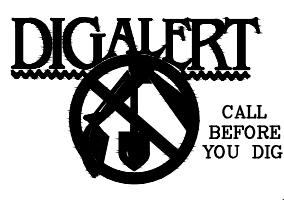
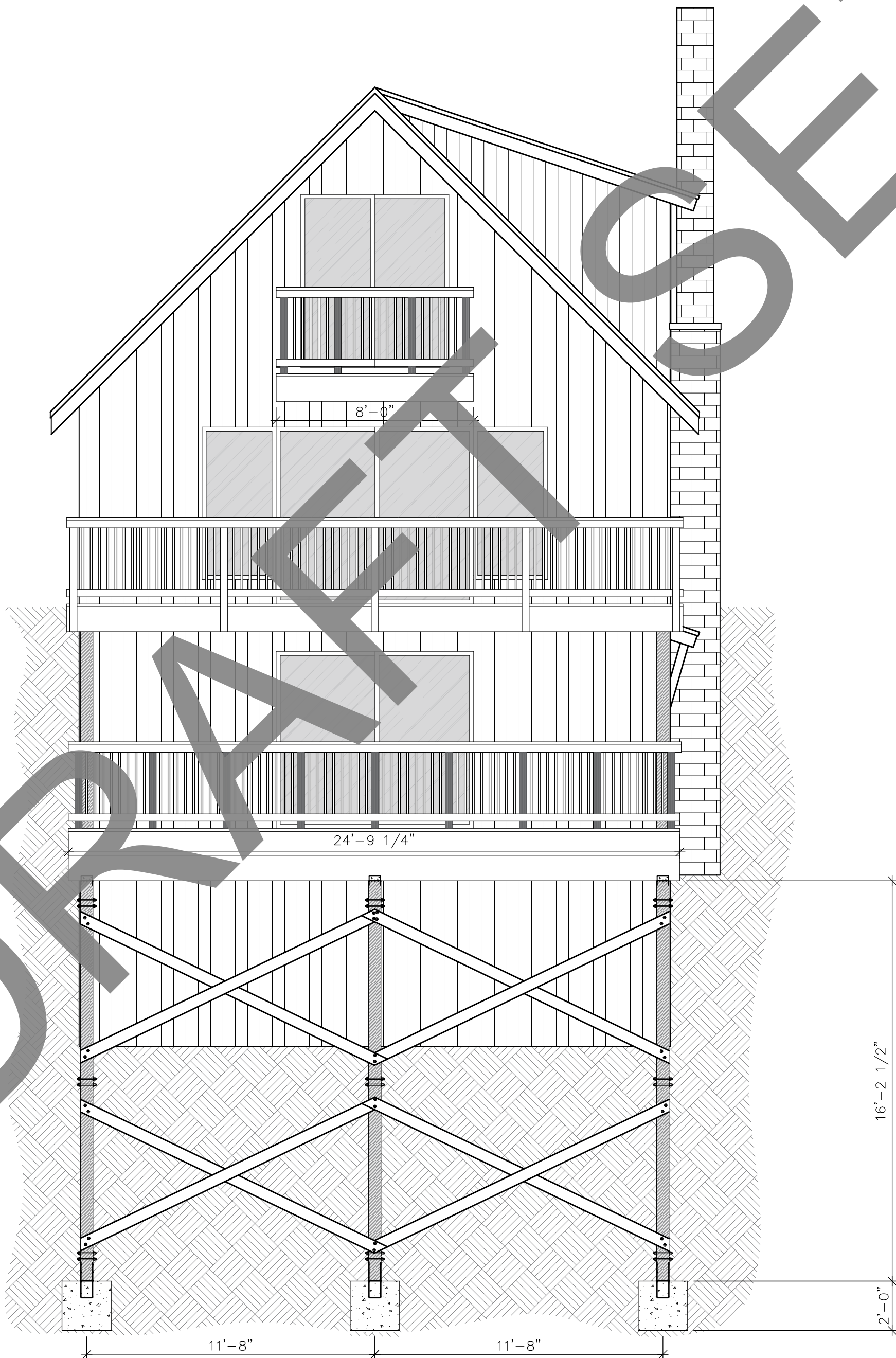


PLANS FOR
NEW LOWER DECK & JULIET BALCONY

720 BUCKINGHAM SQUARE
LAKE ARROWHEAD, CA 92407



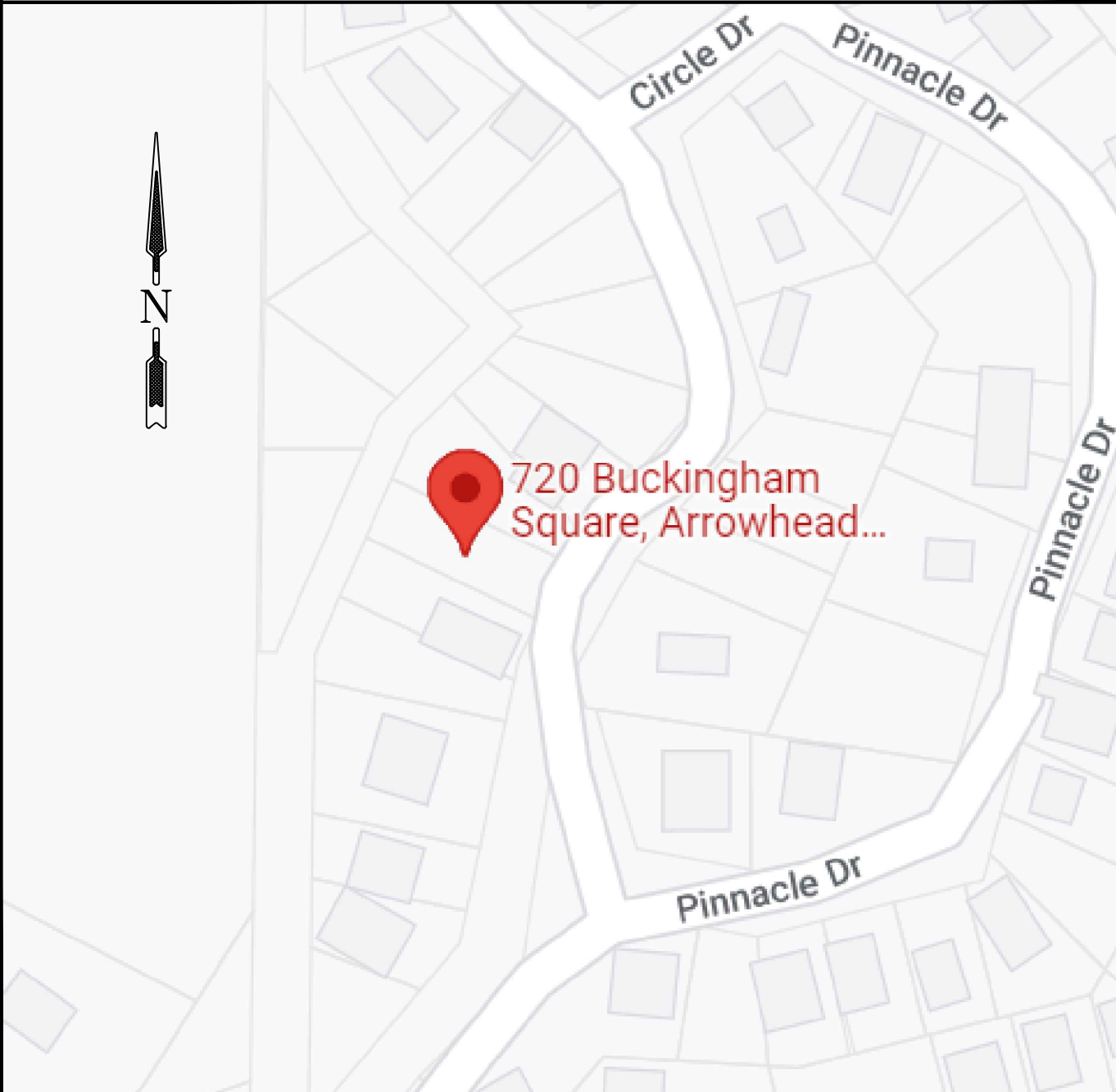
EXISTING & NEW STRUCTURES	
(E) SINGLE FAMILY HOME.....	1,616.00 SQ.FT.
(E) UPPER DECK AREA	262.00 SQ.FT.
(N) LOWER DECK AREA.....	447.00 SQ.FT.
TOTAL SQ. FT.	2,325.00 SQ. FT.
TOTAL LOT SIZE.....	3,670.13 SQ.FT.
SCOPE OF PROJECT	
LOWER DECK RECONSTRUCTION & NEW CANTILEVER JULIET BALCONY ON 3RD FLOOR.	
SITE COVERAGE INFO.	
TOTAL BUILDING AREA.....	1,200.00 SQ.FT.
TOTAL LOT SIZE.....	3,670.00 SQ. FT.
PERCENTAGE OF COVERAGE.....	32%
COUNTY MAX. LOT COVERAGE.....	40%
LOCAL SERVICES	DESIGNER NOTES
BUILDING AND SAFETY LAND USE SERVICES DEPT., BUILDING & SAFETY DIVISION 26010 STATE HIGHWAY 189 P.O. BOX 709 TWIN PEAKS, CA 92391 PHONE: (909) 336-0640 FAX: (909) 336-0616 SB COUNTY: (909) 387-8311 SB CITY: (909) 387-4244	1. THIS SET OF PLANS, PER CONTRACT WITH ARROWHEAD BLUEPRINT AND CAD, IS A BUILDERS SET OF PLANS. THIS MEANS THAT NOT ALL DETAILS AND SPECIFICATIONS ARE PROVIDED AND THE GENERAL CONTRACTOR AND SUBCONTRACTOR WILL BE REQUIRED TO HAVE GENERAL CONSTRUCTION KNOWLEDGE TO COMPLETE THE STRUCTURE. 2. ANY CHANGES OR DEVIATIONS FROM THESE PLANS WITHOUT WRITTEN CONSENT OF AN AUTHORIZED BOYER & ASSOCIATES EMPLOYEE RELEASES THE PROJECT DESIGNER AND BOYER & ASSOCIATES FROM ANY LIABILITY FOR THE ENTIRE PROJECT. 3. (FS1) AN APPROVED EROSION AND SEDIMENT CONTROL PLAN AND PERMIT WILL BE REQUIRED FOR ALL DEVELOPMENT PROJECTS. PRIOR TO BUILDING PERMIT FINAL APPROVAL THE PROPERTY SHALL BE IN COMPLIANCE WITH THE VEGETATION CLEARANCE REQUIREMENTS PRESCRIBED IN CALIFORNIA PUBLIC RESOURCES CODE 4291 AND CALIFORNIA GOVERNMENT CODE SECTION 51182. 4. THE OWNER AND OR GENERAL/FRAMING CONTRACTOR ARE RESPONSIBLE TO REVIEW AND VERIFY ALL SHEAR SCHEDULED FOR THIS PROJECT. ALL SHEAR NAILING, SIMPSON STRONG-WALLS, HARDY FRAMES AND ANY OTHER ALTERNATIVE SHEAR STRUCTURE ARE TO BE INSTALLED AND LOCATED PER PLANS. ANY INCONSISTENCIES OR NECESSARY STRUCTURAL CHANGES ARE TO BE ADDRESSED BY THE ENGINEER OF RECORD BEFORE MOVING FORWARD WITH THE PROJECT IN QUESTION. STRUCTURAL CHANGES MADE DURING CONSTRUCTION THAT ARE NOT REVIEWED BY THE ENGINEER OF RECORD ARE LEGALLY THE RESPONSIBILITY OF THE OWNERS AND OR CONTRACTORS INVOLVED.
BUILDING AND SAFETY SAN BERNARDINO COUNTY ASSESSOR, TWIN PEAKS DIVISION 26010 STATE HIGHWAY 189 P.O. BOX 393 TWIN PEAKS, CA 92391 PHONE: (909) 336-0650 FAX: (909) 336-0656	
SITE INSPECTION APPOINTMENTS PHONE: (909) 338-2613	CODES AND REQUIREMENTS OCCUPANCY: R-3 TYPE OF CONSTRUCTION: V-B SPRINKLERED: SEE FIRE LETTER BUILDING CODE STANDARDS: 2022 CRC, 2022 CBC, 2022 CPC, 2022 CMC, 2022 CEC, 2022 CFC, 2022 UBC 2022 CALIFORNIA ENERGY CODE 2022 CALGREEN LOCAL SAN BERNARDINO COUNTY / CITY BLDG. CODES
SOUTHERN CALIFORNIA EDISON PHONE: 1-800-655-4555	DIGALERT IN ORDER TO COMPLY WITH SENATE BILL AB73, ANY PERSONS EXCAVATING PRIVATE PROPERTY MUST FIRST NOTIFY DIGALERT AT 1-800-422-4133, 48 HOURS PRIOR TO EXCAVATING IN ORDER TO IDENTIFY THE LOCATIONS OF POSSIBLE UNDERGROUND UTILITIES. UNDERGROUND SERVICE ALERT PHONE: 1-800-422-4133  CALL AT LEAST 2 WORKING DAYS PRIOR TO EXCAVATING.
SOUTHERN CALIFORNIA GAS PHONE: 1-800-427-2200	
VERIZON CALIFORNIA PHONE: 1-800-483-4000	
WATER / SEWER COMPANIES SEE YOUR LOCAL WHITE PAGES FOR CONTACT INFORMATION	
FIRE DEPARTMENTS SEE YOUR LOCAL WHITE PAGES FOR CONTACT INFORMATION	



REAR ELEVATION

SCALE 1/4" = 1'-0"

VICINITY MAP



CONSULTANTS

OWNER
RICHARD A. ROBERTS
1367 TORONTO DRIVE
LAKE ARROWHEAD, CA. 92352
PHONE: xxx
EMAIL: gm4dis24@gmail.com

DRAFTING & PLANNING
ARROWHEAD BLUEPRINT AND CAD
280 HIGHWAY 173
LAKE ARROWHEAD, CA. 92352
PHONE: (909) 513-1070

SURVEYOR
- N/A
-
PHONE: (XXX)XXX-XXXX

DESIGNER
ABC PLANS
280 HIGHWAY 173
LAKE ARROWHEAD, CA. 92352
PHONE: (909) 513-1070
Email: abcplans@yahoo.com

BUILDER / CONTRACTOR
- N/A

SHEET INDEX

A-1	TITLE PAGE
A-2	SITE PLAN & EROSION CONTROL PLAN
A-3	SURVEY
A-4	EXISTING FLOOR PLANS
A-5	PROPOSED FLOOR PLANS
A-6	ELEVATIONS
A-7	FRAMING FLOOR PLANS
G-1	CGBSC-1
G-2	CGBSC-2
G-3	2019 RESIDENTIAL MANDATORY MEASURES
G-4	NPDES NOTES
G-5	MINIMUM RESIDENTIAL DECK REQU.

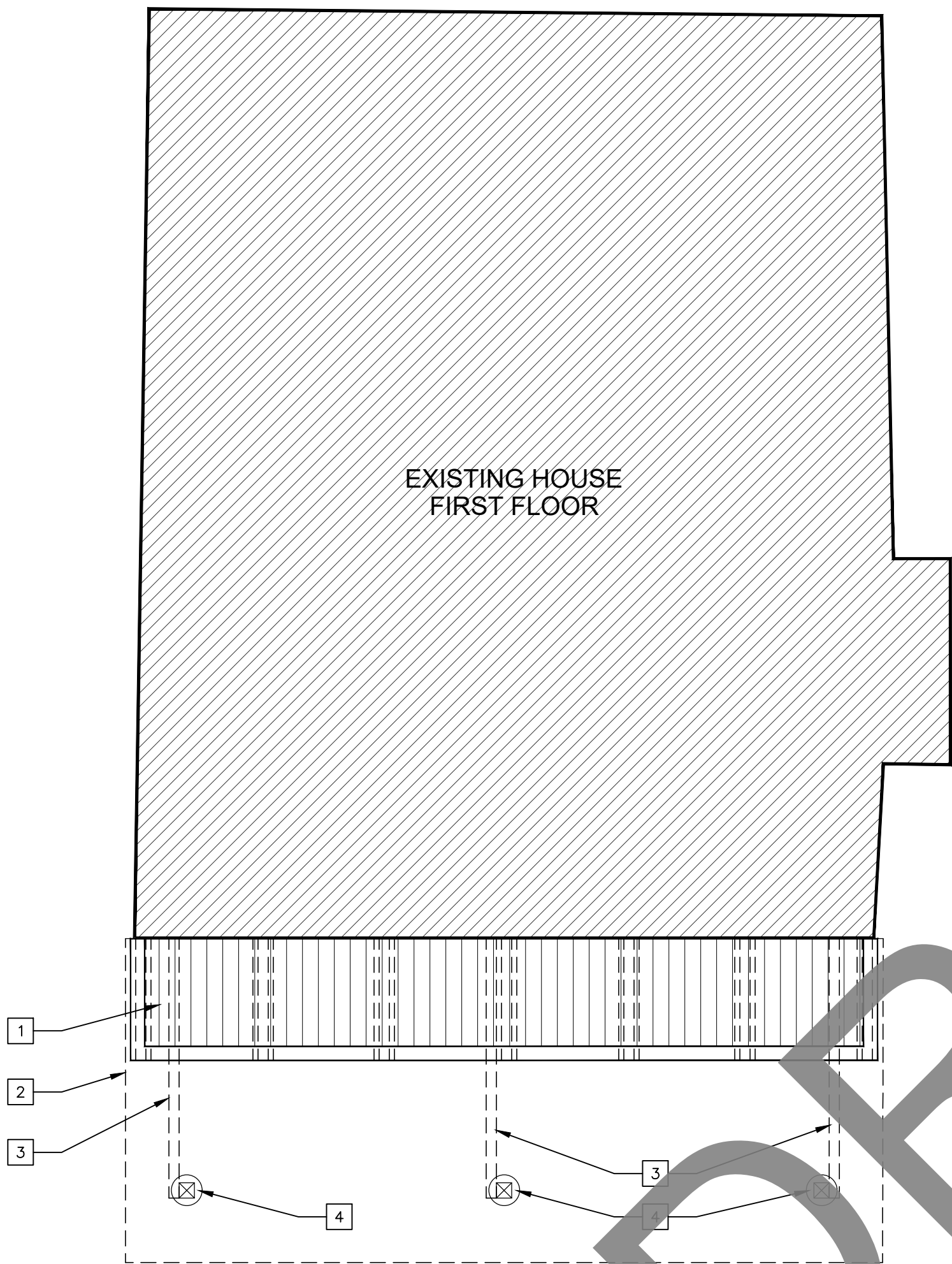
CLIENT INFO.		
JOB DESCRIPTION:	NEW UPPER DECK & CANTILEVER JULIET BALCONY	
APN #:	0332-041-31	
OWNER:	KEVIN PIECHOTA	
	720 BUCKINGHAM SQUARE	
	LAKE ARROWHEAD, CA 92407	

REVISIONS	
DATE:	01/00/00
DATE:	01/00/00
DATE:	01/00/00
DATE:	01/00/00

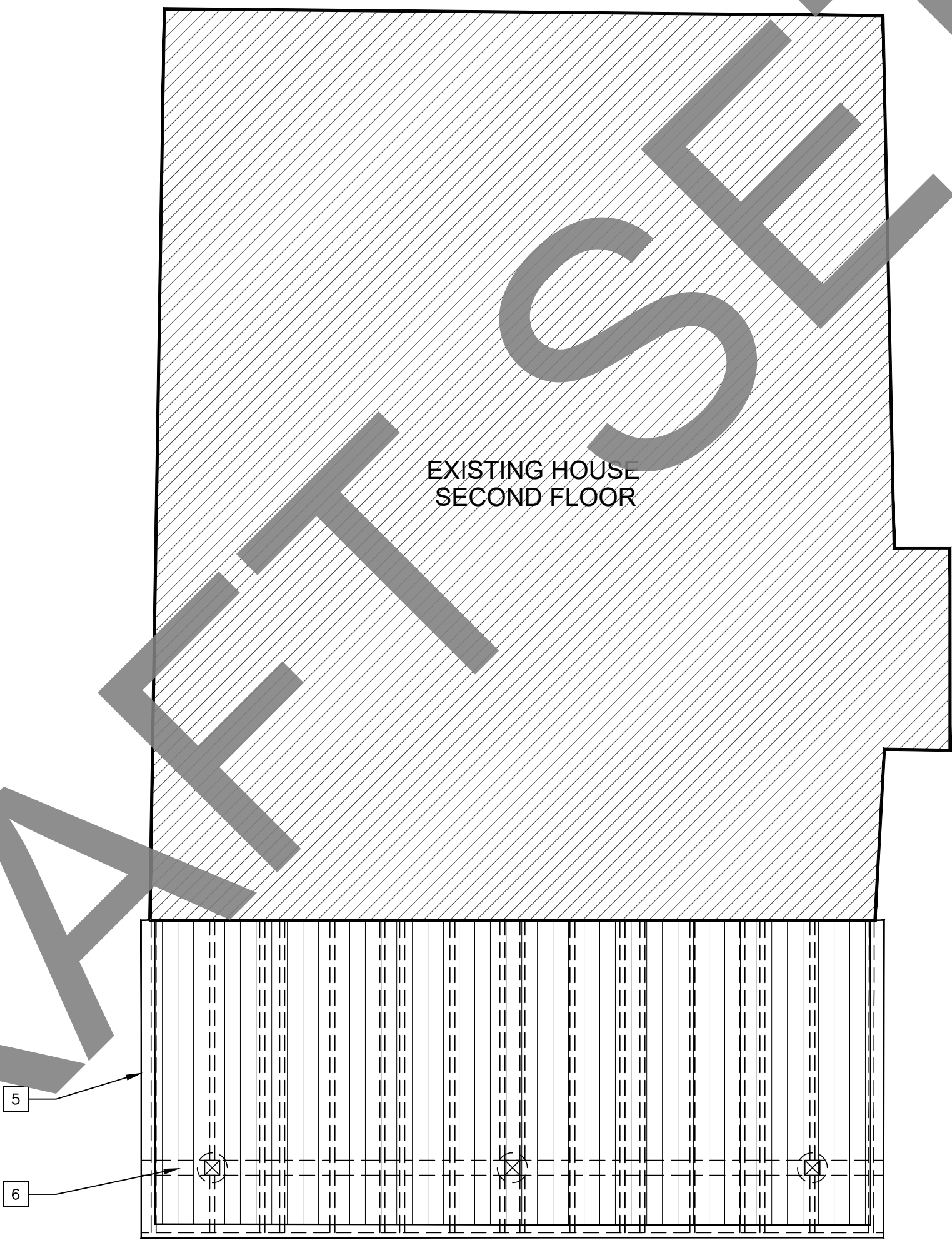
DRAWN	ADRIANA JUAREZ
BID	01/09/23
PLAN CHECK	01/00/00
JOB NO.	

TITLE PAGE & PROJECT INFO.	
A-1	
1	OF 13 SHEETS

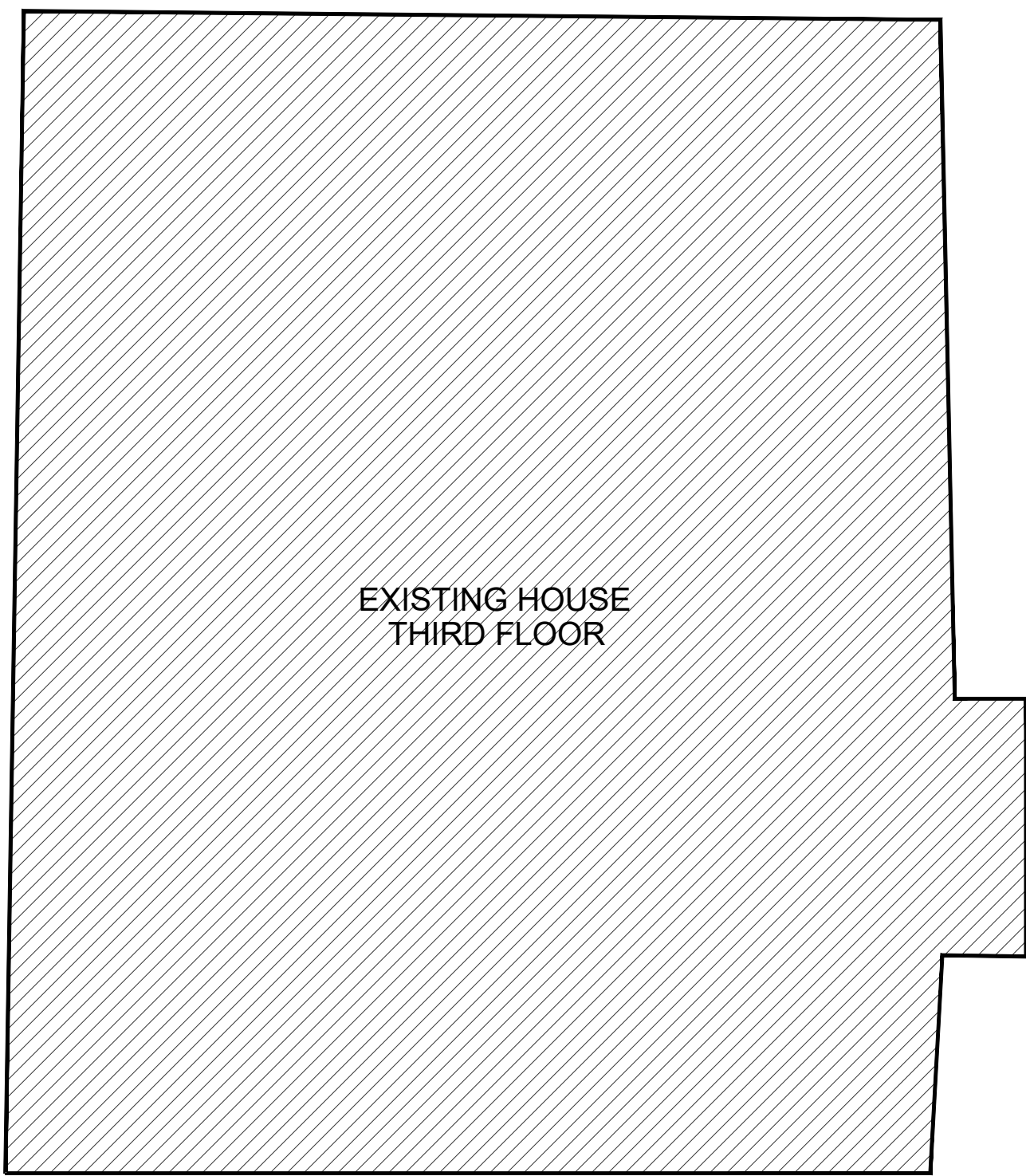
FLOOR PLAN KEY NOTES	
1	(E) DECKING & JOIST TO BE REMOVED
2	(E) LINE OF DECK ABOVE TO REMAIN
3	(E) BEAMS TO BE REMOVED
4	(E) 6x6 POST & PIER TO BE REMOVED
5	(E) UPPER DECK, GUARDRAIL & JOIST TO REMAIN
6	(E) 6x12 BEAM TO REMAIN



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



EXISTING
SECOND FLOOR DECK PLAN
SCALE 1/4" = 1'-0"



EXISTING
THIRD FLOOR PLAN
SCALE 1/4" = 1'-0"

CLIENT INFO.	
JOB DESCRIPTION:	NEW UPPER DECK & CANTILEVER JULIET BALCONY
APN #:	0332-041-31
OWNER:	KEVIN PIECHOTA 720 BUCKINGHAM SQUARE LAKE ARROWHEAD, CA 92407

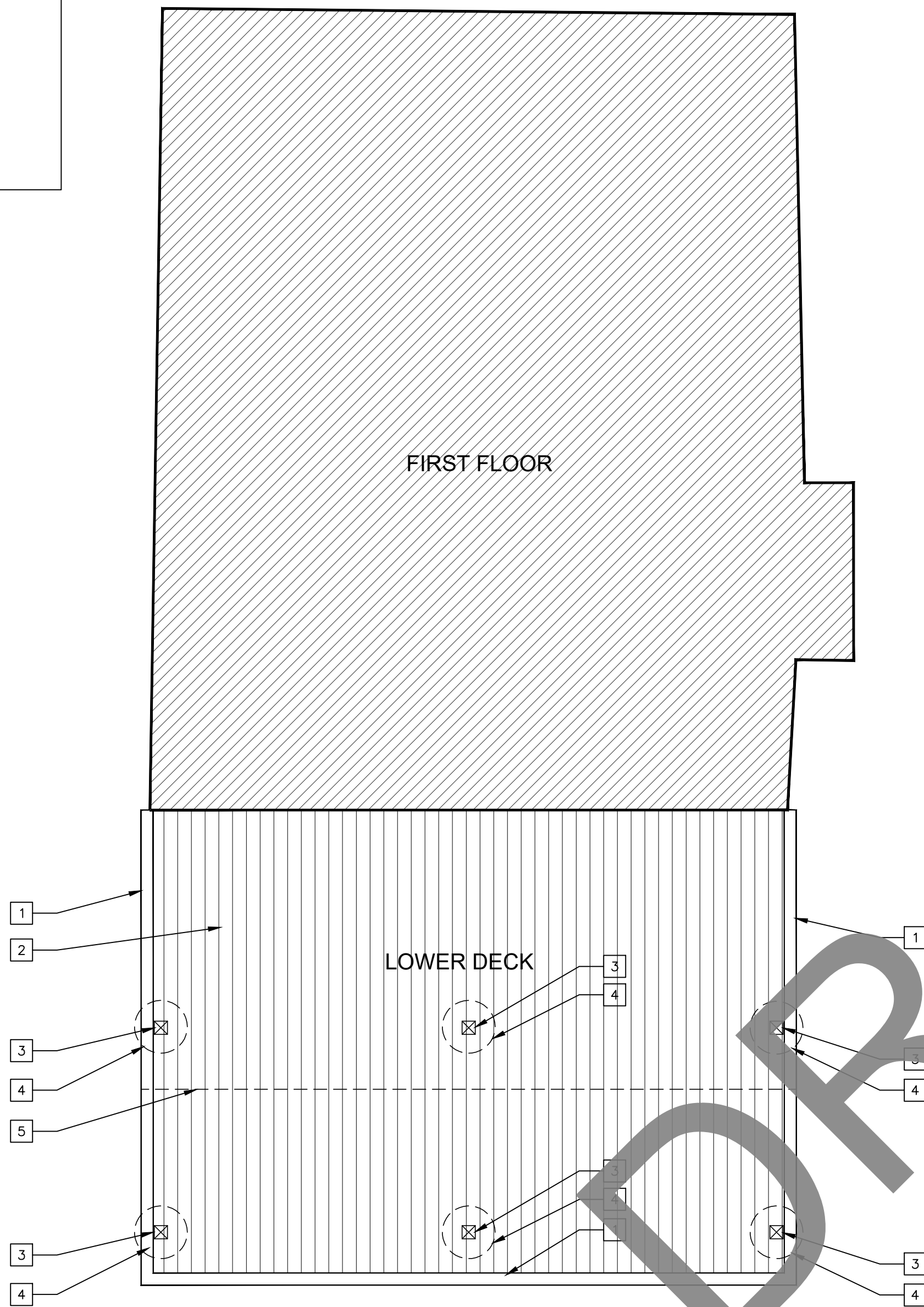
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DATE:	0/00/00
DATE:	0/00/00
DATE:	0/00/00
DATE:	0/00/00

DRAWN	ADRIANA JUAREZ
BID	01/09/23
PLAN CHECK	0/00/00
JOB NO.	

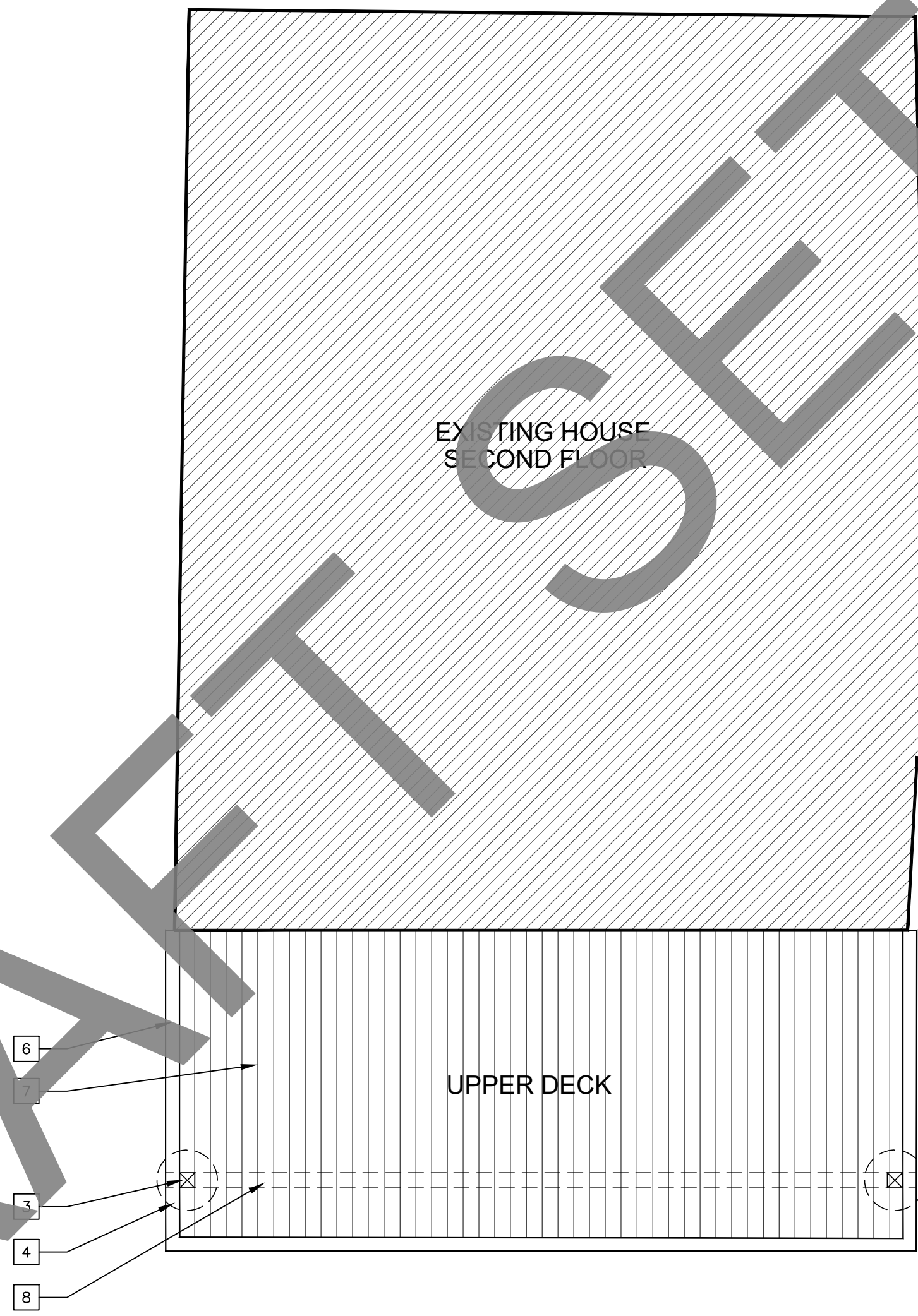
EXISTING FLOOR PLANS	
A-4	
4	OF 13 SHEETS

FLOOR PLAN KEY NOTES

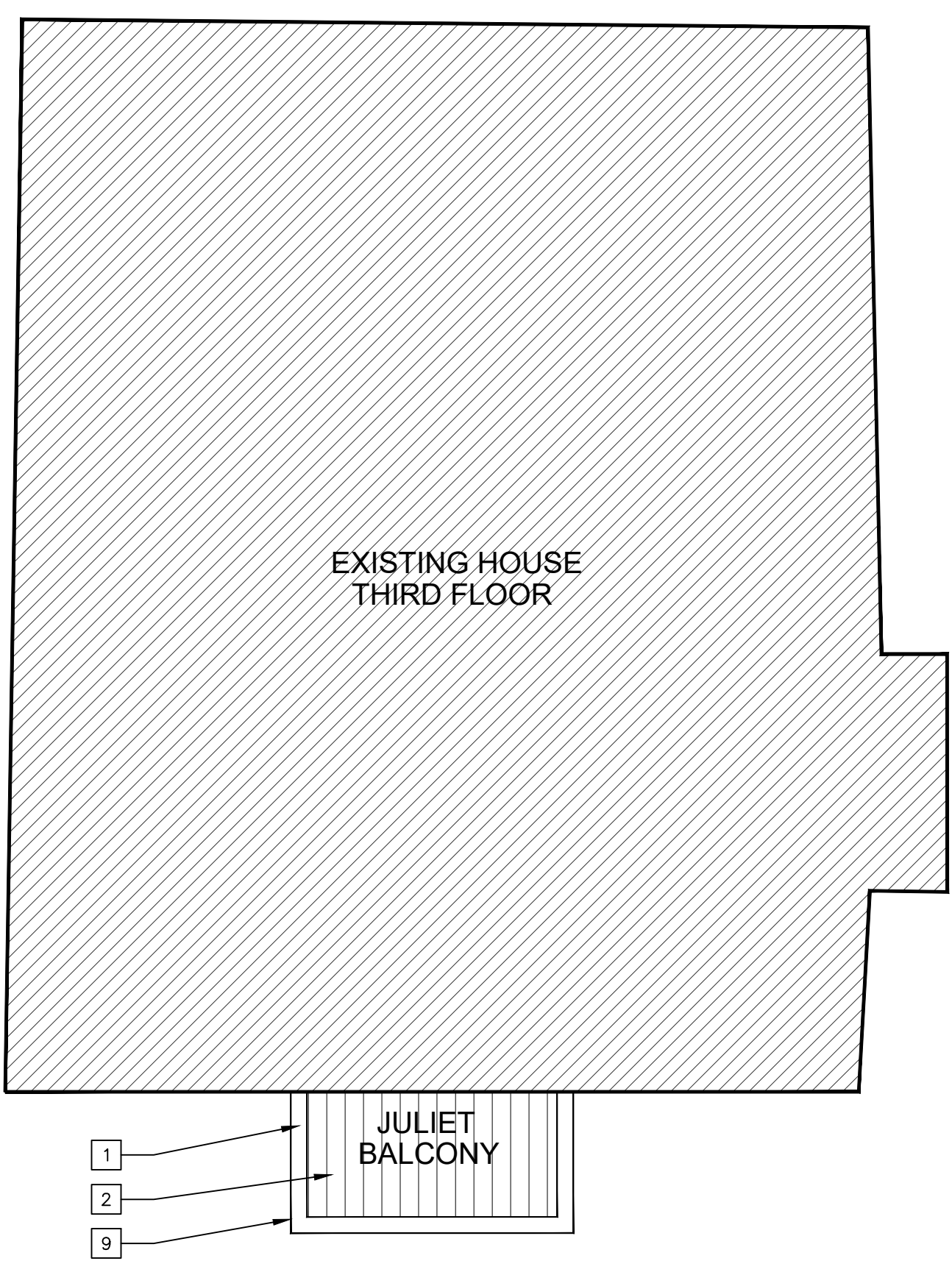
- 1 (N) 42" HIGH GUARDRAIL 4x4 WOOD POST & 2x2 BALUSTERS PER COUNTY STANDARDS
- 2 (N) 1 1/4" DECKING PRESERVATIVE TREATED WOOD
- 3 (N) 6x6 POST
- 4 (N) PIER 24"Ø
- 5 (E) LINE OF DECK ABOVE
- 6 (E) GUARDRAIL TO REMAIN
- 7 (E) DECKING TO REMAIN
- 8 (E) BEAM 6x12 TO REMAIN
- 9 (N) CANTILEVER JULIET BALCONY



PROPOSED
FIRST FLOOR DECK PLAN
SCALE 1/4" = 1'-0"



EXISTING
SECOND FLOOR DECK PLAN
SCALE 1/4" = 1'-0"



PROPOSED
THIRD FLOOR JULIET BALCONY DECK PLAN
SCALE 1/4" = 1'-0"

CLIENT INFO.

JOB DESCRIPTION:	
NEW UPPER DECK & CANTILEVER JULIET BALCONY	
APN #: 0332-041-31	
OWNER:	
KEVIN PIECHOTA	
720 BUCKINGHAM SQUARE	
LAKE ARROWHEAD, CA 92407	

REVISIONS

DATE:	0/00/00
DATE:	0/00/00
DATE:	0/00/00
DATE:	0/00/00

DRAWN	ADRIANA JUAREZ
BID	01/09/23
PLAN CHECK	0/00/00
JOB NO.	

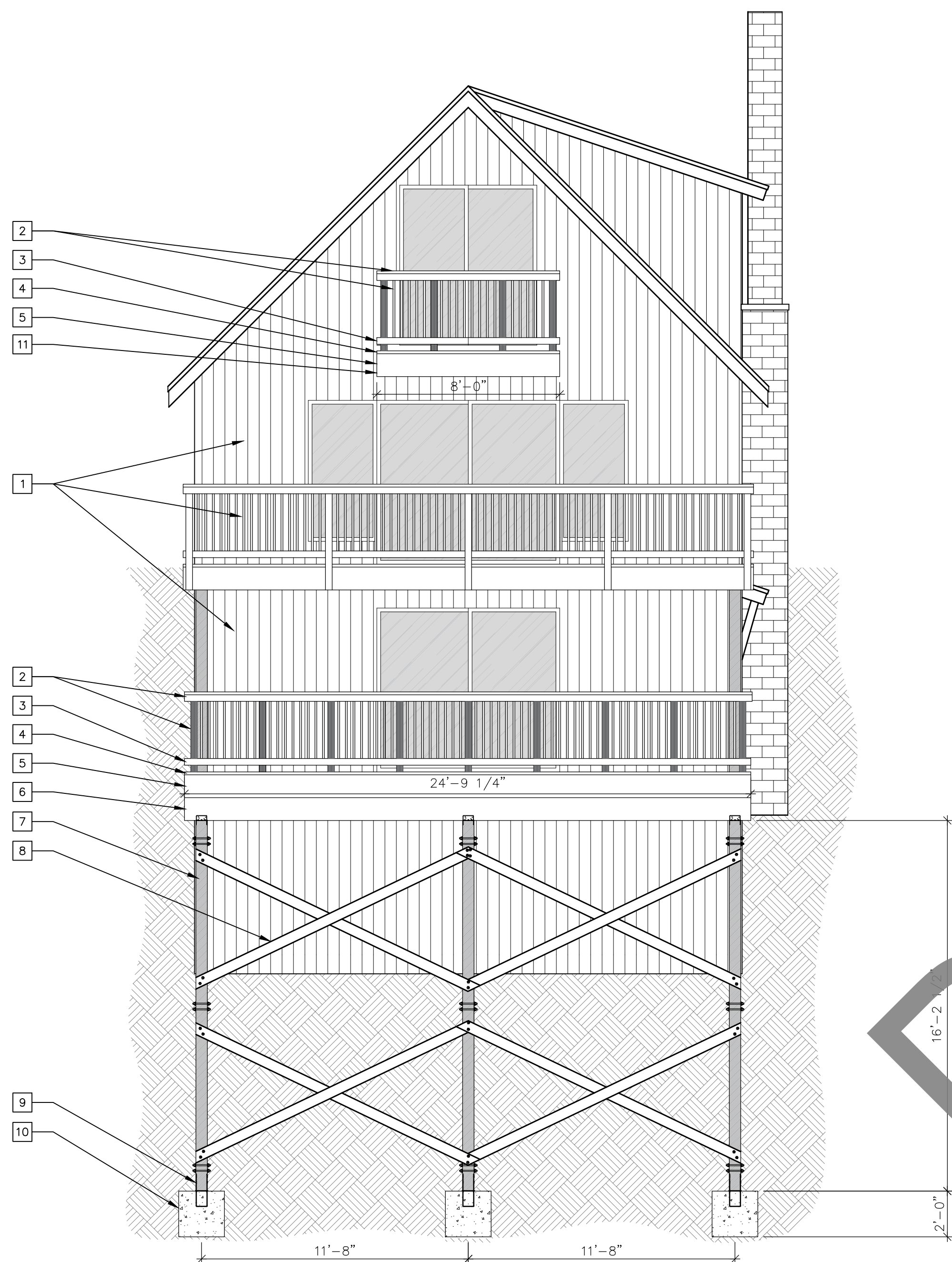
PROPOSED
FLOOR PLANS

A-5

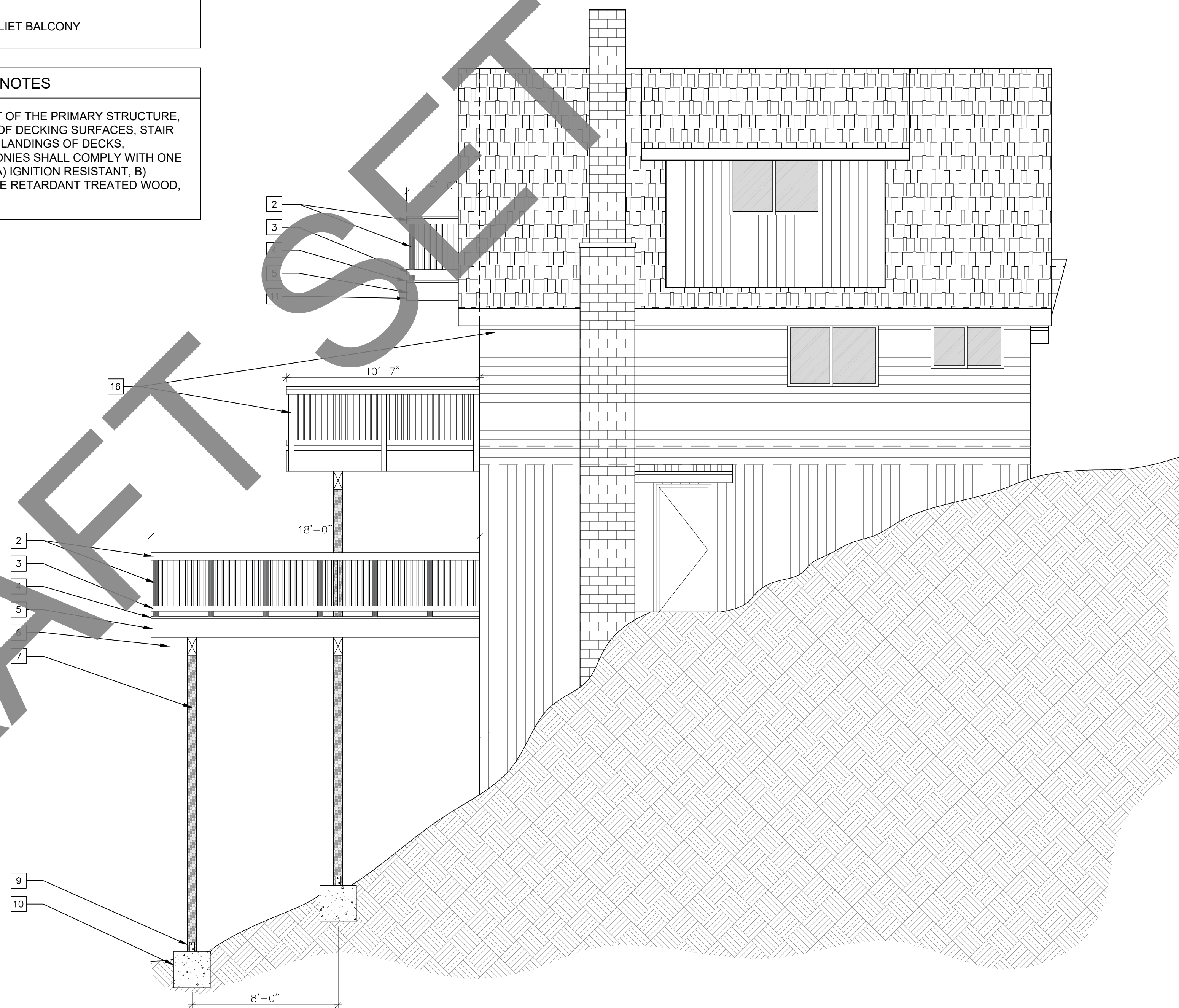
5 OF 13 SHEETS

ELEVATION KEY NOTES	
1	(E) HOUSE TO REMAIN
2	(N) 42" HIGH GUARDRAIL 4x4 WOOD POST & 2x2 BALUSTERS PER COUNTY STANDARDS
3	(N) 2x6 CAP
4	(N) 1 1/4" DECKING PRESERVATIVE TREATED WOOD
5	(N) 2x12 LEDGER
6	(N) 6x12 BEAM
7	(N) 6x6 POST
8	(N) 6x6 BRACE AT EACH SIDE OF POST
9	(N) SIMPSON STRONG-TIE
10	(N) PIER 24"Ø
11	(N) CANTILEVER JULIET BALCONY

NOTES	
WHEN WITHIN 10 FEET OF THE PRIMARY STRUCTURE, THE CONSTRUCTION OF DECKING SURFACES, STAIR TREADS, RISERS AND LANDINGS OF DECKS, PORCHES, AND BALCONIES SHALL COMPLY WITH ONE OF THE FOLLOWING: A) IGNITION RESISTANT, B) HEAVY TIMBER, C) FIRE RETARDANT TREATED WOOD, D) NON-COMBUSTIBLE	



FRONT ELEVATION
SCALE 1/4" = 1'-0"



LEFT ELEVATION
SCALE 1/4" = 1'-0"

CLIENT INFO.	
JOB DESCRIPTION:	NEW UPPER DECK & CANTILEVER JULIET BALCONY
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OWNER:	KEVIN PIECHOTA
	720 BUCKINGHAM SQUARE
	LAKE ARROWHEAD, CA 92407

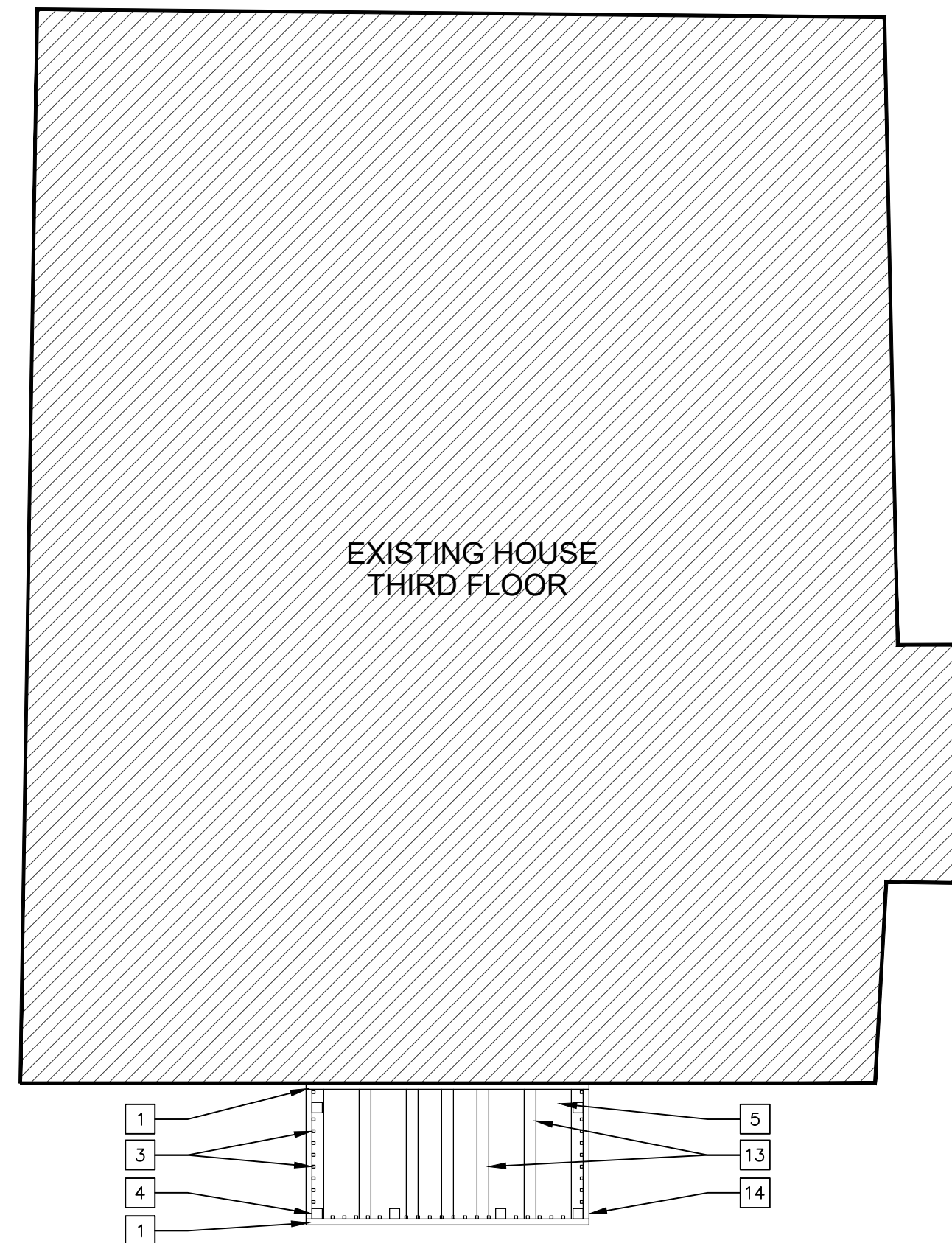
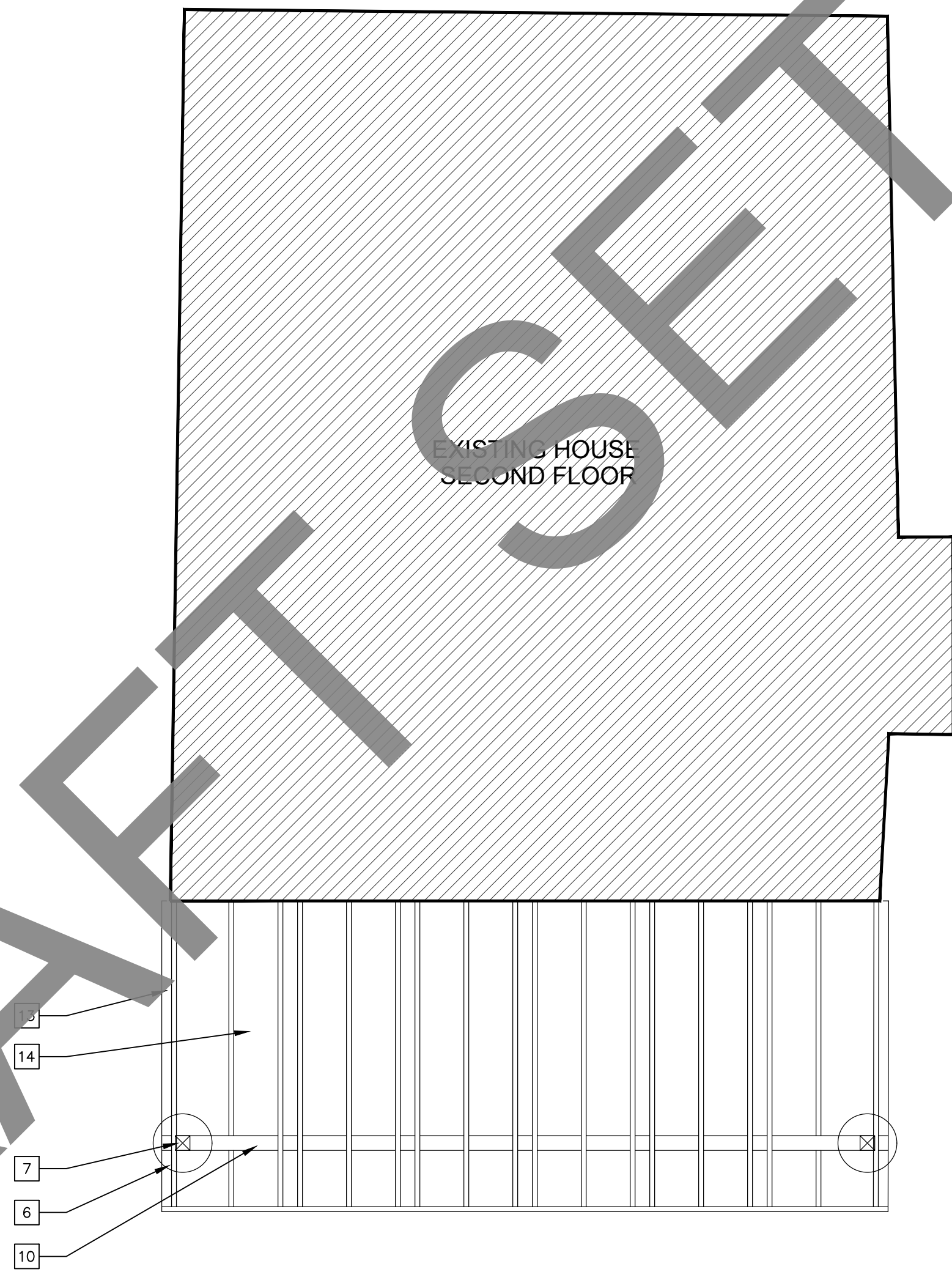
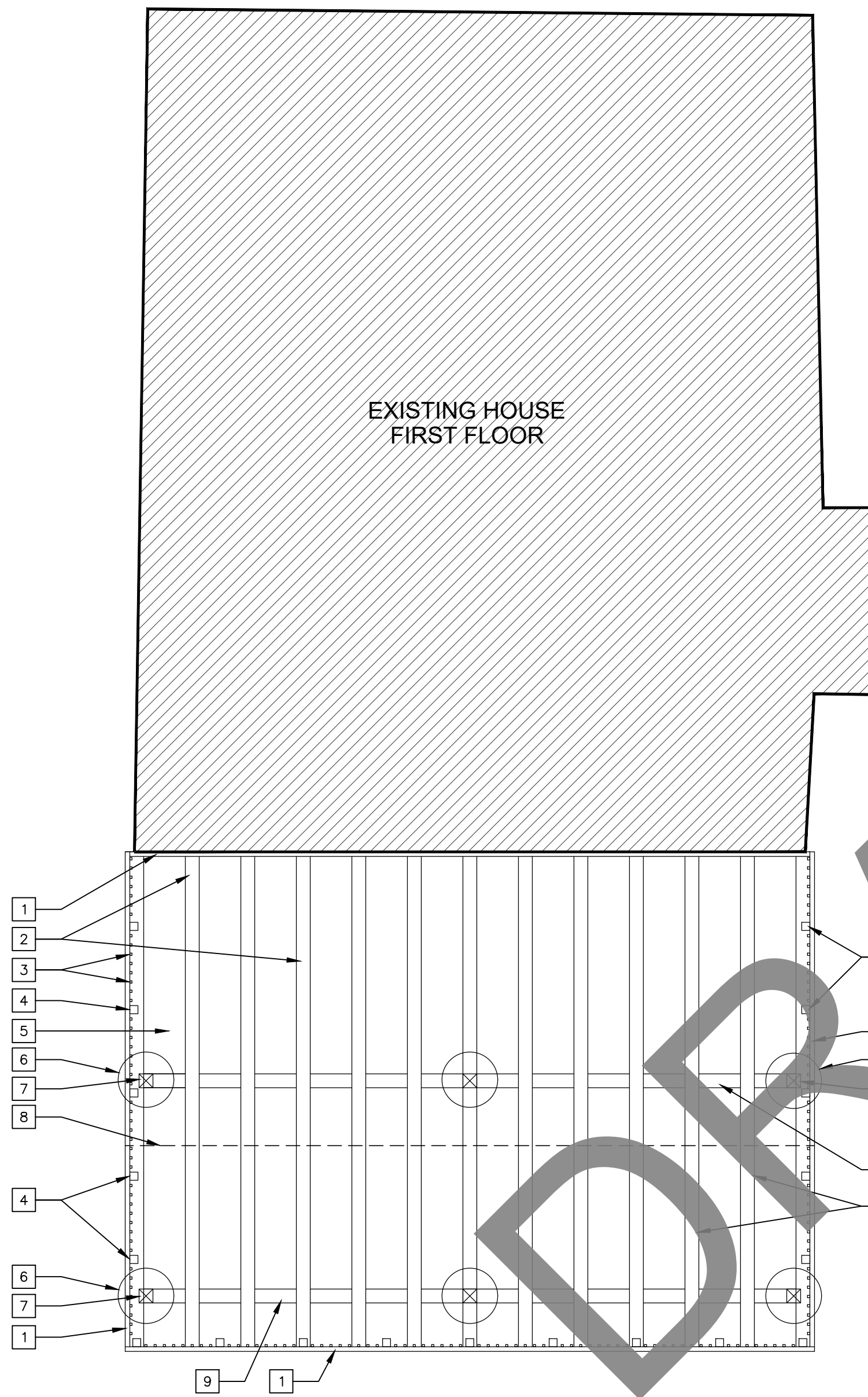
REVISIONS	
DATE:	0/00/00
DATE:	0/00/00
DATE:	0/00/00
DATE:	0/00/00

DRAWN	ADRIANA JUAREZ
BID	01/09/23
PLAN CHECK	0/00/00
JOB NO.	

ELEVATIONS	
A-6	
6	OF 13 SHEETS

FRAMING KEY NOTES

- 1 (N) 2x12 LEDGER
2 (N) 6x12 DECK JOIST @ 16" O.C.
3 (N) 2x2 WOOD BALUSTERS @4" O.C.
4 (N) 4X4 POST
5 (N) 1 1/4" DECKING PRESERVATIVE TREATED WOOD
6 (N) PIER 24"Ø
7 (N) 6x6 POST
8 (E) LINE OF DECK ABOVE
9 (N) 6x12 BEAM
10 (E) 6X12 BEAM TO REMAIN
13 (E) GUARDRAIL TO REMAIN
14 (E) DECKING & JOIST TO REMAIN
13 (N) 4X12 JOIST @16 O.C.
14 (N) CANTILEVER JULIET BALCONY



CLIENT INFO.

JOB DESCRIPTION:	
NEW UPPER DECK & CANTILEVER JULIET BALCONY	
APN #: 0332-041-31	
OWNER:	
KEVIN PIECHOTA	
720 BUCKINGHAM SQUARE	
LAKE ARROWHEAD, CA 92407	

REVISIONS

DATE:	0/00/00
DATE:	0/00/00
DATE:	0/00/00
DATE:	0/00/00

DRAWN	ADRIANA JUAREZ
BID	01/09/23
PLAN CHECK	0/00/00
JOB NO.	

FRAMING FLOOR PLANS

A-7

7 OF 13 SHEETS



2019 CALIFORNIA GREEN BUILDING STANDARDS CODE

RESIDENTIAL MANDATORY MEASURES, SHEET 1 (January 2020, Includes August 2019 Supplement)

Y
NA
RESPON.
PARTY

+ YES
= NOT APPLICABLE
RESPONSIBLE PARTY (i.e. ARCHITECT, ENGINEER,
OWNER, CONTRACTOR, INSPECTOR ETC.)



Y	NA	RESPON. PARTY	CHAPTER 3 GREEN BUILDING SECTION 301 GENERAL	Y	NA	RESPON. PARTY	CHAPTER 3 GREEN BUILDING SECTION 301 GENERAL	Y	NA	RESPON. PARTY	DIVISION 4.3 WATER EFFICIENCY AND CONSERVATION	Y	NA	RESPON. PARTY	DIVISION 4.4 MATERIAL CONSERVATION AND RESOURCE EFFICIENCY
			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 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.				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, and 4.303.4.4.				4.406 ENHANCED DURABILITY AND REDUCED MAINTENANCE 4.406.1 RODENT PROOFING. Plumbing fixtures around pipes, electric cables, conduits or other openings in sole/bottom plates at exterior walls shall be protected against the passage of rodents by closing such openings with cement mortar, concrete masonry or a similar method acceptable to the enforcing agency.
			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.				Note: 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 and Section 4.106.4.2.2, Item 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.				4.408.2 CONSTRUCTION WASTE MANAGEMENT PLAN. Submit a construction waste management plan in conformance with Items 1 through 5. The construction waste management plan shall be updated as necessary and shall be available during construction for examination by the enforcing agency.
			301.2 LOW-RISE AND HIGH-RISE RESIDENTIAL BUILDINGS, [HCD] The provisions of individual sections of CALGreen may apply to either low-rise residential buildings high-rise residential buildings, or both. Individual sections will be designated by banners to indicate where the section applies specifically to low-rise only (LR) or high-rise only (HR). When the section applies to both low-rise and high-rise buildings, no banner will be used.				Exception: Electric vehicle charging stations serving public housing are required to comply with the California Building Code, Chapter 11B.				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.				Exceptions: 1. Excavated soil and land-clearing debris. 2. Alternate waste reduction methods developed by working with local agencies if diversion or recycle facilities capable of compliance with this item do not exist or are not located reasonably close to the jobsite. 3. The enforcing agency may make exceptions to the requirements of this section when isolated jobsites are located in areas beyond the haul boundaries of the diversion facility.
			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.				4.106.4.2.2 Electric vehicle charging space (EV space) dimensions. The EV space shall be designed to comply with the following: 1. The minimum length of each EV space shall be 18 feet (5486 mm). 2. The minimum width of each EV space shall be 9 feet (2743 mm). 3. One in every 25 EV spaces, but not less than one EV space, shall have an 8-foot (2438 mm) wide minimum aisle. A 5-foot (1524 mm) wide minimum aisle shall be permitted provided the minimum width of the EV space is 12 feet (3658 mm). a. Surface slope for this EV space and the aisle shall not exceed 1 unit vertical in 48 units horizontal (2.083 percent slope) in any direction.				4.303.1.2 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.				4.408.2 CONSTRUCTION WASTE MANAGEMENT PLAN. Submit a construction waste management plan in conformance with Items 1 through 5. The construction waste management plan shall be updated as necessary and shall be available during construction for examination by the enforcing agency.
			ABBREVIATION DEFINITIONS: HCD Department of Housing and Community Development BSC California Building Standards Commission DSA-SS Division of the State Architect, Structural Safety OSHFD Office of Statewide Health Planning and Development LR Low Rise HR High Rise AA Additions and Alterations N New				4.106.4.2.3 Single EV space required. Install a listed raceway capable of accommodating a 208/240-volt dedicated branch circuit. The raceway shall not be less than trade size 1 (nominal 1-inch inside diameter). The raceway shall originate at the main service or subpanel and shall terminate into a listed cabinet, box or enclosure in close proximity to the proposed location of the EV space. Construction documents shall identify the raceway termination point. The service panel and/or subpanel shall provide capacity to install a 40-ampere minimum dedicated branch circuit and space(s) reserved to permit installation of a branch circuit overcurrent protective device.				4.303.1.3 Showerheads. 4.303.1.3.1 Single Showerhead. Showerheads shall have a maximum flow rate of not more than 1.8 gallons per minute at 80 psi. Showerheads shall be certified to the performance criteria of the U.S. EPA WaterSense Specification for Showerheads. 4.303.1.3.2 Multiple showerheads serving one shower. When a shower is served by more than one showerhead, the combined flow rate of all the showerheads and/or other shower outlets controlled by a single valve shall not exceed 1.8 gallons per minute at 80 psi, or the shower shall be designed to only allow one shower outlet to be in operation at a time. Note: A hand-held shower shall be considered a showerhead.				4.408.3 WASTE MANAGEMENT COMPANY. Utilize a waste management company, approved by the enforcing agency, which can provide verifiable documentation that the percentage of construction and demolition waste material diverted from the landfill complies with Section 4.408.1. Note: The owner or contractor may make the determination if the construction and demolition waste materials will be diverted by a waste management company.
			CHAPTER 4 RESIDENTIAL MANDATORY MEASURES DIVISION 4.1 PLANNING AND DESIGN SECTION 4.102 DEFINITIONS 4.102.1 DEFINITIONS The following terms are defined in Chapter 2 (and are included here for reference)				4.106.4.2.4 Multiple EV spaces required. Construction documents shall indicate the raceway termination point and proposed location of future EV spaces and EV chargers. Construction documents shall also provide information on amperage of future EVSE, raceway method(s), wiring schematics and electrical load calculations to verify that the electrical panel service capacity and electrical system, including any on-site distribution transformer(s), have sufficient capacity to simultaneously charge all EVs at all required EV spaces at the full rated amperage of the EVSE. Plan design shall be based upon a 40-ampere minimum branch circuit. Required raceways and related components that are planned to be installed underground, enclosed, inaccessible or in concealed areas and spaces shall be installed at the time of original construction.				4.303.1.4 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 minute at 60 psi. 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 exceed 2.2 gallons per minute at 60 psi, and must default to a maximum flow rate of 1.8 gallons per minute at 60 psi. Note: Where complying faucets are unavailable, aerators or other means may be used to achieve reduction.				4.408.4 WASTE STREAM REDUCTION ALTERNATIVE [LR]. Projects that generate a total combined weight of construction and demolition waste disposed of in landfills, which do not exceed 3.4 lbs./sq.ft. of the building area shall meet the minimum 65% construction waste reduction requirement in Section 4.408.1 4.408.4.1 WASTE STREAM REDUCTION ALTERNATIVE. Projects that generate a total combined weight of construction and demolition waste disposed of in landfills, which do not exceed 2 pounds per square foot of the building area, shall meet the minimum 65% construction waste reduction requirement in Section 4.408.1
			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.				4.106.4.3 New hotels and motels. All newly constructed hotels and motels shall provide EV spaces capable of supporting future installation of EVSE. The construction documents shall identify the location of the EV spaces.				4.303.2 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 of the California Plumbing Code.				4.408.5 DOCUMENTATION. Documentation shall be provided to the enforcing agency which demonstrates compliance with Section 4.408.2, Items 1 through 5, Section 4.408.3 or Section 4.408.4.. Notes: 1. Sample forms found in "A Guide to the California Green Building Standards Code (Residential)" located at www.hcd.ca.gov/CALGreen.html may be used to assist in documenting compliance with this section. 2. Mixed construction and demolition debris (C & D) processors can be located at the California Department of Resources Recycling and Recovery (CalRecycle).
			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.				Notes: 1. Construction documents are intended to demonstrate the project's capability and capacity or facilitating future EV charging. 2. There is no requirement for EV spaces to be constructed or available until EV chargers are installed for use.				4.304 OUTDOOR WATER USE 4.304.1 OUTDOOR POTABLE WATER USE IN LANDSCAPE AREAS. Residential developments shall comply with a local water efficient landscape ordinance or the current California Department of Water Resources' Model Water Efficient Landscape Ordinance (MWELO), whichever is more stringent.				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 waste, and metals, or meet a lawfully enacted local recycling ordinance, if more restrictive.
			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.				4.106.4.3.1 Number of required EV spaces. The number of required EV spaces shall be based on the total number of parking spaces provided for all types of parking facilities in accordance with Table 4.106.4.3.1. Calculations for the required number of EV spaces shall be rounded up to the nearest whole number.				TABLE 4.106.4.3.1 TABLE - MAXIMUM FIXTURE WATER USE				4.410.1 OPERATION AND MAINTENANCE MANUAL. At the time of final inspection, a manual, compact disc, web-based reference or other media acceptable to the enforcing agency which includes all of the following shall be placed in the building: 1. Directions to the owner or occupant that the manual shall remain with the building throughout the life cycle of the structure. 2. Operation and maintenance instructions for the following: a. Equipment and appliances, including water-saving devices and systems, HVAC systems, photovoltaic systems, electric vehicle chargers, water-heating systems and other major appliances and equipment. b. Roof and yard drainage, including gutters and downspouts. c. Space conditioning systems, including condensers and air filters. d. Landscape irrigation systems. e. Water reuse systems. 3. Information from local utility, water and waste recovery providers on methods to further reduce resource consumption, including recycle programs and locations. 4. Public transportation and/or carpool options available in the area. 5. Educational material on the positive impacts of an interior relative humidity between 30-60 percent and what methods an occupant may use to maintain the relative humidity level in that range. 6. Information about water-conserving landscape and irrigation design and controllers which conserve water. 7. Instructions for maintaining gutters and downspouts and the importance of diverting water at least 5 feet away from the foundation. 8. Information on required routine maintenance measures, including, but not limited to, caulking, painting, grading around the building, etc. 9. Information about state solar energy and incentive programs available. 10. A copy of all special inspections verifications required by the enforcing agency or this code.
			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.				4.106.4.3.2 Electric vehicle charging space (EV space) dimensions. The EV spaces shall be designed to comply with the following: 1. The minimum length of each EV space shall be 18 feet (5486mm). 2. The minimum width of each EV space shall be 9 feet (2743mm).				NOTES: 1. The Model Water Efficient Landscape Ordinance (MWELO) is located in the California Code Regulations, Title 23, Chapter 2.7, Division 2. MWELO and supporting documents, including water budget calculator, are available at: https://www.water.ca.gov/				Exception: Rural jurisdictions that meet and apply for the exemption in Public Resources Code Section 42645.82 (a)(2)(A) et seq. are not required to comply with the organic waste portion of this section.
			Note: Refer to the State Water Resources Control Board for projects which disturb one acre or more of soil, or are part of a larger common plan of development which in total disturbs one acre or more of soil. (Website: https://www.waterboards.ca.gov/water_issues/programs/stormwater/construction.html)				4.106.4.3.3 Single EV space required. When a single EV space is required, the EV space shall be designed in accordance with Section 4.106.4.2.3.								
			4.106.3 GRADING AND PAVING. Construction plans shall indicate how the site grading or drainage system will manage all surface water flows to keep water from entering buildings. Examples of methods to manage surface water include, but are not limited to, the following: 1. Swales 2. Water collection and disposal systems 3. French drains 4. Water retention gardens 5. Other water measures which keep surface water away from buildings and aid in groundwater recharge.				4.106.4.3.4 Multiple EV spaces required. When multiple EV spaces are required, the EV spaces shall be designed in accordance with Section 4.106.4.2.4.								
			Exception: Additions and alterations not altering the drainage path.				4.106.4.3.5 Identification. The service panels or sub-panels shall be identified in accordance with Section 4.106.4.2.5.								
			4.106.4 Electric vehicle (EV) charging for new construction. New construction shall comply with Sections 4.106.4.1, 4.106.4.2, or 4.106.4.3 to facilitate future installation and use of EV chargers. Electric vehicle supply equipment (EVSE) shall be installed in accordance with the California Electrical Code, Article 625.				4.106.4.3.6 Accessible EV spaces. In addition to the requirements in Section 4.106.4.3, EV spaces for hotels/motels and all EVSE, when installed, shall comply with the accessibility provisions for the EV charging stations in the California Building Code, Chapter 11B.								
			Exceptions: 1. On a case-by-case basis, where the local enforcing agency has determined EV charging and infrastructure are not feasible based upon one or more of the following conditions: 1.1 Where there is no commercial power supply. 1.2 Where there is evidence substantiating that meeting the requirements will alter the local utility infrastructure design requirements on the utility side of the meter so as to increase the utility side cost to the homeowner or the developer by more than \$400.00 per dwelling unit. 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 minimum dedicated branch circuit and space(s) reserved to permit installation of a branch circuit overcurrent protective device.												
			4.106.4.1.1 Identification. The service panel or subpanel circuit directory shall identify the overcurrent protective device space(s) reserved for future EV charging as "EV CAPABLE". The raceway termination location shall be permanently and visibly marked as "EV CAPABLE".												
			4.106.4.2 New multifamily dwellings. If residential parking is available, 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 EVSE. Calculations for the required number of EV spaces shall be rounded up to the nearest whole number.												
			Notes: 1. Construction documents are intended to demonstrate the project's capability and capacity for facilitating future EV charging. 2. There is no requirement for EV spaces to be constructed or available until EV chargers are installed for use.												
			4.106.4.2.1 Electric vehicle charging space (EV space) locations. Construction documents shall indicate the location of proposed EV spaces. Where common use parking is provided at least one EV space shall be located in the common use parking area and shall be available for use by all residents.												

DISCLAIMER: THIS DOCUMENT IS PROVIDED AND INTENDED TO BE USED AS A MEANS TO INDICATE AREAS OF COMPLIANCE WITH THE 2016 CALIFORNIA GREEN BUILDING STANDARDS (CALGREEN) CODE. DUE TO THE VARIABLES BETWEEN BUILDING DEPARTMENT JURISDICTIONS, THIS CHECKLIST IS TO BE USED ON AN INDIVIDUAL PROJECT BASIS AND MAY BE MODIFIED BY THE END USER TO MEET THOSE INDIVIDUAL NEEDS. THE END USER ASSUMES ALL RESPONSIBILITY ASSOCIATED WITH THE USE OF THIS DOCUMENT, INCLUDING VERIFICATION WITH THE FULL CODE.

CLIENT INFO.			
JOB DESCRIPTION: NEW UPPER DECK & CANTILEVER JULIET BALCONY			
APN #: 0332-041-31			
OWNER: KEVIN PECHOTA 720 BUCKINGHAM SQUARE LAKE ARROWHEAD, CA 92407			

REVISIONS	
DATE:	0/00/00
DATE:	0/00/00
DATE:	0/00/00
DATE:	0/00/00

DRAWN	ADRIANA JUAREZ
BID	01/09/23
PLAN CHECK	0/00/00
JOB NO.	

CGBS-C-1	
G-1	
9	OF 13 SHEETS



2019 CALIFORNIA GREEN BUILDING STANDARDS CODE

RESIDENTIAL MANDATORY MEASURES, SHEET 1 (January 2020, Includes August 2019 Supplement)

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



Y	N/A	RESPON. PARTY																																																																									
			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 ROG). Note: MIR values for individual compounds and hydrocarbon solvents are specified in CCR, Title 17, Sections 94700 and 94701. MOISTURE CONTENT. The weight of the water in wood expressed in percentage of the weight of the oven-dry wood. PRODUCT-WEIGHTED MIR (PWMIR). The sum of all weighted-MIR for all ingredients in a product subject to this article. The PWMIR is the total product reactivity expressed to hundredths of a gram of ozone formed per gram of product (excluding container and packaging). Note: PWMIR is calculated according to equations found in CCR, Title 17, Section 94521 (a). REACTIVE ORGANIC COMPOUND (ROC). Any compound that has the potential, once emitted, to contribute to ozone formation in the troposphere. VOC. A volatile organic compound (VOC) broadly defined as a chemical compound based on carbon chains or rings with vapor pressures greater than 0.1 millimeters of mercury at room temperature. These compounds typically contain hydrogen and may contain oxygen, nitrogen and other elements. See CCR Title 17, Section 94508(a). 4.503 FIREPLACES 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 COVERINGS 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: - Adhesives, adhesive bonding primers, adhesive primers, sealants, sealant primers and caulks shall comply with local or regional air pollution control or air quality management district rules where applicable or SCAQMD Rule 1168 VOC limits, as shown in Table 4.504.1 or 4.504.2, as applicable. Such products also shall comply with the Rule 1168 prohibition on the use of certain toxic compounds (chloroform, ethylene dichloride, methylene chloride, perchloroethylene and trichloroethylene), except for aerosol products, as specified in Subsection 2 below. - Aerosol adhesives, and smaller unit sizes of adhesives, and sealant or caulking compounds (in units of product, less packaging, which do not weigh more than 1 pound and do not consist of more than 16 fluid ounces) shall comply with statewide VOC standards and other requirements, including prohibitions on use of certain toxic compounds, of California Code of Regulations, Title 17, commencing with section 94507. 4.504.2.2 Paints and Coatings. Architectural paints and coatings shall comply with VOC limits in Table 1 of the ARB Architectural Suggested Control Measure, as shown in Table 4.504.3, unless more stringent local limits apply. The VOC content limit for coatings that do not meet the definitions for the specialty coatings categories listed in Table 4.504.3 shall be determined by classifying the coating as a Flat, Nonflat or Nonflat-High Gloss coating, based on its gloss, as defined in subsections 4.21, 4.36, and 4.37 of the 2007 California Air Resources Board, Suggested Control Measure, and the corresponding Flat, Nonflat or Nonflat-High Gloss VOC limit in Table 4.504.3 shall apply. 4.504.2.3 Aerosol Paints and Coatings. Aerosol paints and coatings shall meet the Product-weighted MIR Limits for ROC in Section 94522(a)(2) and other requirements, including prohibitions on use of certain toxic compounds and ozone depleting substances, in Sections 94522(e)(1) and (f)(1) of California Code of Regulations, Title 17, commencing with Section 94520; and in areas under the jurisdiction of the Bay Area Air Quality Management District additionally comply with the percent VOC by weight of product limits of Regulation 8, Rule 49. 4.504.2.4 Verification. Verification of compliance with this section shall be provided at the request of the enforcing agency. Documentation may include, but is not limited to, the following: - Manufacturer's product specification. - Field verification of on-site product containers.																																																																								
			<table><tr><th colspan="2">TABLE 4.504.1 - ADHESIVE VOC LIMIT_{1,2}</th></tr><tr><td colspan="2">(Less Water and Less Exempt Compounds in Grams per Liter)</td></tr><tr><th>ARCHITECTURAL APPLICATIONS</th><th>VOC LIMIT</th></tr><tr><td>INDOOR CARPET ADHESIVES</td><td>50</td></tr><tr><td>CARPET PAD ADHESIVES</td><td>50</td></tr><tr><td>OUTDOOR CARPET ADHESIVES</td><td>150</td></tr><tr><td>WOOD FLOORING ADHESIVES</td><td>100</td></tr><tr><td>RUBBER FLOOR ADHESIVES</td><td>60</td></tr><tr><td>SUBFLOOR ADHESIVES</td><td>50</td></tr><tr><td>CERAMIC TILE ADHESIVES</td><td>65</td></tr><tr><td>VCT & ASPHALT TILE ADHESIVES</td><td>50</td></tr><tr><td>DRYWALL & PANEL ADHESIVES</td><td>50</td></tr><tr><td>COVE BASE ADHESIVES</td><td>50</td></tr><tr><td>MULTIPURPOSE CONSTRUCTION ADHESIVE</td><td>70</td></tr><tr><td>STRUCTURAL GLAZING ADHESIVES</td><td>100</td></tr><tr><td>SINGLE-PLY ROOF MEMBRANE ADHESIVES</td><td>250</td></tr><tr><td>OTHER ADHESIVES NOT LISTED</td><td>50</td></tr><tr><th colspan="2">SPECIALTY APPLICATIONS</th></tr><tr><td>PVC WELDING</td><td>510</td></tr><tr><td>CPVC WELDING</td><td>490</td></tr><tr><td>ABS WELDING</td><td>325</td></tr><tr><td>PLASTIC CEMENT WELDING</td><td>250</td></tr><tr><td>ADHESIVE PRIMER FOR PLASTIC</td><td>550</td></tr><tr><td>CONTACT ADHESIVE</td><td>80</td></tr><tr><td>SPECIAL PURPOSE CONTACT ADHESIVE</td><td>250</td></tr><tr><td>STRUCTURAL WOOD MEMBER ADHESIVE</td><td>140</td></tr><tr><td>TOP & TRIM ADHESIVE</td><td>250</td></tr><tr><th colspan="2">SUBSTRATE SPECIFIC APPLICATIONS</th></tr><tr><td>METAL TO METAL</td><td>30</td></tr><tr><td>PLASTIC FOAMS</td><td>50</td></tr><tr><td>POROUS MATERIAL (EXCEPT WOOD)</td><td>50</td></tr><tr><td>WOOD</td><td>30</td></tr><tr><td>FIBERGLASS</td><td>80</td></tr><tr><td></td><td></td></tr><tr><td colspan="2">1. IF AN ADHESIVE IS USED TO BOND DISSIMILAR SUBSTRATES TOGETHER, THE ADHESIVE WITH THE HIGHEST VOC CONTENT SHALL BE ALLOWED.</td></tr><tr><td colspan="2">2. FOR ADDITIONAL INFORMATION REGARDING METHODS TO MEASURE THE VOC CONTENT SPECIFIED IN THIS TABLE, SEE SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT RULE 1168.</td></tr></table>	TABLE 4.504.1 - ADHESIVE VOC LIMIT _{1,2}		(Less Water and Less Exempt Compounds in Grams per Liter)		ARCHITECTURAL APPLICATIONS	VOC LIMIT	INDOOR CARPET ADHESIVES	50	CARPET PAD ADHESIVES	50	OUTDOOR CARPET ADHESIVES	150	WOOD FLOORING ADHESIVES	100	RUBBER FLOOR ADHESIVES	60	SUBFLOOR ADHESIVES	50	CERAMIC TILE ADHESIVES	65	VCT & ASPHALT TILE ADHESIVES	50	DRYWALL & PANEL ADHESIVES	50	COVE BASE ADHESIVES	50	MULTIPURPOSE CONSTRUCTION ADHESIVE	70	STRUCTURAL GLAZING ADHESIVES	100	SINGLE-PLY ROOF MEMBRANE ADHESIVES	250	OTHER ADHESIVES NOT LISTED	50	SPECIALTY APPLICATIONS		PVC WELDING	510	CPVC WELDING	490	ABS WELDING	325	PLASTIC CEMENT WELDING	250	ADHESIVE PRIMER FOR PLASTIC	550	CONTACT ADHESIVE	80	SPECIAL PURPOSE CONTACT ADHESIVE	250	STRUCTURAL WOOD MEMBER ADHESIVE	140	TOP & TRIM ADHESIVE	250	SUBSTRATE SPECIFIC APPLICATIONS		METAL TO METAL	30	PLASTIC FOAMS	50	POROUS MATERIAL (EXCEPT WOOD)	50	WOOD	30	FIBERGLASS	80			1. IF AN ADHESIVE IS USED TO BOND DISSIMILAR SUBSTRATES TOGETHER, THE ADHESIVE WITH THE HIGHEST VOC CONTENT SHALL BE ALLOWED.		2. FOR ADDITIONAL INFORMATION REGARDING METHODS TO MEASURE THE VOC CONTENT SPECIFIED IN THIS TABLE, SEE SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT RULE 1168.	
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TABLE 4.504.2 - SEALANT VOC LIMIT	
(Less Water and Less Exempt Compounds in Grams per Liter)	
SEALANTS	VOC LIMIT
ARCHITECTURAL	250
MARINE DECK	760
NONMEMBRANE ROOF	300
ROADWAY	250
SINGLE-PLY ROOF MEMBRANE	450
OTHER	420
SEALANT PRIMERS	
ARCHITECTURAL	
NON-POROUS	250
POROUS	775
MODIFIED BITUMINOUS	500
MARINE DECK	760
OTHER	750

TABLE 4.504.3 - VOC CONTENT LIMITS FOR ARCHITECTURAL COATINGS _{2,3}	
GRAMS OF VOC PER LITER OF COATING, LESS WATER & LESS EXEMPT COMPOUNDS	
COATING CATEGORY	VOC LIMIT
FLAT COATINGS	50
NON-FLAT COATINGS	100
NONFLAT-HIGH GLOSS COATINGS	150
SPECIALTY COATINGS	
ALUMINUM ROOF COATINGS	400
BASEMENT SPECIALTY COATINGS	400
BITUMINOUS ROOF COATINGS	50
BITUMINOUS ROOF PRIMERS	350
BOND BREAKERS	350
CONCRETE CURING COMPOUNDS	350
CONCRETE/MASONRY SEALERS	100
DRIVEWAY SEALERS	50
DRY FOG COATINGS	150
FAUX FINISHING COATINGS	350
FIRE RESISTIVE COATINGS	350
FLOOR COATINGS	100
FORM-RELEASE COMPOUNDS	250
GRAPHIC ARTS COATINGS (SIGN PAINTS)	500
HIGH TEMPERATURE COATINGS	420
INDUSTRIAL MAINTENANCE COATINGS	250
LOW SOLIDS COATINGS ₁	120
MAGNESITE CEMENT COATINGS	450
MASTIC TEXTURE COATINGS	100
METALLIC PIGMENTED COATINGS	500
MULTICOLOR COATINGS	250
PRETREATMENT WASH PRIMERS	750
PRIMERS, SEALERS, & UNDERCOATERS	100
REACTIVE PENETRATING SEALERS	250
RECYCLED COATINGS	250
ROOF COATINGS	50
RUST PREVENTATIVE COATINGS	250
SHELLACS	
CLEAR	730
OPAQUE	650
SPECIALTY PRIMERS, SEALERS & UNDERCOATERS	100
STAINS	250
STONE CONSOLIDANTS	450
SWIMMING POOL COATINGS	340
TRAFFIC MARKING COATINGS	100
TUB & TILE REFINISH COATINGS	420
WATERPROOFING MEMBRANES	250
WOOD COATINGS	275
WOOD PRESERVATIVES	350
ZINC-RICH PRIMERS	340

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

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

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

TABLE 4.504.5 - FORMALDEHYDE LIMITS:	
MAXIMUM FORMALDEHYDE EMISSIONS IN PARTS PER MILLION	
PRODUCT	CURRENT LIMIT
HARDWOOD PLYWOOD VENEER CORE	0.05
HARDWOOD PLYWOOD COMPOSITE CORE	0.05
PARTICLE BOARD	0.09
MEDIUM DENSITY FIBERBOARD	0.11
THIN MEDIUM DENSITY FIBERBOARD ₂	0.13

1. VALUES IN THIS TABLE ARE DERIVED FROM THOSE SPECIFIED BY THE CALIF. AIR RESOURCES BOARD, AIR TOXICS CONTROL MEASURE FOR COMPOSITE WOOD AS TESTED IN ACCORDANCE WITH ASTM E 1353. 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 testing and product requirements of at least one of the following:

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

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

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

4.504.4 RESILIENT FLOORING SYSTEMS. Where resilient flooring is installed, at least 80% of floor area receiving resilient flooring shall comply with one or more of the following:

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

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

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

- Product certifications and specifications.
- Chain of custody certifications.
- Product labeled and invoiced as meeting the Composite Wood Products regulation (see CCR, Title 17, Section 93120, et seq.).
- Exterior grade products marked as meeting the PS-1 or PS-2 standards of the Engineered

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 foundations required to have a vapor retarder by the California Residential Code, Chapter 5, shall also comply with this section.

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

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

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

- 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.
- Moisture readings shall be taken at a point 2 feet (610 mm) to 4 feet (1219 mm) from the grade stamped end of each piece verified.
- At least three random moisture readings shall be performed on wall and floor framing with documentation acceptable to the enforcing agency provided at the time of approval to enclose the wall and floor framing.

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

4.506 INDOOR AIR QUALITY AND EXHAUST

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

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

Notes:

- For the purposes of this section, a bathroom is a room which contains a bathtub, shower or tub/shower combination.
- 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:

- The heat loss and heat gain is established according to ANSI/ACCA 2 Manual J - 2011 (Residential Load Calculation), ASHRAE handbooks or other equivalent design software or methods.
- Duct systems are sized according to ANSI/ACCA 1 Manual D - 2014 (Residential Duct Systems), ASHRAE handbooks or other equivalent design software or methods.
- 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.
- Public utility training programs.
- Training programs sponsored by trade, labor or statewide energy consulting or verification organizations.
- Programs sponsored by manufacturing organizations.
- Other programs acceptable to the enforcing agency.

702.2 SPECIAL INSPECTION [HCD].

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

- Certification by a national or regional green building program or standard publisher.
- 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.
- Other programs acceptable to the enforcing agency.

Notes:

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

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

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

703 VERIFICATIONS

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

CLIENT INFO.

JOB DESCRIPTION:			
	NEW UPPER DECK & CANTILEVER JULIET BALCONY		
	APN #: 0332-041-31		
	OWNER: KEVIN PIECHOTA		
	720 BUCKINGHAM SQUARE		
	LAKE ARROWHEAD, CA 92407		

REVISIONS

DATE:	0/00/00
DATE:	0/00/00
DATE:	0/00/00
DATE:	0/00/00

DRAWN	ADRIANA JUAREZ
BID	01/09/23
PLAN CHECK	0/00/00
JOB NO.	

CGBSC-2

G-2

10 OF 13 SHEETS



2019 Low-Rise Residential Mandatory Measures Summary

NOTE: Low-rise residential buildings subject to the Energy Standards must comply with all applicable mandatory measures, regardless of the compliance approach used. Review the respective section for more information. *Exceptions may apply. (01/2020)

Building Envelope Measures:	
\$ 110.6(a):	Air Leakage. Manufactured fenestration, exterior doors, and exterior pet doors must limit air leakage to 0.3 CFM per square foot or less when tested per NFRC-450, ASTM E283, or AIAA/WMAA CSA-101.13.2 (4/4/2011).
\$ 110.6(a):	Labeling. Fenestration products and exterior doors must have a label meeting the requirements of § 110.111(a).
\$ 110.6(b):	Field fabricated exterior doors and fenestration products must use U-factors and solar heat gain coefficient (SHGC) values from Tables 110.6-A, 110.6-B, or JA4.5 for exterior doors. They must be caulked and/or weather-stripped.
\$ 110.7:	Air Leakage. All joints, penetrations, and other openings in the building envelope that are potential sources of air leakage must be caulked, gasketed, or weather stripped.
\$ 110.8(a):	Insulation Certification by Manufacturers. Insulation must be certified by the Department of Consumer Affairs, Bureau of Household Goods and Services (BHGS).
\$ 110.8(a):	Insulation Requirements for Heated Slab Floors. Heated slab floors must be insulated per the requirements of § 110.8(g).
\$ 110.8(b):	Roofing Products Solar Reflectance and Thermal Emittance. The thermal emittance and aged solar reflectance values of the roofing material must meet the requirements of § 110.8(i) and be labeled per §110-113 when the installation of a cool roof is specified on the CF1R.
\$ 110.8(b):	Radiant Barrier. When required, radiant barriers must have an emittance of 0.05 or less and be certified to the Department of Consumer Affairs.
\$ 150.0(a):	Ceiling and Rafter Roof Insulation. Minimum R-22 insulation in wood-frame ceiling; or the weighted average U-factor must not exceed 0.043. Minimum R-19 or weighted average U-factor of 0.054 or less in a rafter roof alteration. Attic access doors must have permanently attached insulation using adhesive or mastic access must be gasketed to prevent air leakage. Insulation must be installed in direct contact with a continuous roof or ceiling which is sealed to limit infiltration and exfiltration as specified in § 110.7, including but not limited to placing insulation either above or below the roof deck or on top of a drywall ceiling.
\$ 150.0(b):	Loose-fill Insulation. Loose fill insulation must meet the manufacturer's required density for the labeled R-value.
\$ 150.0(c):	Wall Insulation. Minimum R-13 insulation in 2x4 inch wood framing wall or have a U-factor of 0.102 or less, or R-20 in 2x6 inch wood framing or have a U-factor of 0.077 or less. Opaque non-framed assemblies must have an overall assembly U-factor not exceeding 0.102. Masonry walls must meet Tables 150.1-A or B.
\$ 150.0(d):	Raised-floor Insulation. Minimum R-19 insulation in raised wood framed floor or 0.037 maximum U-factor.
\$ 150.0(f):	Slab Edge Insulation. Slab edge insulation must meet all of the following: have a water absorption rate, for the insulation material alone without facings, no greater than 0.3 percent; have a water vapor permeance no greater than 2.0 perm per inch; be protected from physical damage and UV light deterioration; and, when installed as part of a heated slab floor, meet the requirements of § 110.8(g).
\$ 150.0(g):	Vapor Retarder. In climate zones 1 through 16, the earth floor of unvented crawl space must be covered with a Class I or Class II vapor retarder. This requirement also applies to controlled ventilation crawl space for buildings complying with the exception to § 150.0(i).
\$ 150.0(g):	Vapor Retarder. In climate zones 14 and 16, a Class I or Class II vapor retarder must be installed on the conditioned space side of all insulation in all exterior walls, vented attics, and unvented attics with air-permeable insulation.
\$ 150.0(i):	Fenestration Products. Fenestration, including skylights, separating conditioned space from unconditioned space or outdoors must have a maximum U-factor of 0.58; or the weighted average U-factor of all fenestration must not exceed 0.58.*
Fireplaces, Decorative Gas Appliances, and Gas Log Measures:	
\$ 110.5(e):	Pilot Light. Continuously burning pilot lights are not allowed for indoor and outdoor fireplaces.
\$ 150.0(e):	Closable Doors. Masonry or factory-built fireplaces must have a closable metal or glass door covering the entire opening of the firebox.
\$ 150.0(e):	Combustion Intake. Masonry or factory-built fireplaces must have a combustion outside air intake, which is at least six square inches in area and is equipped with a readily accessible, operable, and light-fitting damper or combustion-air control device.*
\$ 150.0(e):	Flue Damper. Masonry or factory-built fireplaces must have a flue damper with a readily accessible control.*
Space Conditioning, Water Heating, and Plumbing System Measures:	
\$ 110.0-§ 110.3:	Certification. Heating, ventilation and air conditioning (HVAC) equipment, water heaters, showerheads, faucets, and all other regulated appliances must be certified by the manufacturer to the California Energy Commission.*
\$ 110.2(a):	HVAC Efficiency. Equipment must meet the applicable efficiency requirements in Table 110.2-A through Table 110.2-K.*
\$ 110.2(b):	Controls for Heat Pumps with Supplementary Electric Resistance Heaters. Heat pumps with supplementary electric resistance heaters must have controls that prevent supplanting when the heating load can be met by the heat pump alone; and in which the cut-on temperature for compression heating is higher than the cut-on temperature for supplementary heating, and the cut-off temperature for compression heating is higher than the cut-off temperature for supplementary heating.*
\$ 110.2(c):	Thermostats. All heating or cooling systems not controlled by a central energy management control system (EMCS) must have a setback thermostat.*
\$ 110.3(c):	Water Heating Recirculation Loops Serving Multiple Dwelling Units. Water heating recirculation loops serving multiple dwelling units must meet the air release valve, backflow prevention, pump priming, pump isolation valve, and recirculation loop connection requirements of § 110.3(c).4.
\$ 110.3(c):	Isolation Valves. Instantaneous water heaters with an input rating greater than 8.8 kBtu per hour (2 kW) must have isolation valves with hose bibbs or other fittings on both cold and hot water lines to allow for flushing the water heater when the valves are closed.*
\$ 110.5:	Pilot Lights. Continuously burning pilot lights are prohibited for natural gas, fan-type central furnaces, household cooking appliances (except appliances without an electrical supply voltage connection with pilot lights that consume less than 180 Btu per hour), and pool and spa heaters.*
\$ 150.0(h):	Building Cooling and Heating Loads. Heating and/or cooling loads are calculated in accordance with the ASHRAE Handbook, Equipment Volume, Applications Volume, and Fundamentals Volume; the SMACNA Residential Comfort System Installation Standards Manual; or the ACCA Manual J using design conditions specified in § 150.0(h).2.



2019 Low-Rise Residential Mandatory Measures Summary

\$ 150.0(k):	Interior Switches and Controls. An energy management control system (EMCS) may be used to comply with control requirements if it: provides functionality of the specified control according to § 110.9; meets the Installation Certificate requirements of § 130.4; meets the EMCS requirements of § 130.0(e); and meets all other requirements in § 150.0(k).2.
\$ 150.0(k):	Interior Switches and Controls. A multisensor programmable controller may be used to comply with dimmer requirements of § 150.0(k) if it provides the functionality of a dimmer according to § 110.9, and complies with all other applicable requirements in § 110.9.
\$ 150.0(k):	Interior Switches and Controls. In bathrooms, garages, laundry rooms, and utility rooms, at least one luminaire in each space must be controlled by an occupant sensor or a vacancy sensor providing automatic off functionality. If an occupant sensor is installed, it must be initially configured to manual-on operation using the manual control required under Section 150.0(k).2C.
\$ 150.0(k):	Interior Switches and Controls. Luminaires that are or contain light sources that meet Reference Joint Appendix JA8 requirements for dimming, and that are not controlled by occupancy or vacancy sensors, must have dimming controls.*
\$ 150.0(k):	Interior Switches and Controls. Under cabinet lighting must be controlled separately from ceiling-installed lighting systems.
\$ 150.0(k):	Residential Outdoor Lighting. For single-family residential buildings, outdoor lighting permitted on a residential building and on other buildings on the same lot, must meet the requirement in item § 150.0(k)(3A) (ON and OFF) and the requirements in either § 150.0(k)(3Aii) (photocell) and either a motion sensor or automatic time switch control, or § 150.0(k)(3Aiii) (automatic time clock), or § 150.0(k)(3Aiv) (EMCS).
\$ 150.0(k):	Residential Outdoor Lighting. For low-rise residential buildings with four or more dwelling units, outdoor lighting for private patios, balconies, and porches, and residential parking lots and carports with less than 100 vehicles per site must comply with either § 150.0(k)(3A) or § 150.0(k)(3B).
\$ 150.0(k):	Residential Outdoor Lighting. For low-rise residential buildings with four or more dwelling units, any exterior lighting for residential parking lots or carports with a total of eight or more vehicles per site and any outdoor lighting controlled by a photocell or a motion sensor must comply with the applicable requirements in Sections 110.9, 130.0, 130.2, 130.4, 140.0, 140.7, and 141.0.
\$ 150.0(k):	Internally Illuminated Address Signs. Internally illuminated address signs must comply with § 150.0(k)(3B); or must consume no more than 5 watts of power as determined according to § 130.0(c).
\$ 150.0(k):	Residential Garages for Eight or More Vehicles. Lighting for residential garages for eight or more vehicles must comply with the applicable requirements for nonresidential garages in Sections 110.9, 130.0, 130.2, 130.4, 140.0, 140.7, and 141.0.
\$ 150.0(k):	Interior Common Areas of Low-rise Multifamily Buildings. In a low-rise multifamily residential building where the total interior common area in a single building equals 20 percent or less of the floor area, permanently installed lighting for the interior common areas in that building must be controlled by an occupant sensor.
\$ 150.0(k):	Interior Common Areas of Low-rise Multifamily Residential Buildings. In a low-rise multifamily residential building where the total interior common area in a single building equals more than 20 percent of the floor area, permanently installed lighting for the interior common areas in that building must:
\$ 150.0(k):	1. Comply with the applicable requirements in Sections 110.9, 130.0, 130.2, 130.4, 140.0, and 141.0; and
\$ 150.0(k):	2. Lighting installed in corridors and stairwells must be controlled by occupant sensors to reduce the lighting power in each space by at least 50 percent. The occupant sensors must be capable of turning the lighting fully on and off, and all designed paths of ingress and egress.
Solar Ready Buildings:	
\$ 110.10(a):	Single Family Residences. Single family residences located in solar zones 1 through 10 or more single family residences and where the application for a tentative subdivision map for the residences has been completed and approved by the enforcement agency, which do not have a photovoltaic system installed, must comply with the requirements of § 110.10(b) through § 110.10(e).
\$ 110.10(a):	Low-rise Multifamily Buildings. Low-rise multi-family buildings that do not have a photovoltaic system installed must comply with the requirements of § 110.10(b) through § 110.10(d).
\$ 110.10(b):	Minimum Solar Zone Area. The solar zone must have a minimum total area as described below. The solar zone must comply with access, pathway, smoke ventilation, and spacing requirements as specified in Title 24, Part 9 or other parts of Title 24 or in any requirements adopted by a local jurisdiction. The solar zone total area must be comprised of areas that have no dimension less than 5 feet and are no less than 80 square feet each for buildings with roof areas less than or equal to 10,000 square feet or no less than 160 square feet each for buildings with roof areas greater than 10,000 square feet. For single family residences, the solar zone must be located on the roof or overhang of the building and have a total area no less than 250 square feet. For low-rise multi-family buildings the solar zone must be located on the roof or overhang of the building, or on the roof or overhang of another building, or on covered parking installed with the building project, and have a total area no less than 15 percent of the total roof area of the building excluding any skylight area. The solar zone requirement is applicable to the entire building, including mixed occupancy.*
\$ 110.10(b):	Azimuth. All sections of the solar zone located on steep-sloped roofs must be oriented between 90 degrees and 300 degrees of true north.
\$ 110.10(b):	Shading. The solar zone must not contain any obstructions, including but not limited to: vents, chimneys, architectural features, and roof mounted equipment.*
\$ 110.10(b):	Shading. Any obstruction located on the roof or any other part of the building that projects above a solar zone must be located at least twice the distance, measured in the horizontal plane, of the height difference between the highest point of the obstruction and the horizontal projection of the nearest point of the solar zone, measured in the vertical plane.*
\$ 110.10(b):	Structural Design Loads on Construction Documents. For areas of the roof designated as a solar zone, the structural design loads for roof dead load and roof live load must be clearly indicated on the construction documents.
\$ 110.10(c):	Interconnection Pathways. The construction documents must indicate: a location reserved for inverters and metering equipment and a pathway reserved for routing of conduit from the solar zone to the point of interconnection with the electrical service; and for single family residences and central water-heating systems, a pathway reserved for routing plumbing from the solar zone to the water-heating system.
\$ 110.10(d):	Documentation. A copy of the construction documents or a comparable document indicating the information from § 110.10(b) through § 110.10(c) must be provided to the occupant.
\$ 110.10(e):	Main Electrical Service Panel. The main electrical service panel must have a minimum busbar rating of 200 amps.
\$ 110.10(e):	Main Electrical Service Panel. The main electrical service panel must have a reserved space to allow for the installation of a double pole circuit breaker for a future solar electric installation. The reserved space must be permanently marked as "For Future Solar Electric".



2019 Low-Rise Residential Mandatory Measures Summary

Requirements for Ventilation and Indoor Air Quality:	
\$ 150.0(o):	Requirements for Ventilation and Indoor Air Quality. All dwelling units must meet the requirements of ASHRAE Standard 62.2, Ventilation and Acceptable Indoor Air Quality in Residential Buildings subject to the amendments specified in § 150.0(o).1.
\$ 150.0(o):	Single Family Detached Dwelling Units. Single family detached dwelling units, and attached dwelling units not sharing ceilings or floors with other dwelling units, occupiable spaces, public garages, or commercial spaces must have mechanical ventilation airflow provided at rates determined by ASHRAE 62.2 Sections 4.1.1 and 4.2.2 and as specified in § 150.0(o).1C.
\$ 150.0(o):	Multifamily Attached Dwelling Units. Multifamily attached dwelling units must have mechanical ventilation airflow provided at rates in accordance with Equation 150.0-B and must be either a balanced system or continuous supply or continuous exhaust system. If a balanced system is not used, all units in the building must use the same system type and the dwelling-unit envelope leakage must be ≤ 0.3 CFM at 50 Pa (0.2 inch water) per square foot of dwelling unit envelope surface area and verified in accordance with Reference Residential Appendix RA3.8.
\$ 150.0(o):	Multifamily Building Central Ventilation Systems. Central ventilation systems that serve multiple dwelling units must be balanced to provide ventilation airflow for each dwelling unit served at a rate equal to or greater than the rate specified by Equation 150.0-B. All unit airflow must be within 20 percent of the unit with the lowest airflow rate as it relates to the individual unit's minimum required airflow rate needed for compliance.
\$ 150.0(o):	Kitchen Range Hoods. Kitchen range hoods must be rated for sound in accordance with Section 7.2 of ASHRAE 62.2.
\$ 150.0(o):	Field Verification and Diagnostic Testing. Dwelling unit ventilation airflow must be verified in accordance with Reference Residential Appendix RA3.7. A kitchen range hood must be verified in accordance with Reference Residential Appendix RA3.7.4.3 to confirm it is rated by HV1 to comply with the airflow rates and sound requirements as specified in Section 5 and 7.2 of ASHRAE 62.2.
Pool and Spa Systems and Equipment Measures:	
\$ 110.4(a):	Certification by Manufacturers. Any pool or spa heating system or equipment must be certified to have all of the following: a thermal efficiency that complies with the Appliance Efficiency Regulations; an on-off switch mounted outside of the heater that allows shutting off the heater without adjusting the thermostat setting; a permanent weatherproof plate or card with operating instructions; and must not use electric resistance heating.*
\$ 110.4(b):	Piping. Any pool or spa heating system or equipment must be installed with at least 36 inches of pipe between the filter and the heater, or dedicated suction and return lines, or built-in or built-up connections to allow for future solar heating.
\$ 110.4(b):	Covers. Outdoor pools or spas that have a heat pump or gas heater must have a cover.
\$ 110.4(b):	Directional Intake and Time Switches for Pools. Pools must have directional intakes that adequately mix the pool water, and a time switch that will allow all pumps to be set or programmed to run only during off-peak electric demand periods.
\$ 110.5:	Pilot Light. Natural gas pool and spa heaters must not have a continuously burning pilot light.*
\$ 150.0(p):	Pool Systems and Equipment Installation. Residential pool systems or equipment must meet the specified requirements for pump sizing, flow rate, piping, filters, and valves.*
Lighting Measures:	
\$ 110.9:	Lighting Controls and Components. All lighting control devices and systems, including dimmers and luminaires must meet the applicable requirements of § 110.9.*
\$ 150.0(k):	Luminaire Efficacy. All installed luminaires must meet the requirements in Table 150.0-A.
\$ 150.0(k):	Blank Electrical Boxes. The number of electrical boxes that are more than five feet above the finished floor and do not contain a luminaire or other device must be no greater than the number of bedrooms. These electrical boxes must be covered by a dimmer, vacancy sensor control, or fan speed control.
\$ 150.0(k):	Recessed Downlight Luminaires in Ceilings. Luminaires recessed into ceilings must meet all of the requirements for: insulation contact (IC) labeling; air leakage; sealing; maintenance; and a secondary light source as described in § 150.0(k).1C.
\$ 150.0(k):	Electronic Ballasts for Fluorescent Lamps. Ballasts for fluorescent lamps rated 13 watts or greater must be electronic and must have an output frequency no less than 20 kHz.*
\$ 150.0(k):	Night Lights, Step Lights, and Path Lights. Night lights, step lights, and path lights are not required to comply with Table 150.0-A or be controlled by vacancy sensors provided that they are rated to consume no more than 5 watts of power and emit no more than 150 lumens.
\$ 150.0(k):	Lighting Integral to Exhaust Fans. Lighting integral to exhaust fans (except when installed by the manufacturer in kitchen exhaust hoods) must meet the applicable requirements of § 150.0(k).1.
\$ 150.0(k):	Screw based luminaires. Screw based luminaires must contain lamps that comply with Reference Joint Appendix JA8.*
\$ 150.0(k):	Light Sources in Drawers, Cabinets, and Linen Closets. Light sources in drawers, cabinets or linen closets that are not compliant with the JA8 elevated temperature requirements, including marking requirements, must be installed in enclosed or recessed luminaires.
\$ 150.0(k):	Light Sources in Drawers, Cabinets, and Linen Closets. Light sources in drawers, cabinets or linen closets are not required to comply with Table 150.0-A or be controlled by vacancy sensors provided that they are rated to consume no more than 5 watts of power, emit no more than 150 lumens, and are controlled with controls that automatically turn the lighting off when the drawer, cabinet or linen closet is closed.
\$ 150.0(k):	Interior Switches and Controls. Exhaust fans must be controlled separately from lighting systems.*
\$ 150.0(k):	Interior Switches and Controls. Lighting must have readily accessible wall-mounted controls that allow the lighting to be manually turned ON and OFF.*
\$ 150.0(k):	Interior Switches and Controls. Lighting control equipment must be installed in accordance with manufacturer's instructions.
\$ 150.0(k):	Interior Switches and Controls. Lighting control equipment must not bypass a dimmer, occupant sensor, or vacancy sensor function if the control is installed to comply with § 150.0(k).
\$ 150.0(k):	Interior Switches and Controls. Lighting controls must comply with the applicable requirements of § 110.9.



2019 Low-Rise Residential Mandatory Measures Summary

\$ 150.0(h):	Clearances. Air conditioner and heat pump outdoor condensing units must have a clearance of at least five feet from the outlet of any dryer
\$ 150.0(h):	Liquid Line Drier. Air conditioners and heat pump systems must be equipped with liquid line filter driers if required, as specified by the manufacturer's instructions.
\$ 150.0(j):	Storage Tank Insulation. Unfired hot water tanks, such as storage tanks and backup storage tanks for solar water-heating systems, must have a minimum of R-12 external insulation or R-16 internal insulation where the internal insulation R-value is indicated on the exterior of the tank.
\$ 150.0(j):	Water Piping, Solar Water-Heating System Piping, and Space Conditioning System Line Insulation. All domestic hot water piping must be insulated as specified in Section 609.11 of the California Plumbing Code. In addition, the following piping conditions must have a minimum insulation wall thickness of one inch or a minimum insulation R-value of 7.7: the first five feet of cold water pipes from the storage tank; all hot water piping with a nominal diameter equal to or greater than 3/4 inch and less than one inch; all hot water piping with a nominal diameter less than 3/4 inch that is associated with a domestic hot water recirculation system. From the heating source to storage tank or between tanks, buried below grade, and from the heating source to kitchen fixtures.*
\$ 150.0(j):	Insulation Protection. Piping insulation must be protected from damage, including that due to sunlight, moisture, equipment maintenance, and wind as required by Section 120.3(b). Insulation exposed to weather must be water retardant and protected from UV light (no adhesive tapes). Insulation covering chilled water piping and refrigerant suction piping located outside the conditioned space must include, or be protected by, a Class I or Class II vapor retarder. Pipe insulation buried below grade must be installed in a waterproof and non-crushable casing or sleeve.
\$ 150.0(n):	Gas or Propane Water Heating Systems. Systems using gas or propane water heaters to serve individual dwelling units must include all of the following: A dedicated 125-volt, 20 amp electrical receptacle connected to the electric panel with a 120/240-volt 3 conductor, 10 AWG copper branch circuit, within three feet of the water heater without obstruction. Both ends of the unswitched conductor must be labeled with the word "space" and be electrically isolated. Have a reserved single pole circuit breaker space in the electrical panel adjacent to the circuit breaker for the branch circuit and labeled with the words "Future 240V Use"; a Category II or IV vent, or a Type B vent with straight pipe between the outside termination and the space where the water heater is installed; a condensate drain that is no more than two inches higher than the base of the water heater, and allows natural draining without pump assistance; and a gas supply line with a capacity of at least 200,000 Btu per hour.
\$ 150.0(n):	Recirculating Loops. Recirculating loops serving multiple dwelling units must meet the requirements of § 110.3(c).5.
\$ 150.0(n):	Solar Water-heating Systems. Solar water-heating systems and collectors must be certified and rated by the Solar Rating and Certification Corporation (SRCC), the International Association of Plumbing and Mechanical Officials, Research and Testing (IAPMO R&T), or by a listing agency that is approved by the Executive Director.
Ducts and Fan Measures:	
\$ 110.8(d):	Ducts. Insulation installed on an existing space-conditioning duct must comply with § 804.0 of the California Mechanical Code (CMC). If a contractor installs the insulation, the contractor must certify to the customer, in writing, that the insulation meets this requirement.
\$ 150.0(m):	CMC Compliance. All air-distribution system ducts and plenums must meet the requirements of the CMC §§ 601.0, 602.0, 603.0, 604.0, 605.0 and ANSI/SMACNA-006-2006 HVAC Duct Construction Standards Metal and Flexible 3rd Edition. Portions of supply-air and return-air ducts and plenums must be insulated to a minimum installed level of R-5.0 or a minimum installed level of R-4.2 when ducts are entirely in conditioned space as confirmed through field verification and diagnostic testing (RAS.1.4.3.8). Portions of the duct system completely exposed and surrounded by directly conditioned space are not required to be insulated. Connections of metal ducts and inner core of flexible ducts must be mechanically fastened. Openings must be sealed with mastic, tape, or other duct-closure system that meets the applicable requirements of UL 181, UL 181A, or UL 181B or aerosol sealant that meets the requirements of UL 723. If mastic or tape is used to seal openings greater than ¼ inch, the combination of mastic and other mesh or tape must be used. Building cavities, support platforms for air handlers, and plenums designed or constructed with materials other than sealed sheet metal, duct board or flexible duct must not be used to convey conditioned air. Building cavities and support platforms may contain ducts. Ducts installed in cavities and support platforms must not be compressed to cause reductions in the cross-sectional area.*
\$ 150.0(m):	Factory-Fabricated Duct Systems. Factory-fabricated duct systems must comply with applicable requirements for duct construction, connections, and closures; joints and seams of duct systems and their components must not be sealed with cloth based rubber adhesive duct tapes unless such tape is used in combination with mastic and draw bands.
\$ 150.0(m):	Field-Fabricated Duct Systems. Field-fabricated duct systems must comply with applicable requirements for: pressure-sensitive tapes, mastics, sealants, and other requirements specified for duct construction.
\$ 150.0(m):	Backdraft Damper. Fan systems that exchange air between the conditioned space and outdoors must have backdraft or automatic dampers.
\$ 150.0(m):	Gravity Ventilation Dampers. Gravity ventilating systems serving conditioned space must have either automatic or readily accessible, manually operated dampers in all openings to the outside, except combustion inlet and outlet air openings and elevator shaft vents.
\$ 150.0(m):	Protection of Insulation. Insulation must be protected from damage, sunlight, moisture, equipment maintenance, and wind. Insulation exposed to weather must be suitable for outdoor service. For example, protected by aluminum, sheet metal, painted canvas, or plastic cover. Cellular foam insulation must be protected as above or painted with a coating that is water retardant and provides shielding from solar radiation.
\$ 150.0(m):	Porous Inner Core Flex Duct. Porous inner core flex ducts must have a non-porous layer between the inner core and outer vapor barrier.
\$ 150.0(m):	Duct System Sealing and Leakage Test. When space conditioning systems use forced air duct systems to supply conditioned air to an occupiable space, the ducts must be sealed and duct leakage tested, as confirmed through field verification and diagnostic testing, in accordance with § 150.0(m).1 and Reference Residential Appendix RA3.
\$ 150.0(m):	Air Filtration. Space conditioning systems with ducts exceeding 10 feet and the supply side of ventilation systems must have MERV 13 or equivalent filters. Filters for space conditioning systems must have a two inch depth or can be one inch deep per Equation 150.0-A. Pressure drops and labeling must meet the requirements in §150.0(m).12. Filters must be accessible for regular service.*
\$ 150.0(m):	Space Conditioning System Airflow Rate and Fan Efficacy. Space conditioning systems that use ducts to supply cooling must have a hole for the placement of a static pressure probe, or a permanently installed static pressure probe in the supply plenum. Airflow must be ≥ 350 CFM per ton of nominal cooling capacity, and an air-handling unit fan efficacy ≤ 0.45 watts per CFM for gas furnace air handlers and ≤ 0.58 watts per CFM for all others. Small duct high velocity systems must provide an airflow ≥ 260 CFM per ton of nominal cooling capacity, and an air-handling unit fan efficacy ≤ 0.62 watts per CFM. Field verification testing is required in accordance with Reference Residential Appendix RA3.3.*



CLIENT INFO.

JOB DESCRIPTION:
NEW UPPER DECK & CANTILEVER JULIET BALCONY

AFN #: 0332-041-31

OWNER:
KEVIN PIECHOTA
720 BUCKINGHAM SQUARE
LAKE ARROWHEAD, CA 92407

REVISIONS

DATE:	0/00/00
DATE:	0/00/00
DATE:	0/00/00
DATE:	0/00/00

DRAWN	ADRIANA JUAREZ
BID	01/09/23
PLAN CHECK	0/00/00
JOB NO.	

2019 RESIDENTIAL MANDATORY MEASURES

G-3

A. PERMIT APPLICATION

- A1. Valuation provided or determined during the initial submittal process was not accurate. Valuations is revised to _____. Pay an additional deposit fee of \$_____.
- A2. Note on plan: Separate permit application is required for the following items:
Retaining walls or block fence walls
a. Grading work
b. Swimming pools
c. Separate structures
d. Shoring
e. Demolition
f. Fire Sprinkler systems
g. Others

B. ADMINISTRATION:

- B1. Obtain all approvals/clearances from the following department/bureau/agency noted below. It is necessary to apply immediately for the signoff as it can take weeks or months for some departments/bureaus/agencies to review and approve the project. All required approvals clearance must be secured prior to permit issuance.
a. Planning
b. Public Works (for grading)
c. County Environmental (for septic tank)
d. Fire Authority
- B2. Provide applicable deferred submittal note: Deferal of any submittal items shall have the prior approval of the building official. Documents for deferred submittal items shall be submitted to the registered design professional in responsible charge who shall review them and forward them to the building official with a notation indicating that the deferred submittal documents have been reviewed and been found to be in general conformance to the design of the building. The deferred submittal items shall not be installed until the deferred submittal documents have been approved by the building official." [2010 CBC 107.3.4.2]
- B3. Note: the first sheet a list of deferred submittal items, such as, manufactured trusses, fire sprinkler system, etc.

B4. AUTOMATIC FIRE SPRINKLER SYSTEM:

- B5. Note : Automatic fire sprinkler system shall be installed in all areas of a dwelling unit. [CRC R313.3.1.1]
Exceptions:
a. Bathrooms not more than 55 square feet (5.1m2) in area.
b. Detached garages; carports w/ no habitable space above; open attached porches; unheated entry areas, such as mud rooms, that area adjacent to an exterior door; and similar areas.
- B6. Note : Install a sign or valve tag at the main shutoff valve to the water distribution system stating the following: **"Warning , the water system for this home supplies fire sprinklers that require certain flows and pressures to fight a fire. Devices that restrict the flow or decrease the pressure or automatically shut off the water to the fire sprinkler system, such as water softeners, filtration systems and automatic shutoff valves, shall not be added to this system without a review of the fire sprinkler system by a fire protection specialist. Do not remove this sign."**[CRC R313.3.7]
- B7. Amend the Building Data showing typ of construction VB-Sprinkler & Occupancy Group of R-3/U
- B8. Note : **"There are no other accessory structures in the parcel lot except those shown on plan."**
- B9. The Energy calculations SHOWN ON THE sheet index shall be integrated in the plan
- B10. Surface drainage shall be diverted to a storm sewer conveyance or other approved pint of collection. Lots shall be graded to drain surface water away from foundation walls. Grade: 6 in within the first **10 feet (5.0%)**. **R401.3 Exception:** Where lot lines, walls, slopes or other physical barriers prohibit 6 inches of fall within **10 feet**, drains or swales shall be constructed to ensure drainage away from the structure. Impervious surfaces within.
- B11. Note: the bathroom 50 cfm vent fan with backdraft dam.

C. ARCHITECTURE

- C1. Fully dimensioned plot plan to scale. Include the following information: Location and size of electrical service panel, gas meter, water meter, sewer line connections; distance or setback of all accessory building to property lines or other building on the lot.
- C2. Note : "A building address **4 inches** high with $\frac{1}{2}$ inch stroke width shall be provided clearly visible room the public way" [CRC R319].
- C3. Provide smoke alarms and Carbon Monoxide in the following locations: [CRC R314.3]
a. In each sleeping room.
b. Outside each separate sleeping area in the immediate vicity of the bedrooms.
a. Each additional story of the dwelling, basements and habitable attics, excluding crawl apases & uninhabitable attics.
- C4. Carbon monoxide shall be provided in the following locations:
a. Outside of ea separate dwelling unit sleeping area in the **immediate vicinity** of the bedrooms.
b. On every level of a dwelling unit including basements.
- C5. Note : Smoke alarms shall receive their primary power from the building wiring. [CRC R314.4]
- C6. Note : Smoke alarms shall be interconnected where more than one is required. [CRC R314.5]
- C7. Show : Emergency escape and rescue required in every sleeping room. Sill height: 44 inches above the floor.
- C8. Note: Minimum opening area: 5.7 squared feet. R310.1.1...5 SF for Gradee floor openings.
a. Minimum opening height: 24 inches. R310.1.2
b. Minimum opening width: 20 inches. R310.1.3
b. Shall be operational from the inside without the use of keys, tools or special knowledge. R310.1.4
- C9. Wall and ceiling finishes shall have a flame spread index of not greater than 200.R302.9.1
- C10. **Insulation** Flame spread index shall not to exceed **25** with and smoke-developed index not to **exceed 450**. R302.10.1
- C11. **Cellulose loose-fill insulation** shall comply with CPSC 16 CFR, Parts 1203 & 1404. Shall be clearly labeled in accordance with CPSC 16 CFR, Parts 1209 and 1404. **R302.10.3**.
- GARBAGE AND CARPORTS: SECTION
- R309 Floor shall be sloped to facilitate the movement of liquids to a drain or toward the main vehicle entry doorway.
- C12 Automatic garage door openers, be listed in accordance with UL 325. **R309.4**

- C13 **Extension garage door springs** shall Conform to the requirements in Sec 1211 of CBC. **R309.5**
- C14 Garage w/ habitable space above shall be protected by **NFPA 13D** residential fire sprinkler system.
- C16. Ducts in the garage and ducts penetrating the walls shall be constructed of a minimum **No. 26 gage, R302.5.2**
- C17. Private garage shall be separated from the dwelling and its attic are area by means of gypsum board not less than $\frac{1}{2}$ " in thickness applied on the garage side. CBC 406.3.4
- C18. Door opening openings shall be solid wood 1-3/8 in thickness or in compliance with fire protection rating not less than 20 minutes. CBC 504.3.4

GLAZING SECTION R308

- C19. Glazing shall be identified with manufacturer's designation acid etched, sandblasted, ceramic-fired, laser etched, embossed, R308.1
- C20. All panes shall be labeled "CPSC 16 CFR 1201" or "ANSI Z97.1" **R308.1.1**
- C21. Window opening within 24" arc distance from the door shall be provided with safety glazing.
- C22. Provide window and door schedule.

HEATING: R303

- C23. Heating shall be provided capable of producing 68°F at a point **3 feet** above the floor and **2 feet** from exterior walls in all habitable rooms. R303
- C24. One or more portable space heaters shall NOT be used. **R303.8**
- C25. For factory built fireplace specify on plan the manufacturer, model number and ICC Evaluation number.
- C26. Dimension on plan the required hearth extensions in accordance with the manufacturer's installation instructions for factory built fireplace.

LIGHT, VENTILATION AND HEATING: SECTION R303

- C27. **Bathroom** Mechanical vent with minimum ventilation rates shall be **50 cfm** for intermittent ventilation of **25 cfm** for continuous ventilation. Ventilation air from the space shall be exhausted directly to the outside backdraft damper.

MEANS OF EGREES: SECTION

- C28. **Egress door** shall not less be than **32 inches** in widh and **78 inches from the top** of the threshold to the bottom of the stop. **R311.1. Provide door schedule.**
- C29. **Floors and landings at exterior doors.** Minimum: **36 inches** in the direction of travel. Slope: $\frac{1}{4}$ unit vertical in 12 units horizontal (2-percent). **R311.3**
- C30. **Floor elevations** at the required egress doors shall not be less than **1 $\frac{1}{2}$** inches lower than the top of the threshold. **R311.3.1**
Exception: The exterior landing or floor shall not be more than **7 $\frac{1}{2}$** inches below the top of the threshold provided the door does not swing over the landing or floor.

- C31. Protection of wood from decay shall be provided in the following locations by the use for naturally durable wood or preservative treated wood in accordance with AWP A U1: **R317.1**
- All wood framing members that rest on concrete or masonry and less than 8 inches from exposed ground. Sills and sleepers on concrete or masonry slab in direct contact with the ground.

SANITATION: SECTION R306

- C32. Show on plan: All plumbing fixtures shall be connected to a sanitary sewer or to an approved private sewage disposal system. R306.3
- C33. All plumbing fixtures shall be connected to an approved water supply. Kitchen sinks, lavatories, bathtubs, shower, bidets, laundry tubs and washing machine outlets shall be provided with hot and cold water. **R306.4**
- C34. Bathtub and shower floors and walls above bathtubs with installed shower heads and in shower compartments shall be finished with a nonabsorbent surface. Such wall surfaces shall extend to a
- D. **PLUMBING:**
- D1. Specify on plan the fireplace valves shall be located outside of the required heating area, but not more than 48" away.
- D2. Specify on plans an accessible fire place shutoff valves (in addition to the valve on the appliance) shall be located within three feet of the appliance.
- D3. Specify on plan the following maximum flow rate standards set by California Energy Commission:

FIXTURE TYPE	MAXIMUM FLOW RATE
Shower Head	1.8 gpm @ 80 psi
Kitchen Faucet	1.8 gpm @ 60 psi
Lavatory Faucet	1.2 gpm @ 60 psi
Water Closet	1.28 gallons per flush
Urinal	0.125 gallons per flush

- D4. Show on plan the upper terminal accessible cleanout. R307
- D5. Note : the gallon capacity of the water heater in accordance and imprinted on CPC Table 501.1
- E. **ELECTRICAL:**
- E1. Specify on plan: Two small appliance branch circuits for the kitchen shall be limited to supplying wall and counter space outlets only.
- E2. Provide dedicated 20-amp circuit to supply laundry facilities appliance outlets.
- E3. Clarify on plans: Dedicated 20-amp circuit shall be provided to serve the required bathroom outlets. This circuit cannot supply any other receptacles/light/tans.
- E4. Receptacle outlets shall be tamper resistant.
- E5. Where the electrical service is located in/on the attached garage and furred garage wall is the method used to run the non-metallic-sheathed cables to the residence through the fire wall, provided a detail showing how the penetration will be fire-stopped

F. STRUCTURAL:

- F1. The building official shall determine whether to require a soil test to determine the soil's characteristics at a particular location. This test shall be done by an approved agency using an approved method. R401.4
- F2. **Geotechnical evaluation.** In lieu of a complete geotechnical evaluation, the load-bearing values in Table R401.4.1 shall be assumed.

NPDES NOTES

1. In the case off emergency, call _____
at work phone # _____
or home phone # _____
2. Sediment from areas disturbed by construction shall be retained on site using structural controls to the maximum extent practicable.
3. Stockpiles of soil shall be properly contained to minimize sediment transport from the site to streets, drainage facilities or adjacent properties via runoff, vehicle tracking, or wind.
4. Appropriate bmp's for construction-related materials, wastes, spills shall be implemented to minimize transport from the site to streets, drainage facilities, or adjoining properties by wind or runoff.
Runoff from equipment and vehicle washing shall be contained at construction sites unless treated to reduce or remove sediment and other pollutants.
5. All construction contractor & subcontractor personnel are to be made aware of the required best management practices and good housekeeping measures for the project site and any associated construction staging areas.
6. At the end of each day of construction activity, all construction debris and waste materials shall be collected and property disposed in trash or recycle bins.
7. Construction sites shall be maintained in such a condition that an anticipated storm does not carry wastes or pollutants off the site. discharges of material other than storm water only when necessary for performance and completion of construction practices and where they do not: cause or contribute to a violation of any water quality standard; cause or threaten to cause pollution, contamination, or nuisance; or contain a hazardous substance in a quantity reportable under federal regulations 40 cfr parts 117 and 302.
8. Potential pollutants include but are not limited to: solid or liquid chemical spills; wastes from paints, stains, sealants, glues, lime, pesticides, herbicides, wood preservatives, & solvents; asbestos fibers, paint flakes or stucco fragments; fuels, oils, lubricants, and hydraulic, radiator or battery fluids; fertilizers, vehicle/equipment wash water and concrete wash water, concrete, detergent or floatable wastes; wastes from any engine/equipment steam cleaning or chemical degreasing and super-chlorinated potable water line flushing; during construction, permitted shall dispose of such materials in a specified and controlled temporary area on-site, physically separated from potential storm water runoff, w/ ultimate disposal in accordance with local, state and federal requirements.
9. Dewatering of contaminated groundwater or discharging contaminated soils via surface erosion is prohibited. Dewatering of non-contaminated groundwater req. a national pollutant discharge elimination system permit from the respective state regional water quality control board.
10. Graded areas on the permitted area perimeter must drain away from the facility. slopes, at the conclusion of each working day, drainage is to be directed toward drainage facilities.
11. The permitted and contractor shall be responsible and shall take necessary precautions to prevent public trespass onto areas where impounded water creates a hazardous condition.
12. The permitted and contractor shall inspect the erosion control work & insure that the work is in accordance with the approved plans.
13. The permitted shall notify all general contractors, subcontractors, material suppliers, lessees, and property owners: that dumping of chemicals into the storm drain system or the watershed is prohibited.
14. Equipment and workers for emergency response shall be available at all times during the rainy season. necessary materials shall be available on site & stockpiled at convenient locations to facilitate rapid construction of temporary facilities when rains is imminent.
15. All removable erosion protection devices shall be in place at the end of ea. working day when the 5-day rain probability forecast exceeds 40%.
16. Sediments from areas disturbed by construction shall be retained on site using an effective combination of erosion and sediment controls to maximize extent practicable, & stockpiles of soil shall be properly contained to minimize sediment transport from the site to streets, drainage facilities or adjacent properties via runoff, vehicle tracking or wind.
17. Appropriate bmp's for construction-related materials, wastes, spills or residues hall be implemented and retained on site to minimize transport from the site to streets, drainage facilities, or adjoining properties by wind or runoff.

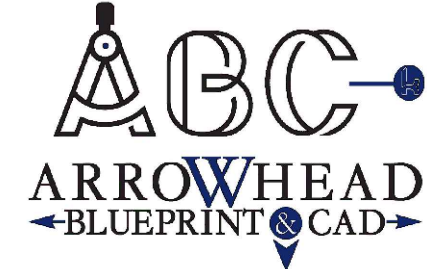
STORM WATER POLLUTION CONTROL

1. Erosion sediment and pollutants shall be retained on site and shall not be transported from the site via wind, vehicle tracking drainage or wind.
2. Stockpiles of earth and other construction-related materials shall be covered and/or protected from being transported from the sit by wind or water
3. Fuels, oils, solvents and other toxic materials must be stored in accordance with existing and shall not be used to contaminate the exterior 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 and approved filtering system is installed and maintained on-site during the constructions duration.

RESIDENTIAL MANDATORY MEASURES REQUIREMENTS FOR (R-3) SFD 2019 California Green Building Standards													
All newly constructed single family dwellings (SDF) & any addition or alteration to an existing single family dwelling which proposes to increase the dwellings conditioned area, volume, or size shall fully comply w/ the adopted 2016 California Green Building Standards Code & the items described in this checklist. These requirements apply only to the specific area of addition or alteration for existing dwellings.													
Building Permit Number: _____	Site Address: _____												
Section	Green Mandatory Measures												
Division 4.1	Planning & Design: Site Development												
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 development shall manage storm water drainage during construction in accordance with this code and State law.												
4.106.2	Grading and paving: Site grading or drainage system will manage all surface water flows to keep water from entering buildings.												
4.106.4	Electric vehicle charging for new one- and two-family dwellings with attached private garages. For dwelling unit, install a listed raceway to accommodate a dedicated 208/240-volt branch circuit (nominal 1-inch inside diameter) that originates at the main service or subpanel and terminates into a listed cabinet, box or other enclosure in close proximity to the proposed location of an EV charger. The service panel or subpanel shall provide capacity to install a 40-amp, minimum dedicated branch circuit and space(s) reserved to permit installation of a branch circuit overcurrent protective device. The service panel or subpanel shall be permanently labeled to identify the breaker space as "EV CAPABLE". The raceway termination location shall be permanently and visibly marked as "EV CAPABLE".												
Division 4.2	Energy Efficiency												
4.201.1	Score: This project shall comply with all applicable energy efficiency requirements as set forth in the most recent version of the California Energy Code. Energy calculations and forms shall be include as part of the plans and drawings.												
Division 4.3	Water Efficiency & Conservation												
4.303.1	Indoor water use. Plumbing fixtures and fittings shall comply with the following: 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. <table><tr><th>FIXTURE TYPE</th><th>MAXIMUM FLOW RATE</th></tr><tr><td>Shower Head</td><td>1.8 gpm @ 80 psi</td></tr><tr><td>Kitchen Faucet</td><td>1.8 gpm @ 60 psi</td></tr><tr><td>Lavatory Faucet</td><td>1.2 gpm @ 60 psi</td></tr><tr><td>Water Closet</td><td>1.28 gallons per flush</td></tr><tr><td>Urinal</td><td>0.125 gallons per flush</td></tr></table>	FIXTURE TYPE	MAXIMUM FLOW RATE	Shower Head	1.8 gpm @ 80 psi	Kitchen Faucet	1.8 gpm @ 60 psi	Lavatory Faucet	1.2 gpm @ 60 psi	Water Closet	1.28 gallons per flush	Urinal	0.125 gallons per flush
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Urinal	0.125 gallons per flush												
4.304.1	Outdoor potable water use in landscape areas. New residential developments with an aggregate landscape area equal to or greater than 500 square feet shall comply with one of the following options: a. A local water efficient landscape ordinance or the current California Department of Water Resources Model Water Efficient Landscape Ordinance (MWEL0), whichever is more stringent. b. Projects with aggregate landscape areas less than 2,500 square feet may comply with the MWEL0's Appendix D Prescriptive Compliance Option.												
Division 4.4	Material Conservation & Resource Efficiency												
4.406.1	Rodent proofing. Annular spaces around pipes, electric cables, conduits or other openings in sole/bottom plates at exterior walls shall be protected against the passage of rodents by closing such openings with cement mortar, concrete masonry or a similar method acceptable to the city building inspector.												
4.408.1	Construction waste management. Recycle and/or salvage for reuse a minimum of 65% of the nonhazardous construction and demolition waste in accordance with either CAL Green Section 4.408.2 Waste Management Plan, 4.408.3 Waste Management Company or 4.408.4 Waste Stream Reduction Alternative. A city approved waste management company/hauler shall be used for the recycling of the construction waste. Documentation of compliance with section 4.408.1 shall be provided to the Authority Having Jurisdiction prior to project final approval.												
4.410.1	Operation and maintenance manual. The builder shall prepare an Operation and Maintenance Manual as outlined in Cal Green Section 4.410.1. The manual shall be given to the owner upon final approval by the building inspector. In such case where the property is being sold, it should be given to the new owner at the time of sale. A copy of the manual shall be available for the inspector prior to, or at the time of final inspection.												
Division 4.5	Environmental Quality												
4.503.1	Fireplace. Any installed gas fireplace shall be a direct vent, sealed combustion type. New wood burning fireplaces are not permissible in accordance with AQMD Rule 445.												
4.503.1	HVAC system Protection. During the construction process and until final startup of the HVAC system, all duct and other related air distribution component openings shall be covered with tape, plastic, sheet metal or other method to reduce the amount of water, dust and debris, which may enter the system.												
4.504.2, 4.504.3, 4.504.4, 4.504.5,	Finish material pollutant control. Finish materials shall comply with the following: a. Adhesives, sealants and caulks. Used on this project shall comply with SCAQMD Rule 1168 for VOC limits and toxic compounds. Aerosol adhesives, sealants and caulks shall comply with statewide VOC standards. b. Paints and coatings. Shall comply with VOC limits in Cal Green table 4.504.3 c. Aerosol paints and coatings. Shall comply with statewide requirements and other requirements noted in Cal Green Section 4.504.2.3. d. Carpet systems. All carpeting and carpet cushions shall meet the requirements of the Carpet and Rug Institute Green Label program. Carpet Adhesives shall comply with VOC limits in Cal Green Table 4.504.1. e. Resilient flooring. Where installed, 80% of the floor area receiving resilient flooring shall comply with one or more of the standards listed in Cal-Green Section 4.504.4. f. Composite wood products. Used on the interior or exterior of the building shall comply with formaldehyde limits per Cal-Green Table 4.504.5. Verification of compliance with the standards listed above shall be provided upon request to the building inspector.												
4.501, 4.502, 4.503.	Interior moisture control. Buildings shall meet or exceed the provisions of the California Building Standards Code. a. Concrete slab foundations. Concrete slab-on foundations/floors that are required to have a vapor retarder by the California Building Code Section 1907 or California Residential Code Section R506, shall have a capillary break installed between the concrete slab and supporting grade.												

Section	Green Mandatory Measures
Division 4.5	Environmental Quality
4.501, 4.502, 4.503.	b. Building materials. With visible signs of water damage shall not be installed. Wall and floor framing lumber shall not be enclosed when the framing members exceed 19% moisture content. Moisture content shall be verified using one of the methods listed in Cal Green SECTION 4.505.3. c. Insulation products which are visible wet or have high moisture content shall be replaced or allowed to dry prior to enclosure in wall of floor cavities.
4.506.1	Indoor air quality and exhaust. Each bathroom (a room which contains a bathtub, shower, or tub/shower combination) shall be mechanically ventilated and shall comply with the following: • Exhaust fans shall be ENERGY STAR compliant and be ducted to terminate outside the building. • Unless functioning as a component of a whole house ventilation system, bathroom exhaust fans must be controlled by a humidity control. • Humidity controls shall be capable of adjustment between 50% and 80% relative humidity. Humidity control may utilize manual or automatic means of adjustment which may be a separate component to the exhaust fan (not required to be built-in).
4.507	HVAC system design. HVAC system shall be sized, designed and have equipment selected using the methods listed in Cal Green Section 4.507.2.

Designer's Declaration Statement	Builder's Declaration Statement
I hereby certify as designer of record that the prop. building plans meet the requirement of The California Green Building Standards Code.	I hereby certify as the builder or installer of record under the permit listed herein, that this project will be constructed to meet the requirements of the California Green Building Standards Code.
Name: _____	Name: (By Owner) _____
Address: _____	Address: _____
Signature: _____	Signature: _____
Date: _____	Date: _____
License #: _____	License #: _____



CLIENT INFO.			
JOB DESCRIPTION:	NEW UPPER DECK & CANTILEVER JULIET BALCONY	APN #: 0332-041-31	OWNER: KEVIN PIECHOTA
			720 BUCKINGHAM SQUARE LAKE ARROWHEAD, CA 92407

REVISIONS	
DATE:	0/00/00
DATE:	0/00/00
DATE:	0/00/00
DATE:	0/00/00

DRAWN	ADRIANA JUAREZ
BID	01/09/23
PLAN CHECK	0/00/00
JOB NO.	

NPDES NOTES	
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Land Use Services Department Building and Safety Division

Minimum Residential Deck Requirements

(Not applicable for spa over deck condition)

The following information is intended to provide GENERAL DECK CONSTRUCTION GUIDELINES ONLY. Alternate deck designs may be possible when accompanied by an engineered analysis and detailed plans. Use of this standard design is at the user's risk and carries no implied or inferred guarantee against failure or defects. **Note, the following conditions are considered to be beyond the scope of this guide and will require additional design from a licensed professional architect or engineer.**

- Decks including more than one level in height.
- Decks with walking surfaces more than ten feet above grade.
- Deck ledgers attached to house overhang, bay window, brick, concrete block, stone, any veneer or hollow block.
- Decks supporting large concentrated or distributed loads such as hot tubs or spas deviating in any respect from exact requirements outlined within this guide are beyond the scope of this document and shall not be allowed without design and approval from a licensed professional architect or engineer.

General Requirements

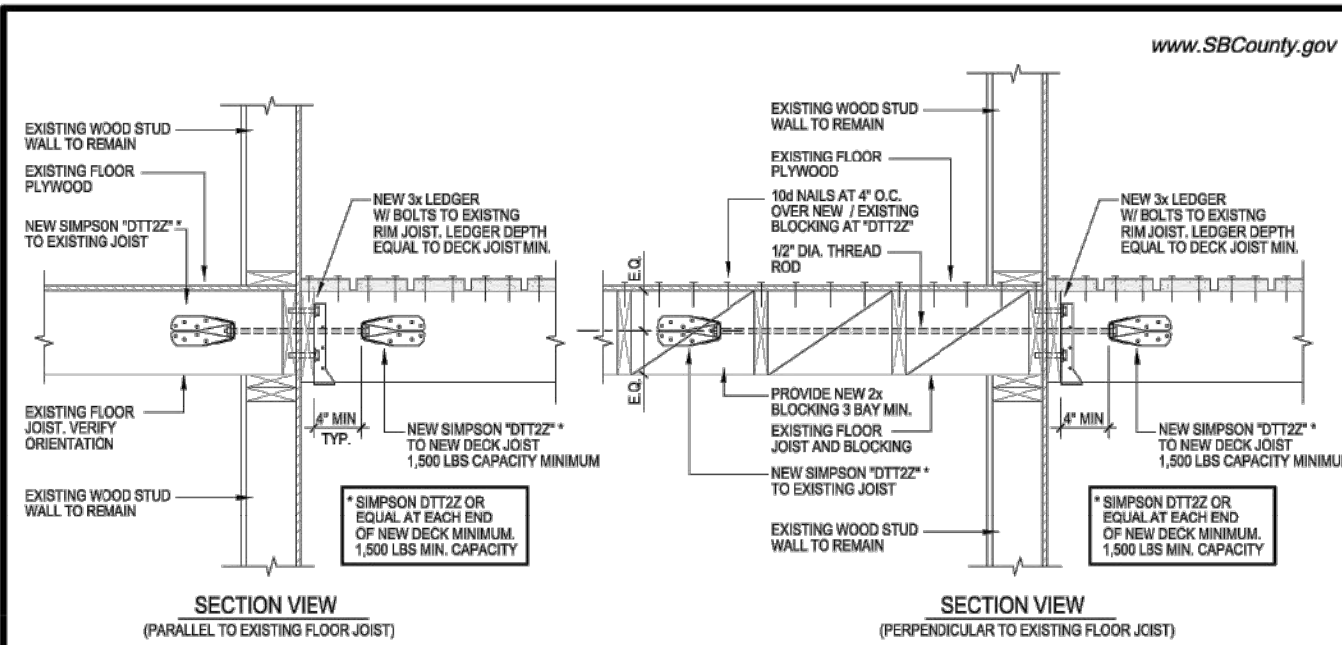
(May be used for a 100 psf snow load condition)

- Deck length shall be equal to or less than overall deck width.
- Standards denoted within this document shall only apply to single level residential wood decks attached to legally permitted existing residences.
- Deck material shall be 2 inch nominal dimension lumber. Decking material shall be attached to deck joist with (2) 16d galvanized nails or (2) #8 screws. Deck boards shall be placed 1/4 inch apart minimum and shall span over (3) deck joists minimum.
- All Deck and Spa or tub post shall be 6x6 nominal minimum and located centered on footing below.
- All through bolts must include washers under bolt head and nut.
- Deck, slab, and footings shall not be constructed over existing septic system, leach field, utility lines, or enclosed meters.
- Existing exterior house siding or existing exterior wall finish shall be removed prior to installation of new ledger board and waterproof afterwards.
- New deck footings located less than 5'-0" to existing house footing shall be placed at the same elevation as existing footing.
- Decks more than 30" inches above adjacent grade shall require 42" inch high guard rail measured vertically above deck walking surface.
- All work shall comply with current California Residential Code.
- Footings and slab concrete mix shall have a minimum compressive strength $f'c=3000$ psi.
- Deck stairs shall be minimum 36" inch wide and have a minimum 36" inch long landing at top and bottom in direction to stair travel.
- All fasteners, hangers, plates, and nails shall be stainless steel, hot-dipped galvanized, or of corrosive resistant protective coating. All steel shall conform to ASTM A36 (fy=36ksi) minimum.
- Decking material shall comply with the following:
 - 1/2" minimum wood deck surface thickness and / or ICC approved deck cover material.
 - Decking shall be protected on the underside with materials approved for one hour fire resistive construction and / or ignition resistance pursuant to CRC section 337.4.
 - Decking shall be composed of noncombustible materials as defined in the California Residential Code or other materials approved by the responsible fire authority. (CRC Section 337.9.3)
- All shop welding and steel fabrication shall be done in a shop approved by a special inspection agency and approved by Building Official. All field welding must be performed by a certified welder and a special inspector shall continuously inspect all field welding.

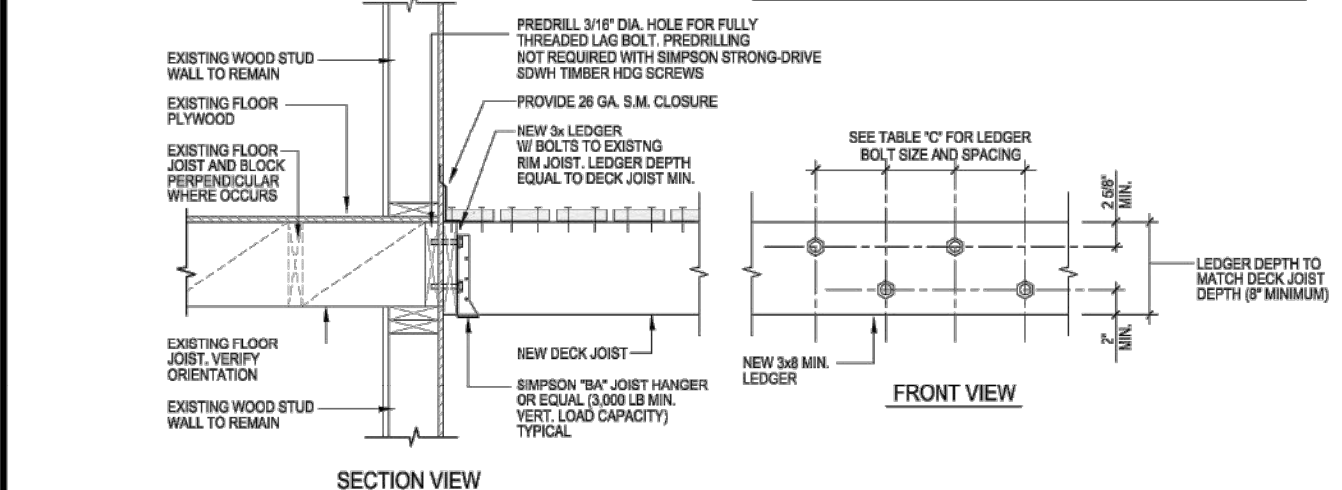
***No special inspection required. Contractor shall provide approved concrete mix design to inspector prior to concrete pour.**

REV 03/17

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6) DECK TO EXISTING FLOOR FRAMING

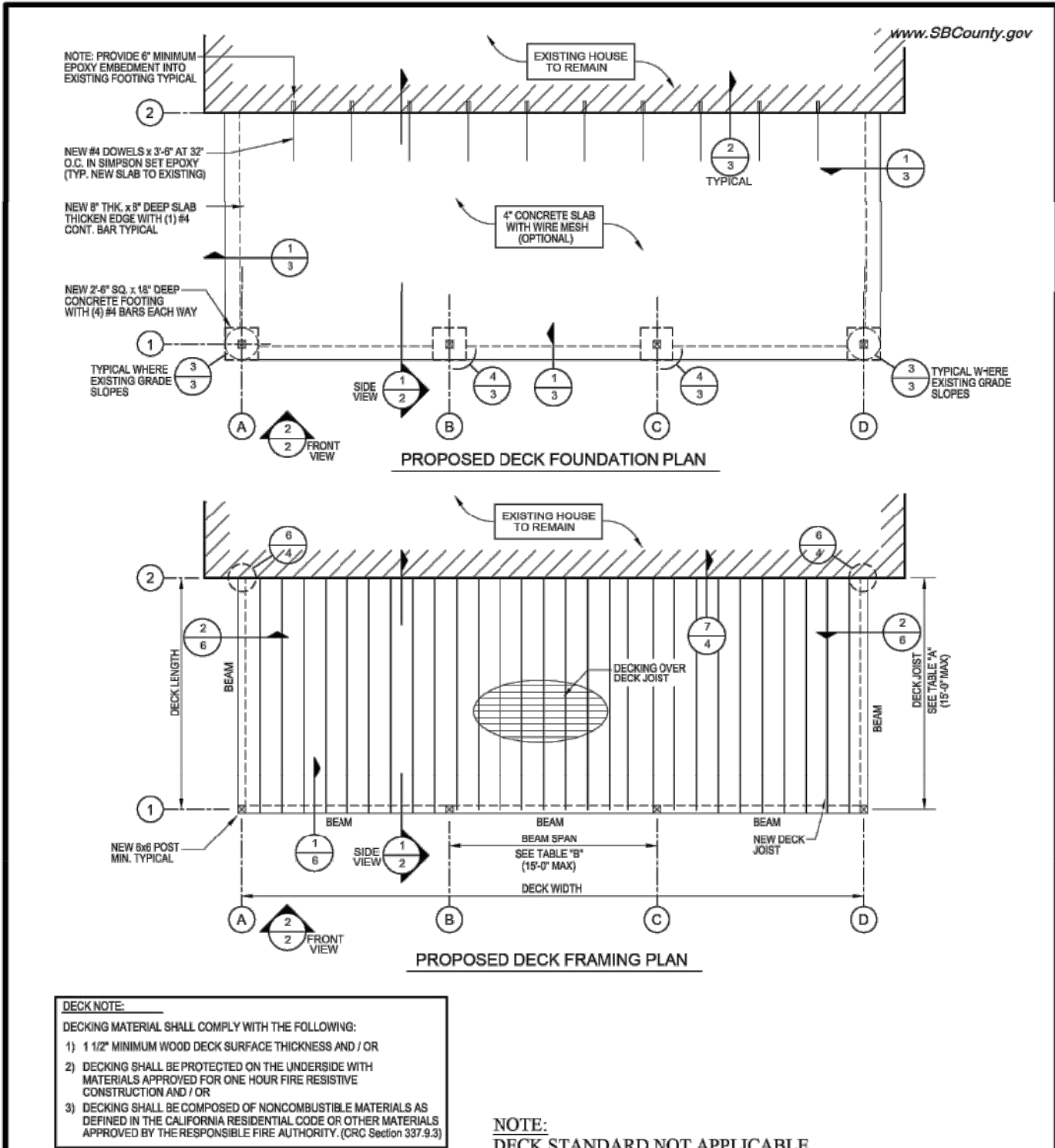


7) DECK TO EXISTING FLOOR FRAMING

NOTE: DECK STANDARD NOT APPLICABLE FOR SPA OVER DECK CONDITIONS.

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Building & Safety Division
BALCONY / DECK STANDARD
(FOR MAXIMUM 100 psf SNOW AREAS TYPICAL)

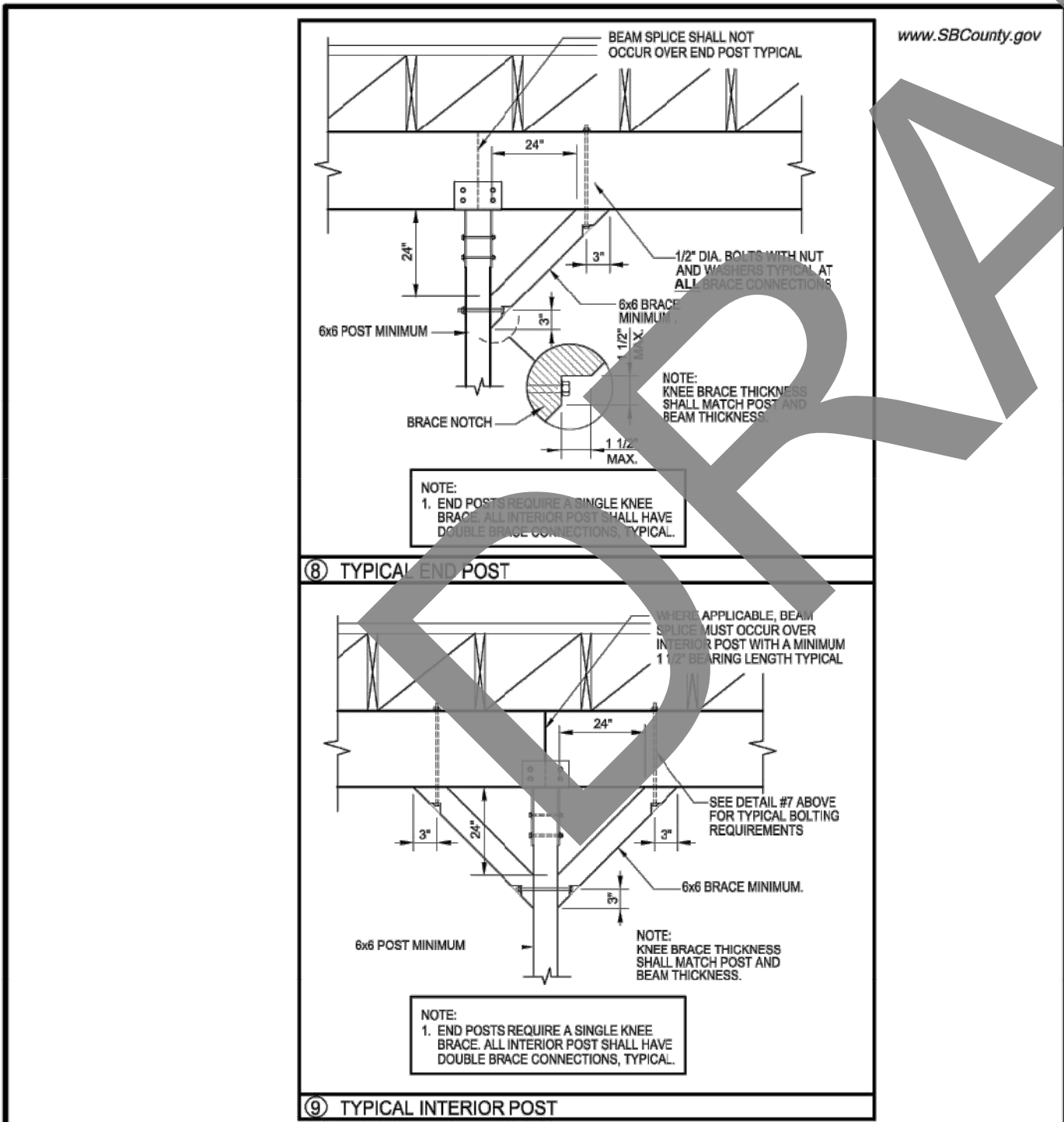
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- NOTE: DECK STANDARD NOT APPLICABLE FOR SPA OVER DECK CONDITIONS.
- DISCLAIMER: ALTERNATE DECK DESIGNS MAY BE POSSIBLE WHEN PROVIDED WITH AN ENGINEERED ANALYSIS. USE OF THIS STANDARD IS AT THE USER'S RISK AND CARRIES NO IMPLIED OR INFERRED GUARANTEE AGAINST FAILURE OR DEFECTS.

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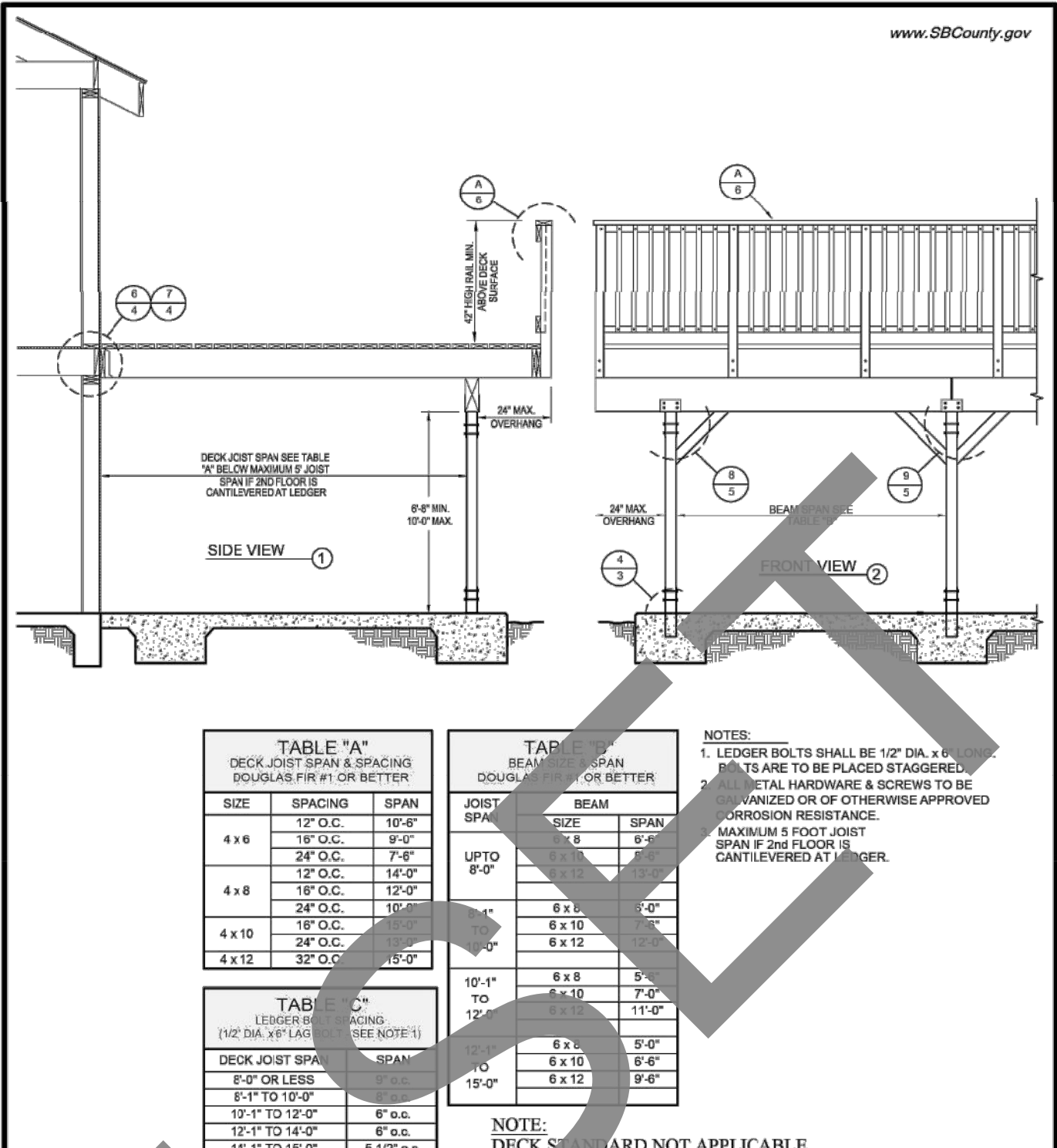
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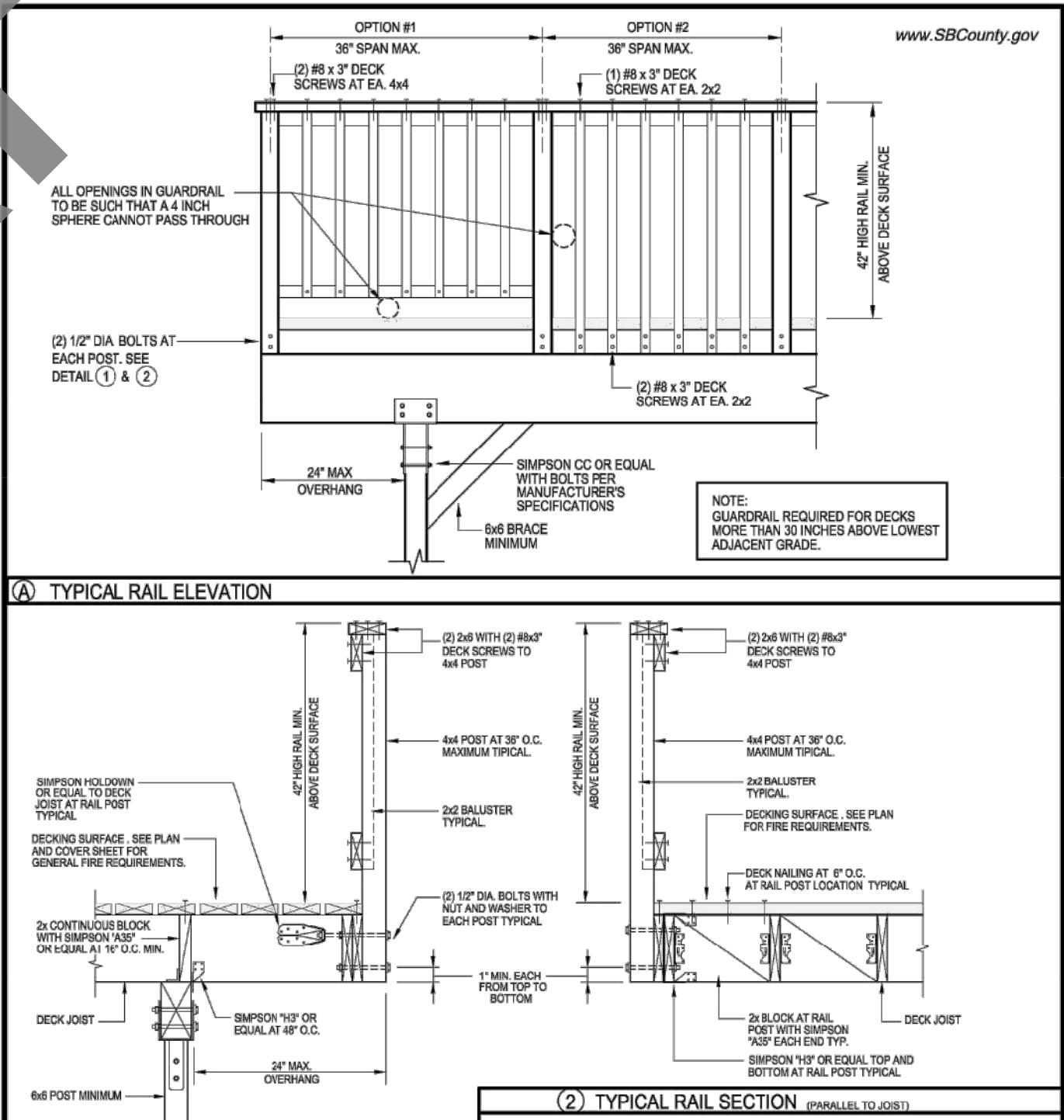


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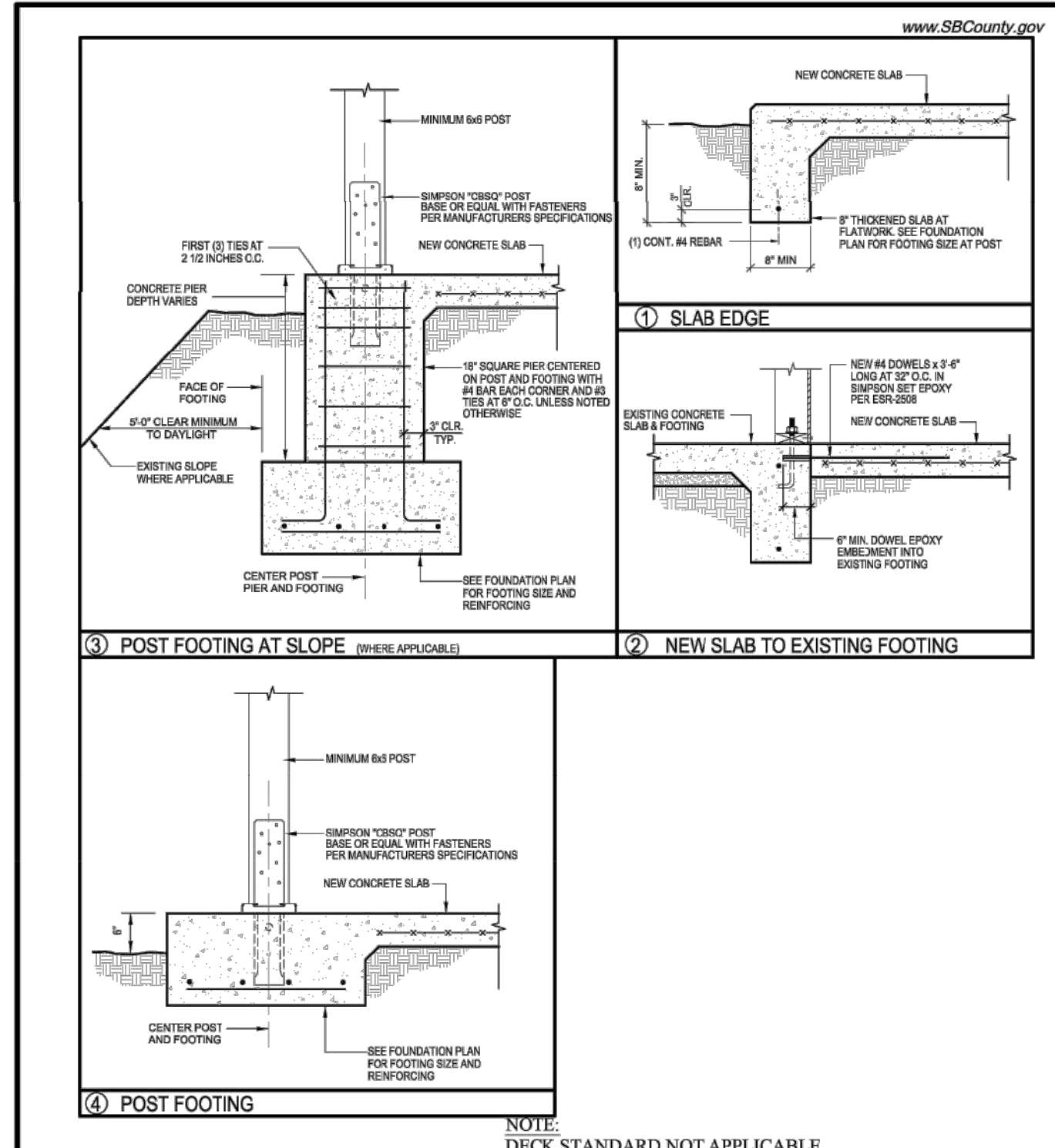
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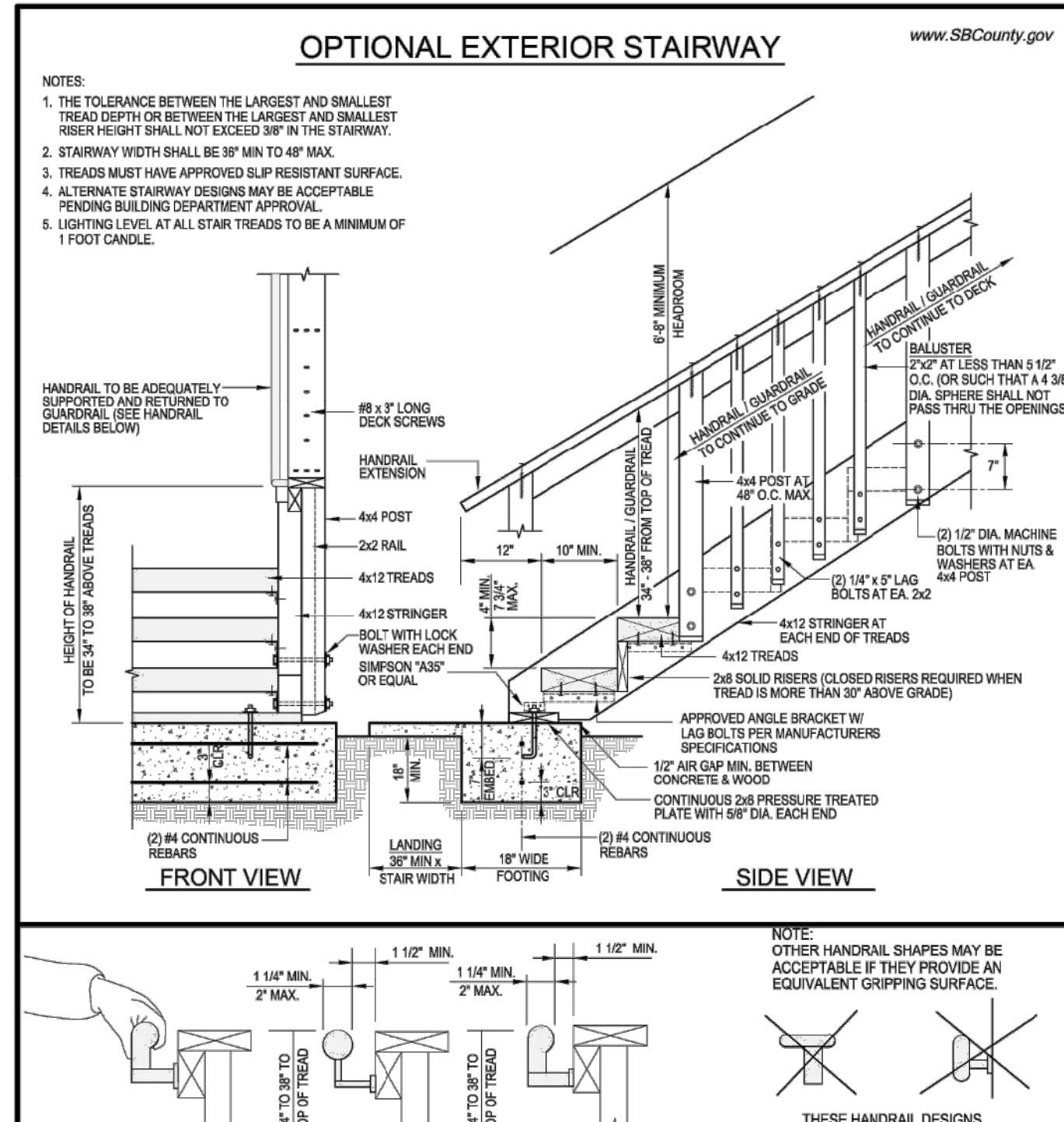


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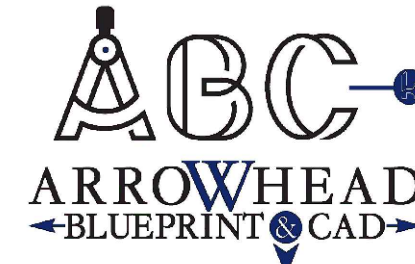


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CLIENT INFO.

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NEW UPPER DECK & CANTILEVER JULIET BALCONY
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OWNER:
KEVIN PIECHOTA
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REVISIONS

DATE: 0/00/00
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DRAWN

BID 01/09/23
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MINIMUM RESIDENTIAL DECK REQUIREMENTS

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