#### RIVERSIDE COUNTY AIRPORT LAND USE COMMISSION

#### STAFF REPORT

AGENDA ITEM:	3.1
HEARING DATE:	March 9, 2023
CASE NUMBER:	<u>ZAP1558MA23 – Stellar Solar Electric (Representative: Frida Mock)</u>
APPROVING JURISDICTION:	March Joint Powers Authority
JURISDICTION CASE NO:	COM-Solar 22-004 (Building Permit)
LAND USE PLAN:	2014 March Air Reserve Base/Inland Port Airport Land Use Compatibility Plan
Airport Influence Area:	March Air Reserve Base
Land Use Policy:	Zone B1
Noise Levels:	65 - 70 CNEL from aircraft

### **RECOMMENDATION:** Staff recommends that the Commission <u>CONTINUE</u> the matter to the April 13, 2023, meeting, pending completion of the Air Force review of the project.

**PROJECT DESCRIPTION**: A proposal to construct a 2,197 square foot rooftop solar panel system on an existing industrial building on 4.45 acres.

**PROJECT LOCATION:** The site is located at 14100 Meridian Parkway, approximately 8,962 feet westerly of the northerly end of Runway 14-32 at March Air Reserve Base.

#### BACKGROUND:

<u>Non-Residential Land Use Intensity</u>: Pursuant to the Airport Land Use Compatibility Plan for the March Air Reserve Base/Inland Port Airport, the site is located within Compatibility Zone B1, which limits average intensity to 50 people per acre and 100 people per single acre. The proposed rooftop solar panels will not generate any occupancy.

<u>March Air Reserve Base/United States Air Force Input:</u> Given that the project site is located in Zone B1 westerly of the northerly runway at March Air Reserve Base, the March Air Reserve Base staff was notified of the proposal to add rooftop solar panels, and sent a solar glare hazard analysis study for their review. Comments from the Air Force regarding this project are still pending.

<u>Prohibited and Discouraged Uses:</u> The applicant does not propose any uses prohibited or discouraged in Compatibility Zone B1 (children's schools, day care centers, hospitals, nursing homes, libraries, hotels/motels, places of assembly, buildings with more than 2 aboveground floors,

Staff Report Page 2 of 6

critical community facilities, highly noise-sensitive outdoor nonresidential uses and hazards to flight).

<u>Flight Hazard Issues</u>: Structure height, electrical interference, and reflectivity/glare are among the issues that solar panels in the airport influence area must address. The project's 2,197 square foot photovoltaic (PV) panel structures would be located on the rooftop of the existing industrial building within Compatibility Zone B1.

#### Glint and Glare/Reflectivity

Based on the Federal Aviation Administration's Interim Policy for Review of Solar Energy System Projects on Federally Obligated Airports, no glare potential or low potential for temporary afterimage ("green" level) are acceptable levels of glare on final approach (within 2 miles from end of runway) for solar facilities located on airport property. However, potential for temporary after-image" ("yellow" level) and potential for permanent eye damage ("red" level) are not acceptable levels of glare on final approach. No glare is permitted at air traffic control towers.

The project proposes 2,197 square feet of solar panels on the existing building rooftop with a fixed tilt of 10 degrees with no rotation, and an orientation of 180 degrees. The applicant has submitted a glare analysis utilizing the web-based Forge Solar, a copy of which is attached hereto. The analysis was based on a 2 mile straight in approach (as per FAA Interim Policy standards) to runways 14 and 32, and also based on the traffic patterns as identified by March Air Reserve Base staff (Runway 12/30 General Aviation, Runway 14/32 General Aviation, Runway 14/32 C-17/KC-135, Runway 14/32 Overhead). The analysis utilized a glide slope approach of 3.0 degrees. No glare would affect the Air Traffic Control Tower.

The analysis concluded that some glare would occur on the 2 mile approach to the runways, and some potential for glare was identified within the Air Force traffic pattern. Evaluation of the Air Force traffic patterns indicates that the panels would result in a low potential for temporary after-image ("green" level glare) or no glare. All times are in standard time.

Runway 14/32 C-17/KC-135 traffic pattern (totaling 31,603 minutes of 'green' level glare):

- Runway 14 Base, totaling 2,470 minutes of "green" level glare, lasting up to 25 minutes a day, between February to March and October to November from 7:00 a.m. to 8:00 a.m.
- Runway 14 Final, totaling 13,282 minutes of "green" level glare, lasting up to 35 minutes a day, between April to September, from 4:00 p.m. to 5:30 p.m.
- Runway 32 Crosswind, totaling 2,493 minutes of "green" level glare, lasting up to 25 minutes a day, between February to March and October to November, from 7:00 a.m. to 8:00 a.m.
- Runway 32 Upwind, totaling 13,358 minutes of "green" level glare, lasting up to 35 minutes a day, between April to September, from 4:00 p.m. to 5:30 p.m.

Runway 12/30 General Aviation traffic pattern (total 25,821 minutes of 'green' level glare):

- Runway 12 Base, totaling 135 minutes of "green" level glare, lasting up to 10 minutes a day, in April and August from 5:00 p.m. to 5:30 p.m.
- Runway 12 Downwind, totaling 12,795 minutes of "green" level glare, lasting up to 30 minutes a day, between April to September from 5:00 p.m. to 6:00 p.m.
- Runway 30 Crosswind, totaling 133 minutes of "green" level glare, lasting up to 10 minutes

Staff Report Page 3 of 6

a day, between April and September from 5:00 p.m. to 6:00 p.m.

• Runway 30 Downwind, totaling 12,758 minutes of "green" level glare, lasting up to 35 minutes a day, between April to September from 5:00 p.m. to 6:00 p.m.

Runway 14/32 Overhead Aviation traffic pattern (totaling 25,323 minutes of 'green' level glare):

- Runway14 Initial, totaling 11,750 minutes of "green" level glare, lasting up to 35 minutes a day, between April to September from 3:00 p.m. to 5:00 p.m.
- Runway 14 Final, totaling 13,573 minutes of "green" level glare, lasting up to 35 minutes a day, between April to September from 4:00 p.m. to 5:30 p.m.

The total of 83,160 minutes of "green" level glare represents less than 32 percent of total day light time.

#### Electrical and Communication Interference

The applicant has indicated that they do not plan to utilize equipment that would interfere with aircraft communications. The PV panels themselves present little risk of interfering with radar transmission due to their low profiles. In addition, solar panels do not emit electromagnetic waves over distances that could interfere with radar signal transmissions, and any electrical facilities that do carry concentrated current will be buried beneath the ground and away from any signal transmission. There are no radar transmission or receiving facilities within the site.

<u>Noise:</u> The March Air Reserve Base/Inland Port Airport Land Use Compatibility Plan depicts the site within the 65 - 70 CNEL range from aircraft noise. The proposed solar panels are a non-noise sensitive use; therefore no mitigation measures are necessary.

<u>Part 77</u>: The elevation of Runway 14-32 at its northerly terminus is 1,535 feet above mean sea level (AMSL). At a distance of approximately 8,962 feet from the project to the nearest point on the runway, Federal Aviation Administration (FAA) review would be required for any structures with top of roof exceeding 1,625 feet AMSL. The site's finished floor elevation is 1,539 feet AMSL and existing building height is 28 feet, resulting in a top point elevation of 1,567 feet AMSL. Therefore, review by the FAA Obstruction Evaluation Service was not required. The height of the solar panels will not significantly increase the overall height of the building.

<u>Open Area</u>: None of the Compatibility Zones for the March Air Reserve Base/Inland Port ALUCP require open area specifically.

#### **CONDITIONS:**

- 1. Any new outdoor lighting that is installed shall be hooded or shielded so as to prevent either the spillage of lumens or reflection into the sky. Outdoor lighting shall be downward facing.
- 2. The following uses/activities are not included in the proposed project and shall be prohibited at this site:
  - (a) Any use which would direct a steady light or flashing light of red, white, green, or amber colors associated with airport operations toward an aircraft engaged in an initial straight or circling climb following takeoff or toward an aircraft engaged in a

straight or circling final approach toward a landing at an airport, other than a DoD or FAA-approved navigational signal light or visual approach slope indicator.

- (b) Any use which would cause sunlight to be reflected towards an aircraft engaged in an initial straight or circling climb following takeoff or towards an aircraft engaged in a straight or circling final approach towards a landing at an airport.
- (c) Any use which would generate smoke or water vapor or which would attract large concentrations of birds, or which may otherwise affect safe air navigation within the area. (Such uses include landscaping utilizing water features, aquaculture, production of cereal grains, sunflower, and row crops, composting operations, wastewater management facilities, artificial marshes, trash transfer stations that are open on one or more sides, recycling centers containing putrescible wastes, construction and demolition debris facilities, fly ash disposal, and incinerators.)
- (d) Any use which would generate electrical interference that may be detrimental to the operation of aircraft and/or aircraft instrumentation.
- (e) Children's schools, day care centers, libraries, hospitals, skilled nursing and care facilities, congregate care facilities, hotels/motels, places of assembly (including, but not limited to places of worship and theaters), buildings with more than 2 aboveground habitable floors, hazardous materials and critical community infrastructure facilities.
- (f) Highly noise-sensitive outdoor nonresidential uses. Examples of noise-sensitive outdoor nonresidential uses that are prohibited include, but are not limited to, major spectator-oriented sports stadiums, amphitheaters, concert halls and drive-in theaters.
- (g) Other Hazards to Flight
- 3. Prior to issuance of building permits, the landowner shall convey an avigation easement to the March Inland Port Airport Authority or its successor in interest, or provide evidence that such easement has been previously conveyed. The Airport Authority may waive this requirement in the event that the Authority determines that pre-existing avigation easements dedicated to the United States of America are sufficient to address its needs. Contact the March Joint Powers Authority at (951) 656-7000 for additional information.
- 4. Any proposed stormwater basins or facilities shall be designed and maintained to provide for a maximum 48-hour detention period following the design storm, and remain totally dry between rainfalls. Vegetation in and around the stormwater basins that would provide food or cover for birds would be incompatible with airport operations and shall not be utilized in project landscaping. Trees shall be spaced so as to prevent large expanses of contiguous canopy, when mature. Landscaping in and around the stormwater basin(s) shall not include trees or shrubs that produce seeds, fruits, or berries.

Landscaping in the stormwater basin, if not rip-rap, should be in accordance with the guidance provided in ALUC "LANDSCAPING NEAR AIRPORTS" brochure, and the "AIRPORTS, WILDLIFE AND STORMWATER MANAGEMENT" brochure available at

#### Staff Report Page 5 of 6

<u>RCALUC.ORG</u> which list acceptable plants from Riverside County Landscaping Guide or other alternative landscaping as may be recommended by a qualified wildlife hazard biologist.

A notice sign, in a form similar to that attached hereto, shall be permanently affixed to the stormwater basin with the following language: "There is an airport nearby. This stormwater basin is designed to hold stormwater for only 48 hours and not attract birds. Proper maintenance is necessary to avoid bird strikes". The sign will also include the name, telephone number or other contact information of the person or entity responsible to monitor the stormwater basin

- 5. March Air Reserve Base must be notified of any land use having an electromagnetic radiation component to assess whether a potential conflict with Air Base radio communications could result. Sources of electromagnetic radiation include, but are not limited to, radio wave transmission in conjunction with remote equipment inclusive of irrigation controllers, access gates, etc.
- 6. All solar arrays installed on the project site shall consist of a 2,197 square foot rooftop solar panel system on an existing industrial building, a fixed tilt of 10 degrees and orientation of 180 degrees. Solar panels shall be limited to a total of 1,928 square feet, and the locations and coordinates shall be as specified in the glare study. Any deviation from these specifications (other than reduction in square footage of panels), including change in tilt or orientation, shall require a new solar glare analysis to ensure that the amended project does not result in any glare impacting the air traffic control tower or creation of any "yellow" or "red" level glare in the flight paths, and shall require review by the Airport Land Use Commission.
- 7. In the event that any glint, glare, or flash affecting the safety of air navigation occurs as a result of project operation, upon notification to the airport operator of an event, the airport operator shall notify the project operator in writing. Within 30 days of written notice, the project operator shall be required to promptly take all measures necessary to eliminate such glint, glare, or flash. An "event" includes any situation that results in an accident, incident, "near-miss," or specific safety complaint regarding an in-flight experience to the airport operator or to federal, state, or county authorities responsible for the safety of air navigation.

The project operator shall work with the airport operator to prevent recurrence of the incidence. Suggested measures may include, but are not limited to, changing the orientation and/or tilt of the source, covering the source at the time of day when events of glare occur, or wholly removing the source to diminish or eliminate the source of the glint, glare, or flash. For each such event made known to the project operator, the necessary remediation shall only be considered to have been fulfilled when the airport operator states in writing that the situation has been remediated to the airport operator's satisfaction.

8. In the event that any electrical interference affecting the safety of air navigation occurs as a result of project operation, upon notification to the airport operator of an event, the airport operator shall notify the project operator in writing. Within 30 days of written notice, the project operator shall be required to promptly take all measures necessary to eliminate such interference. An "event" includes any situation that results in an accident, incident, "nearmiss," report by airport personnel, or specific safety complaint to the airport operator or to

#### Staff Report Page 6 of 6

federal, state, or county authorities responsible for the safety of air navigation. The project operator shall work with the airport operator to prevent recurrence of the event. For each such event made known to the project operator, the necessary remediation shall only be considered to have been fulfilled when the airport operator states in writing that the situation has been remediated to the airport operator's satisfaction.

X:\AIRPORT CASE FILES\March\ZAP1558MA23\ZAP1558MA23sr.doc

## NOTICE OF AIRPORT IN VICINITY

This property is presently located in the vicinity of an airport, within what is known as an airport influence area. For that reason, the property may be subject to some of the annoyances or inconveniences associated with proximity to airport operations (for example: noise, vibration, or odors). Individual sensitivities to those annoyances [can vary from person to person. You may wish to consider what airport annoyances], if any, are associated with the property before you complete your purchase and determine whether they are acceptable to you. Business & Professions Code Section 11010 (b)

# NOTICE

## THERE IS AN AIRPORT NEARBY.

## THIS STORM WATER BASIN IS DESIGNED TO HOLD

## **STORM WATER FOR ONLY 48 HOURS AND**

### **NOT TO ATTRACT BIRDS**

## PROPER MAINTENANCE IS NECESSARY TO AVOID BIRD STRIKES

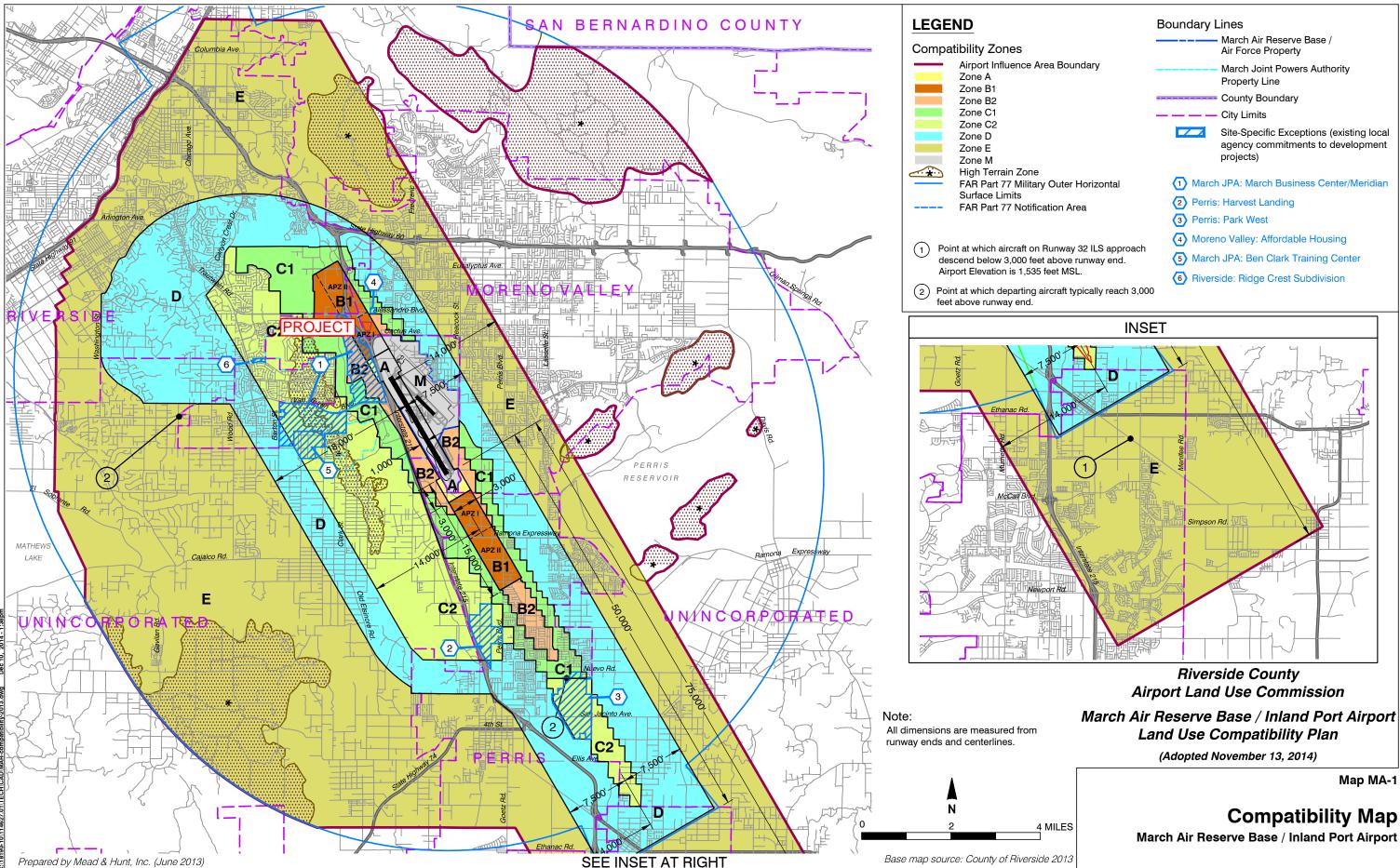


IF THIS BASIN IS OVERGROWN, PLEASE CONTACT:

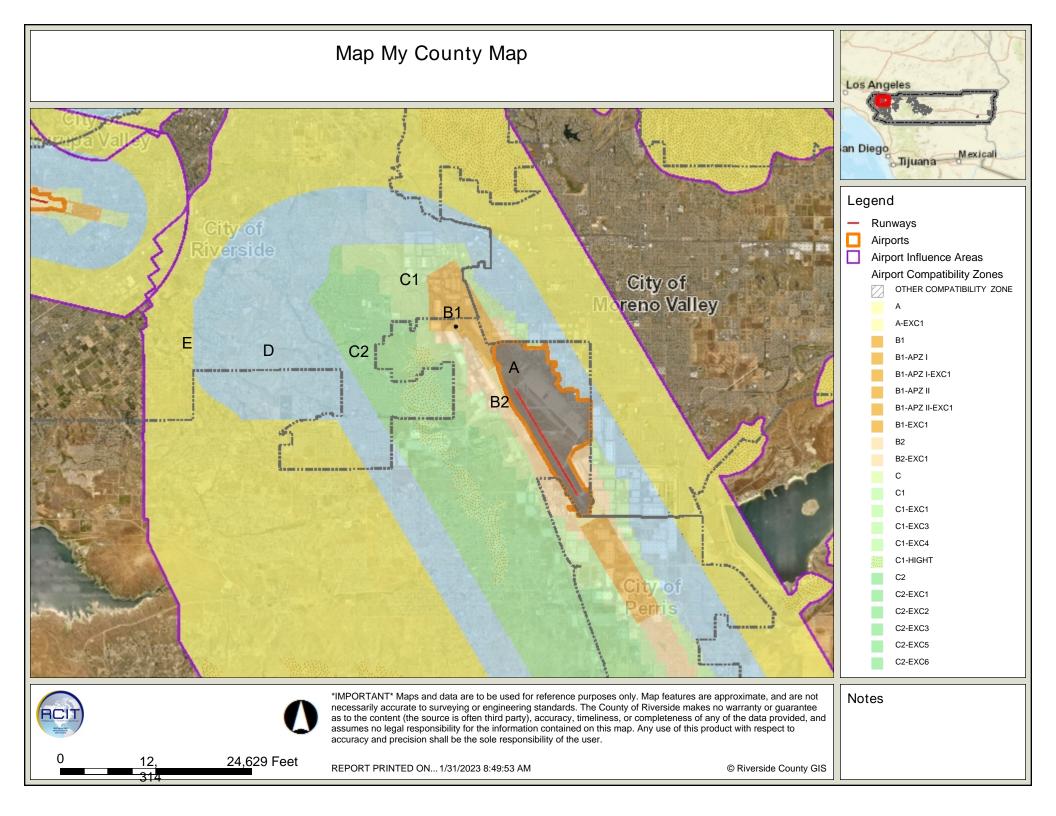
Name:

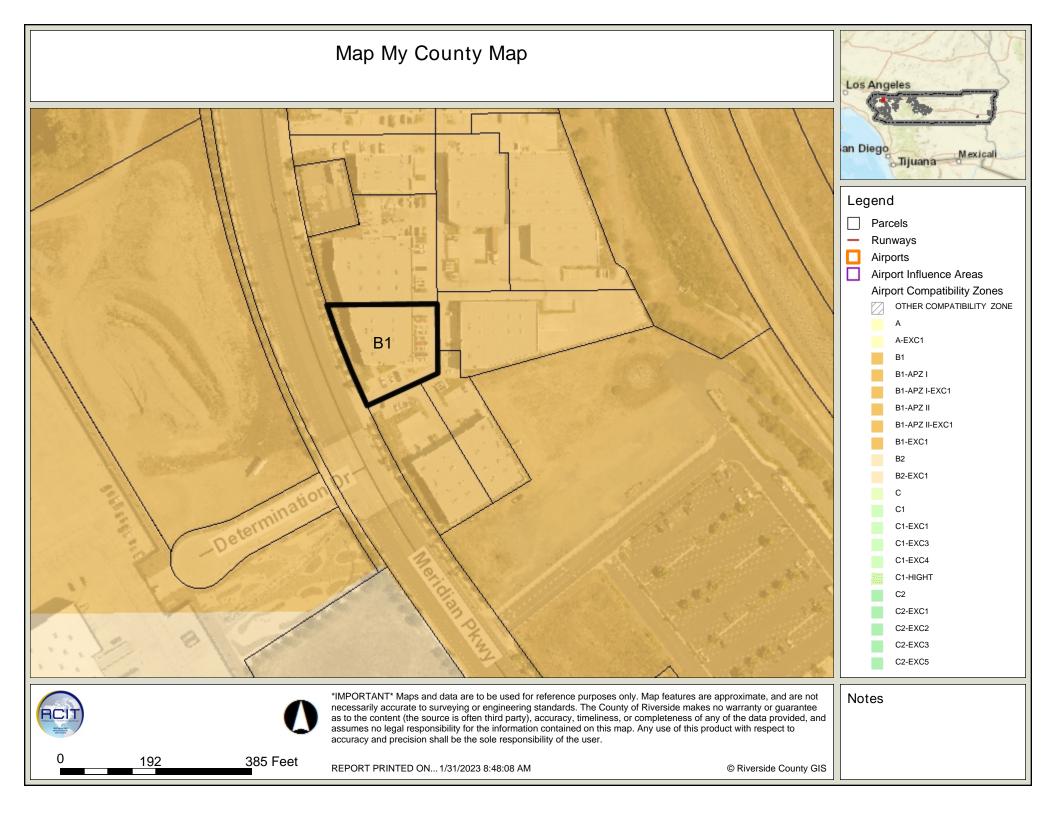
\_\_\_\_\_ Phone:

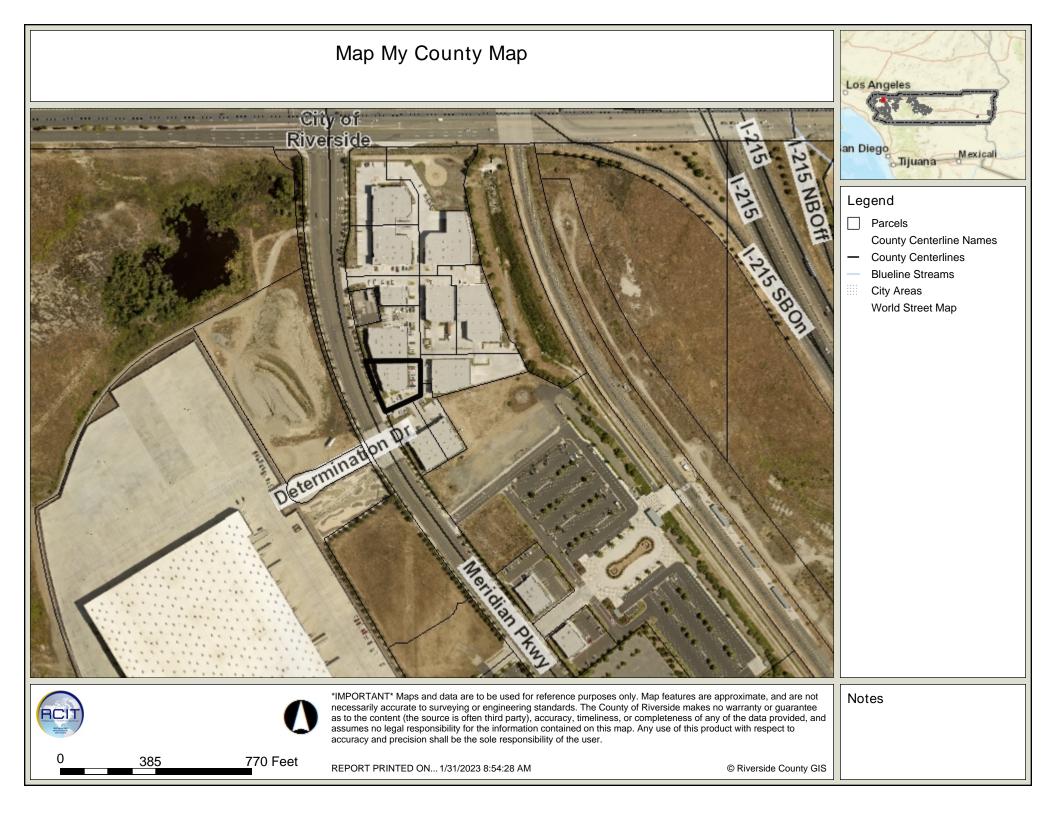


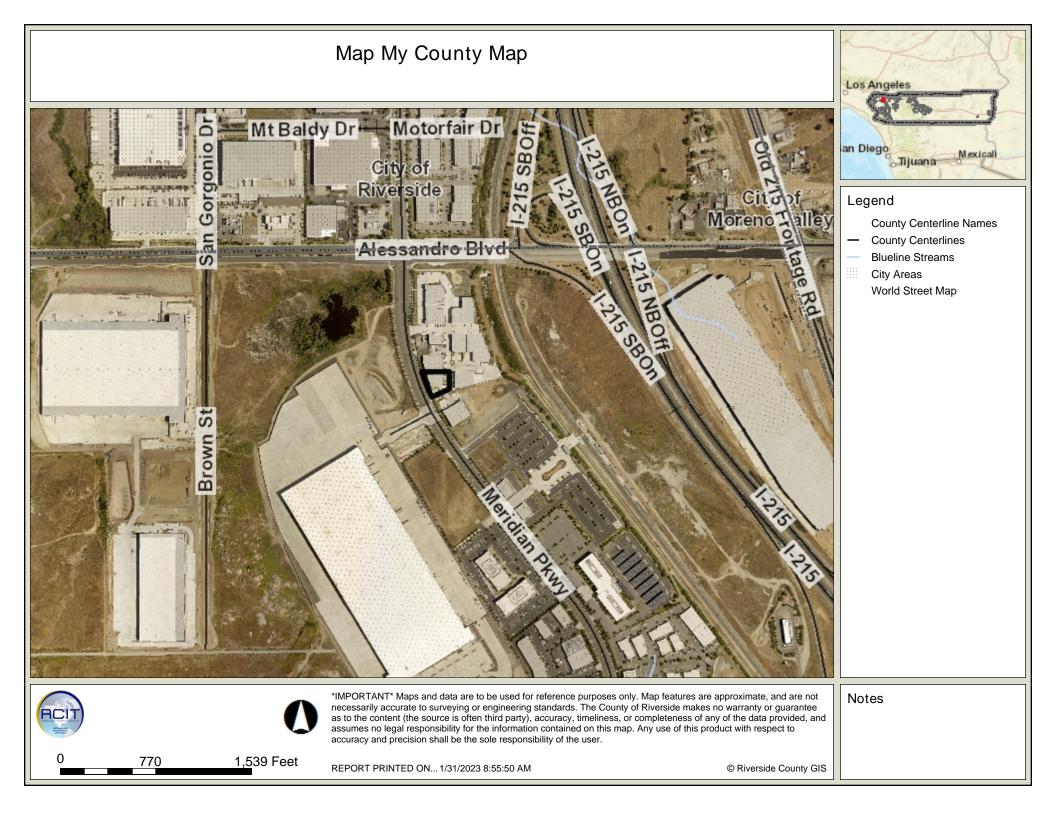


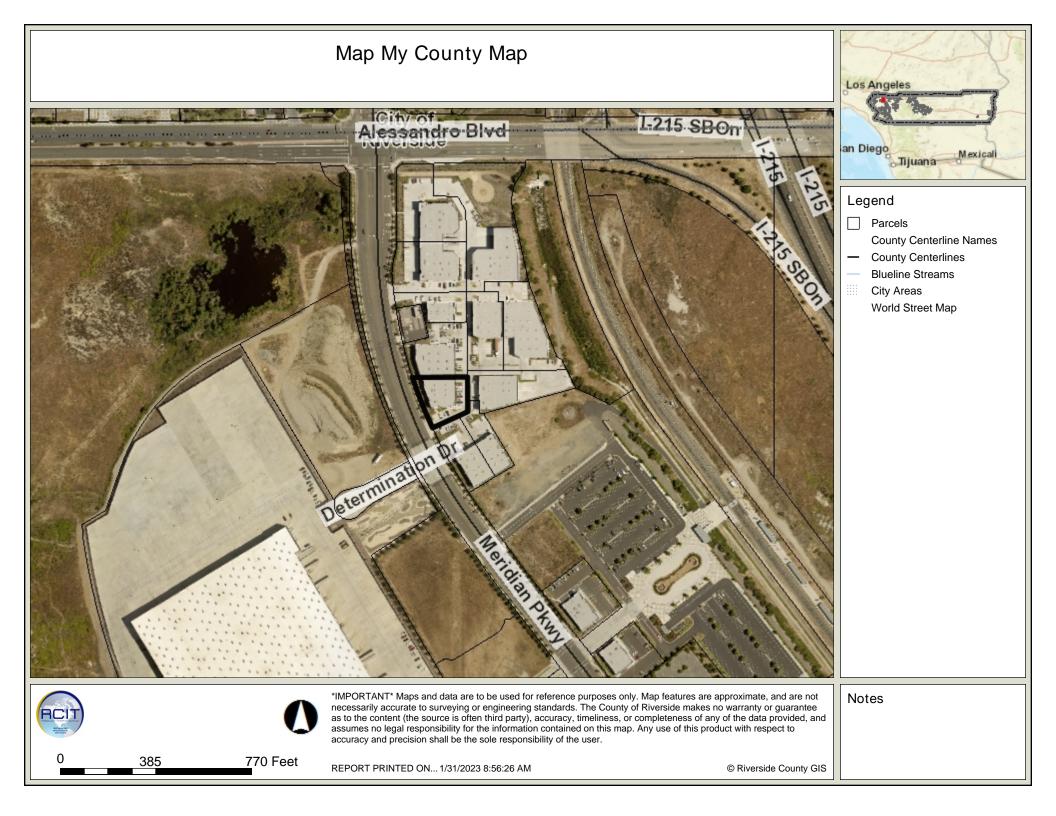
March Air Reserve Base / Inland Port Airport

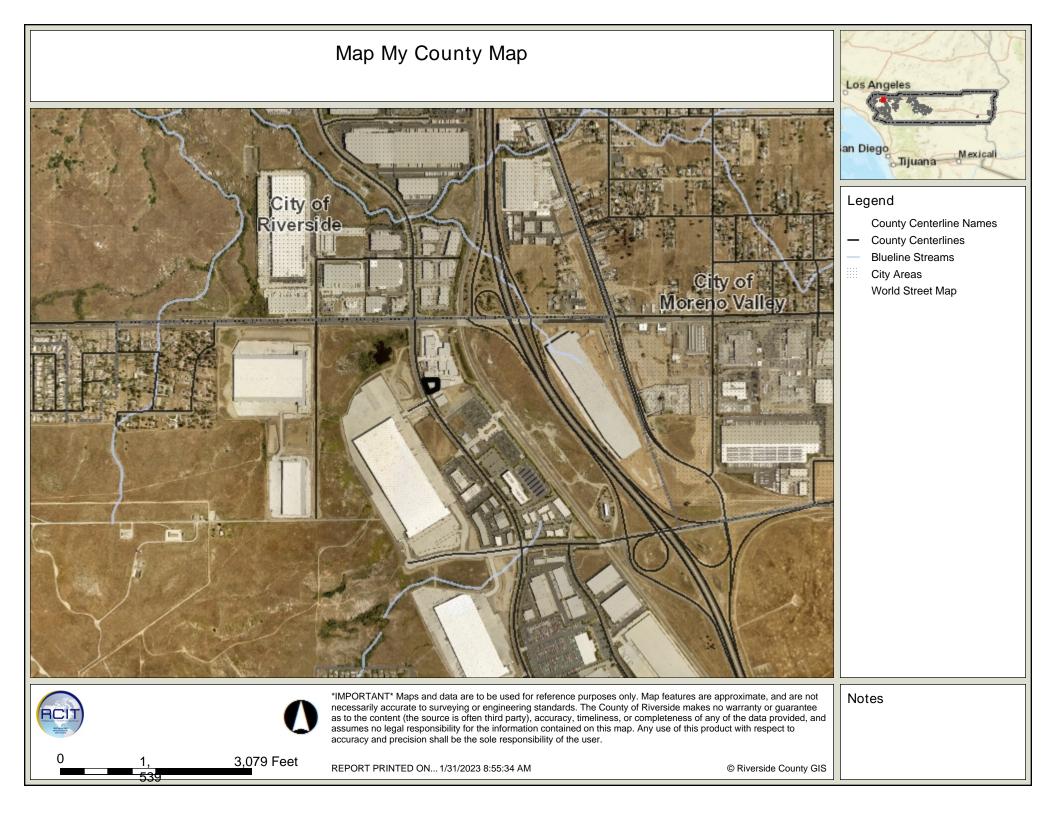


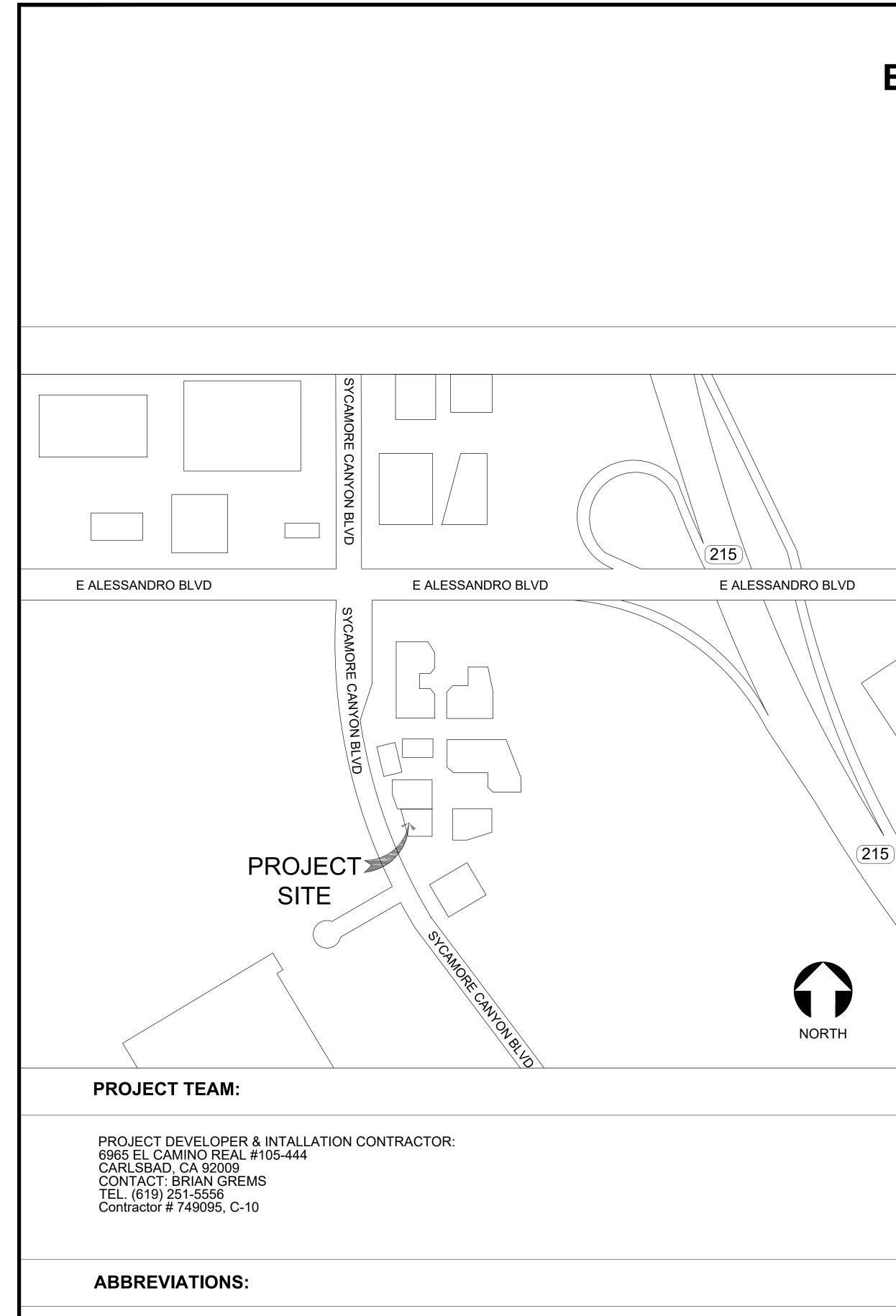












AC DC DISC ALTERNATING CURRENT DIRECT CURRENT ELECTRICAL DISCONNECT EXISTING (E) NEW (N) ELECTRICAL METALLIC CONDUIT ÈŃT OC ON CENTER PHOTOVOLTAIC ΡV **RIGID METALIC CONDUIT** RMC TRANSFORMER XFMR

## BOSSTICK- JETBED BLDG. PV ROOFTOP 14100 MERIDIAN PARKWAY MARCH AIR RESERVE BASE, CA 92518

### 29.10 kW DC SOLAR ELECTRIC SYSTEM PROJECT 26.57 kW AC SOLAR ELECTRIC SYSTEM PROJECT

### **PROJECT SCOPE:**

THE PROJECT ENTAILS THE INSTALLATION OF A 29.10 KWDC SYSTEM AT 14100 MERIDIAN PARKWAY, RIVERSIDE, CA 92508. THE SYSTEM WILL NOT BE PLACED INTO OPERATION UNTIL AUTHORIZED BY SCE.

THE SYSTEM COMPRISED OF: • (60) HANWHA DUO Q.PEAK XL-G1.03/ BFG

- 485W MODULES
  (1) SOLECTRIA PVI 25TL-480 INVERTER
- (1) COLLECTING T VI 23 TE 400 IN
   (32) TIGO RSD TS4-A-2F
   (1) 60A PV DISCONNECT (600V)
- (1) 60A PV DISCONNECT (600V)
   MODULES WILL BE INSTALLED ON EXISTING ROOF AND EXISTING STRUCTURE USING
- ROOF AND EXISTING STRUCTURE USING IRONRIDGE BX AT 10 DEGREE TILT ON THE ROOF SYSTEM.

### **CODE INFORMATION:**

ALL WORK AND MATERIAL SHALL COMPLY V THE REQUIREMENTS OF THESE CODES AND APPLICABLE LOCAL ORDINANCES.

2020 CALIFORNIA BUILDING CODE 2020 CALIFORNIA MECHANICAL CODE 2020 CALIFORNIA PLUMBING CODE 2020 CALIFORNIA ELECTRICAL CODE 2020 CALIFORNIA FIRE CODE TITLE 24 (ADA) CALIFORNIA ADMISTRATIVE

### **TABLE OF CONTENTS:**

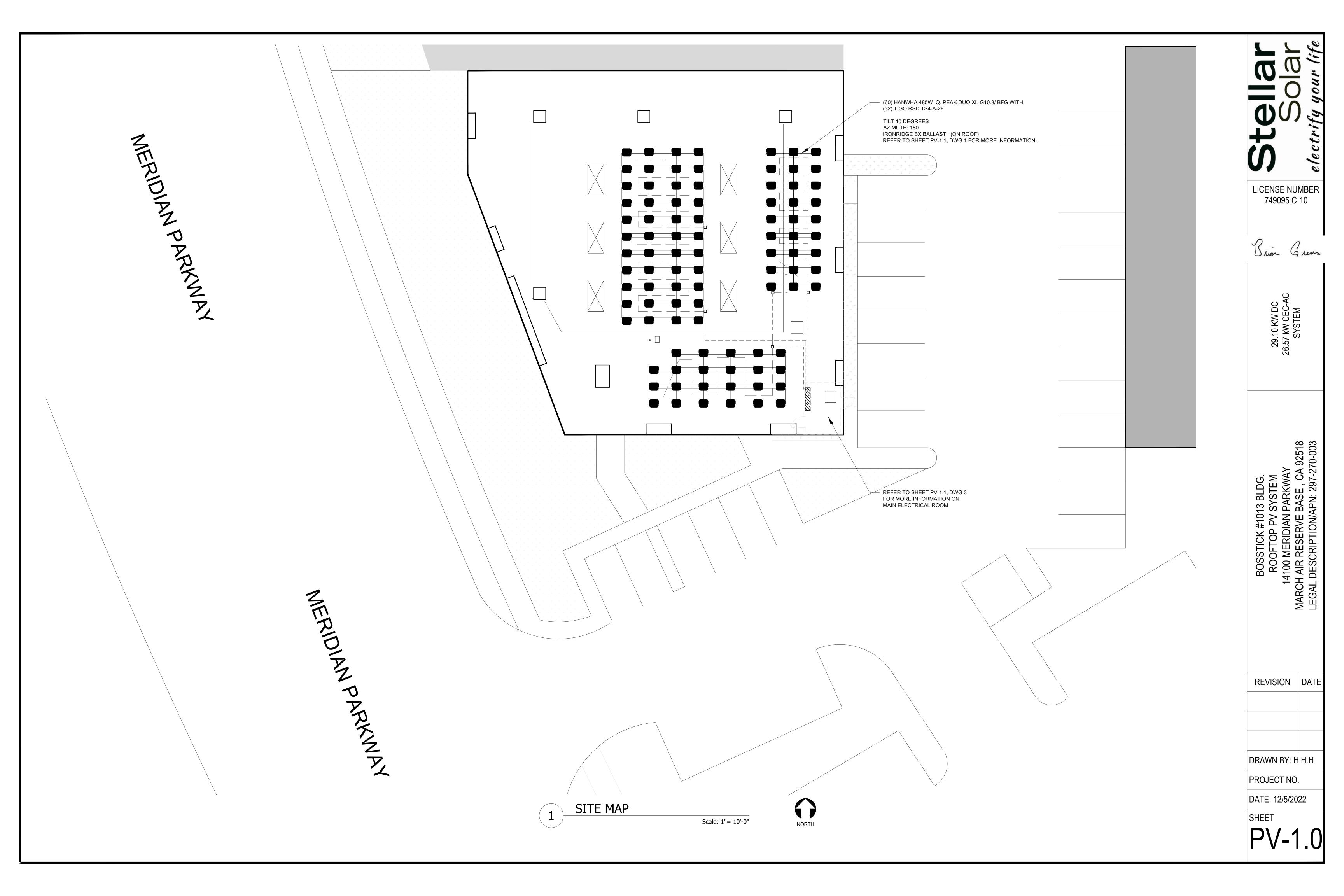
SHEET #	
T-1	TABLE
PV-1.0	SITE PL
PV-1.1	ENLAR
SR100	IRONRI
SR300	IRONRI
SR501	IRONRI
SR701	IRONRI
SR702	IRONRI
PV-2.0	ROOF S
PV-3.0	PV SING
PV-4.0	SIGNAC
PV-5.0	SPEC S
PV-5.1	SPEC S
PV-5.2	SPEC S

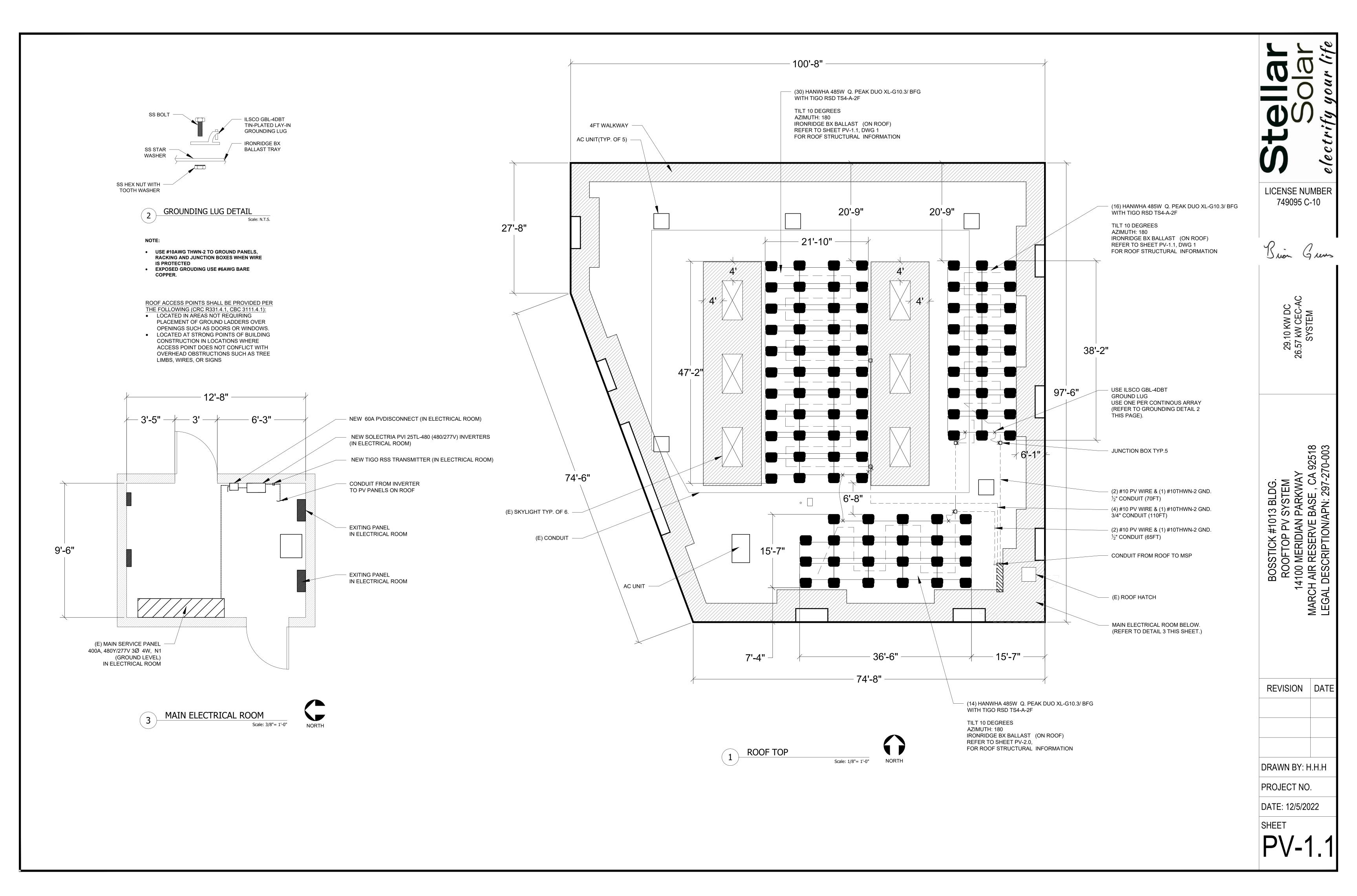
### **GENERAL NOTES:**

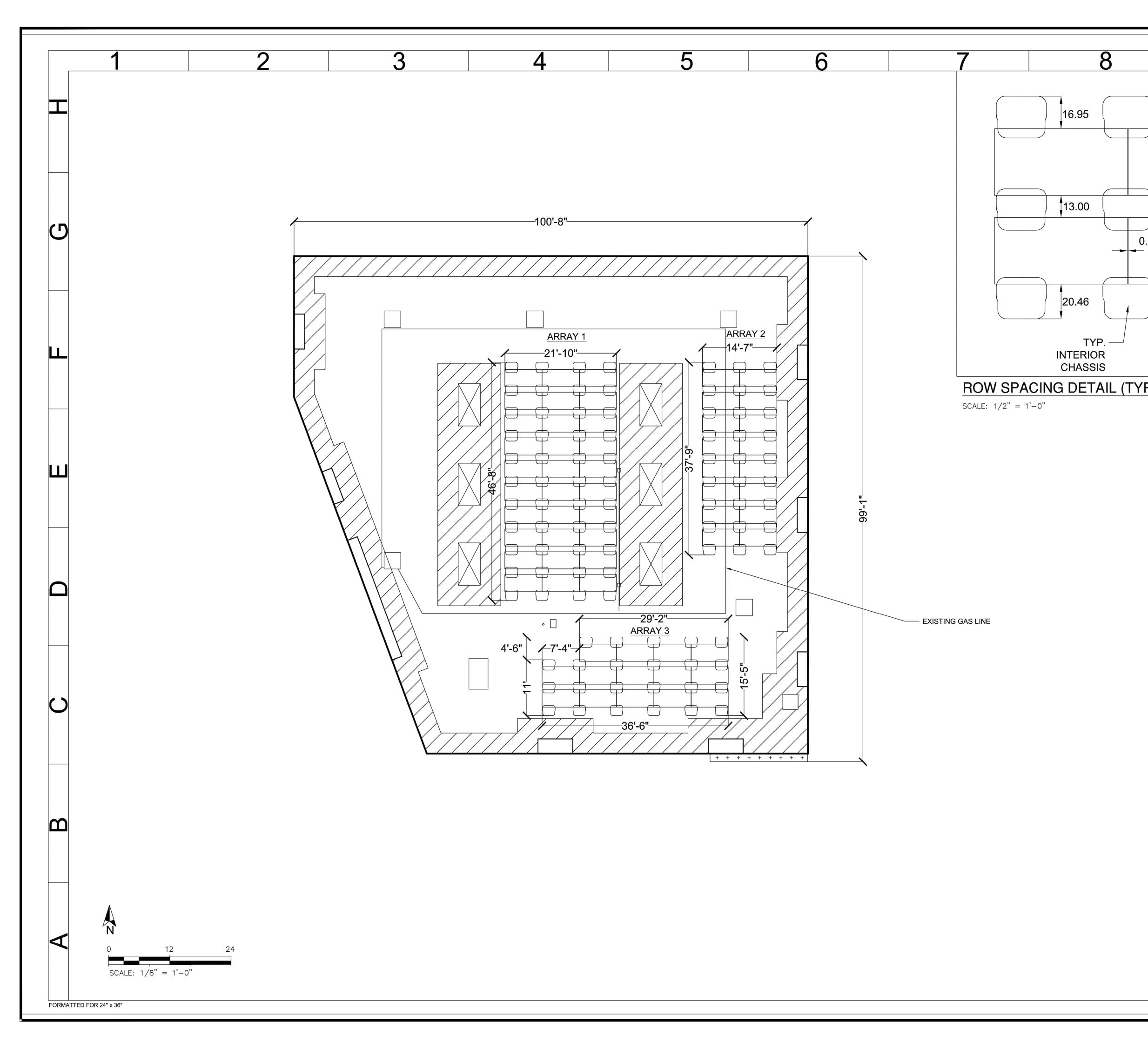
• SOLAR PHOTOVOLTAIC SYSTEM TO BE INSTALLED ON COMMERCIAL STRUCTURE.

- DESIGN COMPLYING WITH THE 2020 EDITION OF CALIFORNIA ELECTRICAL CODE, NEC, 2020 CA LOCAL ORDINANCES AND POLICIES.
- THIS PROJECT HAS BEEN DESIGNED IN COMPLIANCE WITH THE CBC SECTION 1609 TO WITHST
  THIS COMMERCIAL BUILDING IS 1 STORY TALL.
- REFER PV-2.0 FOR INFORMATION ON ROOF STRUCTURE.
- THIS SYSTEM WILL NOT BE INTERCONNECTED UNTIL APPROVAL FROM THE LOCAL JURISDICTION
   THE SOLAR PHOTOVOLTAIC INSTALLATION SHALL NOT OBSTRUCT ANY PLUMBING, MECHANICA
- IF THE EXISTING MAIN SERVICE PANEL HAS A VERIFIABLE GROUNDING ELECTRODE, IT IS NEA
- THE BUILDING HAS ROOF ACCESS THROUGH A SET OF INTERNAL STARIS. NO LADDER NEEDEL
   DEODED ACCESS AND WORKING OF FARMING WILL BE DROVIDED AS DED SECTION 110.26 CEC
- PROPER ACCESS AND WORKING CLEARANCE WILL BE PROVIDED AS PER SECTION 110.26 CEC

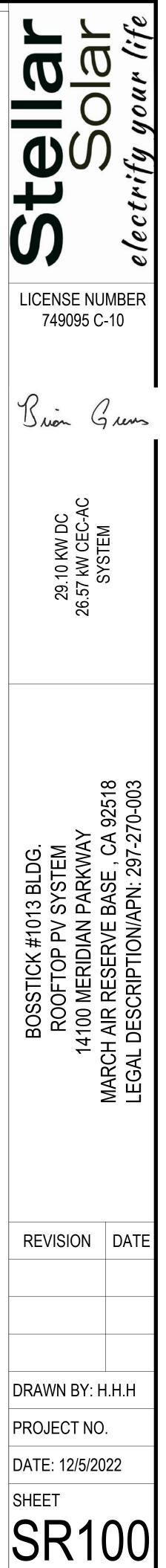
	PROJECT DATA:		U IU
WITH D ALL	APN: LEGAL DESCRIPTION: LOT TYPE P PARCEL 3 MAP PLATB 245 MAP PLATP 061 SUBDIVISIONNAME PM 37313 ZONING DESIGNATION: LIGHT INDUSTRIAL	Brion (	7 rens
CODE		29.10 KW DC 26.57 kW CEC-A	0101EM
	DESCRIPTION		
RIDGE BAI RIDGE BAI RIDGE BAI RIDGE BAI RIDGE BAI	F PLAN / ELECTRICAL ROOM LLAST DESIGN LLAST DESIGN LLAST DESIGN LLAST DESIGN LLAST DESIGN	BOSSTICK #1013 B ROOFTOP PV SYS 100 MERIDIAN PAF	MARCH AIR RESERVE BASE , CA 92518 LEGAL DESCRIPTION/APN: 297-270-003
	IIA BUILDING CODE, COUNTY OF RIVERSIDE FIRE CODE, AND ALL WINIMUM 110 MPH WIND LOAD.	REVISION	DATE
CAL OR E AND IS ( D.	O THE UTILITY IS OBTAINED. BUILDING ROOF VENTS. ON A GROUNDING PLATE ON THE WALL.		
J.		DRAWN BY: H	
		DATE: 12/5/20	
		SHEET <b>T</b> -	1

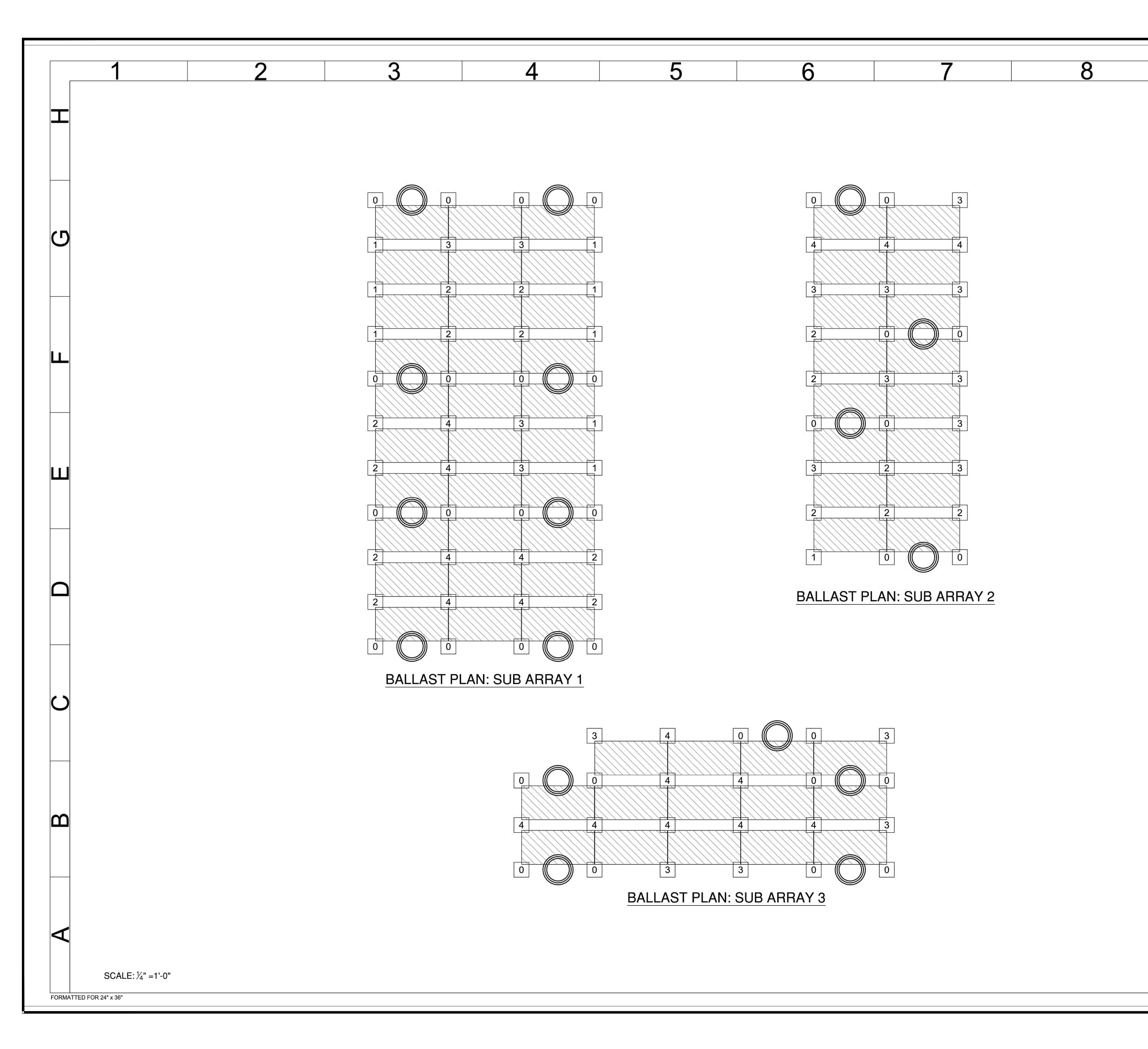






PROJECT ID PROJECT ID TBD PROJECT ID TBD INSTALLER PROJECT OWNER FROJECT OWNER SYSTEM SIZE (RW DC) PROJECT OWNER SYSTEM SIZE (RW DC) PROJECT OWNER BASE PROJECT OWNER SYSTEM SIZE (RW DC) PROJECT OWNER DARGCH AIR SYSTEM SIZE (RW DC) SYSTEM SIZE (RW DC)	AR AN ESERVE
PROJECT ID TBD PROJECT ID TBD PROJECT OWNER BOSSTICK CODE SET 7-16 SYSTEM SIZE [KW DC] 9-100 SITE ADDRESS PARKWAY OTY BASE STATE CA ZIP 92518 "SNOW LOAD [PSF] 0 "WIND EXPOSURE CAT. C SEISMIC DESIGN CAT. D SEISMIC DESIGNIC CAT. D SEISMIC DESIGN CAT. D SEISMIC DESIGNIC CAT. D	
38       16.00         TYP.       BASE         EDGE       STALLER         STEM SIZE [KW DC]       29.100         STALE       CA         ZIP       92518         STATE       CA         ZIP       92518         "SNOW LOAD [PSF]       0         "WIND SPED [MPH]         SEISMIC DESIGN CAT.       D         SEISMIC DESIGN CAT.       D         SEISMIC DESIGN CAT.       D         SEISMIC DESIGN CAT.       D         "RISK CATEGORY       II         "*RISK CATEGORY       II         "*ROOF SLOPE [DEG]       3         "*ROOF SLOPE [DEG]       3         "*NODEL       C.02F6K DUO         "WIDT PLINJ       87.24         "WIDT PLINJ       1.38         "WIDT PLINJ       84.15         "WIDT PLINJ       1.30         "THICKNESS [N]       1.30         "T	AN ESERVE
38       16.00         TYP.       STATE         EDGE       CHASSIS         **NNV LOAD [PSF]       0         **WIND SPEED [MPH]       96         **WIND EXOSURE CAT.       0         SEISMIC DEGS       1.2         ***NOOF ING MATERIAL       MODIFIED BI         ***MANUFACTURER       HANWHA QLC         ***MODH [IN]       41.14         ***MONDFIIN]       41.5 <tr< th=""><th>AN ESERVE</th></tr<>	AN ESERVE
38       16.00         TYP.       EDGE         EDGE       CHASSIS         TYP.       EDGE         CHASSIS       **Now Load (PSF)         **Now Load (PSF)       0         **Wind SPEED [MPH]       96         **	ESERVE
38       16.00         TYP.       STE ADDRESS         SIMIC DESIGN CAT.       92518         **SNOW LOAD [PSF]       0         **WIND SPEED [MPH]       96         **WATH       96         **WIND SPEED [MPH]       96         **WIND SPEED [MPH]       96      <	ESERVE
16.00       GTY       MARCH AIR F         18       16.00       GTY       MARCH AIR F         STATE       CA       Z       STATE       CA         ZIP       92518       STATE       CA       Z         STATE       CA       Z       STATE       CA         ZIP       92518       STATE       CA       Z         STATE       CA       Z       STATE       CA         ZIP       92518       STATE       CA       Z         STATE       CA       Z       STATE       CA         ZIP       92518       STATE       CA       Z         STATE       CA       Z       S       S       S         SEISMIC DESIGN CAT.       D       SEISMIC DESIGN CAT.       D       S       S         SEISMIC SdS       1.2       S<	ESERVE
18       16.00         16.00       *STATE       CA         21P       92518         *SNOW LOAD [PSF]       0         *WIND SPEED [MPH]       96         *WIND EXPOSURE CAT.       C         SEISMIC DESIGN CAT.       D         **ROFING MATERIAL       MODIFIED BIT         **ROFING MATERIAL       MODIFIED BIT         **MODEL       Q.PEAK DUO         XL-G10.3/BFC       **MODEL         **MODEL       Q.PEAK DUO         XL-G10.3/BFC       **WIDTH [IN]         **MODEL       Q.PEAK DUO         XL-G10.3/BFC       **WIDTH [IN]         **WIDTH [IN]       41.14         **THICKNESS [IN]       1.38         **WEIGHT [LB]       64.15         **WATTAGE CLASS [W]       485         ARRAY AZIMUTH [DEG.]       160         **TILT ANGLE [DEG.]       10         ROW SPACING [IN]       53.60         NITERROW SPACING [IN]	
8 16.00 16.00 TYP. EDGE CHASSIS .) () () () () () () () () () (	ELLS
16.00       •*SNOW LOAD [PSF]       0         •*WIND SPEED [MPH]       96         •*WIND EXPOSURE CAT.       C         SEISMIC DESIGN CAT.       D         **DECK HEIGHT [IT]       27.5         **PARAPET HEIGHT [IN]       41         **ROOF SLOPE [DEG.]       3         **ROOF SLOPE [DEG.]       3         **MODEL       Q.PEAK DUO         XL-G10.3/BFC       **MODEL         **MODEL       Q.PEAK DUO         XL-G10.3/BFC       **MODEL         **WEIGHT [IN]       87.24         **WIDTH [IN]       41.14         **THICKNESS [IN]       1.38         **WEIGHT [LB]       64.15         **WATTAGE CLASS [W]       485         ARRAY AZIMUTH [DEG.]       10         ROW SPACING [IN]       13.00         **CMU WEIGHT [LB]       15.5         **CMU WEIGHT [LB]       15.5         **CMU DM.'S [NOM. IN]       2X8X16         EQUIPMENT WEIGHT [LB]       4.721         <	ELLS
	ELLS
SEISMIC DESIGN CAT.       D         SEISMIC 5dS       1.2         **RISK CATEGORY       II         **DECK HEIGHT [FT]       27.5         **PARAPET HEIGHT [IN]       41         **ROOF SLOPE [DEG.]       3         **ROOFING MATERIAL       MODIFIED BIT         **MODEL       %L-G10.3/BFC         **WIDTH [IN]       87.24         **WIDTH [IN] </td <td>ELLS</td>	ELLS
SEISMIC SdS       1.2         TYP.       **Risk CATEGORY       II         **DECK HEIGHT [FT]       27.5         **PARAPET HEIGHT [IN]       41         **ROOF SLOPE [DEG.]       3         **ROOF SLOPE [DEG.]       3         **ROOF SLOPE [DEG.]       3         **MODEL       Q.PEAK DUO XL-G10.3/BFG         **MODEL       Q.PEAK DUO XL-G10.3/BFG         **WIDTH [IN]       87.24         **WIDTH [IN]       41.14         **THICKNESS [IN]       1.38         **WEIGHT [LB]       64.15         **WEIGHT [LB]       64.15         **TULT ANGLE [DEG.]       10         ROW SPACING [IN]       53.60         INTERROW SPACING [IN]       13.00         **CMU WEIGHT [LB]       15.5         **CMU WEIGHT [LB]       15.5         **CMU WEIGHT [LB]       15.5         **CMU WEIGHT [LB]       15.5	ELLS
TYP.       EDGE         CHASSIS       **DECK HEIGHT [FT]       27.5         **PARAPET HEIGHT [IN]       41         **ROOF SLOPE [DEG.]       3         **ROOFING MATERIAL       MODIFIED BIT         **MANUFACTURER       HANWHA Q.C         CHASSIS       **MODEL         **MODEL       Q.PEAK DUO         XL-G10.3/BFG       **WIDTH [IN]         **UEIGHT [IN]       87.24         **WIDTH [IN]       41.14         **THICKNESS [IN]       1.38         **WEIGHT [LB]       64.15         **WEIGHT [LB]       64.15         **WATTAGE CLASS [W]       485         ARRAY AZIMUTH [DEG.]       180         **TILT ANGLE [DEG.]       10         ROW SPACING [IN]       53.60         INTERROW SPACING [IN]       53.60         INTERROW SPACING [IN]       13.00         **CMU WEIGHT [LB]       15.5         **CMU UDIM.'S [NOM. IN]       2X8X16         EQUIPMENT WEIGHT [LB]       4,721         BALLAST WEIGHT [LB]       2,527	ELLS
TYP.       EDGE       3         CHASSIS       **Roof slope [deg.]       3         **Roof slope [deg.]       **Roof slope [deg.]       3         **Roof slope [deg.]       **Manufacturer       Hanwha q.c         **Model       Q.PEAK duo       XL-G10.3/BFG         **Woldth [IN]       #1.14       **Length [IN]       87.24         **Wildth [IN]       #1.14       **Weight [LB]       64.15         **Weight [LB]       64.15       **Weight [LB]       64.15         **Wattage class [W]       485       485       485         Array Azimuth [deg.]       180       **Tilt Angle [deg.]       10         Row spacing [IN]       53.60       INTERROW Spacing [IN]       53.60         INTERROW SPACING [IN]       13.00       **CMU Weight [LB]       15.5         **CMU DIM.'S [NOM. IN]       2X8X16       EQUIPMENT WEIGHT [LB]       4.721         BALLAST WEIGHT [LB]       2.527       4.721	ELLS
TYP.       EDGE       3         CHASSIS       **ROOF SLOPE [DEG.]       3         **MANUFACTURER       HANWHA Q.C         **MODEL       Q.PEAK DUO         **LENGTH [IN]       87.24         **WIDTH [IN]       41.14         **WIDTH [IN]       41.14         **WEIGHT [LB]       64.15         **WUIDTH [IN]       485         ARRAY AZIMUTH [DEG.]       10         ROW SPACING [IN]       53.60         INTERROW SPACING [IN]       13.00         **CMU DIM.'S [NOM. IN]       2X8X16         EQUIPMENT WEIGHT [LB]       4,721         BALLAST WEIGHT [LB]       4,721	ELLS
EDGE CHASSIS       **MANUFACTURER       HANWHA Q.Q.         **MODEL       Q.PEAK DUO XL-G10.3/BFG         **LENGTH [IN]       87.24         **WIDTH [IN]       41.14         **THICKNESS [IN]       1.38         **WEIGHT [LB]       64.15         **WATTAGE CLASS [W]       485         ARRAY AZIMUTH [DEG.]       180         **TILT ANGLE [DEG.]       10         ROW SPACING [IN]       53.60         INTERROW SPACING [IN]       53.60         INTERROW SPACING [IN]       13.00         **CMU WEIGHT [LB]       15.5         **CMU UMIGHT [LB]       15.5         **CMU UBIGHT [LB]       15.5         **CMU UBIM.'S [NOM. IN]       2X8X16         EQUIPMENT WEIGHT [LB]       4,721         BALLAST WEIGHT [LB]       2,527	ELLS
CHASSIS       **MODEL       Q.PEAK DUO         **LENGTH [IN]       87.24         **WIDTH [IN]       41.14         **WIDTH [IN]       1.38         **WEIGHT [LB]       64.15         **WATTAGE CLASS [W]       485         **WATTAGE CLASS [W]       485         *TILT ANGLE [DEG.]       10         ROW SPACING [IN]       53.60         INTERROW SPACING [IN]       53.60         INTERROW SPACING [IN]       13.00         **CMU WEIGHT [LB]       15.5         **CMU WEIGHT [LB]       15.5         **CMU DIM.'S [NOM. IN]       2X8X16         EQUIPMENT WEIGHT [LB]       4,721         BALLAST WEIGHT [LB]       2,527	
CHASSIS       MODEL       XL-G10.3/BFG         **LENGTH [IN]       87.24         **WiDTH [IN]       41.14         **WiDTH [IN]       41.14         **WEIGHT [LB]       64.15         **WEIGHT [LB]       64.15         **WATTAGE CLASS [W]       485         ARRAY AZIMUTH [DEG.]       180         **TILT ANGLE [DEG.]       10         ROW SPACING [IN]       53.60         INTERROW SPACING [IN]       13.00         **CMU WEIGHT [LB]       15.5         **CMU DIM.'S [NOM. IN]       2X8X16         EQUIPMENT WEIGHT [LB]       4,721         BALLAST WEIGHT [LB]       2,527	
) **WIDTH [IN] 41.14 **THICKNESS [IN] 1.38 **WEIGHT [LB] 64.15 **WATTAGE CLASS [W] 485 ARRAY AZIMUTH [DEG.] 180 **TILT ANGLE [DEG.] 10 ROW SPACING [IN] 53.60 INTERROW SPACING [IN] 53.60 INTERROW SPACING [IN] 13.00 **CMU WEIGHT [LB] 15.5 **CMU DIM.'S [NOM. IN] 2X8X16 EQUIPMENT WEIGHT [LB] 4,721 BALLAST WEIGHT [LB] 2,527	
***WEIGHT [LB]       64.15         **WATTAGE CLASS [W]       485         **WATTAGE CLASS [W]       485         ARRAY AZIMUTH [DEG.]       180         **TILT ANGLE [DEG.]       10         ROW SPACING [IN]       53.60         INTERROW SPACING [IN]       53.60         INTERROW SPACING [IN]       13.00         **CMU WEIGHT [LB]       15.5         **CMU DIM.'S [NOM. IN]       2X8X16         EQUIPMENT WEIGHT [LB]       4,721         BALLAST WEIGHT [LB]       2,527	
**WATTAGE CLASS [W] 485 **WATTAGE CLASS [W] 485 ARRAY AZIMUTH [DEG.] 180 **TILT ANGLE [DEG.] 10 ROW SPACING [IN] 53.60 INTERROW SPACING [IN] 13.00 **CMU WEIGHT [LB] 15.5 **CMU DIM.'S [NOM. IN] 2X8X16 EQUIPMENT WEIGHT [LB] 4,721 BALLAST WEIGHT [LB] 2,527	
**TILT ANGLE [DEG.] 10 ROW SPACING [IN] 53.60 INTERROW SPACING [IN] 13.00 **CMU WEIGHT [LB] 15.5 **CMU DIM.'S [NOM. IN] 2X8X16 EQUIPMENT WEIGHT [LB] 4,721 BALLAST WEIGHT [LB] 2,527	
ROW SPACING [IN]       53.60         INTERROW SPACING [IN]       13.00         **CMU WEIGHT [LB]       15.5         **CMU DIM.'S [NOM. IN]       2X8X16         EQUIPMENT WEIGHT [LB]       4,721         BALLAST WEIGHT [LB]       2,527	
INTERROW SPACING [IN]       13.00         **CMU WEIGHT [LB]       15.5         **CMU DIM.'S [NOM. IN]       2X8X16         EQUIPMENT WEIGHT [LB]       4,721         BALLAST WEIGHT [LB]       2,527	
EQUIPMENT WEIGHT [LB]4,721BALLAST WEIGHT [LB]2,527	
EQUIPMENT WEIGHT [LB]4,721BALLAST WEIGHT [LB]2,527	
BALLAST WEIGHT [LB] 2,527	
TOTAL WEIGHT [LB] 7.247	
**DEAD LOAD [PSF] 4.1000	
**MODULE COUNT 60	
94     94	
ANCHOR COUNT 17	
APPROVED:	
REVISION NEEDED:	
THE HIGHLIGHTED (**) PROJECT DETAILS	
HAVE BEEN REVIEWED FOR ACCURACY. UNDERSTAND THAT ADDITIONAL FEES M BE INCURRED SHOULD PROJECT DETAIL	AY
LAYOUT CHANGE AFTER APPROVAL.	
PRINT NAME:	
SIGNATURE:	
LEGEND	
= IRONRIDGE BX CHASSIS	
= MODULE	
= FIRE PATHW	AY
	GE
<b>IRONRIDGE:</b> 800-227-9523	
28357 INDUSTRIAL BLVD., HAYWARD, www.IronRidge.com	CA 94545
FINAL LAYOUT: This layout was designed and	
engineered by Ironridge staff and/or consultant layout was based on the available information t was provided by the installer. Ironridge does n	nat
Eor DV System Only take any responsibility for any issues due to mi or incorrect information. All dimensions should	ssing be
FOR PV System Only verified in the field before installation. Addition anchors, ballast, or other equipment may be re if any changes are made to the original drawing	quired
the responsibility of the installer to follow all requirements listed in the Ironridge Installation	. 12 13
이제 DU Meridiak 문가 Parkway 변 Manual. Do not copy or distribute.	
No. S3878 Exp. 3-31-23 ★ DRAWING INFO	
OF CALIFO	ATE /21/2022
SHEET NAME SHEET NUMBER	
RACKING LAYOUT SR100	

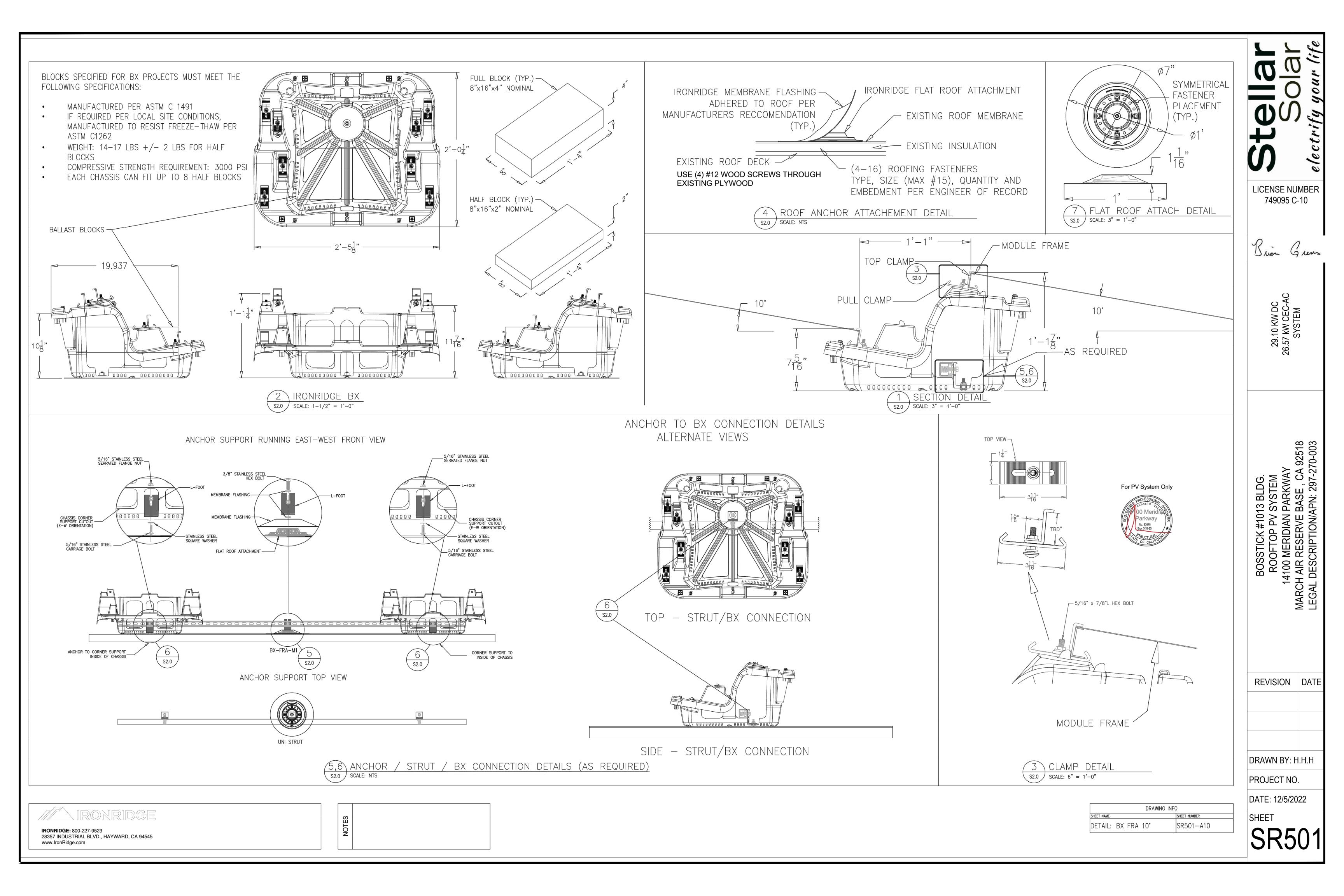




	MAP				13
	PROJECT ID	твр			T.
F	INSTALLER	STELLAR SOLAR			+
PROJECT	PROJECT OWNER	BOSSTICK			ç
PRO	CODE SET	7-16			~
	SYSTEM SIZE [KW DC]	29.100			0
	SITE ADDRESS	14100 MERIDIAN			
	CITY	PARKWAY MARCH AIR RESERVE		CENSE NU	IMBEF
	STATE	BASE CA		749095 C	-10
	ZIP	92518			
SITE	**SNOW LOAD [PSF]	0			
	**WIND SPEED [MPH]	96			
	**WIND EXPOSURE CAT.	с	- <u>198</u> -		
	SEISMIC DESIGN CAT.	D	2	. /	7
	SEISMIC SdS	1.2	$ $ $\square$	von (	g ren
	**RISK CATEGORY	П			a de la construcción de la constru La construcción de la construcción d
ЮN	**DECK HEIGHT [FT]	27.5			
BUILDING	**PARAPET HEIGHT [IN]	41			
Ы	**ROOF SLOPE [DEG.]	3			
				J J C	
	**MANUFACTURER	HANWHA Q.CELLS Q.PEAK DUO			5
	**MODEL	XL-G10.3/BFG		ν Ν Ν	
ULE	**LENGTH [IN]	87.24		X > C	- 0
MODULE	**WIDTH [IN]	41.14		5 ≤ 5	5
2		1.38		29 .57	
	**WEIGHT [LB]	64.15		29.10 KW DC 26.57 kW CEC-AC	
	**WATTAGE CLASS [W] ARRAY AZIMUTH [DEG.]	485			
	**TILT ANGLE [DEG.]	180			
	ROW SPACING [IN]	53.60			
	INTERROW SPACING [IN]	13.00			
Ξ	**CMU WEIGHT [LB]	15.5			
SYSTEM	**CMU DIM.'S [NOM. IN]	2X8X16			
S	EQUIPMENT WEIGHT [LB]	4,721			
	BALLAST WEIGHT [LB]	2,527			
	TOTAL WEIGHT [LB]	7,247			
	**DEAD LOAD [PSF]	4.1000		(	യ ന
~	**MODULE COUNT	60			CA 92518 37-270-003
TOTALS	**CHASSIS COUNT	94			92 0-
2	BALLAST COUNT	163		M A≺	<u>5</u>
	ANCHOR COUNT	17			97, C
	APPROVED:			ΙΗ Χ΄	ЧЙ
	REVISION NEEDED:		L L L L L L L L L L L L L L L L L L L	с Л Л Л Л Г Л Г Г Г Г Г Г	BASE APN:
	REVISION NEEDED.			SYSTE	A B
	THE HIGHLIGHTED (**) PRO HAVE BEEN REVIEWED FO	DJECT DETAILS		PV SYSTE AN PARK	ЩĮ́≥́
	UNDERSTAND THAT ADDIT BE INCURRED SHOULD PR	IONAL FEES MAY			
	LAYOUT CHANGE AFTER A			<u>5</u> 01	Ш
					出ഥ
	PRINT NAME:		<b>'</b>		
	PRINT NAME:			ן אַ אַ אַ אַ	R R
					IR RE SCR
	PRINT NAME:		ROSSTICK #1013 BLD	ROOFTOP 4100 MERID	I AIR RESE Descript
			RO.S	ROOFTO 14100 MERII	CH AIR RE L DESCR
			ROR NOR	14100 N	RCH AIR RE GAL DESCR
				14100 N	AARCH AIR RE EGAL DESCR
			NOR NOR	14100 N	тĽ
	SIGNATURE: LEGE	ALLAST BLOCKS	NOR NOR	14100 N	MARCH AIR RE LEGAL DESCR
	SIGNATURE: LEGE			14100 N	MARCH AIR RE LEGAL DESCR
	SIGNATURE: LEGE # = BA PE	ALLAST BLOCKS	NOR NOR	14100 N	MARCH AIR RE LEGAL DESCR
	SIGNATURE: LEGE # = BA PE	ALLAST BLOCKS ER TRAY	NOR NOR	14100 N	MARCH AIR RE LEGAL DESCR
	SIGNATURE: LEGE # = BA PE = MO	ALLAST BLOCKS ER TRAY	NOR NOR	14100 N	MARCH AIR RE LEGAL DESCR
	SIGNATURE: LEGE # = BA PE = MO	ALLAST BLOCKS ER TRAY DDULE		14100 N	MARCH AIR RE LEGAL DESCR
	SIGNATURE: LEGE # = BA PE = MO	ALLAST BLOCKS ER TRAY DDULE		1	
	SIGNATURE: LEGE # = BA PE = MO	ALLAST BLOCKS ER TRAY DDULE		EVISION	
	SIGNATURE: $ \begin{array}{c}                                     $	ALLAST BLOCKS ER TRAY ODULE RE PATHWAY		1	
	SIGNATURE: $ \begin{array}{c}                                     $	ALLAST BLOCKS ER TRAY DDULE		1	MARCH AIR RE LEGAL DESCR
	SIGNATURE:	ALLAST BLOCKS ER TRAY DDULE RE PATHWAY		1	
	SIGNATURE:	ALLAST BLOCKS ER TRAY DDULE RE PATHWAY		1	
	SIGNATURE:	ALLAST BLOCKS ER TRAY DDULE RE PATHWAY NRIDGE		1	
	SIGNATURE:	ALLAST BLOCKS ER TRAY DDULE RE PATHWAY <b>NRIDGE</b> , HAYWARD, CA 94545		1	
	SIGNATURE:	ALLAST BLOCKS ER TRAY DDULE RE PATHWAY <b>NRIDGE</b> , HAYWARD, CA 94545 (A HAYWARD, CA 94545)		1	
	SIGNATURE:	ALLAST BLOCKS ER TRAY DDULE RE PATHWAY <b>NRIDGE</b> , HAYWARD, CA 94545 (A sdesigned and and/or consultants. This able information that Ironridge does not issues due to missing	R	1	DAT
	SIGNATURE:	ALLAST BLOCKS ER TRAY DDULE RE PATHWAY <b>NRIDGE</b> , HAYWARD, CA 94545 , HAYWARD, CA 94545	R	EVISION	DAT
	SIGNATURE:	ALLAST BLOCKS ER TRAY DDULE RE PATHWAY <b>NRIDGE</b> , HAYWARD, CA 94545 , HAYWARD, CA 94545 /as designed and and/or consultants. This able information that Ironridge does not issues due to missing mensions should be allation. Additional roof pment may be required e original drawing. It is	RE	EVISION	DAT
	SIGNATURE:	ALLAST BLOCKS ER TRAY DDULE RE PATHWAY <b>NRIDGE</b> , HAYWARD, CA 94545 , HAYWARD, CA 94545 , HAYWARD, CA 94545	RE	EVISION	DATI
	SIGNATURE:	ALLAST BLOCKS ER TRAY DDULE RE PATHWAY <b>NRIDGE</b> , HAYWARD, CA 94545 , HAYWARD, CA 94545 , HAYWARD, CA 94545	RE DRA PRO	EVISION EVISION	DAT H.H.H
	SIGNATURE:	ALLAST BLOCKS ER TRAY DDULE RE PATHWAY <b>NRIDGE</b> , HAYWARD, CA 94545 , HAYWARD, CA 94545 //as designed and and/or consultants. This able information that Ironridge does not issues due to missing mensions should be allation. Additional roof pment may be required e original drawing. It is er to follow all ridge Installation pute.	RE DRA PRO	EVISION	DAT H.H.H
EVIS	SIGNATURE:	ALLAST BLOCKS R TRAY DDULE RE PATHWAY <b>NRIDGE</b> , HAYWARD, CA 94545 , HAYWARD, CA 94545 , HAYWARD, CA 94545 , MAYWARD, CA 94545 , HAYWARD, CA 94545 , HAYWARD, CA 94545	RE DRA DAT	EVISION EVISION AWN BY: H DJECT NC TE: 12/5/20	DAT H.H.H
EVIS	SIGNATURE:	ALLAST BLOCKS ER TRAY DDULE RE PATHWAY <b>NRIDGE</b> , HAYWARD, CA 94545 , HAYWARD, CA 94545 //as designed and and/or consultants. This able information that Ironridge does not issues due to missing mensions should be allation. Additional roof pment may be required e original drawing. It is er to follow all ridge Installation pute.	RE DRA PRO	EVISION EVISION AWN BY: H DJECT NC TE: 12/5/20	DATI
EVIS O.	SIGNATURE:	ALLAST BLOCKS ER TRAY DDULE RE PATHWAY <b>NRIDGE</b> , HAYWARD, CA 94545 , HAYWARD, CA 94555 , HAYWARD, CA 945555 , HAWWARD, HAYWARD, HAYWARD, HAYWARD, HAYWARD, HAYWARD, H	RE DRA DRA SHE	EVISION EVISION AWN BY: H DJECT NC TE: 12/5/20	DATI 1.H.H ). )22

For PV System Only	
PROFESSIONAL RENNETH 24 CHI	
の Meridia Parkway No. 53878	
STRUCTURAL OF CALLFORM	

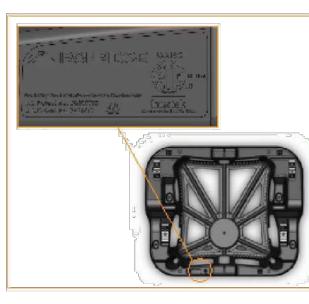
9





www.lronRidge.com

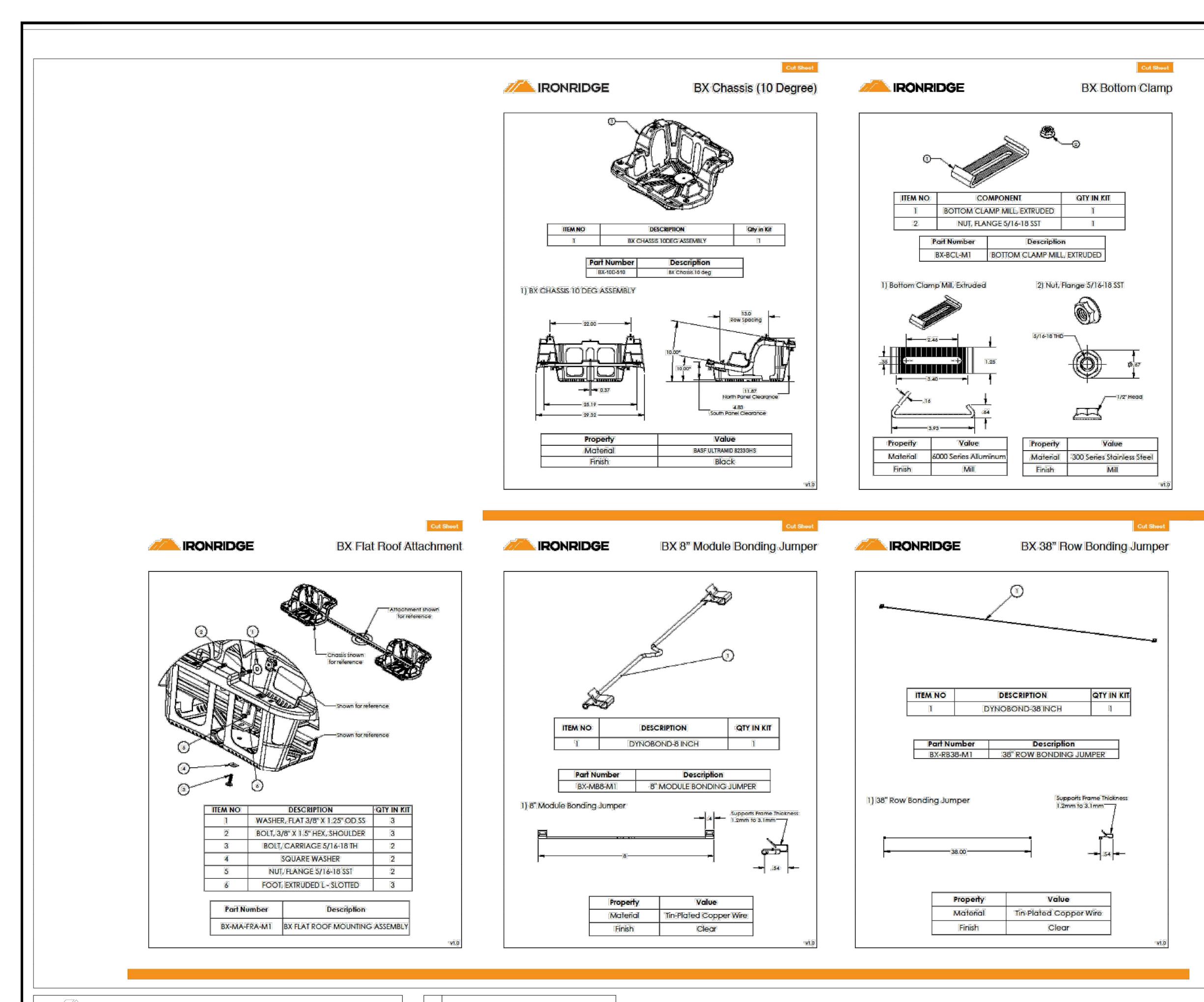




Flange Nut Flange Nut Square Square Carriage Eolt	
<u> </u>	250 in 105

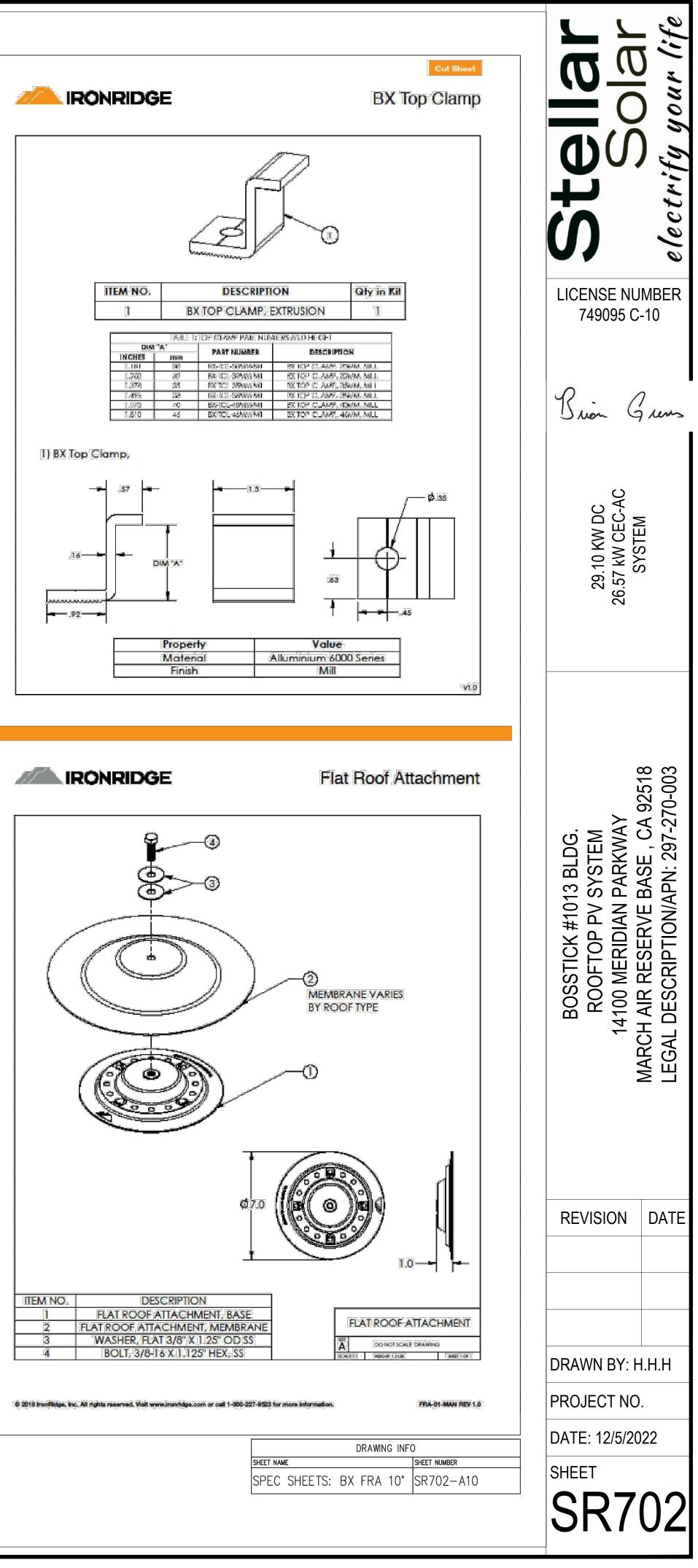
		DRAWING INFO	)
SHEET NAM	E		SHEET NUMBER
SPEC	SHEETS:	BX FRA	SR701-A00

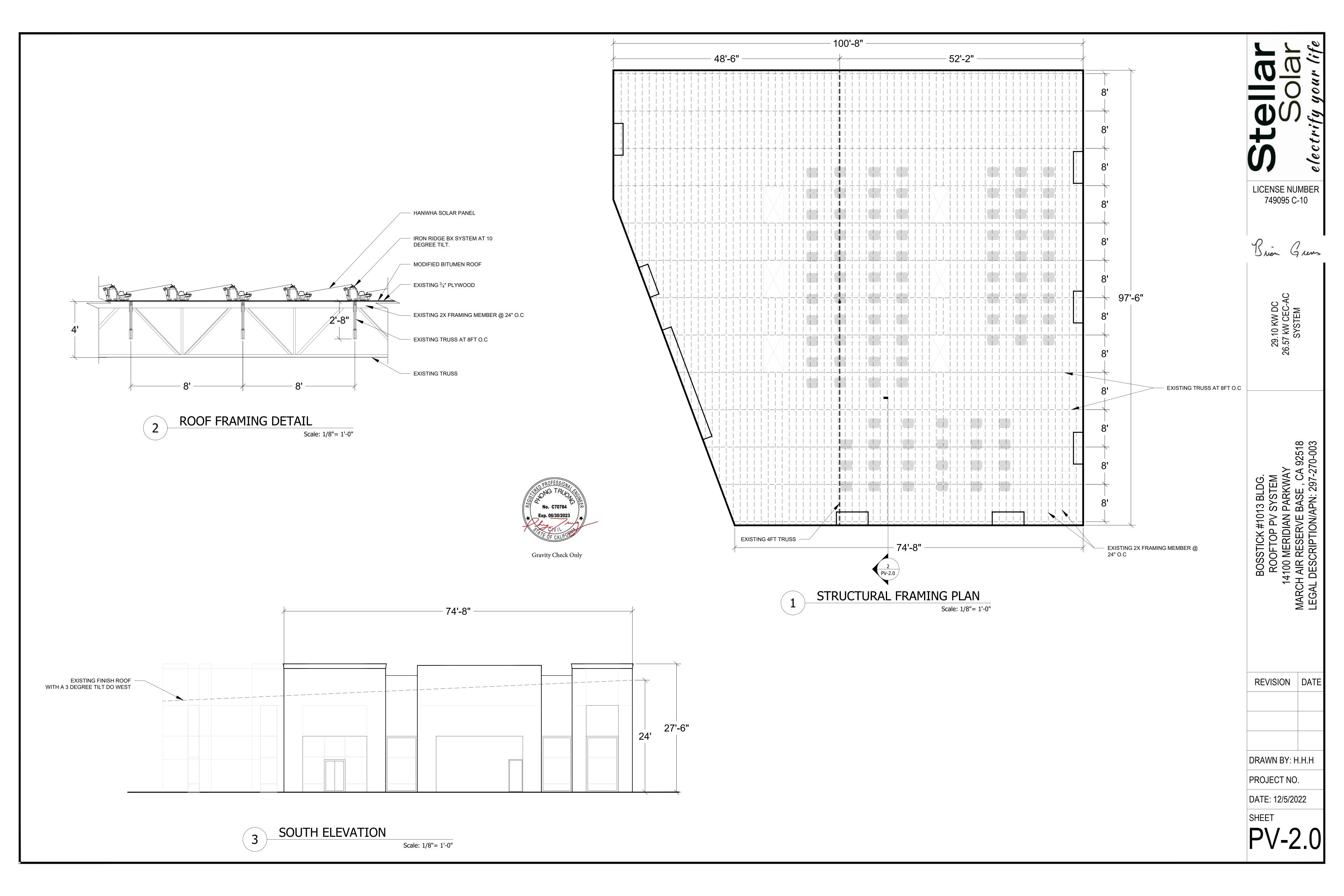
Jelogy LICENSE NUMBER 749095 C-10
29.10 KW DC 26.57 kW CEC-AC SYSTEM SYSTEM
29.10 k 26.57 kW SYS
BOSSTICK #1013 BLDG. ROOFTOP PV SYSTEM 14100 MERIDIAN PARKWAY MARCH AIR RESERVE BASE, CA 92518 LEGAL DESCRIPTION/APN: 297-270-003
REVISION DATE
DRAWN BY: H.H.H PROJECT NO. DATE: 12/5/2022 SHEET SR701

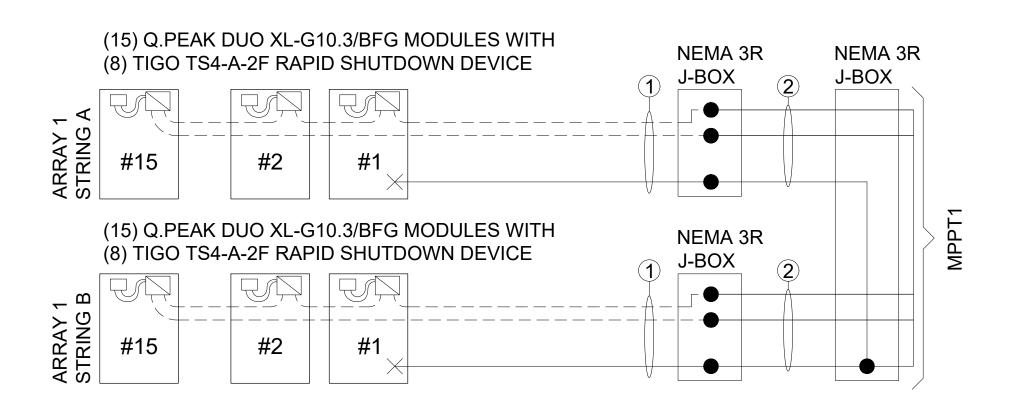


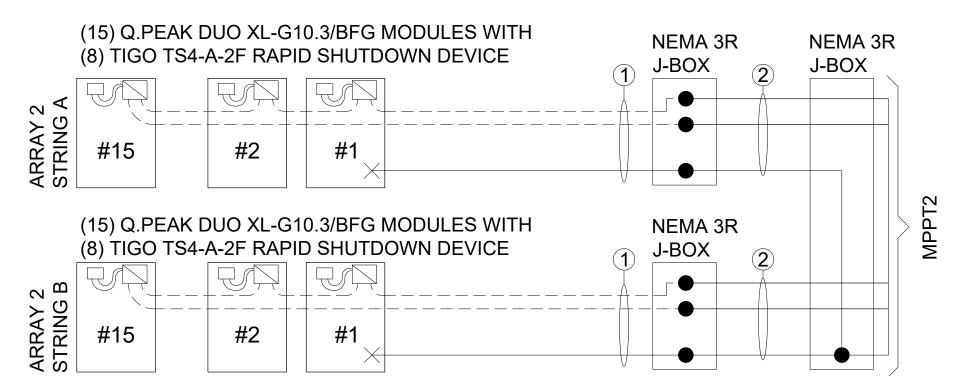
\_\_ IRONRIDGE

IRONRIDGE: 800-227-9523 28357 INDUSTRIAL BLVD., HAYWARD, CA 94545 www.lronRidge.com NOTES







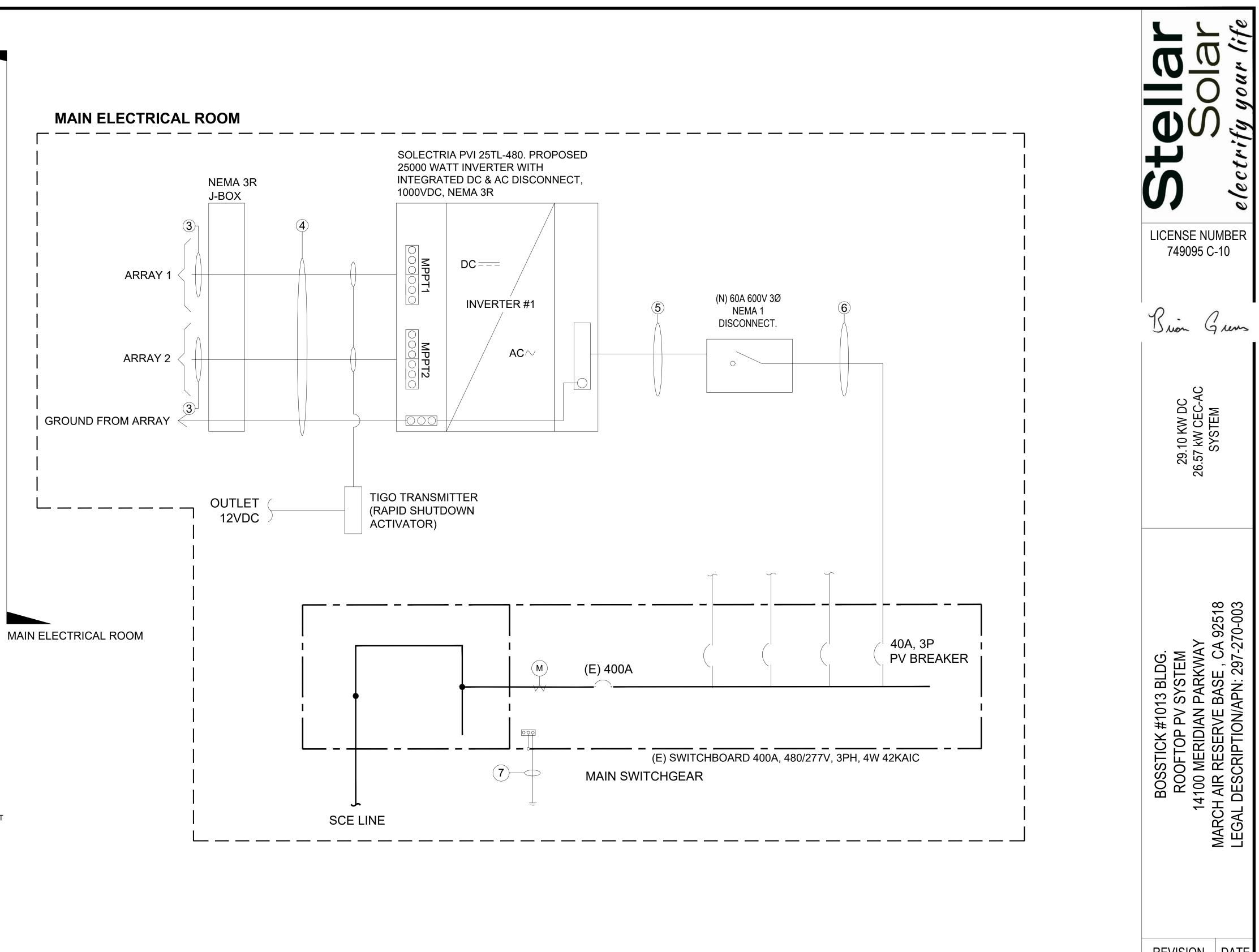


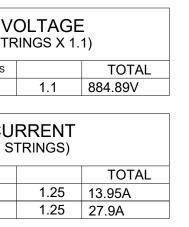
#### ELECTRICAL NOTES:

 ALL PLAQUES AND SIGNAGE REQUIRED BY THE 2016 EDITION OF CALIFORNIA ELECTRICAL CODE AND MARCH JOINT POWERS AUTHORITY AREA ELECTRICAL NEWSLETTER, WILL BE INSTALLED AS REQUIRED.

- ALTERNATE POWER SOURCE PLACARD SHALL BE PLASTIC WITH ENGRAVED LETTERING IN A CONTRASTING COLOR TO THE PLAQUE. THIS PLAQUE WILL BE ATTACHED BY POP RIVETS OR SCREWS OR OTHER APPROVED METHOD. IF EXPOSED TO SUNLIGHT, IT SHALL BE UV RESISTANT.
- EXPOSED NON-CURRENT CARRYING METAL PARTS OF MODULE FRAMES, EQUIPMENT, AND CONDUCTOR ENCLOSURES SHALL BE GROUNDED IN ACCORDANCE WITH 250.134 OR 250.136 (A) REGARDLESS OF VOLTAGE.
- IF THE EXISTING GROUNDING ELECTRODE SYSTEM CAN NOT BE VERIFIED OR IS ONLY METALLIC WATER PIPING, IT IS THE CONTRACTOR'S RESPONSIBILITY TO INSTALL A SUPPLEMENTAL GROUNDING ELECTRODE. • ACCESS TO DC WIRING WILL BE RESTRICTED TO QUALIFIED PERSONAL ONLY.
- NEW BACK FED PV BREAKER SHALL BE POSITIONED AT OPPOSITE END OF MAIN BREAKER PER CEC ART. 705.12
- BACK-FED CIRCUIT BREAKER SHALL COMPLY WITH CEC ART. 690.10 (E) AND 408.36 (D). PHOTOVOLTAIC DC CONDUCTORS ENTERING THE BUILDING SHALL BE INSTALLED IN A METALLIC RACEWAY AND SHALL BE IDENTIFIED EVERY 10 FEET WITH MINIMUM 3/8 INCH HIGH WHITE LETTERING ON RED BACKGROUND READING: "WARNING: PHOTOVOLTAIC POWER SOURCE".
- ALL MODULES WILL BE GROUNDED IN ACCORDANCE WITH CODE AND THE MANUFACTURER'S INSTALLATION INSTRUCTIONS.

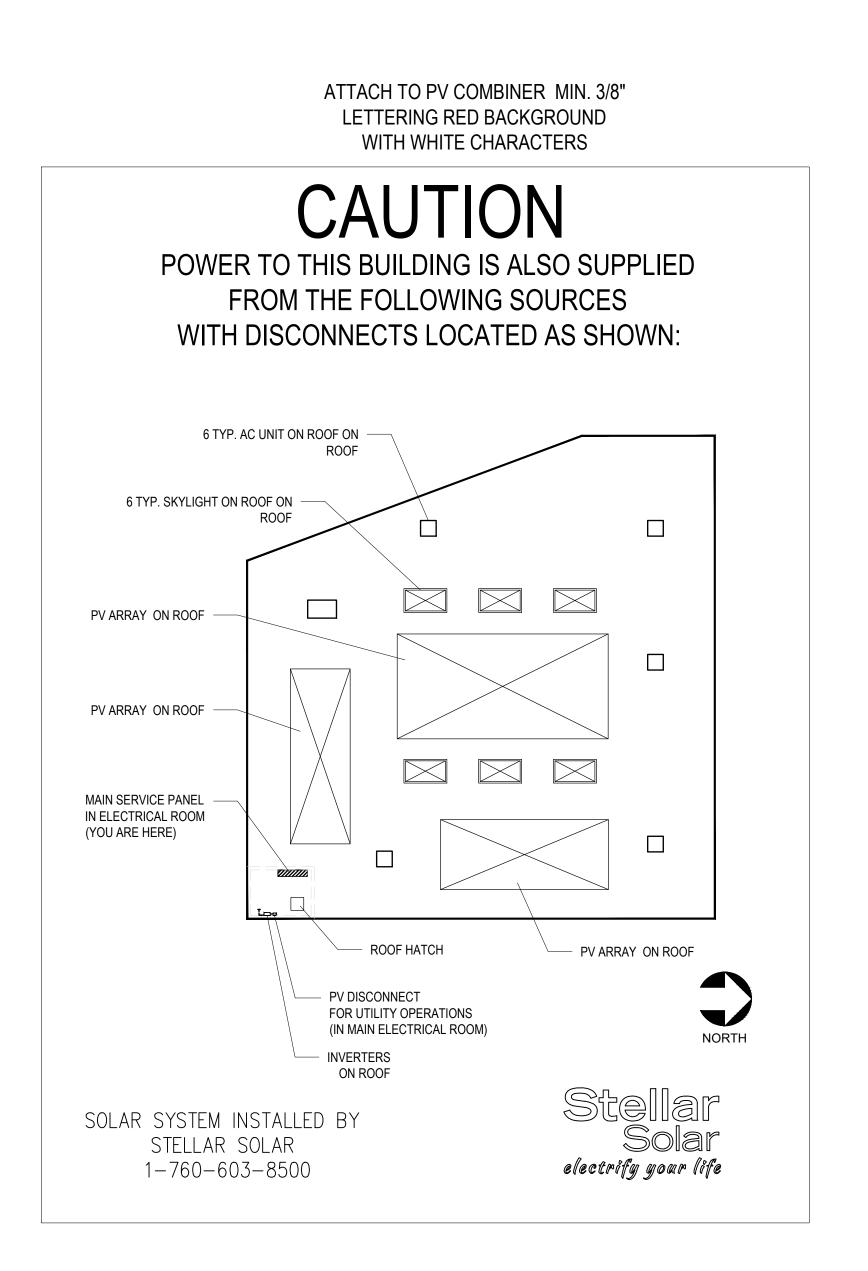
C	OPERATING CURRENT (IMP X # OF STRINGS)				RATING CIRCUIT V K # OF MODULE PER STF		
IMP	# OF STRINGS	TOTAL		VOC	# OF MODULES PER STRINGS		
11.16A	1	11.16A		53.63V	15	1.1	8
11.16A	2	22.32A					
	OPERATING VOLTAGE (VMP X # OF MODULE PER STRINGS)			S	HORT CIRCUIT CU (ISC X 1.25 X # OF S		
VMP	# OF MODULES PER STRINGS	TOTAL		ISC	# OF STRINGS		
45.63V	15	684.45V		11.16A	1	1.25	1
				11.16A	2	1.25	2





TAG	DESCRIPTION	PHASE	OPERATING VOLTAGE	OPERATING CURRENT	CONDUIT SIZE/TYPE		GROUNDED/NEUTRAL	GROUNDING	LENGTH	CONDUIT FILL	VOLTAGE DROP
1	PV ARRAY TO JUNCTION BOX (ON ROOF)	N/A	560-850Vdc	15 Adc	N/A	(2) #10 PV WIRE	N/A	(1) #10	50'	N/A	N/A
2	JUNCTION BOX TO JUNCTION BOX (ELECTRICAL ROOM)	N/A	560-850Vdc	15 Adc	1/2" E.M.T	(2) #10 PV WIRE	N/A	(1) #10	65'	35.7%	N/A
3	JUNCTION BOX TO JUNCTION BOX (ELECTRICAL ROOM)	N/A	560-850Vdc	15 Adc	3/4" E.M.T	(4) #10 PV WIRE	N/A	(1) #10	110'	36.8%	N/A
	JUNCTION BOX TO INVERTER (IN ELECTRICAL ROOM)	N/A	560-850Vdc	15 Adc	3/4" E.M.T	(4) #10 PV WIRE	N/A	(1) #10	2'	36.8%	N/A
4	SONCTION BOX TO INVERTER (IN ELECTRICAL ROOM)	11/7 (	560-850Vdc	15 Adc	3/4" E.M.T	(4) #10 PV WIRE	N/A	(1) #10	2'	36.8%	N/A
5	INVERTER TO PV DISCONNECT (IN ELECTRICAL ROOM)	3 P	480Vac	31 Aac	3/4" E.M.T	(3) #8 THWN-2 (CU)	(1) #10 THWN-2 (CU)	(1) #10 THWN-2 (CU)	5'	29%	0.04%
6	PV DISCONNECT TO MAIN SERVICE PANEL	3 P	480Vac	31 Aac	3/4" E.M.T	(3) #8 THWN-2 (CU)	(1) #10 THWN-2 (CU)	(1) #10 THWN-2 (CU)	20'	29%	0.17%
7	EXISTING GROUNDING SYSTEM	3 P	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

29.10 KW DC 26.57 kW CEC-AC SYSTEM							
BOSSTICK #1013 BLDG. ROOFTOP PV SYSTEM 14100 MERIDIAN PARKWAY	MAKCH AIK KESEKVE BASE , CA 92518 LEGAL DESCRIPTION/APN: 297-270-003						
REVISION	DATE						
DRAWN BY: H							
PROJECT NO DATE: 12/5/20							
SHEET							
PV-3	3.0						



IMP: VMP. VOC: ISC:

ALL PLA

ATTACH TO DC DISCONNECT MIN. 1/4" LETTERING RED BACKGROUND WITH WHITE CHARACTERS		ATTACH TO ANY INTERNAL AND EXTERIOR CONDUIT WITH SOLAR CIRCUIT	ATTACH TO 1/4" LETTER
		CAUTION: SOLAR CIRCUIT	WITH V
: 684.45V 684.45V : 884.89V 884.89V	MPETE         A       B         MPF 11.16A       11.16A         MPF 684.45V       684.45V         MC 7884.89V       884.89V         MC 7884.89V       13.95A         MC 7884.89V       13.95A	ATTACH TO ANY INTERNAL AND EXTERIOR CONDUIT WITH DC CIRCUIT CAUTION: DC CIRCUIT ATTACH TO PV DISCONNECT SWITCH 690.14(C)(2) X2 PHOTOVOL TAIC AC DISCONNECT 690.12 PER 2016 CEC 690.56 9 (C) PHOTOVOL TAIC SYSTEM EQUIPPED WITH RAPID SHUTDOWN MITCH TO THE "OFF" POSITION TO SHUT DOWN NUTCH TO THE "OFF" POSITION TO SHUT DOWN	ELEC LINE AND ENERG THIS EL IS AL PHOTO CAUTION SYST ATTACH T MIN. 1/4" LETTE WITH WH V ELECTR THE DC CO PHOTOVO UNGROUNDED
AQUES TO BE:		CEC 690.56 (C)(3)	

RAPID SHUTDOWN

FOR SOLAR PV SYSTEM

PV J-BOX

1

PLACARDS & SIGNAGE BLDG K-L

Scale: N.T.S.

 RED BACKGROUND • WHITE LETTERING • MINIMUM 3/8" LETTER HEIGHT • ALL CAPITAL LETTERS • ARIAL OR SIMILAR FONT, NON-BOLD • REFLECTIVE, WEATHER **RESISTANT MATERIAL** SUITABLE FOR THE ENVIRONMENT.

MAIN SERVICE PANEL MIN. ERING RED BACKGROUND WHITE CHARACTERS

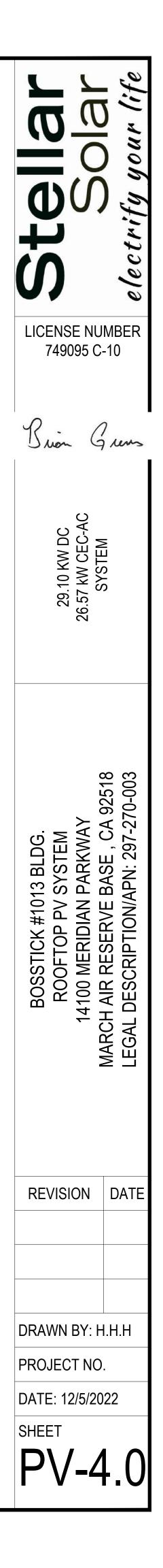
WARNING ECTRIC SHOCK HAZARD D LOAD TERMINALS MAY BE GIZED IN OPEN POSITION

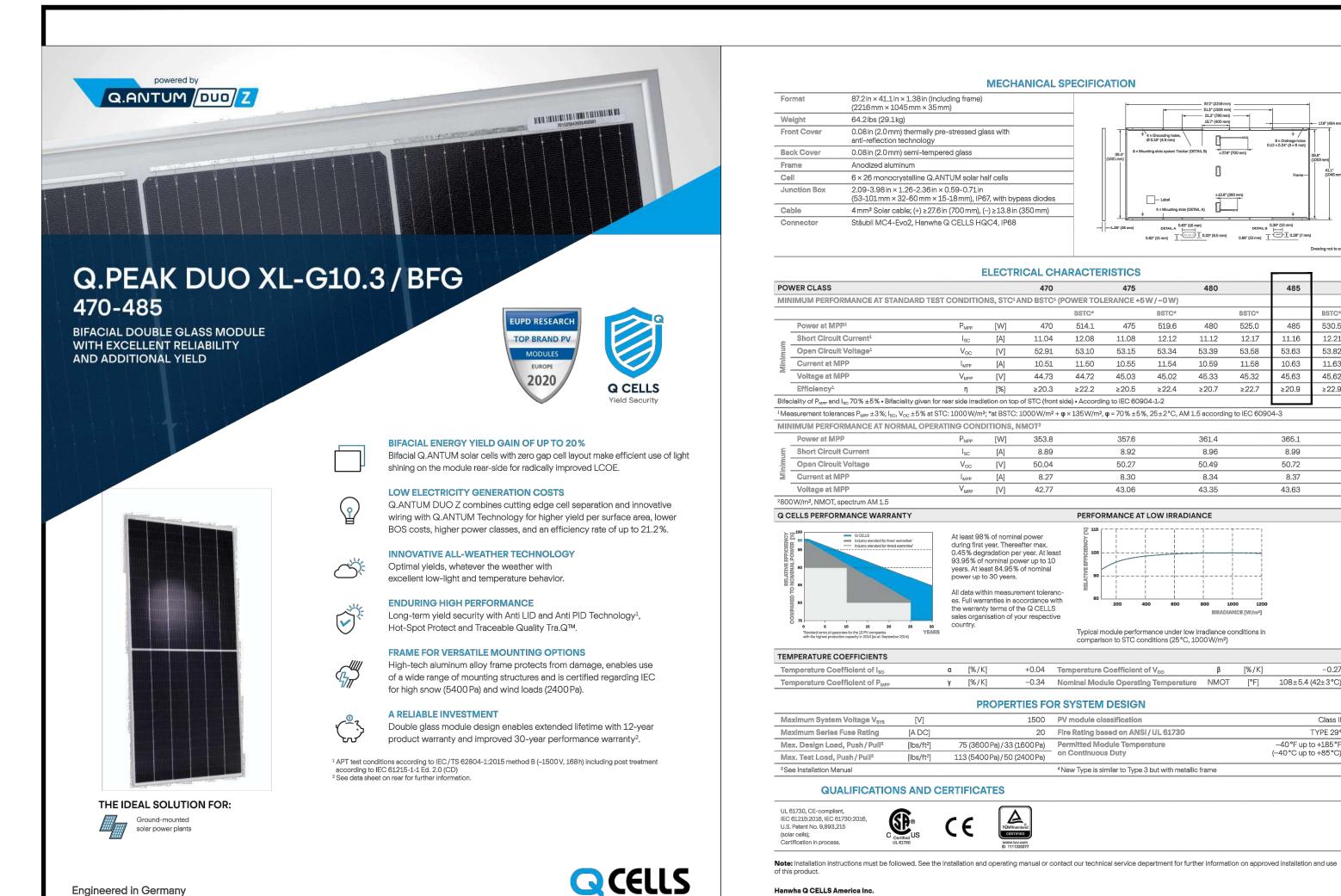
ELECTRICAL SYSTEM ALSO SERVED BY A TOVOLTAIC SYSTEM.

N: SOLAR ELECTRIC TEM CONNECTED

TO DC DISCONNECT ERING RED BACKGROUND HITE CHARACTERS

WARNING: RIC SHOCK HAZARD CONDUCTORS OF THIS VOLTAIC SYSTEM ARE D AND MAY BE ENERGIZED









## Tígo

### **RSS Transmitter with Pure** Signal technology

Rapid Shutdown Activator

The Tigo Rapid Shutdown System (RSS) Transmitter is a part of Module Level rapid shutdown solution when paired with Tigo Module Level Power Electronics (MLPE). The RSS Transmitter can link multiple RSS transmitters together, this enables Tigo's Pure Signal Technology, providing one coordinated keep-alive signal to the array.

Dimensions

#### **Features**

Engineered in Germany

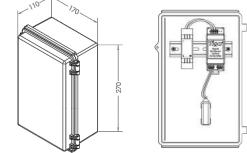
- PLC Communication
- Scalable from residential to large utility projects
- Patented Pure Signal Technology for multiple transmitters
- Configurable with one or two RSS Cores
- Bi-colored core ensures accurate signal directionality

#### <u>Benefits</u>

- Meets NEC 690.12 2014, 2017, and 2020 requirements
- Automatic or manual shutdown
- Reduce balance of system cost
- Easy and fast to install
- Compatible with majority of the inverters in the market

### 38 x 41.3 x 90.9 mm Dimensions (W x D x H) (1.5 x 1.63 x 3.58in) 41.3 -----Rapid Shutdown System Transmitter

Outdoor Enclosure (optional) 170 x 110 x 270 mm Dimensions (W x D x H) (6.69 x 4.33 x 10.63in)





FC curue Photovoltaic Rapid Shutdown System Equipment, QIJW

87.2 in × 41.1 in × 1.38 in (including frame)

(2216mm × 1045mm × 35mm)

anti-reflection technology

0.08 in (2.0 mm) semi-tempered glass

2.09-3.98 in × 1.26-2.36 in × 0.59-0.71 in

country.

α [%/K]

γ [%/K]

CE

12V<sub>DC</sub> (+/- 2%)

5.5W/0.85W

1500V 10

30

IP68, NEMA 4

Dual Core RSS Din Rail Transmitter Kit, 120/240VAC PS, Outdoor Enclosure kit

Description

or enclosur

1A

400 Spectrum Center Drive, Suite 1400, Irvine, CA 92618, USA | TEL +1 949 748 59 96 | EMAIL inquiry@us.q-cells.com | WEB www.q-cells.us

[A DC]

[lbs/ft<sup>2</sup>]

Hanwha Q CELLS America Inc.

Input

Average)

RSS Core

Max Current

String

Item #

490-00000-51

490-00000-52

492-00000-51

492-00000-52

493-00000-52

Max String Voltage

Environmental

Outdoor Enclosure

Transmitter Input Voltage

Transmitter Input Current

Power consumption (Max/

Max Number of Strings per Core

Max Supported PV Modules per

Operating Temperature Range

Temperature Range (optional)

Enclosure Rating (optional)

Ordering Options

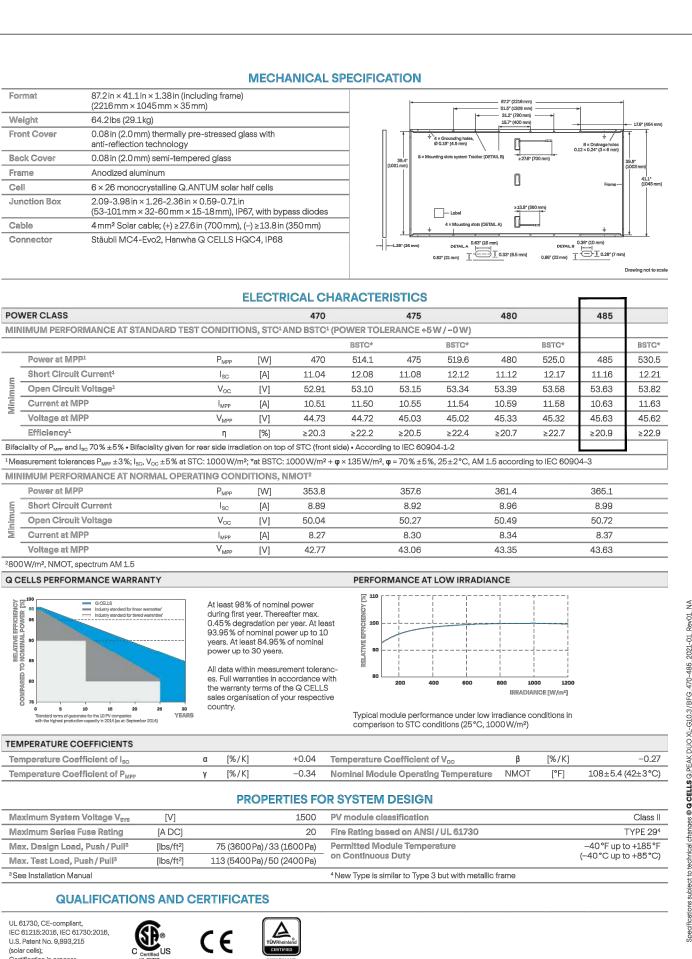
64.2 lbs (29.1 kg)

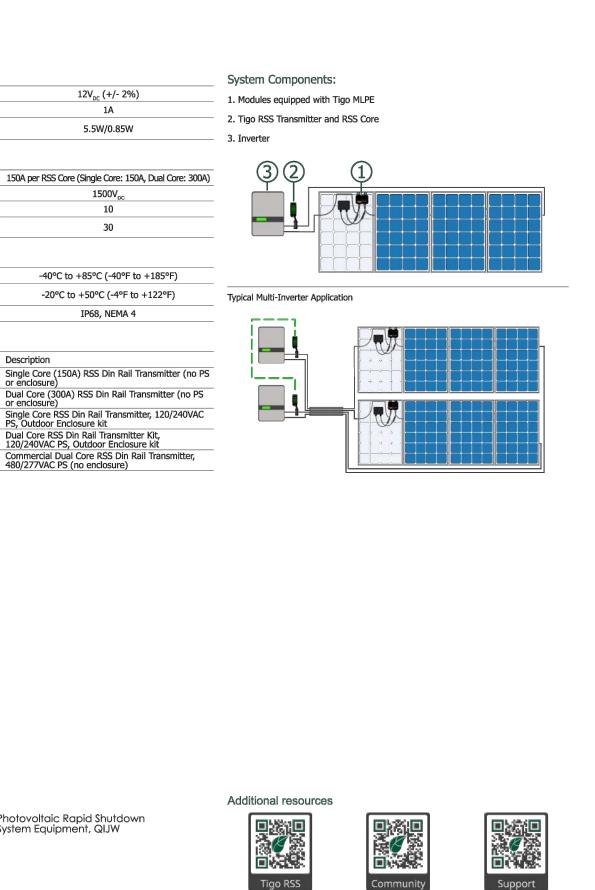
Anodized aluminum

Tigo

Tígo

tigoenergy.com PN: 002-00096-00 | Rev. 2022.6.28





tigoenergy.com PN: 002-00096-00 | Rev. 2022.6.28



## TS4-A-2F

Module-level PV Rapid Shutdown for two modules The TS4-A-2F (Fire Safety) is the advanced add-on rapid shutdown solution that brings smart module functionality to standard PV modules for higher reliability. Ensure safety by upgrading existing PV systems or by adding safety features to new installations.

Tígo

TS4-A-2F

138.4 x 139.7 x 22.9mm (5.4 x 5.5 x 0.9in)

590g (1.3lbs)

20A/25A

1400W

15A

1000W

e -

The TS4-A-2F complies with NEC 2017 & 2020 690.12 Rapid Shutdown specifications when installed with the Tigo RSS Transmitter or an inverter with built-in Tigo certified transmitter.

Quick Specs

Dimensions (W x H x D)

Max Current (Imp/Isc)\*

\*Use local codes/requirements to calculate maximum current.

Max Wattage

Weight

#### Features

- High input current rating Now rated for 20A Imp/ 25A Isc to better accommodate bifacial and high current modules
- Simple, Fast Installation Snap to standard PV module frame or remove clips for rack mounting
- PLC Signaling
   Rapid shutdown signaling over PV conductors
- Automatic Shutdown PV array enters rapid shutdown in the event of AC grid loss
- PVRSS Certified Tested and UL certified with hundreds of top inverter models



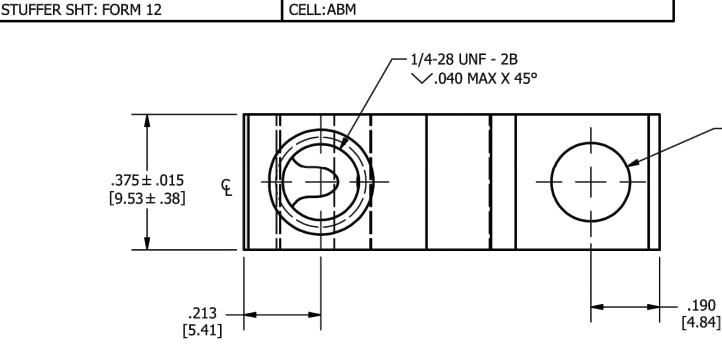
SURFACE AREA: 2.738 IN<sup>2</sup>

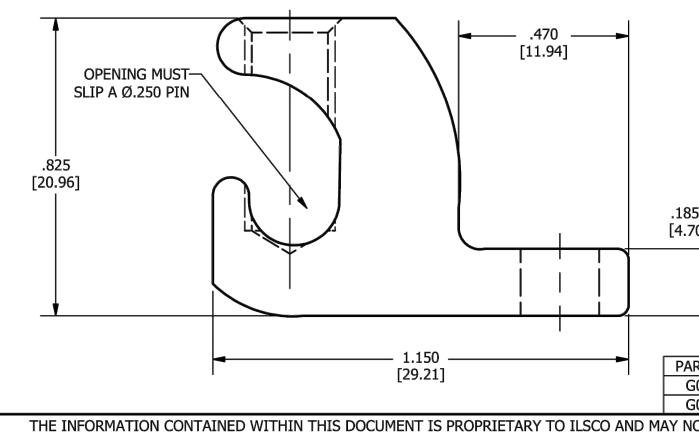
Tigo



tigoenergy.com PN: 002-00092-00 | Rev. 2.1 2022.11.3

SCREW: E1276 MATERIAL:COPPER, X0C7309 2 PL. 3 PL. CAT. NO.: PLATING: SEE CHART DRAWI MARKING: 🕕 GBL-4DB, 4-14, CU, DB 🕘 🚷 MASS:.052 LBS. DATE:





DEC.4.03 TRUE CL.4 AAS GOP77 SHEET 1 OF 1 VEX.LL SCALE 3:1 VEX.LL SCALE 3:1 VEX	r life
	ро
	5
	ife
	ctr
Image: Notice State of the	lec
Additional and a state of the state of	0
Y49035 C         With Name	MBER
	10
Discrete Million market Winderson 2000 (Provide Scotler Winderson 2000) (Provide Scotler Winderson 2000 (Provide Scotler Winder	
	)
Line::::::::::::::::::::::::::::::::::::	rens
Status       Bits & Bits	
Image: Contraction of the contraction o	
St. 005 St.	-
St. 005 St.	
St. 005 St.	) )
Image: Addition of the work section	
Tigo       tigoenergy.com         MERCHARGOTHENNEL PECHTON       DWG. NO.         G09777       DESCRIPTION         V2/2020 SIZE: A       DESCRIPTION         Cat #: GBL-4DBT       CORP.         e%.218 THRU       Cat #: GBL-4DBT         F1276       SCALE 1:1         F6.218 THRU       FEEVILIE         Cat #: GBL-4DBT         F1276       SCALE 1:1	
MISCUMES OTONINGS STATED DEC. 405 NEED 11 UT772020 ISE: A CORP.       DWG. NO. G0977 SHEET 1 OF 1 CORP.         BY: CLH SCALE: 3: UT772020 ISE: A CORP.       DESCRIPTION         CAL #: GBL-4DB GBL-4DBT       CAL #: GBL-4DBT         F:0.218 THRU       FBL276 SCALE 1: 1         F:0.218 THRU       FBL276 CORP.         F:0.005 CORP.       FBL276 CORP.         F:0.005 COR	
Ste 1:005       Marcel 1:01       G0977         MBY: CLH       SCALE: 3:1       GOP77         SHEET 1 OF 1       CORP.       CORP.         REV       DESCRIPTION       CORP.         CORP.       CORP.       CORP.         CORP.       CORP.       CORP.         REV       DESCRIPTION       Corp.         Corp.       Corp.       Corp.         Corp.	
BE: 4:303       MRCL: 4:05         VBY: CLH       SCALE: 3:1         PUTZY2007 SIZE: A       CORP.         CORP.       CORP.	
5±.005 70±.13]	
DRAWN BY: H	DATE
RT NUMBER PLATING MARKING DATE: 12/5/20	22
G0977A00B       BRIGHT DIP       GBL-4DB,4-14, CU, DB       G       G       SHEET         G0977A00T       EL-TIN       GBL-4DBT,4-14, CU, DB       G       G       SHEET       SHEET         OT BE DISCLOSED WITHOUT PRIOR WRITTEN CONSENT       FOR CONSENT       SHEET       SHEET       SHEET	

## **SOLECTRIA® PVI 25TL-480**

#### **3-PHASE TRANSFORMERLESS** COMMERCIAL STRING INVERTER

#### FEATURES

- 1000 VDC Certified to IEEE 1547-2018
- and UL 1741SB 2 MPPTs with 3 inputs each
- Integrated DC and AC disconnects
- AC terminals compatible with copper and aluminum conductors
- SunSpec Modbus compliant
- 15 90° installation
- orientation Remote diagnostics
- Built-in SunSpec compliant transmitter for Module-Level Rapid Shutdown
- UL Listed as PV Rapid Shutdown Systems with APsmart, Northern Electric Power (NEP), and Tigo
- Energy LED indicator light
- Yaskawa Connect Pro app for system visibility Compatible with Bifacial

#### PV Modules OPTIONS

- Web-based monitoring Shade cover
- 15° rooftop mounting rack \* Rooftop Mounting Kit includes support legs for a 15° tilt angle and shade

cover (not depicted)







Yaskawa Solectria Solar's PVI 25TL-480 is a state-of-the-art compact 3-phase string inverter, ideal for rooftops, carports and ground-mount PV systems.



Tech Brief

**BX** Chassis

YASKAWA SOLECTRIA SOLAR

#### PVI 25TL-480 DESIGN

The PVI 25TL-480 comes standard with AC and DC disconnects, two MPPTs, and a wiring box with six fuse positions for the positive conductors (compliant with the 2017 and 2020 NEC).

For rooftop PV systems, both wirebox models provide PV Rapid Shutdown System (PVRSS) compliance and include a built-in SunSpec compliant powerline communication transmitter. One wirebox model is Tigo Enhanced for rapid shutdown and the other wirebox model is compatible with APsmart rapid shutdown devices.

Yaskawa Solectria Solar also offers its Roof-Mounting Kit, to simplify installation on rooftops. Yaskawa Solectria Solar's family of PVI 25TL-480 inverter models provides flexibility and convenience unmatched in the industry



askawa Solectria Solar 1-978-683-9700 | Email: inverters@solectria.com | solectria.com Document No. FL.PVI25TL-480.01 | 08/02/2022 | © 2021 Yaskawa America, Inc.

### IRONRIDGE

wide bends to reduce point loading and

braced corners to increase rigidity.

#### Strong, Light, and Ready for Anything

The IronRidge BX System is designed to meet the needs of commercial solar-navigating complex roof layouts, while also handling the most extreme environmental conditions.

At the core of BX is the Chassis, a ballasted mount made of BASF Ultramid polyamides. They are exceptional for their high mechanical strength, rigidity and thermal stability (and are 100% recyclable).

Moreover, Ultramid polyamides afford good impact resistance even at low temperatures as well as UV protections for long life. Chassis come in 5° and 10° options and are backed by IronRidge's 25-year warranty.



ballast weathering.

### SOLECTRIA® PVI 25TL-480 TECHNICAL DATA

#### SPECIFICATIONS

PVI 25TL-480 Commerc	ial Transformerless String Inverter
	Maximum PV Power
	Maximum Input Voltage
	DC Voltage Ranges: Operating / Maximum Pow
DC Input	Start-up DC Input Voltage / Power
	Number of MPPT Trackers / Inputs
	Maximum Available PV Current (Isc x 1.25)
	DC Surge Protection
	Rated AC Real Power / Apparent Power / Output
	Nominal Output Voltage / Range
	Nominal Output Frequency / Range
	Power Factor
AC Output	Fault Current Contribution (1 Cycle RMS)
	Total Harmonic Distortion (THD) @Rated Load
	Grid Connection Type
	Maximum OCPD Device
	AC Surge Protection
	Peak Efficiency
Efficiency	CEC Efficiency
	Tare Loss
	Ambient Temperature Range
Environment	Storage Temperature Range
Environment	Relative Humidity (non-condensing)
	Operating Altitude
	Modbus Protocol
	SolrenView Web-Based Monitoring Service
Communications	Revenue Grade Metering
communications	Communication Interface
	Remote Firmware Upgrades
	Remote Diagnostics
	Certifications and Standards
Safety	Selectable Grid Standards
	Smart Grid Features
Warranty	Standard Limited Warranty
	Acoustic Noise Rating
	AC/DC Disconnect
	Mounting Angle
Mechanical	Dimensions (H x W x D)
	Weight
	Enclosure Rating and Finish

	Wirebox Fuse Configuration		6 Fused Positions (3 P
	Wirebox Versions	APsmart Transmitter Built-In	Inverter Model: PVI-25 (only positive polarity
versions	Tigo Transmitter Built-In	Inverter Model: PVI-25 (only positive polarity	

\* Please inquire at inverters@solectria.com for more information \* Yaskawa Solectria Solar does not supply optional fuse sizes Bluetooth® is a registered trademark of Bluetooth SIG, Inc. USA.



#### Inter-Row Spacing & Edge Clearances

5° Chassis **10° Chassis** 

With 10-13" inter-row spacing, BX provides an 8-10% increase in power density compared with other ballasted systems—that's a capacity increase of 20% in a typical 50kW system. The BX Chassis geometry also offers more than 5" of clearance in the 10-degree configuration and 8" in the 5-degree configuration, enabling the system to avoid drain domes, roof saddles, and conduit supports.

#### Flat Roof Attachment Anchors

BX Systems can be fully ballasted, fully anchored, or a hybrid optimized for the site

Combine BX with an IronRidge Flat Roof Attachment Kit to eliminate hundreds of pounds of required ballast weight and achieve configurations as light as 3 PSF.

The placement and fastening method can be optimized for existing roof structures, and pre-approved membranes are offered to maintain membrane roof warranties.

#### **Testing & Certification**

#### Design Assistant

Automated design software provides an accurate bill of materials, using a simple drag-and-draw interface to generate a complete system plan—also generate a ballast map showing the required ballast for each Chassis.

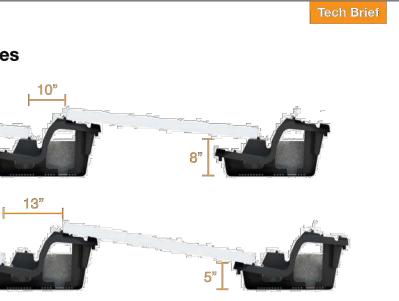
Permit Documentation Design Assistant project reports are backed with a ASCE/PE stamp and Commercial Services are also available to assist with more complex projects. Visit our website or contact an IronRidge sales represenative.

#### UL 2703

Certification for the BX System conforms to the latest requirements and includes 1) Mechanical, 2) Bonding, and 3) Class A Fire Ratings (without wind deflectors). Ninety percent of solar modules are fully supported.



Yaskawa Solectria Solar 1-978-683-9700 | Email: inverters@solectria.com | solectria.com Document No. FL.PVI25TL-480.01 | 08/02/2022 | © 2021 Yaskawa America, Inc.









RESIDENTIAL FEATURES

7600TL inverters

**RESIDENTIAL OPTIONS** 

Web-based monitoring

COMMERCIAL FEATURES

inverters

outlet needed

• Fully compatible with PVI 3800-

• Up to 32 devices per data logger

• Weather proof enclosure (Type 4X)

Fully compatible with PVI 14-36TL

Up to 32 devices per data logger

Powered by inverter, no power

SOLECTRIA.COM

COMMERCIAL OPTIONS

Web-based monitoring

Weather proof enclosure (Type 4X)

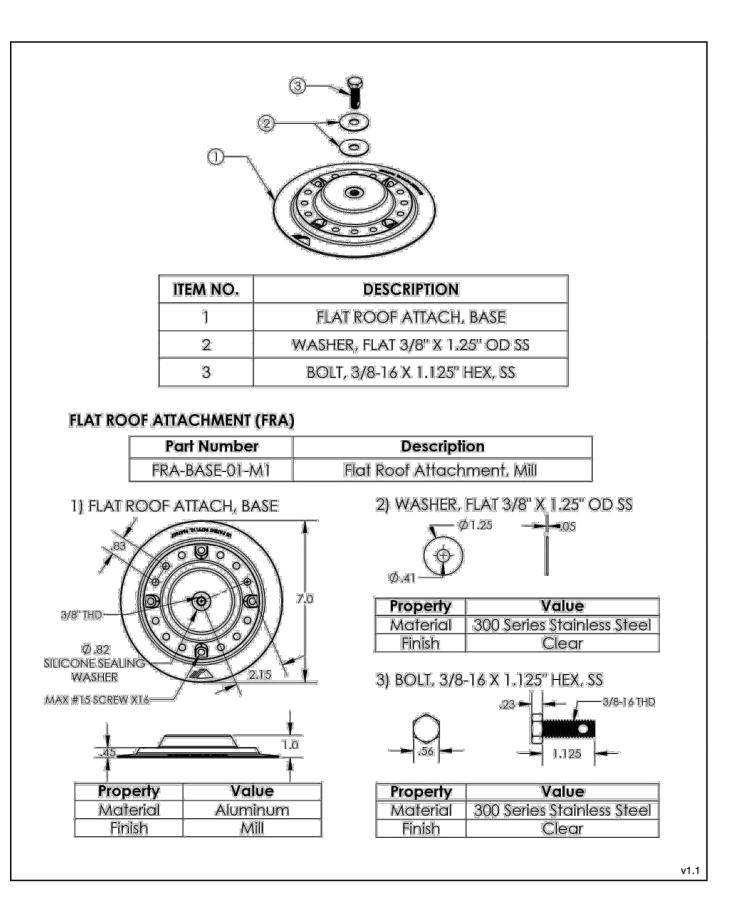
### WEB-BASED MONITORING DATA LOGGER

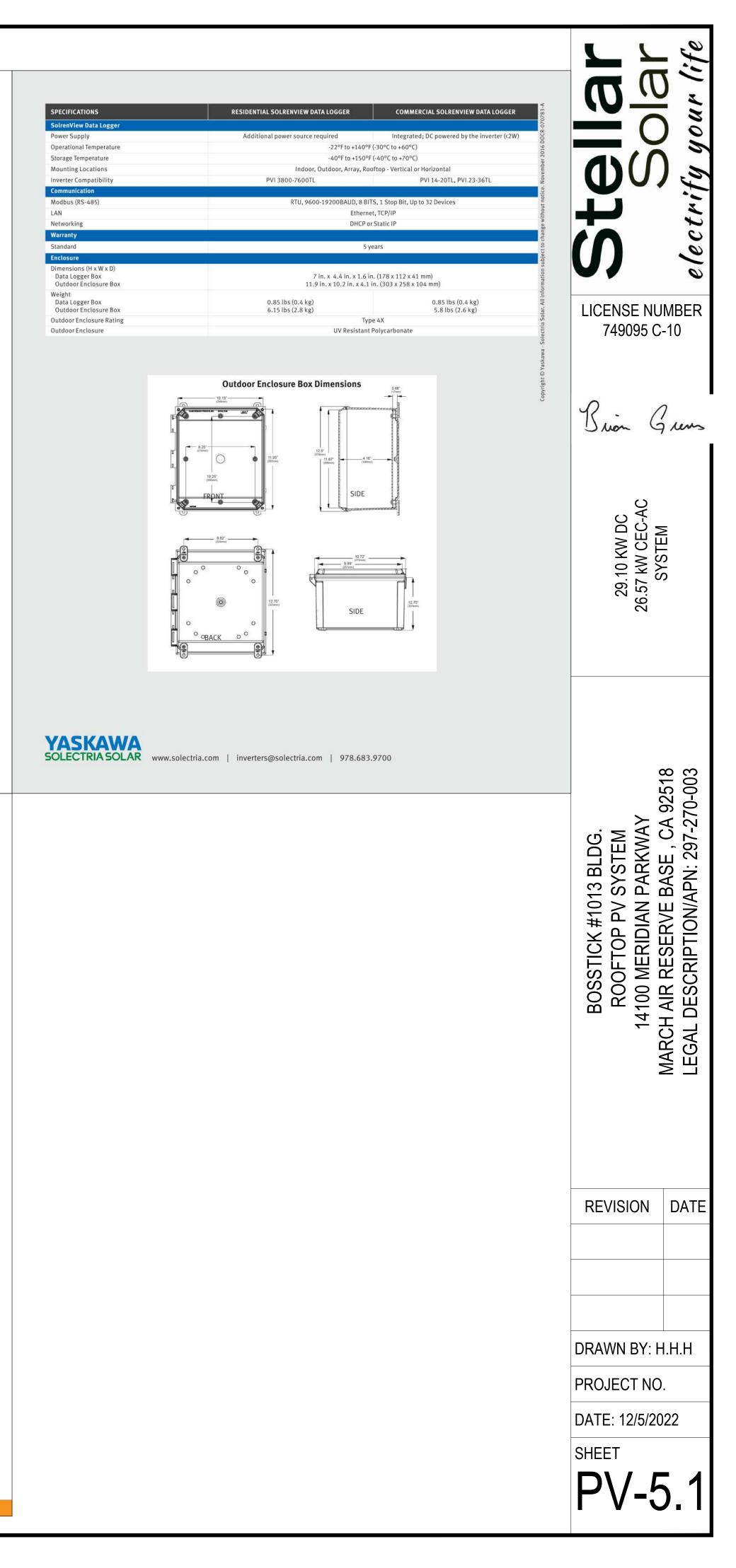
**YASKAWA** SOLECTRIA SOLAR

Yaskawa - Solectria Solar's SolrenView Data Logger offers customers a solution for system data collection and is fully compatible with PVI 3800-7600TL & PVI 14-36TL. This solution provides performance data that can be monitored online when paired with the SolrenView Inverter Direct Monitoring package. The Data Logger is available as a Residential or Commercial solution. The Residential solution has the option of shipping pre-mounted in a weather tight enclosure allowing for installation flexibility and accessibility as a part of the PV system, while this is a standard feature of the Commercial Data Logger. The Commercial solution provides additional design flexibility as it is powered by the inverter using the supplied Modbus and power cable, eliminating the need to supply power to the logger in the field. Both SolrenView Data Logger solutions use the RS-485 Modbus protocol to communicate with devices connected in a daisy chain sequence. They allow up to 32 devices to be connected per data logger in each daisy chain.



### Flat Roof Attachment





#### RATINGS

#### UL 2703 LISTED



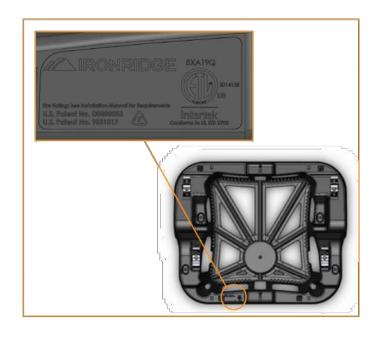
- Conforms to STD UL 2703 (2015) Standard for Safety First Edition: Mounting Systems, Mounting Devices, Clamping/ Retention Devices, and Ground Lugs for Use with Flat-Plate Photovoltaic Modules and Panels.
- Max Overcurrent Protective Device (OCPD) Rating: 25A
- Max Module Size: 24ft<sup>2</sup> Module Orientation: Landscape
- System Level Allowable Design Load Rating: 30 PSF downward, 20 PSF upward, 5 PSF lateral. Actual system structural capacity is defined by PE stamped project designs.
- CLASS A SYSTEM FIRE RATING PER UL 2703
- Any System Tilt with Modules Types 1, 2 & 3 on Low Slope Roofs (< 9.5 degrees)</li>
  Any module-to-roof gap is permitted with no perimeter guarding required. This rating is applicable with any IronRidge or 3rd party roof attachment and with or without concrete blocks in the Chassis.
- Class A rated PV systems can be installed on Class A, B, and C roofs without affecting the roof fire rating. STRUCTURAL CERTIFICATION
- Designed and Certified for Compliance with the International Building Code & ASCE/SEI-7
  Wind Tunnel Testing by I.F.I.

#### MARKINGS

© 2019 IBONBIDGE, INC. VERSION 1.3

2019 IBONRIDGE, INC. VERSION 1.3

Product markings are located on the top surface of the BX Chassis.



**BX SYSTEM INSTALLATION MANUAL** ·

#### MODULE COMPATIBILITY ET Solar modules with 35 and 40 mm frames ET-Y6ZZxxxAA Where "Y" can be P, L, or M; "ZZ" can be 60 or 72; "xxx" refers to the module power rating; and "AA" can be WB, WW, BB, WBG, WWG, WBAC, ET Solar WBCO, WWCO, WWBCO or BBAC Flex modules with 35 and 40 mm frames and model identifier FXS-xxxYY-ZZ; where "xxx" is the module power rating; "YY" can be BB or BC; and "ZZ" can be MAA1B, MAA1W, MAB1W, SAA1B, SAA1W, Flex SAC1B, SAC1W, SAD1W, SBA1B, SBA1W, SBC1B, or SBC1W GCL modules with 35 mm and 40 mm frames GCL-ab/YY xxx Where "a" can be M or P; "b" can be 3 or GCL 6; "YY" can be 60, 72, 72H, or 72DH; and xxx is the module power rating Gigawatt modules with 40 mm frames GWxxxYY Where "xxx" refers to the module power rating; and GigaWatt Solar "YY" can be either PB or MB Hansol modules with 35 and 40 frames HSxxxYY-zz Where "xxx" is the module power rating; "YY" can Hansol be PB, PD, PE, TB, TD, UB, UD, or UE; and "zz" can be AH2, AN1, AN3, AN4, HV1, or JH2 Hanwha Solar modules with 40 and 45 mm frames HSLaaP6-YY-1-xxxZ Where "aa" can be either 60 or Hanwha Solar 72; "YY" can be PA or PB; "xxx" refers to the module power rating; and "Z" can be blank or B Hanwha Q CELLS Modules with 32, 35, 40, and 42mm frames and model identifier aaYY-ZZ-xxx where "aa" can be Q. or B.; "YY" can be PLUS, PRO, PEAK, LINE PRO, LINE PLUS, PLUS DUO, or PEAK DUO; and "ZZ" can be G3, G3.1, G4, G4.1, L-G2, L-G2.3, L-G3, L-G3.1, L-G3y, L-G4, L-G4.2, L-G4y, LG4.2/TAA, BFR-G3, BLK-G3, BFR-G3.1, BLK-G3.1, BFR-G4, BFR-G4.1, BFR Hanwha Q CELLS G4.3, BLK-G4.1, G4/SC, G4.1/SC, G4.1/TAA, G4.1/MAX, BFR G4.1/TAA, BFR G4.1/MAX, BLK G4.1/ TAA, BLK G4.1/SC, EC-G4.4, G5, BLK-G5, L-G5, L-G5.1, L-G5.2, L-G5.2/H, L-G5.3, G6, G6+, BLK-G6, L-G6, L-G6.1, L-G6.2, L-G6.3, G7, BLK-G6+, BLK-G7, G7.2, G8, BLK-G8, G8+, BLK-G8+ L-G7, L-G7.1, L-G7.2, L-G7.3, L-G8, L-G8.1, L-G8.2, or L-G8.3; and "xxx" is the module power rating Heliene modules with 40 mm frames YYZZxxxA where "YY" can be 36, 60, 72, or 96; "ZZ" can be M, P, Heliene or MBLK; "xxx" is the module power rating; and "A" can be blank, HomePV, or Bifacial Hyundai modules with 33, 35, 40 and 50 mm frames HiY-SxxxZZ Where "Y" can be A, D, M or S; "xxx" Hyundai refers to the module power rating; and "ZZ" can be HG, HI, KI, MI, MF, MG, RI, RG, RG(BF), RG(BK), SG, TI, or TG Itek Modules with 40 mm frames IT-xxx-YY Where "xxx" is the module power rating; and "YY" can be Itek blank, HE, or SE, or SE72 JA Solar modules with 30, 35, 40 and 45 mm frames JAyyzz-bbww-xxx/aa Where "yy" can be M, P, M6 or P6; "zz" can be blank, (K), (L), (R), (V), (BK), (FA), (TG), (FA)(R), (L)(BK), (L)(TG), (R)(BK), (R)(TG), JA Solar (V)(BK), (BK)(TG), or (L)(BK)(TG); "bb" can be 48, 60, or 72; "ww" can be D09, S01, S02, S03, S06, S09, or S10; "xxx" is the module power rating; and "aa" can be BP, MP, SI, SC, PR, 3BB, 4BB, 4BB/RE, 5RR Jinko modules with 35 and 40 mm frames JKMYxxxZZ-aa Where "Y" can either be blank or S; "xxx" is Jinko the module power rating; "ZZ" can be P, PP, M; and "aa" can be blank, 60, 60B, 60H, 60L, 60BL, 60HL, 60HBL, 60-J4, 60B-J4, 60B-EP, 60(Plus), 60-V, 60-MX, 72, 72-V, 72H-V, 72L-V, 72HL-V or 72-MX Kyocera Modules with 46mm frames KYxxxZZ-AA Where "Y" can be D or U; "xxx" is the module power rating; "ZZ" can be blank, GX, or SX; and "AA" can be LPU, LFU, UPU, LPS, LPB, LFBS, LFBS, LFB2, Kyocera LPB2, 3AC, 3BC, 3FC, 4AC, 4BC, 4FC, 4UC, 5AC, 5BC, 5FC, 5UC, 6BC, 6FC, 8BC, 6MCA, or 6MPA LG modules with 35, 40 and 46 mm frames LGxxxYaZ-bb Where "xxx" is the module power rating; "Y" can be A, E, N, Q, S; "a" can be 1 or 2; "Z" can be C, K, T, or W; and "bb" can be A3, A5, B3, G3, G4, J5, K4, or V5 Longi modules with 30, 35 and 40 mm frames LRa-YYZZ-xxxM Where "a" can be 4 or 6; "YY" can be Longi blank, 60 or 72; "ZZ" can be blank, BK, BP, HV, PB, PE, PH, HBD, HPB, or HPH; "xxx" is the module power rating Mission Solar modules with 33 and 40 mm frames MSEbbxxxZZaa Where "bb" can be blank or 60A; Mission Solar "xxx" is the module power rating; "ZZ" can be blank, MM, SE, SO, SQ , SR, or TS; and "aa" can be blank, 1J, 4J, 4S, 5K, 5T, 60, 6J, 6S, 6W, 8K, 8T, or 9S Mitsubishi modules with 46 mm frames PV-MYYxxxZZ Where "YY" can be LE or JE; xxx is the module Mitsubishi power rating; and "ZZ" can be either HD, HD2, or FB

#### **BX SYSTEM INSTALLATION MANUAL - 1**

#### OVERVIEW

#### BX CHASSIS (5° & 10°)

BX Chassis is designed to clamp PV modules and secure them in place. Reference tabs are integrated to aid with aligning modules according to system layout. The Chassis is available in two SKUs: 5 and 10 degree tilt configurations. The Chassis is designed to accommodate 4 full size (16" x 8" x 4") or 8 half-size concrete ballast blocks (16" x 8" x 2") nominal dimensions.

Concrete ballast block must meet the following

- requirements: Manufactured per ASTM C 1491 (Standard
- specification for concrete pavers)
- Manufactured to resist freeze-thaw as required per
- local conditions Weight: 14-17 lbs +/- 2 lbs for half size and 28-34
- lbs +/- 2 lbs for full size
- Compressive Strength requirement: 3000 PSI min

#### MODULE CLAMPING

Top Clamps are module frame height specific and accommodate most common module sizes: 30mm, 32mm, 33mm, 35mm, 38mm, 40mm, 46mm.

#### ARRAY GROUNDING

Only one PV Module Grounding Lug is required per continuous array, regardless of array size. Use the IronRidge PV Module Grounding Lug (PV-LUG-01-A1).

Alternately, the following grounding lugs have been tested or evaluated for use with the BX system:

- Ilsco GBL-4DBT
- Amphenol HGLUI

### Burndy CL501TN, BGBS4

#### MLPE DEVICES (OPTIONAL)

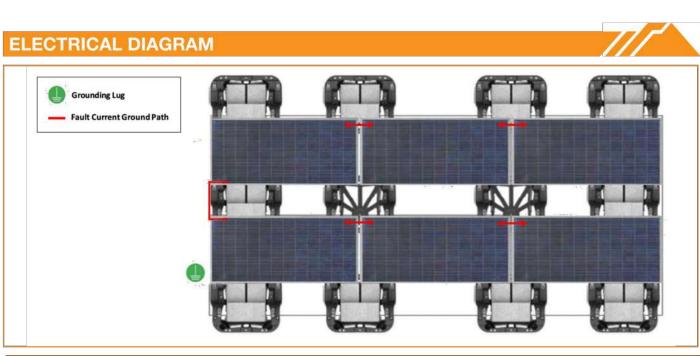
The following third party MLPE module mounting brackets have been tested or evaluated for use with the BX system:

 EcoFasten Rock-It Clip 2.0 Unirac MLPE Mount

♀ Refer to respective manufacturer for specific installation instructions of MLPE module mounting brackets.

#### WIRE MANAGEMENT

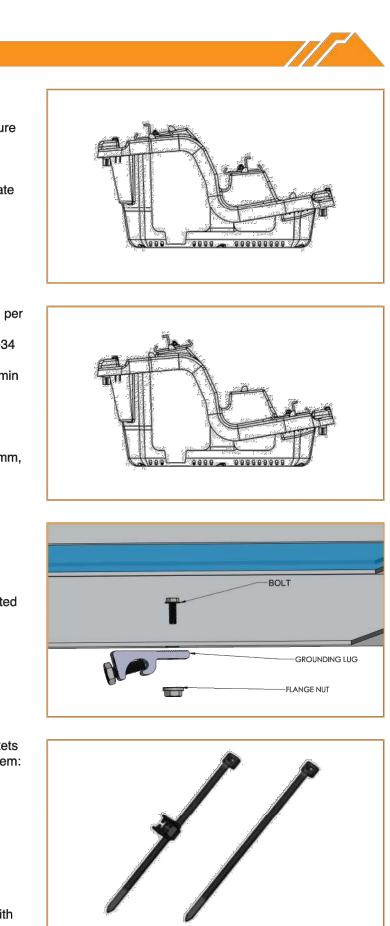
Optional Edge Clips and wire ties can be used to aid with wire management.



#### MODULE COMPATIBILITY

The BX System may be used to ground and/or mount a PV module complying with UL 2703 only when the specific module has been evaluated for grounding and/or mounting in compliance with the included instructions. Unless otherwise noted, "xxx" refers to the module power rating and both black and silver frames are included in the certification.

MAKE	MODELS
Amerisolar	Amerisolar modules with 35 and 40 mm frames AS-bYxxxZ Where "b" can be 5 or 6; "Y" can be M, P, M27, P27, M30, or P30; "xxx" is the module power rating; and "Z" can be blank, W or WB
Aptos	Aptos modules with 35 and 40 mm frames DNA-yy-zz23-xxx where "yy" can be 120 or 144; "zz" can be MF or BF; and ""xxx" is the module power rating
Astronergy Solar	Astronergy modules with 30, 35, 40, and 45 mm frames aaSMbbyyC/zz-xxx Where "aa" can be CH or A; "bb" can be 60, 66, or 72; "yy" can be blank, 10 or 12; "C" can M, P, M(BL), M-HC, M(BL)-HC, P-HC, M(DG), or M(DGT); "zz" can be blank, HV, F-B, or F-BH ; and "xxx" is the module power rating
ASUN	ASUN modules with 35 and 40 mm frames ASUN-xxx-YYZZ-aa Where "xxx" is the module power rating;" YY" can be 60 or 72; "ZZ" can be M,or MH5; and "aa" can be blank or BB
Auxin	Auxin modules with 40 mm frames AXN6y6zAxxx Where "y" can be M or P; "z" can be 08, 09, 10, 11, or 12; "A" can be F or T; and "xxx" is the module power rating
Axitec	Axitec Modules with 35 and 40 mm frames AC-xxxY/aaZZ Where "xxx" is the module power rating; "Y" can be M, P or MH; "aa" can be blank, 125- or 156-; and "ZZ" can be 54S, 60S, 72S, 120SB, or 144S
Boviet	Boviet modules with 35 and 40mm frames BVM66aaYY-xxxBB Where "aa" can be 9, 10 or 12; "YY" is N or P; "xxx" is the module power rating; and "BB" can be blank or L
BYD	BYD modules with 35 mm frames BYDxxxAY-ZZ Where "xxx" is the module power rating; "A" can be M6, P6, MH or PH; "Y" can be C or K; and "ZZ" can be 30 or 36
Canadian Solar	Canadian Solar modules with 30, 35 and 40 mm frames CSbY-xxxZ Where "b" can be 1, 3 or 6; "Y" can be H, K, P, U, V, W, or X; "xxx" refers to the module power rating; and "Z" can be M, P, MS, PX , M-SD, P-AG, P-SD, MB-AG, PB-AG, MS-AG, or MS-SD
CertainTeed	CertainTeed modules with 35 and 40 frames CTxxxYZZ-AA Where "xxx" is the module power rating; "Y" can be M, P or HC; "ZZ" can be 00,01, 10, or 11; and "AA" can be 01, 02, 03 or 04
CSUN	Csun modules with 35 and 40 mm frames YYxxx-zzAbb Where "YY" is CSUN or SST; xxx is the module power rating; "zz" is blank, 60, or 72; and "A" is blank, P or M; "bb" is blank, BB, BW, or ROOF
© 2019 IRONRIDGE, IN	NC. VERSION 1.3 BX SYSTEM INSTALLATION MANUAL - 1





A. MODULE-TO-MODULE BONDING

© 2019 IRONRIDGE, INC. VERSION 1.3

The 8" Bonding Jumper is an electrial bonding jumper that can be used for module to module bonding.

 $\Im$  New jumpers should be used if re-installation of jumper is  $\heartsuit$  Jumpers are installed on the bottom flange of modules.

Supports flange thicknesses 1.2mm to 3.1mm.

**BX SYSTEM INSTALLATION MANUAL - 8** 

#### 7. COMPLETE BONDING (CONTINUED)

#### **B. ROW-TO-ROW BONDING**

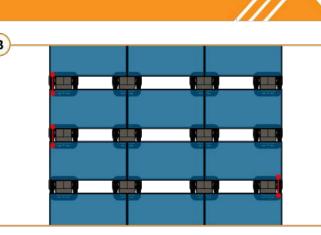
The 38" Bonding Jumper is an electrial bonding jumper that should be used for row to row bonding by securing Clips to inner flanges on long side of a module from each row, as shown. Tapping Clips into place may be required for modules with thicker flanges.

 $\Im$  The bonding does not need to take place on the same side of the array, so long as every row is bonded to the next row.

#### 8. PV MODULE GROUNDING LUGS

Ground each continuous array by securing a PV Module Grounding Lug to any module in the array.

 ${\bf \widehat{v}}$  Only one PV Module Grounding Lug is required per continuous array, regardless of array size. Reference module manufacturer's installation instructions for grounding location.



## GROUNDING LUG 20 in-lbs 30 in-lbs

#### STRING INVERTER MOUNTING KIT (OPTIONAL)

The String Inverter Mounting Kit creates a mounting platform for inverters on top of the BX Chassis.

#### A. CROSS RAILS

Cut provided rails to length, as needed. Install four Cage Nuts in the square holes on the edges of the Chassis. Then, install an L-Foot into each Cage Nut location using a 5/16" bolt tightened to 80 in-Ibs. Attach rails to L-Feet using 3/8" T-bolt bonding hardware tightened to 250 in-lbs.

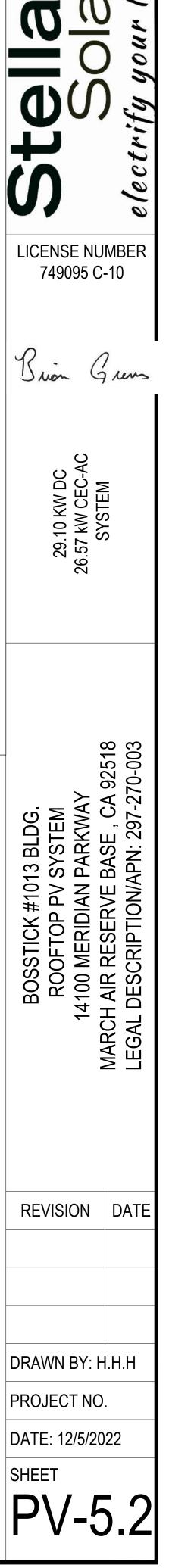
#### **B. TOP RAILS**

Assemble the top rails using four L-Feet on top of cross rails. Install four L-Feet on top of the cross rails using 1/4" T-bolt and nut tightened to 80 in-lbs. Attach top rails to L-Feet using 3/8" T-bolt Bonding Hardware tightened to 250 in-lbs. Space top rails according to the mounting requirements for the inverter being used.

019 IRONRIDGE, INC. VERSION 1.3









StellarSolar

#### Glint & Glare Assessment

#### Bosstick #1013 Building Rooftop PV system

17225, Rev. 02

Prepared for: StellarSolar

Prepared by:

Phoventus, Inc. 2401 Bristol Cir Building A# 103, Oakville, ON L6H 5S9

Revision	Date (YYYY-MM-DD)	Issue Reason	Elaborated By	Approved By
00	2023-01-18	Draft	SH/RC	RL
01	2023-01-19	Final	SH/RC	RL
02	2023-01-24	Owner's comments	SH/RC	RL
02	Date	Current Revision	Descriptive Only	Descriptive Only

**Disclaimer:** This report was prepared exclusively for StellarSolar (the Client) by Phoventus Inc. (Phoventus). The quality of information, conclusions and estimates contained herein is consistent with the level of effort involved in Phoventus' services and based on: i) information available at the time of preparation, ii) data supplied by outside sources and iii) the assumptions, conditions and qualifications set forth in this report. This report is intended to be used by the Client only, subject to the terms and conditions of its contract with Phoventus. Any use of or reliance upon this report by a third party is done at the sole risk of such third party and Phoventus hereby disclaims any responsibility or liability in connection therewith.



StellarSolar

#### **Table of Contents**

Exe	ecutive Su	ummary5	
1	Acronyms7		
2	Introduc	tion8	
3	Assessr	nent Methodology9	
3	.1 Inpu	ut Parameters	
	3.1.1	The PV Array10	
	3.1.2	2-Mile Flight Path Receptors13	
	3.1.3	ATCT Tower 17	
	3.1.4	Route Receptors	
3	.2 Ass	sumptions	
4	Glare Ar	nalysis Procedure	
5	Assessr	nent of Impact	
5	.1 Sur	nmary of Impact	
	5.1.1	GA Rwy 12 Base	
	5.1.2	GA Rwy 12 Downwind57	
	5.1.3	GA Rwy 30 Crosswind	
	5.1.4	GA Rwy 30 Downwind57	
	5.1.5	C KC Rwy 14 Base	
	5.1.6	C KC Rwy 14 Final	
	5.1.7	C KC Rwy 32 Crosswind	
	5.1.8	C KC Rwy 32 Upwind	
	5.1.9	OHead Rwy 14 Final58	
	5.1.10	OHead Rwy 14 Initial	
6	Conclus	ion59	
7	Referen	ces	
8	Individua	als Performing the Assessment61	
9	Forge Solar Results62		



StellarSolar

#### **List of Tables**

Table 1 – Summary of ocular impact on all receptors.	Б
Table 2 – Vertices defining Parcel 1 PV array area.	
Table 3– Vertices defining Parcel 2 PV array area.	
Table 3 – Vertices defining Parcel 3 PV array area.	
Table 5 – Vertices defining FP1 on GlareGauge.	
Table 6 – Vertices defining FP2 on GlareGauge.	
Table 7 – Vertices defining FP3 on GlareGauge.	
Table 8 – Vertices defining FP2 on GlareGauge.	
Table 9 – Vertices defining ATCT on GlareGauge.	
Table 10 – Vertices defining route receptor GA Rwy 12 Base	
Table 11 – Vertices defining route receptor GA Rwy 12 Crosswind	
Table 12 – Vertices defining route receptor GA Rwy 12 Downwind	
Table 13 – Vertices defining route receptor GA Rwy 12 Final	
Table 14 – Vertices defining route receptor GA Rwy 12 Upwind	
Table 15 – Vertices defining route receptor GA Rwy 30 Base	
Table 16 – Vertices defining route receptor GA Rwy 30 Crosswind	
Table 17 – Vertices defining route receptor GA Rwy 30 Downwind	
Table 18 – Vertices defining route receptor GA Rwy 30 Final	
Table 19 – Vertices defining route receptor GA Rwy 30 Upwind	
Table 20– Vertices defining route receptor C KC Rwy 14 Base	
Table 21 – Vertices defining route receptor C KC Rwy 14 crosswind	
Table 22 – Vertices defining route receptor C KC Rwy 14 Downwind	
Table 23 – Vertices defining route receptor C KC Rwy 14 Final	
Table 24 – Vertices defining route receptor C KC Rwy 14 Upwind	
Table 25 – Vertices defining route receptor OHead Rwy 14 Downwind	
Table 26 – Vertices defining route receptor OHead Rwy 14 Final	
Table 27 – Vertices defining route receptor OHead Rwy 14 Initial	
Table 28 – Vertices defining route receptor OHead Rwy 32 Downwind	
Table 29 – Vertices defining route receptor OHead Rwy 32 Final	
Table 30 – Vertices defining route receptor OHead Rwy 32 Initial	
Table 31 – Vertices defining route receptor GA Rwy 14 Base	
Table 32 – Vertices defining route receptor GA Rwy 14 Crosswind         Table 33 – Vertices defining route receptor GA Rwy 14 Downwind	
Table 33 – Vertices defining route receptor GA Rwy 14 Downwind	
Table 35 – Vertices defining route receptor GA Rwy 14 Upwind	
Table 36 – Vertices defining route receptor GA Rwy 32 Base	
Table 37 – Vertices defining route receptor GA Rwy 32 Crosswind	
Table 38 – Vertices defining route receptor GA Rwy 32 Downwind	
Table 39 – Vertices defining route receptor GA Rwy 32 Final	
Table 40 – Vertices defining route receptor GA Rwy 32 Upwind	
Table 41 – Vertices defining route receptor C KC Rwy 32 Base	
Table 42 – Vertices defining route receptor C KC Rwy 32 Crosswind	
Table 43 – Vertices defining route receptor C KC Rwy 32 Downwind	
Table 44 – Vertices defining route receptor C KC Rwy 32 Final	
Table 45 – Vertices defining route receptor C KC Rwy 32 Upwind	
Table 46 - Summary of GlareGauge ocular impact on all FPs, OPs, and Route Recepetors from o	
array	55



StellarSolar

#### List of Figures

Figure 1 – Study area for showing all Observational Points and Flight paths.	٥
Figure 2 – Array area plotted on GlareGauge	
Figure 2 –Array area plotted on GlareGauge	
Figure 3 –Array area plotted on GlareGauge	
Figure 5 – FP1 plotted on GlareGauge	
Figure 6 – FP2 plotted on GlareGauge	
Figure 7 – FP2 plotted on GlareGauge	
Figure 8 – FP2 plotted on GlareGauge	
Figure 9 – ATCT Tower plotted on GlareGauge.	
Figure 10 – Route receptor along GA Rwy 12 Base	18
Figure 11 – Route receptor along GA Rwy 12 Crosswind	19
Figure 12 – Route receptor along GA Rwy 12 Downwind	
Figure 13 – Route receptor along GA Rwy 12 Final.	21
Figure 14 – Route receptor along GA Rwy 12 Upwind	
Figure 15 – Route receptor along GA Rwy 30 Base	
Figure 16 – Route receptor along GA Rwy 30 Crosswind	24
Figure 17 – Route receptor along GA Rwy 30 Downwind	25
Figure 18 – Route receptor along GA Rwy 30 Final	
Figure 19 – Route receptor along GA Rwy 30 Upwind	
Figure 20– Route receptor along C KC Rwy 14 Base	28
Figure 21 – Route receptor along C KC Rwy 14 crosswind	29
Figure 22 – Route receptor along C KC Rwy 14 Downwind	30
Figure 23 – Route receptor along C KC Rwy 14 Final	31
Figure 24 – Route receptor along C KC Rwy 14 Upwind	32
Figure 25 – Route receptor along OHead Rwy 14 Downwind	33
Figure 26 – Route receptor along OHead Rwy 14 Final	
Figure 27 – Route receptor along OHead Rwy 14 Initial	35
Figure 28 – Route receptor along OHead Rwy 32 Downwind	
Figure 29 – Route receptor along OHead Rwy 32 Final	
Figure 30 – Route receptor along OHead Rwy 32 Initial	38
Figure 31 – Route receptor along GA Rwy 14 Base	
Figure 32 – Route receptor along GA Rwy 14 Crosswind	
Figure 33 – Route receptor along GA Rwy 14 Downwind	
Figure 34 – Route receptor along GA Rwy 14 Final	
Figure 35 – Route receptor along GA Rwy 14 Upwind	
Figure 36 – Route receptor along GA Rwy 32 Base	
Figure 37 – Route receptor along GA Rwy 32 Crosswind Figure 38 – Route receptor along GA Rwy 32 Downwind	45
Figure 39 – Route receptor along GA Rwy 32 Final Figure 40 – Route receptor along GA Rwy 32 Upwind	
Figure 41 – Route receptor along C KC Rwy 32 Base Figure 42 – Route receptor along C KC Rwy 32 Crosswind	
Figure 42 – Route receptor along C KC Rwy 32 Closswind	
Figure 44 – Route receptor along C KC Rwy 32 Final	
Figure 45 – Route receptor along C KC Rwy 32 Upwind	



StellarSolar

#### Glint & Glare Assessment, Rev. 02

#### **Executive Summary**

StellarSolar is evaluating a rooftop PV system (the Project) in California. StellarSolar engaged with Phoventus Inc. to conduct a Glint and Glare Assessment of the Bosstick #1013 Building rooftop PV system, this report. This assessment complies with the 2021 U.S. Federal Aviation Administration (FAA) Policy [2], specifically employing a Solar Glare Hazard Analysis Tool (SGHAT) for all instances of glare.

This assessment uses GlareGauge (a ForgeSolar software that calculates glint and glare impact) and considers all Flight Paths and Air Traffic Control Towers in the study area. The assessment considers the Project's visual impact on four flight paths ,one Air Traffic Control Tower and route receptors.

Table 1 presents a summary of the visual impacts on all receptors.

Component	Green glare (min)	Yellow glare (min)
Flight Path: FP1	0	0
Flight Path: FP2	0	0
Flight Path: FP3	0	0
Flight Path: FP4	0	0
1-ATCT	0	0
C KC Rwy 14 Base	2,470	0
C KC Rwy 14 Crosswind	0	0
C KC Rwy 14 Downwind	0	0
C KC Rwy 14 Final	13,828	0
C KC Rwy 14 Upwind	0	0
C KC Rwy 32 Base	0	0
C KC Rwy 32 Crosswind	2,493	0
C KC Rwy 32 Downwind	0	0
C KC Rwy 32 Final	0	0
C KC Rwy 32 Upwind	13,358	0
GA Rwy 12 Base	135	0
GA Rwy 12 Crosswind	0	0
GA Rwy 12 Downwind	12,795	0
GA Rwy 12 Final	0	0
GA Rwy 12 Upwind	0	0

Table 1 – Summary of ocular impact on all receptors.



StellarSolar

Component	Green glare (min)	Yellow glare (min)
GA Rwy 30 Base	0	0
GA Rwy 30 Crosswind	0	0
GA Rwy 30 Downwind	12,758	0
GA Rwy 30 Final	0	0
GA Rwy 30 Upwind	0	0
GA Rwy 14 Base	0	0
GA Rwy 14 Crosswind	0	0
GA Rwy 14 Downwind	0	0
GA Rwy 14 Final	0	0
GA Rwy 14 Upwind	0	0
GA Rwy 32 Base	0	0
GA Rwy 32 Crosswind	0	0
GA Rwy 32 Downwind	0	0
GA Rwy 32 Final	0	0
GA Rwy 32 Upwind	0	0
OHead Rwy 14 Downwind	0	0
OHead Rwy 14 Final	13,573	0
OHead Rwy 14 Initial	11,750	0
OHead Rwy 32 Downwind	0	0
OHead Rwy 32 Final	0	0
OHead Rwy 32 Initial	0	0

This assessment indicated that the Project is expected to create only green glare in minimal daily duration, restricted to certain seasons and times of the day. Considering the small duration of glare predicted at the Project receptors, Phoventus believes that no further investigations or mitigations are required to address glare impacts.



StellarSolar

### 1 Acronyms

ATCT	Air Traffic Control Tower
FAA	Federal Aviation Administration
FP	Flight Path
OP	Observation Point
PV	Photovoltaic
SGHAT	Solar Glare Hazard Analysis Tool



StellarSolar

# 2 Introduction

StellarSolar (the Client) engaged with Phoventus Inc. to conduct a Glint and Glare Assessment for the Bosstick #1013 Building rooftop PV system (the Project) in California.

This report aims to fulfill the FAA requirements concerning solar glare assessment. According to FAA Policy [2], the assessment report must:

- Describe the time, location, duration and intensity of solar glare predicted to be caused by the Project.
- Describe the software or tools used in the assessment, the assumptions and the input parameters (equipment-specific and environmental) utilized.
- Describe the qualification of the individual(s) performing the assessment.
- Identify the potential solar glare at Airports and Air traffic control towers.
- Identify the potential solar glare at any registered and known unregistered aerodromes within 4,000 metres from the boundary of the Project, including the potential effect on runways, flightpaths and air traffic control towers personnel.



StellarSolar

# 3 Assessment Methodology

We used FAA regulations and best practices to define the study area, Air traffic control (ATCT), flight paths (FP), and Route receptors for the Project.

The study area (scope) considers the Project's visual impact on two flight paths, Air Traffic Control and Route receptors at March air reserve Base.

This assessment uses GlareGauge; a ForgeSolar software specialized in calculating glint and glare impact. GlareGauge is approved by the FAA and clearly states whether the facility passes FAA regulations regarding the impact of glint and glare.

GlareGauge calculates the ocular impact over an entire calendar year in one-minute intervals, including all times between when the sun rises above the horizon until the sun sets below the horizon.



Figure 1 – Study area for showing all Observational Points and Flight paths.



StellarSolar

### Glint & Glare Assessment, Rev. 02

### 3.1 Input Parameters

The solar array, ATCT, flight paths (FPs), and Route Receptors were plotted using an interactive Google Map API and inputting site-specific data. The following sections provide details of the parameters specified for the analysis calculations in the GlareGauge software.

### 3.1.1 The PV Array

• PV Array 1

Array layout and site boundary were plotted using the interactive Google Map API and adjusted for accuracy. The boundary defines the reflective area encompassing the modules and is defined by the site layout to date.



Name: PV Array 1 Axis tracking: Fixed (no rotation) Tilt: 10.0 deg Orientation: 180.0 deg Rated power: -Panel material: Smooth glass with AR coating Vary reflectivity with sun position? Yes Correlate slope error with surface type? Yes Slope error: Correlate with material

Figure 2 – Array area plotted on GlareGauge.

Vertex	Latitude (deg)	Longitude (deg)	Ground elevation (ft)	Height above ground (ft)
1	33.914502	-117.291257	1546.32	23.95
2	33.914503	-117.291154	1545.98	23.95
3	33.914390	117.291158	1546.08	23.95
4	33.914392	-117.291259	1545.55	23.95

Table 2 – Vertices defining Parcel 1 PV array area.



### • PV Array 2

Array layout and site boundary were plotted using the interactive Google Map API and adjusted for accuracy. The boundary defines the reflective area encompassing the modules and is defined by the site layout to date.



Figure 3 – Array area plotted on GlareGauge.

Name: PV Array 2 Axis tracking: Fixed (no rotation) Tilt: 10.0 deg Orientation: 180.0 deg Rated power: -Panel material: Smooth glass with AR coating Vary reflectivity with sun position? Yes Correlate slope error with surface type? Yes Slope error: Correlate with material

Vertex	Latitude (deg)	Longitude (deg)	Ground elevation(ft)	Height above ground (ft)
1	33.914498	-117.291123	1545.75	23.95
2	33.914496	-117.291054	1545.24	23.95
3	33.914419	-117.291055	1545.22	23.95
4	33.914416	-117.291133	1545.80	23.95

Table 3– Vertices defining Parcel 2 PV array area.



StellarSolar

### PV Array 3 •

Array layout and site boundary were plotted using the interactive Google Map API and adjusted for accuracy. The boundary defines the reflective area encompassing the modules and is defined by the site layout to date.

Name: PV Array 3

Orientation: 180.0 deg

**Tilt:** 10.0 deg

Rated power: -

Yes

Axis tracking: Fixed (no rotation)

Slope error: Correlate with material

Panel material: Smooth glass with AR coating Vary reflectivity with sun position? Yes Correlate slope error with surface type?



Figure 4 – Array area plotted on GlareGauge.

Table 4 – Vertices defining Parcel 3 PV array area. Latitude Longitude Ground Height above Vertex (deg) (deg) elevation (ft) ground (ft) 1 33.914363 -117.291217 1546.10 23.95 2 -117.291099 1545.73 33.914365 23.95 3 33.914314 -117.291098 1546.02 23.95 4 33.914316 -117.291216 1546.07 23.95



StellarSolar

3.1.2 2-Mile Flight Path Receptors

The flight paths were plotted using the interactive Google Map API and adjusted for accuracy. The FP1 and FP2 are for the March Air Reserve Base.

• Flight Path 1



Figure 5 – FP1 plotted on GlareGauge

Name: FP1 Description: March air reserve base Threshold height: 50 ft Direction: 135.0° Glide slope: 3.0 deg Pilot view restricted: Yes Vertical view restriction: 30.0 deg Azimuthal view restriction: 50.0 deg

Number	Latitude (deg)	Longitude (deg)	Ground elevation (ft)	Height above ground (ft)	Total elevation (ft)
Threshold	33.890243	-117.260666	1517.92	50.00	1567.92
2-Mile	33.910687	-117.285323	1543.40	577.95	2121.35

### Table 5 – Vertices defining FP1 on GlareGauge.



StellarSolar

• Flight Path 2



Figure 6 – FP2 plotted on GlareGauge.

Name: FP2 Description: March air reserve Base Threshold height: 56 ft Direction: 149.0° Glide slope: 2.59° Pilot view restricted: Yes Vertical view restriction: 30.0 deg Azimuthal view restriction: 50.0 deg

Number	Latitude (deg)	Longitude (deg)	Ground elevation (m)	Height above ground (ft)	Total elevation (ft)
Threshold	33.896436	-117.270631	1536.71	56.00	1592.71
2-Mile	33.921219	-117.288592	1524.71	545.68	2070.39

Table 6 – Vertices defining FP2 on GlareGauge.



StellarSolar

• Flight Path 3



Figure 7 – FP2 plotted on GlareGauge.

Name: FP3 Description: March air reserve Base Threshold height: 50 ft Direction: 315.0° Glide slope: 3.0° Pilot view restricted: Yes Vertical view restriction: 30.0 deg Azimuthal view restriction: 50.0 deg

Number	Latitude (deg)	Longitude (deg)	Ground elevation (m)	Height above ground (ft)	Total elevation (ft)
Threshold	33.884351	-117.253579	1507.14	50.00	1557.14
2-Mile	33.863907	-117.228923	1469.94	640.63	2110.57



StellarSolar

• Flight Path 4



Figure 8 – FP2 plotted on GlareGauge.

Name: FP4 Description: March air reserve Base Threshold height: 59 ft Direction: 329.0° Glide slope: 3.0° Pilot view restricted: Yes Vertical view restriction: 30.0 deg Azimuthal view restriction: 50.0 deg

Table 8 –	Vertices defining FP2 on GlareGauge.
-----------	--------------------------------------

Number	Latitude (deg)	Longitude (deg)	Ground elevation (m)	Height above ground (ft)	Total elevation (ft)
Threshold	33.865319	-117.248518	1488.44	59.00	1547.44
2-Mile	33.840536	-117.230563	1460.06	640.81	2100.87



v. 02

StellarSolar

## 3.1.3 ATCT Tower



Figure 9 – ATCT Tower plotted on GlareGauge.

Table 9 –	Vertices defining ATCT	on GlareGauge.
-----------	------------------------	----------------

Name: 1-ATCT

Description: KRIV Tower

ſ	Number	Latitude (deg)	Longitude (deg)	Ground elevation (ft)	Height above ground (ft)
Ĩ	1-ATCT	33.891568	-117.251182	1510.14	118.01



StellarSolar

### 3.1.4 Route Receptors

• GA Rwy 12 Base

GA Rwy 12 Base is plotted using the interactive Google Map API and adjusted for accuracy.



Name: GA Rwy 12 Base Route type: Two-way Viewing angle: 50.0 deg

Figure 10 – Route receptor along GA Rwy 12 Base

Vertex	Latitude (deg)	Longitude (deg)	Ground elevation (ft)	Height above ground (ft)
1	33.910322	-117.264967	1500.14	1300.12
2	33.905592	-117.270622	1500.14	1300.12



StellarSolar

• GA Rwy 12 Crosswind

GA Rwy 12 Crosswind is plotted using the interactive Google Map API and adjusted for accuracy.



Name: GA Rwy 12 Crosswind Route type: Two-way Viewing angle: 50.0 deg

Figure 11 - Route receptor along GA Rwy 12 Crosswind

Vertex	Latitude (deg)	Longitude (deg)	Ground elevation (ft)	Height above ground (ft)
1	33.876081	-117.235119	1500.14	1300.12
2	33.880814	-117.229467	1500.14	1300.12



StellarSolar

• GA Rwy 12 Downwind

GA Rwy 12 Downwind is plotted using the interactive Google Map API and adjusted for accuracy.



Name: GA Rwy 12 Downwind Route type: Two-way Viewing angle: 50.0 deg

Figure 12 – Route receptor along GA Rwy 12 Downwind

Table 12 -	- Vertices defining	route receptor	GA Rwy 12 Downwind
------------	---------------------	----------------	--------------------

Vertex	Latitude (deg)	Longitude (deg)	Ground elevation (ft)	Height above ground (ft)
1	33.887897	-117.229483	1500.14	1300.12
2	33.910333	-117.256469	1500.14	1300.12

Name: GA Rwy 12 Final Route type: Two-way Viewing angle: 50.0 deg



Glint & Glare Assessment, Rev. 02

StellarSolar

- GA Rwy 12 Final
  - GA Rwy 12 Final is plotted using the interactive Google Map API and adjusted for accuracy.



Figure 13 – Route receptor along GA Rwy 12 Final

Table 13 - Ve	ertices defining	route receptor	GA Rwy 12 Final
---------------	------------------	----------------	-----------------

Vertex	Latitude (deg)	Longitude (deg)	Ground elevation (ft)	Height above ground (ft)
1	33.898508	-117.270608	1500.14	1300.12
2	33.890258	-117.260680	1500.14	0

Name: GA Rwy 12 Upwind Route type: Two-way Viewing angle: 50.0 deg



Glint & Glare Assessment, Rev. 02

StellarSolar

• GA Rwy 12 Upwind

GA Rwy 12 Upwind is plotted using the interactive Google Map API and adjusted for accuracy.



Figure 14 – Route receptor along GA Rwy 12 Upwind

Vertex	Latitude (deg)	Longitude (deg)	Ground elevation (ft)	Height above ground (ft)
1	33.884319	-117.253536	1500.14	0
2	33.876069	-117.243611	1500.14	1300.13



StellarSolar

• GA Rwy 30 Base

GA Rwy 30 Base is plotted using the interactive Google Map API and adjusted for accuracy.



Figure 15 – Route receptor along GA Rwy 30 Base

Name: GA Rwy 30 Base Route type: Two-way Viewing angle: 50.0 deg

Vertex	Latitude (deg)	Longitude (deg)	Ground elevation (ft)	Height above ground (ft)
1	33.880814	-117.229471	1500.14	1300.13
2	33.876081	-117.235119	1500.14	1300.13



StellarSolar

• GA Rwy 30 Crosswind

GA Rwy 30 Crosswind is plotted using the interactive Google Map API and adjusted for accuracy.



Name: GA Rwy 30 Crosswind Route type: Two-way Viewing angle: 50.0 deg

Figure 16 – Route receptor along GA Rwy 30 Crosswind

Vertex	Latitude (deg)	Longitude (deg)	Ground elevation (ft)	Height above ground (ft)
1	33.905592	-117.270622	1500.14	1300.13
2	33.910322	-117.264967	1500.14	1300.13

Name: GA Rwy 30 Downwind

Route type: Two-way Viewing angle: 50.0 deg



Glint & Glare Assessment, Rev. 02

StellarSolar

• GA Rwy 30 downwind

GA Rwy 30 Downwind is plotted using the interactive Google Map API and adjusted for accuracy.



Figure 17 - Route receptor along GA Rwy 30 Downwind

Table 17 - Vertices defining route receptor GA Rwy 30 Downwind

Vertex	Latitude (deg)	Longitude (deg)	Ground elevation (ft)	Height above ground (ft)
1	33.910333	-117.256469	1500.14	1300.13
2	33.887897	-117.229483	1500.14	1300.13

Name: GA Rwy 30 Final Route type: Two-way Viewing angle: 50.0 deg



Glint & Glare Assessment, Rev. 02

StellarSolar

- GA Rwy 30 Final
  - GA Rwy 30 Final is plotted using the interactive Google Map API and adjusted for accuracy.



Figure 18 – Route receptor along GA Rwy 30 Final

Table 18 – Vertices definin	g route receptor GA Rwy 30 Final
-----------------------------	----------------------------------

Vertex	Latitude (deg)	Longitude (deg)	Ground elevation (ft)	Height above ground (ft)
1	33.876069	-117.243611	1500.14	1300.13
2	33.884319	-117.253536	1500.14	0



StellarSolar

• GA Rwy 30 Upwind

GA Rwy 30 Upwind is plotted using the interactive Google Map API and adjusted for accuracy.



Name: GA Rwy 30 Upwind Route type: Two-way Viewing angle: 50.0 deg

Figure 19 – Route receptor along GA Rwy 30 Upwind

Vertex	Latitude (deg)	Longitude (deg)	Ground elevation (ft)	Height above ground (ft)
1	33.890258	-117.260681	1500.14	0
2	33.898508	-117.270608	1500.14	1300.12



StellarSolar

- C KC Rwy 14 Base
  - C KC Rwy 14 Base is plotted using the interactive Google Map API and adjusted for accuracy.



Name: C KC Rwy 14 Base Route type: Two-way Viewing angle: 50.0 deg

Figure 20– Route receptor along C KC Rwy 14 Base

Vertex	Latitude (deg)	Longitude (deg)	Ground elevation (ft)	Height above ground (ft)
1	33.922394	-117.325047	1500.14	1300.12
2	33.931244	-117.309014	1500.14	1300.12

Table 20– Vertices defining route receptor C KC Rwy 14 Base



StellarSolar

• C KC Rwy 14 crosswind

C KC Rwy 14 crosswind is plotted using the interactive Google Map API and adjusted for accuracy.



Name: C KC Rwy 14 crosswind Route type: Two-way Viewing angle: 50.0 deg

Figure 21 – Route receptor along C KC Rwy 14 crosswind

Table	21	- \	/ertic	ces d	efinir	ng ro	ute rece	otor C I	KC Rwy 14 crosswind
	_	-	-	_	-	-	-	-	

Vertex	Latitude (deg)	Longitude (deg)	Ground elevation (ft)	Height above ground (ft)
1	33.821961	-117.228367	1500.14	1500.14
2	33.813147	-117.244350	1500.14	1500.14



StellarSolar

• C KC Rwy 14 Downwind

C KC Rwy 14 Downwind is plotted using the interactive Google Map API and adjusted for accuracy.



Name: C KC Rwy 14 Downwind Route type: Two-way Viewing angle: 50.0 deg

Figure 22 – Route receptor along C KC Rwy 14 Downwind

Table 22 – Ve	rtices defining route	receptor C KC R	wy 14 Downwind
---------------	-----------------------	-----------------	----------------

Vertex	Latitude (deg)	Longitude (deg)	Ground elevation (ft)	Height above ground (ft)
1	33.819225	-117.262269	1500.14	1500.14
2	33.908131	-117.325528	1500.14	1500.14



StellarSolar

• C KC Rwy 14 Final

C KC Rwy 14 Final is plotted using the interactive Google Map API and adjusted for accuracy.



Name: C KC Rwy 14 Final Route type: Two-way Viewing angle: 50.0 deg

Figure 23 – Route receptor along C KC Rwy 14 Final

Vertex	Latitude (deg)	Longitude (deg)	Ground elevation (ft)	Height above ground (ft)
1	33.925156	-117.291061	1500.14	1500.14
2	33.896431	-117.270636	1500.14	0



StellarSolar

- C KC Rwy 14 Upwind
  - C KC Rwy 14 Upwind is plotted using the interactive Google Map API and adjusted for accuracy.



Name: C KC Rwy 14 Upwind Route type: Two-way Viewing angle: 50.0 deg

Figure 24 – Route receptor along C KC Rwy 14 Upwind

Table 24 - Vertices defining route	receptor C KC Rwy 14 Upwind
------------------------------------	-----------------------------

Vertex	Latitude (deg)	Longitude (deg)	Ground elevation (ft)	Height above ground (ft)
1	33.864994	-117.248281	1500.14	0
2	33.836269	-117.227869	1500.14	1500.14



StellarSolar

• OHead Rwy 14 Downwind

OHead Rwy 14 Downwind is plotted using the interactive Google Map API and adjusted for accuracy.



Name: OHead Rwy 14 Downwind Route type: Two-way Viewing angle: 50.0 deg

Figure 25 – Route receptor along OHead Rwy 14 Downwind

Vertex	Latitude (deg)	Longitude (deg)	Ground elevation (ft)	Height above ground (ft)
1	33.863564	-117.293808	1500.14	2000.20
2	33.908131	-117.325528	1500.14	2000.20

Table 25 – Vertices defining route receptor OHead Rwy 14 Downwind	Table 25 –	Vertices	defining	route rece	ptor OHead	Rwy 14	Downwind
---	------------	----------	----------	------------	------------	--------	----------



StellarSolar

- OHead Rwy 14 Final
  - OHead Rwy 14 Final is plotted using the interactive Google Map API and adjusted for accuracy.



Name: OHead Rwy 14 Final Route type: Two-way Viewing angle: 50.0 deg

Figure 26 – Route receptor along OHead Rwy 14 Final

Table 26 – Vei	rtices defining route	receptor OHead	Rwy 14 Final
----------------	-----------------------	----------------	--------------

Vertex	Latitude (deg)	Longitude (deg)	Ground elevation (ft)	Height above ground (ft)
1	33.925156	-117.291061	1500.14	2000.20
2	33.896431	-117.270636	1500.14	0



StellarSolar

• OHead Rwy 14 Initial

OHead Rwy 14 Initial is plotted using the interactive Google Map API and adjusted for accuracy.



Name OHead Rwy 14 Initial Route type: Two-way Viewing angle: 50.0 deg

Figure 27 – Route receptor along OHead Rwy 14 Initial

Table 27 – Vertices defining route	receptor OHead Rwy 14 Initial
------------------------------------	-------------------------------

Vertex	Latitude (deg)	Longitude (deg)	Ground elevation (ft)	Height above ground (ft)
1	33.968036	-117.322128	1500.14	2000.20
2	33.880706	-117.259453	1500.14	2000.20



StellarSolar

### • OHead Rwy 32 Downwind

OHead Rwy 32 Downwind is plotted using the interactive Google Map API and adjusted for accuracy.



Name: OHead Rwy 32 Downwind Route type: Two-way Viewing angle: 50.0 deg

Figure 28 - Route receptor along OHead Rwy 32 Downwind

Vertex	Latitude (deg)	Longitude (deg)	Ground elevation (ft)	Height above ground (ft)
1	33.863564	-117.293808	1500.14	2000.20
2	33.819225	-117.262269	1500.14	2000.20



StellarSolar

• OHead Rwy 32 Final

OHead Rwy 32 Final is plotted using the interactive Google Map API and adjusted for accuracy.



Name: OHead Rwy 32 Final Route type: Two-way Viewing angle: 50.0 deg

Figure 29 – Route receptor along OHead Rwy 32 Final

Vertex	Latitude (deg)	Longitude (deg)	Ground elevation (ft)	Height above ground (ft)
1	33.836269	-117.222787	1500.14	2000.20
2	33.864994	-117.248281	1500.14	0



StellarSolar

• OHead Rwy 32 Initial

OHead Rwy 32 Initial is plotted using the interactive Google Map API and adjusted for accuracy.



Name: OHead Rwy 32 Initial Route type: Two-way Viewing angle: 50.0 deg

Figure 30 – Route receptor along OHead Rwy 32 Initial

Table 30 – V	ertices defining route	receptor OHead Rwy 32 Initial
--------------	------------------------	-------------------------------

Vertex	Latitude (deg)	Longitude (deg)	Ground elevation (ft)	Height above ground (ft)
1	33.793375	-117.196878	2000.20	1300.12
2	33.880706	-117.270622	2000.20	1300.12



StellarSolar

• GA Rwy 14 Base

GA Rwy 14 Base is plotted using the interactive Google Map API and adjusted for accuracy.



Name: GA Rwy 14 Base Route type: Two-way Viewing angle: 50.0 deg

Figure 31 – Route receptor along GA Rwy 14 Base

Table 31 –	Vertices	defining	route	receptor	GA Rwy 1	4 Base
------------	----------	----------	-------	----------	----------	--------

Vertex	Latitude (deg)	Longitude (deg)	Ground elevation (ft)	Height above ground (ft)
1	33.904833	-117.292903	1500.14	1500.14
2	33.908242	-117.286017	1500.14	1500.14



StellarSolar

• GA Rwy 14 Crosswind

GA Rwy 14 Crosswind is plotted using the interactive Google Map API and adjusted for accuracy.



Name: GA Rwy 14 Crosswind Route type: Two-way Viewing angle: 50.0 deg

Figure 32 – Route receptor along GA Rwy 14 Crosswind

Vertex	Latitude (deg)	Longitude (deg)	Ground elevation (ft)	Height above ground (ft)
1	33.848078	-117.243236	1500.14	1500.14
2	33.844669	-117.250119	1500.14	1500.14



StellarSolar

• GA Rwy 14 Downwind

GA Rwy 14 Downwind is plotted using the interactive Google Map API and adjusted for accuracy.



Name: GA Rwy 14 Downwind Route type: Two-way Viewing angle: 50.0 deg

Figure 33 – Route receptor along GA Rwy 14 Downwind

Table 33 – Ver	rtices defining route receptor	GA Rwy 14 Downwind
----------------	--------------------------------	--------------------

Vertex	Latitude (deg)	Longitude (deg)	Ground elevation (ft)	Height above ground (ft)
1	33.846422	-117.258344	1500.14	1500.14
2	33.897972	-117.295011	1500.14	1500.14



StellarSolar

GA Rwy 14 Final

GA Rwy 14 Final is plotted using the interactive Google Map API and adjusted for accuracy.



Name: GA Rwy 14 Final Route type: Two-way Viewing angle: 50.0 deg

Figure 34 – Route receptor along GA Rwy 14 Final

Table 34 – Vertice	s defining route	receptor GA Rwy 14 Final
--------------------	------------------	--------------------------

Vertex	Latitude (deg)	Longitude (deg)	Ground elevation (ft)	Height above ground (ft)
1	33.906486	-117.277783	1500.14	1500.14
2	33.896431	-117.270636	1500.14	0



StellarSolar

• GA Rwy 14 Upwind

GA Rwy 14Upwind is plotted using the interactive Google Map API and adjusted for accuracy.



Name: GA Rwy 14 Upwind Route type: Two-way Viewing angle: 50.0 deg

Figure 35 – Route receptor along GA Rwy 14 Upwind

Table 35 –	Vertices defining	route receptor	GA Rwy 14 Upwind
------------	-------------------	----------------	------------------

Vertex	Latitude (deg)	Longitude (deg)	Ground elevation (ft)	Height above ground (ft)
1	33.864994	-117.248281	1500.14	0
2	33.854942	-117.241136	1500.14	1500.14



StellarSolar

• GA Rwy 32 Base GA Rwy 32 Base is plotted using the interactive Google Map API and adjusted for accuracy.



Name: GA Rwy 32 Base Route type: Two-way Viewing angle: 50.0 deg

Figure 36 – Route receptor along GA Rwy 32 Base

	Table 36 –	Vertices	defining	route	receptor	GA Rwy 32 Bas	se
--	------------	----------	----------	-------	----------	---------------	----

Vertex	Latitude (deg)	Longitude (deg)	Ground elevation (ft)	Height above ground (ft)
1	33.844669	-117.250119	1500.14	1500.14
2	33.848078	-117.243236	1500.14	1500.14



StellarSolar

• GA Rwy 32 Crosswind

GA Rwy 32 Crosswind is plotted using the interactive Google Map API and adjusted for accuracy.



Name: GA Rwy 32 Crosswind Route type: Two-way Viewing angle: 50.0 deg

Figure 37 – Route receptor along GA Rwy 32 Crosswind

Vertex	Latitude (deg)	Longitude (deg)	Ground elevation (ft)	Height above ground (ft)
1	33.908242	-117.286017	1500.14	1500.14
2	33.904833	-117.292903	1500.14	1500.14



StellarSolar

• GA Rwy 32 Downwind

GA Rwy 32 Downwind is plotted using the interactive Google Map API and adjusted for accuracy.



Name: GA Rwy 32 Downwind Route type: Two-way Viewing angle: 50.0 deg

Figure 38 – Route receptor along GA Rwy 32 Downwind

Table 38 –	Vertices	defining	route	receptor	GA Rwy	32 Downwind
------------	----------	----------	-------	----------	--------	-------------

Vertex	Latitude (deg)	Longitude (deg)	Ground elevation (ft)	Height above ground (ft)
1	33.897972	-117.295011	1500.14	1500.14
2	33.846422	-117.258344	1500.14	1500.14



StellarSolar

• GA Rwy 32 Final GA Rwy 32 Final is plotted using the interactive Google Map API and adjusted for accuracy.



Name: GA Rwy 32 Final Route type: Two-way Viewing angle: 50.0 deg

Figure 39 - Route receptor along GA Rwy 32 Final

Table 39 –	Vertices	defining	route	receptor	GA Rwy	32 Final
------------	----------	----------	-------	----------	--------	----------

Vertex	Latitude (deg)	Longitude (deg)	Ground elevation (ft)	Height above ground (ft)
1	33.854942	-117.241136	1500.14	1500.14
2	33.864994	-117.248281	1500.14	0



StellarSolar

• GA Rwy 32 Upwind GA Rwy 32 Upwind is plotted using the interactive Google Map API and adjusted for accuracy.



Name: GA Rwy 32 Upwind Route type: Two-way Viewing angle: 50.0 deg

Figure 40 – Route receptor along GA Rwy 32 Upwind

Table 40-	Vertices defining	route receptor	GA Rwy 32 Upwind
-----------	-------------------	----------------	------------------

Vertex	Latitude (deg)	Longitude (deg)	Ground elevation (ft)	Height above ground (ft)
1	33.896431	-117.270636	1500.14	0
2	33.906486	-117.277783	1500.14	1500.14



StellarSolar

- C KC Rwy 32 Base
  - C KC Rwy 32 Base is plotted using the interactive Google Map API and adjusted for accuracy.



Name: C KC Rwy 32 Base Route type: Two-way Viewing angle: 50.0 deg

Figure 41 – Route receptor along C KC Rwy 32 Base

Table 41 -	Vertices defining	route receptor	C KC Rwy 32 Base
------------	-------------------	----------------	------------------

Vertex	Latitude (deg)	Longitude (deg)	Ground elevation (ft)	Height above ground (ft)
1	33.813147	-117.244350	1500.14	1500.14
2	33.821961	-117.228367	1500.14	1500.14

Name: C KC Rwy 32 Crosswind

Route type: Two-way Viewing angle: 50.0 deg



Glint & Glare Assessment, Rev. 02

StellarSolar

• C KC Rwy 32 Crosswind

C KC Rwy 32 Crosswind is plotted using the interactive Google Map API and adjusted for accuracy.



Figure 42 – Route receptor along C KC Rwy 32 Crosswind

Table 42 – Vertices defining route r	receptor C KC Rwy 32 Crosswind
--------------------------------------	--------------------------------

Vertex	Latitude (deg)	Longitude (deg)	Ground elevation (ft)	Height above ground (ft)	
1	33.931244	-117.309014	1500.14	1500.14	
2	33.922394	-117.325047	1500.14	1500.14	



StellarSolar

• C KC Rwy 32 Downwind

C KC Rwy 32 Downwind is plotted using the interactive Google Map API and adjusted for accuracy.



Name: C KC Rwy 32 Downwind Route type: Two-way Viewing angle: 50.0 deg

Figure 43 – Route receptor along C KC Rwy 32 Downwind

Vertex	Latitude (deg)	0		Height above ground (ft)	
1	33.908131	-117.325528	1500.14	1500.14	
2	33.819225	-117.262269	1500.14	1500.14	



StellarSolar

- C KC Rwy 32 Final
  - C KC Rwy 32 Final is plotted using the interactive Google Map API and adjusted for accuracy.



Name: C KC Rwy 32 Final Route type: Two-way Viewing angle: 50.0 deg

Figure 44 – Route receptor along C KC Rwy 32 Final

Vertex	Latitude (deg)			Height above ground (ft)	
1	33.836269	-117.227869	1500.14	1500.14	
2	33.864994	-117.248281	1500.14	1500.14	



StellarSolar

- C KC Rwy 32 Upwind
  - C KC Rwy 32 Upwind I is plotted using the interactive Google Map API and adjusted for accuracy.



Name: C KC Rwy 32 Upwind Route type: Two-way Viewing angle: 50.0 deg

Figure 45 – Route receptor along C KC Rwy 32 Upwind

Vertex	Latitude (deg)	Longitude (deg)	Ground elevation (ft)	Height above ground (ft)	
1	33.896431	-117.270636	1500.14	0	
2	33.925156	-117.291061	1500.14	1500.14	

### 3.2 Assumptions

- 1. Times associated with glare are denoted in Standard time. For Daylight Savings, add one hour.
- 2. Glare analyses do not account for physical obstructions between reflectors and receptors. This includes buildings, tree cover, and geographic obstacles.
- 3. Detailed system geometry is not rigorously simulated.
- 4. The glare hazard determination relies on several approximations, including observer eye characteristics, angle of view, and typical blink response time. Actual values and results may vary.
- 5. Hazard zone boundaries shown in the Glare Hazard plot are an approximation and visual aid. Actual ocular impact outcomes encompass a continuous, not discrete, spectrum.
- 6. Glare locations displayed on receptor plots are approximate. Actual glare-spot locations may differ.
- 7. Glare vector plots are simplified representations of analysis data. Actual glare emanations and results may differ.
- 8. Glare locations displayed on receptor plots are approximate. Actual glare-spot locations may differ.



StellarSolar

## 4 Glare Analysis Procedure

The assessment results will be interpreted, analyzed, and reported to quantify and determine the significance of any ocular impact found. In the case of impact found, the potential requirement(s) for mitigation are discussed.

The Solar Glare Hazard Analysis Tool (SGHAT) User's Manual v 3.0 states that:

"If glare is found, the tool calculates the retinal irradiance and subtended source angle (size/distance) of the glare source to predict potential ocular hazards ranging from temporary after-image to retinal burn. The results are presented in a simple, easy-to-interpret plot that specifies when glare will occur throughout the year, with color codes indicating the potential ocular hazard. The tool can also predict relative energy production while evaluating alternative designs, layouts, and locations to identify configurations that maximize energy production while mitigating the impacts of glare."

The color codes used in this assessment are based on a red, yellow, and green structure that categorizes the level of danger to a person's eyes, as defined by [1]. The descriptions are as follows:

- Green: Low potential for temporary after-image,
- Yellow: Potential for temporary after-image, and
- Red: Potential for permanent eye damage.

For clarification, an after image can be described as a lingering image of glare in the field of view or flash blindness when observed prior to a typical blink response time.

The FAA requires the following criteria be met for solar energy systems on airport property:

- No glare of any kind for Air Traffic Control Tower(s) ("ATCT") at cab height; and
- Default glare analysis and observer eye characteristics are as follows:
  - Analysis time interval: 1 minute;
  - Ocular transmission coefficient: 0.5;
  - Pupil diameter: 0.002 meters;
  - Eye focal length: 0.017 meters; and
  - Sun subtended angle: 9.3 milliradians.

As set out by the FAA [2], the criteria listed above are inputs to this assessment.



StellarSolar

### **5** Assessment of Impact

This section presents the findings of the glint and glare assessment using the GlareGauge analysis software that forms the Solar Glare Hazard Analyses Tool as approved by the FAA. Results are informational only and open to interpretation.

### 5.1 Summary of Impact

Table 46 summarizes the Glare results.

Table 46 – Summary of GlareGauge ocular impact on all FPs, OPs, and Route Receptors from each PV array.

		,		
Component	Green glare (min)	Yellow glare (min)		
Flight Path: FP1	0	0		
Flight Path: FP2	0	0		
Flight Path: FP3	0	0		
Flight Path: FP4	0	0		
1-ATCT	0	0		
C KC Rwy 14 Base	2,470	0		
C KC Rwy 14 Crosswind	0	0		
C KC Rwy 14 Downwind	0	0		
C KC Rwy 14 Final	13,828	0		
C KC Rwy 14 Upwind	0	0		
C KC Rwy 32 Base	0	0		
C KC Rwy 32 Crosswind	2,493	0		
C KC Rwy 32 Downwind	0	0		
C KC Rwy 32 Final	0	0		
C KC Rwy 32 Upwind	13,358	0		
GA Rwy 12 Base	135	0		
GA Rwy 12 Crosswind	0	0		
GA Rwy 12 Downwind	12,795	0		
GA Rwy 12 Final	0	0		
GA Rwy 12 Upwind	0	0		
GA Rwy 30 Base	0	0		



StellarSolar

Component	Green glare (min)	Yellow glare (min)		
GA Rwy 30 Crosswind	0	0		
GA Rwy 30 Downwind	12,758	0		
GA Rwy 30 Final	0	0		
GA Rwy 30 Upwind	0	0		
GA Rwy 14 Base	0	0		
GA Rwy 14 Crosswind	0	0		
GA Rwy 14 Downwind	0	0		
GA Rwy 14 Final	0	0		
GA Rwy 14 Upwind	0	0		
GA Rwy 32 Base	0	0		
GA Rwy 32 Crosswind	0	0		
GA Rwy 32 Downwind	0	0		
GA Rwy 32 Final	0	0		
GA Rwy 32 Upwind	0	0		
OHead Rwy 14 Downwind	0	0		
OHead Rwy 14 Final	13,573	0		
OHead Rwy 14 Initial	11,750	0		
OHead Rwy 32 Downwind	0	0		
OHead Rwy 32 Final	0	0		
OHead Rwy 32 Initial	0	0		

The following subsections detail the glare found along the RRs C KC Rwy 14 Base, C KC Rwy 14 Final, C KC Rwy 32 Crosswind, C KC Rwy 32 Upwind, GA Rwy 12 Base, GA Rwy 12 Downwind, GA Rwy 30 Crosswind, GA Rwy 30 Downwind, OHead Rwy 14 Final, and OHead Rwy 14 Initial.

All the graphics can be found in Section 9.

#### Glint & Glare Assessment, Rev. 02

#### 5.1.1 GA Rwy 12 Base

GA Rwy 12 Base is predicted to receive approximately 135 minutes of green glare annually. The glare is seasonal and predicted to occur in April and August. Daily glare is predicted for the period from 17:00 to 18:00.

Route 1 is located on the southeast of the Project. At the time when glare was found, the sun was setting to the northwest of the route, directly in line with the Project. In this case, the glare is being originated from the same general direction as the sun for this period so that the glare impact may be eclipsed by the direct effects of the sun.

#### 5.1.2 GA Rwy 12 Downwind

Route 3 is predicted to receive approximately 12,795 minutes of green glare per year. The glare is predicted to occur from April to September. Daily glare is predicted for the period 17:30 to 18:00. Less than 30 minutes of glare per day is expected during these periods.

Route 3 is located on the southeast of the Project. At the time when glare was found, the sun was setting to the northwest of the route, directly in line with the Project. In this case, the glare is being originated from the same general direction as the sun for this period so that the glare impact may be eclipsed by the direct effects of the sun.

#### 5.1.3 GA Rwy 30 Crosswind

GA Rwy Crosswind is predicted to receive approximately 133 minutes of green glare per year. The glare is predicted to occur in Mid-April and September. Daily glare is predicted for the period 17:30 to 18:00. Less than 20 minutes of glare per day is expected during these periods.

GA Rwy Crosswind is located on the southeast of the Project. At the time when glare was found, the sun was setting to the northwest of the route, directly in line with the Project. In this case, the glare is being originated from the same general direction as the sun for this period so that the glare impact may be eclipsed by the direct effects of the sun.

#### 5.1.4 GA Rwy 30 Downwind

GA Rwy 30 Downwind is predicted to receive approximately 12,758 minutes of green glare per year. The glare is predicted to occur from April to September. Daily glare is predicted for the period 17:30 to 18:00. Less than 35 minutes of glare per day is expected during these periods.

GA Rwy 30 Downwind is located on the southeast of the Project. At the time when glare was found, the sun was setting to the northwest of the route, directly in line with the Project. In this case, the glare is being originated from the same general direction as the sun for this period so that the glare impact may be eclipsed by the direct effects of the sun.

#### 5.1.5 C KC Rwy 14 Base

C KC Rwy 14 Base is predicted to receive approximately 2,470 minutes of green glare per year. The glare is predicted to occur in February, October and November. Daily glare is predicted for the period 6:00 to 7:00. Less than 30 minutes of glare per day is expected during these periods.

C KC Rwy 14 Base is located on the north of the Project. As the Project is composed of fixed-tilt modules oriented to the south, it is unlikely that sunlight will be reflected towards the north. Therefore, effects on receptors located north of the Project are expected to be limited or non-existent. Approximations of the software's algorithms probably cause these results.



#### Glint & Glare Assessment, Rev. 02

### 5.1.6 C KC Rwy 14 Final

C KC Rwy 14 Final is predicted to receive approximately 13,282 minutes of green glare per year. The glare is predicted to occur from April to August. Daily glare is predicted for the period 16:00 to 17:00. Less than 35 minutes of glare per day is expected during these periods.

C KC Rwy 14 Final is located on the north of the Project. As the Project is composed of fixed-tilt modules oriented to the south, it is unlikely that sunlight will be reflected towards the north. Therefore, effects on receptors located north of the Project are expected to be limited or non-existent. Approximations of the software's algorithms probably cause these results.

#### 5.1.7 C KC Rwy 32 Crosswind

C KC Rwy 32 Crosswind is predicted to receive approximately 2,493 minutes of green glare per year. The glare is predicted to occur in February, October and November. Daily glare is predicted for the period 6:00 to 7:00. Less than 25 minutes of glare per day is expected during these periods.

C KC Rwy 32 Crosswind is located on the north of the Project. As the Project is composed of fixed-tilt modules oriented to the south, it is unlikely that sunlight will be reflected towards the north. Therefore, effects on receptors located north of the Project are expected to be limited or non-existent. Approximations of the software's algorithms probably cause these results.

#### 5.1.8 C KC Rwy 32 Upwind

C KC Rwy 32 Upwind is predicted to receive approximately 13,358 minutes of green glare per year. The glare is predicted to occur from April to August. Daily glare is predicted for the period 17:00 to 18:00. Less than 25 minutes of glare per day is expected during these periods.

C KC Rwy 32 Upwind is located on the southeast of the Project. At the time when glare was found, the sun was setting to the northwest of the route, directly in line with the Project. In this case, the glare is being originated from the same general direction as the sun for this period so that the glare impact may be eclipsed by the direct effects of the sun.

#### 5.1.9 OHead Rwy 14 Final

OHead Rwy 14 Final is predicted to receive approximately 13,573 minutes of green glare per year. The glare is predicted to occur from April to August. Daily glare is predicted for the period 17:00 to 18:00. Less than 25 minutes of glare per day is expected during these periods.

OHead Rwy 14 Final is located on the north of the Project. As the Project is composed of fixed-tilt modules oriented to the south, it is unlikely that sunlight will be reflected towards the north. Therefore, effects on receptors located north of the Project are expected to be limited or non-existent. Approximations of the software's algorithms probably cause these results.

#### 5.1.10 OHead Rwy 14 Initial

OHead Rwy 14 Initial is predicted to receive approximately 11,750 minutes of green glare per year. The glare is predicted to occur from April to August. Daily glare is predicted for the period 17:00 to 18:00. Less than 25 minutes of glare per day is expected during these periods.

OHead Rwy 14 Initial is located on the north of the Project. As the Project is composed of fixed-tilt modules oriented to the south, it is unlikely that sunlight will be reflected towards the north. Therefore, effects on receptors located north of the Project are expected to be limited or non-existent. Approximations of the software's algorithms probably cause these results.



# 6 Conclusion

This assessment indicated that the Project is expected to create only green glare in minimal daily duration, restricted to certain seasons and times of the day. Considering the small duration of the glare predicted at the Route Receptors, Phoventus believes no further investigations or mitigations are required to address glare impacts.

The site passes according to FAA policy.



StellarSolar

### 7 References

[1] Ho, C. K., Ghanbari, C. M., and Diver, R. B., 2011, "Methodology to Assess Potential Glint and Glare Hazards From Concentrating Solar Power Plants: Analytical Models and Experimental Validation", *ASME J. Sol. Energy Eng.*, 133.

[2] Federal Aviation Administration (2021). Final Policy, Review of Solar Energy System Projects on Federally Obligated Airports. Document Number 2021-09862.



StellarSolar

# 8 Individuals Performing the Assessment

- Sara Hazin, Junior Electrical Engineer
  - **Role:** Glare Analyst and Co-author
  - **Experience:** She has a bachelor's degree in Electrical Engineering and a Master's in Engineering. She has provided technical support for solar systems implementation in the USA, in which glare was considered.
- Ronaldo Chacon, Electrical Engineer
  - **Role:** Glare Analyst and Co-author
  - **Experience:** He has Bachelor's, Master's, and PhD in Electrical Engineering. He has provided technical support for solar systems implementation in the USA, in which glare was considered.
- Robert Lydan, Managing Director
  - **Role:** Technical Reviewer
  - Experience: He is an expert witness with experience in technical solar development in the USA. He has worked in technical oversight and technical review, or authorship of 5+ glare assessments.



# 9 Forge Solar Results



# FORGESOLAR GLARE ANALYSIS

Project: STELLAR

Site configuration: Untitled

Analysis conducted by Ronaldo Chacon (rchacon@phoventus.com) at 01:57 on 25 Jan, 2023.

### **U.S. FAA 2013 Policy Adherence**

The following table summarizes the policy adherence of the glare analysis based on the 2013 U.S. Federal Aviation Administration Interim Policy 78 FR 63276. This policy requires the following criteria be met for solar energy systems on airport property:

- No "yellow" glare (potential for after-image) for any flight path from threshold to 2 miles
- No glare of any kind for Air Traffic Control Tower(s) ("ATCT") at cab height.
- Default analysis and observer characteristics (see list below)

ForgeSolar does not represent or speak officially for the FAA and cannot approve or deny projects. Results are informational only.

COMPONENT	STATUS	DESCRIPTION
Analysis parameters	PASS	Analysis time interval and eye characteristics used are acceptable
2-mile flight path(s)	PASS	Flight path receptor(s) do not receive yellow glare
ATCT(s)	PASS	Receptor(s) marked as ATCT do not receive glare

Default glare analysis parameters and observer eye characteristics (for reference only):

- Analysis time interval: 1 minute
- Ocular transmission coefficient: 0.5
- Pupil diameter: 0.002 meters
- Eye focal length: 0.017 meters
- Sun subtended angle: 9.3 milliradians

FAA Policy 78 FR 63276 can be read at https://www.federalregister.gov/d/2013-24729



# FORGESOLAR GLARE ANALYSIS

Project: **STELLAR** Site configuration: **Untitled** 

Created 16 Jan, 2023 Updated 25 Jan, 2023 Time-step 1 minute Timezone offset UTC-8 Site ID 82500.14602 Category 10 to 100 kW DNI peaks at 1,000.0 W/m^2 Ocular transmission coefficient 0.5 Pupil diameter 0.002 m Eye focal length 0.017 m Sun subtended angle 9.3 mrad PV analysis methodology V2



#### Summary of Results Glare with low potential for temporary after-image predicted

PV Array	Tilt	Orient	Annual Green Glare		Annual Green Glare Annual Yellow Glare		Energy
	٥	0	min	hr	min	hr	kWh
PV array 1	10.0	180.0	19,232	320.5	0	0.0	-
PV array 2	10.0	180.0	19,045	317.4	0	0.0	-
PV array 3	10.0	180.0	19,147	319.1	0	0.0	-

Total annual glare received by each receptor; may include duplicate times of glare from multiple reflective surfaces.

Receptor	Annual Green Glare		Annual Yellow Glare	
	min	hr	min	hr
C KC Rwy 14 Base	2,470	41.2	0	0.0
C KC Rwy 14 Crosswind	0	0.0	0	0.0
C KC Rwy 14 Downwind	0	0.0	0	0.0
C KC Rwy 14 Final	13,282	221.4	0	0.0
C KC Rwy 14 Upwind	0	0.0	0	0.0
C KC Rwy 32 Base	0	0.0	0	0.0
C KC Rwy 32 Crosswind	2,493	41.5	0	0.0
C KC Rwy 32 Downwind	0	0.0	0	0.0
C KC Rwy 32 Final	0	0.0	0	0.0



Receptor	Annual Green Glare		Annual Yellow Glare	
	min	hr	min	hr
C KC Rwy 32 Upwind	13,358	222.6	0	0.0
GA Rwy 12 Base	135	2.2	0	0.0
GA Rwy 12 Crosswind	0	0.0	0	0.0
GA Rwy 12 Downwind	12,795	213.2	0	0.0
GA Rwy 12 Final	0	0.0	0	0.0
GA Rwy 12 Upwind	0	0.0	0	0.0
GA Rwy 30 Base	0	0.0	0	0.0
GA Rwy 30 Crosswind	133	2.2	0	0.0
GA Rwy 30 Downwind	12,758	212.6	0	0.0
GA Rwy 30 Final	0	0.0	0	0.0
GA Rwy 30 Upwind	0	0.0	0	0.0
FP 12	0	0.0	0	0.0
FP 14	0	0.0	0	0.0
FP 30	0	0.0	0	0.0
FP 32	0	0.0	0	0.0
1-ATCT	0	0.0	0	0.0



## **Component Data**

### **PV Arrays**

Name: PV array 1 Axis tracking: Fixed (no rotation) Tilt: 10.0° Orientation: 180.0° Rated power: -Panel material: Smooth glass with AR coating Reflectivity: Vary with sun Slope error: correlate with material



Vertex	Latitude (°)	Longitude (°)	Ground elevation (ft)	Height above ground (ft)	Total elevation (ft)
1	33.914502	-117.291257	1546.32	23.95	1570.27
2	33.914503	-117.291154	1545.98	23.95	1569.93
3	33.914390	-117.291158	1546.08	23.95	1570.03
4	33.914392	-117.291259	1545.55	23.95	1569.50

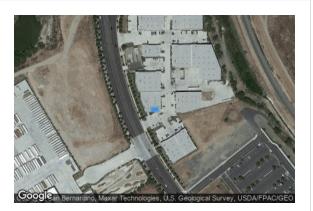
Name: PV array 2 Axis tracking: Fixed (no rotation) Tilt: 10.0° Orientation: 180.0° Rated power: -Panel material: Smooth glass with AR coating Reflectivity: Vary with sun Slope error: correlate with material



Vertex	Latitude (°)	Longitude (°)	Ground elevation (ft)	Height above ground (ft)	Total elevation (ft)
1	33.914498	-117.291123	1545.75	23.95	1569.70
2	33.914496	-117.291054	1545.24	23.95	1569.19
3	33.914419	-117.291055	1545.22	23.95	1569.17
4	33.914416	-117.291133	1545.80	23.95	1569.75



Name: PV array 3 Axis tracking: Fixed (no rotation) Tilt: 10.0° Orientation: 180.0° Rated power: -Panel material: Smooth glass with AR coating Reflectivity: Vary with sun Slope error: correlate with material



Vertex	Latitude (°)	Longitude (°)	Ground elevation (ft)	Height above ground (ft)	Total elevation (ft)
1	33.914363	-117.291217	1546.10	23.95	1570.05
2	33.914365	-117.291099	1545.73	23.95	1569.68
3	33.914314	-117.291098	1546.02	23.95	1569.97
4	33.914316	-117.291216	1546.07	23.95	1570.02

### **Route Receptors**

<b>ath type</b> : ⊺	≿Rwy 14 Base <sup>•</sup> wo-way <b>ew angle</b> : 50.0°				
			Goog	ean Bernardino, Maxar Technologies, U.S. G	eological Survey, USDA/FPAC/GE
Vertex	Latitude (°)	Longitude (°)	Goog Ground elevation (ft)	ean Bernardino, Maxar Technologies, U.S. G Height above ground (ft)	eological Survey, USDA/FPAC/GE Total elevation (ft)
Vertex	Latitude (°) 33.922394	Longitude (°)			



Name: C KC Rwy 14 Crosswind Path type: Two-way Observer view angle: 50.0°



Vertex	Latitude (°)	Longitude (°)	Ground elevation (ft)	Height above ground (ft)	Total elevation (ft)
1	33.821961	-117.228367	1500.14	1500.14	3000.28
2	33.813147	-117.244350	1500.14	1500.14	3000.28

Name: C KC Rwy 14 Downwind Path type: Two-way Observer view angle: 50.0° Vertex Latitude (°) Longitude (°) Ground elevation (ft) Height above ground (ft) Total elevation (ft) 33.819225 -117.262269 1500.14 1500.14 3000.28 1 2 33.908131 -117.325528 1500.14 1500.14 3000.28

ath type: T	: Rwy 14 Final <sup>•</sup> wo-way <b>ew angle</b> : 50.0°				
			Googl	Et / Copernicus, Maxar Technologies, U.S. G	eological Survey, USDA/FPAC/G
Vertex	Latitude (°)	Longitude (°)	Goog Ground elevation (ft)	e / Copernicus, Maxar Technologies, U.S. G Height above ground (ft)	eological Survey, USDA/FPAC/G Total elevation (ft)
Vertex	Latitude (°) 33.925156	Longitude (°)			



Name: C KC Rwy 14 Upwind Path type: Two-way Observer view angle: 50.0°



Vertex	Latitude (°)	Longitude (°)	Ground elevation (ft)	Height above ground (ft)	Total elevation (ft)
1	33.864994	-117.248281	1500.14	0.00	1500.14
2	33.836269	-117.227869	1500.14	1500.14	3000.28

Name: C KC Rwy 32 Base Path type: Two-way Observer view angle: 50.0° U.S. G V USDA/EPAC Vertex Latitude (°) Longitude (°) Ground elevation (ft) Height above ground (ft) Total elevation (ft) 33.813147 -117.244350 1500.14 1500.14 3000.28 1 2 33.821961 -117.228367 1500.14 1500.14 3000.28

ath type: T	: Rwy 32 Crosswind <sup>•</sup> wo-way <b>ew angle</b> : 50.0°	1	Goog	en Bernardino, Maxar Technologies, U.S. G	eological Survey, USDAFFPAC/G
Vertex	Latitude (°)	Longitude (°)	Ground elevation (ft)	Height above ground (ft)	Total elevation (ft)
Vertex	Latitude (°) 33.931244	Longitude (°)	Ground elevation (ft) 1500.14	Height above ground (ft) 1500.14	Total elevation (ft) 3000.28



Name: C KC Rwy 32 Downwind Path type: Two-way Observer view angle: 50.0°



Vertex	Latitude (°)	Longitude (°)	Ground elevation (ft)	Height above ground (ft)	Total elevation (ft)
1	33.908131	-117.325528	1500.14	1500.14	3000.28
2	33.819225	-117.262269	1500.14	1500.14	3000.28

Name: C KC Rwy 32 Final Path type: Two-way Observer view angle: 50.0° Vertex Latitude (°) Longitude (°) Ground elevation (ft) Height above ground (ft) Total elevation (ft) 33.836269 -117.227869 1500.14 1500.14 3000.28 1 2 33.864994 -117.248281 1500.14 1500.14 3000.28

Path type: ⊺	: Rwy 32 Upwind <sup>:</sup> wo-way <b>ew angle</b> : 50.0°		Geog	e, / Copernicus, Maxar Technologies, U.S. C	eological Survey, USDA/FPAC/GEO
Vertex	Latitude (°)	Longitude (°)	Ground elevation (ft)	Height above ground (ft)	Total elevation (ft)
4	33.896431	-117.270636	1500.14	0.00	1500.14
1					



Name: GA Rwy 12 Base Path type: Two-way Observer view angle: 50.0°



Vertex	Latitude (°)	Longitude (°)	Ground elevation (ft)	Height above ground (ft)	Total elevation (ft)
1	33.910322	-117.264967	1500.14	1300.12	2800.26
2	33.905592	-117.270622	1500.14	1300.12	2800.26

Name: GA Rwy 12 Crosswind Path type: Two-way Observer view angle:  $50.0^{\circ}$ Google<sub>an E</sub> Vertex Latitude (°) Longitude (°) Ground elevation (ft) Height above ground (ft) Total elevation (ft) 1500.14 1 33.876081 -117.235119 1300.12 2800.26 2 1500.14 33.880814 -117.229467 1300.12 2800.26

Name: GA Rwy 12 Downwind Path type: Two-way Observer view angle: 50.0° Vertex Latitude (°) Longitude (°) Ground elevation (ft) Height above ground (ft) Total elevation (ft) 1 33.887897 -117.229483 1500.14 1300.12 2800.26 2 33.910333 1500.14 1300.12 2800.26 -117.256469



Name: GA Rwy 12 Final Path type: Two-way Observer view angle: 50.0°



Vertex	Latitude (°)	Longitude (°)	Ground elevation (ft)	Height above ground (ft)	Total elevation (ft)
1	33.898508	-117.270608	1500.14	1300.12	2800.26
2	33.890258	-117.260680	1500.14	0.00	1500.14

Name: GA Rwy 12 Upwind Path type: Two-way Observer view angle: 50.0° Google USDA/FP/ Vertex Latitude (°) Longitude (°) Ground elevation (ft) Height above ground (ft) Total elevation (ft) 33.884319 -117.253536 1500.14 0.00 1500.14 1 2 33.876069 -117.243611 1500.14 1300.13 2800.27

ath type: Two-way bserver view angle: 50.0°					
Vertex	Latitude (°)	Longitude (°)	Goog Ground elevation (ft)	Can Bernardino, Maxar Technologies, U.S. G Height above ground (ft)	eological Survey, USDA/FPAC/G Total elevation (ft)
Vertex	Latitude (°) 33.880814	Longitude (°)			



Name: GA Rwy 30 Crosswind Path type: Two-way Observer view angle: 50.0°



Vertex	Latitude (°)	Longitude (°)	Ground elevation (ft)	Height above ground (ft)	Total elevation (ft)
1	33.905592	-117.270622	1500.14	1300.12	2800.26
2	33.910322	-117.264967	1500.14	1300.12	2800.26

Name: GA Rwy 30 Downwind Path type: Two-way Observer view angle: 50.0° Vertex Latitude (°) Longitude (°) Ground elevation (ft) Height above ground (ft) Total elevation (ft) 33.910333 -117.256469 1500.14 1300.12 2800.26 1 2 33.887897 -117.229483 1500.14 1300.12 2800.26

<b>ath type</b> : ⊺	twy 30 Final wo-way <b>ew angle</b> : 50.0°		Goog	en Bernardino, Maxar Technologies, U.S. G	eological Survey, USDA/FPAC/GEO
Vertex	Latitude (°)	Longitude (°)	Ground elevation (ft)	Height above ground (ft)	Total elevation (ft)
	33.876069	-117.243611	1500.14	1300.13	2800.27
1	00.070000				



Path type: 7	Rwy 30 Upwind Fwo-way iew angle: 50.0°				
			Goog	ean Bernardino, Maxar Technologies, U.S. G	eological Survey, USDA/FPAC/GEO
Vertex	Latitude (°)	Longitude (°)	Goog Ground elevation (ft)	Can Bernardino, Maxar Technologies, U.S. G Height above ground (ft)	eological Survey, USDA/FPAC/GEO Total elevation (ft)
Vertex	Latitude (°) 33.890258	Longitude (°)			

### Flight Path Receptors

ame: FP 12 escription: hreshold hei lirection: 135 ilide slope: 3 ilot view rest ertical view: zimuthal view	.0° .0° <b>tricted?</b> Yes 30.0°				
Point	Latitude (°)	Longitude (°)	Google Ground elevation (ft)	an Bernardino, Maxar Technologies, U.S. Ge Height above ground (ft)	eological Survey, USDA/FPAC/GE Total elevation (ft)
Threshold	33.890243	-117.260666	1517.92	50.00	1567.92



Name: FP 14 Description: Threshold height: 56 ft Direction: 149.0° Glide slope: 2.59° Pilot view restricted? Yes Vertical view: 30.0° Azimuthal view: 50.0°



Point	Latitude (°)	Longitude (°)	Ground elevation (ft)	Height above ground (ft)	Total elevation (ft)
Threshold	33.896436	-117.270631	1536.71	56.00	1592.71
Two-mile	33.921219	-117.288592	1524.71	545.68	2070.39

Name: FP 30 Description: Threshold hei Direction: 315 Glide slope: 3 Pilot view rest Vertical view: Azimuthal view	.0° .0° t <b>ricted?</b> Yes 30.0°				FF.
Point	Latitude (°)	Longitude (°)	Google Ground elevation (ft)	an Bernardino, Maxar Technologies, U.S. Ge Height above ground (ft)	tological Survey, USDA/FPAC/GE
Threshold	33.884351	-117.253579	1507.14	50.00	1557.14
Two-mile	33.863907	-117.228923	1469.94	640.63	2110.57

escription: hreshold he hirection: 329 alide slope: 3 ilot view res ertical view: zimuthal vie	0.0° .0° <b>tricted?</b> Yes 30.0°				
				and a second sec	
Point	Latitude (°)	Longitude (°)	Google Ground elevation (ft)	an Bernardino, Maxar Technologies, U.S. Gr Height above ground (ft)	Total elevation (ft)
Point Threshold	Latitude (°) 33.865319	Longitude (°)			



### **Discrete Observation Point Receptors**

Name	ID	Latitude (°)	Longitude (°)	Elevation (ft)	Height (ft)
1-ATCT	1	33.891568	-117.251182	1510.14	118.01

Map image of 1-ATCT





### Summary of Results Glare with low potential for temporary after-image predicted

PV Array	Tilt	Orient	Annual Gr	een Glare	Annual Ye	llow Glare	Energy
	٥	o	min	hr	min	hr	kWh
PV array 1	10.0	180.0	19,232	320.5	0	0.0	-
PV array 2	10.0	180.0	19,045	317.4	0	0.0	-
PV array 3	10.0	180.0	19,147	319.1	0	0.0	-

Total annual glare received by each receptor; may include duplicate times of glare from multiple reflective surfaces.

Receptor	Annual Green Glare		Annual Yellow Glare	
	min	hr	min	hr
C KC Rwy 14 Base	2,470	41.2	0	0.0
C KC Rwy 14 Crosswind	0	0.0	0	0.0
C KC Rwy 14 Downwind	0	0.0	0	0.0
C KC Rwy 14 Final	13,282	221.4	0	0.0
C KC Rwy 14 Upwind	0	0.0	0	0.0
C KC Rwy 32 Base	0	0.0	0	0.0
C KC Rwy 32 Crosswind	2,493	41.5	0	0.0
C KC Rwy 32 Downwind	0	0.0	0	0.0
C KC Rwy 32 Final	0	0.0	0	0.0
C KC Rwy 32 Upwind	13,358	222.6	0	0.0
GA Rwy 12 Base	135	2.2	0	0.0
GA Rwy 12 Crosswind	0	0.0	0	0.0
GA Rwy 12 Downwind	12,795	213.2	0	0.0
GA Rwy 12 Final	0	0.0	0	0.0
GA Rwy 12 Upwind	0	0.0	0	0.0
GA Rwy 30 Base	0	0.0	0	0.0
GA Rwy 30 Crosswind	133	2.2	0	0.0
GA Rwy 30 Downwind	12,758	212.6	0	0.0
GA Rwy 30 Final	0	0.0	0	0.0
GA Rwy 30 Upwind	0	0.0	0	0.0
FP 12	0	0.0	0	0.0
FP 14	0	0.0	0	0.0



Receptor	Annual Green Glare		Annual Yellow Glare	
	min	hr	min	hr
FP 30	0	0.0	0	0.0
FP 32	0	0.0	0	0.0
1-ATCT	0	0.0	0	0.0



## PV: PV array 1 low potential for temporary after-image

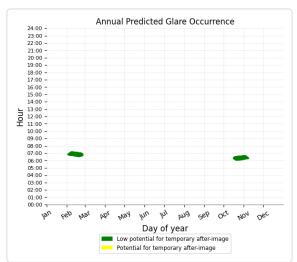
Receptor results ordered by category of glare

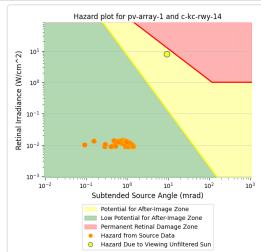
Receptor	Annual Green Glare		Annual Yellow Glare	
	min	hr	min	hr
C KC Rwy 14 Base	832	13.9	0	0.0
C KC Rwy 14 Final	4,424	73.7	0	0.0
C KC Rwy 32 Crosswind	843	14.1	0	0.0
C KC Rwy 32 Upwind	4,502	75.0	0	0.0
GA Rwy 12 Base	42	0.7	0	0.0
GA Rwy 12 Downwind	4,273	71.2	0	0.0
GA Rwy 30 Crosswind	43	0.7	0	0.0
GA Rwy 30 Downwind	4,273	71.2	0	0.0
C KC Rwy 14 Crosswind	0	0.0	0	0.0
C KC Rwy 14 Downwind	0	0.0	0	0.0
C KC Rwy 14 Upwind	0	0.0	0	0.0
C KC Rwy 32 Base	0	0.0	0	0.0
C KC Rwy 32 Downwind	0	0.0	0	0.0
C KC Rwy 32 Final	0	0.0	0	0.0
GA Rwy 12 Crosswind	0	0.0	0	0.0
GA Rwy 12 Final	0	0.0	0	0.0
GA Rwy 12 Upwind	0	0.0	0	0.0
GA Rwy 30 Base	0	0.0	0	0.0
GA Rwy 30 Final	0	0.0	0	0.0
GA Rwy 30 Upwind	0	0.0	0	0.0
P 12	0	0.0	0	0.0
FP 14	0	0.0	0	0.0
FP 30	0	0.0	0	0.0
FP 32	0	0.0	0	0.0
1-ATCT	0	0.0	0	0.0

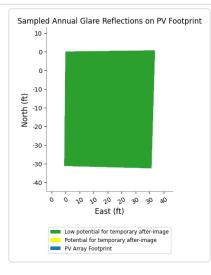


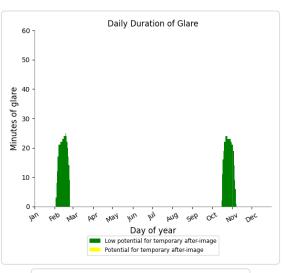
#### PV array 1 and C KC Rwy 14 Base

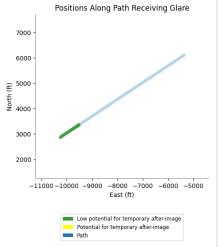
Receptor type: Route 0 minutes of yellow glare 832 minutes of green glare







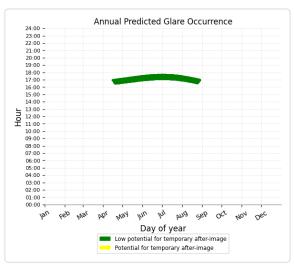


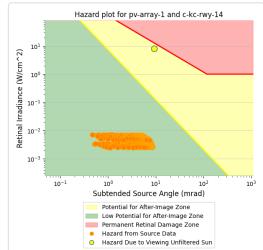


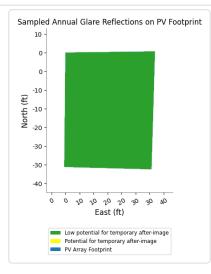


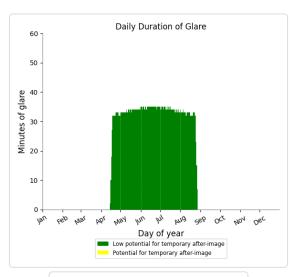
#### PV array 1 and C KC Rwy 14 Final

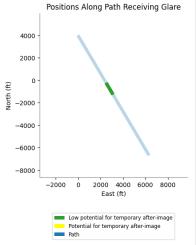
Receptor type: Route 0 minutes of yellow glare 4,424 minutes of green glare







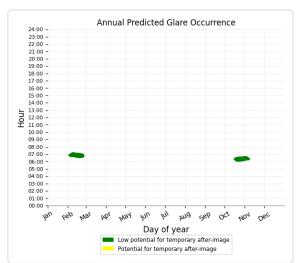


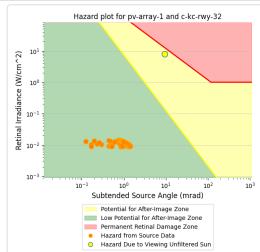


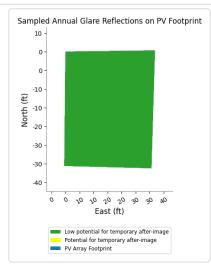


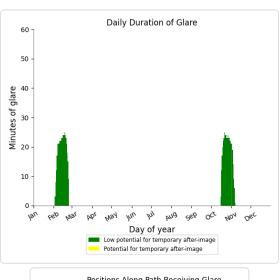
#### PV array 1 and C KC Rwy 32 Crosswind

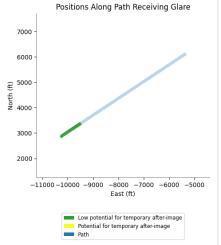
Receptor type: Route 0 minutes of yellow glare 843 minutes of green glare







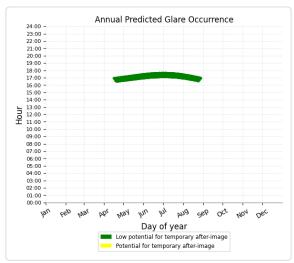


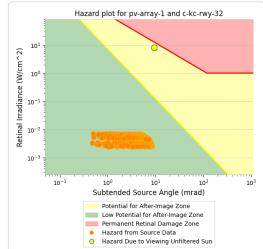


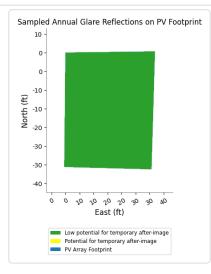


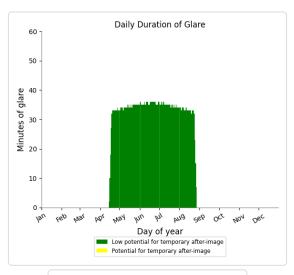
#### PV array 1 and C KC Rwy 32 Upwind

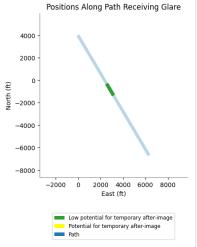
Receptor type: Route 0 minutes of yellow glare 4,502 minutes of green glare







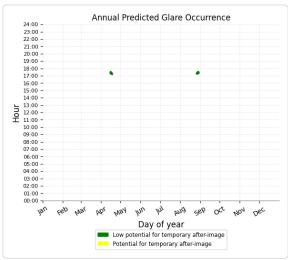


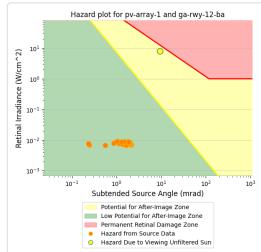


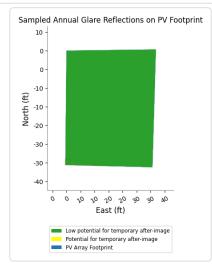


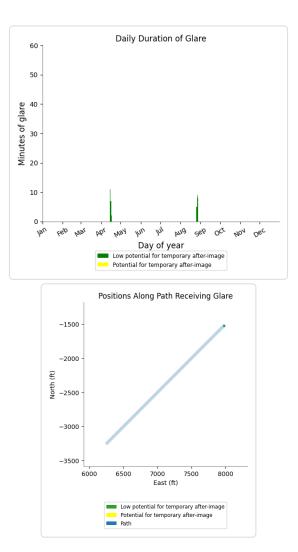
#### PV array 1 and GA Rwy 12 Base

Receptor type: Route 0 minutes of yellow glare 42 minutes of green glare





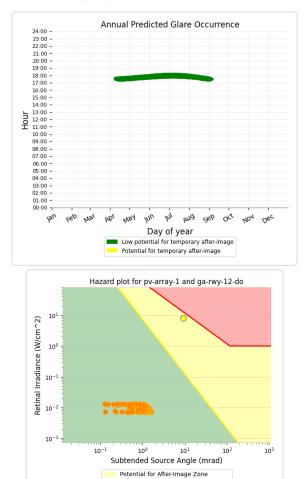


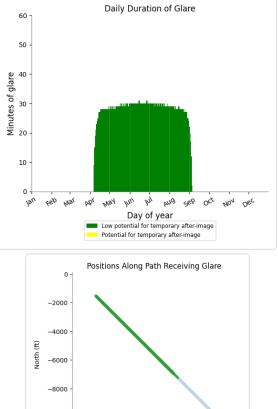


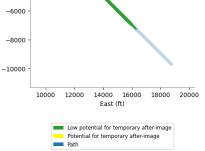


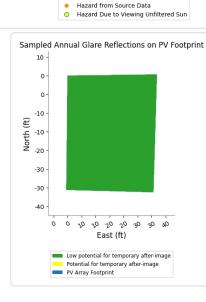
#### PV array 1 and GA Rwy 12 Downwind

Receptor type: Route 0 minutes of yellow glare 4,273 minutes of green glare







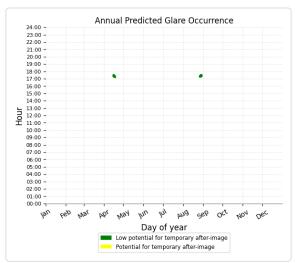


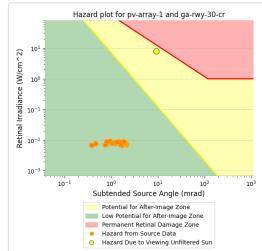
Low Potential for After-Image Zone Permanent Retinal Damage Zone

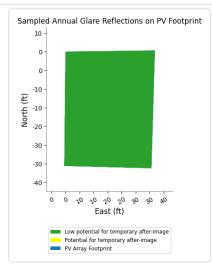


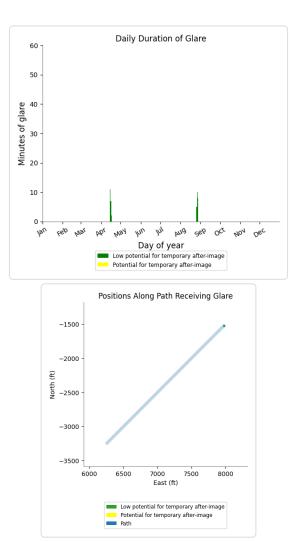
#### PV array 1 and GA Rwy 30 Crosswind

Receptor type: Route 0 minutes of yellow glare 43 minutes of green glare





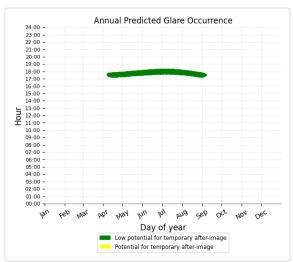


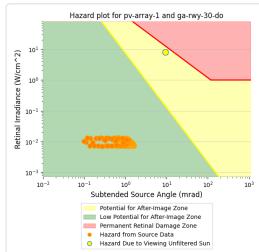


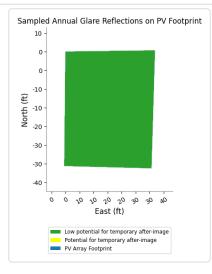


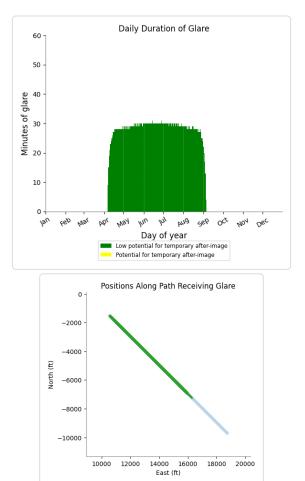
#### PV array 1 and GA Rwy 30 Downwind

Receptor type: Route 0 minutes of yellow glare 4,273 minutes of green glare









Low potential for temporary after-image

Potential for temporary after-image Path



#### PV array 1 and C KC Rwy 14

#### Crosswind

Receptor type: Route No glare found

#### PV array 1 and C KC Rwy 14

#### Upwind

Receptor type: Route No glare found

## PV array 1 and C KC Rwy 32

#### Downwind

Receptor type: Route No glare found

#### PV array 1 and GA Rwy 12

#### Crosswind

Receptor type: Route No glare found

## PV array 1 and GA Rwy 12

## Upwind

Receptor type: Route No glare found

#### PV array 1 and GA Rwy 30

#### **Final**

Receptor type: Route No glare found

#### PV array 1 and FP 12

Receptor type: 2-mile Flight Path **No glare found** 

#### PV array 1 and FP 30

Receptor type: 2-mile Flight Path **No glare found** 

### PV array 1 and C KC Rwy 14

#### Downwind

Receptor type: Route No glare found

#### PV array 1 and C KC Rwy 32

## Base

Receptor type: Route
No glare found

#### PV array 1 and C KC Rwy 32

#### Final

Receptor type: Route No glare found

#### PV array 1 and GA Rwy 12

#### Final

Receptor type: Route
No glare found

#### PV array 1 and GA Rwy 30

#### Base Receptor type: Route No glare found

#### PV array 1 and GA Rwy 30

#### Upwind

Receptor type: Route
No glare found

## PV array 1 and FP 14

Receptor type: 2-mile Flight Path **No glare found** 

## PV array 1 and FP 32

Receptor type: 2-mile Flight Path **No glare found** 



## PV array 1 and 1-ATCT

Receptor type: Observation Point **No glare found** 



## PV: PV array 2 low potential for temporary after-image

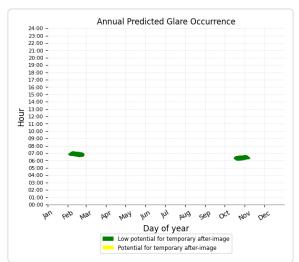
Receptor results ordered by category of glare

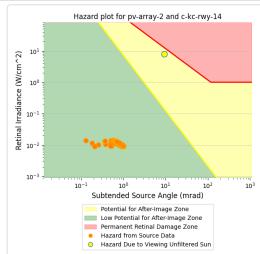
Receptor	Annual Green Glare		Annual Yellow Glare	
	min	hr	min	hr
C KC Rwy 14 Base	843	14.1	0	0.0
C KC Rwy 14 Final	4,423	73.7	0	0.0
C KC Rwy 32 Crosswind	844	14.1	0	0.0
C KC Rwy 32 Upwind	4,424	73.7	0	0.0
GA Rwy 12 Base	36	0.6	0	0.0
GA Rwy 12 Downwind	4,239	70.7	0	0.0
GA Rwy 30 Crosswind	30	0.5	0	0.0
GA Rwy 30 Downwind	4,206	70.1	0	0.0
C KC Rwy 14 Crosswind	0	0.0	0	0.0
C KC Rwy 14 Downwind	0	0.0	0	0.0
C KC Rwy 14 Upwind	0	0.0	0	0.0
C KC Rwy 32 Base	0	0.0	0	0.0
C KC Rwy 32 Downwind	0	0.0	0	0.0
C KC Rwy 32 Final	0	0.0	0	0.0
GA Rwy 12 Crosswind	0	0.0	0	0.0
GA Rwy 12 Final	0	0.0	0	0.0
GA Rwy 12 Upwind	0	0.0	0	0.0
GA Rwy 30 Base	0	0.0	0	0.0
GA Rwy 30 Final	0	0.0	0	0.0
GA Rwy 30 Upwind	0	0.0	0	0.0
FP 12	0	0.0	0	0.0
FP 14	0	0.0	0	0.0
FP 30	0	0.0	0	0.0
FP 32	0	0.0	0	0.0
1-ATCT	0	0.0	0	0.0

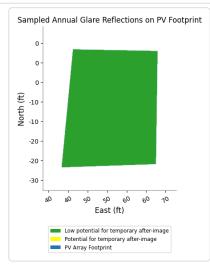


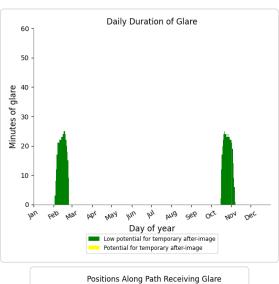
#### PV array 2 and C KC Rwy 14 Base

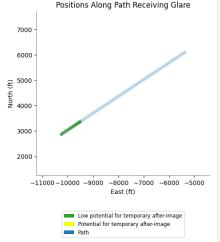
Receptor type: Route 0 minutes of yellow glare 843 minutes of green glare







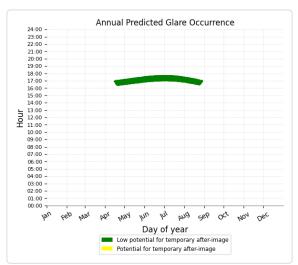


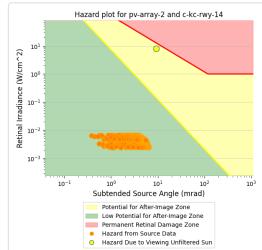


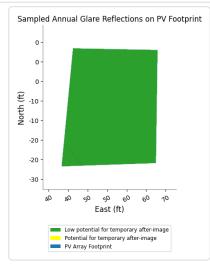


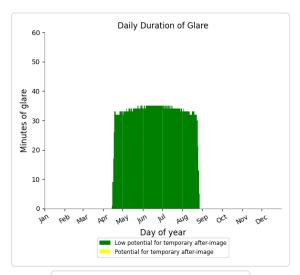
#### PV array 2 and C KC Rwy 14 Final

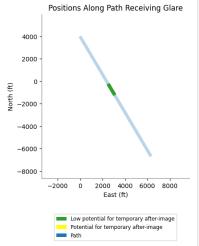
Receptor type: Route 0 minutes of yellow glare 4,423 minutes of green glare







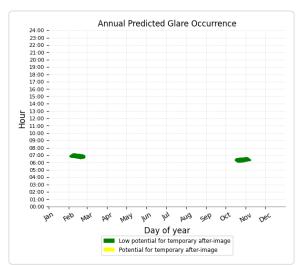


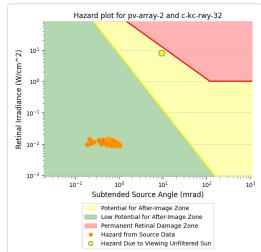


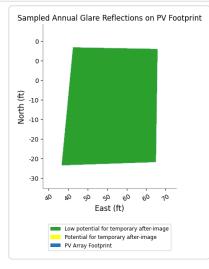


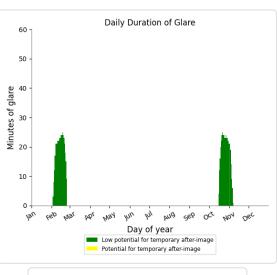
#### PV array 2 and C KC Rwy 32 Crosswind

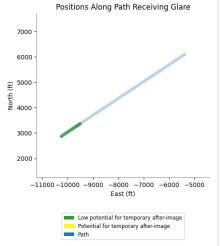
Receptor type: Route 0 minutes of yellow glare 844 minutes of green glare







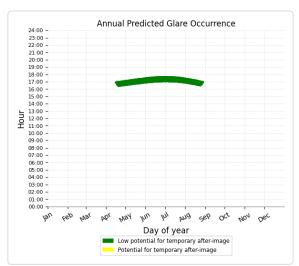


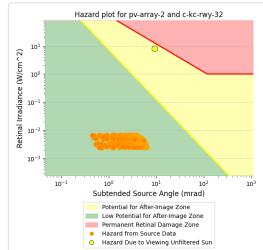


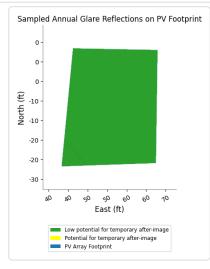


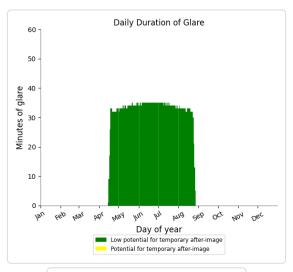
#### PV array 2 and C KC Rwy 32 Upwind

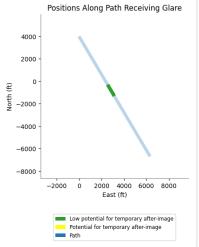
Receptor type: Route 0 minutes of yellow glare 4,424 minutes of green glare







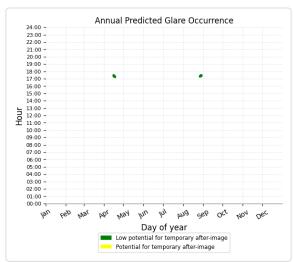


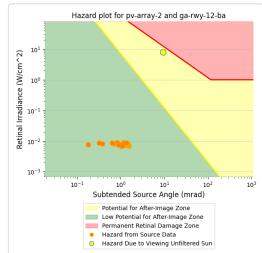


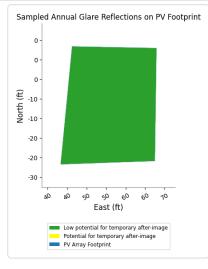


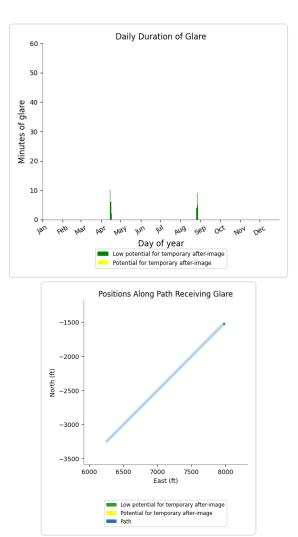
#### PV array 2 and GA Rwy 12 Base

Receptor type: Route 0 minutes of yellow glare 36 minutes of green glare





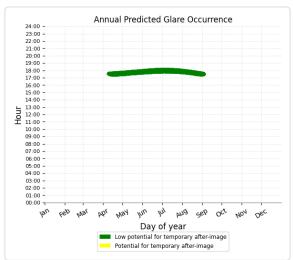


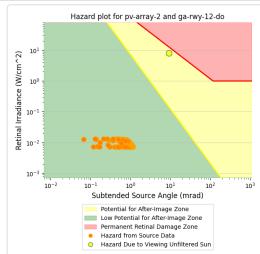


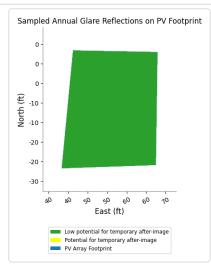


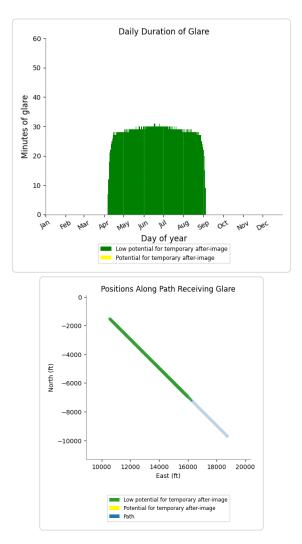
#### PV array 2 and GA Rwy 12 Downwind

Receptor type: Route 0 minutes of yellow glare 4,239 minutes of green glare





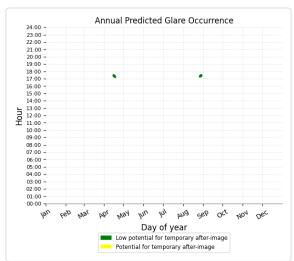


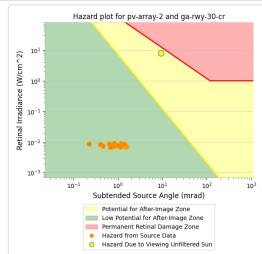


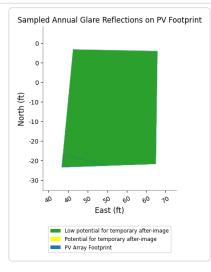


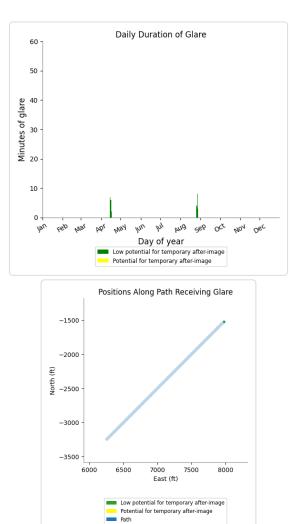
#### PV array 2 and GA Rwy 30 Crosswind

Receptor type: Route 0 minutes of yellow glare 30 minutes of green glare





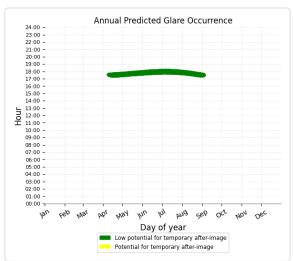


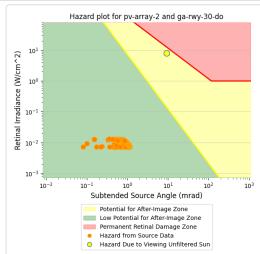


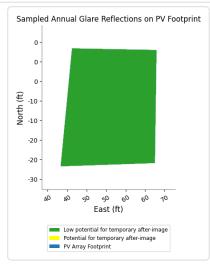


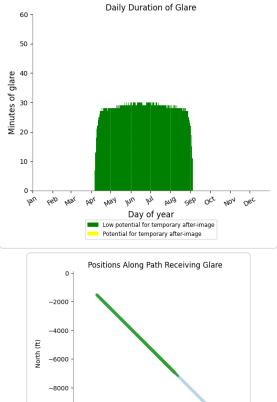
#### PV array 2 and GA Rwy 30 Downwind

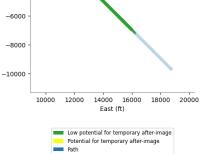
Receptor type: Route 0 minutes of yellow glare 4,206 minutes of green glare













#### PV array 2 and C KC Rwy 14

#### Crosswind

Receptor type: Route No glare found

#### PV array 2 and C KC Rwy 14

#### Upwind

Receptor type: Route No glare found

## PV array 2 and C KC Rwy 32

#### Downwind

Receptor type: Route No glare found

#### PV array 2 and GA Rwy 12

#### Crosswind

Receptor type: Route No glare found

## PV array 2 and GA Rwy 12

# Upwind

Receptor type: Route No glare found

#### PV array 2 and GA Rwy 30

#### Final

Receptor type: Route No glare found

#### PV array 2 and FP 12

Receptor type: 2-mile Flight Path **No glare found** 

#### PV array 2 and FP 30

Receptor type: 2-mile Flight Path **No glare found** 

## PV array 2 and C KC Rwy 14

#### Downwind

Receptor type: Route No glare found

#### PV array 2 and C KC Rwy 32

## Base

Receptor type: Route
No glare found

#### PV array 2 and C KC Rwy 32

#### Final

Receptor type: Route No glare found

#### PV array 2 and GA Rwy 12

#### Final

Receptor type: Route
No glare found

## PV array 2 and GA Rwy 30

#### Base Receptor type: Route No glare found

#### PV array 2 and GA Rwy 30

#### Upwind

Receptor type: Route
No glare found

## PV array 2 and FP 14

Receptor type: 2-mile Flight Path **No glare found** 

## PV array 2 and FP 32

Receptor type: 2-mile Flight Path **No glare found** 



## PV array 2 and 1-ATCT

Receptor type: Observation Point **No glare found** 



## PV: PV array 3 low potential for temporary after-image

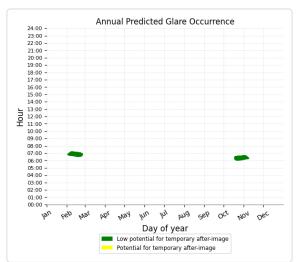
Receptor results ordered by category of glare

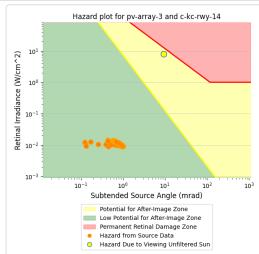
Receptor	Annual Green Glare		Annual Yellow Glare	
	min	hr	min	hr
C KC Rwy 14 Base	795	13.2	0	0.0
C KC Rwy 14 Final	4,435	73.9	0	0.0
C KC Rwy 32 Crosswind	806	13.4	0	0.0
C KC Rwy 32 Jpwind	4,432	73.9	0	0.0
GA Rwy 12 Base	57	0.9	0	0.0
GA Rwy 12 Downwind	4,283	71.4	0	0.0
GA Rwy 30 Crosswind	60	1.0	0	0.0
GA Rwy 30 Downwind	4,279	71.3	0	0.0
C KC Rwy 14 Crosswind	0	0.0	0	0.0
C KC Rwy 14 Downwind	0	0.0	0	0.0
CKC Rwy 14 Jpwind	0	0.0	0	0.0
C KC Rwy 32 Base	0	0.0	0	0.0
C KC Rwy 32 Downwind	0	0.0	0	0.0
CKC Rwy 32 Final	0	0.0	0	0.0
GA Rwy 12 Crosswind	0	0.0	0	0.0
GA Rwy 12 Final	0	0.0	0	0.0
A Rwy 12 Upwind	0	0.0	0	0.0
GA Rwy 30 Base	0	0.0	0	0.0
A Rwy 30 Final	0	0.0	0	0.0
A Rwy 30 Upwind	0	0.0	0	0.0
P 12	0	0.0	0	0.0
P 14	0	0.0	0	0.0
P 30	0	0.0	0	0.0
P 32	0	0.0	0	0.0
-ATCT	0	0.0	0	0.0

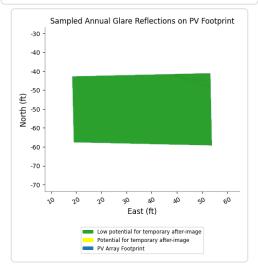


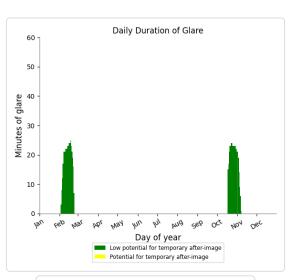
#### PV array 3 and C KC Rwy 14 Base

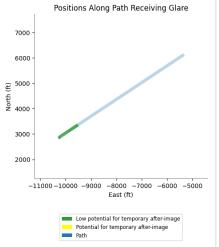
Receptor type: Route 0 minutes of yellow glare 795 minutes of green glare







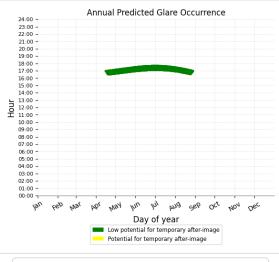


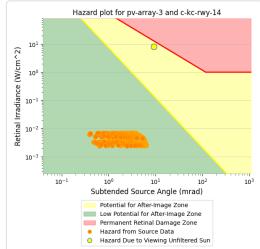


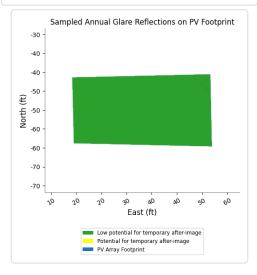


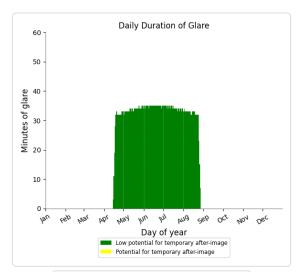
#### PV array 3 and C KC Rwy 14 Final

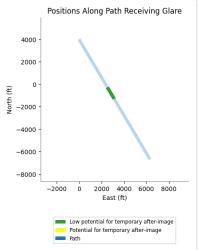
Receptor type: Route 0 minutes of yellow glare 4,435 minutes of green glare







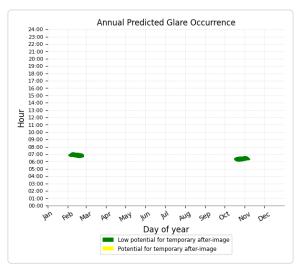


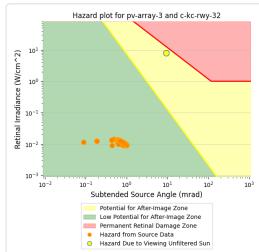


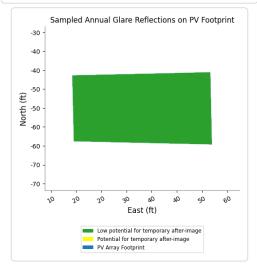


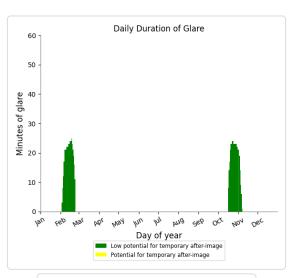
#### PV array 3 and C KC Rwy 32 Crosswind

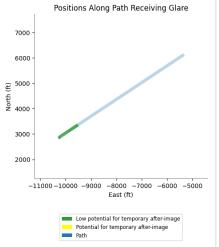
Receptor type: Route 0 minutes of yellow glare 806 minutes of green glare







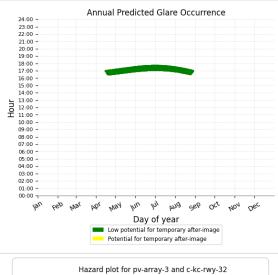


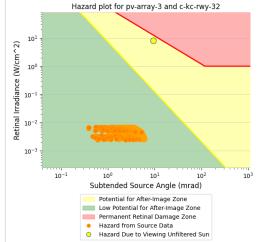


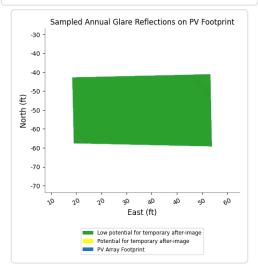


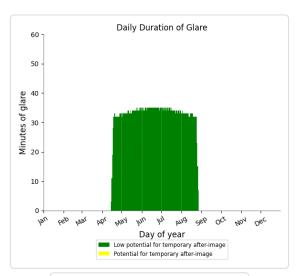
#### PV array 3 and C KC Rwy 32 Upwind

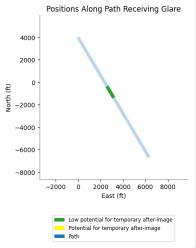
Receptor type: Route 0 minutes of yellow glare 4,432 minutes of green glare







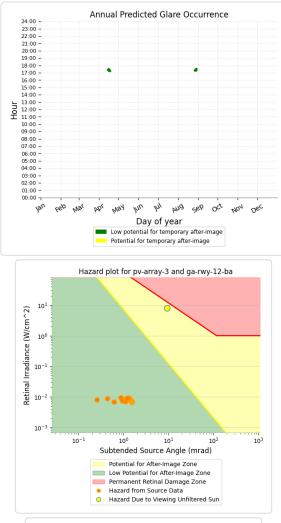


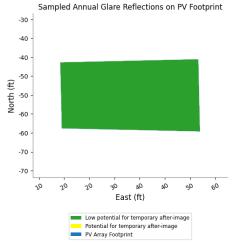


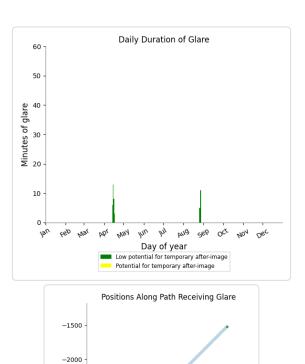


#### PV array 3 and GA Rwy 12 Base

Receptor type: Route 0 minutes of yellow glare 57 minutes of green glare







North (ft)

-2500

-3000

-3500

6000

6500

Path

7000

East (ft)

Low potential for temporary after-image Low potential for temporary after-in
 Potential for temporary after-image
 Path

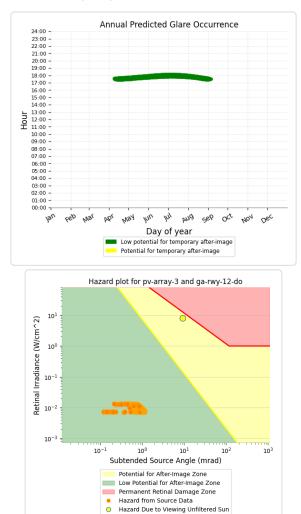
7500

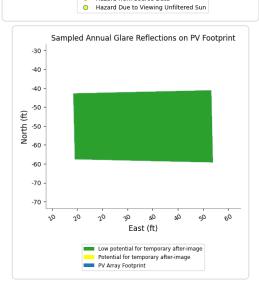
8000

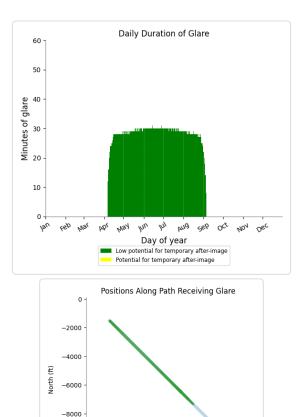


#### PV array 3 and GA Rwy 12 Downwind

Receptor type: Route 0 minutes of yellow glare 4,283 minutes of green glare







-10000

10000

12000

14000

East (ft)

Low potential for temporary after-image

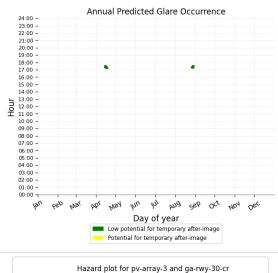
Potential for temporary after-image Path

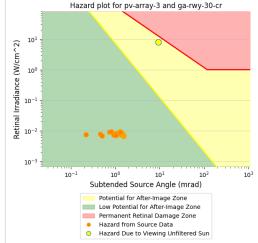
16000 18000 20000

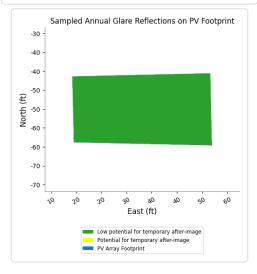


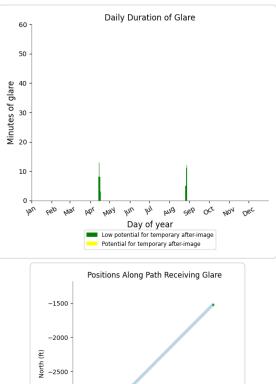
#### PV array 3 and GA Rwy 30 Crosswind

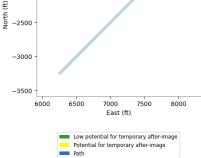
Receptor type: Route 0 minutes of yellow glare 60 minutes of green glare







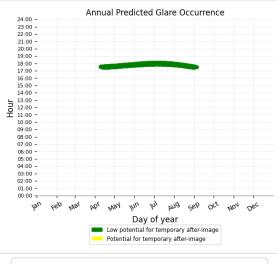


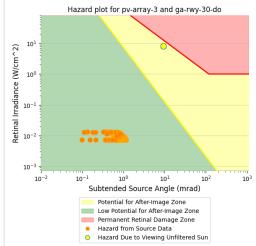


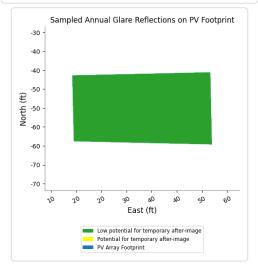


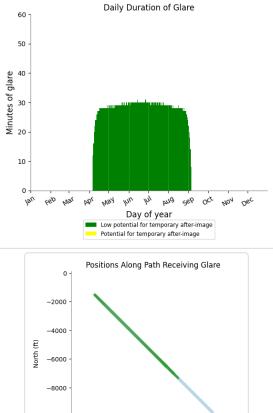
#### PV array 3 and GA Rwy 30 Downwind

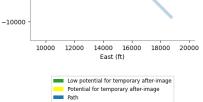
Receptor type: Route 0 minutes of yellow glare 4,279 minutes of green glare













#### PV array 3 and C KC Rwy 14

#### Crosswind

Receptor type: Route No glare found

#### PV array 3 and C KC Rwy 14

#### Upwind

Receptor type: Route No glare found

## PV array 3 and C KC Rwy 32

#### Downwind

Receptor type: Route No glare found

#### PV array 3 and GA Rwy 12

#### Crosswind

Receptor type: Route No glare found

## PV array 3 and GA Rwy 12

## Upwind

Receptor type: Route No glare found

#### PV array 3 and GA Rwy 30

#### **Final**

Receptor type: Route No glare found

#### PV array 3 and FP 12

Receptor type: 2-mile Flight Path **No glare found** 

#### PV array 3 and FP 30

Receptor type: 2-mile Flight Path **No glare found** 

## PV array 3 and C KC Rwy 14

#### Downwind

Receptor type: Route No glare found

#### PV array 3 and C KC Rwy 32

## Base

Receptor type: Route
No glare found

#### PV array 3 and C KC Rwy 32

#### Final

Receptor type: Route No glare found

#### PV array 3 and GA Rwy 12

#### Final

Receptor type: Route
No glare found

## PV array 3 and GA Rwy 30

#### Base Receptor type: Route No glare found

#### PV array 3 and GA Rwy 30

#### Upwind

Receptor type: Route
No glare found

## PV array 3 and FP 14

Receptor type: 2-mile Flight Path **No glare found** 

## PV array 3 and FP 32

Receptor type: 2-mile Flight Path **No glare found** 



#### PV array 3 and 1-ATCT

Receptor type: Observation Point **No glare found** 

# Assumptions

"Green" glare is glare with low potential to cause an after-image (flash blindness) when observed prior to a typical blink response time. "Yellow" glare is glare with potential to cause an after-image (flash blindness) when observed prior to a typical blink response time. Times associated with glare are denoted in Standard time. For Daylight Savings, add one hour.

The algorithm does not rigorously represent the detailed geometry of a system; detailed features such as gaps between modules, variable height of the PV array, and support structures may impact actual glare results. However, we have validated our models against several systems, including a PV array causing glare to the air-traffic control tower at Manchester-Boston Regional Airport and several sites in Albuquerque, and the tool accurately predicted the occurrence and intensity of glare at different times and days of the year.

Several V1 calculations utilize the PV array centroid, rather than the actual glare spot location, due to algorithm limitations. This may affect results for large PV footprints. Additional analyses of array sub-sections can provide additional information on expected glare. This primarily affects V1 analyses of path receptors.

Random number computations are utilized by various steps of the annual hazard analysis algorithm. Predicted minutes of glare can vary between runs as a result. This limitation primarily affects analyses of Observation Point receptors, including ATCTs. Note that the SGHAT/ ForgeSolar methodology has always relied on an analytical, qualitative approach to accurately determine the overall hazard (i.e. green vs. yellow) of expected glare on an annual basis.

The analysis does not automatically consider obstacles (either man-made or natural) between the observation points and the prescribed solar installation that may obstruct observed glare, such as trees, hills, buildings, etc.

The subtended source angle (glare spot size) is constrained by the PV array footprint size. Partitioning large arrays into smaller sections will reduce the maximum potential subtended angle, potentially impacting results if actual glare spots are larger than the sub-array size. Additional analyses of the combined area of adjacent sub-arrays can provide more information on potential glare hazards. (See previous point on related limitations.)

The variable direct normal irradiance (DNI) feature (if selected) scales the user-prescribed peak DNI using a typical clear-day irradiance profile. This profile has a lower DNI in the mornings and evenings and a maximum at solar noon. The scaling uses a clear-day irradiance profile based on a normalized time relative to sunrise, solar noon, and sunset, which are prescribed by a sun-position algorithm and the latitude and longitude obtained from Google maps. The actual DNI on any given day can be affected by cloud cover, atmospheric attenuation, and other environmental factors.

The ocular hazard predicted by the tool depends on a number of environmental, optical, and human factors, which can be uncertain. We provide input fields and typical ranges of values for these factors so that the user can vary these parameters to see if they have an impact on the results. The speed of SGHAT allows expedited sensitivity and parametric analyses.

The system output calculation is a DNI-based approximation that assumes clear, sunny skies year-round. It should not be used in place of more rigorous modeling methods.

Hazard zone boundaries shown in the Glare Hazard plot are an approximation and visual aid based on aggregated research data. Actual ocular impact outcomes encompass a continuous, not discrete, spectrum.

Glare locations displayed on receptor plots are approximate. Actual glare-spot locations may differ.

Refer to the Help page at www.forgesolar.com/help/ for assumptions and limitations not listed here.

Default glare analysis parameters and observer eye characteristics (for reference only):

- · Analysis time interval: 1 minute
- Ocular transmission coefficient: 0.5
- · Pupil diameter: 0.002 meters
- · Eye focal length: 0.017 meters
- · Sun subtended angle: 9.3 milliradians

2016 © Sims Industries d/b/a ForgeSolar, All Rights Reserved.



# FORGESOLAR GLARE ANALYSIS

#### Project: STELLAR

Site configuration: Rwy 14 32 GA Rectangular Analysis

Created 25 Jan, 2023 Updated 25 Jan, 2023 Time-step 1 minute Timezone offset UTC-8 Site ID 82965.14602 Category 10 to 100 kW DNI peaks at 1,000.0 W/m^2 Ocular transmission coefficient 0.5 Pupil diameter 0.002 m Eye focal length 0.017 m Sun subtended angle 9.3 mrad PV analysis methodology V2



## Summary of Results No glare predicted

PV Array	Tilt	Orient	Annual Gr	een Glare	Annual Ye	llow Glare	Energy
	0	o	min	hr	min	hr	kWh
PV array 1	10.0	180.0	0	0.0	0	0.0	-
PV array 2	10.0	180.0	0	0.0	0	0.0	-
PV array 3	10.0	180.0	0	0.0	0	0.0	-

Total annual glare received by each receptor; may include duplicate times of glare from multiple reflective surfaces.

Receptor	Annual Green Glare		Annual Yellow Glare	
	min	hr	min	hr
GA Rwy 14 Base	0	0.0	0	0.0
GA Rwy 14 Crosswind	0	0.0	0	0.0
GA Rwy 14 Downwind	0	0.0	0	0.0
GA Rwy 14 Final	0	0.0	0	0.0
GA Rwy 14 Upwind	0	0.0	0	0.0
GA Rwy 32 Base	0	0.0	0	0.0
GA Rwy 32 Crosswind	0	0.0	0	0.0
GA Rwy 32 Downwind	0	0.0	0	0.0
GA Rwy 32 Final	0	0.0	0	0.0
GA Rwy 32 Upwind	0	0.0	0	0.0
FP 12	0	0.0	0	0.0



Receptor	Annual Gr	een Glare	Annual Ye	llow Glare
	min	hr	min	hr
FP 14	0	0.0	0	0.0
FP 30	0	0.0	0	0.0
FP 32	0	0.0	0	0.0
1-ATCT	0	0.0	0	0.0



# **Component Data**

## **PV Arrays**

Name: PV array 1 Axis tracking: Fixed (no rotation) Tilt: 10.0° Orientation: 180.0° Rated power: -Panel material: Smooth glass with AR coating Reflectivity: Vary with sun Slope error: correlate with material



Vertex	Latitude (°)	Longitude (°)	Ground elevation (ft)	Height above ground (ft)	Total elevation (ft)
1	33.914502	-117.291257	1546.32	23.95	1570.27
2	33.914503	-117.291154	1545.98	23.95	1569.93
3	33.914390	-117.291158	1546.08	23.95	1570.03
4	33.914392	-117.291259	1545.55	23.95	1569.50

Name: PV array 2 Axis tracking: Fixed (no rotation) Tilt: 10.0° Orientation: 180.0° Rated power: -Panel material: Smooth glass with AR coating Reflectivity: Vary with sun Slope error: correlate with material



Vertex	Latitude (°)	Longitude (°)	Ground elevation (ft)	Height above ground (ft)	Total elevation (ft)
1	33.914498	-117.291123	1545.75	23.95	1569.70
2	33.914496	-117.291054	1545.24	23.95	1569.19
3	33.914419	-117.291055	1545.27	23.95	1569.22
4	33.914416	-117.291133	1545.80	23.95	1569.75



Name: PV array 3 Axis tracking: Fixed (no rotation) Tilt: 10.0° Orientation: 180.0° Rated power: -Panel material: Smooth glass with AR coating Reflectivity: Vary with sun Slope error: correlate with material



Vertex	Latitude (°)	Longitude (°)	Ground elevation (ft)	Height above ground (ft)	Total elevation (ft)
1	33.914363	-117.291217	1546.10	23.95	1570.05
2	33.914365	-117.291099	1545.73	23.95	1569.68
3	33.914314	-117.291098	1546.02	23.95	1569.97
4	33.914316	-117.291216	1546.07	23.95	1570.02

## **Route Receptors**

Path type:	Rwy 14 Base Two-way <b>iew angle</b> : 50.0°		Goog	en Bernardino, Maxar Technologies, U.S. G	edogical Survey, USDAFFPAC/GEO
		Lengitude (°)	Ground elevation (ft)	Height above ground (ft)	Total elevation (ft)
Vertex	Latitude (°)	Longitude (°)		neight above ground (it)	rotar clovation (it)
Vertex	Latitude (°) 33.904833	-117.292903	1500.14	1500.14	3000.28

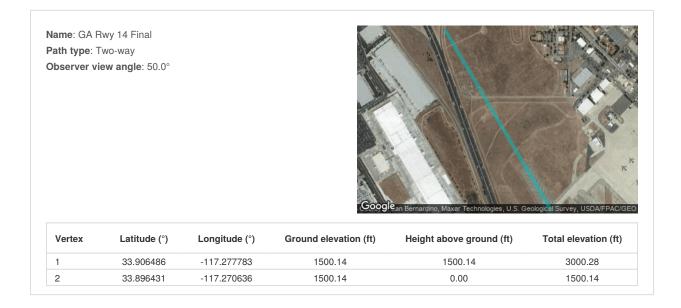


Name: GA Rwy 14 Crosswind Path type: Two-way Observer view angle: 50.0°



Vertex	Latitude (°)	Longitude (°)	Ground elevation (ft)	Height above ground (ft)	Total elevation (ft)
1	33.848078	-117.243236	1500.14	1500.14	3000.28
2	33.844669	-117.250119	1500.14	1500.14	3000.28

Name: GA Rwy 14 Downwind Path type: Two-way Observer view angle:  $50.0^{\circ}$ Vertex Latitude (°) Longitude (°) Ground elevation (ft) Height above ground (ft) Total elevation (ft) 1500.14 1500.14 1 33.846422 -117.258344 3000.28 2 1500.14 33.897972 -117.295011 1500.14 3000.28



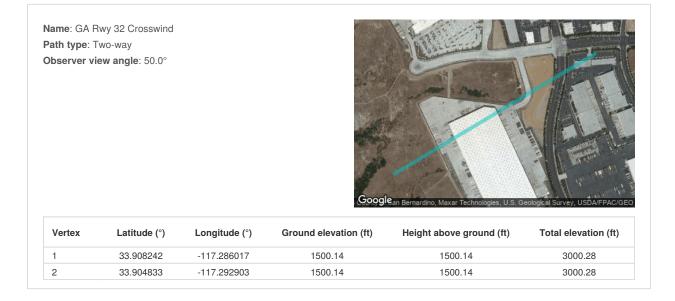


Name: GA Rwy 14 Upwind Path type: Two-way Observer view angle: 50.0°



Vertex	Latitude (°)	Longitude (°)	Ground elevation (ft)	Height above ground (ft)	Total elevation (ft)
1	33.864994	-117.248281	1500.14	0.00	1500.14
2	33.854942	-117.241136	1500.14	1500.14	3000.28

Name: GA Rwy 32 Base Path type: Two-way Observer view angle:  $50.0^{\circ}$ Vertex Latitude (°) Longitude (°) Ground elevation (ft) Height above ground (ft) Total elevation (ft) 1500.14 1 33.844669 -117.250119 1500.14 3000.28 2 33.848078 -117.243236 1500.14 1500.14 3000.28





Name: GA Rwy 32 Downwind Path type: Two-way Observer view angle: 50.0°



Vertex	Latitude (°)	Longitude (°)	Ground elevation (ft)	Height above ground (ft)	Total elevation (ft)
1	33.897972	-117.295011	1500.14	1500.14	3000.28
2	33.846422	-117.258344	1500.14	1500.14	3000.28

Name: GA Rwy 32 Final Path type: Two-way Observer view angle:  $50.0^{\circ}$ Vertex Latitude (°) Longitude (°) Ground elevation (ft) Height above ground (ft) Total elevation (ft) 1500.14 1500.14 1 33.854942 -117.241136 3000.28 2 1500.14 0.00 33.864994 -117.248281 1500.14





# **Flight Path Receptors**

Name: FP 12 Description: Threshold height: 50 ft Direction: 135.0° Glide slope: 3.0° Pilot view restricted? Yes					
Vertical view:			Google	an Bernardino, Maxar Technologies, U.S. G	eological Survey, USDA/FPAC/GEO
Point	Latitude (°)	Longitude (°)	Ground elevation (ft)	Height above ground (ft)	Total elevation (ft)
Threshold	33.890243	-117.260666	1519.07	50.00	1569.07

1543.40

Name: FP 14 Description: Threshold height: 50 ft Direction: 149.0° Glide slope: 2.59° Pilot view restricted? Yes Vertical view: 30.0° Azimuthal view: 50.0°

33.910687

-117.285323

Two-mile



2122.50

579.10

Point	Latitude (°)	Longitude (°)	Ground elevation (ft)	Height above ground (ft)	Total elevation (ft)
Threshold	33.896436	-117.270631	1535.67	50.00	1585.67
Two-mile	33.921219	-117.288592	1524.58	538.77	2063.35



Name: FP 30 Description: Threshold height: 50 ft Direction: 315.0° Glide slope: 3.0° Pilot view restricted? Yes Vertical view: 30.0° Azimuthal view: 50.0°



Point	Latitude (°)	Longitude (°)	Ground elevation (ft)	Height above ground (ft)	Total elevation (ft)
Threshold	33.884351	-117.253579	1505.92	50.00	1555.92
Two-mile	33.863910	-117.228919	1469.80	639.55	2109.35

hreshold hei irection: 329 lide slope: 3 ilot view rest ertical view: zimuthal view	.0° .0° t <b>ricted?</b> Yes 30.0°				3
Point	Latitude (°)	Longitude (°)	Google Ground elevation (ft)	an Bernardino, Maxar Technologies, U.S. Ge Height above ground (ft)	
Point Threshold	Latitude (°) 33.865319	Longitude (°) -117.248518			Total elevation (ft)



# **Discrete Observation Point Receptors**

Name	ID	Latitude (°)	Longitude (°)	Elevation (ft)	Height (ft)
1-ATCT	1	33.891566	-117.251168	1508.79	118.00

Map image of 1-ATCT





PV Array	Tilt	Orient	Annual Gr	een Glare	Annual Ye	llow Glare	Energy
	0	o	min	hr	min	hr	kWh
PV array 1	10.0	180.0	0	0.0	0	0.0	-
PV array 2	10.0	180.0	0	0.0	0	0.0	-
PV array 3	10.0	180.0	0	0.0	0	0.0	-

# Summary of Results No glare predicted

Total annual glare received by each receptor; may include duplicate times of glare from multiple reflective surfaces.

Receptor	Annual Gr	een Glare	Annual Ye	llow Glare
	min	hr	min	hr
GA Rwy 14 Base	0	0.0	0	0.0
GA Rwy 14 Crosswind	0	0.0	0	0.0
GA Rwy 14 Downwind	0	0.0	0	0.0
GA Rwy 14 Final	0	0.0	0	0.0
GA Rwy 14 Upwind	0	0.0	0	0.0
GA Rwy 32 Base	0	0.0	0	0.0
GA Rwy 32 Crosswind	0	0.0	0	0.0
GA Rwy 32 Downwind	0	0.0	0	0.0
GA Rwy 32 Final	0	0.0	0	0.0
GA Rwy 32 Upwind	0	0.0	0	0.0
FP 12	0	0.0	0	0.0
FP 14	0	0.0	0	0.0
FP 30	0	0.0	0	0.0
FP 32	0	0.0	0	0.0
1-ATCT	0	0.0	0	0.0



# PV: PV array 1 no glare found

Receptor results ordered by category of glare

Receptor	Annual Gr	een Glare	Annual Ye	llow Glare
	min	hr	min	hr
GA Rwy 14 Base	0	0.0	0	0.0
GA Rwy 14 Crosswind	0	0.0	0	0.0
GA Rwy 14 Downwind	0	0.0	0	0.0
GA Rwy 14 Final	0	0.0	0	0.0
GA Rwy 14 Upwind	0	0.0	0	0.0
GA Rwy 32 Base	0	0.0	0	0.0
GA Rwy 32 Crosswind	0	0.0	0	0.0
GA Rwy 32 Downwind	0	0.0	0	0.0
GA Rwy 32 Final	0	0.0	0	0.0
GA Rwy 32 Upwind	0	0.0	0	0.0
FP 12	0	0.0	0	0.0
FP 14	0	0.0	0	0.0
FP 30	0	0.0	0	0.0
FP 32	0	0.0	0	0.0
1-ATCT	0	0.0	0	0.0

#### PV array 1 and GA Rwy 14

#### Base

Receptor type: Route No glare found

# PV array 1 and GA Rwy 14

#### Downwind

Receptor type: Route
No glare found

# PV array 1 and GA Rwy 14

#### Crosswind

Receptor type: Route
No glare found

# PV array 1 and GA Rwy 14

#### Final

Receptor type: Route
No glare found



#### PV array 1 and GA Rwy 14

### Upwind

Receptor type: Route No glare found

# PV array 1 and GA Rwy 32

#### Crosswind

Receptor type: Route No glare found

# PV array 1 and GA Rwy 32

#### **Final**

Receptor type: Route
No glare found

# PV array 1 and FP 12

Receptor type: 2-mile Flight Path No glare found

#### PV array 1 and FP 30

Receptor type: 2-mile Flight Path **No glare found** 

# **PV** array 1 and 1-ATCT

Receptor type: Observation Point **No glare found** 

# PV array 1 and GA Rwy 32

#### Base

Receptor type: Route No glare found

# PV array 1 and GA Rwy 32

# Downwind

Receptor type: Route No glare found

#### PV array 1 and GA Rwy 32

# Upwind

Receptor type: Route
No glare found

# PV array 1 and FP 14

Receptor type: 2-mile Flight Path No glare found

# PV array 1 and FP 32

Receptor type: 2-mile Flight Path **No glare found** 



# PV: PV array 2 no glare found

Receptor results ordered by category of glare

Receptor	Annual Gr	Annual Green Glare		llow Glare
	min	hr	min	hr
GA Rwy 14 Base	0	0.0	0	0.0
GA Rwy 14 Crosswind	0	0.0	0	0.0
GA Rwy 14 Downwind	0	0.0	0	0.0
GA Rwy 14 Final	0	0.0	0	0.0
GA Rwy 14 Upwind	0	0.0	0	0.0
GA Rwy 32 Base	0	0.0	0	0.0
GA Rwy 32 Crosswind	0	0.0	0	0.0
GA Rwy 32 Downwind	0	0.0	0	0.0
GA Rwy 32 Final	0	0.0	0	0.0
GA Rwy 32 Upwind	0	0.0	0	0.0
FP 12	0	0.0	0	0.0
FP 14	0	0.0	0	0.0
FP 30	0	0.0	0	0.0
FP 32	0	0.0	0	0.0
1-ATCT	0	0.0	0	0.0

# PV array 2 and GA Rwy 14

#### Base

Receptor type: Route
No glare found

#### PV array 2 and GA Rwy 14

#### Downwind

Receptor type: Route
No glare found

# PV array 2 and GA Rwy 14

#### Upwind

Receptor type: Route **No glare found** 

# PV array 2 and GA Rwy 14

#### Crosswind

Receptor type: Route
No glare found

#### PV array 2 and GA Rwy 14

#### Final

Receptor type: Route
No glare found

# PV array 2 and GA Rwy 32

#### Base

Receptor type: Route No glare found



#### PV array 2 and GA Rwy 32

### Crosswind

Receptor type: Route
No glare found

# PV array 2 and GA Rwy 32

#### Final

Receptor type: Route No glare found

# PV array 2 and FP 12

Receptor type: 2-mile Flight Path **No glare found** 

# PV array 2 and FP 30

Receptor type: 2-mile Flight Path **No glare found** 

### PV array 2 and 1-ATCT

Receptor type: Observation Point **No glare found** 

# PV array 2 and GA Rwy 32

#### Downwind

Receptor type: Route No glare found

# PV array 2 and GA Rwy 32

# Upwind

Receptor type: Route No glare found

# PV array 2 and FP 14

Receptor type: 2-mile Flight Path No glare found

# PV array 2 and FP 32

Receptor type: 2-mile Flight Path **No glare found** 



# PV: PV array 3 no glare found

Receptor results ordered by category of glare

Receptor	Annual Green Glare		Annual Yellow Glare	
	min	hr	min	hr
GA Rwy 14 Base	0	0.0	0	0.0
GA Rwy 14 Crosswind	0	0.0	0	0.0
GA Rwy 14 Downwind	0	0.0	0	0.0
GA Rwy 14 Final	0	0.0	0	0.0
GA Rwy 14 Upwind	0	0.0	0	0.0
GA Rwy 32 Base	0	0.0	0	0.0
GA Rwy 32 Crosswind	0	0.0	0	0.0
GA Rwy 32 Downwind	0	0.0	0	0.0
GA Rwy 32 Final	0	0.0	0	0.0
GA Rwy 32 Upwind	0	0.0	0	0.0
FP 12	0	0.0	0	0.0
FP 14	0	0.0	0	0.0
FP 30	0	0.0	0	0.0
FP 32	0	0.0	0	0.0
1-ATCT	0	0.0	0	0.0

#### PV array 3 and GA Rwy 14

#### Base

Receptor type: Route
No glare found

#### PV array 3 and GA Rwy 14

#### Downwind

Receptor type: Route
No glare found

# PV array 3 and GA Rwy 14

#### Upwind

Receptor type: Route No glare found

# PV array 3 and GA Rwy 14

#### Crosswind

Receptor type: Route
No glare found

#### PV array 3 and GA Rwy 14

#### Final

Receptor type: Route
No glare found

# PV array 3 and GA Rwy 32

#### Base

Receptor type: Route No glare found



#### PV array 3 and GA Rwy 32

### Crosswind

Receptor type: Route
No glare found

# PV array 3 and GA Rwy 32

#### Final

Receptor type: Route
No glare found

# PV array 3 and FP 12

Receptor type: 2-mile Flight Path **No glare found** 

# PV array 3 and FP 30

Receptor type: 2-mile Flight Path **No glare found** 

### PV array 3 and 1-ATCT

Receptor type: Observation Point **No glare found** 

# PV array 3 and GA Rwy 32

#### Downwind

Receptor type: Route No glare found

# PV array 3 and GA Rwy 32

# Upwind

Receptor type: Route No glare found

# PV array 3 and FP 14

Receptor type: 2-mile Flight Path No glare found

# PV array 3 and FP 32

Receptor type: 2-mile Flight Path **No glare found** 



# Assumptions

"Green" glare is glare with low potential to cause an after-image (flash blindness) when observed prior to a typical blink response time. "Yellow" glare is glare with potential to cause an after-image (flash blindness) when observed prior to a typical blink response time. Times associated with glare are denoted in Standard time. For Daylight Savings, add one hour.

The algorithm does not rigorously represent the detailed geometry of a system; detailed features such as gaps between modules, variable height of the PV array, and support structures may impact actual glare results. However, we have validated our models against several systems, including a PV array causing glare to the air-traffic control tower at Manchester-Boston Regional Airport and several sites in Albuquerque, and the tool accurately predicted the occurrence and intensity of glare at different times and days of the year. Several V1 calculations utilize the PV array centroid, rather than the actual glare spot location, due to algorithm limitations. This may affect results for large PV footprints. Additional analyses of array sub-sections can provide additional information on expected glare. This primarily

affects V1 analyses of path receptors.

Random number computations are utilized by various steps of the annual hazard analysis algorithm. Predicted minutes of glare can vary between runs as a result. This limitation primarily affects analyses of Observation Point receptors, including ATCTs. Note that the SGHAT/ ForgeSolar methodology has always relied on an analytical, qualitative approach to accurately determine the overall hazard (i.e. green vs. yellow) of expected glare on an annual basis.

The analysis does not automatically consider obstacles (either man-made or natural) between the observation points and the prescribed solar installation that may obstruct observed glare, such as trees, hills, buildings, etc.

The subtended source angle (glare spot size) is constrained by the PV array footprint size. Partitioning large arrays into smaller sections will reduce the maximum potential subtended angle, potentially impacting results if actual glare spots are larger than the sub-array size. Additional analyses of the combined area of adjacent sub-arrays can provide more information on potential glare hazards. (See previous point on related limitations.)

The variable direct normal irradiance (DNI) feature (if selected) scales the user-prescribed peak DNI using a typical clear-day irradiance profile. This profile has a lower DNI in the mornings and evenings and a maximum at solar noon. The scaling uses a clear-day irradiance profile based on a normalized time relative to sunrise, solar noon, and sunset, which are prescribed by a sun-position algorithm and the latitude and longitude obtained from Google maps. The actual DNI on any given day can be affected by cloud cover, atmospheric attenuation, and other environmental factors.

The ocular hazard predicted by the tool depends on a number of environmental, optical, and human factors, which can be uncertain. We provide input fields and typical ranges of values for these factors so that the user can vary these parameters to see if they have an impact on the results. The speed of SGHAT allows expedited sensitivity and parametric analyses.

The system output calculation is a DNI-based approximation that assumes clear, sunny skies year-round. It should not be used in place of more rigorous modeling methods.

Hazard zone boundaries shown in the Glare Hazard plot are an approximation and visual aid based on aggregated research data. Actual ocular impact outcomes encompass a continuous, not discrete, spectrum.

Glare locations displayed on receptor plots are approximate. Actual glare-spot locations may differ.

Refer to the Help page at www.forgesolar.com/help/ for assumptions and limitations not listed here.

Default glare analysis parameters and observer eye characteristics (for reference only):

- · Analysis time interval: 1 minute
- Ocular transmission coefficient: 0.5
- Pupil diameter: 0.002 meters
- Eye focal length: 0.017 meters
- · Sun subtended angle: 9.3 milliradians

2016 © Sims Industries d/b/a ForgeSolar, All Rights Reserved.



# FORGESOLAR GLARE ANALYSIS

#### Project: **STELLAR** Site configuration: **Overhead Analysis**

Created 24 Jan, 2023 Updated 25 Jan, 2023 Time-step 1 minute Timezone offset UTC-8 Site ID 82961.14602 Category 10 to 100 kW DNI peaks at 1,000.0 W/m^2 Ocular transmission coefficient 0.5 Pupil diameter 0.002 m Eye focal length 0.017 m Sun subtended angle 9.3 mrad PV analysis methodology V2



# Summary of Results Glare with low potential for temporary after-image predicted

PV Array	Tilt	Orient	Annual G	reen Glare	Annual Ye	llow Glare	Energy
	٥	0	min	hr	min	hr	kWh
PV array 1	10.0	180.0	8,535	142.2	0	0.0	-
PV array 2	10.0	180.0	8,366	139.4	0	0.0	-
PV array 3	10.0	180.0	8,422	140.4	0	0.0	-

Total annual glare received by each receptor; may include duplicate times of glare from multiple reflective surfaces.

Receptor	Annual Green Glare		Annual Yellow Glare	
	min	hr	min	hr
OHead Rwy 14 Downwind	0	0.0	0	0.0
OHead Rwy 14 Final	13,573	226.2	0	0.0
OHead Rwy 14 Initial	11,750	195.8	0	0.0
OHead Rwy 32 Downwind	0	0.0	0	0.0
OHead Rwy 32 Final	0	0.0	0	0.0
OHead Rwy 32 Initial	0	0.0	0	0.0
FP 1	0	0.0	0	0.0
FP 12	0	0.0	0	0.0
FP 30	0	0.0	0	0.0
FP 32	0	0.0	0	0.0
1-ATCT	0	0.0	0	0.0



# **Component Data**

# **PV Arrays**

Name: PV array 1 Axis tracking: Fixed (no rotation) Tilt: 10.0° Orientation: 180.0° Rated power: -Panel material: Smooth glass with AR coating Reflectivity: Vary with sun Slope error: correlate with material



Vertex	Latitude (°)	Longitude (°)	Ground elevation (ft)	Height above ground (ft)	Total elevation (ft)
1	33.914502	-117.291257	1546.38	23.95	1570.33
2	33.914503	-117.291154	1546.05	23.95	1570.00
3	33.914390	-117.291158	1546.05	23.95	1570.00
4	33.914392	-117.291259	1545.81	23.95	1569.76

Name: PV array 2 Axis tracking: Fixed (no rotation) Tilt: 10.0° Orientation: 180.0° Rated power: -Panel material: Smooth glass with AR coating Reflectivity: Vary with sun Slope error: correlate with material



Vertex	Latitude (°)	Longitude (°)	Ground elevation (ft)	Height above ground (ft)	Total elevation (ft)
1	33.914498	-117.291123	1545.90	23.95	1569.85
2	33.914496	-117.291054	1545.93	23.95	1569.88
3	33.914419	-117.291055	1545.31	23.95	1569.26
4	33.914416	-117.291133	1545.24	23.95	1569.19



Name: PV array 3 Axis tracking: Fixed (no rotation) Tilt: 10.0° Orientation: 180.0° Rated power: -Panel material: Smooth glass with AR coating Reflectivity: Vary with sun Slope error: correlate with material



Vertex	Latitude (°)	Longitude (°)	Ground elevation (ft)	Height above ground (ft)	Total elevation (ft)
1	33.914363	-117.291217	1546.06	23.95	1570.01
2	33.914365	-117.291099	1545.98	23.95	1569.93
3	33.914314	-117.291098	1545.92	23.95	1569.87
4	33.914316	-117.291216	1545.53	23.95	1569.48

# **Route Receptors**

9ath type: ∃ )bserver vi	ad Rwy 14 Downwi Two-way <b>iew angle</b> : 50.0°				
			Goog	e	Imagery ©2023 TerraMet
Vertex	Latitude (°)	Longitude (°)	Goog Ground elevation (ft)	Peter Height above ground (ft)	Total elevation (ft)
Vertex	Latitude (°) 33.863564	Longitude (°)			



Name: OHead Rwy 14 Final Path type: Two-way Observer view angle: 50.0°



Vertex	Latitude (°)	Longitude (°)	Ground elevation (ft)	Height above ground (ft)	Total elevation (ft)
1	33.925156	-117.291061	1500.14	2000.20	3500.34
2	33.896431	-117.270636	1540.14	0.00	1540.14

Name: OHead Rwy 14 Initial Path type: Two-way Observer view angle: 50.0° Vertex Latitude (°) Longitude (°) Ground elevation (ft) Height above ground (ft) Total elevation (ft) 33.968036 -117.322128 1500.14 2000.20 3500.34 1 2 33.880706 -117.259453 1500.14 2000.20 3500.34

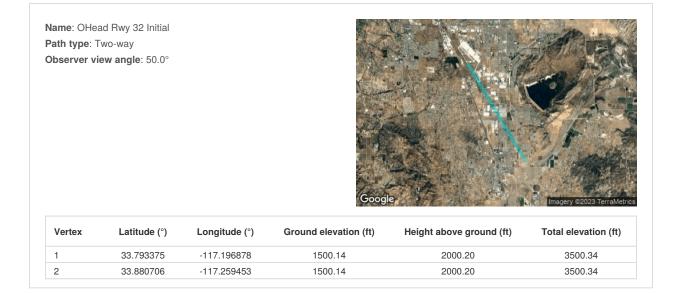
ath type: T	ad Rwy 32 Downwi <sup>-</sup> wo-way <b>ew angle</b> : 50.0°	nd	Goog		Inagery @2023 TerraMetric
Vertex	Latitude (°)	Longitude (°)	Ground elevation (ft)	Height above ground (ft)	Total elevation (ft)
1	33.863564	-117.293808	1500.14	2000.20	3500.34



Name: OHead Rwy 32 Final Path type: Two-way Observer view angle: 50.0°



Vertex	Latitude (°)	Longitude (°)	Ground elevation (ft)	Height above ground (ft)	Total elevation (ft)
1	33.836269	-117.222787	1500.14	2000.20	3500.34
2	33.864994	-117.248281	1500.14	0.00	1500.14





# **Flight Path Receptors**

Name: FP 1 Description: Threshold hei Direction: 149 Glide slope: 2 Pilot view rest Vertical view: Azimuthal view	.0° .59° t <b>ricted?</b> Yes 30.0°		Google	Pan Bernardino, Maxar Technologies, U.S. Ge	elogical Survey, USDA/FPAC/GEO
Point	Latitude (°)	Longitude (°)	Ground elevation (ft)	Height above ground (ft)	Total elevation (ft)
		117.070001	1535.67	56.00	1591.67
Threshold	33.896436	-117.270631	1555.07	30.00	1591.07

Name: FP 12 Description: Threshold height: 50 ft Direction: 135.0° Glide slope: 3.0° Pilot view restricted? Yes Vertical view: 30.0° Azimuthal view: 50.0°



Point	Latitude (°)	Longitude (°)	Ground elevation (ft)	Height above ground (ft)	Total elevation (ft)
Threshold	33.890243	-117.260666	1517.92	50.00	1567.92
Two-mile	33.910687	-117.285323	1543.40	577.95	2121.35



Name: FP 30 Description: Threshold height: 50 ft Direction: 315.0° Glide slope: 3.0° Pilot view restricted? Yes Vertical view: 30.0° Azimuthal view: 50.0°



Point	Latitude (°)	Longitude (°)	Ground elevation (ft)	Height above ground (ft)	Total elevation (ft)
Threshold	33.884351	-117.253579	1505.92	50.00	1555.92
Two-mile	33.863907	-117.228923	1469.80	639.55	2109.35

Description: Threshold height: 50 ft Direction: 329.0° Glide slope: 3.0° Pilot view restricted? Yes Vertical view: 30.0° Azimuthal view: 50.0°					
Point	Latitude (°)	Longitude (°)	Google Ground elevation (ft)	an Bernardino, Maxar Technologies, U.S. Ge Height above ground (ft)	eological Survey, USDA/FPAC/ Total elevation (ft)
Point Threshold	Latitude (°) 33.865319	Longitude (°) -117.248518			



# **Discrete Observation Point Receptors**

Name	ID	Latitude (°)	Longitude (°)	Elevation (ft)	Height (ft)
1-ATCT	1	33.891563	-117.251182	1508.79	118.00

Map image of 1-ATCT





# Summary of Results Glare with low potential for temporary after-image predicted

PV Array	Tilt	Orient	Annual Green Glare		Annual Yellow Glare		Energy
	o	o	min	hr	min	hr	kWh
PV array 1	10.0	180.0	8,535	142.2	0	0.0	-
PV array 2	10.0	180.0	8,366	139.4	0	0.0	-
PV array 3	10.0	180.0	8,422	140.4	0	0.0	-

Total annual glare received by each receptor; may include duplicate times of glare from multiple reflective surfaces.

Receptor	Annual Gr	een Glare	Annual Yellow Glare	
	min	hr	min	hr
OHead Rwy 14 Downwind	0	0.0	0	0.0
OHead Rwy 14 Final	13,573	226.2	0	0.0
OHead Rwy 14 Initial	11,750	195.8	0	0.0
OHead Rwy 32 Downwind	0	0.0	0	0.0
OHead Rwy 32 Final	0	0.0	0	0.0
OHead Rwy 32 Initial	0	0.0	0	0.0
FP 1	0	0.0	0	0.0
FP 12	0	0.0	0	0.0
FP 30	0	0.0	0	0.0
FP 32	0	0.0	0	0.0
1-ATCT	0	0.0	0	0.0



# PV: PV array 1 low potential for temporary after-image

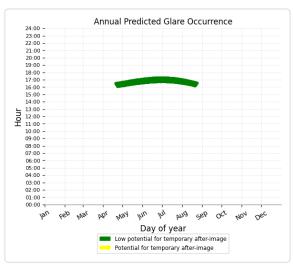
Receptor results ordered by category of glare

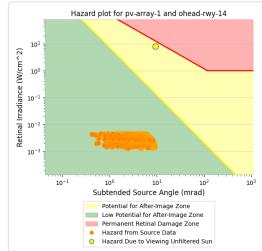
Receptor	Annual Gr	een Glare	Annual Ye	llow Glare
	min	hr	min	hr
OHead Rwy 14 Final	4,564	76.1	0	0.0
OHead Rwy 14 Initial	3,971	66.2	0	0.0
OHead Rwy 14 Downwind	0	0.0	0	0.0
OHead Rwy 32 Downwind	0	0.0	0	0.0
OHead Rwy 32 Final	0	0.0	0	0.0
OHead Rwy 32 Initial	0	0.0	0	0.0
FP 1	0	0.0	0	0.0
FP 12	0	0.0	0	0.0
FP 30	0	0.0	0	0.0
FP 32	0	0.0	0	0.0
1-ATCT	0	0.0	0	0.0

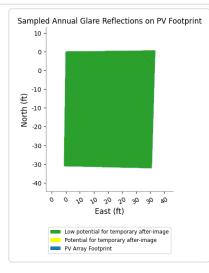


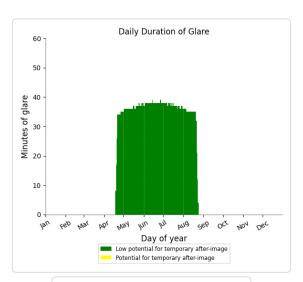
# PV array 1 and OHead Rwy 14 Final

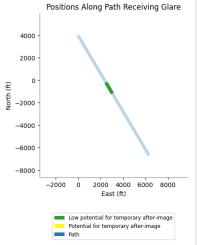
Receptor type: Route 0 minutes of yellow glare 4,564 minutes of green glare







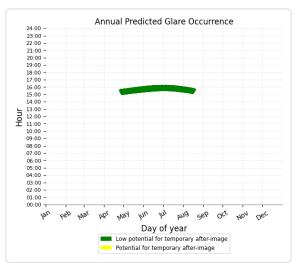


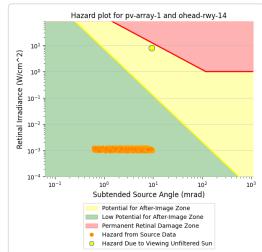


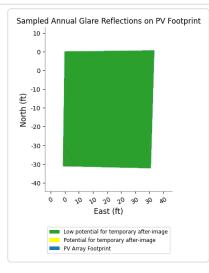


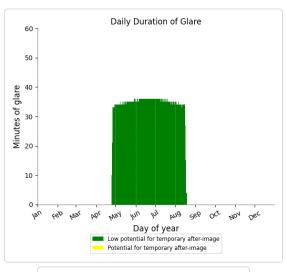
# PV array 1 and OHead Rwy 14 Initial

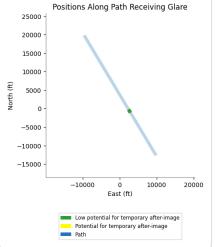
Receptor type: Route 0 minutes of yellow glare 3,971 minutes of green glare













### PV array 1 and OHead Rwy 14

#### Downwind

Receptor type: Route
No glare found

# PV array 1 and OHead Rwy 32

#### Final

Receptor type: Route No glare found

#### PV array 1 and FP 1

Receptor type: 2-mile Flight Path **No glare found** 

# PV array 1 and FP 30

Receptor type: 2-mile Flight Path **No glare found** 

### PV array 1 and 1-ATCT

Receptor type: Observation Point **No glare found** 

# PV array 1 and OHead Rwy 32

#### Downwind

Receptor type: Route No glare found

# PV array 1 and OHead Rwy 32

# Initial

Receptor type: Route
No glare found

# PV array 1 and FP 12

Receptor type: 2-mile Flight Path **No glare found** 

# PV array 1 and FP 32

Receptor type: 2-mile Flight Path No glare found



# PV: PV array 2 low potential for temporary after-image

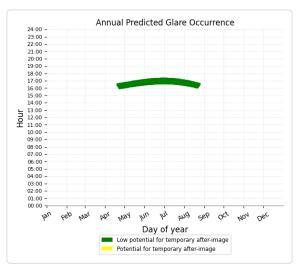
Receptor results ordered by category of glare

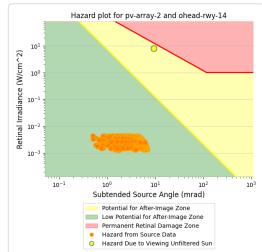
Receptor	Annual Gr	een Glare	Annual Ye	llow Glare
	min	hr	min	hr
OHead Rwy 14 Final	4,495	74.9	0	0.0
OHead Rwy 14 Initial	3,871	64.5	0	0.0
OHead Rwy 14 Downwind	0	0.0	0	0.0
OHead Rwy 32 Downwind	0	0.0	0	0.0
OHead Rwy 32 Final	0	0.0	0	0.0
OHead Rwy 32 Initial	0	0.0	0	0.0
FP 1	0	0.0	0	0.0
FP 12	0	0.0	0	0.0
FP 30	0	0.0	0	0.0
FP 32	0	0.0	0	0.0
1-ATCT	0	0.0	0	0.0

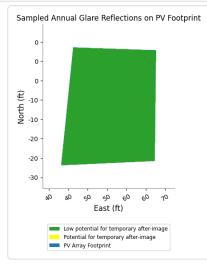


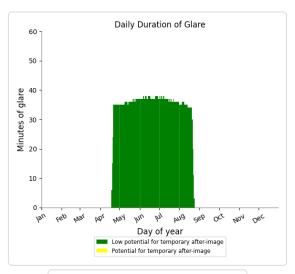
# PV array 2 and OHead Rwy 14 Final

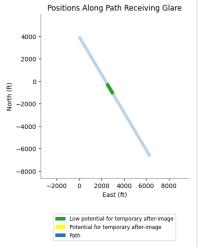
Receptor type: Route 0 minutes of yellow glare 4,495 minutes of green glare







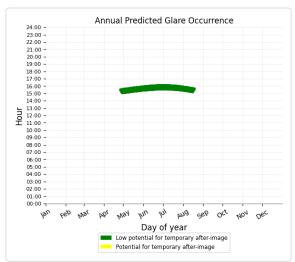


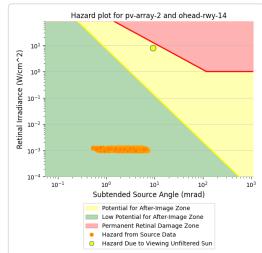


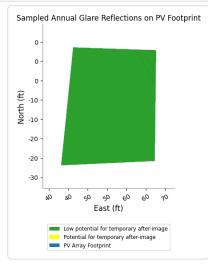


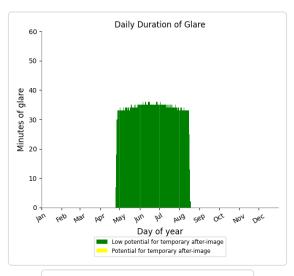
# PV array 2 and OHead Rwy 14 Initial

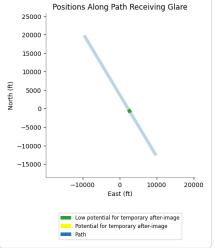
Receptor type: Route 0 minutes of yellow glare 3,871 minutes of green glare













### PV array 2 and OHead Rwy 14

#### Downwind

Receptor type: Route
No glare found

# PV array 2 and OHead Rwy 32

#### Final

Receptor type: Route No glare found

#### PV array 2 and FP 1

Receptor type: 2-mile Flight Path **No glare found** 

# PV array 2 and FP 30

Receptor type: 2-mile Flight Path **No glare found** 

### PV array 2 and 1-ATCT

Receptor type: Observation Point **No glare found** 

# PV array 2 and OHead Rwy 32

#### Downwind

Receptor type: Route No glare found

# PV array 2 and OHead Rwy 32

# Initial

Receptor type: Route
No glare found

# PV array 2 and FP 12

Receptor type: 2-mile Flight Path **No glare found** 

# PV array 2 and FP 32

Receptor type: 2-mile Flight Path **No glare found** 



# PV: PV array 3 low potential for temporary after-image

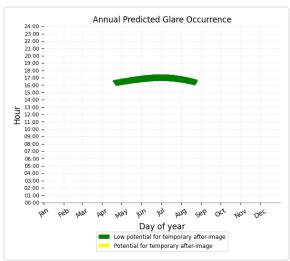
Receptor results ordered by category of glare

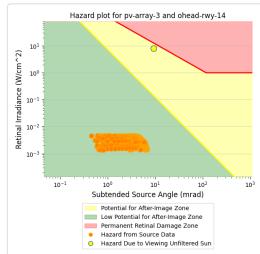
Receptor	Annual Gr	een Glare	Annual Ye	llow Glare
	min	hr	min	hr
OHead Rwy 14 Final	4,514	75.2	0	0.0
OHead Rwy 14 Initial	3,908	65.1	0	0.0
OHead Rwy 14 Downwind	0	0.0	0	0.0
OHead Rwy 32 Downwind	0	0.0	0	0.0
OHead Rwy 32 Final	0	0.0	0	0.0
OHead Rwy 32 Initial	0	0.0	0	0.0
FP 1	0	0.0	0	0.0
FP 12	0	0.0	0	0.0
FP 30	0	0.0	0	0.0
FP 32	0	0.0	0	0.0
1-ATCT	0	0.0	0	0.0

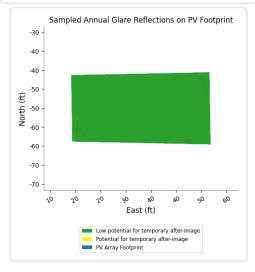


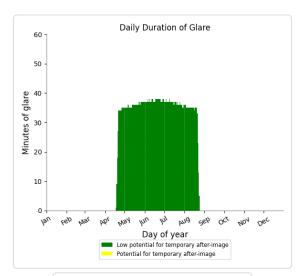
# PV array 3 and OHead Rwy 14 Final

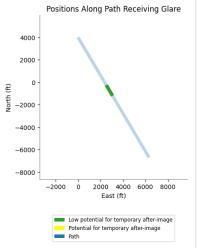
Receptor type: Route 0 minutes of yellow glare 4,514 minutes of green glare







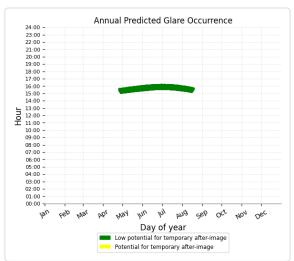


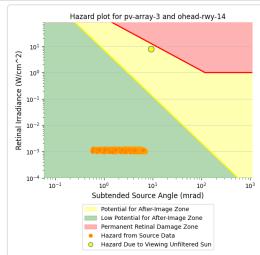


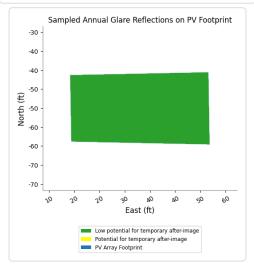


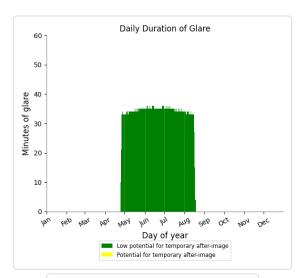
# PV array 3 and OHead Rwy 14 Initial

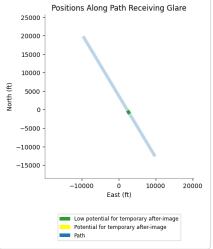
Receptor type: Route 0 minutes of yellow glare 3,908 minutes of green glare













### PV array 3 and OHead Rwy 14

#### Downwind

Receptor type: Route
No glare found

# PV array 3 and OHead Rwy 32

#### Final

Receptor type: Route No glare found

#### PV array 3 and FP 1

Receptor type: 2-mile Flight Path **No glare found** 

# PV array 3 and FP 30

Receptor type: 2-mile Flight Path **No glare found** 

### PV array 3 and 1-ATCT

Receptor type: Observation Point **No glare found** 

# PV array 3 and OHead Rwy 32

#### Downwind

Receptor type: Route No glare found

# PV array 3 and OHead Rwy 32

# Initial

Receptor type: Route
No glare found

# PV array 3 and FP 12

Receptor type: 2-mile Flight Path **No glare found** 

# PV array 3 and FP 32

Receptor type: 2-mile Flight Path **No glare found** 



# Assumptions

"Green" glare is glare with low potential to cause an after-image (flash blindness) when observed prior to a typical blink response time. "Yellow" glare is glare with potential to cause an after-image (flash blindness) when observed prior to a typical blink response time. Times associated with glare are denoted in Standard time. For Daylight Savings, add one hour.

The algorithm does not rigorously represent the detailed geometry of a system; detailed features such as gaps between modules, variable height of the PV array, and support structures may impact actual glare results. However, we have validated our models against several systems, including a PV array causing glare to the air-traffic control tower at Manchester-Boston Regional Airport and several sites in Albuquerque, and the tool accurately predicted the occurrence and intensity of glare at different times and days of the year. Several V1 calculations utilize the PV array centroid, rather than the actual glare spot location, due to algorithm limitations. This may affect results for large PV footprints. Additional analyses of array sub-sections can provide additional information on expected glare. This primarily

affects V1 analyses of path receptors.

Random number computations are utilized by various steps of the annual hazard analysis algorithm. Predicted minutes of glare can vary between runs as a result. This limitation primarily affects analyses of Observation Point receptors, including ATCTs. Note that the SGHAT/ ForgeSolar methodology has always relied on an analytical, qualitative approach to accurately determine the overall hazard (i.e. green vs. yellow) of expected glare on an annual basis.

The analysis does not automatically consider obstacles (either man-made or natural) between the observation points and the prescribed solar installation that may obstruct observed glare, such as trees, hills, buildings, etc.

The subtended source angle (glare spot size) is constrained by the PV array footprint size. Partitioning large arrays into smaller sections will reduce the maximum potential subtended angle, potentially impacting results if actual glare spots are larger than the sub-array size. Additional analyses of the combined area of adjacent sub-arrays can provide more information on potential glare hazards. (See previous point on related limitations.)

The variable direct normal irradiance (DNI) feature (if selected) scales the user-prescribed peak DNI using a typical clear-day irradiance profile. This profile has a lower DNI in the mornings and evenings and a maximum at solar noon. The scaling uses a clear-day irradiance profile based on a normalized time relative to sunrise, solar noon, and sunset, which are prescribed by a sun-position algorithm and the latitude and longitude obtained from Google maps. The actual DNI on any given day can be affected by cloud cover, atmospheric attenuation, and other environmental factors.

The ocular hazard predicted by the tool depends on a number of environmental, optical, and human factors, which can be uncertain. We provide input fields and typical ranges of values for these factors so that the user can vary these parameters to see if they have an impact on the results. The speed of SGHAT allows expedited sensitivity and parametric analyses.

The system output calculation is a DNI-based approximation that assumes clear, sunny skies year-round. It should not be used in place of more rigorous modeling methods.

Hazard zone boundaries shown in the Glare Hazard plot are an approximation and visual aid based on aggregated research data. Actual ocular impact outcomes encompass a continuous, not discrete, spectrum.

Glare locations displayed on receptor plots are approximate. Actual glare-spot locations may differ.

Refer to the Help page at www.forgesolar.com/help/ for assumptions and limitations not listed here.

Default glare analysis parameters and observer eye characteristics (for reference only):

- · Analysis time interval: 1 minute
- Ocular transmission coefficient: 0.5
- Pupil diameter: 0.002 meters
- Eye focal length: 0.017 meters
- · Sun subtended angle: 9.3 milliradians

2016 © Sims Industries d/b/a ForgeSolar, All Rights Reserved.



### NOTICE OF PUBLIC HEARING RIVERSIDE COUNTY AIRPORT LAND USE COMMISSION www.rcaluc.org

A PUBLIC HEARING has been scheduled before the Riverside County Airport Land Use Commission (ALUC) to consider the applications described below.

Any person may submit written comments to the ALUC before the hearing or may appear and be heard in support of or opposition to the project at the time of hearing. **Information on how to participate in the hearing will be available on the ALUC website at www.rcaluc.org.** The ALUC holds hearings for local discretionary permits within the Airport Influence Area, reviewing for aeronautical safety, noise and obstructions. ALUC reviews a proposed plan or project solely to determine whether it is consistent with the applicable Airport Land Use Compatibility Plan. For more information please contact <u>ALUC Planner Jackie Vega at (951) 955-0982</u>.

The March Joint Powers Authority Planning Department should be contacted on non-ALUC issues. For more information, please contact March Joint Powers Authority Planner Roxanne Corona at 951-656-7000.

The proposed project application may be viewed by a prescheduled appointment and on the ALUC website <u>www.rcaluc.org</u>. Written comments may be submitted at the Riverside County Administrative Center, 4080 Lemon Street, 14th Floor, Riverside, California 92501, Monday through Friday from 8:00 a.m. to 3:30 p.m., or by e-mail to javega@rivco.org. Individuals with disabilities requiring reasonable modifications or accommodations, please contact Barbara Santos at (951) 955-5132.

PLACE OF HEARING:	Riverside County Administration Center 4080 Lemon Street, 1 <sup>st</sup> Floor Board Chambers Riverside California
DATE OF HEARING:	March 9, 2023

TIME OF HEARING: 9:30 A.M.

CASE DESCRIPTION:

<u>ZAP1558MA23 – Stellar Solar Electric (Representative: Frida Mock)</u> – March Joint Powers Authority Case No. COM-Solar 22-004 (Building Permit). A proposal to construct a 2,197 square foot rooftop solar panel system on an existing industrial building on 4.45 acres, located at 14100 Meridian Parkway (Airport Compatibility Zone B1 of the March Air Reserve Base/Inland Port Airport Influence Area).



## **APPLICATION FOR MAJOR LAND USE ACTION REVIEW**

		ALUC STAFF OI	NLY	
ALUC Case Num	<u>ıber</u> :	Date Submitte	ed:	
<u>AIA:</u>		Zone:	Public Hearing	Staff Review
		Applicant		
Applicant Full Name:				
Applicant Addres				
Phone:		Email:		
	Representativ	e/ Property Owner	Contact Information	
Representative:			Email	:
_				:
Address:				
Property Owner:			Email	·
				:
Address:				
		Local Jurisdiction	Agency	
Agency Name:				:
Staff Contact:			<b>F</b>	
Address:		:		:
Local Agency Case No.:				
		Project Location	on	
Street Address:			Gross Parcel Siz	.e.:
Assessor's Parce	el No.:			
		_Solar_		
		Solar		
Is the project pro	posing solar Panels? Yes	No	If yes, please p (only if in Zone (	rovide solar glare study. C or higher)

	Data	
Site Elevation:(above mean sea level)		
Height of Building or structures:		
What type of drainage basins are being proposed and the squarefootage:		
	Notice	

**A. NOTICE:** Failure of an applicant to submit complete or adequate information pursuant to Sections 65940 to 65948 inclusive of the California Government Code, MAY constitute grounds for disapproval of actions, regulations, or permits.

**B. REVIEW TIME:** Estimated time for "staff level review" is approximately 30 days from date of submittal. Estimated time for "commission level review" is approximately 45 days from date of a complete application submittal to the next available commission hearing meeting.

#### C. SUBMISSION PACKAGE:

#### Please submit all application items DIGITALLY via USB or CD:

- Completed ALUC Application Form
- Plans Package: site plans, floor plans, building elevations, grading plans, subdivision maps
- Exhibits of change of zone, general plan amendment, specific plan amendment
- Project description of existing and proposed use

#### Additionally, please provide:

- ALUC fee payment (Checks made out to Riverside County ALUC)
- Gummed address labels of all surrounding property owners within a 300-foot radius of project site. (Only required if the project is scheduled for a public hearing).

		,		
	ALL OTHERS		MARCH ZONE E	
	INITIAL REVIEW	AMENDED	INITIAL REVIEW	AMENDED
CASE TYPE	FEE	<b>REVIEW FEE</b>	FEE	<b>REVIEW FEE</b>
General Plan or General Plan				
Element (County or City)	\$3,696	\$2,458	\$2,310	\$1,537
Community Plan or Area Plan				
(County or City)	\$3,696	\$2,402	\$2,310	\$1,502
(New) Specific Plan or Master Plan	\$3,261	N/A	\$2,038	N/A
Specific Plan Amendment	N/A	\$2,181	N/A	\$1,363
General Plan Amendment	\$1,331	N/A	\$832	N/A
Change of Zone or Ordinance				
Amendment	\$1,331	\$887	\$832	\$554
Non-Impact Legislative Project				
(as determined by staff)	\$420	N/A	\$375	N/A
Tract Map	\$1,515 \$1,017		\$947	\$636
Conditional Use Permit or Public				
Use Permit	\$1,331	\$887	\$832	\$554
Plot Plan, Development Review				
Plan or Design Review	\$1,331	\$887	\$832	\$554
Parcel Map	\$1,331	\$887	\$832	\$554
Environmental Impact Report*	\$3,050	\$2,033	\$1,906	\$1,271
Other Environmental Assessments*	\$1,671	\$1,109	\$1,044	\$693
Building Permit or Tenant				
Improvement	\$573	\$389	\$359	\$243

## SCHEDULE OF DEVELOPMENT REVIEW FEES (effective 3/1/19)

Effective March 1, 2019, an additional fee of \$190.00 will be charged to projects requiring ALUC public hearings (no additional fee for staff review cases).

ADDITIONAL PROJECT SPECIFIC FEES (in addition to the above fees)				
Location in APZ I or II of March	\$2,500	\$2,500	N/A	N/A
AIA Large Commercial Solar Project (Energy Generation Facility)	\$3,000	\$3,000	\$3,000	\$3,000
Heliports/Helicopter Landing Sites	\$1,000	\$1,000	\$1,000	\$1,000
Speculative Nonresidential Multiple Buildings (4 or more)	\$8,210	\$8,210	N/A	N/A

**NOTE:** \* This fee is collected only for projects that are not classified under one of the above categories.

#### Checks should be made payable to: Riverside County Airport Land Use Commission

Riverside County Airport Land Use Commission, County Administrative Center, 4080 Lemon Street, 14<sup>th</sup> Floor, Riverside, CA 92501, Phone: 951-955-5132 Fax: 951-955-5177 Website: <u>www.rcaluc.org</u>

## RIVERSIDE COUNTY AIRPORT LAND USE COMMISSION

#### **STAFF REPORT**

AGENDA ITEM:	3.2
HEARING DATE:	March 9, 2023
CASE NUMBER:	ZAP1559MA23 – PK Architecture (Representative: Sage Realty Group)
APPROVING JURISDICTION:	City of Perris
JURISDICTION CASE NO:	PLN2305029 (Specific Plan Amendment <b>),</b> DPR2200031 (Development Plan Review), TPM2305028 (Tentative Parcel Map)
LAND USE PLAN:	2014 March Air Reserve Base/Inland Port Airport Land Use Compatibility Plan
Airport Influence Area:	March Air Reserve Base/Inland Port Airport
Land Use Policy:	Compatibility Zone D
Noise Levels:	Below 60 CNEL from aircraft
MAJOR ISSUES:	None

#### **RECOMMENDATION:** Staff recommends that the Commission find the Specific Plan Amendment <u>CONSISTENT</u> with the 2014 March Air Reserve Base/Inland Port Airport Land Use Compatibility Plan, and also find the Development Plan Review and Tentative Parcel Map <u>CONSISTENT</u>, subject to the conditions included herein.

**PROJECT DESCRIPTION**: A proposal to construct three industrial buildings totaling 66,686 square feet on 4.42 acres. The applicant also proposes to amend the March Plaza Specific Land Use Designation, changing the sites zoning from Commercial (C) to Light Industrial (LI) and Business Professional Office (BPO). The applicant also proposes merging six existing parcels into one.

**PROJECT LOCATION:** The site is located northerly of Harley Knox Boulevard, westerly of Perris Boulevard, and southerly of Oleander Avenue, approximately 6,471 feet southeasterly of the southerly end of Runway 14-32 at March Air Reserve Base.

#### BACKGROUND:

<u>Non-Residential Intensity</u>: Pursuant to the Airport Land Use Compatibility Plan for the March Air Reserve Base/Inland Port Airport, the site is located within Compatibility Zone D, which does not restrict non-residential intensity.

Staff Report Page 2 of 4

<u>Prohibited and Discouraged Uses:</u> The applicant does not propose any uses prohibited or discouraged in Compatibility Zone D.

<u>Noise:</u> The March Air Reserve Base/Inland Port Airport Land Use Compatibility Plan depicts the site as being outside the 60 CNEL range from aircraft noise. Therefore, no special measures are required to mitigate aircraft-generated noise.

<u>Part 77</u>: The elevation of Runway 14-32 at its southerly terminus is 1,488 feet above mean sea level (1,488 feet AMSL). At a distance of approximately 6,471 feet from the runway to the site, Federal Aviation Administration (FAA) review would be required for any structures with top of roof elevation exceeding 1,553 feet AMSL. The site's finished floor elevation is 1,460 feet AMSL and the proposed building height is 29 feet, for a top point elevation of 1,489 feet AMSL. Therefore, review by the FAA Obstruction Evaluation Service (FAA OES) was not required.

<u>Open Area:</u> None of the Compatibility Zones for the March Air Reserve Base/Inland Port ALUCP require open area specifically.

<u>Hazards to Flight:</u> Land use practices that attract or sustain hazardous wildlife populations on or near airports significantly increase the potential of Bird Aircraft Strike Hazards (BASH). The FAA strongly recommends that storm water management systems located within 5,000 or 10,000 feet of the Airport Operations Area, depending on the type of aircraft, be designed and operated so as not to create above-ground standing water. To facilitate the control of hazardous wildlife, the FAA recommends the use of steep-sided, rip-rap lined, narrow, linearly shaped water detention basins. All vegetation in and around detention basins that provide food or cover for hazardous wildlife should be eliminated. (FAA Advisory Circular 5200-33C). The project is located 6,471 feet from the runway, and therefore would be subject to the above requirement.

The project includes a 1,000 square foot bioretention basin. Pursuant to the study "Wildlife Hazard Management at Riverside County Airports: Background and Policy", October 2018, by Mead & Hunt, which is the basis of the brochure titled "Airports, Wildlife and Stormwater Management", such limited basins are permissible with the appropriate criteria: the basin is used in conjunction with appropriate landscaping for such uses as adjacent to structures, parking islands, medians, site entrances, planter boxes, and vegetation is selected carefully so as not to provide food, shelter, nesting, roosting, or water for wildlife. The project has been conditioned to be consistent with the basin criteria (as well as providing 48-hour draw down of the basin).

<u>Specific Plan Amendment:</u> The applicant also proposes to amend the March Plaza Specific Land Use Designation, changing the sites zoning from Commercial (C) to Light Industrial (LI) and Business Professional Office (BPO). The proposed amendments would be as, or more, consistent with the Compatibility Plan as the underlying compatibility zone does not restrict intensity.

#### CONDITIONS:

- 1. Any new outdoor lighting that is installed shall be hooded or shielded so as to prevent either the spillage of lumens or reflection into the sky. Outdoor lighting shall be downward facing.
- 2. The following uses/activities are not included in the proposed project and shall be prohibited at this site:

#### Staff Report Page 3 of 4

- (a) Any use which would direct a steady light or flashing light of red, white, green, or amber colors associated with airport operations toward an aircraft engaged in an initial straight or circling climb following takeoff or toward an aircraft engaged in a straight or circling final approach toward a landing at an airport, other than a DoD or FAA-approved navigational signal light or visual approach slope indicator.
- (b) Any use which would cause sunlight to be reflected towards an aircraft engaged in an initial straight or circling climb following takeoff or towards an aircraft engaged in a straight or circling final approach towards a landing at an airport.
- (c) Any use which would generate smoke or water vapor, or which would attract large concentrations of birds, or which may otherwise affect safe air navigation within the area. (Such uses include landscaping utilizing water features, aquaculture, production of cereal grains, sunflower, and row crops, composting operations, wastewater management facilities, artificial marshes, trash transfer stations that are open on one or more sides, recycling centers containing putrescible wastes, construction and demolition debris facilities, fly ash disposal, and incinerators.)
- (d) Any use which would generate electrical interference that may be detrimental to the operation of aircraft and/or aircraft instrumentation.
- (e) Hazards to flight
- 3. The attached notice shall be provided to all prospective purchasers of the property and tenants of the building, and shall be recorded as a deed notice.
- 4. Any proposed detention basins or facilities shall be designed and maintained to provide for a maximum 48-hour detention period following the design storm, and remain totally dry between rainfalls. Vegetation in and around the detention basins that would provide food or cover for birds would be incompatible with airport operations and shall not be utilized in project landscaping. Trees shall be spaced so as to prevent large expanses of contiguous canopy, when mature. Landscaping in and around the detention basin(s) shall not include trees or shrubs that produce seeds, fruits, or berries.

Landscaping in the detention basin, if not rip-rap, should be in accordance with the guidance provided in ALUC "LANDSCAPING NEAR AIRPORTS" brochure, and the "AIRPORTS, WILDLIFE AND STORMWATER MANAGEMENT" brochure available at <u>RCALUC.ORG</u> which list acceptable plants from Riverside County Landscaping Guide or other alternative landscaping as may be recommended by a qualified wildlife hazard biologist.

A notice sign, in a form similar to that attached hereto, shall be permanently affixed to the stormwater basin with the following language: "There is an airport nearby. This stormwater basin is designed to hold stormwater for only 48 hours and not attract birds. Proper maintenance is necessary to avoid bird strikes". The sign will also include the name, telephone number or other contact information of the person or entity responsible to monitor the stormwater basin.

Staff Report Page 4 of 4

- 5. March Air Reserve Base must be notified of any land use having an electromagnetic radiation component to assess whether a potential conflict with Air Base radio communications could result. Sources of electromagnetic radiation include radio wave transmission in conjunction with remote equipment inclusive of irrigation controllers, access gates, etc.
- 6. The project has been evaluated to construct three industrial buildings totaling 66,686 square feet. Any increase in building area, change in use to any higher intensity use, change in building location, or modification of the tentative parcel map lot lines and areas will require an amended review to evaluate consistency with the ALUCP compatibility criteria, at the discretion of the ALUC Director.

X:\AIRPORT CASE FILES\March\ZAP1559MA23\ZAP1559MA22sr.doc

# NOTICE OF AIRPORT IN VICINITY

This property is presently located in the vicinity of an airport, within what is known as an airport influence area. For that reason, the property may be subject to some of the annoyances or inconveniences associated with proximity to airport operations (for example: noise, vibration, or odors). Individual sensitivities to those annoyances [can vary from person to person. You may wish to consider what airport annoyances], if any, are associated with the property before you complete your purchase and determine whether they are acceptable to you. Business & Professions Code Section 11010 (b)

# NOTICE

# THERE IS AN AIRPORT NEARBY.

# THIS STORM WATER BASIN IS DESIGNED TO HOLD

# **STORM WATER FOR ONLY 48 HOURS AND**

# **NOT TO ATTRACT BIRDS**

# PROPER MAINTENANCE IS NECESSARY TO AVOID BIRD STRIKES

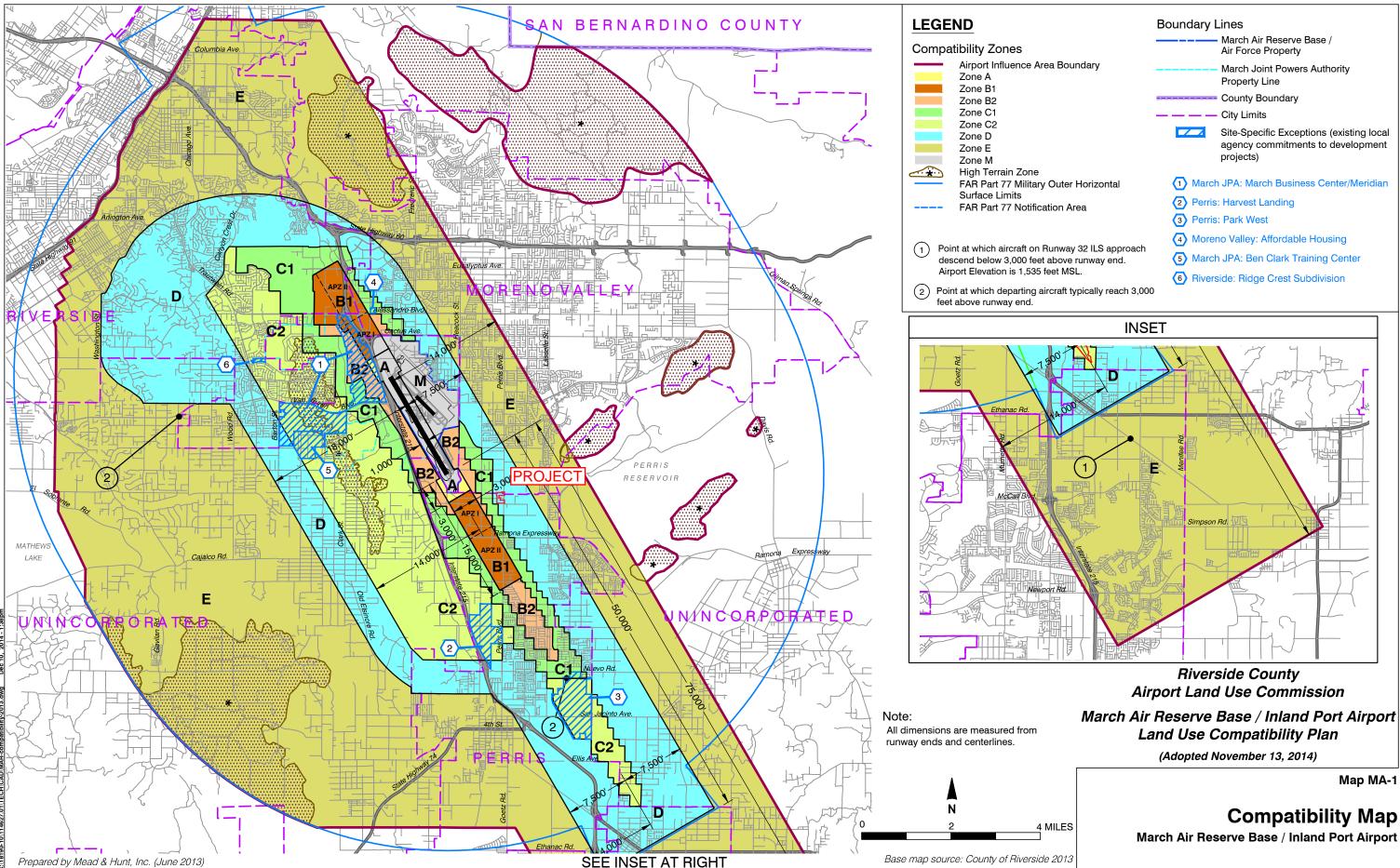


IF THIS BASIN IS OVERGROWN, PLEASE CONTACT:

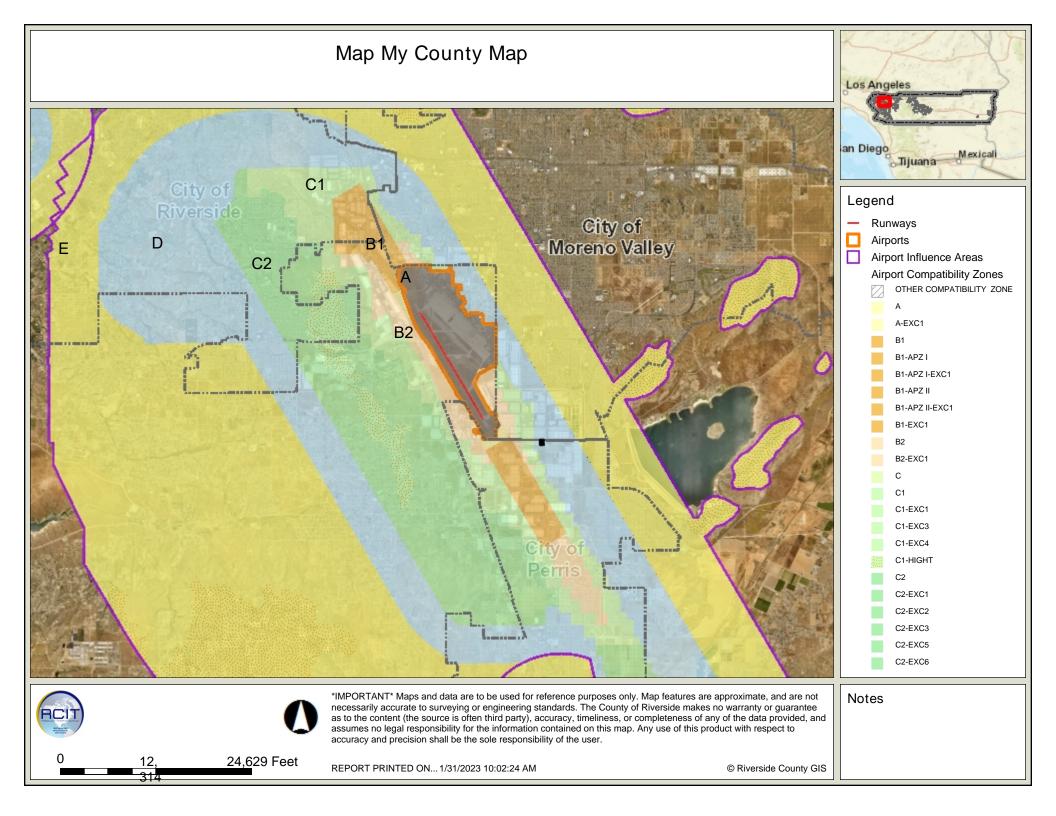
Name:

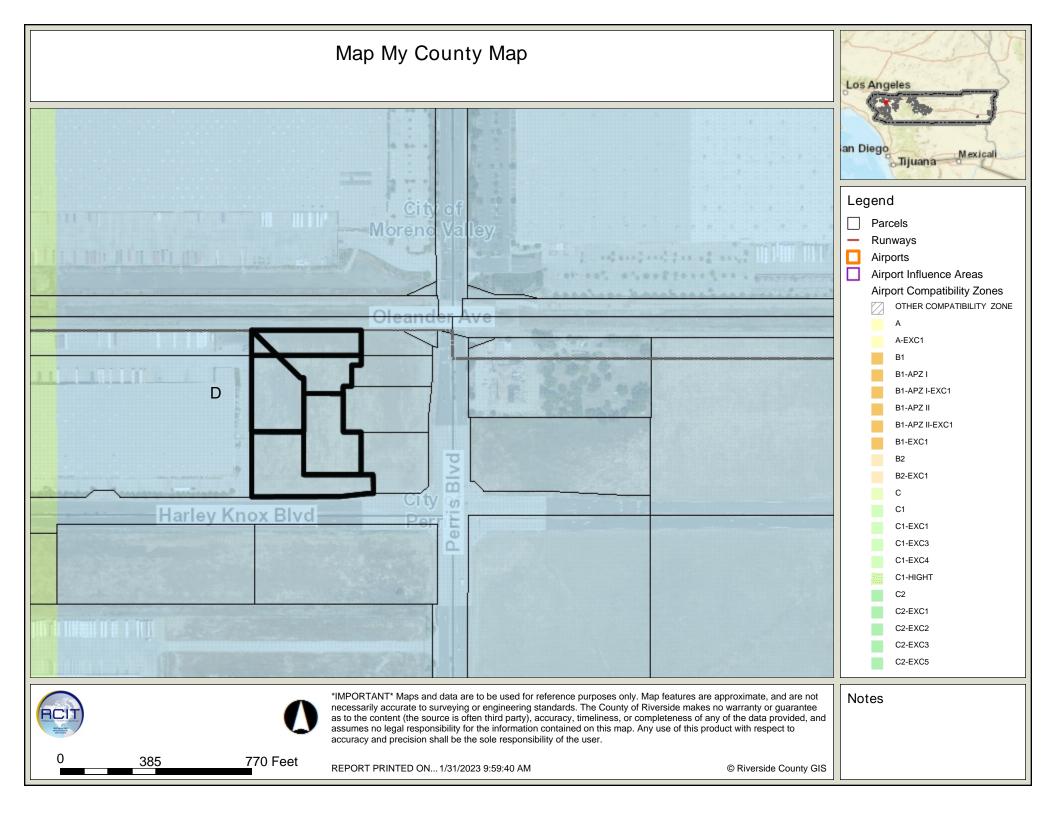
\_\_\_\_\_ Phone:

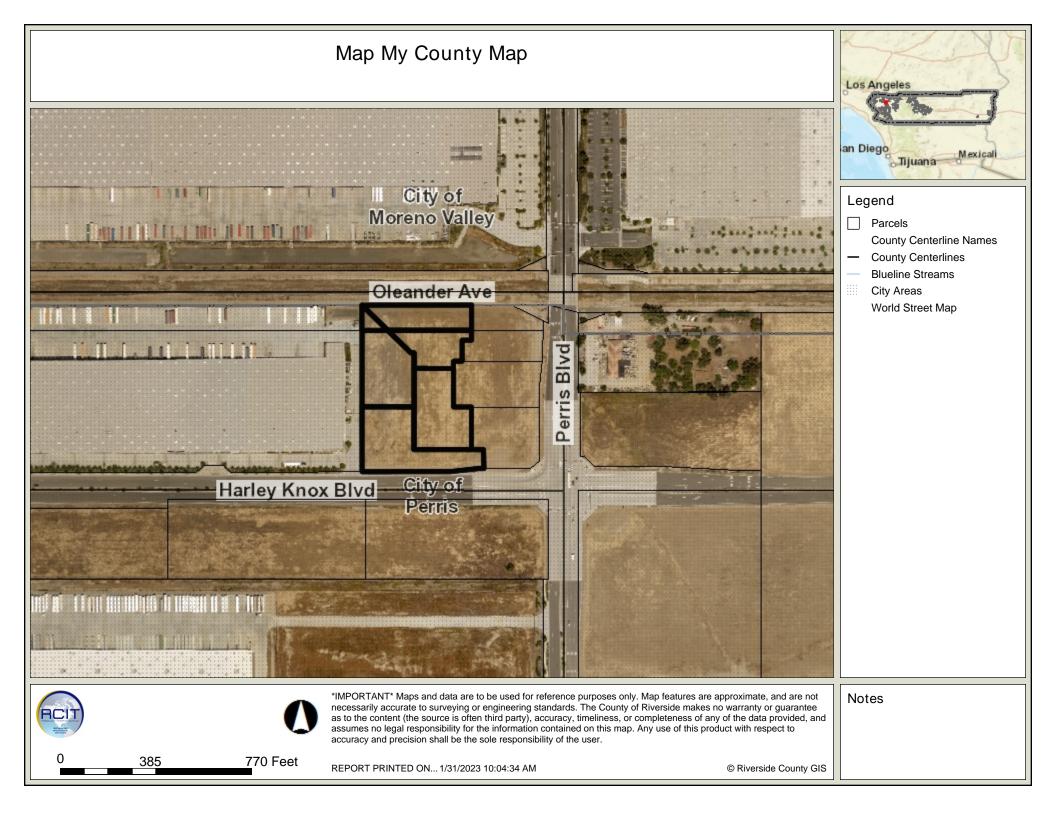


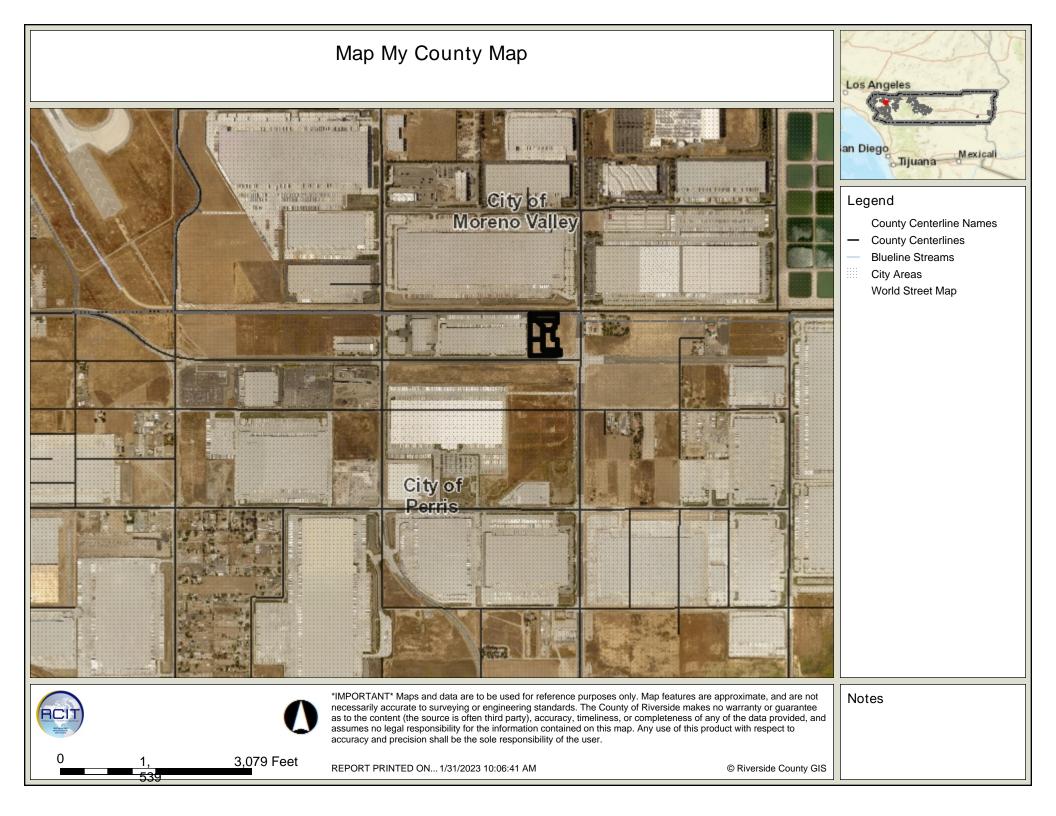


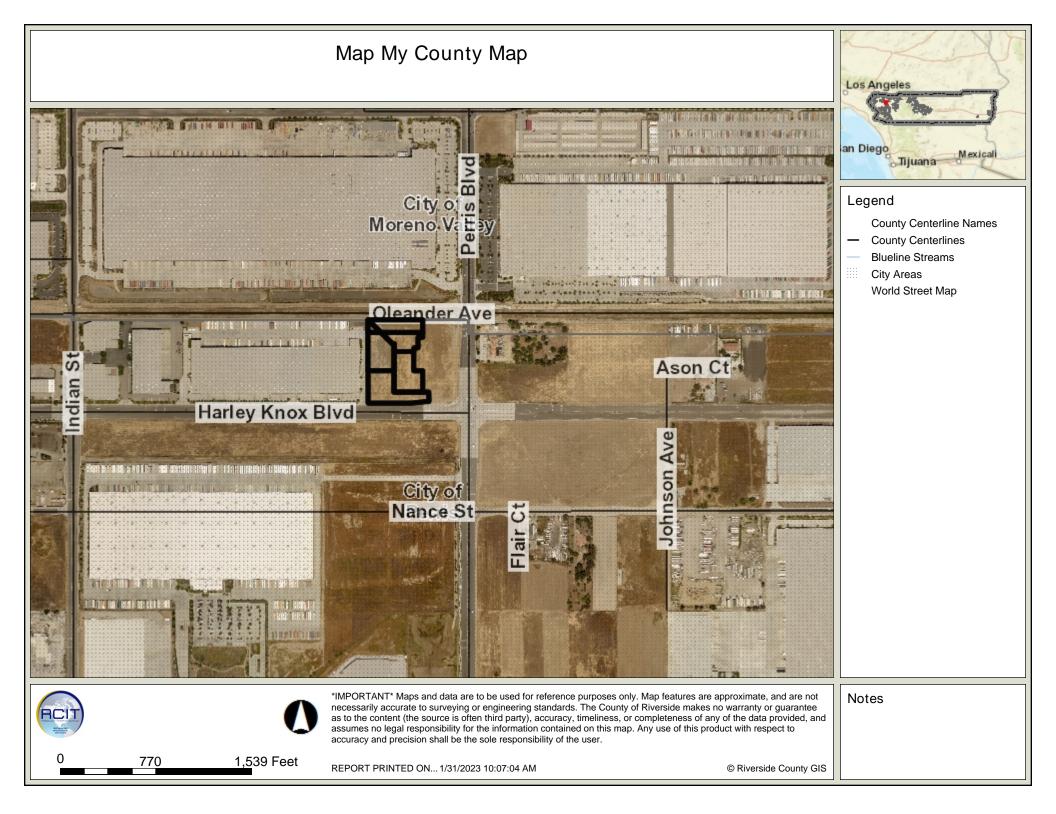
March Air Reserve Base / Inland Port Airport

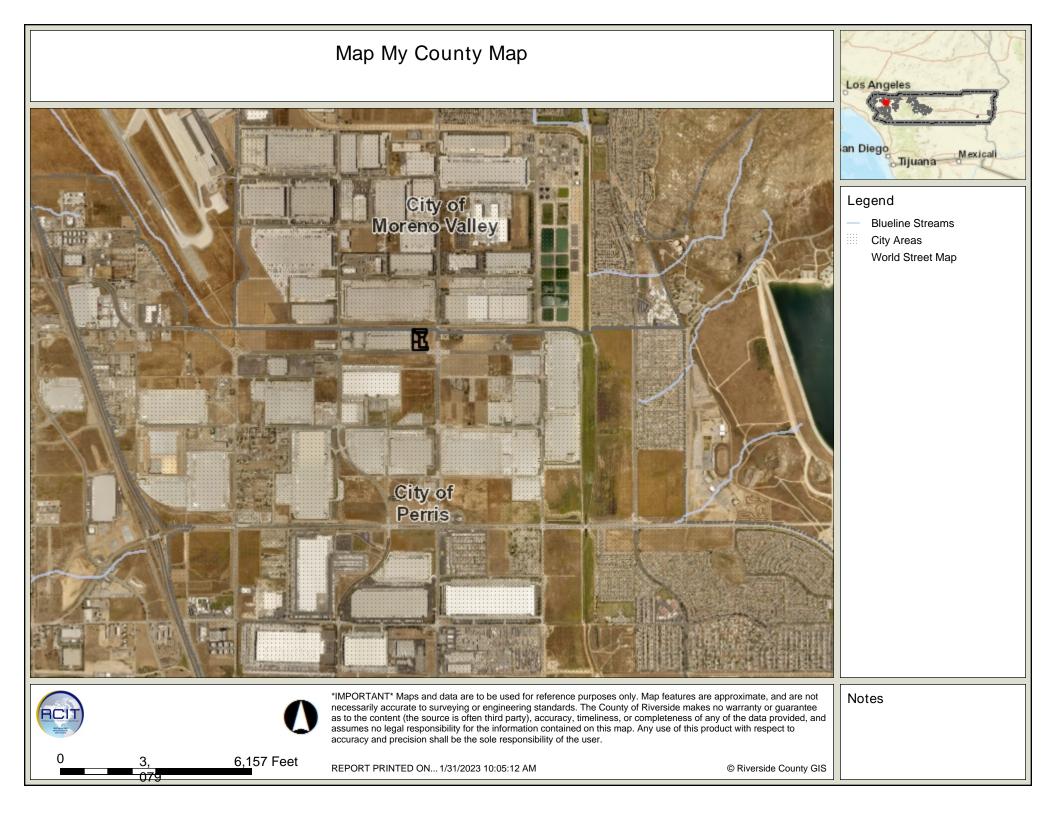


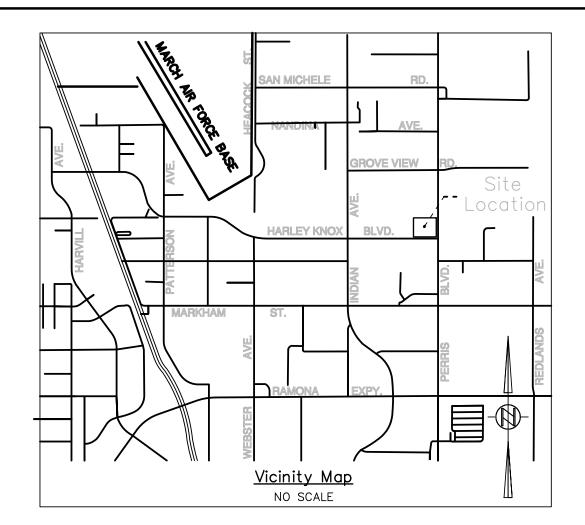












## LEGAL DESCRIPTION

ALL THAT CERTAIN REAL PROPERTY SITUATED IN THE COUNTY OF RIVERSIDE, STATE OF CALIFORNIA, DESCRIBED AS FOLLOWS:

### PARCEL A:

PARCELS 4, 5, 6 AND 7 OF PARCEL MAP NO. 37270, IN THE CITY OF PERRIS, COUNTY OF RIVERSIDE, STATE OF CALIFORNIA, AS SHOWN ON A MAP RECORDED IN BOOK 248, PAGES 60, 61 AND 62 OF PARCEL MAPS, IN THE OFFICE OF THE COUNTY RECORDER OF SAID COUNTY.

#### APN: 302-090-055, 302-090-056, 302-090-057, 302-090-058, 302-090-060, AND 302-090-061

EXCEPTION EASEMENTS

#### PARCEL B:

NON-EXCLUSIVE EASEMENT FOR VEHICULAR AND PEDESTRIAN INGRESS AND EGRESS, PARKING, MONUMENT SIGNS, DRAINAGE AND OTHER INCIDENTAL PURPOSES AS MORE PARTICULARLY SET FORTH IN SECTION 2, EASEMENTS OF THAT CERTAIN DOCUMENT ENTITLED "DECLARATION OF COVENANTS, CONDITIONS, RESTRICTIONS, RECIPROCAL EASEMENTS AND ACCESS RIGHTS FOR MARCH PLAZA" RECORDED OCTOBER 21, 2021 AS INSTRUMENT NO- 2021-0623694 OF OFFICIAL RECORDS.

## BENCHMARK

RIVERSIDE COUNTY DESIGNATION: M-31

3-1/4" ALUMINUM DISK STAMPED 'RIV. CO. SURVEYOR M-31 RESET APRIL 1886', FLUSH AT THE SW COR, OF BRIDGE ON TOP OF SWK. NEAR FACE OF CURB, AT THE CROSSING OF PERRIS BLVD. & RIV. CO. FLOOD CONTROL CHANNEL (PERRIS LATERAL "A"), 43 FT. W. OF C.L. OF PERRIS BLVD. AND 4.5 FT. E. OF CONC. BRIDGE BARRIER.

#### ELEV. = 1474.67 FT. (5/1996)

PROPERTY ADDRESS VACANT LAND, NWC N PERRIS BLVD. & HARLEY KNOX BLVD. PERRIS, CALIFORNIA. 92571

#### FLOOD ZONE DESIGNATION

SUBJECT PROPERTY FLOOD ZONE: X (AREAS DETERMINED TO BE OUTSIDE THE 0.2% ANNUAL CHANCE FLOODPLAIN) MAP NUMBER: 06065C1430H EFFECTIVE DATE: AUGUST 18, 2014

#### <u>4: LAND USE</u> CURRENT LAND USE: VACANT PROPOSED LAND USE:

COMMERCIAL SURROUNDING LAND USE

(W) - LIGHT INDUSTRIAL (N) - RIVERSIDE COUNTY FLOOD CONTROL

(E) - COMMERCIAL (S) – COMMERCIAL

## ASSESSORS PARCEL MAP NO:

APN: 302-090-055, 302-090-056, 302-090-057, 302-090-058, 302-090-060, AND 302-090-061 Subdivider RUTH KAHN PERRIS, LLC 3057 MCCONNEL DRIVE LOS ANGELES, CA 90064 (310) 770–2847

ZONING AND PLANNING CURRENT ZONING: COMMERCIAL PROPOSED ZONING: COMMERCIAL FRONT YARD SETBACKS: 5 FEET SIDE YARD SETBACKS: NONE REAR YARD SETBACKS: NONE

PROPERTY ADDRESS: NW CORNER OF HARLEY KNOX BLVD AND PERRIS BLVD

UTILITY SERVICE AGENCIES: ELECTRIC: SOUTHERN CALIFORNIA EDISON WATER: EASTERN MUNICIPAL WATER DISTRICT SEWER: EASTERN MUNICIPAL WATER DISTRICT TELEPHONE: VERIZON GAS: SEMPRA ENERGY CABLE / INTERNET: TIME WARNER CABLE VAL VERDE UNIFIED SCHOOL DISTRICT SCHOOL:







TWO WORKING DAYS BEFORE YOU DIG

BASIS OF BEARINGS: THE BEARINGS SHOWN HEREON ARE BASED ON THE CENTERLINE OF OLEANDER AVENUE, BEING: N 89°22'54" W, PER PARCEL MAP 31832, P.M.B. 217/81-82, RECORDS OF RIVERSIDE COUNTY, CALIFORNIA.

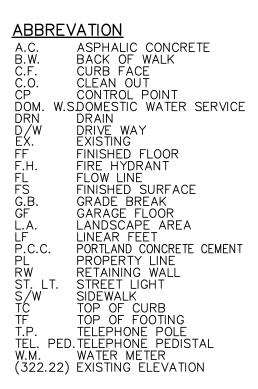
<u>NOTES:</u>

- 41 DRIVEWAY DESIGN SHALL BE CAPABLE OF SUPPORTING A 75,000 POUND FIRE TRUCK.
- 2. STREET TREES WILL BE PLANTED ALONG HARLEY KNOX BLVD AND PERRIS BLVD TO THE SATISFACTION OF PUBLIC WORKS.
- 3. CLOSE ANY UNUSED DRIVEWAY WITH STANDARD CURB, GUTTER AND SIDEWALK.
- 4. COMPLY WITH STREET LIGHTING REQUIREMENTS.
- 5. PRESENT USE OF PROPERTY IS VACANT.
- 6. ALL PROPOSED DRAINAGE DEVICES TO BE PRIVATELY MAINTAINED.

7. ALL SEWER SHOWN, WITHIN THE PROJECT BOUNDARY, WILL BE PRIVATE.

#### LAND AREA

LOT SIZE (AC)	USEABLE AREA		
v)	(DEVOID OF SLOPE)		
0.98	0.98		
1.01	1.01		
1.01	1.01		
1.50	1.50		
1.15	1.15		
1.70	1.70		
7.35	7.35		
	0.98 1.01 1.01 1.50 1.15 1.70		



<u>LEGEND</u>

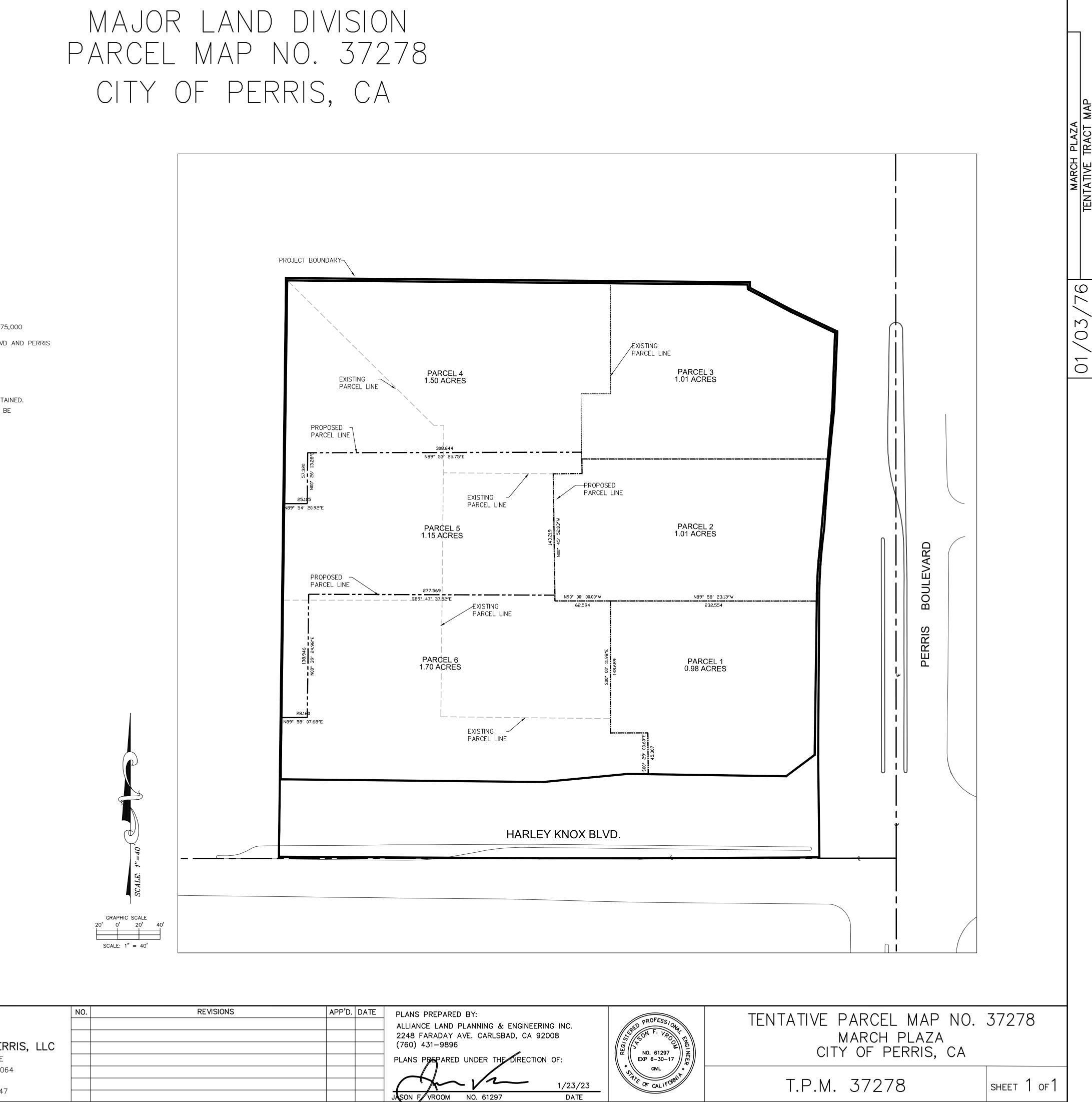
PROJECT BOUNDARY ... PROP. PARCEL LINE ... EXIST PARCEL LINE ... 

## OWNER/DEVELOPER:

RUTH KAHN PE 3057 MCCONNEL DRIV LOS ANGELES, CA. 90 ATT: ELIOTT KAHN PHONE (310) 770-284

I:\CAD\2251 - MARCH PLAZA\PARCEL MAP\2251\_PARCEL MAP.dwg

# MAJOR LAND DIVISION CITY OF PERRIS, CA



	NO.	REVISIONS	APP'D.	DATE	PLANS PREPARED BY:
					ALLIANCE LAND PLANNING & ENGINEERING INC.
					2248 FARADAY AVE. CARLSBAD, CA 92008
PERRIS, LLC					(760) 431–9896
RIVE					PLANS PREPARED UNDER THE DIRECTION OF:
90064					
2847					1/23/23
2047					JASON F VROOM NO. 61297 DATE

# **BUILDING STATISTICS**

## BUILDING STATISTICS:

BUILDING USE & OCCUPANCY TYPE (PER 2019 CBC 306.2)

TOTAL BUILDING AREA: (PER 2019 CBC 507.4 \$ 705.3)

PROPOSED BUILDING BREAKDOWN

	OFFICE
BUILDING A	5,130 S.F.
BUILDING B	4,908 S.F.
BUILDING C	4,942 S.F.
TOTAL:	14,980 S.F.

#### CONSTRUCTION TYPE: (PER 2019 CBC TABLE 602)

OCCUPANT LOAD (PER 2019 CBC TABLE 1004.5) BUILDING HEIGHT

## EXISTING BUILDING BREAKDOWN

BUILDING "D"	2,420 S.F.
BUILDING "E"	2,955 S.F.
BUILDING "F"	2,420 S.F.
TOTAL:	7,795 S.F.

# **PARKING STATISTICS**

PROPOSED PARKING

BUILDING "A" (37 REQUIRED)

BUILDING "B" (33 REQUIRED)

BUILDING "C" (35 REQUIRED) 4,942 S.F. OF

TOTAL PROPOSED SITE PARKING REQUI

TOTAL SITE PARKING PROVIDED PARKING PROVIDED: STANDARD STALLS: ACCESSIBLE STALLS:

REQUIRED EVCS: (PER 2019 CA. GREEN CODE CHAPTER 5

PROVIDED EVCS: 8 STALLS (I VAN & I STANDARD ACCESSIBLE SPACE) (NOT PART OF PARKING PROVIDED)

REQUIRED CLEAN AIR VEHICLE STALLS: II STALLS (PER 2019 CA. GREEN CODE CHAPTER 5) PROVIDED CLEAN AIR VEHICLE STALLS: II STALLS

REQUIRED BICYCLE PARKING: 5% OF TOTAL PARKING STALLS = (PER 2019 CA. GREEN CODE CHAPTER 5) 12 BICYCLE PARKING

ACTUAL BICYCLE PARKING PROVIDED:

LOADING SPACES REQUIRED: 20,000 S.F. - 50,000 S.F.

LOADING SPACES PROVIDED:

EXISTING PARKING

BUILDING "D" (34 REQUIRED)

2,420 S.F. BUILDING "E" (12 REQUIRED) 2,955 S.F.

BUILDING "F" (34 REQUIRED) 2,420 S.F.

TOTAL (E) SITE PARKING REQUIRED

TOTAL (E) SITE PARKING PROVIDED

## B & F-I & S-I MODERATE-HAZARD INDUSTRIAL AND MODERATE STORAGE

66,686 SF

WAREHOUSE	TOTAL
18,751 S.F.	23,881 S.F.
15,432 S.F.	20,340 S.F.
17,523 S.F.	22,465 S.F.
51,706 S.F.	66,686 S.F.

TYPE V-B; FULLY SPRINKLERED

150

LOW PARAPET = 25'-0" HIGH PARAPET = 28'-6"



<u>)</u> (4	<u>3 Parking Provided)</u>	
5,130 S.F. OFF	ICE AT 1/300 S.F.	
17	300 S.F.	= 18 REQ.
18,751 S.F. WAR	REHOUSE	
/ا	1,000 S.F. <20,000 S.F.	= 19 REQ.
	<u>8 Parking Provided)</u>	
4,908 S.F. OFF	FICE AT 1/300 S.F.	
	300 S.F.	= 17 REQ.
15,432 S.F. WA	REHOUSE	
/ا	1,000 S.F. <20,000 S.F.	= 16 REQ.
<u>) (4</u>	7 PARKING PROVIDED)	
4,942 S.F. OFF	ICE AT 1/300 S.F.	
17	300 S.F.	= 17 REQ.
17,523 S.F. WA	REHOUSE	
/ا	1,000 S.F. <20,000 S.F.	= 18 REQ.
	-n	
<u>RKING REQUIRE</u>		=105
VIDED		=143
	143 STALLS	
	135 STALLS	
	8 STALLS	
	(W/I VAN STALL)	
	7 STALLS	
E CHAPTER 5)		

12 BICYCLE PARKING

I SPACES

I SPACE PER BUILDING

(38 PARKING PROVIDED)	
1/50 DINING + 10	= 34 REQ.
(29 PARKING PROVIDED)	
1/250	= 12 REQ
(34 PARKING PROVIDED)	
1/50 DINING + 10	= 34 REQ.
	=80
	= 0

## PROJECT SUMMARY

PROJECT DESCRIPTION THE PROPOSED PROJECT WILL CONSIST OF THREE (3) MULTI-TENANT INDUSTRIAL CONCRETE TILT-UP BUILDINGS WITH SPEC SUITES ON LOT # 1, LOT # 2, AND LOT : 5. TOTAL ON-SITE BUILDING AREA IS 66,686 SF FOR ALL THREE BUILDINGS ON-SITE PARKING FACILITY WILL BE PROVIDED COMPLYING WITH CURRENT ACCESSIBILITY AND MUNICIPAL CODE REQUIREMENTS.

PROJECT ADDRESS

EXISTING LAND USE ARE:

EXISTING LAND USE DESIGNATION:

PROPOSED LAND USE DESIGNATION:

AIRPORT OVERLAY ZONE

FLOOD ZONE:

LOT COVERAGE:

FLOOR AREA RATIO: PREVIOUS LOT #:

PREVIOUS APN:

EXISTING SITE AREA: SITE ARE: (LOT-3: (LOT-4: (LOT-6:

PROPOSED SITE STATISTICS: SITE ARE: (LOT-I (LOT-2:

(LOT-5: BUILDING S.F .: LOT COVERAGE:

LANDSCAPE AREA: LANDSCAPE COVERAGE:

HARDSCAPE AREA: HARDSCAPE COVERAGE: (INCLUDES PARKING, DRIVE AISLE, # TRASH ENCLOSURES)

### NWC N. PERRIS BLVD. and HARLEY KNOX BLVD. PERRIS, CA 92571

LU-I PLANING AREA # | (NORTH COMMERCIAL/INDUSTRIAL)

.

C - COMMERCIAL PA-I - PLANNING AREA I PERRIS VALLEY COMMERCE CENTER SPECIFIC PLAN

COMMERCIAL AND BUSINESS PARK/INDUSTRIAL PERRIS VALLEY COMMERCE CENTER SPECIFIC PLAN

"D" FLIGHT CORRIDOR BUFFER PER EXHIBIT LU-18 \$ TABLE LU-32

SPECIAL FLOOD "A" HAZARD AREA INUNDATED BY 100 - YEAR FLOOD

50 % MAX. OF LOT 77,014 SF MAX. 0.75 F.A.R. MAX. 1, 2, 3, 4, 5, 6, \$7

302-090-052 302-090-053 302-090-054

302-090-056 302-090-057 302-090-058 302-090-059 302-090-060 302-090-061

± 3.0 AC / ± 130,680 SF ± 0.98 AC / ± 42,690 SF) ± 1.01 AC / ± 43,995 SF) ± 1.01 AC / ± 43,995 SF)

± 4.42 AC /± 192,535 SF  $\pm 1.17$  AC /  $\pm 65,730$  SF) ± 1.01 AC / ± 50,211 SF) ± 1.0 AC / ± 74,772 SF)

66,686 S.F. 35 %

± 28,880 SF 15 %

± 96,969 S.F. 50 %



COUNTY.

EXCEPTING THEREFROM THAT PORTION CONVEYED TO THE RIVERSIDE COUNTY FLOOD CONTROL AND WATER CONSERVATION DISTRICT BY DEED RECORDED DECEMBER 19, 1952 AS INSTRUMENT NO. 54384 OF OFFICIAL RECORDS OF RIVERSIDE COUNTY, CALIFORNIA.

TOGETHER WITH THE FOLLOWING DESCRIBED PORTION OF LOT 2 IN SAID BLOCK

BEGINNING AT THE SOUTHEAST CORNER OF SAID LOT 2; THENCE NORTH 89°28.46. WEST 12.75 FEET ALONG THE SOUTHERLY LINE THEREOF; THENCE NORTH 00°34'26" EAST 614.81 FEET TO THE SOUTHERLY LINE OF THE LAND DESCRIBED IN THE DEED RECORDED DECEMBER 19, 1952 AS INSTRUMENT NO. 54384 OF OFFICIAL RECORDS; THENCE ALONG SAID SOUTHERLY LINE, SOUTH 89°30'30" EAST 12.74 FEET TO THE NORTHEAST CORNER OF SAID LOT 2; THENCE ALONG THE EASTERLY LINE THEREOF, SOUTH OO°34'33" WEST 614.82 FEET TO THE POINT OF BEGINNING.

SAID PROPERTY BEING DESCRIBED AS PARCEL I IN A CERTIFICATE OF COMPLIANCE LOT LINE ADJUSTMENT 03-0320, RECORDED JANUARY 12, 2004 AS INSTRUMENT NO. 2004-0019480 OF OFFICIAL RECORDS OF RIVERSIDE COUNTY.

EXCEPTING THEREFROM THAT PORTION CONVEYED TO THE RIVERSIDE COUNTY FLOOD CONTROL AND WATER CONSERVATION DISTRICT BY DEED RECORDED JANUARY 23, 2004 AS INSTRUMENT NO. 2004-0048687 OF OFFICIAL RECORDS OF RIVERSIDE COUNTY.

TOGETHER WITH THAT PORTION OF THE WEST HALF OF PERRIS BOULEVARD (100 FEET WIDE) AS SHOWN BY SAID MAP OF THE RIVERSIDE TRACT BOUNDED ON THE SOUTH BY THE EASTERLY PROLONGATION OF THE SOUTHERLY LINE OF SAID LOT I AND BOUNDED ON THE NORTH BY THE EASTERLY PROLONGATION OF THE SOUTHERLY LINE OF SAID LAND CONVEYED TO RIVERSIDE COUNTY FLOOD CONTROL AND WATER CONSERVATION DISTRICT BY DEED RECORDED DECEMBER 19, 1952 AS INSTRUMENT NO. 54384 IN BOOK 1426, PAGE 87 OF OFFICIAL RECORDS, WHICH UPON VACATION WOULD REVERT TO SAID PORTION OF LOT I BY OPERATION OF LAW.

APN: 302-090-034-7 AND 302-090-037-0

## VICINITY MAP

SITE

## LEGAL DESCRIPTION

REAL PROPERTY IN THE CITY OF PERRIS, COUNTY OF RIVERSIDE, STATE OF CALIFORNIA, DESCRIBED AS FOLLOWS:

LOT I IN BLOCK 2 OF THE RIVERSIDE TRACT, IN THE CITIES OF PERRIS AND MORENO VALLEY, COUNTY OF RIVERSIDE, STATE OF CALIFORNIA, AS SHOWN ON THE MAP ON FILE IN BOOK 14, PAGE 668 OF MAPS, RECORDS OF SAN DIEGO

E-I PL-I ap-2 ap-2.1 ap-2.2 ар-3 ар-4 ар-5 ap-6 ap-7 ap-8 ap-9 ap-10 ap-11 ap-12 ap-13 ap-14

mb

•

•

.

•

.

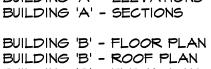
•

# SHEET INDEX

ARCHITECTURAL PLANS COVER SHEET / PROJECT INFORMATION PRELIMINARY GRADING PLAN PHOTOMETRIC SITE PLAN PRELIMINARY LANDSCAPE PLAN

SITE PLAN MISC. SITE DETAILS FIRE ACCESS PLAN AND NOTES

BUILDING 'A' - FLOOR PLAN BUILDING 'A' - ROOF PLAN BUILDING 'A' - ELEVATIONS



BUILDING 'B' - ELEVATIONS BUILDING 'B' - SECTIONS BUILDING 'C' - FLOOR PLAN BUILDING 'C' - ROOF PLAN BUILDING 'C' - ELEVATIONS

BUILDING 'C' - SECTIONS MATERIAL BOARD

# **PROJECT DIRECTORY**

## OWNER:

RUTH KAHN PERRIS, LLC 3057 Mc CONNELL DRIVE LOS ANGELES, CA 90064 PHONE: (310) 770-2847 CONTACT: ELIOTT KAHN

## ARCHITECT:

PK:ARCHITECTURE 5126 CLARETON DRIVE, SUITE 110 AGOURA HILLS, CA 91301 PHONE: (818) 584-0057 CONTACT: BRIAN POLIQUIN (bpoliquin@pkarchitecture.net)

CIVIL ENGINEER: ALLIANCE LAND PLANNING & ENGINEERING, INC. 2248 FARADAY AVENUE CARLSBAD, CA 92008 PHONE: (760)431-9896 CONTACT: MICHAEL LA BOUNTY (mlabounty@allianceeng.com)

LANDSCAPE ARCHITECT: ARCADIA STUDIO 202 EAST COTA STREET SANTA BARBARA, CA 93101 TEL 805.962.9055 FAX 805.962.5658 ARCADIASTUDIO.COM CONTACT: Derrik Eichelberger or WILLIAM BISHOP

(dte@arcadiastudio.com) ELECTRICAL ENGINEER: VECTOR ENGINEERING GROUP 19012 SADDLEBACK RIDGE RD

SANTA CLARITA, CA 91351 T: 818.731.9120 CONTACT: JO A. RAYNER, PE

(jrayner@vectorengineeringgroup.com)



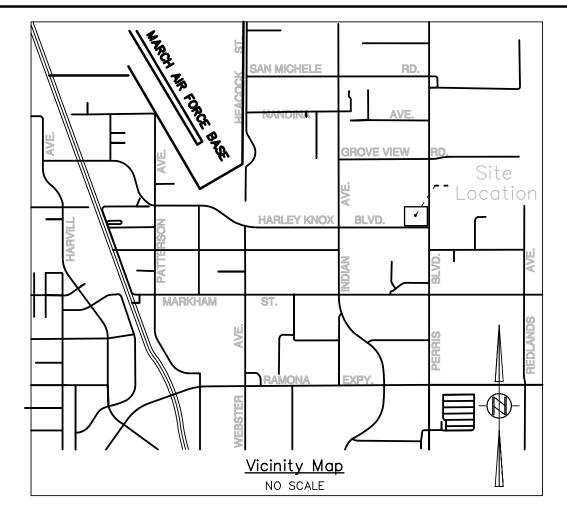


29619 agoura road aqoura hills : california : 91301 t: 818.584.0057 f: 866.800.1289 w: pkarchitecture.net









### LEGAL DESCRIPTION

ALL THAT CERTAIN REAL PROPERTY SITUATED IN THE COUNTY OF RIVERSIDE, STATE OF CALIFORNIA, DESCRIBED AS FOLLOWS:

#### PARCEL A:

PARCELS 4, 5, 6 AND 7 OF PARCEL MAP NO. 37270, IN THE CITY OF PERRIS, COUNTY OF RIVERSIDE, STATE OF CALIFORNIA. AS SHOWN ON A MAP RECORDED IN BOOK 248, PAGES 60, 61 AND 62 OF PARCEL MAPS, IN THE OFFICE OF THE COUNTY RECORDER OF SAID COUNTY.

APN: 302-090-055, 302-090-056, 302-090-057, 302-090-058, 302-090-060, AND 302-090-061

#### EXCEPTION EASEMENTS

#### PARCEL B:

NON-EXCLUSIVE EASEMENT FOR VEHICULAR AND PEDESTRIAN INGRESS AND EGRESS, PARKING, MONUMENT SIGNS, DRAINAGE AND OTHER INCIDENTAL PURPOSES AS MORE PARTICULARLY SET FORTH IN SECTION 2, EASEMENTS OF THAT CERTAIN DOCUMENT ENTITLED "DECLARATION OF COVENANTS, CONDITIONS, RESTRICTIONS, RECIPROCAL EASEMENTS AND ACCESS RIGHTS FOR MARCH PLAZA" RECORDED OCTOBER 21, 2021 AS INSTRUMENT NO- 2021-0623694 OF OFFICIAL RECORDS.

## **BENCHMARK**

RIVERSIDE COUNTY DESIGNATION: M-31

3-1/4" ALUMINUM DISK STAMPED 'RIV. CO. SURVEYOR M-31 RESET APRIL 1886', FLUSH AT THE SW COR, OF BRIDGE ON TOP OF SWK. NEAR FACE OF CURB, AT THE CROSSING OF PERRIS BLVD. & RIV. CO. FLOOD CONTROL CHANNEL (PERRIS LATERAL "A"), 43 FT. W. OF C.L. OF PERRIS BLVD. AND 4.5 FT. E. OF CONC. BRIDGE BARRIER.

## ELEV. = 1474.67 FT. (5/1996)

PROPERTY ADDRESS VACANT LAND, NWC N PERRIS BLVD. & HARLEY KNOX BLVD. PERRIS, CALIFORNIA. 92571

#### FLOOD ZONE DESIGNATION

SUBJECT PROPERTY FLOOD ZONE: X (AREAS DETERMINED TO BE OUTSIDE THE 0.2% ANNUAL CHANCE FLOODPLAIN) MAP NUMBER: 06065C1430H

## EFFECTIVE DATE: AUGUST 18, 2014 <u>4: LAND USE</u>

CURRENT LAND USE: VACANT PROPOSED LAND USE: COMMERCIAL

## SURROUNDING LAND USE

(W) - LIGHT INDUSTRIAL (N) - RIVERSIDE COUNTY FLOOD

CONTROL (E) - COMMERCIAL

(S) - COMMERCIAL

## ASSESSORS PARCEL MAP NO:

APN: 302-090-055, 302-090-056, 302-090-057, 302-090-058, 302-090-060, AND 302-090-061 Subdivider RUTH KAHN PERRIS, LLC 3057 MCCONNEL DRIVE

LOS ANGELES, CA 90064 (310) 770-2847

### ZONING AND PLANNING

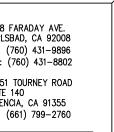
CURRENT ZONING: COMMERCIAL COMMERCIAL PROPOSED ZONING: FRONT YARD SETBACKS: 5 FEET SIDE YARD SETBACKS: NONE REAR YARD SETBACKS: NONE

PROPERTY ADDRESS: NW CORNER OF HARLEY KNOX BLVD AND PERRIS BLVD

#### UTILITY SERVICE AGENCIES: SOUTHERN CALIFORNIA EDISON ELECTRIC: EASTERN MUNICIPAL WATER DISTRICT WATER: EASTERN MUNICIPAL WATER DISTRICT SEWER: TELEPHONE: VERIZON GAS: SEMPRA ENERGY CABLE / INTERNET: TIME WARNER CABLE SCHOOL: VAL VERDE UNIFIED SCHOOL DISTRICT



CIVIL ENGINEERING • LAND PLANNING • HILLSIDE DESIGN • SURVEYING





TWO WORKING DAYS BEFORE YOU DIG

## BASIS OF BEARINGS:

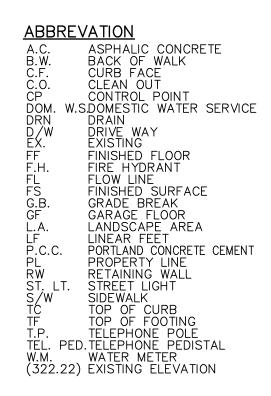
THE BEARINGS SHOWN HEREON ARE BASED ON THE CENTERLINE OF OLEANDER AVENUE, BEING: N 89°22'54" W. PER PARCEL MAP 31832, P.M.B. 217/81-82, RECORDS OF RIVERSIDE COUNTY, CALIFORNIA.

#### <u>NOTES:</u>

- 41 DRIVEWAY DESIGN SHALL BE CAPABLE OF SUPPORTING A 75,000
- POUND FIRE TRUCK. 2. STREET TREES WILL BE PLANTED ALONG HARLEY KNOX BLVD AND PERRIS
- BLVD TO THE SATISFACTION OF PUBLIC WORKS.
- 3. CLOSE ANY UNUSED DRIVEWAY WITH STANDARD CURB.
- GUTTER AND SIDEWALK. 4. COMPLY WITH STREET LIGHTING REQUIREMENTS.
- 5. PRESENT USE OF PROPERTY IS VACANT.
- 6. ALL PROPOSED DRAINAGE DEVICES TO BE PRIVATELY MAINTAINED.
- 7. ALL SEWER SHOWN, WITHIN THE PROJECT BOUNDARY, WILL BE PRIVATE.

## LAND AREA

LOT#		USEABLE AREA ( DEVOID OF SLOPE)
	(AC)	
1	1.17	1.17
2	1.01	1.01
3	1.00	1.00
4	2.17	2.17
5	1.00	1.00
6	0.99	0.99
TOTAL	7.34	7.34



#### <u>LEGEND</u> PROJECT BOUNDARY .. PROP. PARCEL LINE.

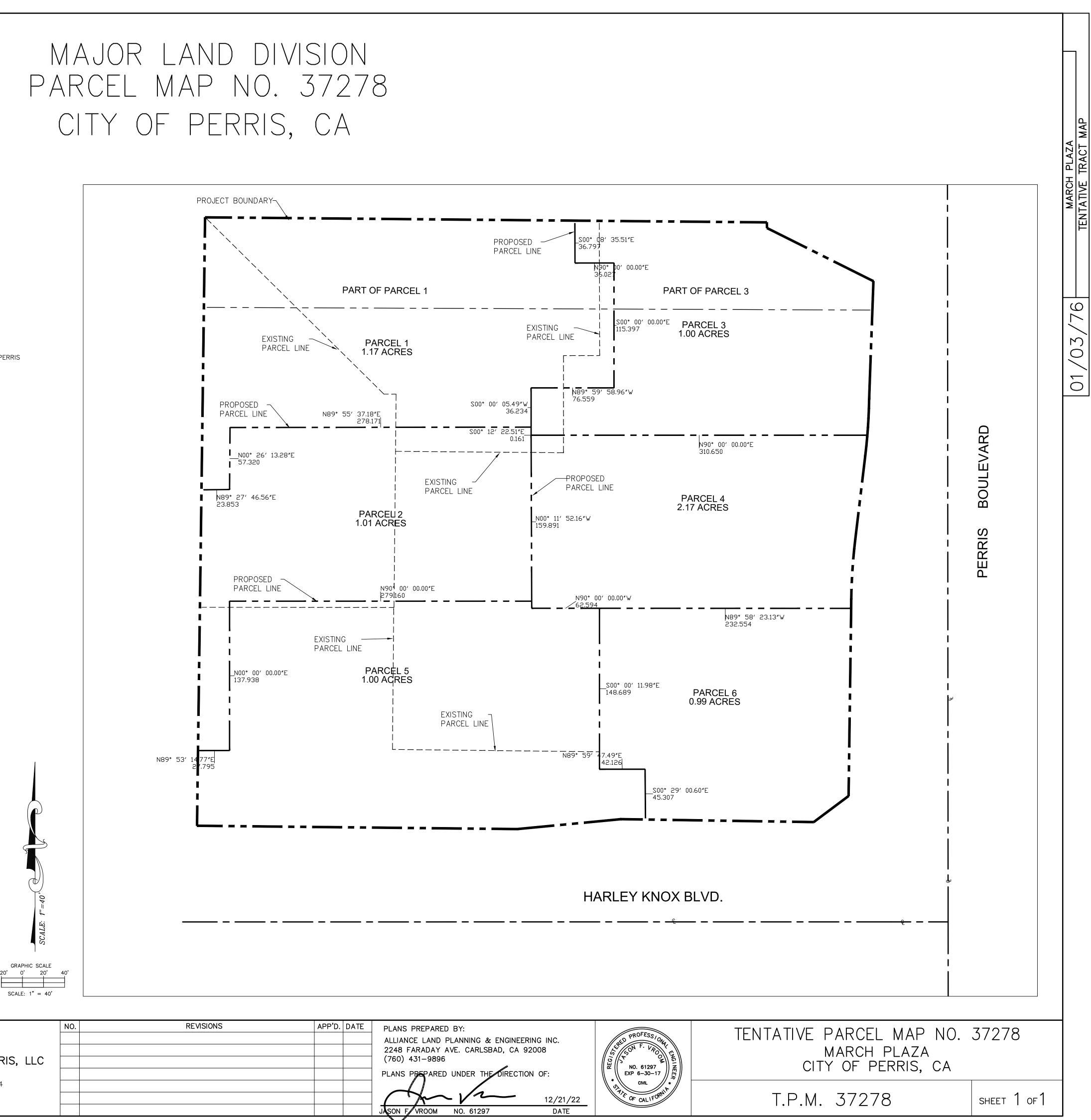
EXIST PARCEL LINE ....



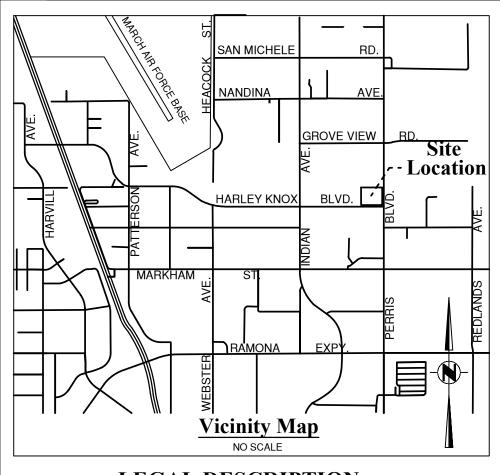
## OWNER/DEVELOPER:

RUTH KAHN F 3057 MCCONNEL DR LOS ANGELES, CA. ATT: ELIOTT KAHN PHONE (310) 770-2

# MAJOR LAND DIVISION CITY OF PERRIS, CA



			ALLIANCE LAND PLANNING & ENGINEERING INC.
			2248 FARADAY AVE. CARLSBAD, CA 92008
PERRIS, LLC			(760) 431–9896
RIVE			PLANS PREPARED UNDER THE DIRECTION OF:
90064			
			12/21/
2847			JASON F VROOM NO. 61297 DATE



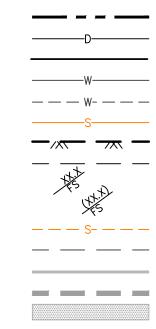
BUILDING C 2,800 SF CAR WASH DRIVE THRU RIVE THRU

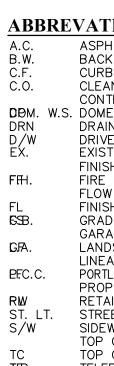
#### LOT# LOT SIZE (AC) 59 1 | 1.17 2 1.01 3 | 1.00 4 | 1.00 1.000 SF 5 1.17 1/250 6 | 1.00 7 0.99 1.000 SF 0.33 237 PARKING 0.55 SPACES REQUIRED 228 STANDARD SPACES TOTAL 8.22 0 COMPACTS SPACES

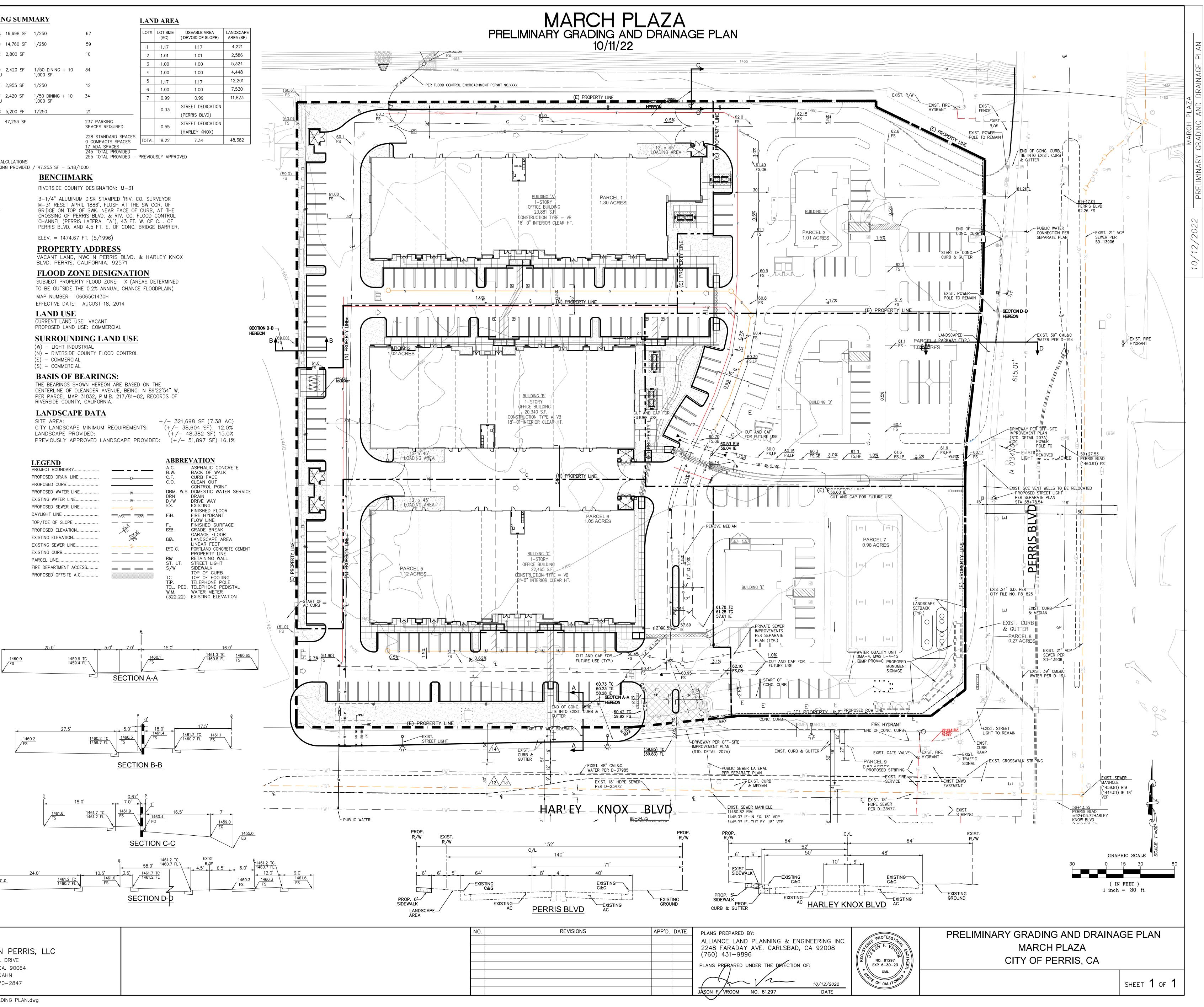
CITY LANDSCAPE MINIMUM REQUIREMENTS: LANDSCAPE PROVIDED:

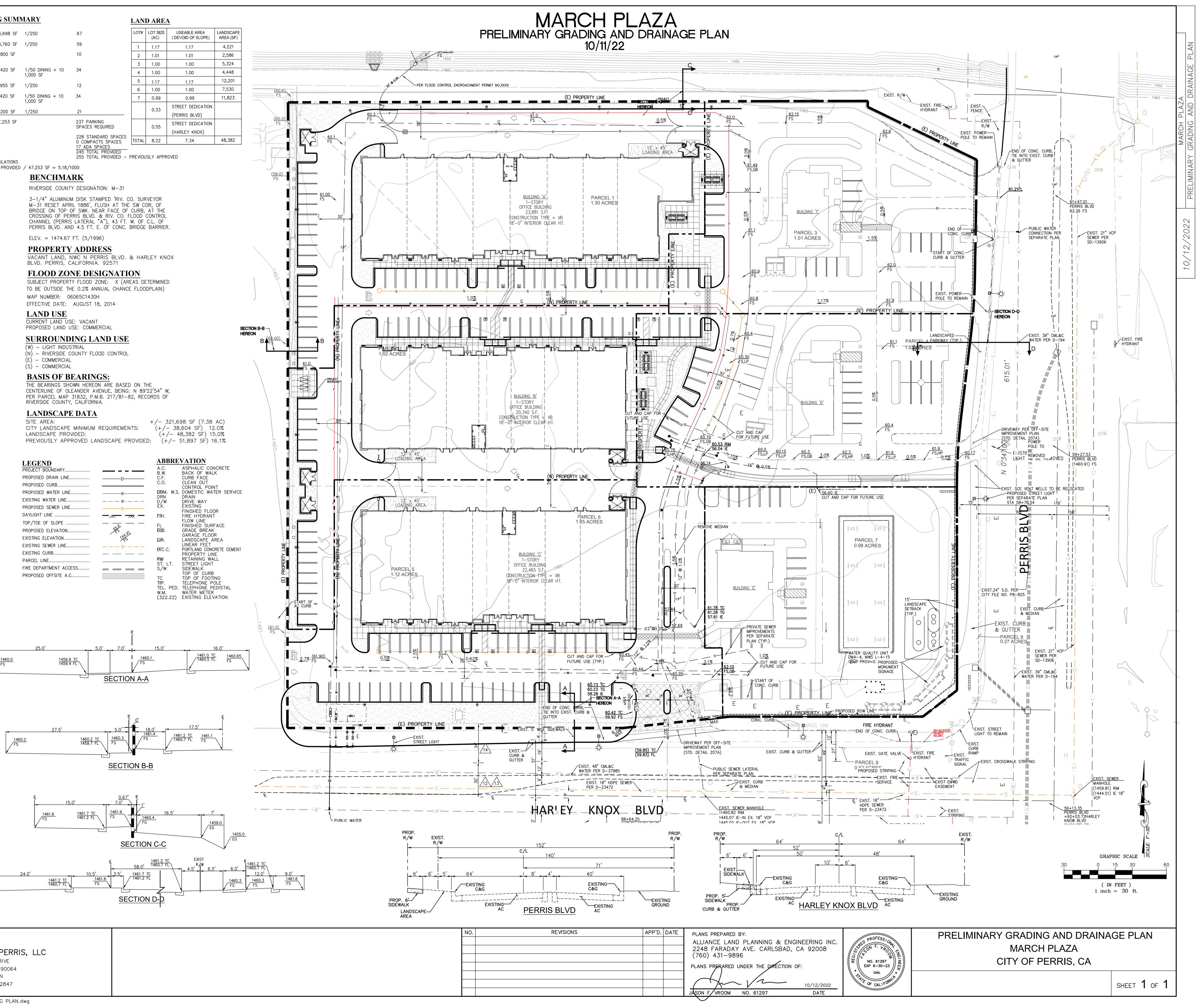


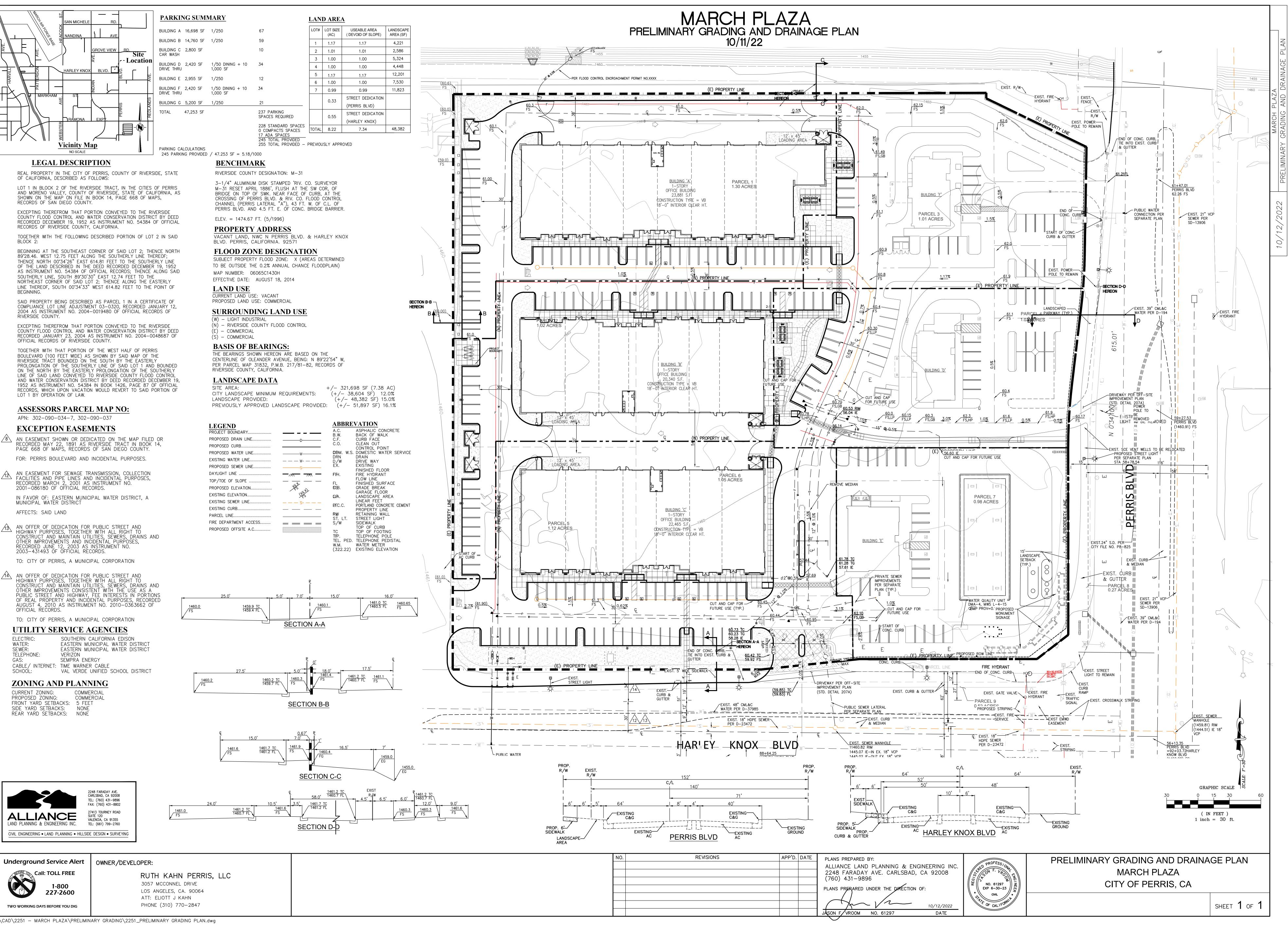
PROJECT BOUNDARY ... PROPOSED DRAIN LINE ... PROPOSED CURB ... PROPOSED WATER LINE ... EXISTING WATER LINE. PROPOSED SEWER LINE .. DAYLIGHT LINE TOP/TOE OF SLOPE PROPOSED ELEVATION ... EXISTING ELEVATION ... EXISTING SEWER LINE .. EXISTING CURB .. PARCEL LINE .. FIRE DEPARTMENT ACCESS ....





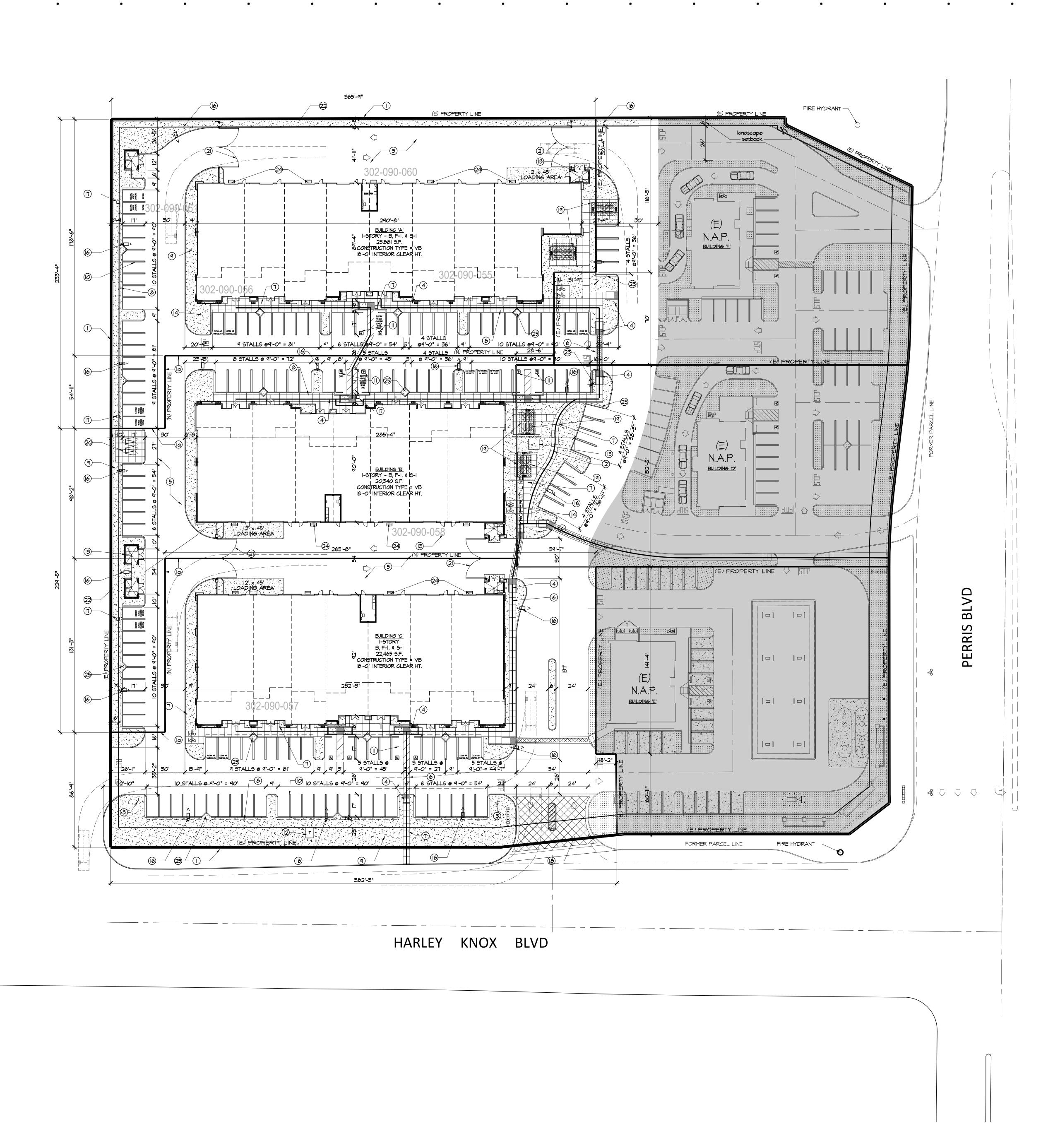






I: \CAD\2251 - MARCH PLAZA\PRELIMINARY GRADING\2251\_PRELIMINARY GRADING PLAN.dwg

•



•

• •

•

•

•

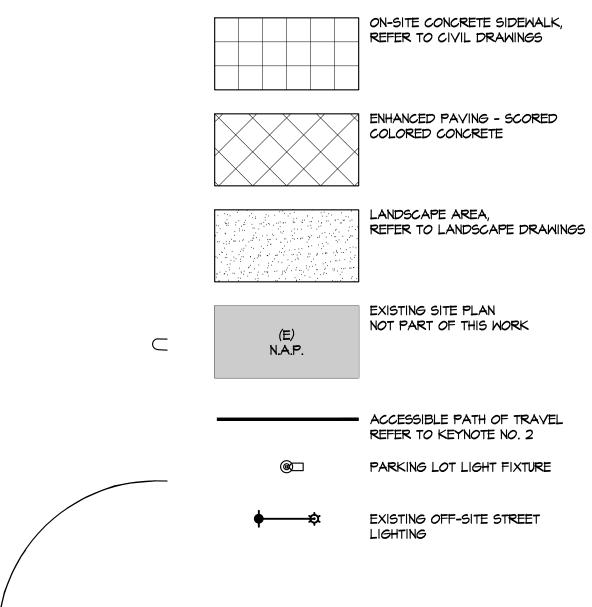
•

•

•		•
site	plan	keynote

	PROPERTY LINE, REFER TO TENTATIVE PARCEL MAP AND CIVIL DRAWINGS
la	PROPOSED PROPERTY LINE, REFER CIVIL DRAWINGS
2	ACCESSIBLE PATH OF TRAVEL WITH 2% MAXIMUM CROSS SLOPE AND 5% MAXIMUM RUN, REFER TO CIVIL DRAWINGS
3	SITE ACCESSIBLE ENTRANCE SIGN SEE (A ap2.)
4	ACCESSIBLE RAMP, 1:12 MAXIMUM SLOPE
5	PARKING AREA PAVING AND DRIVE AISLE, REFER TO CIVIL DRAWINGS FOR ADDITIONAL INFORMATION BASED ON SOIL ENGINEER RECOMMENDATIONS
6	CONRETE WALKWAY. 12" CONCRETE PERIMETER BAND WITH A 3'-O" × 3'-O" SCORED CONCRETE PATTERN AT A 45 DEGREE. COLOR TO BE "DAVIS COLOR" - OUTBACK-677.
7	5'-0"x5'-0" CONCRETE SIDEWALKS AND STOOPS STANDARD GRAY CONCRETE WITH A LIGHT BROOM FINIS
٨	LINE OF PARKING STALL OVERHANG
٩	LANDSCAPE AREA, REFER TO LANDSCAPE DRAWINGS
0	SITE PARKING STRIPING PER CITY OF PERRIS STANDARDS
	ACCESSIBLE STALL AND STRIPING, MAXIMUM 2% ALL DIRECTIONS
(12)	NEW ELECTRICAL TRANSFORMER WITH REQUIRED SAFETY BOLLARDS.
(13)	TRASH AND RECYCLE ENCLOSURE, SEE $\begin{pmatrix} c \\ gp2, l \end{pmatrix}$
(14)	BICYCLE RACKS, (8) BICYCLE SPACES SEE
(15)	NEW ARTWORK LOCATION
(16)	PARKING LOT LIGHT FIXTURE AND CONCRETE BASE, MAXIMUM 20 FT HIGH MEASURED FROM GROUND TO LENS - COORDINATE WITH PHOTOMETRIC PLAN
(7)	FUTURE LOCATION OF VEHICLE CHARGING STATIONS. PROVIDE REQUIRED POWER. REFER TO ELECTRICAL DWG'S.
B	CONCRETE ENTRY DRIVE. 24" CONCRETE PERIME BAND WITH A 5'-O" $\times$ 5'-O" SCORED PATTERN AT 45 DEGREE. COLOR TO BE "DAVIS COLOR"
	OUTBACK-677.
(19)	TYPICAL EMPLOYEE BREAK AREA SEE
(20)	BICYCLE LOCKERS (6)
(2I)	LOADING AREA SECURITY ACCESS GATE "FIRE ACCESS ONLY" WITH KNOX BOX
22	
23	12" WIDE SAFETY CURB SEE
24)	BUILDING WALL SCONCE LIGHT FIXTURE, MAXIMUM 15 FT HIGH MEASURED FROM GROUND TO LENS. COORDINATE WITH BUILDING ELEVATIONS & PHOTOMETRIC PLAN
25)	5'x5' LANDSCAPE DIAMOND AT EVERY SIX STALLS TYP.

## site plan legend



# es

•

DOPS BROOM FINISH.

1 2% ALL RED SAFETY

TE PERIMETER ATTERN AT A

NALL SEE Nap2.1





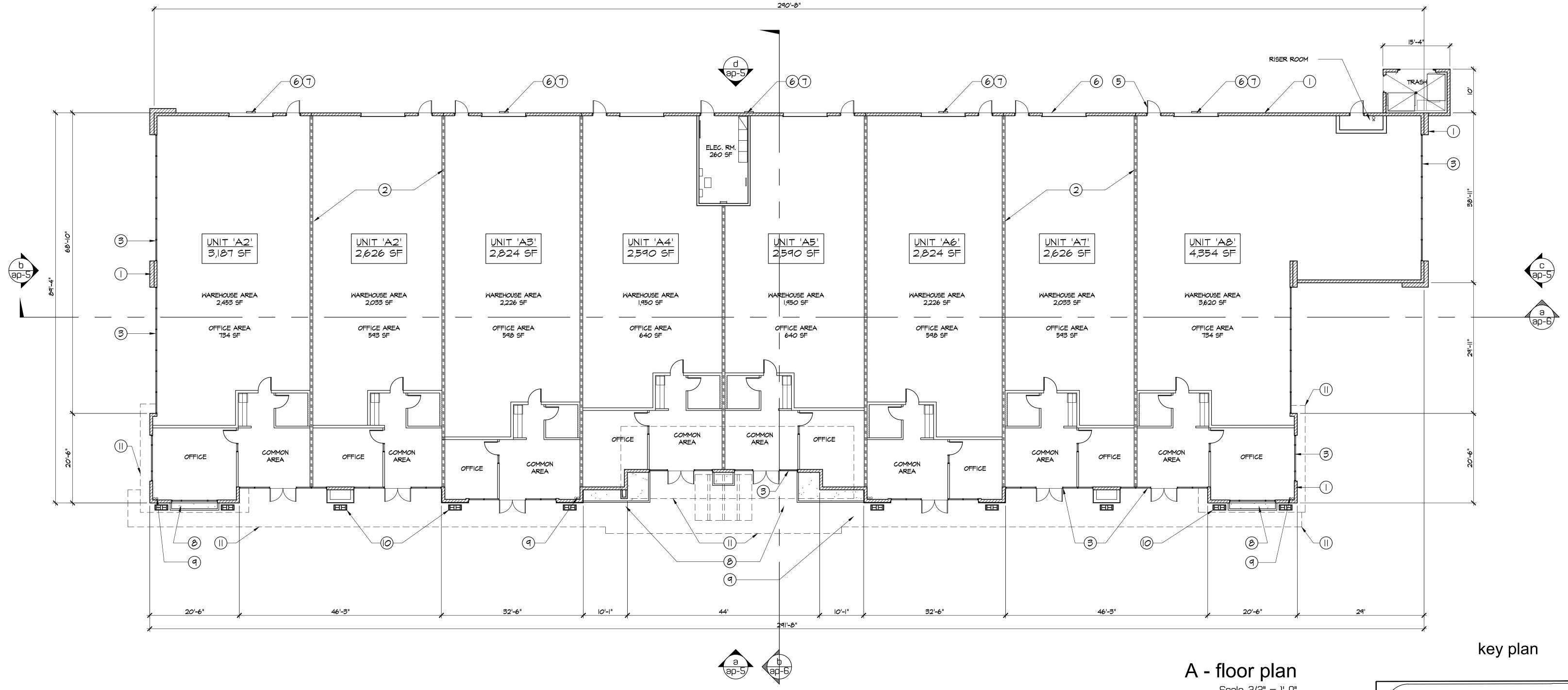
29619 agoura road aqoura hills : california : 91301 t: 818.584.0057 f: 866.800.1289 w: pkarchitecture.net

> Ζ  $\mathbf{\Sigma}$ S Œ <u>- -</u> ШZ ш \_\_\_\_ ср СС Œ  $\Box$ N T >\_\_\_\_ ц т с Ш ſ ப ப  $- \cap$ ပ  $\exists$ Ζ









• • • • • • • • • • • •

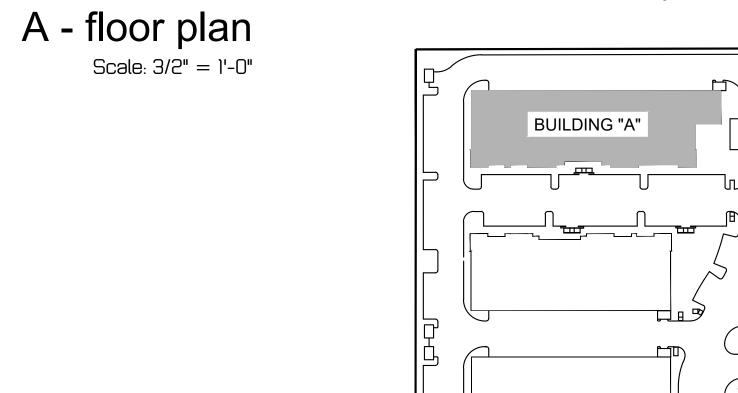
## • • keyed notes

(I) PAINTED CONCRETE TILT-UP WALL

2 INTERIOR DEMISING WALL

•

- 3 EXTRUDED ALUMINUM STOREFRONT SYSTEM, MILL FINISH WITH DUAL GLAZED WINDOW SYSTEM
- (4) METAL AWNING PAINTED ABOVE
- (5) PAINTED 3'XT' HOLLOW METAL DOOR AND FRAME
- 6 IO'XI2' ROLL-UP DOOR COLOR TO MATCH DUNN EDWARDS DE6369 LEGENDARY GRAY
- (7) Exterior Wall Mounted Wall Pack outdoor lighting
- (B) BOARD FORMED CONCRETE RAISED PLANTER
- (9) INTERNAL DOWNSPOUT PER CITY OF PERRIS CODE
- (10) painted steel 1-beam columns for awning with concrete base
- (II) EAVE PROJECTION ABOVE



0FFICE 5,130 S.F.

.

• •

•

TOTAL

23,881 S.F.

L D

0 <u>ہ</u>

> ш

HARLEY KNOX BLVD.

U





•

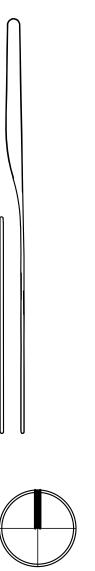
29619 agoura road agoura hills : california : 91301 t: 818.584.0057 f: 866.800.1289 w: pkarchitecture.net



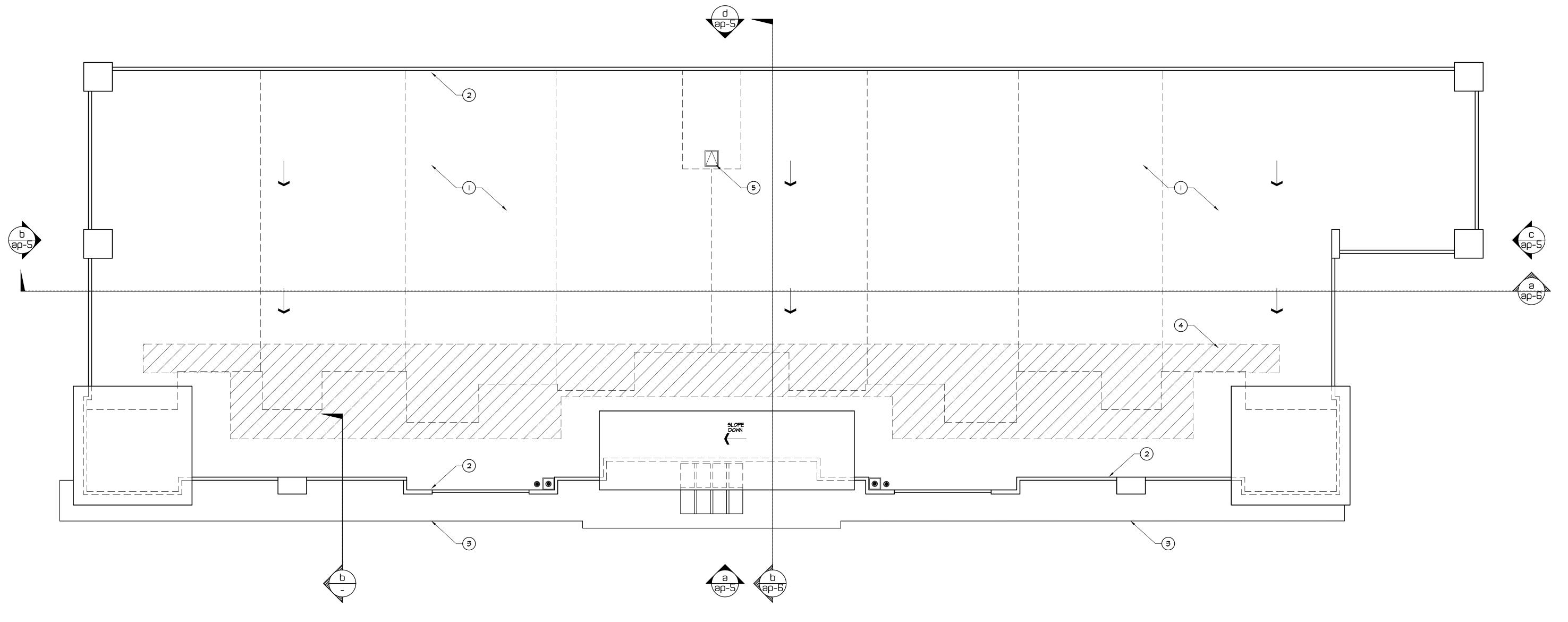


floor plan building 'A'

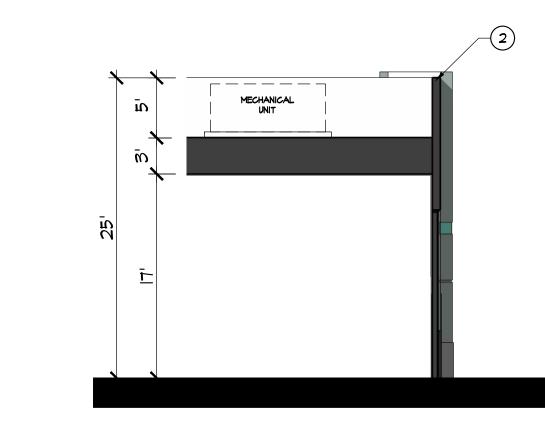




•



· · · · · · · · · · ·

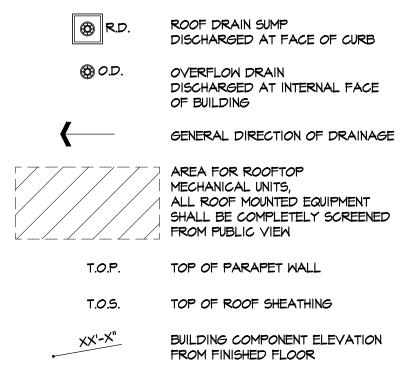


B - parapet wall section (mechanical screen) Scale: 1/8" = 1'-0"

## • • • roof plan keynotes

- () CLASS 'A' 60 MIL SARNAFIL 6410 ENERGY SMART ROOF MEMBRANE; CAP SHEET COLOR TO BE WHITE OVER 1/2" GEORGIA-PACIFIC DENS DECK ROOF BOARD FRAMING AND SHEATHING PER STRUCTURAL 2 5'-0" HIGH PARAPET WALL / MECHANICAL SCREEN
- 3 CANOPY BELOW
- (4) AREA FOR ROOFTOP MECHANICAL UNITS
- 5 ROOF ACCESS HATCH

# roof plan legend



# A - roof plan Scale: 3/2" = 1'-0"

•

•

•

•

•

key plan BUILDING "A" L D l m 2 HARLEY KNOX BLVD.







29619 agoura road agoura hills : california : 91301 t: 818.584.0057 f: 866.800.1289 w: pkarchitecture.net

> >m Ţ  $\times$ \_\_\_\_ Ζ  $\mathbf{\Sigma}$ **n** Œ — ШZ ш ср СС Œ  $\bigcirc$ N Œ > ц т т **М**  $- \cap$  $\bigcirc$ Ε  $\exists$ Ζ



roof plan building 'A'

date: 10.06.2021 job number: 21-55.20





true north

•

•

•



•

•

•

•

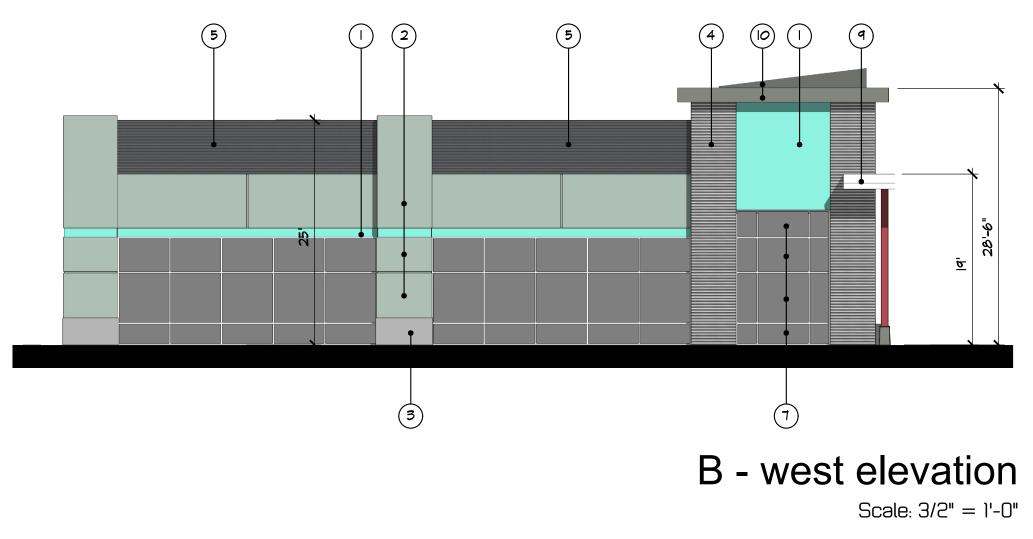
•

•

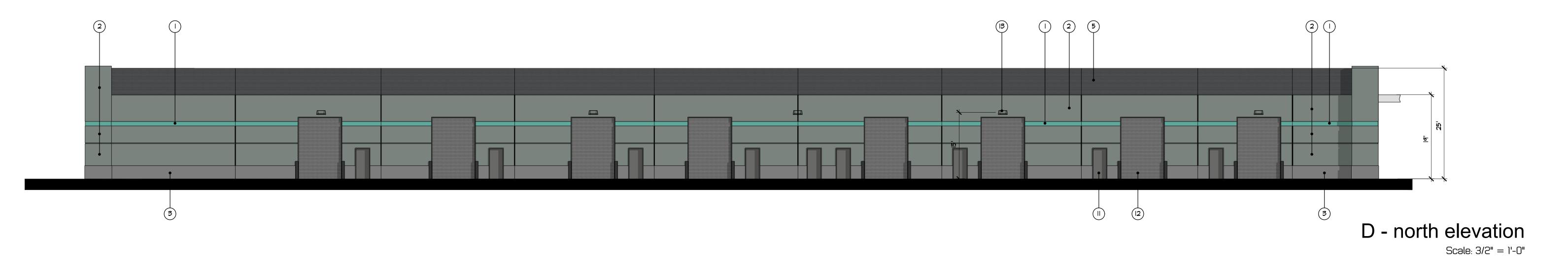
•

•

• • • • • •



• • • •



C - east elevation

Scale: 3/2" = 1'-0"

## keyed notes

() CONCRETE TILT-UP WALL PAINTED TO MATCH DUNN EDWARDS DET548 FIESTA BLUE 2 CONCRETE TILT-UP WALL PAINTED TO MATCH DUNN EDWARDS DETGO9 DECO GRAY

# 3 CONCRETE TILT-UP WALL PAINTED TO MATCH DUNN EDWARDS DE6368 WALRUS

(4) CORRUGATED METAL PANELS PAINTED LIGHT GRAY

5 CORRUGATED METAL PANELS PAINTED CHARCOAL

6 STEEL I-BEAM COLUMNS PAINTED TO MATCH DUNN EDWARDS DET425 ROYAL RED FLASH

7 DUAL GLAZED GREEN TINT GLAZING

(8) EXTRUDED ALUMINUM STOREFRONT SYSTEM, MILL FINISH

(9) METAL AWNING PAINTED WHITE

O METAL PARAPET CAP PAINTED TO MATCH DUNN EDWARDS DET629 FADE TO BLACK

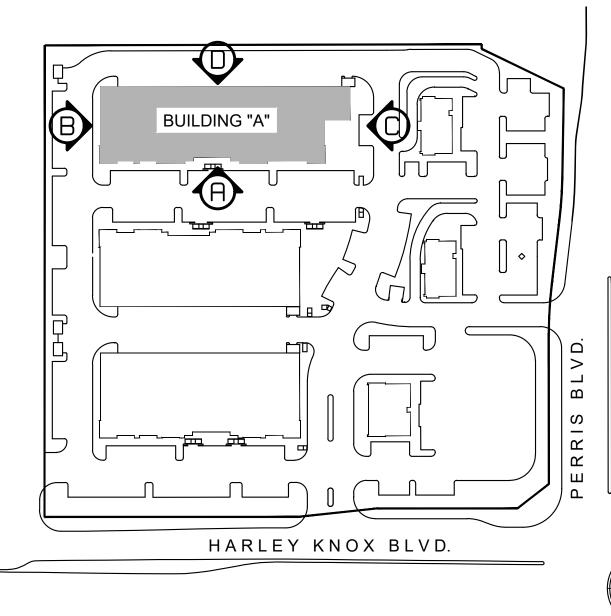
II) 3'x7' HOLLOW METAL DOOR AND FRAME COLOR TO MATCH DUNN EDWARDS DE6369 LEGENDARY GRAY

(12) IO'XI2' ROLL-UP DOOR COLOR TO MATCH DUNN EDWARDS DE6369 LEGENDARY GRAY (13) EXTERIOR WALL MOUNTED WALL PACK BY: HUBBEL OUTDOOR LIGHTING, GEOPACK SERIES TRAPEZOID

(14) PROPOSED TENANT SIGNAGE LOCATION. SIZE AND LOCATION PER THE CITIES SPECIFIC PLAN.

(15) BOARD FORMED CONCRETE

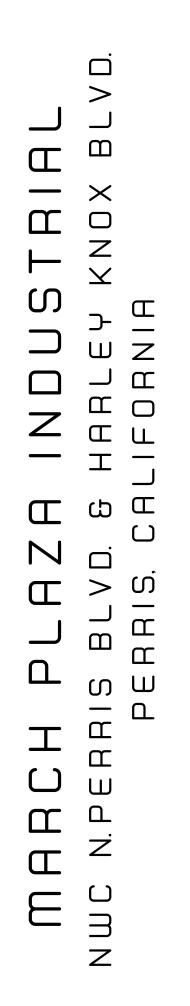
key plan







29619 agoura road agoura hills : california : 91301 t: 818.584.0057 f: 866.800.1289 w: pkarchitecture.net



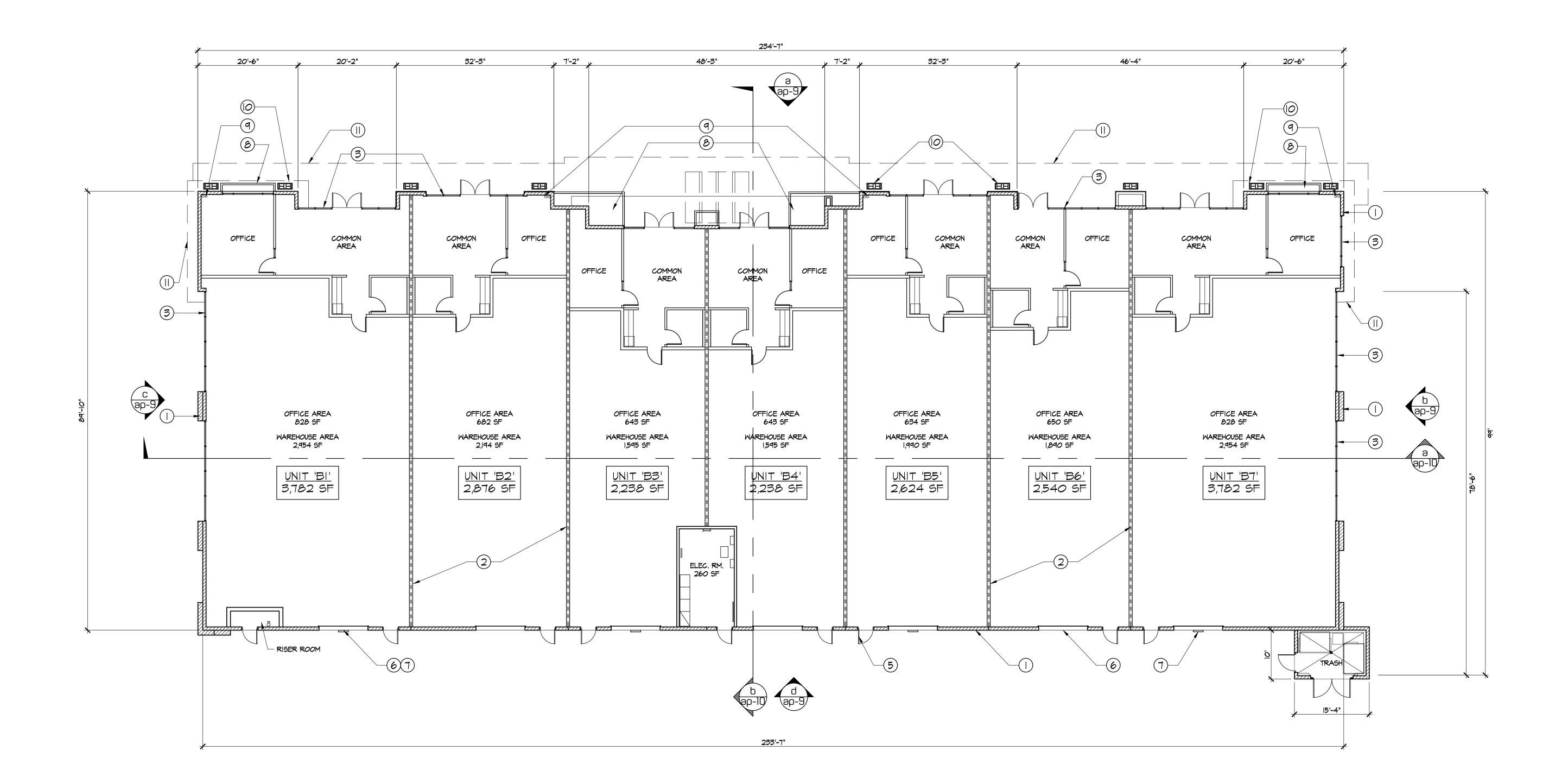








•



· · · · · · · · · · ·

## • • keyed notes

(I) PAINTED CONCRETE TILT-UP WALL

2 INTERIOR DEMISING WALL

•

3 EXTRUDED ALUMINUM STOREFRONT SYSTEM, MILL FINISH WITH DUAL GLAZED WINDOW SYSTEM

(4) METAL AWNING PAINTED ABOVE

- 5 PAINTED 3'XT' HOLLOW METAL DOOR AND FRAME

6 IO'XI2' ROLL-UP DOOR COLOR TO MATCH DUNN EDWARDS DE6369 LEGENDARY GRAY (7) EXTERIOR WALL MOUNTED WALL PACK OUTDOOR LIGHTING

(B) BOARD FORMED CONCRETE RAISED PLANTER

(9) INTERNAL DOWNSPOUT PER CITY OF PERRIS CODE

(10) painted steel 1-beam columns for awning with concrete base

II) EAVE PROJECTION ABOVE



•

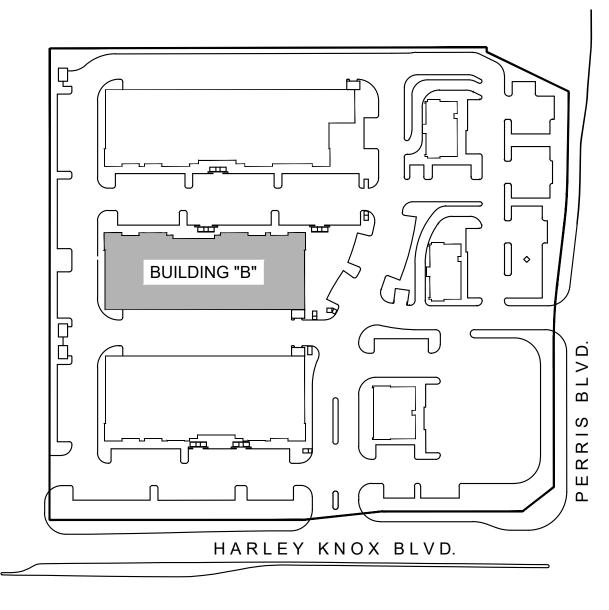
•

•

•

• •

key plan



OFFICE 4,908 S.F.

WAREHOUSE 15,432 S.F.

20,340 S.F.

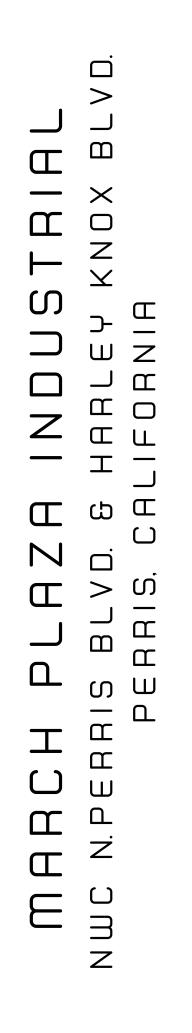
TOTAL





•

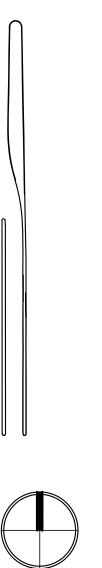
29619 agoura road agoura hills : california : 91301 t: 818.584.0057 f: 866.800.1289 w: pkarchitecture.net



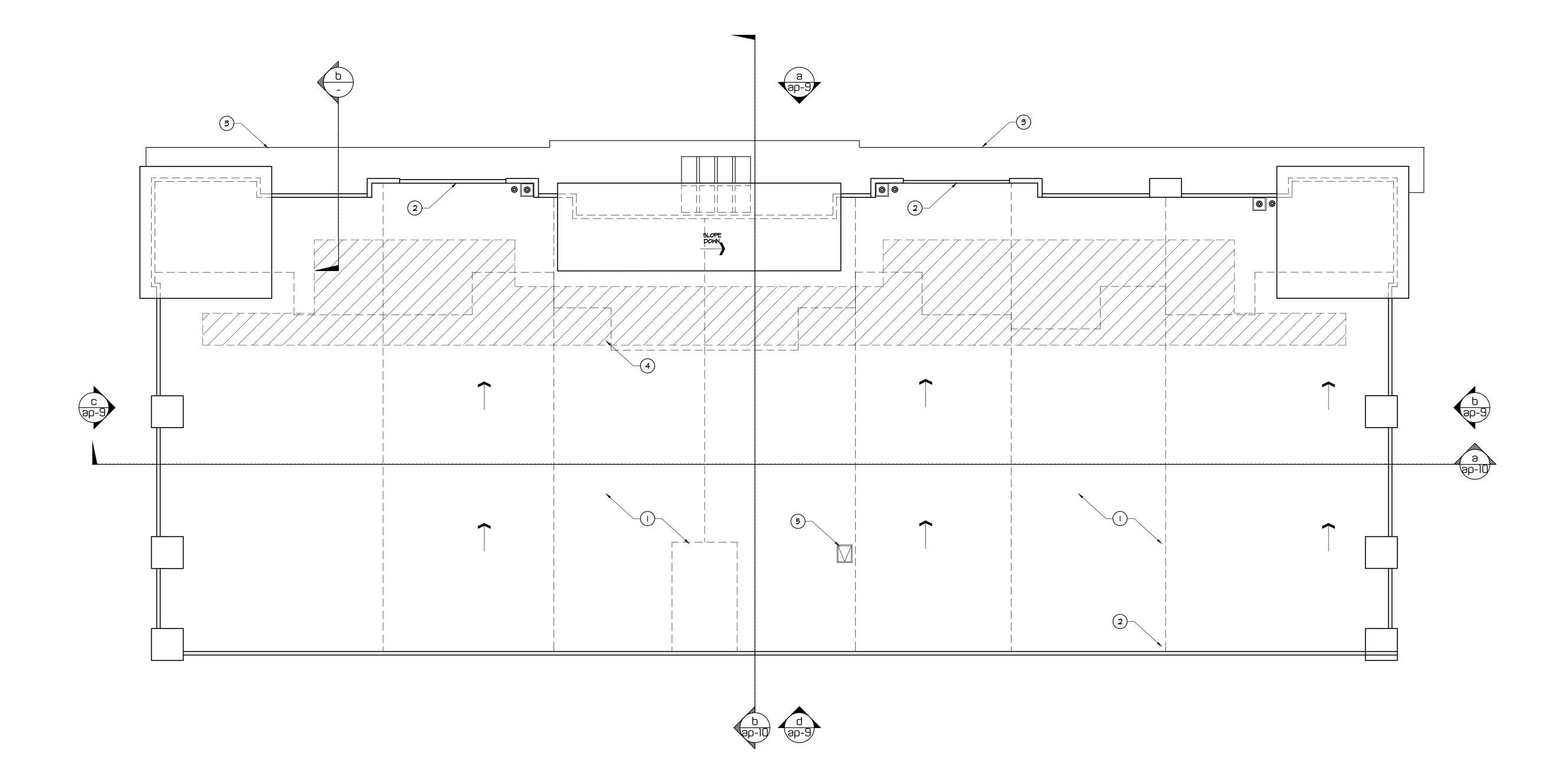


floor plan building 'B'

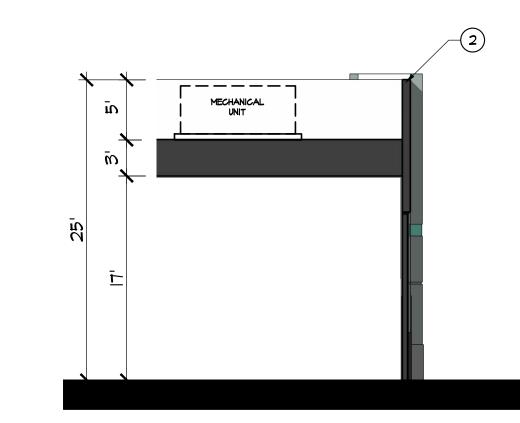




•



· · · · · · · · · · ·

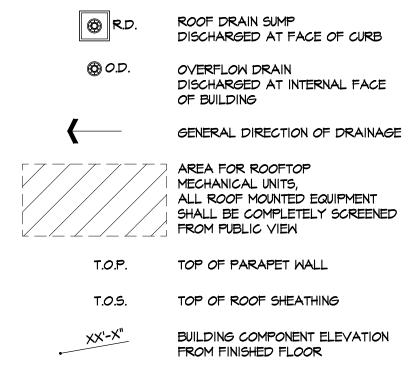


B - parapet wall section (mechanical screen) Scale: 1/8" = 1'-0"

## • • • roof plan keynotes

- () CLASS 'A' 60 MIL SARNAFIL 6410 ENERGY SMART ROOF MEMBRANE; CAP SHEET COLOR TO BE WHITE OVER 1/2" GEORGIA-PACIFIC DENS DECK ROOF BOARD FRAMING AND SHEATHING PER STRUCTURAL 2 5'-0" HIGH PARAPET WALL / MECHANICAL SCREEN
- 3 CANOPY BELOW
- (4) AREA FOR ROOFTOP MECHANICAL UNITS
- 5 ROOF ACCESS HATCH

# roof plan legend



# **A - roof plan** Scale: 3/2" = 1'-0"

•

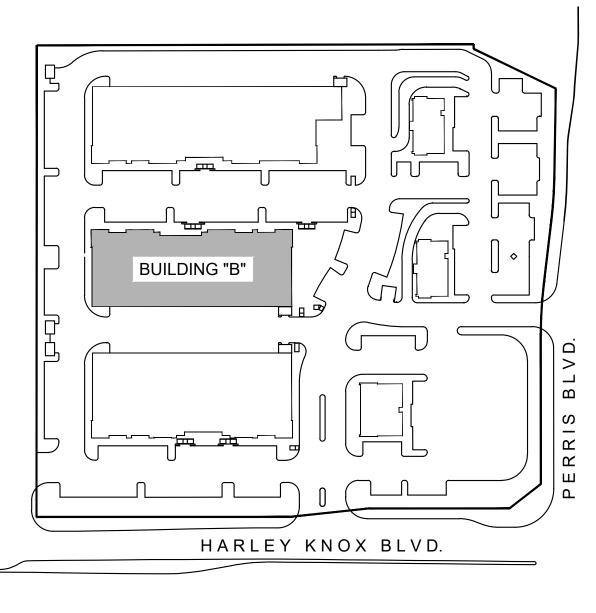
•

•

•

•

key plan



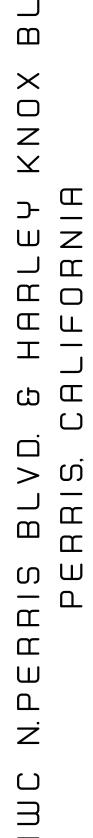






29619 agoura road agoura hills : california : 91301 t: 818.584.0057 f: 866.800.1289 w: pkarchitecture.net

> ſ Ţ  $\times$ \_\_\_\_ ſ Z Y  $\vdash$ ហ  $\square$ ш E N <u>۲</u> Œ · \_ \_ Œ  $\Box$ Ε ∏ N

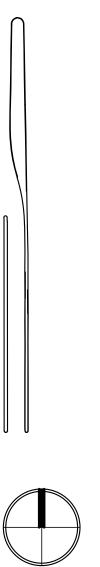




roof plan building 'B'

date: 10.06.2021 job number: 21-55.20





true north

•

•

•

•

•

•

•

•

•

•

•

•

•

•

•

•

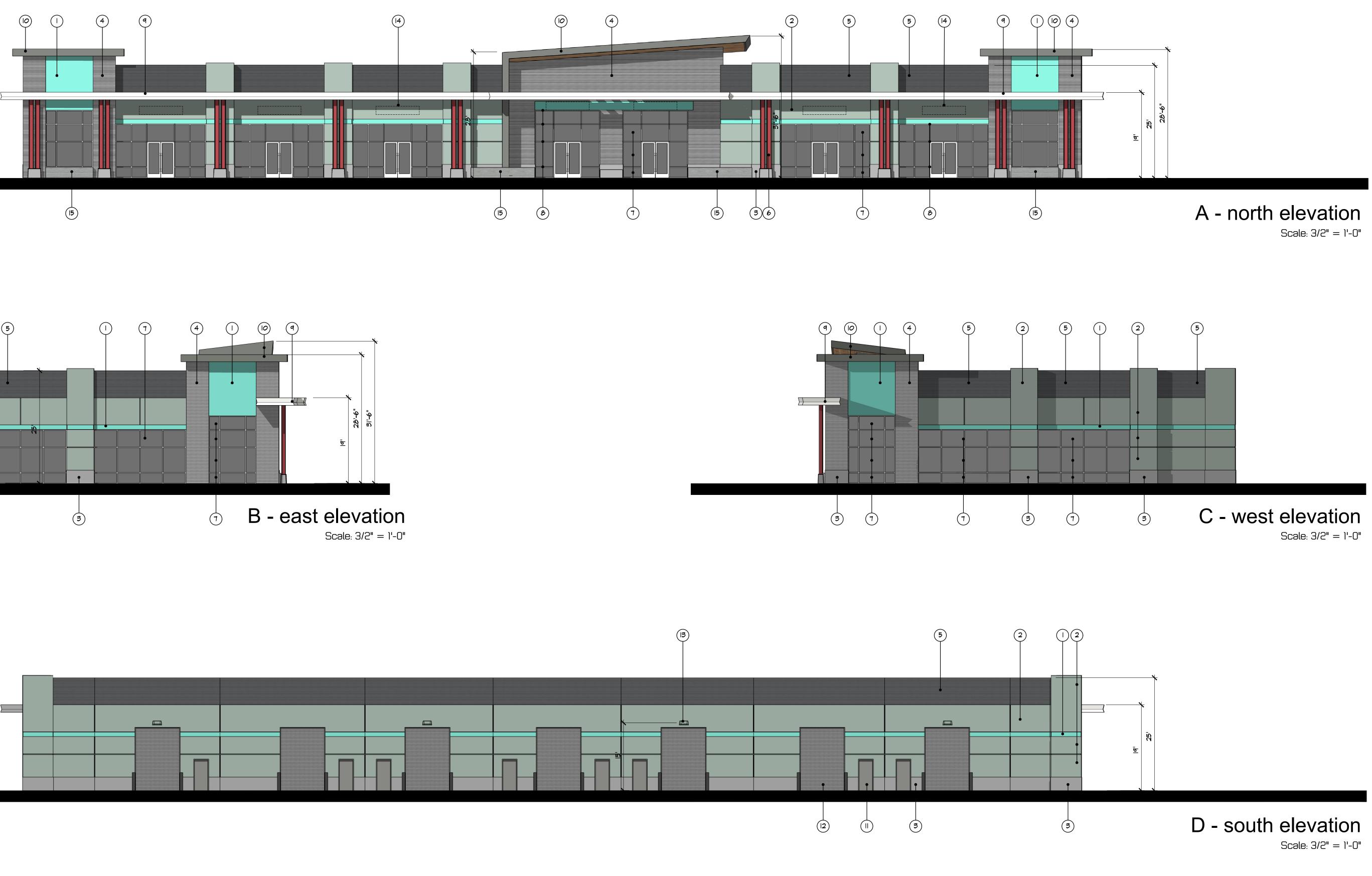
•

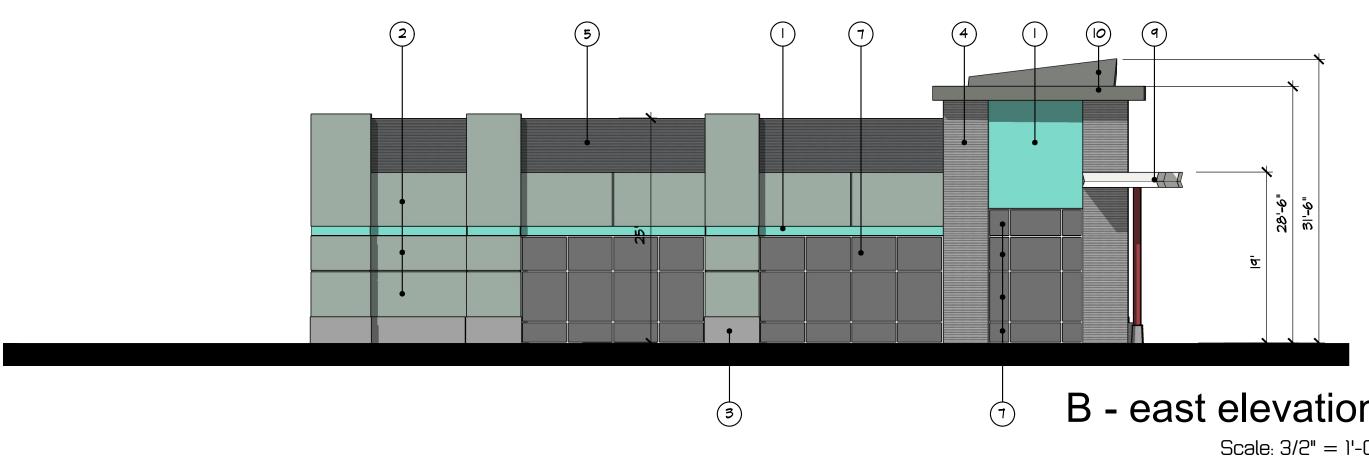
•

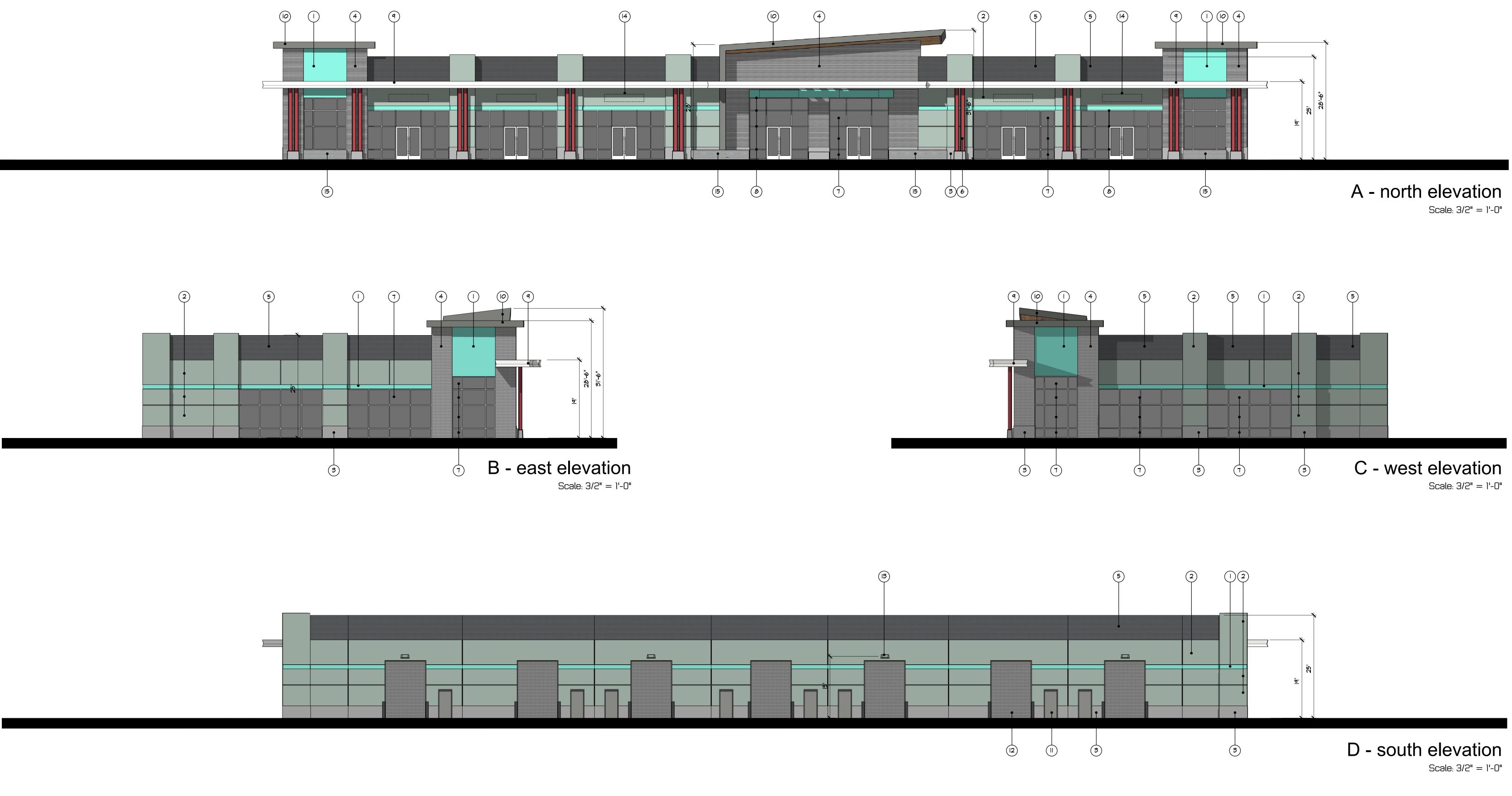
•

•

•







# keyed notes

() CONCRETE TILT-UP WALL PAINTED TO MATCH DUNN EDWARDS DET548 FIESTA BLUE 2 CONCRETE TILT-UP WALL PAINTED TO MATCH DUNN EDWARDS DET609 DECO GRAY

## 3 CONCRETE TILT-UP WALL PAINTED TO MATCH DUNN EDWARDS DE6368 WALRUS

(4) CORRUGATED METAL PANELS PAINTED LIGHT GRAY

5 CORRUGATED METAL PANELS PAINTED CHARCOAL

6 STEEL I-BEAM COLUMNS PAINTED TO MATCH DUNN EDWARDS DET425 ROYAL RED FLASH

7 DUAL GLAZED GREEN TINT GLAZING

(8) EXTRUDED ALUMINUM STOREFRONT SYSTEM, MILL FINISH

(9) METAL AWNING PAINTED WHITE

O METAL PARAPET CAP PAINTED TO MATCH DUNN EDWARDS DET629 FADE TO BLACK

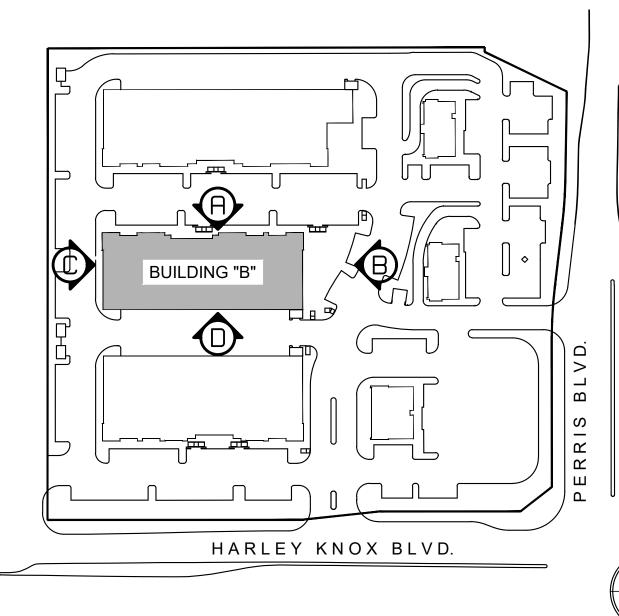
II) 3'x7' HOLLOW METAL DOOR AND FRAME COLOR TO MATCH DUNN EDWARDS DE6369 LEGENDARY GRAY

(12) IO'XI2' ROLL-UP DOOR COLOR TO MATCH DUNN EDWARDS DE6369 LEGENDARY GRAY (13) EXTERIOR WALL MOUNTED WALL PACK BY: HUBBEL OUTDOOR LIGHTING, GEOPACK SERIES TRAPEZOID

(14) PROPOSED TENANT SIGNAGE LOCATION. SIZE AND LOCATION PER THE CITIES SPECIFIC PLAN.

(15) BOARD FORMED CONCRETE

# key plan

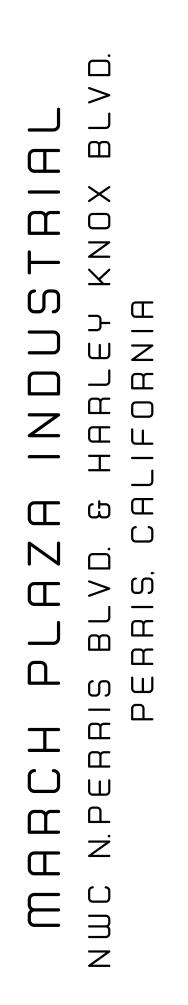




•

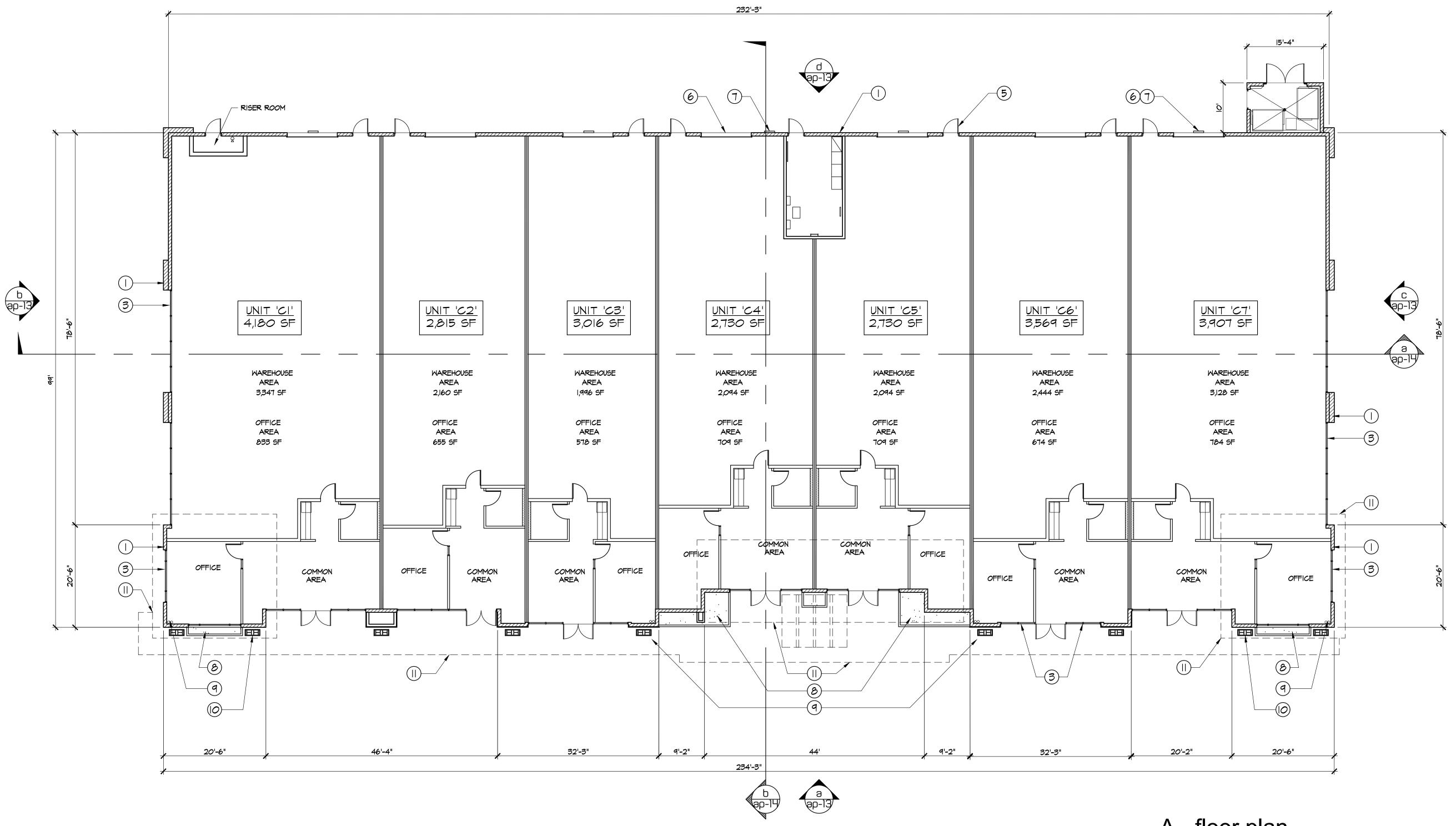


29619 agoura road agoura hills : california : 91301 t: 818.584.0057 f: 866.800.1289 w: pkarchitecture.net









• • • • • • • • • • • •

• •

•

•

•

•

## • • keyed notes

(I) PAINTED CONCRETE TILT-UP WALL

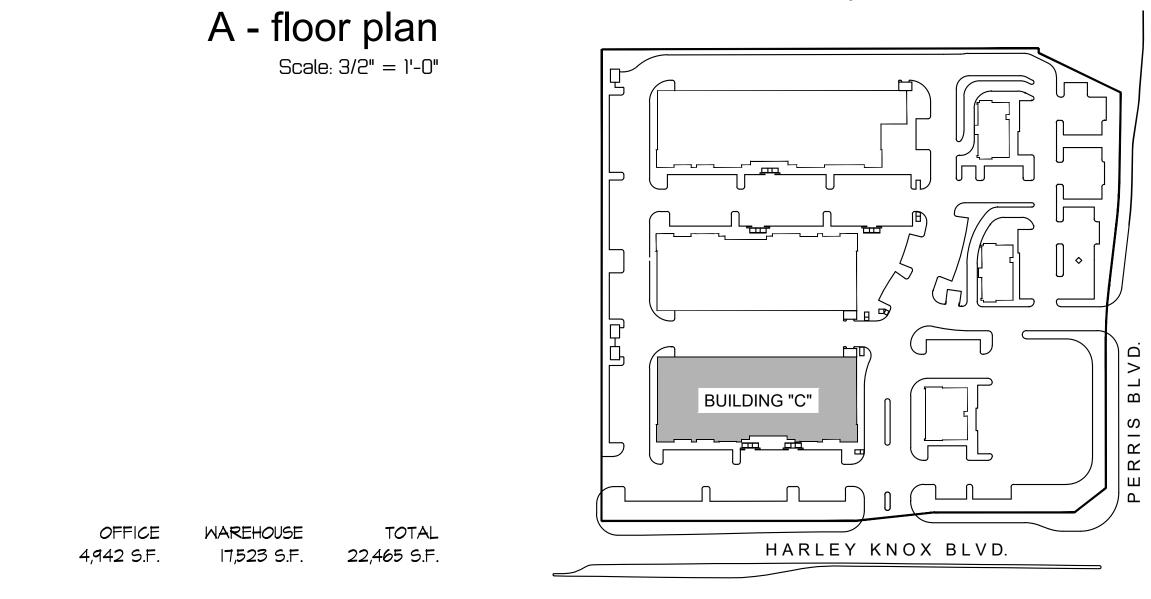
2 INTERIOR DEMISING WALL

•

3 EXTRUDED ALUMINUM STOREFRONT SYSTEM, MILL FINISH WITH DUAL GLAZED WINDOW SYSTEM

- 4 METAL AWNING PAINTED ABOVE
- (5) PAINTED 3'XT' HOLLOW METAL DOOR AND FRAME
- 6 IO'XI2' ROLL-UP DOOR COLOR TO MATCH DUNN EDWARDS DE6369 LEGENDARY GRAY (7) EXTERIOR WALL MOUNTED WALL PACK OUTDOOR LIGHTING
- (B) BOARD FORMED CONCRETE RAISED PLANTER
- (9) INTERNAL DOWNSPOUT PER CITY OF PERRIS CODE
- (10) painted steel 1-beam columns for awning with concrete base
- II) EAVE PROJECTION ABOVE







•



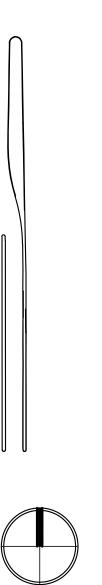
29619 agoura road agoura hills : california : 91301 t: 818.584.0057 f: 866.800.1289 w: pkarchitecture.net

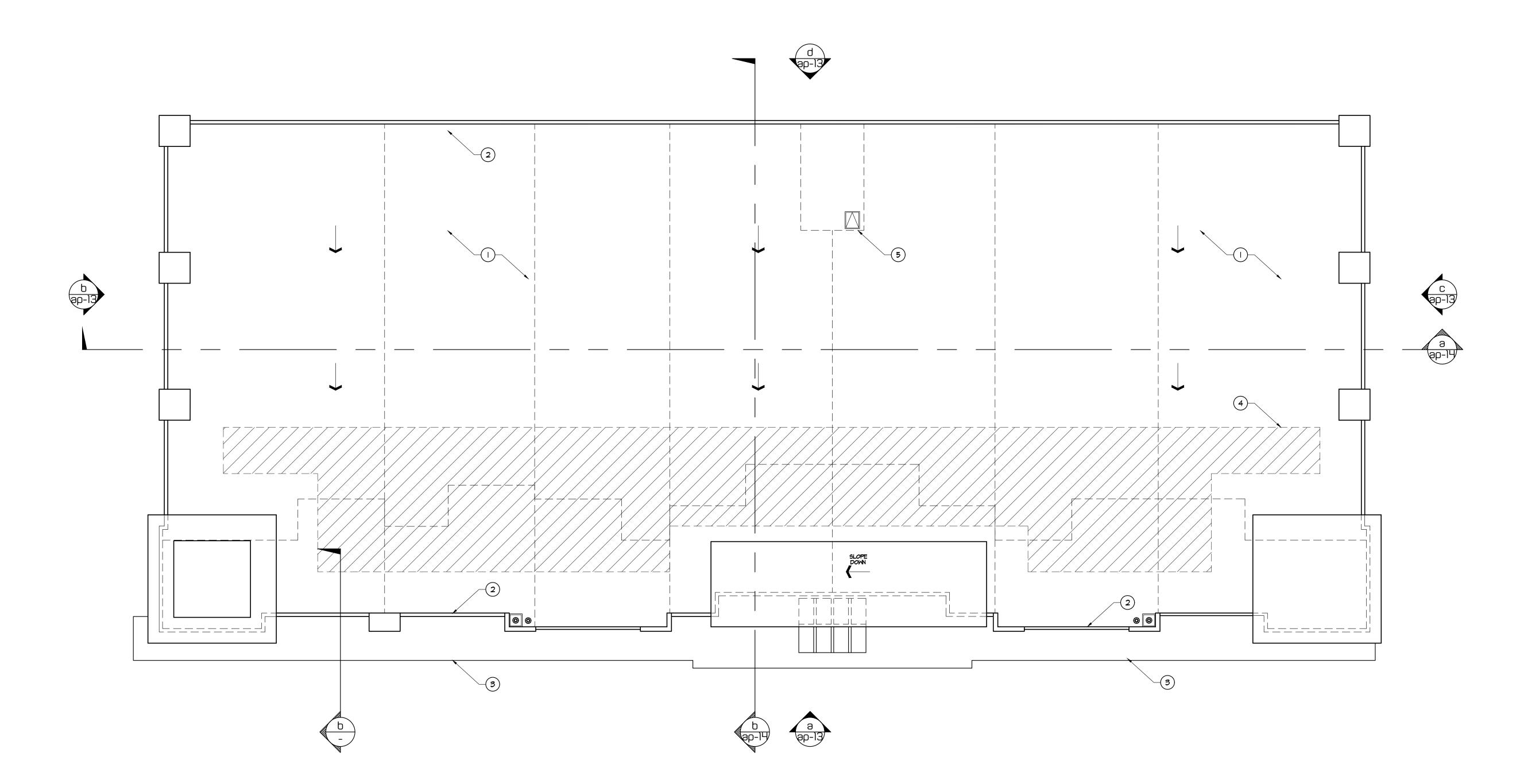




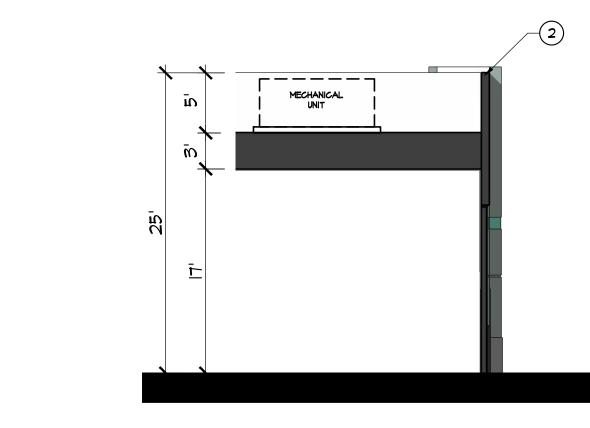
floor plan building 'C'







• • • • • • • • • • • • •

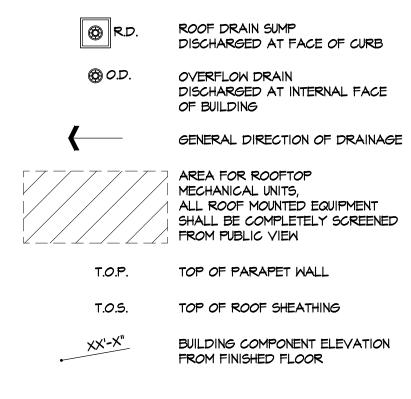


B - parapet wall section (mechanical screen)

## • • • roof plan keynotes

- () CLASS 'A' 60 MIL SARNAFIL 6410 ENERGY SMART ROOF MEMBRANE; CAP SHEET COLOR TO BE WHITE OVER 1/2" GEORGIA-PACIFIC DENS DECK ROOF BOARD FRAMING AND SHEATHING PER STRUCTURAL 2 5'-0" HIGH PARAPET WALL / MECHANICAL SCREEN
- 3 CANOPY BELOW
- (4) AREA FOR ROOFTOP MECHANICAL UNITS
- 5 ROOF ACCESS HATCH

# roof plan legend





•

• •

key plan L D HARLEY KNOX BLVD.







29619 agoura road agoura hills : california : 91301 t: 818.584.0057 f: 866.800.1289 w: pkarchitecture.net

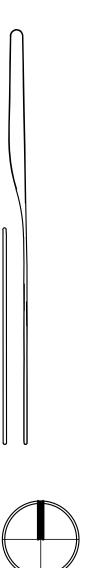
> $\square$ >ſ Ţ  $\times$ \_\_\_\_ Ζ  $\mathbf{\Sigma}$ S Œ \_ Ζ ср СС Œ  $\square$ N Π \_ ц т с ſ **С Ш** — n  $\Box$ Ε  $\exists$ Ζ



roof plan building 'C'

date: 10.06.2021 job number: 21-55.20





true north

•

•

•

•

•

•

•

•

•

•

•

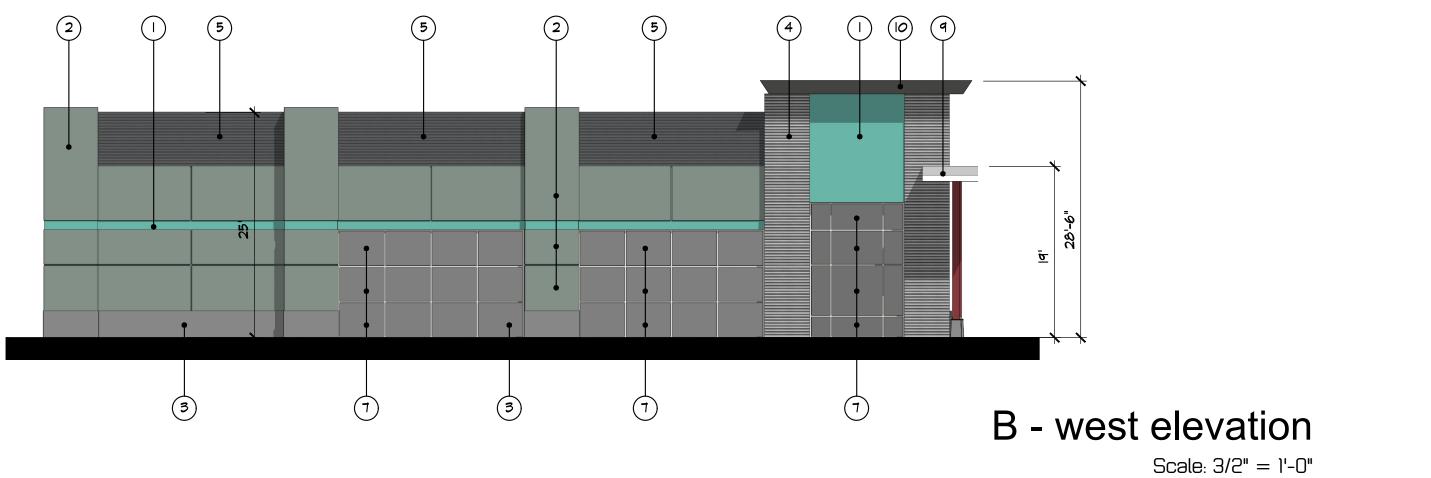


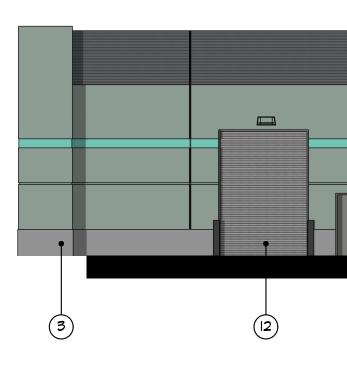
•

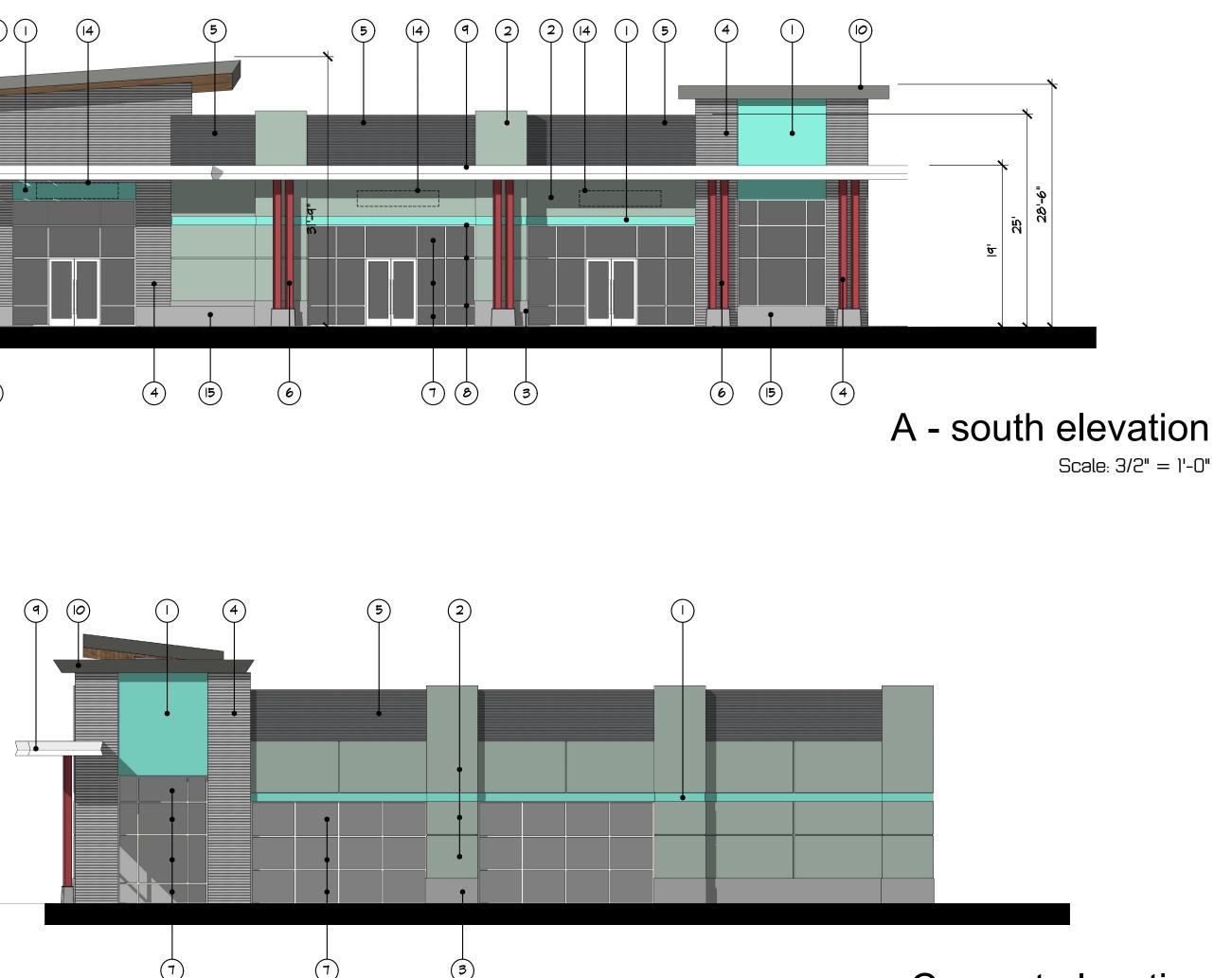
•

•

•







•

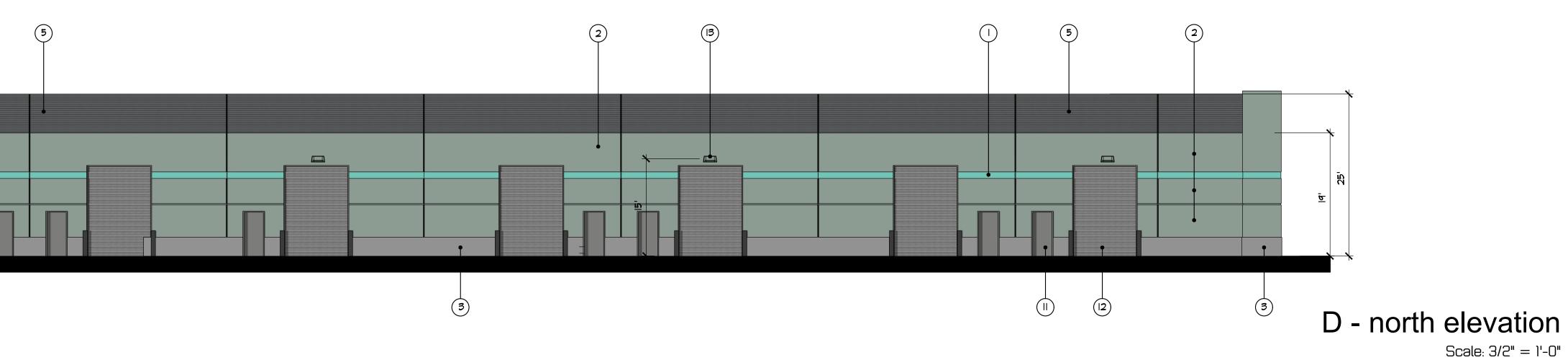
•

•

•

•

•



(4) CORRUGATED METAL PANELS PAINTED LIGHT GRAY 5 CORRUGATED METAL PANELS PAINTED CHARCOAL 6 STEEL I-BEAM COLUMNS PAINTED TO MATCH DUNN EDWARDS DET425 ROYAL RED FLASH 7 DUAL GLAZED GREEN TINT GLAZING (8) EXTRUDED ALUMINUM STOREFRONT SYSTEM, MILL FINISH (9) METAL AWNING PAINTED WHITE METAL PARAPET CAP PAINTED TO MATCH DUNN EDWARDS DET629 FADE TO BLACK II) 3'x7' HOLLOW METAL DOOR AND FRAME COLOR TO MATCH DUNN EDWARDS DE6369 LEGENDARY GRAY (12) IO'XI2' ROLL-UP DOOR COLOR TO MATCH DUNN EDWARDS DE6369 LEGENDARY GRAY (13) EXTERIOR WALL MOUNTED WALL PACK BY: HUBBEL OUTDOOR LIGHTING, GEOPACK SERIES TRAPEZOID (14) PROPOSED TENANT SIGNAGE LOCATION. SIZE AND LOCATION PER THE CITIES SPECIFIC PLAN. (15) BOARD FORMED CONCRETE

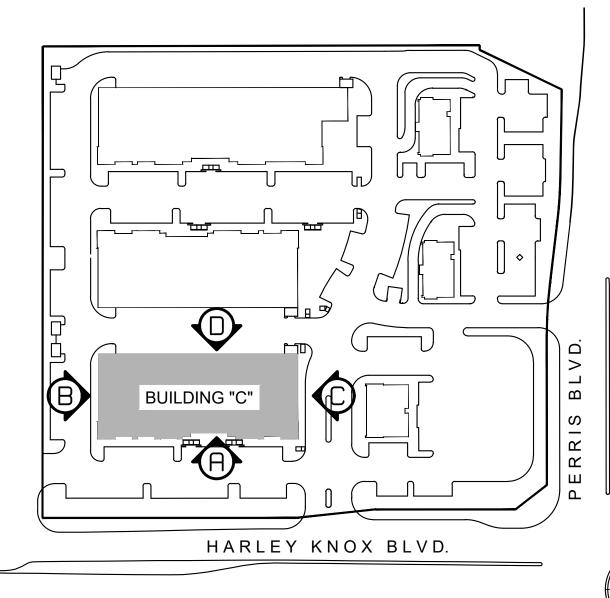
C - east elevation Scale: 3/2" = 1'-0"

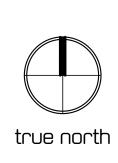
# keyed notes

() CONCRETE TILT-UP WALL PAINTED TO MATCH DUNN EDWARDS DET548 FIESTA BLUE 2 CONCRETE TILT-UP WALL PAINTED TO MATCH DUNN EDWARDS DET609 DECO GRAY

## 3 CONCRETE TILT-UP WALL PAINTED TO MATCH DUNN EDWARDS DE6368 WALRUS

# key plan





date: 10.06.2021 job number: 21-55.20

 $\mathcal{O}$ 

lde



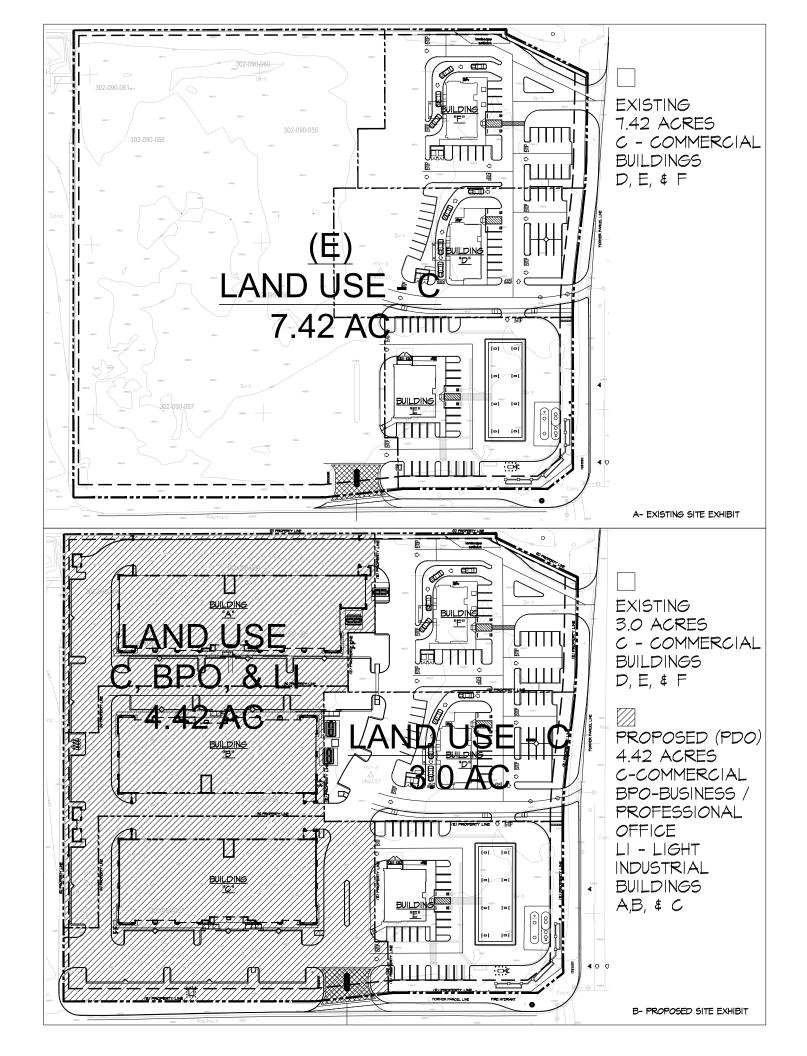


29619 agoura road agoura hills : california : 91301 t: 818.584.0057 f: 866.800.1289 w: pkarchitecture.net



## March Plaza SPA Text DPR 22-00031

The purpose of SPA is to modify Figure 2.0-1, Specific Land Use Designation, and Table 2.0-1, Land Use Comparison. to reflect a Plan Development Overlay of approximately 4.42 acres of 7.42 acres Commercial (C) zone, to allow Light Industrial (LI) and Business Professional Office (BPO) use. The property is located at the northwest corner of Perris Blvd and Harley Knox Blvd. This would allow flexibility for a variety of land uses of the underlying Commercial (C) zone.



## PERMITTED USES: The following uses shall be permitted within the specified buildings.

MARCH PLAZA SPECIFIC PLAN AMENDMENT EXHIBIT				
	Existing Acres (2012 PVCCSP)		Proposed Acres	
Business Par/Professional C	343		4.42	
Commercial (C)		349		7.42
Liqht Industrial (LI)		1,866		4.42
	, BUILDING B,	ŧ BUILDING C,	(C, BPC	р, LI)
PERMITTED USES:	USES SUBJECT	- TO (CUP):	PROHIE	BITED USES:
<ul> <li>Animal Grazing</li> <li>Food &amp; Food services (no alcohol)</li> <li>General Retail</li> <li>Mortuary</li> <li>Personal Services</li> <li>Vehicle-Related routine services &amp; maintenance</li> <li>Monopoles or similar wireless communications towers or facilities less than 65'</li> <li>Medical Care clinics and offices, (excluding urgent care facilities and hospitals and clinics requiring a state permit)</li> <li>Manufacturing, Industrial: Indoor</li> <li>Mini-Storage/Wholesale facilities</li> <li>Warehouse/Distribution centers</li> <li>Public &amp; Semi-public educational facilities</li> <li>Business/Professional Office</li> <li>All permitted uses within the Commercial (C) Zone District shall be allowed</li> <li>All permitted uses within the Business Professional</li> <li>Office (BPO) Zone District shall be allowed</li> <li>All permitted uses within the Light Industrial (LI) Zone</li> </ul>	<ul> <li>Animal Servi</li> <li>Alcohol Sale consumption</li> <li>Alcohol Sale consumption</li> <li>Drive-Thru s</li> <li>Hotels # Mo</li> <li>Landscape I</li> <li>Large Equip</li> <li>Live-Work Ui</li> <li>Pest Contro</li> <li>Swap Meets</li> <li>Vehicle-Relation</li> <li>Storage # Otle</li> <li>Monopoles and Wireless commandation</li> <li>Monopoles and Wireless commandation</li> <li>Child care and Nonsery schoo</li> <li>Hospitals # Centers</li> <li>Live-in Care (aged or infirration child care faction</li> <li>Schools,Tech</li> <li>Recreationa facilities (Indo</li> <li>Manufacturin Pharmaceutica</li> <li>Materials, Ches</li> <li>All condition</li> <li>Uses within the zone districts</li> </ul>	ces s for off-site s for on-site ervices tels Nurseries ment Retail nits (Indoor) (Outdoor) ated Outdoor her Facilities or similar nunications ilities more enter / I, private Urgent Care facilities n excluding ilities) nnical & trade I areas & or) g: al, Hazardous micals titutions ally permitted s (LI) & (BPO) shall be ct to obtaining Use Permit exception of	<ul> <li>Care</li> <li>Agric</li> <li>Anima</li> <li>Slaught</li> <li>Adult</li> <li>Gove</li> <li>Public</li> <li>Public</li> <li>Tay</li> <li>Day</li> <li>Mobil</li> <li>Multi-</li> <li>town-ha</li> </ul>	cultural Uses al or Poultry ter Entertainment Ernment Facilities infrastructure es care, large family care, small family le Home Parks Family Units (condos, omes, apartments) e Family detached

### NOTICE OF PUBLIC HEARING RIVERSIDE COUNTY AIRPORT LAND USE COMMISSION www.rcaluc.org

A PUBLIC HEARING has been scheduled before the Riverside County Airport Land Use Commission (ALUC) to consider the applications described below.

Any person may submit written comments to the ALUC before the hearing or may appear and be heard in support of or opposition to the project at the time of hearing. **Information on how to participate in the hearing will be available on the ALUC website at <u>www.rcaluc.org.</u> The ALUC holds hearings for local discretionary permits within the Airport Influence Area, reviewing for aeronautical safety, noise and obstructions. ALUC reviews a proposed plan or project solely to determine whether it is consistent with the applicable Airport Land Use Compatibility Plan. For more information please contact <u>ALUC Planner Jackie Vega at (951) 955-0982</u>.** 

The City of Perris Planning Department should be contacted on non-ALUC issues. For more information, please contact City of Perris Planner Nathan Perez at 951-656-7000.

The proposed project application may be viewed by a prescheduled appointment and on the ALUC website <u>www.rcaluc.org</u>. Written comments may be submitted at the Riverside County Administrative Center, 4080 Lemon Street, 14th Floor, Riverside, California 92501, Monday through Friday from 8:00 a.m. to 3:30 p.m., or by e-mail to javega@rivco.org. Individuals with disabilities requiring reasonable modifications or accommodations, please contact Barbara Santos at (951) 955-5132.

PLACE OF HEARING:	Riverside County Administration Center 4080 Lemon Street, 1 <sup>st</sup> Floor Board Chambers Riverside California
	March 9, 2023

DATE OF HEARING: March 9, 2023

TIME OF HEARING: 9:30 A.M.

CASE DESCRIPTION:

ZAP1559MA23 – PK Architecture (Representative: Sage Realty Group) – City of Perris Case Nos. PLN2305029 (Specific Plan Amendment), DPR2200031 (Development Plan Review), TPM2305028 (Tentative Parcel Map). A proposal to construct three industrial buildings totaling 66,686 square feet on 4.42 acres, located northerly of Harley Knox Boulevard, westerly of Perris Boulevard, and southerly of Oleander Avenue. The applicant also proposes to amend the March Plaza Specific Land Use Designation, changing the sites zoning from Commercial (C) to Light Industrial (LI) and Business Professional Office (BPO). The applicant also proposes merging six existing parcels into one. (Airport Compatibility Zone D of the March Air Reserve Base/Inland Port Airport Influence Area).



## **APPLICATION FOR MAJOR LAND USE ACTION REVIEW**

ALUC STAFF ONLY				
ALUC Case Number: ZAP1559MA23	Date Submitte	ted: 01/24/2023		
AIA: March	Zone: D	Public Hearing Staff Review		
	Applicant			
Applicant Full Name: Brian Poliquin				
Applicant Address: 29619 Agoura Road,	Agoura Hills, C	A 91301		
Phone: (818) 584-0057	Email:	bpoliquin@pkarchitecture.net		
	Property Owner	r Contact Information		
Representative: Joel Kirschenstein		Email: joel@sagerealtygroup.com		
		Phone: (805) 377-3999		
Address:				
Property Owner: Eliott Kahn Address: 3057 McConnell Drive, Los Ang		Email: eliottjkahn@earthlink.net Phone: (310)770-2847		
Address: 5057 McConnell Drive, Los An	geles CA 30004	T		
Agency ou contact	cal Jurisdiction	Agency		
Name: City of Perric		Phone: (951) 943-5003		
Staff Contact: Nathan Perez		Email: nperez@cityofperris.org		
Address: 135 N. "D" Street, Perris CA 92570				
Local Agency Case No.: (DPR) 22-00031PLN2305029 (Specific Plan Amendment), DPR2200031 (Development Plan Review), TPM2305028 (Tentative Parcel Map)				
	Project Locati	ion		
Street         NWC of N. Perriss Blvd. & Harley Knox Blvd.         Gross Parcel Size.: 4.42 Acres (192,535 sq ft)           Assessor's Parcel No.:         302-090-055, -056, -057, -058, -060, & -061				
Solar				
Is the project proposing solar Panels? Yes No If yes, please provide solar glare study.				

(only if in Zone C or higher)

	Data
Site Elevation:(above mean sea level)	1460
Height of Building or structures:	25'-0" Low Parapet to 28'-6" High Parapet
What type of drainage being proposed and t footage:	<sup>e basins are</sup> Hydrology Basins-N/A, Water Quality Basins-N/A.

Notice

**A. NOTICE:** Failure of an applicant to submit complete or adequate information pursuant to Sections 65940 to 65948 inclusive of the California Government Code, MAY constitute grounds for disapproval of actions, regulations, or permits.

**B. REVIEW TIME:** Estimated time for "staff level review" is approximately 30 days from date of submittal. Estimated time for "commission level review" is approximately 45 days from date of a complete application submittal to the next available commission hearing meeting.

#### C. SUBMISSION PACKAGE:

#### Please submit all application items DIGITALLY via USB or CD:

- Completed ALUC Application Form
- Plans Package: site plans, floor plans, building elevations, grading plans, subdivision maps
- Exhibits of change of zone, general plan amendment, specific plan amendment
- Project description of existing and proposed use

#### Additionally, please provide:

- ALUC fee payment (Checks made out to Riverside County ALUC)
- Gummed address labels of all surrounding property owners within a 300-foot radius of project site. (Only required if the project is scheduled for a public hearing).

#### RIVERSIDE COUNTY AIRPORT LAND USE COMMISSION

#### **STAFF REPORT**

#### ADMINISTRATIVE ITEMS

#### 5.1 Director's Approvals

A. During the period of January 16, 2022, through February 15, 2023, as authorized pursuant to Section 1.5.2(d) of the 2004 Riverside County Airport Land Use Compatibility Plan, ALUC Director Paul Rull reviewed one non-legislative case and issued a determination of consistency.

ZAP1040FL22 (Zone E) pertains to City of Jurupa Valley Case No. MA21214 (Site Development Review), a proposal to construct a 78,660 square foot commercial center on 9.3 acres, located on the southwest corner of Mission Boulevard and Opal Street. The project is located within Compatibility Zone E of Flabob Airport Influence Area, where Zone E does not restrict non-residential intensity. The elevation of Runway 6-24 at its westerly terminus is approximately 750 feet above mean sea level (AMSL). At a distance of approximately 6,851 feet from the runway to the above-referenced parcel, Federal Aviation Administration (FAA) review would be required for any structures with top point exceeding 887 feet AMSL. The project's site elevation is 872 feet AMSL and the proposed maximum structure height is 39 feet, for a top point elevation of 911 feet AMSL. Therefore, review by the FAA Obstruction Evaluation Service (FAA OES) for height/elevation reasons was required. The applicant submitted Form 7460-1 to the FAA OES. A "Determination of No Hazard to Air Navigation" letter for Aeronautical Study No. 2022-AWP-22248-OE was issued on January 12, 2023. The study revealed that the proposed facility would not exceed obstruction standards and would not be a hazard to air navigation provided conditions are met. These FAA OES conditions have been incorporated into this finding.

ALUC Director Paul Rull issued a determination of consistency for this project on January 19, 2023.

B. Additionally, as authorized pursuant to ALUC Resolution No. 2015-01, as extended by Resolution No. 2020-01, ALUC Director Paul Rull reviewed one legislative cases within the March Air Reserve Base/Inland Port Airport Influence Area and issued a determination of consistency.

ZAP1552MA22 (Zone E) pertains to County of Riverside Case Nos. SP00260S04 (Specific Plan Substantial Conformance), TTM38503 (Tentative Tract Map), a proposal to divide 9.9 acres into 37 single-family residential lots and two lots for open space and drainage, located easterly of Briggs Road. The applicant also proposes to amend the site's Specific Plan to utilize provisions for Planning Area 39 designated as a school site for the backup purposes of residential development, to allocate additional units from other Planning Areas in the Specific Plan while maintaining the total number of units at 2,023. The project is located within Compatibility Zone E of March Air Reserve Base/Inland Port Airport Influence Area, where Zone E does not restrict residential density. Although the project is located within the March Air Reserve Base/Inland Port Airport Influence Area, the nearest runway is actually Runway 15-33 at Perris Valley Airport. The elevation of Runway 15-33 at Perris Valley Airport is approximately 1,413 feet above mean sea level (AMSL) at its northerly terminus. At a distance of 27,148 feet from the project to the nearest point on the runway, Federal Aviation Administration Obstruction Evaluation Service (FAA OES) review would be required for any structures with an elevation at top of roof exceeding 1,684 feet AMSL. The site elevation is 1,529 feet AMSL, and the proposed building height is 40 feet, resulting in a top point elevation of 1,569 feet AMSL. Therefore, FAA OES review for height/elevation was not required.

ALUC Director Paul Rull issued a determination of consistency for this project on January 31, 2023.

C. Additionally, ALUC Director Paul Rull reviewed two local jurisdiction non-impact legislative cases pursuant to ALUC Resolution No. 2011-02, and issued a determination of consistency.

ZAP1068RG23 (Countywide) pertains to County of Riverside Ordinance Amendment (CZ2100128), a proposal to amend Article XIXh (Commercial Cannabis Activities) in Ordinance No. 348, updating certain provisions related to development standards, operating requirements, enforcement, and revocation. This amendment also proposes to allow for cannabis retailers in the Mixed Use Zone, change from a Variance requirement to a Setback Adjustment, when a cannabis facility proposes to locate closer than 1,000 ft to a potentially impacted use, and merge Board of Supervisors existing Policy F7 – Cannabis Retailers within a Commercial Retail Corridor, into Ordinance No. 348, then rescinding Policy F7. The proposed amendments do not involve changes in development standards or allowable land uses that would increase residential density or non-residential intensity. Therefore, these amendments have no possibility of having an impact on the safety of air navigation within airport influence areas located within the County of Riverside.

ALUC Director Paul Rull issued a determination of consistency for this project on January 19, 2023.

\*\*\*\*\*\*\*

ZAP1069RG23 (Citywide) pertains to City of Riverside Zoning Code Amendment (PR-2022-001453), a proposal amending Title 19 (Zoning) of the Riverside Municipal Code including, but not limited to Articles V (Base Zones and Related Use and Development Provisions), VI (Overlay Zones), VII (Specific Plan Land Use Provisions), and X (Definitions) related to commercial cannabis uses. The proposed amendments include but are not limited to: eliminate the Citywide prohibit of commercial cannabis uses; establish Cannabis Storefront Retail, Cannabis Warehousing/Distribution and Cannabis Cultivation and Cannabis Microbusinesses as prohibited uses in specified Zones; establish Cannabis Cultivation and Cannabis Microbusinesses as prohibited uses in all Zones; amend various chapters of the zoning code for consistency with proposed amendments to Titles 5 and 9 of the Municipal Code; and Establish Definitions related to the proposed changes to cannabis uses.

ALUC Director Paul Rull issued a determination of consistency for this project on February 9, 2023.

D. Additionally, ALUC Director Paul Rull reviewed one non-legislative case within the March Air Reserve Base/Inland Port Airport Influence Area pursuant to ALUC Resolution No. 2020-02, and issued a determination of consistency.

ZAP1555MA22 (Zones C1 and D) pertains to County of Riverside Case Nos. SP00260S04 (Specific Plan Substantial Conformance), TTM38503 (Tentative Tract Map), a proposal to divide 9.9 acres into 37 singlefamily residential lots and two lots for open space and drainage, located easterly of Briggs Road. The applicant also proposes to amend the site's Specific Plan to utilize provisions for Planning Area 39 designated as a school site for the backup purposes of residential development, to allocate additional units from other Planning Areas in the Specific Plan while maintaining the total number of units at 2,023. The project is located within Compatibility Zone E of March Air Reserve Base/Inland Port Airport Influence Area, where Zone E does not restrict residential density. Although the project is located within the March Air Reserve Base/Inland Port Airport Influence Area, the nearest runway is actually Runway 15-33 at Perris Valley Airport. The elevation of Runway 15-33 at Perris Valley Airport is approximately 1,413 feet above mean sea level (AMSL) at its northerly terminus. At a distance of 27,148 feet from the project to the nearest point on the runway, Federal Aviation Administration Obstruction Evaluation Service (FAA OES) review would be required for any structures with an elevation at top of roof exceeding 1,684 feet AMSL. The site elevation is 1,529 feet AMSL, and the proposed building height is 40 feet, resulting in a top point elevation of 1,569 feet AMSL. Therefore, FAA OES review for height/elevation was not required.

ALUC Director Paul Rull issued a determination of consistency for this project on January 31, 2023.

- **5.2** <u>Update March Air Reserve Base Compatibility Use Study (CUS)</u> Presentation by Project Director Simon Housman or his designee.
- **5.3** <u>Reminder in April Election of Officers and Re-election of At-Will position</u> Presentation by ALUC Director Paul Rull or his designee.

X:\ALUC Administrative Items\Admin. 2023\ADmin Item 3-9-23.doc



#### **RIVERSIDE COUNTY AIRPORT LAND USE COMMISSION**

January 19, 2023

Miguel Del Rio, Associate Planner City of Jurupa Valley Planning Department 8930 Limonite Avenue CHAIR Steve Manos Jurupa Valley CA 92509 Lake Elsinore

#### RE: AIRPORT LAND USE COMMISSION (ALUC) DEVELOPMENT REVIEW – DIRECTOR'S VICE CHAIR Russell Betts DETERMINATION **Desert Hot Springs**

COMMISSIONERS John Lyon Riverside	Related File No.: MA APN: 182	P1040FL22 21214 (Site Development Review) P-031-001, 182-031-002, 182-022-002 npatibility Zone E			
Steven Stewart Palm Springs					
Richard Stewart Moreno Valley	Dear Mr. Del Rio				
Michelle Geller Riverside	Under the delegation of the Riverside County Airport Land Use Commission (ALUC) pursuant to Policy 1.5.2(d) of the Countywide Policies of the 2004 Riverside County Airport Land Use				
Vernon Poole Murrieta	Compatibility Plan, staff reviewed City of Jurupa Valley Case No. MA21214 (Site Development Review), a proposal to construct a 78,660 square foot commercial center on 9.3 acres, located on the southwest corner of Mission Boulevard and Opal Street.				
STAFF	The project is located within Comp E does not restrict non-residentia	oatibility Zone E of Flabob Airport Influence Area, where Zone I intensity.			
Director Paul Rull	The elevation of Runway 6-24 at	its westerly terminus is approximately 750 feet above mean			
Simon Houseman Jackie Vega Barbara Santos	sea level (AMSL). At a distance of approximately 6,851 feet from the runway to the above- referenced parcel, Federal Aviation Administration (FAA) review would be required for any structures with top point exceeding 887 feet AMSL. The project's site elevation is 872 feet AMSL				
County Administrative Center 4080 Lemon St.,14th Floor. Riverside, CA 92501 (951) 955-5132 www.rcaluc.org	and the proposed maximum structure height is 39 feet, for a top point elevation of 911 fee AMSL. Therefore, review by the FAA Obstruction Evaluation Service (FAA OES) fo height/elevation reasons was required. The applicant submitted Form 7460-1 to the FAA OES A "Determination of No Hazard to Air Navigation" letter for Aeronautical Study No. 2022-AWP 22248-OE was issued on January 12, 2023. The study revealed that the proposed facility would not exceed obstruction standards and would not be a hazard to air navigation provided conditions are met. These FAA OES conditions have been incorporated into this finding.				
	As ALUC Director, I hereby find	the above-referenced project <u>CONSISTENT</u> with the 2004 bility Plan, provided that the City of Jurupa Valley applies the			
	CONDITIONS:				
		led shall be hooded or shielded to prevent either the spillage o the sky. Outdoor lighting shall be downward facing.			

2. The following uses shall be prohibited:

#### AIRPORT LAND USE COMMISSION

- (a) Any use which would direct a steady light or flashing light of red, white, green, or amber colors associated with airport operations toward an aircraft engaged in an initial straight climb following takeoff or toward an aircraft engaged in a straight final approach toward a landing at an airport, other than an FAA-approved navigational signal light or visual approach slope indicator.
- (b) Any use which would cause sunlight to be reflected towards an aircraft engaged in an initial straight climb following takeoff or towards an aircraft engaged in a straight final approach towards a landing at an airport.
- (c) Any use which would generate smoke or water vapor or which would attract large concentrations of birds, or which may otherwise affect safe air navigation within the area. (Such uses include landscaping utilizing water features, aquaculture, production of cereal grains, sunflower, and row crops, artificial marshes, wastewater management facilities, composting operations, trash transfer stations that are open on one or more sides, recycling centers containing putrescible wastes, construction and demolition debris facilities, fly ash disposal, and incinerators.)
- (d) Any use which would generate electrical interference that may be detrimental to the operation of aircraft and/or aircraft instrumentation.
- 3. The attached notice shall be provided to all potential purchasers of the property and to permanent tenants of any building(s) thereon.
- 4. Any new aboveground detention basins on the site shall be designed so as to provide for a maximum 48-hour detention period following the conclusion of the storm event for the design storm (may be less, but not more), and to remain totally dry between rainfalls. Vegetation in and around the detention basin(s) that would provide food or cover for bird species that would be incompatible with airport operations shall not be used in project landscaping.
- 5. The Federal Aviation Administration has conducted an aeronautical study of the proposed project (Aeronautical Study No. 2022-AWP-22248-OE) and has determined that neither marking nor lighting of the structure(s) is necessary for aviation safety. However, if marking and/or lighting for aviation safety are accomplished on a voluntary basis, such marking and/or lighting (if any) shall be installed in accordance with FAA Advisory Circular 70/7460-1 M and shall be maintained in accordance therewith for the life of the project.
- 6. The proposed buildings shall not exceed a height of 39 feet above ground level and a maximum elevation at top point of 886 feet above mean sea level.
- 7. The maximum height and top point elevation specified above shall not be amended without further review by the Airport Land Use Commission and the Federal Aviation Administration; provided, however, that reduction in structure height or elevation shall not require further review by the Airport Land Use Commission.
- 8. Temporary construction equipment used during actual construction of the structure(s) shall not exceed 39 feet in height and a maximum elevation of 886 feet above mean sea level, unless separate notice is provided to the Federal Aviation Administration through the Form 7460-1 process.

#### **AIRPORT LAND USE COMMISSION**

9. Within five (5) days after construction of the permanent structure reaches its greatest height, FAA Form 7460-2 (Part II), Notice of Actual Construction or Alteration, shall be completed by the project proponent or his/her designee and e-filed with the Federal Aviation Administration. (Go to <u>https://oeaaa.faa.gov</u> for instructions.) This requirement is also applicable in the event the project is abandoned or a decision is made not to construct the structure(s).

If you have any questions, please contact me, at (951) 955-6893

Sincerely, RIVERSIDE COUNTY AIRPORT LAND USE COMMISSION

Paul Rull, ALUC Director

- Attachments: Notice of Airport in Vicinity Aeronautical Study No. 2022-AWP-22248-OE
- cc: Nine Oak Investments (applicant/property owner) Shelah Riggs, Michael Baker International (representative) Beth LaRock, Manager, Flabob Airport ALUC Case File

X:\AIRPORT CASE FILES\Flabob\ZAP1040FL22\ZAP1040FL22.LTR.doc

## NOTICE OF AIRPORT IN VICINITY

This property is presently located in the vicinity of an airport, within what is known as an airport influence area. For that reason, the property may be subject to some of the annoyances or inconveniences associated with proximity to airport operations (for example: noise, vibration, or odors). Individual sensitivities to those annoyances [can vary from person to person. You may wish to consider what airport annoyances], if any, are associated with the property before you complete your purchase and determine whether they are acceptable to you. Business & Professions Code Section 11010 (b)

# NOTICE

## THERE IS AN AIRPORT NEARBY.

## THIS STORM WATER BASIN IS DESIGNED TO HOLD

## **STORM WATER FOR ONLY 48 HOURS AND**

### **NOT TO ATTRACT BIRDS**

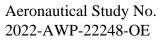
## PROPER MAINTENANCE IS NECESSARY TO AVOID BIRD STRIKES



IF THIS BASIN IS OVERGROWN, PLEASE CONTACT:

Name:

\_\_\_\_\_ Phone:





Mail Processing Center Federal Aviation Administration Southwest Regional Office Obstruction Evaluation Group 10101 Hillwood Parkway Fort Worth, TX 76177

Issued Date: 01/12/2023

Danny Nguyen Nine Oak Investments 433 N. Camden Dr. Suite 1000 Beverly Hills, CA 90210

#### **\*\* DETERMINATION OF NO HAZARD TO AIR NAVIGATION \*\***

The Federal Aviation Administration has conducted an aeronautical study under the provisions of 49 U.S.C., Section 44718 and if applicable Title 14 of the Code of Federal Regulations, part 77, concerning:

Structure:	Commercial Use Building Mission Village Shopping Center
Location:	Riverside, CA
Latitude:	34-00-21.00N NAD 83
Longitude:	117-25-36.70W
Heights:	847 feet site elevation (SE)
	39 feet above ground level (AGL)
	886 feet above mean sea level (AMSL)

This aeronautical study revealed that the structure does not exceed obstruction standards and would not be a hazard to air navigation provided the following condition(s), if any, is(are) met:

It is required that FAA Form 7460-2, Notice of Actual Construction or Alteration, be e-filed any time the project is abandoned or:

\_\_\_\_\_ At least 10 days prior to start of construction (7460-2, Part 1)

\_\_\_X\_\_ Within 5 days after the construction reaches its greatest height (7460-2, Part 2)

Based on this evaluation, marking and lighting are not necessary for aviation safety. However, if marking/ lighting are accomplished on a voluntary basis, we recommend it be installed in accordance with FAA Advisory circular 70/7460-1 M.

This determination expires on 07/12/2024 unless:

- (a) the construction is started (not necessarily completed) and FAA Form 7460-2, Notice of Actual Construction or Alteration, is received by this office.
- (b) extended, revised, or terminated by the issuing office.
- (c) the construction is subject to the licensing authority of the Federal Communications Commission (FCC) and an application for a construction permit has been filed, as required by the FCC, within

6 months of the date of this determination. In such case, the determination expires on the date prescribed by the FCC for completion of construction, or the date the FCC denies the application.

NOTE: REQUEST FOR EXTENSION OF THE EFFECTIVE PERIOD OF THIS DETERMINATION MUST BE E-FILED AT LEAST 15 DAYS PRIOR TO THE EXPIRATION DATE. AFTER RE-EVALUATION OF CURRENT OPERATIONS IN THE AREA OF THE STRUCTURE TO DETERMINE THAT NO SIGNIFICANT AERONAUTICAL CHANGES HAVE OCCURRED, YOUR DETERMINATION MAY BE ELIGIBLE FOR ONE EXTENSION OF THE EFFECTIVE PERIOD.

This determination is based, in part, on the foregoing description which includes specific coordinates, heights, frequency(ies) and power. Any changes in coordinates, heights, and frequencies or use of greater power, except those frequencies specified in the Colo Void Clause Coalition; Antenna System Co-Location; Voluntary Best Practices, effective 21 Nov 2007, will void this determination. Any future construction or alteration, including increase to heights, power, or the addition of other transmitters, requires separate notice to the FAA. This determination includes all previously filed frequencies and power for this structure.

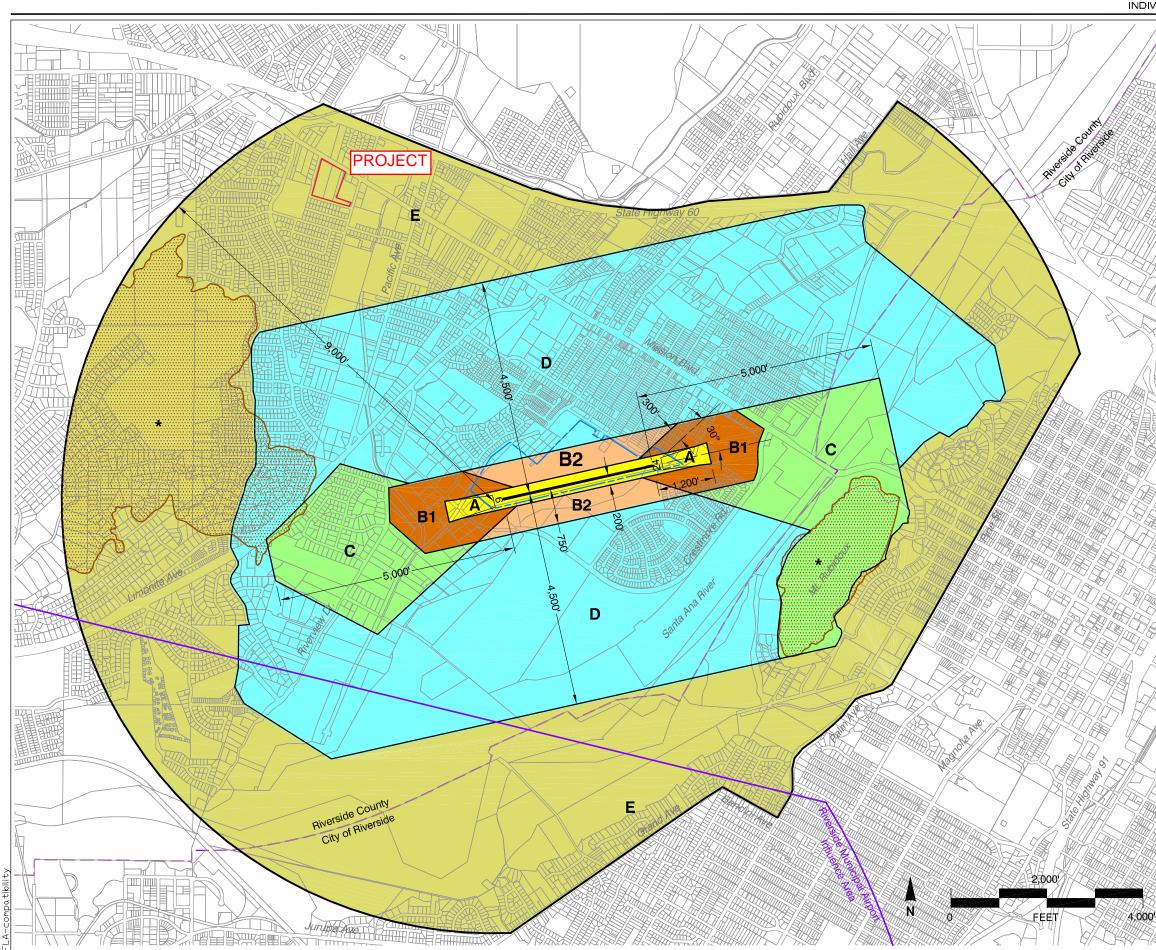
If construction or alteration is dismantled or destroyed, you must submit notice to the FAA within 5 days after the construction or alteration is dismantled or destroyed.

This determination does include temporary construction equipment such as cranes, derricks, etc., which may be used during actual construction of the structure. However, this equipment shall not exceed the overall heights as indicated above. Equipment which has a height greater than the studied structure requires separate notice to the FAA.

This determination concerns the effect of this structure on the safe and efficient use of navigable airspace by aircraft and does not relieve the sponsor of compliance responsibilities relating to any law, ordinance, or regulation of any Federal, State, or local government body.

If we can be of further assistance, please contact our office at (206) 231-2877, or Nicholas.Sanders@faa.gov. On any future correspondence concerning this matter, please refer to Aeronautical Study Number 2022-AWP-22248-OE.

Signature Control No: 564292527-568138187 Nicholas Sanders Technician ( DNE )



1

#### Legend

**Compatibility Zones** 

	A
$\geq$	Z
><	Z
>><	Z
><	Z
	Z
><	Z
	Н

Airport Influence Area Boundary Ione A Cone B1 Zone B2 Zone C Ione D Zone E leight Review Overlay Zone

#### Boundary Lines

Airport Property Line
 Original Airport Property Line
 Original Airport Property Line

#### Note

Airport influence boundary measured from a point 200 feet beyond runway ends in accordance with FAA airspace protection criteria (FAR Part 77). All other dimensions measured from runway ends and centerlines.

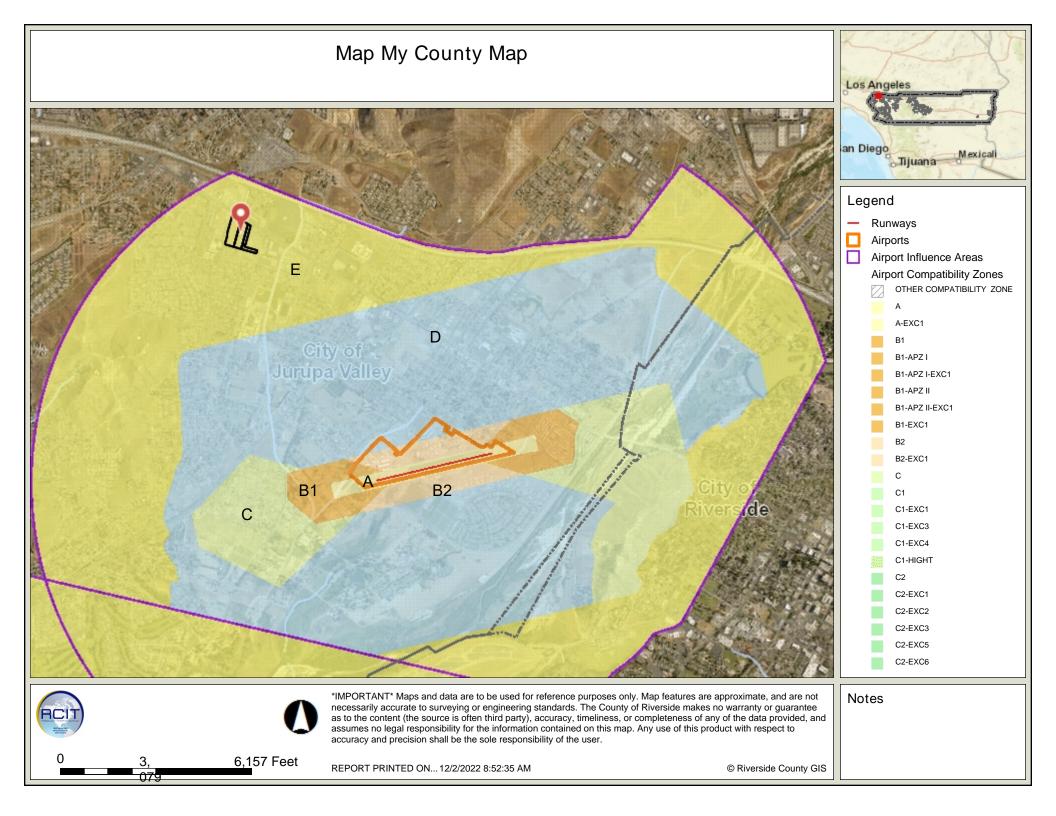
See Chapter 2, Table 2A for compatibility criteria associated with this map.

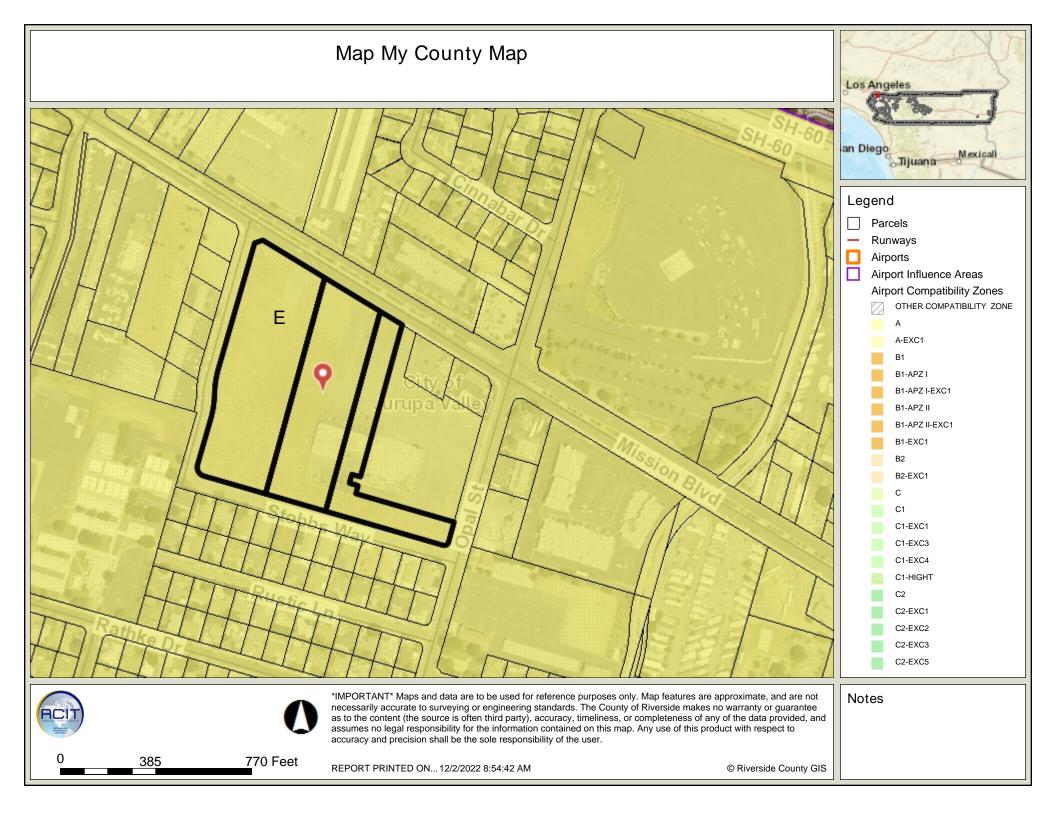
Riverside County Airport Land Use Commission Riverside County Airport Land Use Compatibility Plan **Policy Document** 

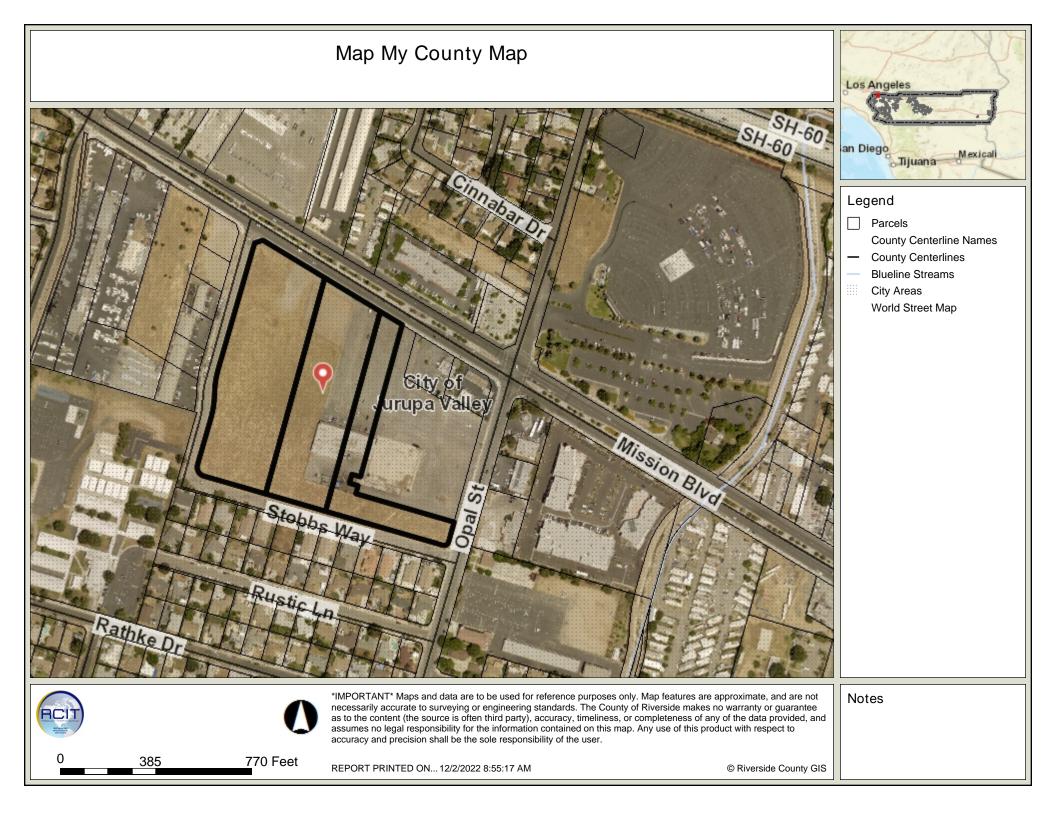
(Adopted December 2004)

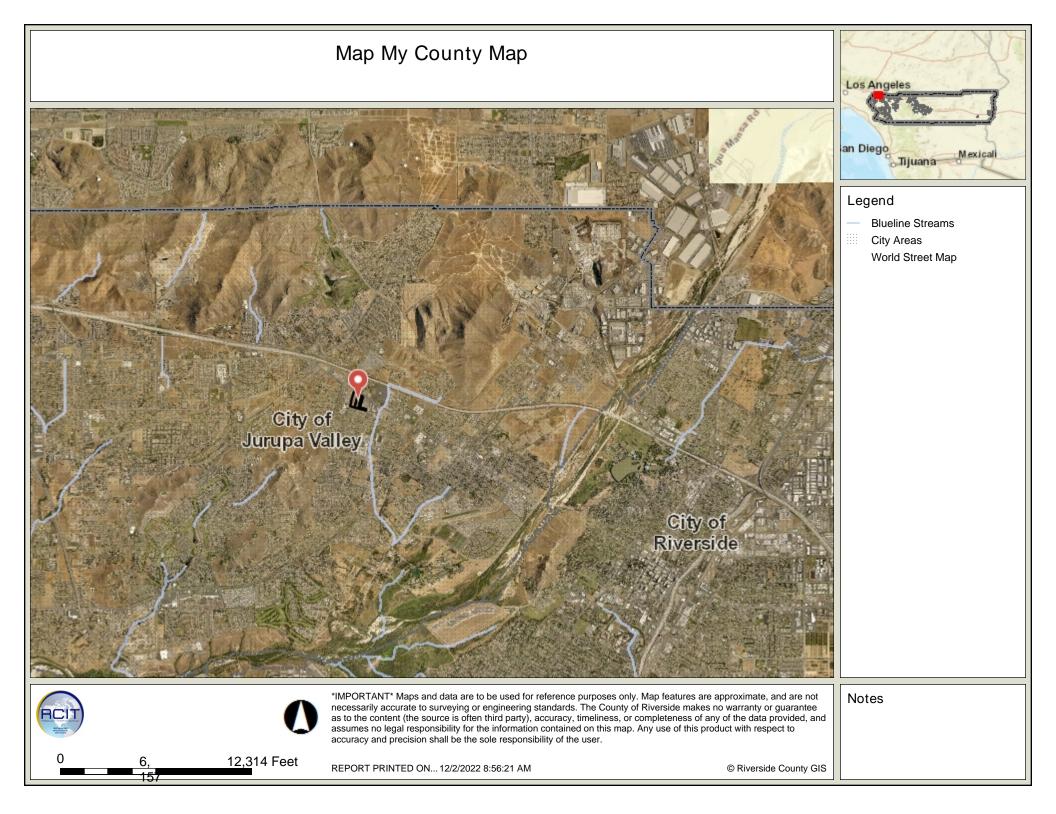
Map FL-1

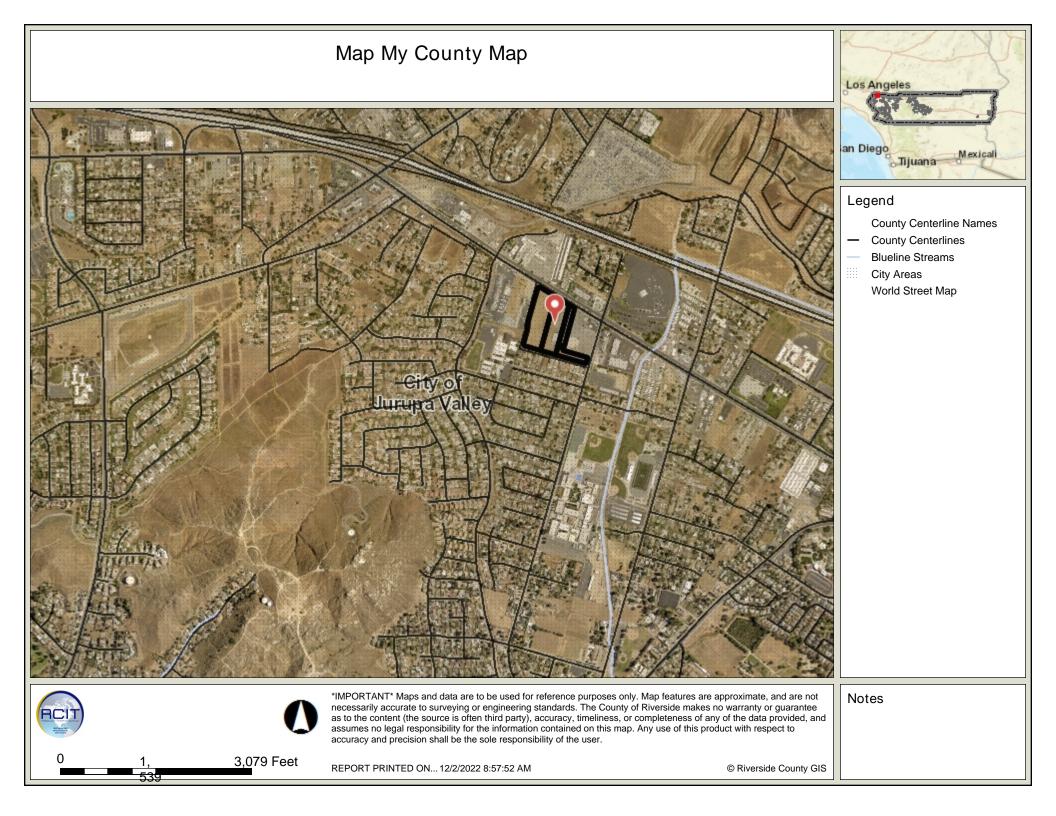
**Compatibility Map** Flabob Alrport

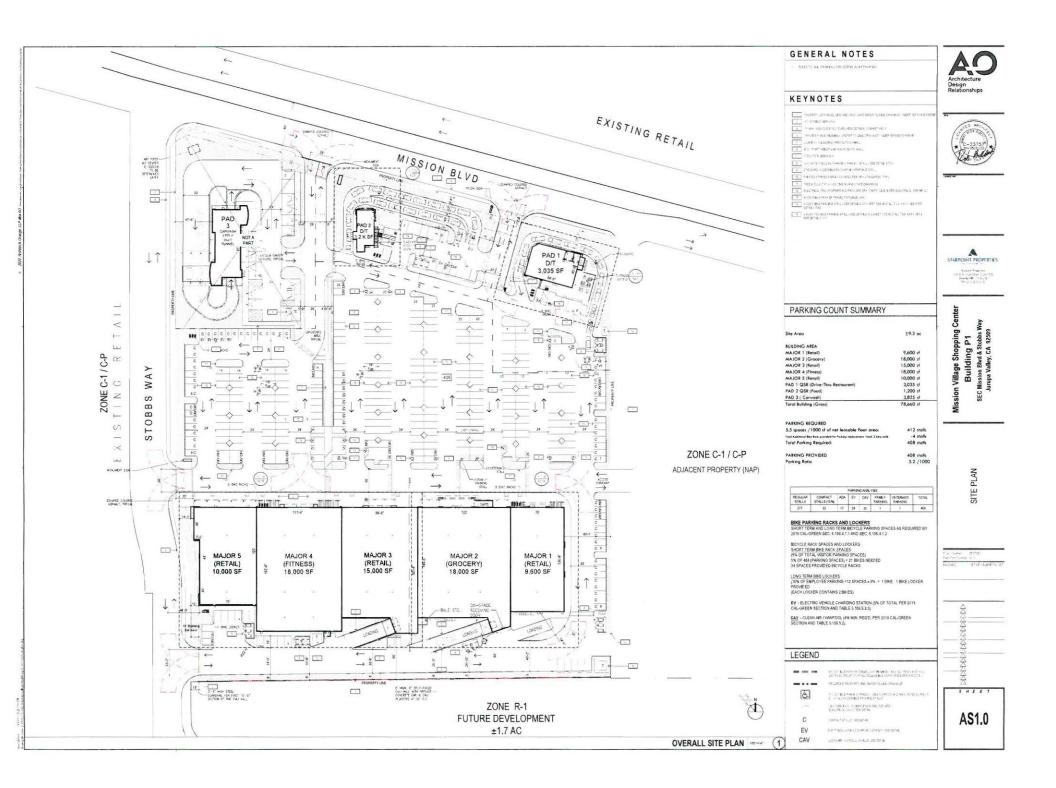


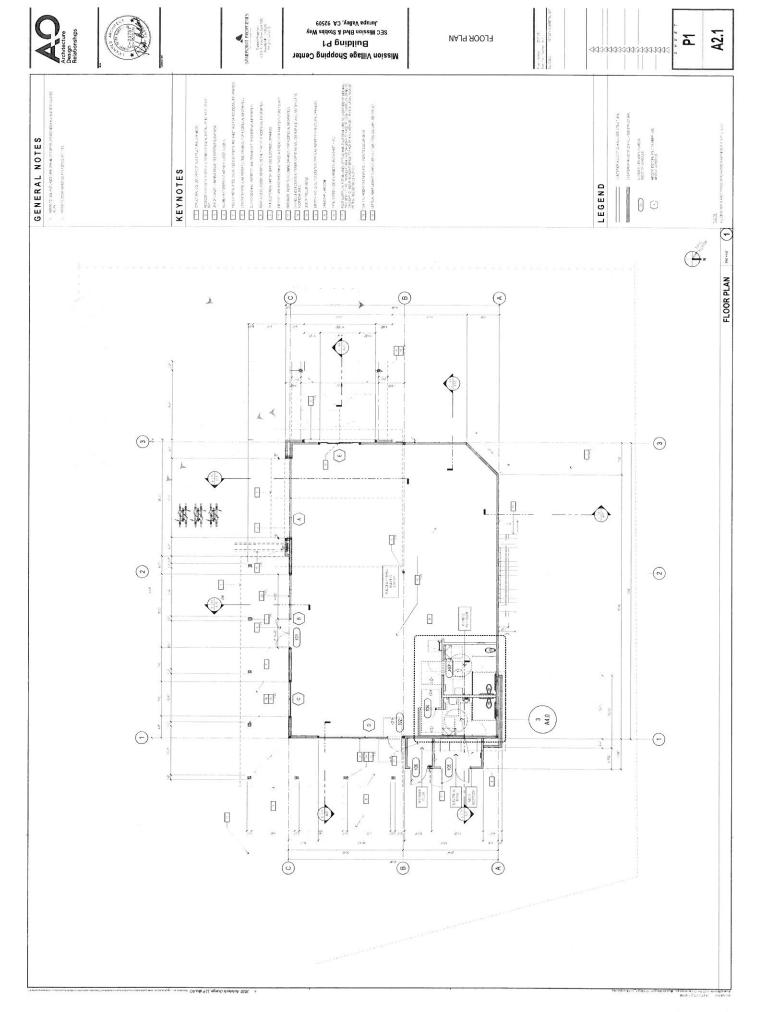


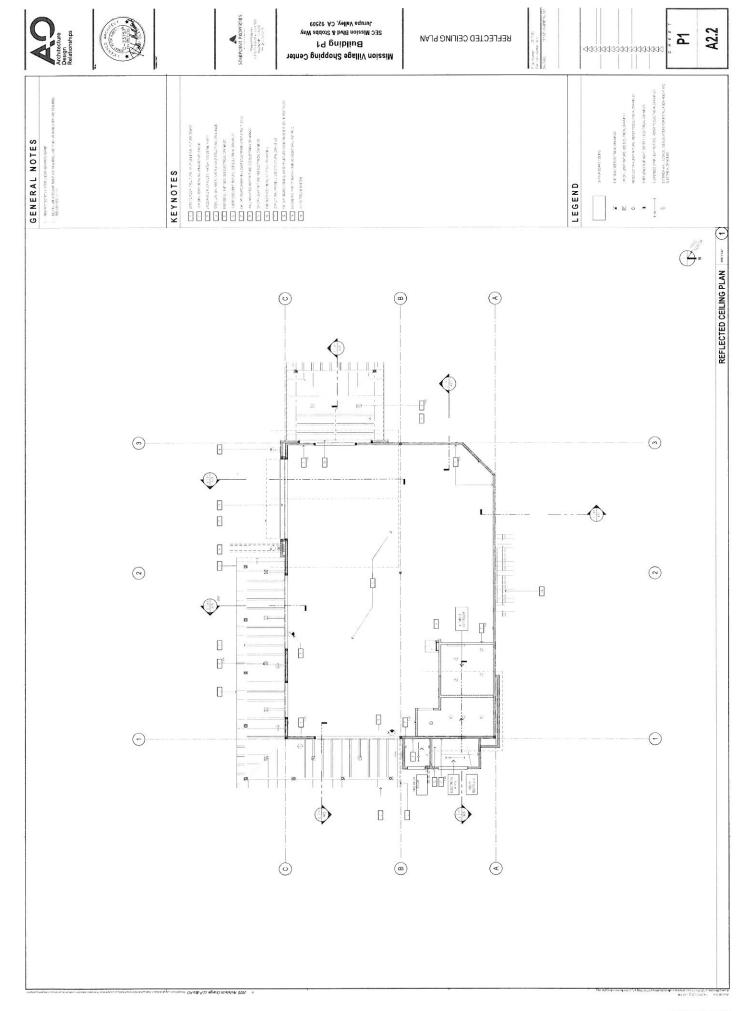


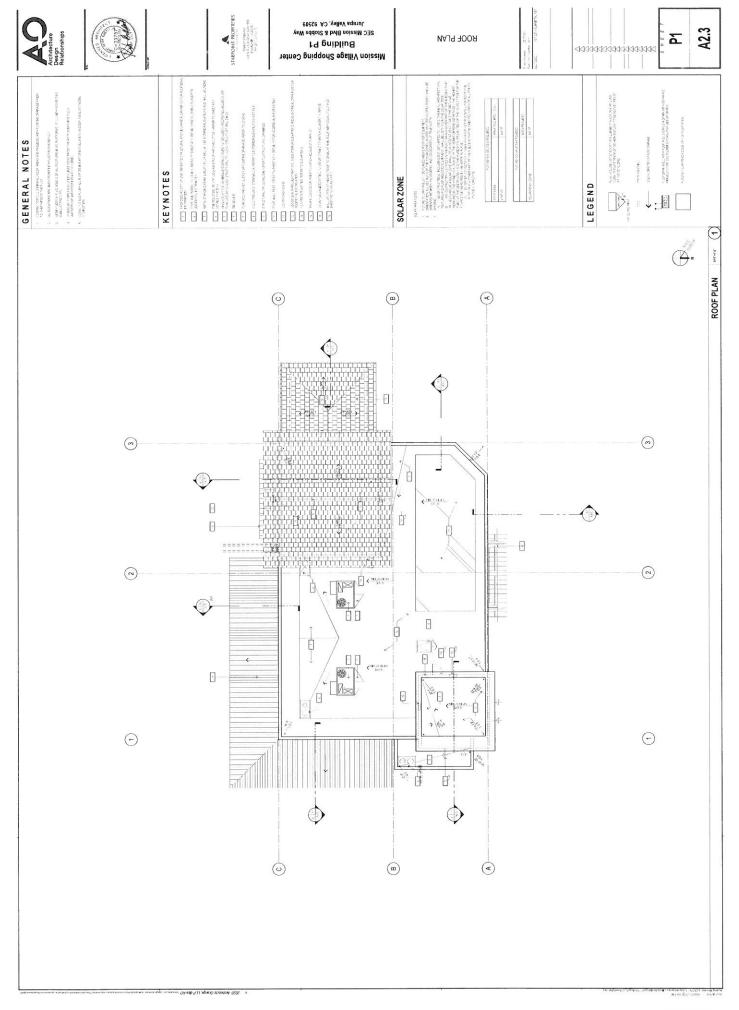




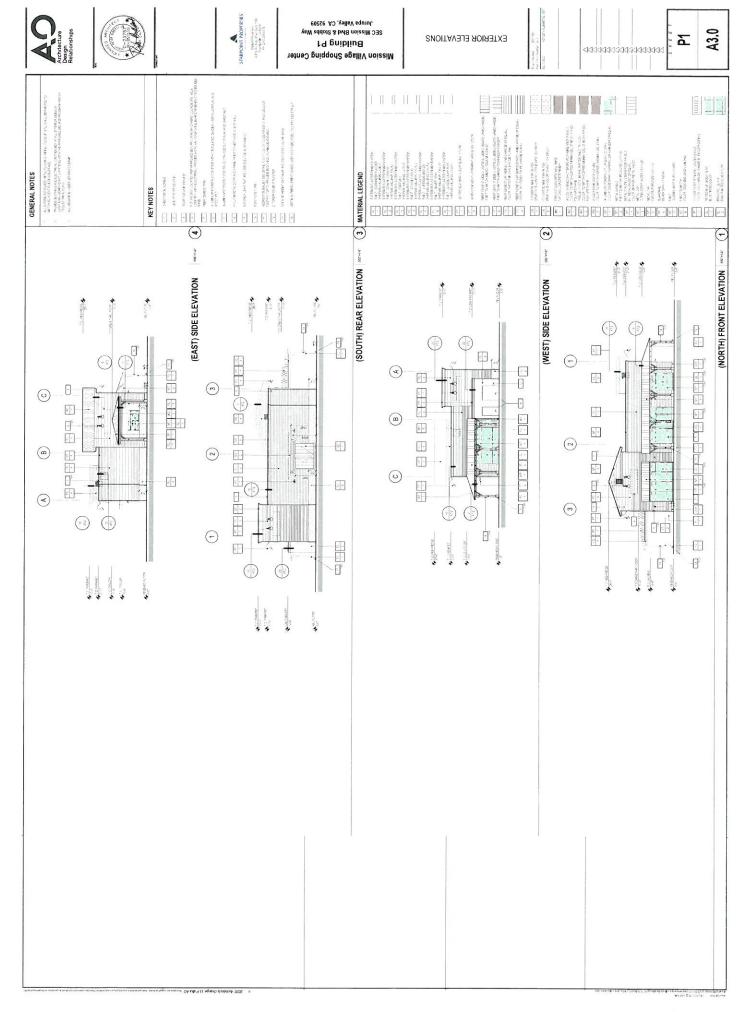








where we have a constraint the statement of the



#### RIVERSIDE COUNTY AIRPORT LAND USE COMMISSION



January 31, 2023

Russell Brady, Project Planner County of Riverside Planning Department 4080 Lemon Street, 12<sup>th</sup> Floor Riverside CA 92501

#### VICE CHAIR Russell Betts Desert Hot Springs Desert Hot Springs

COMMISSIONERS

John Lyon Riverside

Richard Stewart Moreno Valley

Steven Stewart Palm Springs

Michael Geller Riverside

Vernon Poole Murrieta

STAFF

Director Paul Rull

Simon Housman Jackie Vega Barbara Santos

County Administrative Center 4080 Lemon St.,14th Floor. Riverside, CA 92501 (951) 955-5132

www.rcaluc.org

File No.:ZAP1552MA22Related File No.:SP00260S04 (Specific Plan Substantial Conformance),<br/>TTM38503 (Tentative Tract Map)APN:461-020-034 and 461-020-041Airport Zone:Zone E

Dear Mr. Brady:

<sup>er</sup> Under the delegation of the Riverside County Airport Land Use Commission (ALUC) pursuant to Resolution No. 2015-01, as extended by Resolution Nos. 2016-02 and 2018-02, of the 2004
 <sup>ta</sup> Riverside County Airport Land Use Compatibility Plan, staff reviewed County of Riverside Case Nos. SP00260S04 (Specific Plan Substantial Conformance), TTM38503 (Tentative Tract Map), a proposal to divide 9.9 acres into 37 single-family residential lots and two lots for open space and drainage, located easterly of Briggs Road. The applicant also proposes to amend the site's Specific Plan to utilize provisions for Planning Area 39 designated as a school site for the backup purposes of residential development, to allocate additional units from other Planning Areas in the Specific Plan while maintaining the total number of units at 2,023.

The project is located within Compatibility Zone E of March Air Reserve Base/Inland Port Airport Influence Area, where Zone E does not restrict residential density.

Although the project is located within the March Air Reserve Base/Inland Port Airport Influence Area, the nearest runway is actually Runway 15-33 at Perris Valley Airport. The elevation of Runway 15-33 at Perris Valley Airport is approximately 1,413 feet above mean sea level (AMSL) at its northerly terminus. At a distance of 27,148 feet from the project to the nearest point on the runway, Federal Aviation Administration Obstruction Evaluation Service (FAA OES) review would be required for any structures with an elevation at top of roof exceeding 1,684 feet AMSL. The site elevation is 1,529 feet AMSL, and the proposed building height is 40 feet, resulting in a top point elevation of 1,569 feet AMSL. Therefore, FAA OES review for height/elevation was not required.

As ALUC Director, I hereby find the above-referenced project <u>**CONSISTENT**</u>, with the 2014 March Air Reserve Base/Inland Port Airport Land Use Compatibility Plan, provided that the County of Riverside applies the following conditions:

#### CONDITIONS:

1. Any new outdoor lighting that is installed shall be hooded or shielded so as to prevent either the spillage of lumens or reflection into the sky. Outdoor lighting shall be downward facing.

- 2. The following uses/activities are not included in the proposed project and shall be prohibited at this site:
  - (a) Any use which would direct a steady light or flashing light of red, white, green, or amber colors associated with airport operations toward an aircraft engaged in an initial straight climb following takeoff or toward an aircraft engaged in a straight final approach toward a landing at an airport, other than an FAA-approved navigational signal light or visual approach slope indicator.
  - (b) Any use which would cause sunlight to be reflected towards an aircraft engaged in an initial straight climb following takeoff or towards an aircraft engaged in a straight final approach towards a landing at an airport.
  - (c) Any use which would generate smoke or water vapor or which would attract large concentrations of birds, or which may otherwise affect safe air navigation within the area. (Such uses include landscaping utilizing water features, aquaculture, outdoor production of cereal grains, sunflower, and row crops, composting operations, wastewater management facilities, artificial marshes, trash transfer stations that are open on one or more sides, recycling centers containing putrescible wastes, construction and demolition debris facilities, fly ash disposal, and incinerators
  - (d) Any use which would generate electrical interference that may be detrimental to the operation of aircraft and/or aircraft instrumentation.
  - (e) Highly noise-sensitive outdoor nonresidential uses.
  - (f) Any use which results in a hazard to flight, including physical (e.g., tall objects), visual, and electronic forms of interference with the safety of aircraft operations.
- 3. The attached "Notice of Airport in Vicinity" shall be provided to all prospective purchasers and occupants of the property.
- 4. Any proposed stormwater basins or facilities shall be designed and maintained to provide for a maximum 48-hour detention period following the design storm, and remain totally dry between rainfalls. Vegetation in and around the stormwater basins that would provide food or cover for birds would be incompatible with airport operations and shall not be utilized in project landscaping. Trees shall be spaced so as to prevent large expanses of contiguous canopy, when mature. Landscaping in and around the stormwater basin(s) shall not include trees or shrubs that produce seeds, fruits, or berries.

Landscaping in the stormwater basin, if not rip-rap, should be in accordance with the guidance provided in ALUC "LANDSCAPING NEAR AIRPORTS" brochure, and the "AIRPORTS, WILDLIFE AND STORMWATER MANAGEMENT" brochure available at RCALUC.ORG which list acceptable plants from Riverside County Landscaping Guide or other alternative landscaping as may be recommended by a qualified wildlife hazard biologist.

A notice sign, in a form similar to that attached hereto, shall be permanently affixed to the stormwater basin with the following language: "There is an airport nearby. This stormwater basin is designed to hold stormwater for only 48 hours and not attract birds. Proper maintenance is necessary to avoid bird strikes". The sign will also include the name, telephone number or other contact information of the person or entity responsible to monitor the stormwater basin

If you have any questions, please contact me at (951) 955-6893.

Sincerely, RIVERSIDE COUNTY AIRPORT LAND USE COMMISSION

Paul Rull, ALUC Director

Attachments: Notice of Airport in Vicinity

cc: Strata Mountain Gate, LLC (applicant/property owner) Albert A. Webb Associates (representative) Gary Gosliga, March Inland Port Airport Authority Major. David Shaw, Base Civil Engineer, March Air Reserve Base ALUC Case File

X:\AIRPORT CASE FILES\March\ZAP1552MA22\ZAP1552MA22.LTR.doc

## NOTICE OF AIRPORT IN VICINITY

This property is presently located in the vicinity of an airport, within what is known as an airport influence area. For that reason, the property may be subject to some of the annoyances or inconveniences associated with proximity to airport operations (for example: noise, vibration, or odors). Individual sensitivities to those annoyances [can vary from person to person. You may wish to consider what airport annoyances], if any, are associated with the property before you complete your purchase and determine whether they are acceptable to you. Business & Professions Code Section 11010 (b)

# NOTICE

## THERE IS AN AIRPORT NEARBY.

## THIS STORM WATER BASIN IS DESIGNED TO HOLD

## **STORM WATER FOR ONLY 48 HOURS AND**

### **NOT TO ATTRACT BIRDS**

## PROPER MAINTENANCE IS NECESSARY TO AVOID BIRD STRIKES

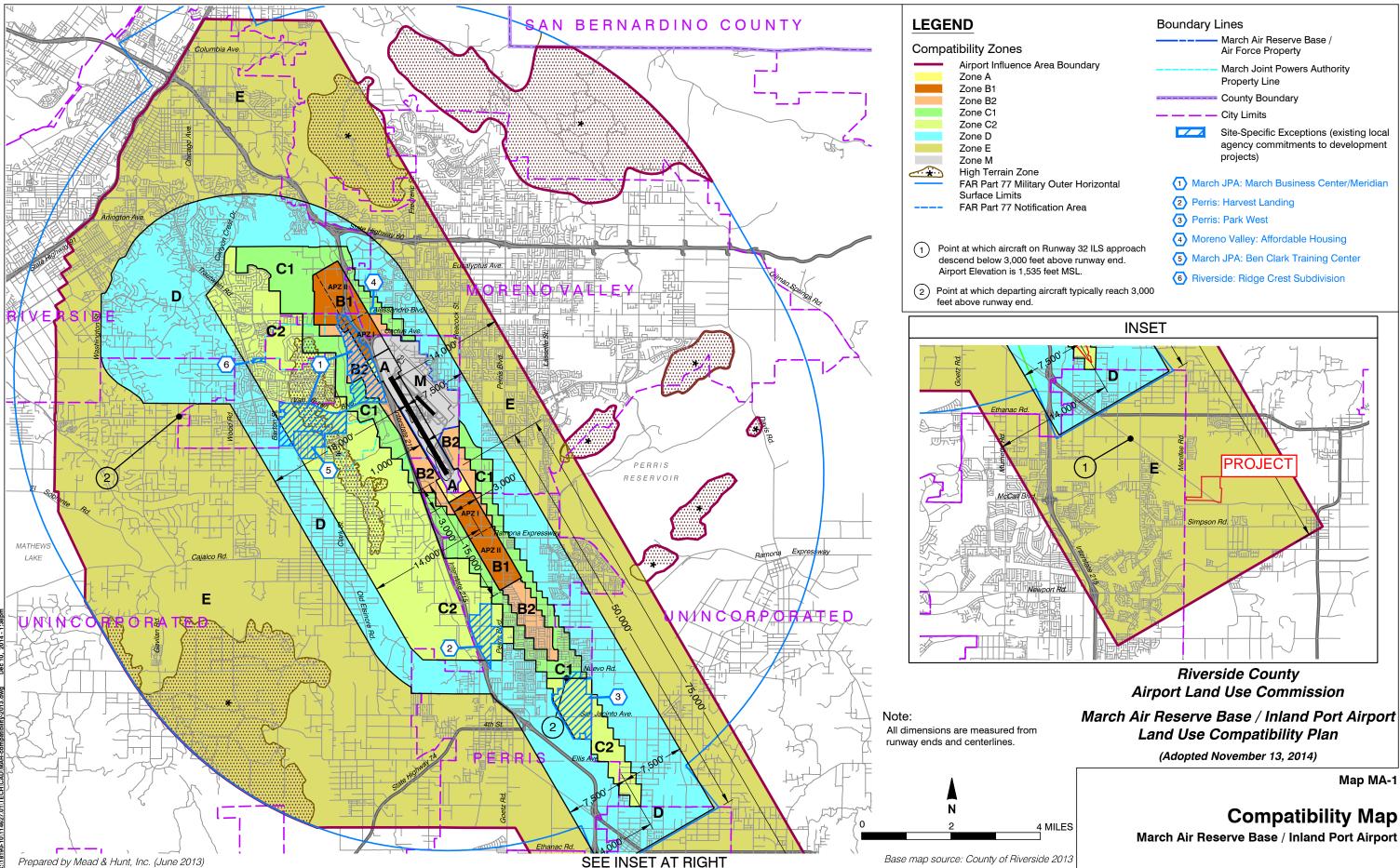


IF THIS BASIN IS OVERGROWN, PLEASE CONTACT:

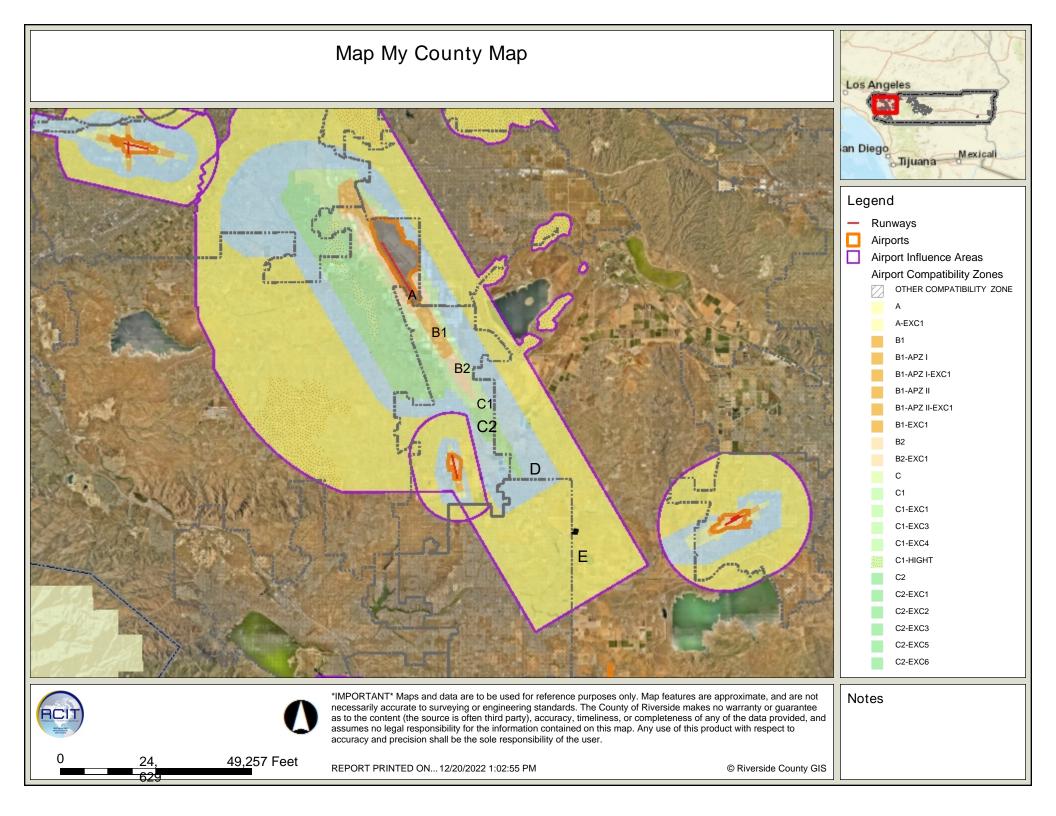
Name:

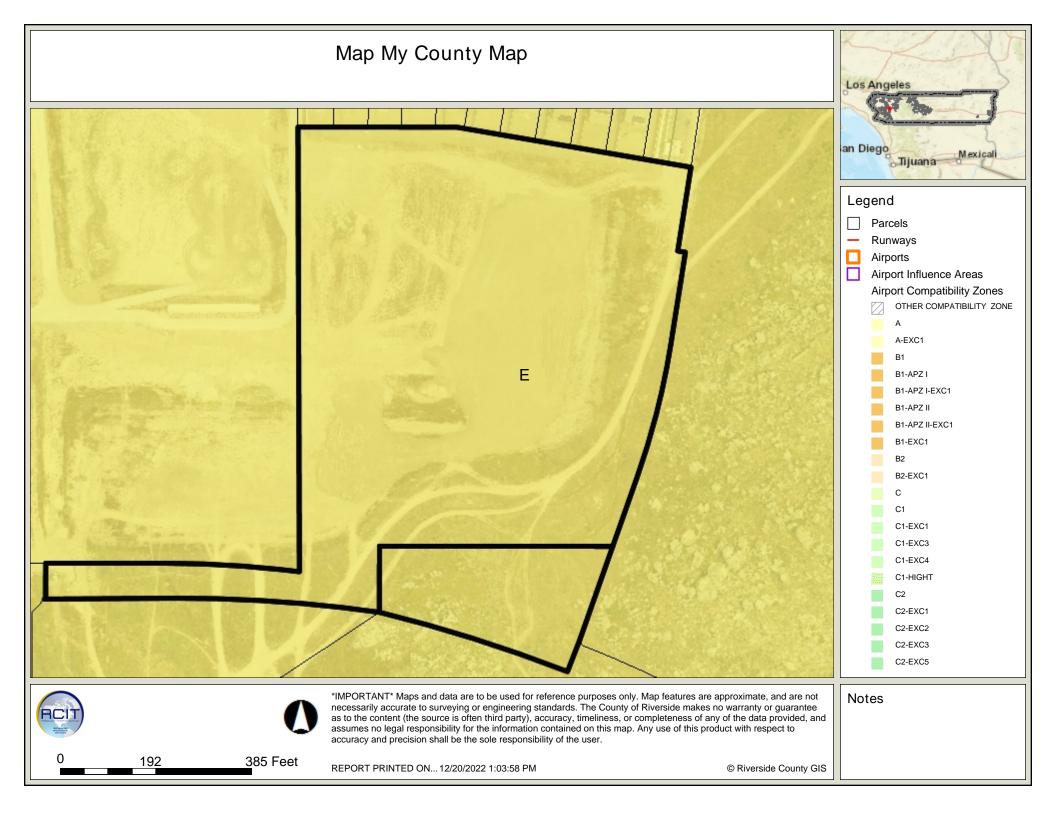
\_\_\_\_\_ Phone:

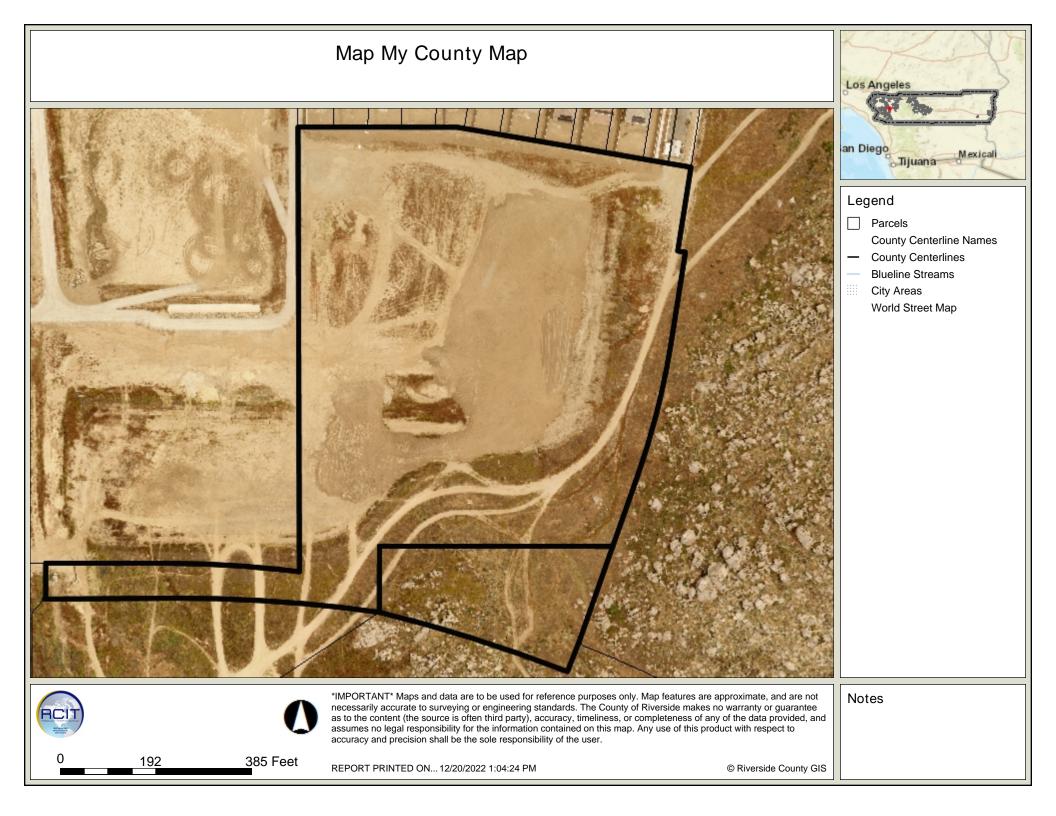


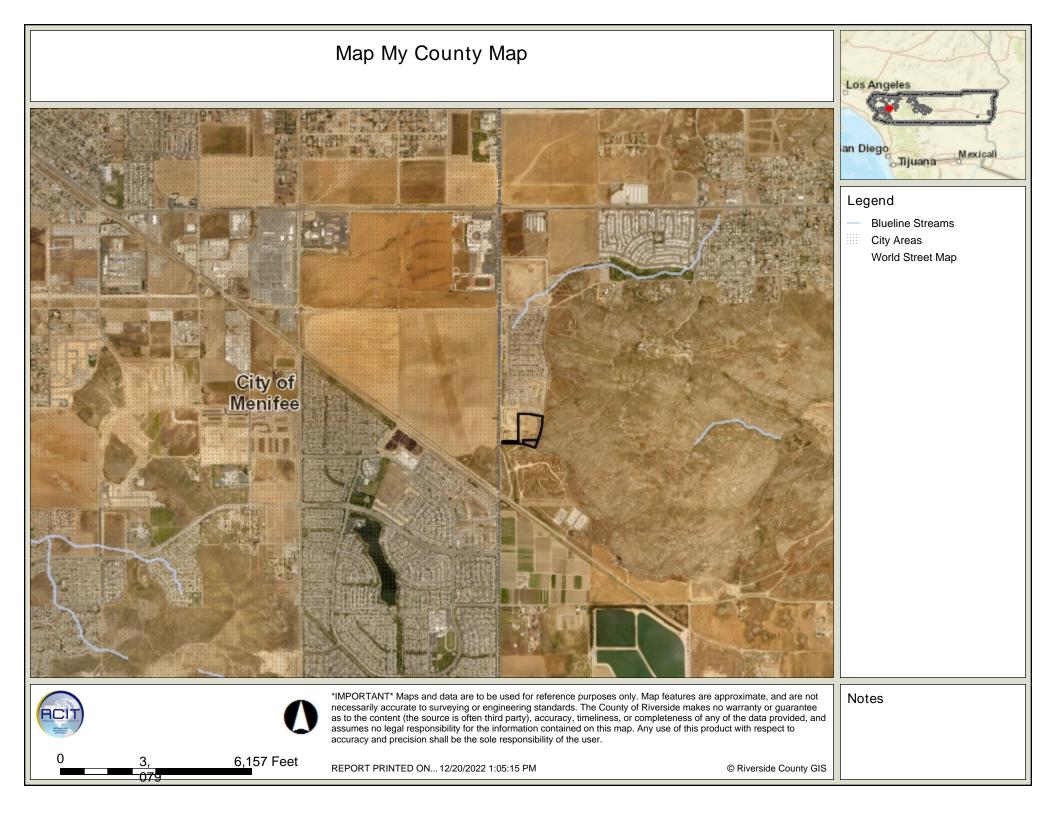


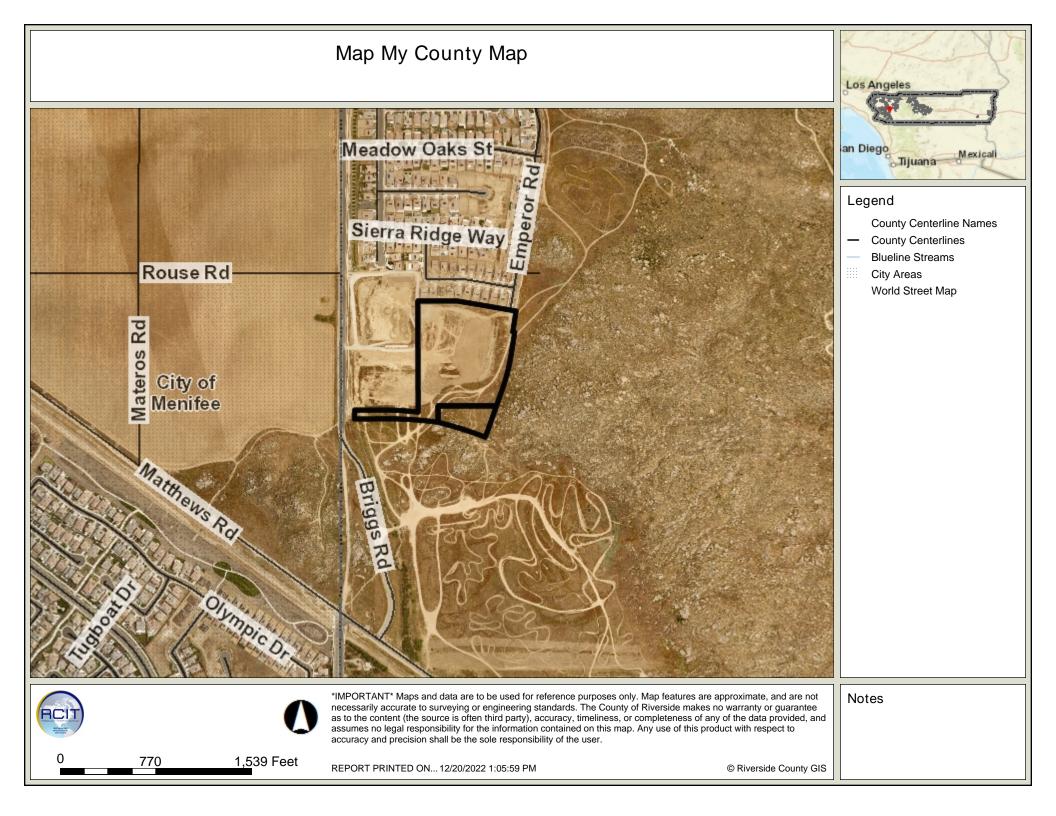
**Compatibility Map** March Air Reserve Base / Inland Port Airport

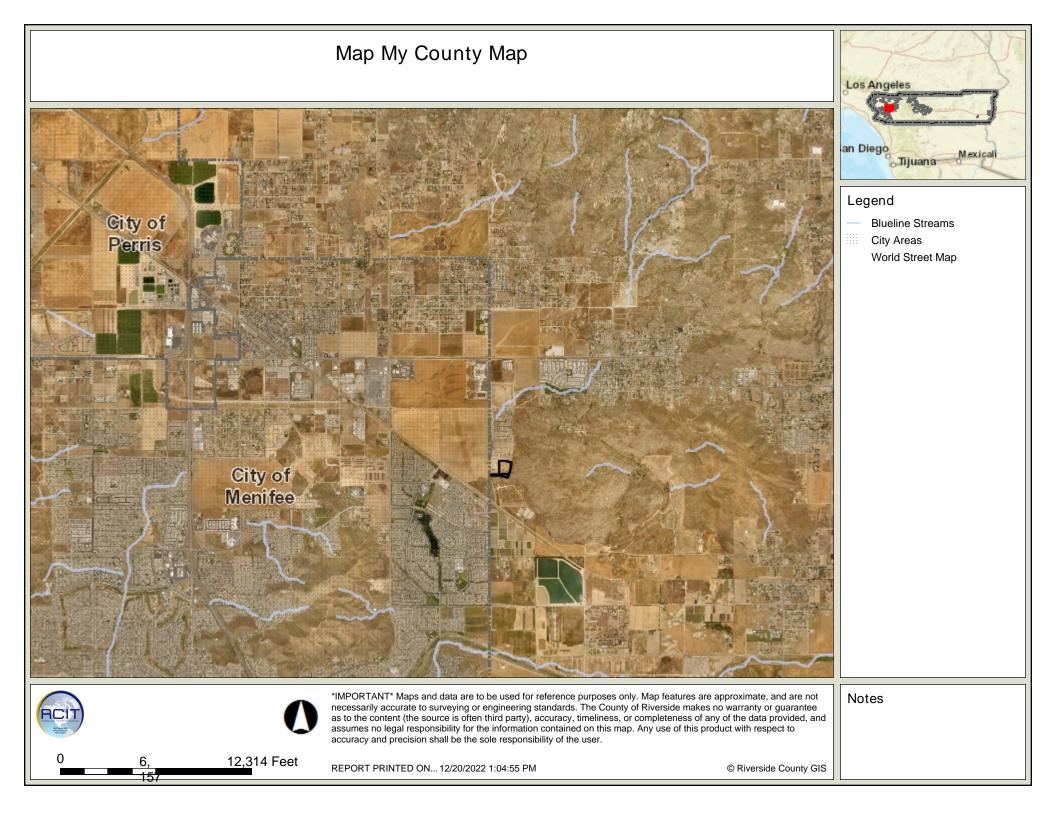














#### UTILITY PROVIDERS

WATER	EASTERN MUNICIPAL WATER DISTRICT
SEWER	PHONE: (915) 928-3777 EXT. 4330 EASTERN MUNICIPAL WATER DISTRICT PHONE: (915) 928-3777 EXT. 4330
ELECTRICAL	SOUTHERN CALIFORNIA EDISON SOUTHERN CALIFORNIA EDISON PHONE: (114) 196-9932
GAS	SOUTHERN CALIFORNIA GAS COMPANY
TELEPHONE	PHONE: (909) 334-7583 CHARTER COMMUNICATION PHONE: (888) 406-7063
CABLE T.V	FRONTIER COMMUNICATIONS PHONE: (800) 921-8101

#### GENERAL INFORMATION

- I. ALL IMPROVEMENTS SHALL BE PER SCHEDULE "A"
- SUBDIVISION, ORDINANCE 348 AND 460.
- 2. THOMAS BROS. MAP BOOK PAGE 838 GRID: J3 & PAGE 838 GRID J4.
- 3. THIS MAP INCLUDES THE ENTIRE CONTIGUOUS OWNERSHIP OF THE LAND DIVIDER.
- 4. PROJECT IS WITHIN MENIFEE NORTH SPECIFIC PLAN (SP260) PLANNING AREA 39.
- PROJECT IS WITHIN BOUNDARY CSA 146 AND CSA 152.
- 6. THERE ARE NO EXISTING WELLS ON THE PROPERTY. 7. ALL SLOPES ARE 2:1 RATIO, UNLESS OTHERWISE NOTED.
- 8. LAND IS NOT WITHIN A SPECIAL STUDIES ZONE.
- 9. LAND IS SUBJECT TO LOW POTENTIAL OF LIQUEFACTION. IO. NO SUBSURFACE SEPTIC SEWAGE DISPOSAL IS INTENDED.
- II. NO EXISTING STRUCTURES OR DWELLINGS ON SITE.
- 12. FLOOD ZONE X, AREA OF MINIMAL FLOOD HAZARD PER
- FEMA PANEL 60245. 13. PROJECT INCLUDES SP260 SUBSTANTIAL CONFORMANCE (SPA4) TO MODIFY THE SP LAND USE FROM PF TO MDR.

EARTHWORK QUANTITIES

RAW CUT: 30,860 C.Y.

58,670 C.Y. RAW FILL: IMPORT: 27,810 C.Y.

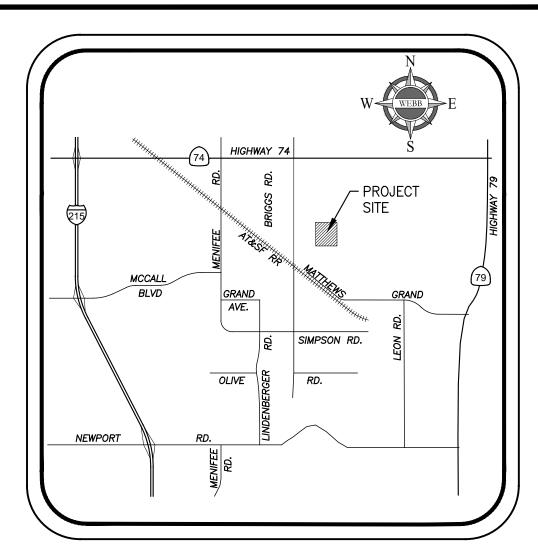
MINIMUM LOT REQUIREMENTS MINIMUM LOT AREA: 5,000 SF MINIMUM AVERAGE WIDTH: 50' MINIMUM AVERAGE DEPTH: N/A

<u>SHEET INDEX</u>

SHEET I SHEET 2 SHEET 3 SHEET 4

TITLE SHEET SECTIONS TTM UTILTIES





#### VICINITY MAP

NTS THOMAS GUIDE MAP BOOK: PAGE 838, GRID J3 & J4 (YEAR 2007) TOWNSHIP: SECTION 18 & 19 OF T5S, R2W

OWNER/APPLICANT

STRATA MOUNTAIN GATE LLC 4310 LA JOLLA VILLAGE DR STE 960 SAN DIEGO, CA 92122 CONTACT: ERIC FLODINE PHONE: (858) 875-0243 EMAIL: ERICF@STRATAEQUITY.COM

SOILS ENGINEER

INLAND FOUNDATION ENGINEERING, INC. 1310 SOUTH SANTA FE AVENUE SAN JACINTO, CA 92583 CONTACT: DANIEL LIND PHONE: (951) 654-1555 FAX: (951) 654-0551

<u>A.P.N.</u>

461-020-041 461-020-034

<u>ACREAGE</u>

NET ACREAGE 8.8 R/W DEDICATION ACREAGE 11 GROSS ACREAGE 9.9

PLN CK REF:

#### LEGAL DESCRIPTION

<u>ENGINEER</u>

ALBERT A. WEBB ASSOCIATES 3788 MCCRAY STREET RIVERSIDE, CA 92506 CONTACT: FAYRES HALL PHONE: (951) 320-6085 EMAIL: FAYRES.HALL@WEBBASSOCIATES.COM

TOPOGRAPHY SOURCE

TOPOGRAPHY FLOWN BY INLAND AERIAL SURVEYS, INC. ON 1/22/2020. (RG PER BGR2IOOIO3 ALSO REFLECTED)

#### <u>LAND USE</u>

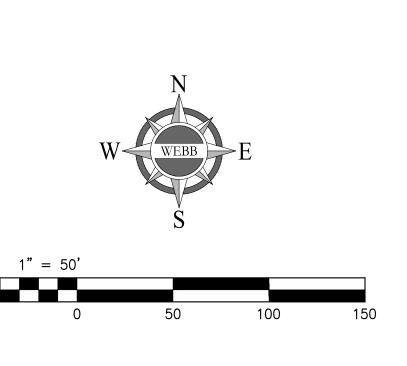
EXISTING LANDU USE: VACANT EXISTING OP LAND USE: SPECIFIC PLAN (SP) PROPOSED LAND USE: SPECIFIC PLAN (SP)

EXISTING/PROPOSED ZONING: PLANNING AREA 39 PER SPECIFIC PLAN 260

SCHOOL DISTRICT

ROMOLAND SCHOOL DISTRICT

THOSE PORTIONS OF PARCEL 2A OF LOT LINE ADJUSTMENTS NO. 05548, RECORDED ON SEPTEMBER 16, 2016 AS INSTRUMENT NO. 2016-0404388, PARCEL I OF CERTIFICATE OF PARCEL MERGER NO. 01975 RECORDED AUGUST 29, 2016 AS INSTRUMENT NO. 2016-0370525 AND PARCEL 2 OF LOT LINE ADJUSTMENT NO. 05562, RECORDED ON NOVEMBER 2, 2016 AS INSTRUMENT NO. 2016-0485376, ALL OF OFFICIAL RECORDS OF RIVERSIDE COUNTY, CALIFORNIA, LYING WITH SECTIONS 19, TOWNSHIP 5 SOUTH, RANGE 2 WEST, SAN BERNARDINO MERIDIAN, RIVERSIDE COUNTY, CALIFORNIA.

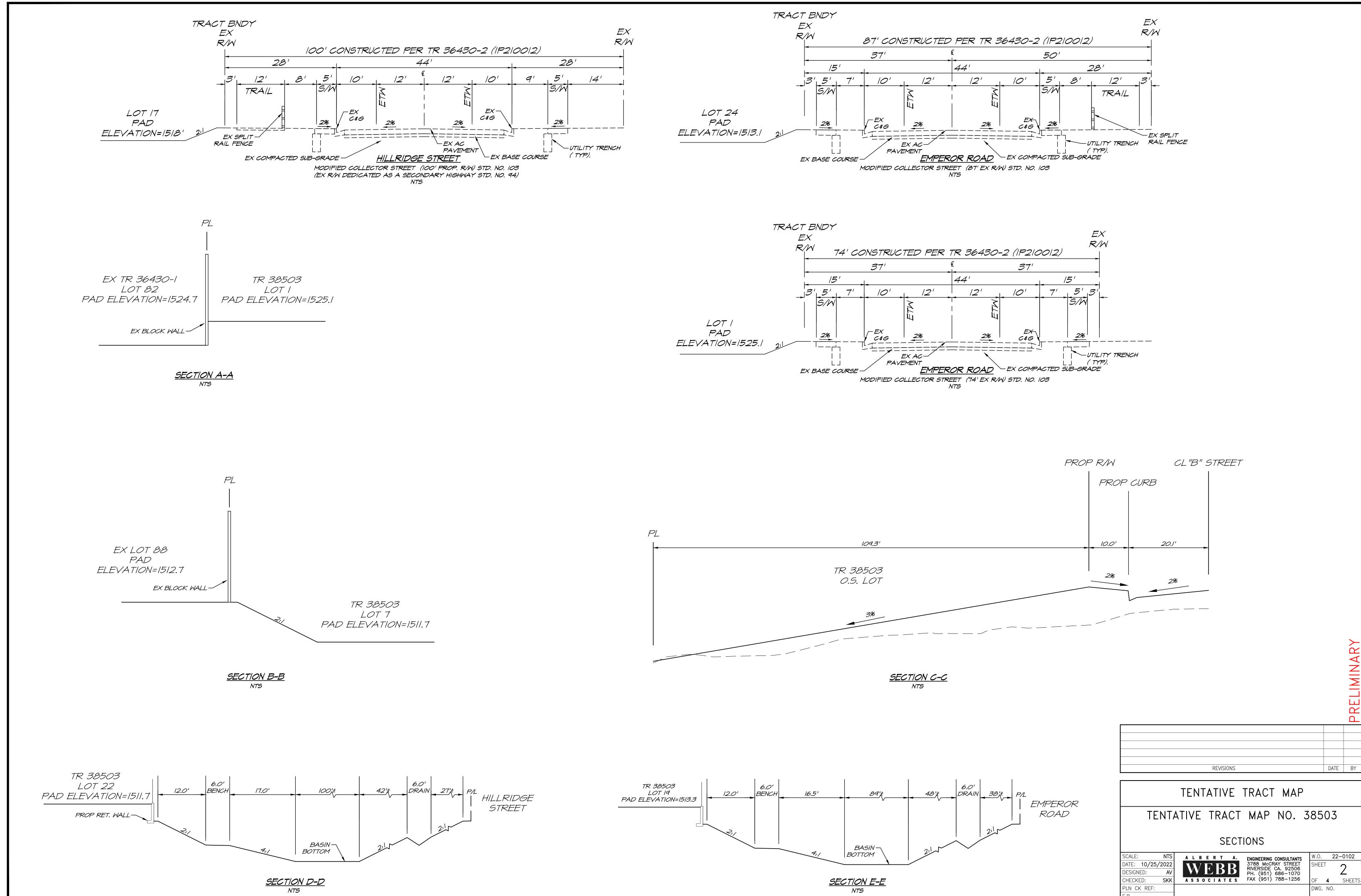


REVISIONS	DATE	BY					
		<u>.</u>					
TENTATIVE TRACT MAP							
TENTATIVE TRACT MAP NO. 38	503						
TITLE SHEET							
SCALE:1" = 50'DATE:10/25/2022DESIGNED:AVCHECKED:SKK	EET ,	0102 1					

 $\cap$ 

 $\cap$ 

DWG. NO.





#### <u>LEGEND</u> \_\_o\_\_\_o\_\_\_o\_\_\_o\_\_\_\_o\_\_\_\_ (1475) 1475 EXISTING FINISHED GRADE FG

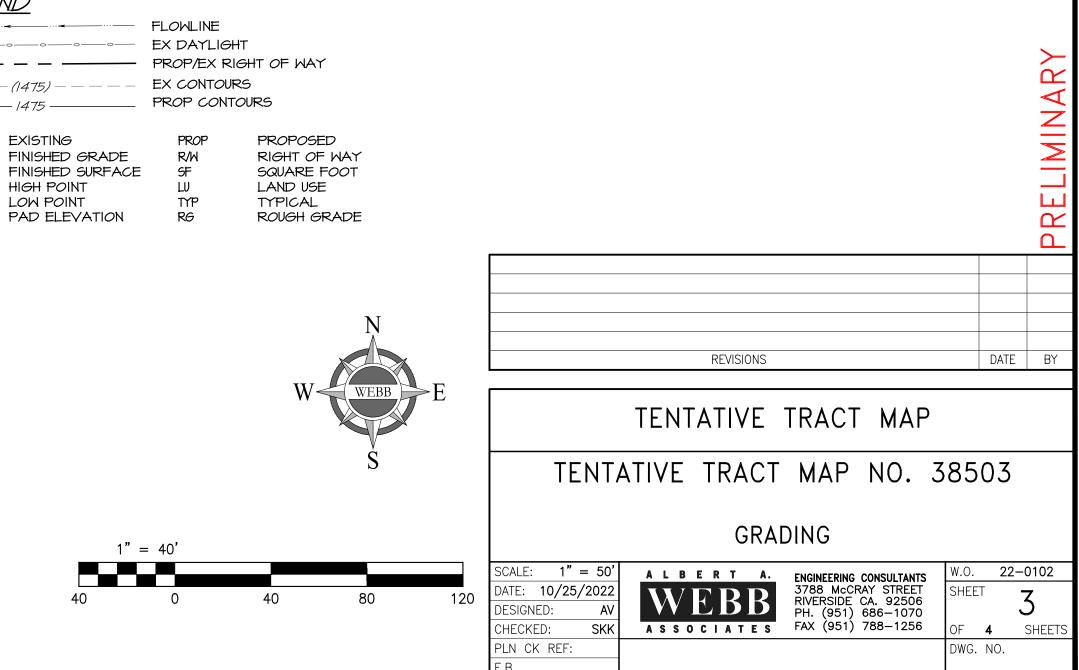
FS

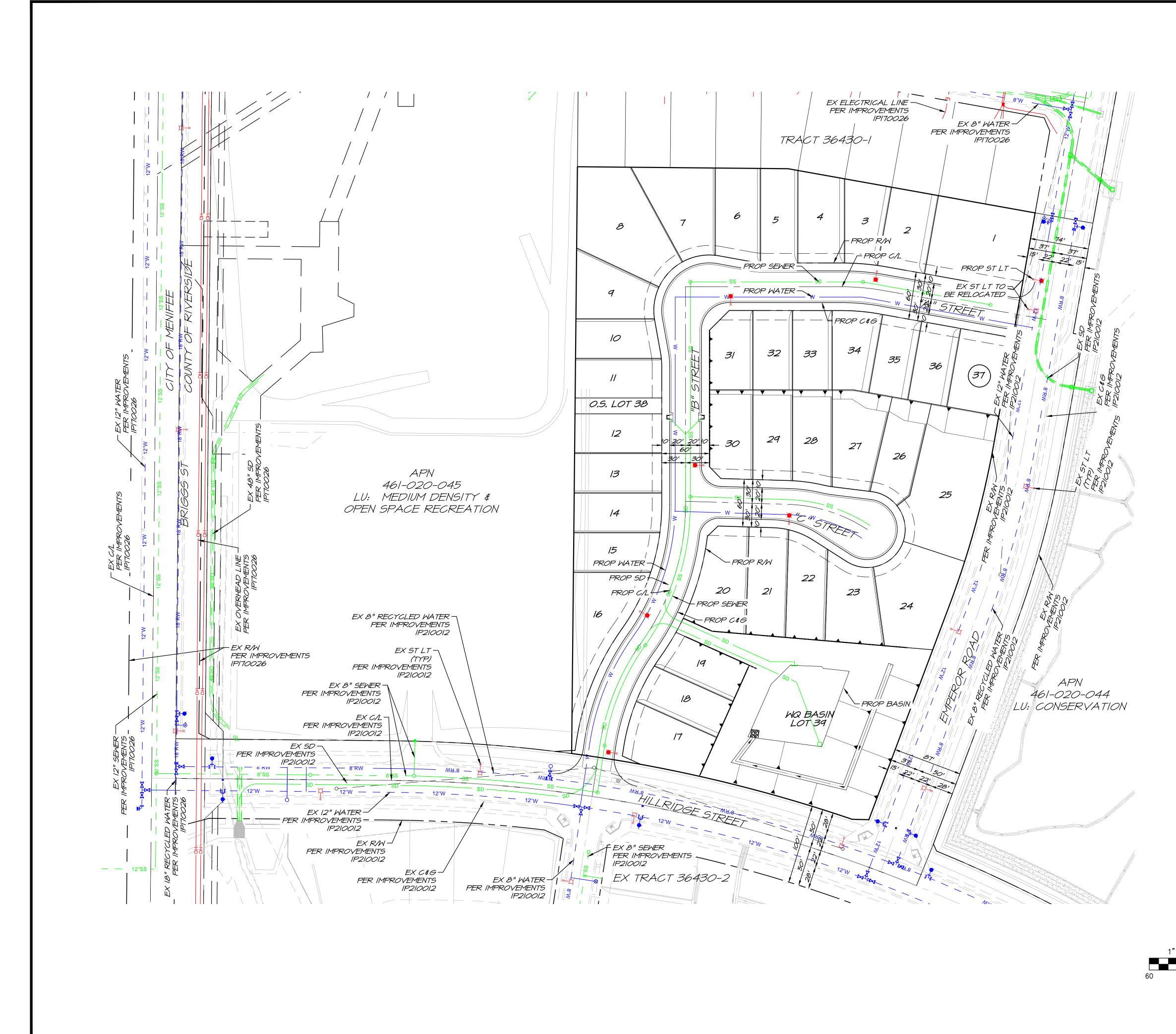
40

HIGH POINT

LOW POINT

LOT #	SF	WIDTH	DEPTH
/	12296	124	100
2	6002	60	100
3	5195	60	100
4	6569	55	110
5	5579	47	118
6	6544	57	115
7	8485	75	123
8	13137	73	125
9	6563	65	107
10	5182	50	104
//	5444	50	108
12	5481	50	109
13	5506	50	109
14	5503	50	109
15	5188	50	103
16	9757	50	110
17	6836	53	///
18	5543	50	110
19	5236	50	105
20	8156	70	122
21	6808	50	135
22	6361	50	125
23	6771	60	107
24	10788	60	100
25	16263	83	120
26	6299	50	120
27	7668	50	122
28	5888	50	118
29	5690	50	113
30	6062	55	113
31	5188	55	100
32	5000	50	100
33	5000	50	100
34	5514	55	100
35	5000	50	100
36	5000	50	100
37	6567	66	100





W WEBB E	
<u>1" = 60'</u>	REVISIONS     DATE     BY       TENTATIVE TRACT MAP       TENTATIVE TRACT MAP NO. 38503       UTILITIES
0 60 120 180	TENTATIVE TRACT MAP NO. 38503
	SCALE:1" = 60'A L B E R T A.ENGINEERING CONSULTANTS 3788 McCRAY STREET RIVERSIDE CA. 92506 PH. (951) 686-1070 

==	= <del>=</del> ====	EX SD
	— — — 48"SD — —	EX 48" SD
	E	EX ELECTR
	— — — 8"W — —	EX 8" WAT
	— — — 12"W ——	EX  2" WA-
	— — — 8"RW ——	EX &" REC
	— — — 18"RW ——	EX I&" REC
	$\Sigma \rightarrow$	EXISTING S
	<b>₩</b> -•	PROPOSED
ΕX	EXISTING	PROP
R/W	RIGHT OF WAY	ST LT
SD	STORM DRAIN	TYP

PROP SEWER R/W	
EX OVERHEAD	
EX 8" SEWER	
EX 12" SEWER	
PROP SD	
EX SD	
EX 48" SD	
EX ELECTRICA	L LINE
EX 8" WATER	
EX 12" WATER	
EX 8" RECYCL	ED WATER
EX 18" RECYCI	ED WATER
EXISTING ST L	Т
PROPOSED ST	LT
PROP ST LT TYP	PROPOSED STREET LIGHT TYPICAL

- PROP WATER

<u>LEGEND</u>

— — — 12"SS — —

----- SD -------

 $\sim$ 

 $\triangleleft$ 

Z



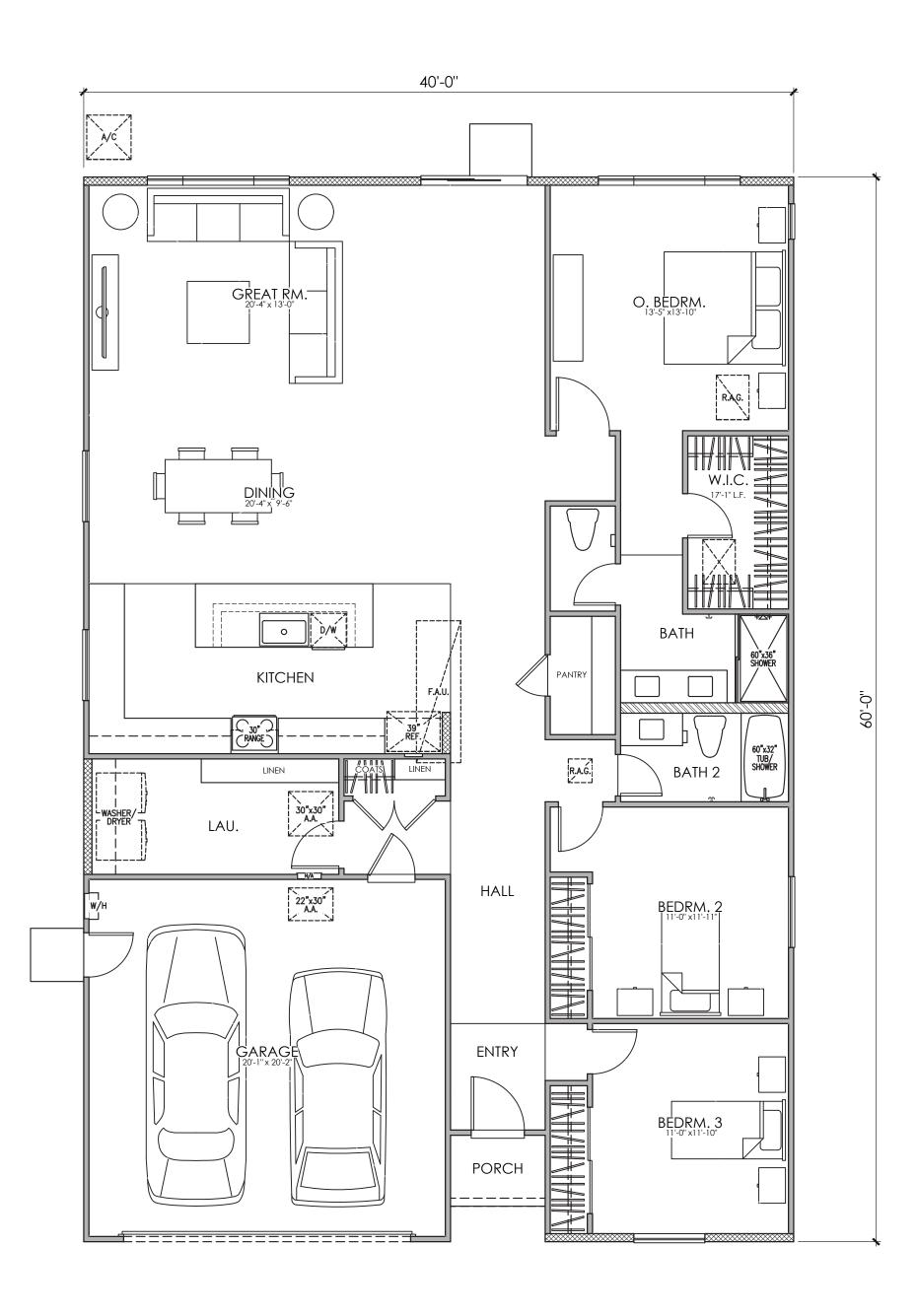


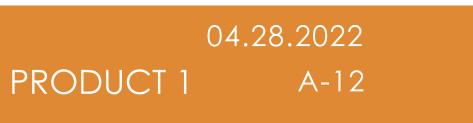
# COPPER HILL AT MOUNTAIN'S EDGE RIVERSIDE, CA

FLOOR PLAN

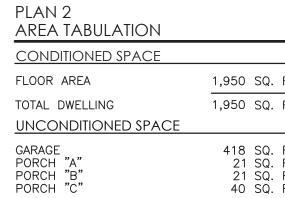
PLAN 2A (1950)

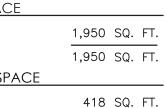
3 BEDROOM, 2 BATH

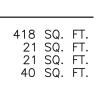




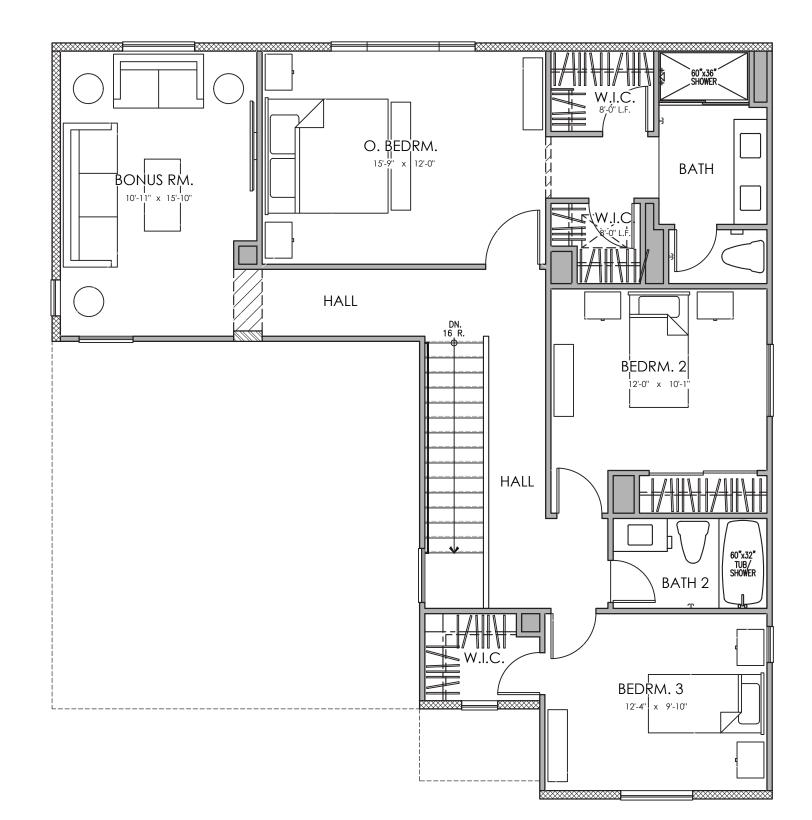
Kevin L. Crook Architect #21005 Inc LANNING + ARCHITECTURE







0 2 4 8 12



SECOND FLOOR

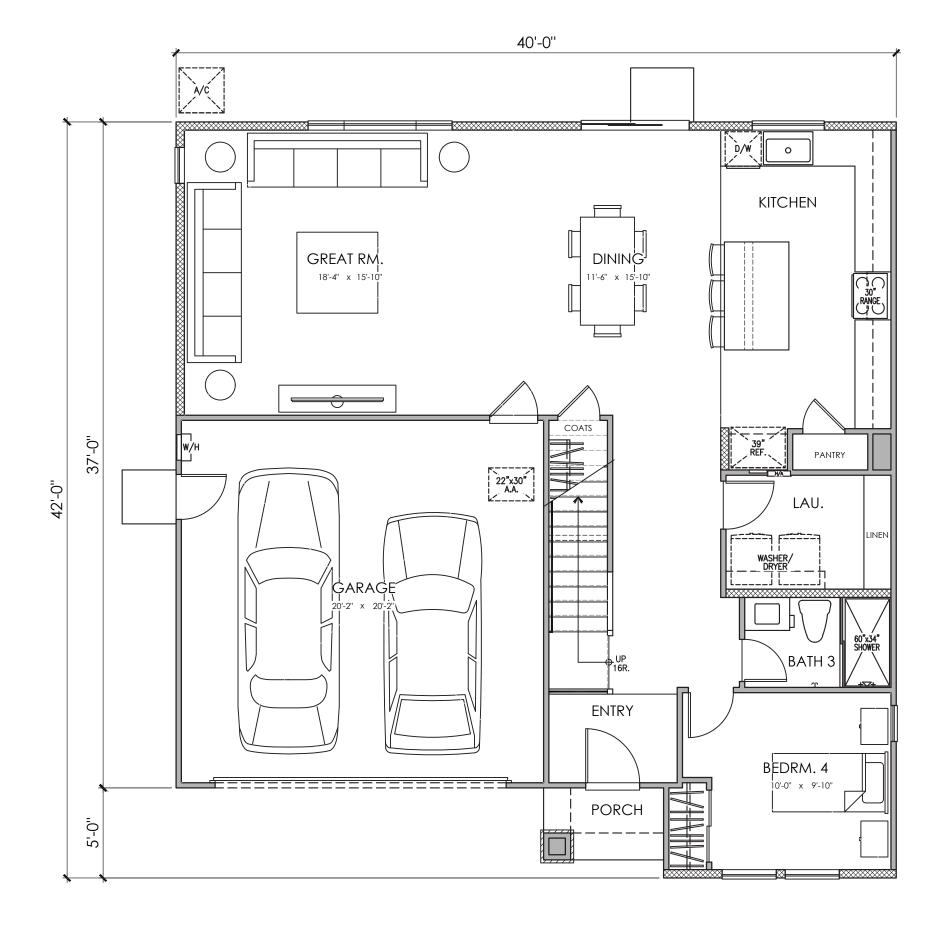




# COPPER HILL AT MOUNTAIN'S EDGE RIVERSIDE, CA

PLAN 3A (2203) 4 BEDROOM, 3 BATH, BONUS FLOOR PLANS

FIRST FLOOR

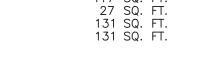




## PLAN 3 AREA TABULATION

CONDITIONED SPACE	
FIRST FLOOR AREA SECOND FLOOR AREA	1128 SQ. FT. 1075 SQ. FT.
TOTAL DWELLING	2203 SQ. FT.
GARAGE PORCH "A" PORCH "B" PORCH "C"	417 SQ. FT. 27 SQ. FT. 131 SQ. FT. 131 SQ. FT.

IED SPACE	2203	SQ.	F
	27	SQ. SQ. SQ.	F





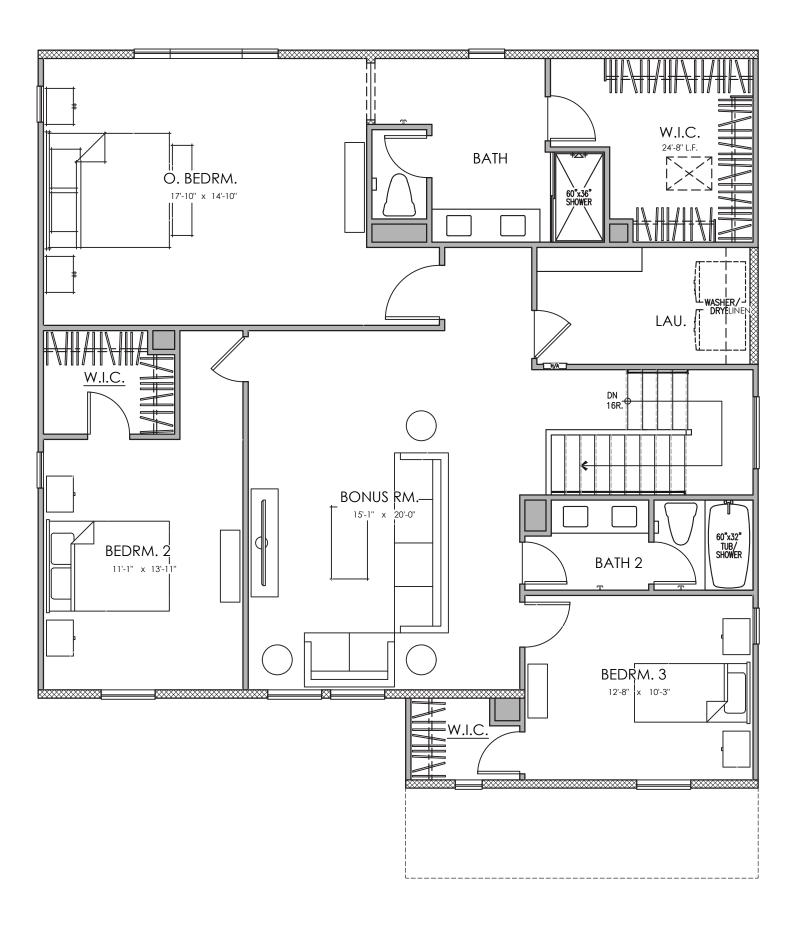


Kevin L. Crook Architect #21005 INC

## LENNAR®

### 4 BEDROOM, 3 BATH, 2 CAR GARAGE, BONUS

## SECOND FLOOR

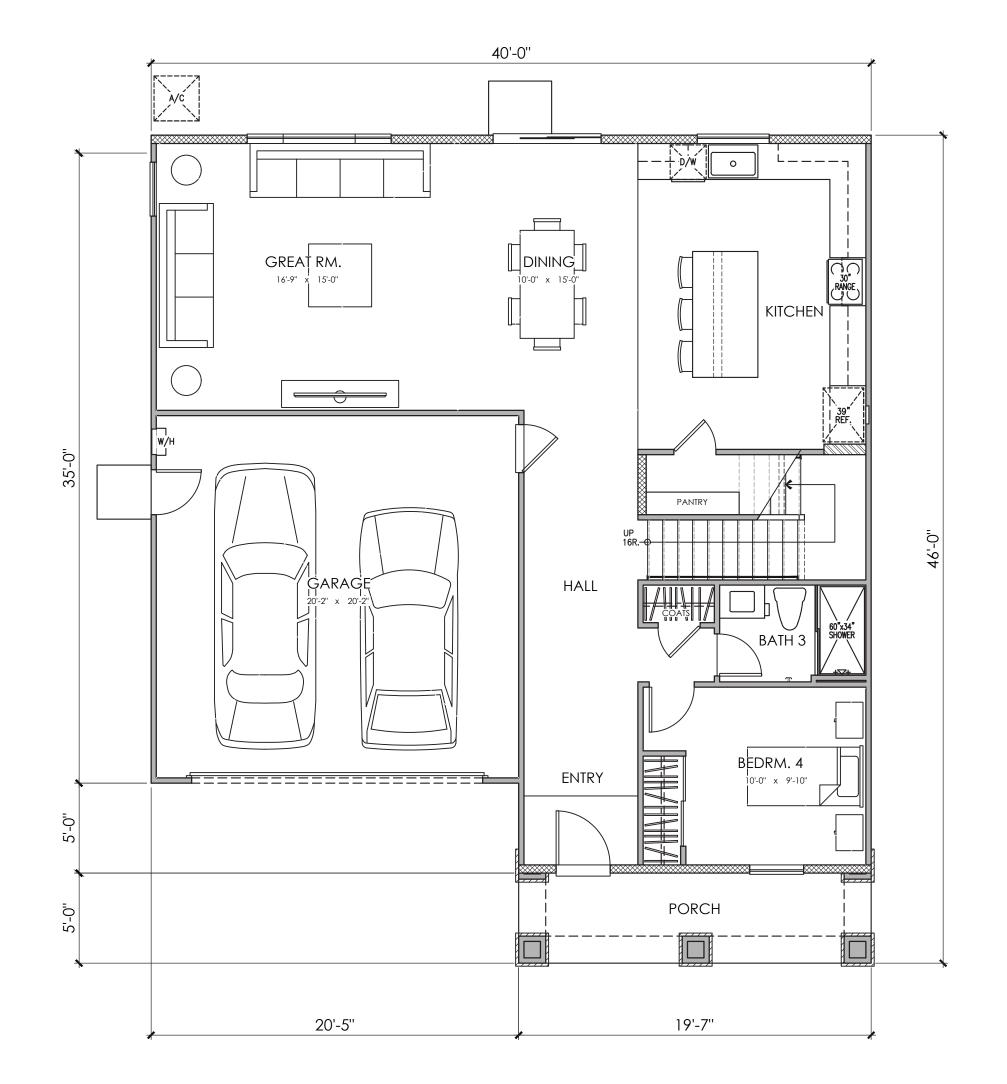


# HIDDEN TERRACE AT MOUNTAIN'S EDGE RIVERSIDE, CA

PLAN 2A (2590)

FLOOR PLANS

FIRST FLOOR



### PLAN 2 AREA TABULATION

CONDITIONED SPACE	
FIRST FLOOR AREA SECOND FLOOR AREA	1,121 SQ. FT. 1,469 SQ. FT.
TOTAL DWELLING	2,590 SQ. FT.
UNCONDITIONED SPACE	
GARAGE PORCH "A" PORCH "B" PORCH "C"	417 SQ. FT. 98 SQ. FT. 98 SQ. FT. 98 SQ. FT.



Kevin L. Crook **Architect** Inc #21005

0 2 4

12



#### **RIVERSIDE COUNTY** AIRPORT LAND USE COMMISSION

January 19, 2023

File No.:

APN:

Dear Mr. Hildebrand,

Related File No.:

John Hildebrand, Planning Director County of Riverside Planning Department 4080 Lemon Street, 12<sup>th</sup> Floor CHAIR Riverside CA 92501

Lake Elsinore VICE CHAIR Russell Betts

**Desert Hot Springs** 

Steve Manos

#### AIRPORT LAND USE COMMISSION (ALUC) DEVELOPMENT REVIEW -RE: DIRECTOR'S DETERMINATION

As authorized by the Riverside County Airport Land Use Commission (ALUC) pursuant to its

Resolution No. 2011-02, as ALUC Director, I have reviewed County of Riverside Ordinance

Amendment (CZ2100128), a proposal to amend Article XIXh (Commercial Cannabis Activities)

in Ordinance No. 348, updating certain provisions related to development standards, operating

requirements, enforcement, and revocation. This amendment also proposes to allow for

cannabis retailers in the Mixed Use Zone, change from a Variance requirement to a Setback Adjustment, when a cannabis facility proposes to locate closer than 1,000 ft to a potentially

impacted use, and merge Board of Supervisors existing Policy F7 – Cannabis Retailers within a

The proposed amendments do not involve changes in development standards or allowable land

uses that would increase residential density or non-residential intensity. Therefore, these

amendments have no possibility of having an impact on the safety of air navigation within airport

Commercial Retail Corridor, into Ordinance No. 348, then rescinding Policy F7.

CZ2100128 (Zoning Ordinance Amendment)

ZAP1068RG23

Countywide

COMMISSIONERS

John Lvon Riverside

Steven Stewart Palm Springs

**Richard Stewart** Moreno Vallev

Michael Geller Riverside

Vernon Poole Murrieta

STAFF

Director Paul Rull

Simon Housman Jackie Vega Barbara Santos

County Administrative Center 4080 Lemon St., 14th Floor. Riverside, CA 92501 (951) 955-5132

As ALUC Director, I hereby find the above-referenced project CONSISTENT with all Riverside County Airport Land Use Compatibility Plans.

This determination of consistency relates to airport compatibility issues and does not necessarily www.rcaluc.org constitute an endorsement of the proposed amendment.

If you have any questions, please contact me at (951) 955-6893.

Sincerelv. RIVERSIDE COUNTY AIRPORT LAND USE COMMISSION

influence areas located within the County of Riverside.

Paul Rull, ALUC Director

ALUC Case File CC:

X:\AIRPORT CASE FILES\Regional\ZAP1068RG23\ZAP1068RG23.LTR.doc

1		
2		ORDINANCE NO. 348.XXXX
3	A	N ORDINANCE OF THE COUNTY OF RIVERSIDE AMENDING
4		ORDINANCE NO. 348 RELATED TO ZONING
5		
6	The Board o	f Supervisors of the County of Riverside ordains as follows:
7	Section 1.	Section 18.18.B of Ordinance No. 348 is amended to read as follows:
8	<u>"B.</u>	APPLICABILITY.
9		This article applies only to non-habitable detached accessory buildings and
10		structures. Article XIXj for additional residential accommodations applies to all
11		habitable detached accessory buildings and structures or structures with portions of
		habitable space. This section shall not apply to agricultural structures in the A-1, A- P, A-2 or A-D zones."
12	Section 2.	Section 18.18.C. of Ordinance No. 348 is amended to read as follows:
13	<u></u>	
14	<u>C.</u>	<u>CB.</u> DETACHED ACCESSORY BUILDINGS AND STRUCTURES.
15		1ALLOWED USE.
16		Subject to the provisions provided in this Section, detached accessory
17		buildings and structures are allowed on lots where the principal use of the lot
18		is a one family dwelling.
		2PLOT PLAN REQUIREMENT.
19		aNotwithstanding the above Section 18.18.B.1., the Planning Director may, based on a determination of potential environmental concerns,
20		require the submittal of a plot plan including the preparation of an
21		environmental assessment pursuant to Section 18.30 of this
22		ordinance if either:
23		iA detached accessory building or structure on a lot equals or
24		exceeds five thousand (5,000) square feet in size; or,
25		iiThe total square footage of all detached accessory
26		buildings or structures of a lot equal or exceed five thousand
		(5,000) square feet. Said determination of potential
27		environmental concerns shall be made by the Planning Director and is within his or her sole discretion.
28		
		1

1	bIf a plot plan is required for a detached accessory building or
2	structure, a public hearing shall be held in accordance with Section
3	18.30 of this ordinance and the plot plan shall only be approved if it
	complies with the requirements of this Section and the requirements
4	of Section 18.30 of this ordinance.
5	3DEVELOPMENT STANDARDS.
6	In addition to the development standards of the applicable zone, a detached
7	accessory building or structure shall comply with the following:
8	aWhere a rear yard is required by this ordinance, a detached accessory
	building or structure may occupy not more than fifty percent of the
9	required rear yard shall not be less than the requirement of the zone.
10	b. In areas of altitudes above four thousand (4,000) feet, a detached
11	accessory building or structure may be constructed in accordance with
12	the same building setback line as is required for a one family dwelling on the same lot.
13	cDetached accessory buildings or structures shall be located in the rear
	portion of a lot and shall not be nearer to the street line than the
14	principal dwelling on the lot not be located closer to the front lot line
15	than the principal dwelling on the same lot, except the Planning
16	Director may, based on a determination that this standard is infeasible
17	for the lot, allow detached accessory buildings or structures to be
18	setback a minimum of 25 feet from the front lot line-
19	dNo detached accessory building shall be nearer to the one family
	dwelling, or other building or structure than isthat permitted by
20	Ordinance No. 457 and Ordinance No 787.
21	e. Notwithstanding the height limitations of any zone, the height limit shall
22	be thirty (30) feet or the height of the principal dwelling, whichever
23	is less The building height of a detached accessory building or
24	structure shall not exceed two stories or forty feet, unless a greater
	height is approved pursuant to Section 18.34. of this ordinance.
25	fBare metal buildings and structures without paint or exterior
26	architectural coatings or treatments shall not be located on a lot one
27	(1) acre or smaller. gNo final inspection shall be performed for the detached accessory
28	gNo final inspection shall be performed for the detached accessory
	2

1	building or structure until a final inspection has been performed for
2	the one family dwelling on the same lot.
3	hNo detached accessory building or structure shall be rented or leased,
	or offered for rent or lease, unless the one family dwelling on the lot
4	is also being rented or leased, or offered for rent or lease, to the same
5	renter or lessee.
6	iNo detached accessory building or structure shall be used for
7	overnight accommodations.
8	jNo detached accessory building or structure shall contain a kitchen.
	kAny detached accessory building or structure must have the same lot
9	access as the one family dwelling on the lot. No additional curb cuts,
10	rear access or any other type of access is allowed to the detached
11	accessory building or structure except as may be authorized by the
12	Transportation Department through the issuance of an encroachment
13	permit.
	1A detached accessory building or structure shall be compatible with the architecture of the one family dwelling and consistent with the
14	character of the surrounding neighborhood.
15	mNotwithstanding the above, in areas of altitudes below four (4,000)
16	thousand feet and where the slope of the front twenty (20) feet of the
17	lot is greater than one (1) foot rise or fall in a seven (7) foot run from
18	the established street elevation, or where the frontage of the lot is
	more than four (4) feet above or below such established street
19	elevation, a private garage may be built to the front or side lot lines if
20	the placement of the building or structure or the design of the building
21	or structure prevents vehicles directly exiting or entering onto the
22	adjacent roadway; however, in areas of altitudes above four thousand
23	(4,000) feet and where the slope of the front twenty $(20)$ feet of a lot
	is greater than one (1) foot rise or fall in a seven (7) foot run from the
24	established street elevation, or where the frontage of the lot is more
25	than four (4) feet above or below such established street elevation, a
26	private garage or carport may be built to the front or side lot lines."
27	
28	
÷	

Section 32. The "Commercial Cannabis Activities" table in Section 18.12.A.2.b. of Ordinance

No. 348 is amended to read as follows:

	PER SQUARE FOOT OR UNIT	PER EMPLOYEE	OTHER CRITERIA	FOR VEHICLE STACKIN G
<u>iIndoor</u> <u>Cannabis</u> <u>eC</u> ultivation		2 spaces/ 3 employees		
mMixed <u>HL</u> ight Cannabis eCultivation		2 spaces/ 3 employees		
<u>Cannabis Wholesale</u> n <u>N</u> ursery		1 space/2 employees		
<u>Cannabis</u> <del>d</del> Distribut <del>or<u>ion Facility</u></del>		2 spaces/ 3 employees of largest shift		
<u>Cannabis</u> <del>m<u>M</u>anufacturing <u>Facility</u></del>		2 spaces/ 3 employees of largest shift		
<u>Cannabis</u> esting <u>Facility</u>		2 spaces/ 3 employees of largest shift		
<u>Cannabis <del>r</del>R</u> etailer <del>s</del>	<u>15 spaces or 1</u> space/200 sq. ft. of gross floor area, whichever is greater			

<u>Cannabis</u> m <u>M</u> icrobusiness <del>es</del> Facility <u>engaged as a</u> Cannabis Retailer <del>with</del> <del>retail sales</del>	-		
Cannabis <u>m</u> Hicrobusiness <del>es</del> Facility not engaged as a Cannabis Retailerwithout retail sales		2 spaces/ 3 employees	

## <u>Section 43.</u> Article XIXh of Ordinance No. 348 is amended in its entirety to read as follows: <u>"Article XIXh COMMERCIAL CANNABIS ACTIVITIES</u> SECTION 19.500. PURPOSE AND INTENT.

The purpose of this Article is to protect the public health, safety, and welfare, enact strong and effective regulatory and enforcement controls in compliance with State law, protect neighborhood character, and minimize potential for negative impacts on people, communities, and the environment in the unincorporated areas of Riverside County by establishing land use regulations for eCommercial eCannabis aActivities. Commercial Ceannabis Aactivities includes eCannabis eCultivation, eCannabis Wholesale Nnurseryies, Ceannabis mManufacturing Facility, eCannabis tTesting fFacilitiyes, eCannabis rRetailers, and eCannabis dDistribution\_Facility, including mMedicinal Cannabis and aAdult-aUse eCannabis. Commercial eCannabis activities require land use regulations due to the unique State legal constraints on\_eCannabis activity, and the potential environmental and social impacts associated with eCannabis activity.

#### SECTION 19.501. PROHIBITED ACTIVITIES.

A. Any Commercial Cannabis Activity that is not expressly provided for in both an approved conditional use permit and a valid Cannabis license issued by the State is

prohibited in all zones and is hereby declared a public nuisance that may be abated by the County and is subject to all available legal remedies, including but not limited to civil injunctions.

- B. Mobile Cannabis Retailers are prohibited in all zones and may not operate in the unincorporated area of Riverside County.
- C. All Cannabis Cultivation shall be conducted in the interior of enclosed structures, facilities or buildings, and all Cannabis Cultivation operations, including all Live Cannabis Plants, at any stage of growth, shall not be visible from the exterior of any structure, facility or building containing Cannabis Cultivation. Portable greenhouses and non-permanent enclosures shall not be used for Cannabis Cultivation unless all applicable permits and licenses have been obtained including, but not limited to, land use permits, building permits and a California license has been issued for a Mixed Light Cannabis Cultivation operation.
- D. Outdoor cultivation of Cannabis is prohibited in the unincorporated area of Riverside County.
- E. All Commercial Cannabis Activities within any dwelling unit, accessory dwelling unit, guest quarters, or any other residential accessory structure permitted for residential occupancy is prohibited.
- F. Unless a Cconditional Uuse Ppermit has been approved that includes the retail sales of Cannabis or Cannabis Products no person shall conduct any retail sales of Cannabis or Cannabis Products on or from a permitted Commercial Cannabis Activity.

#### SECTION 19.502. APPLICABILITY.

A. Except as provided in Section 19.503 of this Article, Commercial Cannabis Activities shall not be allowed in the unincorporated areas of Riverside County without first obtaining all required land use permits, licenses or other entitlements required by local or State laws and regulations.

- B. Cannabis is not an agricultural commodity with respect to Ordinance No. 625, the Right-to-Farm ordinance, and is not considered Farmland or Agriculture as those terms are defined in the Riverside County General Plan or Ordinance No. 625.
- C. For the purposes of this Article, Cannabis does not include Industrial Hemp as defined in this ordinance.

#### SECTION 19.503. EXEMPTIONS.

This Article does not apply to the activities listed below which shall be accessory to a legally existing private residence and comply with all other applicable State and local laws, requirements requirements, and regulations.

A. Personal Cannabis Cultivation.

This Article shall not prohibit a person 21 years of age or older from engaging in the Indoor Cannabis Cultivation of six or fewer Live Cannabis Plants within a single private residence or inside a detached accessory structure located upon the grounds of a private residence that is fully enclosed and secured, to the extent the cultivation is authorized by Health and Safety Code sections 11362.1 and 11362.2. In no event shall more than six Live Cannabis Plants be allowed per private residence. For purposes of this section, private residence means a one family dwelling, an apartment unit, a mobile home or other similar dwelling.

B. Cannabis Cultivation by a Primary Caregiver.
This Article shall not prohibit the cultivation of Cannabis by a qualified patient or primary caregiver in accordance with <u>Section 12 of</u> Riverside County Ordinance No. 925.

#### SECTION 19.504. PROHIBITED LOCATIONS.

Commercial Cannabis Activities are prohibited in the following zones: R-R, R-R-O, R-1, R-1A, R-A, R-2, R2-A, R-3, R-3A, R-T, R-T-R, R-4, R-5, R-6, R-7, C/V, C-C/V, WC-R, WC-W, WC-WE, WC-E, W-2, R-D, N-A, W-2-M, W-1, W-E, M-R, M-R-A and MU.

SECTION 19.505. PERMIT REQUIREMENTS FOR ALL COMMERCIAL CANNABIS

#### ACTIVITIES.

All Commercial Cannabis Activities shall comply with the following requirements:

A. APPLICATION REQUIREMENTS.

At the time of filing the application for a Commercial Cannabis Activity on a form provided by the Planning Department, the applicant shall also provide the applicable fee for processing the land use permit application.

B. STATE LICENSE REQUIRED.

Obtain the requisite State license for the approved Commercial Cannabis Activity within two (2) years of obtaining an approved conditional use permit for the Commercial Cannabis Activity or prior to a certificate of occupancy, whichever is sooner, and maintain during the life of the Commercial Cannabis Activity the applicable California license issued pursuant to California Business and Professions Code <u>s</u>Sections 19300.7 or 26050(a) as may be amended from time to time.

C. SUSPENSION, REVOCATION, OR TERMINATION OF STATE LICENSE. Suspension of a license issued by the State of California, or by any State licensing authority, shall immediately suspend the ability of a Commercial Cannabis Activity to operate within the County until the State, or its respective State licensing authority, reinstates or reissues the State license. Revocation or termination of a license by the State of California, or by any State licensing authority, will also be grounds to revoke or terminate any conditional use permit granted to a Commercial Cannabis Activity pursuant to this Article. <u>Any operator or applicant of a</u> <u>Commercial Cannabis Activity shall provide written notice to the County of any</u> <u>suspension, revocation, or termination of any State license for Commercial Cannabis</u> <u>Activity within 48 hours of such -suspension, revocation, or termination.</u>

#### D. HEALTH AND SAFETY.

Commercial Cannabis Activities shall at all times be operated in such a way as to ensure the health, safety, and welfare of the public. Commercial Cannabis Activities

shall not create a public nuisance or adversely affect the health or safety of the nearby residents, businesses or employees working at the Commercial Cannabis Activity by creating dust, glare, heat, noise, noxious gasses, odor, smoke, traffic, vibration, unsafe conditions or other impacts, or be hazardous due to the use or storage of materials, processes, products, and runoff of water, pesticides or wastes.

#### E. DEVELOPMENT AGREEMENT.

No approval required by this ordinance shall be given for any permit for a Commercial Cannabis Activity unless the Board of Supervisors prior to or concurrently with approves a development agreement, pursuant to Section 18.26b of this ordinance, setting forth the terms and conditions under which the Commercial Cannabis Activity will operate in addition to the requirements of this ordinance, all other local ordinances and regulations, <u>sS</u>tate law and such other terms and conditions that will protect and promote the public health, safety and welfare. No use or operation under any permit for a Commercial Cannabis Activity shall be allowed to begin or continue unless-until the development agreement is effective and <u>not terminated</u>.

#### F. NUISANCE ODORS.

<u>Cannabis odor is a public nuisance.</u> All Commercial Cannabis Activities shall be sited and operated in a manner that prevents Cannabis nuisance odors from being detected offsite. All Commercial Cannabis Activities shall provide a sufficient odor absorbing ventilation and exhaust system so that odor generated inside the Commercial Cannabis Activity that is distinctive to its operation is not detected outside of the operation's facility, anywhere on adjacent lots or public rights-of-way, on or about the exterior or interior common area walkways, hallways, breezeways, foyers, lobby areas, or any other areas available for use by common tenants or the visiting public, or within any other unit located inside the same building as the

1 Commercial Cannabis Activity. In order to control nuisances such as odors, 2 humidity and mold, Commercial Cannabis Activities shall install and maintain at the 3 minimum, the following equipment, or any other equipment that can be proven to be 4 an equally or more effective method or technology to control these nuisances: 5 1. An exhaust air filtration system with odor control that prevents internal odors 6 from being emitted externally; 7 2. An air system that creates negative air pressure between the Commercial 8 Cannabis Activities' interior and exterior, so that the odors generated by the 9 Commercial Cannabis Activity are not detectable on the outside of the 10 Commercial Cannabis Activity. 11 G. COMMERCIAL CANNABIS ACTIVITY OPERATOR QUALIFICATIONS. 12 1. All operators and all employees of a Commercial Cannabis Activity must be 13 21 years of age or older. 14 2. All Opperators of a Commercial Cannabis Activity shall be subject to 15 background checks. 16 3. Permits for Commercial Cannabis Activities shall not be granted for 17 operators with felony convictions, as specified in subdivision (c) of Section 18 667.5 of the Penal Code and subdivision (c) of Section 1192.7 of the Penal 19 Code. 20 Applicants or operators providing false or misleading information in the 4. 21 permitting process will result in rejection of the application or nullification 22 or revocation of any permit granted pursuant to this Article. 23 4\_\_\_\_ 24 VERIFIED CANNABIS RELATED VIOLATIONS. H. 25 1. Permits for Commercial Cannabis Activity shall not be granted for a period 26 of two (2) years for properties on which the County has verified a recent 27 Cannabis related violation. The two (2) year period commences upon 28

1	resolution of the recent Cannabis related violation.					
2	2. For the purposes of this section, Cannabis related violations are					
3	defined as recent when the violation occurs within one or more of following					
4	periods of time:					
5	a. Within the twelve (12) months prior to submission of an					
6	application for a Commercial Cannabis Activity described by this					
7	Article; or					
8	b Anytime after submission of an application for and up to					
9	approval of a Commercial Cannabis Activity described by this					
10	Article.					
11	3. The Planning Director may waive this penalty for good cause as may be					
12	demonstrated by the property owner(s). A property owner's demonstration					
13	of good cause may include, but is not limited to, providing sufficient					
14	evidence to show the current property owner(s) did not own the property nor					
15	have any involvement with the verified Cannabis related violation on the					
16	property or other good faith effort to comply with the County's ordinance.					
17						
18	I. H. RELOCATION OF A PERMITTED COMMERCIAL CANNABIS					
19	ACTIVITY.					
20	In the event the permittee or successor in interest vacates and relocates the					
21	Commercial Cannabis Activity to a new location, a new conditional use permit will					
22	need to be granted by the County in accordance with this ordinance prior to					
23	commencing operations at the new location.					
24						
25	JI. HOURS OF OPERATION.					
26	A Commercial Cannabis Activity operating as a Cannabis Retailer may be open to					
27	the public seven days a week only between the hours of 6:00 A.M. and 10:00 P.M.					
28						
	11					

All other Commercial Cannabis Activities may operate only during the hours specified in the conditional use permit granted by the County.

#### JK. INSPECTIONS.

A Commercial Cannabis Activity shall be subject to inspections by appropriate local and State agencies, including, but not limited to, the Riverside County Departments of Code Enforcement, Planning, Fire, Public Health, Environmental Health, the AAgricultural Commissioner's Office and the Sheriff's Department.

**<u>KL</u>**. MONITORING PROGRAM.

Permittees of a Commercial Cannabis Activity shall participate in the County's monitoring program to verify permit requirements such as, but not limited to, security measures, water use and State track-and-trace requirements.

LM. RESTRICTION ON ALCOHOL AND TOBACCO SALES OR CONSUMPTION. Commercial Cannabis Activities shall not allow the sale, dispensing, or consumption of alcoholic beverages or tobacco on the site of the Commercial Cannabis Activity.

#### MN. RESTRICTION ON CONSUMPTION.

Cannabis shall not be consumed or used on the lot of any Commercial Cannabis Activity.

#### <u>NO</u>. SECURITY.

A Commercial Cannabis Activity shall implement sufficient security measures to deter and prevent the unauthorized entrance into areas containing Cannabis or Cannabis Products, to deter and prevent the theft of Cannabis or Cannabis Products at the Commercial Cannabis Activity and to ensure emergency access in accordance with applicable Fire Code standards. Guard dogs shall not be used at the Commercial Cannabis Activity as a security measure. Security measures shall include, but not be limited to, the following:

1. A plan to prevent individuals from loitering on the lot if they are not

engaging in activity expressly related to the Commercial Cannabis Activity.

- 24 hour emergency contact information for the owner or an on-site employee which shall be provided to the County.
- 3. A professionally installed, maintained, and monitored alarm system.
- 4. Except for Live Cannabis Plants being cultivated at a <u>Cannabis</u> e<u>C</u>ultivation facility and limited amounts of Cannabis for display purposes, all Cannabis and Cannabis Products shall be stored in a secured and locked structure and in a secured and locked safe room, safe, or vault, and in a manner as to prevent diversion, theft, and loss.
- 5. 24 hour security surveillance cameras to monitor all entrances and exits to a Commercial Cannabis Activity, all interior spaces within the Commercial Cannabis Activity that are open and accessible to the public, and all interior spaces where Cannabis, cash or currency is being stored for any period of time on a regular basis. The permittee for a Commercial Cannabis Activity shall be responsible for ensuring that the security surveillance camera's footage is accessible. Video recordings shall be maintained for a minimum of 90 days, and shall be made available to the County upon request.
- 6. Sensors shall be installed to detect entry and exit from all secure areas.
- 7. Panic buttons shall be installed in all Commercial Cannabis Activities.
- Any bars installed on the windows or the doors of a Commercial Cannabis Activity shall be installed only on the interior of the building.
- Security personnel must be licensed by the State of California Bureau of Security and Investigative Services.
- A Commercial Cannabis Activity shall have the capability to remain secure during a power outage and all access doors shall not be solely controlled by an electronic access panel to ensure locks are not released during a power outage.

27 28

1

2

3

4

5

6

7

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

23

24

25

26

1	11.	A Commercial Cannabis Activity shall cooperate with the County and, upon
2		reasonable notice to the Commercial Cannabis Activity, allow the County to
3		inspect or audit the effectiveness of the security plan for the Commercial
4		Cannabis Activity.
5	12.	The permittee for a Commercial Cannabis Activity shall notify the Riverside
6		County Sheriff's Department immediately after discovering any of the
7		following:
8		a. Significant discrepancies identified during inventory.
9		b. Diversion, theft, loss, or any criminal activity involving the
10		Commercial Cannabis Activity or any agent or employee of the
11		Commercial Cannabis Activity.
12		c. The loss or unauthorized alteration of records related to Cannabis,
13		registering qualifying patients, primary caregivers, or employees or
14		agents of the Commercial Cannabis Activity.
15		d. Any other breach of security.
16	13.	Firearms shall not be permitted at a Commercial Cannabis Activity by an
17		owner, manager, employee, volunteer, independent contractor, or designee
18		vendor other than those individuals authorized as a State Licensed Security
19		Personnel.
20	<u>14.</u>	Cannabis or Cannabis Products shall not be stored outside at any time.
21	<del>14.<u>15.</u></del>	Cannabis Retailers which are open to the public or Cannabis Microbusiness
22		Facilities which are engaged as a Cannabis Retailer and open to the public
23		shall require any owner, manager, employee, volunteer, other personnel,
24		independent contractor, or designee that is onsite at the Cannabis Retailer
25		during its hours of operation to wear a uniform, which clearly identifies the
26		wearer as part of the Cannabis Retailer or Cannabis Microbusiness, as
27		applicable, and not the public.
28		

#### **⊖**<u>P</u>. PERMIT AND LICENSE POSTING.

The permittee shall post or cause to be posted at the Commercial Cannabis Activity all required County and State permits and licenses to operate. Such posting shall be in a central location, visible to the patrons, and in all vehicles that deliver or transport Cannabis.

#### **PQ**. SIGNAGE.

1

2

3

4

5

6

7

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

23

24

25

26

27

28

Signage for a Commercial Cannabis Activity shall comply with the following:

- In addition to the requirements set forth in this <u>Section</u> and California Business and Professions Code section 26152 as may be amended, business identification signage for a Commercial Cannabis Activity shall comply with Section 19.4 of this ordinance.
- 2. No Commercial Cannabis Activity shall advertise by having a person or device holding a sign or an air dancer sign advertising the activity to passersby, whether such person, device or air dancer is on the lot of the Commercial Cannabis Activity or elsewhere including, but not limited to, the public right-of-way.
- No Commercial Cannabis Activity shall publish or distribute advertising or marketing that is attractive to children.
- No Commercial Cannabis <u>Activity</u> shall advertise or market Cannabis or Cannabis Products on motor vehicles.
- 5. Except for advertising signs inside a licensed Premises and provided that such advertising signs do notNo sign shall advertise or market Cannabis or Cannabis Products in a manner intended to encourage persons under 21 years of age to consume Cannabis or Cannabis Products
- 5. , no Commercial Cannabis Activity shall advertise or market Cannabis or Cannabis Products on an advertising sign within 1,000 feet of a Child Day Care Center, a K-12 school, a public park or a Youth Center.

- No signs placed on the lot of a Commercial Cannabis Activity shall obstruct any entrance or exit to the building or any window.
- 7. Each entrance to a Commercial Cannabis Activity shall be visibly posted with a clear and legible notice indicating that smoking, ingesting, or otherwise consuming Cannabis on the lot of the Commercial Cannabis Activity is prohibited.

8. Signage shall not be directly illuminated, internally or externally.

9.8. No banners, flags, billboards, or other prohibited signs may be used at any time.

#### <u>QR</u>. RECORDS.

- Each owner and permittee of a Commercial Cannabis Activity shall maintain clear and adequate records and documentation demonstrating that all Cannabis or Cannabis Products have been obtained from and are provided to other permitted and licensed <u>Commercial</u> Cannabis <u>Activity</u> operations. The County shall have the right to examine, monitor, and audit such records and documentation, which shall be made available to the County upon written request.
- 2. Each owner and permittee of a Commercial Cannabis Activity shall maintain a current register of the names and contact information, including name, address, and telephone number, of anyone owning or holding an ownership interest in the Commercial Cannabis Activity, and of all the officers, managers, employees, agents and volunteers currently employed or otherwise engaged by the Commercial Cannabis Activity. The County shall have the right to examine, monitor, and audit such records and documentation, which shall be made available to the County upon request.
- 3. All Commercial Cannabis Activities shall maintain an inventory control and reporting system that accurately documents the present location, amounts,

27 28

1

2

3

4

5

6

7

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

23

24

25

and descriptions of all Cannabis and Cannabis Products for all stages of the growing and production or manufacturing, laboratory testing and distribution processes until purchase by or distribution to a qualified patient, primary caregiver for medical purposes or an adult 21 years of age or older who qualifies to purchase aAdult-uUse Cannabis.

#### **<u>RS</u>**. WATER.

All Commercial Cannabis Activities shall obtain a 'Will Serve' letter from the applicable water purveyor, indicating agreement to supply water for the Commercial Cannabis Activity. The letter shall include the activity proposed and any improvements required for service. For Commercial Cannabis Activities where water service is not available, conditions from the Department of Environmental Health for a permitted onsite, in-ground well will be required for the conditional use permit. Irrigation and domestic water supplies shall not include water transported by vehicle from off-site sources.

#### <u>**ST</u>**. WASTE WATER.</u>

All Commercial Cannabis Activities shall obtain a 'Will Serve' letter from the applicable sanitary sewer purveyor, indicating agreement to supply sewer for the Commercial Cannabis Activity. The letter shall include the activity proposed and any improvements required for service. For Commercial Cannabis Activities where sewer service is not available, conditions from the Department of Environmental Health will be required for the conditional use permit. Where sanitary sewer is not available, the applicant shall obtain clearance from the appropriate regional water quality control board.

#### <u>**T**U</u>. PARKING.

Parking shall be provided in accordance with Section 18.12 of this ordinance.

#### $\underline{\mathbf{V}} \underline{\mathbf{U}}$ . VISIBILITY.

In no case shall Live Cannabis Plants be visible from a public or private road,

sidewalk, park or common public viewing area.

#### ₩¥. \_\_\_\_HAZARDOUS MATERIALS.

1

2

3

4

5

6

7

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

23

24

25

26

27

28

All Commercial Cannabis Activities that utilize hazardous materials shall comply with applicable hazardous waste generator, Riverside County Ordinance No. 615, and hazardous materials handling, Riverside County Ordinance No. 651, requirements and maintain any applicable permits for these programs from the Riverside County Fire Department, the Riverside County Department of Environmental Health, the Riverside County Department of Waste Resources and the Agricultural Commissioner.

#### $\underline{X}$ . COMPLIANCE WITH LOCAL AND STATE LAWS AND REGULATIONS.

 All Commercial Cannabis Activities shall comply with all applicable local and State laws, ordinances and regulations related to, but not limited to, the following: the California Environmental Quality Act, California Building Code, California Fire Code, Riverside County Ordinance No. 787, Riverside County Ordinance No. 457, Riverside County Ordinance No. 657, Riverside County Ordinance No. 745, Airport Land Use Compatibility Plans, weights and measures regulations, track and trace requirements, pesticide use, water quality, storm water discharge and the grading of land.

2. All buildings and structures, including greenhouse, hoop structures, or other similar structures shall comply with all applicable Building, Fire, and Safety laws and regulations. All buildings and structures shall be reviewed by the Riverside County Building and Safety Department in accordance with the California Building Code and Riverside County Ordinance No. 457 and by the Riverside County Fire Department in accordance with Riverside County Ordinance No. 787 and the California Fire Code.

Y

#### <del>X</del>.

#### MATERIAL ALTERATIONS TO PREMISES.

No physical change, alteration, or modification shall be made to a Premises without first obtaining the appropriate approvals from the County, including but not limited a substantial conformance or revised permit and all other necessary permits. Alterations or modifications requiring approval include, without limitation: (i) the removal, creation, or relocation of a common entryway, doorway, passage, or a means of public entry or exit, when such common entryway, doorway, or passage alters or changes limited-access areas within the Premises; (ii) the removal, creation, addition, or relocation of a <u>Cannabis</u> Cultivation Area; (iii) or the addition or alteration of a water supply. The requirement of this Section is in addition to compliance with any other applicable State or local law or regulation pertaining to approval of building modifications, zoning, and land use requirements. In the event that the proposed modification requires a new or modified conditional use permit such permit must be obtained prior to issuance of building permits.

#### <u>Z</u>¥. MULTIPLE COMMERCIAL CANNABIS ACTIVITIES.

Multiple Commercial Cannabis Activities may be allowed on the same lot provided the proposed activities are allowed in the zone classification and meet all requirements in this Article and State Law.

#### SECTION 19.506. PUBLIC HEARING AND REQUIREMENTS FOR APPROVAL.

- A. A public hearing shall be held on the application for a conditional use permit in accordance with the provisions of Section 18.26 of this ordinance and all of the procedural requirements and rights of appeal set forth therein shall govern the public hearing.
- B. No conditional use permit for a Commercial Cannabis Activity shall be approved unless the following findings are made:
  - . \_\_\_\_The permit is consistent with the General Plan,-and any applicable specific

1	plan, and the zoning classification.
2	1
3	<u>2.</u> The permit complies with the requirements of Sections <u>18.12</u> , 18.28, 19.505,
4	<del>19.511, 19.513, 19.515, 19.517, 19.519, 19.521 and 19.523,</del> as applicable, of
5	this ordinance.
6	2.3. The permit complies with all the requirements and findings of this Article
7	for the applicable the Commercial Cannabis Activity(ies).
8	3.4. The permit complies with the development standards for the zoning
9	classification in which the Commercial Cannabis Activity is located.
10	4.5. The permit will not be detrimental to the public health, safety or general
11	welfare.
12	C. Conditional use permits shall be subject to all conditions necessary or convenient to
13	assure that the Commercial Cannabis Activity will satisfy the requirements of this
14	Article.
15	SECTION 19.507. PERMIT EXPIRATION AND REQUEST FOR RENEWAL AFTER
16	EXPIRATION.
17	A. All conditional use permits granted for a Commercial Cannabis Activity shall expire and
18	become null and void All conditional use permits granted for a Commercial Cannabis Activity shall
19	be conditioned for the permittee to obtain a valid Cannabis license from the State of California
20	within 6 months of the conditional use permit's approval date. In the event the condition of approval
21	is not complied with, the conditional use permit will automatically become null and void on the 6
22	month anniversary date of the conditional use permit's approval.
23	B. All conditional use permits issued for a Commercial Cannabis Activity shall expire aas
24	provided in each permit's conditions of approval and development agreement. No less than 6
25	months from the expiration date, the permittee may request the conditional use permit to be renewed
26	as provided in the development agreement. Any request for renewal shall be in writing to the
27	Planning Department and in conjunction with a revised permit application. The renewal request
28	

and revised permit	application shall be processed in accordance with the procedures for processing
the original permit,	including any requirements for public hearing, notice of hearing and all rights
of appeal. If all ob	ligations detailed within the development agreement associated with the permit
are not met, the revi	sed permit application and renewal request will be recommended for denial. If
a request for renew	al is not requested or is not granted the conditional use permit shall be deemed
expired on the date	set forth in the permit's conditions of approval and development agreement.
<u>SECTION 19.508.</u>	OUTDOOR CANNABIS CULTIVATION PROHIBITED.
Notwithstanding an	y other provision of this ordinance, Outdoor Cannabis Cultivation of Mature
Cannabis Plants is p	prohibited in all zone classifications.
<u>SECTION 19.509.</u>	INDOOR (ARTIFICIAL LIGHT) CANNABIS CULTIVATION.
A. ZON	NING.
Notv	vithstanding any other provision of this ordinance, Indoor Cannabis Cultivation
is all	lowed as follows:
1.	Specialty Cottage Indoor Cannabis Cultivation.
	Specialty Cottage Indoor Cannabis Cultivation is allowed in the following
	zone classifications with an approved conditional use permit in accordance
	with <u>sS</u> ection 18.28 of this ordinance: C-1/C-P, C-P-S, I-P, M-SC, M-M, M-
	H, A-1, A-P, A-2 and A-D.
2.	Specialty Indoor Cannabis Cultivation.
	Specialty Indoor Cannabis Cultivation is allowed in the following zone
	classifications with an approved conditional use permit in accordance with
	sSection 18.28 of this ordinance: C-1/C-P, C-P-S, I-P, M-SC, M-M, M-H,
	A-1, A-P, A-2 and A-D.
3.	Small Indoor Cannabis Cultivation.
	Small Indoor Cannabis Cultivation is allowed in the following zone
	classifications with an approved conditional use permit in accordance with
	sSection 18.28 of this ordinance: C-1/C-P, C-P-S, I-P, M-SC, M-M, M-H,
	21

1			A-1, A-P, A-2, and A-D.
2		4.	Medium Indoor Cannabis Cultivation.
3			Medium Indoor Cannabis Cultivation is allowed on lots one gross acre or
4			more in the following zone classifications with an approved conditional use
5			permit in accordance with <u>S</u> ection 18.28 of this ordinance: I-P, M-S-C, M-
6			M and M-H.
7	В.	SIZE	LIMITATIONS.
8		1.	All Indoor Cannabis Cultivations shall not exceed the Canopy size threshold
9			established by State law.
10		<u>2.</u>	The Canopy size does not include immature Live Cannabis Plants that are
11			not flowering. Pursuant to State law, should a Live Cannabis Plant outside
12			of the Canopy area(s) begin to flower, a plant tag shall be applied, the Live
13			Cannabis Plant shall be moved to a designated Canopy area, and reported in
14			the track and trace system without delay.
15		<del>2.</del>	3. The Canopy size on a single-lot for a Specialty Cottage Indoor
16			Cannabis Cultivation shall not exceed 500 square feet.
17		<del>3.</del>	<u>4.</u> The Canopy size on a single-lot for a Specialty Indoor Cannabis
18			Cultivation shall not exceed 5,000 square feet.
19		4 <del>.</del>	5. The Canopy size on a single lot for a Small Indoor Cannabis
20			Cultivation shall not exceed 10,000 square feet.
21		<del>5.</del>	6. The Canopy size on a single-lot for a Medium Indoor Cannabis
22			Cultivation shall not exceed 22,000 square feet except as provided for in
23			19.509.B. <u>67</u> <del>below.</del>
24		<del>6.</del>	7. Multiple Indoor Cannabis Cultivations may operate on a single lot
25			provided all the following is complied with:
26			a. A conditional use permit has been granted for Indoor Cannabis
27			Cultivation and specifies the number and size of each proposed
28			
			22

		licensed Premises.
		b. The individual Canopy size for each Indoor Cannabis Cultivation
		operation complies with State law, and the cumulative Canopy area
		for all the Indoor Cannabis Cultivation operations on one lot does not
		exceed the total amount of 43,560 square feet.
	<u>8.</u>	For properties with an approved conditional use permit for Indoor Cannabis
		Cultivation and Cannabis Wholesale Nursery, the calculated Canopy size for
		Indoor Cannabis Cultivation does not include the area of the property for the
		Cannabis Wholesale Nursery.
SECTION 19	9.510.	MIXED LIGHT CANNABIS CULTIVATION.
А.	ZON	ES.
	Notw	rithstanding any other provision of this ordinance, Mixed Light Cannabis
	Cultiv	vation is allowed as follows:
	1.	Specialty Cottage Mixed Light Cannabis Cultivation.
		Specialty Cottage Mixed Light Cannabis Cultivation is allowed on lots <u>of</u>
		one gross acre or more in the following zone classifications with an approved
		conditional use permit in accordance with Section 18.28 of this ordinance:
		A-1, A-P, A-2 and A-D.
	2.	Specialty Mixed Light Cannabis Cultivation.
		Specialty Mixed Light Cannabis Cultivation is allowed on lots of one and
		one-half gross acres or more in the following zone classifications with an
		approved conditional use permit in accordance with Section 18.28 of this
		ordinance: A-1, A-P, A-2 and A-D.
	3.	Small Mixed Light Cannabis Cultivation.
		Small Mixed Light Cannabis Cultivation is allowed on lots <u>of</u> two and one-
		half gross acres in the following zone classifications with an approved
		23

1			conditional use permit in accordance with <u>sS</u> ection 18.28 of this ordinance:
2			A-1, A-P, A-2 and A-D.
3		4.	Medium Mixed Light Cannabis Cultivation.
4			Medium Mixed Light Cannabis Cultivation is allowed on lots <u>of</u> five gross
5			acres or more in the following zone classifications with an approved
6			conditional use permit in accordance with Section 18.28 of this ordinance:
7			A-1, A-2.
8			
9	B.	SIZE	LIMITATIONS.
10		1.	A Mixed Light Cannabis Cultivation shall not exceed the Canopy size
11			threshold established by State law.
12			2. The Canopy size does not include immature Live Cannabis Plants
13			that are not flowering. Pursuant to State law, should a Live Cannabis Plant
14			outside of the Canopy area(s) begin to flower, a plant tag shall be applied,
15			the Live Cannabis Plant shall be moved to a designated Canopy area, and
16			reported in the track and trace system without delay.
17		2.	<u>3.</u> The Canopy size on a single lot for a Specialty Cottage Mixed Light
18			Cannabis Cultivation shall not exceed 2,500 square feet.
19		<del>3.</del>	<u>4.</u> The Canopy size on a single lot for a Specialty Mixed Light Cannabis
20			Cultivation shall not exceed 5,000 square feet.
21		4.	5. The Canopy size on a single lot for a Small Mixed Light Cannabis
22			Cultivation shall not exceed 10,000 square feet.
23		<del>5.</del>	<u>6.</u> The Canopy size on a single lot for a Medium Mixed Light Cannabis
24			Cultivation shall not exceed 22,000 square feet except as provided for in
25			19.510.B. <u>7</u> 6. <del>below.</del>
26		<del>6.</del>	7. Multiple Mixed Light Cannabis Cultivation operations may operate
27			on a single lot provided all the following is complied with:
28			
			24
28			24

A conditional use permit has been granted for Mixed Light Cannabis a. Cultivation and specifies the number and size of each proposed 3 licensed Premises. 4 The individual Canopy size for each Mixed Light Cannabis b. 5 Cultivation operation complies with State law and the cumulative 6 Canopy area for all the Mixed Light Cannabis Cultivation operations does not exceed the total amount of 43,560 square feet. 8 b.\_\_\_\_ For properties with an approved conditional use permit for Mixed Light 8. 10 Cannabis Cultivation and Cannabis Wholesale Nursery, the calculated Canopy size for Mixed Light Cannabis Cultivation does not include the area 12 of the property for the Cannabis Wholesale Nursery. 13 SECTION 19.511. CANNABIS CULTIVATION STANDARDS. 14 In addition to the approval requirements in Section 19.506 of this ordinance and the -development 15 standards in the applicable zoning classification, Cannabis Cultivation operations shall comply with 16 the standards provided below. If there is an inconsistency between the development standards of the zone classification and these standards, the more restrictive standard applies. 18 A. LOCATION REQUIREMENTS. 19 1. Indoor and Mixed Light Cannabis Cultivation shall not be located within 20 1,000 feet of any Child Day Care Center, K-12 school, public park, or Youth Center. The distance shall be measured from the nearest points of the 22 respective lot lines using a direct straight-line measurement. A new adjacent use will not affect the continuation of an existing legal use that has been 24 established under this Article and continuously operating in compliance with 25 the conditional use permit, and local and State laws and regulations. This 26 location requirement may be modified with the approval of a variance pursuant to Section 18.27 of this ordinance. In no case shall the distance be 28

1

2

7

9

11

17

21

23

#### less than allowed by State law.

21. Indoor <u>Cannabis Cultivation</u> and Mixed Light Cannabis Cultivation are not allowed in an established agricultural preserve or on a lot under a land conservation contract pursuant to the Williamson Act. Indoor <u>Cannabis</u> <u>Cultivation</u> and Mixed Light Cannabis Cultivation shall not be considered agriculture for the purposes of Ordinance No. 625 the County's Right-to-Farm Ordinance.

<u>32</u>. All Cannabis Cultivation is prohibited on natural slopes 25% or greater.

#### B. MINIMUM LOT SIZE.

 Minimum lot size for Indoor Cannabis Cultivation. The minimum lot size for Indoor Cannabis Cultivation is provided belowprovided below:

Commercial Cannabis Activity	Minimum Lot Size (Square Feet)	Allowable Zone(s)
Specialty	Minimum lot size	C1/CP, C-P-S, I-P, M-SC, M-M, M-H, A-
Cottage	per Zone	1, A-P, A-2, A-D
Specialty	Minimum lot size	C1/CP, C-P-S, I-P, M-SC, M-M, M-H, A-
Specialty	per Zone	1, A-P, A-2, A-D
Small	Minimum lot size	C1/CP, C-P-S, I-P, M-SC, M-M, M-H, A-
Sman	per Zone	1, A-P, A-2, A-D
Medium	Minimum lot size	I-P, M-SC, M-M, M-H
wedium	per Zone	

#### 2. Minimum lot size for Mixed Light Cannabis Cultivation. The minimum

lot size for Mixed Light Cannabis Cultivation is provided below:

Commercial Cannabis Activity	Minimum Lot Size (Gross Acres)	Allowable Zone(s)
Specialty Cottage	1	A-1, A-P, A-2, A-D
Specialty	1.5	A-1, A-P, A-2, A-D
Small	2.5	A-1, A-P, A-2, A-D
Medium	5	A-1, A2

1	C.	MINIMUM LOT DIMENSIONS.		
2		The minimum average lot width for Mixed Light Cannabis Cultivation lots shall be		
3		150 feet.		
4	D.	SETBACKS.		
5		1. Indoor Cannabis Cultivation and Mixed Light Cannabis Cultivation shall not		
6		be located within 1,000 feet of any Child Day Care Center, K-12 school,		
7		public park, Youth Center, or Religious Institution. This distance shall be		
8		measured from the nearest points of the respective property lines using a		
9		direct straight-line measurement without regard to intervening structures, as		
10		specified in subdivision (b) of Section 26054 of the Business and Professions		
11		Code. A new adjacent use will not affect the continuation of an existing legal		
12		use that has been established under this Article and continuously operating		
13		in compliance with the conditional use permit, and local and State laws and		
14		regulations.		
15		<u>1.2.</u> Indoor Cannabis Cultivation:		
16		All Indoor Cannabis Cultivation shall comply with the setback standards for		
17		the zone classification in which they are located.be within a fully enclosed		
18		building or buildings and setback from the lot lines and public right of way		
19		in accordance with the development standards for the zone classification in		
20		which it is located. When an Indoor Cannabis Cultivation facility is located		
21		adjacent to a residentially zoned lot the minimum setback shall be 25 feet.		
22		2.3. Mixed Light Cannabis Cultivation:		
23		a. Except for Medium Mixed Light Cannabis Cultivation, the Cannabis		
24		Cultivation Area for Mixed Light Cannabis Cultivation shall be		
25		setback a minimum of 50 feet from all lot lines and public right-of-		
26		ways.		
27		b. The Cannabis Cultivation Area for Medium Mixed Light Cannabis		
28				
		27		

1	0	Cultivation shall be setback a minimum of 100 feet from all lot lines
2	a	nd public right-of-ways.
3	с. Т	The Cannabis Cultivation Area for all Mixed Light Cannabis
4	0	Cultivation shall be located a minimum of 50 feet from the drip line
5	0	f any riparian vegetation of any watercourse.
6	d. A	Il hoop structures, greenhouses and other similar structures used for
7	a	ll Mixed Light Cannabis Cultivation shall be separated by a
8	n	ninimum of 6 feet.
9	e. V	When adjacent to a residentially zoned lot, the Cannabis Cultivation
10	A	area for all Mixed Light Cannabis Cultivation shall be setback a
11	n	ninimum of 100 feet from the adjacent residentially zoned lot lines.
12	<del>3.<u>4.</u> Setbacks</del>	may be modified with an approved setback adjustments may be
13	made in	accordance with Section 18.33 of this ordinance., except iIn no
14	<u>case</u> ever	t shall <u>a</u> setbacks be less than the setbacks required by the State of
15	Californ	a Department of Food and Agriculture or other applicable State law.
16	E. SCREENING A	ND FENCING.
17	All Mixed Ligh	t Cannabis Cultivation shall occur within a secure fence at least 6
18	feet in height th	hat fully encloses the Cannabis Cultivation Premises or Cannabis
19	Cultivation <b>a<u>A</u>re</b>	ea and prevents easy access to the Cannabis Cultivation Area. The
20	fence must be so	lid, durable and include a lockable gate(s) that is locked at all times,
21	except for durin	g times of active ingress and egress. Fences shall be separated by a
22	minimum of six	feet from all cultivation structures, providing a clear six foot path.
23	The fence shall	comply with all other applicable County ordinances, policies, and
24	design standards	s related to height, location, materials, or other fencing restrictions.
25	Cannabis Cultiv	vation Areas shall not be secured by fences with barbed wire or
26	screened with pl	astic sheeting on chain link. Chain link with slats is allowed.
27	F. ENCLOSURES	
28		
	11	

- Cannabis Cultivation operations shall occur within a fully enclosed permitted building, greenhouse, hoop structure, or other similar structure. Mixed light supplemental lighting shall not exceed 25 watts per square foot to be used up to one hour before sunrise or after sunset, unless the building or structure is equipped with light-blocking measures to ensure that no light escapes.
  - All greenhouses, hoop structures, or other similar structures shall comply with Section 19.505. <u>WX</u>. of this article
- G. ENERGY CONSERVATION MEASURES.

All Cannabis Cultivation operations shall include adequate measures to address the projected energy demand for Cannabis <u>C</u>eultivation at the lot. On-site renewable energy generation shall be required for all Indoor Cannabis Cultivation operations. Renewable energy systems shall be designed to have a generation potential equal to or greater than 20-percent of the anticipated energy demand.

H. WATER CONSERVATION MEASURES.

All Cannabis Cultivation operations shall include adequate measures that minimize use of water for cultivation on the lot. Water conservation measures, water capture systems, or grey water systems shall be incorporated into the operations in order to minimize use of water where feasible.

- I. OPERATIONS.
  - 1. <u>Indoor Cannabis Cultivation shall be within a fully enclosed building or buildings.</u>
  - 2. All Cannabis Cultivation lighting shall be fully shielded, downward casting and not spill over onto structures, other properties or the night sky. All Indoor Cannabis Cultivation and Mixed Light Cannabis Cultivation operations shall be fully contained so that little to no light escapes. Light shall not escape at a level that is visible from neighboring properties between

sunset and sunrise.

- 32. All Cannabis Cultivation operations shall accumulate or store garbage and refuse in a nonabsorbent, water-tight, vector resistant, durable, easily cleanable, galvanized metal or heavy plastic containers with tight fitting lids. No refuse container shall be filled beyond the capacity to completely close the lid. All garbage and refuse on the site shall not be accumulated or stored for more than seven calendar days, and shall be properly disposed of before the end of the seventh day. All waste, including but not limited to refuse, garbage, green waste and recyclables, must be disposed of in accordance with County and State laws and regulations. All waste generated from Cannabis Cultivation operations must be properly stored and secured to prevent access from the public.
- <u>34</u>. Onsite generators are prohibited, except as a source of energy in an emergencies. Onsite generators for emergency use shall be included in the conditional use permit.
- 54. Cannabis Cultivation within the A-1, A-P, A-2, and A-D Zones shall not include the retail sales of Cannabis or Cannabis Products.

#### J. \_\_\_\_\_TRANSPORT-ONLY DISTRIBUTION.

Cannabis Cultivation operations with an approved conditional use permit may transport the Cannabis the licensee has cultivated to another Commercial Cannabis Activity licensee, only if the Cannabis Cultivation operator also has an approved transport-only distribution license in accordance with California Code of Regulations section 15315 and all other applicable State law. This type of transport-only distribution is not considered Cannabis Distribution for the purposes of this Article.

<u>K.</u> FINDINGS.

1

2

3

4

5

6

7

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

23

24

25

26

27

28

In addition to the requirements for approval in Section 19.506 of this ordinance, no conditional use permit shall be approved or conditionally approved unless the following findings are made:

- The Indoor <u>Cannabis Cultivation</u> or Mixed Light Cannabis Cultivation complies with all the requirements of the State and County for Cannabis Cultivation.
- 2. The Indoor <u>Cannabis Cultivation</u> or Mixed Light Cannabis Cultivation is not located within 1,000 feet from any Child Day Care Center, K-12 school, public park, or Youth Center, or <u>Religious Institution</u> or a <u>setback adjustmentvariance</u> in accordance with Section 18.33 of this ordinance has been approved allowing a shorter distance, but not less than allowed by State law. <u>The distance is measured in accordance with</u> <u>Section 19.511.D.1.</u>
- The Indoor <u>Cannabis Cultivation</u> or Mixed Light Cannabis Cultivation includes adequate measures that minimize use of water for cultivation on the lot.
- The Indoor <u>Cannabis Cultivation</u> or Mixed Light Cannabis Cultivation includes adequate quality control measures to ensure cultivation on the lot meets State and County regulatory standards.
- 5. The Indoor <u>Cannabis Cultivation</u> or Mixed Light Cannabis Cultivation includes adequate measures that address enforcement priorities for cultivation including restricting access to minors, and ensuring that Cannabis is not supplied to unlicensed or unpermitted persons.
- 6. For Indoor and Mixed Light Cannabis Cultivation lots with verified Cannabis related violations within the last 12 months prior to the

1		adoption date of Ordinance No. 348.4898, the proposed use will not
2		contribute to repeat violations on the lot and all applicable fees have been
3		<del>paid.</del>
4	<u>6.</u>	_The Indoor Cannabis Cultivation or Mixed Cannabis Cultivation will
5		operate in a manner that prevents Cannabis nuisance odors from being
6		detected offsite.
7	7	
8	<u>SECTION 19.512.</u>	CANNABIS WHOLESALE NURSERIES.
9	A. APPL	ICABILITY.
10	Notwi	thstanding any other provision of this ordinance, Cannabis Wholesale
11	Nurse	ries are allowed as follows:
12	1.	Outdoor Cannabis Wholesale Nurseries.
13		Outdoor Cannabis Wholesale Nurseries are allowed on lots larger than or
14		equal to two gross acres in the following zone classifications with an
15		approved conditional use permit in accordance with Section 18.28 of this
16		ordinance: A-1, A-P, A-2 and A-D.
17	2.	Indoor Cannabis Wholesale Nurseries.
18		Indoor Cannabis Wholesale Nurseries are allowed in the following zone
19		classifications with an approved conditional use permit in accordance with
20		Section 18.28 of this ordinance: I-P, M-SC, M-M and M-H.
21	3.	Mixed Light Cannabis Wholesale Nurseries.
22		Mixed Light Cannabis Wholesale Nurseries are allowed on lots larger than
23		or equal to one gross acre in the following zone classifications with an
24		approved conditional use permit in accordance with Section 18.28 of this
25		ordinance: A-1, A-P, A-2 and A-D.
26	B. N	<del>O MULTIPLE USE PERMITS.</del>
27	N	o other Commercial Cannabis Activity shall be allowed on a lot that has an
28		
		32

# SECTION 19.513. CANNABIS WHOLESALE NURSERIES STANDARDS.

In addition to the approval requirements in Section 19.506 of this ordinance and the\_development standards for the applicable zoning classification, Cannabis Wholesale Nurseries shall comply with the standards provided below. If there is an inconsistency between the development standards of the zone classification and these standards, the more restrictive standard applies.

A. MINIMUM LOTPROPERTY SIZE.

### A. GENERAL LOCATION.

Cannabis Wholesale Nurseries shall not be located within 600 feet from any Child Day Care Center, K-12 school, public park, or Youth Center. Distance shall be measured from the nearest point of the respective lot lines using a direct straight-line measurement. A new adjacent use will not affect the continuation of an existing use that has been established under this Article and continuously operating in compliance with the conditional use permit, and local and State laws and regulations.

### B. MINIMUM LOTPROPERTY SIZE.

-Minimum lot size for Outdoor Cannabis Wholesale Nurseries. The minimum lot size for Outdoor Cannabis Wholesale Nurseries is listed below:

Activity	Minimum Lot Size (Gross Acres)	Allowable Zone(s)
Outdoor Cannabis Wholesale Nursery	2	A-1, A-P, A-2, A-D

2. Minimum lot size for Indoor Cannabis Wholesale Nurseries. The

minimum lot size for Indoor Cannabis Wholesale Nurseries is listed below: Minimum Lot Size Activity (Gross Acres) Allowable Zone(s) Indoor Cannabis Minimum lot size I-P, M-SC, M-M, M-H Wholesale per Zone Nursery 3. Minimum lot size for Mixed Light Cannabis Wholesale Nurseries. The minimum lot size for Mixed Light Cannabis Wholesale Nurseries is listed below: **Minimum Lot Size** Allowable Zone(s) Activity (Gross Acres) **Mixed Light** Cannabis 1 A-1, A-2 Wholesale Nursery <del>C.</del> MINIMUM LOT DIMENSIONS. B. The minimum average lot width for Cannabis Wholesale Nurseries shall be 150 feet. Ð. SETBACKS. С. Cannabis Wholesale Nurseries shall not be located within 600 feet from any 1. Child Day Care Center, K-12 school, public park, Youth Center, or Religious Institution. This distance shall be measured from the nearest points of the respective property lines using a direct straight-line measurement without regard to intervening structures, as specified in subdivision (b) of Section 26054 of the Business and Professions Code. A new adjacent use will not affect the continuation of an existing use that has been established under this Article and continuously operating in compliance with the conditional use permit, and local and State laws and regulations. This setback meets the minimum requirements of State law and may not be modified with approval

1

2

3

4

5

6

7

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

23

24

25

26

27

28

of a setback adjustment.

- **1.2.** The Premises for all Cannabis Wholesale Nurseries shall be setback a minimum of 50 feet from the lot lines and public right-of ways.
- 2.3. The Premises for all Outdoor and Mixed Light Cannabis Wholesale Nurseries shall be setback a minimum of 50 feet from the drip line of any riparian vegetation of any watercourse.
- <u>4.</u> Setbacks may be modified with the approval of a setback adjustment <u>in accordance withpursuant to</u> Section 18.33 of this ordinance. In no case shall a setback be less than setbacks required by the State of California Department of Food and Agriculture or other applicable State law.
  - 3.

### **<u>D</u>E.** SCREENING AND FENCING.

Live Cannabis Plants shall not be visible from outside of the lot for a Cannabis Wholesale Nursery. All Cannabis Wholesale Nursery activities shall occur within a secure fence at least six feet in height that fully encloses the Premises of the Cannabis Wholesale Nursery and prevents easy access to the Premises. The fence must be solid, durable and include a lockable gate(s) that is locked at all times, except for during times of active ingress and egress. Fences shall be separated by a minimum of six feet from all Cannabis Wholesale Nursery structures, providing a clear six foot path. The fence shall comply with all other applicable County ordinances, policies, and design standards related to height, location, materials, or other fencing restrictions. Cannabis Wholesale Nursery Premises shall not be secured by fences with barbed wire or screened with plastic sheeting on chain link. Chain link with slats is allowed.

#### FE. MATURE CANNABIS PLANTS.

 Mature Cannabis Plants as defined by the California Department of Food and Agriculture are not allowed to be grown, kept, stored or sold in the at any

Cannabis Wholesale Nursery area of the property.-For properties with an approved conditional use permit for Cannabis 2. Wholesale Nursery and Indoor Cannabis Cultivation and/or Mixed Light Cannabis Cultivation, Mature Cannabis Plants shall not be -grown, kept, stored or sold in the Cannabis Wholesale Nursey area of the property. Exception: Mature Cannabis Plants may be kept at the Cannabis Wholesale 3. Nursery for seed production and/or research and development, as allowed by State law. <del>G</del>F. ENCLOSURES. Except for outdoor Cannabis Wholesale Nurseries, operations shall occur 1. within a fully enclosed permitted building, greenhouse, hoop structure, or other similar structure. Mixed light supplemental lighting shall not exceed 25 watts per square foot to be used up to one hour before sunrise or after sunset, unless the building or structure is equipped with light-blocking measures to ensure that no light escapes. 2. All greenhouses, hoop structures, or other similar structures shall comply with Section 19.505. $\underline{WX}$ . of the Article. HG. ENERGY CONSERVATION MEASURES. Cannabis Wholesale Nurseries shall include adequate measures to address the projected energy demand for Cannabis eCultivation on the lot. On-site renewable energy generation shall be required for all Indoor Cannabis Wholesale Nursery operations. Renewable energy systems shall be designed to have a generation potential equal to or greater than 20-percent of the anticipated energy demand. WATER CONSERVATION MEASURES. H. Cannabis Wholesale Nursery operations shall include adequate measures that minimize use of water for Cannabis eCultivation at the site. Water conservation measures, water capture systems, or grey water systems shall be incorporated into

1

2

3

4

5

6

7

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

23

24

25

26

27

Cannabis eCultivation in order to minimize use of water where feasible. TRANSPORT-ONLY DISTRIBUTION. I. Cannabis Cultivation operations with an approved conditional use permit may transport the Cannabis the licensee has cultivated to another Commercial Cannabis Activity licensee, only if the Cannabis Cultivation operator also has an approved transport-only distribution license in accordance with California Code of Regulations section 15315 and all other applicable State law. This type of transport-only distribution is not considered Cannabis Distribution for the purposes of this Article. J. FINDINGS. In addition to the requirements for approval in Section 19.506 of this ordinance, no conditional use permit shall be approved or conditionally approved unless the following findings are made: 1. The Cannabis Wholesale Nursery complies with all the requirements of the State and County for the cultivation of Cannabis and Cannabis Wholesale Nurseries. 2. The Cannabis Wholesale Nursery is not located within 600 feet from any Child Day Care Center, K-12 school, public park, or Youth Center, or Religious Institution. The distance is measured in accordance with Section 19.513.C.1. 3. The Cannabis Wholesale Nursery includes adequate measures that minimize use of water for activities at the site. 4. The Cannabis Wholesale Nursery includes adequate quality control measures to ensure Cannabis kept on the lot meets State regulatory standards. 5. The Cannabis Wholesale Nursery includes adequate measures that address enforcement priorities for Cannabis activities including

1

2

3

4

5

6

7

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

23

24

25

26

27

1	restricting access to minors, and ensuring that Cannabis and Cannabis
2	Products are not supplied to unlicensed or unpermitted persons within the
3	State and not distributed out of State.
4	6. For Cannabis Wholesale Nurseries lots with verified Cannabis-related
5	violations within the last 12 months prior to the adoption date of
6	Ordinance No. 348.4898, the use will not contribute to repeat violations
7	on the lot and all applicable fees have been paid.
8	76. The Cannabis Wholesale Nursery will operate in a manner that prevents
9	Ceannabis nuisance odors from being detected offsite.
10	
11	SECTION 19.514. CANNABIS MANUFACTURING FACILITIES.
12	A. APPLICABILITY.
13	Notwithstanding any other provision of this ordinance, Cannabis
14	Manufacturing Facilities are allowed as follows:
15	1. Non-Volatile Cannabis Manufacturing Facility.
16	Non-volatile Cannabis Manufacturing Facilities for extractions using
17	mechanical methods or using non-volatile solvents, requiring a Type 6 State
18	license, are allowed in the following zones with an approved conditional use
19	permit in accordance with Section 18.28 of this ordinance: C-1, C-P, C-P-S,
20	C-O, I-P, M-SC, M-M,-and the M-H, and M-U zones. These facilities may
21	also conduct infusion operations and packaging and labeling of eCannabis
22	<u>P</u> products.
23	2. Type N Cannabis Manufacturing Facilities.
24	Cannabis Manufacturing Facilities that produce eEdible Cannabis Products
25	or topical Cannabis products using infusion processes, or other types of
26	<u>C</u> eannabis <u>pP</u> roducts other than extracts or concentrates, requiring a Type N
27	State license, are allowed in the following zones with an approved
28	
	38

conditional use permit in accordance with Section 18.28 of this ordinance: <u>C-1, C-P, C-P-S, C-O, I-P, M-SC, M-M, and the M-H, and M-U</u>. These facilities may also package and label <u>C</u>eannabis <u>P</u>products.

- 3. Type P Cannabis Manufacturing Facilities. Cannabis Manufacturing Facilities that only package or repackage eCannabis Pproducts or label or relabel the Ceannabis Pproduct container or wrapper, requiring a Type P State license, are allowed in the following zones with an approved conditional use permit in accordance with Section 18.28 of this ordinance: C-1, C-P, C-P-S, C-O, I-P, M-SC, M-M and the M-H, and M-U.
- 4. Volatile Cannabis Manufacturing Facility.

Cannabis Manufacturing Facilities involving volatile processes or substances, requiring a Type 7 volatile manufacturing State license, are allowed in the following zones with an approved conditional use permit in accordance with Section 18.28 of this ordinance: I-P, M-SC, M-M and M-H.–\_–A Volatile Cannabis Manufacturing Facility may also conduct extractions using nonvolatile solvents or mechanical methods, conduct infusion operations and conduct packaging and labeling of <u>C</u>eannabis <u>Pp</u>roducts.

5. Shared-Use Cannabis Manufacturing Facility.

A Shared-Use Cannabis Manufacturing Facility is allowed in the following zones with an approved conditional use permit in accordance with Section 18.28 of this ordinance: I-P, M-SC, M-M and M-H. -A Shared-Use Cannabis Manufacturing Facility may include the following facilities: a non-volatile <u>Cannabis</u> <u>mM</u>anufacturing <u>fF</u>acility, an infusion only <u>Cannabis</u> <u>mM</u>anufacturing <u>Ff</u>acility or a volatile <u>Cannabis <u>mM</u>anufacturing <u>fF</u>acility. The conditional use permit for a Shared-Use Cannabis Manufacturing</u>

27 28

1

2

3

4

5

6

7

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

23

24

25

Facility shall identify the types of facilities operating at the Shared-Use Cannabis Manufacturing Facility.

## SECTION 19.515. CANNABIS MANUFACTURING FACILITIES STANDARDS.

In addition to the approval requirements in Section 19.506 of this ordinance and the development standards for the applicable zoning classification, Cannabis Manufacturing Facilities shall comply with the standards provided below. If there is an inconsistency between the development standards of the zone classification and these standards, the more\_restrictive standard applies.

A. GENERAL LOCATION.

Cannabis Manufacturing Facilities shall not be located within 600 feet from any Child Day Care Center, K-12 school, public park, or Youth Center. Distance shall be measured from the nearest point of the respective lot lines using a direct straight-line measurement. A new adjacent use will not affect the continuation of an existing legal use that has been established under this Article and continuously operating in compliance with the conditional use permit, and local and State laws and regulations.

## B.A. MINIMUM LOT SIZE.

The minimum lot size for a Cannabis Manufacturing Facility shall be 10,000 square feet.

- **<u>B</u>C**. SETBACKS.
  - 1.Cannabis Manufacturing Facilities shall not be located within 600 feet from<br/>any Child Day Care Center, K-12 school, public park, Youth Center, or<br/>Religious Institution. This distance shall be measured from the nearest points<br/>of the respective property lines using a direct straight-line measurement<br/>without regard to intervening structures, as specified in subdivision (b) of<br/>Section 26054 of the Business and Professions Code. A new adjacent use<br/>will not affect the continuation of an existing legal use that has been<br/>established under this Article and continuously operating in compliance with

the conditional use permit, and local and State laws and regulations. This setback meets the minimum requirements of State law and may not be modified with approval of a setback adjustment.

- 1.2. Except for a Volatile Cannabis Manufacturing Facility, Cannabis Manufacturing Facilities shall comply with the setback standards for the zone classification in which they are located, except Volatile and Shared-Use Cannabis Manufacturing Facilities shall also be setback from a residential zone a minimum of 40 feet, which may include landscaping as required. in, except when adjacent to a residential zone where the minimum setback from the residentially zoned lot lines shall be 25 feet. A Volatile Cannabis Manufacturing Facility shall be setback from a residential zone a minimum of 40 feet which may include landscaping as required.
  - 2.3. Setbacks may be modified with an approved setback adjustment in accordance with Section 18.33 of this ordinance. In no case shall a setback be less than setbacks required by the State of California Department Bureau of Cannabis Control, the California Building Code, or Ordinance No. 457, or other applicable State law.
- D. <u>C.</u> LIMITATION ON THE MANUFACTURING OF <u>EDIBLE</u> CANNABIS-<u>EDIBLE</u> PRODUCTS.

Cannabis Manufacturing Facilities shall not manufacture <u>Edible</u> Cannabis edible pProducts in the shape of animals, people, insects, or fruit.

## **<u>D</u>E.** OPERATIONS.

—1. Any compressed gases used in the manufacturing process shall not be stored on any lot-within in containers that exceeds the amount which is approved by the Riverside County Fire Department and authorized by the conditional use permit. 2. Closed loop systems for compressed gas extraction systems must be commercially manufactured, bear a permanently affixed and visible serial number and certified by an engineer licensed by the State of California that the system was commercially manufactured, is safe for its intended use, and was built to codes of recognized and generally accepted good engineering practices.

3. Cannabis Manufacturing Facilities shall have a training program for persons using solvents or gases in a closed looped system to create <u>Ceannabis extracts on how to use the system</u>, to access applicable material safety data sheets and to handle and store the solvents and gases safely.

### E. TRANSPORT-ONLY DISTRIBUTION.

Cannabis Manufacturing Facilities with an approved conditional use permit may transport Cannabis Products the licensee has manufactured to another Commercial Cannabis Activity licensee, only if the Cannabis Manufacturing Facility operator also has an approved transport-only distribution license in accordance with California Code of Regulations section 15315 and all other applicable State law. This type of transport-only distribution is not considered Cannabis Distribution for the purposes of this Article.

## **<u>FF</u>**. FINDINGS.

In addition to the requirements for approval in Section 19.506 of this ordinance, no conditional use permit shall be approved or conditionally approved unless the following findings are made:

- The Cannabis Manufacturing Facility complies with all the requirements of the State and County for the manufacturing of Cannabis.
- 2. The Cannabis Manufacturing Facility does not pose a significant threat to the

public or to neighboring uses from explosion or from release of harmful gases, liquids, or substances.

- 3. The Cannabis Manufacturing Facility includes adequate quality control measures to ensure Cannabis manufactured at the facility meets industry standards and includes a documented employee safety training program, a Materials Data Safety Sheet, and meets all requirements in Health and Safety Code <u>s</u>Section 11362.775, as it may be amended from time to time.
- 4. The Cannabis Manufacturing Facility includes adequate measures that address enforcement priorities for Cannabis activities including restricting access to minors, and ensuring that Cannabis and Cannabis Products are obtained from and supplied only to other permitted licensed sources within the State and not distributed out of State.
- The Cannabis Manufacturing Facility is not located within 600 feet from any Child Day Care Center, K-12 school, public park, or-Youth Center, or <u>Religious Institution</u>. <u>The distance is measured in accordance with Section</u> <u>19.515.B.1.</u>
- SECTION 19.516. CANNABIS TESTING FACILITIES.
  - A. APPLICABILITY.

Notwithstanding any other provision of this ordinance, Cannabis Testing Facilities are allowed in the following zone classifications with an approved conditional use permit in accordance with Section 18.28 of this ordinance: C-1/C-P, C-P-S, I-P, M-SC, M-M, and M-H.

B. NO MULTIPLE USE PERMITS.

No other Commercial Cannabis Activity shall be allowed on a lot that has an approved conditional use permit for a Cannabis Testing Facility.

# SECTION 19.517. CANNABIS TESTING FACILITIES STANDARDS.

In addition to the approval requirements in Section 19.506 of this ordinance and the development

standards for the applicable zoning classification, Cannabis Testing Facilities shall comply with the standards provided below. If there is an inconsistency between the development standards of the zone classification and these standards, the more restrictive standard applies.

### A. <u>A. GENERAL LOCATION.</u>

<u>Cannabis Testing Facilities shall not be located within 600 feet from any Child Day Care Center,</u> K-12 school, public park, or Youth Center. Distance shall be measured from the nearest point of the respective lot lines using a direct straight-line measurement. A new adjacent use will not affect the continuation of an existing legal use that has been established under this Article and continuously operating in compliance with the conditional use permit, and local and State laws and regulations.

**B<u>BA</u>**. SETBACKS.

- Cannabis Testing Facilities shall not be located within 600 feet from any Child Day Care Center, K-12 school, public park, Youth Center, or Religious Institution. This distance shall be measured from the nearest points of the respective property lines using a direct straight-line measurement without regard to intervening structures, as specified in subdivision (b) of Section 26054 of the Business and Professions Code. A new adjacent use will not affect the continuation of an existing legal use that has been established under this Article and continuously operating in compliance with the conditional use permit, and local and State laws and regulations. This setback meets the minimum requirements of State law and may not be modified with approval of a setback adjustment.
  - 2. <u>All-Cannabis Testing Facilities shall comply with the setback standards for</u> the zone classification in which they are located in, except when adjacent to a residential zone where the minimum setback from the residentially zoned lot lines shall be 25 feet.
    - <u>32</u>. Setbacks may be modified with an approved setback adjustment in accordance with Section 18.33 of this ordinance. In no case shall a setback

1 be less than setbacks required by the State of California Department Bureau 2 of Cannabis Control, the California Building Code, or Ordinance No. 457, 3 or other applicable State law. 4 <del>C</del>B. **OPERATIONS.** 5 1. Cannabis Testing Facilities shall be required to conduct all testing in a 6 manner pursuant to Business and Professions Code section 26100 and shall 7 be subject to State and local law and regulations. 8 2. Cannabis Testing Facilities shall not be open to the public. 9 10 ĐC. FINDINGS. 11 In addition to the requirements for approval in Section 19.506 of this ordinance, no 12 conditional use permit shall be approved or conditionally approved unless the following findings are made: 13 14 1. The Cannabis Testing Facility complies with all the applicable 15 requirements of the State and County for the testing of Cannabis. 16 2. The owners, permittees, operators, and employees of the Cannabis 17 Testing Facility are not associated with any other Commercial Cannabis 18 Activity. 19 3. The Cannabis Testing Facility is accredited by an appropriate 20 accrediting agency as approved by the State and in compliance with with 21 the California Code of RegulationsHealth and Safety Code Section 22 5238, which may be amended from time to time. 23 4. The Cannabis Testing Facility's operating plan demonstrates proper 24 protocols and procedures for statistically valid sampling methods and 25 accurate certification of Cannabis and Cannabis Products for potency, 26 purity, pesticide residual levels, mold, and other contaminants according 27 to adopted industry standards. 28 45

- 5. The Cannabis Testing Facility includes adequate measures that address enforcement priorities for Cannabis activities including restricting access to minors, and ensuring that Cannabis and Cannabis Products are obtained from and supplied only to other permitted licensed sources within the State and not distributed out of <u>S</u>state.
- The Cannabis Testing Facility is not located within 600 feet from any Child Day Care Center, K-12 school, public park, or Youth Center, or <u>Religious Institution</u>. <u>The distance is measured in accordance with Section</u> <u>19.517.A.1.</u>
  - 7. For Cannabis Testing Facilities lots with verified cannabis-related violations within the last 12 months prior to the adoption date of Ordinance No. 348.4898, the use will not contribute to repeat violation on the lot and all applicable fees have been paid.

# SECTION 19.518. CANNABIS RETAILER.

# A. APPLICABILITY.

Notwithstanding any other provision of this ordinance, Cannabis Retailers are allowed as follows:

1. Cannabis Retailer – Non-Storefront

Non-storefront Cannabis Retailers within a permanent structure are allowed in the following zone classifications with an approved conditional use permit in accordance with Section 18.28 of this ordinance: C-1/C-P, C-P-S, I-P, M-SC, M-M<u>, and M-U</u>.

2. Cannabis Retailer – Storefront

Storefront Cannabis Retailers within a permanent structure are allowed in the following zones with an approved conditional use permit in accordance with Section 18.28 of this ordinance: C-1/C-PC-P-S, I-P, MS-C, M-M<sub>a</sub>-and M-H<sub>a</sub>

27 28

1

2

3

4

5

6

7

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

23

24

25

and M-U. 3. Mobile Cannabis Retailers are prohibited in all zone classifications. SECTION 19.519. CANNABIS RETAILER MINIMUM STANDARDS. In addition to the approval requirements in Section 19.506 of this ordinance and development standards for the applicable zoning classification, Cannabis Retailers shall comply with the standards provided below. If there is an inconsistency between the development standards of the zone classification and these standards, the more restrictive standard applies. GENERAL LOCATION. A. Cannabis Retailers shall not be located on a property containing a residential dwelling unit. Cannabis Retailers shall not be located within 1,000 feet from any Child Day Care Center, K-12 school, public park, or Youth Center. Distance shall be measured from the nearest point of the respective lot lines using a direct straight-line measurement. A new adjacent use will not affect the continuation of an existing legal use that has been established under this Article and continuously operating in compliance with the conditional use permit, and local and State laws and regulations. This location requirement may be modified with the approval of a variance pursuant to Section 18.27 of this ordinance. In no case shall the distance be less than allowed by State

2. Cannabis Retailers shall not be located within 1,000 feet of any other Cannabis Retailer.

3. Cannabis Retailers shall not be located within 500 feet of a smoke shop or similar facility.

 Cannabis Retailers shall not be located on a lot containing a residential dwelling unit.

B. SETBACKS.

law.

1

2

3

4

5

6

7

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

23

24

25

26

27

28

1. Cannabis Retailers shall not be located within 1,000 feet from any Child Day

1			Care Center, K-12 school, public park, Youth Center, or Religious
2			Institution.
3		<u>2.</u>	<u>2.</u> <u>Cannabis Retailers shall not be located within 1,000 feet of</u>
4			any other Cannabis Retailer.
5		<u>33</u> .	Cannabis Retailers shall not be located within 500 feet of a smoke shop or
6			similar facility.
7	<u>4. Cannabis Reta</u>	<del>uilers sl</del>	nall not be located on a lot containing a residential
8		4.	The distance of each setback shall be measured from the nearest points of
9			the respective property lines using a direct straight-line measurement without
10			regard to intervening structures, as specified in subdivision (b) of Section
11			26054 of the Business and Professions Code. A new adjacent use will not
12			affect the continuation of an existing legal use that has been established
13			under this Article and continuously operating in compliance with the
14			conditional use permit, and local and State laws and regulations.
15	dwelling unit.		
16		<u>5.</u>	<u>All</u> Cannabis Retailers shall comply with the setback standards for the zone
17			classification in which they are located in, except when adjacent to a
18			residential zone where the minimum setback from the residentially zoned lot
19			lines shall be 40 feet.
20		<u>6<del>56</del></u> 2.	Setbacks may be modified with an approved setback adjustment in
21			accordance with Section 18.33 of this ordinance. In no case, shall a setback
22			be less than setbacks required by the State of California Department Bureau
23			of Cannabis Control, California Building Code, or Ordinance No. 457, or
24			other applicable State law.
25		<u>C.</u>	CONCENTRATION LIMITS.
26		<u>1.</u>	Limits.
27			a. The number of Cannabis Retailers located within a Commercial
28			
			48

1	Retail Corridor is limited to one (1) for each 2,000 inhabitants of the
2	census tract in which the Cannabis Retailers are located.
3	b. The number of Cannabis Retailers located within a Commercial
4	Retail Corridor may be increased to one (1) for each 1,000 inhabitants
5	of the census tract in which the Cannabis Retailer is located with a
6	finding of public convenience or necessity as provided in this Article.
7	
8	c. The United States Census Bureau shall be the source of
9	authority for determining the number of inhabitants (population) per
10	<u>census tract.</u>
11	2. Public Convenience or Necessity Finding.
12	Applicants seeking a conditional use permit for a Cannabis Retailer within a
13	Commercial Retail Corridor that is determined to be an Unduly Concentrated
14	Corridor may request the Board of Supervisors find that the proposed
15	Cannabis Retailer would serve as a public convenience or necessity.
16	a. ———In order for a public convenience or necessity determination
17	to be presented to the Board of Supervisors, applicants shall
18	demonstrate both of the following:
19	1) The addition of the proposed Cannabis Retailer will not result
20	in a Commercial Retail Corridor having a number of
21	Cannabis Retailers greater than one for each 1,000 inhabitants
22	of the census tract in which the Cannabis Retailer is located;
23	and,
24	2) The addition of the proposed Cannabis Retailer will not cause
25	more than 10% or more of the commercially zoned properties,
26	in gross acres, within the Commercial Retail Corridor to be
27	utilized for Cannabis Retailers.
28	
	49

1 1	
1	b. In order for a public convenience or necessity determination to be
2	made by the Board of Supervisors, applicants shall demonstrate all
3	of the following:
4	1) The proposed Cannabis Retailer will not be detrimental to the
5	character of development in the immediate neighborhood and
6	will be in harmony with the overall objectives of the
7	Riverside County General Plan.
8	2) The addition of the proposed Cannabis Retailer will not
9	increase the severity of existing law enforcement or public
10	nuisance problems in the surrounding area with increased
11	calls for service due to Cannabis related complaints or
12	criminal activity associated with Cannabis.
13	3) The community benefits of permitting an additional Cannabis
14	Retailer outweigh any negative impacts to the community as
15	<u>a whole.</u>
16	4) Reasonable efforts were made to seek community
17	input regarding the addition of the proposed Cannabis
18	Retailer to the Commercial Retail Corridor.
19	c. In addition to the above requirements, applicants shall
20	demonstrate at least one of the following:
21	1) The proposed Cannabis Retailer serves an area of increased
22	density or consumer traffic; including but not limited to
23	adjacency to high population census tracts and/or distance
24	away from sensitive uses or other special circumstances
25	within the corridor, such that the proposed location would
26	serve the public convenience or necessity by satisfying a
27	higher demand for Cannabis Retail locations; or
28	
	50

1	2) The proposed Cannabis Retailer is located in an area
2	with a history of a high number of unpermitted Cannabis
3	Retailers such that an additional permitted location would
4	serve a public convenience or necessity by satisfying a higher
5	demand for permitted Cannabis Retail locations and reduce
6	patronage of unlicensed facilities.
7	C. D. OPERATIONS.
8	1. Entrances into the retail location of the Cannabis Retailer shall be separate
9	from the reception area and locked at all times with entry strictly controlled.
10	An electronic or mechanical entry system shall be utilized to limit access and
11	entry to the retail location.
12	1. All Cannabis Retailers must conduct their operations within a permanent
13	structure.
14	2. Non-storefront Cannabis Retailers are authorized to conduct Cannabis
15	Deliveries only and shall be closed to the public.
16	2.3. Cannabis Retailers may include the sale of Medicinal Cannabis, requiring an
17	M-License from the State. Cannabis Retailers selling only Medicinal
18	Cannabis shall verify consumers who enter the Premises are at least 18 years
19	of age and that they hold a valid Physician's Recommendation.
20	3.4. Cannabis Retailers may include the sale of AdultUse Cannabis, requiring
21	an A-license from the State. Cannabis Retailers selling only Adult-Use
22	Cannabis shall verify that consumers who enter the Premises are at least 21
23	years of age.
24	4.5. A Cannabis Retailers may include the sale of both Medicinal Cannabis and
25	AdultUuse Cannabis requiring both an A-License and an M-License from
26	the State. All Cannabis Retailers selling both Medic <u>in</u> al <u>Cannabis</u> and Adult-
27	Use Cannabis shall verify that consumers who enter the premises are at least
28	
	51

1		18 years of age and that they hold a valid Physician's Recommendation or
2		are at least 21 years of age.
3	<del>5.<u>6</u>.</del>	_Display areas shall include the smallest amount of Cannabis and Cannabis
4		Products reasonably anticipated to meet sales during operating hours.
5	<del>6.<u>7</u>.</del>	Cannabis and Cannabis Products not in the display area shall be maintained
6		in a locked secure area.
7	<del>7.<u>8</u>.</del>	_Not more than 10% of the Cannabis Retailer floor area, up to a maximum of
8		50 square feet, shall be used for the sale of incidental goods such as, but not
9		limited to, clothing, posters, or non-eCannabis goods.
10	<u>8.9.</u>	Restroom facilities shall be locked and under the control of the Cannabis
11		Retailer.
12	<u>910</u> .	Cannabis Retailers shall ensure that all Cannabis and Cannabis Products held
13		for sale by the Cannabis Retailer are cultivated, manufactured, transported,
14		distributed, and tested by California licensed and permitted facilities that are
15		in full conformance with State and local laws and regulations.
16	1 <u>01</u> .	Cannabis Retailers shall not distribute any Cannabis or Cannabis Product
17		unless such products are labeled and in a tamper-evident package in
18		compliance with the California Business and Professions Code and any
19		additional rules promulgated by a licensing authority.
20	1 <u>2</u> <del>1</del> .	Cannabis Retailers shall not provide free samples of any type, including
21		Cannabis Products, to any person and shall not allow any person to provide
22		free samples on the Cannabis Retailer's lot.
23	12 <u>3</u> .	Deliveries of Cannabis and Cannabis Products shall be to a customer at a
24		physical address and shall be conducted in accordance with California
25		Business and Professions Code <u>s</u> ection 26090 or as may be amended and
26		all <u>sState laws and</u> regulations pertaining to delivery of Cannabis and
27		Cannabis Products.
28		

- <u>13.</u> <u>14.</u> Cannabis or Cannabis Products shall not be sold or delivered by any means or method to any person within a motor vehicle.
- 154. Cannabis Retailers shall not include a drive-in, drive-through or walk up window where retail sales of Cannabis or Cannabis Products are sold to persons or persons within or about a motor vehicle.

### D. <u>E. MOBILE DELIVERIES</u>

Cannabis Retailers with an approved conditional use permit may provide <u>Cannabis dD</u>eliveries-of Cannabis Products consistent with State law. <u>Cannabis</u> <u>Delivery is not a separate Commercial Cannabis Activity for the purposes of this</u> <u>Article.</u>

## $\underline{\mathbf{F}}$ . FINDINGS.

In addition to the requirements for approval in Section 19.506 of this ordinance, no conditional use permit shall be approved or conditionally approved unless the following findings are made:

- The Cannabis Retailer complies with all the requirements of the State and County for the selling of Cannabis.
- 2. The non-storefront Cannabis Retailer is not open to the public.
- 3. The Cannabis Retailer is not located within 1,000 feet from any Child Day Care Center, K-12 school, public park, or Youth Center, or Religious Institution –or a setback adjustment variance in accordance with Section 18.33 of this ordinance has been approved allowing a shorter distance, but not less than allowed by State law. The distance is measured in accordance with Section 19.519.B.4.
- 4. The Cannabis Retailer includes adequate measures that address enforcement priorities for Commercial Cannabis Activities including restricting access to

minors, and ensuring that Cannabis and Cannabis Products are obtained from and supplied only to other permitted licensed sources within the State and not distributed out of State.

5. For Cannabis Retailer lots with verified cannabis-related violations within the last 12 months prior to the adoption date of Ordinance No. 348.4898, the use will not contribute to repeat violation on the lot and all applicable fees have been paid.

### SECTION 19.520. CANNABIS DISTRIBUTION FACILITIES.

### APPLICABILITY.

**NN**otwithstanding any other provision of this ordinance, Cannabis Distribution Facilities are allowed in the following zone classifications with an approved conditional use permit in accordance with Section 18.28 of this ordinance: C-1/C-P, C-P-S, I-P, M-SC, M-M and M-H.

### SECTION 19.521. —CANNABIS DISTRIBUTION FACILITIES STANDARDS.

In addition to the approval requirements in Section 19.506 of this ordinance and development standards for the applicable zoning classification, Cannabis Distribution Facilities shall comply with the standards provided below. If there is an inconsistency between the development standards of the zone classification and these standards, the more restrictive standard applies.

## A. GENERAL LOCATION.

Cannabis Distribution Facilities shall not be located within 600 feet from any Child Day Care Center, K-12 school, public park, or Youth Center. Distance shall be measured from the nearest point of the respective lot lines using a direct straight-line measurement. A new adjacent use will not affect the continuation of an existing legal use that has been established under this Article and continuously operating in compliance with the conditional use permit, and local and State laws and regulations.

**<u>BA</u>**. SETBACKS.

1. <u>Cannabis Distribution Facilities shall not be located within 600 feet from any</u>

Child Day Care Center, K-12 school, public park, Youth Center, or Religious Institution. This distance shall be measured from the nearest point of the respective property lines using a direct straight-line measurement without regard to intervening structures, as specified in subdivision (b) of Section 26054 of the Business and Professions Code. A new adjacent use will not affect the continuation of an existing legal use that has been established under this Article and continuously operating in compliance with the conditional use permit, and local and State laws and regulations. This setback meets the minimum requirements of State law and may not be modified with approval of a setback adjustment.

- 2. All-Cannabis Distributions Facilities shall comply with the setback standards for the zone classification <u>in which</u> they are located <u>in, except when adjacent</u> to a residential zone where the minimum setback from the residentially zoned lot lines shall be 25 feet.
- 23. Setbacks may be modified with an approved setback adjustment in accordance with Section 18.33 of this ordinance. In no case shall a setback be less than setbacks required by the State of California <u>Department Bureau</u> of Cannabis Control, the California Building Code, or Ordinance No. 457, or other applicable State law.

## **<u>CB</u>**. OPERATIONS.

- Cannabis and Cannabis Products shall only be transported between permitted and licensed Commercial Cannabis Activities.
- In addition to the requirements of Section 19.505.<u>RQ.</u>, the following record keeping measures are required to be implemented for all Cannabis Distribution Facilities:
  - a. Prior to transporting Cannabis or Cannabis Products, a shipping manifest shall be completed as required by <u>sS</u>tate law and

1 regulations. 2 A copy of the shipping manifest shall be maintained during b. 3 transportation and shall be made available upon request to law 4 enforcementenforcement, or any agents of the State or County 5 charged with enforcement. 6 Cannabis Distribution Facilities shall maintain appropriate records of c. 7 transactions and shipping manifests that demonstrate an organized 8 method of storing and transporting Cannabis and Cannabis Products 9 to maintain a clear chain of custody. 10 3. Cannabis Distribution Facilities shall ensure that appropriate samples of 11 Cannabis or Cannabis Products are tested by a permitted and licensed testing 12 facility prior to distribution and shall maintain a copy of the test results in its 13 files. 14 4. Cannabis Distribution Facilities shall not be open to the public. 15 5. Cannabis Distribution Facilities shall not transport or store non-eCannabis 16 goods. 17 FINDINGS. ĐC. 18 In addition to the requirements for approval in Section 19.506 of this ordinance, no 19 conditional use permit shall be approved or conditionally approved unless the 20 following findings are made: 21 1. The Cannabis Distribution Facility complies with all the requirements of the 22 State and County for Cannabis the dDistribution of Cannabis. 23 2. The Cannabis Distribution Facility's operating plan demonstrates proper 24 protocols and procedures that address enforcement priorities for Cannabis 25 related activities including restricting access to minors, and ensuring that 26 Commercial Cannabis Activities and Cannabis Products are obtained from 27 and supplied only to other permitted and licensed sources and not distributed 28

out of State.

 The Cannabis Distribution Facility is not <u>located</u> within 600 feet from any Child Day Care Center, K-12 school, public park, or-Youth Center, or <u>Religious Institution</u>. <u>The distance is measured in accordance with Section</u> <u>19.521.A.1.</u>

4. The Cannabis Distribution Facility is not open to the public.

5. For Cannabis Distribution Facility lots with verified cannabis-related violations within the last 12 months prior to the adoption date of Ordinance No. 348.4898, the use will not contribute to repeat violations on the lot and the all applicable fees have been paid.

SECTION 19.522. CANNABIS MICROBUSINESS FACILITIES.

## APPLICABILITY.

Notwithstanding any other provision of this ordinance, Cannabis Microbusiness Facilities are allowed in the following zone classifications with an approved conditional use permit in accordance with Section 18.28 of this ordinance: C-1/C-P, C-P-S, I-P, M-SC, M-M<sub>2</sub> and M-H, and M-U, except in the instance that a Cannabis Microbusiness Facility includes manufacturing uses where such Cannabis Microbusiness Facility is only allowed in the <u>C-1, C-P, C-P-S, C-O, I-P, M-SC, M-M<sub>2</sub></u> and M-H, and M-U zones.

## SECTION 19.523. CANNABIS MICROBUSINESS FACILITIES STANDARDS.

In addition to the approval requirements in Section 19.506 of this ordinance and development standards for the applicable zoning classification, Cannabis Microbusiness Facilities shall comply with the standards provided below. If there is an inconsistency between the development standards of the zone classification and these standards, the more restrictive standard applies.

## A. GENERAL LOCATION.

1. Cannabis Microbusiness Facilities shall not be located within 600 feet from

any Child Day Care Center, K-12 school, public park, or Youth Center. Distance shall be measured from the nearest point of the respective lot lines using a direct straight-line measurement. A new adjacent use will not affect the continuation of an existing legal use that has been established under this Article and continuously operating in compliance with the conditional use permit, and local and State laws and regulations.

7 Cannabis Microbusiness Facilities that include a Cannabis retail competent 8 shall not be located within 1,000 feet from any Child Day Care Center, K-12 9 school, public park, or Youth Center. Distance shall be measured from the 10 nearest point of the respective lot lines using a direct straight-line 11 measurement. A new adjacent use will not affect the continuation of an 12 existing legal use that has been established under this Article and 13 continuously operating in compliance with the conditional use permit, and 14 local and State laws and regulations. This location requirement may be 15 modified with the approval of a variance pursuant to Section 18.27 of this 16 ordinance. In no case shall the distance be less than allowed by State law.

## B. <u>A.</u> SETBACKS.

 Cannabis Microbusiness Facilities that are not engaged as a Cannabis Retailer shall not be located within 600 feet from any Child Day Care Center, K-12 school, public park, Youth Center, or Religious Institution. This setback meets the minimum requirements of State law and may not be modified with approval of a setback adjustment.

2. Cannabis Microbusiness Facilities that are engaged as a Cannabis Retailer with an approved conditional use permit shall not be located within 1,000 feet from any Child Day Care Center, K-12 school, public park, Youth Center, or Religious Institution.

3. The distance shall be measured from the nearest points of the

28

17

18

19

20

21

22

23

24

25

26

27

1

2

3

4

5

respective property lines using a direct straight-line measurement without regard to intervening structures, as specified in subdivision (b) of Section 26054 of the Business and Professions Code. A new adjacent use will not affect the continuation of an existing legal use that has been established under this Article and continuously operating in compliance with the conditional use permit, and local and State laws and regulations.

- 1. <u>4.</u> <u>All Unless otherwise specified by this Article, Cannabis</u> Microbusiness Facilities shall comply with the setback standards for the zone classification in which they are located in, except when adjacent to a residential zone where the minimum setback from the residentially zoned lot lines shall be 25 feet. In the event that a Cannabis Microbusiness Facility includes retail sales of Cannabis, then the minimum setback from residentially zoned lot lines shall be 40 feet.
- 2. <u>54.</u> Setbacks may be modified with an approved setback adjustment in accordance with Section 18.33 of this ordinance. In no case shall a setback be less than setbacks required by the State of California <u>Department Bureau</u> of Cannabis Control, the California Building Code, or Ordinance No. 457, <u>or other applicable State law</u>.
- <u>B</u>€. ACTIVITIES.

1

2

3

4

5

6

7

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

23

24

25

26

27

- Cannabis Microbusiness Facilities shall not transport or store non-eCannabis goods.
- Cannabis Microbusiness Facilities may <u>cultivate indoors</u>, distribute, manufacture (<u>with non-without</u>-volatile <u>compoundssolvents</u>) and <u>offer and</u> <u>offer for retaildispense</u> Cannabis under a single Cannabis Microbusiness Facilities license issued by the <u>State\_State</u>.
- Cannabis Microbusiness Facilities may cultivate Cannabis indoors in an area less than 10,000 square feet.

1	4. Cannabis Microbusiness Facilities shall include at least three of the
2	following Commercial Cannabis Activities, which shall be set forth in the
3	conditional use permit:
4	a. Indoor <u>Cannabis</u> Cultivation <u>less thanup to 10,000</u> square feet
5	b. <u>Cannabis</u> Manufacturing Facility (with non-volatile
6	<u>compounds</u> solvents)
7	c. <u>Cannabis</u> Distribution <u>Facility</u>
8	d. <u>Cannabis</u> Retail <u>er-sales</u>
9	
10	<del>D</del> <u>C</u> . <u>DELIVERIES</u> .
11	Cannabis Microbusiness Facilities that are engaged as a Cannabis Retailer with an
12	approved conditional use permit may provide Cannabis Deliveries consistent with
13	State law. Cannabis Delivery is not a separate Commercial Cannabis Activity for
14	the purposes of this Article.
15	
16	D. OPERATIONS.
17	Cannabis Microbusiness Facilities shall comply with the operational requirements
18	set forth in this Article that apply to the specified uses authorized by the approved
19	conditional use permits. For Cannabis Microbusiness Facilities that are engaged in
20	Indoor Cannabis Cultivation, the Cannabis Microbusiness Facility shall comply with
21	, and the water and energy conservation standards required of Cannabis Cultivation
22	by this Article as applicable to Cannabis Microbusiness Facilities that includes
23	cultivation.
24	E. TRANSPORT-ONLY DISTRIBUTION.
25	Cannabis Microbusiness Facilities with an approved conditional use permit may
26	transport the Cannabis or Cannabis Product the licensee has cultivated or
27	manufactured to another Commercial Cannabis Activity licensee, only if the
28	

Cannabis Microbusiness Facility operator also has an approved transport-only distribution license in accordance with California Code of Regulations section 15315 and all other applicable State law. This type of transport-only distribution is not considered Cannabis Distribution for the purposes of this Article.

## <u>F</u>E. FINDINGS.

In addition to the requirements for approval in Section 19.506 of this ordinance, no conditional use permit shall be approved or conditionally approved unless the following findings are made:

- The Cannabis Microbusiness Facility complies with all the requirements of the State and local laws and regulations.
- 2. The Cannabis Microbusiness Facility's operating plan demonstrates proper protocols and procedures that address enforcement priorities for Cannabis activities including restricting access to minors, and ensuring that Cannabis and Cannabis Products are obtained from and supplied only to other permitted and licensed sources within the State and not distributed out of State.
- 3. The Cannabis Microbusiness Facility that is engaged as a Cannabis Retailer with an approved conditional use permit is not located within 1,000 feet from any Child Day Care Center, K-12 school, public park, or-Youth Center, or Religious Institution or a setback adjustment variance in accordance with Section 18.33 of this ordinance has been approved allowing a shorter distance, but not less than recommended by State law. The distance is measured in accordance with Section 19.523.A.3.
- 4. The Cannabis Microbusiness Facility that is not engaged as a Cannabis Retailer with an approved conditional use permit is not located within 600 feet from any Child Day Care Center, K-12 school, public park, Youth

1

2

3

4

5

6

7

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

23

24

25

26

27

1		Center, or Religious Institution or a setback adjustment in accordance with
2		Section 18.33 of this ordinance has been approved allowing a shorter
3		distance, but not less than recommended by State law. The distance is
4		measured in accordance with Section 19.523.A.3.
5	4.	For Cannabis Microbusiness Facility lots with verified cannabis-related
6		violations within the last 12 months prior to the adoption date of Ordinance
7		No. 348.4898, the use will not contribute to repeat violation on the site and
8		all applicable fees have been paid.
9	<u>SECTION 19.524.</u>	TEMPORARY CANNABIS EVENT.
10	A. REQU	JIREMENTS FOR APPROVAL.
11	The P	lanning Director shall approve an application for a temporary Cannabis event
12	permi	t if all of the following are met:
13	1.	The temporary Cannabis event will take place on County Fair property or
14		District Agricultural Association property.
15	2.	The temporary Cannabis event is not located within 1,000 feet from any Child
16		Day Care Center, K-12 school, public park, or Youth Center, or Religious
17		Institution. This Ddistance shall be measured from the nearest point of the
18		respective lot lines using a direct straight-line measurement without regard to
19		intervening structures, as specified in subdivision (b) of Section 26054 of the
20		Business and Professions Code.
21	3.	The temporary Cannabis event will not occur during the hours of 12:00 a.m.
22		to 6:00 a.m.
23	4.	The temporary Cannabis event is setback a minimum of 100 feet from lot
24		lines.
25	5.	Any participant selling The sale of Cannabis or Cannabis Products shall be
26		performed by a Cannabis Retailer or Cannabis Microbusiness that possesses
27		both an approved conditional use permit and a valid State Cannabis Retailer
28		
		62

1		license or a valid State Cannabis Microbusiness license from the State, which
2		shall be included in the permit application. Participants licensed as a
3		Cannabis Retailer or Cannabis Microbusiness Facility engaged as a Cannabis
4		Retailer must comply with all rules for on-site sales and consumption,
5		including, but not limited to: displays of Cannabis and Cannabis Products,
6		packaging of Cannabis and Cannabis Products, age restrictions on sales,
7		daily sales limits, no free samples, and track and trace requirements. Each
8		participant licensed as a Cannabis Retailer or Cannabis Microbusiness
9		Facility engaged as a Cannabis Retailer may only sell Cannabis or Cannabis
10		Products in a retail area designated in the diagram of the physical layout of
11		the temporary Cannabis event. Each participant licensed as a Cannabis
12		Retailer or Cannabis Microbusiness Facility engaged as a Cannabis Retailer
13		shall not sell Cannabis or Cannabis Products from mobile wagons, carts, or
14		other similar means.
15	<u>116.</u>	A condition of approval shall be applied to all temporary Cannabis event
16		permits requiring the event organizer to obtain a valid State Cannabis event
17		organizer license and a valid State as an event organizer and for the
18		temporary Cannabis event license, at least 110 calendar days before the
19		event's-first day of the event. If this condition of approval is not met, the
20		temporary Cannabis event permit becomes null and void.
21	<u>7</u> <del>6</del> .	The sale or consumption of alcohol or tobacco is not allowed at the location
22		of the temporary Cannabis event.
23	7. The event organizer	for the temporary Cannabis will obtain a valid State event organizer license
24	authorizing the retail sale of	Cannabis goods and the temporary Cannabis event.
25	<u>89</u> 8.	Access to the area(s) where sale or consumption of Cannabis occurs is
26		restricted to persons 21 years of age or older.
27	<u>910</u> 9.	Cannabis consumption is not visible from any public place or non-age-
28		
		63

1	restricted area.
2	1 <u>01</u> $\theta$ . Security shall be present at the temporary Cannabis event.
3	11. A condition of approval shall be applied to all temporary Cannabis event
4	permits requiring the event organizer to obtain a valid State license as an
5	event organizer and for the temporary event at least 10 calendar days before
6	the event's first day. If this condition of approval is not met, the temporary
7	Cannabis event permit becomes null and void.
8	B. APPLICATION.
9	——No less than 120 days from the event's first day, an event organizer shall
10	apply for and obtain a temporary Cannabis event permit in accordance with Section
11	18.30 of this ordinance. All the procedural provisions of Section 18.30 shall apply
12	to the application, except subsection c. thereof relating to requirements for approval,
13	subsection e. thereof relating to appeals and subsection f. thereof relating to the use
14	of the permit after the application is approved.
15	C. REVOCATION.
16	A temporary Cannabis event permit may be revoked pursuant to and in accordance
17	with Section 19.525 of this ordinance.
18	
19	SECTION 19.525. MODIFICATION OR REVOCATION OF PERMITS FOR
20	COMMERCIAL CANNABIS ACTIVITIES.
21	A. AUTHORITY FOR MODIFICATION OR REVOCATION.
22	The Board of Supervisors shall have the authority to modify or revoke a
23	previously granted conditional use permit for Commercial Cannabis Activity
24	upon finding that one or more of the following conditions exist:
25	1. The use is detrimental to the public health, safety or general welfare.
26	2. The use is a public nuisance.
27	3. The permit was obtained by fraud or perjured testimony.
28	

1		4. The use is being conducted in violation of the conditions of approval or
2		advisory notification document.
3		5. The use for which the permit was granted has ceased or has been
4		suspended for one year or more.
5		6. A Certificate of Occupancy has not been obtained for the approved
6		Commercial Cannabis Activity within two (2) years of obtaining an
7		approved conditional use permit for the Commercial Cannabis Activity.
8		The Planning Director has the discretion to allow up to three (3)
9		extensions of one (1) year each based on a showing by the permittee of a
10		good faith intent to commence the use. The Planning Director's
11		extensions are not subject to a public hearing.
12	<u>B.</u>	INITIATION OF MODIFICATION OR REVOCATION.
13		A public hearing shall be set before the Board of Supervisors upon a
14		determination by the Planning Director that grounds for modification or
15		revocation exist.
16	<u>C.</u>	NOTICE OF PUBLIC HEARING.
17		Notice of the time, date and place of the public hearing shall be given as provided
18		in Section 18.26.C. of this ordinance.
19	<u>D.</u>	-PUBLIC HEARING.
20		In conducting the public hearing, the Board of Supervisors shall:
21		1. Set the hearing procedures;
22		2. Hear relevant testimony from interested persons and the Chairperson of
23		the Board of Supervisors may require that witnesses be sworn;
24		3. Make its decision within a reasonable time after the close of the public
25		hearing; and
26		4. Have the discretion to continue the hearing from time to time.
27	<u>E.</u>	-NOTICE OF DECISION.
28		
	11	

1	1. Notice of the Board of Supervisor's decision and a report of the	
2	proceedings shall be filed with the Clerk of the Board of Supervisors not	
3	later than 45 days following the date the decision is adopted.	
4	2. A copy of the notice of decision and the report of the proceedings shall	
5	also be mailed to the applicant at the address on file with the Planning	
6	Department within that period of time.	
7	<u> </u>	
8	The decision of the Board of Supervisors to modify or revoke a previously	
9	granted conditional use permit for Commercial Cannabis Activity is final."	
10	Any conditional use permit granted under this Article may be revoked upon the findings	
11	and procedures contained in Section 18.31 of this ordinance except that the Planning	
12	Commission shall be the hearing body to make a determination that grounds for revocation	
13	exist and provide notice of the revocation. All other procedural requirements and rights of	
14	appeal set forth in Section 18.31 of this ordinance shall govern the hearing."	
15	Section 5. Section 21.19d. of Ordinance No. 348 is amended to read as follows:	
16	" <u>SECTION 21.19d.</u> – <u>CANNABIS, ADULT-USE.</u>	
17	Cannabis and any <u>Ceannabis</u> <u>P</u> roduct intended to be sold for use by adults 21 years or older	
18		
19	pursuant to State law-the Medicinal and Adult-Use Cannabis Regulation and Safety Act (Senate	
20	<del>Bill 94 (2017)</del> ."	
21	Section 6. Section 21.19e. of Ordinance No. 348 is amended to read as follows:	
22	"SECTION 21.19e. ————————————————————————————————————	
23	<u>———Cannabis or Cannabis Product intended to be sold or donated for use pursuant to the</u>	
24	Compassionate Use Act of 1996 (Proposition 215), found in Section 11362.5 of the Health	
25	and Safety Code, by a patient in California who possesses a physician's recommendation	
26	for Cannabis for medical purposes, or in compliance with any compassionate use, equity,	
27	or other similar program administered by a local jurisdiction."	
28		

1	Sectio	on 7. Section 21.19f. of Ordinance No. 348 is amended to read as follows:
2		"SECTION 21.19f. CANNABIS CULTIVATION.
3		Any activity involving the planting, growing, harvesting, drying, curing,
4		gradinggrading, or trimming of eCannabis."
5		
6		
7		
8	Section 8.	Section 21.19g. of Ordinance No. 348 is amended to read as follows:
9		"SECTION 21.19g. CANNABIS CULTIVATION AREA.
10		The area on a lot where Cannabis is planted, grown, harvested, dried, cured,
11		graded, or trimmed or that does all or any combination of these activities."
12	Sectio	on 9. Section 21.19h. of Ordinance No. 348 is amended to read as follows:
13		"SECTION 21.19h. CANNABIS MOBILE DELIVERY.
14		The commercial transfer of Cannabis or eCannabis pProducts from a Cannabis
15		Retailer or Cannabis Microbusiness engaged as a Cannabis Retailer with an approved
16		conditional use permit and Type 9 State license, up to an amount_allowed by the State of
17		California - Bureau Department of Cannabis Control-or its successor, to a primary
18		caregiver, qualified patient, or customer at- a physical address in California in
19		compliance with all State laws and regulationsand requires a Type 9 State license."
20		
21		
22	Section 10.	Section 21.19i. of Ordinance No. 348 is amended to read as follows:
23		"SECTION 21.19i. CANNABIS DISTRIBUTION.
24		The procurement, sale, and transport of Ceannabis and Ceannabis Pproducts
25		between <u>Commercial eCannabis Activity</u> licensees."
26		
27	Sectio	on 11. Section 21.19j. of Ordinance No. 348 is amended to read as follows:
28		
		67

1		"SECTION 21.19j. CANNABIS DISTRIBUTION FACILITIES.
2		<u>A</u> facility engaged in the storage of Cannabis or <u>C</u> eannabis <u>p</u> Products, for later
3		distribution to permitted and licensed Cannabis Manufacturing Facilities, Cannabis Testing
4		Facilities, or Cannabis Retailers."
5	Section	<u>n 12</u> . Section 21.19k. of Ordinance No. 348 is amended to read as follows:
6		"SECTION 21.19k. CANNABIS MANUFACTURING.
7		The compounding, blending, extracting, infusing, or otherwise making or
8		preparing a eCannabis pProduct and includes any processing, preparing, holding, or
9		storing of components and ingredients."
10		
11		
12		
13	Section 13.	Section 21.191 of Ordinance No. 348 is amended to read as follows:
14		<u>"SECTION 21.191. CANNABIS MANUFACTURING FACILITY</u> (NON
15	<b>VOLA</b>	<del>TILE)</del> .
16		A facility requiring a Type 6, Type N, Type P or Type S State manufacturing
17		license, that processes, produces, prepares, propagates, holds, stores, packages, labels
18		or compounds cannabis or cannabis products either directly or indirectly or by
19		extraction and/or infusion methods, or independently by means of chemical synthesis
20		or by a combination of extraction and/or infusion and chemical synthesis, using non-
21		volatile <u>or volatile</u> , organic compounds, as applicable to the State license, at a fixed
22		location, that packages or repackages cannabis or cannabis products, or labels or
23		relabels its containers. Cannabis manufacturing also includes any processing, preparing,
24		holding, or storing of components and ingredients".
25		
26	Sectior	<u>n 14.</u> Section 21.19m of Ordinance No. 348 is amended to read as follows:
27		"SECTION 21.19m. CANNABIS MICROBUSINESS FACILITY.
28		

1	A facility that is engaged in at least three of the following Commercial Cannabis Activities:
2	Indoor Cannabis Cultivation less than 10,000 square feet, Cannabis Manufacturing (with
3	non-volatile compounds), Cannabis Distribution, or Cannabis Retailer."
4	Section 15. Section 21.19n of Ordinance No. 348 is amended to read as follows:
5	<u>"SECTION 21.19n. CANNABIS OWNER.</u>
6	A Cannabis Owner is any of the following:
7	1A person with an aggregate ownership interest of 20 percent or more in the
8	Commercial
9	Cannabis Activity for which a license or permit is being sought, unless the interest is
10	solely a security, lien, or encumbrance.
11	2The chief executive officer of a nonprofit or other entity.
12	3A member of the board of directors of a nonprofit.
13	4An individual who will be participating in the direction, control, or management
14	of the
15	person applying for Commercial Cannabis Activity permit or license."
16	Section 16. Section 21.190 of Ordinance No. 348 is amended to read as follows:
17	<u>———"SECTION 21.190. CANNABIS PACKAGE.</u>
18	Any container or receptacle used for holding e <u>C</u> annabis or e <u>C</u> annabis <u>pP</u> roducts."
19	Section 17. Section 21.19p of Ordinance No. 348 is amended to read as follows:
20	<u>"SECTION 21.19p. CANNABIS PLANT, MATURE.</u>
21	A Cannabis plant that is flowering, as defined by State law."
22	Section 18. Section 21.19q of Ordinance No. 348 is amended to read as follows:
23	"SECTION 21.19q. CANNABIS PRODUCT, EDIBLE.
24	Manufactured Cannabis Product that is intended to be used, in whole or in part, for
25	human consumption, including, but not limited to, chewing gum, but excluding
26	products set forth in Division 15 (commencing with Section 32501) of the Food and
27	Agricultural Code. An edible cannabis product is not considered food, as defined by
28	

1	Section 109935 of the Health and Safety Code, or a drug, as defined by Section 109925
2	of the Health and Safety Code."
3	
4	Section 198. Section 21.19re of Ordinance No. 348 is amended to read as follows:
5	<u>"SECTION 21.19rq. CANNABIS PRODUCTS.</u>
6	Cannabis that has undergone a process whereby the plant material has been
7	transformed into a
8	_concentrate, including, but not limited to, concentrated eCannabis, or an edible or topical
9	product
10	containing eCannabis or concentrated Ceannabis and other ingredients."
11	<u>Section 19.</u> Section 21.19r of Ordinance No. 348 is amended to read as follows:
12	<u>SECTION 21.19r. EDIBLE PRODUCT.</u>
13	Manufactured cannabis product that is intended to be used, in whole or in part, for
14	human consumption, including, but not limited to, chewing gum, but excluding
15	products set forth in Division 15 (commencing with Section 32501) of the Food and
16	Agricultural Code. An edible cannabis product is not considered food, as defined by
17	Section 109935 of the Health and Safety Code, or a drug, as defined by Section 109925
18	of the Health and Safety Code.
19	Section 20. Section 21.19s. of Ordinance No. 348 is amended to read as follows:
20	"SECTION 21.19s. CANNABIS RETAILER.
21	A facility where Cannabis, <u>C</u> eannabis <u>P</u> products, or devices specifically for
22	the use of Cannabis or <u>C</u> eannabis <u>P</u> products are offered, either individually or in any
23	combination, for retail sale <u>and/or, including an establishment that</u> <u>Cannabis</u>
24	Deliverydelivers cannabis and cannabis products as part of a retail sale. Cannabis retailers
25	may include mobile delivery but shall not include mobile dispensaries. Cannabis Retailers
26	were formerly known as cannabis dispensaries. Non-store front Cannabis Retailers are not
27	open to the public. Store front Cannabis Retailers are open to the public."
28	

<u>Section 21.</u> ——Section 21.19t. of Ordinance No. 348 is amended to read as follows: \_\_\_\_\_<u>-"SECTION 21.19t. CANNABIS TESTING FACILITY</u>.

A laboratory, facility, or entity that offers or performs tests of e<u>C</u>annabis or e<u>C</u>annabis p<u>P</u>roducts." $\rightarrow$ 

#### Section 22. A new Section 21.19u. is added to Ordinance No. 348 to read as follows: "SECTION 21.19u. CANNABIS WHOLESALE NURSERY.

A <u>A</u> site that produces only clones, immature plants, seeds, or other agricultural products used specifically for the planting, propagation, and cultivation of Cannabis. Cultivation as a Cannabis

\_Wholesale Nursery may be considered outdoor, indoor or mixed-light cultivation."

Section 23. A new Section 21.19v. is added to Ordinance No. 348 to read as follows:

#### "SECTION 21.19v. CANOPY.

For purposes of Article XIXh only, the designated area or areas at a licensed Premises that will contain Mature <u>Cannabis</u> Plants at any point in time. Canopy shall be calculated in square feet and measured using clearly identifiable boundaries of all areas that will contain Mature <u>Cannabis</u> Plants at any point in time, including all of the spaces within the boundaries."

Section <u>3124</u>. A new Section 21.19w. is added to Ordinance No. 348 to read as follows:

#### "SECTION 21.19w. COMMERCIAL CANNABIS ACTIVITY.

The cultivation, possession, manufacture, distribution, processing, storing, laboratory testing, packaging, labeling, transportation, delivery or sale of Cannabis and e<u>C</u>annabis <u>P</u>products as provided for in this division."

Section 3225. A new Section 21.19x. is added to Ordinance No. 348 to read as follows: "SECTION 21.19x. COMMERCIAL RETAIL CORRIDOR.

<u>Those corridor areas in the unincorporated area of Riverside County located within one-half</u> <u>mile from a designated freeway, including Interstate 10, Interstate 15, Interstate 215, State</u>

1	Route 91, and State Route 60."
2	Section 3326. A new Section 21.19y. is added to Ordinance No. 348 to read as follows:
3	<u>"SECTION 21.19y. RELIGIOUS INSTITUTION.</u>
4	Any church, synagogue, mosque, temple or building which is used primarily for religious
5	worship and related religious activities."
6	Section 3427. A new Section 21.19z. is added to Ordinance No. 348 to read as follows:
7	"SECTION 21.19z. UNDULY CONCENTRATED CORRIDOR.
8	A Commercial Retail Corridor where the number of approved conditional use permits for
9	cannabis retailers within that Commercial Retail Corridor has reached a limit of one for each
10	2,000 inhabitants of the census tract in which the cannabis retailers are located."
11	Section 3528. Section 21.31b of Ordinance No. 348 is deleted.
12	Section <u>3629</u> . Section 21.51j. of Ordinance No. 348 is amended to read as follows:
13	"SECTION 21.51]. MIXED LIGHT CANNABIS CULTIVATION.
14	The cultivation of Mature Cannabis Plants in a greenhouse, hoop structure, glasshouse,
15	econservatory, hothouse, or other similar structure using light deprivation or one of the
16	artificial
17	
18	lighting models described below:
19	1Mixed-light Tier 1 – the use of artificial light at a rate of six (6) watts per square
20	foot or less.
21	2Mixed-light Tier 2 – the use of artificial light at a rate above six (6) and below or
22	equal to twenty-five (25) watts per square foot."
23	Section 370. Section 21.51k. of Ordinance No. 348 is amended to read as follows:
24	<u>"SECTION 21.51k. MOBILE CANNABIS RETAILER.</u>
25	The commercial transfer of Cannabis or cannabis products from an outdoor location or
26	mobile structure (e.g. food truck or food cart).
27	A motorized or non-motorized vehicle, cart, trailer, wagon, container or other similar
28	

1	personal property not located on a licensed Premises, pursuant to State law, and from
2	which Cannabis, Cannabis Products, or devices specifically for the use of Cannabis or
3	Cannabis Products are offered, either individually or in any combination, for retail sale
4	and/or Cannabis Delivery."
5	Section 381. Section 21.511. of Ordinance No. 348 is deleted.
6	Section 329. Section 21.51m. of Ordinance No. 348 is deleted.
7	
8	
9	<i>#</i> #
10	<u>##</u>
11	SECTION 21.19q. CANNABIS TRANSPORT.
12	The transfer of Cannabis or cannabis products from the permitted Commercial Cannabis Activity
13	location of one licensee to the permitted Commercial Cannabis Activity location of another
14	licensee, for the purposes of conducting Commercial Cannabis Activities authorized
15	pursuant to the California Business & Professions Code Sections 19300, et seq. and 26000.
16	Section <u>3340</u> . EFFECTIVE DATE. This ordinance shall take effect thirty (30) days after its
17	adoption.
18	
19	
20	BOARD OF SUPERVISORS OF THE COUNTY
21	OF RIVERSIDE, STATE OF CALIFORNIA
22	
23 24	By: Chairman, Board of Supervisors
24 25	Chairman, Board of Supervisors
25 26	ATTEST:
20 27	CLERK OF THE BOARD
27	
20	73
	/3

1	D
2	By: Deputy
3	
4	
5	(SEAL)
6	
7	
8	
9	
10	
11	APPROVED AS TO FORM
12	January, 2023
13	
14	
15	By:
16	Deputy County Counsel
17	Deputy County Counsel
18	
19	
20	
21	
22	
23	
24	
25	
26	
27	
28	
	74



#### RIVERSIDE COUNTY AIRPORT LAND USE COMMISSION

February 9, 2023

CHAIR Steve Manos Lake Elsinore Matthew Taylor, Principal Planner City of Riverside Planning Division 3900 Main Street 3<sup>rd</sup> Floor Riverside CA 92522

VICE CHAIR Russell Betts Desert Hot Springs
RE: AIRPORT LAND USE COMMISSION (ALUC) DEVELOPMENT REVIEW – DIRECTOR'S DETERMINATION

COMMISSIONERS	File No.: Related File No.:	ZAP1069RG23
John Lyon Riverside	APN:	PR-2022-001453 (Zoning Code Amendment) Citywide
Steven Stewart Palm Springs	Dear Mr. Taylor,	
Richard Stewart Moreno Valley	Resolution No. 2011-02, as	ide County Airport Land Use Commission (ALUC) pursuant to its ALUC Director, I have reviewed City of Riverside Zoning Code
Michael Geller Riverside	Municipal Code including, k	453), a proposal amending Title 19 (Zoning) of the Riverside out not limited to Articles V (Base Zones and Related Use and I (Overlay Zones), VII (Specific Plan Land Use Provisions), and X
Vernon Poole Murrieta	(Definitions) related to comn	nercial cannabis uses. The proposed amendments include but are Citywide prohibit of commercial cannabis uses; establish Cannabis
STAFF	Storefront Retail, Cannabis permitted/conditionally perm	Warehousing/Distribution and Cannabis Testing Laboratories as itted uses in specified Zones; establish Cannabis Cultivation and
Director Paul Rull	zoning code for consistency	as prohibited uses in all Zones; amend various chapters of the with proposed amendments to Titles 5 and 9 of the Municipal Code;
Simon Housman Jackie Vega Barbara Santos		ated to the proposed changes to cannabis uses.
County Administrative Center 4080 Lemon St.,14 <sup>th</sup> Floor. Riverside, CA 92501 (951) 955-5132	Riverside Municipal Airport	t Land Use Compatibility Plan, the 2014 March Air Reserve ad Use Compatibility Plan, and the 2004 Flabob Airport Land Use
www.rcaluc.org		tency relates to airport compatibility issues and does not necessarily of the proposed amendment.
	If you have any questions, p	lease contact me at (951) 955-6893.
	Sincerely, RIVERSIDE COUNTY AIRF	PORT LAND USE COMMISSION
	Par Rul	
	Paul Rull, ALUC Director	
	cc: ALUC Case File	

X:\AIRPORT CASE FILES\Regional\ZAP1069RG23\ZAP1069RG23.LTR.doc

#### TITLE 19 – ZONING

#### Chapter 19.146 - NORTHSIDE SPECIFIC PLAN ZONE (NSP)

. .

.

#### 19.146.025\_-Prohibited uses.

A. Any use which is listed as prohibited in the adopted Northside Specific Plan or prohibited by state and/or federal law is strictly prohibited.

B. Commercial marijuana cultivation, manufacturing, distribution, or sale is also strictly prohibited.

•

#### Chapter 19.147 - DOWNTOWN SPECIFIC PLAN ZONE (DSP)

#### 19.147.025 -Prohibited uses.

Any use which is listed as prohibited in the adopted Downtown Specific Plan or prohibited by state and/or federal law is strictly prohibited. Commercial marijuana cultivation, manufacturing, distribution, or sale is also strictly prohibited.

Chapter 19.150 - BASE ZONES PERMITTED LAND USES

.

#### 19.150.020 Permitted land uses.

- A. A. Table 19.150.020 A. (Permitted Uses Table), Table 19.150.020 B. (Incidental Uses Table) and Table 19.150.020 C. (Temporary Uses Table) in Chapter 19.150 (Base Zones Permitted land uses) identify permitted uses, permitted accessory uses, permitted temporary uses, and uses permitted subject to the approval of a minor conditional use permit (Chapter 19.730 - Minor Conditional Use Permit), or conditional use permit (Chapter 19.760 - Conditional Use Permit), or uses requiring some other permit. Table 19.150.020 A. also identifies those uses that are specifically prohibited. Uses not listed in tables are prohibited unless the Community & Economic Development Department Director, or his/her designee, pursuant to Chapter 19.060 (Interpretation of Code), determines that the use is similar and no more detrimental than a listed permitted or conditional use. Any use which is prohibited by state and/or federal law is also strictly prohibited.
- B. B. Chapter 19.149 Airport Land Use Compatibility includes additional Airport Land Use Compatibility Plan requirements for discretionary actions proposed on property located within an Airport Compatibility Zone. When located within an Airport Land Use Compatibility Zone, greater land use, restrictions for airport compatibility may apply per the applicable Airport Land Use Compatibility Plan.

								19.1	50.020.	A Permi	tted Use	s Table										
This table identif	ies permitte	ed uses and	uses requiri	ng approval	of other per	mits by zoni	ing designati	ion. In addit	ion to these	uses, other	incidental a	nd tempora	ry uses may	also be perr	nitted as no	ted in the Ir	cidental Us	es Table and	I the <b>Tem</b>	oorary Us	es Table.	
	fies permitted uses and uses requiring approval of other permits by zoning designation. In addition to these uses, other incidental and temporary uses may also be permitted as noted in the Incidental Uses Table and the <b>Temporary</b> Uses Table																					
Use			ation (RC), R tate (RE), Si	esidential Zo esidential Ag ngle-Family F ential (R-3 ar	gricultural (R Residential (I			(Office	, Commercia	nmercial Zon Il Retail, Con ial Regional	nmercial		ixed Use Zor rhood, Villag			ess Manufac	al Zones turing Park, Industrial, A		(Public	Other Zones Facilities, Ra orhood Com Overlay)	Location of Required Standards in the Municipal Code	
	RC**	RA-5**	RR	RE	R-1	R-3	R-4	0	CR	CG	CRC*	MU-N	MU-V*	MU-U*	BMP	I	AI	AIR	PF	RWY	NC Overlay	wunicipal code
•																						
<u>Cannabis</u> Cultivation <del>, Personal</del>	х	х	x	х	x	х	x	x	х	х	x	x	x	х	х	х	х	х	х	х	х	See <u>Also</u> Incidental Uses Table
Cannabis, Microbusiness	х	Х	х	Х	х	х	Х	х	Х	Х	Х	Х	х	Х	Х	х	Х	Х	Х	Х	Х	
Cannabis Uses and Activities Storefront Retail																						See Retail Sales
Cannabis Non-storefront Retail																						See Retail Sales
Cannabis Testing Laboratory																						<u>See Laboratories -</u> <u>Research</u>

								19.1	50.020.	A Permit	tted Use	s Table										
This table identifi	This table identifies permitted uses and uses requiring approval of other permits by zoning designation. In addition to these uses, other incidental and temporary uses may also be permitted as noted in the Incidental Uses Table and the <b>Temporary</b> Uses Table.																					
											Zones											
Use	Residential Zones (Residential Conservation (RC), Residential Agricultural (RA-5), Rural Residential (RR), Residential Estate (RE), Single-Family Residential (R-1), Multiple Family Residential (R-3 and R-4))								Office & Commercial Zones (Office, Commercial Retail, Commercial General, Commercial Regional Center)					Mixed Use Zones (Neighborhood, Village, Urban)			ial Zones turing Park, Industrial, A		Other Zones (Public Facilities, Railroad, Neighborhood Commercial Overlay)			Location of Required Standards in the Municipal Code
	RC**	RA-5**	RR	RE	R-1	R-3	R-4	0	CR	CG	CRC*	MU-N	MU-V*	MU-U*	BMP	I	AI	AIR	PF	RWY	NC Overlay	
<u>Cannabis</u> , <u>Warehousing &amp;</u> Warehouse/ <u>Distribution-Facilities</u>																						See Warehousing & Distribution Facilities
· · · · · · · · · · · · · · · · · · ·																						
										•												

								19.1	50.020.	B Incide	ntal Use	s Table										
					This ta	ble identifie	es uses which	are general	ly only perm	itted as an i		e to some ot	her permitte	ed use on the	e property.							
Use			ation (RC), R tate (RE), Si		gricultural (R. Residential (F			(Office	Office & Com , Commercia al, Commerc	l Retail, Con	nmercial	Mixed Use Zones (Neighborhood, Village, Urban)				ess Manufa	rial Zones cturing Park, t Industrial,		(Publi	Other Zone c Facilities, F oorhood Cor Overlay)	Location of Required Standards in the Municipal Code	
	RC**	RA-5**	RR	RE	R-1	R-3	R-4	0	CR	CG	CRC*	MU-N	MU-V*	MU-U*	BMP	I	AI	AIR	AIR PF RWY NC Overlay			
•																						
Marijuana <u>Cannabis</u> Cultivation:																						
Commercial <u>, including Medical</u> Cannabis Cultivation, (Prohibited use)		x	х	Х	x	х	x	Х	х	х	x	Х	Х	×	Х	X	X	×	x	X	x	19.342 - <del>Marijuana<u>Cannabi</u> Uses and Activities</del>
Personal - Indoor	Р	Р	Р	Р	Р	Р	Р	х	Х	х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	See Article X
——Personal - Outdoor (Prohibited Use)	х	Х	х	х	х	Х	Х	Х	х	х	х	Х	Х	х	Х	Х	X	Х	Х	Х	Х	(Definitions)
• • •																						

. .

Page **3** of **9** 

#### Chapter 19.220 - SPECIFIC PLAN OVERLAY ZONE (SP)

#### 19.220.020 Permitted land uses and development standards.

For those properties where the Specific Plan Overlay Zone is applied, all permitted use restrictions, development standards, and other applicable standards or regulations governing development as contained within the adopted specific plan shall apply. To the extent that the specific plan does not enumerate use restrictions, development standards, or other applicable regulations, the standards associated with the underlying base zone shall apply. In the event that provisions of the adopted specific plan conflict with or do not correspond with the provisions of the underlying base zone, the provisions as contained in the adopted specific plan shall apply and supersede the underlying base zone requirements..., with the exception of marijuana-related uses which shall be exclusively regulated by the underlying zone and are specifically prohibited. Specific plans shall be prepared and processed to Chapter 19.820 (Specific Plan/Specific Plan Amendments).

#### Chapter 19.342 MARIJUANACANNABIS PERSONAL USES AND ACTIVITIES

.

#### 19.342.010 Purpose.

<u>The purpose of this Chapter is to</u> provide regulations related to personal and medical use only topursuant to California Health and Safety Code sections 11362.1 and 11362.2.

#### 19.342.020 - Prohibition.

- A. All marijuana cultivation, processing, delivery, sales and dispensaries, or any similar use, shall be prohibited activities in all zones and all specific plan areas in the City. No use permit, variance, building permit, or any other entitlement, license, or permit, whether administrative or discretionary, shall be approved or issued for the activities of marijuana cultivation, processing, delivery, sales, the establishment or operation of a marijuana dispensary or retail store, or any similar use, in the City, and no person shall otherwise establish or conduct such activities in the City.
- B. This section is meant to prohibit all activities for which a State license is required. Accordingly, the City shall not issue any permit, license, except for testing laboratories, or other entitlement for any activity for which a State license is required under the Medicinal and Adult Use Cannabis Regulation and Safety Act.
- C. Except as set forth in Section 19.342.040 below, cultivation of marijuana for medical purposes, including cultivation by a qualified patient or a primary caregiver, is expressly prohibited in all zones and all specific plan areas in the City. No person, including a qualified patient or primary caregiver, shall cultivate any amount of marijuana in the City, even for medical purposes.

#### <del>(Ord. 7431 § 5, 2018)</del>

19.342.030 - Cultivation.

- A. Outdoor. No individual or entity may plant, cultivate, harvest, dry, or process marijuana plants outdoors in any zone or specific plan area of the City. No use permit, building permit, variance, or any other permit or entitlement, whether administrative or discretionary, shall be approved or issued for any such use or activity.
- B. Indoor. No individual or entity may plant, cultivate, harvest, dry, or process marijuana plants inside a private residence, or inside an accessory structure to a private residence located upon the grounds of a private residence, in excess of the limitations imposed by California Health and Safety Code section 11362.2. No individual or entity may plant, cultivate, harvest, dry, or process marijuana plants inside any enclosed structure within any zone or specific plan area of the City which is not either a private residence or an accessory structure to a private residence located upon the grounds of a private residence.

#### 19.342.040 Personal-use.

Pursuant to California Health and Safety Code sections 11362.1 and 11362.2, aAn individual may cultivate marijuanacannabis for personal use only within a residential structure or other fully enclosed and locked accessory structure located entirely on residential property owned or legally possessed by him or her, pursuant to the following regulations:

- A. The cultivation of <u>marijuanacannabis</u> may take place only inside a lawfully existing and fully enclosed and secure private residence, or inside a lawfully existing and fully enclosed and secure accessory structure to a private residence that is located on the same parcel as the private residence. No cultivation shall occur outside of a fully enclosed structure.
- B. The primary use of the property shall be for a residence and cultivation is to be considered an incidental use.
- C. All areas used for cultivation of marijuanacannabis shall comply with all Buildings Codes and Regulations of the Riverside Municipal Code and the State of California, as well as all other applicable laws.
- D. Indoor grow lights are not allowed in any structure used for human habitation. Indoor grow lights in any other structure shall not exceed 1,000 watts per light, and shall comply with the California Building, Electrical and Fire Codes as adopted by the City.
- E. The use of gas products or volatile solvents, or dangerous poisons, toxins or carcinogens (including but not limited to CO 2, butane, propane, natural gas, xylene, styrene, gasoline, kerosene, O2 H2, methanol, isopropyl alcohol, methylene chloride, acetone, benzene, toluene, and trichloro-ethylene,) or generators for cultivation of marijuanacannabis is prohibited.
- F. Any structure used for the cultivation of marijuanacannabis must have a ventilation and filtration system installed that shall prevent marijuanacannabis plant odors from exiting the interior of the structure and designed to prevent mold and moisture and otherwise protect the health and safety of persons residing in the residence and cultivating the marijuanacannabis. This ventilation shall at a minimum consist of a system meeting the requirements of the current, adopted edition of the California Building Code section 1203.4 (Natural Ventilation) or section 402.3 (Mechanical Ventilation), or their equivalent(s).

- G. Any accessory structure used for the cultivation of <u>marijuanacannabis</u> shall be located in the rear yard area of the parcel or premises and must maintain a minimum setback equal to the greater of (1) the setback imposed pursuant to the applicable zoning provisions of this Code, or (2) ten feet from any property line. The yard where the structure is maintained must be enclosed by a solid fence at least six feet in height.
- H. Adequate mechanical locking or electronic security systems must be installed as part of the structure prior to the commencement of cultivation.
- MarijuanaCannabis cultivation shall be limited to six marijuanacannabis plants per private residence, regardless of whether the marijuanacannabis is cultivated inside the residence or in an accessory structure. The limit of six plants per private residence shall apply regardless of how many individuals reside at the private residence.
- J. The residential structure shall remain at all times a residence, with legal and functioning cooking, sleeping and sanitation facilities with proper ingress and egress. No room used for cooking of meals, sleeping or bathing shall be used for cultivation.
- K. Cultivation of marijuanacannabis shall take place only on impervious surfaces.
- L. There shall be no exterior evidence of marijuanacannabis cultivation occurring on the parcel.
- M. No more than one room in any structure may be used for cultivation.
- N. The <u>marijuanacannabis</u> cultivation area shall not exceed 32 square feet and not exceed ten feet in height per residence. This limit applies regardless of the number of individuals residing in the residence.
- O. No room or area in a structure that is used for cultivation shall be accessible to persons under 21 years of age.
- P. Written consent of the property owner to cultivate <u>marijuanacannabis</u> within the residential structure shall be obtained and shall be kept on the premises, and available for inspection by agents of the City.
- Q. A portable fire extinguisher, that complies with the regulations and standards adopted by the State Fire Marshal and applicable law, shall be kept in any room used for cultivation of marijuanacannabis.
- R. No one other than a full-time resident of the residence shall be involved or take part in the cultivation and said full-time resident may not participate in cultivation in any other location within the City.
- S. No chemical fertilizers, pesticides, or other chemical agents shall be used for marijuanacannabis cultivation.
- T. The marijuanacannabis cultivation area shall not adversely affect the health or safety of the nearby residents by creating dust, glare, heat, noise, noxious gases, odor, smoke, traffic, vibration, or other impacts; and shall not be conducted in a manner that is hazardous due to the use or storage of materials, processes, products or wastes, or from other actions related to the cultivation.

- U. For the protection of local groundwater resources and indoor air quality, and to avoid disposal of harmful substances into sewers or septic systems, no chemical shall be used for <u>marijuanacannabis</u> cultivation that contains any substance on the list prepared pursuant to California Health and Safety Code section 25249.8; provided, that any chemical specifically approved by the California Department of Pesticide Regulation for indoor use on <u>marijuanacannabis</u> may be used in amounts prescribed by the Department. No chemical used for <u>marijuanacannabis</u> cultivation shall be stored in a manner visible from neighboring residences or to individuals located outside the property line or in the public right-of-way.
- V. Cultivation shall be limited exclusively for the personal use of lawful residents of the property on which the cultivation is occurring.

**ARTICLE X: - DEFINITIONS** 

#### Chapter 19.910 – DEFINITIONS

#### 19.910.020 "A" Definitions

*Agricultural stand means,* in the RA-5 Zone, a stand for the sale of agricultural products produced or raised on the same premises, excluding marijuanacannabis and hemp.

Agricultural use means the use of land for the commercial or non-commercial purpose of planting, growing, raising, and harvesting of crops, livestock, or poultry; all of which shall be subject to any applicable state license, to a conditional use permit where required under this Code, and to the limitations and exclusions presented in this definition or as set forth for specific zones created under this Code. For the purpose of this definition, crops shall not include marijuanacannabis or hemp.

19.910.040 "C" Definitions

Cannabis shall have the same meaning as defined in TitleSection 5.77.060 of this Code.

*Cannabis* Products shall have the same meaning as defined in **Title**Section 5.77.060 of this Code.

Cannabis means the term "cannabis" shall mean all items included in the California Health and Safety Code sections 11018 and 11018.1.

*Cannabis cultivation, commercial* shall have the same meaning as defined in Section 5.77.060 of this Code.

means the planting, growing harvesting, drying, trimming, clipping or processing of any kind, number, or size of cannabis plants or any part thereof. Cannabis shall be synonymous with cannabis, hemp, and any other cannabis derivatives.

<u>Cannabis cultivation, personal means cannabis cultivation inside a lawfully existing and fully</u> <u>enclosed and secure private residence, or inside a lawfully existing and fully enclosed and secure</u> <u>accessory structure to a private residence that is located on the same parcel as the private</u> <u>residence for the exclusive personal use of a resident of the residence who is 21 years of age or</u> <u>older, as permitted by California Health and Safety Code sections 11362.1 and 11362.2.</u>

Cannabis Distribution shall have the same meaning as defined in Section 5.77.060 of this Code.

<u>Cannabis Non-storefront Retail shall have the same meaning as defined in Section 5.77.060 of this Code.</u>

<u>Cannabis Storefront Retail</u> shall have the same meaning as defined in Section 5.77.060 of this <u>Code.</u>

<u>Cannabis Testing Laboratory shall have the same meaning as defined in Section 5.77.060 of this</u> <u>Code.</u>

Cannabis, Microbusiness means

Cannabis cultivation, delivery means the transport, shipment, conveyance, delivery, or transfer of cannabis for any purpose.

Cannabis, mobile dispensary. See definition in Chapter 9.65 Mobile Cannabis Dispensaries

<u>Cannabis, primary caregiver. See the definition for primary caregiver set forth in California Health</u> and Safety Code Sections 11362.5 and 11362.7 et seq.

Cannabis, qualified patient. See the definition for qualified patient set forth in California Health and Safety Code Sections 11362.5 and 11362.7 et seq.

Cannabis, medical dispensary means a facility where cannabis is made available for medical purposes in accordance with Health and Safety Code Section 11362.5 (Proposition 215).

Cannabis. See "marijuana."

19.910.090 "H" Definitions.

*Home occupation* means any use of a dwelling unit and related property for employment or occupational purposes that is incidental to the residential use of the dwelling unit. The cultivation, manufacturing, distribution, transport, or sale of <u>marijuanacannabis</u> or <u>marijuanacannabis</u> products is not a permitted home occupation.

19.910.140 "M" Definitions.

#### Marijuana – See Cannabis.

Marijuana means the term "marijuana" shall mean all items included in the California Health and Safety Code sections 11018 and 11018.1.

Marijuana cultivation means the planting, growing harvesting, drying, trimming, clipping or processing of any kind, number, or size of marijuana plants or any part thereof. Marijuana shall be synonymous with cannabis, hemp, and any other cannabis derivatives.

Marijuana cultivation personal means marijuana cultivation inside a lawfully existing and fully enclosed and secure private residence, or inside a lawfully existing and fully enclosed and secure accessory structure to a private residence that is located on the same parcel as the private residence for the exclusive personal use of a resident of the residence who is 21 years of age or older, as permitted by California Health and Safety Code sections 11362.1 and 11362.2.

Marijuana cultivation, delivery means the transport, shipment, conveyance, delivery, or transfer of marijuana for any purpose.

Marijuana, mobile dispensary. See definition in Chapter 9.65 - Mobile Marijuana Dispensaries

Marijuana, primary caregiver. See the definition for primary caregiver set forth in California Health and Safety Code Sections 11362.5 and 11362.7 et seq.

Marijuana, qualified patient. See the definition for qualified patient set forth in California Health and Safety Code Sections 11362.5 and 11362.7 et seq.

Massing means the unified composition of a structure's volume, affecting the perception of density and bulk. See definition in the Downtown Specific Plan.

Material processing facility (MPF) means a facility where source separated (presorted) recyclable materials are further sorted and separated, then bulked or converted for reprocessing, by hand or by use of machinery.

Material recovery facility (MRF) means a solid waste facility where mixed municipal solid waste is sorted or separated, by hand or by use of machinery, for the purpose of recovering recyclable materials.

Medical marijuana dispensary means a facility where marijuana is made available for medical purposes in accordance with Health and Safety Code Section 11362.5 (Proposition 215).

#### RIVERSIDE COUNTY AIRPORT LAND USE COMMISSION



January 31, 2023

File No.:

APNs:

Related File Nos.:

Compatibility Zone:

CHAIR Steve Manos Lake Elsinore CHAIR City of Perris Development Services Department – Planning Division 101 N. D Street Perris CA 92570

ZAP1555MA22

Zones C1 and D

VICE CHAIR Russell Betts Desert Hot Springs

### RE: AIRPORT LAND USE COMMISSION (ALUC) DEVELOPMENT REVIEW – DIRECTOR'S DETERMINATION

(Development Plan Review)

SPA22-05047 (Specific Plan Amendment),

022, 302-130-023, 302-130-024, 302-130-027

302-130-002, 302-130-008, 302-130-018, 302-130-021, 302-130-

DPR22-00006

COMMISSIONERS

John Lyon Riverside

Russell Betts Desert Hot Springs

Richard Stewart Moreno Valley

Michelle Geller Riverside

Vernon Poole Murrieta

STAFF

Director Paul Rull

Simon A. Housman Jackie Vega Barbara Santos

County Administrative Center 4080 Lemon St.,14th Floor. Riverside, CA 92501 (951) 955-5132

www.rcaluc.org

Dear Mr. Evans: Under the delegation of the Riverside County Airport Land Use Commission (ALUC) pursuant to ALUC Resolution No. 2020-02 of the Countywide Policies of the 2004 Riverside County Airport Land Use Compatibility Plan, staff reviewed City of Perris Case Nos. SPA22-05047 (Specific Plan Amendment), DPR22-00006 (Development Plan Review), a proposal for a minor change from the 878,750 square foot industrial manufacturing building with mezzanines on 40.75 acres as previously consistent under ZAP1516MA22, to a 774,419 square foot industrial building with mezzanines on 36.01 acres, located northerly of Ramona Expressway, westerly of Redlands Avenue, easterly of Perris Boulevard, and southerly of Perry Street. The applicant also proposes amending the Perris Valley Commerce Center Specific Plan rezoning the site from Commercial to Light Industrial.

The proposed changes include a decrease of the building area from 878,750 square feet to 774,419 square feet, and a reconfiguration of the internal floor area consisting of 754,419 square feet of manufacturing area, 10,000 square feet of office area, and 10,000 square feet of second floor office mezzanine area. (The original project under ZAP1516MA22 had proposed a total building area of 878,750 square feet, with 858,750 square feet of manufacturing area, 10,000 square feet of second floor office mezzanine area.

Approximately 4.5 acres of the site located northerly of Ramona Expressway is planned for future commercial development and 4.8 acres of the site located easterly of Perris Boulevard is planned for future commercial development – there are no entitlements proposed for this area at this time.

The site is located within Airport Compatibility Zones C1 and D of the March Air Reserve Base/Inland Port Airport Influence Area (AIA). Within Compatibility Zone C1 of the March Air Reserve Base/Inland Port Airport Land Use Compatibility Plan, where Zone C1 limits average intensity to 100 people per acre and single acre to 250 people, and Zone D does not restrict non-residential intensity.

#### AIRPORT LAND USE COMMISSION

Analysis of just the portion of the building located entirely within Zone C1 (as intensity is not restricted for the portion of the building located in Zone D), includes 2,500 square feet of first floor office area, and 2,500 square feet of second floor office mezzanine area, accommodating an occupancy of 25 people, resulting in an average intensity of 70 people per acre, and a single acre occupancy of 25 people, both of which are consistent with Zone C1 average intensity criterion of 100 people per acre, and single acre criterion maximum of 250 people.

As ALUC Director, I hereby find the above-referenced project <u>**CONSISTENT**</u> with the 2014 March Air Reserve Base/Inland Port Airport Land Use Compatibility Plan, provided that the City of Perris applies the following recommended conditions:

#### CONDITIONS:

- 1. Any new outdoor lighting that is installed shall be hooded or shielded so as to prevent either the spillage of lumens or reflection into the sky. Outdoor lighting shall be downward facing.
- 2. The following uses/activities are not included in the proposed project and shall be prohibited at this site:
  - (a) Any use which would direct a steady light or flashing light of red, white, green, or amber colors associated with airport operations toward an aircraft engaged in an initial straight or circling climb following takeoff or toward an aircraft engaged in a straight or circling final approach toward a landing at an airport, other than a DoD or FAA-approved navigational signal light or visual approach slope indicator.
  - (b) Any use which would cause sunlight to be reflected towards an aircraft engaged in an initial straight or circling climb following takeoff or towards an aircraft engaged in a straight or circling final approach towards a landing at an airport.
  - (c) Any use which would generate smoke or water vapor or which would attract large concentrations of birds, or which may otherwise affect safe air navigation within the area. (Such uses include landscaping utilizing water features, aquaculture, production of cereal grains, sunflower, and row crops, composting operations, wastewater management facilities, artificial marshes, trash transfer stations that are open on one or more sides, recycling centers containing putrescible wastes, construction and demolition debris facilities, fly ash disposal, and incinerators.)
  - (d) Any use which would generate electrical interference that may be detrimental to the operation of aircraft and/or aircraft instrumentation.
  - (e) Children's schools, day care centers, libraries, hospitals, skilled nursing and care facilities, congregate care facilities, places of assembly (including but not limited to places of worship and theaters)
  - (f) Highly noise-sensitive outdoor nonresidential uses. Examples of noise-sensitive outdoor nonresidential uses that are prohibited include, but are not limited to, major spectator-oriented sports stadiums, amphitheaters, concert halls and drive-in theaters.
  - (g) Other Hazards to flight.
- 3. The attached "Notice of Airport in Vicinity" shall be provided to all prospective

#### AIRPORT LAND USE COMMISSION

purchasers and occupants of the property, and be recorded as a deed notice.

4. The project has been conditioned to utilized underground detention systems, which shall not contain surface water or attract wildlife. Any other proposed basin would require review and approval by the ALUC. Any proposed stormwater basins or facilities shall be designed and maintained to provide for a maximum 48-hour detention period following the design storm, and remain totally dry between rainfalls. Vegetation in and around the basins that would provide food or cover for birds would be incompatible with airport operations and shall not be utilized in project landscaping. Trees shall be spaced so as to prevent large expanses of contiguous canopy, when mature. Landscaping in and around the basin(s) shall not include trees or shrubs that produce seeds, fruits, or berries.

Landscaping in the detention basin, if not rip-rap, should be in accordance with the guidance provided in ALUC "LANDSCAPING NEAR AIRPORTS" brochure, and the "AIRPORTS, WILDLIFE AND STORMWATER MANAGEMENT" brochure available at <u>RCALUC.ORG</u> which list acceptable plants from Riverside County Landscaping Guide or other alternative landscaping as may be recommended by a qualified wildlife hazard biologist.

A notice sign, in a form similar to that attached hereto, shall be permanently affixed to the stormwater basin with the following language: "There is an airport nearby. This stormwater basin is designed to hold stormwater for only 48 hours and not attract birds. Proper maintenance is necessary to avoid bird strikes". The sign will also include the name, telephone number or other contact information of the person or entity responsible to monitor the stormwater basin.

- 5. March Air Reserve Base must be notified of any land use having an electromagnetic radiation component to assess whether a potential conflict with Air Base radio communications could result. Sources of electromagnetic radiation include radio wave transmission in conjunction with remote equipment inclusive of irrigation controllers, access gates, etc.
- 6. The project has been evaluated to construct a 774,419 square foot industrial building, which includes 754,419 square feet of industrial area, 10,000 square feet of first floor office area, and 10,000 square feet of second floor office mezzanine area. Any increase in building area, change in use to any higher intensity use, change in building location, or modification of the tentative parcel map lot lines and areas will require an amended review to evaluate consistency with the ALUCP compatibility criteria, at the discretion of the ALUC Director.
- 7. The project does not propose rooftop solar panels at this time. However, if the project were to propose solar rooftop panels in the future, the applicant/developer shall prepare a solar glare study that analyzes glare impacts, and this study shall be reviewed by the Airport Land Use Commission and March Air Reserve Base.

If you have any questions, please contact me at (951) 955-6893.

Sincerely, RIVERSIDE COUNTY AIRPORT LAND USE COMMISSION

Paul Rull, ALUC Director

#### AIRPORT LAND USE COMMISSION

Attachments: Notice of Airport in Vicinity

cc: Optimus Building Corporation (applicant/property owner) Mike Naggar & Associates (representative) Gary Gosliga, March Inland Port Airport Authority Major. David Shaw, Base Civil Engineer, March Air Reserve Base ALUC Case File

X:\AIRPORT CASE FILES\March\ZAP1555MA22\ZAP1555MA22.LTR.doc

## NOTICE OF AIRPORT IN VICINITY

This property is presently located in the vicinity of an airport, within what is known as an airport influence area. For that reason, the property may be subject to some of the annoyances or inconveniences associated with proximity to airport operations (for example: noise, vibration, or odors). Individual sensitivities to those annoyances [can vary from person to person. You may wish to consider what airport annoyances], if any, are associated with the property before you complete your purchase and determine whether they are acceptable to you. Business & Professions Code Section 11010 (b)

# NOTICE

## THERE IS AN AIRPORT NEARBY.

## THIS STORM WATER BASIN IS DESIGNED TO HOLD

## **STORM WATER FOR ONLY 48 HOURS AND**

## **NOT TO ATTRACT BIRDS**

## PROPER MAINTENANCE IS NECESSARY TO AVOID BIRD STRIKES

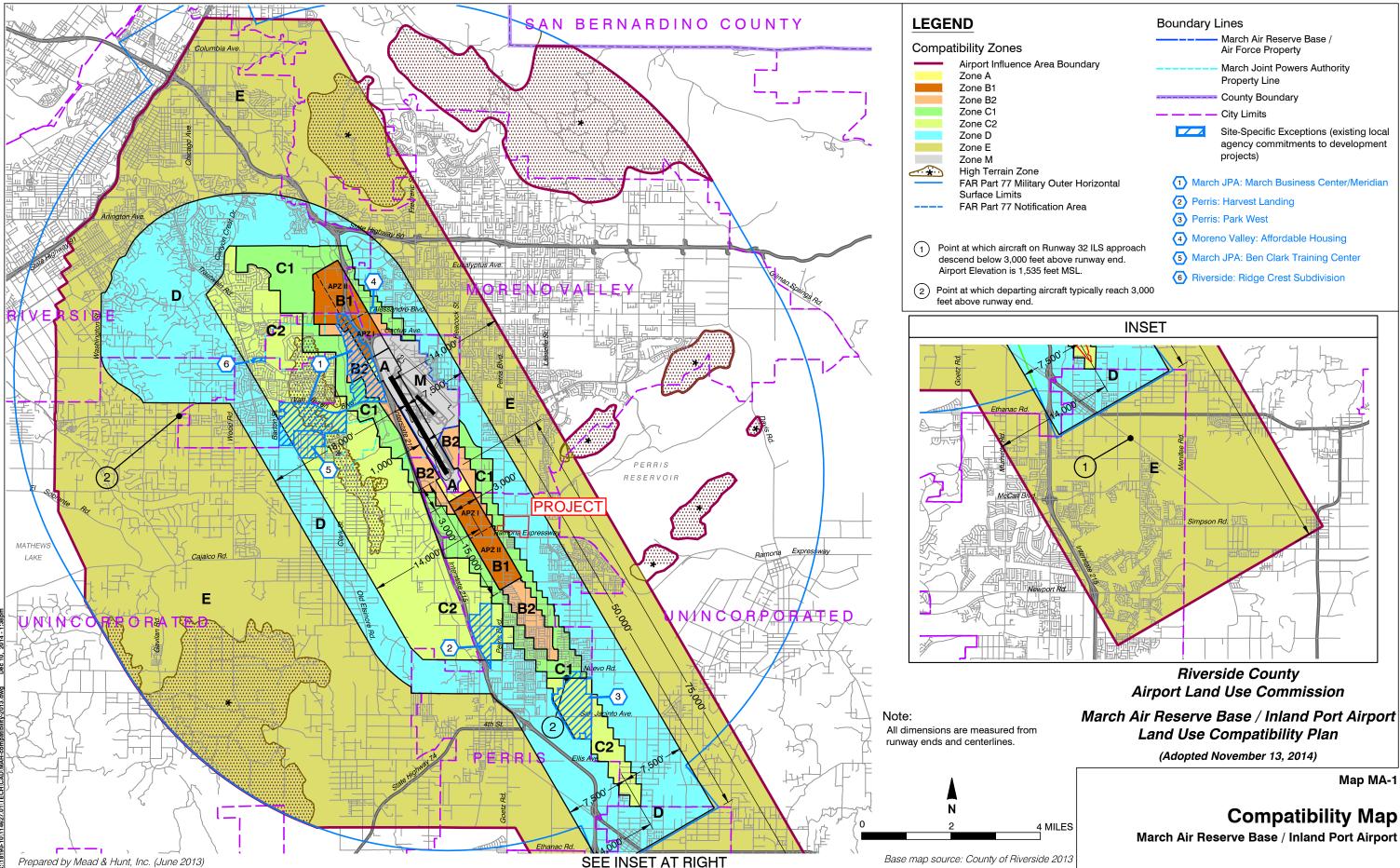


IF THIS BASIN IS OVERGROWN, PLEASE CONTACT:

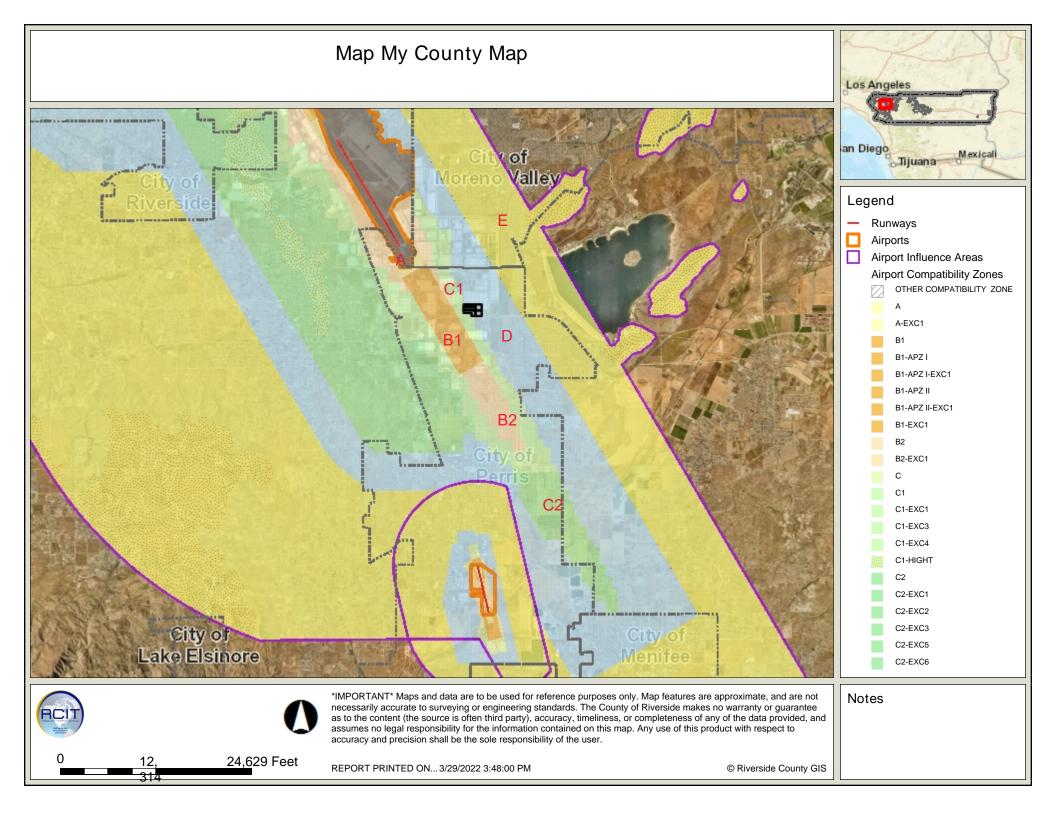
Name:

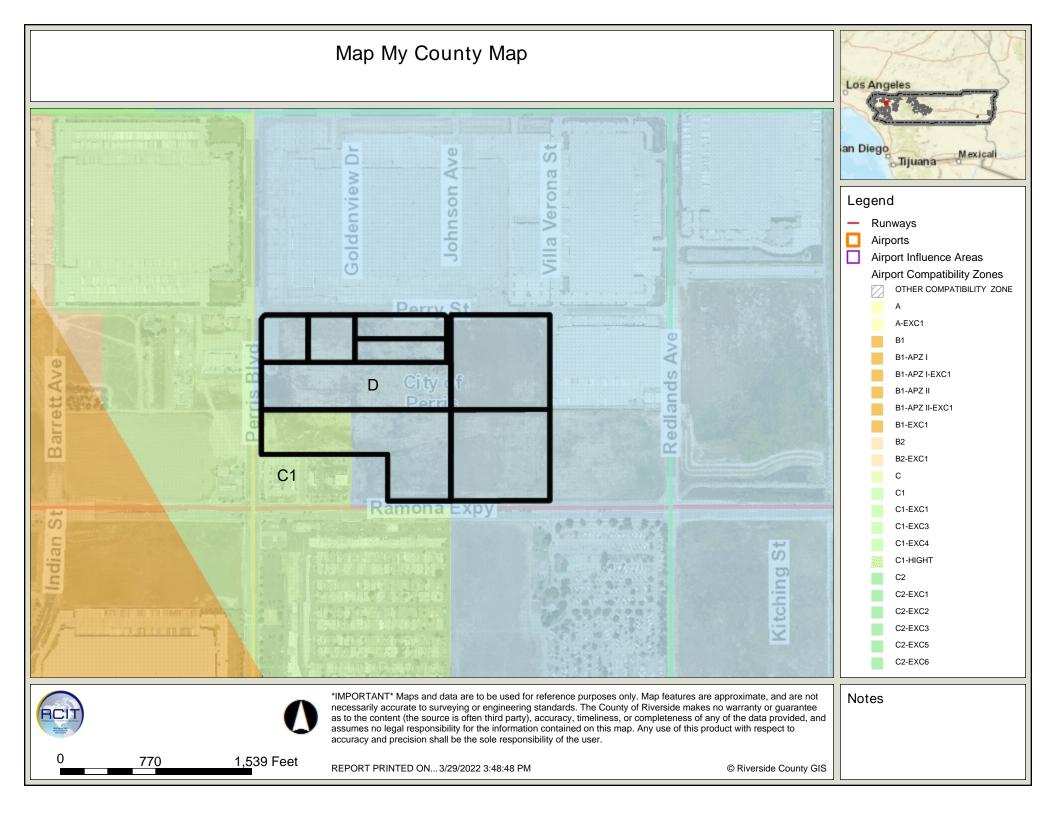
\_\_\_\_\_ Phone:

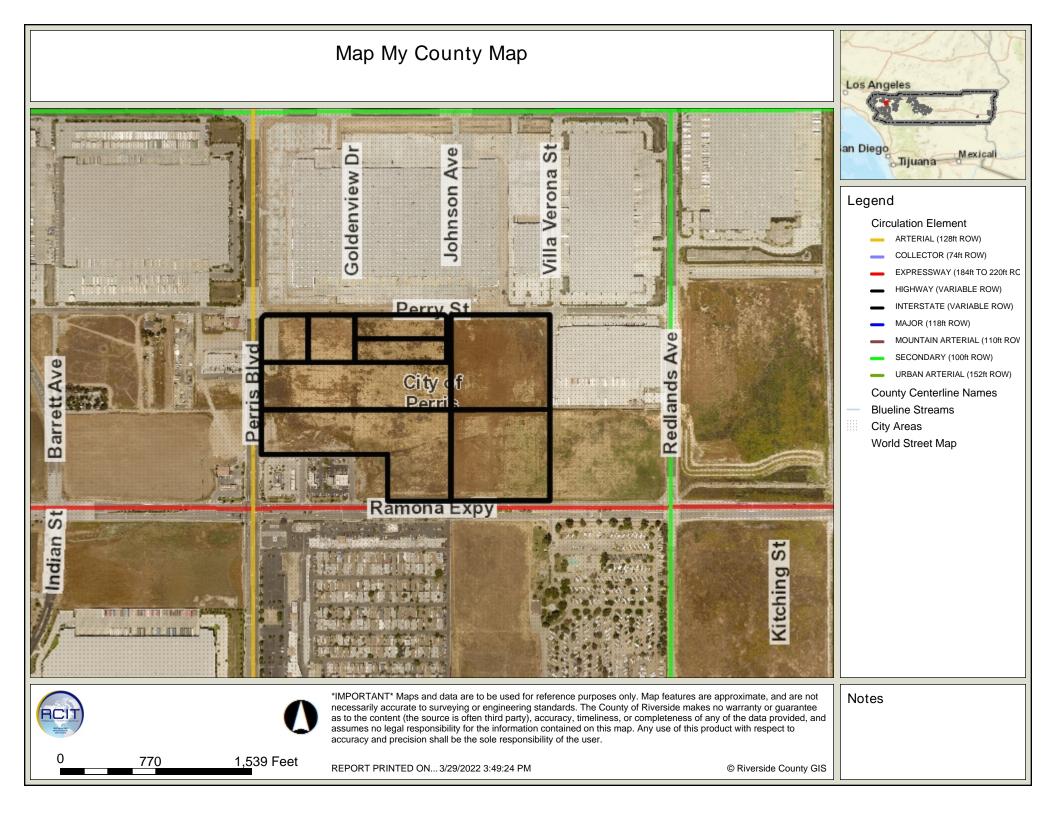


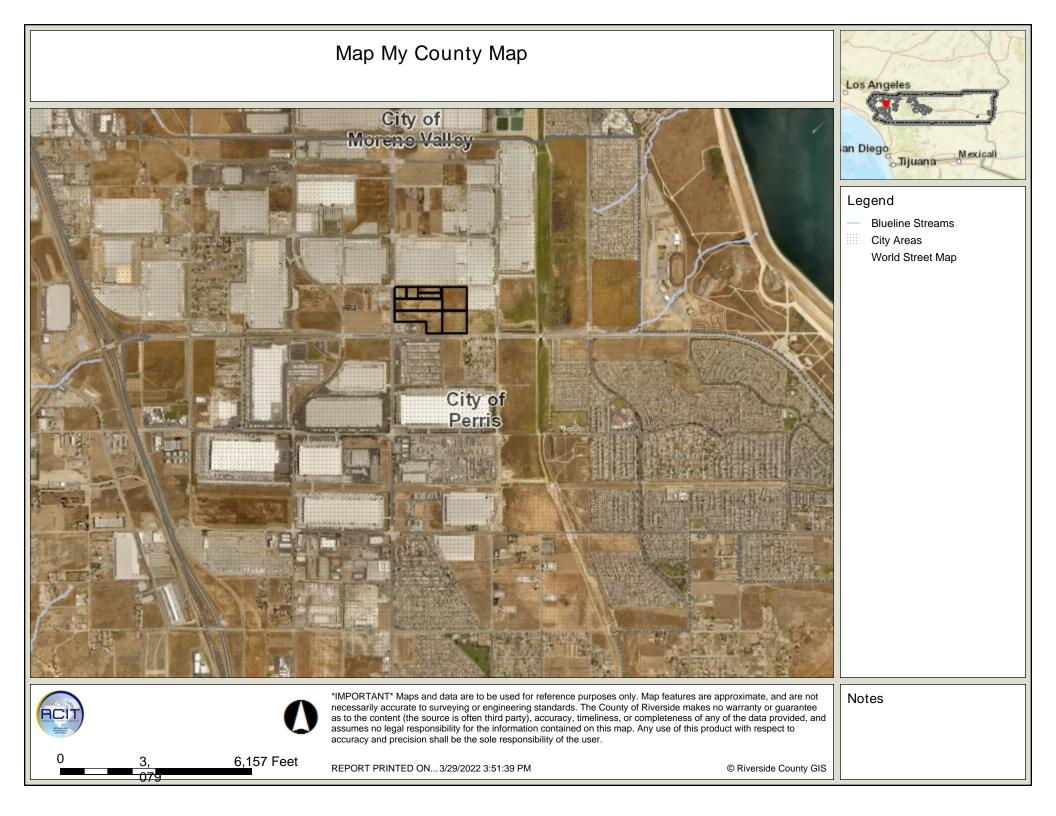


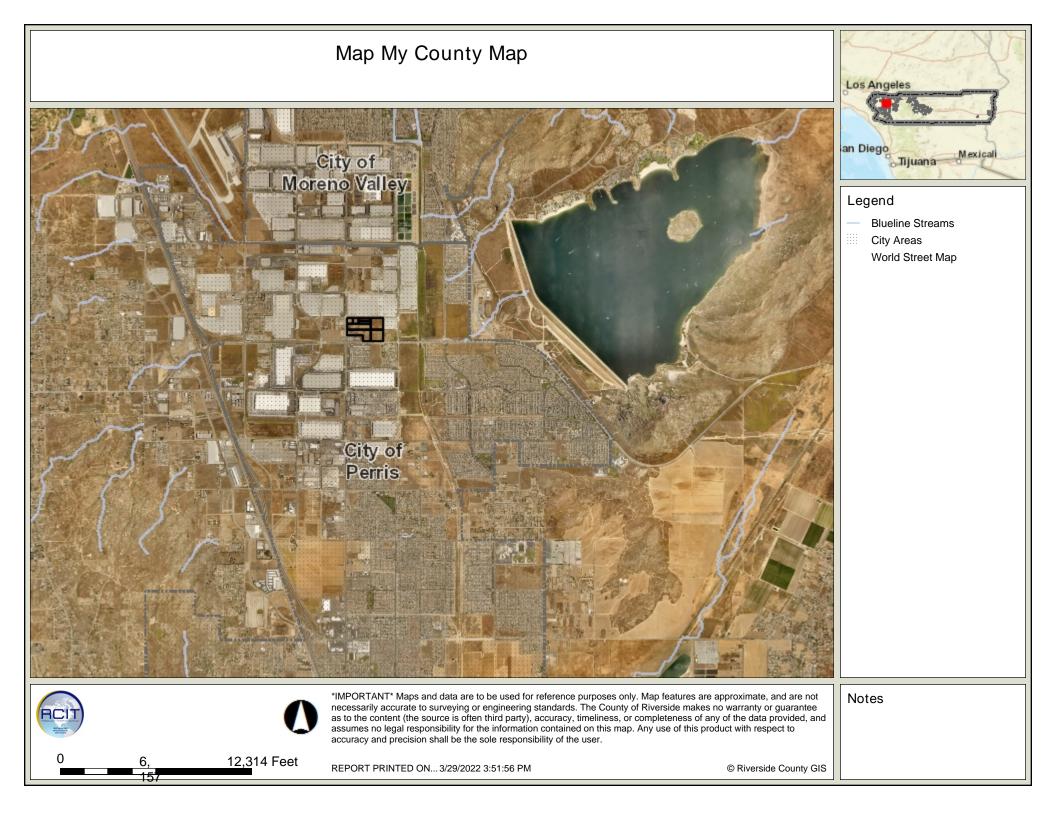
**Compatibility Map** March Air Reserve Base / Inland Port Airport

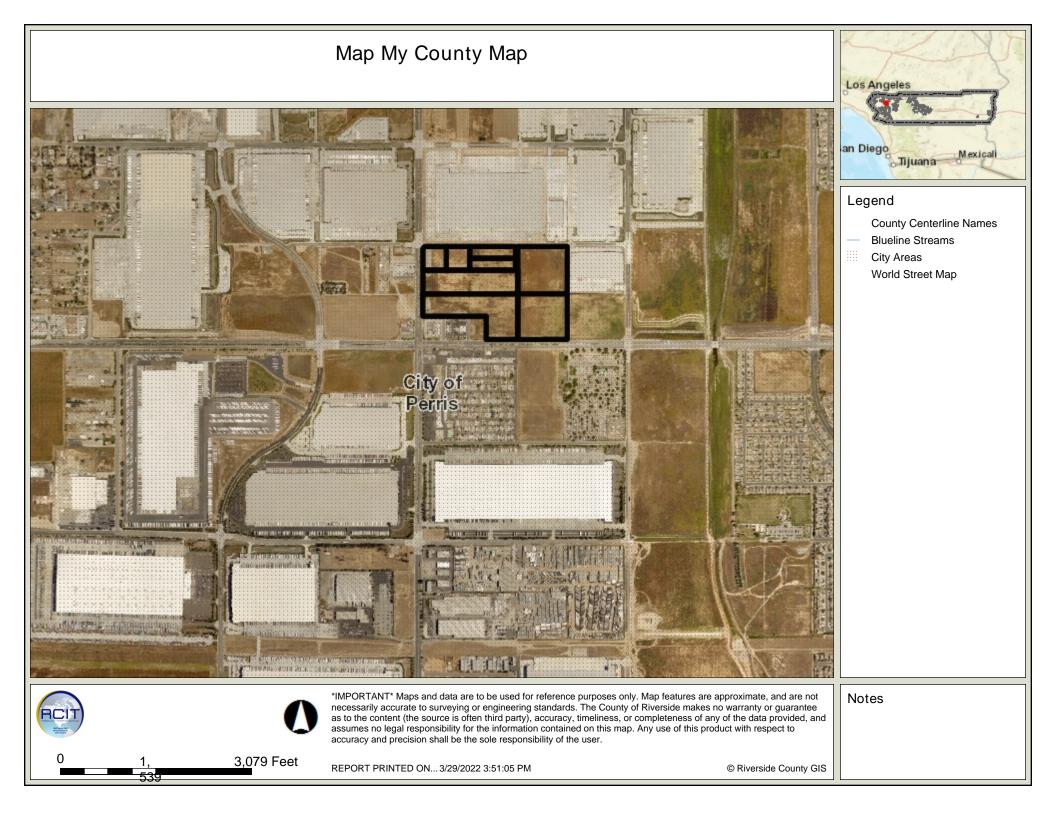


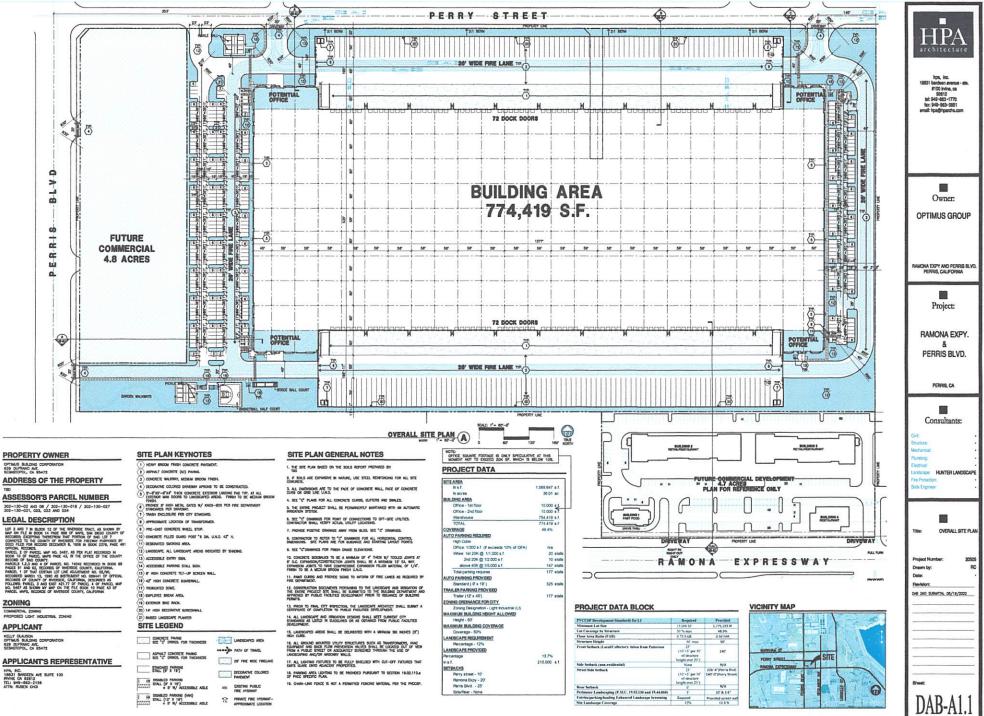




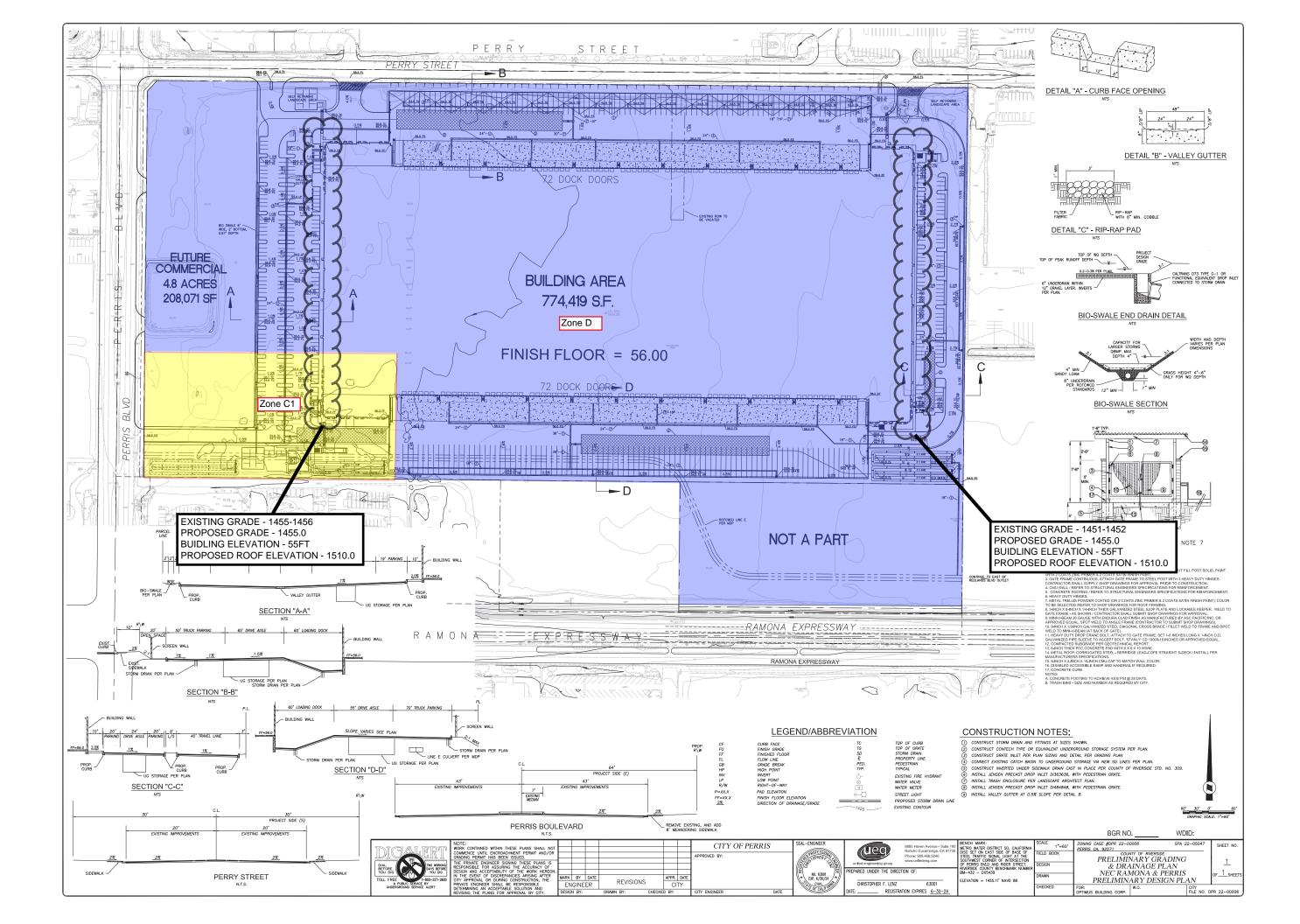








CAUTION : IF THIS SHEET IS NOT A 30" X 42" IT IS A REDUCED PRIM





#### AIRPORT LAND USE COMMISSION MEETING MINUTES February 9, 2023



2-15-23

<u>COMMISSIONERS PRESENT</u>: Russell Betts, Steve Manos, Michael Geller, Vernon Poole, Michael Lewis (alternate for Steven Stewart), Larry Froehlich (alternate for Richard Stewart)

COMMISSIONERS ABSENT: John Lyon, Steven Stewart, Richard Stewart

#### 2.0 <u>PUBLIC HEARING: CONTINUED ITEMS</u> NONE

#### 3.0 PUBLIC HEARING: NEW CASES

3.1 Staff report recommended: CONSISTENT

Staff recommended at hearing: CONSISTENT, subject to the updated conditions submitted at the meeting

ALUC Commission Action: CONSISTENT, subject to the updated conditions submitted at the meeting (Vote 6-0; Absent: Lyon)

Motion: Michael Geller Second: Michael Lewis

3.2 Staff report recommended: **CONSISTENT** 

Staff recommended at hearing: **CONSISTENT** 

ALUC Commission Action: CONSISTENT (Vote 6-0; Absent: Lyon)

Motion: Michael Lewis Second: Michael Geller **ZAP1071HR22 – The Focus Group (Representative: David Church)** – City of Hemet Case Nos. ZC22-001 (Change of Zone), CUP22-001 (Conditional Use Permit), a proposal to construct a 1,008 square foot carry-out only restaurant building with drive-thru on 0.75 acres, located on the northwest corner of Tanya Avenue and Sanderson Avenue. The applicant also proposes to change the sites zoning from M-2 (General Manufacturing) to M-1 (Limited Manufacturing). (Airport Compatibility Zone D of the Hemet-Ryan Airport Influence Area). Staff Planner: Jackie Vega at (951) 955-0982, or e-mail at Javega@rivco.org

ZAP1553MA22 – Capital Properties, LLC (Representative: T&B Planning) County of Riverside Case Nos. GPA220003 (General Plan Amendment), CZ220003 (Change of Zone), PPT220004 (Plot Plan), TPM38337 (Tentative Parcel Map). A proposal to construct a 591,203 square foot manufacturing building with mezzanines on 40.88 acres located northerly of Walnut Street, southerly of Rider Street, and westerly of Patterson Avenue The applicant also proposes amending the site's general plan land use designation from Medium Density Residential (MDR) to Light Industrial (LI), and also changing the sites zoning from One-Family Dwellings (R-1), Light Agriculture (A-1-1), and Rural Residential (R-R-1) to Industrial Park (I-P). The applicant also proposes a tentative parcel map to merge existing eight parcels into one parcel (Airport Compatibility Zone C2 of the March Air Reserve Base/Inland Port Airport Influence Area). Staff Planner: Jackie Vega at (951) 955-0982, or e-mail at Javega@rivco.org

#### VIDEO:

A video recording of the entire proceedings is available on the ALUC website at www.rcaluc.org. If you have any questions please contact Barbara Santos, ALUC Commission Secretary, at (951) 955-5132 or E-mail at basantos@rivco.org

#### AIRPORT LAND USE COMMISSION MEETING MINUTES February 9, 2023

- 3.3 Staff report recommended: ZAP1556MA22 – Bridge Investment Group (Representative: T&B CONSISTENT Planning, Inc.) - County of Riverside Case No. PPT220024 (Plot Plan). A proposal to construct a 106,931 square foot industrial building with mezzanines on 5.26 acres, located southerly of Cajalco Road and Staff recommended at hearing: westerly of Patterson Avenue (Airport Compatibility Zone C2 of the CONSISTENT March Air Reserve Base/Inland Port Airport Influence Area). Staff ALUC Commission Action: Planner: Jackie Vega at (951) 955-0982, or e-mail at CONSISTENT (Vote 6-0; Javega@rivco.org Absent: Lyon) Motion: Michael Lewis Second: Michael Geller
- 3.4 Staff report recommended: CONSISTENT

Staff recommended at hearing: **CONSISTENT** 

ALUC Commission Action: CONSISTENT (Vote 6-0; Absent: Lyon)

Motion: Michael Geller Second: Russell Betts **ZAP1557MA22 – Truck Terminal Properties (Representative:** Joseph E. Bonadiman & Associates, Inc.) – City of Perris Case Nos. SPA22-05173 (Specific Plan Amendment), CUP22-05172 (Conditional Use Permit). A proposal to establish a 219-space truck trailer parking facility with a 720 square foot office building on 8.34 acres, located on the northeast corner of Markham Street and Perris Boulevard. The applicant also proposes amending the Perris Valley Commerce Center Specific Plan, changing the sites zoning from Business Park (BP) to Light Industrial (LI). (Airport Compatibility Zone D of the March Air Reserve Base/Inland Port Airport Influence Area). Staff Planner: Jackie Vega at (951) 955-0982, or e-mail at Javega@rivco.org

4.0 **PUBLIC HEARING: MISCELLANEOUS ITEMS** None

#### 5.0 ADMINISTRATIVE ITEMS

- 5.1 Director's Approvals Information Only
- 5.2 Update March Air Reserve Base Compatible Use Study (CUS)

Simon Housman, Project Director of the March CUS, presented Power Point slides. The objective was to give the Commissioners a bird's eye view of the scope of the MCUS and to reach out to him if they would like to spend an hour or more one on one going through the study.

#### 6.0 APPROVAL OF MINUTES

Vice Chair Betts motioned to approve the January 12, 2023. Seconded by Michael Geller. Absent: John Lyon (Vote 6-0)

#### 7.0 ORAL COMMUNICATION ON ANY MATTER NOT ON THE AGENDA None

#### 8.0 COMMISSIONER'S COMMENTS

None

VIDEO:

A video recording of the entire proceedings is available on the ALUC website at www.rcaluc.org. If you have any questions please contact Barbara Santos, ALUC Commission Secretary, at (951) 955-5132 or E-mail at basantos@rivco.org

#### **AIRPORT LAND USE COMMISSION MEETING** MINUTES February 9, 2023

#### ADJOURNMENT 9.0

Steve Manos, Chair adjourned the meeting at 10:16 a.m.

Y:\ALUC COMMISSION - PUBLIC HEARING\ALUC Minutes\2023 Minutes\Minutes 2-9-23.doc

VIDEO: A video recording of the entire proceedings is available on the ALUC website at www.rcaluc.org. If you have any questions please contact Barbara Santos, ALUC Commission Secretary, at (951) 955-5132 or E-mail at basantos@rivco.org