

FOOTNOTES:
1. All nails to be COMMONS. **DO NOT** use box type nails. All "field" nailing to be 12"oc, UNO. Penetration shall be 1-1/2" Min. in framing.
2. All transfers to be installed into min. 1-1/2" thick members, UNO. Where clips are spaced less than 6" oc, stagger clips on each side of wall.
3. All shear walls to have 5/8" anchor bolts, embeded 7" into concrete foundations, with 3"x3"x0.229" thick plate washers, minimum. Washers may be slotted (slot length not to exceed 1-3/4") w/ standard cut washer placed between nut and plate washer. Washers shall extend within 1/2" of the edge of the bottom plate on the sheathed side. At walls sheathed on 2 sides, plate washers shall be alternated to each side of plate. [Governing Bulding Code, Section 2308.3.1] [AF&PA SDPWS 4.3.6.4.3]
4. Simpson SDS 1/4"x5" Screws through 2x sill, or SDS 1/4"x8" Screws through 3x sill or double plates. Install into minimum 1-3/4" thick members (rim and/or blocking). [ICC ESR 2236]
5. Simpson SDWS (Exterior Grade) 0.22"x5" Screws through 2x sill, or SDWS (Exterior Grade) 0.22"x8" Screws through 3x sill or double plates. Install into minimum 1-3/4" thick members (rim and/or blocking). [ICC ES AC233]
6. See details for permitted transfer clip types and locations.
8. Where LTP4 clips are installed over shear wall sheathing, fasten with full length 8d common nails.
9. 16d common nails through the sill plate to rim member or blocking. **DO NOT** use w/ LVL or LSL Rims.
10. Install screws into 3-1/2" wide continuous member, staggered 1-1/2" apart.
11. Install screws into Glulams or solid sawn member. LSL, LVL, or PSL members are NOT acceptable, UNO.
12. Provide both A35 and LTP4 clips on opposite sides of shearwall in order to achieve net spacing requirement.

ENGINEER OF RECORD:

230 W Sola Unit B
230 West Sola St
Santa Barbara, CA

REVISION:

PC	08.11.2026	PLAN CHECK

PROJECT ENGINEER:
David W.
(805) 962-9966 x220
dwebster@ashleyvance.com

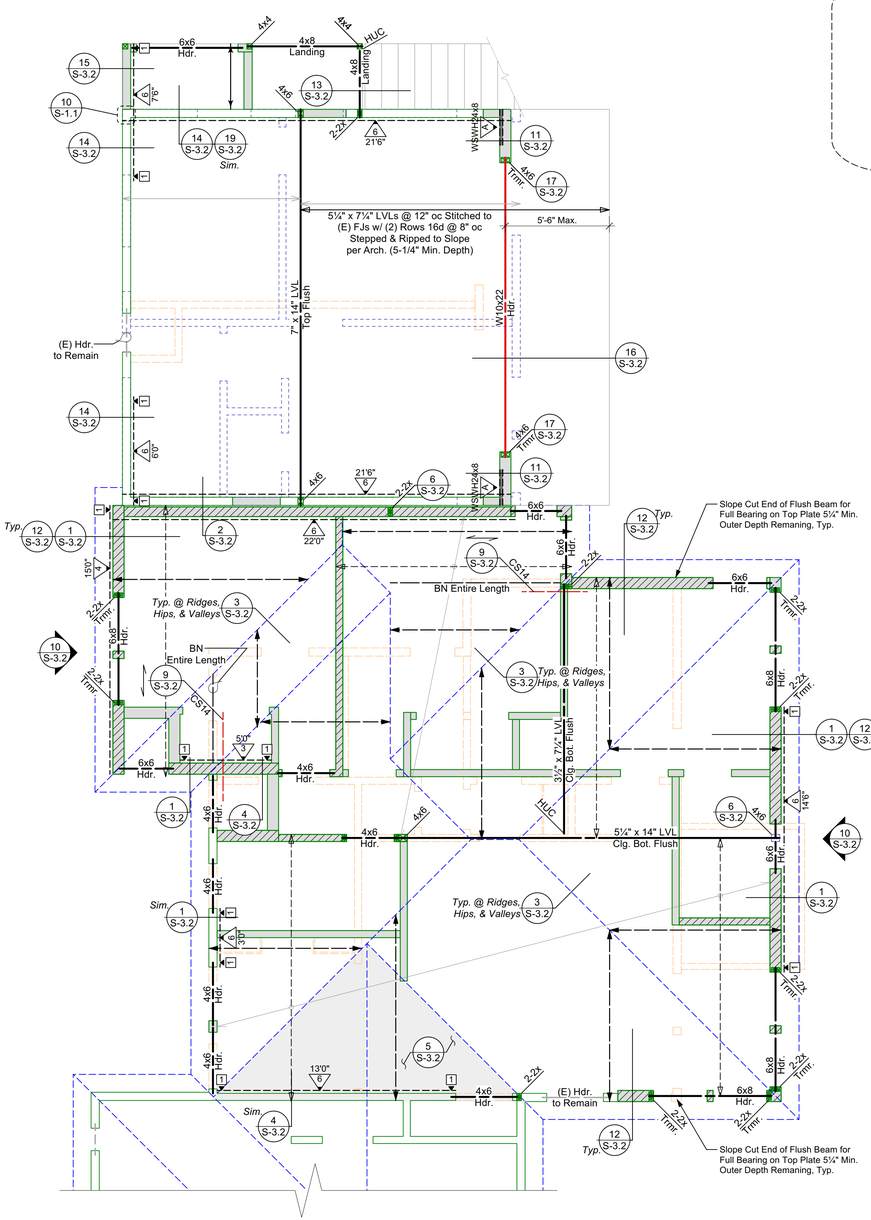
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AV JOB: 241697 | SHEET SIZE: 24"x36"

FOUNDATION PLAN

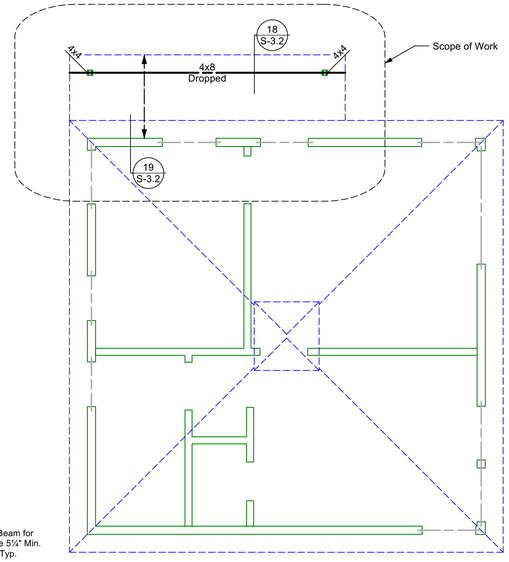
S-2.1

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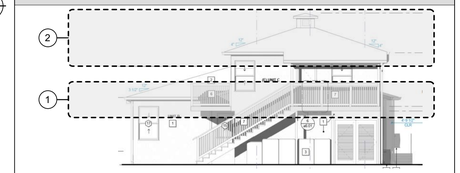


1 UPPER FLOOR & LOWER ROOF FRAMING PLAN



2 UPPER ROOF FRAMING PLAN

FRAMING LEVEL KEY



GENERAL FRAMING NOTES

(N) Beams (per Call-out)

(E) Beams (to Remain)

All Lumber 4x6, 6x6 and Smaller to be DF #2 UNO
All Lumber 4x8, 6x8 and Larger to be DF #1 UNO

All Beams to Bear on Plates w/ Indicated Post or Doubler Below UNO

All Hangers Shall be Installed w/ Max. Nailing per Mfr. & Sized for Full Width & Depth of Supported Members, UNO

Roof sheathing to be 5/8" plywood or OSB, PI 40/20, nailed w/ 10d commons at 6", 6", 12"

Floor sheathing to be 3/4" plywood or OSB, T & G, PI 40/20, glued and nailed w/ 10d commons at 6", 6", 12"

(N) Ceiling Joists -- 2x8 D.F. #2 @ 16" oc in Simpson LUS Hangers, Typ. (UNO)

(N) Roof Rafters -- 2x6 D.F. #2 @ 24" oc in Simpson LUS Hangers, Typ. (UNO) 12'-0" Max Span , See **Detail 12/S-3.2**

(N) Floor Joists -- 2x8 D.F. #2 @ 16" oc in Simpson LUS Hangers, Typ. (UNO)

(N) Deck Joists per Plan

(E) Floor Framing (to Remain)

Waterproofing, flashing, & finish details per Architecturals.

See General Notes & Specifications for additional requirements and material specifications.

All dimensions per Architectural plans

Contractor to VERIFY all dimensions w/ Architectural plans PRIOR to commencement of construction.

Contractor shall verify all existing conditions prior to construction & contact Engineer and Architect regarding any discrepancies.

WALL SCHEDULE

Stud wall locations per Architecturals.

(E) Wood-Framed Wall to be Removed

(E) Wood-Framed Wall to Remain

(N) Non-Struc. Wood-Framed Wall

Wall Thickness per Arch.
Min. 2x6 D.F. Stud @ 16" o.c.

(N) Struc. Wood-Framed Wall

Wall Thickness per Arch.
Min. 2x6 D.F. Stud @ 16" o.c.

All Walls to have Continuous Double Top Plates, All Splices to be per Detail **7/S-1.1**

Wood Framed Wall Above

MANUFACTURED SHEAR WALLS

WSWH A — Simpson Strong-Wall Wood Shearwall
WSWH24x8 w/ WSWH-AB1 x 30
Install per Mfr. Specs. & ICC-ES ESR-2652

HOLDOWN SCHEDULE

TYPE	HOLDOWN[1]	MIN. POST	ANCHOR / EMBEDMENT	DETAILS
1	HDUE5	(2) 2x	SABR 5/8x24 / 18" Min.	**(E) Ftg.** 5/S-3.1
2	HDUE7	(2) 2x	SABR 5/8x24 / 18" Min.	**(N) Ftg.** 6 & 7/S-3.1

FOOTNOTES:
1. Shared holdowns to be installed per detail **10/S-1.1**, *Typical Shearwall Intersections,* (UNO)

SHEARWALL SCHEDULE

NO.	MATERIALS	DBL. SIDED	SILL PLATE	PANEL B'DRY	NAILING[1] SIZE	NAILING[1] SPC'G	TRANSFERS[2] 5/8"Ø[3] AB	SDS[4] Screw	SDWS[5] Screw	A35, LTP4[6,8] or LTP5	RBC	16d[9]
6	15/32" CDX Plywood	N	2x	2x	10d	6"	41"	9"	11"	13"	11"	5"
4	15/32" CDX Plywood	N	2x	3x	10d	4"	27"	6"	7"	9"	8"	3"
3	15/32" CDX Plywood	N	2x	3x	10d	3"	21"	4"[10]	5"[10]	6"	6"	-
2	15/32" CDX Plywood	N	2x	3x	10d	2"	16"	3"[10]	4"[10]	5"	4"	-

FOOTNOTES:
1. All nails to be COMMONS. **DO NOT** use box type nails. All "field" nailing to be 12"oc, UNO. Penetration shall be 1-1/2" Min. in framing.
2. All transfers to be installed into min. 1-1/2" thick members, UNO. Where clips are spaced less than 6" oc, stagger clips on each side of wall.
3. All shear walls to have 5/8" anchor bolts, embeded 7" into concrete foundations, with 3"x3"x0.229" thick plate washers, minimum. Washers may be slotted (slot length not to exceed 1-3/4") w/ standard cut washer placed between nut and plate washer. Washers shall extend within 1/2" of the edge of the bottom plate on the sheathed side. At walls sheathed on 2 sides, plate washers shall be alternated to each side of plate. [Governing Bulding Code, Section 2308.3.1] [AF&PA SDPWS 4.3.6.4.3]
4. Simpson SDS 1/4"x5" Screws through 2x sill, or SDS 1/4"x8" Screws through 3x sill or double plates. Install into minimum 1-3/4" thick members (rim and/or blocking). [ICC ESR 2236]
5. Simpson SDWS (Exterior Grade) 0.22"x5" Screws through 2x sill, or SDWS (Exterior Grade) 0.22"x8" Screws through 3x sill or double plates. Install into minimum 1-3/4" thick members (rim and/or blocking). [ICC ES AC233]
6. See details for permitted transfer clip types and locations.
8. Where LTP4 clips are installed over shear wall sheathing, fasten with full length 8d common nails.
9. 16d common nails through the sill plate to rim member or blocking. **DO NOT** use w/ LVL or LSL Rims.
10. Install screws into 3-1/2" wide continuous member, staggered 1-1/2" apart.
11. Install screws into Glulams or solid sawn member. LSL, LVL, or PSL members are NOT acceptable, UNO.
12. Provide both A35 and LTP4 clips on opposite sides of shearwall in order to achieve net spacing requirement.

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REVISION:

PC	08.11.2026	PLAN CHECK

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dwebster@ashleyvance.com

DATE: 03/31/26 | SCALE: 1/4"=1'-0"
AV JOB: 241697 | SHEET SIZE: 24"x36"

ROF FRAMING PLAN

S-2.2

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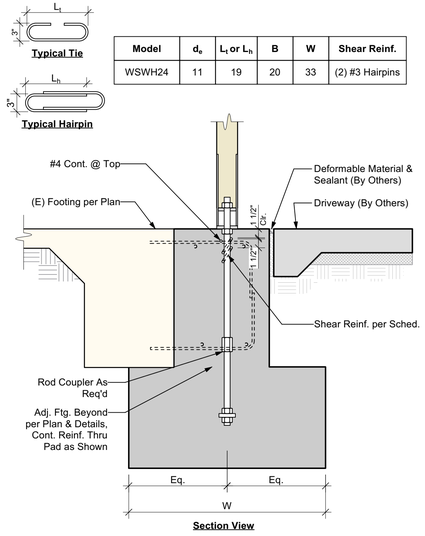
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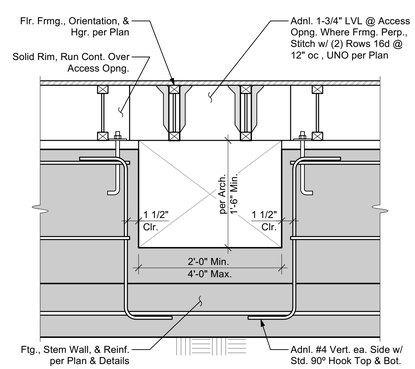
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20 NOT USED

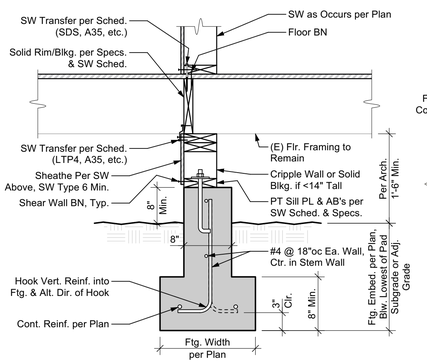


Model	d_e	L_t or L_h	B	W	Shear Reinf.
WSWH24	11	19	20	33	(2) #3 Hairpins

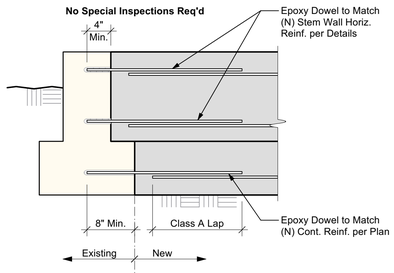
14 WSWH AT FOUNDATION



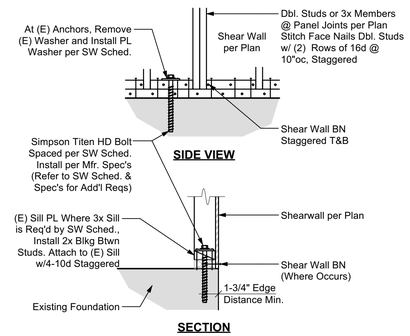
15 ACCESS OPENING THRU FOUNDATION



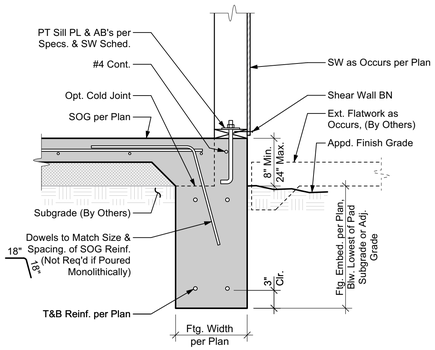
16 TYPICAL INTERIOR RAISED FOUNDATION



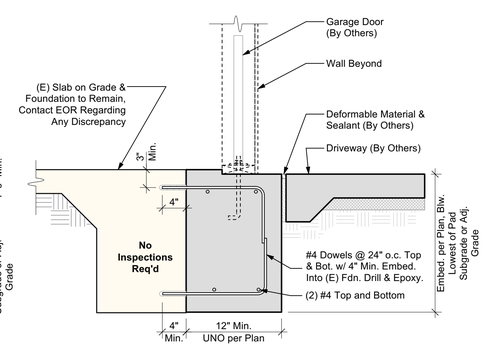
9 NEW FDN. TO EXISTING FDN.



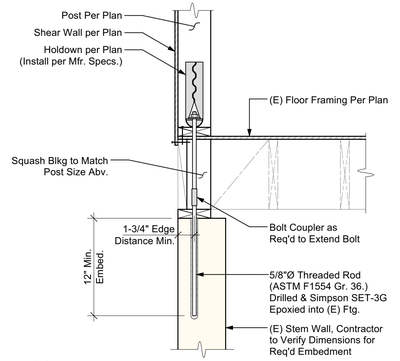
10 SHEAR TO EXISTING SILL PLATE



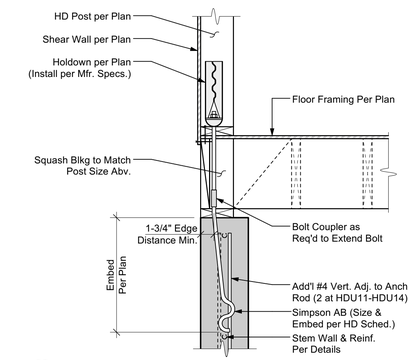
11 TYPICAL EXTERIOR FOUNDATION



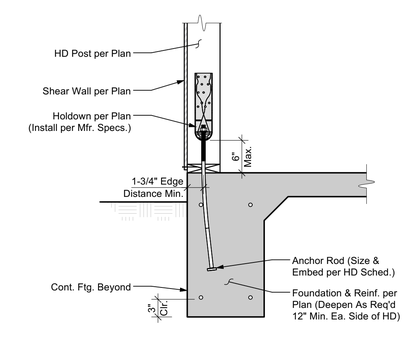
12 NEW FDN. TO EXISTING FDN. @ GARAGE



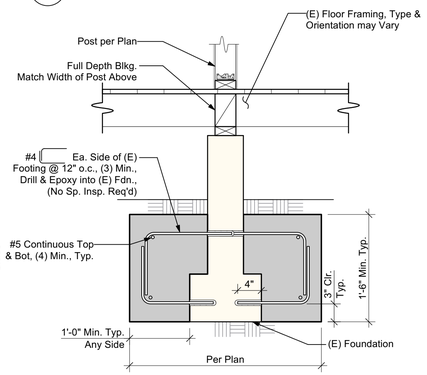
5 HOLDOWN TO EXISTING STEM WALL



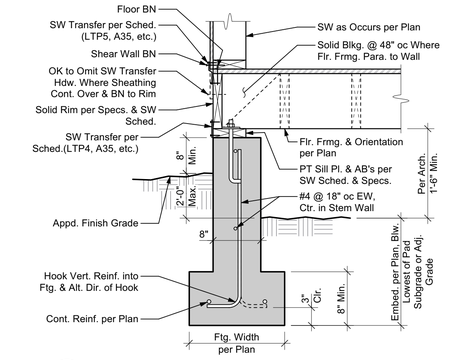
6 HOLDOWN TO STEM WALL



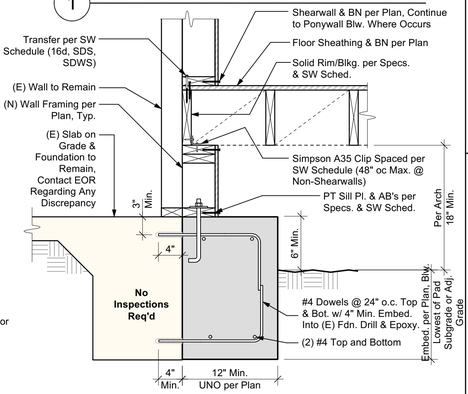
7 HOLDOWN TO FOUNDATION



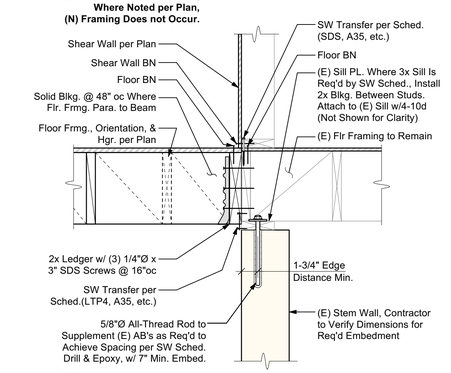
8 NEW PAD AT (E) TEE FOOTING



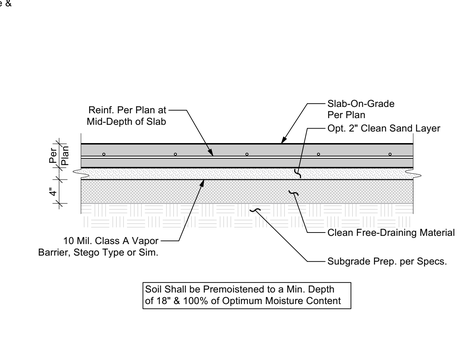
1 EXTERIOR RAISED FOUNDATION



2 NEW FDN. TO EXISTING FDN.



3 SHEAR WALL TO EXISTING STEM WALL



4 TYP. SLAB ON GRADE

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230 W Sola Unit B

230 West Sola St
Santa Barbara, CA

ENGINEER OF RECORD:

REVISION:

PC	08.11.2026	PLAN CHECK

PROJECT ENGINEER:
David W.
(805) 962-9966 x220
dwebster@ashleyvance.com

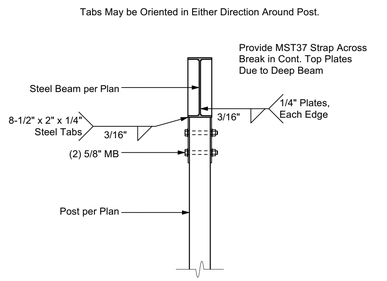
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AV JOB: 241697	SHEET SIZE: 24"x36"

STRUCTURAL DETAILS

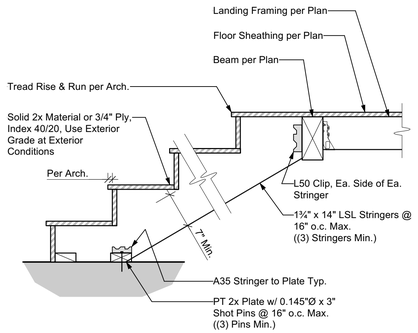
S-3.1

DO NOT SCALE THESE DRAWINGS. REFER TO ARCHITECTURAL PLANS FOR ALL DIMENSIONS.

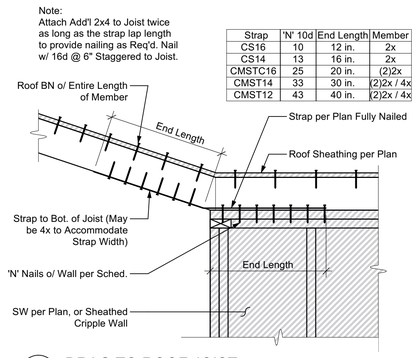
Aug 11, 2026
11:16:18 AM



17 STEEL BEAM TO WOOD POST

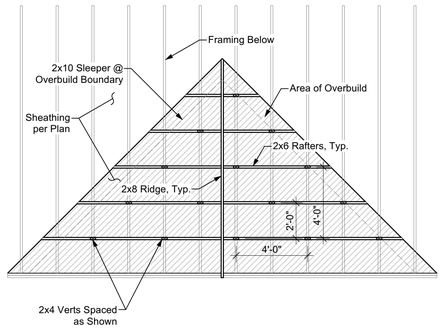


13 LSL STAIR BASE

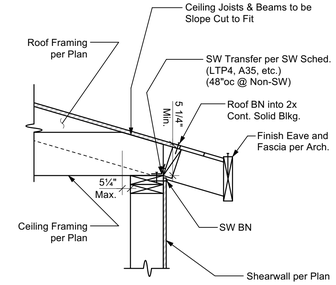


Strap	'N' 10d	End Length	Member
CS16	10	12 in.	2x
CS14	13	16 in.	2x
CMSTC16	25	20 in.	(2)2x
CMST14	33	30 in.	(2)2x / 4x
CMST12	43	40 in.	(2)2x / 4x

9 DRAG TO ROOF JOIST

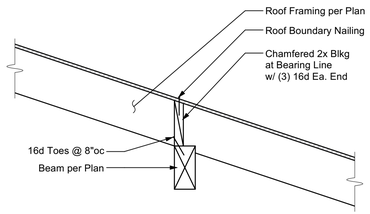


5 TYP. OVERBUILD FRAMING

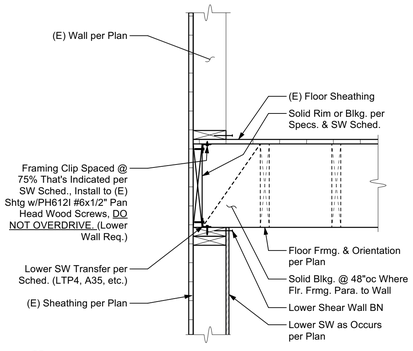


(Sheathing May be Placed on Either Side of Wall)

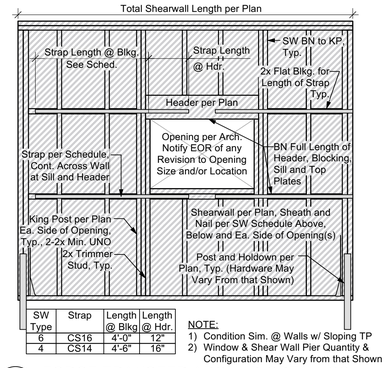
1 SHEAR TRANSFER TO RAFTERS



18 RAFTERS TO ROOF BEAM



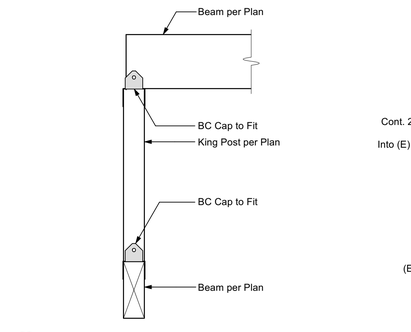
14 SHEAR TRANSFER: AT (E) FLOOR FRAMING



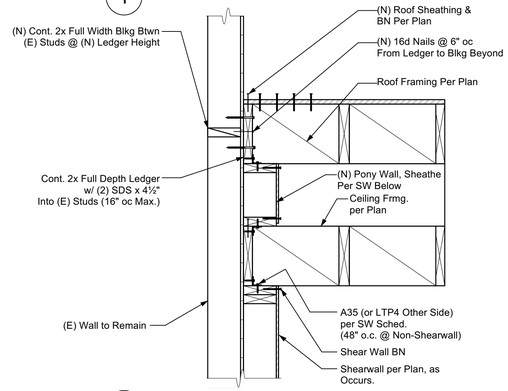
SW Type	Strap	Length @ Blkg	Length @ Hdr.
6	CS16	4'-0"	12"
4	CS14	4'-6"	16"

NOTE:
1) Condition Sim. @ Walls w/ Sloping TP
2) Window & Shear Wall Pier Quantity & Configuration May Vary from that Shown

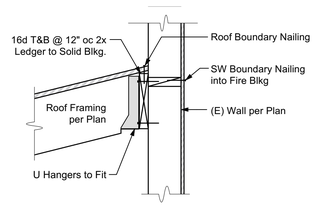
10 FORCE TRANSFER AROUND OPENINGS



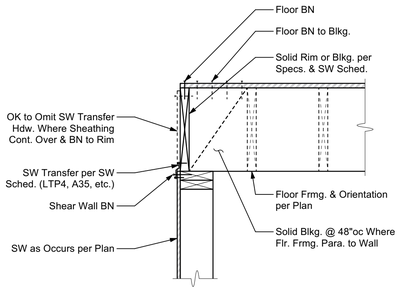
6 KING POST TO BEAM



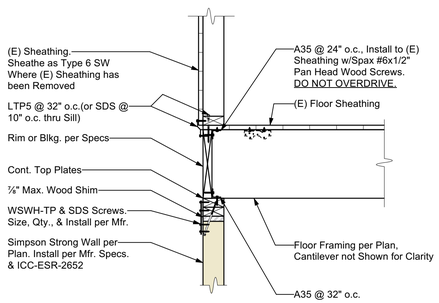
2 SHEAR TRANSFER: ROOF AT EXT. WALL



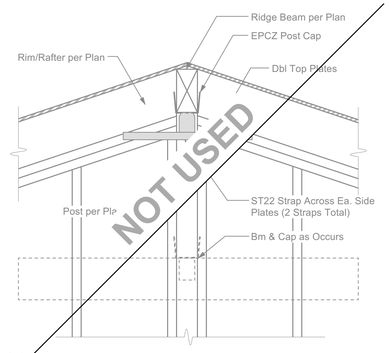
19 LEDGER TO EXISTING WALL



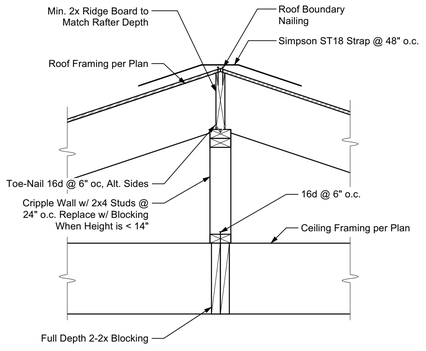
15 SHEAR TRANSFER: FLOOR AT EXT. WALL



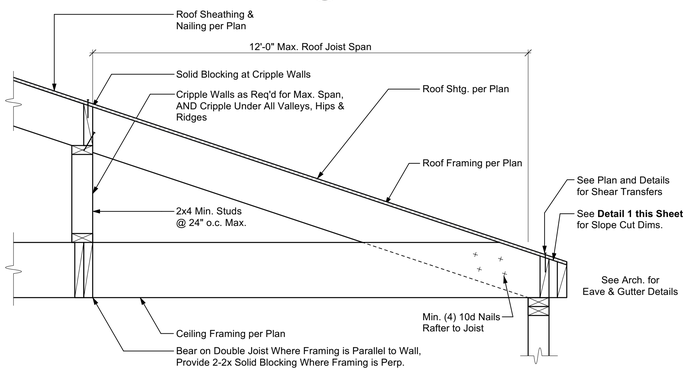
11 WSWH AT EXISTING FLOOR FRAMING



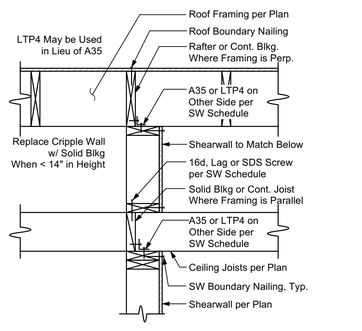
7 RIDGE BEAM TO WALL



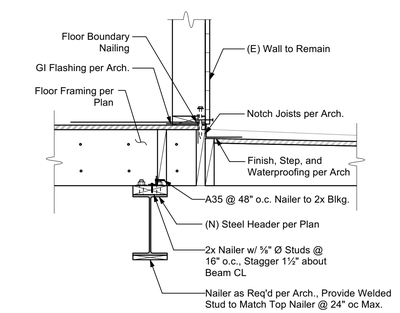
3 FRAMING AT RIDGES, HIPS & VALLEYS



12 STRUCTURAL CEILING FRAMING



4 SHEAR TRANSFER AT CEILING



16 NOTCHED JOISTS AT CANT. DECK

20 NOT USED

Aug 11, 2026
11:10:18 AM

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ENGINEER OF RECORD:

230 W Sola Unit B
230 West Sola St
Santa Barbara, CA

REVISION:

PC	08.11.2026	PLAN CHECK

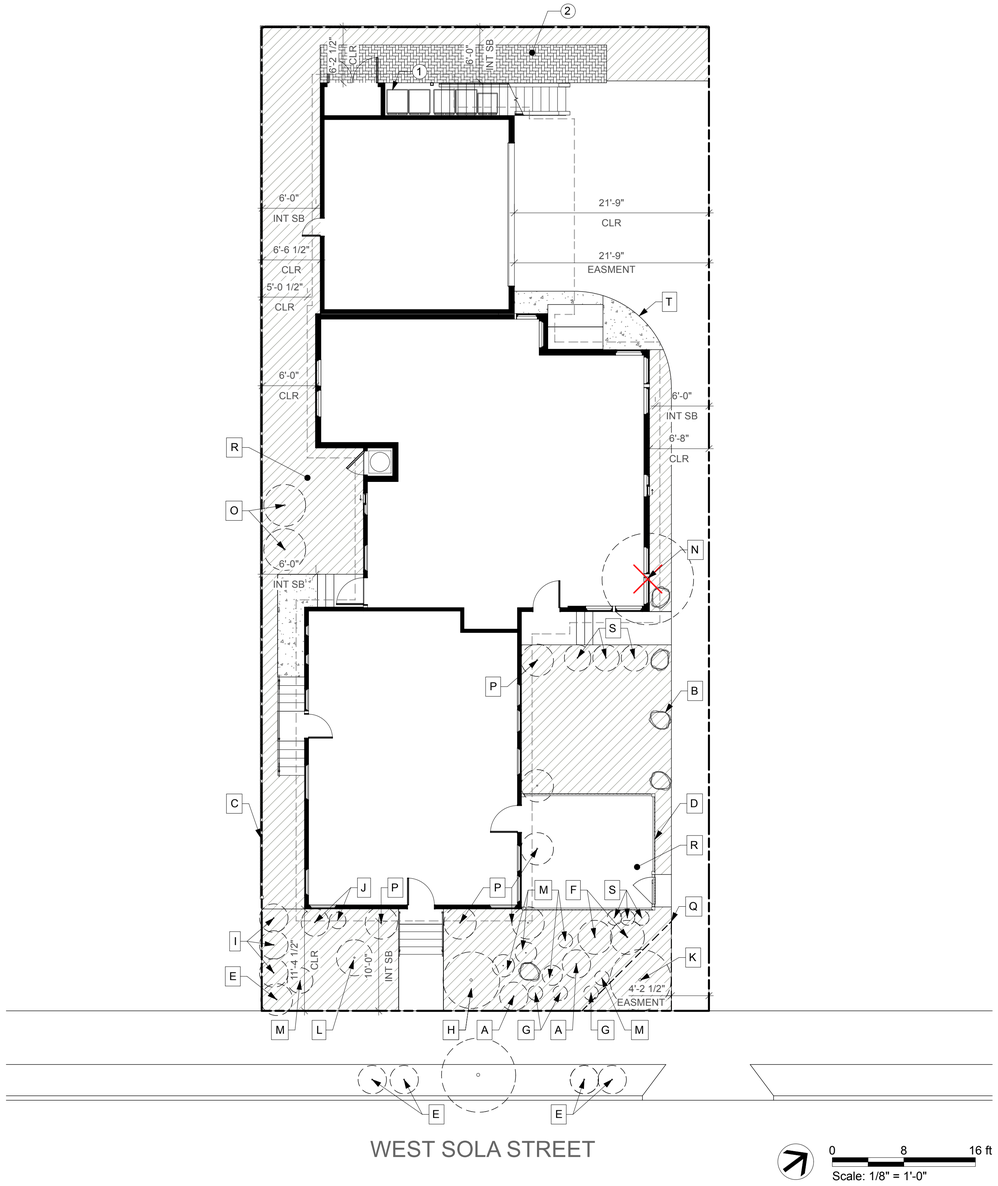
PROJECT ENGINEER:
David W.
(805) 962-9966 x220
dwebster@ashleyvance.com

DATE: 03/31/26	SCALE: NTS
AV JOB: 241697	SHEET SIZE: 24"x36"

STRUCTURAL DETAILS

S-3.2

DO NOT SCALE THESE DRAWINGS. REFER TO ARCHITECTURAL PLANS FOR ALL DIMENSIONS.



Materials Legend

Material		Size	Area
	existing concrete pavement per Architect	N/A	44 SF
	permeable paver per architect	N/A	135 SF
	brown shredded bark mulch or equal, MIN. 3" depth	N/A	1530 SF

***Crushed Stone Supplier:** Southwest Boulder & Stone (714) 882-1010

Proposed Notes

1. (P) trash, recycle and green waste container location
2. (P) permeable pavers, per Architect

Existing Notes

- A (E) Agave attenuata
- B (E) boulders TYP.
- C (E) 6' wood fence
- D (E) wooden fence
- E (E) Limonium perezii
- F (E) Strelitzia reginae
- G (E) Aloe vera
- H (E) Acanthus mollis
- I (E) Cajanus cajan
- J (E) Hibiscus rosa-sinensis
- K (E) Polystichum munitum
- L (E) Calandrinia spectabilis
- M (E) Cymbopogon citratus
- N (E) Cupressus lusitanica to be removed
- O (E) strelitzia nicolai
- P (E) Syzygium australe
- Q (E) 10' x 10' sight visibility triangle
- R (E) private side yard patio area
- S (E) Agapanthus africanus
- T (E) CONC. to remain

Existing Tree Protection & Removal Notes

All existing plant material to remain and be protected unless otherwise noted.

(E) tree/shrub symbol

(E) to be removed symbol

General Notes

1. Due to unforeseen circumstances that occur as projects undergo construction, site conditions will change. Therefore, if a proposed built element, grade change, planting or irrigation seems problematic and it is evident that it is not realistic due to new site conditions, please inform LA to coordinate this issue prior to construction.

Sola Remodel

230 W Sola St
Santa Barbara, CA 9310
APN# 039-061-019

Submi

#	DA
1	03.
2	08.

Type: FOR PERMIT

Drawn By:

NAME	DATE
Scott Inman	01/26

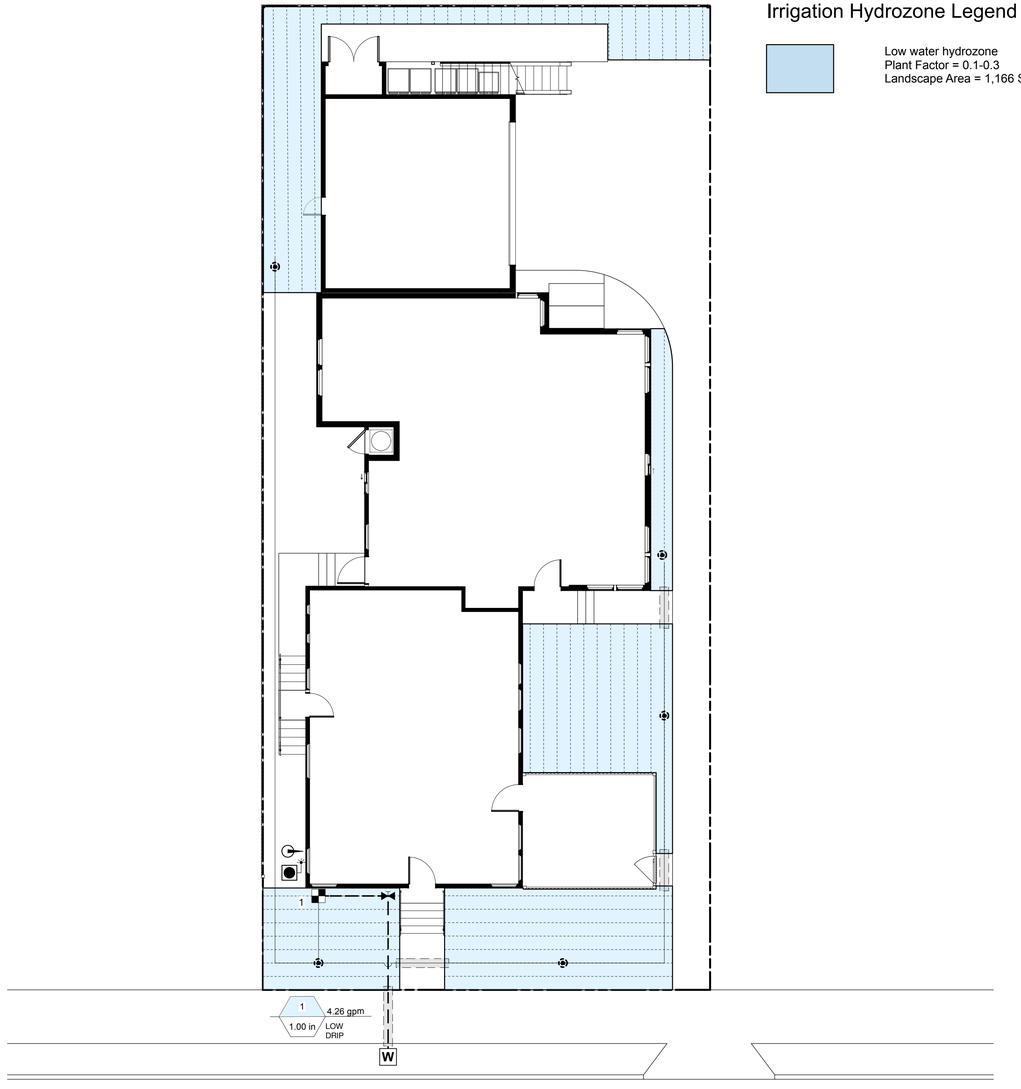
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Title:

Materials Plan

Sheet Number:

L1.1



0 8 16 ft

Scale: 1/8" = 1'-0"

Irrigation Hydrozone Legend

Low water hydrozone
Plant Factor = 0.1-0.3
Landscape Area = 1,166 SF

Irrigation Equipment Schedule

symbol on plan	description	brand and model	detail	requirements
W	1" Water Meter	Provided by developer		
	new mainline pipe for potable water W/ blue 3" identification tape	1" SCH 40 PVC, W/ SCH 40 PVC fittings.	2 / L2.3	1-1/2" and smaller: depth of cover 18" MIN. 2" and larger: depth of cover 24" MIN.; identify pipe W/ (3") minimum width tape with (1") contrasting lettering bearing the continuous wording "Potable Water"
	new lateral line pipe for potable water	SCH 40 PVC, W/ SCH 40 PVC fittings	1 / L2.3	depth of cover : 12" MIN. lateral pipes to be 1" unless otherwise noted; no class 200 pipe is to be used.
	sleeve pipe for main, laterals and wires under paving and through walls	SCH 40 PVC, W/ SCH 40 PVC couplings	3 / L2.3	depth of cover : same as main and laterals. glue all couplings; sleeve size to be MIN. 2.5x diameter of passing pipe; shallow depth under paving is not permitted.
	Weather/ Rain Combo Sensor	HUNTER WSS-SEN		confirm location with Owner prior to installation. install per manufacturer's instructions **in. location free of overhead obstruction.**
	X-Core Controller, 4-station, outdoor, 120 VAC with lead and U.S. plug	HUNTER XC-400	4 / L2.4	confirm location with owner prior to installation; install per manufacturer's instructions.
	gate valve mainline shut off	SPEARS, true union, with VITON o-rings, line size	3 / L2.4	HUNTER MB-0811 Multi-purpose box, coordinate exact location W/ planting plan, conceal in planting if possible.
	Drip Control Zone Kit, ¾", with anti-siphon valve, 40 PSI regulation 0.5 to 15 GPM	HUNTER ACZ-075-40	1 / L2.4	install per detail
	0.6 GPH subsurface drip irrigation; 0.43 in/hr precip. rate @ 30 or 40 PSI **space drip lines at 18" O.C.; install laterals parallel to grade**	HUNTER HDL-06-18	4,5 / L2.3	burial depth: 4" below grade - coordinate layout with planting plan, see planting sheets; **space drip lines at 18" O.C.; place landscape staple @ every 3' on center, install laterals parallel to grade**
	pipe transition point in drip box	Pipe Transition point from PVC lateral to drip tubing with riser in 6" drip box.	2 / L2.4	install per detail
HYDROZONE/ VALVE NUMBER; GPM; WATER USE; VALVE SIZE (in.)	valve designation on plan			valve number: brand into lid of valve box with 1 1/4" high numbers corresponding to controller stations, using a CHRISTY's brander and dies, or equal. valve numbers on plan are suggested order.

IRRIGATION NOTES

1. The design of the irrigarion system shall conform to the hydrozones of the landscape design plan.

2. In mulched planting areas, the use of low volume water irrigation is required to maximize water infiltration into the roots.

3. Sprinkler heads and other emission devices shall have matched precipitation rates, unless otherwise directed by the manufacturer specifications.

4. Head to head coverage is recommended. However, sprinker spacing shall be set to achieve distribution uniformity using the manufacturer's specifications.

5. Areas less than ten (10) feet in width in any direction shall be irrigated with subsurface irrigation or other means that produces no runoff or overspray.

6. A dedicated water meter shall be provided for common landscape area.

7. A weather base "smart controller": shall be utilized.

8. Controller shall be programmed to water in early morning or night.

9. A rain sensor shall be installed at each controller

10. Water use calculation shall certify conformance with the current requirements.

11. Contractor shall obtain soils agronomy test after grading is complete. Landscape architect shall review soils test prior to planting.

12. Trees are to be irrigated by bubbler.

I have complied with criteria of the ordinance and applied them accordingly for the efficient use of water in the irrigation design plan.

08.10.26

JACK KIESEL, LANDSCAPE ARCHITECT #5206. DATE

Note:

1. Precise location of irrigation back flow device, controller and sensor shall be coordinated with Owner or Owner's authorized representative prior to construction.

2. Irrigation audit (if required), to be requested and obtained by landscape contractor for the certification of completion.

ALL IRRIGATION EQUIPMENT SHOWN IN PAVING FOR DESIGN CLARITY ONLY. INSTALL ALL IRRIGATION EQUIPMENT WITHIN PLANTING AREAS UNLESS OTHERWISE SPECIFIED

(POTABLE WATER)

LOCATE P.O.C. EQUIPMENT IN PLANTING AREA, CONFIRM FINAL LOCATION WITH THE OWNER OR OWNER'S AUTHORIZED REPRESENTATIVE PRIOR TO CONSTRUCTION.

STATIC PRESSURE: 60 PSI
MAIN LINE AND WATER METER SIZE: 1INCH

Sola Remodel

230 W Sola St
Santa Barbara, CA 9310
APN# 039-061-019

Submi

#	DA
1	03.
2	08.

Type: FOR PERMIT

Drawn By:

NAME	DATE
Scott Inman	01/26

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Title:

Irrigation Plan

Sheet Number:

L2.1

Irrigation Notes:

1. Install drip irrigation system per City of Santa Barbara standards.

2. Verify location of water meter.

3. This plan is diagrammatic. All pipes, valves, etc. shown within paved areas are for design clarification only and shall be installed in planting areas wherever possible. No elbows or 45˚ ells may be placed under paving, these are to be located in planting areas only. Avoid conflicts with utilities, new planting, new site or architectural elements.

4. Do not install the irrigation system as indicated on the drawings when it is obvious in the field that obstructions or grade differences exist and should be brought to the attention of the owner's authorized representative.

5. Irrigation system is designed assuming a static water pressure of approximately 60 psi at point-of-connection. Prior to installation of irrigation system, contractor shall verify pressure at point-of-connection and report any discrepancies to the landscape architect.

6. It is the intent of this plan to provide adequate irrigation to all planting areas. Contractor shall be responsible for making any and all adjustments to the irrigation system necessary to insure 100% irrigation coverage of all planting areas.

7. Install the irrigation system in accordance with all local codes.

8. Piping installed under pathways or paved areas, through walls or footings shall be placed inside schedule 40 pvc sleeves of adequate size to allow free movement of the pipe in the sleeve.

9. Flush all lines and adjust all emitters for maximum performance. Call landscape architect and owner 48 hours in advance for coverage tests.

10. Adjust flow controls for proper performance and valve longevity.

11. Provide sleeving for mainline below driveways, sidewalks, and walls.

12. Irrigation lines shall be buried at the following minimum depths:
    PVC pressure mainline:18"
    PVC lateral line:12"
    PVC lines 2-1/2" or larger: 24"

Irrigation System Design Criteria:
proposed water meter, assumed 60 psi static pressure.
maximum flow = 5 ft/sec. velocity in main line pipe.

Water Pressure Note:
Contractor shall verify p.o.c. static pressure in field prior to beginning any work. Notify landscape architect for any discrepancies not similar to static pressure given by water purveyor.

psi: 60 psi

Note A:
Point of connection shall be a 1" water meter with a 1" lateral service line. Verify the actual location, size and water pressure in the field prior to starting work. If any of the poc information shown on these drawing is found to be different than the actual poc information gathered in the field, immediately notify the landscape architect. Should the contractor fail to verify the poc information any changes required by low pressure or volume shall be the sole responsibility of the contractor.

Static Water Pressure	60	PSI
Design Water Pressure	20	PSI
Maximum System Demand	4.26	GPM
Residual Pressure	38.50	PSI

Note B:
Controller 'C' shall be a Hunter XC-400, controller assembly installed in an outdoor pedestal as part of controller assembly. 1 total station used. Final location of controllers and electrical P.O.C. shall be confirmed with owner's authorized representative prior to commencing work.

Note:
This design is diagrammatic. All equipment shown in paved areas is for design clarity only and is to be installed within planting areas.

Valve Location Note:
Electric control valves and isolation valve locations on this drawing are approximate. The landscape contractor shall stake out each electrical control valve and isolation valve location for review and approval by owner prior to installation of all valves. Final location and exact positioning for electric control valves and isolation valves shall be determined by the owner. Minor modifications of electric control valves and isolation valve locations as requested by the owner shall be provided by the contractor at no additional cost to the owner. Failure to obtain owner's approval prior to the installation shall cause the contractor to make owner directed revisions at no additional cost to the owner. In general, unless otherwise directed by owner, all valves shall be installed three feet from edge of hardscape, walk or curb in shrub planting areas.

Notes:
Mainline shown within paving for clarity only, actual mainline location to be a minimum of 18" off adjacent hardscape and other obstacles typ.

All lateral lines with greater than five feet of elevation change shall have the king bros. mod. no. ksc-(xxx)-s (appropriate line size) swing check valve installed at every five (5) feet of elevation change minimum. Contractor shall verify all swing check valve locations with owner's authorized representative prior to commencing work.

Irrigation sleeves shown for major street, driveway and hardscape crossings for clarity only. Contractor shall install sleeving below all paving, hardscape, etc. and as directed by owner's authorized representative.

All piping, mainline and lateral, and wire shall be sleeved under paving. All sleeves to be minimum 2x diameter of irrigation pipe sleeves. All mainline shall be accompanied with a minimum 2-inch diameter wire sleeve. Sleeving to extend minimum 12 inches beyond paving.

Bubblers and lateral lines are shown within paving and buildings for clarity only, actual location to be within planter. Bubblers shall be aligned with trees and as directed by owner's authorized representative. Confirm all layout in field with owner's authorized representative prior to commencing work.

I HAVE COMPLIED WITH THE CRITERIA OF THE ORDINANCE AND APPLIED THEM FOR THE EFFICIENT USE OF WATER IN THE LANDSCAPE. (MWELO 492.6).

08.10.26

JACK KIESEL, LANDSCAPE ARCHITECT #5206. DATE

MAWA & ETWU CALCULATIONS

Site Information

Site Name → *230 W Sola*
Site Type → Residential
Annual Eto (inches/yr) → 43.5
Allowed ETAF: 0.55

Hydrozone or Planting Description	Plant Factor (PF)		Irrigation Method	Irrigation Efficiency (IE)	ETAF (PF/IE)	Hydrozone Area (sqft.)	ETAF x Area	Estimated Total Water Use (gal./yr.)
Regular Landscape Areas								
1	0.3	Low	Drip	0.82	0.37	1,166	427	11,505
					SUBTOTAL →	**1,166**	**427**	**11,505**
Special Landscape Areas								
0					1	0	0	0
					SUBTOTAL →	**0**	**0**	**0**
							Estimated Total Water Use (ETWU) →	**11,505**
							Maximum Allowed Water Allowance (MAWA) →	**17,296**

ETAF Calculations

Regular Landscape Areas
Total ETAF x Area 427
Total Area 1,166
Average ETAF 0.37

All Landscape Areas
Total ETAF x Area 427
Total Area 1,166
Sitewide ETAF 0.37

Notes:

Irrigation Efficiency (IE) adjusted to 0.82 for Hydrozone 1 based on the use of subsurface pressure-compensating inline drip tubing with dedicated lateral pressure regulation as specified on Sheet L2.1

Calculator developed to meet code effective Dec. 1, 2015 This calculator is for estimating purposes only.

Sola Remodel

230 W Sola St
Santa Barbara, CA 9310
APN# 039-061-019

Submi

#	DA
1	03.
2	08.

Type: FOR PERMIT

Drawn By:

NAME	DATE
Scott Inman	01/26

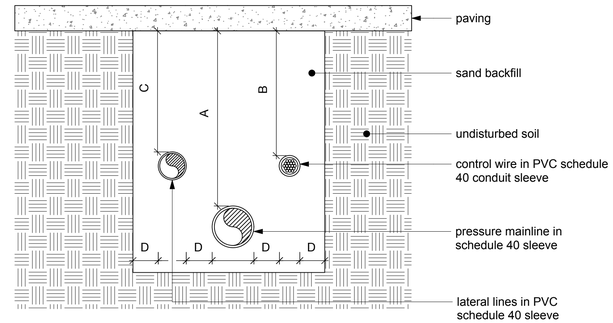
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Title:

Irrigation Notes

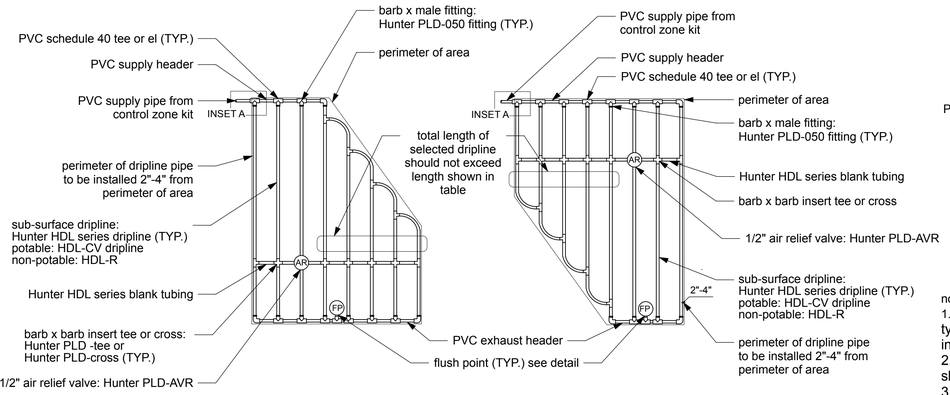
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L2.2

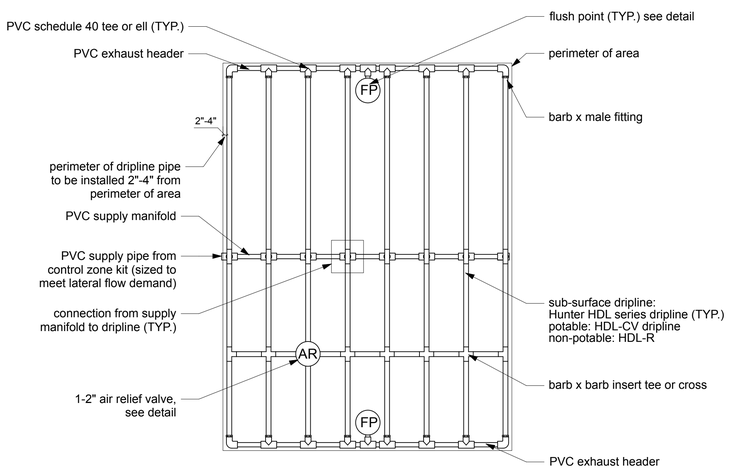


DIMENSION	A	B	C	D
1/4" TO 4" IN SIZE	36"	24"	24"	4"

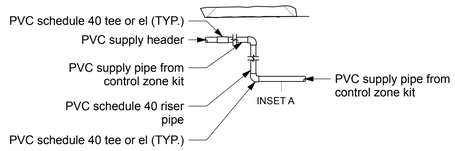
3 Sleeve Installation
NTS



5 Irregular Sub-Surface Dripline Layout
NTS



4 Sub-Surface Dripline Center Feed Layout
NTS



HDL-PC/R – 0.4 GPH

Pressure (PSI)	Emitter Spacing (in.)		
	12	18	24
10	205	285	361
15	285	404	511
20	339	475	604
25	380	532	675
30	411	582	735
40	463	657	831
50	507	719	912
60	548	772	981

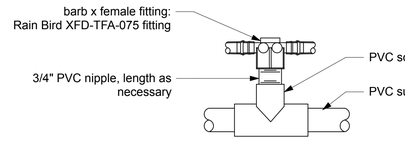
HDL-PC/R – 0.6 GPH

Pressure (PSI)	Emitter Spacing (in.)		
	12	18	24
10	168	236	298
15	236	333	423
20	280	395	501
25	314	441	560
30	339	482	610
40	385	545	688
50	419	594	753
60	451	638	810

HDL-PC/R – 0.9 GPH

Pressure (PSI)	Emitter Spacing (in.)		
	12	18	24
10	114	164	208
15	164	233	292
20	192	273	348
25	214	304	385
30	236	333	419
40	267	376	479
50	292	414	523
60	314	441	560

note:
1. distance between lateral row and emitter spacing to be based on soil type, plant materials and changes in elevation. see Rain Bird XFS dripline installation guide for suggested spacings.
2. length of longest dripline lateral should not exceed the maximum length shown in the accompanying table.
3. Air relief valve to be installed at high point of area.
4. when using 17mm insert fitting with design pressure over 50 psi, it is recommended that stainless steel clamps be installed on each fitting.



XFS Dripline Maximum Lateral Lengths (Feet)

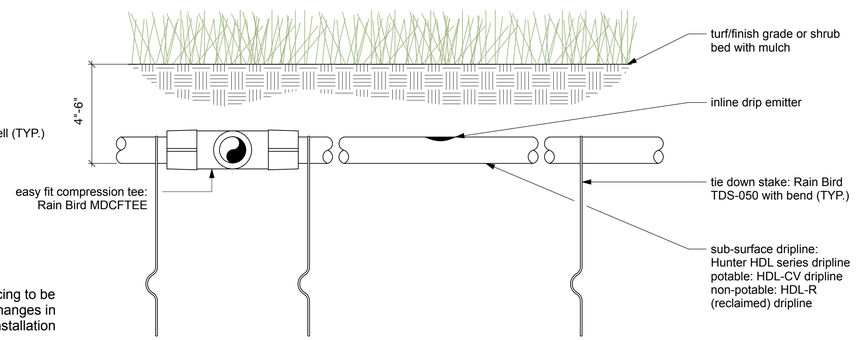
Inlet Pressure psi	12" Spacing		18" Spacing		24" Spacing	
	Nominal Flow (gph)		Nominal Flow (gph)		Nominal Flow (gph)	
	0.6	0.9	0.6	0.9	0.6	0.9
15	273	155	314	250	424	322
20	318	169	353	294	508	368
30	360	230	413	350	586	414
40	395	255	465	402	652	474
50	417	285	528	420	720	488
60	460	290	596	455	780	514

note:
1. distance between row and emitter spacing to be based on soil type, plant materials and changes in material. see Rain Bird XF-SDI dripline installation guide for suggested spacings.
2. length of longest dripline lateral should not exceed the maximum length shown in the accompanying table.
3. Air relief valve to be installed at high point of area.
4. when using 17mm insert fitting with design pressure over 50 psi, it is recommended that stainless steel clamps be installed on each fitting.



DIMENSION	A	B	C
1/2" TO 2-1/2" IN SIZE	18"	12"	4"
3" TO 6" IN SIZE	24"		4"

2 Pipe Detail
NTS



note:
1. place tie down stakes every three feet in sand, four feet in loam, and five feet in clay.
2. at fittings where three is a change of direction such as trees or elbows, use tie-down stakes on each leg of the change of direction.
3. insertion plow and trenched installations do not require the down stakes.

1 Sub-Surface Dripline Burial
NTS

Sola Remodel

230 W Sola St
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Type: FOR PERMIT

Drawn By:

NAME	DATE
Scott Inman	01/26

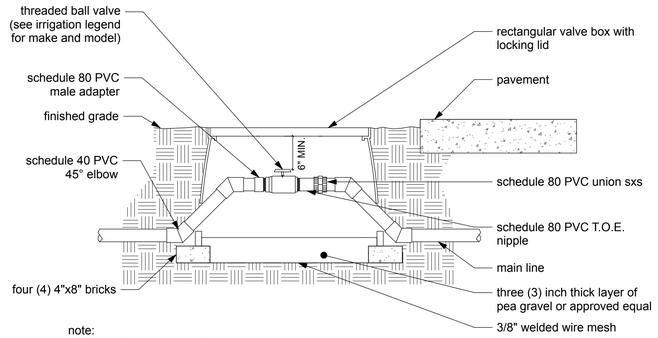
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Title:

Irrigation Details

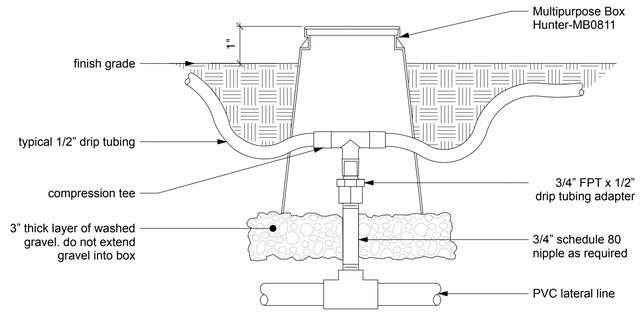
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L2.3

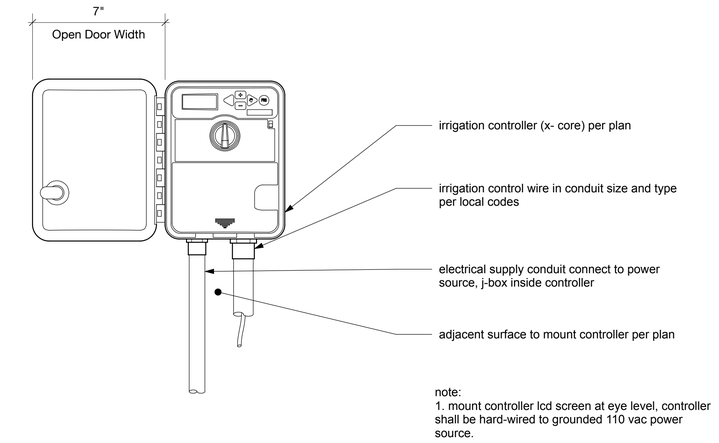


note:
1. locate all boxes in planting areas
2. wrap valve box with a minimum of 3 mil thick plastic and secure it using duct tape or electrical tape
3. all threaded connection to be made using teflon tape
4. all changes in elevation shall be made using schedule 40 PVC 45° elbows

3 Ball Valve
NTS

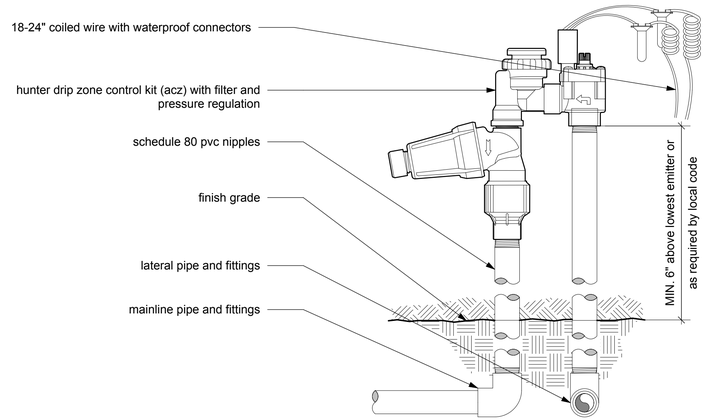


2 Sub-Surface Dripline Transition Point
NTS



note:
1. mount controller lcd screen at eye level, controller shall be hard-wired to grounded 110 vac power source.

4 X-Core® Hunter Irrigation Controller - Wall Mount
NTS



1 Drip Control Zone Kit
NTS

Sola Remodel

230 W Sola St
Santa Barbara, CA 9310
APN# 039-061-019

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1	03.
2	08.

Type: FOR PERMIT

Drawn By:

NAME	DATE
Scott Inman	01/26

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Title:

Irrigation Details

Sheet Number:

L2.4

IRRIGATION SPECIFICATIONS

PART 1 - GENERAL CONDITIONS

1.1 Description:

A. Work Included: Provide all labor, materials, transportation, and services necessary to furnish and install irrigation systems as shown on the drawings and described herein.

1.2 Quality Assurance:

A. Manufacturer's Directions: Manufacturer's directions and detailed drawings shall be followed in all cases where the manufacturers of articles used in this contract furnish directions covering points not shown in the drawings and specifications.

B. Ordinances and Regulations: All local, municipal and state laws, and rules and regulations governing or relating to any portion of this work are hereby incorporated into and made a part of these specifications and their provisions shall be carried out by the Contractor. Anything contained in these specifications shall not be construed to conflict with any of the above rules and regulations or requirements of the same. However, when these specifications and drawings call for or describe materials, workmanship, or construction of a better quality, higher standard, or larger size than is required by the above rules and regulations, the provisions of these specifications and drawings shall take precedence.

C. Explanation of Drawings:

1. Due to the scale of the drawings, it is not possible to indicate all offsets, fittings, sleeves, etc., which may be required. The Contractor shall carefully investigate the structural and finished conditions affecting all of his work and plan his work accordingly, furnishing such fittings, etc. as may be required to meet such conditions. Drawings are generally diagrammatic and indicative of the work to be installed. The work shall be installed in such a manner as to avoid conflicts between irrigation systems, planting, and architectural features.

2. The word Landscape Architect as used herein shall refer to the Owner's authorized representative.

3. All work called for on the drawings by notes or details shall be furnished and installed whether or not specifically mentioned in the specifications.

4. The Contractor shall not willfully install the irrigation system as shown on the drawings when it is obvious in the field that obstructions, grade differences, or discrepancies in area dimensions exist that might not have been considered in the irrigation design. Such obstructions or differences should be brought to the attention of the Owner's authorized representative. In the event this notification is not performed, the irrigation contractor shall assume full responsibility for any revisions necessary.

1.3 Submittals:

A. Material List:

1. The Contractor shall furnish the articles, equipment, materials, or processes specified by name in the drawings and specifications. No substitution will be allowed without prior written approval by the Landscape Architect.

2. Complete material list shall be submitted prior to performing any work. Material list shall include the manufacturer, model number, and description of all materials and equipment to be used. Copies of catalog information shall not be substituted for the materials list, and will be rejected as unacceptable.

3. Equipment or materials installed or furnished without prior approval of the Landscape Architect may be rejected and the Contractor required to remove such materials from the site at his own expense.

4. Approval of any item, alternate, or substitute indicated only that the product apparently the requirements of the drawings and specifications on the basis of the information or samples submitted.

5. Manufacturer's warranties shall not relieve the Contractor of his liability under the guarantee. Such warranties shall only supplement the guarantee.

B. Record Drawings:

1. The Contractor shall provide and keep up to date a complete "record" set of blue line ozalid prints which shall be corrected daily and show every change from the original drawings and specifications and the exact locations, sizes, and kinds of equipment. These drawings shall also serve as work progress sheets and shall be the basis for measurement and payment for work completed. This set of drawings shall be kept on the site and shall be used only as a record set.

2. The Contractor shall make neat and legible annotations thereon daily as the work proceeds, showing the work as actually installed. These drawings shall be available at all times for inspection and shall be kept in a location designated by the Landscape Architect.

3. Before the date of the final inspection, the Contractor shall transfer all information from the record prints to a sepia mylar or mylar procured from the Landscape Architect. All work shall be neat, drawn in waterproof ink by a technical ink pen designed specifically for use on mylar material. Work completed in felt tip pen or ball point pen will be rejected because of the non-permanent nature of both devices. All work shall be subject to approval by the Landscape Architect.

4. The Contractor shall dimension from two permanent points of reference the location of the following items:

a. Connection to existing water lines
b. Connections to existing electrical power
c. Gate valves
d. Routing of pressure main line pipe
e. Sprinkler control valves
f. Routing of control and common wire
g. Quick coupling valves
h. Other related equipment as directed by the Landscape Architect.

5. On or before the date of the final inspection, the Contractor shall deliver the corrected and completed mylars to the Landscape Architect. Delivery of the mylars will not relieve the Contractor of the responsibility of furnishing required information that may be omitted from the prints he compiled at the site.

C. Controller Charts:

1. Record drawings shall be approved by the Landscape Architect before controller charts are prepared.

2. Provide one controller chart for each controller supplied.

3. The chart shall show the area controlled by each automatic controller and shall be sized as designated by each automatic controller or as designated by the Owner's authorized representative.

4. The chart is to be a reduced drawing of the actual record drawings. However, in the event the controller sequence is not legible when the drawing is reduced, it shall be readable when the controller chart is completed.

5. The chart shall be a blackline or blueline ozalid print and a different color shall be used to indicate the area of coverage for each control valve station.

6. When completed and approved, the chart shall be sealed by a plastic laminating process. the plastic laminating sheets shall be a minimum of 10 mil. thickness each.

D. Operation and Maintenance

1. Prepare and deliver to the Landscape Architect within ten calendar days prior to completion of construction, two hard cover binders with three rings each containing the following information:

a. Index sheets stating Contractor's address and telephone number, list of equipment with names and addresses of local manufacturer's representatives.
b. Catalog and parts sheets on every material and equipment installed under this contract.
c. Guarantee statement (Section 1.05).
d. Complete operating and maintenance instructions on all major pieces of equipment.

2. In addition to the above mentioned maintenance manual, provide the Owner's maintenance personnel with instructions for major equipment and show evidence in writing to the Landscape Architect at the conclusion of the project that this service has been rendered.

E. Equipment to be Furnished:

1. Supply as part of this contract the following tools:

a. Two sets of special tools required for removing, disassembling, and adjusting each type of sprinkler and valve installed under this contract.

b. Two five-foot valve keys for operation of gate valves (as required).

c. Two keys for each automatic controller or enclosure.
d. Six quick coupler keys and matching hose swivels for each type of quick coupling valve installed.

2. The above mentioned equipment shall be turned over to the Owner at the conclusion of the project. Before final inspection can occur, evidence that the Owner has received material must be shown to the Landscape Architect.

1.4 Product Protection, Storage, and Handling:

A. Handling of PVC Pipe and Fittings: The Contractor is cautioned to exercise care in handling, loading, unloading, and storing of PVC pipe and fittings. All PVC pipe shall be transported in a vehicle which allows the length of pipe to lie flat so as not to subject it to undue bending or concentrated external load at any point. Any section of pipe that has been dented or damaged will be discarded, and if installed, shall be replaced with new piping.

1.5 Analysis of samples and tests: None.

1.6 Guarantee:

A. The guarantee for the sprinkler irrigation system shall be made in accordance with the attached form. The general conditions and supplementary conditions of these specifications shall be filed with the Owner or his representative prior to acceptance of the irrigation system.

B. A copy of the guarantee form shall be included in the operations and maintenance manual (Section 1.03, D).

C. The guarantee form shall be re-typed onto the Contractor's letterhead and contain the following information:

GUARANTEE FOR SPRINKLER IRRIGATION SYSTEM

We hereby guarantee that the sprinkler system we have furnished and installed is free from defects in materials and workmanship, and the work has been completed in accordance with the drawings and specifications. We agree to repair or replace any defects in material or workmanship which may develop during the period of one year from the date of acceptance and also to repair or replace any damage resulting from the repairing or replacing of such defects at no additional cost to the Owner. We shall make repairs or replacements within a reasonable time after receipt of written notice from the Owner. In the event of our failure to make such repairs or replacements within a reasonable time after receipt of written notice from the Owner, we authorize the Owner to proceed to have said repairs or replacements made at our expense and we will pay the costs and charges therefore upon demand.

(The above statement is to be followed by the project name, location, signature, address, and telephone number of Irrigation Contractor, in addition to the date of acceptance).

PART 2 - MATERIALS

2.1 General: Use only new materials of brands and types noted on the drawings, specified herein, or approved equals.

A. PVC pressure Main Line Pipe and Fittings:

1. Pressure main line piping for sizes 2-inches and larger shall be PVC Class 315.

2. Pipe shall be made from an NSF approved Type 1, Grade 1, PVC compound conforming to ASTM resin specification D1784. All pipe must meet requirements as set forth in Federal Specification PS-22-70 (Solvent Weld Pipe) with an appropriate standard dimension (S.D.R.)

3. Pressure main line piping for sizes 1 and 1/2 inch and smaller shall be PVC Schedule 40 with solvent welded joints.

4. Pipe shall be made from NSF approved Type 1, Grade 1, PVC compound conforming to ASTM resin specification D1785. All pipe must meet requirements as set forth in Federal Specification PS-21-70 (Solvent-Weld Pipe).

5. PVC solvent-weld fittings shall be Schedule 40, 1-2, 11-1 NSF approved conforming to ASTM test procedure D2466.

6. Solvent cement and primer for PVC solvent-weld pipe and fittings shall be of the type and installation methods prescribed by the manufacturer.

7. All PVC pipe must bear the following markings:

a. Manufacturer's name
b. Nominal pipe size
c. Schedule or class
d. Pressure rating in PSI
e. NSF (National Sanitation Foundation) approval
f. Date of extrusion

8. All fittings shall bear the manufacturer's name or trademark, material designation, size, applicable I.P.S. schedule and NSF seal of approval.

B. PVC Non-Pressure Lateral Line Piping:

1. Non-pressure buried lateral line piping shall be Schedule 40 PVC with solvent-weld joints, unless otherwise noted on the Irrigation Notes sheet.
2. Pipe shall be made from NSF approved, Type 1, Grade II, PVC compound conforming to ASTM resin specification D1784. All pipe must meet requirements set forth in Federal Specifications PS-22-70 with an appropriate standard dimension ratio.
3. Except as noted in paragraphs 1 of 2 of Section 2.01C, all requirements for non-pressure lateral line pipe and fittings shall be the same as for solvent-weld pressure main line pipe and fittings as set forth in Section 2.01B of these specifications.

C. Gate Valve:

1. Gate valves 3-inches and smaller shall be 125-lb. SWP bronze gate valve with screw-in bonnet, non-rising stem and solid wedge disc, have threaded ends, and be equipped with bronze wheel handle.

2. Gate valves 3-inches and smaller shall be similar to those manufactured by Nibco or approved equal.

3. All gate valves shall be installed per installation detail.

D. Quick Coupling Valves: Quick coupling valves shall have a brass two-piece body designed for working pressure of 150 PSI operable with quick coupler key. Key size and type shall be as shown on plans.

E. Backflow Preventer Unit:

1. Backflow prevention units shall be of size and type indicated on the irrigation drawings. Install the backflow prevention units in accordance with the irrigation construction details.

2. Wye strainers at backflow prevention units shall have a bronzed screwed body with 100 mesh monel screen and shall be similar to Bailey 100A or approved equal.

F. Check Valves:

1. Swing check valves 2-inches and smaller shall be 200 lbs. WOG bronze bronze construction and replaceable composition, neoprene or rubber disc, and shall meet or exceed Federal Specification WW-V-51D, Class A, Type IV.

2. Anti-drain valves shall be of heavy-duty virgin PVC construction with F.I.P. thread inlet and outlet. Internal parts shall be stainless steel with Buna-N seals. Valve shall be field adjustable against drawout from 3 to 40 feet of head. Anti-drain valve shall be similar to the King Bros. "CV" series or approved equal.

G. Control Wiring:

1. Connections between the automatic controllers and the electric control valves shall be made with direct burial copper wire AWG-U.F. 600 volt. Pilot wires sharing the same automatic controller shall be the same color. Common wire shall be white in color with a stripe to match the pilot wires with which it is circuited on the same controller. Provide different colors for each controller installed on the same project. Install wire in accordance with valve manufacturer's specifications and wire chart. In no case shall wire size be less than #14.

2. Wiring shall occupy the same trench and shall be installed along the same route as pressure supply or lateral lines wherever possible.

3. Where more than one wire is placed in a trench, the wiring shall be taped together at intervals of ten feet.

4. An expansion curl shall be provided at each wire connection. Expansion curl shall be of sufficient length at each splice connection at each electric control valve so that in case of repair, the valve bonnet may be brought to the surface without disconnection of the control wires. Control wires shall be laid loosely in trench without stress or stretching of control wire conductors.

5. All splices shall be made with Rainbird ST-03UL Snap-Tite wire connector with PT/S5 sealer or approved equal. Use one wire connector per wire splice.

6. Field splices between the automatic controller and electric control valves will not be permitted without prior approval of the Landscape Architect.

H. Automatic Controller:

1. Automatic controller shall be of size and type shown on the drawings.

2. Final location of automatic controller shall be approved by the Owner's authorized representative prior to installation.

3. Unless otherwise noted on the plans, the 120-volt electrical power to the automatic controller location shall be furnished by others. The final hook-up of the automatic controller to the 120-volt power source shall be the responsibility of the irrigation contractor.

I. Electric Control Valves:

1. Electric control valves shall be of the size and type shown on the drawings.
2. Unless otherwise noted on plan or construction details, all electric control valves shall have a manual flow adjustment.
3. Provide and install one control valve box for each electric control valve.

J. Control Valve Boxes:

1. Use Hunter MB0811, with green bolt down cover or approved equal. Extension sleeve shall be PVC-6-inch minimum size.

2. Use 9-1/2" x 16" x 11" rectangular box for all electric control valves, Carson Industries 1419-12B with green bolt down cover or approved equal.

K. Sprinkler Heads:

1. All sprinkler heads shall be of the size, type, and deliver the same rate of precipitation with the diameter (or radius) of spray, pressure, and discharge in G.P.M. as shown on the drawings and/or specified in these special provisions.

2. All spray type sprinklers shall have a screw adjustment.

3. Riser/swing joint assemblies shall be fabricated in accordance with the irrigation construction details shown on the drawings.

4. Riser nipples for all sprinkler heads shall be the same size as the riser opening in the sprinkler body.

PART 3 - EXECUTION

3.1 Inspection:

A. Site Conditions:

1. All scaled dimensions are approximate. The Contractor shall check and verify all site dimensions and receive Landscape Architect's approval prior to proceeding with work under this section.

2. Exercise extreme care in excavating and working near existing utilities. Contractor shall be responsible for damages to utilities which are caused by his operations or neglect. Check existing utilities drawings or call utilities companies for existing utility locations.

3. Coordinate installation of sprinkler irrigation materials, including pipe so there shall be no interference with utilities or other construction or difficulty in planting trees, shrubs, and groundcovers.

4. The Contractor shall carefully check all grades to satisfy himself that he may safely proceed before starting work on the sprinkler irrigation system.

3.2 Preparation:

A. Physical Layout:

1. Prior to installation, the Contractor shall stake out all pressure supply lines, routing, and location of sprinkler heads.

2. All layout shall be approved by Landscape Architect prior to installation.

Sola Remodel

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Santa Barbara, CA 9310
APN# 039-061-019

Submi

#	DA
1	03.
2	08.

Type: FOR PERMIT

Drawn By:

NAME	DATE
Scott Inman	01/26

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Title:

Irrigation Specifications

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B. Water Supply:

1. Sprinkler irrigation system shall be connected to water supply points of connection as shown on drawings.

2. Connections shall be made at approximate locations as shown on the drawings. Contractor is responsible for minor changes caused by actual site conditions.

C. Electrical Supply:

1. Electrical connections for automatic controller shall be made to electrical points of connection as shown on the drawings.

2. Connections shall be made at approximate locations as shown on the drawings. Contractor is responsible for minor changes caused by actual site conditions.

3.3 Installation:

A. Trenching:

1. Dig trenches straight and support pipe continuously on bottom of trench. Lay pipe to even grade. Trenching excavation shall follow layout indicated on the drawings and as noted.

2. Provide for a minimum cover of 18-inches for all pressure supply lines.

3. Provide for a minimum cover of 12-inches for all non-pressure lines.

4. Provide for a minimum cover of 18-inches for all control wiring.

B. Backfilling:

1. The trenches shall not be backfilled until all required tests are performed. Trenches shall be carefully backfilled with the excavated materials approved for backfilling, consisting of earth, loam, sandy clay, sand or other approved materials, free from large clods of earth or stones. Backfill shall be mechanically compacted in landscaped areas to a dry density equal to adjacent undisturbed soil in planting areas. Backfill will conform to adjacent grades without dips, sunken areas, humps, or other surface irregularities.

2. A fine granular material backfill will be initially placed on all lines. No foreign matter larger than 1/2-inch in size will be permitted in the initial backfill.

3. Flooding of trenches will be permitted only with approval of the Landscape Architect.

4. If settlement occurs and subsequent adjustments in pipe, valves, sprinkler heads, lawn, or planting, or other construction as necessary, the Contractor shall make all required adjustments without cost to the Owner.

C. Trenching and Backfill Under Paving:

1. Trenches located under areas where paving, asphaltic concrete or concrete will be installed shall be backfilled with sand (a layer two-inches below the pipe and six-inches above the pipe), and compacted in layers to 95% compaction, using manual or mechanical tamping devices. Trenches for piping shall be compacted to equal the compaction of the existing adjacent undisturbed soil and shall be left in a firm unyielding condition. The sprinkler irrigation Contractor shall set in place, cap, and pressure test all piping under paving prior to the paving work.

2. Generally, piping under existing walks is done by jacking, boring, or hydraulic driving, but where any cutting or breaking of sidewalks and/or concrete is necessary it shall be done and replaced by the Contractor as part of the contract cost. Permission to cut or break sidewalks and/or concrete shall be obtained from the Landscape Architect. No hydraulic driving will be permitted under new concrete paving.

D. Assemblies:

1. Routing of sprinkler irrigation lines as indicated on the drawings is diagrammatic. Install lines (and various assemblies) in such a manner as to conform with the details per plans.

2. Install no multiple assemblies on plastic lines. Provide each assembly with its own outlet.

3. Install all assemblies specified herein in accordance with respective detail. In absence of detail drawings or specifications pertaining to specific items required to complete work, perform such work in accordance with the best standard practice with prior approval of the Landscape Architect.

4. PVC pipe and fittings shall be thoroughly cleaned of dirt, dust, and moisture before installation. Installation and solvent-weld methods shall be as recommended by the pipe and fitting manufacturer.

5. On PVC to metal connections, the Contractor shall work the metal connections first. Teflon tape, or approved equal, shall be used on all threaded PVC to PVC, and on all threaded PVC to metal joints. Light wrench pressure is all that is required. Where threaded PVC connections are required, use threaded PVC adapters into which the pipe may be welded.

E. Line Clearance: All lines shall have a minimum clearance of 6 inches from each other and from lines of other trades. Parallel lines shall not be installed directly over one another.

F. Automatic Controller: Install per manufacturer's instructions. Remote control valves shall be connected to controller in numerical sequence as shown on the drawings.

G. High Voltage Wiring for Automatic Controller:

1. 120-volt power connection to the automatic controller shall be provided by the Irrigation Contractor.

2. All electrical work shall conform to local codes, ordinances, and union authorities having jurisdiction.

H. Remote Control Valves: Install where shown on the drawings and per detail. When grouped together, allow at least 12 inches between valve boxes. Install each remote control valve in a separate valve box.

I. Flushing of System:

1. After all new sprinkler pipe lines and risers are in place and connected, all necessary diversion work has been completed, and prior to installation of sprinkler heads, the control valves shall be opened and a full head of water used to flush out the system.

2. Sprinkler heads shall be installed only after flushing of the system has been accomplished to the complete satisfaction of the Landscape Architect.

J. Sprinkler Heads:

1. Install the sprinkler heads as designated on the drawings. Sprinkler heads to be installed in this work shall be equivalent in all respects to those itemized in the irrigation equipment legend.

2. Spacing of sprinkler heads shall not exceed the maximum as indicated on the drawings. In no case shall the spacing exceed the maximum recommended by the manufacturer.

3.4 Temporary Repairs: The Owner reserves the right to make temporary repairs to keep the sprinkler system equipment in operating condition. The exercise of this right by the Owner shall not relieve the Contractor of his responsibilities under the terms of the guarantee as herein specified.

3.5 Existing Trees: Where it is necessary to excavate adjacent to existing trees, the Contractor shall use all possible care to avoid injury to trees and tree roots. Excavation in areas where 2-inch and larger roots occur shall be done by hand. All roots 2-inches and larger in diameter, except directly in the path of pipe or conduit, shall be tunneled under and shall be heavily wrapped with burlap to prevent scarring or excessive drying. Where a ditching machine is run close to trees having roots smaller than 2 inches in diameter, the wall of the trench adjacent to the tree shall be hand trimmed, making clean cuts through. Roots 1/2 inch and larger in diameter shall be painted with two coats of tree seal, or equal. Trenches adjacent to trees should be closed within 24-hours, and where this is not possible, the side of the trench adjacent to the tree shall be kept shaded with burlap or canvas.

3.6 Field Quality Control:

A. Adjustment of the System:

1. The Contractor shall flush and adjust all sprinkler heads for optimum performance and to prevent overspray onto walks, roadways, and buildings as much as possible.

2. If it is determined that adjustments in the irrigation equipment will provide proper and more adequate coverage, the Contractor may also include changes in nozzle sizes and degrees of arc as required.

3. Lowering raised sprinkler heads by the Contract shall be accomplished within ten days after notification by Owner or Landscape Architect.

4. All sprinkler heads shall be set perpendicular to finished grade unless otherwise designated on the plan or as required for proper coverage (slopes, etc.).

B. Testing of Irrigation System:

1. The Contractor shall request the presence of the Landscape Architect in writing at least 48 hours in advance of any testing.

2. Test all pressure lines under hydrostatic pressure of 150 PSI and prove watertight.

Note: Testing of pressure main line piping shall occur prior to installation of electric control valves or quick coupling valves.

3. All piping under paved areas shall be tested under hydrostatic pressure of 150 psi and proved watertight, prior to paving.

4. Sustain pressure in tested lines for not less than three hours. If leaks develop, replace joints and repeat test until entire system is proven watertight.

5. All hydrostatic tests shall be made only in the presence of the Landscape Architect. No pipe shall be backfilled until it has been observed, tested, and approved in writing.

6. Contractor shall furnish force pump & all other test equipment necessary.

When the sprinkler irrigation system is completed, perform a coverage test in the presence of the Landscape Architect to determine if the water coverage for planting areas is complete and adequate. Furnish all materials and perform all work required to correct any inadequacies of coverage due to the deviation from plans, or where the system has been willfully installed as indicated on the drawing when it is obviously inadequate, without bringing this to the attention of the Landscape Architect. This test shall be accomplished before any groundcover is planted.

7. Upon completion of each phase of work, the entire system shall be tested and adjusted to meet site requirements.

3.7 Maintenance:

A. Landscape shall be maintained to ensure water efficiency. A regular maintenance schedule shall include, but not be limited to, checking, adjusting, flushing, filter cleaning, and repairing irrigation equipment, resetting the automatic controller, aerating and dethatching turf areas, replenishing mulch, fertilizing, pruning, and weeding in all landscape areas.

B. The entire sprinkler irrigation system shall be under full automatic operation for a period of seven days prior to any planting and for 90 days after inspection to begin maintenance period.

C. The Landscape Architect reserves the right to waive or shorten the operation period.

3.8 Clean-up: Clean-up shall be made as each portion of work progresses. Refuse and excess dirt shall be removed from the site. All walks and paving shall be broomed or washed down, and any damage sustained on the work of others shall be repaired to original conditions.

3.9 Final Observation Prior to Acceptance:

A. The Contractor shall operate each system in its entirety for the Landscape Architect at the time of final inspection. Any items deemed not acceptable by the qualified observer shall be reworked to the complete satisfaction of the Landscape Architect.

B. The Contractor shall show evidence to the Landscape Architect that the Owner has received all accessories, charts, record drawings and equipment as required before final observation can occur.

3.10 Observation Schedule:

A. Contractor shall be responsible for notifying the Landscape Architect in advance for the following observations according to the time indicated:

1. Pre-job conference - 7 days.
2. Pressure supply line installation and testing - 48 hours.
3. Automatic controller installation - 48 hours.
4. Control wire installation - 48 hours.
5. Lateral line and sprinkler installation - 48 hours.
6. Coverage test - 48 hours.
7. Observation to begin maintenance period - 7 days.
8. Final Observation - 7 days.

B. When observations have been conducted by other than the Landscape Architect, show evidence of when & by whom these observations were made.

C. No observation will commence without record drawings. In the event the Contractor calls for an observation without record drawings, without completing previously noted corrections, or without preparing the system for observation, he shall be responsible for reimbursing the Landscape Architect at the rate per hour (portal to portal) plus transportation costs, for the inconvenience. No further observations will be scheduled until this charge has been paid.

END

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Irrigation Specifications

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Existing Tree Protection & Removal Notes

All existing plant material to remain and be protected unless otherwise noted.

(E) tree/shrub symbol

(E) to be removed symbol

I have complied with criteria of the ordinance and applied them accordingly for the efficient use of water in the landscape design plan.

08.10.26

JACK KIESEL, LANDSCAPE ARCHITECT #5206. DATE

Plant List

Symbols	Botanical Name	Common Name	Size	Qty	Mature Height	Mature Size Width	WUCOLS
	Shrubs						
	Rosmarinus o. 'Blue Spires'	Blue Spires Rosemary	5 gal	12	4 - 5 ft	3 - 4 ft	Low
	Perennials						
	Juncus patens 'Elk's Blue'	Elk's Blue Rush	1 gal	9	12 - 24 in	12 - 24 in	Low
	Limonium perezii	Sea Lavender	1 gal	12	12 - 18 in	12 - 24 in	Low
	Strelitzia reginae	Bird of Paradise	5 gal	4	4 - 6 ft	4 - 5 ft	Low
	Succulents						
	Agave attenuata	Century Plant	5 gal	6	4 - 5 ft.	6 - 8ft.	Low
	Aloe vera	Aloe Vera	1 gal	11	2 - 3 ft.	1 - 2 ft.	Low
	Total			54			

Existing Notes

A (E) Agave attenuata
B (E) boulders TYP.
C (E) 6' wood fence
D (E) wooden fence
E (E) Limonium perezii
F (E) Strelitzia reginae
G (E) Aloe vera
H (E) Acanthus mollis
I (E) Cajanus cajan
J (E) Hibiscus rosa-sinensis
K (E) Polystichum munitum
L (E) Calandrinia spectabilis
M (E) Cymbopogon citratus
N (E) Cupressus lusitanica to be removed
O (E) strelitzia nicolai
P (E) Syzygium australe
Q (E) 10' x 10' sight visibility triangle
R (E) private side yard patio area
S (E) Agapanthus africanus
T (E) CONC. to remain

Landscape Requirements

Total Lot Area: 5527 sq. ft.

Landscape Area Required: **15% (829 sq ft)**
Landscape Area Provided: **21% (1,166 sq ft)**

1. Hardscape featuring pervious paver stones, gravel, sand, wood, and decomposed granite may be used to satisfy up to 50% of the required landscape area.

2. Visibility at a driveway that crosses a front property line shall not be blocked above a height of 42 inches within the triangle areas.

Planting Notes

Important note: All plant materials shall be set out as shown on plan. Final locations shall be approved by the Landscape Architect prio to planting.

1. Prior to starting work, Contractor shall take representative soil samples from the project site. Soil shall be analyzed by an approved commercial soil testing laborator for suitability for ornamental planting. A copy of the results of the soil analysis shall be submitted to the Owner and Landscape Architect. Contractor shall follow the recommendations of the soils lab as to the application of fertilizer & amendments to provide a suitable medium for planting. The Contractor shall notify the Landscape Architect and Owner of any potential problems which may result due to harmful substances found in the soil. Failure to act as specified may result in the Contractor assuming financial responsibility for any damage to plants.

2. Contractor shall clear and grub all planting areas, removing all weed growth and construction debris, prior to installation of plant materials.

3. All plants are identified by typical symbols and quantities in each area. Plant quantities indicated on the plan are approximate and are provided for the convenience of the contractor. It shall be the responsibility of the contractor to confirm all plant quantities prior to bidding. In the event of discrepancies in plant count, quantities indicated by plant symbols shall prevail.

4. As noted above, all plant materials shall be set out as shown on plan by Contractor for approval by Landscape Architect. Landscape Architect shall inspect Contractor layout prior to actual plant installation. Landscape Architect shall be given 48 hours notice to inspect Contractor layout prior to final plant installation.

5. Contractor shall provide and install 3" of chocolate brown mulch in all planted areas unless otherwise noted. Mulch shall be spread evenly. Contractor to provide Landscape Architect with samples of mulch for approval prior to installation.

6. Linear Root Barriers shall be provided for all trees 5 'or closer to paving and curbs.

7. All (E) trees to remain unless otherwise noted.

8. All (P) trees are single standard form trunks unless otherwise noted.

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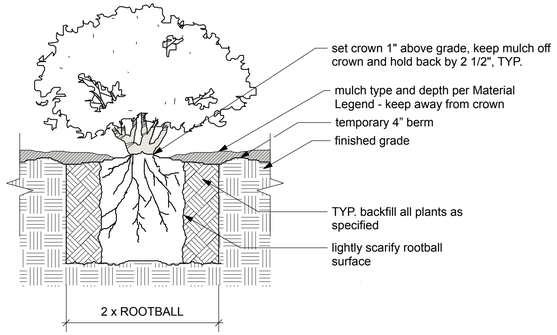
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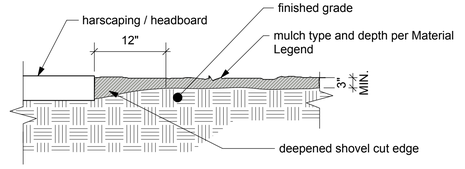
Planting Plan

Sheet Number:

L3.1

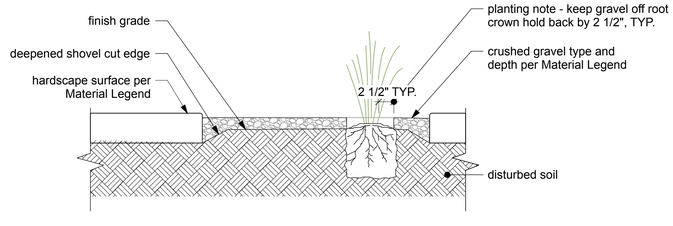


3 Shrub Planting
NTS



note:
mulch under trees and shrubs to blend into ground cover areas

2 Mulch Installation
NTS



NOTE: NO Landscape Fabrics are to be used under crushed rock/gravel

1 Crushed Gravel Mulch Installation
NTS

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Title:

Planting Details

Sheet Number:

L3.2

SECTION 02900

LANDSCAPE PLANTING

PART 1 GENERAL

1.01 GENERAL PROVISIONS

A. Drawings and general provisions of Contract, including General and Supplementary Conditions and Division 1 Specification Sections, apply to this Section.

B. Furnish all labor, materials and equipment necessary to provide and install all trees, plants and groundcovers as shown on the Drawings. The Contractor's work shall include:
1. Take representative soil samples.
2. Prepare soil for planting and furnish all soil amendments.
3. Contract grow all plant materials.
4. Install all plant materials per the planting plan.
5. Stake, tie and guy plant materials as specified.
6. Dispose of trash, debris and surplus materials.
7. Maintain the planting in a vigorous, healthy condition until final project acceptance.
8. Guarantee all 24" box size and larger trees for a period of 90 days following the date of final project completion

1.02 QUALITY ASSURANCE

A. Contractor must have knowledge and experience with the native plants specified. Contractor must also have successfully completed native landscape projects of similar size and nature and demonstrate familiarity and competence with planting techniques and identification of plants native to the Southern California region.

1.03 SUBMITTALS

A. Submit documentation to the Landscape Architect within 15 days after award of the Contract that provision has been made and acted upon for contract growing and acceptable sourcing of all plant materials. Contractor shall be responsible for all material listed on the plant list. All substitutions due to unavailability must be requested in writing prior to confirmation of ordering. All materials shall be subject to inspection by the Landscape Architect at any time after confirmation of ordering.

B. The Contractor shall furnish the Landscape Architect with copies of receipts for all amendments specified in Article 2.01 - Materials.

C. Certified copies of soils analysis results.

D. Manufacturer's or Supplier's installation instructions.

E. Samples of each of the following:
1. Edging materials and accessories to verify type selected.
2. Mulch material to verify quality selected.
3. Soil amendment materials

1.04 PRODUCT DELIVERY, STORAGE AND HANDLING

A. Delivery:
1. Deliver soil amendments to site bearing manufacturer's guaranteed chemical analysis, name, rademark, and conformance to State law.
2. Deliver all plants and stockpile with legible identification labels.
a. State correct scientific plant name and size for each clone, species, or cultivar indicated on plant list.
b. Use durable waterproof labels with water-resistant ink that will remain legible for at least 60 days.
3. Protect plant material during delivery to prevent damage to root ball or desiccation of leaves.
4. While stored on site, all seed and container plants to be fully protected from damage, which could adversely affect germination or plant health.
5. The Contractor shall notify the Landscape Architect 7 days in advance of delivery of all plant materials and shall submit an itemized list of the plants in each delivery.

B. Storage:
1. Store plant material in shade and protect from weather and mechanical damage.
2. Maintain and protect plant material not to be planted within 4 hours in a healthy, vigorous condition.

C. Handling: The Contractor is cautioned to exercise care in handling, loading, unloading and storing of plant materials. Plant materials that have been damaged in any way shall be discarded, and, if installed, shall be replaced with undamaged materials at the Contractor's expense.

1.05 JOB CONDITIONS

A. Site Conditions: When conditions detrimental to plant growth are encountered, such as rubble fill, adverse drainage conditions, or obstructions, notify the Landscape Architect before planting.

B. Field Conditions: The planting plan is diagrammatic. Scaled dimensions are approximate. Prior to proceeding with installation work, the Contractor shall verify all dimensions with field conditions and notify the Landscape Architect of any deviation on the Drawing.

PART 2 PRODUCTS

2.01 MATERIALS

A. All materials shall be of standard, approved and first-grade quality and shall be in prime condition when installed and accepted. Commercially processed or packaged material shall be delivered to the site in the original unopened container bearing the manufacturer's guaranteed analysis. Contractor shall supply the Landscape Architect with a sample of all supplied materials accompanied by analytical data from an approved laboratory source illustrating compliance or bearing the manufacturer's guaranteed analysis.

B. Organic Amendment: For rates of application, see section 3.02 Preparation
1. Shall be All Around Compost (available from All Around Irrigation, 4760 Carpinteria Avenue, Carpinteria CA (805) 684.3115) or approved equal, incorporated with on-site soils at the application site prior to use.
2. The compost shall not contain paint, petroleum products, herbicides, fungicides or other chemical residues that would be harmful to plant or animal life. Contaminants and deleterious materials such as plastic, glass, metal, dirt, or rocks shall not exceed 0.1 percent.
3. Particle Size: 97 percent passing through 1/2" screen.
4. Salinity: Salinity of compost shall not be excessive.
5. N -P-K : Less than 5 percent.
6. Organic Content: Minimum 40 percent
7. pH: Shall range from 6.0 - 8.0
8. Moisture: Shall be less than 30%.
9. Weed Seeds and pathogens: Shall be eliminated through minimum sterilization procedure of 15 days at 55° Celsius.
10. Must pass Solvita Compost Maturity test as in article 3.02

C. Soil Amendments: refer to soils report.

D. Fertilizer: refer to soils report.

E. Imported Topsoil: refer to soils report.

F. Soil for planting areas on rooftops or equivalent: N/A.

G. Plant Material:
1. Quality: Plants shall be in accordance with the California State Department of Agriculture's regulation for nursery inspections, rules and rating. All plants shall have a normal habit of growth and shall be sound, healthy, vigorous and free of insect infestations, plant diseases, sun scalds, fresh abrasions of the bark, excessive abrasions, or other objectionable disfigurements. Tree trunks shall be sturdy and have well "hardened" systems and vigorous and fibrous root systems which are not root- or pot-bound. In the event of disagreement as to condition of root system, the root conditions of the plants furnished by the Contractor in containers will be determined by removal of earth from the roots of not less than two plants or more than two percent of the total number of plants of each species or variety. Where container-grown plants are from several sources, the roots of not less than two plants from each source of each species or variety will be inspected. In case the sample plants inspected are found to be defective, the Landscape Architect reserves the right to reject the entire lot or lots of plants represented by the defective samples. The Landscape Architect is the sole judge as to acceptability. Any defective plants rendered unsuitable for planting because of this inspection will be considered as samples and will be provided at the expense of the Contractor.
2. Size: The size of the plants shall correspond with that normally expected for species and variety of commercially available nursery stock or as specified on Drawings. The minimum acceptable size of all plants measured before pruning with the branches in normal position, shall conform with the measurements, if any, specified on the Drawings in the list of plants to be furnished. Plants larger in size than specified may be used with the approval of the Landscape Architect, but the use of larger plants will make no change in the Contract Price.
3. Replacement: All plants not conforming to the requirements herein specified, shall be considered defective and such plants, whether in place or not, shall be marked as rejected and immediately removed from the site of work and replaced with new plants at the Contractor's expense. The plants shall be of the species, variety, size and condition specified herein or as shown on the Drawings. Under no condition will there be any substitutions of plants or sizes listed on the Drawings, except with the expressed consent of the Landscape Architect, in accordance with Sections relating to Changes in Work and Control of Materials.
4. Pruning: At no time shall trees or plant materials be pruned, trimmed or topped prior to delivery. Any alteration of their shape shall be conducted only with the approval of the Landscape Architect.
5. Plant material shall be true to name and variety as specified on the plans. In cases of discrepancy, botanical names shall take precedence over common names. Substitute plant material will not be permitted unless specifically approved in writing by the Landscape Architect, in accordance with Sections relating to Changes in Work and Control of Materials.
6. Nursery Grown and Collected Stock:
a. Grown under climatic conditions similar to those in locality of Project.
b. Container-grown stock in vigorous, healthy condition, not root-bound or with root system hardened off.
c. Use only flatted or liner stock plant material which is well established in removable containers or formed homogeneous soil sections.
7. Substitute plant material will not be permitted unless specifically approved in writing by the Landscape Architect.

H. Guying and Staking Materials: Install per plant list.
1. Wood Tree Stakes: Lodge pole pine, 2-inch (min. nominal size) diameter by 8 feet long (5 gal., 15 gal. plants), by 10 long feet long for box trees 24-inch or larger, no split stakes.
2. Ties: V.I.T. twist brace, in manufacturer's suggested lengths, as manufactured by V.I.T. Company, (714)-891-8338, or approved equal.
3. Guy Wire: 10 gauge galvanized.
4. Turnbuckles/Compression Springs: 1/2 inch galvanized.
5. PVC Pipe: 1/2 Schedule 40 (white).
6. Rubber Hose: rubber garden-type.

I. Tree Paint: Morrison Tree Seal, Cabot Tree Paint, or equal.

J. Water: Must be potable, and/or reclaimed water (as supplied by the specified water purveyor) containing no substances harmful to plant life.

K. Mulch: All planting areas, to a minimum depth of 3" wood mulch, unless otherwise noted on Materials Plan.

PART 3 EXECUTION

3.01 EXAMINATION

A. Obtain certification that final grades to within 0.1 foot have been established prior to commencing planting operations. Provide for inclusion of all amendments, settling, etc.

B. Inspect trees, shrubs and liner stock for injury, insect infestation and trees and shrubs for improper pruning.

C. Do not begin planting of trees until deficiencies are corrected or plants replaced.

D. The Contractor shall verify the locations of underground utilities prior to excavation. Damage to any such utilities resulting from the Contractor's work shall be repaired at his/her expense.

E. The Contractor shall investigate the site for any subsurface drainage or unusual soil conditions which might prove detrimental to the success of the design as specified on the plan insofar as growth and survival of plant material is concerned. Should any such condition exist, the Contractor shall notify the Landscape Architect and submit a proposal for corrective measures and their cost. Should the Contractor fail to provide such notification, he will be held solely responsible for any corrections deemed necessary by the Landscape Architect should damage occur.

3.02 PREPARATION

A. Soil Analysis:
1. Soil from two sample locations was analyzed for suitability for ornamental planting (as specified on the Drawings). Analysis was completed by:
Waypoint Analytical
4741 East Hunter Ave, Ste. A
Anaheim, CA 92807
2. Results and recommendations from the soil analysis are included in this Drawing set on sheet L3.6.
3. Contractor shall amend and fertilize as recommended by the report to provide a suitable medium for planting. The Contractor shall notify the Landscape Architect of harmful substances found in the soil. Failure to act as specified may result in Contractor assuming financial responsibility for damage to plants.

B. Soil Preparation:
1. After approximate finished grades have been established, soil shall be conditioned and fertilized according to recommendations provided in the soil analysis report.
2. At the time of planting, the top 3 inches of all areas to be planted shall be free of stones, stumps, or other deleterious matter 1 inch in diameter or larger, and shall be free from all wire, plaster or similar objects that would be a hindrance to planting or maintenance.
3. Soils which have been compacted by construction activity shall be loosened and made suitable for planting by disking, ripping, or other appropriate means.

C. Soil Preparation: On structure soils
1. The soil mix shall be delivered to the site thoroughly mixed and placed while damp, but not wet.
2. Fertilizer shall be added at time of placement according to rates described above.
3. The planting mix shall be crowned in the center of all planting areas, installed to the very top of the surrounding planter walls.
4. Prior to planting thoroughly water soils for one week and top off with additional material to top of surrounding planter walls. Crown center of planting areas to 2" above surrounding planter walls.

D. Final Grades:
1. Minor modifications to grade may be required to establish the final grade.
2. Finish grading shall insure proper drainage of the site.
3. All areas shall be graded so that the final grades will be 2 inches below adjacent paved areas, sidewalks, valve boxes, clean-outs, drains, manholes, etc., or as indicated on Drawings.
4. Surface drainage shall be directed away from all building foundations and paved areas.
5. Eliminate erosion scars prior to commencing maintenance period.
6. Site should be received within +/-0.10' of finish grade. It is the Landscape Contractor's responsibility to verify and notify the Landscape Architect if additional site grading is needed.

E. Disposal of Excess Soil: Dispose of any unacceptable soil at an offsite location approved by Owner's Representative.

F. Weed Eradication:
1. Prior to installation of plants, planting area will be free of exotics, invasives, or other plant material likely to inhibit or confine native plant growth. All weed removal operations to be performed at the direction of the Landscape Architect. Mechanical removal of weeds is preferred in most cases.
a. Removal process should not promote spreading of weeds.
b. Remove plants prior to seed distribution, or assure no seeds are distributed during removal processes.
c. Entire root system of plants that reproduce by rhizome or stolon must be removed.
2. Contractor shall obtain all permits associated with the application of herbicides and application shall be by licensed personnel.
a. No spraying shall occur without prior approval of Owner's Representative of Contractor's methods to protect non-target species.
b. No application will be permitted when wind speed exceeds 5 MPH.
c. No spraying will be allowed when coastal fog is present, unless effectiveness under these conditions is demonstrated.
d. No spraying shall be permitted within 24 hours of rainfall.
e. No non-target plants shall be contaminated by spray drift.
f. Ambient temperatures shall be within the recommended range for each of the specified herbicides.
g. Target plants shall not be disturbed until the herbicide has taken effect, approximately 4 to 6 weeks, depending on the time of year.

Sola Remodel

230 W Sola St
Santa Barbara, CA 9310
APN# 039-061-019

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1	03.
2	08.

Type: FOR PERMIT

Drawn By:

NAME	DATE
Scott Inman	01/26

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Title:

Planting Specs

Sheet Number:

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3.03 PLANTING INSTALLATION

A. General:
1. Actual planting shall be performed during those periods when weather and soil conditions are suitable and in accordance with locally accepted practice. Optimal time for planting California natives is November to February. If possible, construction scheduling shall be coordinated to allow planting to occur during this time.
2. Only as many plants as can be planted and watered on that same day shall be distributed in a planting area.
3. Containers shall be opened and plants shall be removed in such a manner that the ball of earth surrounding the roots is not broken and they shall be planted and watered as herein specified immediately after removal from the containers. Containers shall not be opened prior to placing the plants in the planting area.

B. Installation of Imported Topsoil: Contractor to provide and install imported topsoil in all planting areas as required to a finish grade of 2 inches below the top of adjacent concrete paving or curbs. Allow for settling.

C. Lay-Out of Plantings: All containerized plants shall be laid out in their containers at the locations indicated by the Drawings before plant pits are dug. All such locations shall be approved by the Landscape Architect. If underground construction or utility line is encountered in the excavation of planting areas, other locations for planting may be selected by the Landscape Architect. It shall be the Contractor's responsibility to confirm with the Landscape Architect and governing agencies the location and depth of all underground utilities and obstructions.

D. Planting of Trees, Shrubs and Groundcovers:
1. Excavation for planting shall include the stripping and stockpiling of all acceptable topsoil encountered within the areas to be excavated for trenches, tree holes, plant pits, and planting beds.
2. Excess soil generated from the planting holes and not used as backfill or in establishing the final grades shall be removed from the site.
3. Protect all areas from excessive compaction when trucking plants and other material to the planting site.
4. Center plant in pit or trench.
5. All excavated holes shall have vertical sides with roughened surfaces and shall be of a size that is twice the diameter and one-half times the depth of the root ball for all trees and shrubs. For individual plant holes, a fork should be used rather than a shovel to loosen clay soils in order to reduce possible layering of soil types.
6. Set plant plumb and hold rigidly in position until soil has been tamped firmly around ball or roots.
7. Drainage: Good drainage is essential to the establishment and continued health of plants native to dry regions. If the soil will not allow water to drain out of a hole one (1) foot deep in one(1) hour, the Contractor shall notify the Landscape Architect of such a condition before planting begins.
8. All plants which settle deeper than the surrounding grade shall be raised to the correct level. After the plant has been placed, additional backfill shall be added to the hole to cover approximately one-half of the height of the root ball. At this stage, water shall be added to the top of the partly-filled hole to thoroughly saturate the root ball and adjacent soil.
9. Container Removal:
   a. Do not injure root ball.
   b. After removing plant, superficially cut edge roots with knife on 3 sides.
10. Box Removal:
   a. Remove bottom of plant boxes before planting.
   b. Remove sides of box without damage to root ball after positioning plant and partly backfilling.

11. Plant Tablets:
   a. The Contractor shall consult with the nurseryman supplying the various plant materials as to the conditions under which they were grown, adding pre-plant fertilizer only if the nurseryman believes it necessary.
   b. If planting occurs in the fall or winter, a time released fertilizer, such as Agriform tablets or Woodace IBDU briquettes should be incorporated according to manufacturer's specifications.
   c. A shorter duration time released fertilizer, such as Osmocote 14-14-14, should be used for spring plantings.
   d. Summer planting of drought tolerant plants is not recommended, but if absolutely necessary, no additional fertilizer should be added until October.
12. Backfill:
   a. The remainder of the hole shall then be backfilled and thoroughly watered. DO NOT OVERLY COMPACT BACKFILL BY STEPPING ON OR TAMPING SOIL. If settling occurs after initial watering, additional backfilling may be necessary.
   b. All planting holes shall be backfilled with: (per cubic yard of mix)
   (1) 3 parts by volume on-site soil.
   (2) 2 parts by volume mature compost, tested for maturity as specified in section 02900Part 2.01 B.
   c. After backfilling, an earthen basin shall be constructed around each plant. Each basin shall be of a depth sufficient to hold at least 2 inches of water. The basins shall be constructed of amended backfill materials. Remove basin in all turf areas after initial watering.
   d. Backfill in containers on structure planting areas shall consist of 100% soil mix as specified above.
13. Watering:
   a. Drought tolerant plants, (plants which are native to areas which receive most of their yearly rainfall during the winter months, or those which receive small amounts of rain just a few times a year), once established in their environment, do not need, and often dislike large amounts of water and fertilizer.
   b. Extra care should be taken to prevent over watering in clay soil situations. Extremely heavy or very poorly drained soils are not recommended for these plantings, and if such conditions occur, the Contractor shall notify the Landscape Architect prior to planting.
14. Pruning: Pruning shall be limited to the minimum necessary to remove injured twigs and branches, and to shape the plant material as directed by the Landscape Architect. Pruning may not be done prior to delivery of plants.
15. Staking and Guying: Staking and guying of all trees shall be completed immediately after planting. All stakes and guys shall be installed as indicated in details.

3.04 OBSERVATION SCHEDULE

A. The Contractor shall be responsible for notifying the Landscape Architect in advance for the following site visits, according to the time indicated:
1. Plant material review: 48 hours.
2. Plant layout review: 48 hours.
3. Soil preparation and planting operations: One tree with each type of specified staking shall be approved prior to planting of trees: 48 hours.
4. Pre-maintenance: 7 days.
5. Final walk-through: 7 days.

B. When observations are conducted by someone other than the Landscape Architect, the Contractor shall show evidence in writing of when and by whom these inspections were made.

C. No site visits shall commence without all items noted in previous observation reports either completed or remedied unless such compliance has been waived by the Landscape Architect. Failure to accomplish punch list tasks or prepare adequately for desired inspections shall make the Contractor responsible for reimbursing the Landscape Architect at his current billing rates per hour portal to portal (plus transportation costs). No further site visits shall be scheduled until this charge has been paid and received.

END OF SECTION 02900

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SECTION 02970

LANDSCAPE MAINTENANCE

PART 1 GENERAL

1.01 GENERAL PROVISIONS

A. Drawings and general provisions of Contract, including General and Supplementary Conditions and Division 1 Specification Sections, apply to this Section.

B. Furnish all labor, material, equipment and services required to maintain the landscape in an attractive condition as specified herein for a period of 1 year.

C. Related Sections:
1. Section 02900 – Landscape Planting
2. Section 02800 – Irrigation System

1.02 QUALITY ASSURANCE

A. Work Force: Contractor's representative shall be experienced in landscape maintenance and shall have received an education in ornamental horticulture.

1.03 MAINTENANCE PERIOD

A. Continuously maintain all landscape & irrigation work during the progress of the work and during the maintenance period until final acceptance of the work by the Owner's Authorized Representative's Authorized Representative.

B. Improper maintenance or possible poor conditions of any planting at the termination of the scheduled maintenance period may cause postponement of the final acceptance date of the Contract. Maintenance shall be continued by the Contractor until all work is acceptable.

C. In order to carry out the plant establishment work, furnish sufficient labor adequate to perform the work during the plant maintenance period.

D. Start of Maintenance Criteria: Maintenance period shall not start until all elements of construction, planting, and irrigation for the entire Project are Substantially Complete. Project will not be segmented into maintenance phases unless specifically authorized in writing by the Owner's Authorized Representative.

E. The Contractor shall request an inspection to begin the plant maintenance period after all planting and related work has been completed in accordance with the Contract Documents. A prime requirement is that all groundcover areas be planted. If such criteria is met to the satisfaction of the Landscape Architect, a notification will be issued to the Contractor to establish the effective beginning date of the period.

F. Any day when the Contractor fails to adequately maintain plantings, replace unsuitable plants or do weed control or other work, as determined necessary by the Landscape Architect, will not be credited as one of the plant maintenance working days.

G. The Contractor's maintenance period will be extended if the provisions required within the Drawings and Specifications are not filled.

H. The Contractor shall submit a schedule of all activities planned during the maintenance period. This shall be accepted by the Landscape Architect prior to the start of maintenance. All schedule changes shall be documented and accepted by the Landscape Architect.

1.04 GUARANTEE AND REPLACEMENT

A. All plant material installed under the Contract shall be guaranteed against any and all poor, inadequate or inferior materials and workmanship for a period of 1 year from date of Substantial Completion. Any plant found to be dead or in poor condition due to faulty materials or workmanship, as determined by the Landscape Architect, shall be replaced by the Contractor at his expense.

B. Any materials found to be dead, missing or in poor condition during the maintenance period shall be replaced immediately. The Landscape Architect shall be the sole judge as to the condition of material. Material to be replaced within the guarantee period shall be replaced by the Contractor within 15 days of written notification by the Owner's Authorized Representative.

1.05 INSPECTIONS

A. Normal progress inspection shall be requested by the Contractor from the Landscape Architect at least 7 days in advance of anticipated inspection. Inspections are as follows:
1. Commencement of maintenance. (Pre-maintenance)
2. At 30 day intervals through maintenance period.
3. Completion of maintenance period - final walk-through: 10 days prior to end of maintenance period.

B. All conditions noted in Section 02900 Landscaping shall apply herein.

1.06 FINAL ACCEPTANCE OF THE PROJECT

A. Prior to the date of the final walk-through, the Contractor shall deliver to the Landscape Architect, Record Drawings prepared in accordance with Section D1.11 Records of Construction Changes.

PART 2 – PRODUCTS

2.01 MATERIALS

A. All materials used shall either conform to landscape planting specifications in other Sections or shall otherwise be acceptable to the Owner's Authorized Representative. The Owner's Authorized Representative shall be given monthly record of all herbicides, insecticides and disease control chemicals used.

B. Tree/Shrub/Groundcover Fertilizer: To be applied as specifically recommended by the soil analysis

PART 3 – EXECUTION

3.01 MAINTENANCE

A. Maintenance shall be according to the following standards:
1. All areas shall be kept free of debris and all planted areas shall be weeded and cultivated at intervals of not more than 10 days. Watering, edging, trimming, fertilization, spraying and pest control, as may be required, shall be included in the maintenance period.
2. The Contractor shall be responsible for maintaining adequate protection of the area. Damaged areas shall be repaired at the Contractor's expense.

3.02 TREE AND SHRUB CARE

A. Avoiding Damage: Plants native to dry regions are often some of the most tenacious and tough plants in the landscape. Once established they will thrive on neglect, but not negligence. Care must be taken to avoid breakage of limbs, scarring of tree or shrub bark, damage to root systems and generally any damage which will enable disease to establish a foothold in the plant.

B. Irrigation:
1. The Contractor shall maintain the landscape in a healthy and vigorous condition, insuring that the plants are watered frequently enough to avoid wilting between watering, but not so frequently as to leave the soil

constantly wet. Attention must be paid to the changes in the environment, such as hot, dry winds, or rain, which will alter irrigation intervals.
2. Drought tolerant plants, (plants which are native to areas which receive most of their yearly rainfall during the winter months, or those which receive small amounts of rain just a few times a year), once established in their environment, do not need, and often dislike large amounts of water and fertilizer.
3. Plants native to dry areas are susceptible to root rot and other diseases due to over-watering in a landscape situation. A plant which is container grown in a very light soil may be planted in a type of soil, such as clay, which holds water for a much longer time. The plant may dry out while the surrounding soil remains moist or it may remain saturated for extended periods.
4. Poor drainage and tight soil are the most common problems with native plant success.
5. Special care and greater than average observation on the part of the personnel responsible for planting and establishment of drought tolerant plants must occur to ensure success.
6. Recently planted container plants require frequent watering, regardless of whether they will become drought tolerant once established. The Contractor shall check the condition of newly planted areas at least twice weekly to determine irrigation schedules.
7. During hot spells, and/or for plants which are in direct sun all day or are in areas where the sun is very warm in the afternoon, watering may have to be done every other day.
8. During the rainy season, watering basins should be leveled out to match the surrounding terrain so as to prevent over-watering of the plants.
9. Maintain a large enough water basin around plants so that enough water can be applied to establish moisture through the major root zone.

A. Soil Level Changes: It is essential to be aware of the soil level of the plants as they are removed from the containers when planting, and to keep the level of soil at the base of the plant equal to or slightly above the surrounding soil surface. Changes in soil levels around the plants, even after becoming established, will adversely affect their health and growth.

B. Plants should retain, as much as possible, a natural habit, without the imposition of man-made shapes upon them. Shaping shrubs into tight balls or clipping a massing of plants into a squared off hedge should be avoided, as it detracts from the overall blending of plant forms.

1. Trees:
a. Pruning of trees shall be completed only with consent of the Landscape Architect. Trees shall be pruned without consent of the Landscape Architect when necessary to prevent damage to persons and/or property. Prune trees to select and develop permanent scaffold

branches that are smaller in diameter than the trunk or branch to which they are attached which have vertical spacing of from 18 inches to 48 inches and radial orientation so as not to overlay one another; to eliminate diseased or damaged growth; to eliminate narrow V-shaped branch forks that lack strength; to reduce toppling and wind damage by thinning out crowns; to maintain a natural appearance; to balance crown with roots.
b. Under no circumstances will stripping of lower branches ("raising-up") of young trees be permitted. Lower branches shall be retained in a "tipped back" or pinched condition with as much foliage as possible to promote caliper trunk growth (tapered trunk). Lower branches can be cut flush with the trunk only after the tree is able to stand erect without staking or other support. Sucker growth shall be removed if deemed appropriate by the Landscape Architect.
c. Evergreen trees shall be thinned out and shaped when necessary to prevent wind and storm damage. The primary pruning of deciduous trees shall be done during the dormant season. Damaged trees or those that constitute health or safety hazards shall be pruned at any time of the year as required to eliminate these conditions.
d. Staking and Guying: Remove stakes and guys as soon as they are no longer needed. Stakes and guys are to be inspected to prevent girdling of trunks or branches and to prevent rubbing that causes bark wounds. Replace all broken stakes and ties with specified materials.

2. Shrubs:
a. No shrubs equal to or greater than 15 gallon size shall be pruned without consent of the Landscape Architect. The objectives of shrub pruning are the same as for trees. Shrubs shall not be clipped into balled or boxed forms under any circumstances unless specified on the planting plans.
b. All pruning cuts shall be made to lateral branches or buds or flush with the trunk. "Stubbing" will not be permitted.

C. Weed Control: Keep basins and areas between plants free of weeds. Hand weeding is required. No herbicides may be used.

D. Insect and Disease Control: Maintain a reasonable control with approved materials.

E. Fertilization:
1. Careful observation of plant health and site conditions must take place prior to any supplemental fertilizer applications. Plants which have been exposed to an excess of fertilizer will be adversely affected for a long period of time, and attempts to leach out excessive fertilizer from the soil may result in drowning the plants.

2. Fertilizing should be restricted to light applications of a low nitrogen formulation during winter and spring, or one application of a time released fertilizer in the fall. The Contractor should refer to the graphs provided for specific application rates and times.
3. Avoid applying fertilizer to the root ball and base of main stem; rather, spread evenly under plant to drip line.
4. After application, water thoroughly.

F. Replacement of Plants: Replace dead, dying and missing plants and plants of a size, condition and variety acceptable to the Owner's Authorized Representative's Authorized Representative at Contractor's expense.

3.03 GROUNDCOVER CARE

A. Weed Control: Control weeds by mechanical means so as to cause minimal damage to planted materials.

B. Watering: Water enough that moisture penetrates throughout root zone and only as frequently as necessary to maintain healthy growth.

C. Fertilization: Fertilize as Specified in the soils report.

D. Remove trash weekly.

E. Replace dead and missing plants at Contractor's expense.

3.05 IRRIGATION SYSTEM

A. The Contractor shall check weekly all systems for proper operation:
1. Check pressure regulator for correct pressure setting (PSI).
2. Check controller program for correct operation.

B. Set and program automatic controllers for seasonal water requirements. Give Owner's Authorized Representative's Authorized Representative a key to controllers and written instructions on how to turn off system in case of emergency.

C. Contractor is responsible for the complete operation and maintenance of the irrigation system except as noted herein (See 1.05 - Guarantee and Replacement).

D. Repair/correct all damages/malfunctions to irrigation system at Contractor's expense. Repairs shall be made within 1 watering period.

END OF SECTION 02970

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Maintenance Specs

Sheet Number:

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PRINTED: 8/30/2026 11:11:40 AM PROJECT NUMBER: 24029
INCLUDED DRAWINGS, SPECIFICATIONS, IDEAS & DESIGNS SHALL REMAIN THE PROPERTY OF MANUAL LABOR & SHALL NOT BE DISTRIBUTED OR USED FOR ANY WORK OTHER THAN THE PROJECT FOR WHICH THEY WERE PREPARED WITHOUT WRITTEN CONSENT

MEP LEGEND

OUTLETS
- 110V DUPLEX OUTLET - AFCI
- 110V QUADPLEX OUTLET - AFCI
- 220V OUTLET - AFCI
- COMBINATION 110V DUPLEX OUTLET & USB CHARGER
- GFCI DUPLEX OUTLET - AFCI
- GFCI QUADPLEX OUTLET - AFCI
- SWITCHED OUTLET - SPLIT - AFCI
- EXTERIOR WATERPROOF OUTLET, GFI WITH COVER

SWITCHES
- SINGLE POLE SWITCH
- "D" DENOTES DIMMER SWITCH
- THREE-WAY SWITCH
- FOUR-WAY SWITCH
- OCCUPANCY SENSOR SWITCH
- OCCUPANCY SENSOR & HUMIDITY-CONTROLLED SWITCH
- VACANCY SENSOR SWITCH
- WHOLE-HOUSE FAN SWITCH
- DS — DOOR SWITCH

LIGHTING
- RECESSED 4" LED CAN LIGHT
- RECESSED DIRECTIONAL 4" LED CAN LIGHT
- LED SCONCE LIGHT
- WET LOCATION, RECESSED 4" CAN LED LIGHT
- CEILING MOUNTED PENDANT/CHANDELIER LIGHT, LED
- LED UNDER-CABINET LIGHT, 12" OR 20" LENGTH
- JELLY JAR SURFACE MOUNT LIGHT W/ PROTECTIVE METAL COVER
- LINEAR LED STRIP LIGHT, ALUM SURF-MOUNTED - 20" LENGTH, 12W-24V
- LINEAR LED STRIP LIGHT, ALUM SURF-MOUNTED - 48" LENGTH, 12W-24V
- LED LOUVER HALL LIGHT, SINGLE GANG, 18" HIGH TO FFE
- SL — MOTION ACTIVATED SECURITY LIGHT

A/V
- C — CABLE TV JACK - STACKABLE JACK WHEN APPLICABLE
- T — TELEPHONE JACK - STACKABLE JACK WHEN APPLICABLE
- DATA OUTLET

VENTILATION
- MICROWAVE VENT FAN - 100 CFM MIN, 3 SONE MAX, VENT TO EXTERIOR
- EXHAUST FAN - 3 SONE MAX, VENT TO EXTERIOR, UON
- VENT HOOD - 130 CFM PER CEC T150.0-G, VENT TO EXTERIOR, UON
- BATH VENT FAN W/ HEATER, 50 CFM MIN, 3 SONE MAX, VENT TO EXTERIOR
- CEILING FAN, W/ LIGHT, REMOTE CONTROL SWITCH
- CEILING FAN, NO LIGHT, REMOTE CONTROL SWITCH

MISCELLANEOUS
- D — A/C 220 DISCONNECT
- DB — DOORBELL
- WH — WATER HEATER
- TH — THERMOSTAT
- GD — 1/3 HP GARBAGE DISPOSAL
- ELECTRICAL PANEL
- PB — PULL BREAKER
- J — CEILING J-BOX W/ BLANK SWITCH PLATE (INSTALL ALL WIRING)
- TS — TUBULAR SKYLIGHT
- EXISTING/NEW ROMEX WIRING - PROVIDE NAIL GUARDS AT STUDS

SAFETY
- SD — SMOKE DETECTOR - 110V W/ BATTERY BACKUP
- SD/CO — SMOKE & CO DETECTOR - 110V W/ BATTERY BACKUP
- FIRE SPRINKLER

NOTE: ALL SYMBOLS MAY NOT BE USED

EQUIPMENT NOISE LIMITATION

PURSUANT TO SBMC 9.16.070(D), MECHANICAL EQUIPMENT MAY NOT CREATE SOUND AT THE PROPERTY LINE OF AN ADJACENT RESIDENTIAL PARCEL IN EXCESS OF 53 dB.

THE NEAREST PROPERTY LINE IS APPROXIMATELY 4' AWAY FROM THE EQUIPMENT. THE SPECIFIED CONDENSER CREATES 51 dB AT THE SOURCE.

FIXTURE CONNECTION SCHEDULE

PLUMBING FIXTURE CONNECTIONS (WHERE APPLICABLE):

ITEM	WASTE SIZE	VENT SIZE	SUPPLY SIZE
WATER CLOSET	3"	2"	1/2" COLD
LAVATORY	1-1/2"	1-1/2"	1/2" COLD/HOT
SHOWER	2"	1-1/2"	1/2" COLD/HOT
KITCHEN SINK	2"	1-1/2"	1/2" COLD/HOT
WASHER	2"	1-1/2"	1/2" COLD/HOT

WATER CONSERVING PLUMBING FIXTURES

1. WATER CLOSET: MAX 1.28 GALLONS OF WATER PER FLUSH (EITHER FLUSH TANK, FLUSHOMETER TANK, OR FLUSHOMETER VALVE OPERATED)
2. LAVATORY FAUCET: MAX FLOW RATE OF 1.2 GPM AT 60 PSI
3. KITCHEN FAUCET: MAX FLOW RATE OF 1.8 GPM AT 60 PSI
4. SHOWERHEAD: MAX COMBINED FLOW RATE OF 1.8 GPM AT 80 PSI FOR ALL SHOWERHEADS IN SINGLE SHOWER

WHOLE BUILDING VENTILATION CALCULATIONS

1. INTENT OF DESIGN INCLUDES TWO SPEED BATHROOM FANS TO BE UTILIZED PER "EXHAUST ONLY" OPTION OF T-24 STANDARDS. EACH RESTROOM EXHAUST FAN'S LOW SPEED IS SIZED TO MEET CODE. HIGH SPEED OPERATES PER OCCUPANCY SENSOR.
2. ALL BATHROOM DOORS SHALL HAVE A 1" UNDER CUT.
3. WHOLE BUILDING FAN CONTROLS SHALL BE LABELED W/ "TO MAINTAIN MINIMUM LEVELS OF OUTSIDE AIR VENTILATION REQ FOR GOOD HEALTH, THE FAN CONTROL SHOULD BE ON AT ALL TIMES WHEN THE BUILDING IS OCCUPIED, UNLESS THERE IS SEVER OUTDOOR AIR CONTAMINATION." THE LABEL TEXT SHALL BE BOLD TYPE, PLACED ON A WHITE BACKGROUND, AND NO SMALLER THAN THE EQUIVALENT OF ARIAL 12 POINT TYPE.

ELECTRICAL NOTES

1. REFER TO INTERIOR ELEVATIONS, AS NEEDED, FOR ADDITIONAL INFORMATION.
2. PROVIDE ALL ELECTRICAL CONNECTIONS REQ'D BY MFR FOR COMPLETE INSTALLATION OF ALL EQUIPMENT.
3. ALL RECEPTACLES IN DWELLING SHALL BE TAMPER RESISTANT [CEC 406.12].
4. ARC-FAULT INTERRUPTER CIRCUITS SHALL BE PROVIDED TO ALL ROOMS FOR ALL OUTLETS & FIXTURES, TYP.
5. PROVIDE ARC-FAULT CIRCUIT INTERRUPTER OUTLETS FOR ALL DWELLING UNIT BEDROOMS [NEC ART. 210-12].
6. PROVIDE GROUND FAULT CIRCUIT INTERRUPTER RECEPTACLES (GFCI) AT BAR, BATHROOMS, KITCHEN, GARAGE & EXTERIOR LOCATIONS, TYP.
7. KITCHEN CIRCUITS: PROVIDE MIN 50-AMP @ ELECTRIC OVEN, MIN 20-AMP @ REFRIGERATOR, MIN 15-AMP @ DISHWASHER, MIN 15-AMP @ GARBAGE DISPOSAL, MIN 20-AMP @ MICROWAVE, TWO MIN 20-AMP SMALL APPLIANCE BRANCH CIRCUITS [CEC 210.52(B)], AND AS-NEEDED FOR ADDITIONAL OR UNUSUAL APPLIANCES.
8. LAUNDRY CIRCUITS: PROVIDE MIN 20-AMP FOR GAS WASHER & DRYER, MIN 30-AMP DEDICATED CIRCUIT FOR ELECTRIC DRYER.
9. BATHROOM CIRCUITS: RECEPTACLES SHALL BE ON A 20-AMP CIRCUIT OR CIRCUITS W/ AT LEAST ONE 20-AMP CIRCUIT SUPPLYING ONLY BATHROOM OUTLETS [CEC 210.11(C)(3)]. ALL BATHROOM OUTLETS ARE TO BE GFI PROTECTED.
10. A/C CONDENSER AND/OR FAU CIRCUITS: PROVIDE SEP DEDICATED CIRCUITS W/ ELECTRICAL DISCONNECT IN SIGHT OF UNIT & READILY ACCESSIBLE [NEC 440-14].
11. ELECTRICAL VEHICLE CHARGING CIRCUITS: PROVIDE DEDICATED CIRCUITS W/ NO OTHER OUTLETS ON THAT CIRCUIT [CEC 625.40] .
12. CIRCUIT CONDUCTORS SHALL CONSIST OF FOUR WIRES. ALL RECEPTACLES & PLUGS FOR APPLIANCES (RANGES, OVENS, VARIOUS COOKING APPLIANCES, & DRYERS) MUST ACCOMMODATE FOUR CONDUCTORS.
13. PROVIDE SWITCHED LIGHT & RECEPTACLE NEAR FAU UNIT W/ SWITCH NEAR ATTIC ACCESS SCUTTLE [CMC 304.4.4]. DUPLEX RECEPTACLES MAY NOT BE MOUNTED FACING UPWARD.
14. PROVIDE A WEATHERPROOF GFCI RECEPTACLE W/IN 25'-0" OF A/C EQUIPMENT [CMC 301.4, CEC 210.63].
15. ALL FIXTURES, SWITCHES & OUTLETS EXPOSED TO THE WEATHER SHALL BE LISTED AS WEATHERPROOF & APPROVED FOR EXTERIOR USE W/ UL LISTED COVER.
16. CEILING MOUNTED EXHAUST FAN TO VENT TO THE EXTERIOR W/ BACKDRAFT DAMPER CAPABLE OF MIN 5 AIR CHANGES PER HOUR.
17. ALL SWITCH PLATES, SWITCHES, OUTLETS & COVER PLATES ARE TO BE CONSISTENT IN COLOR BY ROOM.
18. MOUNTING HEIGHTS (ABOVE SFL):
    A. SWITCHES @ 48" TO TOP OF BOX, UON (OR TO MATCH EXISTING)
    B. RECEPTACLES @ 18" TO BOTTOM OF BOX, UON (OR TO MATCH EXISTING)
    C. RECEPTACLES ABOVE COUNTERS @ 6" MIN ABOVE COUNTERTOP, OR AS REQ'D TO CLEAR BACKSPLASH, UON
    D. RECEPTACLES ON BRANCH CIRCUITS OF 30 AMPERES OR LESS @ 15" MIN, 48" MAX ABOVE THE FLOOR OR WORKING PLATFORM [CBC]
    E. OTHER RECEPTACLE HEIGHTS, WHERE PROVIDED, ARE TO BOTTOM OF BOX
    F. LIGHTED DOORBELL SWITCH @ 48" MAX
19. ALL OUTLETS & SWITCHES ARE TO BE ALIGNED, CENTERED OR EQUIDISTANT FROM EACH OTHER, WHERE POSSIBLE.
20. ALL LOW VOLTAGE WIRING, CABLE, & TV WIRING ARE TO ENTER INTO THE HOUSE VIA ELECTRICAL PVC "LB" ACCESS FITTING ONLY.
21. ALL EQUIPMENT SHALL HAVE AN APPROVED TESTING LABORATORY LABEL ATTACHED (UL, CSA, ETL, ETC.) [CEC].
22. THE CENTER OF THE GRIP OF THE OPERATING HANDLE OF CONTROLS OR SWITCHES SHALL BE 48 INCHES ABOVE THE FLOOR OR WORKING PLATFORM [CBC].
23. OFFSET ELECTRICAL OUTLETS AT SEPARATION WALLS PER GYPSUM ASSOCIATION SOUND ISOLATION STANDARDS. OUTLETS IN DWELLING UNIT SEPARATION WALLS SHALL HAVE ACOUSTIC PADS SURROUNDING THE BOX & WIRE HOLES.
24. ALL CABLE/TV/DATA LOCATIONS ARE TO BE STACKED OUTLETS, LEVITON TYPE 625D.
25. TELECOMMUNICATION, AUDIO/VIDEO & SECURITY LAYOUT & SPEC'S BY OTHERS.
26. PROVIDE ACCESS PANELS AS REQ'D BY CMC, CPC, CBC/CRC (PROVIDE SUBMITTAL TO ARCHITECT FOR REVIEW & OWNER FOR APPROVAL PRIOR TO INSTALLATION).

MECHANICAL NOTES

1. MFR'S SPEC'S & RECOMMENDATIONS SUPERCEDE ANY TYP NOTES GIVEN ON THIS PLAN. REVIEW MFR INSTRUCTIONS PRIOR TO INSTALLATION. CONTRACTOR SHALL BRING ANY CONFLICTS TO THE ATTENTION OF THE OWNER.
2. THE CONTRACTOR SHALL HAVE REQ'D EQUIPMENT INSTALLATION INSTRUCTIONS & COMPLIANCE FORMS ON-SITE AT THE TIME OF INSPECTION [CMC 303.1].
3. PROVIDE ACCESS PANELS AS REQ'D BY CMC, CPC, CBC/CRC (PROVIDE SUBMITTAL TO ARCHITECT FOR REVIEW & OWNER FOR APPROVAL PRIOR TO INSTALLATION).
4. EACH BATHROOM SHALL BE MECHANICALLY VENTED TO THE EXTERIOR W/ ENERGY STAR COMPLIANT FAN. FAN MUST BE CONTROLLED BY HUMIDITY CONTROL [CALGREEN 4.506.1]. 50 CFM MIN [CMC T403.7], 3 SONE MAX [ASHRAE 62.2], HVI OR AHAM LISTING REQ'D.
5. RANGE HOOD SHALL VENT TO THE EXTERIOR W/ SMOOTH-INTERIOR METAL DUCTING, TYP [CMC 504.3]. (RE-CIRC'N ALLOWED FOR (E) RE-CIRCULATION ALTERATIONS UNDER SPECIFIED THRESHOLDS). FOR INTERMITTENT ON-DEMAND SYSTEMS, 100 CFM MIN [CMC T403.7(7)], 3 SONE MAX [ASHRAE 62.2], HVI OR AHAM LISTING REQ'D.
6. EXHAST DUCT TERMINATIONS TO INCLUDE BACKDRAFT DAMPERS [CMC 504.1.1].
7. ALL VENT OPENINGS ON VERTICAL SURFACES OF EXTERIOR WALLS SHALL BE SCREENED W/ 1/4" CORROSION-RESISTANT, NONCOMBUSTIBLE WIRE MESH [CMC 502.1].
8. AIR DUCT EXHAUSTS SHALL TERMINATE NOT LESS THAN 3'-0" FROM A PROPERTY LINE, 10'-0" FROM A FORCED AIR INLET, & 3'-0" FROM OPENINGS INTO THE BUILDING, OR ONTO A PUBLIC WALKWAY [CMC 502.2.1].
9. DUCTS IN A PRIVATE GARAGE & DUCTS PENETRATING WALLS OR CEILINGS SEPARATING DWELLING UNIT FROM GARAGE ARE TO BE CONSTRUCTED OF MIN 0.019" THICK SHEET STEEL & SHALL HAVE NO OPENINGS INTO THE GARAGE.
10. ALL VENTING FOR GAS-FIRED EQUIPMENT SHALL COMPLY W/ CPC, CRC, CMC & MFR SPECS.
11. MATERIALS EXPOSED W/IN DUCTS OR PLENUMS SHALL COMPLY W/ CMC 601.1-601.2.
12. GROUND-MOUNTED EQUIPMENT SUCH AS HEAT PUMPS AND CONDENSERS TO PROVIDE SEISMIC ANCHORING TO 4" MIN SLAB, 3" MIN ABOVE GRADE, TYP.

PLUMBING NOTES

1. CENTER ALL SHOWER HEADS & FAUCETS, UON.
2. REFER TO INTERIOR ELEVATIONS FOR KITCHEN, BATHROOM & SHOWER AS NEEDED FOR ADDITIONAL INFORMATION.
3. ALL VENTS THROUGH ROOF SHALL BE A MIN OF 10' AWAY FROM - AND 3' ABOVE - ANY AIR INTAKES.
4. CONTRACTOR TO UTILIZE EXISTING WATER SUPPLY LINES WHERE POSSIBLE.
5. CONTROL VALVE FOR SHOWER OR TUB-SHOWER SHALL BE PRESSURE BALANCE OR THERMOSTATIC MIXING VALVE TYPE [CPC 408.4].
6. WHERE A FIXTURE COMES IN CONTACT W/ THE WALL OR FLOOR, THE JOINT BETWEEN THE FIXTURE & THE WALL OR FLOOR SHALL BE WATERTIGHT [CPC 402.2].
7. FIXTURES SHALL BE SET LEVEL & PROPERLY ALIGNED W/ REFERENCE TO ADJACENT WALLS. NO WATER CLOSET OR BIDET SHALL BE SET CLOSER THAN 15" INCHES FROM ITS CENTER TO A SIDE WALL OR OBSTRUCTION, OR CLOSER THAN 30" INCHES CENTER TO CENTER TO A SIM FIXTURE. CLEAR SPACE IN FRONT OF THE WATER CLOSET, LAVATORY, OR BIDET SHALL BE NOT LESS THAN 24" INCHES. EXCEPTION: THE INSTALLATION OF A PAPER DISPENSER OR ACCESSIBILITY GRAB BAR SHALL NOT BE CONSIDERED AN OBSTRUCTION [CPC 402.5].
8. PROVIDE, IF NOT PRESENT, EXTERIOR WALL MOUNT HOSE BIB(S) W/ BACKFLOW PREVENTION DEVICE ATTACHED VIA COUPLER/BREAK AWAY SET SCREW. HOSE BIBS & LAWN SPRINKLER SYSTEM(S) SHALL HAVE B'FLOW PREVENTION DEVICES.
9. THE FLOW RATES FOR ALL PLUMBING FIXTURES SHALL COMPLY W/ THE MAX FLOW RATES IN CGBC 4.303.1.
10. WHEN A SHOWER IS SERVED BY MORE THAN ONE SHOWERHEAD, THE COMBINED FLOW RATE OF ALL SHOWER-HEADS AND/OR OTHER SHOWER OUTLETS CONTROLLED BY A SINGLE VALVE SHALL NOT EXCEED 1.8 GALLONS PER MINUTE AT 80 PSI, OR THE SHOWER SHALL BE DESIGNED TO ALLOW ONLY ONE SHOWER OUTLET TO BE IN OPERATION AT A TIME [CGBC 4.303.1.3.2].
11. PER CGBC SECTION 4.303.3 PLUMBING FIXTURES AND FITTINGS SHALL BE INSTALLED IN ACCORDANCE WITH THE CALIFORNIA PLUMBING CODE, AND SHALL MEET THE APPLICABLE STANDARDS REFERENCED IN TABLE 1701.1 OF THE CPC.
12. INSTALLED AUTOMATIC IRRIGATION SYSTEM CONTROLLERS FOR LANDSCAPING PROVIDED BY THE BUILDER & INSTALLED AT THE TIME OF FINAL INPECTION SHALL BE WEATHER- OR SOIL MOISTURE-BASED CONTROLLERS & AUTOMATICALLY ADJUST IRRIGATION IN RESPONSE TO CHANGES IN PLANTS' NEEDS AS WEATHER CONDITIONS CHANGE PER CGBC 4.304.1. WEATHER BASED CONTROLS WITHOUT INTEGRAL SENSORS OR COMMUNICATION SYSTEMS THAT ACCOUNT FOR LOCAL RAINFALL SHALL HAVE A SEP WIRED OR WIRELESS RAIN SENSOR WHICH CONNECTS OR COMMUNICATES W/ THE CONTROLLER(S).
13. EACH BATHROOM SHALL BE MECHANICALLY VENTILATED USING AN ENERGY STAR COMPLIANT FAN, DUCTED TO TERMINATE OUTSIDE THE BUILDING. UNLESS FUNCTIONING AS A COMPONENT OF A WHOLE HOUSE VENT'N SYSTEM, FANS MUST BE CONTROLLED BY A HUMIDITY CONTROL THAT MEETS REQ'S OF CGBC 4.506.1.
14. ANY INSTALLED GAS FIREPLACE SHALL BE A DIRECT-VENT SEALED-COMBUSTION TYPE PER [CGBC 4.503.1].
15. AN OPERATION & MAINTENANCE MANUAL INCLUDING, AT MIN, THE ITEMS LISTED IN SECTION 4.410.1, SHALL BE COMPLETED & PLACED IN THE BUILDING AT THE TIME OF FINAL INSPECTION.
16. PROVIDE ACCESS PANELS AS REQ'D BY CMC, CPC, CBC/CRC (PROVIDE SUBMITTAL TO ARCHITECT FOR REVIEW & OWNER FOR APPROVAL PRIOR TO INSTALLATION).
17. INSTALL SESMIC STRAPPING FOR WATER HEATERS PER CODE.

WHOLE BUILDING VENTILATION CALCULATIONS

ASHRAE 62.2 (I.1) WHOLE-BUILDING VENTILATION REQUIREMENT CALCULATIONS

EQUATION 4.1a: Qfan = 0.01 x Afloor + 7.5 x (Nbr + 1)

Afloor = CONDITIONED FLOOR AREA (SF)
Nbr = NUMBER OF BEDROOMS, NOT TO BE LESS THAN ONE
Qfan = VENTILATION AIRFLOW REQU'T = MIN FAN AIRFLOW RATING (CFM)

Qfan = 0.01 x 961 SF + 7.5 x (3+1)
Qfan = 39.61 CFM REQUIRED

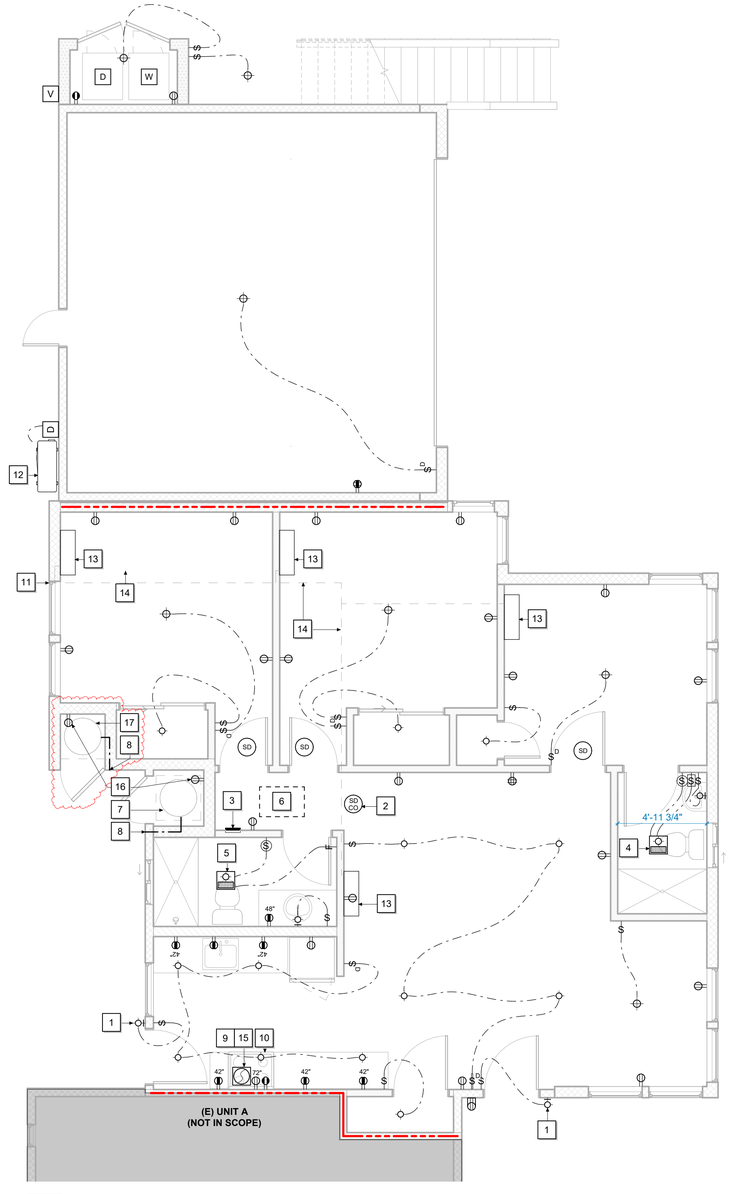
SYSTEM: CONTINUOUS 130 CFM SUPPLY FAN IN POWDER ROOM (PANASONIC FV-13VS3, SEE MANUFACTURER'S SPECIFICATIONS)

KEYNOTES

1	OUTDOOR RESIDENTIAL LIGHTING MUST BE CONTROLLED BY A MANUAL ON/OFF SWITCH, IN ADDITION TO MOTION DETECTION (CA ENERGY CODE 160.5.A.3)
2	REQUIRED SMOKE AND CARBON MONOXIDE DETECTORS SHALL RECEIVE PRIMARY POWER FROM THE BUILDING WIRING WITH BATTERY BACKUP. EACH DETECTOR SHALL BE INTERCONNECTED IN SUCH A MANNER THAT THE ACTIVATION OF ONE ALARM WILL ACTIVATE ALL OF THE ALARMS IN THE DWELLING UNIT.(CBC 907.2.11, CRC R314, CRC R315)
3	(N) 100-AMP ELEC PANEL
4	LOCAL BATH VENT DUCTED TO EXTERIOR MIN. 50 CFM, <3 SONES (PER ASHRAE 62.2). PROVIDE INTEGRAL OR SWITCHED HUMIDITY CONTROL CAPABLE OF ADJUSTMENT BETWEEN A RELATIVE HUMIDITY RANGE OF 50% TO A MAX OF 80% (CAL GREEN 4.5060). INTEGRATED LIGHT TO BE CONTROLED SEPARATELY BY OCCUPANCY OR VACANCY SENSOR (CEC 150.0(k)2).
5	WHOLE BUILDING FAN (W.B.F) REQUIREMENTS: BATH VENT TO EXTERIOR (<1 SONE, CFM PER W.B.F. CALCULATIONS) SHALL RUN CONTINOUSLY (ASHRAE 62.2) WITH TOGGLE SWITCH LOCATED IN DISCRETE LOCATION (LABELED PER W.B.F. NOTES). INTEGRATED LIGHT TO BE CONTROLED SEPERATELY BY OCCUPANCY SWITCH (CALGREEN 4.506) AND OPTIONALLY, FAN SPEED (LOW/HIGH) TO BE CONTROLLED BY OCCUPANCY SWITCH.
6	PROVIDE MINIMUM 22x30 ATTIC ACCESS
7	(N) 55-GAL GAS TANK WATER HEATER TO SERVE UNIT B
8	TERMINATION POINT OF WATER HEATER PRESSURE AND TEMPERATURE RELIEF DRAIN. (608.5 CPC.)
9	DUCTING TO BE RUN IN SOFFIT OR CEILING TO AVOID PENETRATING THE RATED FIRE SEPERATION
10	GAS STOVE & OVEN W/ HOOD
11	MINISPLIT HANDLER DRAIN TO PLANTER
12	(N) WALL MOUNTED MINI-SPLIT HEAT PUMP CONDENSOR TO SERVE UNIT B, EQUIPMENT IS MORE THAN 5FT FROM PROPERTY LINE AND OPERATES BETWEEN 51-54db
13	MINI-SPLIT AIR HANDLER WITH INTEGRATED OR EXTERNAL CONDENSATION PUMP
14	MINISPLIT HANDLER CONDENSATION DRAIN LINES ROUTED IN CEILING
15	HOOD VENT TO EXTERIOR MIN 100 CFM, <3 SONES (PER ASHRAE 62.2). PROVIDE MIN 5" SMOOTH METAL DUCT PER CMC 504.3 & ASHRAE 62.2 TABLE 5.3
16	HPWH READY SPACE PER CALIFORNIA ENERGY CODE SECTION §150.0(n)(1)(A). PROVIDE A DEDICATED 125V, 20A OUTLET CONNECTED TO ELECTRICAL PANEL W/ AN ELECTRICALLY ISOLATED 120/240V 3 CONDUCTOR, BRANCH CIRCUIT RATED @ 30A MIN. CONDUCTOR TO BE LABELED W/ "SPARE". PROVIDE A RESERVED SINGLE POLE CIRCUIT BREAKER SPACE IN ELEC PANEL ADJ TO THE CIRCUIT BREAKER LABELED W/ "FUTURE 240V USE". PROVIDE A CONDENSATE DRAIN MAX 2" ABOVE BASE OF WH THAT ALLOWS NATURAL DRAINING W/OUT PUMP ASSISTANCE.
17	(N) 55-GAL GAS TANK WATER HEATER TO SERVE UNIT C

FIRE-RATED ASSEMBLIES

SYMBOL	DESCRIPTION
	FLOOR/CEILING & WALL ASSEMBLIES SHALL COMPLY W/ CODE REQ'S FOR FIRE-RATINGS, INCLUDING: MATERIALS, CONSTRUCTION, PENETRATIONS, OPENINGS, FIXTURES, DUCT CHASES, ETC. THIS MAY REQUIRE SPECIFIC RATED PRODUCTS. SEE NOTES AND DETAILS, WHERE APPLICABLE.



1 (N) 1ST FLOOR MEP PLAN
1/4" = 1'-0"

MANUAL LABOR
375 EAST MAIN STREET
VENTURA, CA, 93001
805 628 3382

PROJECT NAME

230 WEST SOLA REMODEL

230 WEST SOLA STREET
SANTA BARBARA, CA 93101

#	DRAWING ISSUED	DATE
	PC #1	06.23.26
1	PC #2	08.14.26

SHEET NAME

MEP PLANS

SHEET INFORMATION

DRAWN BY: AS
SCALE: AS NOTED
PLAN NORTH:
TRUE NORTH:

SHEET NUMBER

e1.00