TOWN OF FAIRFAX STAFF REPORT

Department of Planning and Building Services

TO: Planning Commission August 17, 2023

FROM: Linda Neal, Principal Planner
LOCATION: 7 Valley Road; APN # 003-191-30
ZONING: RS-6 Residential Single-family

PROJECT: Reconstruction/expansion of an existing carport to include a storage

room, installation of a front walkway trellis, and legalization of

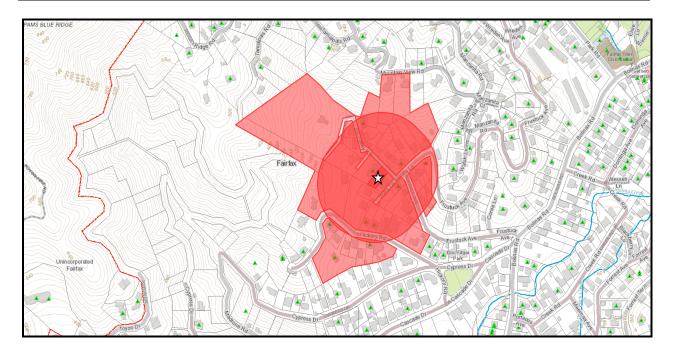
conversion of an existing storage building into an office

ACTION: Conditional Use Permit and Combined Front/Rear Setback Variance

Application # 23-23

APPLICANT: Brooks McDonald, Architect **OWNER:** Kyle Miller & Jessie Curtner

CEQA STATUS: Categorically exempt, sections15301(d), (e), and 15305(a)



7 VALLEY ROAD

PROJECT DESCRIPTION

The project encompasses the demolition of the existing 403 square-foot carport and 25 square-foot storage closet on the north side of the residence to construct a 438 square-foot carport and 104 square-foot storage room underneath the carport, construction of an approximately 127 square-foot (9.5 ft. by 6.5 ft) trellis over the residence front access walkway, and legalization of the conversion of a rear 122 square foot accessory structure (104 square-foot interior measurement) for use as office space. The front

walkway and the additional paved parking space at the front of the site west of the driveway/carport will be replaced with pervious surfaces as part of the project.

BACKGROUND

The site is 6,000 square-feet in size and 50-feet wide. The 1,448 square-foot, 2-story, 3-bedroom, 1 ½-bathroom, single-family residence was built in 1971 and there is no record of when the 122 square-foot accessory structure was built but the first reference to it in the property file was in a 2013 resale that identified it as an existing storage shed with electrical service. The structure has now been converted into an office.

DISCUSSION

The project complies with the requirements of the RS-6 Zone and floor area ratio (FAR), lot coverage and height regulations as follows:

	Front	Rear	Combined	Side	Combined	FAR	Cover	Height
	Setback	Setback	Front/rear	Setbacks	Side		age	
			Setback		Setbacks			
Required/	6 ft.	6 ft.	25 ft.	5 ft. & 5	15 ft.	.40	.35	28.5 ft., 2
Permitted				ft.				stories
Existing	8 ft.	2 ft. 2	10 ft. 2 in.	6 ft. & 8	14 ft.	.23	.60	22 ft. 6 in.,
		in.		ft.				2 stories
Proposed	6 ft.	No	8 ft. 2 in.	No	No change	.24	.58	No change
_		change		change				

The house was built in 1971 when there were no required combined front/rear or combined side-yard setbacks and the minimum side yard setbacks were 5-feet. The location of the existing house limits the area where a parking structure can be built in the front yard.

The project requires the approval of the following discretionary permits by the Planning Commission:

- 1. A Conditional Use Permit (CUP) (Town Code Chapter 17.032)
- 2. A Combined Front/Rear Setback Variance (Town Code Chapter 17.028)

The legalization of the accessory structure as an office will increase the FAR of the site from 23% to 24% which is well below the allowable 35% (Town Code § 17.040.010).

Sixty percent of the site is currently covered with structures, parking, patios, and walkways (impervious improvements that count towards lot coverage per Town Code § 17.040.010 and § 17.008.020, definition of Lot Coverage). The project will decrease the existing lot coverage from 60% to 58% and will not require the approval of a lot coverage variance since the lot coverage limitation was amended to include impervious surfaces on September 6, 2002, after the backyard walkway/patio improvements were installed (Ordinance 696). Therefore, the existing lot coverage is legal non-conforming, and the project will decrease the non-conformity.

Conditional Use Permit

Town Code § 17.080.050 requires that a Conditional Use Permit (CUP) be obtained from the Planning Commission prior to any use, occupancy, or physical improvement of or on a building site failing to meet the minimum parcel size and width requirements based on its slope in the RS-6 Residential Single-family Zone. The minimum required lot size is 6,000 square-feet and the minimum required lot width is 60-feet [Town Code § 17.080.050(A)]. The project site is 6,000 square-feet in size but is only 50-feet wide. Therefore, any proposed new construction that does not maintain the same use and/or footprint as the structure it is replacing requires the approval of a CUP.

Town Code § 17.080.040 restricts the use of accessory structures in the RS-6 Zone to greenhouses, tool sheds, playhouses and similar improvements, private garages, private swimming pools and one accessory dwelling unit. Use of an accessory structure for a home office can be approved in accordance with Town Code 17.080.030(I) which gives the authority to the Planning Commission to grant CUPs to allow uses in accessory structures that are not listed as permitted in the RS-6 Zone.

Town Code § 17.032.010(A) indicates that, "the purpose of the conditional use permit is to allow the proper integration into Fairfax of uses which may be suitable only in certain locations in the town or in a zone or only if the uses are designed or laid out on the site in a particular manner."

Conditional Use Permit Findings Suggested Findings [Town Code §§ 17.032.060(A) through (D)]

The Planning Commission has approved similar residential uses in detached accessory structures throughout the Town so the approval of this CUP will not be a grant of special privilege.

The office is only used by the residents of 7 Valley Road between the hours of 7 AM and 7 PM and will therefore not create any light disturbance for the neighboring properties. Therefore, the development and use of property as approved under the CUP shall not cause excessive or unreasonable detriment to adjoining properties or premises.

Use of the accessory structure for an office by only the residents of 7 Valley Road will not increase traffic traveling to the site or the use of available public parking spaces within the immediate neighborhood. Therefore, the use of the accessory structure as daytime office space will not conflict with the surrounding residential uses and is not contrary to those objectives, goals or standards set forth in the 2010-2030 Fairfax General Plan or Title 17, the Zoning Ordinance.

Approval of the CUP will result in equal or better development of the premises than would otherwise be the case.

Combined Front/Rear Setback Variance

The minimum front setback required in the RS-6 Residential Single-family Zone on a site with a 10% slope is 6-feet and the required combined front/rear setback is 25-feet [Town Code § 17.080.070(A)(1)].

<u>Front/rear Setback Variance Suggested Findings [Town Code 17.080.070(A)(1) through (4)]</u>

The existing accessory office structure maintains a rear setback of 2-feet 2-inches and the new carport, built with a 6-foot front setback instead of the 8-foot setback maintained by the existing non-conforming carport, will maintain a combined front/rear setback of 6-feet 2-inches. Therefore, the project requires the approval of a minimum and combined front/rear setback variance.

The purpose of the Variance process is to allow variation from the setback requirements where there is some physical feature of a site that results in complying with the setback regulations involving practical difficulties or unnecessary hardship for an owner that is not in keeping with the spirit and purpose of the setback regulations (Town Code § 17.028.010).

- The strict application of the 25-foot combined front/rear setback variance on this narrow lot would make it impossible for the owner to construct a covered parking area that meets the minimum parking depth requirement of 19-feet and provide necessary storage for the residence, a privilege enjoyed by other property owners in the immediate neighborhood (6 Valley Road, 18 Valley Road, 20 Valley).
- 2. The approval of the variance will not be a grant of special privilege as there are other properties in the neighborhood that do not comply with the combined front/rear setback variance having also been constructed prior to the adoption of the current Zoning Ordinance in 1973 (Ordinance 362).
- The strict application of this title would result in excessive or unreasonable hardship because the owner would not be able to comply with the covered parking requirement set forth in Town Code 17.052.010(D).
- 4. The granting of the variance of adjustment will not be detrimental to the public welfare or injurious to other property in the vicinity in which the property is situated because the new carport will maintain the minimum and combined required side-yard setbacks from the nearest neighboring residences at 1 and 15 Valley Road.

Miscellaneous

The project does not constitute a 50% remodel [Town Code § 17.008.020 and 17.016.040(B)(2)] and therefore, does not require the approval of a Design Review Permit.

The site is not located within ¼ mile of any known Northern Spotted Owl Nesting Site.

Other Agency/Department Comments/Conditions

Fairfax Building Department

The conversion of the storage shed to an office requires the issuance of a building permit and will require demonstration to the Building Official that the construction complies with the Uniform Building Code and the Ross Valley Fire Code. Staff verified with the Ross Valley Fire Department that sprinklers are only required for

accessory structures that have interior measurements totaling 120 square-feet or more. The existing accessory structure interior is only 104 square-feet and staff verified with Ross Valley Fire that it will not require installation of a sprinkler system.

Fairfax Police Department, Public Works Department, Ross Valley Fire Department, Marin Municipal Water District, Ross Valley Sanitary District None of the other Town Departments or other agencies or districts commented on the project, but their standard conditions of project approval have been included and can be read in their entirety in attached Resolution No. 2023-20.

RECOMMENDATION

- 1. Conduct the public hearing.
- 2. Move to approve application # 23-23 by adopting Resolution No. 2023-21 setting forth the findings and conditions of the project approval.

ATTACHMENTS

A - Resolution No. 2023-20

B - Photos of the office

RESOLUTION NO. 2023-20

A Resolution of the Fairfax Planning Commission Approving Application # 23-23 for a Conditional Use Permit and Combined Front/Rear Setback Variance for the Reconstruction/Expansion of an Existing Carport and Construction of a Front Trellis and Legalization of the Conversion of an Accessory Structure into an Office at 7 Valley Road

WHERAS, the Town of Fairfax has received an application from Kyle Miller and Jessie Curtner to demolish the existing 403 square-foot carport and 25 square-foot storage closet on the north side of their residence to construct a 438 square-foot carport and 104 square-foot storage room underneath the carport cover along the north side of the residence, to construct an approximately 127 square-foot trellis over the residence front access walkway, and to legalize the conversion of the rear 122 square foot accessory structure for use as office space; and

WHEREAS, the Planning Commission held a duly noticed Public Hearing on August 17, 2023, at which time the Planning Commission determined that the project does not conflict with any of the 2010-2030 Fairfax General Plan goals, objectives, and policies, complies with the Conditional Use Permit and Variance Chapters of the Zoning Ordinance and is categorically exempt from CEQA per § 15301(a) and § 15303(e); and

WHEREAS, based on the plans and other documentary evidence in the record the Planning Commission has determined that the applicant has met the burden of proof required to support the findings necessary to approve the Conditional Use Permit and the Variance; and

WHEREAS, The project is exempt from the California Environmental Quality Act per Categorical Exemption Sections 15301(d), (e), and 15305(a).

WHEREAS, the Planning Commission has made the following findings:

The project is consistent with the 2010-2030 Fairfax General Plan Policy LU-7.1.5: New and renewed residential development shall preserve and enhance the existing character of the Town's neighborhoods in diversity, architectural character, size, and mass.

Conditional Use Permit Findings [Town Code Sections 17.032.060(A) through (D)]

- The Planning Commission has approved similar residential uses in detached accessory structures throughout the Town so the approval of this Conditional Use Permit will not be a grant of special privilege.
- 2. The development and use of property as approved under the Conditional Use Permit shall not cause excessive or unreasonable detriment to adjoining properties or premises. The office is only used by the residents of 7 Valley Road between the hours of 7 AM and 7 PM and will therefore not create any light disturbance for the neighboring properties.

- 3. Use of the accessory structure for an office by only the residents of 7 Valley Road as a home office and will not increase traffic traveling to the site or the use of available public parking spaces within the immediate neighborhood. Therefore, the use of the accessory structure as a daytime office space will not conflict with the surrounding residential uses and is not contrary to those objectives, goals or standards set forth in the 2010-2030 Fairfax General Plan or Title 17, the Zoning Ordinance.
- 4. Approval of the Conditional Use Permit will result in equal or better development of the premises than would otherwise be the case.

Combined Front/Rear Setback Variance [Town Code Section 17.028.070(A)(1) through (4)]

- The strict application of the 25-foot combined front/rear setback variance on this narrow lot would make it impossible for the owner to construct a covered parking area that meets the minimum parking depth requirement of 19-feet and provide necessary storage for the residence, a privilege enjoyed by other property owners in the immediate neighborhood (6 Valley Road, 18 Valley Road, 20 Valley).
- 2. The approval of the variance will not be a grant of special privilege as there are other properties in the neighborhood that do not comply with the combined front/rear setback variance having also been constructed prior to the adoption of the current Zoning Ordinance in 1973 (Ordinance 362).
- The strict application of this title would result in excessive or unreasonable hardship because the owner would not be able to comply with the covered parking requirement set forth in Town Code 17.052.010(D).
- 4. The granting of the variance or adjustment will not be detrimental to the public welfare or injurious to other property in the vicinity in which the property is situated because the new carport will maintain the minimum and combined required side-yard setbacks from the nearest neighboring residences at 1 and 15 Valley Road.

WHEREAS, the Planning Commission has approved the project subject to the applicant's compliance with the following conditions:

- 1. The project is approved per the plans prepared by Brooks McDonald received by the Town on August 1, 2023, as a home office for use by the residents of 7 Valley Road only.
- 2. During the construction process the following shall be required:
 - a. All construction-related vehicles including equipment delivery and contractor vehicles shall be situated off the travel lane of the adjacent public right-of-way at all times. Construction materials and tools shall be

- stored on site. This condition may be waived by the Building Official on a case-by-case basis with prior notification from the project sponsor.
- b. Any proposed temporary closures of a public right-of-way shall require prior approval by the Fairfax Police Department and any necessary traffic control, signage or public notification shall be the responsibility of the applicant or his/her assigns. Any violation of this provision will result in a stop work order being placed on the property and issuance of a citation.
- 3. Any changes, modifications, additions, or alterations made to the approved set of plans will require a modification of Application # 23-23. Modifications that do not significantly change the project, the project design or the approved discretionary permits *may* be approved by the Planning Commission or the Planning Director. Any construction based on job plans that have been altered without the benefit of an approved modification of Application # 23-23 will result in the job being immediately stopped and red tagged.
- 4. Any damages to the public portions of Valley Road, Frustuck Avenue, or other public roadway used to access the site resulting from construction-related activities shall be the responsibility of the property owner.
- 5. The applicant and its heirs, successors, and assigns shall, at its sole cost and expense, defend with counsel selected by the Town, indemnify, protect, release, and hold harmless the Town of Fairfax and any agency or instrumentality thereof, including its agents, officers, commissions, and employees (the "Indemnitees") from any and all claims, actions, or proceedings arising out of or in any way relating to the processing and/or approval of the project as described herein, the purpose of which is to attack, set aside, void, or annul the approval of the project, and/or any environmental determination that accompanies it, by the Planning Commission, Town Council, Planning Director, or any other department or agency of the Town. This indemnification shall include, but not be limited to, suits, damages, judgments, costs, expenses, liens, levies, attorney fees or expert witness fees that may be asserted or incurred by any person or entity, including the applicant, third parties and the Indemnitees, arising out of or in connection with the approval of this project, whether or not there is concurrent, passive, or active negligence on the part of the Indemnitees. Nothing herein shall prohibit the Town from participating in the defense of any claim, action, or proceeding. The parties shall use best efforts, acting in good faith, to select mutually agreeable defense counsel. If the parties cannot reach agreement, the Town may select its own legal counsel and the applicant agrees to pay directly, or timely reimburse on a monthly basis, the Town for all such court costs, attorney fees, and time referenced herein, provided, however, that the applicant's duty in this regard shall be subject to the Town's promptly notifying the applicant of any said claim, action, or proceeding.
- 6. The applicant shall comply with all applicable local, county, state and federal laws and regulations. Local ordinances which must be complied with include, but are not limited to: The Noise Ordinance, Chapter 8.20, Polystyrene Foam, Degradable

and Recyclable Food Packaging, Chapter 8.16, Garbage and Rubbish Disposal, Chapter 8.08, Urban Runoff Pollution Prevention, Chapter 8.32, and the Americans with Disabilities Act.

7. The conversion of the storage shed to an office requires the issuance of a building permit and will require demonstration to the Building Official that the construction complies with the Uniform Building Code and the Ross Valley Fire Code.

NOW, THEREFORE BE IT RESOLVED, the Planning Commission of the Town of Fairfax hereby finds and determines as follows:

The approval of the Conditional Use Permit and Variance complies with the Fairfax Town Code and the Fairfax Zoning Ordinance, Town Code Title 17; and

Construction of the project can occur without causing significant impacts on neighboring residences and the environment.

The foregoing resolution was adopted at a regular meeting of the Planning Commission held in said Town, on the 17th day of August 2023 by the following vote:

AYES: NOES:	
ABSENT:	
Attest:	Chair Cindy Swift
Linda Neal, Principal Planner	





7 VALLEY ROAD

FAIRFAX, CA 94930 APN# 003-191-30

GENERAL NOTES

1. VERIFY ALL EXISTING DIMENSIONS & CONDITIONS AT THE SITE & NOTIFY ARCHITECT OF ANY VARIATIONS OR CONFLICTING OR MISSING DIMENSIONS OR DATA PRIOR TO BIDDING OR COMMENCING WORK. USE WRITTEN DIMENSIONS ONLY; DO NOT SCALE DRAWINGS FOR THE PURPOSE OF DETERMINING A DIMENSION DURING CONSTRUCTION.

2. CONDITIONS NOT SPECIFICALLY DETAILED SHALL BE BUILT TO CONFORM TO SIMILAR CONSTRUCTION, IN ACCORDANCE WITH THE BEST COMMON PRACTICE AND/OR MANUFACTURER'S SPECIFICATIONS FOR THE INSTALLATION OF THEIR MATERIALS OR ITEMS.

3. ALL MATERIALS, WORKMANSHIP & METHODS SHALL CONFORM TO CURRENTLY ADOPTED CALIFORNIA BUILDING CODE (CBC), CALIFORNIA PLUMBING CODE (CPC), CALIFORNIA MECHANICAL CODE (CMC), AND THE CALIFORNIA ELECTRICAL CODE (CEC) AND ANY OTHER APPLICABLE CODES & ORDINANCES OF THE LOCAL JURISDICTION.

4. SAFETY: THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR SAFETY ON THE JOB SITE AND ADHERE TO ALL FEDERAL, STATE LOCAL AND O.S.H.A. SAFETY REGULATIONS.

5. CONSTRUCTION BRACING & SHORING: THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR ALL BRACING AND SHORING REQUIRED DURING CONSTRUCTION UNTIL ALL CONSTRUCTION IS COMPLETE.

6. DO NOT STORE CONSTRUCTION MATERIALS OR OPERATE CONSTRUCTION EQUIPMENT IN SUCH A MANNER THAT DESIGN LIVE LOADS OF THE STRUCTURES ARE EXCEEDED. DO NOT STORE CONSTRUCTION MATERIALS ON OVERHANGING FRAMING.

7. TREES LOCATED CLOSE TO THE CONSTRUCTION SITE SHALL BE PROTECTED FROM INADVERTENT DAMAGE FROM CONSTRUCTION EQUIPMENT BY WRAPPING TRUNKS WITH PROTECTIVE MATERIALS, AVOIDING FILL OF ANY TYPE AGAINST THE BASE OF THE TRUNKS AND AVOIDING AN INCREASE IN

8. [IF APPLICABLE:] SHOWERS AND TUB SHALL USE INDIVIDUAL CONTROL VALVES OF THE PRESSURE BALANCE OR THE THERMOSTATIC MIXING VALVE TYPE. (CPC 420).

SOIL DEPTH AT THE FEEDING ZONE OR DRIP LINE OF THE RETAINED TREES.

9. [IF APPLICABLE:] GLAZING USED IN DOORS AND PANELS OF SHOWER AND TUB ENCLOSURES SHALL BE FULLY TEMPERED GLASS, LAMINATED SAFETY GLASS OR APPORVED PLASTIC OF A SHATTER-RESISTANT TYPE. (CBC 5406 (D) 5)

10. [IF APPLICABLE:] SHOWER WALLS SHALL BE FINISHED WITH A NON-ABSORBENT SURFACE TO A HEIGHT OF 72" OR GREATER ABOVE DRAIN

11. INSTALL CERTIFIED INSULATION MATERIALS PER THE TITLE 24 MANDATORY MEASURES CHECKLIST MF-1R AND TITLE 24 ENERGY REPORT (ATTACHED ONLY IF APPLICABLE). INSULATION INSTALLED SHALL MEET FLAME SPREAD & SMOKE DENSITY REQUIREMENTS OF STATE OF CALIFORNIA TITLE 24,

SYMBOL LEGEND

STUDIO A ← room name **ROOM NAME** 117 ----room number - 99A WALL TYPE 101 DOOR NUMBER $\langle 9 \rangle$ WINDOW NUMBER +9'-6" RCP ELEVATION FINISH FLOOR X'-XX" ELEVATION FIRST FLR FFE — datum location

EL. = +X'-X" A.F.F. — elevation **ELEVATION** view direction SECTION —sheet number -drawing number x drawing number DETAIL -sheet number – view direction **ELEVATION** -sheet number -drawing number - drawing number

– elevation designation INTERIOR ELEVATION sheet number

COLUMN GRIDLINE ADDENDUM

EXISTING WALLS TO REMAIN EXISTING WALLS TO BE REMOVED EXISTING ELEMENTS TO BE REMOVED NEW TYP. NON-RATED WALL

1-HOUR RATED WALL: 1 LAYER TYPE X 5/8" GWB EACH SIDE

CENTER LINE LINE OF ITEM ABOVE

JOINT

LAMINATED

LOW POINT

LAVATORY

FRONT FACADE

VICINITY MAP



LOT COVERAGE

LOT SIZE*: 6000

ASSESSOR'S PARCEL MAP

EXISTING LOT COVERAGE (IMPERVIOUS, INCLUDING CARPORT)

MAIN HOUSE. REAR HARDSCAPE: 1710 SF FRONT HARDSCAPE: 737 SF CARPORT: 403 SF

3610 SF (60.17%) PERVIOUS: 2390 SF = 39.83%

PROPOSED LOT COVERAGE (IMPERVIOUS, INCLUDING CARPORT)

1710 SF

507 SF

438 SF

3483 SF (58.05%)

MAIN HOUSE: REAR HARDSCAPE: FRONT HARDSCAPE: CARPORT: TOTAL:

MAP WAS PREPARED FOR ASSESSMENT PURPOSES ONLY. NO LIABILITY IS ASSUMED FOR THE ACCURACY OF THE DATA SHOWN. ASSESSOR'S PARCELS MAY NOT COMPLY WITH LOCAL SUBDIVISION OR BUILDING ORDINANCES.

PERVIOUS: 2517 SF = 41.95%

PROJECT DIRECTORY

REV 1: 06.29.2023

GENERAL CONTRACTOR: KYLE MILLER & JESSIE CURTNER

7 VALLEY ROAD FAIRFAX, CA 94930 KYLE.MACLAREN@GMAIL.COM JCURTNER@GMAIL.COM

ARCHITECT: BROOKS MCDONALD ARCHITECTURE 1615 BRIDGEWAY

SAUSALITO, CA 94965 415.350.8011 BROOKS@BROOKSMCDARCHITECTURE.COM

STRUCTURAL ENGINEER: SCOTT HENDERSON 183 BUTTERFIELD RD SAN ANSELMO, CA 415.521.0564

PROJECT DESCRIPTION

NEW CARPORT, HARDSCAPE & LANDSCAPING AT FRONT OF PROPERTY,

PARCEL INFORMATION BLOCK / LOT:

7 VALLEY ROAD FAIRFAX, CA 94930

RS-6 SINGLE FAMILY RESIDENTIAL, HIGH DENSITY **ZONING DISTRICT:** 28.5' / 22.5' PROPOSED HEIGHT & BULK DISTRICT: FRONT & REAR SETBACKS: 6' FRONT & 19' REAR

15' TWO SIDES COMBINED 40% (2400 SF ALLOWED, 1592 EXISTING,

OCCUPANCY NO. STORIES: 2 EXISTING / 2 PROPOSED

CONSTRUCTION TYPE: V-B GROSS FLOOR AREA: 1592 SF EXISTING / 1670 SF PROPOSED WILDLAND-URBAN INTERFACE: YES. ALL CONSTRUCTION SHALL COMPLY

ALL NEW DECKING SHALL BE CON HEART REDWOOD 2X MINIMUM THICKNESS.

AREA CALCS (SQUARE FEET)

FLOOR	EXISTING	PROPOSED	DELTA
1ST FLOOR	724	724	+0
2ND FLOOR	724	724	+0
REAR OFFICE	122	122	+0
FRONT STORAGE	25	104	+79
TOTAL GROSS	1595	1674	+79

A0.1 PROJECT INFORMATION A1.0 EXISTING SITE/ROOF PLAN

A1.1 PROPOSED SITE/ROOF PLAN

A2.0 DEMO FIRST FLOOR PLAN & EXISTING FIRST FLOOR OFFICE PLAN

CG2 CALGREEN CHECKLIST

2022 CALIFORNIA RESIDENTIAL CODE WITH LOCAL AMENDMENTS 2022 CALIFORNIA MECHANICAL CODE WITH LOCAL AMENDMENTS 2022 CALIFORNIA PLUMBING CODE WITH LOCAL AMENDMENTS 2022 CALIFORNIA ELECTRICAL CODE WITH LOCAL AMENDMENTS 2022 CALIFORNIA FIRE CODE WITH LOCAL AMENDMENTS 2022 CALIFORNIA ENERGY CODE WITH LOCAL AMENDMENTS 2022 CALIFORNIA GREEN BUILDING CODE WITH LOCAL AMENDMENTS FAIRFAX MUNICIPAL CODE



A2.1 PROPOSED FIRST FLOOR PLAN

A4.2 WEST EXTERIOR ELEVATIONS

CG1 CALGREEN CHECKLIST

PROJECT INFO

6.29.2023

A0.1

 $\mathbf{Z} \stackrel{ ext{T}}{\circ}$

OA

Β

Δ ∢

SCOTT@HENDERSON-STRUCTURAL.COM

NEW STORAGE ROOM AT FIRST FLOOR, AND DEMO EXISTING CHIMNEY.

PROJECT DATA

PROPERTY ADDRESS:

LOT AREA: 6000 SF

ZONING INFORMATION

SIDE SETBACK:

1670 SF PROPOSED)

BUILDING INFORMATION

F.A.R.:

WITH BUILDING STANDARDS IN 2022 CFC CHAPTER 7A AND 2022 CRC SECTION 337. ALL VEGETATION AND CONSTRUCTION MATERIALS ARE TO BE MAINTAINED AWAY FROM THE RESIDENCE DURING CONSTRUCTION (DEFENSIBLE SPACE);

FLOOR	EXISTING	PROPOSED	DELTA
1ST FLOOR	724	724	+0
2ND FLOOR	724	724	+0
REAR OFFICE	122	122	+0
FRONT STORAGE	25	104	+79
TOTAL GROSS	1595	1674	+79

SHEET INDEX

ARCHITECTURAL DRAWINGS

AL2 CONSTRUCTION MANAGEMENT PLAN

A2.2 EXISTING SECOND FLOOR PLAN & EXISTING OFFICE ROOF PLAN A4.0 NORTH EXTERIOR ELEVATIONS & MATERIALS A4.1 EAST EXTERIOR ELEVATIONS & TRELLIS LIGHTING SPEC

A4.3 EXISTING OFFICE ELEVATIONS A5.0 CURB MOUNTED SKYLIGHTS SPECS



2022 CALIFORNIA BUILDING CODE WITH LOCAL AMENDMENTS

CALIFORNIA ELECTRICAL CODE, CALIFORNIA CODE OF REGULATIONS.

EΑ

AREA DRAIN ABOVE SUB FLOOR **ADJUSTABLE** ELEC ABOVE FINISH FLOOR ELEV ALUMINUM EQ ARCHITECTURAL

ATTENTION EXT **BLOCKING** F.O.F. F.O.S. BUILDING FAU BOARD **BETWEEN** BY OWNER CABINETRY CENTERLINE

CLOSET CEILING CONCRETE MASONRY UNIT COLUMN CONCRETE CONTINUOUS **CENTER POINT** CERAMIC TILE DIAMETER DOUBLE

DETAIL

DOWN

DEPARTMENT

DISHWASHER

DRAWINGS

DRAWER

ABBREVIATIONS

ADJ

AFF

ARCH

ATTN

BLDG

BD

B.O.

CAB

CLO

CLG

COL

CONC

CONT

C.T.

DBL

DET

DEPT

H.B. HDR INSUL

FLR **FLOOR** F.R. FIRE RATED GUAGE GALVANIZED GALV GROUND FAULT CIRCUIT INTERRUPTER OH GFCI GLASS GND GROUND GWB GYPSUM WALLBOARD (SHEETROCK) HOSE BIB HDWR HARDWARE HEADER HIGH POINT HORIZ HORIZONTAL HEIGHT INSIDE DIMENSION INCH

INSULATION

JUNCTION BOX

INTERIOR

EACH

EXPANSION JOINT

ELECTRICAL

ELEVATION

EQUAL

EXISTING

EXTERIOR

FACE OF FINISH

FACE OF STRUCTURE

FORCED AIR UNIT

MECH MECHANICAL MUMIMIM MOISTURE RESISTANT MTL METAL NOM NTS

RCP

RD

REFR

LAM

LAV

NFW NOT IN CONTRACT NOMINAL NOT TO SCALE **PLASTER** PLYWD PTD PAINTED QTY

ON CENTER OUTSIDE DIMENSION OVERHEAD OPENING OPPOSITE PROPERTY LINE PLYWOOD QUANTITY RISER

REFERENCE

REFRIGERATOR

RADIUS REFLECTED CEILING PLAN **ROOF DRAIN**

SCHED SHTG SIM SIMILAR SPEC SQUARE SQ STD STEEL STRUCT SUSP SUSPENDED TREAD TBD TO BE DETERMINED **TEMP TEMPERED**

T.T.P.

T.T.C.

T.T.W.

THK

REG

REINF

RET

REQ'D

R.O.W.

S.A.D. **SCHEDULE** SHEATHING **SPECIFICATION** SQUARE FEET SEE MECHANICAL DRAWINGS SEE STRUCTURAL DRAWINGS STAINLESS STEEL STANDARD STRUCTURAL

TOP OF

THICK

TOP OF PLATE

TOP OF WALL

TOP OF CONCRETE

REGISTER

REQUIRED

RETURN

REVISED

ROOM

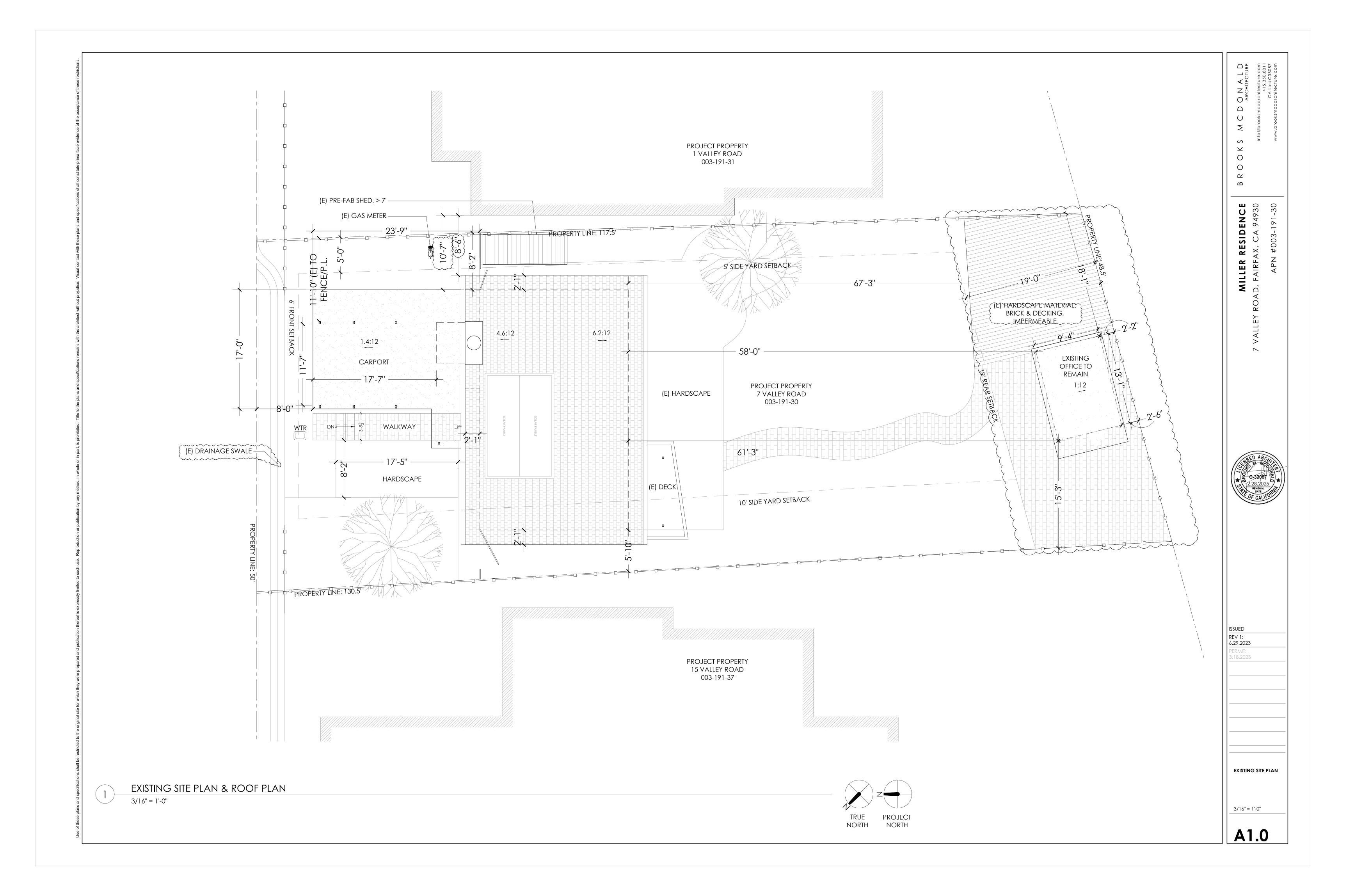
WD

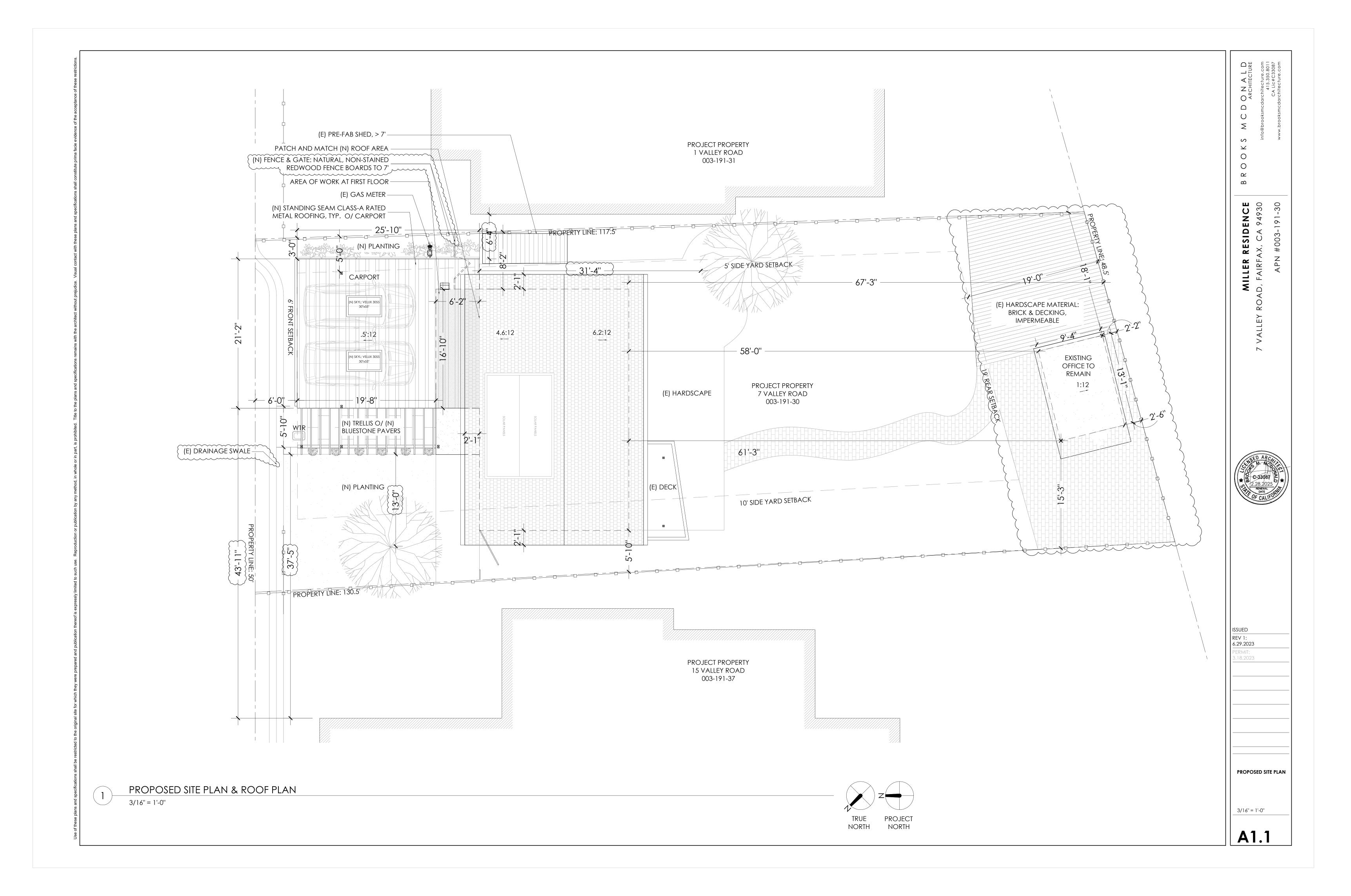
VERIFY IN FIELD WATER CLOSET WOOD WATER RESISTANT

TYPICAL REINFORCED UON UNLESS OTHERWISE NOTED UNFINISHED UNF VAR **VARIES** VESTIBULE

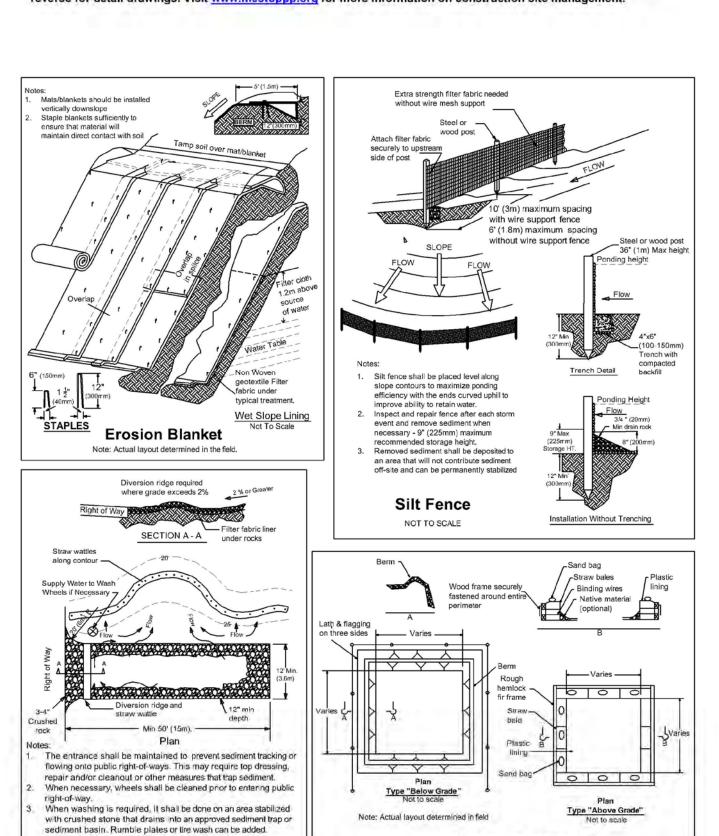
RIGHT OF WAY RAIN WATER LEADER SEE ARCHITECTURE DRAWINGS

VINYL COMPOSITE TILE





- (1) Check with your local Planning and Public Works departments for creek setback requirements. Grading and/or building may be
- (2) During grading phase, track-walk up and down slopes (not parallel to them).
- (3) *Stabilize site entrance and temporary driveway use 3-4" crushed rock for a minimum of 50' (or as far as possible) to prevent
- tracking soil offsite. This can be used in conjunction with a tire wash or rumble plates. (4) *Use straw wattles along contours of short slopes or slopes 3:1 or flatter, keyed into ground at least 3" deep (typically 25' apart).
- (5) *Install silt fence along contours as secondary measure to keep sediment onsite and to minimize vehicle and foot traffic beyond limits of site disturbance. Silt fencing must be keyed in.
- (6) *Install erosion control blankets (or equivalent) on any disturbed site with 3:1 slopes or steeper, keyed into the ground at least 3".
- (7) *Construct a concrete washout site adjacent to stabilized entrance. Clean as needed and remove at end of project. (8) Cover all stockpiles and landscape material and burm properly with straw wattles or sand bags. Keep behind silt fence, away from water bodies. Hazardous materials must be kept in closed containers that are covered and utilize secondary containment,
- (9) *Use pea-gravel bags, (or similar product) around drain inlets located both onsite and in gutter as a last line of defense. (10) Place port-a-potty near stabilized site entrance, behind the curb and away from gutters, storm drain inlets, and water bodies.
- (11) Cover all exposed soil with straw mulch and tackifier (or equivalent).
- (12) Existing vegetation should be preserved as much as possible. Areas of disturbed soil/vegetation should be revegetated as soon
- (13) Prevent equipment fluid leaks onto ground by placing drip pans or plastic tarps under equipment.
- Note: Schedule construction activities to reduce erosion potential. Sediment and erosion control shall be continually maintained throughout the rainy season (October 15th - April 15th) and must remain effective through the construction and landscape phases. Inspect and maintain Best Management Practices (BMPs) before and after rain events. *See reverse for detail drawings. Visit www.mcstoppp.org for more information on construction site management.



preferable to sand bags near inlets) If you require materials in alternative formats, please contact: 415-473-4381 voice/TTY or disabilityaccess@co.marin.ca.us

Concrete Washout

Site Entrance

CMP NOTES:

HOURS OF OPERATION

CONSTRUCTION HOURS ARE LIMITED PER THE MILL VALLEY MUNICIPAL CODE TO WEEKDAYS FROM 7:00 AM TO 6:00 PM. CONSTRUCTION NOISE IS NOT ALLOWED BEFORE 8 AM OR AFTER 5 PM.

PROJECT DELIVERIES AND OFF-HAUL (INCLUDING EQUIPMENT, MATERIALS, REMOVAL OF SOIL, REFUSE OR DEMOLITION DEBRIS) ARE LIMITED TO WEEKDAYS BETWEEN THE HOURS OF 9:00 AM AND 4:00PM. ALL DRIVERS SHALL BE ADVISED OF THE DESIGNATED PROJECT TRUCK ROUTE, INCLUDING APPROVED TURN AROUND LOCATIONS, PRIOR TO ANY DELIVERIES OR MATERIAL REMOVAL. ALL OPEN-BED TRUCKS SHALL BE TARPED.

JOB SITE RULES

- 1. ALL DEBRIS FROM DAY'S ACTIVITIES WILL BE PICKED UP AND THE AREA BROOM SWEPT, AND PROPERLY DISPOSED OF OR STOCKPILED.
- 2. SMOKING IS PROHIBITED ON SITE AND WITHIN TWENTY-FIVE FEET OF ANY BUILDING.

MATERIAL STORAGE

ALL CONSTRUCTION MATERIALS, DEBRIS, FACILITIES, AND EQUIPMENT SHALL BE STORED ON SITE. IF THAT IS NOT POSSIBLE, AN ENCROACHMENT PERMIT SHALL BE OBTAINED FROM THE DEPARTMENT OF PUBLIC WORKS PRIOR TO PLACING ANY CONSTRUCTION MATERIALS, PARKING, DEBRIS, OR UNLICENSED EQUIPMENT IN THE PUBLIC RIGHT-OF-WAY. THE FEE FOR USING THE PUBLIC RIGHT-OF-WAY FOR STORAGE OF CONSTRUCTION MATERIALS OR EQUIPMENT IS \$10.00 PER SPACE PER DAY IN RESIDENTIAL AREAS, AND \$20.00 PER DAY IN COMMERCIAL AREAS. A MINIMUM OF 11 FEET OF CLEARANCE SHALL BE MAINTAINED AT ALL TIMES ALONG THE ROADWAY. PORTABLE TOILETS AND JOB SHEDS SHALL NOT BE PERMITTED TO BE PLACED IN THE PUBLIC RIGHT-OF-WAY WITHOUT PRIOR APPROVAL OF THE DEPARTMENT OF PUBLIC WORKS.PORTABLE TOILETS AND JOB SHEDS WILL NOT BE PERMITTED TO BE PLACED IN THE PUBLIC RIGHT-OF-WAY, OR WITHIN CREEK SETBACKS. PORTABLE TOILETS SHALL UTILIZE A SECONDARY CONTAINMENT SYSTEM. A VIOLATION OF THE CMP WITH RESPECTS TO PORTABLE TOILET SHALL RESULT IN A NOTICE VIOLATION, APPLICABLE FINES, AND A RESULT IN WORK ORDER.

PARKING

PROJECT VEHICLES PARKED IN THE PUBLIC RIGHT-OF-WAY ON THE SITE STREET OR NEARBY SITE STREETS, REQUIRE A ROAD IMPACT PERMIT FROM THE DEPARTMENT OF PUBLIC WORKS. A SEPARATE ROAD IMPACT PERMIT WILL BE GIVEN IF PROJECT DEMONSTRATES THAT NO ON-SITE PARKING IS FEASIBLE. CONTACT DPW AT (415)384-4800. VEHICLES PARKED IN THE PUBLIC RIGHT-OF-WAY WITHOUT A PERMIT DISPLAYED ON DASHBOARD WILL BE TOWED. ROAD IMPACT PERMITS FOR PARKING REQUIRE "NO PARKING" SIGNS TO BE POSTED A MINIMUM OF 72 HOURS IN ADVANCE. PROJECT VEHICLES SHALL PARK ON THE PROJECT SITE AND CARPOOL FROM AN ACCEPTABLE PUBLIC LOT SUCH AS THE MANZANITA PARK AND RIDE. ANY PROJECT-RELATED WORKERS, CONTRACTORS OR SUBCONTRACTORS UNABLE TO PARK ON-SITE WILL CARPOOL TO THE SITE. WORKER PARKING SHALL BE CONSISTENT WITH THE APPROVED PROJECT SCHEDULE. ANY UNPERMITTED ROAD IMPACT WILL RESULT IN A STOP WORK ORDER FOR VIOLATION OF THE CONSTRUCTION MANAGEMENT PLAN. WORK WILL NOT PERMITTED TO RESUME UNTIL THE PROJECT CONTRACTOR AND ANY INVOLVED SUBCONTRACTORS ATTEND A CONSTRUCTION MANAGEMENT REVIEW MEETING WITH CITY STAFF, INCLUDING, BUT NOT LIMITED TO THE DEPARTMENT OF PUBLIC WORKS, PLANNING DEPARTMENT AND BUILDING DEPARTMENT AND ALL APPLICABLE FEES HAVE BEEN PAID IN FULL.

ROAD IMPACTS (ROAD/LANE CLOSURES, LANE SHIFT, PARKING, TRAFFIC DELAY)

ROAD IMPACTS SHALL ONLY BE PERMITTED WITH PRIOR AUTHORIZATION BY DPW. APPLICANT SHALL PROVIDE A MINIMUM OF 48 HOURS NOTICE IN ADVANCE OF THE PROPOSED DATE OF CLOSURE TO THE AFFECTED PROPERTY OWNERS AND POST THE ROAD CLOSURE 48 HOURS IN ADVANCE OF WORK, NOTICE SHALL INCLUDE DATE(S) AND DURATION OF PROPOSED CLOSURE, THE TRAFFIC CONTROL PLAN AS WELL AS ANY DETOURS THAT MAY BE AVAILABLE. EVIDENCE OF SUCH WRITTEN NOTIFICATION TO AFFECTED RESIDENTS AND PROPERTY OWNERS SHALL BE PROVIDED TO DPW.

CONTRACTOR MUST CONTACT THE DEPARTMENT OF PUBLIC WORKS TO OBTAIN A LANE CLOSURE, ROAD CLOSURE, AND/OR TRANSPORTATION PERMIT IF CONSTRUCTION VEHICLES ARE TOO LARGE. ALL DRIVERS SHALL BE ADVISED OF THE POTENTIAL FOR LIMITED ACCESS ALONG THE DESIGNATED TRUCK ROUTE AND THAT THE CITY, WITH 24-HOURS ADVANCED NOTICE, WILL PROVIDE TRAFFIC CONTROL AND ASSISTANCE IN REACHING THE JOB SITE SAFELY.

TRAFFIC/TRUCK ROUTE (USE CITY'S DESIGNATED TRUCK ROUTE)

TRAFFIC SHALL BE DIRECTED TO THE SITE VIA CENTER BLVD/SIR FRANCIS DRAKE BLVD TO FRUSTUCK AVE TO DOMINGA AVE AND BACK UP TO CENTER BLVD. ROUTE MAY BE ADJUSTED TO ACCOMMODATE CONSTRUCTION VEHICLES AND EFFICIENCY OF CONSTRUCTION.

ENFORCEMENT

THIS PLAN SHALL BE A BINDING DOCUMENT; FAILURE TO ADHERE TO THE PLAN MAY RESULT IN A "STOP WORK" ORDER. THE "STOP WORK" ORDER WILL BE LIFTED ONLY AFTER THE CITY HAS SUFFICIENT ASSURANCE THAT THE REPEATED VIOLATIONS WILL CEASE THROUGH THE REMAINDER OF THE PROJECT. THIS PLAN SHALL BE UPDATED AS PROJECT CONDITIONS CHANGE. UPDATES TO PLAN SHALL BE PROVIDED TO THE DEPARTMENT OF PUBLIC WORKS, POSTED ON THE JOB SITE, AND COMMUNICATED TO NEIGHBORING PROPOERTY OWNERS.

STORMWATER POLLUTION PREVENTION

APPLICANT IS RESPONSIBLE FOR USING BEST MANAGEMENT PRACTICE FOR THE CONSTRUCTION INDUSTRY ("GENERAL CONSTRUCTION AND SITE SUPERVISION" BROCHURE AVAILABLE AT DPW) TO PREVENT STORM WATER POLLUTION. APPLICANT IS RESPONSIBLE FOR ALL ENVIRONMENTAL DAMAGE RESULTING FROM THE CONSTRUCTION OF THE PROJECT.

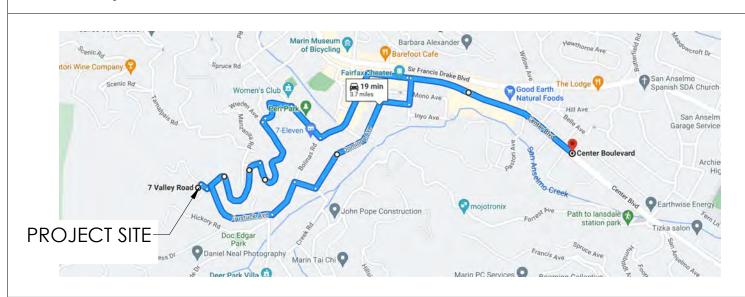
WASTEWATER REQUIREMENTS

- 1. ALL WORK RELATED TO SEWER REPLACEMENT OR REHABILITATION REQUIRES A PERMIT FROM THE CITY.
- 2. ALL DEFICIENCIES IN THE LATERAL MUST BE REPAIRED PRIOR TO RECEIVING FINAL SIGNOFF FOR THIS PROJECT.

EROSION/SEDIMENT CONTROL MEASURES

- 1. STABILIZE SITE ENTRANCE AND TEMPORARY DRIVEWAY. USE 3-4" CRUSHED ROCK FOR A MINIMUM OF 50' (OR AS FAR AS POSSIBLE) TO PREVENT TRACKING SOIL OFFSITE. THIS CAN BE USED IN CONJUNCTION WITH A TIRE WASH OR RUMBLE PLATES.
- 2. USE STRAW WATTLES ALONG CONTOURS OF SHORT SLOPES OR SLOPES 3:1 OR FLATTER, KEYED INTO GROUND AT LEAST 3" DEEP (TYPICALLY 25' APART).
- 3. CONSTRUCT A CONCRETE WASHOUT SITE ADJACENT TO STABILE ENTRANCE CLEAN AS NEEDED AND REMOVE AT END OF PROJECT
- 4. COVER ALL STOCKPILES & LANDSCAPE MATERIAL AND BERM PROPERLY WITH STRAW WATTLES OR SAND BAGS. HAZARDOUS MATERIAL MUST BE KEPT IN CLOSED CONTAINERS THAT ARE COVERED AND UTILIZE SECONDARY CONTAINMENT, NOT DIRECTLY ON SOIL. 5. USE PEA-GRAVEL BAGS, (OR SIMILAR PRODUCT) AROUND DRAIN INLETS LOCATED BOTH
- ONSITE AND IN GUTTER AS A LAST LINE OF DEFENSE. 6. COVER ALL EXPOSED SOIL WITH STRAW MULCH AND TACKIFIER (OR EQUIVALENT).
- 7. EXISTING VEGETATION SHOULD BE PRESERVED AS MUCH AS POSSIBLE. AREAS OF
- DISTURBED SOIL/VEGETATION SHOULD BE RE-VEGETATED AS SOON AS PRACTICAL.

TRAFFIC/TRUCK ROUTE:



PROJECT SCHEDULE:

MOBILIZATION/START DATE	
EXTERIOR TRIM & SIDING INSTALL	2 WÉEKS
FINAL INSPECTION	(TBD)
PROJECT FINALIZED	(TBD)

PROJECT CONTACTS:

GENERAL CONTRACTOR INFORMATION:

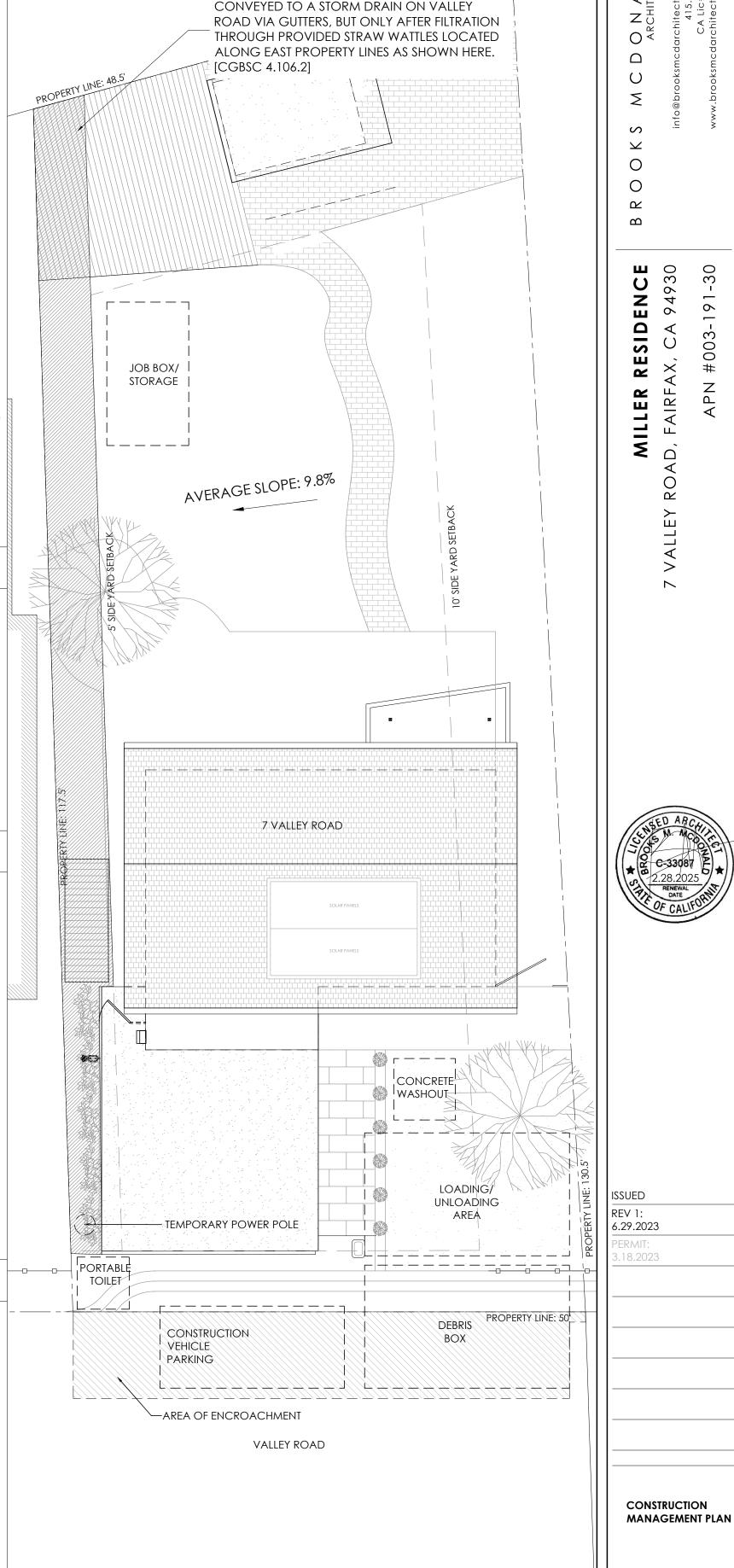
E-MAIL ADDRESS: PHONE NUMBER:

PROJECT MANAGER INFORMATION: NAME:

E-MAIL ADDRESS: PHONE NUMBER:

EMERGENCY CONTACT: NAME: PHONE NUMBER:

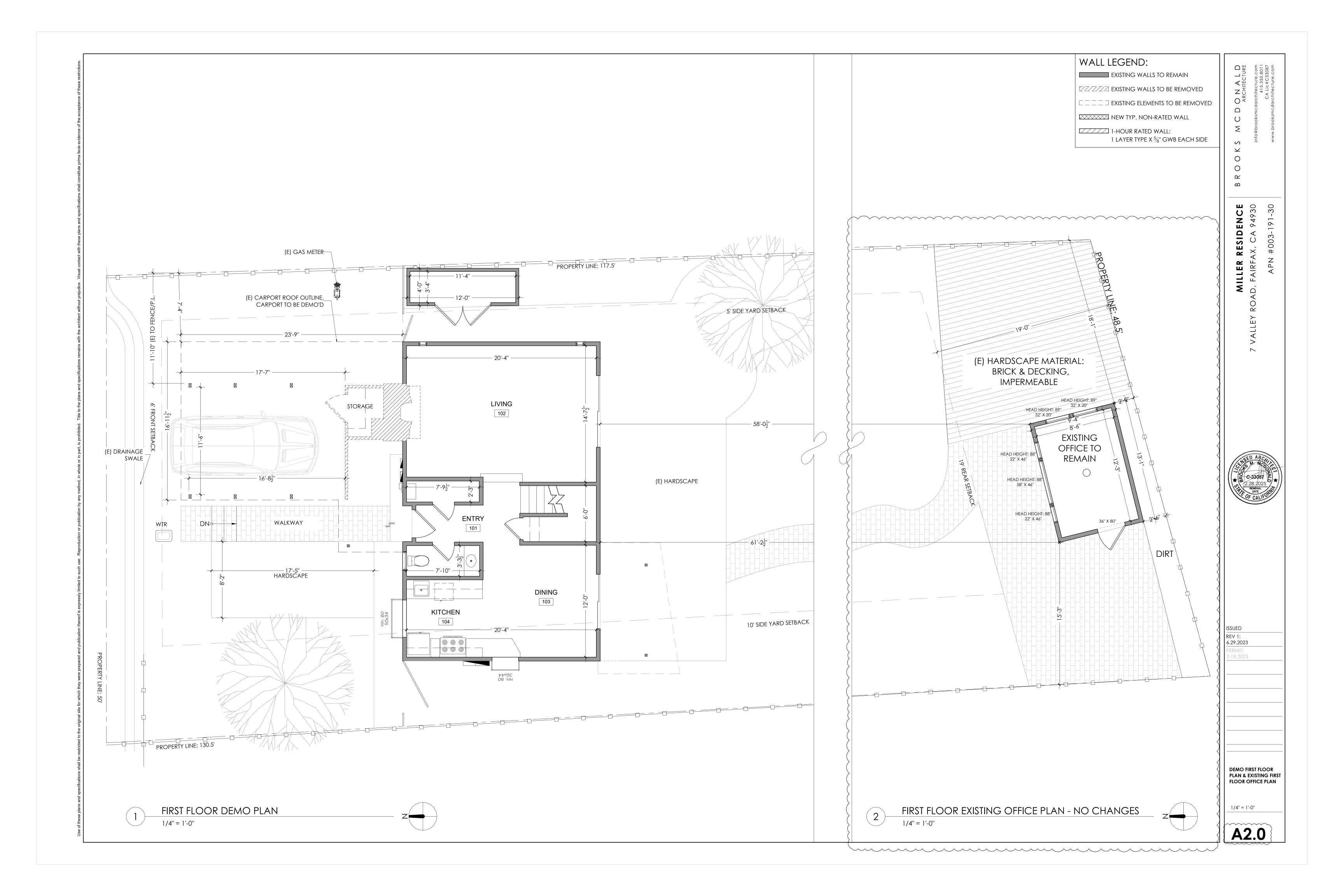
TOWN OF FAIRFAX ENFORCEMENT LINE (415)453-2263

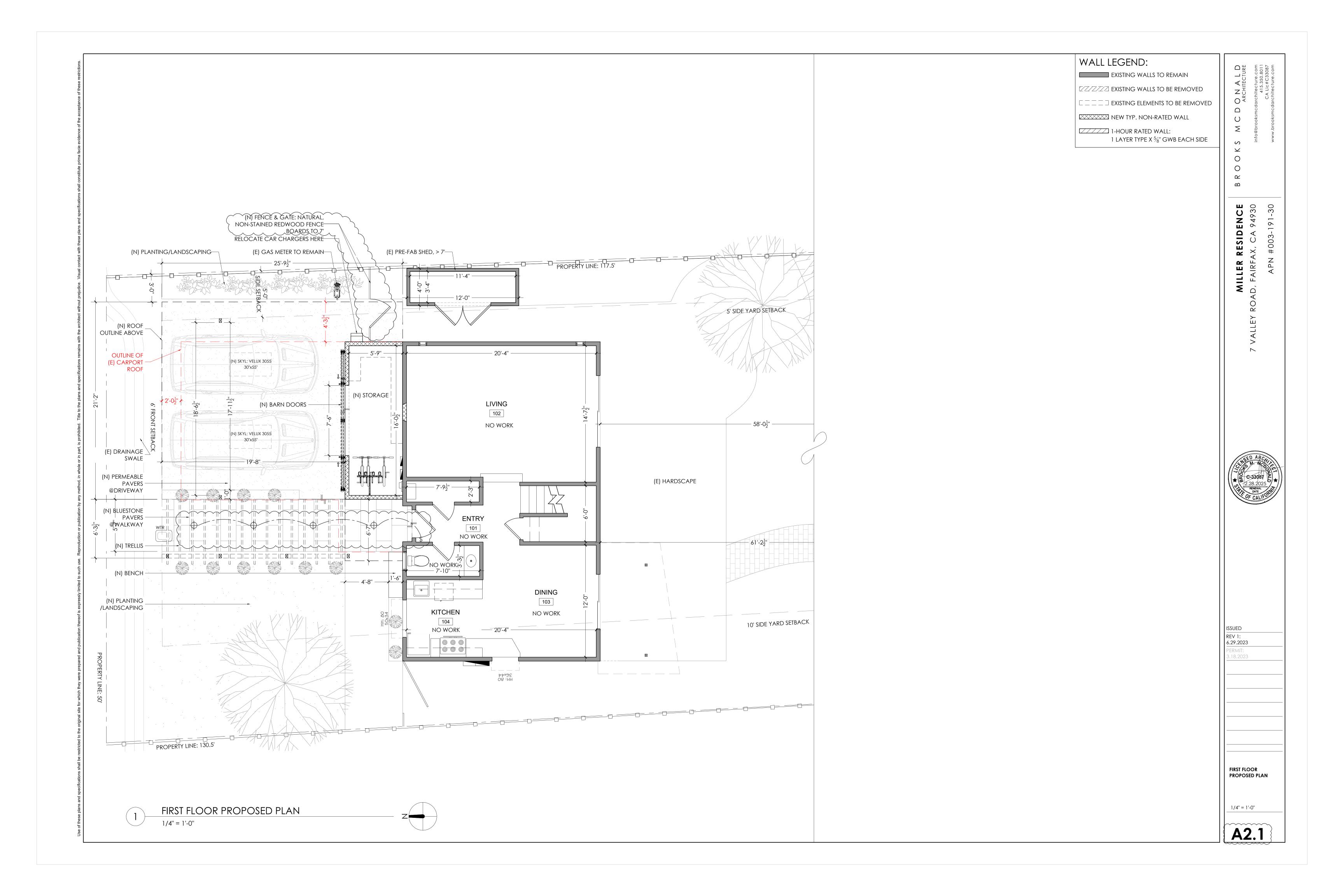


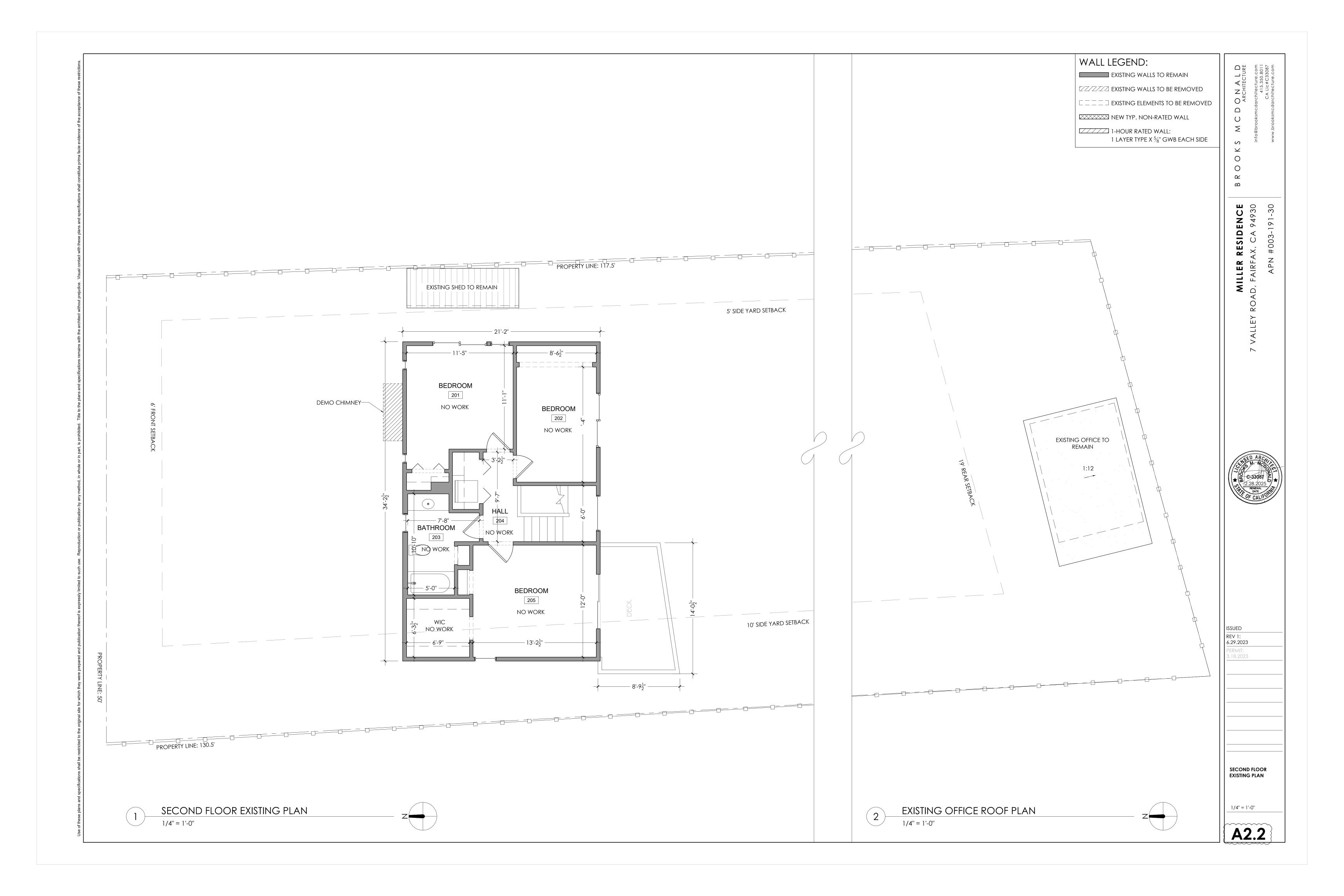
CONSTRUCTION MANAGEMENT PLAN

A1.2

DURING CONSTRUCTION, STORM WATER WILL BE











STANDING SEAM METAL ROOFING & BLUESTONE PAVERS



TURFSTONE PERMEABLE PAVERS AT CARPORT AREA



TRELLIS DESIGN TO MATCH (E)
TRELLIS @ REAR YARD

BROOKS MCDONALD
ARCHITECTURE
info@brooksmcdarchitecture.com
415.350.8011

MILLER RESIDENCE ALLEY ROAD, FAIRFAX, CA 94930 APN #003-191-30

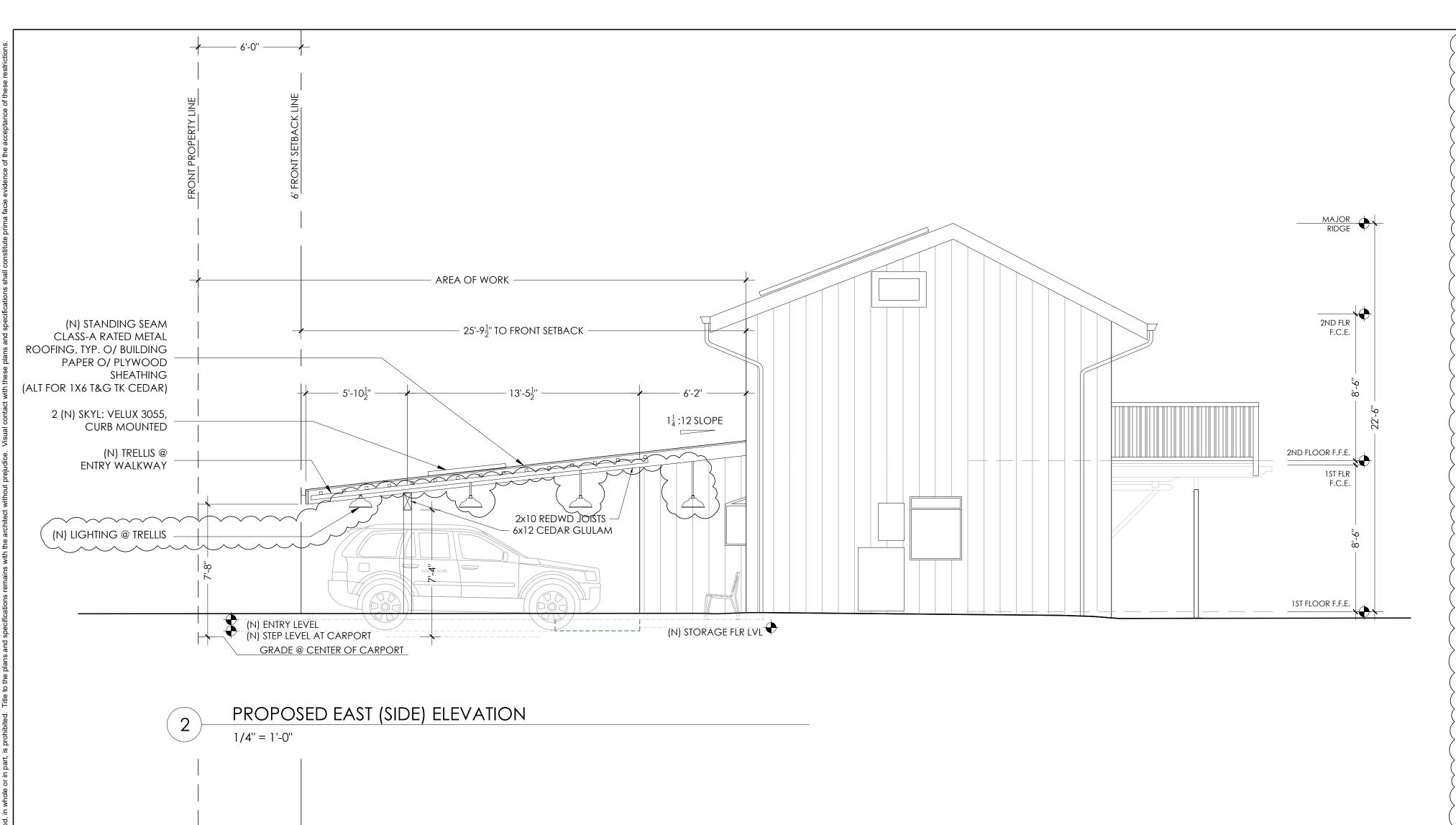


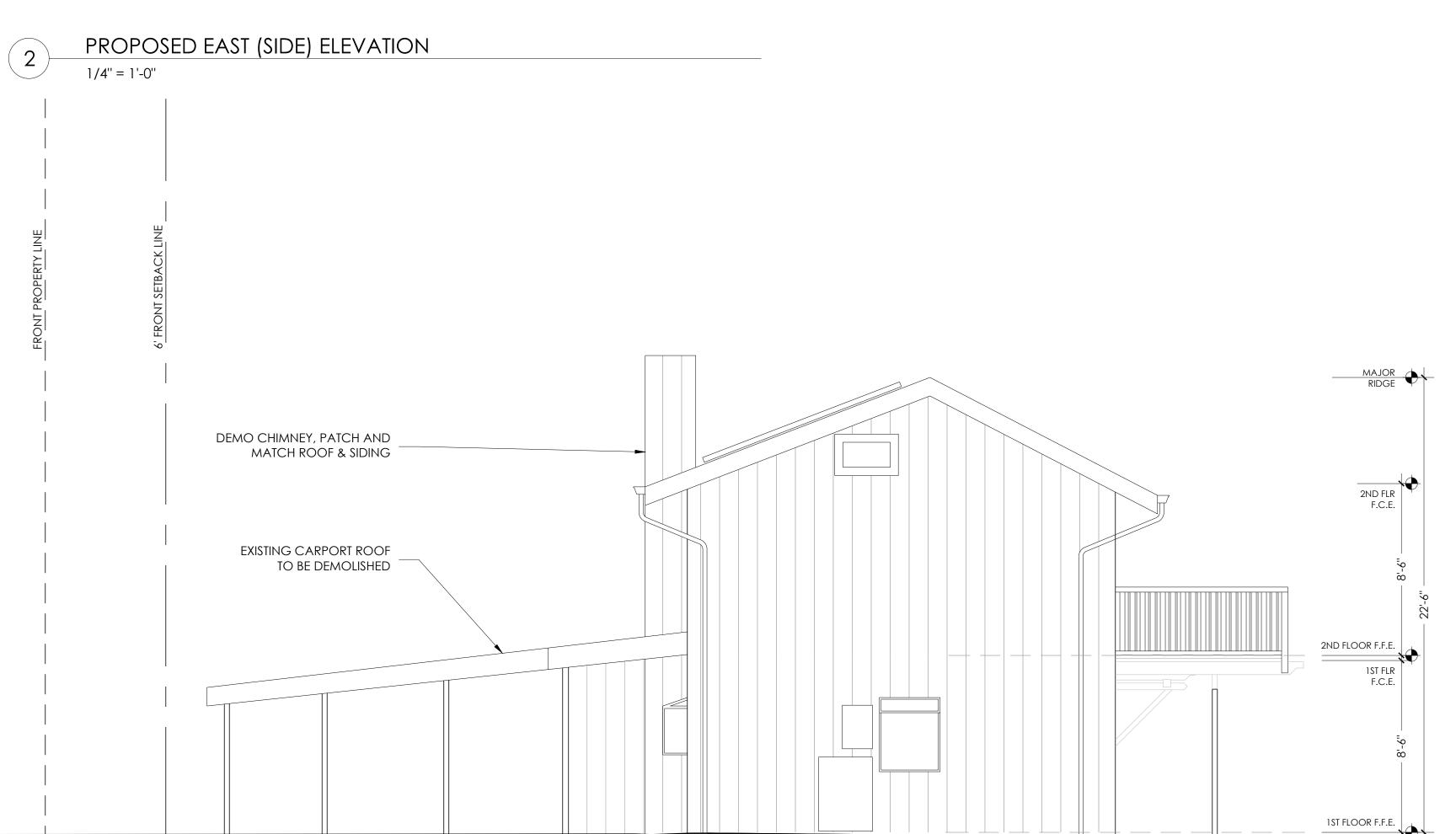
ISSUED
REV 1:
6.29.2023
PERMIT:
3.18.2023

EXTERIOR ELEVATIONS

1/4" = 1'-0"

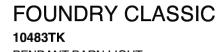
A4.0





EXISTING EAST (SIDE) ELEVATION

1/4" = 1'-0"



PENDANT BARN LIGHT

Decidedly industrious, Foundry is reinventing purposeful lighting. Focused and direct, the sturdy aluminum shade features knurled brass details to offset the Gloss White, Museum Bronze or Textured Black finish while casting a uniform light. The simple, understated form plants a vintage aesthetic for both inside and outside spaces while offering mix and match options that customize the look.

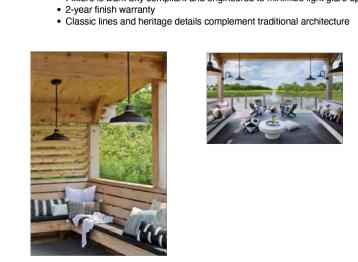
DETAILS	
FINISH:	Textured Black
MATERIAL:	Aluminum
SHADE:	Metal
SLOPE DEGREE:	90
DIMMABLE:	No

	DIMENSIONS	
	WIDTH:	16"
	HEIGHT:	7.5"
	WEIGHT:	5lb

LIGHT SOURCE	
LIGHT SOURCE:	Socketed
WATTAGE:	1-14w Med. LED, 100w Equiv.
VOLTAGE:	120v

	MOUNTING	
	CANOPY:	6" Dia.
	LEAD WIRE:	1 X 72"
J	MAX HEIGHT:	41.5

hoboci delaits:			
	SHIPPING		
 This item may be hung on a sloped ceiling This fixture includes multiple down stems in various lengths to customize the installation height 	CARTON LENGTH:	33	
of the fixture, including one 6" stem and two 12" stems	CARTON WIDTH:	20	
 Suitable for use in damp locations as defined by NEC and CEC. Meets United States UL Underwriters Laboratories & CSA Canadian Standards Association Product Safety Standards. 	CARTON HEIGHT:	11	
Fixture is Dark Sky compliant and engineered to minimize light glare upward into the night sky	CARTON WEIGHT:	8	



HINKLEY

PRODUCT DETAILS:



HINKLEY 33000 Pin Oak Parkway

Avon Lake, OH 44012

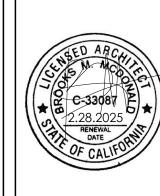
PHONE: (440) 653-5500 Toll Free: 1 (800) 446-5539

TRELLIS LIGHTING SPEC

RESIDENCE
-AX, CA 94930
N #003-191-30

Z

 $O_{\frac{4}{5}}$

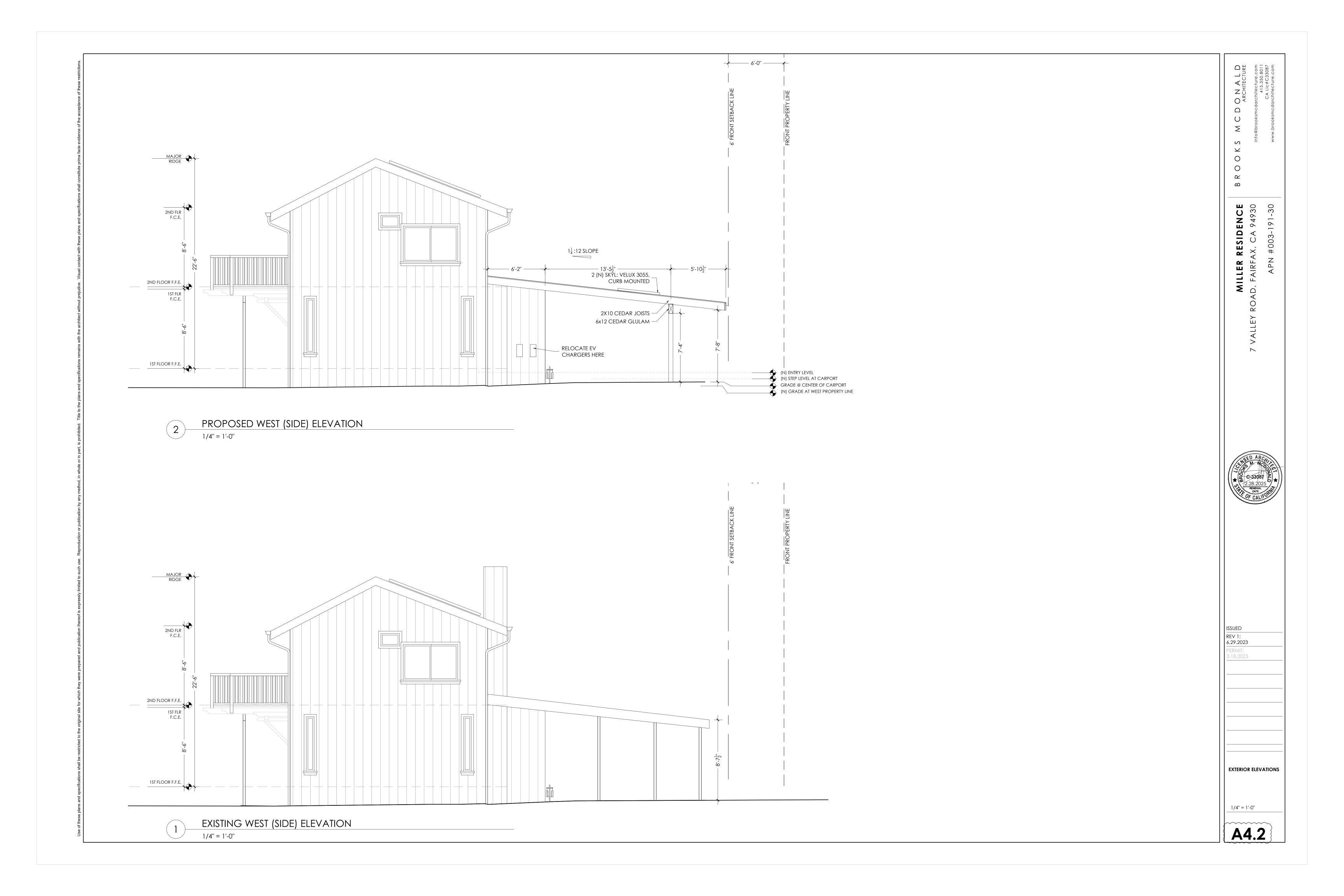


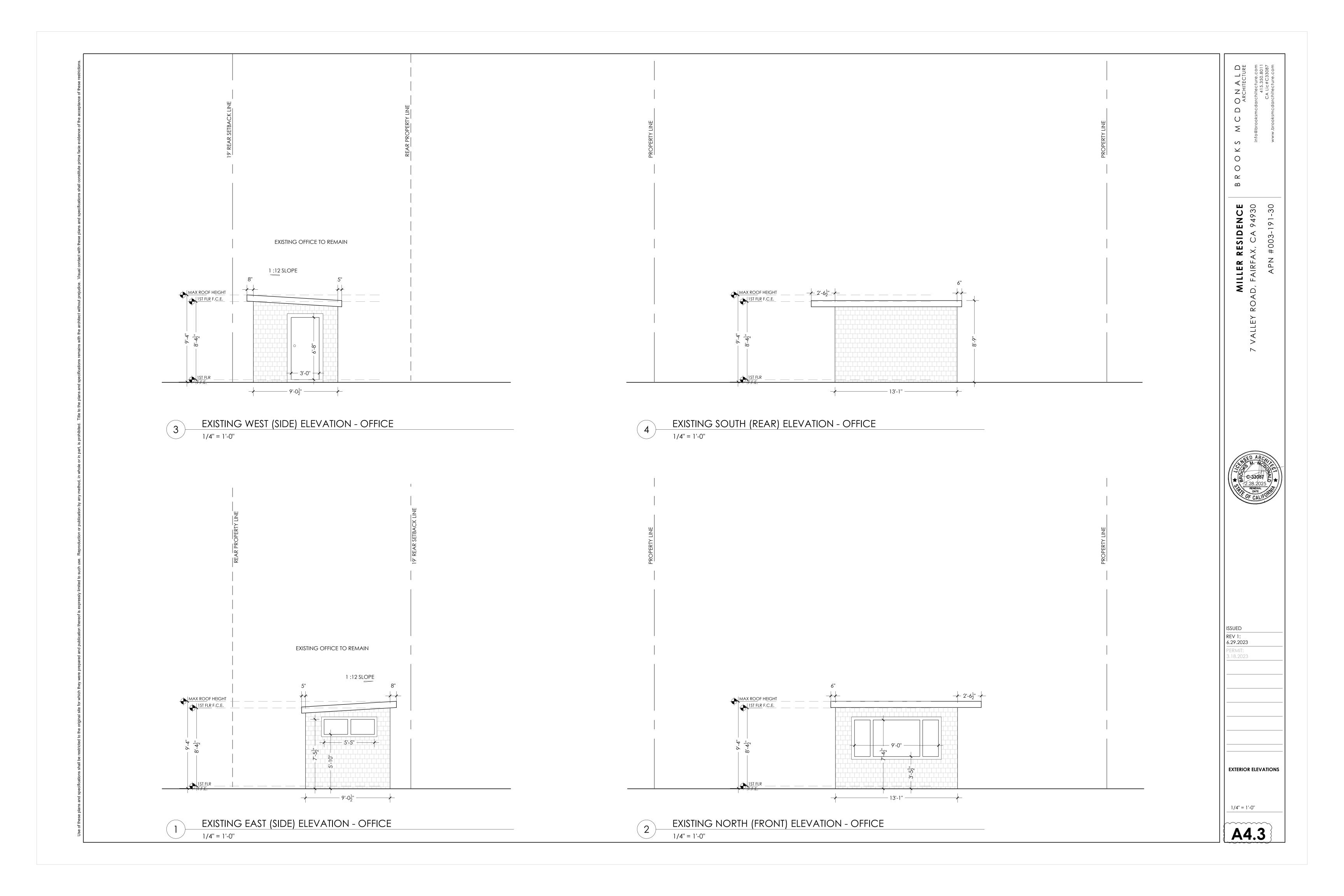
ISSUED REV 1: 6.29.2023 PERMIT: 3.18.2023

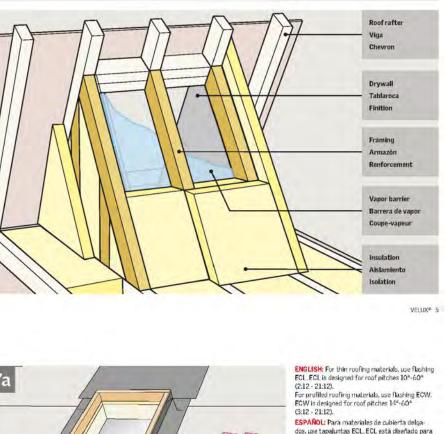
EXTERIOR ELEVATIONS

1/4" = 1'-0"

A4.1







ENGLISH: Maintain illustrated clearances

between skylight frame and critical areas such as valleys, ridges, slope changes and roof-to-wall intersections.

ESPAÑOL: Respete los espacios libres ilustrados.

entre el marco del tragaluz y áreas críticas como limahoyas, cumbreras, cambios de inclinación e

intersecciones de techo y pared.

FRANÇAIS: Respecter le dégagement illustré

entre le cadre du puits de lumière et les endroits

critiques tels que noue, faîtage, variation d'inclinai-son et intersection de tolture et mur.

2222

2230

2234

2270 *

3030

3046

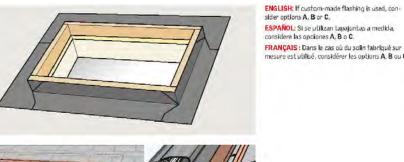
3434

4672 *

6 VELUX®

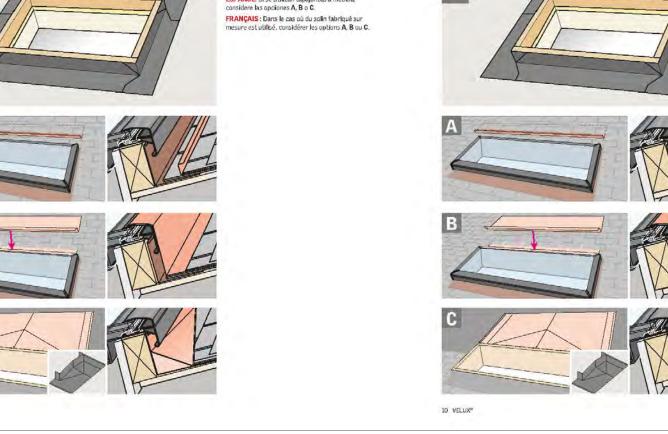
33½" x 49½"





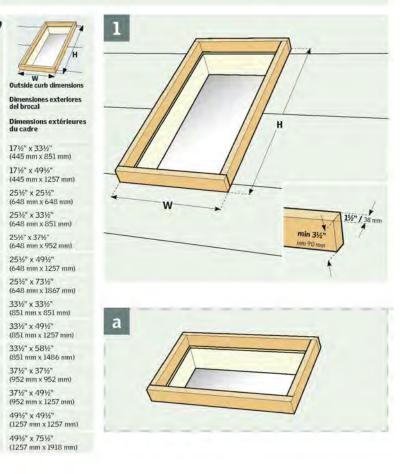


10 VELUX®









ENGLISH: For thin roofing materials, use flashing ECL. ECL is designed for roof pitches 10°-60°

(2.12 - 21:12).

For profiled roofing materials, use flashing ECW.

ECW is designed for roof pitches 14°-60°
(3:12 - 21:12).

dos, use tapajuntas ECL ECL está diseñado para techos con inclinación de 10°-60° (2:12 - 21:12). Para materiales de cubierta ondulados, use tapajuntas ECW. ECW está diseñado para techos

En monacond et 4"-60" CSL-2-EL2).

FRANÇAIS: En présence de matériau de toiture mince, utiliser les solins FCL conçus pour inclinaison de toiture et 0"-60" (2:12 - 2:1:2). Pour matériau de toiture portilé, utiliser les solins FCW conçus pour inclinaison de toiture 14"-60" (3:12 - 2:1:2).

ENGLISH: If custom-made flashing is used, con-

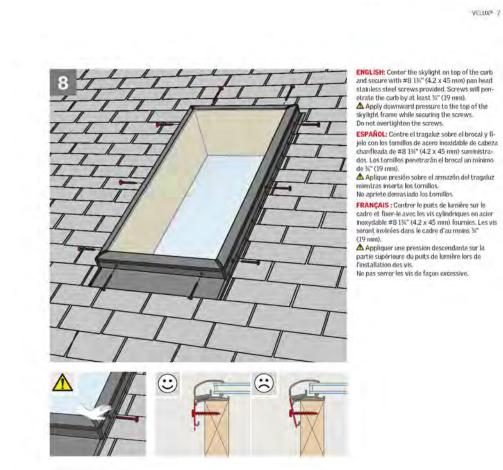
ESPAÑOL: Si se utilizan tapajuntas a medida, considere las opciones A, B o C.

FRANÇAIS: Dans le cas où du solin fabriqué sur

sider options A, B or C.

ESPAÑOL: Para materiales de cubierta delga-

con Inclinación de 14°-60° (3:12 - 21:12).



In rare circumstances, all glass may be subject to unexpected and

spontaneous breakage due to imperfections in the glass that are undetectable during the manufacturing and inspection process by the

manufacturer of the glass and the VELUX factory. Your VELUX sales company offers the choice of lammated or tempered

glass skylights. Laminated glass is a combination of two or more glass sheets with one or more interlayers of plastic (PVB) or lesin. In case of breakage, the interlayer is designed to hold the fragments together.

Tempered glass does not contain an interlayer to hold the fragments

may strike an individual.

Inclinación del techo

Importancia de una instalación correcta

ESPAÑOL: Lista de verificación de Instalación El Instalador debe verificar que:

El tragaluz FCM montado en brocal esté instalado en techos de 0º a 60º.

 El brocal del tragaluz esté correctamente construido según las dimensiones indicadas en estas instrucciones de instalación.

• El tragaluz/el brocal del tragaluz esté correctamente envuelto con lámina de soporte autoadhesiva para tragaluz VELUX segun las instrucciones de

como se describe en www.velux.com.

• El cliente esté informado del procedimiento de uso de la garantía.

Para obtener información completa sobre la garantía VELUX, visitar

FCM está diseñado para techos con inclinación de 0"-60" (0:12 - 21:12).

Consideraciones especiales para aplicaciones con inclinaciones de menos de 15° :

El rendimiento satisfactorio del producto depende de sii correcta

Las ventanas de tejado y los tragaluces VELUX deben instalarse siguiendo

estas instrucciones. El proveedor no acepta responsabilidad alguna por errores del instalador. Aunque las ventanas para tejados y los tragaluces VELUX se han diseñado y fabricado para lograr los niveles de calidad

más altos, la exposición a condiciones climáticas severas e incluso a condiciones interiores adversas (por ejemplo, humedad muy alta) pueden

del producto. En estos casos puede ser necesario establecer medidas

together. Instead, tempered glass is designed to break into small, pebblelike pieces. When tempered glass breaks, pieces of glass come loose and

Accesorios de protección solar

Barrera de vapor

instalación provistas con el tragaliz, el tapajuntas o la lámina de soporte.

El tapajuntas VELUX indicado para el material de cubierta correspondiente se instale según las instrucciones de instalación provistas con el base que el bas

• El tragaluz montado en brocal esté correctamente sujeto al brocal e Los tragaluces y las superficies interiores en las viviendas más antiguas

instalado encima del topajuntas.

El tragaluz y los accesorios funcionen correctamente.

El cliente esté informado del mantenimiento que requiere el producto tal

Para obtener información completa sobre la garantía VELUX, visitar www.velux.com.

El proveedor no asume responsabilidad alguna por el incumplimiento de leyes, ordenanzas, normas de construcción o requisitos de seguridad por parte del arquitecto, instalador o propietario del edificio.

FCM està diseñado para techos con inclinación de 0°-60° (0:12 - 2:12).

La garantía de instalación YELUX de "filtración cero" es válda solo para el tragaluz FCM VELUX montado en brocal con tapajuntas ECL VELUX correctamente instalado en techos con inclinación de 10°-60° o tapajuntas ECW VELUX correctamente instalado en techos con inclinación de 14°-60° (Consideraciones especiales para aplicaciones con inclinación de 44°-60° (Consideraciones especiales para aplicaciones con inclinación de 10°-60° (Consideración de 10°-60° (Conside

Cualquier co.iidensación que se forme en el cristal debido à la himedad alta puede gotear.

diseñado para que se rómpa en pedazos bien pequeños. Cuando el cristal templado se rómpe, pedazos de cristal pueden soltarse y golpear a un individuo.

El agua estancada y la suciedad que permanecen en el cristal durante un tiempo pueden causar manchas y corrosión en el cristal.

Consulte con los reglamentos locales y/o asesores de material de construcción para determinar cuál tipo de cristal es el más adecuado construcción para determinar cuál tipo de cristal es el más adecuado construcción para determinar cuál tipo de cristal es el más adecuado construcción para determinar cuál tipo de cristal es el más adecuado construcción para determinar cuál tipo de cristal es el más adecuado construcción para determinar cuál tipo de cristal es el más adecuado construcción para determinar cuál tipo de cristal es el más adecuado construcción para determinar cuál tipo de cristal es el más adecuado construcción para determinar cuál tipo de cristal es el más adecuado construcción para determinar cuál tipo de cristal es el más adecuado construcción para determinar cuál tipo de cristal es el más adecuado construcción para determinar cuál tipo de cristal es el más adecuado construcción para determinar cuál tipo de cristal es el más adecuado construcción para determinar cuál tipo de cristal es el más adecuado construcción para determinar cuál tipo de cristal es el más adecuado construcción para determinar cuál tipo de cristal es el más adecuado construcción para determinar cuál tipo de cristal es el más adecuado construcción para determinar cuál tipo de cristal es el más adecuado construcción para determinar cuál tipo de cristal es el más adecuado construcción para determinar cuál tipo de cristal es el más adecuado construcción para determinar cuál tipo de cristal es el más adecuado construcción para determinar cuál tipo de cristal es el más adecuado construcción para determinar cuál tipo de cristal es el más adecuado construcción para determinar cuál tipo de cristal es el más adecuado construcción para determinar cuál tipo de cristal es el más adecuado construcción para de construcción para de cristal es el más adecuado construcción para de construcción para de construcción par

Ninguno de los dos casos mencionados arriba está cubierto por la garantía para usted o sí se requiere cristal laminado en su aplicación.

Consulte las instrucciones por tipo de accesorio o comuniquese con su distribuidor VELUX para obtener más información.

Cuando una barrera de vapor forma parte de la construcción de un techo, debe extenderse y conectarse al brocal del tragaluz.

Para obtener más información acerca de la correcta eliminación de pintura

Bajo ciertas circunstancias, todo cristal está sujeto a romperse de

manera inesperada o espontánea debido a imperfecciones en el cristal no defectadas durante su manufacturación o durante el proceso de inspección por el fabricante del cristal y de la fabrica VELUX. Su distribuidor VELUX ofrece la opción de tragaluces de cristal laminado

VELUX* 3

ENGLISH: To ensure waterproofing, skylight curbs shall be completely wrapped in VELUX adhesive

skylight underlayment as indicated. Underlayment

Note: If snow accumulation on the roof is likely.

adhesive skylight underlayment around the

skylight curb must be properly integrated with

curbs with heights over 31/2" (90 mm) may require additional underlayment material for proper instal

Peel off backing from VELUX adhesive skylight

underlayment prior to applying it to roof decking and skylight curb. Ensure that surfaces are clean, dry and free of debris.

ESPAÑOL: Para garantizar la impermeabilidad, los brocales de tragaluz deben estar completamente envueltos con la lámina de soporte autoadhesiva para tragaluz VELUX tal como se muestra. Debe aplicarse la lámina de soporte antes de instalar el tapajuntas. Retire la lámina de soporte existente de la zona

alrededor del hueco tal como se muestra. Nota: Si se acumula nieve sobre el techo, se logra la impermeabilidad instalando una membrana im-permeable autoadhesiva continua por debajo del material de cubierta y del material del tapajuntas.

La lámina de soporte autoadhesiva para tragaluz

VELUX colocada alrededor del brocal del tragalu debe integrarse correctamente con la membrana impermeable del tablero. Los brocales de tragaluz cuyas alturas superen los 3½" (90 mm) pueden necesitar lámina de soporte adicional para una

Despegue la protección del reverso de la lámina de

de aplicarla al tablero del techo y al brocal del tra-galuz. Verifique que las superficies estén limpias,

FRANÇAIS : Pour en assurer son étanchéité, le

FRANÇAIS : Pour en assurer son étancierte, le cadre du puist de lumière devra être complè-tement enveloppé à l'aide de la membrane de toiture autocollante pour puits de lumière VELUX, tel qu'illustré. La membrane de toiture doit être appliquée avant l'installation du solin.

Retirer la membrane de toiture existante autour de l'ouverture brute, tel qu'illustré.

bables, l'étanchéité sera assurée en installant une

membrane autocollante à l'épreuve des intempémemorane autocollante a repreuve des intempe-ries en contrus sous le maféria de totture et sous les solins, La membrane de totture autocollante pour puits de lumière VELUX autour du cadre du puits de lumière doit être proprement intégrée à la membrane étanche du tablier de totture. Les

cadres de hauteur supérieurs à 3½" (90 mm) pourraient demander davantage de membrane

Retirer le papier protecteur de la membrane de

toiture autocollante pour puits de lumière VELUX avant de l'appliquer à la toiture et au cadre. Assu-rez-vous que les surfaces sont propres, sèches et sans débris,

VELUX# 7

Note: Si des accumulations de neige sont pro

correcta instalación.

secas y sin residuos.

rough opening as shown.

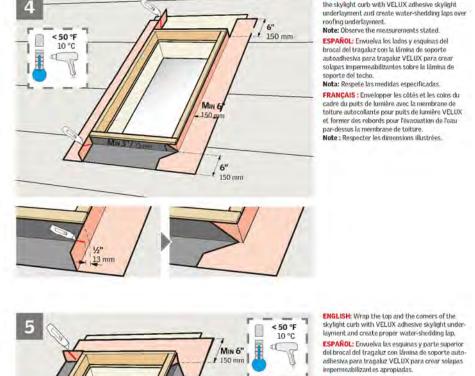
must be applied before installing the flashing. Remove existing roofing underlayment around the

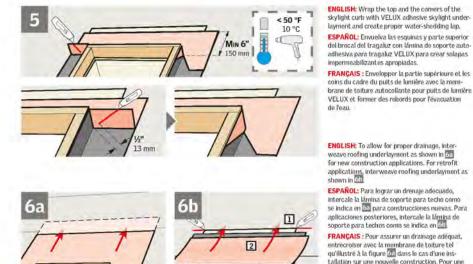
con plomo, visite el sitio web: www.epa.gov/lead.

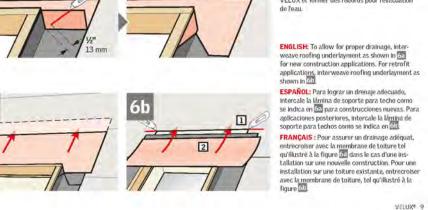












VELUX®

ENGLISH:	
HOME OWNER INFORMATION	
PLEASE COMPLETE AND GIVE TO HOME OWNER.	
Date:	
Product number:	
(stamped on product exterior)	
Quantity:	
Flashing:	
Accessories installed:	
Model Size Variant code	
Roofing material:	
Installation contractor:	
Dealer purchased from:	
ESPAÑOL:	
INFORMACIÓN DEL PROPIETARIO	
COMPLETAR Y ENTREGAR AL PROPIETARIO.	
Fecha:	
(impreso en la parte externa del producto)	
Cantidad:	
Tapajuntas:	
Accesorios instalados:	
Modelo	
Material de cubierta:	
Instalador:	

Accessories installed:	
Model Size Variant code	
Roofing material:	
nstallation contractor:	
Dealer purchased from:	
ESPAÑOL:	
NFORMACIÓN DEL PROPIETARIO	
COMPLETAR Y ENTREGAR AL PROPIETARIO.	
(impreso en la parte externa del producto)	
Cantidad:	
Tapajuntas:	
Modelo Tamaño Código de variante	
Vlaterial de cubierta:	
Distribuidor al que se compró el producto:	
FRANÇAIS:	
NFORMATION POUR LE PROPRIÉTAIRE OCCUPANT	-
VEUILLEZ COMPLÉTER ET REMETTRE AU PROPRIÉ	
	E INICE OCOURANT.
estampé sur l'extérieure du produit)	
Normal M. C.	
Augustie :	
Solin :	
Solin :	
Solin :	
Solin : Accessoires installés : Modèle Dimension Code Matériau de toiture :	
Solin :	

KR: VELUX International (VELUX A/S) +45 7632 9240 www.velux.co.kr

US: VELUX America LLC 1-800-88-VELUX www.veluxusa.com

www.velux.com

A L

 $\mathbf{Z} \stackrel{ ext{T}}{\circ}$

OA

 \Box

S

0

 α

Β

ш ()

5

R 8

R R

ш

0

 \mathcal{C}

0

0

#

ISSUED REV 1: 6.29.2023 3.18.2023

> CURB MOUNTED SKYLIGHT SPECS

A5.0

1.EV Capable. Ten (10) percent of the total number of parking spaces on a building site, provided for all types of parking facilities, shall be electric vehicle charging spaces (EV spaces) capable of supporting future Level 2 EVSE. Electrical load calculations shall demonstrate that the electrical panel service capacity and electrical system, including any on-site distribution transformer(s), have sufficient capacity to simultaneously charge all

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

1.When EV chargers (Level 2 EVSE) are installed in a number equal to or greater than the required number

2.When EV chargers (Level 2 EVSE) are installed in a number less than the required number of EV capable spaces, the number of EV capable spaces required may be reduced by a number equal to the number of EV chargers installed

a. Construction documents are intended to demonstrate the project's capability and capacity for facilitating

future EV charging. b.There is no requirement for EV spaces to be constructed or available until receptacles for EV charging or EV chargers are installed for use.

2.EV Ready. Twenty-five (25) percent of the total number of parking spaces shall be equipped with low power Level 2 EV charging receptacles. For multifamily parking facilities, no more than one receptacle is required per dwelling unit when more than one parking space is provided for use by a single dwelling unit.

Exception: Areas of parking facilities served by parking lifts.

EVs at all required EV spaces at a minimum of 40 amperes.

Y N/A RESPON. CHAPTER 3

GREEN BUILDING

SECTION 301 GENERAL

specific area of the addition or alteration.

other important enactment dates.

high-rise buildings, no banner will be used.

ABBREVIATION DEFINITIONS:

Additions and Alterations

SECTION 4.102 DEFINITIONS

4.106 SITE DEVELOPMENT

High Rise

CHAPTER 4

OSHPD

SECTION 302 MIXED OCCUPANCY BUILDINGS

DIVISION 4.1 PLANNING AND DESIGN

California Building Standards Commission

Division of the State Architect, Structural Safety

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

lighting fixtures are not considered alterations for the purpose of this section.

Note: Repairs including, but not limited to, resurfacing, restriping and repairing or maintaining existing

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

et seg., for the definition of a noncompliant plumbing fixture, types of residential buildings affected and

of occupancy or final permit approval by the local building department. See Civil Code Section 1101.1,

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

specifically to low-rise only (LR) or high-rise only (HR). When the section applies to both low-rise and

302.1 MIXED OCCUPANCY BUILDINGS. In mixed occupancy buildings, each portion of a building

FRENCH DRAIN. A trench, hole or other depressed area loosely filled with rock, gravel, fragments of brick or similar

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

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,

4.106.2 STORM WATER DRAINAGE AND RETENTION DURING CONSTRUCTION. Projects which disturb less

1. Retention basins of sufficient size shall be utilized to retain storm water on the site.

than one acre of soil and are not part of a larger common plan of development which in total disturbs one acre

during construction, one or more of the following measures shall be implemented to prevent flooding of adjacent

2. Where storm water is conveyed to a public drainage system, collection point, gutter or similar

Note: Refer to the State Water Resources Control Board for projects which disturb one acre or more of soil, or

manage all surface water flows to keep water from entering buildings. Examples of methods to manage surface

5. Other water measures which keep surface water away from buildings and aid in groundwater

1. On a case-by-case basis, where the local enforcing agency has determined EV charging and

1.1 Where there is no local utility power supply or the local utility is unable to supply adequate

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

2. Accessory Dwelling Units (ADU) and Junior Accessory Dwelling Units (JADU) without additional

infrastructure are not feasible based upon one or more of the following conditions:

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

proposed location of an EV charger. Raceways are required to be continuous at enclosed, inaccessible or

service or subpanel and shall terminate into a listed cabinet, box or other enclosure in close proximity to the

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

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

location shall be permanently and visibly marked as "EV CAPABLE".

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

disposal method, water shall be filtered by use of a barrier system, wattle or other method approved

or more, shall manage storm water drainage during construction. In order to manage storm water drainage

management of storm water drainage and erosion controls shall comply with this section.

3. Compliance with a lawfully enacted storm water management ordinance.

Exception: Additions and alterations not altering the drainage path.

are part of a larger common plan of development which in total disturbs one acre or more of soil.

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

4.106.4 Electric vehicle (EV) charging for new construction. New construction shall comply with Sections

equipment (EVSE) shall be installed in accordance with the California Electrical Code, Article 625.

4.106.4.1 or 4.106.4.2 to facilitate future installation and use of EV chargers. Electric vehicle supply

4.106.4, may adversely impact the construction cost of the project.

4.106.3 GRADING AND PAVING. Construction plans shall indicate how the site grading or drainage system will

1. [HCD] Accessory structures and accessory occupancies serving residential buildings shall

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

shall comply with the specific green building measures applicable to each specific occupancy.

comply with Chapter 4 and Appendix A4, as applicable.

Chapter 4 and Appendix A4, as applicable.

Department of Housing and Community Development

Office of Statewide Health Planning and Development

RESIDENTIAL MANDATORY MEASURES

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

property, prevent erosion and retain soil runoff on the site.

water include, but are not limited to, the following:

parking facilities.

accordance with the California Electrical Code.

overcurrent protective device.

French drains

2. Water collection and disposal systems

buildings, or both. Individual sections will be designated by banners to indicate where the section applies

4.106.4.2.2 Multifamily development projects with 20 or more dwelling units, hotels and motels with 20 or more sleeping units or quest rooms. The number of dwelling units, sleeping units or guest rooms shall be based on all buildings on a project site subject to this section.

1.EV Capable. Ten (10) percent of the total number of parking spaces on a building site, provided for all types of parking facilities, shall be electric vehicle charging spaces (EV spaces) capable of supporting future Level 2 EVSE. Electrical load calculations shall demonstrate that the electrical panel service capacity and electrical system. including any on-site distribution transformer(s), have sufficient capacity to simultaneously charge all EVs at all required EV spaces at a minimum of 40 amperes.

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

Exception: When EV chargers (Level 2 EVSE) are installed in a number greater than five (5) percent of parking spaces required by Section 4.106.4.2.2, Item 3, the number of EV capable spaces required may be reduced by a number equal to the number of EV chargers installed over the five (5) percent required.

a. Construction documents shall show locations of future EV spaces.

b. There is no requirement for EV spaces to be constructed or available until receptacles for EV charging or

2.EV Ready. Twenty-five (25) percent of the total number of parking spaces shall be equipped with low power Level 2 EV charging receptacles. For multifamily parking facilities, no more than one receptacle is required per dwelling unit when more than one parking space is provided for use by a single dwelling unit.

Exception: Areas of parking facilities served by parking lifts.

3.EV Chargers. Five (5) percent of the total number of parking spaces shall be equipped with Level 2 EVSE. Where common use parking is provided, at least one EV charger shall be located in the common use parking area and shall be available for use by all residents or guests.

When low power Level 2 EV charging receptacles or Level 2 EVSE are installed beyond the minimum required, 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 EVSE shall have a capacity of not less than 30 amperes. ALMS shall not be used to reduce the minimum required electrical capacity to the required EV capable spaces.

4.106.4.2.2.1 Electric vehicle charging stations (EVCS).

Electric vehicle charging stations required by Section 4.106.4.2.2, Item 3, shall comply with Section 4.106.4.2.2.1. 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

4.106.4.2.2.1.1 Location. EVCS shall comply with at least one of the following options:

Chapter 2, to the building.

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

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 and Section 4.106.4.2.2.1.2, Item 3.

4.106.4.2.2.1.2 Electric vehicle charging stations (EVCS) dimensions. The charging spaces shall be designed to comply with the following:

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

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

3.One in every 25 charging spaces, but not less than one, shall also have an 8-foot (2438 mm) wide minimum aisle. A 5-foot (1524 mm) wide minimum aisle shall be permitted provided the minimum width of the EV space is

a.Surface slope for this EV space and the aisle shall not exceed 1 unit vertical in 48 units horizontal (2.083 percent slope) in any direction

4.106.4.2.2.1.3 Accessible EV spaces. In addition to the requirements in Sections 4.106.4.2.2.1.1 and 4.106.4.2.2.1.2, all EVSE, when 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

installed, or space(s) reserved to permit installation of a branch circuit overcurrent protective device.

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

Exception: A raceway is not required if a minimum 40-ampere 208/240-volt dedicated EV branch circuit is installed in close proximity to the location or the proposed location of the EV space, at the time of original construction in accordance with the California Flectrical Code.

2.Multiple EV spaces required. Construction documents shall indicate the raceway termination point and the location of installed or future EV spaces, receptacles or EV chargers. Construction documents shall also provide information on amperage of installed or future receptacles or EVSE, raceway method(s), wiring schematics and electrical load calculations. Plan design shall be based upon a 40-ampere minimum branch circuit. Required raceways and related components that are planned to be installed underground, enclosed, inaccessible or in concealed areas and spaces shall be installed at the time of original construction.

altered and the work requires a building permit, ten (10) percent of the total number of parking spaces added or altered shall be electric vehicle charging spaces (EV spaces) capable of supporting future Level 2 EVSE.

1.Construction documents are intended to demonstrate the project's capability and capacity for facilitating future

2. There is no requirement for EV spaces to be constructed or available until EV chargers are installed for use. 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

4.303.1 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,

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 sea., 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

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.

4.303.1.3.1 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.

4.303.1.4.1 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 aucets 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

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

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

4.303.1.4.5 Pre-rinse spray valves.

When installed, shall meet the requirements in the California Code of Regulations, Title 20 (Appliance Efficiency Regulations), Sections 1605.1 (h)(4) Table H-2, Section 1605.3 (h)(4)(A), and Section 1607 (d)(7) and shall be equipped with an integral automatic shutoff.

FOR REFERENCE ONLY: The following table and code section have been reprinted from the California Code of Regulations, Title 20 (Appliance Efficiency Regulations), Section 1605.1 (h)(4) and Section

TABLE H-2 STANDARDS FOR COMMERCIAL PRE-RINSE SPRAY VALUES MANUFACTURED ON OR AFTER JANUARY 28, 2019

PRODUCT CLASS MAXIMUM FLOW RATE (gpm) [spray force in ounce force (ozf)] Product Class 1 ($\leq 5.0 \text{ ozf}$) 1.00 Product Class 2 (> 5.0 ozf and \leq 8.0 ozf) Product Class 3 (> 8.0 ozf) Title 20 Section 1605.3 (h)(4)(A): Commercial prerinse spray values manufactured on or after January

1, 2006, shall have a minimum spray force of not less than 4.0 ounces-force (ozf)[113 grams-force(gf)] 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.

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

TARIF - MAXIMIIM FIXTURE WATER USE

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

NOT APPLICABLE RESPONSIBLE PARTY (ie: ARCHITECT, ENGINEER, 4.304 OUTDOOR WATER USE 4.304.1 OUTDOOR POTABLE WATER USE IN LANDSCAPE AREAS. Residential developments shall comply

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

Model Water Efficient Landscape Ordinance (MWELO), whichever is more stringent.

calculator, are available at: https://www.water.ca.gov/

with a local water efficient landscape ordinance or the current California Department of Water Resources'

DIVISION 4.4 MATERIAL CONSERVATION AND RESOURCE **EFFICIENCY**

4.406 ENHANCED DURABILITY AND REDUCED MAINTENANCE 4.406.1 RODENT PROOFING. Annular spaces around pipes, electric cables, conduits or other openings in sole/bottom plates at exterior walls shall be protected against the passage of rodents by closing such

openings with cement mortar, concrete masonry or a similar method acceptable to the enforcing agency. 4.408 CONSTRUCTION WASTE REDUCTION, DISPOSAL AND RECYCLING **4.408.1 CONSTRUCTION WASTE MANAGEMENT.** Recycle and/or salvage for reuse a minimum of 65 percent of the non-hazardous construction and demolition waste in accordance with either Section

4.408.2, 4.408.3 or 4.408.4, or meet a more stringent local construction and demolition waste

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

3. The enforcing agency may make exceptions to the requirements of this section when isolated jobsites are located in areas beyond the haul boundaries of the diversion facility.

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

1. Identify the construction and demolition waste materials to be diverted from disposal by recycling, reuse on the project or salvage for future use or sale. 2. Specify if construction and demolition waste materials will be sorted on-site (source separated) or

bulk mixed (single stream). 3. Identify diversion facilities where the construction and demolition waste material collected will be

4. Identify construction methods employed to reduce the amount of construction and demolition 5. Specify that the amount of construction and demolition waste materials diverted shall be calculated by weight or volume, but not by both.

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

Note: The owner or contractor may make the determination if the construction and demolition waste materials will be diverted by a waste management company. 4.408.4 WASTE STREAM REDUCTION ALTERNATIVE [LR]. Projects that generate a total combined

weight of construction and demolition waste disposed of in landfills, which do not exceed 3.4 lbs./sq.ft. of the building area shall meet the minimum 65% construction waste reduction requirement in Section 4.408.1

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

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

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 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

disc, web-based reference or other media acceptable to the enforcing agency which includes all of the following shall be placed in the building:

4.410.1 OPERATION AND MAINTENANCE MANUAL. At the time of final inspection, a manual, compact

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. 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 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. 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

12. Information and/or drawings identifying the location of grab bar reinforcements. **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

space around residential structures

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

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.

 Z^{5}

O ₹

S

Β

Δ

6.29.2023 3.18.2023

CALGREEN CHECKLIST

CG1

RESIDENTIAL MANDATORY MEASURES, SHEET 2 (January 2023)

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 O³/g ROC). Note: MIR values for individual compounds and hydrocarbon solvents are specified in CCR, Title 17, Sections

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

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

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

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

4.503 FIREPLACES

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

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

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

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

- 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 tricloroethylene), except for aerosol products, as specified in Subsection 2 below.
- 2. Aerosol adhesives, and smaller unit sizes of adhesives, and sealant or caulking compounds (in units of product, less packaging, which do not weigh more than 1 pound and do not consist of more than 16 fluid ounces) shall comply with statewide VOC standards and other requirements, including prohibitions on use of certain toxic compounds, of California Code of Regulations, Title 17, commencing with section 94507.

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

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 Bav Area Air Quality Management District additionally comply with the percent VOC by weight of product limits of Regulation

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.

TABLE 4.504.1 - ADHESIVE VOC LIMIT $_{1,2}$	2
(Less Water and Less Exempt Compounds in Gran	ns per Liter)
ARCHITECTURAL APPLICATIONS	VOC LIMIT
NDOOR 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.

s per Liter)
s per Liter)
VOC LIMIT
250
760
300
250
450
420
250
775
500
760
750

GRAMS OF VOC PER LITER OF COATING, LESS W COMPOUNDS	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		
NDUSTRIAL MAINTENANCE COATINGS	250		
LOW SOLIDS COATINGS1	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		

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 LIM	NTS1
MAXIMUM FORMALDEHYDE EMISSIONS IN PARTS	S 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 FIBERBOARD2	0.13
1. VALUES IN THIS TABLE ARE DERIVED FROM THE CALIF. AIR RESOURCES BOARD, AIR TOXICS COIL COMPOSITE WOOD AS TESTED IN ACCORDANCE FOR ADDITIONAL INFORMATION, SEE CALIF. CO	NTROL MEASURE FOR CE WITH ASTM E 1333.

TITLE 17, SECTIONS 93120 THROUGH 93120.12.

DIVISION 4.5 ENVIRONMENTAL QUALITY (continued) 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)

2. THIN MEDIUM DENSITY FIBERBOARD HAS A MAXIMUM THICKNESS OF

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.

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

4.504.4 RESILIENT FLOORING SYSTEMS. Where resilient flooring is installed, at least 80% of floor area receiving

resilient flooring shall 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.

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

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

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

. Product certifications and specifications. Chain of custody certifications.

. Product labeled and invoiced as meeting the Composite Wood Products regulation (see

CCR, Title 17, Section 93120, et seq.). Wood Association, the Australian AS/NZS 2269, European 636 3S standards, and Canadian CSA 0121, CSA 0151, CSA 0153 and CSA 0325 standards.

5. Other methods acceptable to the enforcing agency.

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

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

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

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,

2. Other equivalent methods approved by the enforcing agency. 3. A slab design specified by a licensed design professional.

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

1. Moisture content shall be determined with either a probe-type or contact-type moisture meter. Equivalent moisture verification methods may be approved by the enforcing agency and shall satisfy requirements

found in Section 101.8 of this code. 2. Moisture readings shall be taken at a point 2 feet (610 mm) to 4 feet (1219 mm) from the grade stamped end

of each piece verified. 3. At least three random moisture readings shall be performed on wall and floor framing with documentation

acceptable to the enforcing agency provided at the time of approval to enclose the wall and floor framing.

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

4.506 INDOOR AIR QUALITY AND EXHAUST **4.506.1 Bathroom exhaust fans.** Each bathroom shall be mechanically ventilated and shall comply with the following:

1. Fans shall be ENERGY STAR compliant and be ducted to terminate outside the building. 2. Unless functioning as a component of a whole house ventilation system, fans must be controlled by a

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

b. A humidity control may be a separate component to the exhaust fan and is not required to be integral (i.e., built-in)

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

4.507 ENVIRONMENTAL COMFORT

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

1. The heat loss and heat gain is established according to ANSI/ACCA 2 Manual J - 2011 (Residential Load Calculation), ASHRAE handbooks or other equivalent design software or methods. 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

CHAPTER 7 INSTALLER & SPECIAL INSPECTOR QUALIFICATIONS 702 QUALIFICATIONS

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

1. State certified apprenticeship programs. 2. Public utility training programs.

3. Training programs sponsored by trade, labor or statewide energy consulting or verification organizations. 4. Programs sponsored by manufacturing organizations.

5. Other programs acceptable to the enforcing agency. **702.2 SPECIAL INSPECTION [HCD].** When required by the enforcing agency, the owner or the

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

1. Certification by a national or regional green building program or standard publisher. 2. Certification by a statewide energy consulting or verification organization, such as HERS raters, building

performance contractors, and home energy auditors.

3. Successful completion of a third party apprentice training program in the appropriate trade. 4. Other programs acceptable to the enforcing agency.

1. Special inspectors shall be independent entities with no financial interest in the materials or the

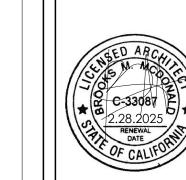
project they are inspecting for compliance with this code. HERS raters are special inspectors certified by the California Energy Commission (CEC) to rate homes in California according to the Home Energy Rating System (HERS).

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

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

703 VERIFICATIONS

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



S

Δ ∢

6.29.2023 3.18.2023

> CALGREEN CHECKLIST