Project Name: MIRADERO - RESIDENCE

APN #: 612-04-048
Owner: MR SIVAPRAKASAM BALASUBRAMANIAN
& MRS. RAMARAJ KALAISELVI
Printed on: 3/29/2023

MIRADERO - RESIDENCE

NEW CONSTRUCTION

0 MIRADERO AVENUE, SAN JOSE, CALIFORNIA 95127 APN: 612-04-048

> (N) STANDARD FIRE HYDRANTAS A **DEFEREED SUBMITAL** FIRE SPRINKLER TO BE DEFERRED ON A SEPARATE PERMIT PRELIMINARY TITLE AND POLICY ORDER NO.: FSBC-TO21001373 FOR

EXCEPTIONS/EASEMENTS

APPLICABLE CODES INDEX OF DRAWING PROJECT DATA MR SIVAPRAKASAM BALASUBRAMANIAN OWNER: THIS PROJECT SHALL COMPLY WITH THE FOLLOWING MODEL **COVER SHEET** CVR & MRS. RAMARAJ KALAISELVI **GENERAL NOTES** PROJECT ADDRESS: 0 MIRADERO AVENUE **ARCHITECTURAL** -2022 CBC (CALIFORNIA BUILDING CODE) SAN JOSE, CALIFORNIA 95127 -2022 CMC (CALIFORNIA MECHANICAL CODE) 612-04-048 SITE PLAN APN: -2022 CPC (CALIFORNIA PLUMBING CODE) PROPOSED FLOOR PLAN LOT AREA: 71.744 SQ.FT -2022 CFC (CALIFORNIA FIRE CODE) PROPOSED FLOOR PLAN PARCEL AREA (Acres): 1.650 ACRES -2022 CEC (CALIFORNIA ELECTRICAL CODE) PROPOSED ROOF PLAN BLOCK: NONE -2022 CRC (CALIFORNIA RESIDENTIAL CODE) **ELEVATIONS** PAGE: -2022 CGBSC (CALIFORNIA GREEN BUILDING STANDARDS CODE) **ELEVATIONS** PROPERTY TYPE: SINGLE FAMILY RESIDENTIAL -2022 CBEES (CALIFORNIA BUILDING ENERGY EFFICIENCY SECTIONS LEGAL DESCPT.: STANDARDS) HS-D1 3D VIEW **ZONING:** -STATE OF CALIFORNIA ENERGY CONSERVATION OCCUPANCY GROUP: R-3 3D VIEW REQUIREMENTS (T-24) FLOOR AREA CALCULATION JURISDICTION: SAN JOSE -INCLUDING CITY AND COUNTY AMENDMENTS ELECTRICAL PLAN YEAR BUILT: CONSTRUCT TYPE: V-B ELECTRICAL PLAN LIGHTING PLAN FIRE SPRINKLER: LIGHTING PLAN PLUMBING PLAN PLUMBING PLAN LANDSCAPING PLAN MATERIAL DETAILS CAL GREEN SCOPE OF WORK **BUILDING DATA** CAL GREEN SHEET 1 CAL GREEN SHEET 2 G-3 **FORMS** 1. NEW CONSTRUCTION MAIN HOUSE (3 STORIES) = 4,500.265 SQ.FT NO. OF STORIES: (N) 3 STORIES A. KITCHEN B. LIVING C. DINING **NEW CONSTRUCTION AREA:** D. 4 BEDROOMS (N) MAIN LEVEL = 1,810.56 SQ.FT E. 5 BATHS = 852.00 SQ.FT (N) UPPER LEVEL 2. REMOVE ONE TREE = 1,213.825 SQ.FT (N) LOWER LEVEL 3. TREE PLANTING (CALIFORNIA NATIVE) (N) GARAGE 3 - CAR = 605.88 SQ.FT Species TOTAL SQ.FT. (NEW RESIDENCE) = 4,500.265 SQ.FT Prunus Ilicifolia - Hollyleaf Cherry Acacia Farnesiana -Sweet Acacia Chilopsis linearis - Desert Willow 4. NEW LANDSCAPE AND HARDSCAPE LOT COVERAGE= 2.416.44/71.744=0.033 ~ 3% 5. NEW ACCESS ROAD 4,500.265/71,744=0.062 ~ 6% 6. NEW FIRE HYDRANT 7. NEW RETANING WALLS

8. GARAGE

BEST MANAGEMENT PRACTICES FOR **CONSTRUCTION ACTIVITIES:**

STORM WATER POLLUTION CONTROL REQUIREMENT FOR CONSTRUCTION ACTIVITIES MINIMUM WATER QUALITY PROTECTION REQUIREMENTS FOR ALL DEVELOPMENT CONSTRUCTION PROJECTS/ CERTIFICATION STATEMENT.

THE FOLLOWING IS INTENDING MINIMUM NOTES OR AS AN ATTACHMENTS FOR CONSTRUCTION AND GRADING PLANS AND REPRESENT THE MINIMUM STANDARDS OF GOOD HOUSEKEEPING WHICH MUST BE IMPLEMENTED ON ALL CONSTRUCTION SITES REGARDLESS OF SIZE (APPLIES TO ALL PERMITS).

- ERODED SEDIMENTS AND OTHER POLLUTANTS MUST BE RETAINED ON SITE AND MAY NOT BE TRANSPORTED FROM THE SITE VIA SHEETFLOW, SWALES, AREA DRAINS, NATURAL DRAINAGE COURSES OR WIND.
- 2. STOCKPILES OF EARTH AND OTHER CONSTRUCTION RELATED MATERIALS MUST BE PROTECTED FROM BEING TRANSPORTED FROM THE SITE BY THE FORCES OF WIND OR WATER.
- 3. FUELS, OILS, SOLVENTS AND OTHER TOXIC MATERIALS MUST BE STORED IN ACCORDANCE WITH THEIR LISTING AND ARE NOT TO CONTAMINATE THE SOIL AND SURFACE WATERS. ALL APPROVED STORAGE CONTAINERS ARE TO BE PROTECTED FROM THE WEATHER. SPILLS MUST BE CLEANED UP IMMEDIATELY AND DISPOSED OF IN A PROPER MANNER. SPILLS MAY NOT BE WASHED INTO THE DRAINAGE SYSTEM.
- 4. NON-STORMWATER RUNOFF FROM EQUIPMENT AND VEHICLE WASHING AND ANY OTHER ACTIVITY SHALL BE CONTAINED AT THE PROJECT SITE.
- 5. EXCESS OR WASTE CONCRETE MAY NOT BE WASHED INTO THE PUBLIC WAY OR ANY OTHER DRAINAGE SYSTEM. PROVISIONS SHALL BE MADE TO RETAIN CONCRETE WASTES ON SITE UNTIL THEY CAN BE DISPOSED OF AS SOLID WASTE.
- 6. TRASH AND CONSTRUCTION RELATED SOLID WASTES MUST BE DEPOSITED INTO A COVERED RECEPTACLE TO PREVENT CONTAMINATION OF RAINWATER AND DISPERSAL BY WIND.
- SEDIMENTS AND OTHER MATERIALS MAY NOT BE TRACKED FROM THE SITE BY VEHICLE TRAFFIC. THE CONSTRUCTION ENTRANCE ROADWAYS MUST BE STABILIZED SO AS TO INHIBIT SEDIMENTS FROM BEING DEPOSITED INTO THE PUBLIC WAY. ACCIDENTAL DEPOSITIONS MUST BE SWEPT UP IMMEDIATELY AND MAY NOT BE WASHED DOWN BY RAIN OR OTHER MEANS.
- 8. ANY SLOPES WITH DISTURBED SOILS OR DENUDED OF VEGETATION MUST BE STABILIZED SO AS TO INHIBIT EROSION BY WIND AND WATER.

NOTE

CONSTRUCTION FOR WORK FOR WHICH A PERMIT IS REQUIRED SHALL BE SUBJECT TO INSPECTION BY THE BUILDING OFFICIAL AND SUCH CONSTRUCTION OR WORK SHALL REMAIN ACCESSIBLE AND EXPOSED FOR INSPECTION PURPOSES UNTIL APPROVED. APPROVAL AS A RESULT OF AN INSPECTION SHALL NOT BE CONSTRUED TO BE AN APPROVAL OF A VIOLATION OF THE PROVISIONS OF THE JURISDICTION CODE OR OF OTHER ORDINANCES OF THE JURISDICTION. INSPECTIONS PRESUMING TO GIVE AUTHORITY TO VIOLATE OR CANCEL THE PROVISIONS OF THE JURISDICTION CODE OR OF OTHER ORDINANCES OF THE JURISDICTION SHALL NOT BE VALID. IT SHALL BE THE DUTY OF THE PERMIT APPLICANT TO CAUSE THE CORK TO REMAIN ACCESSIBLE AND EXPOSED FOR INSPECTION PURPOSES. NEITHER THE BUILDING OFFICIAL NOR THE JURISDICTION SHALL BE LIABLE FOR EXPENSE ENTAILED IN THE REMOVAL OR REPLACEMENTS OF ANY MATERIAL REQUIRED TO ALLOW INSPECTION

GENERAL NOTES

- 1. CONTRACTOR SHALL, PRIOR TO COMMENCEMENT OF WORK FIELD VERIFY ALL EXISTING PROJECT CONDITIONS, INCLUDING DIMENSIONS AND UTILITY LOCATIONS AND UTILITY SIZES.
- 2. FIELD INFORMATION OF DISCREPANCIES SHALL BE RECORDED ON A REPRODUCIBLE DOCUMENT AND IMMEDIATELY TRANSMITTED TO THE DESIGNER FOR PROJECT RECORD COORDINATION AND NECESSARY RESOLUTION PRIOR TO CONTINUE WITH WORK.
- 3. CONTRACTOR SHALL VERIFY AND BE RESPONSIBLE FOR ALL WORK AND MATERIAL - INCLUDING THOSE FURNISHED BY SUBCONTRACTORS.
- 4. WRITTEN DIMENSIONS TAKE PRECEDENCE OVER SCALED SIZES, DO NOT SCALE DRAWINGS TO DETERMINE ANY LOCATIONS. THE ARCHITECT SHALL BE NOTIFIED OF ANY DISCREPANCIES PRIOR TO CONTINUING
- 5. ALL WORK SHALL CONFORM TO THE LATEST ADOPTED EDITIONS OF ALL APPLICABLE BUILDING CODES, THE AMERICANS WITH DISABILITIES ACT, AS WELL AS ALL OTHER LOCAL GOVERNING CODES AND ORDINANCES.
- 6. ALL ELECTRICAL MECHANICAL, AND PLUMBING WORK SHALL CONFORM TO THE REQUIREMENTS OF ALL LEGALLY CONSTITUTED AUTHORITIES HAVING JURISDICTION.
- 7. THE GENERAL BUILDING PERMITS SHALL BE PAID FOR BY THE OWNER AND SECURED BY THE GENERAL CONTRACTOR. ALL OTHER REQUIRED PERMITS SHALL BE PAID FOR BY THE CONTRACTOR OR SUBCONTRACTOR DIRECTLY **RESPONSIBLE**
- 8. ALL REQUIRED CITY AND COUNTY LICENSES SHALL BE ACQUIRED AND PAID FOR BY THE INDIVIDUAL TRADES
- 9. ALL CONTRACTORS SHALL HAVE VALID CERTIFICATES OF WORKMAN'S COMPENSATION OF FILE WITH THE APPROPRIATE AGENCIES.
- 10. CONTRACTOR SHALL ASSIST OWNER IN OBTAINING FINAL APPROVAL OF LOCAL HEALTH DEPARTMENT AND THE TEMPORARY AND FINAL CERTIFICATES OF OCCUPANCY.
- 11. CONTRACTOR SHALL PROVIDE BACKING FOR SUPPORT OF ALL WALL CEILING AND PARTITION MOUNTED ITEMS SUCH AS LIGHT FIXTURES, SHELVING, EQUIPMENT AND TELEVISIONS COORDINATE LOCATIONS AND REQUIREMENT WITH THE PLUMBING, MECHANICAL, ELECTRICAI
- 12. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO LOCATE ALL EXISTING UTILITIES WHETHER SHOWN HEREIN OR NOT AND TO PROTECT THEM FROM DAMAGE. THE CONTRACTOR(S) SHALL BEAR ALL EXPENSE FOR THE REPAIR OR REPLACEMENT OF UTILITIES AND ALL OTHER PROPERTY DAMAGED BY OPERATIONS IN CONJUNCTION WITH EXECUTION OF WORK.
- 13. CONTRACTOR SHALL PROVIDE PROTECTION IN ACCORDANCE WITH AL APPLICABLE BUILDING CODES. CONTRACTOR SHALL PROVIDE REQUIRED PROTECTION INCLUDING BUT NOT LIMITED TO SHORING BRACING AND ALL OTHER SUPPORTS (INCLUDING ENGINEERING OF SYSTEMS) NECESSARY TO MAINTAIN OVERALL STRUCTURAL INTEGRITY OF THE BUILDING.
- 14. ALL DEMOLITION AND CUTTING SHALL BE PERFORMED IN A MANNER AND BY METHODS WHICH ENSURE AGAINST DAMAGE TO EXISTING WORK.
- 15. INTERIOR WALL AND CEILING FINISHES SHALL NOT EXCEED FLAME SPREAD CLASSIFICATIONS DICTATED BY ALL APPLICABLE BUILDING CODES.
- 16. GYPSUM BOARD AND SUSPENDED CEILING SYSTEMS SHALL CONFORM TO ALL LOCAL GOVERNING BUILDING CODES AND ORDINANCES.

17. ALL GLASS AND GLAZING SHALL COMPLY WITH ALL APPLICABLE BUILDING

- CODES AS WELL AS THE U.S. CONSUMER PRODUCT SAFETY COMMISSION. SAFETY STANDARDS FOR ARCHITECTURAL GLAZING MATERIAL. 18. PIPES, CONDUITS, OR DUCTS EXCEEDING ONE THIRD OF THE SLAB OR MEMBER THICKNESS SHALL NOT BE PLACED IN STRUCTURAL CONCRETE
- UNLESS SPECIFICALLY DETAILED REFER TO MECHANICAL, ELECTRICAL, PLUMBING AND STRUCTURAL DRAWINGS FOR LOCATION OF SLEEVES AND OTHER ACCESSORIES. 19. CONTRACTOR SHALL REFER TO AND CONFORM WITH ALL FINDINGS AND
- RECOMMENDATIONS SET FORTH IN THE SOILS REPORT.
- 20. THE DESIGNER ACCEPTS NO RESPONSIBILITY FOR THE ACCURACY OF THE FINDING IN THE SOILS REPORT, NOR FOR THE FINAL RECOMMENDATIONS SHOULD ANY UNUSUAL CONDITIONS BECOME APPARENT DURING GRADING OR FOUNDATION CONSTRUCTION NOTIFY THE SOILS ENGINEER FOR INSTRUCTIONS PRIOR TO CONTINUING WORK.
- 21. EXTERIOR OPENINGS SHALL COMPLY WITH ALL SECURITY REQUIREMENTS AS OUTLINED IN ALL LOCAL BUILDING CODES AND ORDINANCES.
- 22. ACCURATE AS-BUILT DRAWINGS SHALL BE GENERATED BY CONTRACTOR DURING CONSTRUCTION AND SUBMITTED TO OWNER UPON COMPLETION OF FINAL PUNCH LIST, BUT PRIOR TO REQUEST FOR FINAL PAYMENT.
- 23. ROOF OBSTRUCTIONS SUCH AS TELEVISIONS ANTENNA, SOLAR PANELS, AND GUY WIRES SHALL NOT BE LOCATED OR INSTALLED IN SUCH A WAY AS TO PREVENT FIRE DEPARTMENT ACCESS OR EGRESS IN THE EVENT OF A FIRE.
- 24. AUTOMATIC IRRIGATIONS SYSTEM CONTROLLERS INSTALLED AT THE TIME OF FINAL INSPECTION SHALL BE WEATHER OR SOIL MOISTURE-BASED.
- 25. AN OPERATION AND MAINTENANCE MANUAL SHALL BE PROVIDED TO THE BUILDING OCCUPANT OR OWNER. 26. SPECIAL INSPECTORS MUST BE QUALIFIED AND ABLE TO DEMONSTRATE
- COMPETENCE TO THE ENFORCING AGENCY IN THE DISCIPLINE IN WHICH THEY ARE INSPECTING. 27. CF-4R AND CF-6R CERTIFICATE FORMS SHALL BE COMPLETED AS

APPLICABLE AND BE PRESENTED TO THE FIELD INSPECTOR PRIOR TO FINAL

INSPECTION IN ACCORDANCE WITH THE ENERGY CALCULATIONS.

APPROVAL STAMP

APN

AVG

B.O.

BD

CLG

CLR

CMU

CO

CONC

CONT

DEMO

DIA

DN

DW

(E)

ELEC

EPS

EQ

EXT

FD

FIN

GFCI

GYP

HB

HW

INT

MIN

(N) NTS

OSB

OC

PERF

PERP

PTD

QTY

REQ'D

SD

SIM

SYM

T.O.

T&G

THRU

TYP

UON

VERT

W/D

W/O

WC

WD

WH

XPS

SPEC

POLYISO

MISC

GLULAM

CW

APPROX

(310) 740-9649 (310) 844-7370

ABBREVIATIONS

POUNDS OR NUMBER AIR CONDITIONING

AVERAGE

BOARD

CEILING

CLEANOUT

CONCRETE

DEMOLISH

DIMENSION

DISHWASHER

EXISTING

ELEVATION

ELEVATION

EQUAL

FINISH

FOOT

EXTERIOR

FLOOR DRAIN

GALVANIZED

GYPSUM

HOSE BIB

INTERIOR

MAXIMUM

MINIMUM

HOT WATER

EXPANDED POLYSTYRENE

GENERAL CONTRACTOR

GLUE-LAMINATED

KILOWATT HOUR

MISCELLANEOUS

NOT TO SCALE

ON CENTER

PAINTED

QUANTITY

REQUIRED

ROOM

SIMII AR

PERFORATED

PERPENDICULAR

RADIUS OR RISER

REFRIGERATOR

SMOKE DETECTOR

SQUARE FOOT

SPECIFICATION

SYMMETRICAL

VOLT, OR VALVE

WASHER & DRYER

WATER CLOSET

WATER HEATER

WEATHERPROOF

EXTRUDED POLYSTYRENE

THROUGH

TYPICAL

VERTICAL

WASHER

WITHOUT

WOOD

TONGUE AND GROOVE

UNLESS OTHERWISE NOTED

POLYISOCYANURATE

PRESSURE-TREATED

G. F. CIRCUIT INTERUPTER

ORIENTED STRANDBOARD

REFLECTED CEILING PLAN

DIMMER

CONTINUOUS

COLD WATER

PENNY (NAILS

BEAM

BOTTOM OF BETWEEN

ASSESSOR'S PARCEL #

CONCRETE MASONRY UNIT



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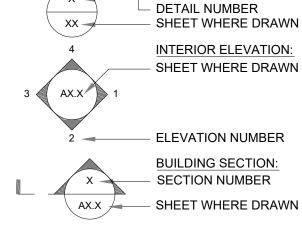
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Signature

CLIENT INFORMATION:

REV: DESCRIPTION:

SYMBOL LEGEND DATE:



SECTION NUMBER - SHEET WHERE DRAWN CENTER LINE

ELEVATIONS

ELEVATION NUMBER

- SHEET WHERE DRAWN

FACE DIMENSION CENTER LINE DIMENSION **ELEVATION**

SHEET NUMBER:

9/19/2024

SHEET TITLE:

CVR

COVER SHEET

SEAL: PROJECT NAME:

GENERAL

- . Provide each bedroom, basement, and habitable attics with a minimum of one exterior window with a 44" maximum clear opening height, 5.7 sq. ft. minimum clear openable | 5. Asphalt shingles with sloped roofs 2/12 to <4/12 shall have two lavers of underlayed area (minimum 5.0 sq. ft. at grade floor openings), 24" minimum clear openable height and 20" minimum clear width, or an openable exterior exit door. (CRC R310.2.1 and CRC R310.2.2) Window wells, ladders, and steps shall comply with CRC R310.2.3 Bars, grilles, covers, ands screens shall be releasable or removable from the inside without the use of a key, tool, special knowledge, or force greater than 15lbs to operate the emergency escape and rescue openings. (CRC R310.4) Photovoltaic panels & modules shall not be below an emergency escape and rescue opening within 36".
- 2. Each bathroom containing a bathtub, shower or tub/shower combination shall be mechanically ventilated with Energy Star approved equipment (minimum 50cfm) with an integral humidistat installed. (ČŔC R303.3.1)
- 3. Provide attic cross ventilation: 1/150 of attic area or 1/300 with at least 40% but not more than 50% of vents are a maximum 3 ft. below the ridge or highest space in the attic and the balance is provided in the lower third of the attic space (not limited to eaves or cornice vents). As an alternative in Climate Zone 16 (Truckee region), the net area may be reduced to 1/300 when a Class I or II vapor barrier is installed on the warm-in-winter side of the ceiling. Baffles are required at vents for insulation. Provide minimum of 1" inch of air space between insulation and roof sheathing.
- 4. Enclosed rafter spaces shall have a 1-inch clear cross ventilation. (Properly sized rafters for insulation) (CRC R806.3)
- . Under floor cross ventilation: minimum 1.0 sq. ft. for each 150 sq. ft. of under floor area. When a class 1 vapor retarder is installed on the ground surface the minimum area of ventilation may be limited to 1sq.ft for each 1,500 square feet of under-floor space. One ventilation opening shall be within three (3) feet of each corner of the building (CRC R408.1). Unvented crawl spaces shall comply with CRC R408.3. Unvented crawl space added option for dehumidification of 70 pints moisture per day per 1,000 sf to requirement for exemption. (R408.3)
- 5. Exterior balconies and elevated walking surfaces exposed to water, where structural framing is protected by an impervious moisture barrier require construction documents with manufacturer's installation instructions (R106.1.5). Must be inspected and approved before concealing barrier. (R109.1.5.3)
- . Enclosed framing in exterior balconies and elevated walking surfaces exposed to rain, snow or drainage from irrigation shall be provided with crossventilation area of at least 1/150. (R317.1.6)
- Provide landings and a porch light at all exterior doors. Landings are to be minimum 3 ft deep x width of door. Landings at required egress doors may step down a maximum of 7.75 inches when the door does not swing over the landing and 1.5 inches when door swings onto the landing. Other than required exterior exit doors may have a threshold of 7.75 inches maximum; a landing is not required if a stair with two or fewer risers is located on the exterior side and the door does not swing over the stairway. (CRC R311.3-R311.3.2)
- 9. Mezzanines shall not be greater than 1/3 of the story unless fire sprinklers are installed then the area can be 1/2 of the story. (R325.3)
- 10. The following windows shall be fully tempered: (CRC R308.4)
- Sliding/swinging glass doors
- Glazing in walls and enclosures facing hot tubs, spas, whirlpools, saunas, steam rooms, bathtubs, showers and swimming pools where the glazing is less than 60 inches above the standing surface within the compartment and within 60 inches horizontally of the water's edge (CRC R308.4.5)
- Glazing within a 24" arc of a door that is less than 60 inches above the floor. Safety glazing required on a wall less than 180 degrees from the plane of the door in a closed position and within 24" of hinge side of an in-swing door. (R308.4.2)

Glazing where the exposed area is greater than 9sq.ft, bottom is less than 18 in. and

- at least 36 in. above the floor, and adjacent to a walking surface Within 60in. of the bottom tread of a stairway and less than 36in. above the landing
- Glazing in guards and railings
- Glazing adjacent to stairways, landings, and ramps within 36in. horizontally of the walking surface less than 36in. above the walking surface

FOUNDATIONS & CONCRETE SLABS

- . Slope drainage 6" within the first 10ft. from the foundation wall. If physical obstructions or lot lines prohibit the 10ft distance, a 2-5 percent slope shall be provided to an approved alternative method of diverting the water away from the foundation. Impervious surfaces shall also be sloped a minimum of 2 percent for 10ft away from structures to an approved drainage way. (CRC R401.3)
- 2. Footings shall extend at least 12 inches into the undisturbed ground surface. (CRC R403.1.4) Unless erected on solid rock, to protect against frost and freezing, the minimum foundation depth is 18 inches below grade if between 4,000-7,000 foot elevation and 24 inches below grade for 7,000 foot elevation and above. Exception: Interior footings shall be a minimum of 12 inches below grade. (L-V 3.14)
- Stepped footings shall be used when slope of footing bottom is greater than 1 in 10 (V. H). Step footing detail shall be shown on building elevations and foundation plan.
- . Concrete slabs: 3 1/2" minimum (CRC R506.1). Slabs under living areas and garages shall be reinforced with wire 6" x 6", 10 gauge x 10 gauge welded mesh or equivalent steel reinforcement and 4" thickness of 3/8 minimum gravel under the concrete slab. Separate from soil with a 6 mil polyethylene vapor retarder with joints lapped not less than 6 inches in living areas. A capillary break shall be installed when a vapor retard-
- 5. Provide an $18'' ext{ x } 24''$ under-floor access, unobstructed by pipes or ducts and within 5'of each under-floor plumbing cleanout and not located under a door to the residence, is required. Provide a solid cover or screen. (CRC 408.4 & CPC 707.9)
- Minimum sill bolting: 1/2" anchor bolts or approved anchors at 6 ft. o.c. maximum for one-story. (CRC R403.1.6) Use anchor bolts at 4 ft. o.c. maximum for three story construction. Embed bolts 7" minimum. The anchor bolts shall be placed in the middle third of the width of the plate. Locate end bolts not less than 7 bolt diameters, nor more than 12" from ends of sill members. In SDC D0 and above: Provide 3"X3"X0.229 plate washers on each bolt at braced or shear wall locations, standard cut washers shall be permitted for anchor bolts not located in braced/shear wall lines. (CRC R403.1.6.1 & R602.11.1)

CLEARANCES AND TREATMENT FOR WOOD FRAMING

- . Weather exposed glu-lam, beams and posts shall be pressure treated or shall be wood of natural resistance to decay (CRC R317.1.3 & 5) 2. Columns exposed to the weather or in basements when supported on concrete pier or
- metal pedestals shall be pressure treated or natural resistance to decay unless the pier/pedestals project 1" above concrete or 6" above earth and the earth is covered by an approved impervious moisture barrier. (CRC R317.1.4 exc. 1) . Columns in enclosed crawl spaces or unexcavated areas located within the periphery
- of the building shall be pressure treated or natural resistance to decay unless the column is supported by a concrete pier or metal pedestal of a height 8" or more and the earth is covered by an impervious moisture barrier. (CRC R317.1.4 exc. 2)
- 1. Deck posts supported by concrete piers or metal pedestals projecting not less than $1^{\prime\prime}$ above a concrete floor or 6" above exposed earth. (CRC R317.1.4 exc. 3)
- . Under-floor areas with storage, fuel-fired equipment or electric-powered equipment with less than 2x10 solid joists shall be protected on the underside by half-inch sheetrock or a sprinkler system. (R302.13
- 2. Balconies must be designed for a minimum live load of 60lbs per square foot. (CRC T-

- .. Positive connection shall be provided to ensure against uplift and lateral displacement. (CRC R502.9 & CBC 2304.10.7) 2. All fasteners used for attachment of siding & into pressure treated lumber shall be of a
- corrosion resistant type. (CRC R317.3) Fire-block in concealed spaces of stud walls/partitions, vertically at ceiling/floor levels,
- & horizontally at 10ft. intervals. Fire-block at soffits, drop ceilings/similar locations & in concealed spaces at the top/bottom of stair stringers. (CRC R302.11)
- . Provide approved building paper under the building siding and approved flashing at exterior openings. (CRC R703.2) Specify a minimum of 2 layers of Grade D paper under stucco and 2 layers of 15lb felt (or equivalent) under stone veneer. . Stucco shall have a minimum clearance to earth of 4 inches and 2 inches to paved
- surfaces with an approved weep screed. (CRC R703.7.2.1) Masonry stone veneer shall be flashed beneath the first course of masonry and provided with weep holes immediately above the flashing. (CRC R703.8.5 and R703.8.6)

debris protection also installed

- 1. Roof sheathing can only cantilever 9 inches beyond a gable end wall unless supported by 17. GFCI outlets are required: for all kitchen receptacles that are designed to serve counoverhang framing. (R802.5.2.1)
- . Provide a minimum 22" x 30" access opening to attic (CRC R807); may be required to be 30"x30" to remove the largest piece of mechanical equipment per the California . Roof drains/gutters required to be installed per the California Plumbing Code with leaf/

- 4. Roof construction and coverings shall comply with CRC Chapters 8, 9 and local ordinance. All roofing shall be tested/listed Class A minimum.
- ment applied per CRC R905.2.2.

GARAGE AND CARPORT

- . Garage shall be separated from the dwelling unit & attic area by ½ inch gypsum board applied to the garage side. Garage beneath habitable rooms shall be separated by not less than 5/8" type X gypsum board. Structure supporting floor/ceiling assemblies used for required separations shall have 1/2" gypsum board installed minimum. Door openings from the garage to the dwelling shall be solid wood/steel doors or honeycomb steel doors not less than 1 3/8" thick or a 20-minute rated fire door. Doors shall be self-closing & self-latching. No openings directly into a sleeping room from the garage. When the dwelling and garage has fire sprinklers installed per R309.6 and R313, doors into the dwelling unit from the garage only need to be selfclosing and self-latching. (CRC R302.5.1 & T-R302.6)
- 2. Ducts penetrating the garage to dwelling separation shall be a minimum of 26 gauge with no openings into the garage. (CRC R302.5.2)
- 3. Penetrations through the garage to dwelling separation wall (other than ducts as listed above) shall be fire-blocked per CRC section R302.11, item #4.
- 4. Garage and carport floor surfaces shall be non-combustible material and slope to drain towards the garage door opening. (CRC R309.1)
- Appliances and receptacles installed in garage generating a glow, spark or flame shall be located 18" above floor unless it is listed as flammable vapor ignition resistant. (CMC 305.1) Provide protective post or other impact barrier from vehicles. (CMC
- Appliances in private garages and carports shall be installed with a minimum clearance of 6ft above the floor unless they are protected from vehicular impact. (CBC 406.2.9.3) 2. ABS piping shall not be exposed to direct sunlight unless protected by water based

STAIRWAYS & RAMPS

- 1. Stair landings required every 12'7" of vertical rise. (CRC R311.7.3) 2. Exterior stair stringers must be naturally resistant to decay or pressure treated. (CRC
- Rise shall be maximum 7.75"; Run shall be 10" minimum; headroom 6'-8" minimum; width 36" minimum, 31.5" between a handrail on one side and 27" with handrails or two sides. Variation between riser heights 3/8" maximum. A nosing not less than .75 inches but not more than 1.25 inches shall be provided on stairways with solid risers where the tread depth is less than 11 inches. The leading edge of treads shall project not more than 1.25 inches beyond the tread below. Open risers are permitted, provided the opening between the treads does not permit the passage of a 4" sphere. (Openings are not limited when the stair has a rise of 30" or less). (CRC
- . Stairways with 4 or more risers shall have a handrail on one side 34" to 38" above the tread nosing. Circular handrails shall have an outside diameter of 1.25"-2"; if not circular, it shall have a perimeter dimension of 4"-6.25" with a maximum crosssectional dimension of 2.25". See R311.7.8.3 item# 2 for type II handrails with a parameter over 6.25". A minimum clearance of 1.5" shall be maintained from the wall or other surface. Handrails shall be returned, terminate in newel posts, or safe-
- . Guards shall be 42" minimum height (unless acting as a handrail/guard for a stairway; the guard height may be 34"-38" in height), with openings less than 4" inches clear (guards on the open sides of stairs may have 4 3/8" openings). (CRC R312)

Provide landings at the top/bottom of the stairway the width of the stairway. The

ty terminals. (CRC R311.7.8.2)

weather. (CRC R317.1.3)

- depth of the landing shall be 36" minimum. (see CRC R311.7.6 for exceptions). Usable spaces underneath enclosed/unenclosed stairways shall be protected by a
- minimum of 1/2" gypsum board. (CRC R302.7) Ramps serving the egress door shall have a slope of not more than 1 unit vertical in 12 units horizontal (8.3-percent slope). All other ramps shall have a maximum slope
- of 1 unit vertical in 8 units horizontal (12.5-percent slope). Exception: Where it is technically infeasible to comply because of site constraints, ramps shall have a slope of not more than 1 unit vertical in 8 units horizontal (12.5-percent slope) (CRC R311.8.1). Provide 3'X3' landings at the top and bottom of ramps, where doors open onto ramps, and where ramps change directions. (CRC R311.8.2)
- Guards are required if deck or floor is over 30" above grade, minimum 42" high, with openings less than 4" (CRC R312). Guardrails shall be designed and detailed for lateral forces according to CRC Table 301.5.
- . Provide deck lateral load connections at each end of the deck and at deck intersections per CRC R507.9.2. Specify connectors with a minimum allowable stress design capacity of 1,500lbs and install with 24" of the end of the deck. 750lb rated devices are allowed (DTT1Z as example) if located at 4 points along the deck.
- 3. Posts/columns shall be retrained at the bottom end to prevent lateral displacement; clearly show approved post bases, straps, etc to achieve this per CRC R407.3 Joists, girders, structural blocking and support posts shall be wood of nat ural resistance to decay or pressure-treated lumber when exposed to the

ELECTRICAL

- No electrical panels in closets of bathrooms. Maintain a clearance of 36" inches in front of panels, 30" wide or width of equipment and 6'-6" high for headroom. (CEC
- 2. Provide a minimum 3 lug intersystem bonding busbar at the main electrical service.
- All automatic garage door openers that are installed in a residence shall have a battery backup function that is designed to operate when activated because of an electrical outage. (CBC 406.2.1)
- 4. A concrete-encased electrode (ufer) consisting of 20' of rebar or #4 copper wire placed in the bottom of a footing is required for all new construction. (CEC 250.52(A) 17. Per section 301.1.1 CalGreen and civil code 1101.3(c), all non-compliant plumbing (3)) Bond all metal gas and water pipes to ground. All ground clamps shall be accessible and of an approved type. (CEC 250.104)
- All 15/20 ampere receptacles installed per CEC 210.52 shall be listed tamper-resistant receptacles. (CEC 406.12)
- All branch circuits supplying 15/20 ampere outlets in family rooms, dining rooms, living rooms, parlors, libraries, dens, bedrooms, sunrooms, recreation rooms, closets hallways, kitchens, laundry room or similar rooms/areas shall be protected by a listed combination type arc-fault circuit interrupter. (CEC 210.12)
- Provide a minimum of one 20A circuit to be used for the laundry receptacle. (CEC 210.11(C)(2)) Provide a minimum of one 20A circuit for bathroom receptacle outlets. (CEC 210.11(C)(3)
- . Provide at least 1 outlet in basements, garages, laundry rooms, decks, balconies, porches and within 3' of the outside of each bathroom basin. (CEC 210.52 (D), (F) &
- . Furnaces installed in attics and crawl spaces shall have an access platform (catwalk in attics), light switch and receptacle in the space. Provide a service receptacle for the furnace. (CEC 210.63)
- 10. All dwellings must have one exterior outlet at the front and the back of the dwelling. (CEC 210.52(E)) Garage receptacles shall not serve outlets outside the garage. Exception: Garage
- circuit may serve readily accessible outdoor receptacle outlets. ((CEC 210.11 (C)(4)) A minimum of 1 receptacle shall be provided for each car space. (210.52(G) 12. At least one wall switched lighting outlet or fixture shall be installed in every habita-

ble room, bathroom, hallways, stairways, attached garages and detached garages

- with electrical power, equipment spaces (attics, basements, etc). (CEC 210.70) 3. Kitchens, dining rooms, pantries, breakfast nooks, and similar areas must have a minimum of two 20A circuits. Kitchen, pantry, breakfast nooks, dining rooms, work surfaces and similar areas counter outlets must be installed in every counter space 12" inches or wider, not greater than 4' o.c., within 24" inches of the end of any counter space and not higher than 20" above counter. (CEC 210.52 (C)) Island counter spaces shall have at least 1 receptacle outlet unless a range top or sink is installed than 2 receptacles may be required. 1 receptacle is required for peninsular counter spaces. Receptacles shall be located behind kitchen sinks if the counter area depth behind the sink is more than 12" for straight counters and 18" for corner in-
- stallations. (CEC Figure 210.52(C)(1)) . Receptacles shall be installed at 12' o.c. maximum in walls starting at 6' maximum from the wall end. Walls longer than two feet shall have a receptacle. Hallway walls longer than 10 ft shall have a receptacle in hallways. (CEC 210.52(A))
- . Receptacles shall not be installed within or directly over a bathtub or shower stall. (CEC 406.9(C) Light pendants, ceiling fans, lighting tracks, etc shall not be located within 3ft horizontally and 8ft vertically above a shower and/or bathtub threshold. (CEC 410.10(D))
- All lighting/fan fixtures located in wet or damp locations shall be rated for the application. (CEC 410.10)
- tertop surfaces, dishwashers, bathrooms, in under-floor spaces or below grade level, in unfinished basements, crawl space lighting outlets, in exterior outlets, within 6' of a laundry/utility/wet bar sinks, laundry areas, and in all garage outlets including outlets dedicated to a single device or garage door opener. (CEC 210.8)
- 8. Carbon-monoxide alarms shall be installed in dwelling units with fuel-burning appliances or with attached garages (CRC R315):

- Outside of each separate sleeping area in the immediate vicinity of bedrooms
- On every level of a dwelling unit including basements Alterations, repairs, or additions exceeding 1,000 dollars (May be battery operated)
- 19. Smoke alarms shall be installed (CRC (R314):

- In each room used for sleeping purposes. • Outside of each separate sleeping area in the immediate vicinity of bedrooms.
- In each story, including basements
- 20. At the top of stairways between habitable floors where an intervening door or obstruction prevents smoke from reaching the smoke detector.
- 21. Shall not be installed within 20ft horizontally of cooking appliances and no closer than 3ft to mechanical registers, ceiling fan's and bathroom doors with a bathtub or • They must be rated for direct insulation contact (IC).
- shower unless this would prevent placement of a smoke detector (314.3(4)). 22. Alterations, repairs, or additions exceeding 1,000 dollars. (May be battery operated.)
- 23. All smoke and carbon-monoxide alarms shall be hardwired with a battery backup (smoke alarms shall have a 10-year sealed battery). (CRC R314.4 & R315.1.2)
- 24. Smoke detectors within 10 feet to 20 feet of the stove shall be ionization type with alarm silencing switch. CRC R314.3.3.
- All 15/20 ampere receptacles in wet locations shall have in-use (bubble) covers installed. All receptacles in wet locations shall also be listed weather-resistant type. (CEC 406.9(B)(1))
- 6. All new electrical receptacles shall be Arc-Fault and/or GFCI protected.
- Underfloor cleanouts shall not be more than 5' from an underfloor access, access door or trap door. (CPC 707.9)
- synthetic latex paints. (CPC 312.13) 3. PVC piping shall not be exposed to direct sunlight unless protected by water based
- synthetic latex paint, .04" thick wrap or otherwise protected from UV degradation. l. Underground water supply lines shall have a $14\,\mathrm{awg}$ blue tracer wire. (CPC604.10.1) 5. The adiacent space next to showers without thresholds shall be considered a "wet
- location" when using the CRC, CBC, and the CEC. (CPC 408.5) . Shower compartments, regardless of shape, shall have a minimum finished interior of 1024 square inches (32" by 32") and shall also be capable of encompassing a 30" circle. The required area and dimensions shall be measured at a height equal to the top of the threshold and shall be maintained to a point of not less than 70" above the shower drain outlet. (CPC 408.6) Provide curtain rod or door a minimum of 22" in width. (CPC 408.5) Showers and tubs with showers require a nonabsorbent surface up to 6' above the floor. (CRC R307.2) Minimum shower re-
- ceptor slope is 1/8" per foot. (408.5) Show location and size of the water heater on plans. Provide pressure relief valve with drain to outside for water heater. (CPC 504.6) Provide seismic strapping in the upper & lower third of the water heater a minimum of 4" above controls. (CPC 507.2) The water heater shall be of an instantaneous type or the following shall be provided (new construction only) (CEC 150(n)):
- A 120V receptacles provided within 3ft • A category III or IV vent, or a straight (without bends) Type B vent Condensate drain that is no more than 2 inches higher than the base of the water
- Gas supply line with a minimum 200,000 Btu/hr dedicated capacity for the water
- A dedicated 120/240, 3 wire circuit with 10AWG wire to a receptacle out-let within 3' let within 3' of the water heater. The unused conductor shall be electri-cally isolated and have a reserved circuit breaker space. Both ends of the conductor shall be labeled "spare" and be electrically isolated. A reserve single-pole circuit breaker space near this circuit labeled "Future 240V Use." (CEC 150.0(n))
- Domestic hot water lines shall be insulated. Insulation shall be the thickness of the pipe diameter up to 2" in size and minimum 2" thickness for pipes larger than 2" in diameter. (CPC 609.11)
- . A 3-inch gravity drain shall be provided at the low point of the space, installed which provides 1/4-inch per foot grade and terminate at an exterior point of the building protected from blockage. The opening shall be screened with a corrosion resistant wire mesh with mesh openings of 1/4-inch in dimension. Lengths of the gravity drains over 10 feet in length shall be first approved by the Building Official.
- . Water heaters located in attics, ceiling assemblies and raised floor assemblies shal show a water-tight corrosion resistant minimum 1 1/2" deep pan under the water heater with a minimum 3/4 inch drain to the exterior of the building. (CPC 507.5)
- . Water closet shall be located in a space not less than 30" in width (15" on each side) and 24" minimum clearance in front. (CPC 402.5) . Indicate on the plans that the maximum hot water temperature discharging from a
- bathtub or whirlpool bathtub filler shall not exceed 120 degrees F. (CPC 408.3) 13. Provide anti-siphon valves on all hose bibs. (CPC 603.5.7)
- 14. Floor drains shall be provided with a trap primer. (CPC 1007) 15. Ali glazing less than 60" above a shower or tub floor and within 60" horizontally from
- fixture's water edge shall be safety glazing. [CRC R308.4, Item 5] 16. Clearly label on the plans the maximum water flow rates per the (CGBSC 4.303.1)
- Water Closets: 1.28qpf Metering Faucets: 0.25 gallons/Cycle • Urinals: .125gpf Clothes Washers: Energy-star Certificate • Kitchen Faucets: 1.8gpm @ 60psi Dishwashers: Energy-star Certificate • Lavatory Faucets: 1.2gpm @ 60psi Showerheads: 2.0apm @ 80psi
- fixtures within this residence shall be replaced with water-conserving plumbing fixtures. (New construction and Remodeling)

MECHANICAL

- All newly installed gas fireplaces shall be direct vent and sealed-combustion type. 2. Any installed wood stove or pellet stove shall meet the U.S. EPA New Source Per-
- formance Standard emission limits and shall have a permanent label certifying Top chimney must extend a minimum of 2 ft. above any part of the building within
- 10 ft. (CMC 802.5.4) Fireplaces shall have closable metal or glass doors, have combustion air intake drawn from the outside and have a readily accessible flue dampener control. Continuous burning pilot lights are prohibited. (CEC 150.0(e))
- Provide combustion air for all gas fired appliances per CMC Chapter 7. . Gas vents passing through an insulated assembly shall have a metal insulation shield a minimum 2" above insulation. (CMC 509.6.2.7)
- Gas water heater and furnace are not allowed in areas opening into bathrooms, closets or bedrooms unless installed in a closet equipped with a listed gasketed door assembly and a listed self-closing device with all combustion air obtained from
- Roof top equipment on roofs with over 4/12 slope shall have a level 30"x30" working platform. (CMC 304.2) Exhaust openings terminating to the outdoors shall be covered with a corrosion
- resistant screen ¼"-1/2" in opening size (not required for clothes dryers). (CMC). Vent dryer to outside of building (not to under-floor area). Vent length shall be 14 ft. maximum. Shall terminate a minimum of 3' from the property line and any
- opening into the building. (CMC 504.4.2) Environmental Air Ducts shall not terminate less than 3' to a property line, 10' to a forced air inlet, 3' to openings into the building and shall not discharge on to a pub-
- lic way. (CMC 502.2.1) 2. Provide minimum 100 square inches make-up air for clothes dryers installed in closets. (CMC 504.4.1(1))
- . Heating system is required to maintain 68 degrees at 3 ft. above floor level and 2ft from exterior walls in all habitable rooms. (CRC R303.10) 14. Wood burning appliances shall not be installed in a new or existing project that is
- not one of the following: A pellet-fueled wood burning heater.
- A U.S. EPA Phase II Certified wood burning heater. An appliance or fireplace determined to meet the U.S. EPA particulate matter emission standard of less than 7.5 grams per hour for a non-catalytic wood fired appli-
- ance or 4.1 grams per hour for a catalytic wood fired appliance and is approved in . Bathroom exhaust fans shall be energy star compliant, ducted to terminate outside the building and controlled by a humidistat capable of bing adjusted between the
- relative humidity range of 50 of 80 percent [CGBC4.506] Gas tank-less w/h to have a uniform energy factor of 0.97 and a recovery efficiency of 0.99 or better (lower).

TITLE 24 ENERGY

- . All ducts in conditioned spaces must include R-4.2 insulation. (150.1(c)9) Mini-
- mum heating and cooling filter ratings shall be MRV 13 (150.0(m)12) . Isolation water valves required for instantaneous water heaters 6.8kBTU/hr and above. Valves shall be installed on both cold and hot water lines. Each valve will need a hose bib or other fitting allowing for flushing the water heater when the valves are closed. (CEC 110.3(c)6)
- 3. ALL luminaires must be high efficacy (150.0(k)1A)
- Luminaries recessed in insulated ceilings must meet five requirements (150.0(k)1C):
- They must be certified as airtight (AT) construction.
- They must have a sealed gasket or caulking between the housing and ceiling to prevent flow of heated or cooled air out of living areas and into the ceiling cavity.
- They may not contain a screw base sockets
- They shall contain a JA8 compliant light source 5. In bathrooms, garages, laundry rooms, and utility rooms, at least on luminaire in each of these spaces shall be controlled by a vacancy sensor or occupant sensor provided the occupant sensor is initially programmed like a vacancy sen-
- sor (manual-on operation). (150.0(k)21) Joint Appendix A (JA8) certified lamps shall be considered high efficacy. JA8 compliant light sources shall be controlled by a vacancy sensor or dimmer. (Exception:
- <70sf closets and hallway) (150.0(k)2K) Under-cabinet lighting shall be switched separately from other lighting systems.
- . All exterior lighting shall be high efficacy, be controlled by a manual on/off switch
- and have one of the following controls (the manual switch shall not override the automatic control device): (150.0(k)3A) Photo-control and motion sensor
- Photo-control and automatic time switch control Astronomical time clock control turning lights off during the day

used in the luminaires installed. (10-103(b))

- All high efficacy light fixtures shall be certified as "high-efficacy" light fixtures by the California Energy Commission. 10. Contractor shall provide the homeowner with a luminaire schedule giving the lamps
- 11. The number of blank electrical boxes more than 5 feet above the finished floor shall not be greater than the number of bedrooms. These electrical boxes must be served by a dimmer, vacancy sensor, or fan speed control. (150(k)1B)
- 2. Provide a gasket/ insulation on all interior attic/under-floor accesses. (110.7) 13. Provide verification on the plans how the building will meet the minimum ventilation and acceptable indoor air quality requirements per ASHRAE Standard 62.2. Window operation is not a permissible method of providing the whole building ventilation airflow required. This is subject to HERS testing. The following label must be attached to the fan switch: "To maintain minimum levels of outside air ventilation required for good health, the fan control should be on at all times when the building is occupied, unless there is severe outdoor air contamination." (California Ener gy Code 150.0(o)) A minimum 100 CFM indoor air quality fan is required in the kitchen and shall be HERS verified.
- <u> WILDLAND URBAN INTERFACE (WUI)</u> .. Exterior wall coverings shall be noncombustible, ignition resistant, heavy timber, log
- wall or fire resistive construction. (CRC R337.7) . Exterior wall coverings shall extend from the foundation to the roof and terminate at 2 inch nominal solid blocking between rafters and overhangs. (CRC R337.7.3.2)
- der-floor areas and undersides of appendages to comply with ignition resistant construction requirements. (CRC R337.5-9) Spaces created between roof coverings and roof decking shall be fire stopped by approved materials or have one layer of minimum 72lb mineral surfaced non-

Open/enclosed roof eaves and soffits, exterior porch ceilings, floor projections, un-

- perforated cap sheet complying with ASTM D 3909. (CRC R337.5.2) . Indicate on the plans where valley flashing is installed, the flashing shall be not less than 26awg and installed over not less than one layer of minimum 72lb mineral surfaced non-perforated cap sheet complying with ASTM D 3909 and at least 36 inches wide running the full length. (CRC R337.5.3)
- Attic gable and eaves above 12ft and under-floor ventilation shall be provided with fully covered metal wire mesh, vents, or other materials that have a minimum 1/16 inch and maximum 1/8 inch openings, non-combustible and corrosion resistant. All other eave vents shall be listed/approved to resist the intrusion of flame and
- burning embers. (CRC R337.6) Indicate on plans exterior glazing shall have a minimum of one-tempered pane. glass block, have a fire resistive rating of 20 minutes or be tested to meet perfor-
- mance requirements of SFM Standard 12-7A-2. (CRC R337.8.2) . Operable skylights shall be protected by a noncombustible mesh screen 1/8" max openings (R337.8.2.2 . Exterior doors including garage doors shall be noncombustible, ignition resistant
- material, minimum 1 3/8 inch solid core, minimum 20 minute fire resistive rating or shall be tested to meet the performance requirements of SFM Standard 12-7A-1.). Garage door perimeter gap maximum 1/8". Metal flashing, jamb and header overlap
- header overlap, and weather-stripping meeting section requirements are permitted. The walking surface material of decks, porches, balconies and stairs within 10ft of grade level shall be ignition resistant material, exterior fire-retardant treated wood

or noncombustible material. (CRC R337.9)

- **GREEN BUILDING** Projects which disturb less than one acre of soil and are not part of a larger common plan of development which in total disturbs one acre or more, shall manage storm water drainage during construction, one or more of the following measures shall be implemented to prevent flooding of adjacent property, prevent erosion
- Retention basins of sufficient size shall be utilized to retain storm water on site Where storm water is conveyed to a public drainage system, collection point, gutter, or similar disposal method, water shall be filtered by use of a barrier system,

and retain soil runoff on the site (CGBSC 4.106.2):

wattle or other method approved by the enforcing agency.

- All new residential construction with attached private garages shall have the following for electric vehicle (EV) charging stations (CGBSC 4.106.4): Install a minimum 1-inch conduit capable of supplying a 208/240V branch circuit to
- a suitable box location for EV charging. The other end shall terminate to the main service and/or subpanel The main panel and/or subpanel shall be of sufficient size to install a 40-ampere
- dedicated branch circuit. The dedicated overcurrent protection space shall be la-Multiple shower heads serving a single shower shall have a combined flow rate of
- 1.8 gpm or the shower shall be designed to allow only one shower outlet to be in operation at a time. (CGBSC 4.303.1.3.2) Residential projects with an aggregate landscape area equal to or greater than 500 square feet shall comply with either a local water efficient landscape ordinance or the current California Department of Water Resources' Model Water Efficient Landscape Ordinance (MWELO), whichever is more stringent. Automatic irrigation system controllers installed at time of final inspection shall have weather or soil based controllers and/or weather based controllers with rain sensors. Soil moisture based
- controllers are not required to have rain sensor input. (CGBSC 4.304) Recycle and/or reuse a minimum of 65 percent of nonhazardous construction and demolition waste. (CGBSC 4.408.2)
- Directions that manual shall remain onsite for the life of the building Operation and maintenance instructions for equipment, appliances, roof/yard drain-

Material regarding importance of keeping humidity levels between 30-60 percent

• A copy of any required special inspection verifications that were required (if any)

The project shall meet minimum pollutant control requirements for adhesives, seal-

3. (Clearly note on the plans) At time of final inspection, a building operation and

maintenance manual, compact disc, etc shall be provided containing the following:

age, irrigation systems, etc. Information from local utility, water and waste recovery providers

Public transportation and carpool options

- Information regarding routine maintenance procedures State solar energy incentive program information
- ants, caulks, paints, carpet, resilient flooring systems, etc. (CGBSC 4.504) 10. Duct openings related to HVAC systems shall be covered with tape, plastic, sheet metal or other methods to reduce the amount of water, dust and debris which may enter the system. (CGBSC 4.504.1)

BUILDING ENVELOPE NOTES

APPROVAL STAMP

- . Glazing in the following locations shall be safety glazing conforming to the human impacts loads:
- Fixed and operable panels of swinging, sliding and bifold door assemblies.
- 3. Glazing in an individual fixed or operable vertical edge is within a 24-inck arc of the door in a closed position and whose bottom edge is less than 60 inches above the floor or walking surface.
- 1. Glazing in an individual fixed or openable panel that meets all the following conditions:
- Exposed area of an individual pane grater that 9 sq.ft.
- Bottom edge less that 18 inches above the floor.

straight line of the water's edge.

- Top edge grater that 36 inches above the floor.
- One or more walking surfaces within 36 inches horizontally of the glazing. 5. Glazing in railings.
- 6. Glazing in enclosures for or wall facing hot tubs, whirlpools, saunas, steam rooms, bathtubs and showers where the bottom edge of the glazing is less than 72 inches above a waling surface and within 72 inches, measured horizontally and in a
- 7. Glazing adjacent to stairways, landings and ramps within 36 inches horizontally of a walking surface when the surface of the glazing is less than 60 inches above the
- plane of the adjacent walking surface. B. Glazing adjacent to stairways within 60 inches horizontally of the bottom tread of the exposed surface of the glazing is less than 60 inches above the nose of the
- 9. All new glazing will be installed with labels to remain in place for inspection. FIRE-RESISTANT RATED CONSTRUCTION
- 1. In combustible construction, fire blocking shall be provided to cut off all concealed draft openings (both vertical and horizontal) and to form an effective fire barrier between stories, and between a top story and the roof space.

In combustible construction where there is usable space both above and below the concealed space of a floor/ceiling assembly, draft-stops shall be installed so that the area of concealed space does not exceed 1000 sq.ft. equal areas for drafts

BUILDING CODE REQUIREMENTS NOTES

- The construction shall not restrict a five-foot clear and unobstructed access to any water or power distribution facilities (poer poles, pull-boxes, transformers, vaults, pumps, valves, meters, appurtenances, etc.) or to the location of the hook-up. the construction shall not be within the feet or any power lines-whether or not the lines are located on the property. failure to comply may cause construction delays and/or additional expenses.
- An approved seismic gas shut off valve or excess flow shut off valve will be installed on the fuel gas line on the down-stream side of the utility meter and be rigidly connected to the exterior of the building or structure containing the fuel piping. (per ordinance 170,158 and 180, 670) separate plumbing permit is
- Provide ultra-flush water closets for all new construction, existing shower heads and toilets must be adapted for low water consumption.
- Provide (70) (72) inch high non-absorbent wall adjacent to shower and approved shatter-resistant materials for shower enclosure. (1210.2.3, 2406.4.5 , r307.2 , r308.4)
- Water heater must be strapped to wall, (507.3 & LAPC)

project construction.

The general notes sheet is based on the 2022 California Building Standard Codes. This is not an all inclusive list of code requirements specific to the project. Reference applicable

fixtures/equipment, structural components, structural design

criteria, building finishes and other components specific to the

sheets and specific areas of the plans for locations of

2022 GENERAL NOTES SHEET

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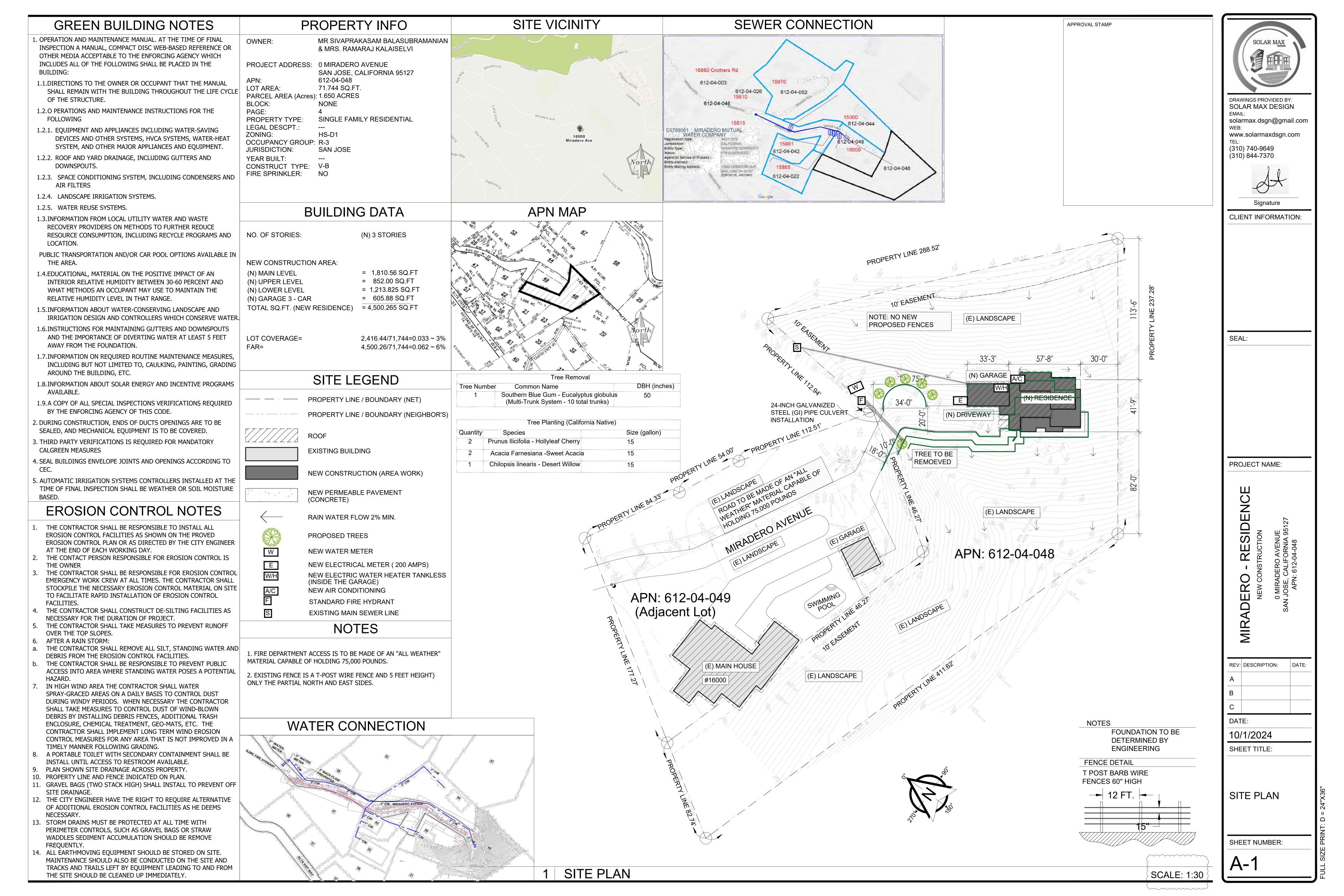
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CLIENT INFORMATION:

SHEET NUMBER:

SEAL: PROJECT NAME: Ш REV: DESCRIPTION: DATE: 9/19/2024 SHEET TITLE: **GENERAL** NOTES



					DOO	R SCHEDUI	LE				
		QTY TYPE	DOOR SIZI	OOR SIZE (INCHES)							
ID. QTY	QTY		FINISHED WIDTH	FINISHED HEIGHT	THICK	MATERIAL	FINISH	U-FACTOR	HARDWARE	THRESHOLD	NOTES
01	1	SLIDING	72"	84"	0'-1 3/4"	WOOD/GLASS	PAINT	.50	STANDARD	ALUM.	NEW
02	1	GARAGE	96"	84"	0'-1 3/8"	WOOD/GLASS	PAINT	-	STANDARD	ALUM.	NEW
03	1	SINGLE	36"	84"	0'-1 3/8"	WOOD/GLASS	PAINT	-	STANDARD	ALUM.	NEW
04	13	SINGLE	32"	84"	0'-1 3/8"	WOOD	PAINT	-	STANDARD	ALUM.	NEW
05	2	BIFOLD	216"	84"	0'-1 3/8"	WOOD/GLASS	PAINT	.50	STANDARD	ALUM.	NEW
06	3	SLIDING	72"	84"	0'-1 3/4"	VINYL/GLASS	PAINT	.50	STANDARD	ALUM.	NEW
07	1	BIFOLD	144"	84"	0'-1 3/4"	VINYL/GLASS	PAINT	.50	STANDARD	ALUM.	NEW
08	1	DOUBLE	36"	84"	0'-1 3/4"	VINYL/GLASS	PAINT	.50	STANDARD	ALUM.	NEW
09	1	GARAGE	180"	84"	0'-1 3/4"	VINYL/GLASS	PAINT	.50	STANDARD	ALUM.	NEW

PROPOSED FIRST FLOOR PLAN

				W	'INDOWS S	CHEDULE				
FRAME SIZE (INCHES)				TYPE						
ID	QTY	FINISHED WIDTH	FINISHED HEIGHT	MATERIAL	TYPE	GLAZING	U-FACTOR	SHGC	STC RATING	NOTES
Α	1	60"	84"	ALUMINUM COATED	FIXED	TEMPERED	.30	.23	.37	NEW
В	1	72"	120"	ALUMINUM COATED	FIXED	TEMPERED	.30	.23	.37	NEW
С	1	72"	48"	ALUMINUM COATED	AWNING	DUAL GLAZED/ LOW E GLASS	.30	.23	.37	NEW
D	1	144"	48"	ALUMINUM COATED	AWNING	DUAL GLAZED/ LOW E GLASS	.30	.23	.37	NEW
Е	5	48"	60"	ALUMINUM COATED	AWNING	DUAL GLAZED/ LOW E GLASS	.30	.23	.37	NEW
F	2	43"	48"	ALUMINUM COATED	FIXED	TEMPERED	.30	.23	.37	NEW
G	4	48"	60"	ALUMINUM COATED	AWNING	DUAL GLAZED/ LOW E GLASS	.30	.23	.37	NEW
Н	2	24"	48"	ALUMINUM COATED	HUNGED	TEMPERED	.30	.23	.37	NEW
I	1	48"	48"	ALUMINUM COATED	AWNING	DUAL GLAZED/ LOW E GLASS	.30	.23	.37	NEW



EXISTING WALL

NEW WALL

DEMO WALL

DOOR IDENTIFICATION TO REFER TO DOOR SCHEDULE

WINDOW IDENTIFICATION TO REFER TO WINDOW SCHEDULE

SMOKE ALARM SHALL BE INTERCONNECTED HARD-WIRED WITH BATTERY BACKUP AND SHALL BE INSTALLED IN ACCORDANCE WITH NFPA 72.

CARBON MONOXIDE ALARM SHALL BE INTERCONNECTED HARD-WIRED WITH BATTERY BACKUP

EXHAUST FAN SHALL BE PROVIDE HUMIDISTAT HAVE A SENSOR IN BATHROOM AREA. MINIMUM VENTILATION SHALL BE 50 CUBIC FEET PER MINUTE FOR INTERMITTENT VENTILATION OR 20 CUBIC FEET PER MINUTE FOR CONTINUOUS VENTILATION.

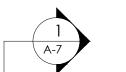
EXHAUST FAN IN KITCHEN DUCTED TO THE OUTSIDE WITH A MINIMUM VENTILATION RATE OF 100 CFRN.

SP NEW SUB-PANEL 100A

(G) NEW GAS METER

© W/H NEW WATER HEATER TANK-LESS



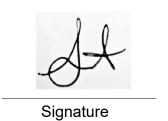




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CLIENT INFORMATION:

SEAL:

PROJECT NAME:

- RESIDENCE STRUCTION

MIRADERO -

REV: DESCRIPTION: DATE:

3/29/2023

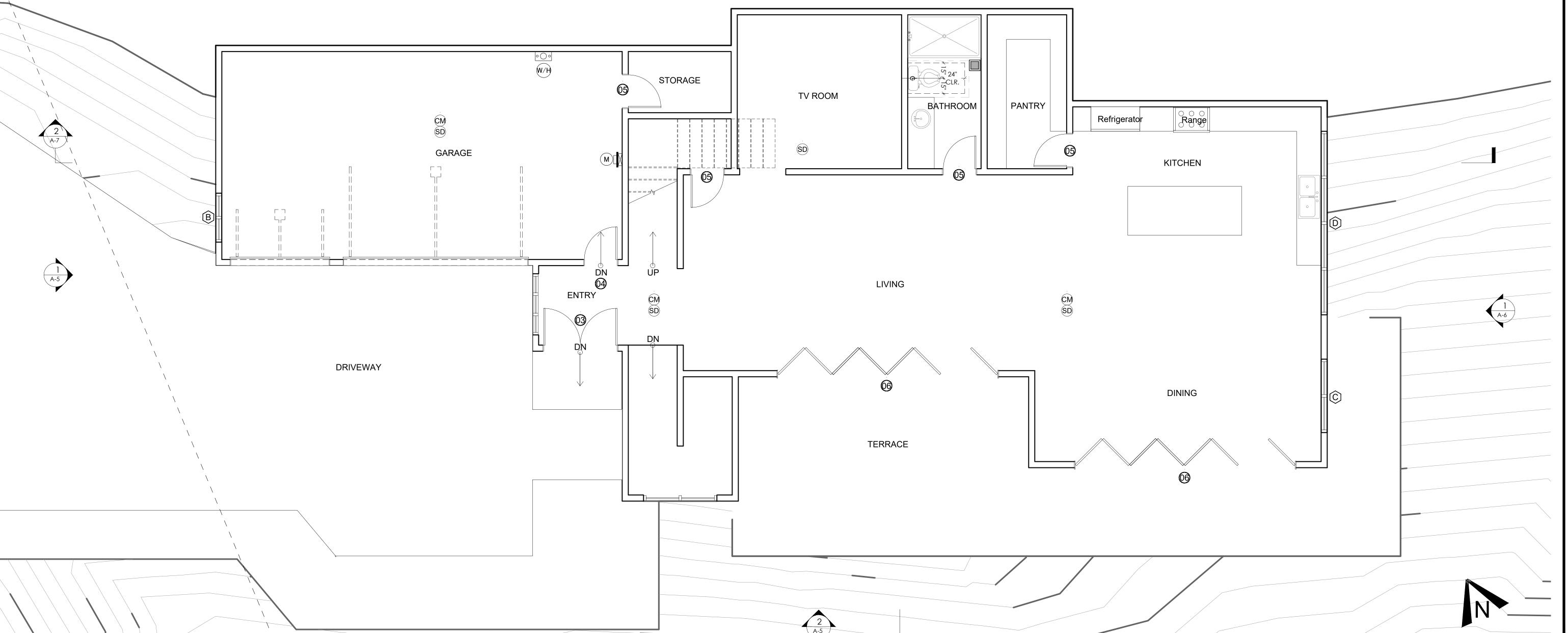
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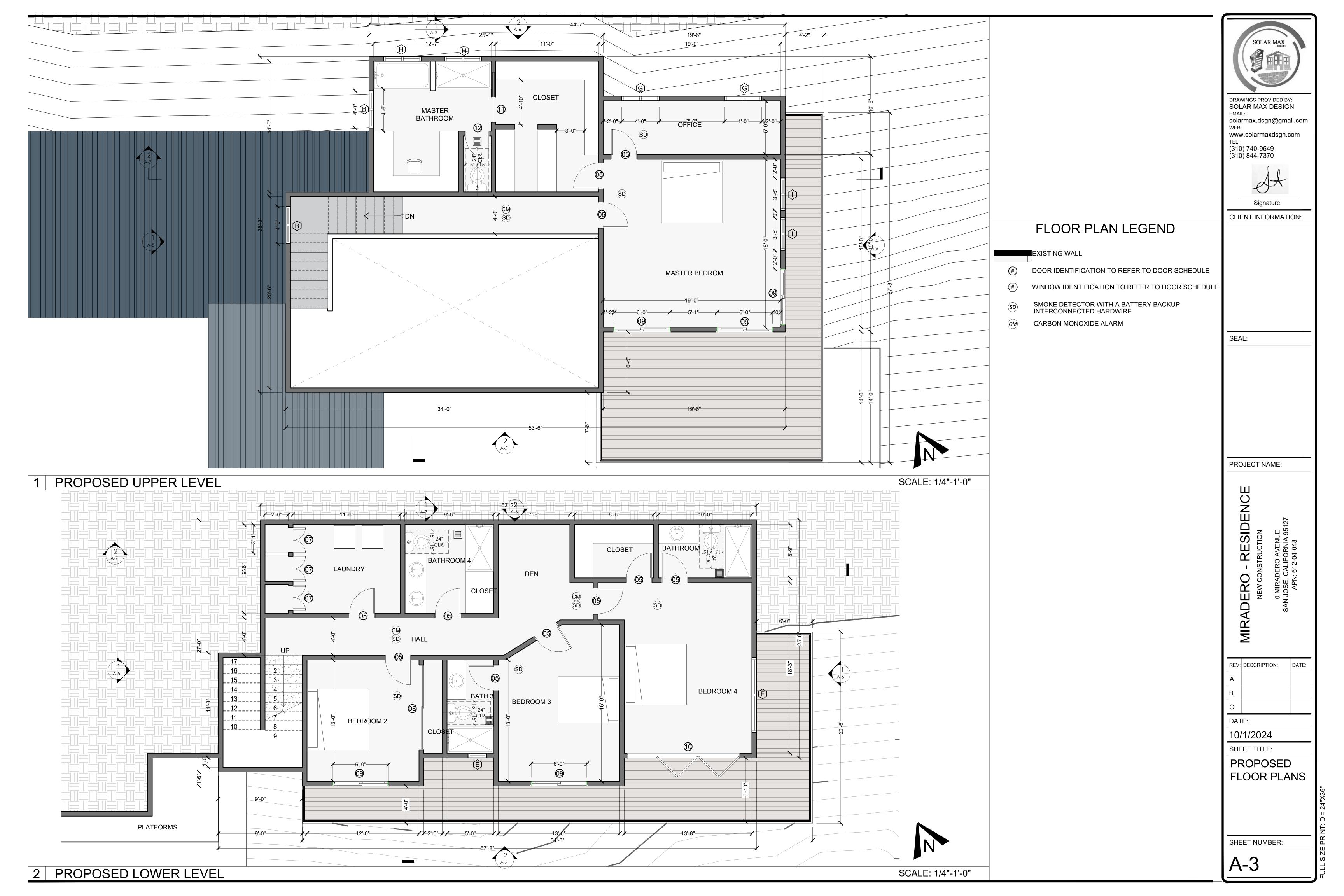
EXISTING

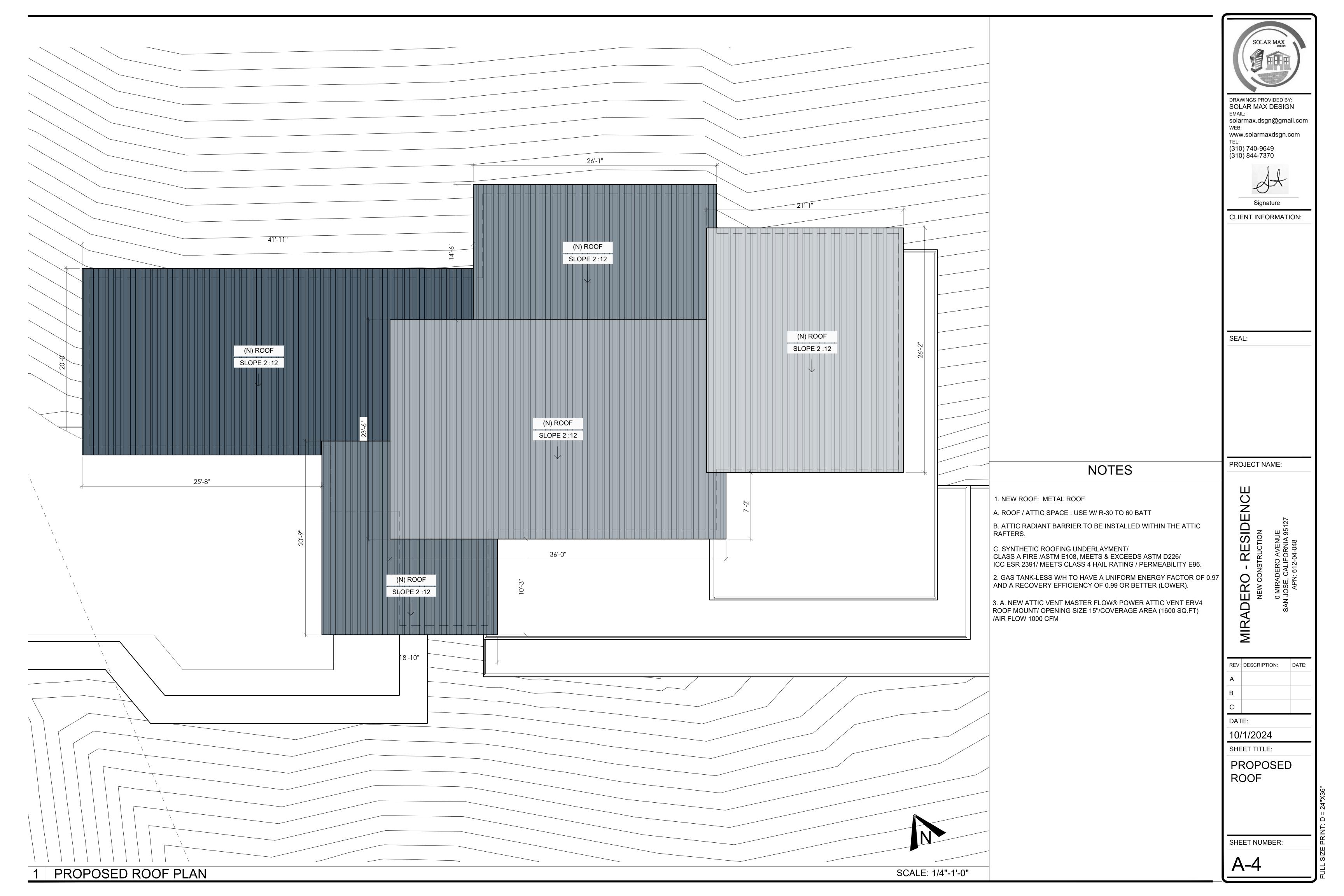
FLOOR PLAN

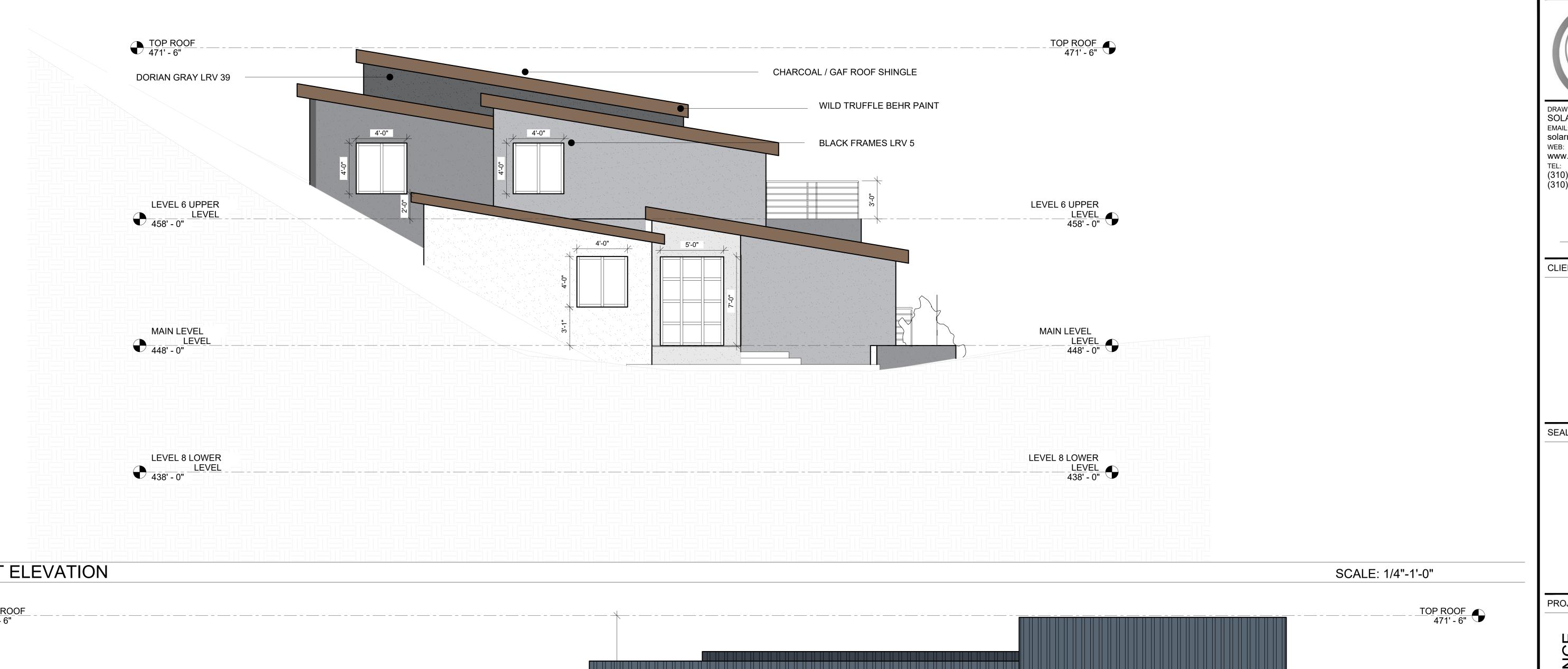
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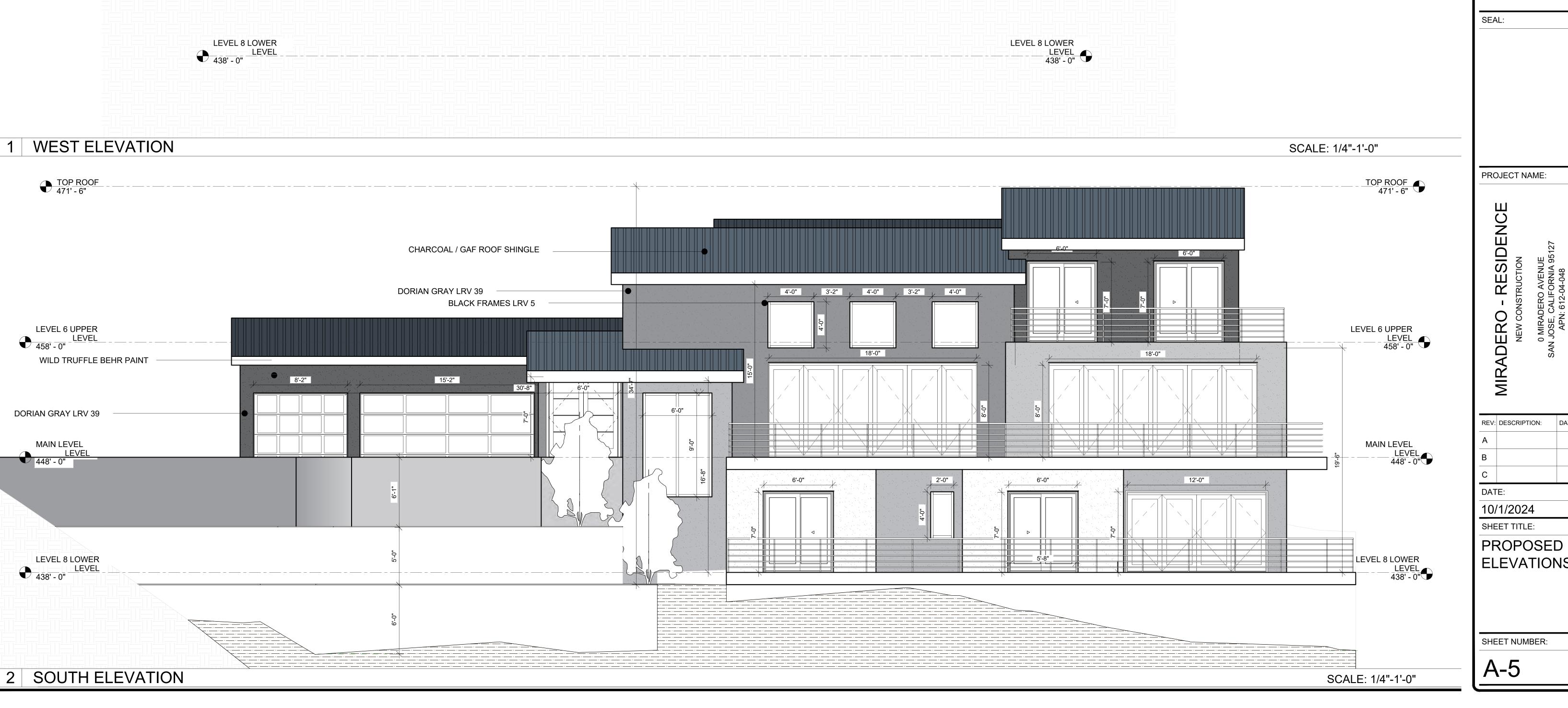
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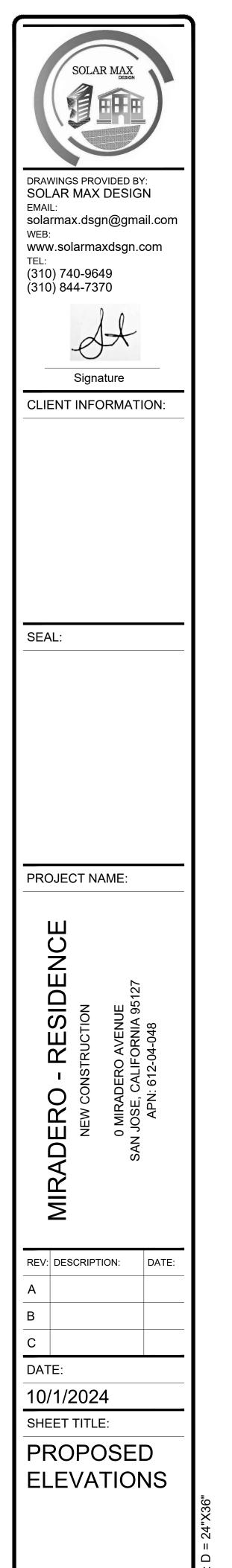


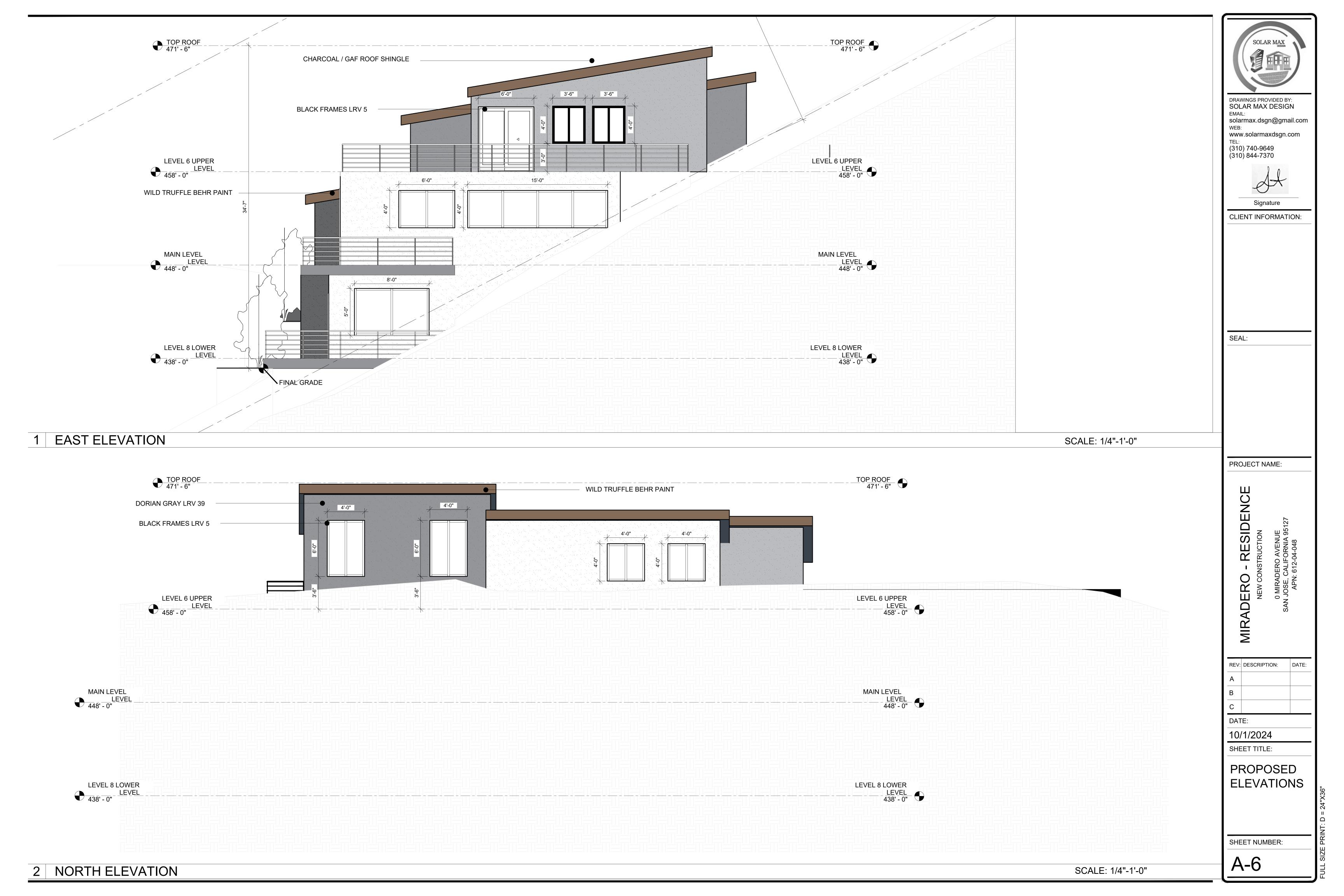


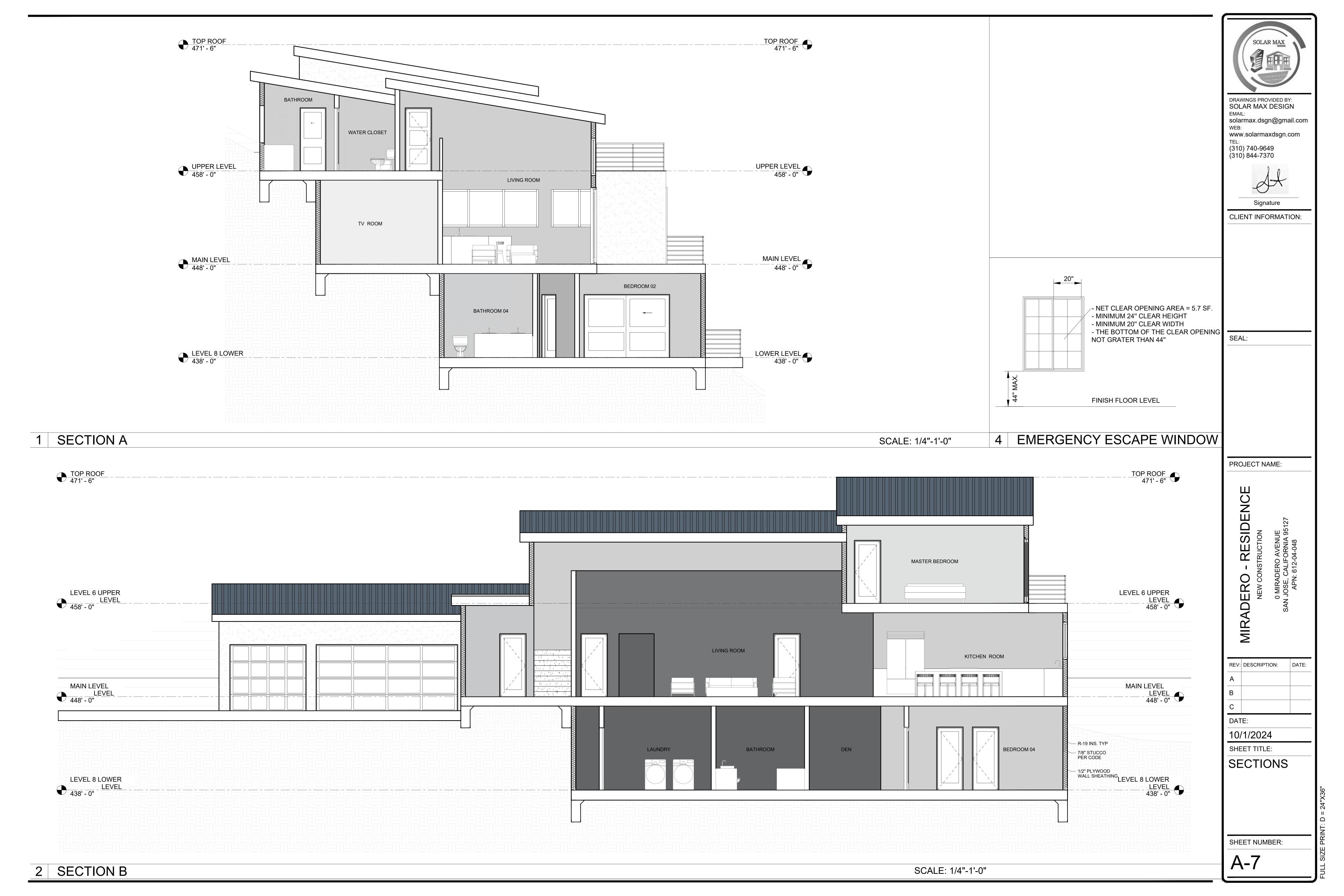




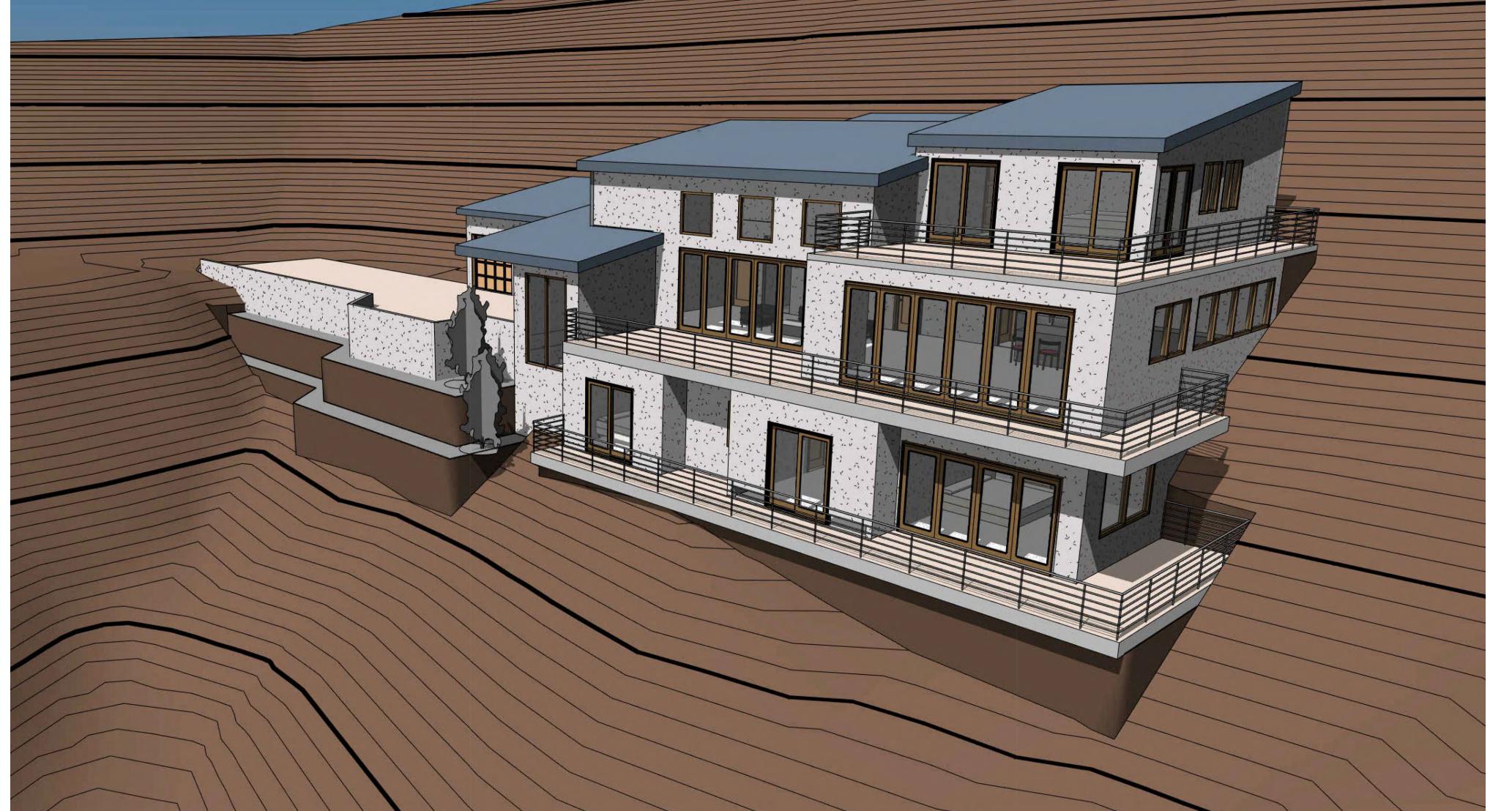






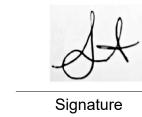








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solarmax.dsgn@gmail.com
WEB:
www.solarmaxdsgn.com
TEL:
(310) 740-9649
(310) 844-7370



CLIENT INFORMATION:

SEAL:

PROJECT NAME:

) - RESIDENCE ONSTRUCTION

MIRADERO -

REV: DESCRIPTION:

DATE:

9/12/2024

SHEET TITLE:

3D VIEWS

SHEET NUMBER:

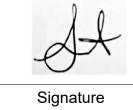
3D VIEW

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





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CLIENT INFORMATION:

SEAL:

PROJECT NAME:

) - RESIDENCE

MIRADERO -

REV: DESCRIPTION:

DATE:

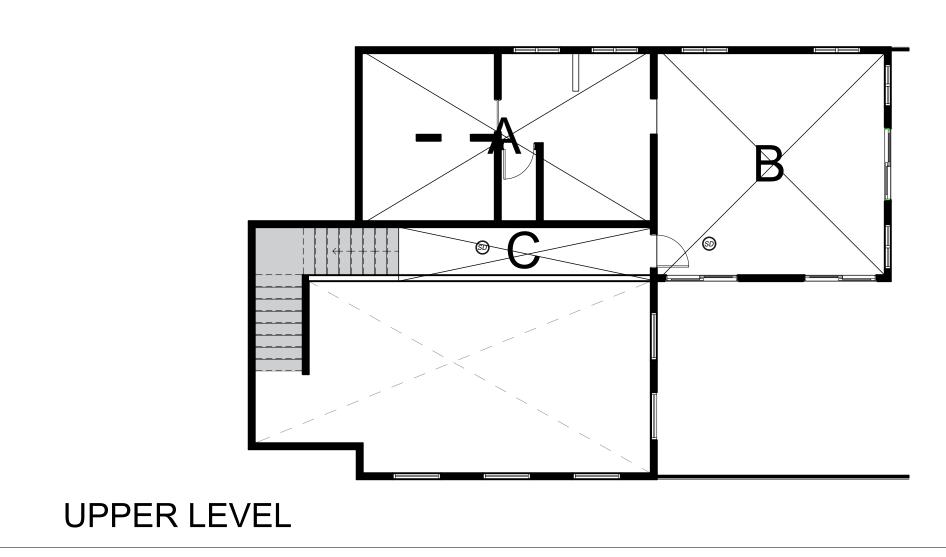
9/12/2024

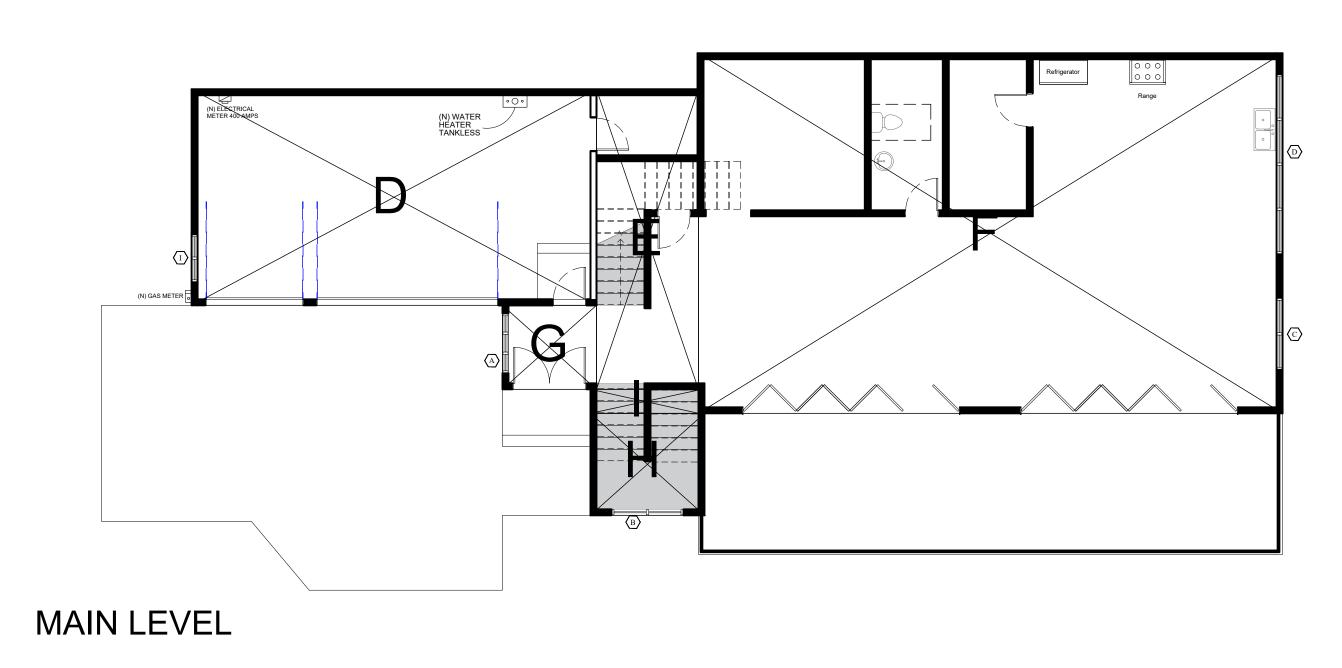
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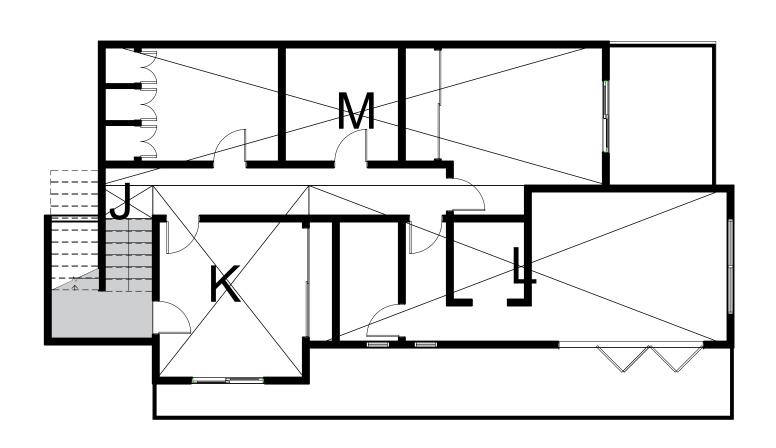
SHEET NUMBER:



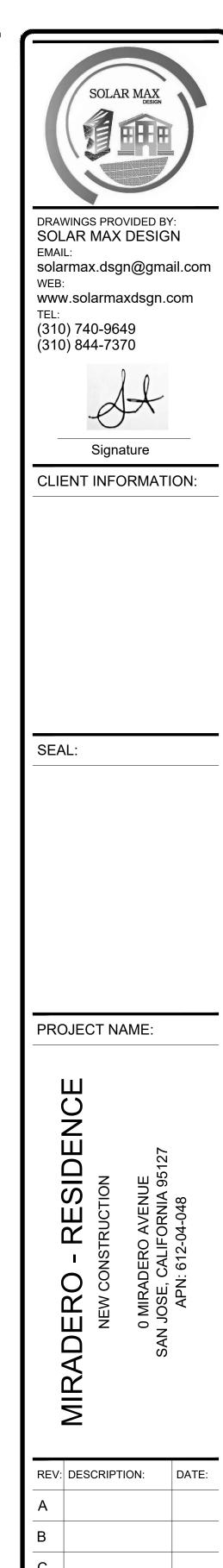
3D VIEW SCALE: 1/4"-1'-0"







AREA CALCULATION						
	FRAME SIZE (INCHES)					
ID	DIMENSIONS	AREA SQF				
Α	25' x15'	375				
В	19.5' x 19.5'	380.25				
С	4.5' x 21.5'	96.75				
D	33.66' x 18'	605.88				
E	8.5' x 25'	212.5				
F	48.75' x 30'	1,462.5				
G	7' x 7.83'	54.81				
Н	8.5' x 9.5'	80.75				
I	2' x 9'	18				
J	2.75' x 4.5'	12.375				
K	13' x 16.5'	214.5				
L	13.5' x 35.33'	476.95				
М	42.5' X 12'	510				
TOTAL 4,500.265						



10/1/2024

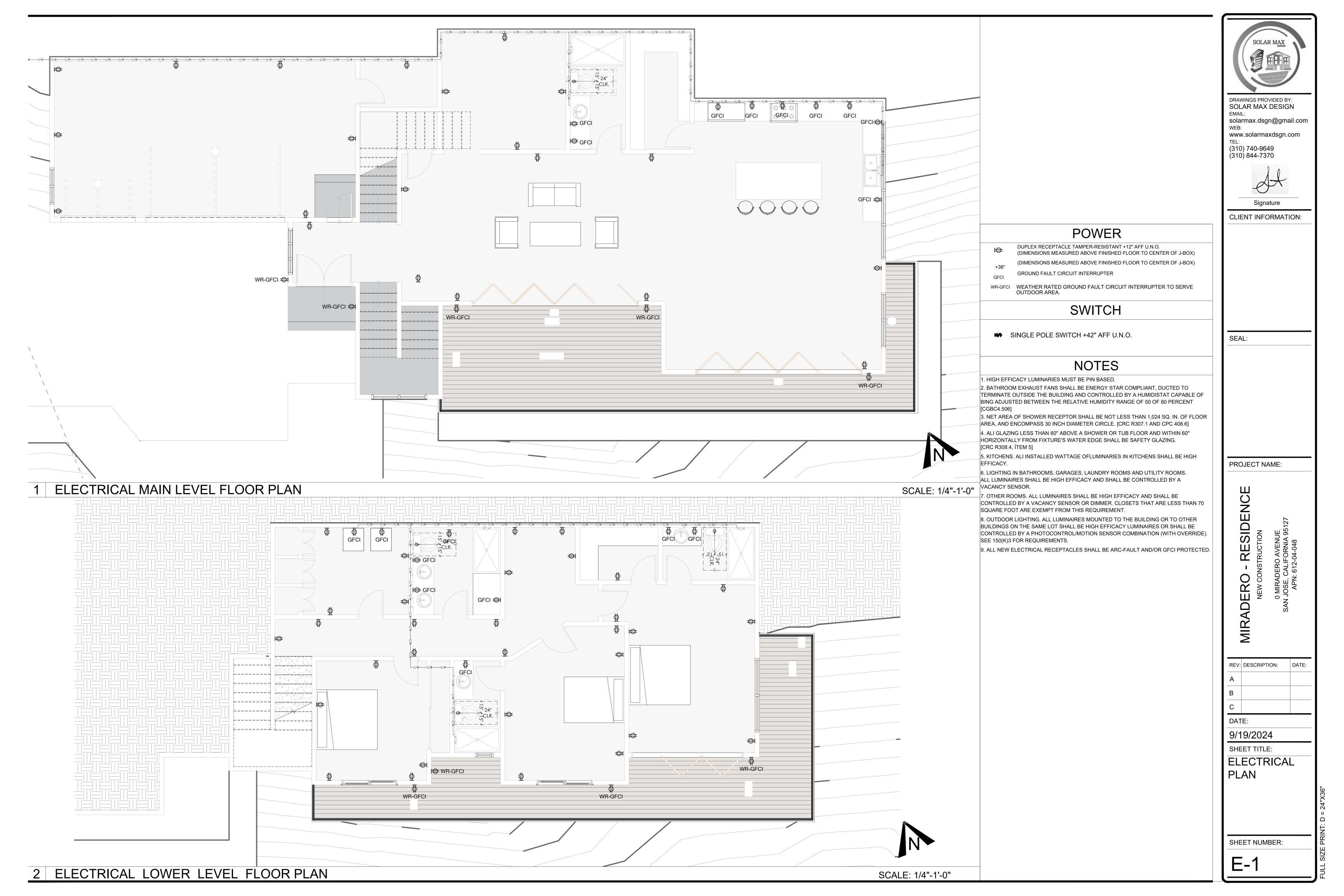
SHEET TITLE: FLOOR AREA

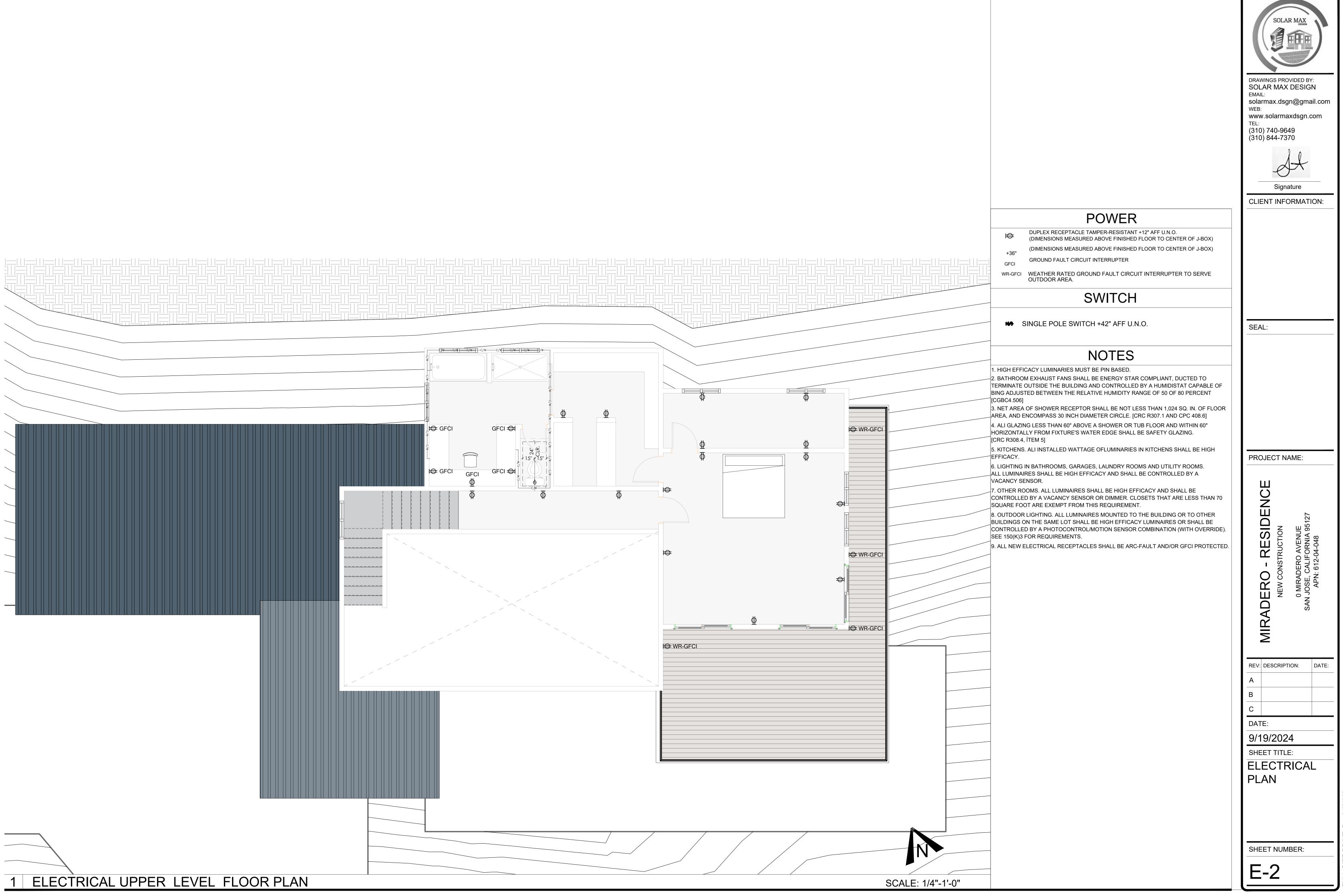
CALCULATIONS

SHEET NUMBER:

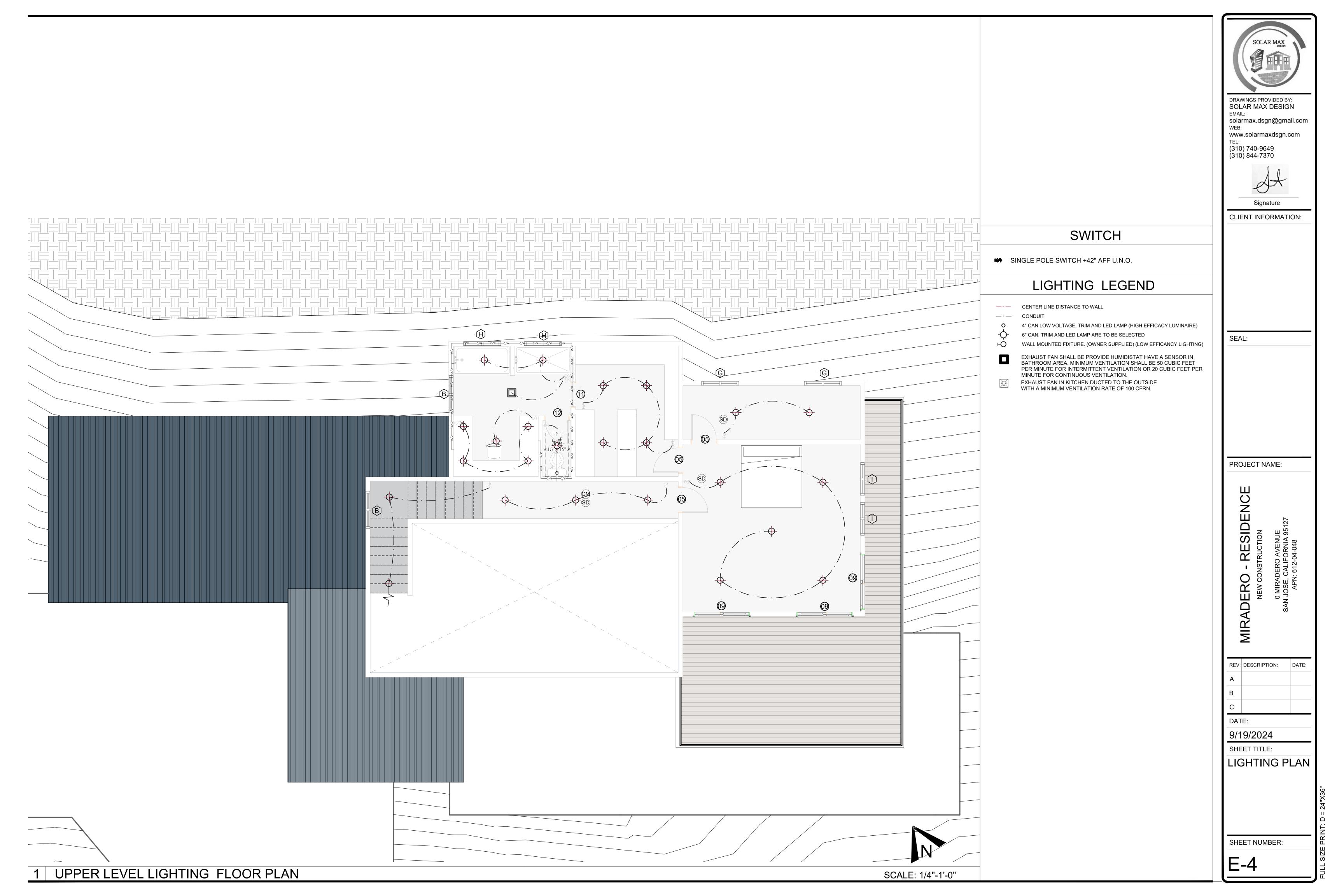
A-10

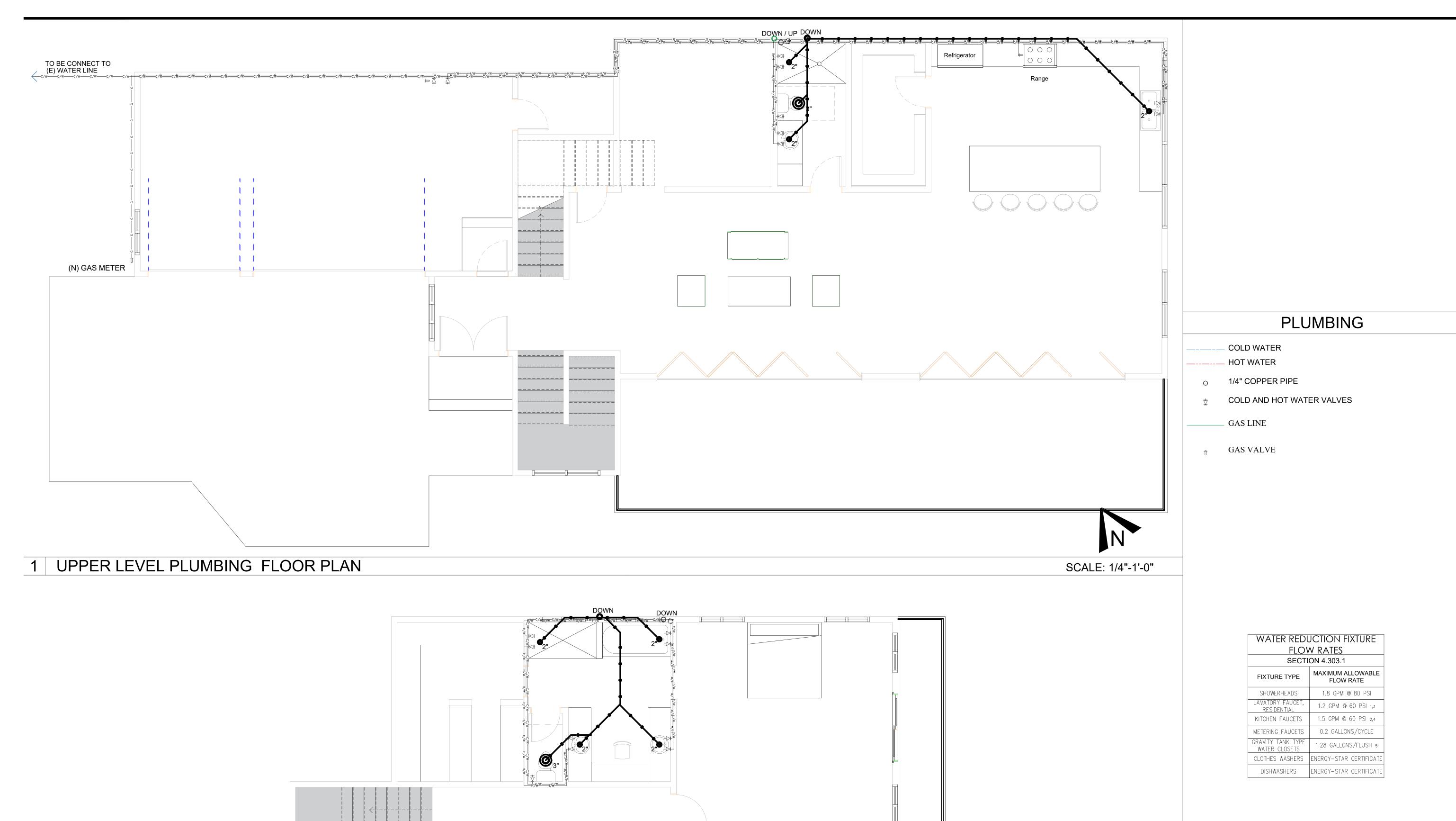
LOWER LEVEL FLOOR AREA CALCULATION

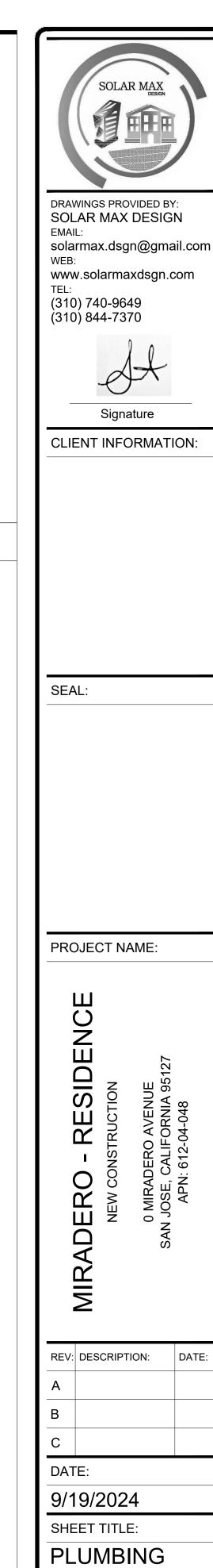










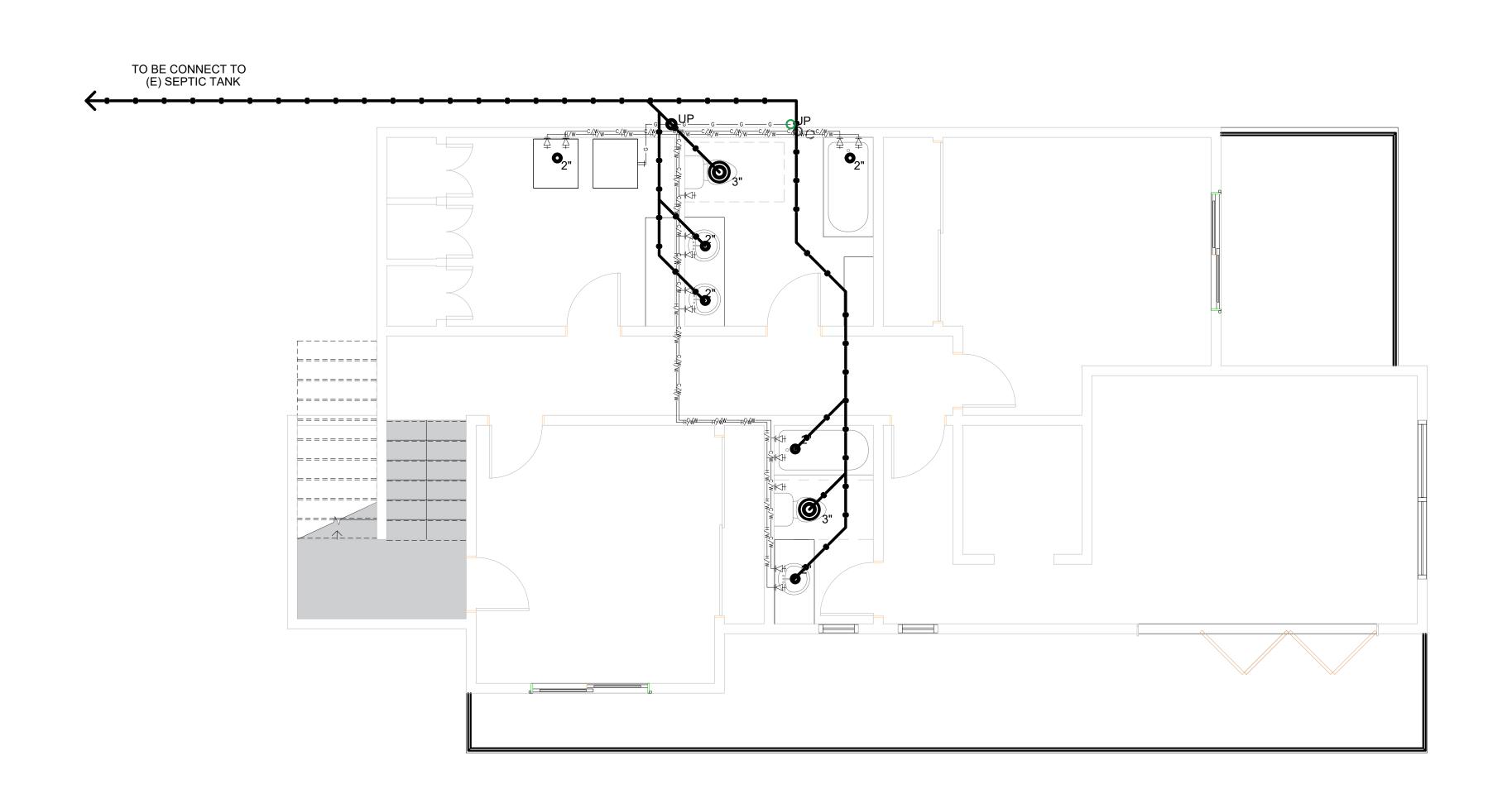


2 UPPER LEVEL PLUMBING FLOOR PLAN

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

P-1

SHEET NUMBER:





COLD WATER
HOT WATER

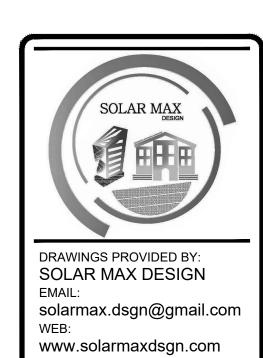
1/4" COPPER PIPE

 $_{\buildrel 2}$ COLD AND HOT WATER VALVES

___ GAS LINE

⊕ GAS VALVE

WATER REDUCTION FIXTURE						
FLOW RATES						
SECTION 4.303.1						
FIXTURE TYPE	MAXIMUM ALLOWABLE FLOW RATE					
SHOWERHEADS	1.8 GPM @ 80 PSI					
LAVATORY FAUCET, RESIDENTIAL	1.2 GPM @ 60 PSI 1,3					
KITCHEN FAUCETS	1.5 GPM @ 60 PSI 2,4					
METERING FAUCETS	0.2 GALLONS/CYCLE					
GRAVITY TANK TYPE WATER CLOSETS	1.28 GALLONS/FLUSH 5					
CLOTHES WASHERS	ENERGY-STAR CERTIFICAT					
DICHWACHERC	ENERGY_STAR CERTIFICAT					



Signature

TEL: (310) 740-9649 (310) 844-7370

CLIENT INFORMATION:

SEAL:

PROJECT NAME:

O - RESIDENCE

V CONSTRUCTION

RADERO AVENUE

SE CALIEDRALA 95127

DESCRIPTION: DA

REV: DESCRIPTION: DATE:

A

B

C

9/19/2024

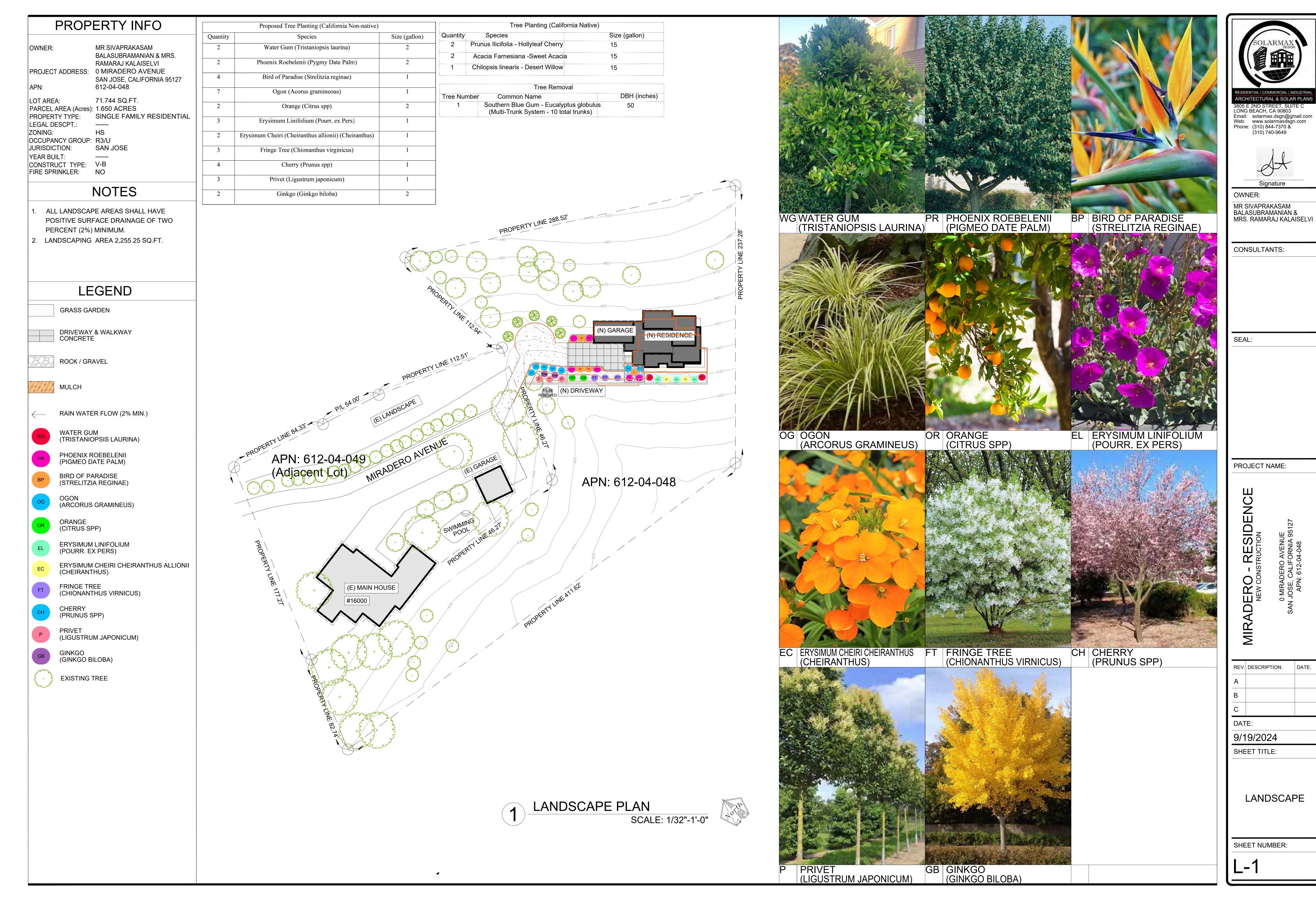
SHEET TITLE:

PLUMBING

SHEET NUMBER:

D_2

N



CHAPTER 3

GREEN BUILDING

1. The Model Water Efficient Landscape Ordinance (MWELO) is located in the California Code Regulations,

DIVISION 4.4 MATERIAL CONSERVATION AND RESOURCE

4.406.1 RODENT PROOFING. Annular spaces around pipes, electric cables, conduits or other openings in

openings with cement mortar, concrete masonry or a similar method acceptable to the enforcing

4.408 CONSTRUCTION WASTE REDUCTION, DISPOSAL AND RECYCLING

percent of the non-hazardous construction and demolition waste in accordance with either Section

4.408.1 CONSTRUCTION WASTE MANAGEMENT. Recycle and/or salvage for reuse a minimum of 65

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

2. Alternate waste reduction methods developed by working with local agencies if diversion or

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

necessary and shall be available during construction for examination by the enforcing agency.

4.408.3 WASTE MANAGEMENT COMPANY. Utilize a waste management company, approved by the

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

per square foot of the building area, shall meet the minimum 65% construction waste reduction

4.408.5 DOCUMENTATION. Documentation shall be provided to the enforcing agency which demonstrates

1. Sample forms found in "A Guide to the California Green Building Standards Code

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

disc, web-based reference or other media acceptable to the enforcing agency which includes all of the

1. Directions to the owner or occupant that the manual shall remain with the building throughout the

3. Information from local utility, water and waste recovery providers on methods to further reduce

5. Educational material on the positive impacts of an interior relative humidity between 30-60 percent

6. Information about water-conserving landscape and irrigation design and controllers which conserve

7. Instructions for maintaining gutters and downspouts and the importance of diverting water at least 5

and what methods an occupant may use to maintain the relative humidity level in that range.

8. Information on required routine maintenance measures, including, but not limited to, caulking,

10. A copy of all special inspections verifications required by the enforcing agency or this code.

4.410.2 RECYCLING BY OCCUPANTS. Where 5 or more multifamily dwelling units are constructed on a

building site, provide readily accessible area(s) that serves all buildings on the site and are identified for the

depositing, storage and collection of non-hazardous materials for recycling, including (at a minimum) paper, corrugated cardboard, glass, plastics, organic waster, and metals, or meet a lawfully enacted local recycling

Exception: Rural jurisdictions that meet and apply for the exemption in Public Resources Code Section

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.

AGRIFIBER PRODUCTS. Agrifiber products include wheatboard, strawboard, panel substrates and door

COMPOSITE WOOD PRODUCTS. Composite wood products include hardwood plywood, particleboard and

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

medium density fiberboard. "Composite wood products" does not include hardboard, structural plywood.

cores, not including furniture, fixtures and equipment (FF&E) not considered base building elements.

42649.82 (a)(2)(A) et seq. are note required to comply with the organic waste portion of

11. Information from the Department of Forestry and Fire Protection on maintenance of defensible

a. Equipment and appliances, including water-saving devices and systems, HVAC systems,

photovoltaic systems, electric vehicle chargers, water-heating systems and other major

(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

compliance with Section 4.408.2, items 1 through 5, Section 4.408.3 or Section 4.408.4..

Department of Resources Recycling and Recovery (CalRecycle).

demolition waste material diverted from the landfill complies with Section 4.408.1.

recycle facilities capable of compliance with this item do not exist or are not located reasonably

in conformance with Items 1 through 5. The construction waste management plan shall be updated as

1. Identify the construction and demolition waste materials to be diverted from disposal by recycling,

2. Specify if construction and demolition waste materials will be sorted on-site (source separated) or

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 waste

enforcing agency, which can provide verifiable documentation that the percentage of construction and

Note: The owner or contractor may make the determination if the construction and demolition waste

lbs./sq.ft. of the building area shall meet the minimum 65% construction waste reduction requirement in

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

Specify that the amount of construction and demolition waste materials diverted shall be calculated

sole/bottom plates at exterior walls shall be protected against the passage of rodents by closing such

4.406 ENHANCED DURABILITY AND REDUCED MAINTENANCE

Title 23, Chapter 2.7, Division 2. MWELO and supporting documents, including water budget calculator, are

N/A RESPON.

4.304 OUTDOOR WATER USE

EFFICIENCY

management ordinance.

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

available at: https://www.water.ca.gov/

1. Excavated soil and land-clearing debris.

bulk mixed (single stream).

requirement in Section 4.408.1

by weight or volume, but not by both.

reuse on the project or salvage for future use or sale

materials will be diverted by a waste management company.

documenting compliance with this section.

4.410 BUILDING MAINTENANCE AND OPERATION

2. Operation and maintenance instructions for the following:

b. Roof and yard drainage, including gutters and downspouts

resource consumption, including recycle programs and locations.

9. Information about state solar energy and incentive programs available.

DIVISION 4.5 ENVIRONMENTAL QUALITY

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

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

Public transportation and/or carpool options available in the area.

Space conditioning systems, including condensers and air filters.

following shall be placed in the building:

appliances and equipment.

d. Landscape irrigation systems.

e. Water reuse systems.

feet away from the foundation

ordinance, if more restrictive.

5.102.1 DEFINITIONS

SECTION 4.501 GENERAL

SECTION 4.502 DEFINITIONS

painting, grading around the building, etc.

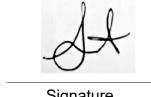
space around residential structures.

life cycle of the structure.

DRAWINGS PROVIDED BY **SOLAR MAX DESIGN**

solarmax.dsgn@gmail.com

(310) 740-9649 (310) 844-7370



CLIENT INFORMATION:

www.solarmaxdsgn.com Signature SEAL: **PROJECT NAME:** SIDEN REV: DESCRIPTION: DATE: 9/19/2024 SHEET TITLE: CAL GREEN SHEET 1 SHEET NUMBER:

4.106.4.2 New multifamily dwellings, hotels and motels and new residential parking facilities. When parking is provided, parking spaces for new multifamily dwellings, hotels and motels shall meet the requirements of Sections 4.106.4.2.1 and 4.106.4.2.2. Calculations for spaces shall be rounded up to the nearest whole number. A parking space served by electric vehicle supply equipment or designed as a future EV charging space shall count as at least one standard automobile parking space only for the purpose of complying with any applicable minimum parking space requirements established by a local jurisdiction. See Vehicle Code Section 22511.2 4.106.4.2.1Multifamily development projects with less than 20 dwelling units; and hotels and motels with less The number of dwelling units, sleeping units or guest rooms shall be based on all buildings on a project site subject to 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 a. Construction documents are intended to demonstrate the project's capability and capacity for facilitating 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. 4.106.4.2.2 Multifamily development projects with 20 or more dwelling units, hotels and motels with 20 or more 2. The charging space shall be located on an accessible route, as defined in the California Building Code,

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 Electrical Code. 4.303.2 Submeters for multifamily buildings and dwelling units in mixed-used residential/commercial 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 THE USER. TABLE - MAXIMUM FIXTURE WATER USE **FIXTURE TYPE**

4.106.4.2.4 Identification. The service panel or subpanel circuit directory shall identify the overcurrent protective device space(s) reserved for future EV charging purposes as "EV CAPABLE" in accordance with the California Electrical Code. 4.106.4.2.5 Electric Vehicle Ready Space Signage. Electric vehicle ready spaces shall be identified by signage or pavement markings, in compliance with Caltrans Traffic Operations Policy Directive 13-01 (Zero Emission Vehicle Signs and Pavement Markings) or its 4.106.4.3 Electric vehicle charging for additions and alterations of parking facilities serving existing When new parking facilities are added, or electrical systems or lighting of existing parking facilities are added or 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. 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 4.201.1 SCOPE.** For the purposes of mandatory energy efficiency standards in this code, the California Energy Commission will continue to adopt mandatory standards. DIVISION 4.3 WATER EFFICIENCY AND CONSERVATION 4.303 INDOOR WATER USE 4.303.1 WATER CONSERVING PLUMBING FIXTURES AND FITTINGS. Plumbing fixtures (water closets and urinals) and fittings (faucets and showerheads) shall comply with the sections 4.303.1.1, 4.303.1.2, 4.303.1.3, Note: All noncompliant plumbing fixtures in any residential real property shall be replaced with water-conserving plumbing fixtures. Plumbing fixture replacement is required prior to issuance of a certificate of final completion, certificate of occupancy, or final permit approval by the local building department. See Civil Code Section 1101.1, et seq., for the definition of a noncompliant plumbing fixture, types of residential buildings affected and other important enactment dates. **4.303.1.1 Water Closets.** The effective flush volume of all water closets shall not exceed 1.28 gallons per flush. Tank-type water closets shall be certified to the performance criteria of the U.S. EPA WaterSense Specification for Tank-type Toilets. Note: The effective flush volume of dual flush toilets is defined as the composite, average flush volume of two reduced flushes and one full flush 4.303.1.2 Urinals. The effective flush volume of wall mounted urinals shall not exceed 0.125 gallons per flush. The effective flush volume of all other urinals shall not exceed 0.5 gallons per flush. 4.303.1.3 Showerheads. **4.303.1.3.1 Single Showerhead.** Showerheads shall have a maximum flow rate of not more than 1.8 gallons per minute at 80 psi. Showerheads shall be certified to the performance criteria of the U.S. EPA WaterSense Specification for Showerheads. **4.303.1.3.2 Multiple showerheads serving one shower**. When a shower is served by more than one showerhead, the combined flow rate of all the showerheads and/or other shower outlets controlled by a single valve shall not exceed 1.8 gallons per minute at 80 psi, or the shower shall be designed to only allow one shower outlet to be in operation at a time 4.303.1.4 Faucets. **4.303.1.4.1 Residential Lavatory Faucets.** The maximum flow rate of residential lavatory faucets shall not exceed 1.2 gallons per minute at 60 psi. The minimum flow rate of residential lavatory faucets shall not be less than 0.8 gallons per minute at 20 psi. 4.303.1.4.2 Lavatory Faucets in Common and Public Use Areas. The maximum flow rate of lavatory faucets installed in common and public use areas (outside of dwellings or sleeping units) in residential buildings shall not exceed 0.5 gallons per minute at 60 psi. 4.303.1.4.3 Metering Faucets. Metering faucets when installed in residential buildings shall not deliver more than 0.2 gallons per cycle. **4.303.1.4.4 Kitchen Faucets.** The maximum flow rate of kitchen faucets shall not exceed 1.8 gallons per minute at 60 psi. Kitchen faucets may temporarily increase the flow above the maximum rate, but not to exceed 2.2 gallons per minute at 60 psi, and must default to a maximum flow rate of 1.8 gallons per 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

sleeping units or guest rooms. The number of dwelling units, sleeping units or guest rooms shall be based on all buildings on a project site subject to **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 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.

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:

for further details.

than 20 sleeping units or guest rooms.

EV chargers installed

EV chargers are installed for use.

Exception: Areas of parking facilities served by parking lifts.

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

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.

Chapter 2, to the building. Exception: Electric vehicle charging stations designed and constructed in compliance with the California

Building Code, Chapter 11B, are not required to comply with Section 4.106.4.2.2.1.1 and Section

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.

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

4.106.4.2.3 EV space requirements.

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

construction in accordance with the California Electrical Code.

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.

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

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

1.8 GMP @ 80 PSI SHOWER HEADS (RESIDENTIAL) MAX. 1.2 GPM @ 60 PSI MIN. 0.8 GPM @ 20 LAVATORY FAUCETS (RESIDENTIAL) LAVATORY FAUCETS IN COMMON & PUBLIC 0.5 GPM @ 60 PSI USE AREAS 1.8 GPM @ 60 PSI KITCHEN FAUCETS

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

(d)(7) and shall be equipped with an integral automatic shutoff.

STANDARDS FOR COMMERCIAL PRE-RINSE SPRAY

VALUES MANUFACTURED ON OR AFTER JANUARY 28, 2022

1605.3 (h)(4)(A).

TABLE H-2

[spray force in ounce force (ozf)]

Product Class 2 (> 5.0 ozf and \leq 8.0 ozf)

Product Class 1 (≤ 5.0 ozf)

Product Class 3 (> 8.0 ozf)

Efficiency Regulations), Sections 1605.1 (h)(4) Table H-2, Section 1605.3 (h)(4)(A), and Section 1607

FOR REFERENCE ONLY: The following table and code section have been reprinted from the California

MAXIMUM FLOW RATE (gpm)

1.00

1.20

1.28

FLOW RATE

Code of Regulations, Title 20 (Appliance Efficiency Regulations), Section 1605.1 (h)(4) and Section

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)]

0.2 GAL/CYCLE

1.28 GAL/FLUSH

METERING FAUCETS WATER CLOSET

0.125 GAL/FLUSH

combustion from the outside atmosphere and discharges all flue gases to the outside atmosphere.

DIRECT-VENT APPLIANCE. A fuel-burning appliance with a sealed combustion system that draws all air for

DISCLAIMER: THIS DOCUMENT IS PROVIDED AND INTENDED TO BE USED AS A MEANS TO INDIVIDUAL NEEDS. THE END USER TO MEET THOSE INDIVIDUAL NEEDS. THE END USER ASSUMES ALL RESPONSIBILITY ASSOCIATED WITH THE USE OF THIS DOCUMENT, INCLUDING VERIFICATION WITH THE FULL CODE.

accordance with the California Electrical Code.

overcurrent protective device.

4.106.4.1.1 Identification. The service panel or subpanel circuit directory shall identify the overcurrent

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

SECTION 301 GENERAL 301.1 SCOPE. Buildings shall be designed to include the green building measures specified as mandatory in the application checklists contained in this code. Voluntary green building measures are also included in the application checklists and may be included in the design and construction of structures covered by this code, but are not required unless adopted by a city, county, or city and county as specified in Section 101.7.

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

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

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

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

other important enactment dates. 301.2 LOW-RISE AND HIGH-RISE RESIDENTIAL BUILDINGS. [HCD] The provisions of individual sections of CALGreen may apply to either low-rise residential buildings high-rise residential buildings, or both. Individual sections will be designated by banners to indicate where the section applies

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

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

high-rise buildings, no banner will be used.

SECTION 302 MIXED OCCUPANCY BUILDINGS

302.1 MIXED OCCUPANCY BUILDINGS. In mixed occupancy buildings, each portion of a building shall comply with the specific green building measures applicable to each specific occupancy. Exceptions: 1. [HCD] Accessory structures and accessory occupancies serving residential buildings shall comply with Chapter 4 and Appendix A4, as applicable.

2. [HCD] For purposes of CALGreen, live/work units, complying with Section 419 of the California Building Code, shall not be considered mixed occupancies. Live/Work units shall comply with Chapter 4 and Appendix A4, as applicable.

DIVISION 4.1 PLANNING AND DESIGN

ABBREVIATION DEFINITIONS: Department of Housing and Community Development California Building Standards Commission Division of the State Architect, Structural Safety OSHPD Office of Statewide Health Planning and Development Low Rise

HR High Rise Additions and Alterations

RESIDENTIAL MANDATORY MEASURES

SECTION 4.102 DEFINITIONS

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

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

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

4.106 SITE DEVELOPMENT

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

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

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

are part of a larger common plan of development which in total disturbs one acre or more of soil. (Website: https://www.waterboards.ca.gov/water_issues/programs/stormwater/construction.html) **4.106.3 GRADING AND PAVING.** Construction plans shall indicate how the site grading or drainage system will

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

 Swales 2. Water collection and disposal systems French drains

Exception: Additions and alterations not altering the drainage path.

4. Water retention gardens 5. Other water measures which keep surface water away from buildings and aid in groundwater

4.106.4 Electric vehicle (EV) charging for new construction. New construction shall comply with Sections 4.106.4.1 or 4.106.4.2 to facilitate future installation and use of EV chargers. Electric vehicle supply

equipment (EVSE) shall be installed in accordance with the California Electrical Code, Article 625. 1. On a case-by-case basis, where the local enforcing agency has determined EV charging and

infrastructure are not feasible based upon one or more of the following conditions: 1.1 Where there is no local utility power supply or the local utility is unable to supply adequate 1.2 Where there is evidence suitable to the local enforcing agency substantiating that additional

local utility infrastructure design requirements, directly related to the implementation of Section 4.106.4. may adversely impact the construction cost of the project. 2. Accessory Dwelling Units (ADU) and Junior Accessory Dwelling Units (JADU) without additional parking facilities.

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

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

protective device space(s) reserved for future EV charging as "EV CAPABLE". The raceway termination



2022 CALIFORNIA GREEN BUILDING STANDARDS CODE

RESIDENTIAL MANDATORY MEASURES, SHEET 2 (January 2023)



NOT APPLICABLE
RESPONSIBLE PARTY (ie: ARCHITECT, ENGINEER OWNER, CONTRACTOR, INSPECTOR ETC.)

Y N/A RESPON. 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 94700 MOISTURE CONTENT. The weight of the water in wood expressed in percentage of the weight of the oven-dry wood. PRODUCT-WEIGHTED MIR (PWMIR). The sum of all weighted-MIR for all ingredients in a product subject to this article. The PWMIR is the total product reactivity expressed to hundredths of a gram of ozone formed per gram of product (excluding container and packaging). Note: PWMIR is calculated according to equations found in CCR, Title 17, Section 94521 (a). REACTIVE ORGANIC COMPOUND (ROC). Any compound that has the potential, once emitted, to contribute to ozone formation in the troposphere.

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

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

4.504 POLLUTANT CONTROL 4.504.1 COVERING OF DUCT OPENINGS & PROTECTION OF MECHANICAL EQUIPMENT DURING

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

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

- 4.504.2.1 Adhesives, Sealants and Caulks. Adhesives, sealant and caulks used on the project shall meet the requirements of the following standards unless more stringent local or regional air pollution or air quality management district rules apply:
- 1. Adhesives, adhesive bonding primers, adhesive primers, sealants, sealant primers and caulks shall comply with local or regional air pollution control or air quality management district rules where applicable or SCAQMD Rule 1168 VOC limits, as shown in Table 4.504.1 or 4.504.2, as applicable. Such products also shall comply with the Rule 1168 prohibition on the use of certain toxic compounds (chloroform, ethylene dichloride, methylene chloride, perchloroethylene and 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 Table 4.504.3 shall apply.

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

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:

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

SPECIAL PURPOSE CONTACT ADHESIVE

SUBSTRATE SPECIFIC APPLICATIONS

POROUS MATERIAL (EXCEPT WOOD)

TOP & TRIM ADHESIVE

METAL TO METAL

PLASTIC FOAMS

WOOD

FIBERGLASS

STRUCTURAL WOOD MEMBER ADHESIVE

TABLE 4.504.1 - ADHESIVE VOC LIMIT_{1,2}

(Less Water and Less Exempt Compounds in Grams per Liter) ARCHITECTURAL APPLICATIONS VOC LIMIT 50 INDOOR CARPET ADHESIVES 50 CARPET PAD ADHESIVES 150 **OUTDOOR CARPET ADHESIVES** 100 WOOD FLOORING ADHESIVES 60 RUBBER FLOOR ADHESIVES 50 SUBFLOOR ADHESIVES 65 **CERAMIC TILE ADHESIVES** 50 VCT & ASPHALT TILE ADHESIVES 50 **DRYWALL & PANEL ADHESIVES** 50 COVE BASE ADHESIVES 70 MULTIPURPOSE CONSTRUCTION ADHESIVE 100 STRUCTURAL GLAZING ADHESIVES 250 SINGLE-PLY ROOF MEMBRANE ADHESIVES 50 OTHER ADHESIVES NOT LISTED SPECIALTY APPLICATIONS 510 PVC WELDING 490 CPVC WELDING 325 ABS WELDING 250 PLASTIC CEMENT WELDING 550 ADHESIVE PRIMER FOR PLASTIC 80 CONTACT ADHESIVE

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

250

140

250

30

50

50

30

80

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

(Less Water and Less Exempt Compounds in Gr	rams per Liter)
SEALANTS	VOC LIMIT
ARCHITECTURAL	250
MARINE DECK	760
NONMEMBRANE ROOF	300
ROADWAY	250
SINGLE-PLY ROOF MEMBRANE	450
OTHER	420
SEALANT PRIMERS	
ARCHITECTURAL	
NON-POROUS	250
POROUS	775
MODIFIED BITUMINOUS	500
MARINE DECK	760
OTHER	750

TABLE 4.504.3 - VOC CONTENT LIMITS FOR

ARCHITECTURAL COATINGS23

COATING CATEGORY	VOC LIMIT
LAT COATINGS	50
ION-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
AUX FINISHING COATINGS	350
IRE RESISTIVE COATINGS	350
LOOR COATINGS	100
ORM-RELEASE COMPOUNDS	250
GRAPHIC ARTS COATINGS (SIGN PAINTS)	500
HIGH TEMPERATURE COATINGS	420
NDUSTRIAL MAINTENANCE COATINGS	250
OW SOLIDS COATINGS ₁	120
MAGNESITE CEMENT COATINGS	450
MASTIC TEXTURE COATINGS	100
METALLIC PIGMENTED COATINGS	500
MULTICOLOR COATINGS	250
PRETREATMENT WASH PRIMERS	420
PRIMERS, SEALERS, & UNDERCOATERS	100
REACTIVE PENETRATING SEALERS	350
RECYCLED COATINGS	250
ROOF COATINGS	50
RUST PREVENTATIVE COATINGS	250
SHELLACS	
CLEAR	730
PAQUE	550
SPECIALTY PRIMERS, SEALERS & INDERCOATERS	100
STAINS	250
STONE CONSOLIDANTS	450
SWIMMING POOL COATINGS	340
RAFFIC MARKING COATINGS	100
UB & TILE REFINISH COATINGS	420
VATERPROOFING MEMBRANES	250
VOOD COATINGS	275
WOOD PRESERVATIVES	350
ZINC-RICH PRIMERS	340

EXEMPT COMPOUNDS

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

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

TABLE 4.504.5 - FORMALDEHYDE L	IIVII I 31
MAXIMUM FORMALDEHYDE EMISSIONS IN PAI	RTS 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 BY THE CALIF. AIR RESOURCES BOARD, AIR T MEASURE FOR COMPOSITE WOOD AS TESTEI	OXICS CONTROL

WITH ASTM E 1333. FOR ADDITIONAL INFORMATION, SEE CALIF. CODE OF REGULATIONS, TITLE 17, SECTIONS 93120 THROUGH 93120.12

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

DIVISION 4.5 ENVIRONMENTAL QUALITY (continued)

4.504.3 CARPET SYSTEMS. All carpet installed in the building interior shall meet the 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.

4.504.3.1 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.
- 3. Product labeled and invoiced as meeting the Composite Wood Products regulation (see CCR, Title 17, Section 93120, et seq.).
- 4. Exterior grade products marked as meeting the PS-1 or PS-2 standards of the Engineere 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.

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:

4.505.3 MOISTURE CONTENT OF BUILDING MATERIALS. Building materials with visible signs of water damage

- 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
- 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.

2. Moisture readings shall be taken at a point 2 feet (610 mm) to 4 feet (1219 mm) from the grade stamped end

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

- 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 tub/shower combination 2. Lighting integral to bathroom exhaust fans shall comply with the California Energy Code.
- 4.507 ENVIRONMENTAL COMFORT 4.507.2 HEATING AND AIR-CONDITIONING SYSTEM DESIGN. Heating and air conditioning systems shall be

sized, designed and have their equipment selected using the following methods: 1. The heat loss and heat gain is established according to ANSI/ACCA 2 Manual J - 2011 (Residential Load Calculation), ASHRAE handbooks or other equivalent design software or methods.

- 2. Duct systems are sized according to ANSI/ACCA 1 Manual D 2014 (Residential Duct Systems), ASHRAE handbooks or other equivalent design software or methods. 3. Select heating and cooling equipment according to ANSI/ACCA 3 Manual S - 2014 (Residential
- Equipment Selection), or other equivalent design software or methods.

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

CHAPTER 7 INSTALLER & SPECIAL INSPECTOR QUALIFICATIONS

702 QUALIFICATIONS 702.1 INSTALLER TRAINING. HVAC system installers shall be trained and certified in the proper installation of HVAC systems including ducts and equipment by a nationally or regionally recognized training or certification program. Uncertified persons may perform HVAC installations when under the direct supervision and responsibility of a person trained and certified to install HVAC systems or contractor licensed to install HVAC systems.

Examples of acceptable HVAC training and certification programs include but are not limited to the following:

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

Certification by a national or regional green building program or standard publisher.

other certifications or qualifications acceptable to the enforcing agency, the following certifications or education may be

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

considered by the enforcing agency when evaluating the qualifications of a special inspector:

Y N/A RESPON. PARTY

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

2. HERS raters are special inspectors certified by the California Energy Commission (CEC) to rate homes in California according to the Home Energy Rating System (HERS).

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

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

703 VERIFICATIONS

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



DRAWINGS PROVIDED BY **SOLAR MAX DESIGN** solarmax.dsgn@gmail.com

(310) 740-9649

www.solarmaxdsgn.com



Signature

CLIENT INFORMATION:

SEAL:

PROJECT NAME:

REV:	DESCRIPTION:	DATE:
Α		
В		
С		
		·

9/19/2024

SHEET TITLE:

CAL GREEN SHEET 2

SHEET NUMBER:

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STORM WATER POLLUTION CONTROL

Storm Water Pollution Control Requirements for Construction Activities

Minimum Water Quality Protection Requirements for All Construction Projects

(2020 Los Angeles Green Building Code)

FORM GRN 1

2020 Los Angeles Green Building Code

FORM GRN 9

ITM#

CODE

SECTION

24 4.504.2

25 4.504.2.1

26 4.504.2.2

27 4.504.2.3

28 4.504.2.4

31 4.504.4

33 4.504.6 Filters

29 | 4.504.3 | Carpet systems

30 4.504.3.1 Carpet cushion

34 | 4.505.2.1 | Capillary break

32 4.504.5 Composite wood products

36 4.506.1 Bathroom exhaust fans

MANDATORY REQUIREMENTS CHECKLIST

ADDITIONS AND ALTERATIONS TO RESIDENTIAL BUILDINGS (COMPLETE AND INCORPORATE THIS FORM INTO THE PLANS)

20/3000	7.00	* <u></u> *	Date:	COLUMN
ITEM #	CODE SECTION	REQUIREMENT	REFERENCE SHEET (Sheet # or N/A)	e.g. note #, deta
		PLANNING AND DESIGN		
1	4.106.2	Storm water drainage and retention during construction		
2	4.106.3	Grading and paving		
3	4.106.5	Cool roof (additions ≥ 500 sq. ft. or $\geq 50\%$)		
		ENERGY EFFICIENCY		
4	4.211.4	Solar ready (additions $\geq 2,000$ sq. ft.)		
		WATER EFFICIENCY & CONSERVATION	ı .	
5	4.303.1	Water conserving plumbing fixtures and fittings		
6	4.303.1.3.2	Multiple showerheads serving one shower		
7	4.303.4	Water use reduction		
8	4.304.1	Outdoor water use in landscape areas		
9	4.304.2	Irrigation controllers		
10	4.304.3	Metering outdoor water use		
-11	4.304.4	Exterior faucets		
12	4.304.5	Swimming pool covers		
13	4.305.1	Graywater ready		
14	4.305.2	Recycled water supply to fixtures		
15	4.305.3.1	Cooling towers (buildings ≤ 25 stories)		
16	4.305.3.2	Cooling towers (buildings > 25 stories)		76
		MATERIAL CONSERVATION & RESOUR	CE EFFICIENC	Y
17	4.406.1	Rodent proofing		
18	4.407.3	Flashing details		
19	4.407.4	Material protection		
20	4.408.1	Construction waste reduction		
21	4.410.1	Operation and maintenance manual	-	
		ENVIRONMENTAL QUALITY		
22	4.503.1	Fireplaces and woodstoves		

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Page 2 of 2

2020 Los Angeles Green Building Code

REQUIREMENT

Covering of duct openings and protection of mechanical equipment during construction

Finish material pollutant control

Paints and coatings

Verification

Resilient flooring systems

35 4.505.3 Moisture content of building materials

37 4.507.2 Heating and air-conditioning system design

Adhesives, sealants, caulks

Aerosol paints and coatings

REFERENCE

Sheet #

or N/A

FORM

9. In new buildings of 25 stories or less, the cooling towers

www.ladbs.org

FORM

GRN 9

COMMENTS

e.g. note #, detail #

or reason for N/A

FORM **GRN 11**

> \circ Ш SIDI RE 0

DATE: REV: DESCRIPTION:

9/19/2024

FORMS

SHEET NUMBER:

The following notes shall be incorporated in the approved set of construction/grading plans and represents the minimum standards of good housekeeping which must be implemented on all construction projects.

Construction means constructing, clearing, grading or excavation that result in soil disturbance. Construction includes structure teardown (demolition). It does not include routine maintenance to maintain original line and grade, hydraulic capacity, or original purpose of facility; emergency construction activities required to immediately protect public health and safety; interior remodeling with no outside exposure of construction material or construction waste to storm water; mechanical permit work; or sign permit work. (Order No. 01-182, NPDES Permit No. CAS004001 - Part 5: Definitions)

- 1. Eroded sediments and pollutants shall be retained on site and shall not be transported from the site via sheet flow, swales, area drains, natural drainage or wind.
- 2. Stockpiles of earth and other construction-related materials shall be covered and/or protected from being transported from the site by wind or water.
- 3. Fuels, oils, solvents and other toxic materials must be stored in accordance with their listing and shall not contaminate the soil nor the surface waters. All approved toxic storage containers are to be protected from the weather. Spills must be cleaned up immediately and disposed of properly and shall not be washed into the drainage system.
- 4. Non-storm water runoff from equipment and vehicle washing and any other activity shall be contained on the project site.
- 5. Excess or waste concrete may not be washed into the public way or any drainage system. Provisions shall be made to retain concrete waste on-site until it can be appropriately disposed of or recycled.
- 6. Trash and construction -related solid wastes must be deposited into a covered receptacle to prevent contamination of storm water and dispersal by wind.
- 7. Sediments and other materials shall not be tracked from the site by vehicle traffic. The construction entrance roadways must be stabilized so as to inhibit sediments from being deposited into the street/public ways. Accidental depositions must be swept up immediately and may not be washed down by rain or by any other means.
- 8. Retention basins of sufficient size shall be provided to retain storm water runoff on-site and shall be properly located to collect all tributary site runoff.
- 9. Where retention of storm water runoff on-site is not feasible due to site constraints, runoff may be conveyed to the street and the storm drain system provided that an approved filtering system is installed and maintained on-site during the construction duration.

2020 Los Angeles Green Building Code

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(Rev. 01/01/20)

DBS DEPARTMENT OF BUILDING AND SAFETY

For each new dwelling and townhouse, provide a listed raceway that can

less than trade size 1 (nominal 1-inch inside diameter), shall originate at the

main service or subpanel and shall terminate into a listed cabinet, box or other

panel or subpanel shall provide capacity to install a 40-ampere minimum

circuit overcurrent protective device. The service panel or subpanel circuit

directory shall identify the overcurrent protective device space(s) reserved for

shall be permanently and visibly marked as "EV CAPABLE". (4.106.4.1)

future EV charging as "EV CAPABLE". The raceway termination location

have sufficient capacity to simultaneously charge all designated EV spaces at

Design shall be based upon a 40-ampere minimum branch circuit. The raceway

the full rated amperage of the Electric Vehicle Supply Equipment (EVSE).

shall not be less than trade size 1 (nominal 1-inch inside diameter), shall

originate at the main service or subpanel and shall terminate into a listed

an EV charger. Raceways and related components that are planned to be

shall be installed at the time of original construction. The service panel or

space(s) reserved for future EV charging purposes as "EV CAPABLE" in

subpanel circuit directory shall identify the overcurrent protective device

3. Roofs with slopes < 2:12 shall have a 3-year aged SRI value of at least 75 or

6. When a shower is served by more than one showerhead, the combined flow

7. Installed automatic irrigation system controllers shall be weather- or soil-based

8. For projects that include landscape work, the Landscape Certification, Form

9. Annular spaces around pipes, electric cables, conduits, or other openings in the

building's envelope at exterior walls shall be protected against the passage of

rodents by closing such openings with cement mortar, concrete masonry, or

metal plates. Piping prone to corrosion shall be protected in accordance with

10. Materials delivered to the construction site shall be protected from rain or other

12. For all new equipment, an Operation and Maintenance Manual including, at a

11. Only a City of Los Angeles permitted hauler will be used for hauling of

GRN 12, shall be completed prior to final inspection approval.

Section 313.0 of the Los Angeles Plumbing Code.

sources of moisture.

construction waste.

rate of all the showerheads controlled by a single valve shall not exceed 2.0

gallons per minute at 80psi, or the shower shall be designed to only allow one

both a 3-year aged solar reflectance of at least 0.63 and a thermal emittance of

at least 0.75. Roofs with slopes > 2:12 shall have an aged SRI value of at least

16 or both a 3-year solar reflectance of at least 0.20 and a thermal emittance of

accordance with the Los Angeles Electrical Code.

owerhead to be in operation at a time.

cabinet, box or other enclosure in close proximity to the proposed location of

istalled underground, enclosed, inaccessible or in concealed areas and spaces

2. For common parking area serving R-occupancies, the electrical system shall

Page 1 of 1

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EPARTMENT OF BUILDING AND SAFE

(Rev. 02/12/2020)

GREEN BUILDING CODE PLAN CHECK NOTES RESIDENTIAL BUILDINGS All new gas fireplaces must be direct-vent, sealed combustion type. Wood

FORM

accommodate a dedicated 208/240 volt branch circuit. The raceway shall not be burning fireplaces are prohibited per AQMD Rule 445. 14. All duct and other related air distribution component openings shall be covered enclosure in close proximity to the proposed location of an EV charger. The with tape, plastic, or sheet metal until the final startup of the heating, cooling dedicated branch circuit and space(s) reserved to permit installation of a branch

> 15. Paints and coatings, adhesives, caulks and sealants shall comply with the Volatile Organic Compound (VOC) limits listed in Tables 4.504.1-4.504.3.

16. The VOC Content Verification Checklist. Form GRN 2, shall be completed and verified prior to final inspection approval. The manufacturer's specifications showing VOC content for all applicable products shall be readily available at the job site and be provided to the field inspector for verification. (4.504.2.4)

17. All new carpet and carpet cushions installed in the building interior shall meet the testing and product requirements of one of the following (4.504.3): a. Carpet and Rug Institute's Green Label Plus Program California Department of Public Health's Specification 01350

d. Scientific Certifications Systems Indoor Advantage™ Gold 18. 80% of the total area receiving resilient flooring shall comply with one or more of the following (4.504.4):

a. VOC emission limits defined in the CHPS High Performance Products b. Certified under UL GREENGUARD Gold . Certification under the Resilient Floor Covering Institute (RFCI) FloorScore program

d. Meet the California Department of Public Health's Specification 01350

4. The required hardscape used to reduce heat island effects shall have a solar 19. New hardwood plywood, particle board, and medium density fiberboard reflectance value of at least 0.30 as determined per ASTM E1918 or ASTM composite wood products used in the building shall meet the formaldehyde limits listed in Table 4.504.5.

5. The flow rates for all plumbing fixtures shall comply with the maximum flow 20. The Formaldehyde Emissions Verification Checklist. Form GRN 3, shall be completed prior to final inspection approval.

21. Mechanically ventilated buildings shall provide regularly occupied areas of the building with a MERV 13 filter for outside and return air. Filters shall be installed prior to occupancy and recommendations for maintenance with filters of the same value shall be included in the operation and maintenance manual.

22. A 4-inch thick base of 1/2 inch or larger clean aggregate shall be provided for proposed slab on grade construction. A vapor barrier shall be provided in direct contact with concrete for proposed slab on grade construction. (4.505.2.1)

3. Building materials with visible signs of water damage shall not be installed. Wall and floor framing shall not be enclosed until it is inspected and found to 24. Newly installed bathroom exhaust fans shall be ENERGY STAR compliant and

be ducted to terminate to the outside of the building. Fans must be controlled by a humidistat which shall be readily accessible. Provide the manufacturer's cut sheet for verification.

25. A copy of the construction documents or a comparable document indicating the information from Energy Code Sections 110.10(b) through 110.10(c) shall be provided to the occupant." (Energy Code §110.10(d))

26. The heating and air-conditioning systems shall be sized and designed using ANSI/ACCA Manual J-2004, ANSI/ACCA 29-D-2009 or ASHRAE minimum, the items listed in Section 4.410.1, shall be completed and placed in handbooks and have their equipment selected in accordance with ANSI/ACCA (4.410.1)36-S Manual S-2004.

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(4.303.1.3.2)

(4.406.1)

(4.408.1)

(MWELO, § 492,7)

(State Assembly Bill No. 1881)

(Rev. 01/01/20)

the building at the time of final inspection.

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PLUMBING FIXTURE FLOW RATES Residential Occupancies

GRN 16

2020 Los Angeles Green Building Code (Incorporate this form into the plans)

SECTION 4.303.1 WATER REDUCTION FIXTURE FLOW RATES

FIXTURE TYPE	MAXIMUM ALLOWABLE FLOW RATE
Showerheads	1.8 gpm @ 80 psi
Lavatory faucets, residential	1.2 gpm @ 60 psi ^{1,3}
Lavatory faucets, nonresidential	0.4 gpm @ 60 psi ^{1,3}
Kitchen faucets	1.5 gpm @ 60 psi ^{2,4}
Metering Faucets	0.2 gallons/cycle
Gravity tank type water closets	1.28 gallons/flush⁵
Flushometer tank water closets	1.28 gallons/flush ⁵
Flushometer valve water closets	1.28 gallons/flush ⁵
Urinals	0.125 gallons/flush
Clothes Washers	ENERGY-STAR certified
Dishwashers	ENERGY-STAR certified

¹Lavatory Faucets shall not have a flow rate less than 0.8 gpm at 20 psi. ² Kitchen faucets may temporarily increase flow above the maximum rate, but not above 2.2gpm @ 60psi and must default to a maximum flow rate of 1.8 gpm @ 60psi. ³ Where complying faucets are unavailable, aerators or other means may be used to achieve reduction. ⁴ Kitchen faucets with a maximum 1.8 gpm flow rate may be installed in buildings that have water closets with a maximum flush rate of 1.06 gallons/flush installed throughout.

⁵ Includes single and dual flush water closets with an effective flush of 1.28 gallons or less. Single Flush Toilets - The effective flush volume shall not exceed 1.28 gallons (4.8 liters). The effective flush volume is the average flush volume when tested in accordance with ASME

Dual Flush Toilets - The effective flush volume shall not exceed 1.28 gallons (4.8 liters). The effective flush volume is defined as the composite, average flush volume of two reduced flushes and one full flush. Flush volumes will be tested in accordance with ASME A112.19.2 and ASME A112.19.14.

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2020 Los Angeles Green Building Code

WATER CONSERVATION NOTES - ORDINANCE #184248

PLUMBING SYSTEM

provide reasonable accommodation to ensure equal access to its programs, services and activities

Multi-family dwellings not exceeding three stories and containing 50 units or less shall install a separate meter or submeter within common areas and within each individual

dwelling unit. 2. Water use reduction shall be met by complying with one of

the following: Provide a 20% reduction in the overall potable water use within the building. The reduction shall be based on the maximum allowable water use for plumbing fixtures and fittings as required by the Los Angeles

Plumbing Code. Calculations demonstrating a 20% reduction in the building "water use baseline", as established in Table 4.303.4.1, shall be provided; or B. New fixtures and fittings shall comply with the maximum flow rates shown in Table 4.303.4.2, or Plumbing fixtures shall use recycled water.

Exception: Fixture replacements 3. New building on a site with 500 square feet or more of cumulative landscape area shall have separate meters or

submeters for outdoor water use. (4.304.3)Additions and alterations on a site with 500 square feet or more of cumulative landscape area and where the entire potable water system is replaced, shall have separate meters or submeters for outdoor water use.

In other than single family dwellings, locks shall be installed on all publicly accessible exterior faucets and hose

6. Provide a cover having a manual or power-operated reel system in any permanently installed outdoor in-ground swimming pool or spa in one- and two-family dwellings. For irregular-shaped pools where it is infeasible to cover 100% of the pool due to its irregular shape, a minimum of 80% of the pool shall be covered.

Except as provided in this section, for sites with over 500 square feet of landscape area, alternate waste piping shall be installed to permit discharge from the clothes washer, bathtub, showers, and bathroom/restrooms wash basins to be used for a future graywater irrigation system. (4.305.1)

Except as provided in this section, where City-recycled water is available within 200 feet of the property line, water closets, urinals, floor drains, and process cooling and heating in the building shall be supplied from recycled water and shall be installed in accordance with the Los Angeles Plumbing Code.

RESIDENTIAL BUILDINGS

shall comply with one of the following: A. Shall have a minimum of 6 cycles of concentration (blowdown); or B. A minimum of 50% of the makeup water supply to the cooling towers shall come from non-potable water sources, including treated backwash. (4.305.3.1)

10. In new buildings over 25 stories, the cooling towers shall comply with all of the following:

A. Shall have a minimum of 6 cycles of concentration (blowdown); and B. 100% of the makeup water supply to the cooling towers shall come from non-potable water sources, including treated backwash.

Where groundwater is being extracted and discharged, develop and construct a system for onsite reuse of the groundwater. Alternatively, the groundwater may be discharged to the sewer.

12. Provide a hot water system complying with one of the following (Los Angeles Plumbing Code Section 610.4.1): A. The hot water system shall not allow more than 0.6 gallons of water to be delivered to any fixture before hot water arrives.

B. Where a hot water recirculation or electric resistance heat trace wire system is installed, the branch from the recirculating loop or electric resistance heat trace wire to the fixture shall contain a maximum of 0.6 gallons. Residential units having individual water heaters shall

have a compact hot water system that meets all of the a. The hot water supply piping from the water heater to the fixtures shall take the most direct path. b. The total developed length of pipe from the water heater to farthest fixture shall not exceed the

distances specified in Table 3.6.5 of the California Energy Code Residential Appendix. c. The hot water supply piping shall be installed and insulated in accordance with Section RA3.6.2 of the California Energy Code Residential Appendix.

IRRIGATION SYSTEM

12. A water budget for landscape irrigation use that conforms to the California Department of Water Resources' Model Water Efficient Landscape Ordinance (MWELO) is required for new landscape areas of 500 sq. ft. or more. The following methods to reduce potable water use in landscape areas include, but are not limited to, use of captured rainwater, recycled water, graywater, or water treated for irrigation purposes and conveyed by a water district or public entity.

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Rust preventative coatings

APPROVAL STAMP

VOC AND FORMALDEHYDE LIMITS 2020 Los Angeles Green Building Code (Incorporate this form into the plans) 2020 Los Angeles Green Building Code Tables 4.504.1, 4.504.2, 4.504.3, 4.504.5, 5.504.4.1, 5.504.4.2, 5.504.4.3, 5.504.4.5 Maximum Formaldehyde Emissions in Parts per Million
PRODUCT CURRENT LII VOC CONTENT LIMITS FOR ARCHITECTURAL COATINGS 2.5 Grams of VOC per Liter of Coating, Less Water and Less Exempt Comp lardwood plywood veneer core COATING CATEGORY 2.3 lardwood plywood composite core Nonflat coatings Nonflat-high gloss coatings hin medium density fiberboard ¹ Values in this table are derived from those specified by the California Air Resources Board, Air Toxics Control Measure for Composite Wood as tested in accordance with ASTM E 1333, For additional information, see California Code of Regulations, Title 17, Sections 93120 through 93120,12. Aluminum roof coatings Basement specialty coatings Bituminous roof coatings Thin medium density fiberboard has a maximum thickness of 5/16 inches (8 mm). ituminous roof primers SEALANT VOC LIMIT
Less Water and Less Exempt Compounds in Grams per Litt concrete curing compounds Concrete curing compounds, Roadways & Aarine deck Concrete/masonry sealer lonmembrane ro riveway sealers Dry fog coatings Faux finishing coatings Single-ply roof membrane Clear Top Coat SEALANT PRIMERS **Decorative Coatings** Nonporous **Trowel Applied Coatings** dified bituminous Fire resistive coatings /larine deck Floor coatings Form-release compounds Graphic arts coatings (sign paints) High temperature coatings ADHESIVE VOC LIMIT 1,2 ndustrial maintenance coatings Less Water and Less Exempt Compounds in Grams per Litt
ARCHITECTURAL APPLICATIONS CURRENT VOC L Low solids coatings1 Magnesite cement coatings ndoor carpet adhesives Mastic texture coatings carpet pad adhesives Metallic pigmented coatings utdoor carpet adhesives Multicolor coatings od flooring adhesive Pretreatment wash primers Rubber floor adhesives Primers, sealers, and undercoaters Subfloor adhesives Reactive penetrating sealers Ceramic tile adhesives Recycled coatings T and asphalt tile adhesives Roof coatings rywall and panel adhesives Roof coatings, aluminum ove base adhesives

ingle-ply roof membrane adhesives Clear Other adhesives not specifically listed SPECIALTY APPLICATIONS Specialty primers, sealers and undercoaters Stains, Interior Stone consolidants lastic cement welding Swimming pool coatings dhesive primer for plastic Traffic marking coatings ontact adhesive Tub and tile refinish coatings pecial purpose contact adhesive Naterproofing membranes uctural wood member adhesive Nood coatings op and trim adhesive Vood preservatives SUBSTRATE SPECIFIC APPLICATIONS Zinc-rich primers 10
Grams of VOC per liter of coating, including water and including exempt compoun letal to metal orous material (except wood) Some values in this table are derived from those specified by the California Air Resources Board, Architectural Coatings Suggested Control Measure, February 5, 2016. More information is available from the Air Resources Board. berglass
If an adhesive is used to bond dissimilar substrates together, the adhesive with the highest For additional information regarding methods to measure the VOC content specified in this able, see South Coast Air Quality Management District Rule 1168, http://www.arb.ca.gov/DRDB/SC/CURHTML/R1168.PDF.

ultipurpose construction adhesives

tructural glazing adhesives

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DRAWINGS PROVIDED BY: **SOLAR MAX DESIGN** solarmax.dsgn@gmail.com www.solarmaxdsgn.com (310) 740-9649 (310) 844-7370

Signature

CLIENT INFORMATION:

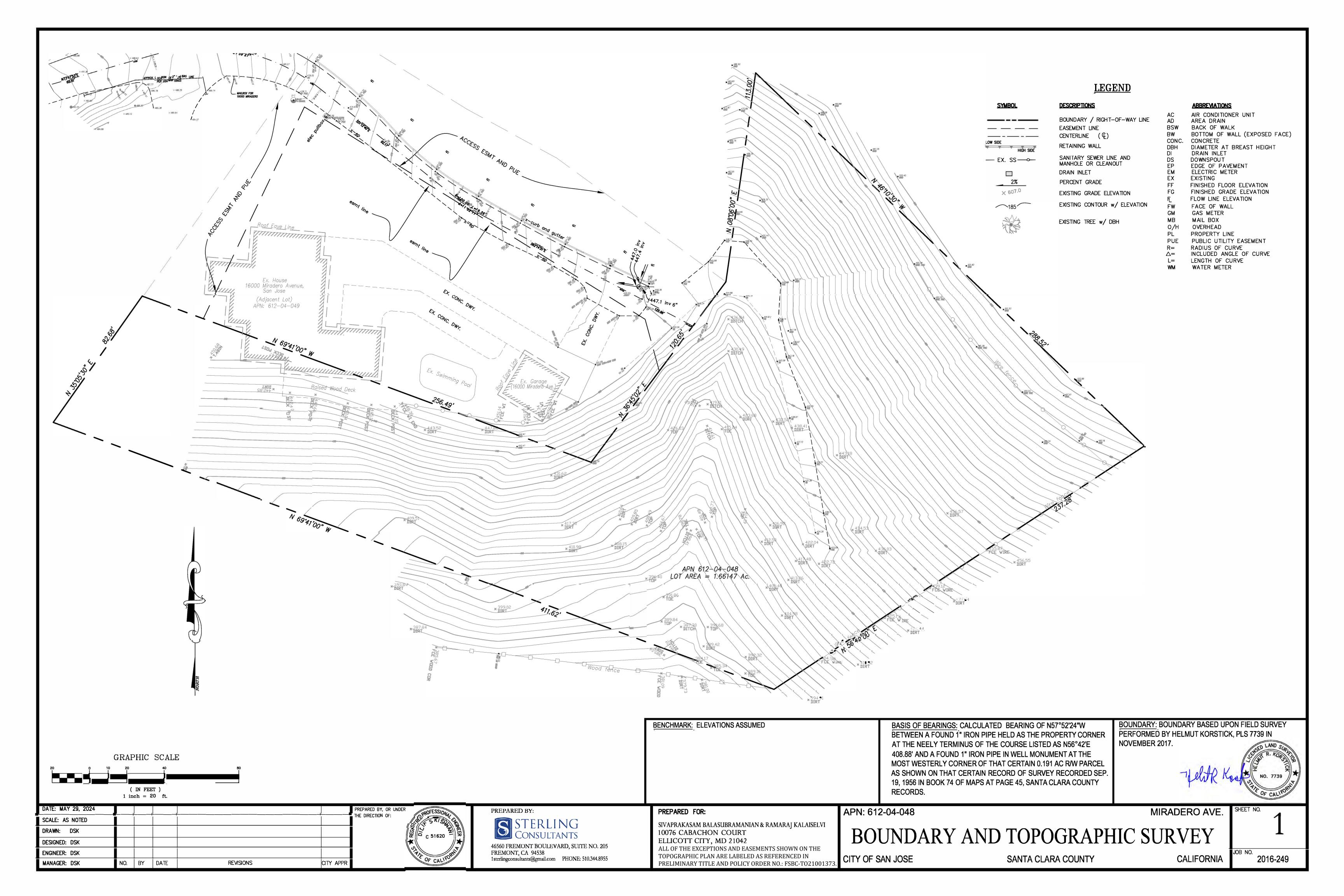
SEAL:

PROJECT NAME:

Ш

DATE:

SHEET TITLE:



PRELIMINARY GRADING PLAN

ACCESSORY DWELLING UNIT

0 Miradero Ave, San Jose, CA 95127

CLOUD#C9-REV1

GENERAL NOTES

- 1. ALL CONSTRUCTION WORK SHALL BE PERFORMED IN ACCORDANCE WITH THE SOILS AND/OR GEOTECHNICAL REPORT PREPARED BY DATED THIS REPORT IS SUPPLEMENTED BY: 1) THESE PLANS AND SPECIFICATIONS, 2) THE COUNTY OF SANTA CLARA STANDARD DETAILS. 3) THE COUNTY OF SANTA CLARA STANDARD SPECS, 4) STATE OF CALIFORNIA STANDARD DETAILS, 5) STATE OF CALIFORNIA STANDARD SPECIFICATIONS. IN THE EVENT OF CONFLICT THE FORMER SHALL TAKE PRECEDENCE OVER THE LATTER. THE PERFORMANCE AND COMPLETION OF ALL WORK MUST BE TO THE
- DEVELOPER IS RESPONSIBLE FOR INSTALLATION OF THE IMPROVEMENTS SHOWN ON THESE PLANS AND HE OR HIS SUCCESSOR PROPERTY OWNERS ARE RESPONSIBLE FOR THEIR CONTINUED MAINTENANCE.
- DEVELOPER SHALL BE RESPONSIBLE FOR CORRECTION OF ANY ERRORS OR OMISSIONS IN THESE PLANS. THE COUNTY SHALL BE AUTHORIZED TO REQUIRE DISCONTINUANCE OF ANY WORK AND SUCH CORRECTION AND MODIFICATION OF PLANS AS MAY BE NECESSARY TO COMPLY WITH COUNTY STANDARDS OR CONDITIONS OF DEVELOPMENT APPROVAL.
- 4. DEVELOPER SHALL OBTAIN ENCROACHMENT PERMITS FROM THE SANTA CLARA VALLEY WATER DISTRICT AND CALIFORNIA DEPARTMENT OF TRANSPORTATION WHERE NEEDED. COPIES OF THESE PERMITS SHALL BE KEPT AT THE JOB SITE FOR REVIEW BY 5. DEVELOPER SHALL REMOVE OR TRIM ALL TREES TO PROVIDE AN UNOBSTRUCTED FIFTEEN (15) FOOT VERTICAL CLEARANCE FOR
- 6. THIS PLAN AUTHORIZES THE REMOVAL OF ONLY THOSE TREES WITH TRUNK DIAMETERS GREATER THAN 12 INCHES MEASURED 4.5 FEET ABOVE THE GROUND THAT ARE SHOWN TO BE REMOVED UNLESS AN AMENDED PLAN IS APPROVED OR A SEPARATE TREE REMOVAL PERMIT IS OBTAINED FROM THE PLANNING OFFICE. IT IS THE CONTRACTOR'S RESPONSIBILITY TO ENSURE THAT REMOVAL OF ADDITIONAL TREES HAS BEEN PERMITTED. DEVELOPER SHALL PROVIDE ADEQUATE DUST CONTROL AS REQUIRED BY THE COUNTY INSPECTOR.
- 8. ALL PERSONS MUST COMPLY WITH SECTION 4442 OF THE PUBLIC RESOURCES CODE AND SECTION 13005 OF THE HEALTH AND SAFETY CODE RELATING TO THE USE OF SPARK ARRESTERS.
- 9. UPON DISCOVERING OR UNEARTHING ANY BURIAL SITE AS EVIDENCED BY HUMAN SKELETAL REMAINS OR ARTIFACTS, THE PERSON MAKING SUCH DISCOVERY SHALL IMMEDIATELY NOTIFY THE COUNTY CORONER AT (4008) 454-2520 AND LAND DEVELOPMENT ENGINEERING OFFICE AT (408) 299-5730. NO FURTHER DISTURBANCE OF THE SITE MAY BE MADE EXCEPT AS AUTHORIZED BY THE LAND DEVELOPMENT OFFICE IN ACCORD WITH PROVISIONS OF THIS ORDINANCE (COUNTY ORDINANCE CODE SECTION B6-18).

10. THESE PLANS ARE FOR THE WORK DESCRIBED IN THE SCOPE OF WORK ONLY. A SEPARATE PERMIT WILL BE REQUIRED FOR THE

11. 11. ANY DEVIATION FROM THESE APPROVED PLANS SHALL BE RE-APPROVED IN WRITING BY THE COUNTY ENGINEER PRIOR TO

CONSTRUCTION STAKING

- 1. THE DEVELOPER'S ENGINEER IS RESPONSIBLE FOR THE INITIAL PLACEMENT AND REPLACEMENT OF CONSTRUCTION GRADE STAKES, THE STAKES ARE TO BE ADEQUATELY IDENTIFIED, LOCATED, STABILIZED, ETC. FOR THE CONVENIENCE OF CONTRACTORS. LATERAL OFFSET OF STAKES SET FOR CURBS AND GUTTERS SHALL NOT EXCEED 2 ½ FEET FROM BACK OF CURB.
- 2. ANY PROPERTY LINE STAKES OR ROAD MONUMENTS DISTURBED DURING CONSTRUCTION SHALL BE REPLACED BY DEVELOPER'S ENGINEER AND LICENSED LAND SURVEYOR. 3. PROPERTY LINE STAKING MUST BE PERFORMED BY THE PROJECT ENGINEER OR LAND SURVEYOR TO
- ESTABLISH OR RE-ESTABLISH THE PROJECT BOUNDARY AND SHALL BE INSPECTED BY THE COUNTY INSPECTOR PRIOR TO THE BEGINNING OF THE WORK.
- 4. PROPER CONSTRUCTION STAKES SHALL BE SET IN THE FIELD BY THE PROJECT ENGINEER OR LAND SURVEYOR AND VERIFIED BY THE COUNTY INSPECTOR PRIOR TO THE COMMENCEMENT OF GRADING.

CONSTRUCTION INSPECTION

1. CONTRACTOR SHALL NOTIFY PERMIT INSPECTION UNIT, SANTA CLARA COUNTY PRIOR TO COMMENCING WORK AND FOR FINAL

THE COUNTY REQUIRES A MINIMUM OF 24 HOURS ADVANCE NOTICE FOR GENERAL INSPECTION, 48 HOURS FOR ASPHALT

- INSPECTION BY SANTA CLARA COUNTY SHALL BE LIMITED TO INSPECTION OF MATERIALS AND PROCESSES OF CONSTRUCTION TO OBSERVE THEIR COMPLIANCE WITH PLANS & SPECIFICATIONS BUT DOES NOT INCLUDE RESPONSIBILITY FOR THE SUPERINTENDENT OF CONSTRUCTION, SITE CONDITIONS, EQUIPMENT OR PERSONNEL. CONTRACTOR SHALL NOTIFY THE COUNTY
- INSPECTION OF WORK AND SITE 4. DEVELOPER AND/OR HIS AUTHORIZED REPRESENTATIVE MUST SUBMIT WRITTEN REQUEST FOR FINAL INSPECTION AND

LAND DEVELOPMENT INSPECTOR AT PHONE (408) 299-6868 AT LEAST 24 HOURS PRIOR TO COMMENCING WORK AND FOR FINAL

ACCEPTANCE. SAID REQUEST SHALL BE DIRECTED TO THE INSPECTION OFFICE NOTED ON THE PERMIT FORM. THE CONTRACTOR SHALL PROVIDE TO THE COUNTY CONSTRUCTION INSPECTOR WITH PAD ELEVATION AND LOCATION CERTIFICATES, PREPARED BY THE PROJECT ENGINEER OR LAND SURVEYOR, PRIOR TO COMMENCEMENT OF THE BUILDING

SITE PREPARATION (CLEARING AND GRUBBING

- EXISTING TREES AUTHORIZED FOR REMOVAL, ROOTS, AND FOREIGN MATERIAL IN AREAS TO BE IMPROVED WILL BE REMOVED TO
- AN AUTHORIZED DISPOSAL SITE AS FOLLOWS: A) TO A MINIMUM DEPTH OF TWO FEET BELOW THE FINISHED GRADE OF PROPOSED ROADWAYS (EITHER PRIVATE OR TO BE DEDICATED TO PUBLIC USE)
- B) FROM AREAS AFFECTED BY THE PROPOSED GRADING EXCEPT WHERE NOTED ON THE PLANS. IT SHALL BE THE RESPONSIBILITY OF THE DEVELOPER TO MOVE OR RELOCATE UTILITY POLES AND OTHER OBSTRUCTIONS IN THE

UTILITY LOCATION, TRENCHING & BACKFILL

- 1. CONTRACTOR SHALL NOTIFY USA (UNDERGROUND SERVICE ALERT) AT 1-800-277-2600 A MINIMUM OF 24 HOURS BEFORE BEGINNING UNDERGROUND WORK FOR VERIFICATION OF THE LOCATION OF UNDERGROUND UTILITIES.
- ACCURATE VERIFICATION AS TO SIZE, LOCATION, AND DEPTH OF EXISTING UNDERGROUND CONDUITS OR FACILITIES SHALL BE THE INDIVIDUAL CONTRACTORS RESPONSIBILITY. PLAN LOCATIONS ARE APPROXIMATE AND FOR GENERAL INFORMATION ONLY.
- ALL UNDERGROUND INSTALLATIONS SHALL BE IN PLACE AND THE TRENCH BACKFILLED AND COMPACTED BEFORE PLACING AGGREGATE BASE MATERIAL OR SURFACE STRUCTURES. SURFACING MAY BE DONE IF THE UTILITY COMPANY CONCERNED INDICATES BY LETTER THAT IT WILL BORE. UNLESS SPECIFICALLY AUTHORIZED BY THE COUNTY, GAS AND WATER MAINS SHALL BE INSTALLED OUTSIDE THE PAVED AREAS.
- 4. TRENCH BACKFILL IN EXISTING PAVEMENT AREAS SHALL BE SAND MATERIAL IN ACCORDANCE WITH THE APPLICABLE PROVISIONS OF THE STATE SPECIFICATIONS. THE STRUCTURAL SECTION FOR TRENCH REPLACEMENT SHALL CONSIST OF NOT LESS THAN 12 INCHES OF APPROVED AGGREGATE BASE MATERIAL COMPACTED TO A RELATIVE COMPACTION OF AT LEAST 95% AND 4 INCHES OF HOT ASPHALT CONCRETE PLACED IN TWO LIFTS. TRENCH RESTORATION FOR HIGHER TYPE PAVEMENTS SHALL BE MADE IN KIND OR AS DIRECTED BY THE COUNTY.
- TRENCH BACKFILL IN NEW CONSTRUCTION AREAS SHALL BE SAND MATERIAL COMPACTED TO A RELATIVE COMPACTION OF AT LEAST 90%. THE REQUIREMENT FOR SELECT MATERIAL MAY BE WAIVED BY COUNTY IF THE NATIVE SOIL IS SUITABLE FOR USE AS TRENCH BACKFILL BUT THE COMPACTION REQUIREMENTS WILL NOT BE THEREBY WAIVED.
- BACKFILL AND TRENCH RESTORATION REQUIREMENTS SHALL APPLY AS MINIMUM STANDARDS TO ALL UNDERGROUND FACILITIES INSTALLED BY OTHER FIRMS OR PUBLIC AGENCIES.

RETAINING WALL

- REINFORCED CONCRETE AND CONCRETE MASONRY UNIT RETAINING WALLS SHALL HAVE FOUNDATION AND REINFORCEMENT INSPECTED BY THE COUNTY ENGINEERING INSPECTOR AND ENGINEER OF RECORD PRIOR TO POURING THE FOUNDATION AND
- 2. SEGMENTAL BLOCK RETAINING WALLS SHALL HAVE FOUNDATION AND REINFORCEMENT INSPECTED BY THE COUNTY

GRADING NOTES

- EXCAVATED MATERIAL SHALL BE PLACED IN THE FILL AREAS DESIGNATED OR SHALL BE HAULED AWAY FROM THE SITE TO A COUNTY APPROVED DISPOSAL SITE. WHERE FILL MATERIAL IS TO BE PLACED ON NATURAL GROUND, IS SHALL BE STRIPPED OF ALL VEGETATION. TO ACHIEVE A PROPER BOND WITH THE FILL MATERIAL, THE SURFACE OF THE GROUND SHALL BE SCARIFIED TO DEPTH OF 6" BEFORE FILL IS PLACED. WHERE NATURAL GROUND IS STEEPER THAN 5:1, IT SHALL BE BENCHED AND THE FILL KEYED IN TO ACHIEVE STABILITY. WHERE NEW FILL IS TO BE PLACED ON EXISTING FILL THE EXISTING FILL SHALL BE REMOVED UNTIL MATERIAL COMPACTED TO 90% RELATIVE COMPACTION IS EXPOSED. THEN THE NEW FILL MATERIAL SHALL BE PLACED AS PER THESE CONSTRUCTION NOTES. FILL MATERIAL SHALL BE PLACED IN UNIFORM LIFTS NOT EXCEEDING 6" IN UNCOMPACTED THICKNESS BEFORE COMPACTION BEGINS THE FILL SHALL BE BROUGHT TO A WATER CONTENT THAT WILL PERMIT PROPER COMPACTION BY EITHER 1) AERATING THE FILL IF IT IS TOO WET OR 2) MOISTENING THE FILL WITH WATER IF IT IS TOO DRY. EACH
- LIFT SHALL BE THOROUGHLY MIXED BEFORE COMPACTION TO ENSURE A UNIFORM DISTRIBUTION OF MOISTURE. EXCESS CUT MATERIAL SHALL NOT BE SPREAD OR STOCKPILED ON THE SITE.
- SURPLUS EARTH FILL MATERIAL SHALL BE PLACED IN A SINGLE (8" MAX) THICK LAYER COMPACTED TO WITHSTAND WEATHERING IN
- NO ORGANIC MATERIAL SHALL BE PLACED IN ANY FILL. NO TREES SHALL BE REMOVED OUTSIDE OF CUT, FILL OR ROADWAY AREAS. 5. THE UPPER 6" OF SUBGRADE BELOW DRIVEWAY ACCESS ROAD OR PARKING AREA SHALL BE COMPACTED TO 95% OF MAXIMUM
- MAXIMUM CUT SLOPE SHALL BE 2 HORIZONTAL TO 1 VERTICAL. MAXIMUM FILL SLOPE SHALL BE 2 HORIZONTAL TO 1 VERTICAL. NOTE: FILL VOLUMES INCLUDE 10% SHRINKAGE. EXCESS MATERIAL SHALL BE OFF HAULED TO A COUNTY APPROVED DUMP SITE.

LOCATION	CUT (C.Y.)	FILL (C.Y.)	IMPORT (C.Y.)	EXPORT (C.Y.)	VERT. DEPTH
RESIDENCE	597.3	87.6	-	509.7	10'
RETAINING WALL (DRIVEWAY)	1666.6	70.3	-	1596.3	7'
POOL/HARDSCAPE	-	-	-	-	-
LANDSCAPE	-	-	-	-	-
DRIVEWAY	196.3	9	-	187.3	6'
OFF SITE IMPROVEMENTS	-	-	-	-	-
TOTAL	2460.2	166.9	_	2293.3	_

NOTE: FILL VOLUMES INCLUDE 10% SHRINKAGE.

- EXCESS MATERIAL SHALL BE OFF HAULED TO A COUNTY APPROVED DUMP SITE. 7. NOTIFY SOILS ENGINEER TWO (2) DAYS PRIOR TO COMMENCEMENT OF ANY GRADING WORK TO COORDINATE THE WORK IN THE
- 8. ALL MATERIALS FOR FILL SHOULD BE APPROVED BY THE SOILS ENGINEER BEFORE IT IS BROUGHT TO THE SITE. 9. THE UPPER 6" OF THE SUBGRADE SOIL SHALL BE SCARIFIED, MOISTURE CONDITIONED AND COMPACTED TO A MINIMUM RELATIVE
- COMPACTION OF 95% 10. ALL AGGREGATE BASE MATERIAL SHALL BE COMPACTED TO A MINIMUM 95% RELATIVE COMPACTION.
- 11. THE GEOTECHNICAL PLAN REVIEW LETTER MUST BE REVIEWED AND APPROVED BY THE COUNTY GEOLOGIST PRIOR TO FINAL APPROVAL BY THE COUNTY ENGINEER FOR BUILDING OCCUPANCY.
- 12. THE PROJECT GEOTECHNICAL ENGINEER SHALL PERFORM COMPACTION TESTING AND PRESENT THE RESULTS TO THE COUNTY ENGINEERING INSPECTOR PRIOR TO THE CONSTRUCTION OF ANY PAVED AREA.
- 13. GRADING WORK BETWEEN OCTOBER 15TH AND APRIL 15TH IS AT THE DISCRETION OF THE SANTA CLARA COUNTY GRADING
- 14. TOTAL DISTURBED AREA FOR THE PROJECT ____

TO DATE STORM WATER POLLUTION PREVENTION PLAN (SWPPP) IS AVAILABLE ON SITE.

16. THE INSPECTOR MAY VERIFY THAT A VALID NOTICE OF INTENT (NOI) HAS BEEN ISSUED BY THE STATE AND THAT A CURRENT AND UP

ACCESS ROADS AND DRIVEWAYS

- DRIVEWAY LOCATIONS SHALL BE AS SHOWN ON THE IMPROVEMENT PLANS WITH CENTERLINE STATIONING. THE MINIMUM CONCRETE THICKNESS SHALL BE 6 INCHES THROUGHOUT (WITH A MAXIMUM APPROACH SLOPE OF 1 1/4 INCHES PER FOOT). 2. ALL DRIVEWAY OR COMMON ACCESS ROAD SECTIONS IN EXCESS OF 15 LONGITUDINAL SLOPE MUST BE PAVED WITH A MINIMUM
- 2-INCH ASPHALT LIFT OR FULL DEPTH CONCRETE LIFT PRIOR TO ANY COMBUSTIBLE FRAMING. THE OWNER AND PRIME CONTRACTOR ARE RESPONSIBLE FOR MAINTAINING PROJECT SITE ACCESS AND NEIGHBORHOOD ACCESS
- FOR EMERGENCY VEHICLES AND LOCAL RESIDENTS. 4. ROADWAYS DESIGNATED AS NOT COUNTY MAINTAINED ROADS AS SHOWN ON THE PLAN WILL NOT BE ELIGIBLE FOR COUNTY MAINTENANCE UNTIL THE ROADWAYS ARE IMPROVED (AT NO COST TO THE COUNTY) TO THE PUBLIC MAINTENANCE ROAD STANDARDS APPROVED BY THE BOARD OF SUPERVISORS AND IN EFFECT AT SUCH TIME THAT THE ROADWAYS ARE CONSIDERED FOR
- ACCEPTANCE INTO THE COUNTY'S ROAD SYSTEM. 5. ALL WORK IN THE COUNTY ROAD RIGHT-OF-WAY REQUIRES AN ENCROACHMENT PERMIT FROM THE ROADS AND AIRPORTS DEPARTMENT. EACH INDIVIDUAL ACTIVITY REQUIRES A SEPARATE PERMIT - I.E. CABLE, ELECTRICAL, GAS, SEWER, WATER, RETAINING WALLS, DRIVEWAY APPROACHES, FENCES, LANDSCAPING, TREE REMOVAL, STORM DRAINAGE IMPROVEMENTS, ETC...

STREET LIGHTING

1. PACIFIC GAS & ELECTRIC ELECTROLIER SERVICE FEE SHALL BE PAID BY THE DEVELOPER AND/OR HIS AUTHORIZED REPRESENTATIVE.

SANITARY SEWER

- 1. THE SANITARY SEWER AND WATER UTILITIES SHOWN ON THESE PLANS ARE NOT PART OF THIS GRADING PERMIT AND ARE SHOWN
- 2. ALL MATERIALS AND METHODS OF CONSTRUCTION OF SANITARY SEWERS SHALL CONFORM TO THE SPECIFICATIONS OF THE JURISDICTION INVOLVED. INSPECTION OF SANITARY SEWER WORK SHALL BE DONE BY SAID JURISDICTION.

PORTLAND CEMENT CONCRETE

CONCRETE USED FOR STRUCTURAL PURPOSES SHALL BE CLASS "A" (6 SACK PER CUBIC YARD) AS SPECIFIED IN THE STATE STANDARD SPECIFICATIONS. CONCRETE PLACED MUST DEVELOP A MINIMUM STRENGTH FACTOR OF 2800 PSI IN A SEVEN-DAY PERIOD. THE CONCRETE MIX DESIGN SHALL BE UNDER THE CONTINUAL CONTROL OF THE COUNTY INSPECTOR.

AS-BUILT PLANS STATEMENT

1. THIS IS A TRUE COPY OF THE AS-BUILT PLANS. THERE (___ WERE) (___ WERE NOT) MINOR FIELD CHANGES - MARKED WITH THE SYMBOL (^). THERE (__WERE) (__ WERE NOT) PLAN REVISIONS INDICATING SIGNIFICANT CHANGES REVIEWED BY THE COUNTY ENGINEER AND MARKED WITH THE SYMBOL Δ .

2. NOTE: THIS STATEMENT IS TO BE SIGNED BY THE PERSON AUTHORIZED BY THE COUNTY ENGINEER TO PERFORM THE INSPECTION WORK. A REPRODUCIBLE COPY OF THE AS-BUILT PLANS MUST BE FURNISHED TO THE COUNTY ENGINEER AFTER CONSTRUCTION.

RECORDED DOCUMENT INFORMATION FOR ALL EASEMENTS

1. Easement(s) for the purpose(s) shown below and rights incidental thereto, as granted in a document: Granted to: Flizabeth Mack Water pipelines Purpose: Recording Date: May 12, 2077 Book 45, Page 106, of Deeds Exact Location not Disclosed of record

Easement(s) for the purpose(s) shown below and rights incidental thereto, as granted in a document: Charles W. Pomerov Granted to: Purpose: Water pipelines

Recording Date: October 18, 1881 Book 61, Page 206, of Deeds Exact Location not Disclosed of record

Easement(s) for the purpose(s) shown below and rights incidental thereto, as granted in a document: Granted to: George H. McCracken, Et Al Purpose: Water pipelines Recording Date: November 12, 2081 Book 61, Page 424, of Deeds

Exact Location not Disclosed of record Easement(s) for the purpose(s) shown below and rights incidental thereto, as granted in a document: Alexis Fammatre Granted to: Purpose: Water pipelines

Recording Date: September 28, 1911 Book 377, Page 59, of Deeds Exact Location not Disclosed of record

5. Easement(s) for the purpose(s) shown below and rights incidental thereto, as granted in a document: Charles H. Brundage and Mary C. Brundage Granted to: Purpose: Water pipelines

Recording Date: September 13, 1918 Book 476, Page 548, of Deeds Exact Location not Disclosed of record

Easement(s) for the purpose(s) shown below and rights incidental thereto, as granted in a document: Chas P. Durney and R.G. Wilkins Granted to:

Water pipelines Recording Date: March 3, 1928

Recording No.: Book 383, Page 374, of Official Records

7. Easement(s) for the purpose(s) shown below and rights incidental thereto, as granted in a document: County Sanitation District Granted to: Purpose: Sewer pipelines

Recording Date: July 31, 1952 Recording No.: Book 2461, Page 393, of Official Records As Described Therein

8. Easement(s) for the purpose(s) shown below and rights incidental thereto, as granted in a document: Granted to: Bruce Kranak and Mary Jean Kranak Purpose: Encroachment easement

Recording Date: June 2, 2009 Recording No.: 20275595, of Official Records As Described Therein

All of the exceptions and easements shown on the civil plan are labeled as referenced in Preliminary Title and Policy Order No.: FSBC-TO21001373, dated Nov 05, 2021.

SHEET INDEX

PRECISE GRADING & DRAINAGE PLAN SECTIONS DETAILS **EROSION CONTROL PLAN** POLLUTION PREVENTION BMP

OWNER

MR SIVAPRAKASAM BALASUBRAMANIAN & MRS. RAMARAJ KALAISELVI ADDRESS: 0 Miradero Ave, San Jose, CA 95127 PHONE: EMAIL:

ARCHITECTURAL DESIGNER

NAME: SOLAR MAX DESIGN PHONE: (310) 740-9649 / (310) 844-7370 EMAIL: solarmax.dsgn@gmail.com

STRUCTURAL ENGINEER PROVIDE

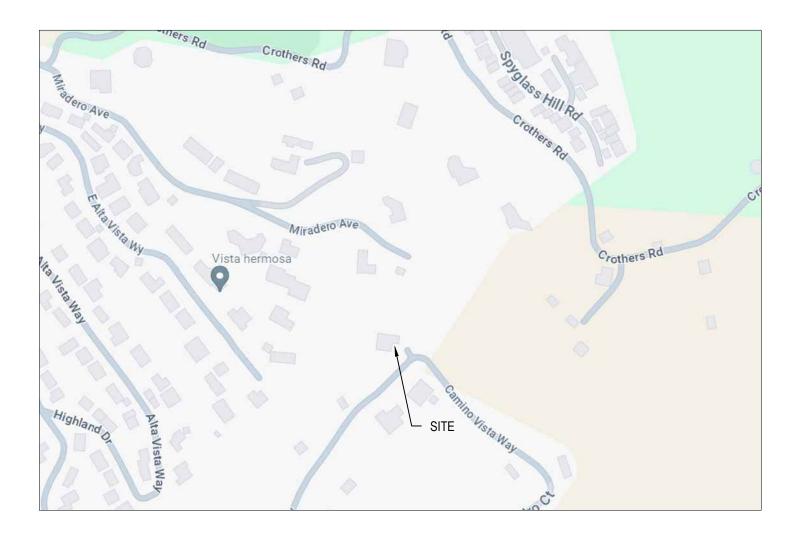
PHONE: EMAIL:

CIVIL ENGINEER

NAME: LEI ZHENG PHONE: (510) 909-1933 EMAIL: engineer.lei@gmail.com

SURVEYOR

ADDRESS: 11040 BOLLINGER CANYON RD, SUITE E-102SAN RAMON, CA 94582 PHONE: (925) 705-3633 EMAIL: 1sterlingconsultantsagmail.com







CHIEF ENGINEER:LEI ZHENG (MASON) PHONE: (510)909-1933 EMAIL: ENGINEER.LEI@GMAIL.COM

DURING CONSTRUCTION IF ANY DIFFICULTY OCCUR. PLEASE CONTACT ENGINEER IMMEDIATELY .IF CONTRACTOR DEVIATE FROM THE DRAWING WITHOUT PRIOR APPROVAL FROM ENGINEER, THE CONTRACTOR WILL TAKE ALL THE LIABILITY DUE TO DEVIATION.

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REV.	DESCRIPTION	DATE
0	APPLY FOR PERMITS	05-10-2024
1	PLAN CHECK	10-18-2024

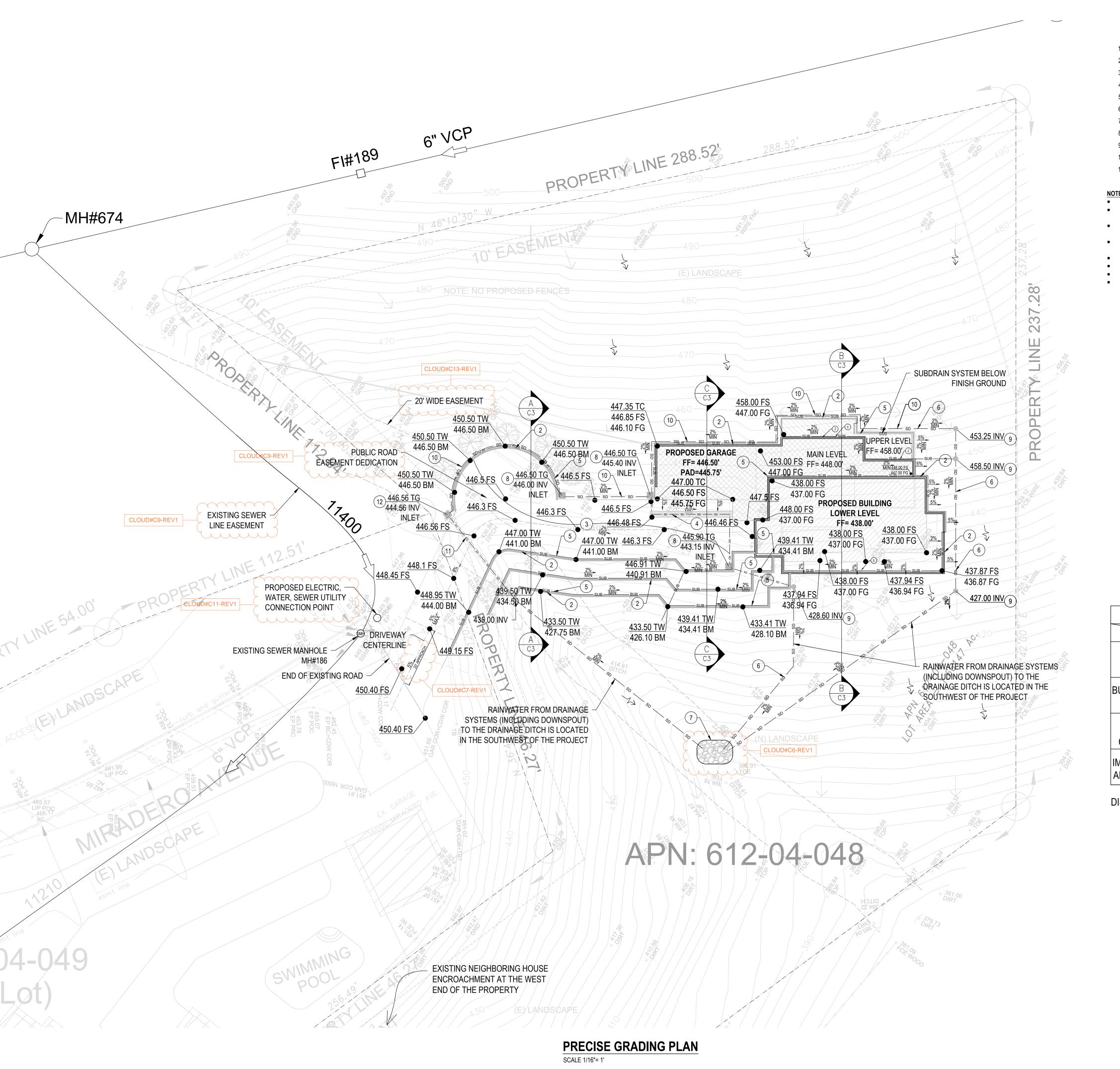
Jurisdiction:

Licensor:

SHEET TITLE:

TITLE SHEET

SHEET NUMBER:



CONSTRUCTION NOTE

- 1 (E) CONCRETE BLOCK WALL
- 2 NEW RETAINING WALL
- 3 CONSTRUCT NEW DRIVEWAY PER DETAIL 1/C-4.
- 4 INSTALL CHANNEL DRAIN SEE DETAIL 6/C-4.
- 5 INSTALL SUBDRAIN SYSTEM
- INSTALL 4" DIA. PVC SCHEDULE 40 OR SDR 35 PIPE DRAIN SYSTEM.
- INSTALL RETENTION AREA LINED WITH RIP-RAP SEE DETAIL 9/C-4
- INSTALL NDS 12" SQUARE CATCH BASIN (TYP)
- INSTALL 4" DIA. PVC OR SDR 35 PIPE DRAIN SYSTEM FOR DOWNSPOUT CONNECT TO DRAINAGE SYSTEM\
- 10 INSTALL SWALE DRAIN SYSTEM SEE DETAIL 8/C-4.
- 11 INSTALL 24" DIA. G.I. PIPE CULVERT

- SEPARATE ENCROACHMENT PERMIT IS REQUIRED FOR ALL WORK DONE IN THE PUBLIC RIGHT-OF-WAY.
- PER 2016 C.B.C. 1804.4, ALL SURFACES IMMEDIATELY ADJACENT TO FOUNDATIONS SHALL SLOPE AWAY AT A
- MINIMUM 2% FOR IMPERVIOUS SURFACES AND 5% FOR PERVIOUS SURFACES. CONTRACTOR TO PROVIDE LANDSCAPING ON SLOPE AREA AT THE REAR OF THE PROPERTY FOR EROSION
- CONTROL PURPOSE. SEE ARCHITECTURAL PLANS FOR SITE DEMOLITION INFORMATION.
- ALL WALLS UNDER SEPARATE PERMIT.
- TOTAL FOOTING DEPTH = DEEPENED FOOTING DEPTH (DF) + MINIMUM FOOTING EMBEDMENT
- ALL DRAINAGE PIPE WILL BE 1% SLOPE UNLESS NOTE OTHERWISE

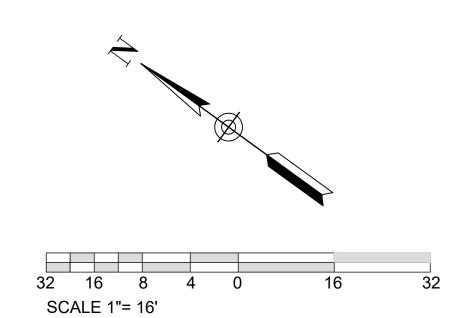
LEGEND

LEGEND	
—— 100 ——	EXISTING CONTOUR
100FS	SPOT ELEVATION
1	PROPOSED CONCRETE AREA
	PROPOSED DECK AREA
	VIEW TERRACE (STONE PAVERS)
	PROPOSED DECOMPOSED GRANITE (DO
	4 INCH PERFORATED PVC PIPE
SD	PROPOSED STORM DRAIN
	FLOW LINE
	PROPERTY LINE
<u>X.X%</u>	SURFACE SLOPE
S=X.X	STORM DRAIN SLOPE

$-\!$	NATURAL SLOPE, MAXIMUM 50%
PAD	PROPOSED PAD ELEVATION
FS	PROPOSED FINISHED SURFACE
FG	PROPOSED FINISHED GROUND
FF	PROPOSED FINISHED FLOOR
PL	PROPERTY LINE
HP	HIGH POINT

IMPERVIOUS AREA			
	PRE-DEVELOPED		
LOT SIZE	71,744 SF	71,744 SF	
BUILDING COVERAGE AREA	0 SF	3,148 SF	
IMPERMEABLE CONCRETE AREA	0 SF	2,608 SF	
IMPERVIOUS SURFACE AREA (TOTAL)	0 SF	5,756 SF	

DISTURBED AREA 14,178 SF



WWW.CECILIA123.COM CHIEF ENGINEER:LEI ZHENG (MASON)

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EMAIL: ENGINEER.LEI@GMAIL.COM

PHONE: (510)909-1933

Miradero OSe $\boldsymbol{\sigma}$ 0

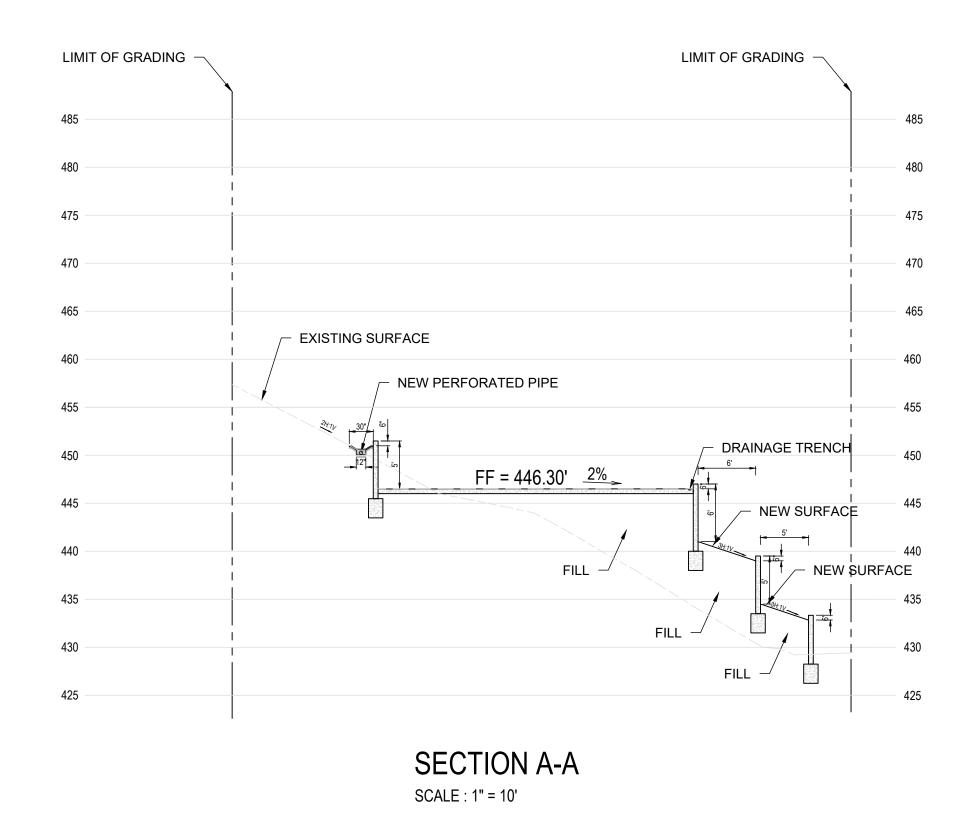
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REV.	REV. DESCRIPTION		
0	APPLY FOR PERMITS	05-10-2024	
1	PLAN CHECK	10-18-2024	

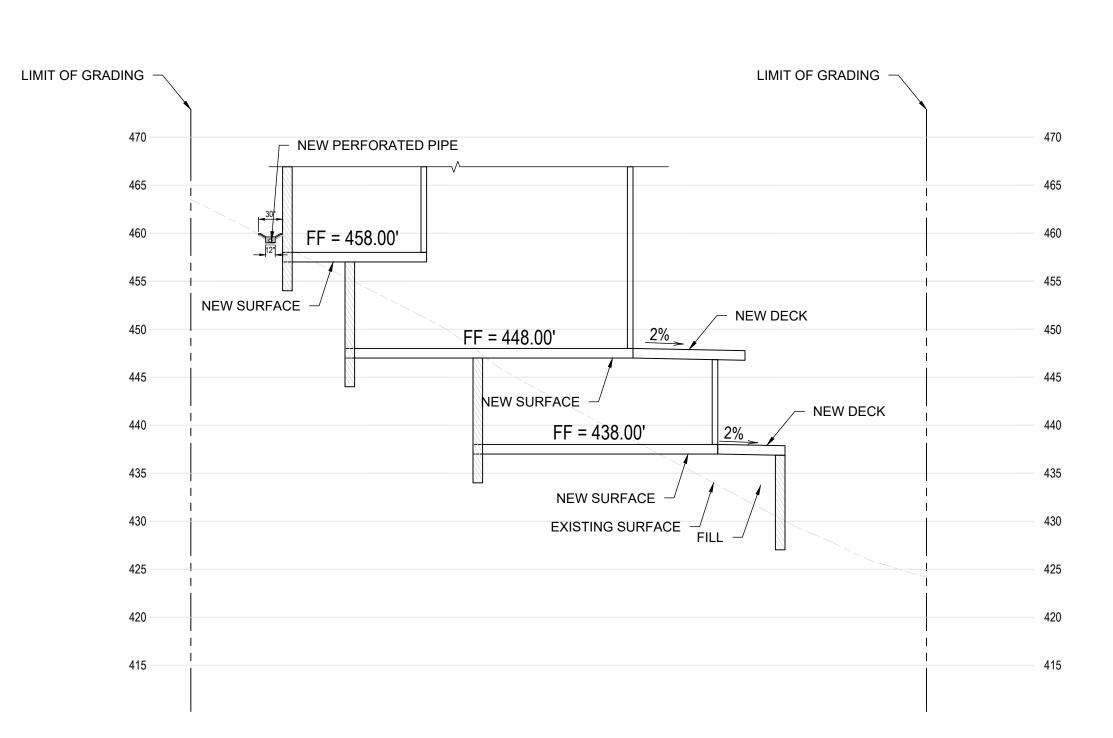
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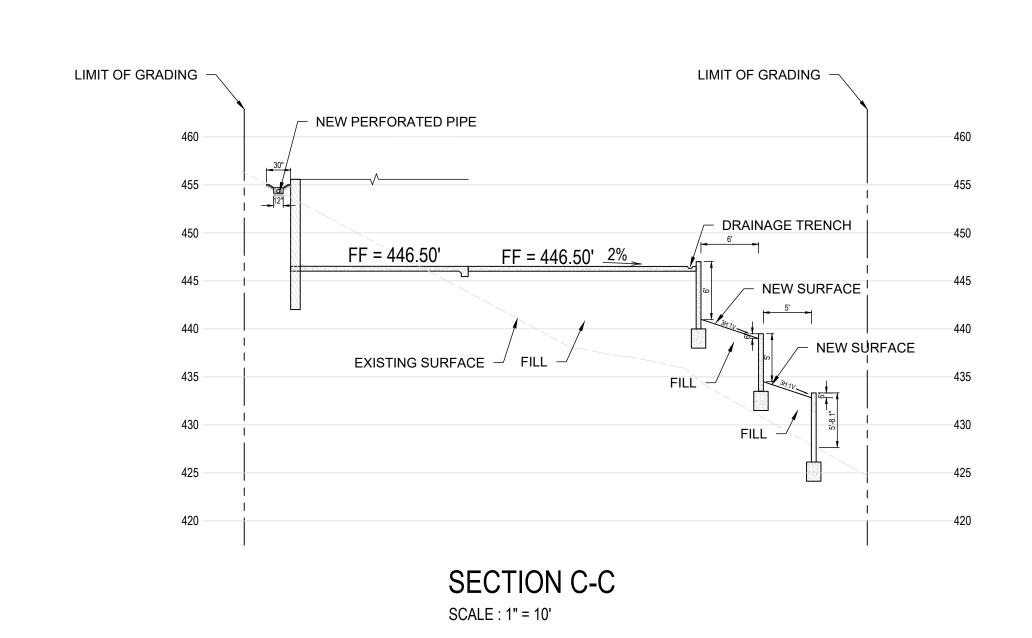
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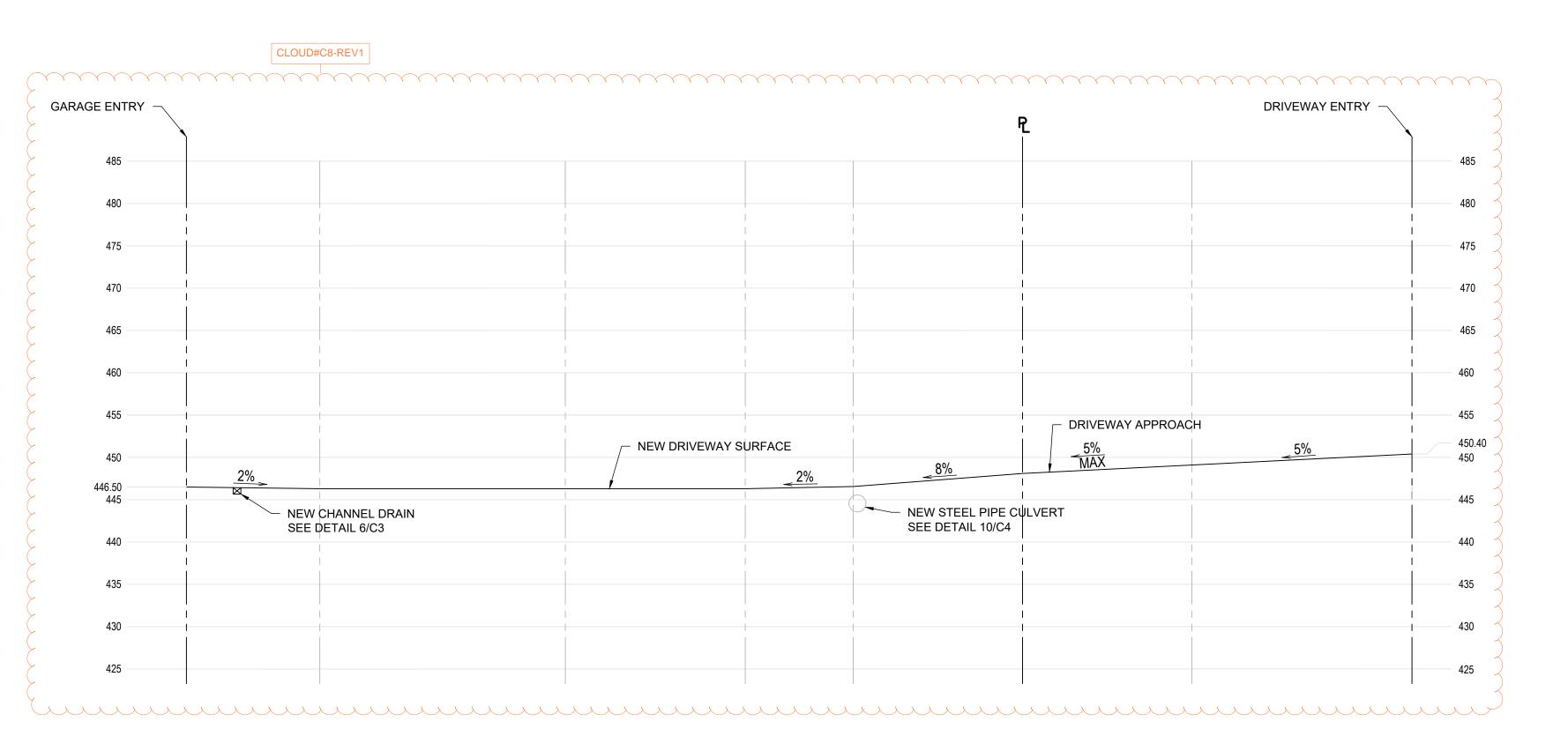
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SECTION B-B SCALE: 1" = 10'





DRIVEWAY CENTERLINE SECTION

SCALE: 1" = 10'

CECILIA HOME
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0 Miradero Ave, San Jose, CA 95127

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	0	APPLY FOR PERMITS	05-10-2024
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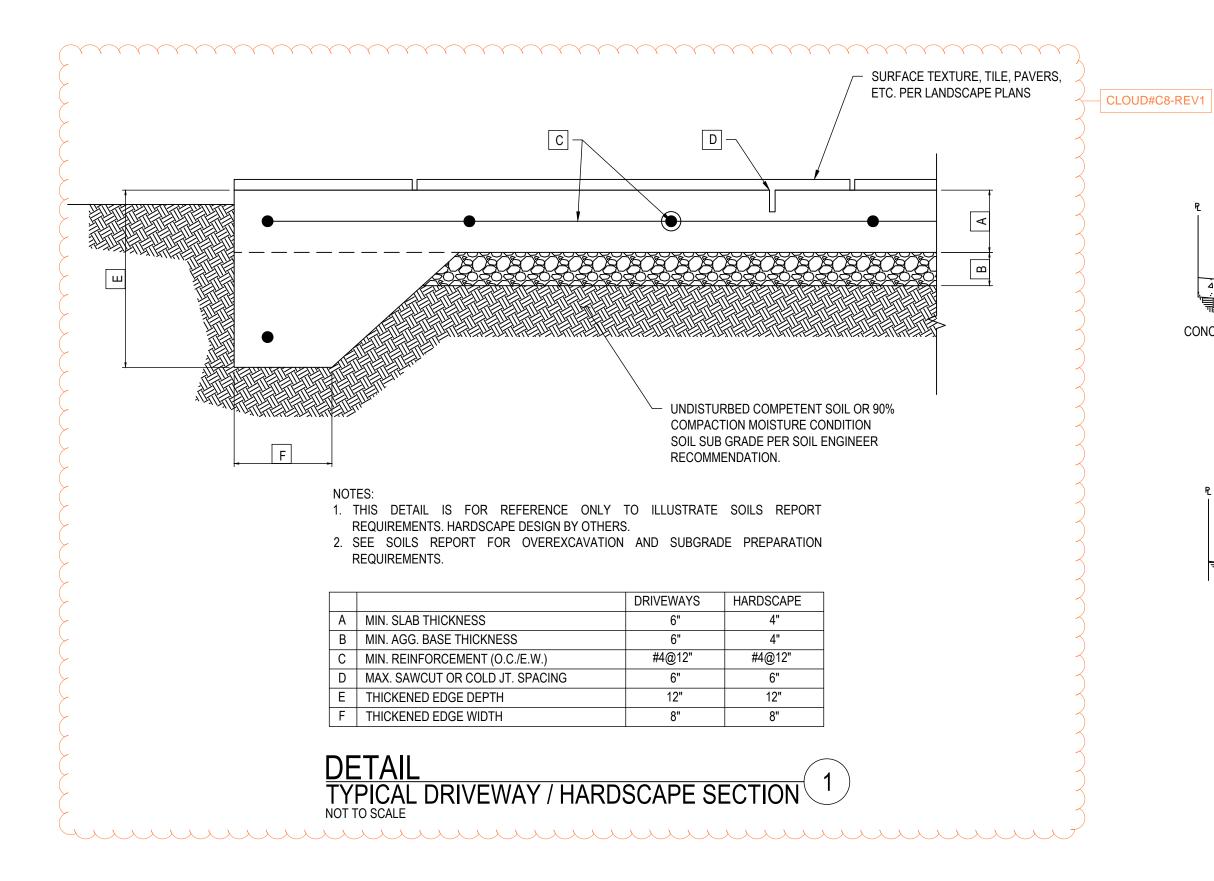
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Licensor:		

SECTIONS

SHEET TITLE:

SHEET NUMBER:

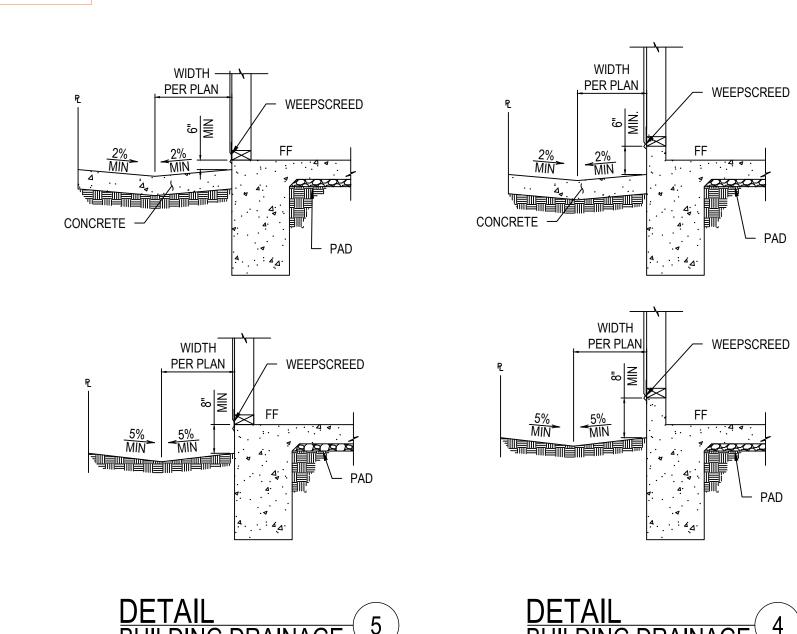


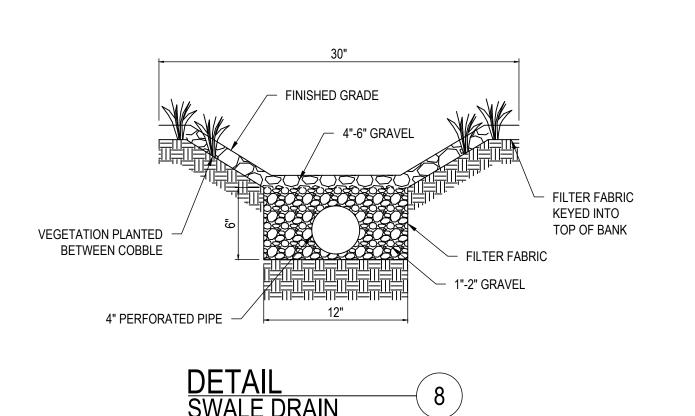
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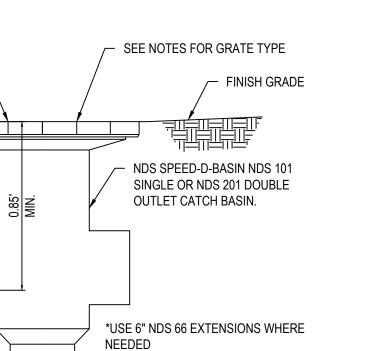
ELEV. PER PLAN

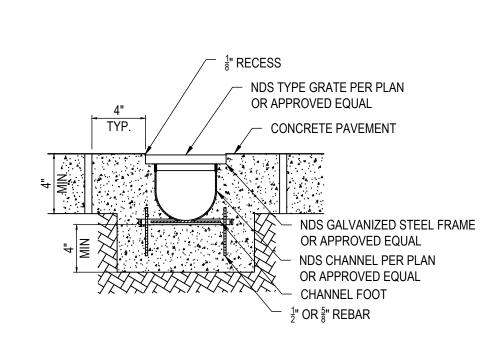
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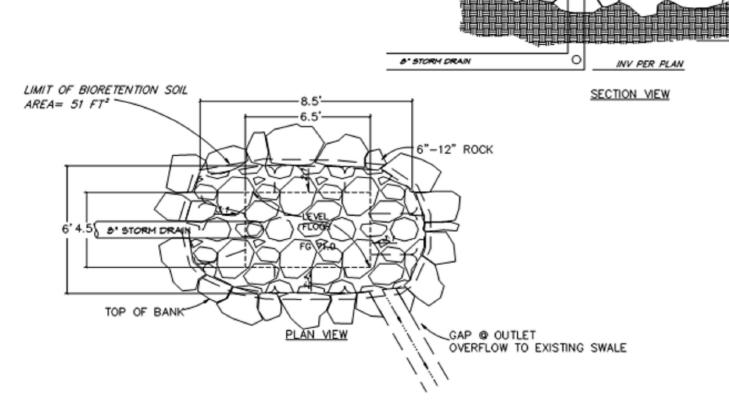
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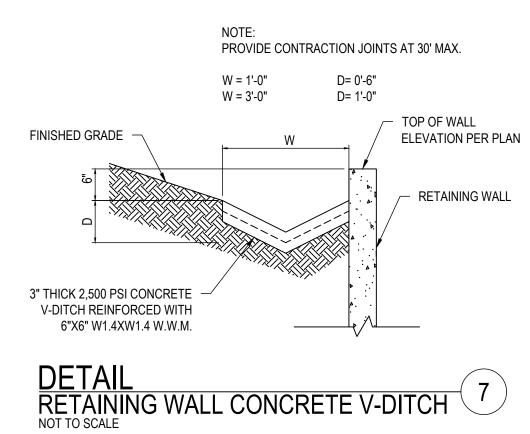


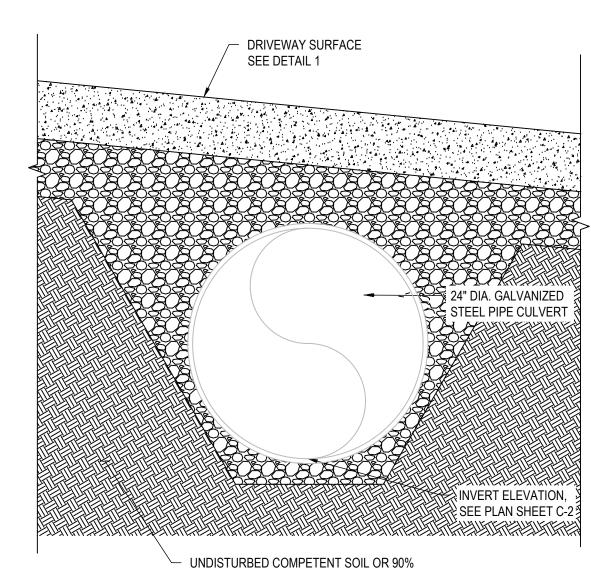


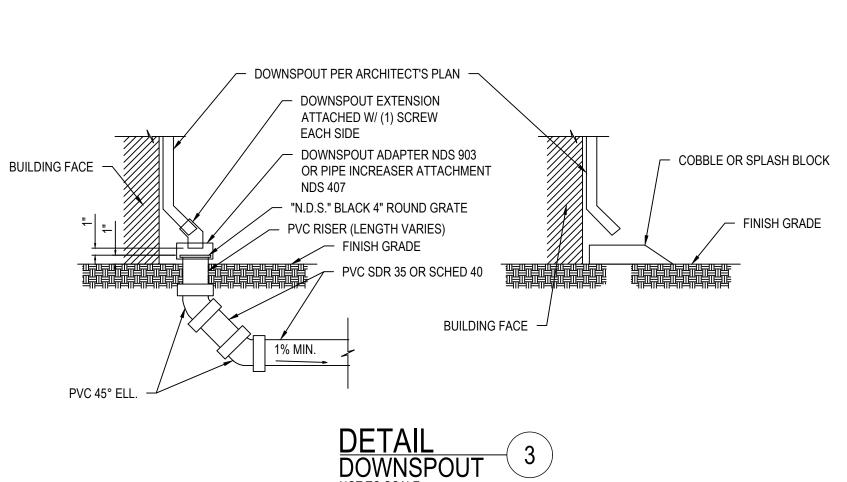












BODIED FAST SET) FOR PIPE THRU 6" Ø.

5. ALL PIPES TO BE 4" Ø PVC SDR 35 OR SCHEDULE 40.

SEE NOTES FOR GRATE TYPE

1% MIN.

4" MIN PVC MAIN W/ TEE OR WYE

2. REFER TO GRADING PLAN FOR FINISH GRADING.

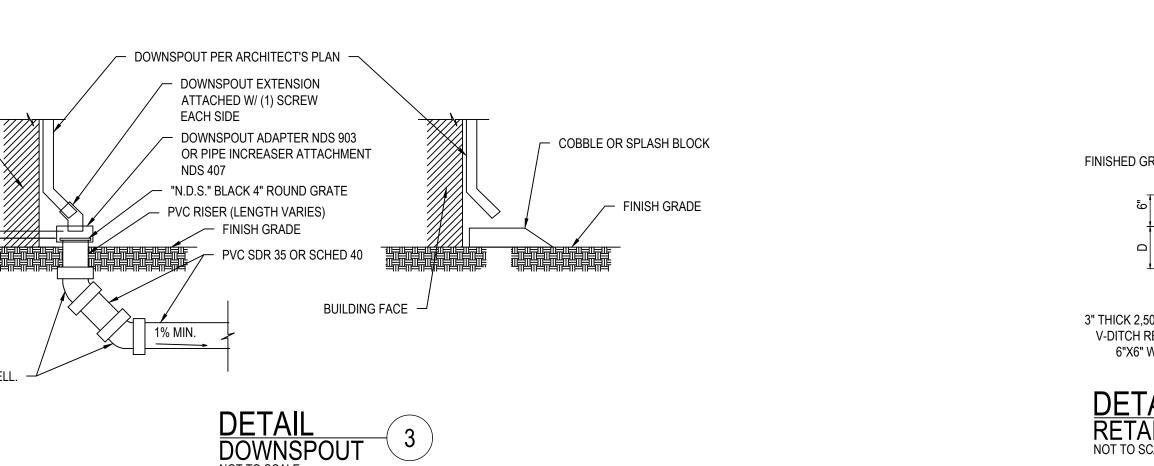
3. DO NOT GLUE GRATE OR RISER TO PIPE.

FINISH GRADE

90° PVC ELL. - 4" PVC SDR 35 DRAIN PIPE (TYP.)

ADAPTOR 4" PVC RISER (IF NEEDED)

1. ALL FITTINGS BY: NDS, INC. (OR EQUAL) PHONE: 4. GLUE "I.P.S. WELD ON" #773 SOLVENT (MEDIUM



TOP OF GRATE

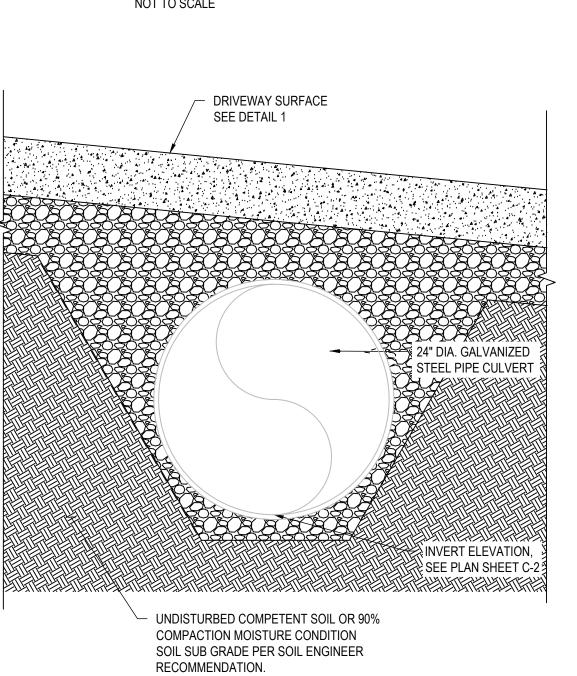
ELEV. PER PLAN

NDS 643 COUPLING -

INV. ELEV. PER PLAN

4" PVC -

1% MIN.



Jose 0

CHIEF ENGINEER:LEI ZHENG (MASON)

EMAIL: ENGINEER.LEI@GMAIL.COM

DURING CONSTRUCTION IF ANY DIFFICULTY

OCCUR, PLEASE CONTACT ENGINEER

FROM THE DRAWING WITHOUT PRIOR

APPROVAL FROM ENGINEER, THE

DUE TO DEVIATION.

Miradero

0

IMMEDIATELY .IF CONTRACTOR DEVIATE

CONTRACTOR WILL TAKE ALL THE LIABILITY

PHONE: (510)909-1933

DESCRIPTION DATE REV. 0 APPLY FOR PERMITS 05-10-2024 1 PLAN CHECK 10-18-2024

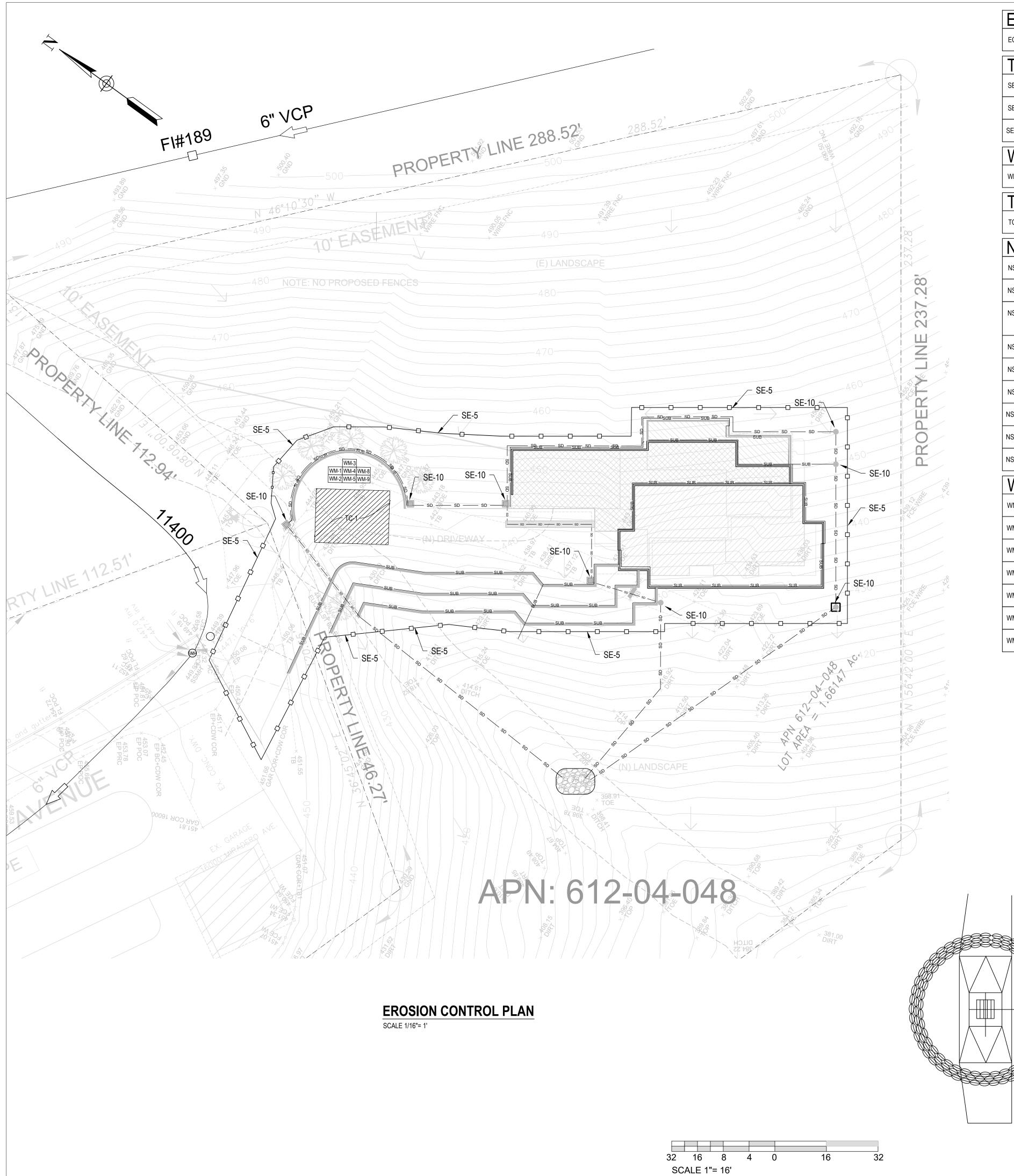
Jurisdiction:

Licensor:

DETAILS

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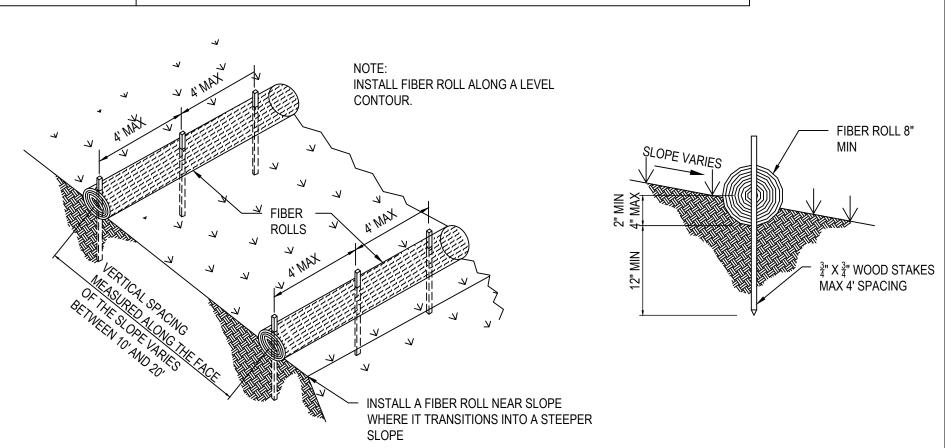
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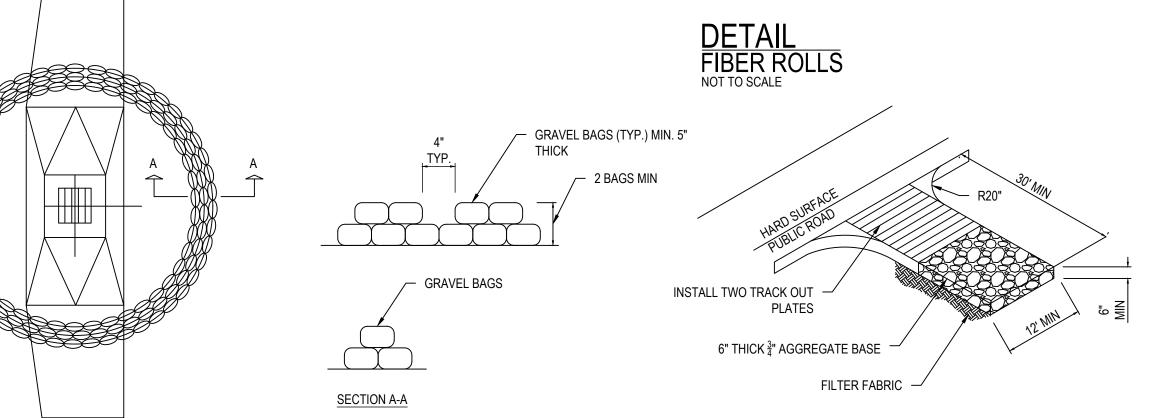


ER	EROSION CONTROL BMPS			
EC-1	SCHEDULING	SCHEDULE PREPARED BY CONTRACTOR SHALL BE ON-SITE DURING CONSTRUCTION.		
TE	MPORARY SEDIMEN	IT CONTROL		
SE-5	FIBER ROLLS	INSTALL WHERE SHOWN ON PLAN.		
SE-7	STREET SWEEPING AND VACUUMING	STREET SHALL BE SWEEPED, SEDIMENT COLLECTED, AND DISPOSED OF OFF-SITE ON A DAILY BASIS.		
SE-10	STORM WATER INLET PROTECTION	ONCE INLET RISERS ARE CONSTRUCTED, SURROUND RISERS WITH GRAVEL BAGS OR CAP THE RISER TO REDUCE SEDIMENT INTRODUCTION TO THE AREA DRAIN SYSTEM.		
WI	ND EROSION CONTR	ROL BMPS		
WE-1	WIND EROSION CONTROL	WATER OR COVER MATERIAL SHALL BE USED TO ALLEVIATE DUST NUISANCE ON THE ROUGH GRADED PADS AND ANY STOCKPILE AREAS.		
TR	ACKING CONTROL			
TC-1	STABILIZED CONSTRUCTION EXIT	RUMBLE RACK SHALL BE PLACED ON THE DRIVEWAY TO ENSURE THAT ALL VEHICLES LEAVING THE SITE PASS OVER THE DEVICES BEFORE ENTERING THE PUBLIC STREET.		

NO	NON-STORMWATER MANAGEMENT				
NS-1	WATER CONSERVATION PRACTICES	MAINTAIN WATER EQUIPMENT TO PREVENT NON-STORMWATER DISCHARGES.			
NS-3	PAVING AND GRADING OPERATIONS	APPLY PARAMETER CONTROLS AND VACUUMING TO PREVENT NON-STORMWATER DISCHARGE.			
NS-6	ILLICIT CONNECTION / ILLEGAL DISCHARGE	CONTRACTOR SHALL REPORT ILLICIT CONNECTIONS OR ILLEGALLY DUMPED MATERIALS ON SITE TO THE RESIDENT ENGINEER IMMEDIATELY AND CONTRACTOR SHALL TAKE NO FURTHER ACTION UNTIL THE RESIDENT ENGINEER PROVIDE A RESPONSE/			
NS-7	POTABLE WATER / IRRIGATION	EXCISE CARE DURING CONSTRUCTION TO PREVENT NON-STORMWATER DISCHARGES.			
NS-8	VEHICLE AND EQUIPMENT CLEANING	ALL VEHICLES AND EQUIPMENT WILL BE CLEANED OFF-SITE.			
NS-9	VEHICLE AND EQUIPMENT FUELING	ALL VEHICLES AND EQUIPMENT WILL BE FUELED OFF-SITE.			
NS-10	VEHICLE AND EQUIPMENT MAINTENANCE	ALL VEHICLES AND EQUIPMENT WILL BE MAINTAINED OFF-SITE.			
NS-12	CONCRETE CURING	APPLIES TO ALL CONCRETE CONSTRUCTION.			
NS-13	CONCRETE FINISHING	APPLIES TO ALL CONCRETE CONSTRUCTION.			

WA	ASTE MANAGEMENT	AND MATERIALS POLLUTION CONTROL
WM-1	MATERIAL DELIVERY AND STORAGE	MATERIALS SHALL BE STORED ON-SITE IN ORIGINAL MARKED CONTAINERS AND COVERED FROM RAIN AND WIND. MATERIAL INVENTORY SHALL CONSIST OF SUPPLY REQUIRED FOR A FEW DAYS.
WM-2	MATERIAL USE	MATERIALS FOR CONSTRUCTION SHALL BE USED IN ACCORDANCE WITH PRODUCT DIRECTION.
WM-3	STOCKPILE MANAGEMENT	MATERIALS STOCKPILES SHALL BE SURROUNDED BY A TEMPORARY SEDIMENT BARRIER AND COVERED TO MAINTAIN DUST CONTROL.
WM-4	SPILL PREVENTION AND CONTROL	AMPLE CLEAN-UP SUPPLIES FOR STORED MATERIALS SHALL BE KEPT ON-SITE. EMPLOYEE SHALL BE EDUCATED ON THE CLASSIFICATION OF SPILLS AND APPROPRIATE RESPONSES.
WM-5	SOLID WASTE MANAGEMENT	SOLID WASTE FROM CONSTRUCTION ACTIVITIES SHALL BE STORED IN APPROPRIATE CONTAINERS. FULL CONTAINERS SHALL BE DISPOSED OF PROPERLY.
WM-8	CONCRETE WASTE MANAGEMENT	AN ON-SITE CONCRETE WASHOUT AREA SHALL BE CONSTRUCTED, USED, AND DISPOSED OF IN A MANNER WHICH MEETS THE REQUIREMENT OF THE CITY.
WM-9	SANITARY / SEPTIC WASTE MANAGEMENT	ON-SITE FACILITY SHALL BE PROVIDED AND MAINTAINED BY THE CONTRACTOR FOR THE DURATION OF THE PROJECT.





DETAIL
GRAVEL BAG FOR INLETS
NOT TO SCALE

DETAIL
STABILIZED CONSTRUCTION ENTRANCE
NOT TO SCALE



WWW.CECILIA123.COM CHIEF ENGINEER:LEI ZHENG (MASON) PHONE: (510)909-1933 EMAIL: ENGINEER.LEI@GMAIL.COM

DURING CONSTRUCTION IF ANY DIFFICULTY OCCUR, PLEASE CONTACT ENGINEER IMMEDIATELY .IF CONTRACTOR DEVIATE FROM THE DRAWING WITHOUT PRIOR APPROVAL FROM ENGINEER, THE CONTRACTOR WILL TAKE ALL THE LIABILITY DUE TO DEVIATION.

O Miradero Ave San Jose, CA 95127

	REV.	DESCRIPTION	DATE
	0	APPLY FOR PERMITS	05-10-2024
	1	PLAN CHECK	10-18-2024

Jurisdiction:

Licensor:

EROSION CONTROL
PLAN

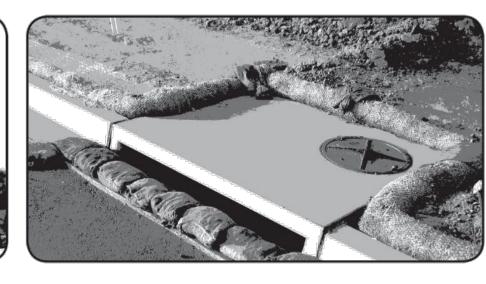
SHEET NUMBER:

POLLUTION PREVENTION—IT'S PART OF THE PLAN

Construction projects are required to implement year-round stormwater BMPs, as they apply to your project.

Runoff from streets and other paved areas is a major source of pollution to San Francisco Bay. Construction activities can directly affect the health of the Bay unless contractors and crews plan ahead to keep construction dirt, debris, and other pollutants out of storm drains and local creeks. Following these guidelines will ensure your compliance with City of Palo Alto Ordinance requirements.











MATERIALS & WASTE **MANAGEMENT**

Non-Hazardous Materials

- ☐ Berm and cover stockpiles of sand, dirt or other construction material with tarps when rain is forecast or when they are not in use.
- ☐ Use (but don't overuse) reclaimed water for dust control.
- ☐ Ensure dust control water doesn't leave site or discharge to storm drains.

Hazardous Materials

- □ Label all hazardous materials and hazardous wastes (such as pesticides, paints, thinners, solvents, fuel, oil, and antifreeze) in accordance with city, county, state and federal regulations.
- ☐ Store hazardous materials and wastes in water tight containers, store in appropriate secondary containment. and cover them at the end of every work day or during wet is forecast.
- ☐ Follow manufacturer's application instructions for hazardous materials and do not use more than necessary. Do not apply chemicals outdoors when rain is forecast within 24 hours.
- ☐ Arrange for appropriate disposal of all hazardous wastes.

Waste Management

- ☐ Cover and maintain dumpsters. Check frequently for leaks. Place dumpsters under roofs or cover with tarps or plastic sheeting secured around the outside of the dumpster. A plastic liner is recommended to prevent leaks. Never clean out a dumpster by hosing it down on the construction site.
- ☐ Place portable toilets away from storm drains. Make sure they are in good working order. Check frequently for leaks.
- ☐ Dispose of all wastes and demolition debris properly. Recycle materials and wastes that can be recycled, including solvents, water-based paints, vehicle fluids, broken asphalt and concrete, wood, and cleared vegetation.
- ☐ Dispose of liquid residues from paints, thinners, solvents, glues, and cleaning fluids as hazardous waste.
- ☐ Keep site clear of litter (e.g. lunch items, cigarette butts).
- ☐ Prevent litter from uncovered loads by covering loads that are being transported to and from site.

Construction Entrances and Perimeter

- ☐ Establish and maintain effective perimeter controls and stabilize all construction entrances and exits to sufficiently control erosion and sediment discharges from site and tracking off site.
- ☐ Sweep or vacuum any street tracking immediately and secure sediment source to prevent further tracking. Never hose down streets to clean up tracking.

EQUIPMENT MANAGEMENT EARTHMOVING & SPILL CONTROL

Maintenance and Parking

- ☐ Designate an area of the construction site, well away from streams or storm drain inlets and fitted with appropriate BMPs, for auto and equipment parking, and storage.
- ☐ Perform major maintenance, repair jobs, and vehicle and equipment washing off site.
- ☐ If refueling or vehicle maintenance must be done onsite, work in a bermed area away from storm drains and over a drip pan or drop cloths big enough to collect fluids. Recycle or dispose of fluids as hazardous waste.
- ☐ If vehicle or equipment cleaning must be done onsite, clean with water only in a bermed area that will not allow rinse water to run into gutters, streets, storm drains, or
- ☐ Do not clean vehicle or equipment onsite using soaps, solvents, degreasers, or steam cleaning equipment, and do not use diesel oil to lubricate equipment or parts onsite.

Spill Prevention and Control

- ☐ Keep spill cleanup materials (e.g., rags, absorbents and cat litter) available at the construction site at all times.
- ☐ Maintain all vehicles and heavy equipment. Inspect frequently for and repair leaks. Use drip pans to catch leaks until repairs are made.
- ☐ Clean up leaks, drips and other spills immediately and dispose of cleanup materials properly.
- ☐ Use dry cleanup methods whenever possible (absorbent materials, cat litter and/or rags)
- ☐ Sweep up spilled dry materials immediately. Never attempt to "wash them away" with water, or bury them.
- ☐ Clean up spills on dirt areas by digging up and properly disposing of contaminated soil.
- ☐ Report any hazardous materials spills immediately! Call City of Palo Alto Communications, (650) 329-2413. If the spill poses a significant hazard to human health and safety, property or the environment, you must report it to the State Office of Emergency Services. (800) 852-7550 (24 hours).

Grading and Earthwork

- ☐ Schedule grading and excavation work during dry weather.
- ☐ Stabilize all denuded areas, install and maintain temporary erosion controls (such as erosion control fabric or bonded fiber matrix) until vegetation is established.
- ☐ Remove existing vegetation only when absolutely necessary, plant temporary vegetation for erosion control on slopes or where construction is not immediately planned.
- ☐ Prevent sediment from migrating offsite and protect storm drain inlets, drainage courses and streams by installing and maintaining appropriate BMPs (e.g., silt fences, gravel bags, fiber rolls, temporary swales, etc.).
- ☐ Keep excavated soil on site and transfer it to dump trucks on site, not in the streets.

Contaminated Soils

- ☐ If any of the following conditions are observed, test for contamination and contact the Regional Water Quality
- Unusual soil conditions, discoloration, or odor.
- Abandoned underground tanks.
- Abandoned wells. Buried barrels, debris, or trash.
- ☐ If the above conditions are observed, document any signs of potential contamination and clearly mark them so they are not distrurbed by construction activities.

Landscaping

- ☐ Protect stockpiled landscaping materials from wind and rain by storing them under tarps all year-round.
- ☐ Stack bagged material on pallets and under cover.
- ☐ Discontinue application of any erodible landscape material within 2 days before a forecast rain event or during wet

CONCRETE MANAGEMENT & DEWATERING

Concrete Management

- ☐ Store both dry and wet materials under cover, protected from rainfall and runoff and away from storm drains or waterways. Store materials off the ground, on pallets. Protect dry materials from wind.
- ☐ Wash down exposed aggregate concrete only when the wash water can (1) flow onto a dirt area; (2) drain onto a bermed surface from which it can be pumped and disposed of properly; or (3) block any storm drain inlets and vacuum washwater from the gutter. If possible, sweep first.
- ☐ Wash out concrete equipment/trucks offsite or in a designated washout area, where the water will flow into a temporary waste pit, and make sure wash water does not leach into the underlying soil. (See CASQA Construction BMP Handbook for properly designed concrete washouts.)

Dewatering

- ☐ Reuse water for dust control, irrigation or another on-site purpose to the greatest extent possible.
- ☐ Be sure to obtain a Permit for Construction in the Public Street from Public Works Engineering before discharging water to a street, gutter, or storm drain. Call the Regional Water Quality Control Plant (RWQCP) at (650) 329-2598 for an inspection prior to commencing discharge. Use filtration or diversion through a basin, tank, or sediment trap as required by the approved dewatering plan. Dewatering is not permitted from October to April.
- ☐ In areas of known contamination, testing is required prior to reuse or discharge of groundwater. Consult with the City inspector to determine what testing to do and to interpret results. Contaminated groundwater must be treated or hauled off-site for proper disposal.

PAVING/ASPHALT WORK

Paving

- □ Avoid paving and seal coating in wet weather or when rain is forecast, to prevent materials that have not cured from contacting stormwater runoff.
- ☐ Cover storm drain inlets and manholes when applying seal coat, slurry seal, fog seal, or similar materials.
- ☐ Collect and recycle or appropriately dispose of excess abrasive gravel or sand. Do NOT sweep or wash it into

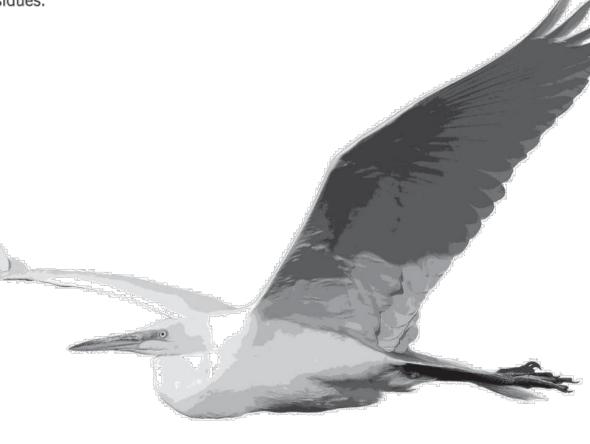
Sawcutting & Asphalt/Concrete Removal

- ☐ Protect storm drain inlets during saw cutting.
- ☐ If saw cut slurry enters a catch basin, clean it up immediately.
- ☐ Shovel or vacuum saw cut slurry deposits and remove from the site. When making saw cuts, use as little water as possible. Sweep up, and properly dispose of all residues.

PAINTING & PAINT REMOVAL

Painting Cleanup and Removal

- ☐ Never clean brushes or rinse paint containers into a street, gutter, storm drain, or stream.
- ☐ For water-based paints, paint out brushes to the extent possible, and rinse into a drain that goes to the sanitary sewer. Never pour paint down a storm drain.
- ☐ For oil-based paints, paint out brushes to the extent possible and clean with thinner or solvent in a proper container. Filter and reuse thinners and solvents. Dispose of excess liquids as hazardous waste.
- ☐ Sweep up or collect paint chips and dust from nonhazardous dry stripping and sand blasting into plastic drop cloths and dispose of as trash.
- ☐ Chemical paint stripping residue and chips and dust from marine paints or paints containing lead, mercury, or tributyltin must be disposed of as hazardous waste. Lead based paint removal requires a state certified contractor.







STORM DRAIN POLLUTERS MAY BE LIABLE FOR FINES OF UP TO \$10,000 PER DAY!

250 Hamilton Avenue Palo Alto, CA 94301 650.329.2211 cityofpaloalto.org





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CONTRACTOR WILL TAKE ALL THE LIABILITY DUE TO DEVIATION.

Miradero

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