

AIRPORT LAND USE COMMISSION RIVERSIDE COUNTY AGENDA

Riverside County Administration Center 4080 Lemon St., 1st Floor Hearing Room Riverside, California

CHAIR Simon Housman Rancho Mirage			Thursday 9:00 a.m., September 12, 2013					
VICE CHAIRMAN Rod Ballance Riverside	the Source	NOTE: If you wish to speak, please complete a "SPEAKER IDENTIFICATION FORM" and give it to the Secretary. The purpose of the public hearing is to allow interested parties to express their concerns. Comments shall be limited to 5 minutes and to matters relevant to the item under consideration. Please do not repeat information already given. If you have no additional information,						
COMMISSIONERS	but w	ish to	be on record, simply give your name and address and state that you agree with the					
Arthur Butler Riverside	previo differ	ous sp from	beaker(s). Also please be aware that the indicated staff recommendation shown below may that presented to the Commission during the public hearing.					
Glen Holmes Hemet			pt materials related to an item on this agenda submitted to the Airport Land Use on or its staff after distribution of the agenda packet are available for public inspection in the					
John Lyon Riverside	Airpor	t Lan	In of its stan after distribution of the agenda packet are available for public inspection in the id Use Commission's office located at 4080 Lemon Street, 14 th Floor, Riverside, CA 92501 mal business hours.					
Greg Pettis Cathedral City	In con	npliar	nce with the Americans with Disabilities Act, if any accommodations are needed, please					
Richard Stewart Moreno Valley		contact Barbara Santos at (951) 955-5132 or E-mail at <u>basantos@rctlma.org</u> . Request should be made at least 48 hours or as soon as possible prior to the scheduled meeting.						
	1.0	INTI	RODUCTIONS					
STAFF		1.1	CALL TO ORDER					
Director Ed Cooper		1.2	SALUTE TO FLAG					
John Guerin Russell Brady Barbara Santos		1.3	ROLL CALL					
County Administrative Center 4080 Lemon St, 14th Floor	2.0	PUB	BLIC HEARING: NEW CASES					
Riverside, CA 92501 (951) 955-5132		BAN	INING AIRPORT					
<u>www.rcaluc.org</u>			ZAP1012BA13 – Rancho San Gorgonio LLC (Representative: Pitassi Architects, Peter J. Pitassi) - City Case Nos. Specific Plan 13-2001, Zone Change 13-3501, General Plan Amendment 13-2503, Tentative Tract Map 13-4501, Development Agreement 13- 1502. Specific Plan 13-2001 is a proposal to develop 848.6 gross acres generally located southerly of Westward Avenue, easterly of Sunset Avenue, northerly of Coyote Trail, and westerly of San Gorgonio Avenue as a master planned community with 3,753 dwelling units, 10 acres of commercial land, and 188.5 acres of open space. Zone Change 13-3501 proposes to change the existing zoning from Very Low/Rural/Medium Density Residential to a Specific Plan. General Plan Amendment 13-2503 proposes to change existing land use from Very Low/Rural/Medium Density Residential to a Specific Plan. Tentative Tract Map 13-4501 proposes to subdivide 848.56 acres into 38 lots for financing, rough grading, and backbone street dedication purposes. Development Agreement 13-1502 proposes to define the parameters for the orderly development of the property with regard to the developer's obligation to provide infrastructure and public improvements and facilities and to define the City's obligations with regard to					

permitting and approvals. (Zone E of Banning Municipal Airport Influence Area). ALUC Staff Planner: Russell Brady at (951) 955-0549, or e-mail at <u>rbrady@rctlma.org</u>.

<u>Staff Recommendation</u>: CONTINUE (Specific Plan and Tract Map) to 11-14-13; CONSISTENT (General Plan Amendment and Zone Change)

MARCH AIR RESERVE BASE

2.2 <u>ZAP1088MA13 – LNR Riverside II, LLC (Representative: K&A Engineering, Don Bergh)</u> – March JPA Case No. Plot Plan 13-02. Plot Plan 13-02 is a proposal to develop a 510,000 square foot industrial warehouse building on 25.74 acres located northerly and easterly of Opportunity Way, easterly of Meridian Parkway, westerly of Interstate 215, and northerly of Van Buren Boulevard, within the land use jurisdiction of the March Joint Powers Authority. (Area II of the March Air Reserve Base Airport Influence Area.) ALUC Staff Planner: Russell Brady at (951) 955-0549, or e-mail at rbrady@rctIma.org.

Staff Recommendation: CONDITIONALLY CONSISTENT

2.3 <u>ZAP1089MA13 – Salsol Prop. (Representative: Shakil Patel)</u> – County Case Nos. CZ07800 (Change of Zone) and PP 25382 (Plot Plan). CZ07800 is a proposal to change the zoning of a 1.21-acre parcel located at the southeast corner of Van Buren Boulevard and Barton Street, northwesterly of the community of Air Force Village West and southerly of the community of Orangecrest, from A-1-10 (Light Agriculture, 10 acre minimum lot size) to C-O (Commercial-Office). PP25382 is a proposal to develop a 10,500 square foot office building with five suites on the property. (At border of Areas II and III of the March Air Reserve Base Airport Influence Area, proposed Zone C2 in Draft Compatibility Plan). ALUC Staff Planner: John Guerin at (951) 955-0982, or e-mail at jguerin@rctlma.org.

Staff Recommendation: CONSISTENT (Change of Zone); CONDITIONALLY CONSISTENT (Plot Plan)

REGIONAL

2.4 ZAP1008RG13 - City of Riverside (Representative: Doug Darnell) - City Case Nos. P12-0334 (General Plan Amendment) and P12-0336 (Rezoning). The City proposes to amend the General Plan designations and change the zoning of various properties as part of the City's Rezoning Program associated with the City's adopted Housing Element 2006-2014 (included in General Plan 2025). These changes would also bring zoning into consistency with General Plan designations. These changes include: (1) rezoning a 0.96acre parcel (APN 227-223-006) located at the northwest corner of Magnolia Avenue and Jefferson Street from R-1-7,000 (Single-Family Residential) to R-4 (Multiple-Family Residential) or R-4-AP-D; (2) amending the General Plan designation of two parcels (APN 145-082-037 and 145-082-038) with a total area of 1.62 acres located along the west side of Van Buren Boulevard, southerly of Duncan Avenue and northerly of Challen Avenue, from HDR (High Density Residential) to MU-V (Mixed Use Village) and to rezone them from CR (Commercial Retail) to MU-V or MU-V-AP-E; (3) amending the General Plan designation of a 3.14-acre parcel (APN 217-093-001) located northerly of Tequesquite Avenue and easterly of San Andreas Avenue from MHDR (Medium High Density Residential) to HDR (High Density Residential); and (4) rezoning ten parcels (APN 191-221-016 through 191-221-024, plus 191-240-051) with a total area of 6.7 acres

AIRPORT LAND USE COMMISSION

located along the east side of Van Buren Boulevard, southerly of Duncan Avenue and northerly of Challen Avenue from R-1-7,000 (Single-Family Residential) to R-3-1500 (Multiple-Family Residential) or R-3-1500-AP-E, and amending the General Plan designation of one of these parcels (APN 191-240-051) from C (Commercial) to HDR. (Zones D and E of Riverside Municipal Airport Influence Area and Zone E of Flabob Airport Influence Area). ALUC Staff Planner: John Guerin at (951) 955-0982, or e-mail at jguerin@rctlma.org.

Staff Recommendation: CONSISTENT

BLYTHE AIRPORT

Staff Recommendation: CONDITIONALLY CONSISTENT

REGIONAL

2.6 <u>ZAP1007RG13 – City of Menifee (Representatives: Charles La Claire and Lisa Gordon).</u> A proposal by the City of Menifee to adopt its first City General Plan. The General Plan includes the following nine elements: Land Use, Housing, Circulation, Economic Development, Community Design, Open Space and Conservation, Safety, Air Quality, and Noise. Five of these Elements (Land Use, Housing, Circulation, Safety, and Noise) are being reviewed for consistency with airport land use compatibility criteria. The City is proposing a web-based format for its General Plan. The City includes land within Area III of the March Air Reserve Base Airport Influence Area and Compatibility Zone E of the Perris Valley Airport Influence Area. ALUC Staff Planner: John Guerin at (951) 955-0982, or e-mail at jguerin@rctlma.org

Staff Recommendation: CONSISTENT

JACQUELINE COCHRAN REGIONAL AIRPORT

2.7 ZAP1020TH13 – Thermal Operating Company, LLC (Representative: Nick Johnson) – County Case Nos.: PP24690R1 (Revised Plot Plan) and PM 36293M1 (Minor Change to Parcel Map). A proposal to modify the previously approved proposal for development of a motorsports race track facility, with garage units on individual lots, within a 329.72-acre area located northerly of 62nd Avenue, westerly of Polk Street, easterly of Tyler Street, and southerly of 60th Avenue in the unincorporated community of Thermal. The applicant is proposing to amend conditions relating to the Occupancy Type of structures on the individual (Founders') lots and conditions prohibiting overnight stays. The proposal also includes the addition of an on-site irrigation reservoir with aviary screen. Additional changes proposed by PP24690R1 include: (1) phasing of project development; (2) replacement of registration building with a member's private garage; (3) deletion of sidewalks along interior streets; (4) modifications to track grading; (5) allowance for on-site sewers to be private; (6) modifications to the off-site open channel; (7) provision for all run off up to the 100-year storm to be retained on-site; and (8) deletion of all water quality swales. PM36293M1 is a proposal to reconfigure and relocate the Founders' lots within unrecorded portions of the parcel map, involving reduction of three to four such lots and siting of most of the remaining 35 lots along the east side of Goodwood Drive. (Compatibility Zones B1, C and D of the Jacqueline Cochran Regional Airport Influence Area). ALUC Staff Planner: John Guerin at (951) 955-0982, or e-mail at jguerin@rctlma.org or Russell Brady at (951) 955-0549, or e-mail at rbrady@rctlma.org.

Staff Recommendation: CONDITIONALLY CONSISTENT

3.0 ADMINISTRATIVE ITEMS

3.1 Director's Approvals

3.2 Wind Turbine Aviation Safety Lighting

4.0 APPROVAL OF MINUTES August 15, 2013

5.0 ORAL COMMUNICATION ON ANY MATTER NOT ON THE AGENDA

6.0 COMMISSIONER'S COMMENTS

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COUNTY OF RIVERSIDE AIRPORT LAND USE COMMISSION

STAFF REPORT

AGENDA ITEM:	2.1
HEARING DATE:	September 12, 2013
CASE NUMBER:	<u>ZAP1012BA13 – Rancho San Gorgonio LLC</u> (Representative: Pitassi Architects, Peter J. Pitassi)
APPROVING JURISDICTION:	City of Banning
JURISDICTION CASE NOS:	Development Agreement 13-1502, General Plan Amendment 13-2503, Specific Plan 13-2001, Tentative Tract Map 13- 4501, Zone Change 13-3501

MAJOR ISSUES: The applicant team has decided to pursue FAA obstruction evaluation review at this time, in lieu of submittal of subsequent subdivisions and structures in the portion of this project in the Airport Influence Area (even though such projects would be evaluated at the staff level).

RECOMMENDATION: Staff recommends a finding of <u>CONSISTENCY</u> for the zone change and general plan amendment. Staff was prepared to recommend CONSISTENCY for the specific plan and tentative tract map as well, but, given the path selected by the applicant team, staff must now recommend <u>CONTINUANCE</u>, pending submittal to FAA. In the event that such submittal occurs prior to hearing, staff would recommend CONDITIONAL CONSISTENCY for the specific plan and tentative tract map.

PROJECT DESCRIPTION: Specific Plan 13-2001 is a proposal to develop 848.6 gross acres as a master planned community with 3,753 dwelling units, 10 acres of commercial land, and 188.5 acres of open space. Zone Change 13-3501 proposes to change the existing zoning from Very Low/Rural/Medium Density Residential to a Specific Plan. General Plan Amendment 13-2503 proposes to change existing land use from Very Low/Rural/Medium Density Residential to a Specific Plan. Tentative Tract Map 13-4501 proposes to subdivide 848.56 acres into 38 lots for financing, rough grading, and backbone street dedication purposes. Development Agreement 13-1502 proposes to define the parameters for the orderly development of the property with regard to the developer's obligation to provide infrastructure and public improvements and facilities and to define the City's obligations with regard to permitting and approvals.

PROJECT LOCATION: The site is generally located southerly of Westward Avenue, easterly of Sunset Avenue, northerly of Coyote Trail, and westerly of San Gorgonio Avenue, in the City of Banning, approximately 6,850 feet southwesterly of the westerly terminus of Runway 8-26 at Banning Municipal Airport.

Staff Report Page 2 of 4

LAND USE PLAN: 2004 Banning Municipal Airport Land Use Compatibility Plan

a. Airport Influence Area:	Banning Municipal Airport
b. Land Use Policy:	Zone E and outside airport influence area
c. Noise Levels:	Below 55 CNEL

BACKGROUND:

<u>Non-Residential Intensity and Residential Density</u>: The site is located in Zone E of the Banning Municipal Airport Influence Area. Non-residential intensity and residential densities are not restricted within Zone E.

<u>Prohibited and Discouraged Uses:</u> The applicant does not propose any uses prohibited or discouraged in Zone E (hazards to flight) within the project, nor would the proposed General Plan Amendment, Specific Plan, or Change of Zone likely allow for any prohibited or discouraged uses.

<u>Noise:</u> The property lies outside the area that would be subject to average exterior noise levels of 55 CNEL or greater under ultimate airport development conditions. Therefore, no special mitigation of noise from aircraft is required.

<u>Part 77</u>: The elevation of Runway 8-26 at its westerly terminus is approximately 2,219 feet above mean sea level (2219 feet AMSL). At a distance of approximately 6,850 feet to the nearest portion of the proposed project (Planning Area 6-C) and 7,200 feet from the highest portion of the proposed project (Planning Area 6-C) and 7,200 feet from the runway, Federal Aviation Administration (FAA) review would be required for any structures with top of roof exceeding 2287.5 feet AMSL in Planning Area 6-C and at 2291 feet AMSL in Planning Area 14. The proposed Tentative Tract Map, although not proposing any buildable lots, does include rough grading of the site which would have ground elevations of approximately 2230 feet AMSL within Planning Area 6-C and 2305 feet AMSL within Planning Area 14. Based on these ground elevations, it is unlikely FAA obstruction evaluation would be required for any development within Planning Area 6-C (Low Density Residential) unless any structures exceeded 50 feet in height. However, the ground elevation alone for Planning Area 14 exceeds the 2291 feet AMSL threshold.

Since no specific, buildable lots are currently proposed, FAA obstruction evaluation at this time would be based on potential future grading, ground elevations, and building heights. Nevertheless, the applicant team has volunteered to submit to FAA at this time in order to forego the requirement for subsequent development within the Airport Influence Area to be submitted to ALUC. The applicant proposes to submit information to FAA based on the currently designed rough grading and maximum building heights, as allowed by the proposed Specific Plan. At the time of writing of this

Staff Report Page 3 of 4

staff report, no submittal to FAA has been confirmed.

<u>Open Area:</u> Zone E of the Banning Municipal Airport Land Use Compatibility Plan does not have any requirements for provision of open space.

CONDITIONS:

- 1. Any outdoor lighting that is installed shall be hooded or shielded so as to prevent either the spillage of lumens or reflection into the sky.
- 2. The following uses shall be prohibited:
 - (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, including landscaping utilizing water features, trash transfer stations that are open on one or more sides, recycling centers containing putrescible wastes, construction and demolition debris facilities, 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 and/or tenants of properties within the portions of this project in the Airport Influence Area.
- 4. Any new retention 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 retention basin(s) that would provide food or cover for bird species that would be incompatible with airport operations shall not be utilized in project landscaping.
- 5. Prior to adoption of this Specific Plan by the City Council, the applicant shall have received a determination of "Not a Hazard to Air Navigation" from the Federal Aviation Administration (FAA) Obstruction Evaluation Service. Copies of the FAA determination shall be provided

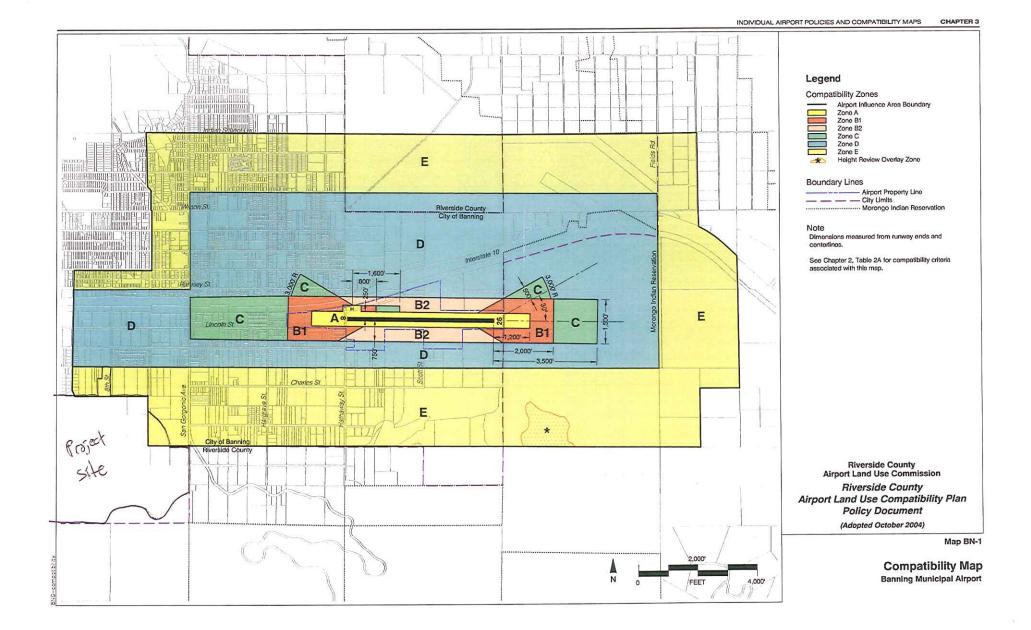
Staff Report Page 4 of 4

to the City of Banning Planning Department and the Riverside County Airport Land Use Commission.

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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 vou. Business & Professions Code Section 11010 (b) 13)(

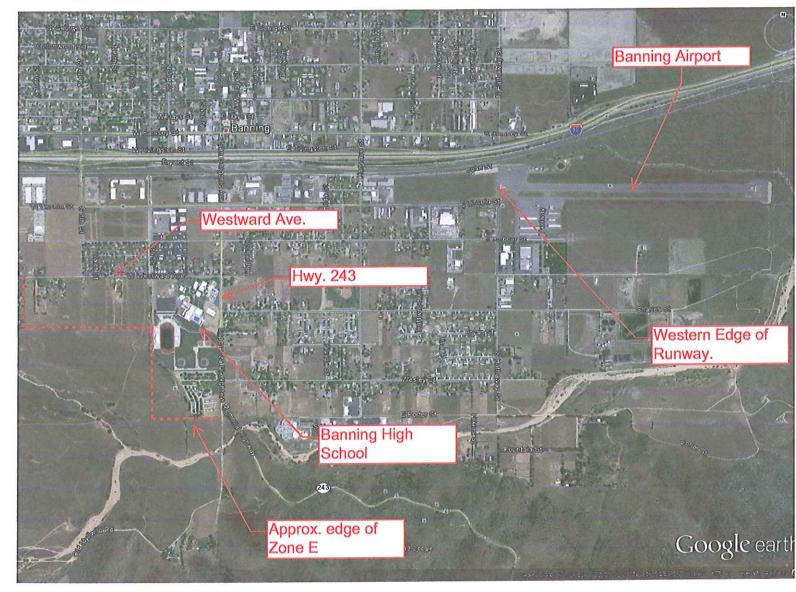


Project:

Rancho San Gorgonio Planned Community Banning, CA. Rancho San Gorgonio, LLC

Owners Representative:

Pitassi Architects, Inc. Peter J. Pitassi, AIA 909-980-1361

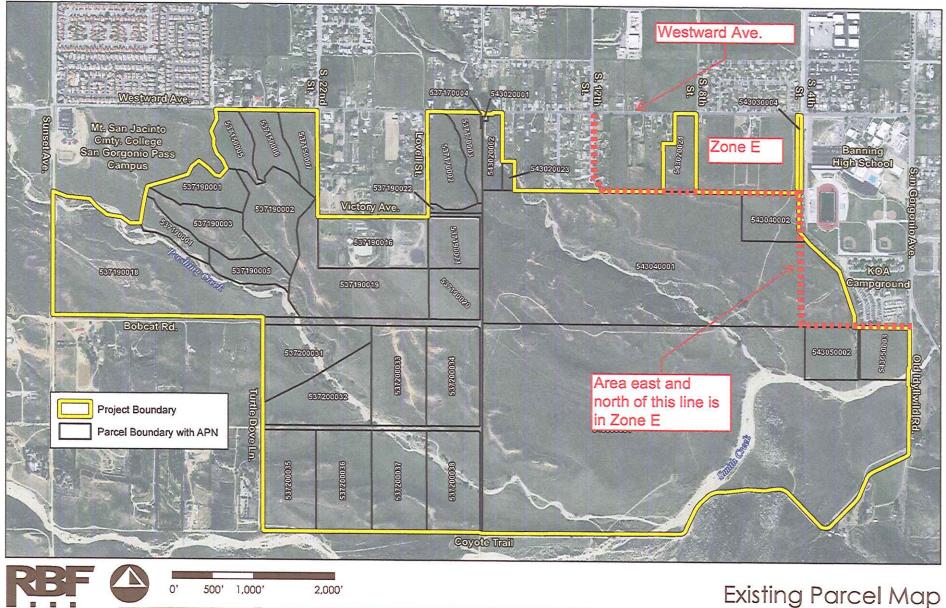


Project:

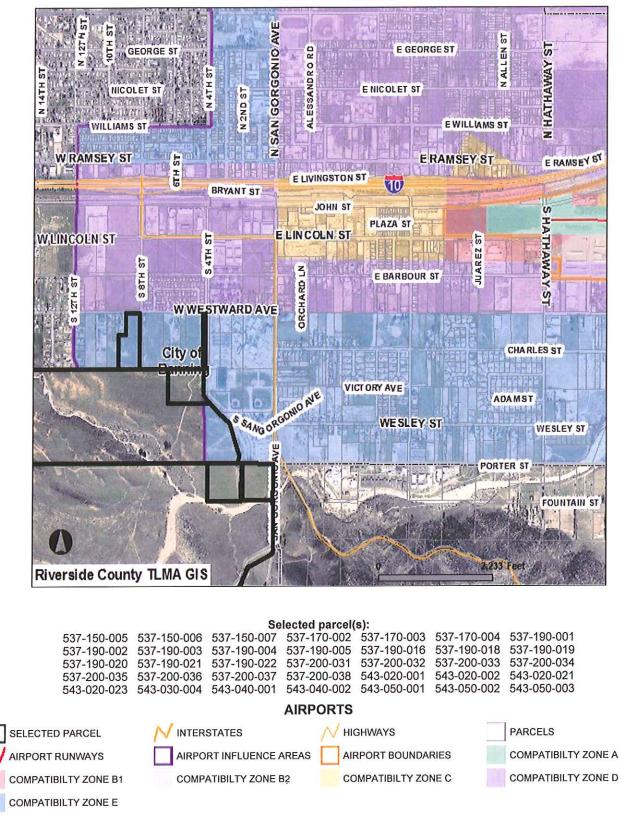
Rancho San Gorgonio Planned Community Banning, CA Rancho San Gorgonio, LLC **Owners Representative:**

Pitassi Architects, Inc. Peter J. Pitassi, AIA 909-980-1361





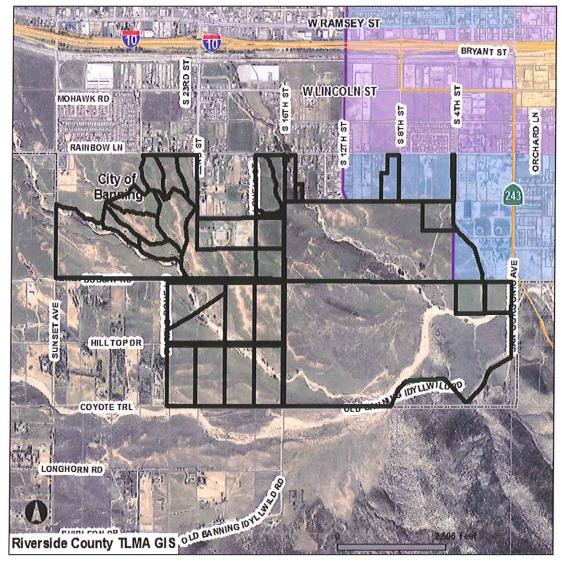
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RIVERSIDE COUNTY GIS

IMPORTANT

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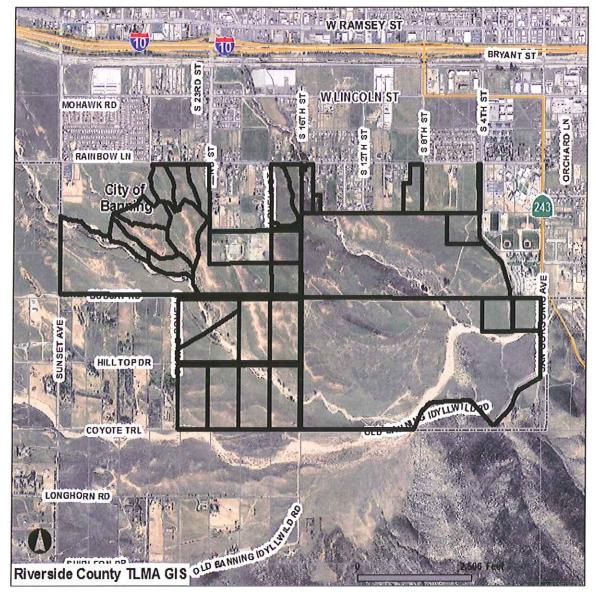
Selected parcel(s):

			06	lected parcell	3].			
	537-150-005	537-150-006	537-150-007	537-170-002	537-170-003	537-170-004	537-190-001	
	537-190-002	537-190-003	537-190-004	537-190-005	537-190-016	537-190-018	537-190-019	
	537-190-020	537-190-021	537-190-022	537-200-031	537-200-032	537-200-033	537-200-034	
	537-200-035	537-200-036	537-200-037	537-200-038	543-020-001	543-020-002	543-020-021	
	543-020-023	543-030-004	543-040-001	543-040-002	543-050-001	543-050-002	543-050-003	
	AIRPORTS							
	SELECTED PARCEL		TATES	// ніс	HWAYS		PARCELS	
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Selected parcel(s):

537-150-005	537-150-006	537-150-007	537-170-002	537-170-003	537-170-004	537-190-001	
537-190-002	537-190-003	537-190-004	537-190-005	537-190-016	537-190-018	537-190-019	
537-190-020	537-190-021	537-190-022	537-200-031	537-200-032	537-200-033	537-200-034	
537-200-035	537-200-036	537-200-037	537-200-038	543-020-001	543-020-002	543-020-021	
543-020-023	543-030-004	543-040-001	543-040-002	543-050-001	543-050-002	543-050-003	

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Source: KTGY Archiecture + Planning



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Land Use Plan (Color)

EXHIBIT 2-2A

Plan Elements **2**



Tabl	e 2-1: Gene	eral Land U	lse Summary		
	21	013 Ranch	o San Gorgor	nio Specific P	lan
Land Use	Gross Acres	% of Area	Dwelling Units	% of Dwelling Units	Average Gross Density (du/ac)
Residential					
Very Low Density (VLDR)	84	9.9%	168	4.5%	2.0
Low Density (LDR)	251.5	29.6%	1,096	29.2%	4.4
Medium Density (MDR) Age Qualified	125.3	14.8%	803	21.4%	6.4
Medium-High Density (MHDR)	23	2.7%	414	11.0%	18.0
High Density (HDR)	36.4	4.3%	1092	29.1%	30.0
Residential Totals	520.2	61.3%	3,573	95.2%	6.9
Parks/Open Space					
RSG Community Park	30	3.6%			
Confluence Park	10.2	1.2%			
Neighborhood Park	12.7	1.5%			
Entry Park	1.1	0.1%			
Village Paseos	12.5	1.5%			
Creeks/Creek Edge Linear Parks	122	14.4%			
Open Space Subtotals	188.5	22.2%			
Other					
Neighborhood Commercial	10	1.2%	180*	4.8%*	18.0*
Public Facility	2.4	0.3%			
Future Development Area	49.7	5.9%			
Backbone Roadways Right-of-Way	76.7	9.0%			
Storm Drain Easement	1.1	0.1%			
Other Subtotals	139.9	16.5%	L	<u> </u>	
SPECIFIC PLAN TOTALS	848.6	100%	3,753	100%	4.4

Notes:

* A Residential Overlay alternative of Medium-High Density Residential (MHDR, 12.1-18.0 du/ac) is allowed on Planning Area 10 in lieu of the Neighborhood Commercial designation, if PA 10 does not develop as commercial.

Plan Elements 2

	Table 2-2: Plan	ning Areas Stat	istical Sum	mary		
Planning Area	Land Use ¹	Target Minimum Lot Size (sq.ft.)	Allowed Density Range (du/ac)	Target Density (du/ac)	Gross – Acres	Target Dwelling Units (DU
PA 1-A	Very Low Density Residential	20,000	0-2.5	2.0	47	94
PA 1-8	Very Low Density Residential	20,000	0-2.5	2.0	18.2	36
PA 1-C	Very Low Density Residential	20,000	0-2.5	2.0	18.8	38
PA 2-A	Low Density Residential	7,000	2.6-6.0	3.4	17.7	60
PA 2-B	Low Density Residential	7,000	2.6-6.0	3.4	17.6	60
PA 2-C	Low Density Residential	7,000	2.6-6.0	3.4	23.2	79
PA 3-A	Low Density Residential	6,000	2.6-6.0	3.8	16.4	83
PA 3-B	Low Density Residential	6,000	2.6-6.0	3.8	16.3	62
PA 3-C	Low Density Residential	6,000	2.6-6.0	3.8	15.5	59
PA 3-D	Low Density Residential	6,000	2.6-6.0	3.8	23.8	90
PA 4-A	Low Density Residential	5,500	2.6-6.0	4.4	11.7	52
РА 4-В	Low Density Residential	5,500	2.6-6.0	4.4	14	61
PA 4-C	Low Density Residential	5,500	2.6-6.0	4.4	15.7	69
PA 4-D	Low Density Residential	5,500	2.6-6.0	4.4	16.8	74
PA 5-A	Low Density Residential	5,000	2.6-6.0	5.2	12.6	66
PA 5-8	Low Density Residential	5,000	2.6-6.0	5.2	23.1	120
PA 6-A	Low Density Residential	4,500	2.6-6.0	6.0	10.6	64
PA 6-B	Low Density Residential	4,500	2.6-6.0	6.0	10.4	62
PA 6-C	Low Density Residential	4,500	2.6-6.0	6.0	5.9	35
PA 7-A	Medium Density Residential – Age Qualified		6.1-12.0	6.5	94.7	604+
PA 7-8	Medium Density Residential – Age Qualified		6.1-12.0	6.5	30.6	199
PA 8	Medium-High Density Residential		12.1-18.0	18.0	23	414
PA 9-A	High Density Residential		18.1-30.0	30.0	24	722
PA 9-8	High Density Residential		18,1-30.0	30.0	12.3	370
PA 10	Neighborhood Commercial (0.35 FAR)				10	
PA 10	Residential Overlay Alternative ²		12.1-18.0	18.0	(10) ²	180
PA 11	RSG Community Park				30	
PA 12	Confluence Park				10.2	
PA 13	Neighborhood Park				12.7	
PA 14	Entry Park				1.1	
PA 15-A	Village Paseo				3.2	
PA 15-B	Village Paseo				6	
PA 15-C	Village Paseo				2.3	
PA 15-D	Village Paseo				1	
PA 16-A	Creeks / Creek Edge Linear Parks				54.8	
PA 16-8	Creeks / Creek Edge Linear Parks				67.2	
PA 17	Public Facility				2.4	·
PA 18	Future Development Area				49.7	
	Backbone Roadways Right-of-Way ³				76.7	
	Storm Darin Easement ⁴				1.1	
	TOTAL				848.6	3,753

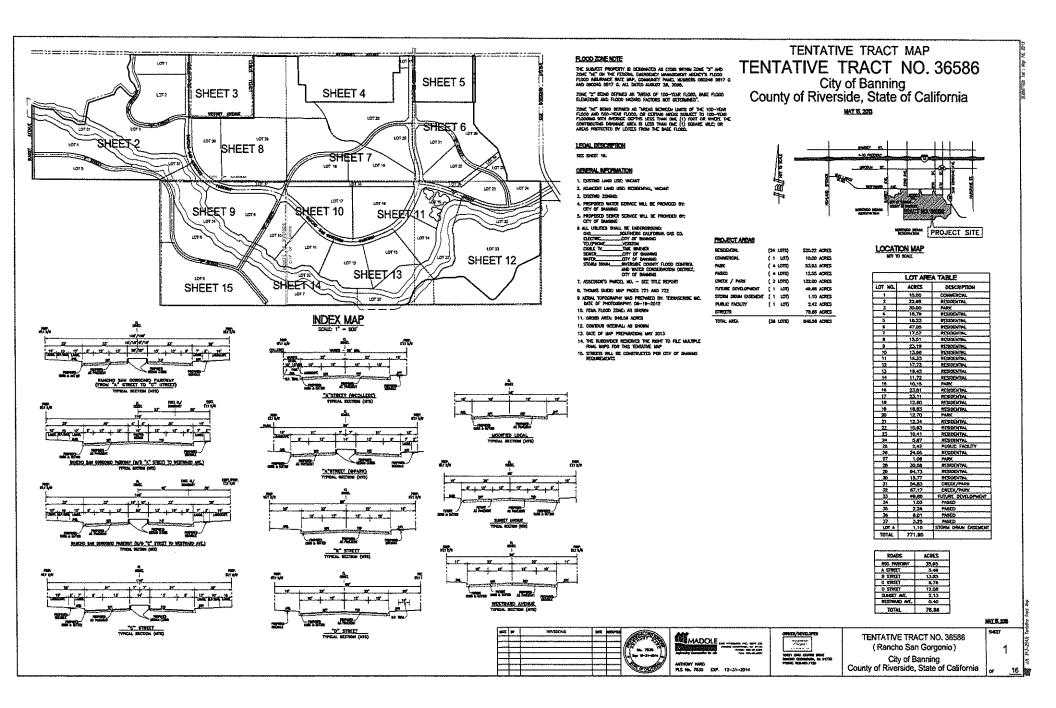
Notes:

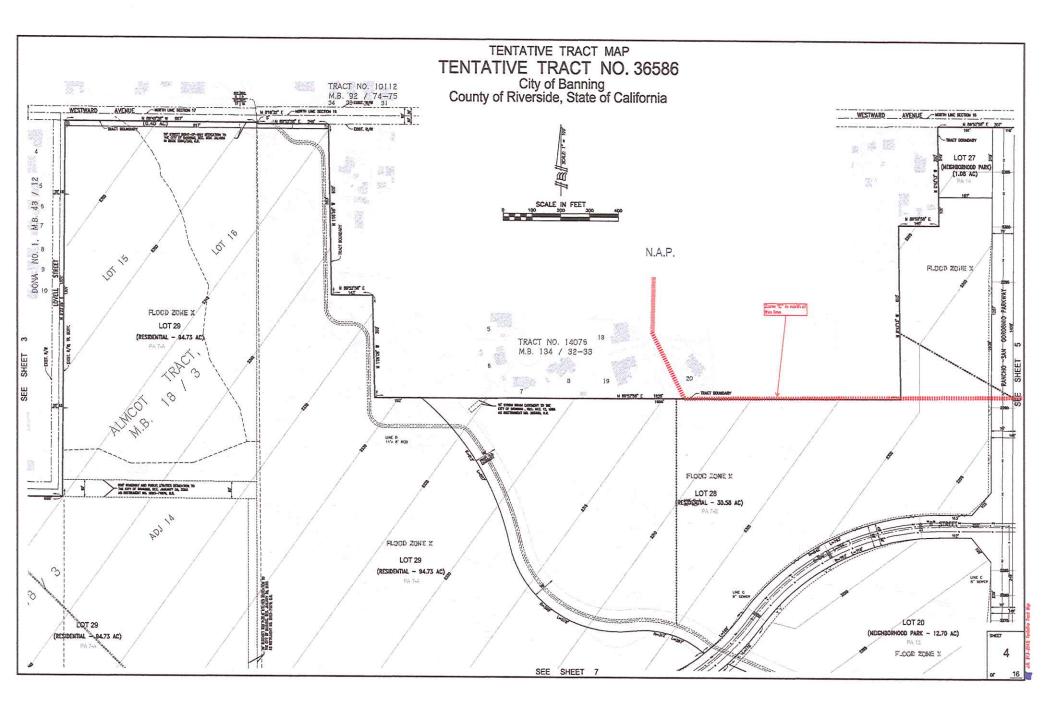
¹Very Low Density Residential (VLDR) and Low Density Residential (LDR) = detached single-family units only, Medium Density Residential (MDR) - Age Qualified includes detached or attached single-family units; Medium-High Density Residential (MHDR) includes detached or attached single-family and multi-family units; High Density Residential includes attached singlefamily and multi-family units.

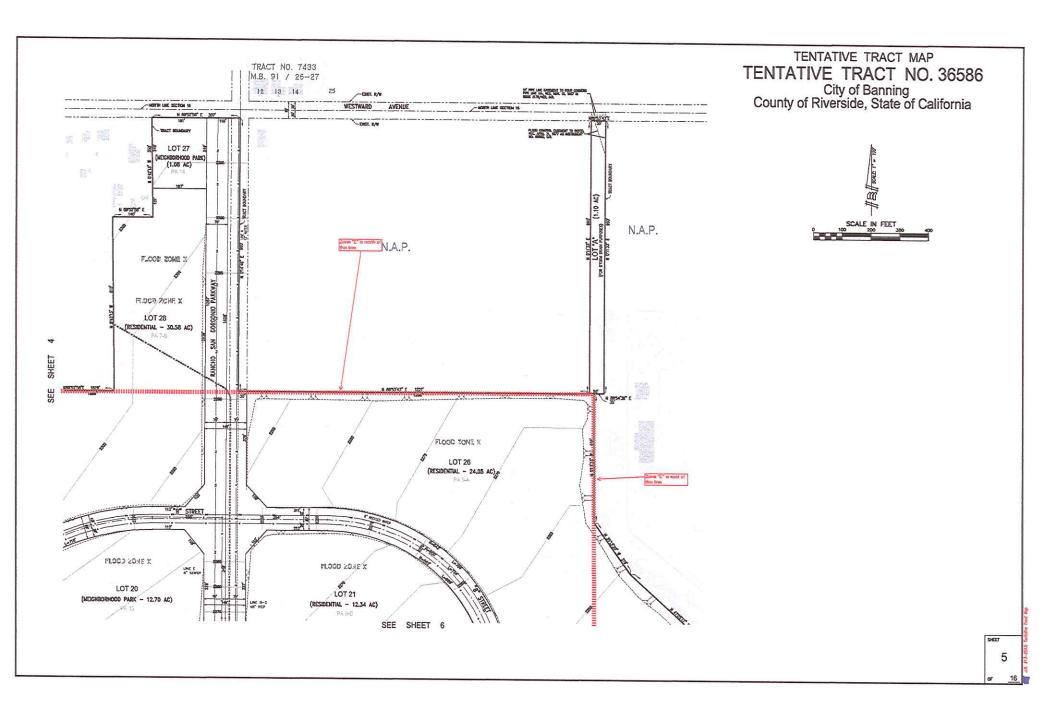
² A Residential Overlay alternative of Medium-High Density Residential (MHDR, 12.1-18.0 du/ac) is allowed on Planning Area 10 in lieu of the Neighborhood Commercial designation, if PA 10 does not develop as commercial. ³ Backbone Roadways Right-of-Way includes adjacent landscaped parkway corridors. ⁴ Located between PAs 7-A and 7-B.

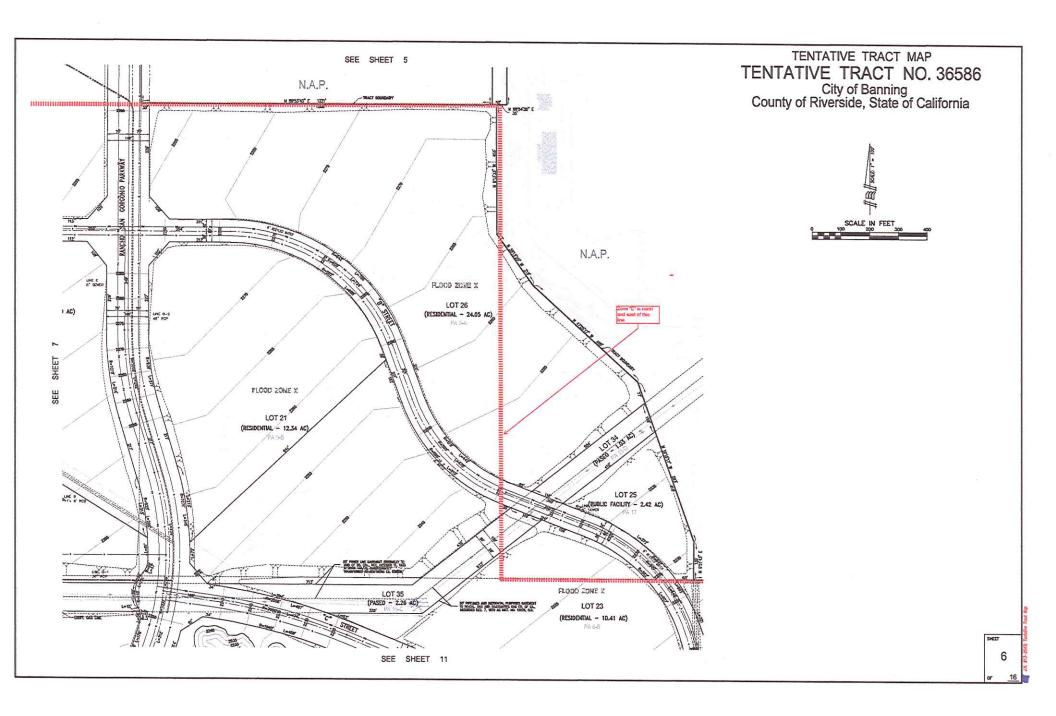
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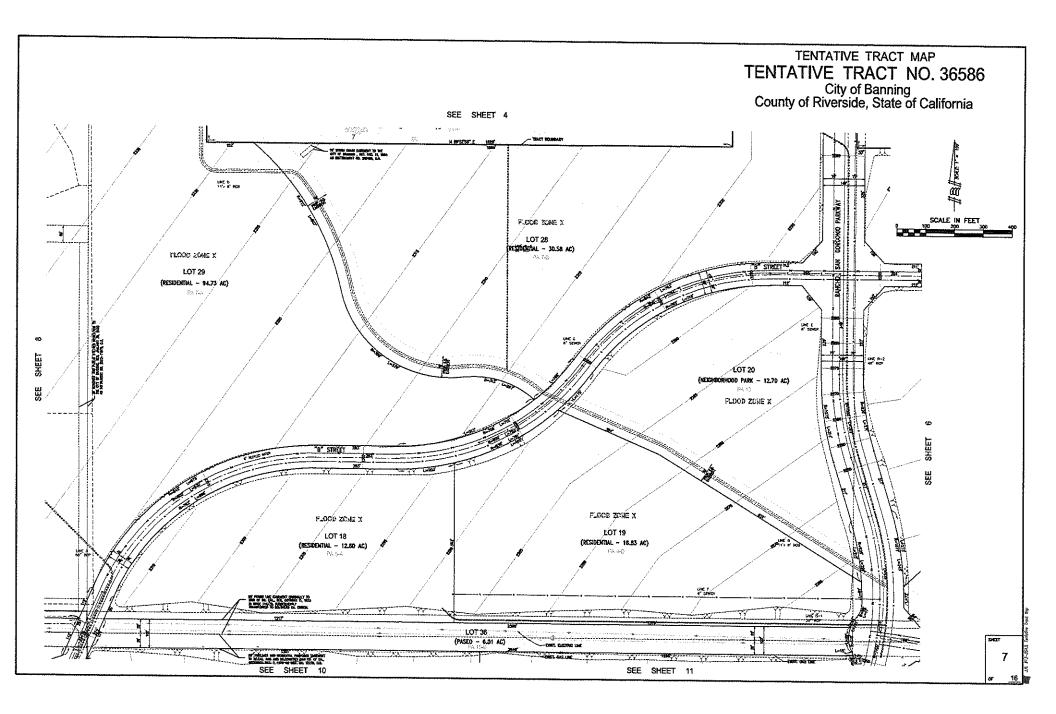
PLAN











NOTICE OF PUBLIC HEARING RIVERSIDE COUNTY AIRPORT LAND USE COMMISSION

A PUBLIC HEARING has been scheduled before the Riverside County Airport Land Use Commission (ALUC) to consider the application 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. The proposed project application may be viewed at the Riverside County Administrative Center, 4080 Lemon Street, 14th Floor, Riverside, California 92501, Monday through Thursday from 8:00 a.m. to 5:00 p.m., except Monday, September 2 (Labor Day), and by appointment on Friday, September 6 from 8:30 a.m. to 5:00 p.m.

PLACE OF HEARING:	Riverside County Administration Center 4080 Lemon St., 1 st Floor Hearing Room Riverside, California
DATE OF HEARING:	September 12, 2013
TIME OF HEARING:	9:00 A.M.

CASE DESCRIPTION:

ZAP1012BA13 – Rancho San Gorgonio LLC (Representative: Pitassi Architects, Peter J. Pitassi) - City Case Nos. Specific Plan 13-2001, Zone Change 13-3501, General Plan Amendment 13-2503, Tentative Tract Map 13-4501, Development Agreement 13-1502. Specific Plan 13-2001 is a proposal to develop 848.6 gross acres generally located southerly of Westward Avenue, easterly of Sunset Avenue, northerly of Coyote Trail, and westerly of San Gorgonio Avenue as a master planned community with 3,753 dwelling units, 10 acres of commercial land, and 188.5 acres of open space. Zone Change 13-3501 proposes to change the existing zoning from Very Low/Rural/Medium Density Residential to a Specific Plan. General Plan Amendment 13-2503 proposes to change existing land use from Very Low/Rural/Medium Density Residential to a Specific Plan. Tentative Tract Map 13-4501 proposes to subdivide 848.56 acres into 38 lots for financing, rough grading, and backbone street dedication purposes. Development Agreement 13-1502 proposes to define the parameters for the orderly development of the property with regard to the developer's obligation to provide infrastructure and public improvements and facilities and to define the City's obligations with regard to permitting and approvals. (Zone E of Banning Municipal Airport Influence Area).

FURTHER INFORMATION: Contact Russell Brady at (951) 955-0549 or John Guerin at (951) 955-0982. The ALUC holds hearings for local discretionary permits within the Airport Influence Areas, reviewing for aeronautical safety, noise and obstructions. All other concerns should be addressed to <u>Ms. Zai Abu Bakar of the City of Banning Planning Department, at (951) 922-3105.</u>

APPLICATION FOR MAJOR LAND USE ACTION REVIEW

ALUC Identification No.

ZAP1012BA13

RIVERSIDE COUNTY AIRPORT LAND USE COMMISSION

PROJECT PROPON	NT (TO BE COMPLETED BY APPLICANT)	
Date of Application Property Owner Mailing Address	July 18, 2013 Rancho San Gorgonio LLC (Phil Burum) Phone Number 909-481-115 10621 Civic Center Drive Rancho Cucamonga, CA 91730	50
Agent (if any) Mailing Address	Peter J. PitassiPhone Number 909-980-13Pitassi Architects, Inc.8439 White Oak Ave., Suite 105Rancho Cucamonga, CA 91730	61
	(TO BE COMPLETED BY APPLICANT) mep showing the relationship of the project site to the airport boundary and runways South of Westward Avenue and west of Highway 243	
Assessor's Parcel No. Subdivision Name Lot Number	in Banning. 543-020-21, 543-030-04, 543-040-02 Parcel Size <u>848 acres tot</u> Rancho San Gorgonio <u>543-040-01</u> Zoning Proposed Classification <u>Specific Plan</u>	
	DN (TO BE COMPLETED BY APPLICANT) ad site plan showing ground elevations, the location of structures, open spaces and water bodies, and the heights of structures and t scription data as needed	rees;
Existing Land Use (describe)	Property is vacant and zoned for low density residential use.	
Proposed Land Use (describe)	Parcels are part of a proposed planned community which will include a variety of residential uses.	
For Residential Uses For Other Land Uses (See Appendix C)	Number of Parcels or Units on Site (exclude secondary units) Unknown at this time Hours of Use	
Height Data	Height above Ground or Tallest Object (including antennas and trees) Proposed Maximum Hqt. 3 Ighest Elevation (above sea level) of Any Object or Terrain on Site 2409 ' AMSL*	5 ft. ft.
Flight Hazards	Does the project involve any characteristics which could create electrical interference, on the project involve any characteristics which could create electrical interference, on the project involve and the project involve any characteristics which could create electrical interference, on the project involve any characteristics which could create electrical interference, on the project involve any characteristics which could create electrical interference, on the project involve any characteristics which could create electrical interference, on the project involve any characteristics which could create electrical interference, on the project involve any characteristics which could create electrical interference, on the project and the projec	

* This elevation is at Sunset Avenue, the far western edge of the planned community. Within Zone E, the highest elevation is 2305' AMSL.

REFERRING AGEN	ICY (TO BE COMPLETED	BY AGENCY S	TAFF)							-				
Date Received Agency Name	City of Ba	City of Banning				Type of Project General Plan Amendment Zoning Amendment or Variance								
Staff Contact Phone Number Agency's Project No.	Zaj Abu Bakar							_ ☑ Subdivision Approval _ □ Use Permit _ □ Public Facility						
ALUC REVIEW (T	O BE COMPLETED BY AL		DIREC	TOR			_ 12	Othe	er 	Sp	ecific	rlan		
Application	Date Received					Ву							•	
Receipt	Is Application Complet	te?		Yes		No								
Airport(s) Nearby					· · · · ·									
Primary Criteria Review	Compatibility Zone(s) Allowable (not prohibit Density/Intensity Acce	-		A Yes Yes		B1 No No						Ē		
	Open Land Requireme Height Acceptable?			Yes Yes		No No								
	Easement/Deed Notice	e Provided?				No								
Special Conditions	Describe:													
Supplemental Criteria Review	Noise					······					N			
Nonon	Safety													
	Airspace Protection													
	Overflight													
ACTIONS TAKEN (T	O BE COMPLETED BY AL	JC EXECUTIVE	DIREC	TOR)									· · · · · · · · · · · · · · · · · · ·	
ALUC Executive Director's Action	Approve Refer to ALUC						Date							
ALUC Action	Consistent Consistent with Co	nditions (list co	ondition	ns/atta	ich ad	dition	Date al pag		eeded)					
												<u></u>		
	Inconsistent (list rea	asons/attach a	ddition	ial pag	jes if i	neede	d)							
					,									
August 2007														



MEMORANDUM

DATE:	July 22, 2013
VIA:	Hand Carry
TO:	John Guerin Airport Land Use Commission Riverside County
FROM:	Peter J. Pitassi, AIA, LEED AP
SUBJECT:	APN 543-020-21, 543-030-04, 543-040-01, 02 Rancho San Gorgonio Planned Community Banning, CA

John, per our previous conversations, please find enclosed our application for the Airport Land Use Commission's review of our properties in the City of Banning. We have enclosed the following:

- Application for Land Use Action, dated July 18, 2013.
- A Project Land Use Plan and Tentative Tract Maps all folded to maximum 8-1/2" x 14" size.
- One (1) reduced copy of each of the above plus an 8-1/2" x 11" aerial photo indicating the location the Banning Airport, our property, and the edge of Zone E.
- One (1) 8-/12" x 11" copy of the AP Maps with an indication of the location of Zone E.
- Four (4) sets of gummed labels of the Owner, Architect, and City Representative for your use.
- One (1) set of gummed labels for all Property Owners within 300' of our parcels.
- Check made payable to County of Riverside Airport Land Use Commission for \$6,640.00.

PJP/cas Enclosures

COUNTY OF RIVERSIDE AIRPORT LAND USE COMMISSION

STAFF REPORT

AGENDA ITEM: 2.2

HEARING DATE: September 12, 2013

CASE NUMBER:ZAP1088MA13 - LNR Riverside II, LLC (Representative:
K&A Engineering, Don Bergh)

APPROVING JURISDICTION: March Joint Powers Authority (March JPA)

JURISDICTION CASE NO: Plot Plan 13-02

MAJOR ISSUES: None (Airspace review in process)

RECOMMENDATION: Staff recommends that the proposed project be found <u>CONDITIONALLY CONSISTENT</u> with the 1984 Riverside County Airport Land Use Plan, as applied to the March Air Reserve Base Airport Influence Area, subject to the conditions included herein and such additional conditions as may be necessary to comply with Federal Aviation Administration (FAA) requirements.

PROJECT DESCRIPTION: Plot Plan 13-02 is a proposal to develop a 510,000 square foot industrial warehouse building on 25.74 acres.

PROJECT LOCATION: The site is located northerly and easterly of Opportunity Way, easterly of Meridian Parkway, westerly of Interstate 215, and northerly of Van Buren Boulevard, within the land use jurisdiction of the March Joint Powers Authority, approximately 1,500 feet westerly of Runway 14-32 at March Air Reserve Base.

LAND USE PLAN: 1984 Riverside County Airport Land Use Plan, as applied to March Air Reserve Base

a. Airport Influence Area:	March Air Reserve Base
b. Land Use Policy:	Area II
c. Noise Levels:	primarily within 65-70 CNEL, according to the Draft F-15 Aircraft Conversion Environmental Impact Statement, 144 th Fighter Wing, California Air National Guard (May 2012)

Staff Report Page 2 of 4

BACKGROUND:

<u>Non-Residential Land Use Intensity</u>: The site is located in Area II of the current March Air Reserve Base Airport Influence Area. Non-residential intensity is not limited within Area II, based on the 1984 Riverside County Airport Land Use Plan.

Pursuant to the Draft Airport Land Use Compatibility Plan for the March Air Reserve Base/Inland Port Airport, the site would be located within Compatibility Zone B2. The draft land use intensity criteria for Compatibility Zone B2 would limit average intensity to 100 people per acre and maximum single-acre intensity to 250 people. (There are no risk-reduction design bonuses available, as March is primarily utilized by large aircraft weighing more than 12,500 pounds.)

Based on the site plan and floor plans provided, a total of 20,000 square feet of office and 490,000 square feet of warehouse space is proposed within the building. A total of 1,080 people would be anticipated, for an average intensity of 42 persons per acre on the 25.74 acres total, utilizing the building code method with 50% reduction for office uses. This intensity would be consistent with the draft Compatibility Zone B2 average intensity criteria of 100.

A second method for determining total occupancy involves multiplying the number of parking spaces provided or required (whichever is greater) by average vehicle occupancy (assumed to be 1.5 persons per vehicle in the absence of more precise data). Based on the number of parking spaces provided (224 automobile and 88 truck loading spaces), the total occupancy would be estimated at 468 people for an average acre intensity of approximately 18, which is also consistent with the Zone B2 average intensity criteria.

The most intensely developed single-acre would consist of 20,000 square feet of office and 23,560 square feet of warehouse space, accommodating a total of 147 people. This intensity would be consistent with the draft Compatibility Zone B2 single-acre intensity criteria of 250.

<u>Prohibited and Discouraged Uses:</u> The applicant does not propose any uses prohibited or discouraged in Area II or draft Compatibility Zone B2 within the project.

<u>Noise:</u> Both the March Air Reserve Base/Inland Port Airport Joint Land Use Study (which relied on the noise contours included in the 2005 AICUZ study) and the F-15 Aircraft Conversion Environmental Impact Study prepared for the 144th Fighter Wing of the California Air National Guard depict the site as being partially within the 65-70 CNEL range, with a small portion of the site possibly falling below 65 CNEL. As warehousing is not a noise sensitive use, no special measures to mitigate aircraft-generated noise are required for most of the building. However, aircraft noise levels within office areas of the building will be required to be attenuated to a maximum interior level of 45 dBA CNEL.

<u>Part 77</u>: The elevation of Runway 14-32 at its northerly terminus is approximately 1535.1 feet above mean sea level (1535.1 feet AMSL). At a distance of approximately 1,500 feet from the runway,

Staff Report Page 3 of 4

Federal Aviation Administration (FAA) review would be required for any structures with top of roof exceeding 1550.1 feet AMSL. The highest proposed building finished floor elevation on-site is 1556.0 feet AMSL. The proposed building has a maximum height of 42 feet for a potential maximum elevation of 1598 feet AMSL. Review by the FAA Obstruction Evaluation Service is required. The proposed building has been submitted for FAA obstruction evaluation review and has been assigned Aeronautical Study Nos. 2013-AWP-4797-OE and 2013-AWP-4798-OE. A determination from FAA is pending at the time of writing of this staff report.

<u>Avigation Easement:</u> Pursuant to Policy 3 of the 1984 Riverside County Airport Land Use Plan, an avigation easement is required for land uses located within Area II.

<u>Open Area</u>: Area II of the 1984 Riverside County Airport Land Use Plan and Draft Compatibility Zone B2 do not have any requirements for provision of open space.

CONDITIONS:

- 1. Any outdoor lighting installed shall be hooded or shielded to prevent either the spillage of lumens or reflection into the sky. Outdoor lighting shall be downward facing.
- 2. The following uses shall be prohibited:
 - (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, 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.
 - (e) Children's schools, day care centers, libraries, hospitals, congregate care facilities,

Staff Report Page 4 of 4

> hotels/motels, places of assembly (including churches and theaters), buildings with more than 3 aboveground habitable floors, noise sensitive outdoor nonresidential uses, and hazards to flight.

- 3. Prior to issuance of any building permits, the landowner shall convey and have recorded an avigation easement to the March Inland Port Airport Authority. Contact March Joint Powers Authority at (951) 656-7000 for additional information.
- 4. Prior to issuance of any building permits, the applicant shall have received a determination of "Not a Hazard to Air Navigation" from the Federal Aviation Administration (FAA) Obstruction Evaluation Service. Copies of the FAA determination shall be provided to the March Joint Powers Authority Planning Department and the Riverside County Airport Land Use Commission.
- 5. The attached notice shall be given to all prospective purchasers and/or tenants of the property.
- 6. Any new retention basins on the site shall be designed so as to provide for a maximum 48hour 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 retention basin(s) that would provide food or cover for bird species that would be incompatible with airport operations shall not be utilized in project landscaping. Landscaping shall utilize plant species that do not produce seeds, fruits, or berries. Trees shall be spaced so as to prevent large expanses of contiguous canopy, when mature.
- 7. This project has been evaluated as a proposal for the establishment of an industrial warehouse with not more than 20,000 square feet of office area in any given acre. March Joint Powers Authority shall require additional review by the Airport Land Use Commission prior to the establishment of any of the following uses in this structure:

Auction rooms, auditoriums, bowling alleys, call centers, care facilities, churches and other places of worship, conference rooms larger than 1,500 square feet in area, classrooms, courtrooms, dance floors, dormitories, drinking establishments, exercise rooms, exhibit rooms, health care facilities, gymnasiums, locker rooms, lounges, retail sales, skating rinks, stages, swimming pools, and all other uses that would be considered to have an occupancy level greater than one person per 100 square feet (minimum square feet per occupant less than 100) pursuant to California Building Code (1998) Table 10-A.

8. Noise attenuation measures shall be incorporated into the design of the office areas of the structure, to the extent such measures are necessary to ensure that interior noise levels from aircraft operations are at or below 45 CNEL.

Y:\AIRPORT CASE FILES\March\ZAP1088MA13\ZAP1088MA13sr.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 vou. Business & Professions Code Section 11010 (b)



Federal Aviation Administration

Form 7460-1 for ASN: 2013-AWP-4797-OE

For information only. This proposal has not yet been studied. Study outcomes will be posted at a later date. Public comments are not requested, and will not be considered at this time.

Overview				
Study (ASN): 2013-AWP-4797-OE		Received Date: 08/01/2013		
Prior Study:		Entered Date: 08/01/2013		
Status: Work	In Progress	Map: View Map		
Construction Info		Structure Summary		
Notice Of: CC	INSTR	Structure Type: Building		
Duration: PE	RM (Months: 0 Days 0)	Structure Name: 510 KSF LNR		
Work Schedule: 03/03/2014 to 02/28/2015		FCC Number:		
Structure Details		Height and Elevation		
Latitude (NAD 83):	33° 53' 46.72" N		Proposed	
Longitude (NAD 83): 117° 16' 35.20"W		Site Elevation:	1556	
Datum:	NAD 83	Structure Height:	42	
City:	Moreno Valley	Total Height (AMSL): 159		
State:	CA		1598	
Nearest County:	Riverside	Frequencies		
		Low Freq High Freq Unit ERP	Unit	

« OE/AAA

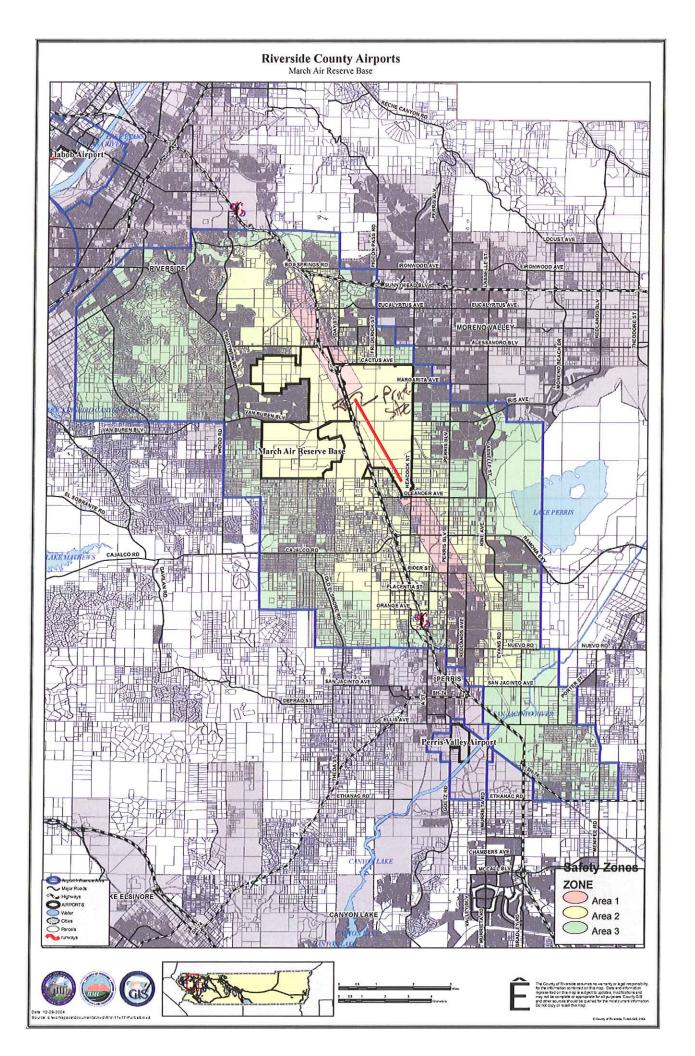


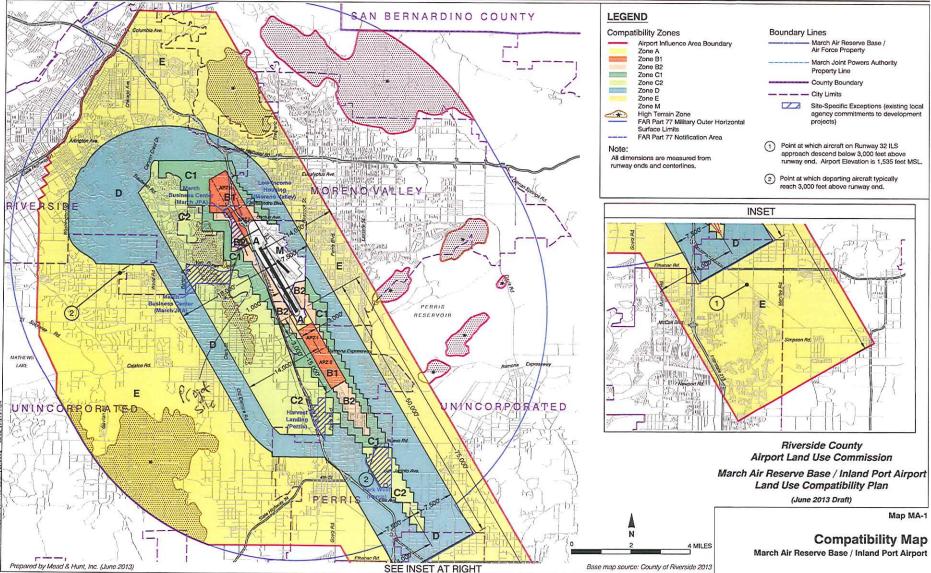
For information only. This proposal has not yet been studied. Study outcomes will be posted at a later date. Public comments are not requested, and will not be considered at this time.

Overview				
Study (ASN): 2013-AWP-4798-0E Prior Study:		Received Date: 08/01/2013		
		Entered Date: 08/01/2013		
Status: Work	In Progress	Map: View Map		
Construction Info		Structure Summary		
Notice Of: CO	VSTR	Structure Type: Building		
Duration: PER	tM (Months: 0 Days: 0)	Structure Name: 510 KSF LNR SE Edge Closest to RW 14/32		
Work Schedule: 03/03/2014 to 02/28/2015		FCC Number:		
Structure Details		Height and Elevation		
Latitude (NAD 83):	33° 53' 37,24" N	******	Proposed	
Longitude (NAD 83): 117º 16' 28.45" W		Site Elevation:	1551	
Datum:	NAD 83	Structure Height:	42	
City:	Moreno Valley	Total Height (AMSL): 1593		
State:	CA			
Nearest County:	Riverside			
		Frequencies		
		Low Freq High Freq Unit	ERP Unit	

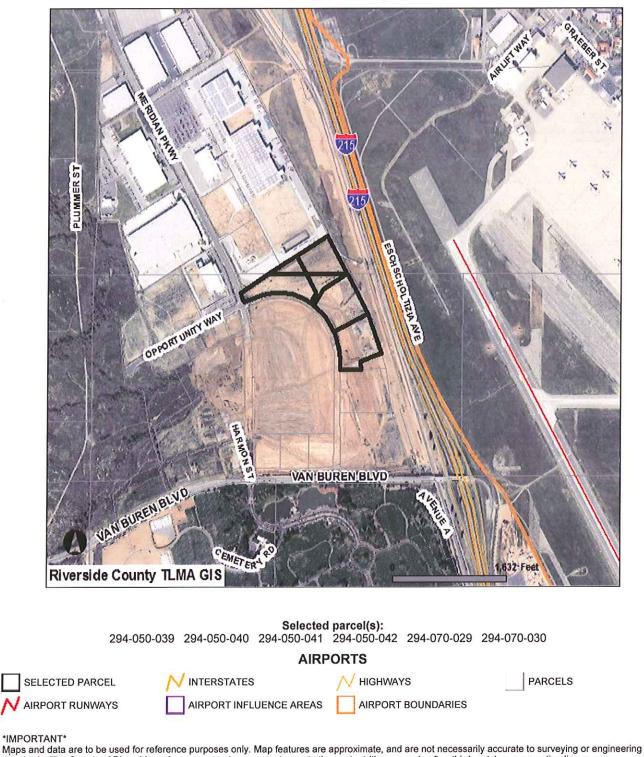
Page 1 of 2

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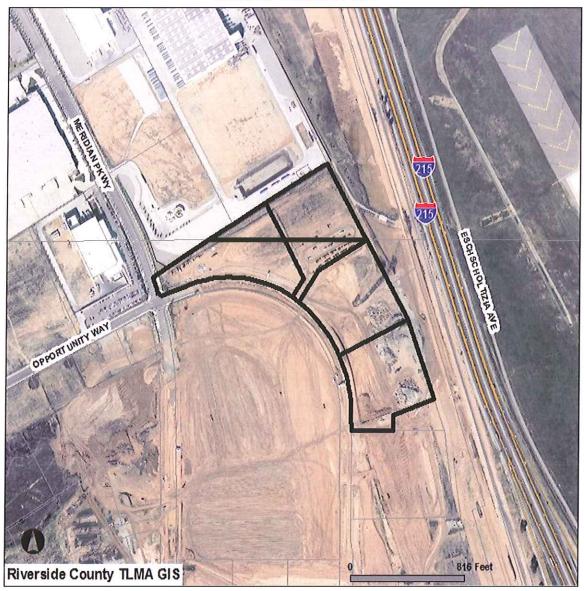
INDIVIDUAL AIRPORT POLICIES AND COMPATIBILITY MAPS CHAPTER 3



IMPORTANT

standards. The County of Riverside makes no warranty or guarantee as to the content (the source is often third party), accuracy, timeliness, or completeness of any of the data provided, and assumes no legal responsibility for the information contained on this map. Any use of this product with respect to accuracy and precision shall be the sole responsibility of the user.

REPORT PRINTED ON ... Wed Aug 21 14:10:10 2013 Version 130624

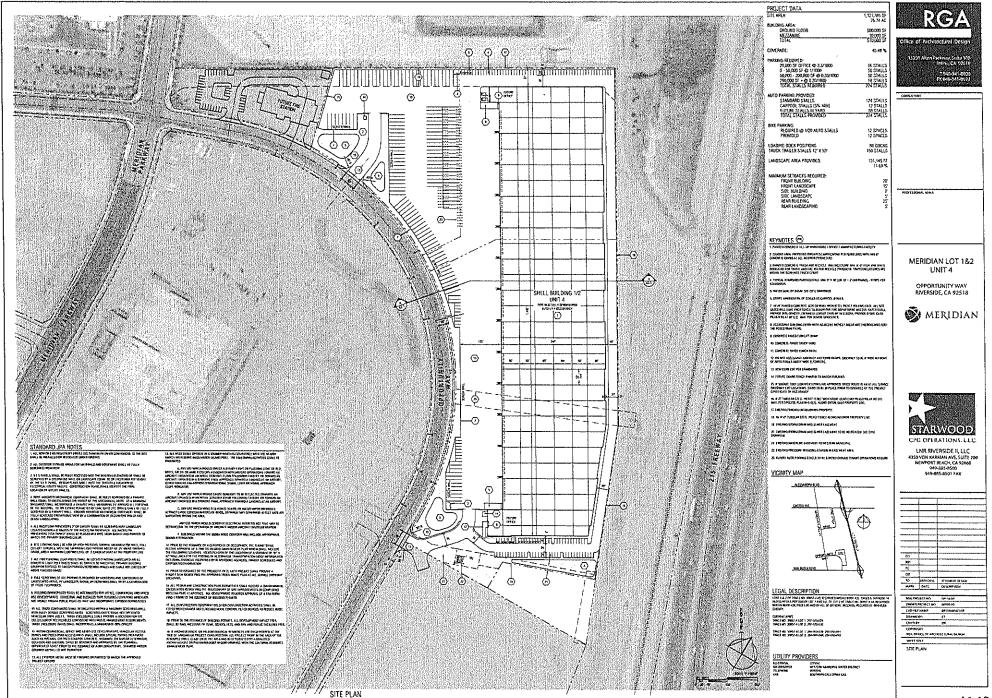


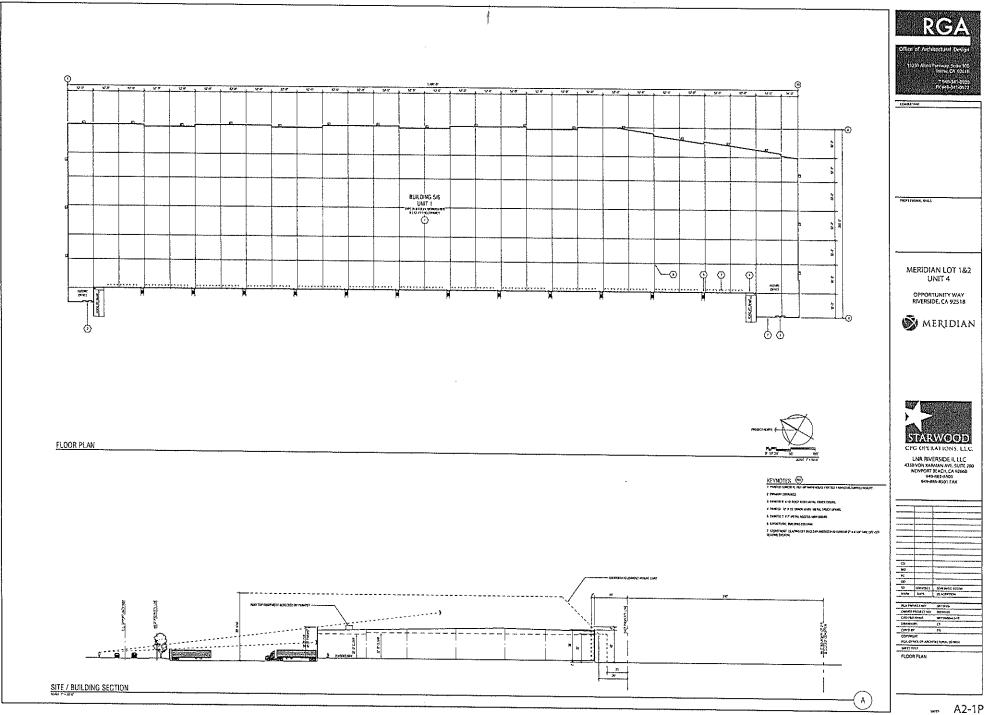
Selected parcel(s): 294-050-039 294-050-040 294-050-041 294-050-042 294-070-029 294-070-030

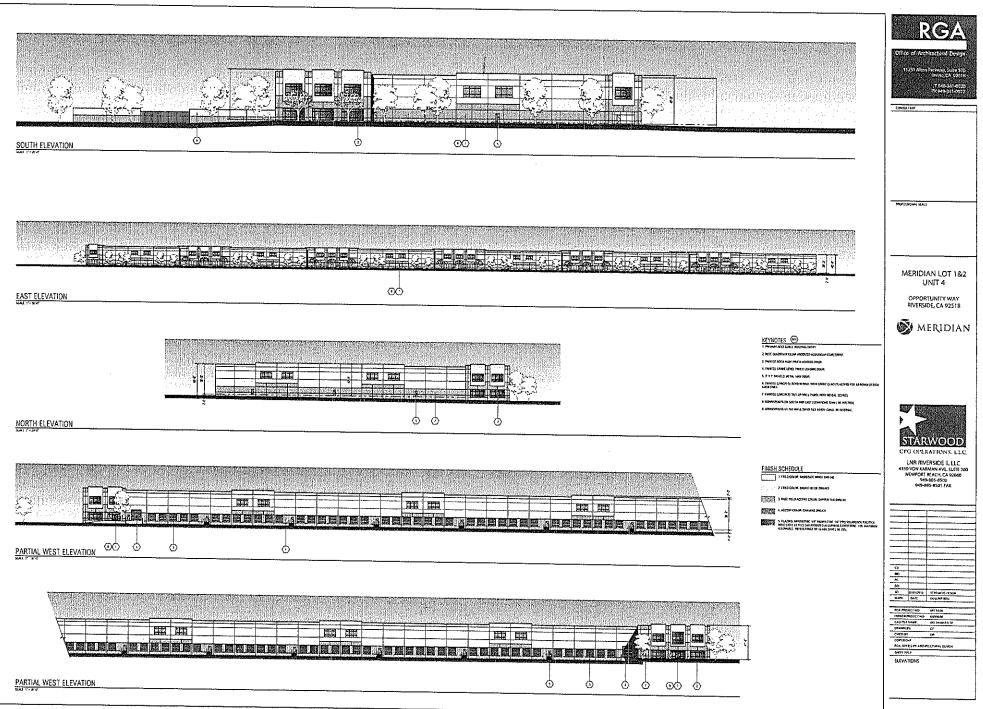
IMPORTANT

Maps and data are to be used for reference purposes only. Map features are approximate, and are not necessarily accurate to surveying or engineering standards. The County of Riverside makes no warranty or guarantee as to the content (the source is often third party), accuracy, timeliness, or completeness of any of the data provided, and assumes no legal responsibility for the information contained on this map. Any use of this product with respect to accuracy and precision shall be the sole responsibility of the user.

REPORT PRINTED ON ... Wed Aug 21 14:08:27 2013







Project Description

The Meridian Lot 1 & 2 Unit 4 proposed project ("Project") is located within the south-eastern portion of the North Campus of the Meridian Specific Plan Area south of Cactus Avenue and east of Opportunity Way. The Project Site is bounded by Meridian Unit 6 Lot 1a to the west, the Fresh & Easy facility to the north, the Burlington Northern Sante Fe rail line and the I-215 to the east, Meridian Unit 4 Lot 3 to the south and Opportunity Way and Sysco to the west. The applicant has submitted a Lot Line Adjustment to reset the Lot Line between Unit 6 Lot 1 & Lot 2 to establish the west boundary of the Project and also has submitted a Parcel Merger to consolidate the modified Unit 6 Lot 2, Unit 4 Lot 1 and Unit 4 Lot 2. into a single parcel encompassing 25.74 acres.

The 25.74 acres will accommodate the development of a 510,000 square foot warehousing and distribution facility designed to accommodate a future, but yet unidentified, industrial user. The approximate 42-foot high, rectangular building will accommodate approximately 20,000 square feet of office space which includes 10,000 of mezzanine area. The remainder of the one story building would be devoted to product storage, sorting, consolidation and distribution. The materials to be stored and distributed at this facility will not be specified until a user is identified. Approximately 88 truck loading docks would be provided along the western side of the building. Two paved forklift paths would be provided on the western side of the building, one near the northwestern corner of the structure and the other near the southwestern corner. Heating, ventilation and air conditioning systems would be constructed on the eastern boundary of the site, within screened truck parking areas, behind a truck yard screen enclosure wall.

The building would be approximately 1,490 feet long by approximately 340 feet wide. Access to and from the facility would be provided by two driveways to/from Opportunity Way. The northern driveway would be located directly across from the main Sysco entry driveway and provide primary truck access. The southern driveway would be located at the south end of the site providing joint access to the Unit 4 Lot 3 parcel and provide employee, visitor and truck access to the site. The employee and visitor parking lots would have 136 auto parking stalls and be located primarily along the northern and southern sides of the building. The parking spaces will be 9 feet by 18 feet (standard parking space dimension); seven parking spaces will be designated for handicapped use and approximately 12 would be allocated for carpool use. The site will have the capacity to add an additional 88 auto parking stalls should tenant operational demands require them. Approximately 150 trailer parking stalls (12 feet wide by 55 feet long) will be provided along the western boundary of the site. The truck loading and trailer stalls would be screened from the nearby public streets by an approximate 14- foot high painted concrete screen wall along the western boundary of the site, adjacent to Opportunity Way.

Detc: 7.7.13 Stratelure: 7 MARCH JOINT POWERS AUTHORITY

TRANSMITTAL

то:	REVIEW AGENCIES
FROM:	GRACE WILLIAMS, SENIOR PLANNER
DATE:	JULY 23, 2013
SUBJECT:	500K WAREHOUSE, UNITS 4 AND 6 (LOTS 1 AND 2)
CASE NOS.:	Plot Plan No. 13-02; Lot Line Adjustment 13-02; Parcel Merger 13-02

Reviewing Agencies

Jim Barrett, Willdan
 Dan Wagner, Riv. Co. Fire
 Habib Motlagh, Trilake Engineering
 Sonia Huff, WMWD
 Greg Hasty, SCE – Planning
 County Environmental Health
 Georgiena Vivian, VRPA Consultants

Dan Fairbanks, March JPA
 Pamela Hann, March ARB
 Casey Bowen, March ARB
 Steven Thomas, Riverside County Flood Control
 Dave Kristedja, So Cal Gas Company
 John Guerin, ALUC
 Riverside Transit Agency

March JPA has received the following applications for a speculative warehouse building on Unit 6, Lots 1 and 2 of the Meridian Business Park Specific Plan:

Plot Plan (PP13-02): The proposed project is to establish a new 510,000 square foot speculative warehouse and distribution facility to accommodate a future industrial user on 25.74 acres. The project site currently involves four legal parcels and the property owner desires to readjust property lines to accommodate the proposed use under Lot Line Adjustment No. 13-02 and Parcel Merger No. 13-02. (See attached project description for further information).

Lot Line Adjustment (LLA 13-02): The proposed action is to move a lot line separating parcel numbers 294-050-0041 and 294-050-042 approximately 514' feet westerly so that parcel number 294-050-041 becomes 2.12 acres for a future fire station, and parcel number 294-050-042 becomes a larger parcel that will be included in Parcel Merger No.13-02.

Parcel Merger (PM 13-02): The proposed action is to merge the following parcels into one in order to accommodate the proposed speculative building: 294-050-042, 294-070-029 and 294-070-030.

The March JPA requests that comments, should you have any, be returned to us no later than Monday, August 5, 2013. Please contact Grace Williams, Senior Planner at (951) 656-7000 for further information or if you have any questions that you would like to discuss beforehand.

ATTACHMENTS:

- 1. Plot Plan
- 2. Lot Line Adjustment
- 3. Parcel Merger

NOTICE OF PUBLIC HEARING RIVERSIDE COUNTY AIRPORT LAND USE COMMISSION

A PUBLIC HEARING has been scheduled before the Riverside County Airport Land Use Commission (ALUC) to consider the application 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. The proposed project application may be viewed at the Riverside County Administrative Center, 4080 Lemon Street, 14th Floor, Riverside, California 92501, Monday through Thursday from 8:00 a.m. to 5:00 p.m., except Monday, September 2 (Labor Day), and by appointment on Friday, September 6 from 8:30 a.m. to 5:00 p.m.

- PLACE OF HEARING: Riverside County Administration Center 4080 Lemon St., 1st Floor Hearing Room Riverside, California
- DATE OF HEARING: September 12, 2013
- TIME OF HEARING: 9:00 A.M.

CASE DESCRIPTION:

ZAP1088MA13 – LNR Riverside II, LLC (Representative: K&A Engineering, Don Bergh) – March JPA Case No. Plot Plan 13-02. Plot Plan 13-02 is a proposal to develop a 510,000 square foot industrial warehouse building on 25.74 acres located northerly and easterly of Opportunity Way, easterly of Meridian Parkway, westerly of Interstate 215, and northerly of Van Buren Boulevard, within the land use jurisdiction of the March Joint Powers Authority. (Area II of the March Air Reserve Base Airport Influence Area.)

FURTHER INFORMATION: Contact Russell Brady at (951) 955-0549 or John Guerin at (951) 955-0982. The ALUC holds hearings for local discretionary permits within the Airport Influence Areas, reviewing for aeronautical safety, noise and obstructions. All other concerns should be addressed to <u>Ms. Grace Williams of the March JPA Planning Department at</u> (951) 656-7000.

	TION FOR MAJOR LAND USE ACTION REVIEW ALUC Identification No. E COUNTY AIRPORT LAND USE COMMISSION ZAPIDSSMAI3
PROJECT PROPON	ENT (TO BE COMPLETED BY APPLICANT)
Date of Application Property Owner Mailing Address	Plan 13-02 (with associated UA+13-02 and Twill Marger ++13-02) LNR Riverside II, LLC Phone Number (949)885-8237 4350 Von Farman Avenue, Suite 200 Newport Beach, CA. 92660
Agent (if any) Mailing Address	Kt A Enginearing (17th): Don Bellathone Number (951) 279-1890 257 N. Svendan Street, Swite 117 Corona, CA. 12880
	N (TO BE COMPLETED BY APPLICANT) ed map showing the relationship of the project site to the airport boundary and runways
Street Address	N/A
Assessor's Parcel No. Subdivision Name Lot Number	$\frac{294-050-034,040,041,043a294-070-029}{4-030}$ Parcel Size $\frac{1041-050}{200}$ Total = .05.740042 Zoning Classification $\frac{59-5}{200}$
lf applicable, attach a det	TION (TO BE COMPLETED BY APPLICANT) alled site plan showing ground elevations, the location of structures, open spaces and water bodies, and the heights of structures and trees; description data as needed NACANT-
Proposed Land Use (describe)	510,000 Square flot speculative Wavehouse/distribution facility
For Residential Uses For Other Land Uses (See Appendix C)	Number of Parcels or Units on Site (exclude secondary units) N/A Hours of Use N/A Number of People on Site Maximum Number Method of Calculation N/A The produst/1 is fax a spec Waterburge publication
Height Data	Height above Ground or Tallest Object (including antennas and trees) $41'-b''$ ft.Highest Elevation (above sea level) of Any Object or Terrain on Site $12555'$ ft.
Flight Hazards	Does the project involve any characteristics which could create electrical interference, Ves confusing lights, glare, smoke, or other electrical or visual hazards to aircraft flight? No

Date Received	JUN 3,2013			Type of	Project			
Agency Name	Mariah Toint Hower	is Auth Riverside		Gei	neral Plan A		ince	
Staff Contact	Cirale Milliams	1-1414 JIN		_	division App		1100	
Phone Number	1951) (p5x-700)	λ.			e Permit	// 0 4 01		
Agency's Project No.		3 Purtelly	W124 12.		lic Facility			
, .ge.loj e i rejective.			J	Oth		Plan	UA Par	12 Morge
ALUC REVIEW (TO BE COMPLETED BY ALUC EXECUTIV	/E DIRECTOR)				-		· · · · ·
Application	Date Received		By					
Receipt	Is Application Complete?	🗌 Yes	🗌 No					
	If No, cite reasons							
Airport(s) Nearby	March Av Reserve	BIR-						
Primary Criteria	Compatibility Zone(s)	Δ Α	🗌 B1	🗋 В2	□с	D	🔲 Е	🗖 Ht.
Criteria Review	Allowable (not prohibited) Use?	🗌 Yes	🗋 No					
	Density/Intensity Acceptable?	🗌 Yes	🗌 No					
	Open Land Requirement Met?	🗌 Yes	🗌 No					
	Height Acceptable?	🗌 Yes	🗌 No					
	Easement/Deed Notice Provided?	🗌 Yes	🗌 No					
Special Conditions	Describe:							
		······································		******				
Supplemental Criteria Review	Noise						·····	
	Safety							
- • • #= · ·	Airspace					¥f		
	Overflight							
ACTIONS TAKEN (TO BE COMPLETED BY ALUC EXECUT	/E DIRECTOR)					· · ·	
ALUC Executive Director's Action	Approve			Date				**************************************
ALUC	Consistent		<u> </u>	Date				
Action	Consistent with Conditions (list	conditions/att	ach addition	al pages if r	ieeded)			
		,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,						
	Inconsistent (list reasons/attack	n additional pa	ges if neede	d)				
							· · · · · · · · · · · · · · · · · · ·	

COUNTY OF RIVERSIDE AIRPORT LAND USE COMMISSION

STAFF REPORT

AGENDA ITEM:2.3HEARING DATE:September 12, 2013CASE NUMBER:ZAP1089MA13 – Salsol Prop. (Representative: Shakil Patel)APPROVING JURISDICTION:County of RiversideJURISDICTION CASE NO:CZ07800 (Change of Zone), PP 25382 (Plot Plan)

MAJOR ISSUES: The proposed building will require obstruction evaluation review by the Federal Aviation Administration relative to March Air Reserve Base.

RECOMMENDATION: Staff recommends that the Commission find the proposed change of zone <u>CONSISTENT</u> with the 1984 Riverside County Airport Land Use Plan, as applied to the March Air Reserve Base Airport Influence Area. At this time, staff recommends that the proposed plot plan be found <u>CONDITIONALLY CONSISTENT</u> with the 1984 Riverside County Airport Land Use Plan, as applied to the March Air Reserve Base Airport Influence Area, subject to the conditions included herein and such additional or modified conditions as may be necessary to comply with FAA requirements.

PROJECT DESCRIPTION: CZ 07800 is a proposal to change the zoning of a 1.21-acre parcel from A-1-10 (Light Agriculture, 10 acre minimum lot size) to C-O (Commercial – Office). PP 25382 is a proposal to develop a 10,500 square foot office building with five suites on the property.

PROJECT LOCATION: The site is located at the southeast corner of Van Buren Boulevard and Barton Street, northwesterly of the community of Air Force Village West and southerly of the community of Orangecrest, approximately 12,480 feet westerly of the northerly terminus of Runway 14-32 at March Air Reserve Base.

LAND USE PLAN: 1984 Riverside County Airport Land Use Plan, as applied to March Air Reserve Base

a. Airport Influence Area:	March Air Reserve Base
b. Land Use Policy:	At border of Areas II and III
c. Noise Levels:	At margin of, but just outside, the 60 CNEL contour, according to the draft March Air Reserve Base/Inland Port Airport Land Use Compatibility Plan.

Staff Report Page 2 of 4

BACKGROUND:

<u>Non-Residential Land Use Intensity</u>: The site is located at the border of Areas II and III of the current March Air Reserve Base Airport Influence Area Map. The site is not located within or near an Accident Potential Zone, as established by the U.S. Air Force. Non-residential land use intensity is not limited within either Area II or Area III, based on the 1984 Riverside County Airport Land Use Plan. Avigation easements are required, pursuant to that Plan.

Pursuant to the draft March Air Reserve Base/Inland Port Airport Land Use Compatibility Plan, the site would be located within Compatibility Zone C2, which would allow an average of 200 persons per acre. With a total area of 1.21 acres, this property could potentially be permitted to accommodate 242 persons. Plot Plan No. 25382 proposes a 10,500 square foot office building, which would be expected to accommodate 53 people, on the basis of one person per 100 square feet, with the standard 50 percent reduction. If this were a retail use, the building would be expected to accommodate 175 people, on the basis of one person per 30 square feet, with a 50 percent reduction. The applicant is proposing to provide 42 parking stalls. Assuming 1.5 persons per vehicle, this would indicate an expected intensity of 63 persons, using the Parking Space Method. In any event, use of a 10,500 square foot building on this site for office purposes would be clearly consistent with the proposed Plan.

The C-O zone is intended primarily for development of office uses, but also allows certain other uses with approval of a plot plan or conditional use permit. These include churches and places of worship, day care centers, banks and financial institutions, and incidental prescription pharmacies with plot plan approval, and restaurants and health and exercise centers, with approval of a conditional use permit.

Staff is recommending a condition of approval that would require Airport Land Use Commission review of uses that would have a maximum intensity exceeding one person per 30 square feet.

<u>Prohibited and Discouraged Uses:</u> The applicant does not propose any uses prohibited or discouraged in Area II or draft Compatibility Zone C2 (children's schools, highly noise-sensitive outdoor nonresidential uses and hazards to flight).

<u>Noise:</u> The site underlies the closed circuit traffic pattern envelope, within which 80% of aircraft overflights occur. Future patrons, customers, and employees may experience annoyance from overflying aircraft. The property lies at the border of the area that would be subject to average exterior noise levels of 60 CNEL or greater under ultimate airport development conditions, as depicted on the exhibits of the draft March Air Reserve Base/Inland Port Airport Land Use Compatibility Plan. The interior standard for office buildings is 45 CNEL. Standard building construction is presumed to provide adequate sound attenuation where the difference between the exterior noise exposure and the interior standard is 15 dB or less. Therefore, no special measures to mitigate aircraft-generated noise are required.

Staff Report Page 3 of 4

<u>Part 77</u>: The elevation of the site ranges from 1,756 to 1,764 feet above mean sea level (1756-1764 feet AMSL). The elevation of Runway 14-32 at its northerly terminus is approximately 1,535 feet AMSL. At a distance of approximately 12,480 feet from the runway, FAA review would be required for any structures with top of roof exceeding 1,659 feet AMSL. Therefore, Federal Aviation Administration (FAA) obstruction evaluation review is required. The applicant has filed for review, and the project has been assigned Aeronautical Study No. 2013-AWP-4901-OE.

Avigation Easement: Pursuant to Policy 3 of the 1984 Riverside County Airport Land Use Plan, an avigation easement is required for land uses located within the airport influence areas developed pursuant to that Plan, including Areas II and III of the March Air Reserve Base Airport Influence Area.

<u>Open Area:</u> Neither the existing applicable Plan (the 1984 Riverside County Airport Land Use Plan) nor the draft Compatibility Plan have any requirements for projects in this area to provide open areas for use in emergency landings.

CONDITIONS:

- 1. Any outdoor lighting installed shall be hooded or shielded to prevent either the spillage of lumens or reflection into the sky. Outdoor lighting shall be downward facing.
- 2. The following uses shall be prohibited:
 - (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, livestock operations, 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.

Staff Report Page 4 of 4

- (e) Highly noise-sensitive outdoor nonresidential uses.
- (f) Children's schools.
- 3. Prior to issuance of any building permits, the landowner shall convey and have recorded an avigation easement to the March Inland Port Airport Authority. Contact March Joint Powers Authority at (951) 656-7000 for procedures and additional information.
- 4. Prior to issuance of any building permits, the applicant shall have received a determination of "Not a Hazard to Air Navigation" from the Federal Aviation Administration (FAA) Obstruction Evaluation Service. Copies of the FAA determination shall be provided to the Riverside County Planning Department, Riverside County Department of Building and Safety (if there is an active case at the time), and the Riverside County Airport Land Use Commission.
- 5. The attached notice shall be provided to all prospective purchasers and/or tenants of the property.
- 6. Any ground-level or aboveground water retention or detention basin or facilities shall be designed so as to provide for a detention period for the design storm that does not exceed 48 hours (may be less, but not more) and to remain totally dry between rainfalls. Vegetation in and around such facilities that would provide food or cover for bird species that would be incompatible with airport operations shall not be utilized in project landscaping. Landscaping shall utilize plant species that do not produce seeds, fruits, or berries. Trees shall be spaced so as to prevent large expanses of contiguous canopy, when mature.
- 7. This project has been evaluated as a proposal for the establishment of a 10,500 square foot office building. The County of Riverside shall require additional review by the Airport Land Use Commission prior to the establishment of any of the following uses in this structure:

Churches, chapels, and other places of worship; classrooms; day care centers; gymnasiums; restaurants (other than carry-out/take-home facilities with less than 12 seats); any other uses that would be considered to have an occupancy level greater than one person per 30 square feet (minimum square feet per occupant less than 30) pursuant to California Building Code (1998) Table 10-A.

Y:\ALUC\March\ZAP1089MA13\ZAP1089MA13sr.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)



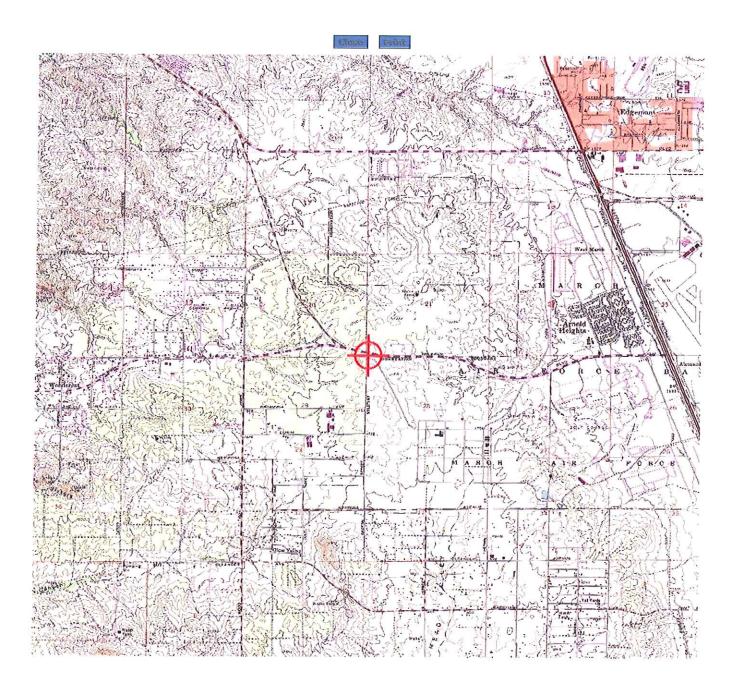
Federal Aviation Administration

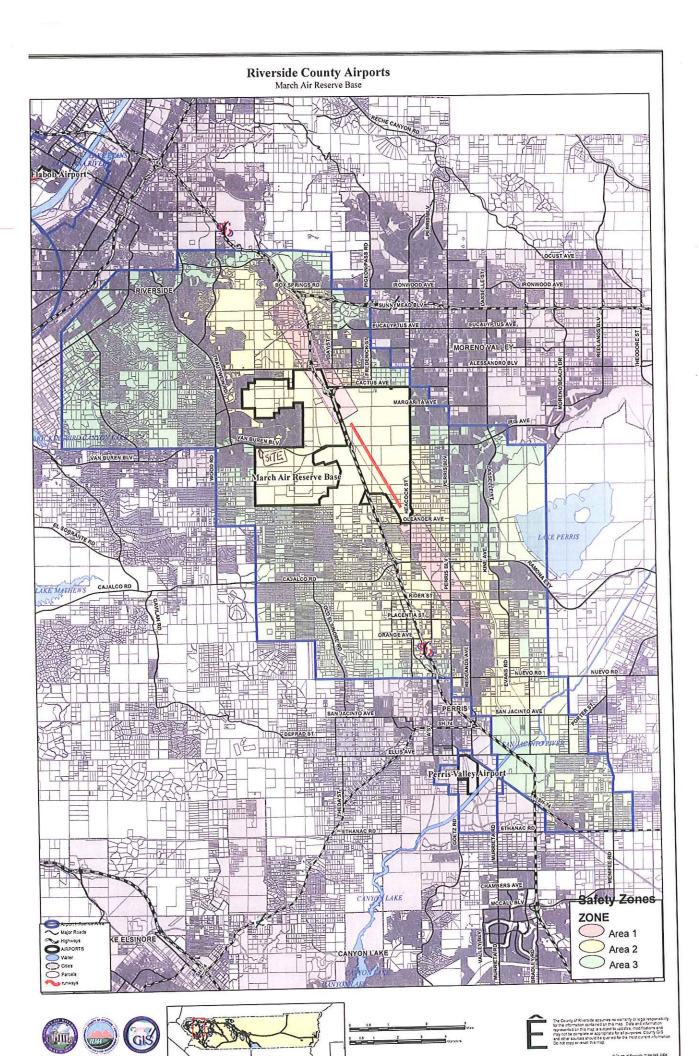
Form 7460-1 for ASN: 2013-AWP-4901-OE

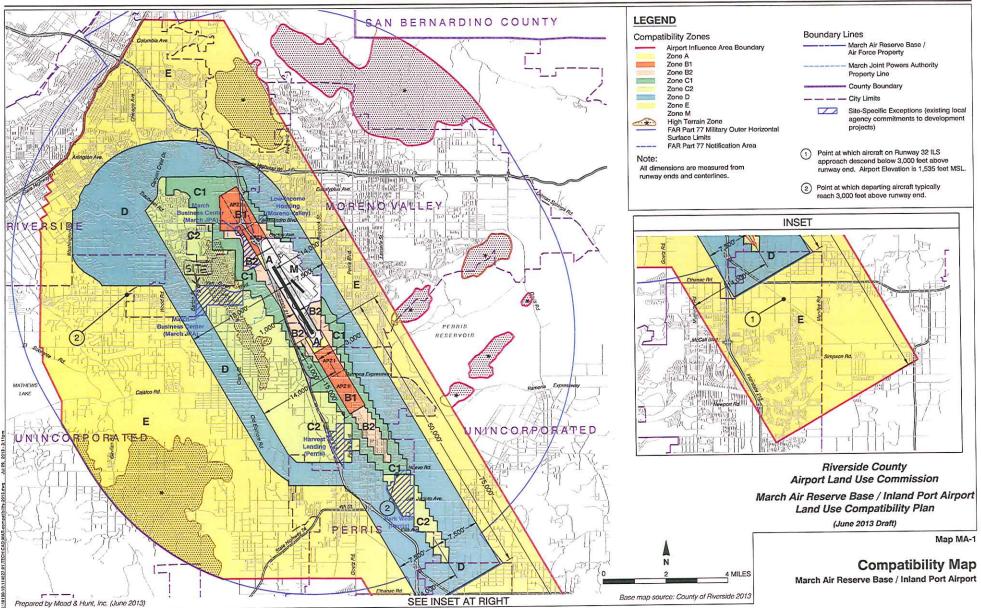
For information only. This proposal has not yet been studied. Study outcomes will be posted at a later date. Public comments are not requested, and will not be considered at this time.

Overview	•
Study (ASN): 2013-AWP-4901-OE	Received Date: 08/07/2013
Prior Study:	Entered Date: 08/07/2013
Status: Work In Progress	Map: View Map
Construction Info	Structure Summary
Notice Of: CONSTR	Structure Type: Building
Duration: PERM (Months: 0 Days 0)	Structure Name: Van Buren & Barto
Work Schedule: 08/01/2014 to 08/01/2015	FCC Number:
Structure Details	Height and Elevation
Latitude (NAD 83): 33° 53' 15.08" N	Propose
Longitude (NAD 83): 117º 18' 48.97" W	Site Elevation: 176
Datum: NAD 83	
City: Riverside	•
State: CA	Total Height (AMSL): 179
Nearest County: Riverside	Frequencies
	Low Freq High Freq Unit ERP Unit

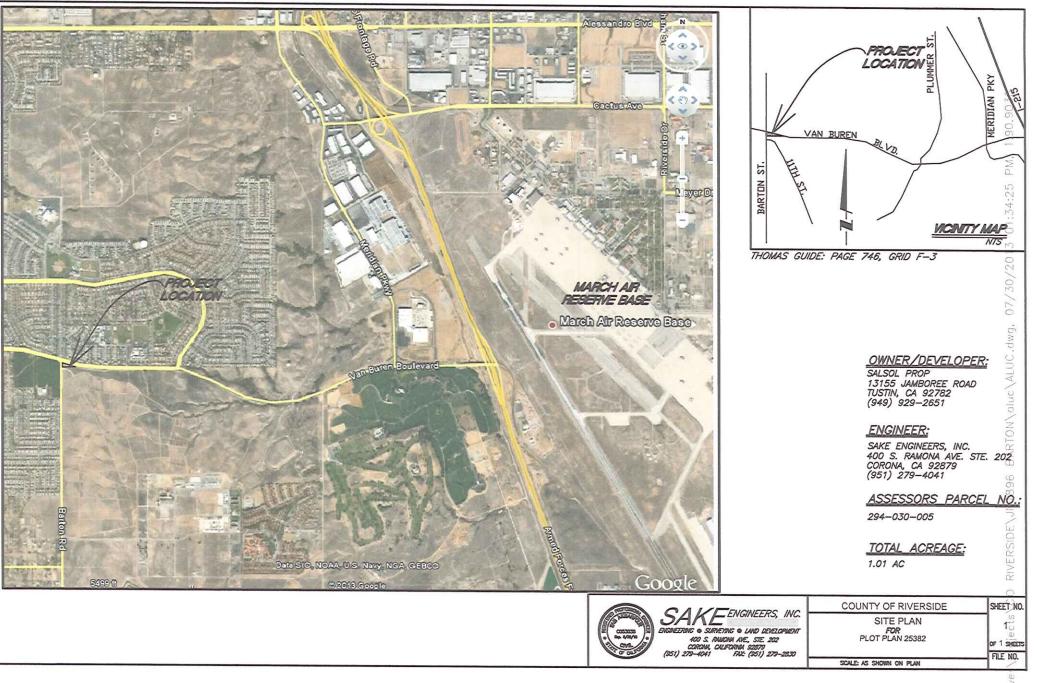
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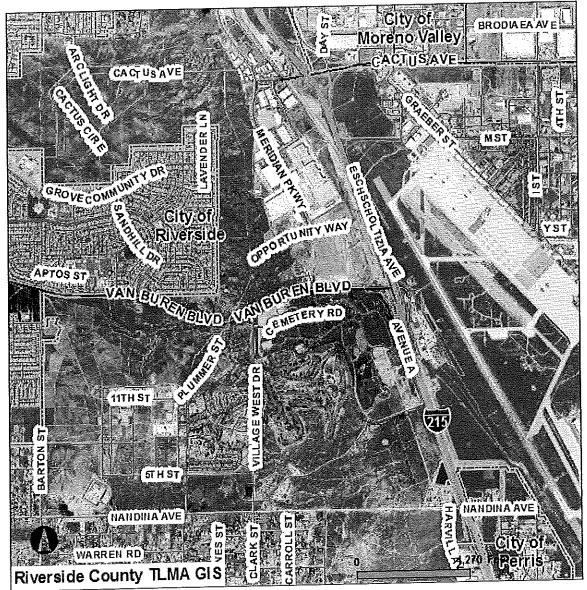




INDIVIDUAL AIRPORT POLICIES AND COMPATIBILITY MAPS CHAPTER 3



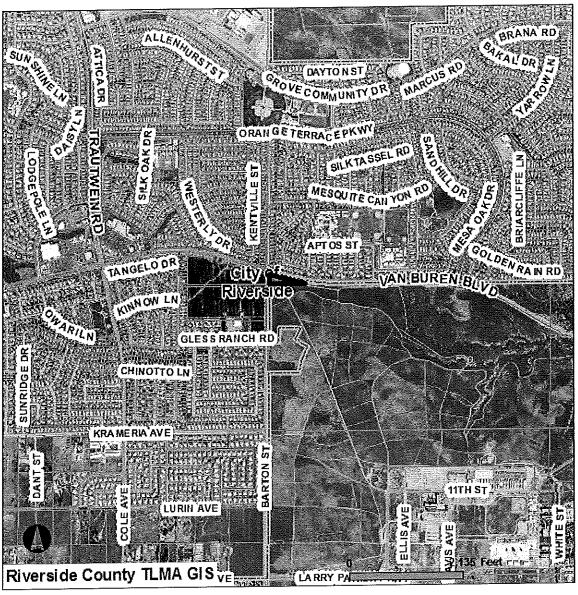




Selected parcel(s): 294-030-005

Maps and data are to be used for reference purposes only. Map features are approximate, and are not necessarily accurate to surveying or engineering standards. The County of Riverside makes no warranty or guarantee as to the content (the source is often third party), accuracy, timeliness, or completeness of any of the data provided, and assumes no legal responsibility for the information contained on this map. Any use of this product with respect to accuracy and precision shall be the sole responsibility of the user.

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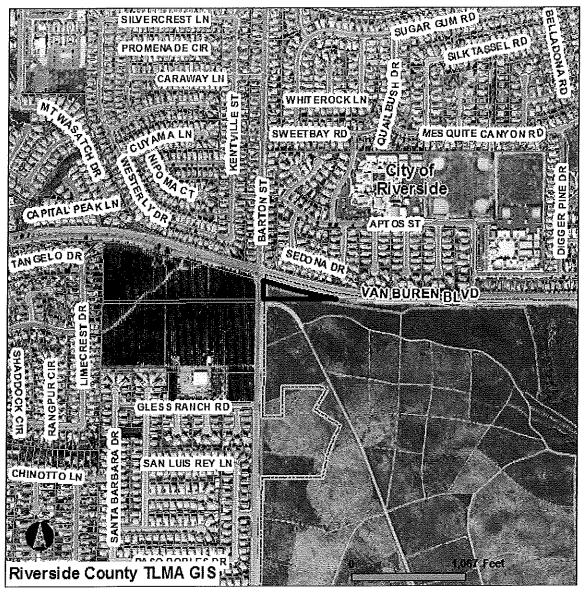


Selected parcel(s): 294-030-005

IMPORTANT

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Selected parcel(s): 294-030-005

IMPORTANT

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Selected parcel(s): 294-030-005

IMPORTANT

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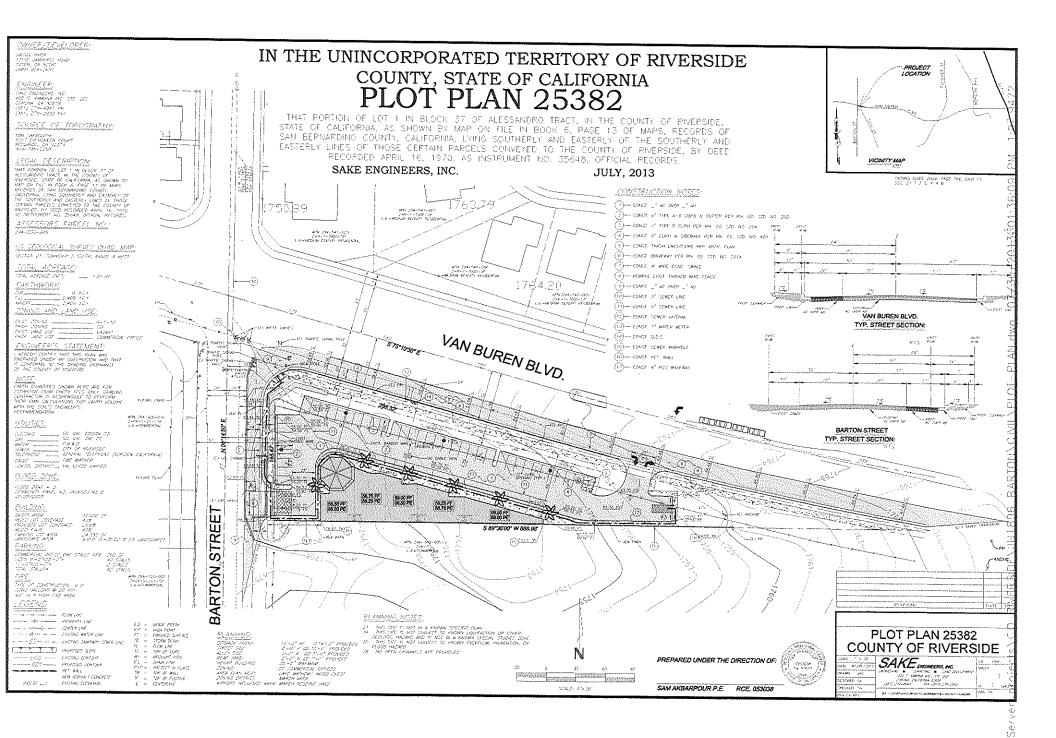


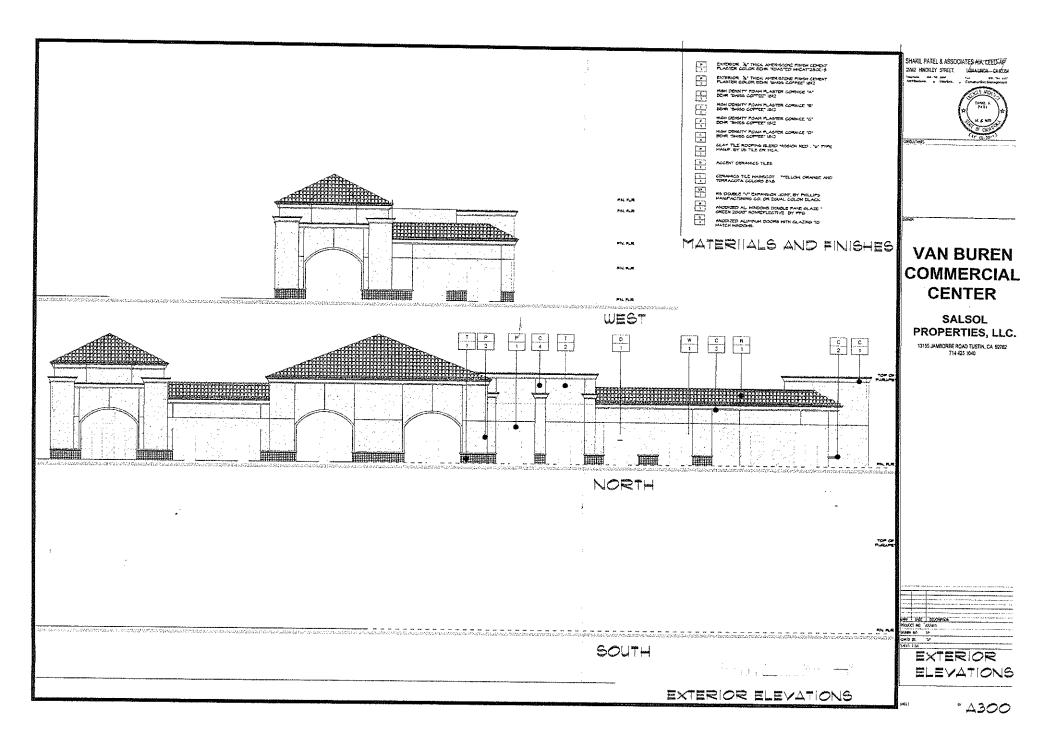
Selected parcel(s): 294-030-005

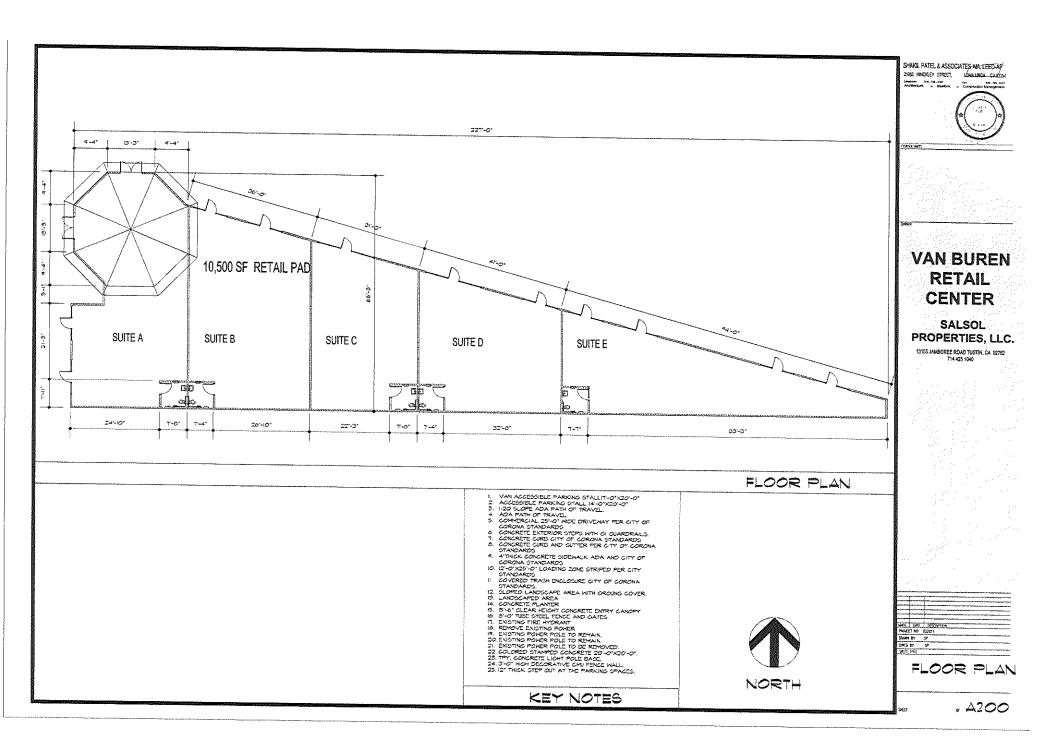
IMPORTANT

Maps and data are to be used for reference purposes only. Map features are approximate, and are not necessarily accurate to surveying or engineering standards. The County of Riverside makes no warranty or guarantee as to the content (the source is often third party), accuracy, timeliness, or completeness of any of the data provided, and assumes no legal responsibility for the information contained on this map. Any use of this product with respect to accuracy and precision shall be the sole responsibility of the user.

REPORT PRINTED ON...Mon Aug 19 11:29:37 2013







9-18-86 (Ord. 348.2623) 03-01-94 (Ord. 348.3584)

06-27-97 (Ord. 348.3793) 09-10-99 (Ord. 348.3883) MINIAULE ING

C-O (COMMERCIAL-OFFICE ZONE)

SECTION 9.71. INTENT. The Board of Supervisors finds that there is a need in the County of Riverside for a zone classification designed to provide areas where primarily professional and administrative offices and related uses may be located. It is the intent that this zone classification ensures that such uses are well designed and landscaped to be harmonious and compatible with surrounding land uses.

SECTION 9.72. USES PERMITTED.

a. The following uses are permitted provided a plot plan has been approved pursuant to the provisions of Section 18.30 of this ordinance:

(1) Administrative and professional offices, including but not limited to business, law, medical, dental, chiropractic, architectural, engineering, community planning, and real estate offices, in which no activity is carried on catering to retail sales and no stock of goods is maintained for sale.

- (2) Art gallery, library, reading room, museum.
- (3) Banks and financial institutions.
- (4) Employment agencies.
- (5) Parking lots and parking structures.
- (6) Prescription pharmacy when related and incidental to a professional office building.
- (7) Tourist information centers.
- (8) Travel agencies.
- (9) Day care centers.

(10) Churches, temples and other places of religious worship.

Amended Effective:b. The following uses are permitted provided a conditional use permit09-10-99 (Ord. 348.3883) repealedhas been approved pursuant to Section 18.28 of this ordinance:10-21-99 (Ord. 348.3888)

(1) Clinics, including but not limited to medical, dental and chiropractic.

(2) (Deleted)

(3) Health and exercise centers, provided all facilities are located within an enclosed building.

- (4) Hotels, resort hotels and motels.
- (5) Laboratories, film, dental, medical, research or testing.
- (6) Restaurants, not including drive-in or take-out restaurants.

(7) Studios for professional work in or teaching of any form of fine arts, including but not limited to photography, music, drama, and dance, where no stock of goods is maintained for sale.

c. The uses listed in Subsections a. and b. do not include sex-oriented businesses.

Amended Effective: 03-01-94 (Ord. 348.3584) Considered a permitted or conditionally permitted use provided that the Planning Director finds that the proposed use is substantially the same in character and intensity as those listed in the designated subsections. Such a use is subject to the permit process which governs the category in which it falls.

Amended Effective: 05-05-92 (Ord. 348-3420) 03-01-94 (Ord. 348.3584) standards of development in the C-O Zone:

a. Lot Area. There is no minimum lot area requirement, unless specifically required by zone classification for a particular area.

b. Setbacks.

(1) Where the front, side, or rear yard adjoins a street, the minimum setback shall be 25 feet from the right-of-way line. Where the front, side, or rear yard adjoins a lot zoned R-R, R-1, R-A, R-2, R-3, R-4, R-6, R-T, R-T-R, W-2-M, or SP with a residential use, the minimum setback shall be 25 feet from the property line.

(2) Where the front, side, or rear yard adjoins a lot with a zoning classification other than those specified in paragraph (1) above, there is no minimum setback.

(3) Setback areas may be used for driveways, parking, and landscaping.

c. Height Requirements. The height of structures, including buildings, shall be as follows:

(1) Structures shall not exceed 40 feet at the yard setback line.

(2) Buildings shall not exceed 50 feet unless a height up to 75 feet is granted pursuant to Section 18.34 of this ordinance.

d. Masonry Wall. Prior to occupancy of any use permitted in this article, a six foot high solid masonry wall or combination landscaped earthen berm and masonry wall shall be constructed on each property line that adjoins any parcel specifically zoned for residential use.

e. Landscaping.

(1) A minimum of 15 percent of the site proposed for development shall be landscaped and irrigated.

(2) Not less than five feet of the front yard setback shall be landscaped.

f. Parking Areas. Parking areas shall be provided as required by Section 18.12 of this ordinance.

g. Trash Collection Areas. Trash collection areas shall be screened by landscaping or architectural features in such a manner as not to be visible from a public street or from any adjacent residential area.

h. Outside Storage Areas. Outside storage areas are prohibited.

i. Utilities. Utilities shall be installed underground except that electrical lines rated at 33kv or greater may be installed above ground.

j. Mechanical Equipment. All roof mounted mechanical equipment shall be screened from the ground elevation view to a minimum sight distance of 1,320 feet.

k. Lighting. All lighting fixtures, including spot lights, electrical reflectors and other means of illumination for signs, structures, landscaping, parking, loading, unloading and similar areas, shall be focused, directed, and arranged to prevent glare or direct illumination on streets or adjoining property.

I. On-site Signs.

(1) Not more than one freestanding sign shall be permitted on a project site, except that if a project has frontage on two or more streets, the project shall be permitted two freestanding signs, provided that the two signs are not located on the same street.

(2) Freestanding signs shall refer only to the permitted uses conducted on the premises, shall be located outside of the road right-of-way, shall not exceed a height of six feet and the maximum surface area of the sign shall not exceed 32 square feet.

(3) Signs affixed to building walls and stating the name of the structure, use or institution, shall not exceed five percent of the surface area of the wall upon which the sign is located, and shall not be illuminated when facing any parcel specifically zoned for residential use.

(4) A building directory with letters not exceeding two inches in height and containing only the name of the occupant, the suite or office number, and the nature of the use or service rendered, shall be permitted.

(5) No on-site sign shall be affixed on, above or over the roof of any building, and no on-site sign shall be affixed to the wall of a building so that it projects above the parapet of the building. For the purposes of this section, a mansard style roof shall be considered a parapet.

m. Access. No access shall be allowed from residential streets.

SECTION 9.74. EXCEPTIONS TO DEVELOPMENT STANDARDS. The development standards contained herein, except lot size, setbacks and height, may be waived or modified as part of the plot plan or conditional use permit process if it is determined that the standard is inappropriate for the proposed use, and that waiver or modification of the standard will not be contrary to the public health and safety.

Added Effective:	Amended Effective	
03-14-89 (Ord. 348.3010)	09-10-99 (Ord. 348.3883)	Go To Section Two
05-05-92 (Ord. 348.3420)		
03-01-94 (Ord. 348.3584)		

. NOTICE OF PUBLIC HEARING

RIVERSIDE COUNTY AIRPORT LAND USE COMMISSION

A PUBLIC HEARING has been scheduled before the Riverside County Airport Land Use Commission (ALUC) to consider the application 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. The proposed project application may be viewed at the Riverside County Administrative Center, 4080 Lemon Street, 14th Floor, Riverside, California 92501, Monday through Thursday from 8:00 a.m. to 5:00 p.m., except Monday, September 2 (Labor Day), and by appointment on Friday, September 6 from 8:30 a.m. to 5:00 p.m.

PLACE OF HEARING: Riverside County Administration Center 4080 Lemon St., 1st Floor Hearing Room Riverside, California

DATE OF HEARING: September 12, 2013

TIME OF HEARING: 9:00 A.M.

CASE DESCRIPTION:

ZAP1089MA13 – Salsol Prop. (Representative: Shakil Patel) – County Case Nos. CZ07800 (Change of Zone) and PP 25382 (Plot Plan). CZ07800 is a proposal to change the zoning of a 1.21-acre parcel located at the southeast corner of Van Buren Boulevard and Barton Street, northwesterly of the community of Air Force Village West and southerly of the community of Orangecrest, from A-1-10 (Light Agriculture, 10 acre minimum lot size) to C-O (Commercial-Office). PP25382 is a proposal to develop a 10,500 square foot office building with five suites on the property. (At border of Areas II and III of the March Air Reserve Base Airport Influence Area, proposed Zone C2 in Draft Compatibility Plan).

FURTHER INFORMATION: Contact John Guerin at (951) 955-0982. The ALUC holds hearings for local discretionary permits within the Airport Influence Areas, reviewing for aeronautical safety, noise and obstructions. All other concerns should be addressed to <u>Ms. Damaris Abraham of the County of Riverside Planning Department, at (951) 955-5719.</u>

Applicat	TION FOR MAJOR LAND USE ACTION	REVIEW ALUC Identification No.
Riversidi	E COUNTY AIRPORT LAND USE COMM	ALSSION ZAP1089 MAI3
PROJECT PROPON	ENT (TO BE COMPLETED BY APPLICANT)	
Date of Application Property Owner Mailing Address	7–29–2013 SALSOL PROP 13155 JAMBOREE ROAD TUSTIN, CA 92782	Phone Number <u>951—929—265</u>
Agent (if any)		Phone Number
Mailing Address		
North Strategies (1997) and Strategies	N (TO BE COMPLETED BY APPLICANT) ed map showing the relationship of the project site to the airport boundary ar	10 runways
Street Address	INTERSECTION OF BARTON ST. AND	VAN BUREN BLVD.
Assessor's Parcel No. Subdivision Name	294–030–005 ALESSANDRO TR	Parcel Size <u>1.01 AC.</u>
Lot Number	1	Zoning Classification <u>CO</u>
Lot Number PROJECT DESCRIP If applicable, atlach a deto include additional project	1 TION (TO BE COMPLETED BY APPLICANT) alled site plan showing ground elevations, the location of structures, open sp description data as needed	
Lot Number PROJECT DESCRIP If spplicable, attach a deta	1 TION (TO BE COMPLETED BY APPLICANT) alled site plan showing ground elevations, the location of structures, open sp	
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Lot Number PROJECT DESCRIP If applicable, attach a deta include additional project Existing Land Use (describe) Proposed Land Use (describe) For Residential Uses For Other Land Uses	1 TION (TO BE: COMPLETED BY APPLICANT) elled site plein showing ground elevations, the location of structures, open sp description data as needed VACANT COMMERCIAL OFFICE Number of Parcels or Units on Site (exclude secondary units) Hours of Use Maximum Number <u>40</u> Maximum Number <u>40</u> Method of Calculation	Classification <u>CO</u> saces and water bodies, and the heights of structures and trees; 0,000@ 250 FOR 0 PERSONS rees) <u>35 ft.</u>
Lot Number PROJECT DESCRIP If applicable, attach a deta include additional project Existing Land Use (describe) Proposed Land Use (describe) For Residential Uses For Other Land Uses (See Appendix C)	1 TION (TO BE COMPLETED BY APPLICANT) alled site plein showing ground elevations, the location of structures, open sp description data as needed VACANT COMMERCIAL OFFICE Number of Parcels or Units on Site (exclude secondary units) Hours of Use 8 AM8 PM Number of People on Site Maximum Number 40 Method of Calculation BASED ON SF 10 OFFICE USE = 4 Height above Ground or Tallest Object (including antennas and tr	Classification <u>CO</u> acces and water bodies, and the heights of structures and trees; 0,000@ 250 FOR 0 PERSONS rees) <u>35 ft.</u> itte <u>1,794.50 ft.</u> ectrical Interference. □ Yes

REFERRING AGEN		STAFF)						
Date Received Agency Name	County of Rivers	aide			neral Plan A			117 - 41 M
Staff Contact Phone Number Agency's Project No.	Demuris Abra CZ 7800	han	······	_ 🗌 Sut	ning Amendn odivision Apr Permit Ilic Facility	nent or Varia proval	ince	
	Plot Plun 25382							
ALUC REVIEW (T	TO BE COMPLETED BY ALUC EXECUT	VE DIRECTOR)						
Application Receipt	Date Received Is Application Complete? If No, cite reasons	☐ Yes	_ By _ No				·	
Airport(s) Nearby	· · ·			······································				
Primary Criteria Review	Compatibility Zone(s) Allowable (not prohibited) Use? Density/Intensity Acceptable? Open Land Requirement Met? Height Acceptable? Easement/Deed Notice Provided?	A Yes Yes Yes Yes	B1 No No No No No No No	□ B2	□ C	□ D] E	<u></u> н
Special Conditions	Describe:	☐ Yes	No No	чаланаана наланаана наланаана				
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	Airspace							
-	Overflight	· · · · · ·		· · · · · · · · · · · · · · · · · · ·				·····
ACTIONS TAKEN (T	O BE COMPLETED BY ALUC EXECUT	/E DIRECTOR)						
ALUC Executive Director's Action	Approve Refer to ALUC			Date				• •
ALUC Action	Consistent Consistent with Conditions (list	conditions/att	ach additiona	Date	eeded)			·····
		· · · · · · · · · · · · · · · · · · ·	· · · · ·			· · · · · · · · · · · · · · · · · · ·	_ :	
	Inconsistent (list reasons/attact	additional pa	ges if neede	d)	•	·····		
August 2007						·····		
· ·		• •					· · · · ·	

SAKE ENGINEERS INC.

TO: JOH	N GUERIN	FROM: JOSE COBIAN
COMPAN	Y: COUNTY O	F RIVERSIDE DATE: 7/31/2013
	n an	
ADDRESS	: 4080 LEMON ST,	, 14 FLOOR JN #: 1896
	RIVERSIDE, (CA 92501
PHONE # FAX #:	: 951-955-0982	
RE: PP 2	5382	CC:
RE. 11 2		
		DR REVIEW
WE ARE S	URGENT FC	DR REVIEW D PLEASE COMMENT PLEASE REPLY PLEASE RECYCLE
	URGENT FO SENDING YOU: DATE:	DR REVIEW DELEASE COMMENT DELEASE REPLY DELEASE RECYCLE
WE ARE S	□ URGENT □ FC SENDING YOU: DATE: 7/31/2013	DR REVIEW DELEASE COMMENT DELEASE REPLY DELEASE RECYCLE DESCRIPTION: ALUC APPLICATION
WE ARE S	□ URGENT □ FC SENDING YOU: DATE: 7/31/2013 7/31/2013	DR REVIEW DELASE COMMENT DELASE REPLY DELASE RECYCLE DESCRIPTION: ALUC APPLICATION SITE PLAN
WE ARE S	□ URGENT □ FC SENDING YOU: DATE: 7/31/2013 7/31/2013 7/31/2013	DR REVIEW PLEASE COMMENT PLEASE REPLY PLEASE RECYCLE DESCRIPTION: ALUC APPLICATION SITE PLAN FLOOR PLAN
WE ARE S	□ URGENT □ FC SENDING YOU: DATE: 7/31/2013 7/31/2013 7/31/2013 7/31/2013 7/31/2013	DR REVIEW DELASE COMMENT DELASE REPLY DELASE RECYCLE DESCRIPTION: ALUC APPLICATION SITE PLAN FLOOR PLAN ELEVATIONS
WE ARE S	□ URGENT □ FC SENDING YOU: DATE: 7/31/2013 7/31/2013 7/31/2013	DR REVIEW PLEASE COMMENT PLEASE REPLY PLEASE RECYCLE DESCRIPTION: ALUC APPLICATION SITE PLAN FLOOR PLAN

Thank you,

Jose Cobian

COUNTY OF RIVERSIDE AIRPORT LAND USE COMMISSION

STAFF REPORT

AGENDA ITEM: 2.4

HEARING DATE: September 12, 2013

CASE SUMIMARY:							
CASE NUMBER:	ZAP1008RG13 – City of Riverside						
APPROVING JURISDICTION:	City of Riv	reside					
JURISDICTION CASE NO:	P12-0334	(General	Plan	Amendment)	and	P12-0336	
	(Rezoning)	•					

MAJOR ISSUES: None.

CLOB STRANG DA

RECOMMENDATION: Staff recommends that the Commission find the proposed General Plan Amendment <u>CONSISTENT</u> with the 2005 Riverside Municipal Airport Land Use Compatibility Plan and the 2004 Flabob Airport Land Use Compatibility Plan, and that the Commission find the proposed rezoning <u>CONSISTENT</u> with the 2005 Riverside Municipal Airport Land Use Compatibility Plan, provided that the new zoning for Site No. 1 incorporates the Airport Protection Overlay Zone suffix (-AP-D), which refers to Site No. 1's location within Compatibility Zone D of the Riverside Municipal Airport Influence Area, and that the new zoning for Site Nos. 2 and 4 incorporates the Airport Protection Overlay Zone suffix (-AP-E), which refers to the location of Site Nos. 2 and 4 within Airport Compatibility Zone E of the Riverside Municipal Airport Influence Area.

PROJECT DESCRIPTION AND LOCATION: The City of Riverside proposes to amend the General Plan designations and zoning of various properties as part of the City's Rezoning Program associated with the City's adopted Housing Element 2006-2014 (included in General Plan 2025). These changes would also bring zoning on these properties into consistency with General Plan designations. These changes include:

- Rezoning a 0.96-acre parcel (Assessor's Parcel Number 227-223-006) located at the northwest corner of Magnolia Avenue and Jefferson Street from R-1-7,000 (Single Family Residential, 7,000 square foot minimum lot area) to R-4 (Multiple-Family Residential), or R-4-AP-D (same as above, with Airport Protection Compatibility Zone D Overlay);
- (2) Amending the General Plan designation of two parcels (Assessor's Parcel Numbers 145-082-037 and 145-082-038) with a total area of 1.62 acres located along the west side of Van Buren Boulevard, southerly of Duncan Avenue and northerly of Challen Avenue, from HDR (High Density Residential) to MU-V (Mixed Use Village), and to rezone them from CR (Commercial Retail) to MU-V, or MU-V-AP-E (Mixed Use Village, with Airport Protection Compatibility Zone E Overlay);

Staff Report Page 2 of 3

- (3) Amending the General Plan designation of a 3.14-acre parcel (Assessor's Parcel Number 217-093-001) located northerly of Tequesquite Avenue and easterly of San Andreas Avenue from MHDR (Medium High Density Residential) to HDR (High Density Residential); and,
- (4) Rezoning ten parcels (Assessor's Parcel Numbers 191-221-016 through 191-221-024, plus 191-240-051) with a total area of 6.7 acres located along the east side of Van Buren Boulevard, southerly of Duncan Avenue and northerly of Challen Avenue, from R-1-7,000 to R-3-1,500 (Multiple Family Residential, 1,500 square foot minimum lot area per dwelling unit), or R-3-1,500-AP-E (same as above, with Airport Protection Compatibility Zone E Overlay), and amending the General Plan designation of one of these parcels (Assessor's Parcel Number 191-240-051) from C (Commercial) to HDR.

LAND USE PLANS:2005 Riverside Municipal Airport Land Use Compatibility Plan2004 Flabob Airport Land Use Compatibility Plan

Site No. 1 is located in Compatibility Zone D of the Riverside Municipal Airport Influence Area. Site Nos. 2 and 4 are located in Compatibility Zone E of that area. Site No. 3 is located in Compatibility Zone E of the Flabob Airport Influence Area.

BACKGROUND:

<u>Residential Density</u>: The sites are located in Airport Compatibility Zones D and E. Countywide compatibility criteria for Zone D limit new residential development to either a maximum density of 0.2 dwelling units per acre (average density of one dwelling unit per five [5] acres) or a minimum density of not less than five (5) dwelling units per acre, prohibiting intermediate density levels greater than 0.2, but less than 5.0, dwelling units per acre. However, pursuant to Additional Compatibility Policy 2.3(a) in the Riverside Municipal Airport Land Use Compatibility Plan, "residential densities as low as 4.0 dwelling units per gross acre" would be found consistent "to the extent that such densities are typical of existing … residential development in nearby areas of the community."

The provisions of Airport Zone D are based on two concepts: (1) that persons living in higher density developments are subject to a greater level of ambient noise and would be less likely to be annoyed by aircraft noise as a result; and (2) that persons living in intermediate density housing and enjoying a quiet living environment are the most likely to register complaints regarding aircraft and aircraft operations. A secondary reason for allowing the higher density housing, but not the intermediate density housing, in Zone D was as an incentive to induce clustering that would facilitate the reservation of unused area as open space suitable for emergency landing.

Only one of the four sites is in Zone D, with the remainder in Zone E. The rezoning of Site No. 1 is to a higher density (from R-1-7,000 to R-4), thus increasing the likelihood that the site would be developed at a density of at least 5 dwelling units per acre. There are no residential density limits in Zone E. Therefore, the proposed densities are not in conflict with Compatibility Plan criteria.

Staff Report Page 3 of 3

<u>Noise:</u> Each site is located outside the areas subject to average aircraft noise levels greater than 55 dB(A) CNEL; therefore, no special aircraft noise mitigation would be required for residential development at these locations.

<u>PART 77:</u> The rezoning and general plan amendment cases are not associated with any construction projects. Therefore, FAA review is not required at this time.

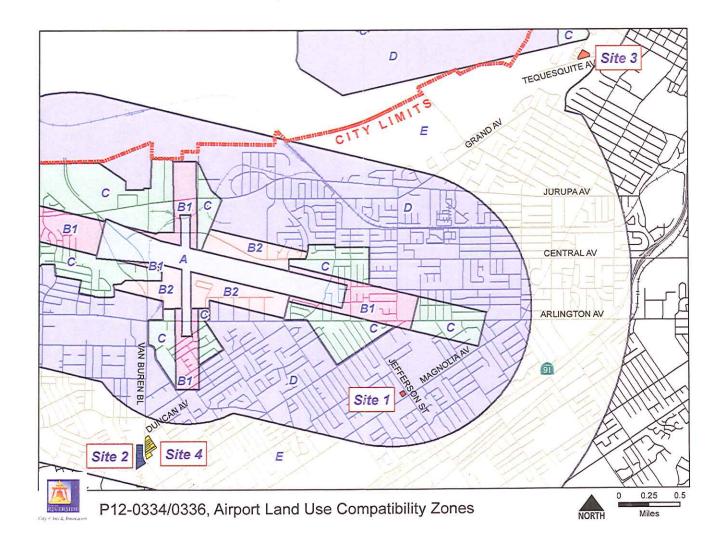
General plan amendments and rezoning are not subject to conditions.

<u>Attachment:</u> State law requires notification in the course of real estate transactions if the property is located in an Airport Influence Area.

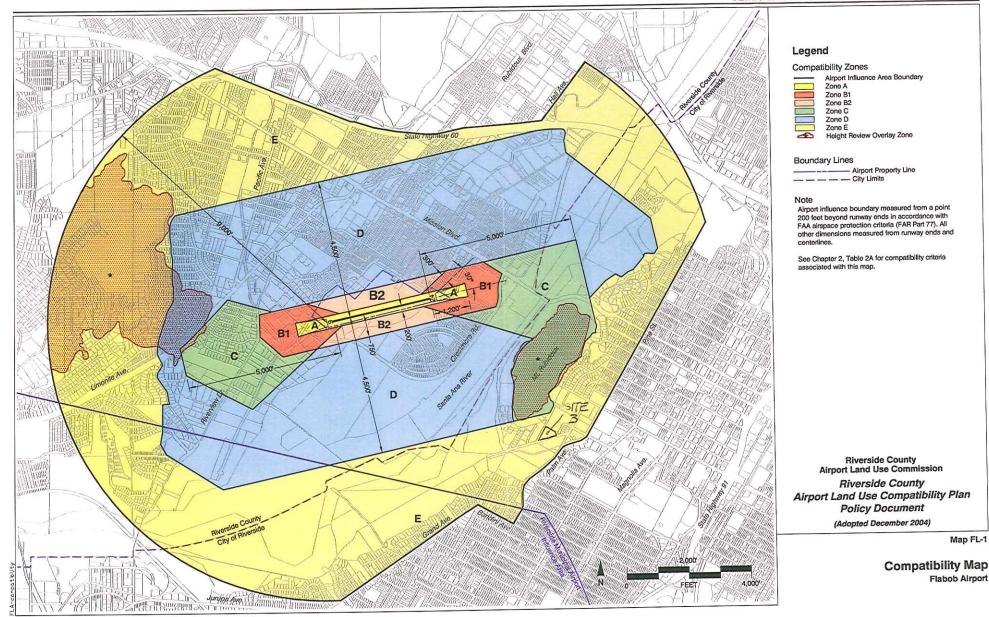
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NOTICE OF AIRPORT IN VICINITY

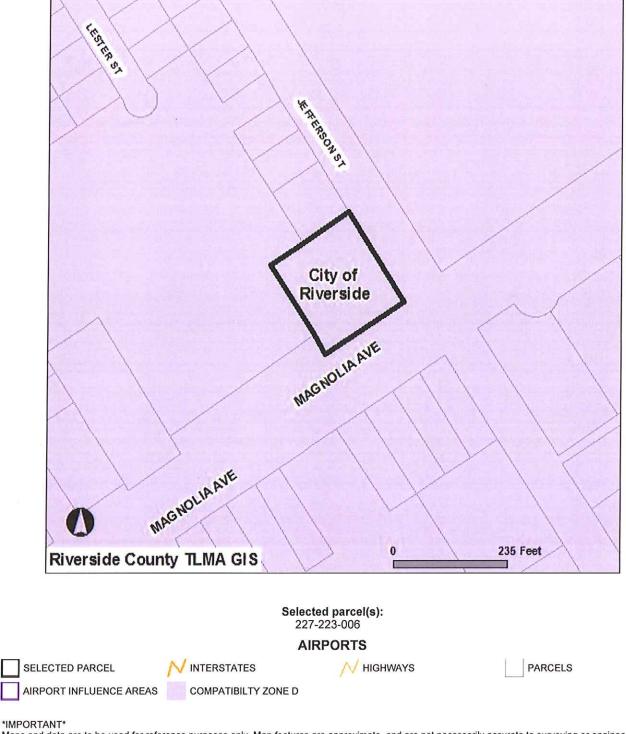
This property is presently located in the vicinity of an airport, within what is known as an airport influence area. For that reason, the property may be subject to some of the annoyances or inconveniences associated with proximity to airport operations (for example: noise, vibration, or odors). Individual 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) (13)(A)



INDIVIDUAL AIRPORT POLICIES AND COMPATIBILITY MAPS CHAPTER 3

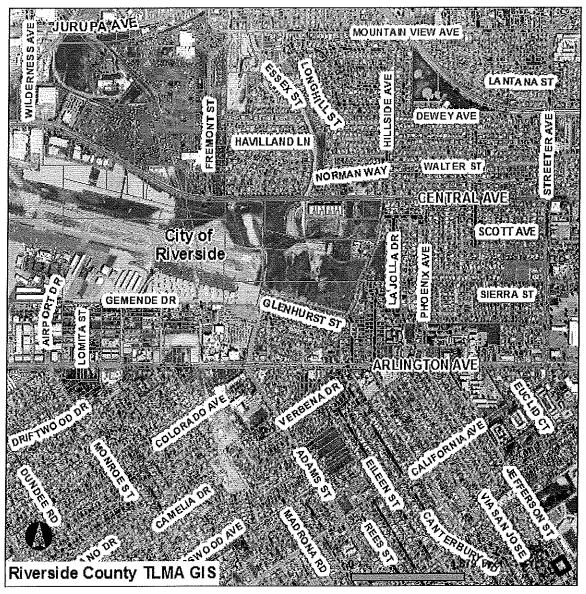






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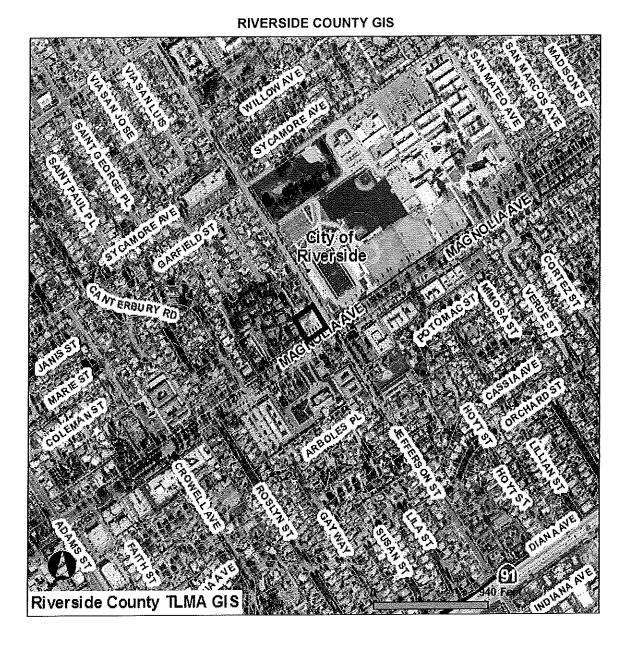


Selected parcel(s): 227-223-006

IMPORTANT

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Selected parcel(s): 227-223-006

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Version 130624

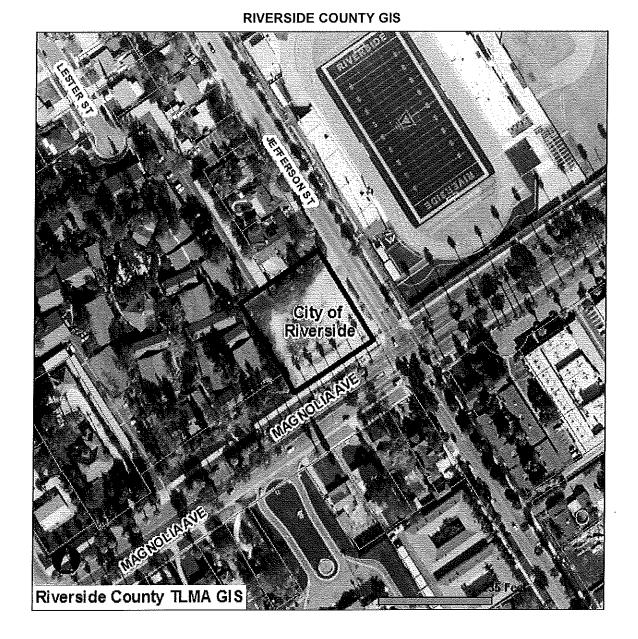
http://www3.tlma.co.riverside.ca.us/cw/rclis/NoSelectionPrint.htm



Selected parcel(s): 227-223-006

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Selected parcel(s): 227-223-006

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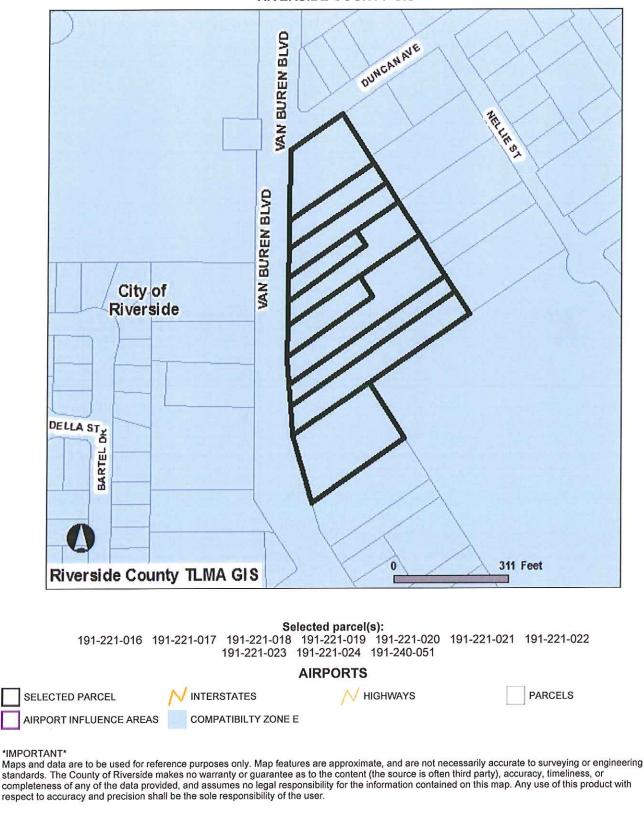


Selected parcel(s): 227-223-006

IMPORTANT

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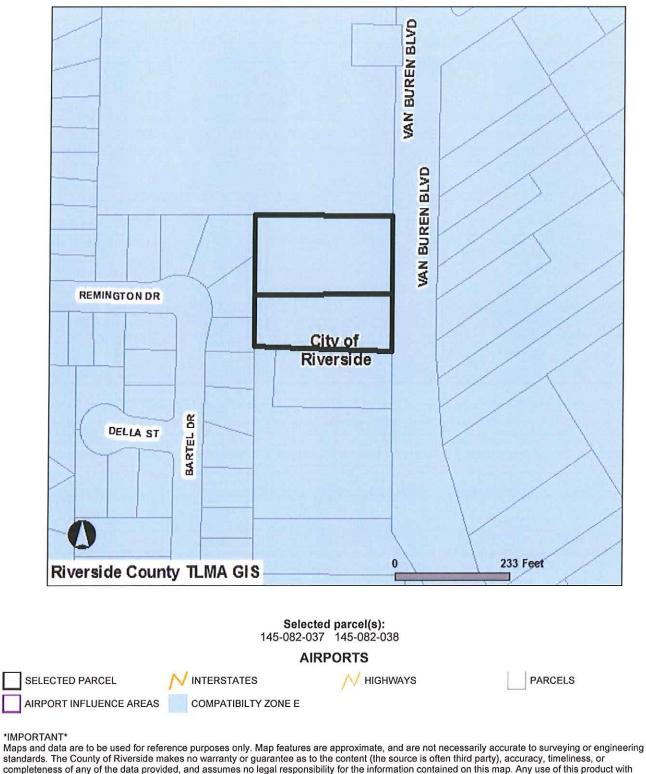
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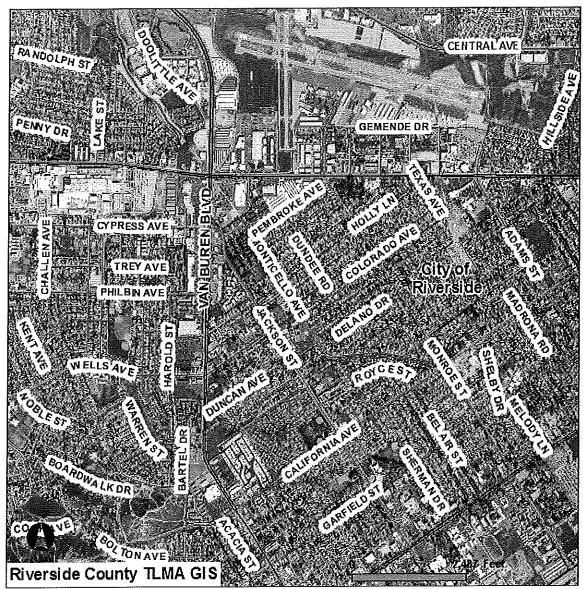
standards. The County of Riverside makes no warranty or guarantee as to the content (the source is often third party), accuracy, timeliness, or completeness of any of the data provided, and assumes no legal responsibility for the information contained on this map. Any use of this product with

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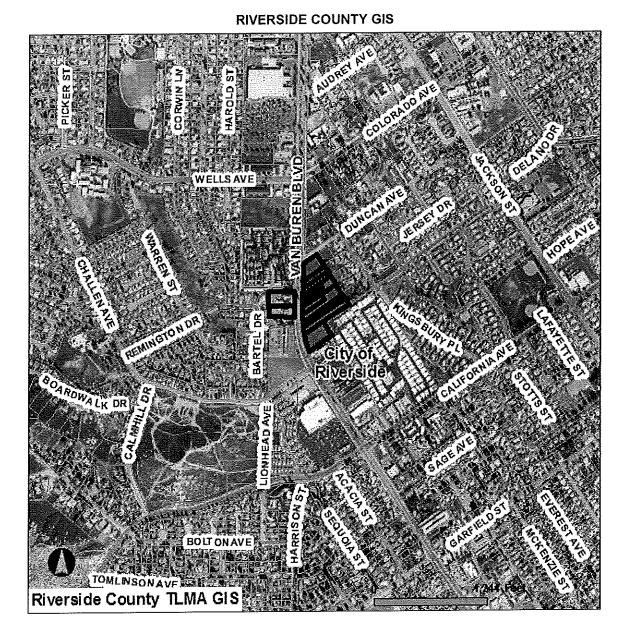


Selected parcel(s): 145-082-037 145-082-038 191-221-016 191-221-017 191-221-018 191-221-019 191-221-020 191-221-021 191-221-022 191-221-023 191-221-024 191-240-051

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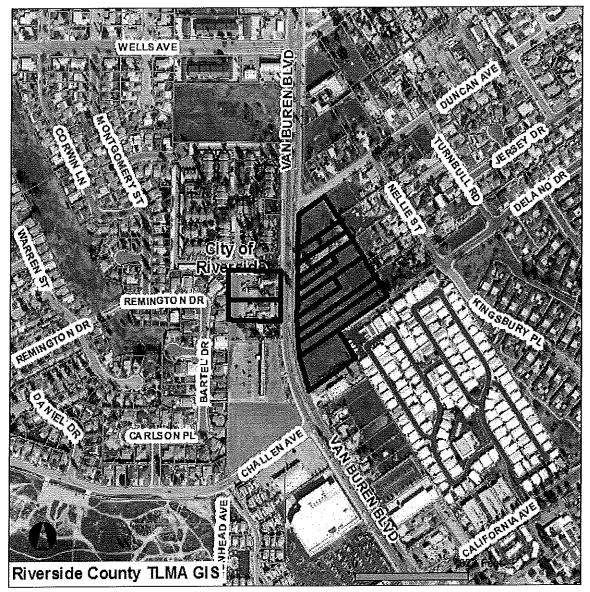


Selected parcel(s): 145-082-037 145-082-038 191-221-016 191-221-017 191-221-018 191-221-019 191-221-020 191-221-021 191-221-022 191-221-023 191-221-024 191-240-051

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Selected parcel(s): 145-082-037 145-082-038 191-221-016 191-221-017 191-221-018 191-221-019 191-221-020 191-221-021 191-221-022 191-221-023 191-221-024 191-240-051

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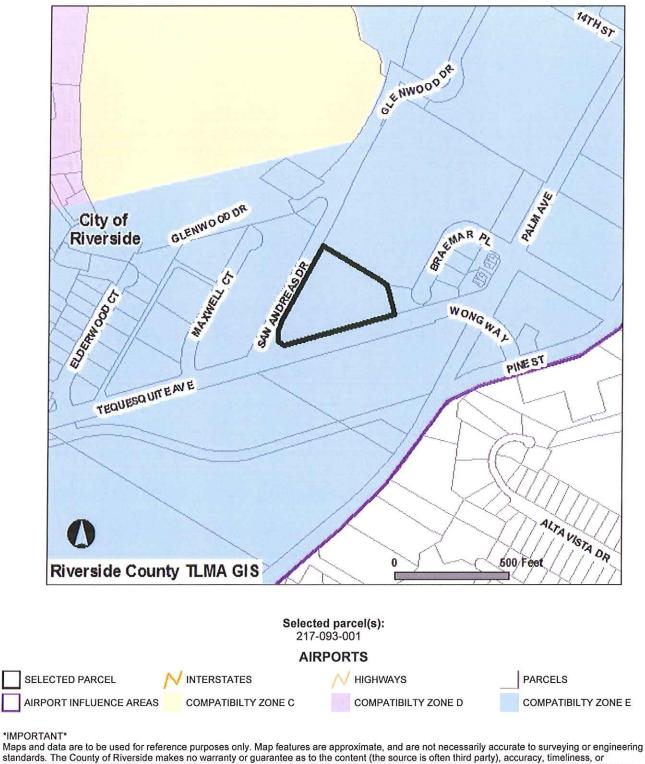


Selected parcel(s): 145-082-037 145-082-038 191-221-016 191-221-017 191-221-018 191-221-019 191-221-020 191-221-021 191-221-022 191-221-023 191-221-024 191-240-051

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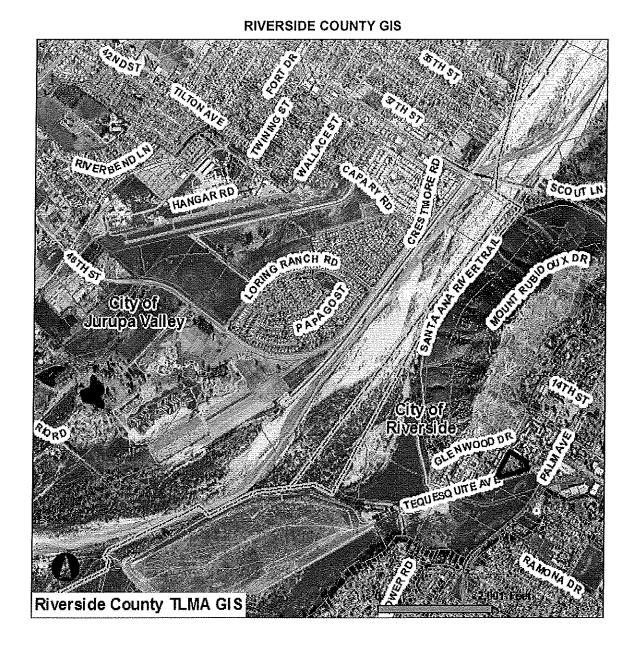
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completeness of any of the data provided, and assumes no legal responsibility for the information contained on this map. Any use of this product with

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respect to accuracy and precision shall be the sole responsibility of the user.



Selected parcel(s): 217-093-001

IMPORTANT

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Selected parcel(s): 217-093-001

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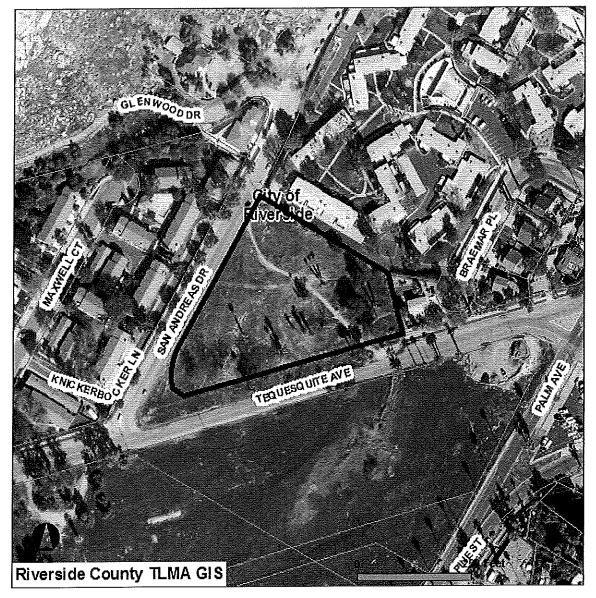
RIVERSIDE COUNTY GIS

Selected parcel(s): 217-093-001

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Selected parcel(s): 217-093-001

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Selected parcel(s): 217-093-001

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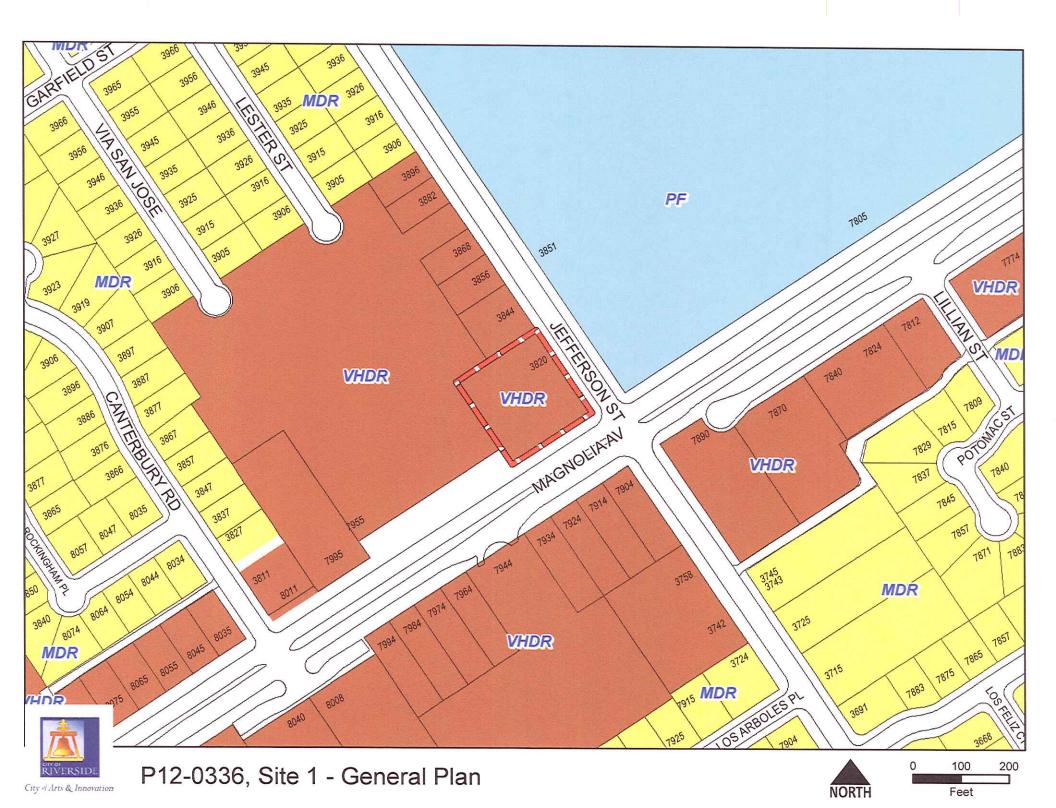


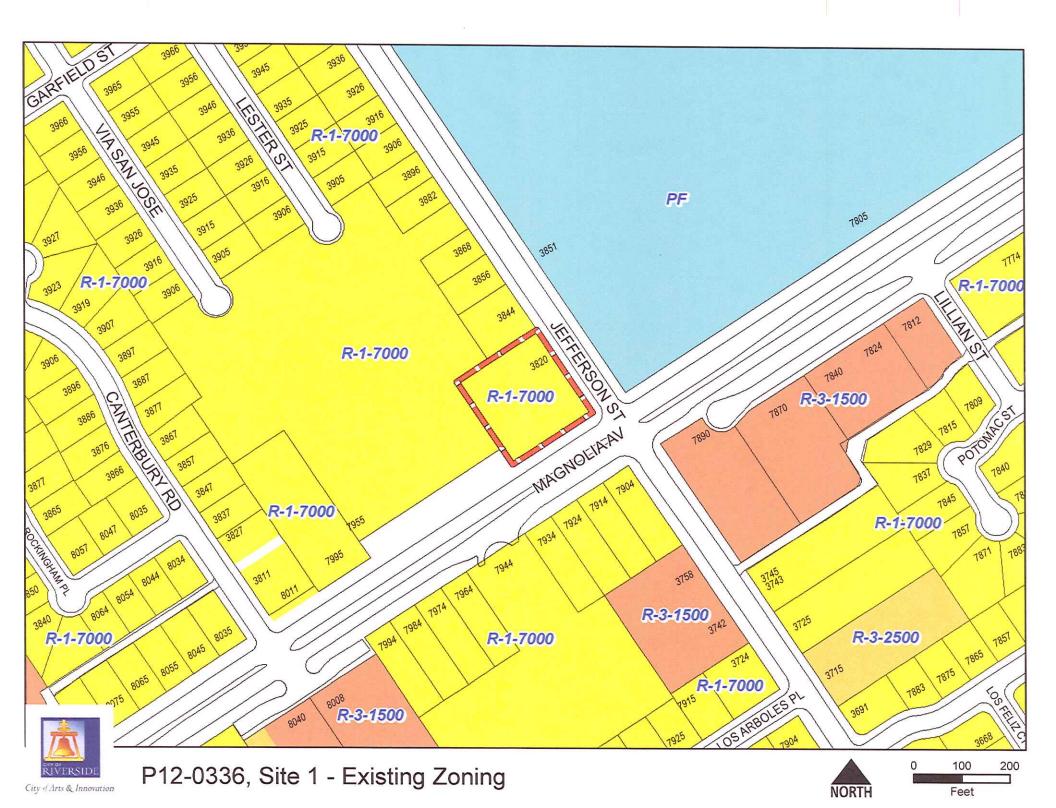


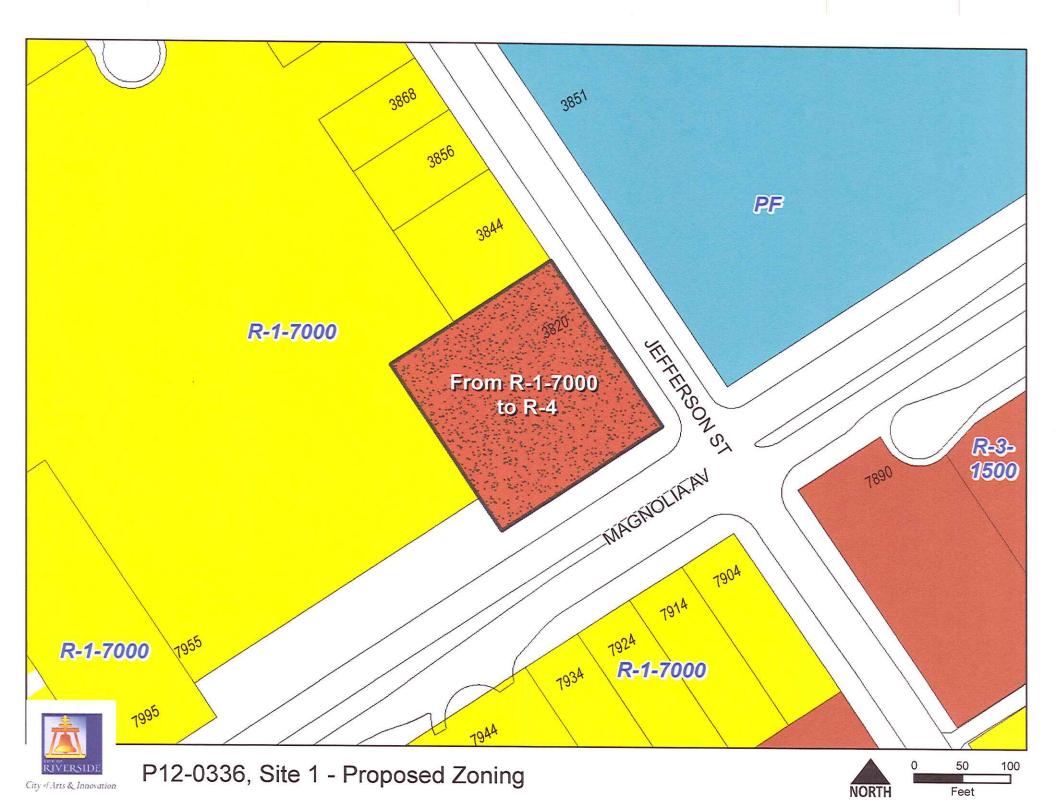
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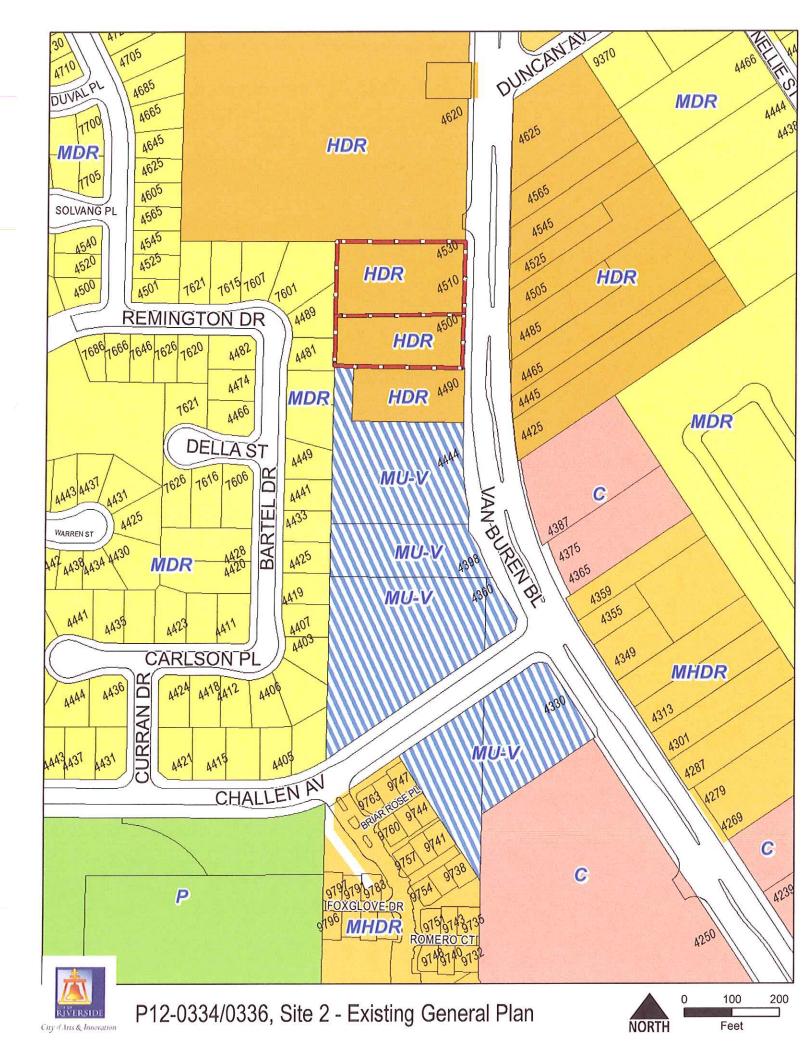
Feet

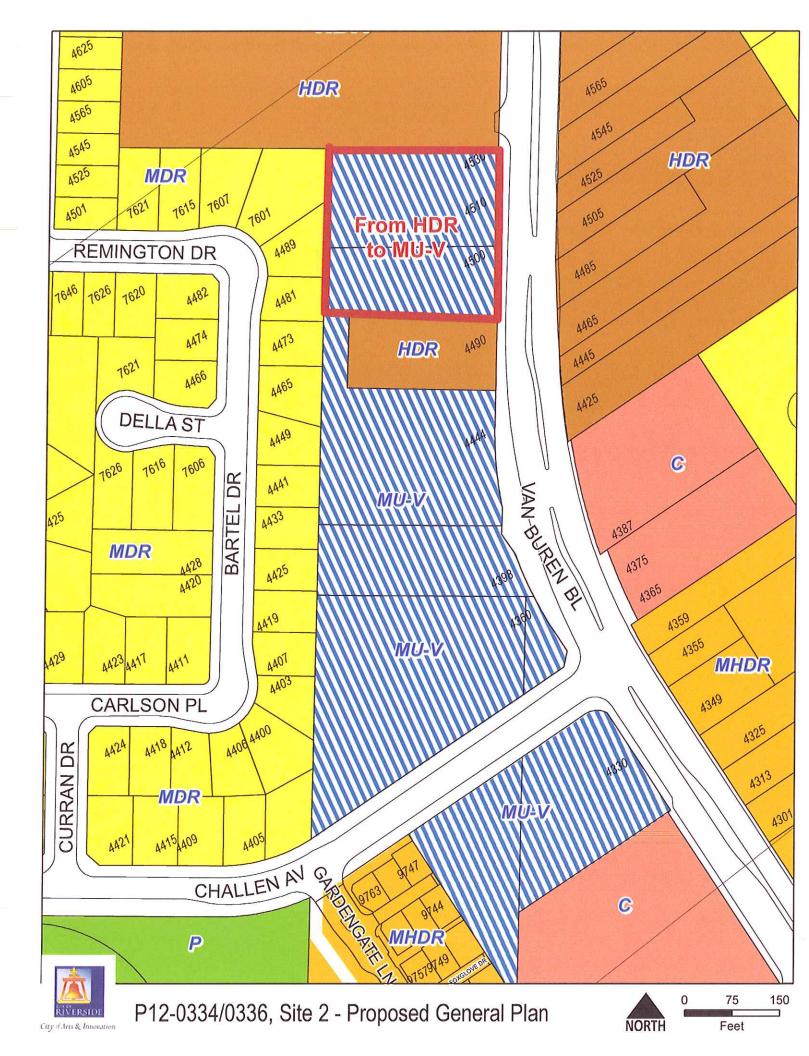


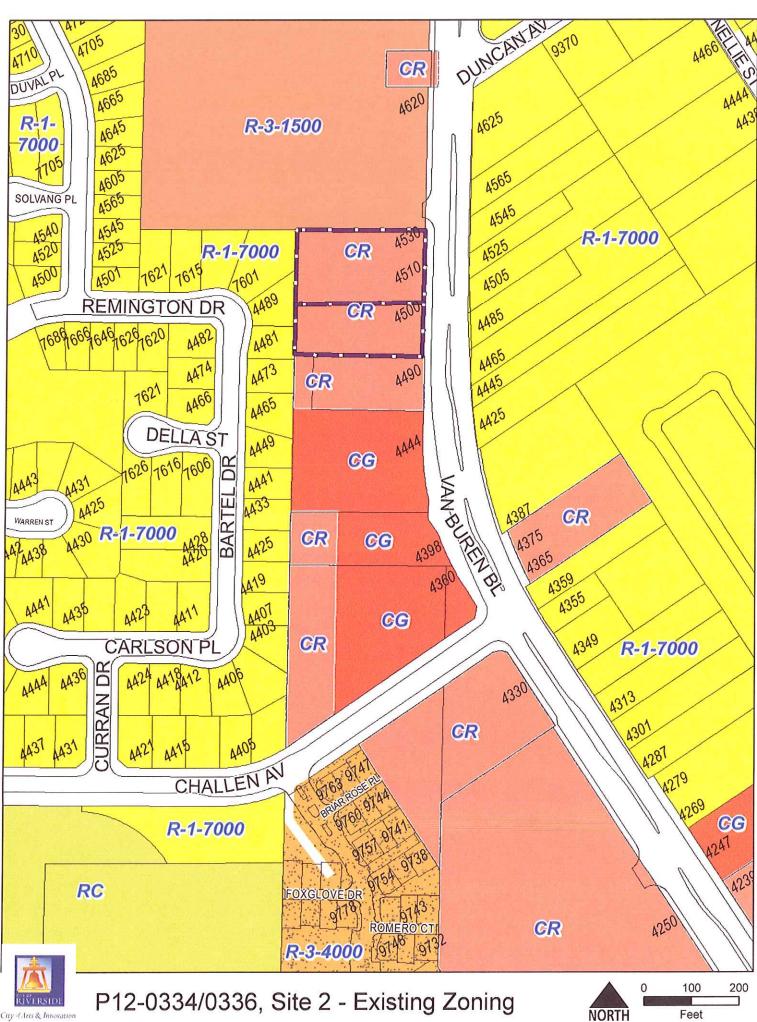




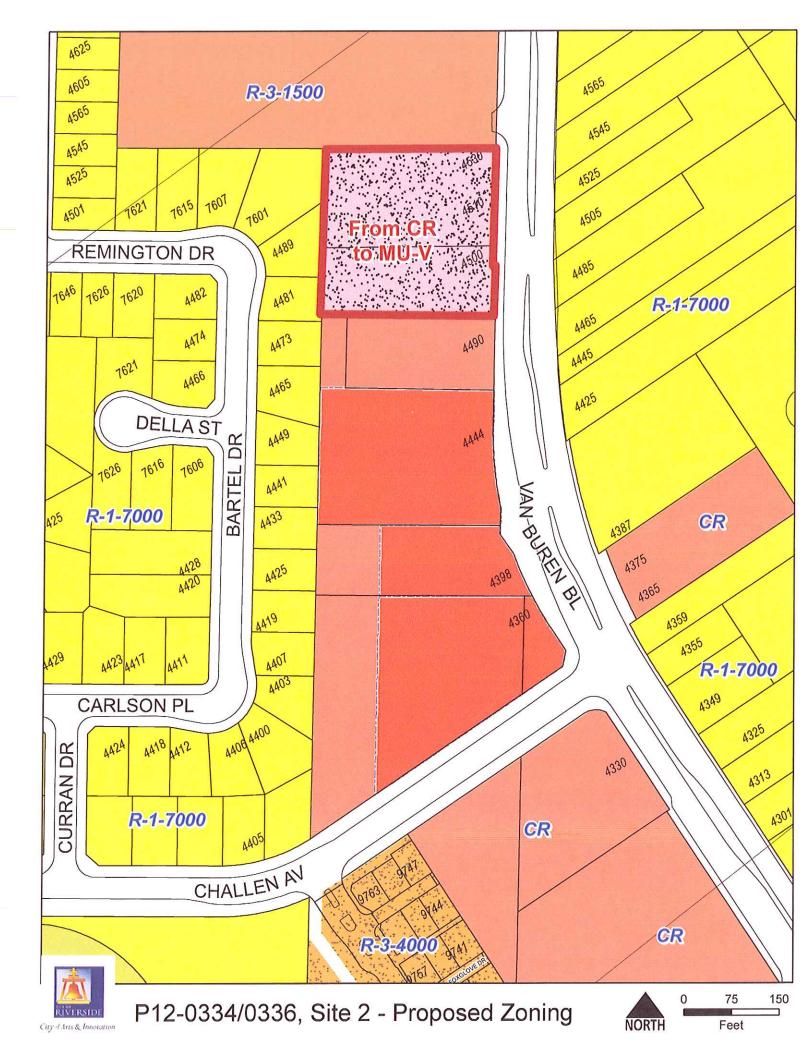






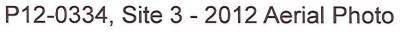


City of Arts & Innoration



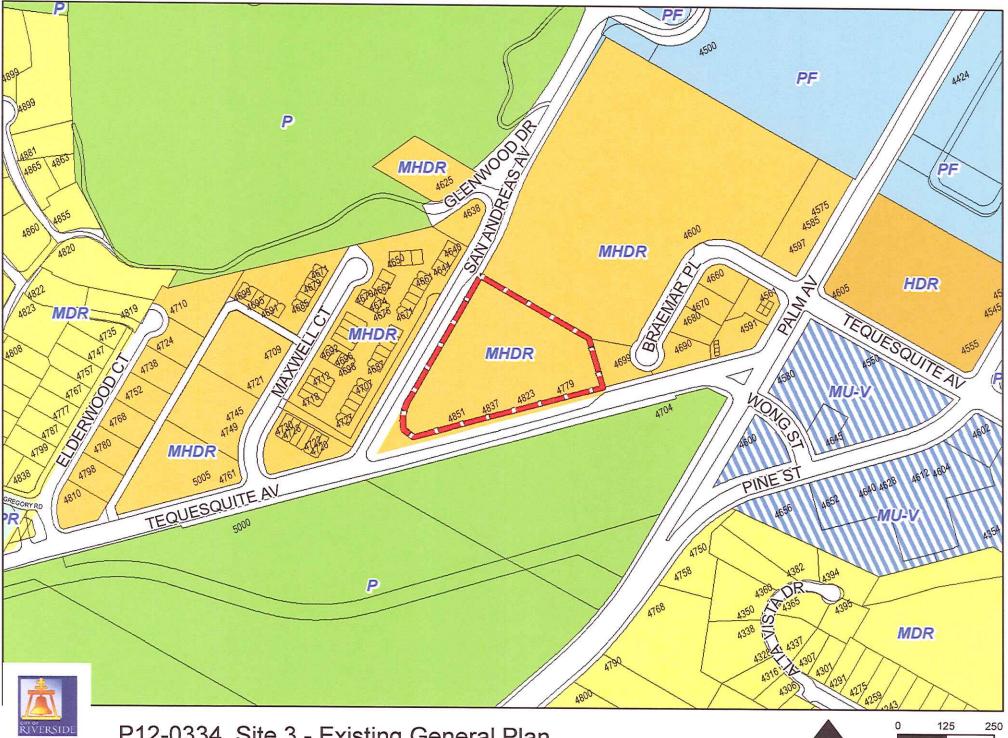








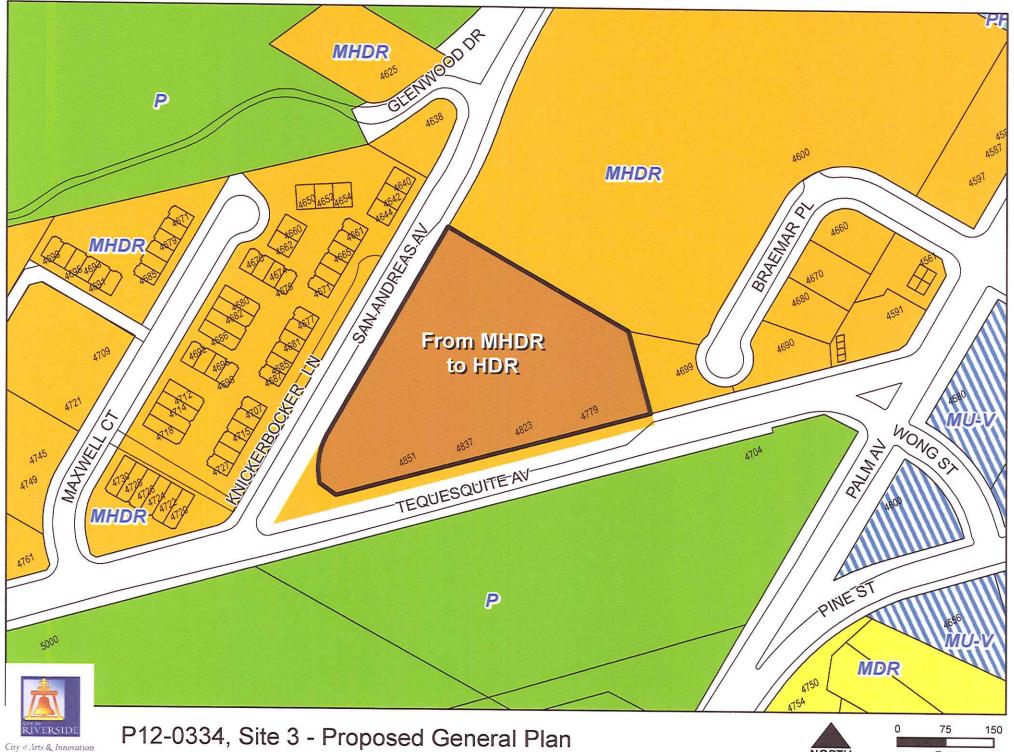
75 Feet



NORTH

Feet

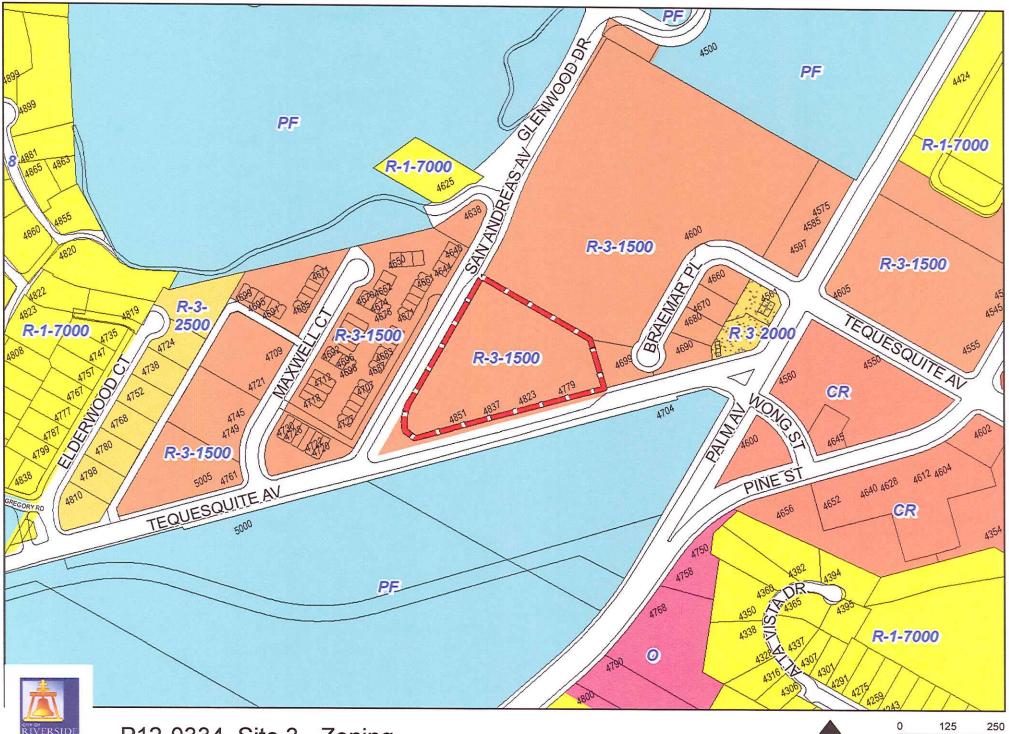
P12-0334, Site 3 - Existing General Plan



City of Arts & Innovation



Feet



NORTH

Feet

City of Arts & Innovation

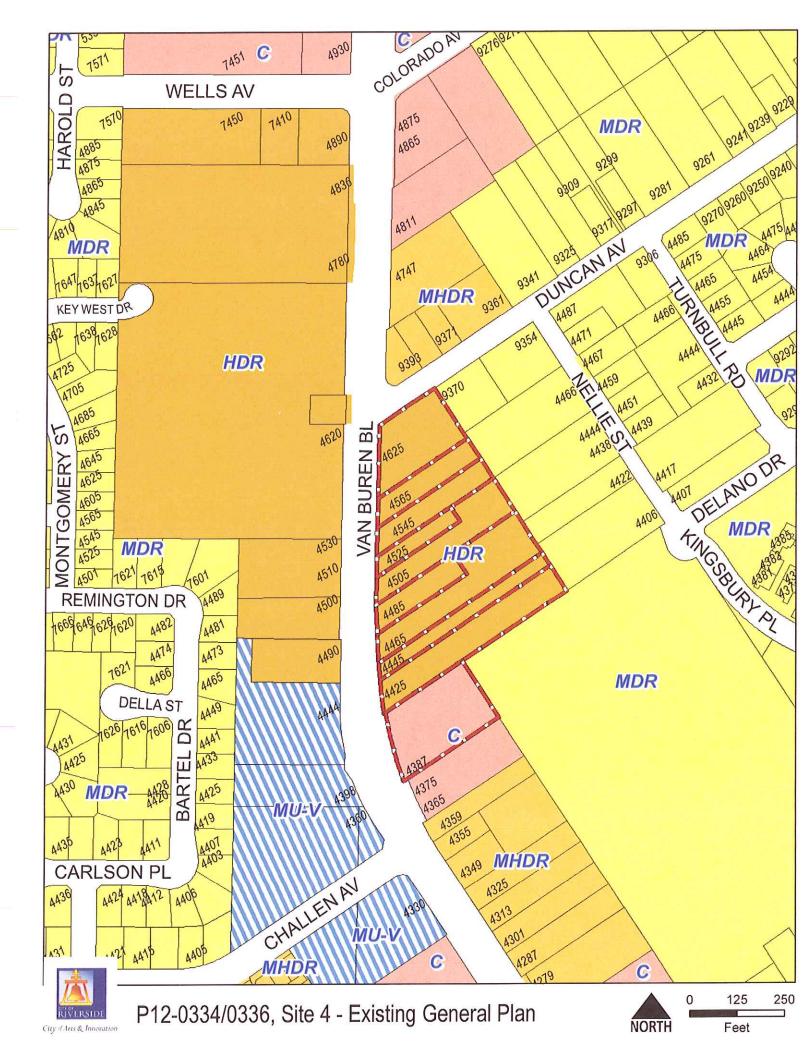
P12-0334, Site 3 - Zoning

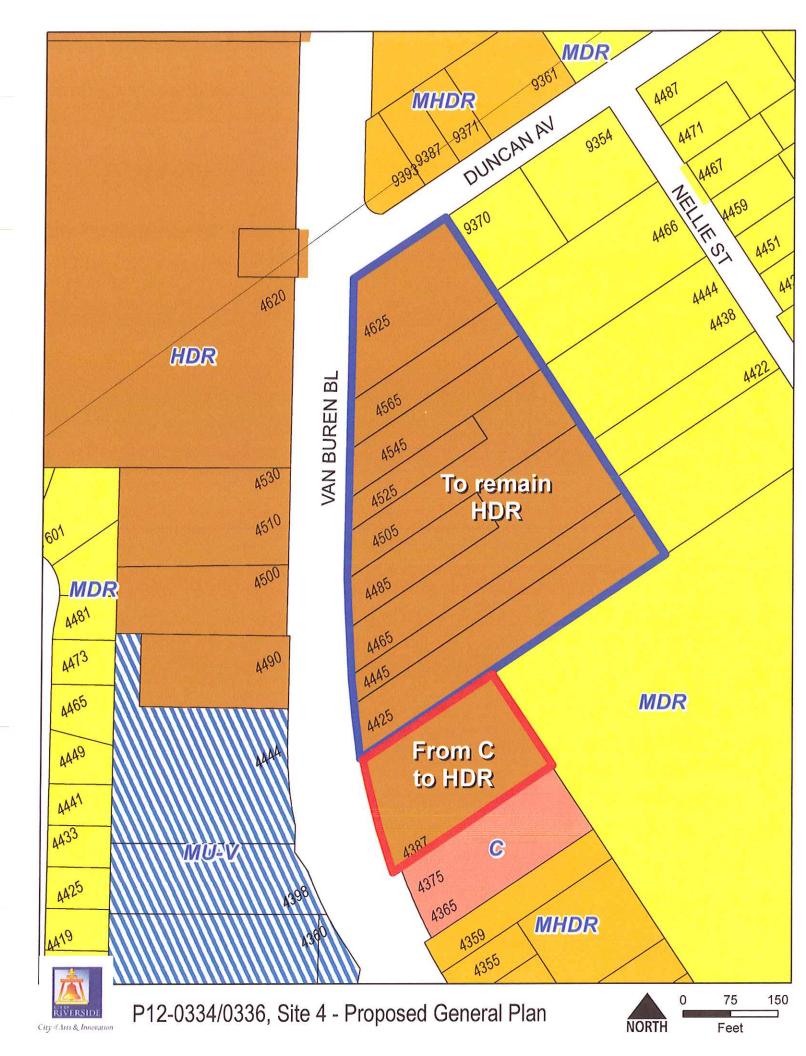


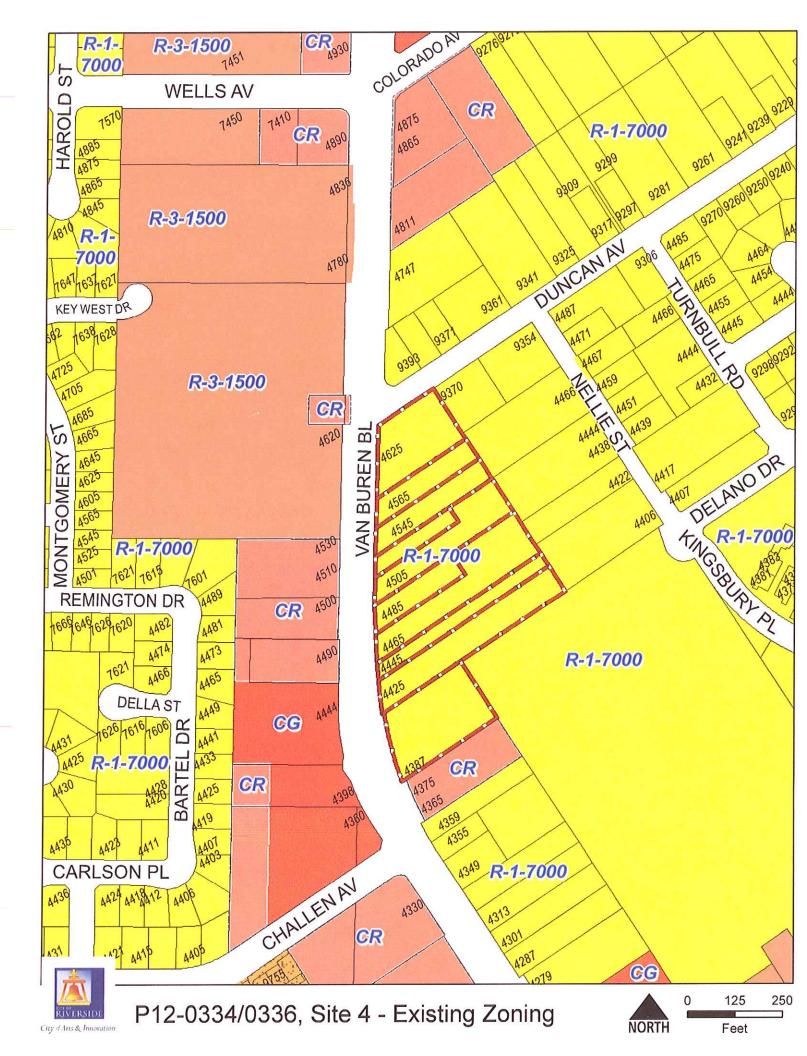
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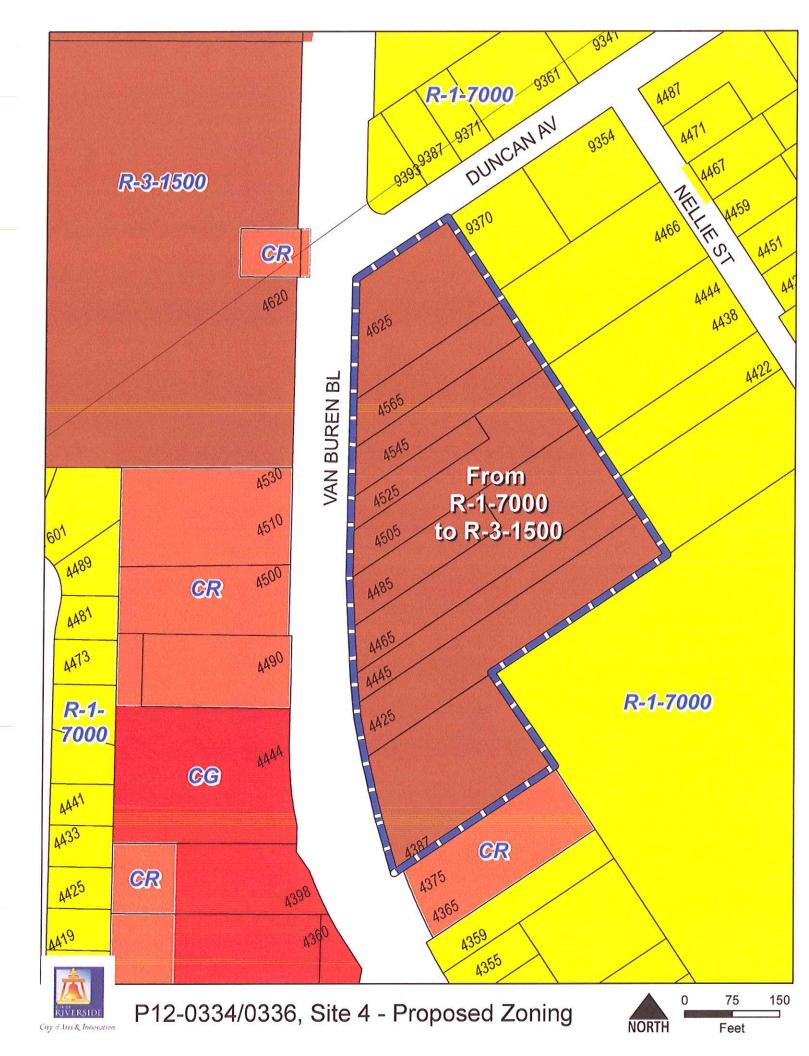
P12-0334/0336, Site 4 - 2012 Aerial Photo

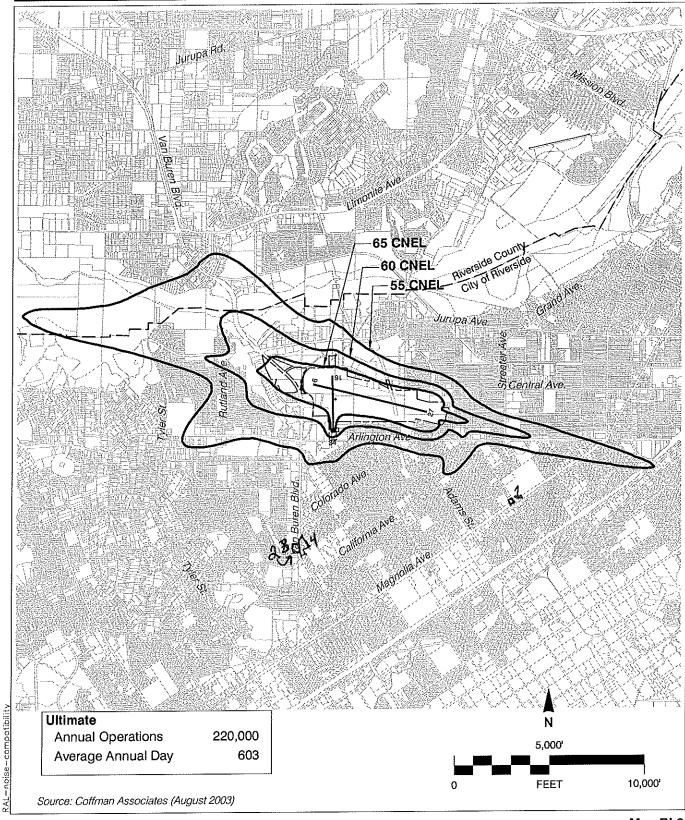
NORTH Feet







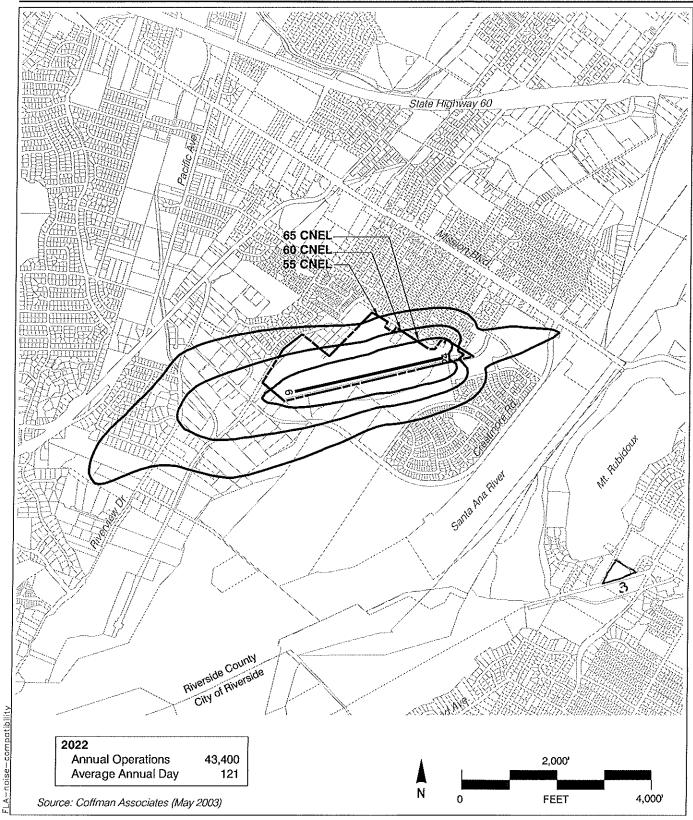




Map RI-3

Noise Compatibility Contours

Riverside Municipal Airport



Map FL-3

Noise Compatibility Contours

Flabob Airport

NOTICE OF PUBLIC HEARING RIVERSIDE COUNTY AIRPORT LAND USE COMMISSION

A PUBLIC HEARING has been scheduled before the Riverside County Airport Land Use Commission (ALUC) to consider the application 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. The proposed project application may be viewed at the Riverside County Administrative Center, 4080 Lemon Street, 14th Floor, Riverside, California 92501, Monday through Thursday from 8:00 a.m. to 5:00 p.m., except Monday, September 2 (Labor Day), and by appointment on Friday, September 6 from 8:30 a.m. to 5:00 p.m.

- PLACE OF HEARING: Riverside County Administration Center 4080 Lemon St., 1st Floor Hearing Room Riverside, California
- DATE OF HEARING: September 12, 2013

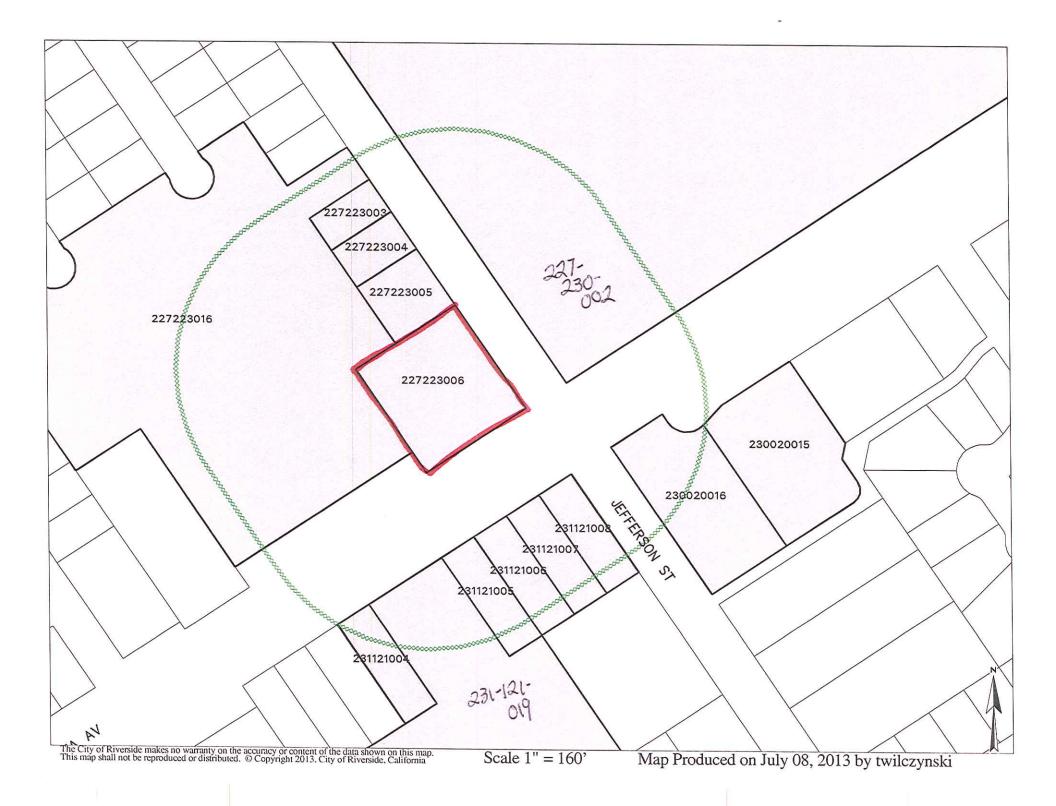
TIME OF HEARING: 9:00 A.M.

CASE DESCRIPTION:

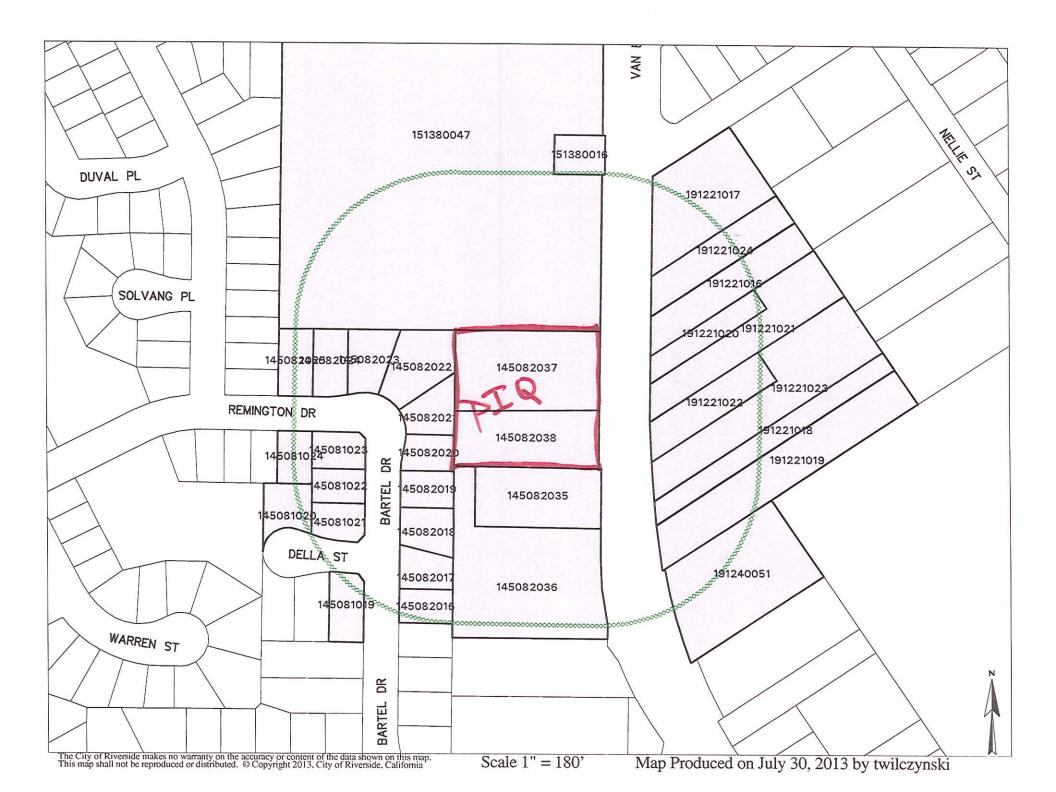
ZAP1008RG13 – City of Riverside (Representative: Doug Darnell) – City Case Nos, P12-0334 (General Plan Amendment) and P12-0336 (Rezoning). The City proposes to amend the General Plan designations and change the zoning of various properties as part of the City's Rezoning Program associated with the City's adopted Housing Element 2006-2014 (included in General Plan 2025). These changes would also bring zoning into consistency with General Plan designations. These changes include: (1) rezoning a 0.96-acre parcel (APN 227-223-006) located at the northwest corner of Magnolia Avenue and Jefferson Street from R-1-7,000 (Single-Family Residential) to R-4 (Multiple-Family Residential) or R-4-AP-D; (2) amending the General Plan designation of two parcels (APN 145-082-037 and 145-082-038) with a total area of 1.62 acres located along the west side of Van Buren Boulevard, southerly of Duncan Avenue and northerly of Challen Avenue, from HDR (High Density Residential) to MU-V (Mixed Use Village) and to rezone them from CR (Commercial Retail) to MU-V or MU-V-AP-E; (3) amending the General Plan designation of a 3.14-acre parcel (APN 217-093-001) located northerly of Tequesquite Avenue and easterly of San Andreas Avenue from MHDR (Medium High Density Residential) to HDR (High Density Residential); and (4) rezoning ten parcels (APN 191-221-016 through 191-221-024, plus 191-240-051) with a total area of 6.7 acres located along the east side of Van Buren Boulevard, southerly of Duncan Avenue and northerly of Challen Avenue from R-1-7,000 (Single-Family Residential) to R-3-1500 (Multiple-Family Residential) or R-3-1500-AP-E, and amending the General Plan designation of one of these parcels (APN 191-240-051) from C (Commercial) to HDR. (Zones D and E of Riverside Municipal Airport Influence Area and Zone E of Flabob Airport Influence Area).

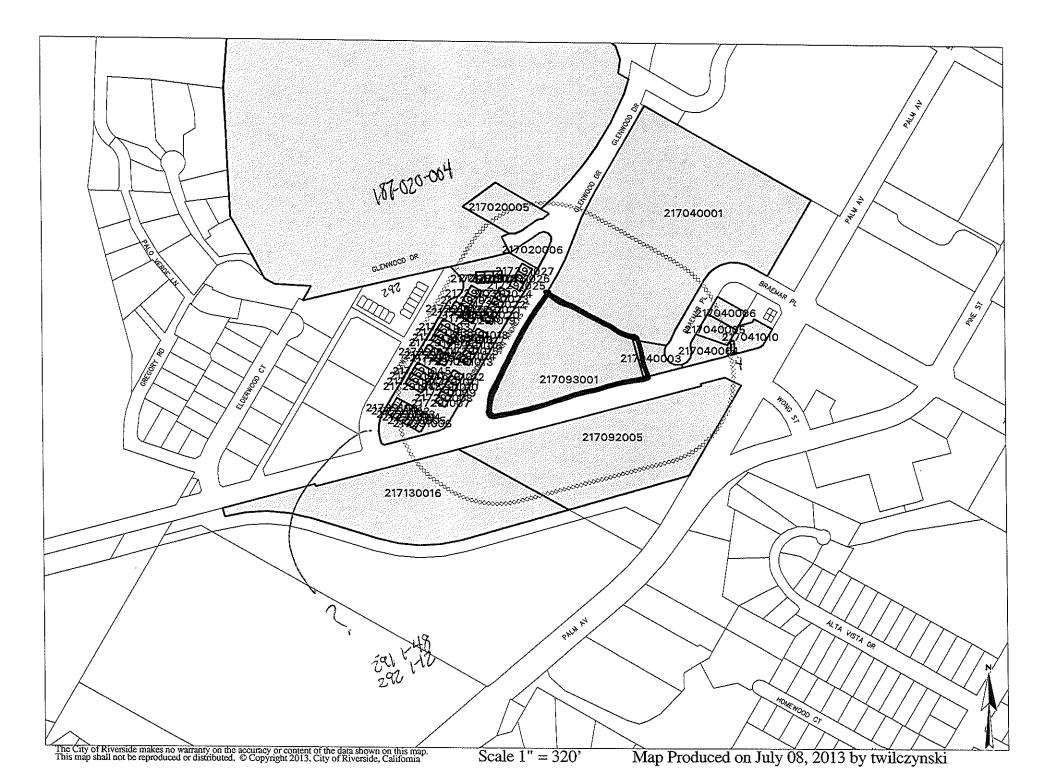
FURTHER INFORMATION: Contact John Guerin at (951) 955-0982. The ALUC holds hearings for local discretionary permits within the Airport Influence Areas, reviewing for aeronautical safety, noise and obstructions. All other concerns should be addressed to <u>Mr.</u> Doug Darnell of the City of Riverside Planning Department, at (951) 826-5219

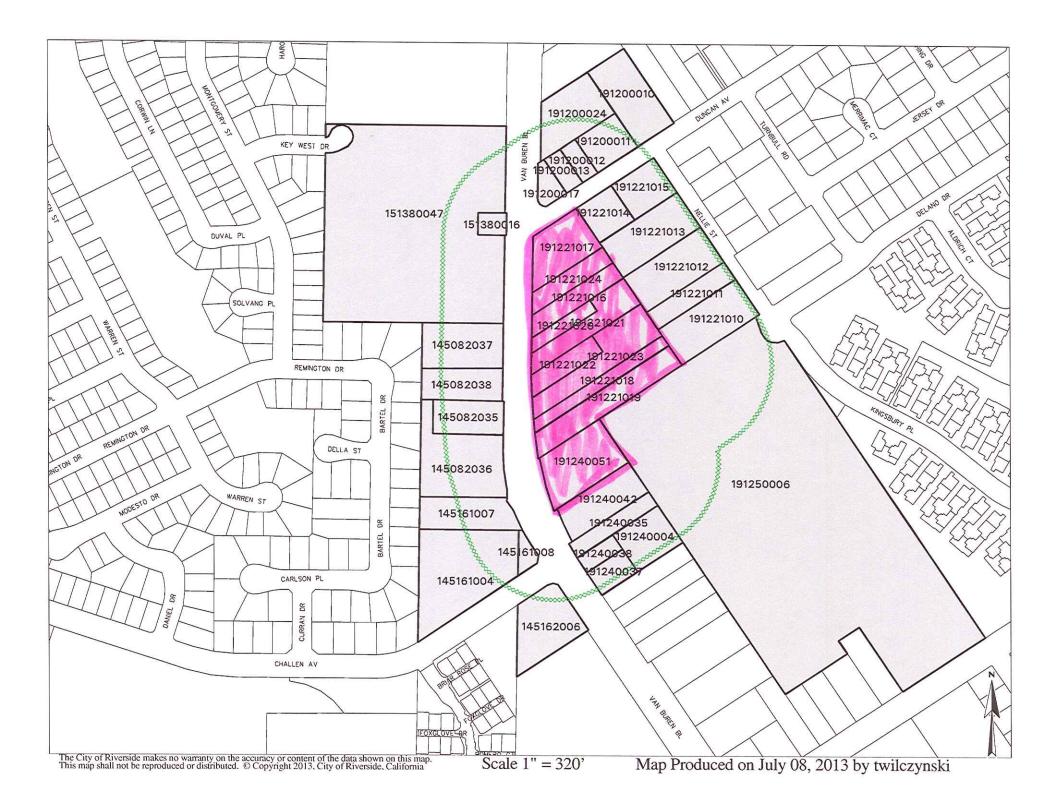
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	TION FOR MAJOR LAND USE ACTION REVIEW ALUC Identification No. DE COUNTY AIRPORT LAND USE COMMISSION ZAPIUSRG 13
	NENT (TO BE COMPLETED BY APPLICANT)
Date of Application Property Owner Mailing Address	CITY OF RIVERSIDE ON BEHALF OF THUR Phone Number 451-826-521 300 MAIN STREET PIVERSIDE CA, 92572 ATTN: DOUG DANNELL, SEN OR PLANNER
Agent (if any) Mailing Address	COMUMUNITY DEV. DEPT. PLANNING DIVISION CITY OF RIVERSIDE, Phone Number
1	ON (TO BE COMPLETED BY APPLICANT) aled map showing the relationship of the project sits to the airport boundary and runways
Street Address	SEE ATTACHED (4 SEPAPATE SITES)
Assessor's Parcel No	D. SEE ATTACHED TABLE Parcel Size SEE ATTACHE
Subdivision Name Lot Number PROJECT DESCRI	N/A SEE ATTACHED Zoning Classification SEE ATTACHE
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Date Received				Type of P	roject			
Agency Name	BITH OF RIVERSIDE				General Plan Amendment			
	Z Zoning Amendment or Variance							
Staff Contact	DOUG DAIPPEU	, SENIO	KRAN		livision App	roval		
Phone Number	151-846-5219	North 1		-	Permit			
Agency's Project No	12-0334-(04)	ELAL M	N AMI	-/	c Facility			
	<u> 10-0326 [REA</u>	N/N (F			<u> </u>			
ALUC REVIEW (TO BE COMPLETED BY ALUC EXECUTIV	E DIRECTOR)						
Application	Date Received		By					
Receipt	is Application Complete?	☐ Yes	🗌 No					
	If No, cite reasons							
Airport(s) Nearby								
Primary Criteria	Compatibility Zone(s)	Δ Α	🗌 B1	🗌 B2	□ c	D	E	Пн
Review	Allowable (not prohibited) Use?	🗌 Yes	🗌 No					
	Density/Intensity Acceptable?	🗌 Yes	🗌 No					
	Open Land Requirement Met?	🗍 Yes	🗌 No					
	Height Acceptable?	🗌 Yes	🗌 No					
	Easement/Deed Notice Provided?	Yes	□ No					
Special Conditions	Describe:				·			
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Supplemental	Noise							
Criteria Review								
	Safety							
	Airspace Protection						, ,,,	
	Overflight							
ACTIONS TAKEN	TO BE COMPLETED BY ALUC EXECUT	VE DIRECTOR)						
ALUC Executive				Date	<u></u>	<u></u>		
Director's Action	Refer to ALUC							
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Action	Consistent Conditions (lis	conditione/atta	ich additio		eeded)			
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	Inconsistent (list reasons/attac	h additional paç	ges if need	ed)				
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Project Description for ALUC Application

Applicant: City of Riverside

Planning Case Nos. P12-0334 (General Plan Amendment) P12-0336 (Rezoning)

The proposed project consists of general plan amendments and rezoning of various sites identified in the City of Riverside Rezoning Program of the Existing Adopted Housing Element 2006-2014 of the General Plan 2025. No development is proposed in conjunction with this these rezoning and general plan amendment proposals.

The City of Riverside has initiated this project on behalf of the property owners and is the applicant for this project. The proposal for these sites is submitted as part of an Application for Major Land Use Review to the Riverside County Airport Land Use Commission for determination of consistency with the Riverside County Airport Land Use Compatibility Plan.

The following is a list of four sites proposed for rezoning and/or a general plan amendment that are located in the Riverside Airport Land Use Compatibility Plan compatibility areas – Zones D and E.

Site No. 1 (Proposed for rezoning only) APN: 227-223-006 Acres: 0.96 Current land use: vacant land Existing Zoning: R-1-7000, Single-Family Residential Proposed Zoning: R-4, Multiple-Family Residential Existing General Plan: VHDR, Very High Density Residential Proposed General Plan: No change (remains VHDR)

ACLUP Compatibility Zone D

Site No. 2 (Proposed for rezoning and general plan amendment) APN: 145-082-037 & 145-082-038 Acres: 1.62 Current land use: single-family residential structures Existing Zoning: CR, Commercial Retail Proposed Zoning: MU-V, Mixed Use Village Existing General Plan: HDR, High Density Residential Proposed General Plan: MUV/Mixed Use Village

ACLUP Compatibility Zone E

Site No. 3 (Proposed for general plan amendment only) APN: 217-093-001 Acres: 3.14 Existing land use: vacant land Existing Zoning: R-3-1500, Multiple-Family Residential Proposed Zoning: No Change (remains R-3-1500, Multiple-Family Residential) Existing General Plan: MHDR, Medium High Density Residential Proposed General Plan: HDR, High Density Residential

ACLUP Compatibility Zone E

Site No. 4 (Proposed for rezoning and general plan amendment) APN's: 191-221-016 191-221-017 191-221-019 191-221-024 191-240-051 191-221-018 191-221-020 191-221-021 191-221-022 191-221-023 Acres: 6.7 Current land use: vacant land and a single-family residence Existing Zoning: R-1-7000, Single-Family Residential Proposed Zoning: R-3-1500, Multiple-Family Residential Existing General Plan: C, Commercial Proposed General Plan: HDR, High Density Residential

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ACLUP Compatibility Zone E

COUNTY OF RIVERSIDE AIRPORT LAND USE COMMISSION STAFF REPORT

AGENDA ITEM:	2.5
HEARING DATE:	September 12, 2013
CASE NUMBER:	ZAP1009BL13 – Next Era Energy Resources (Representative: Stuart McCurdy)
APPROVING JURISDICTION:	County of Riverside
JURISDICTION CASE NO.:	CUP 3682 (Conditional Use Permit)

MAJOR ISSUES: The project proposes overhead electric transmission lines within the Blythe Airport Influence Area, where numerous existing and proposed overhead transmission and distribution lines are or will be located. The project's proposed lines have potential impacts on already existing or proposed constraints to the operation of the airport. However, the proposed transmission line's location and height is generally further from the runway than, and shorter than, the nearest other proposed transmission line associated with the Blythe Solar Power Project (ZAP1006BL10) that was previously reviewed by ALUC.

RECOMMENDATION: Staff recommends that the proposed project be found <u>CONDITIONALLY CONSISTENT</u>, subject to the conditions specified herein and such additional conditions as may be necessary to comply with Federal Aviation Administration (FAA) requirements.

PROJECT DESCRIPTION:

The project (McCoy Solar) proposes to construct a 750 megawatt (MW) solar photovoltaic electric generating facility and associated facilities on 5,363 acres, including overhead 230 kV transmission lines located northerly of the extension of 2nd Avenue/Fisher Boulevard and westerly of the extension of Mesa Drive within the land use jurisdiction of the County of Riverside. The primary facility would be located entirely outside of the Blythe Airport Influence Area, but the proposed 230 kV line would be located partially within Compatibility Zones C, D, and E of the Airport Influence Area. The project's proposed 230 kV line would generally parallel the previously proposed 230 kV transmission line associated with ZAP1006BL10 within the Airport Influence Area.

Staff Report Page 2 of 6

PROJECT LOCATION:

The project site is located northerly of the extension of 2nd Avenue/Fisher Boulevard and westerly of the extension of Mesa Drive. The majority of the project is located on federal land under the jurisdiction of the Bureau of Land Management. An approximate 50 megawatt portion would be located on 477 acres within unincorporated Riverside County. The proposed 230 kV line is generally located westerly of the extension of Monroe Drive, between the extension of 2nd Avenue/Fisher Boulevard to the north and the extension of Seeley Avenue to the south. Blythe Airport is located northerly of Interstate 10 and Hobsonway and easterly of Mesa Drive, in unincorporated Riverside County. The closest portion of the primary facility's boundaries is located approximately 21,600 feet northerly from the northerly end of Runway 17-35 of Blythe Airport. The closest portion of the proposed 230 kV "gen-tie" transmission line for connection to the Colorado River substation is located approximately a minimum of 5,090 feet southwesterly and 6,046 feet directly west from the future ultimate westerly end of Runway 8-26.

LAND USE PLAN: 2004 Blythe Airport Land Use Compatibility Plan

a.	Airport Influence Area:	Blythe Airport
b.	Land Use Policy:	Airport Compatibility Zones C, D, and E
c.	Noise Levels:	Below 55 CNEL

BACKGROUND:

<u>Flight Hazard Issues:</u> The primary solar facility, including all photovoltaic panels, would not be located within the Airport Influence Area (AIA), so its potential impacts on the airport are anticipated to be minimal and are thus not included in the following analysis. The only component of the proposed solar facility that would be located within the AIA would be the proposed 230 kV transmission lines.

The 13.1-mile long transmission line towers would range between 70 feet and 145 feet above ground level. The route generally proceeds from the primary facility in a north to south direction, and then heads westerly to connect to the Colorado River substation located outside the Airport Influence Area. The proposed transmission line would generally parallel the previously proposed 230 kV transmission line associated with ZAP1006BL10 within the Airport Influence Area. The proposed transmission line would generally be located further from the runway than the ZAP1006BL10 transmission line, excluding a portion of the proposed transmission line located within Compatibility Zone E as both the lines head westerly. The alignment of the proposed transmission line was specifically designed to avoid crossing through Compatibility Zone B1, pursuant to the Commission's action in evaluating ZAP1006BL10.

Staff Report Page 3 of 6

As discussed in the following Part 77 analysis section, all 118 structures have been submitted to FAA and accepted for review. Analysis of the height and location of these transmission lines relative to existing hazards is included in the following Cumulative Hazards to Flight analysis section.

To further detail potential hazards posed by the transmission lines relative to previously proposed lines, information on the clearance of the proposed project's structures compared to the Blythe Mesa I structures based on a 2% slope (50:1 ratio or 1.46 degrees) is provided. The proposed project's transmission line directly west of Runway 8 (ID'd as structure 57) is located 6,046 feet (6,046') from the end of the runway and has a 50:1 ratio at an elevation of 516'. The structure is at 503', which gives it a clearance of 13'. ZAP1006BL10's transmission line directly west of Runway 8 is at approximately 5,600' from the end of the runway. The 50:1 ratio is at an elevation of 508' and their structure is at 498' as confirmed by FAA submittal (2010-AWP-3727-OE), which gives it a clearance of 10'. Therefore, the proposed transmission line would provide greater clearance from the 50:1 ratio than the previously approved ZAP1006BL10 transmission line.

Electrical and Communications Interference

Potential transmission line-related radio frequency interference is a potential indirect effect of transmission line operation and is produced by the physical interactions of line electric fields. Such interference is due to the radio noise produced by the action of the electric fields on the surface of the energized conductor. The process involved is known as corona discharge and can occur within gaps between the conductor and insulators or metal fittings. Since the level of interference depends on factors such as line voltage, distance from the line to the receiving device, orientation of the antenna, signal level, line configuration and weather conditions, maximum interference levels are not specified as design criteria for modern transmission lines. The level of any such interference usually depends on the magnitude of the electric fields involved and the distance from the line. However, the potential for such impacts is minimized by reducing the line electric fields and locating the line away from inhabited areas.

The potential for such corona-related interference is usually of concern for lines of 345 kV and above. The MSEP transmission line will operate at 230 kV and will be designed in accordance with standard utility practices to reduce the electric field at energized surfaces to acceptable levels. In addition, electric field mitigation devices called corona rings will be mounted at conductor-hardware interface points at the end of the insulators to reduce the field levels at those locations. Radio frequency interference is therefore not expected to be a concern during operation of the transmission line.

Cumulative Hazards to Flight

The area surrounding the Blythe Municipal Airport has been one of the focus areas for development of solar energy facilities within Riverside County. These projects include a variety of features that may create hazards to aircraft, including but not limited to Staff Report Page 4 of 6

obstructions, glare/reflectivity, thermal plumes, and interference with aircraft communications. Each of these hazards considered individually for a project or even cumulatively for an individual project may not result in a substantial hazard to flight. However, when an individual project's impacts are considered with the existing environment and other planned projects, a net cumulative substantial hazard to flight may occur.

There are currently four proposed solar energy projects northerly of Interstate 10 within the AIA that could potentially contribute to cumulative glint, glare, or flash situations that would be an additional stress factor for pilots attempting to take off from, or land at, a Blythe Airport runway, in violation of the standard requirement that uses reflecting sunlight toward aircraft attempting takeoffs or landings be prohibited. Although the proposed primary facility would not be located within the AIA, the proposed transmission line located within the AIA could incrementally contribute to the cumulative impacts of all of the solar projects and existing conditions surrounding the airport.

The project's proposed new towers are primarily further from the runways than other proposed towers on the west side of the airport and would be the same height or lower than other proposed towers on the west side of the airport. In addition, as was detailed previously, the proposed project's towers would result in a greater 50:1 ratio clearance compared to the previously proposed ZAP1006BL10 transmission line. Thus, the project's towers would not create a substantial increased impact to hazards off the west end of Runway 8.

<u>Non-Residential Land Use Intensity</u>: The single acre non-residential intensity criteria for Compatibility Zones C and D are 150 and 300 respectively. The average acre nonresidential intensity criteria for Compatibility Zones C and D are 75 and 100, respectively.

Construction of the proposed transmission line is expected to require about five months total to complete. During construction, a maximum of 15 workers would be on site. After construction, no occupancy within the AIA would occur since no buildings are proposed within the AIA. During operation, inspection and maintenance may occur on the transmission lines within the AIA which would result in a minimum number of employees that would be well within the applicable intensity criteria. Typical inspection and maintenance of the transmission line would consist of a maximum of 4 workers at any given time. None of these levels of worker populations would exceed the Zone C or D average or single-acre intensity criteria.

<u>Open Area:</u> Countywide land use compatibility criteria require that a minimum of 20% and 10% of land in Airport Compatibility Zones C and D, respectively, consist of open land as defined in Policy 4.2.4 of the ALUCP. The applicant has indicated that the project provides between 88% and 98% open space on each of the parcels excluding the area of the property dedicated to the transmission line. Within the portions of the project within Zones C and D in particular, the project would provide 95.78% and 96.15%, respectively.

Staff Report Page 5 of 6

<u>Part 77:</u> Federal Aviation Administration (FAA) obstruction evaluation review has been submitted for all 118 transmission line structures, although some of the structures were determined to not require FAA obstruction evaluation review based on the 1:100 slope ratio. The towers and other structures were issued Aeronautical Study Numbers (ASNs) of 2013-AWP-5211-OE through 2013-AWP-5328-OE. At the time of writing of the staff report, no determinations have been made by FAA.

<u>Noise:</u> The site is located outside the area projected to be subject to average noise levels from aircraft operations in excess of 55 CNEL.

CONDITIONS:

- 1. The following uses shall be prohibited:
 - (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.
 - (d) Any use which would generate electrical interference that may be detrimental to the operation of aircraft and/or aircraft instrumentation.
- 2. Any outdoor lighting installed shall be hooded or shielded to prevent either the spillage of lumens or reflection into the sky.
- 3. The attached notice shall be provided to all potential purchasers, and shall be recorded as a deed notice for those parcels within the project located wholly or partially within Airport Compatibility Zones C and D.
- 4. In the event that any incidence of electrical interference affecting the safety of air navigation occurs as a result of project operation, upon notification to the airport operator of an incidence, 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 "incidence" includes any situation that results in an accident, incident, "near-

miss," report by airport personnel, or specific safety complaint 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. For each such incidence 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.

5. Prior to issuance of any building permits, the applicant shall have received a determination of "Not a Hazard to Air Navigation" from the Federal Aviation Administration (FAA) Obstruction Evaluation Service. Copies of the FAA determination shall be provided to the Riverside County Planning Department and the Riverside County Airport Land Use Commission.

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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)



Federal Aviation Administration

Project Submission Success Project Name: MCCOY-000248477-13

Project MCCOY-000248477-13 has been submitted successfully to the FAA.

Your filing is assigned Aeronautical Study Number (ASN):

2013-AWP-5211-OE 2013-AWP-5212-OE 2013-AWP-5213-OE 2013-AWP-5214-OE 2013-AWP-5215-OE 2013-AWP-5216-OE 2013-AWP-5217-OE 2013-AWP-5218-OE 2013-AWP-5219-OE 2013-AWP-5220-OE 2013-AWP-5221-OE 2013-AWP-5222-OE 2013-AWP-5223-OE 2013-AWP-5224-OE 2013-AWP-5225-OE 2013-AWP-5226-OE 2013-AWP-5227-OE 2013-AWP-5228-OE 2013-AWP-5229-OE 2013-AWP-5230-OE 2013-AWP-5231-OE 2013-AWP-5232-OE 2013-AWP-5233-OE 2013-AWP-5234-OE 2013-AWP-5235-OE 2013-AWP-5236-OE 2013-AWP-5237-OE 2013-AWP-5238-OE 2013-AWP-5239-OE 2013-AWP-5240-OE 2013-AWP-5241-OE 2013-AWP-5242-OE 2013-AWP-5243-OE 2013-AWP-5244-OE 2013-AWP-5245-OE 2013-AWP-5246-OE 2013-AWP-5247-OE 2013-AWP-5248-OE 2013-AWP-5249-OE 2013-AWP-5250-OE 2013-AWP-5251-OE 2013-AWP-5252-OE 2013-AWP-5253-OE 2013-AWP-5254-OE 2013-AWP-5255-OE 2013-AWP-5256-OE 2013-AWP-5257-OE 2013-AWP-5258-OE 2013-AWP-5259-OE 2013-AWP-5260-OE 2013-AWP-5261-OE 2013-AWP-5262-OE 2013-AWP-5263-OE 2013-AWP-5264-OE 2013-AWP-5265-OE 2013-AWP-5266-OE 2013-AWP-5267-OE 2013-AWP-5268-OE 2013-AWP-5269-OE 2013-AWP-5270-OE 2013-AWP-5271-OE 2013-AWP-5272-OE 2013-AWP-5273-OE 2013-AWP-5274-OE

Project Submission Success
Project Name: MCCOY-000248477-13

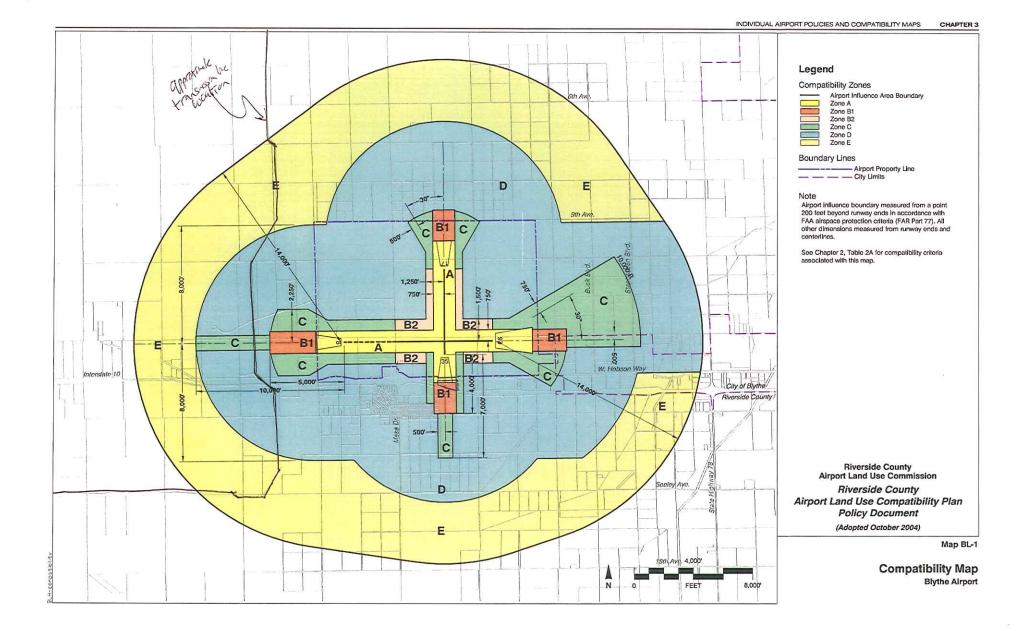
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2013-AWP-5324-OE
2013-AWP-5325-OE
2013-AWP-5326-OE
2013-AWP-5327-OE
2013-AWP-5328-OE

Please refer to the assigned ASN on all future inquiries regarding this filing.

Please return to the system at a later date for status updates.

It is the responsibility of each e-filer to exercise due diligence to determine if coordination of the proposed construction or alteration is necessary with their state aviation department. Please use the link below to contact your state aviation department to determine their requirements: State Aviation Contacts

To ensure e-mail notifications are delivered to your inbox please add noreply@faa.gov to your address book. Notifications sent from this address are system generated FAA e-mails and replies to this address will NOT be read or forwarded for review. Each system generated e-mail will contain specific FAA contact information in the text of the message.



Application Supplement

McCoy Solar LLC, a subsidiary of NextEra Energy Resources, LLC (NextEra), is submitting this Application for Major Land Use Review to the Riverside County Airport Land Use Commission (ALUC) for the proposed McCoy Solar Energy Project (MSEP), an up to 750 MW photovoltaic (PV) electric generating facility in Riverside County, CA.

The solar plant site and the transmission line needed for the Project are proposed for development primarily on public lands managed by the Bureau of Land Management (BLM) on a site approximately two miles northwest of the Blythe Municipal Airport (see Figures 1 and 2). The pertinent BLM office is the Palm Springs-South Coast Field Office, 1201 Bird Center Drive, Palm Springs, CA, 92262. The current BLM officer assigned to the MSEP is Mr. Frank McMenimen.

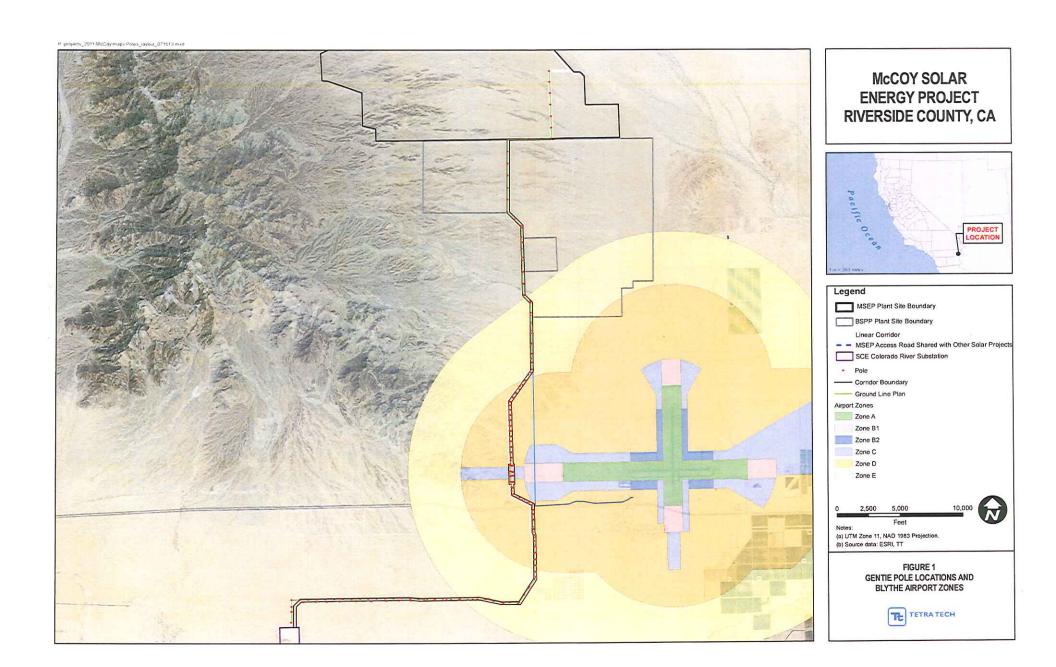
In addition to the public lands that will be used for the Project, there are three privately owned parcels within the solar plant site, totaling 477 acr es that fall under the jurisdiction of Riverside County. Riverside County is the California Environmental Quality Act (CEQA) lead agency and is the referring agency for this application. The current County Planner assigned to the MSEP is Mr. Adam Rush.

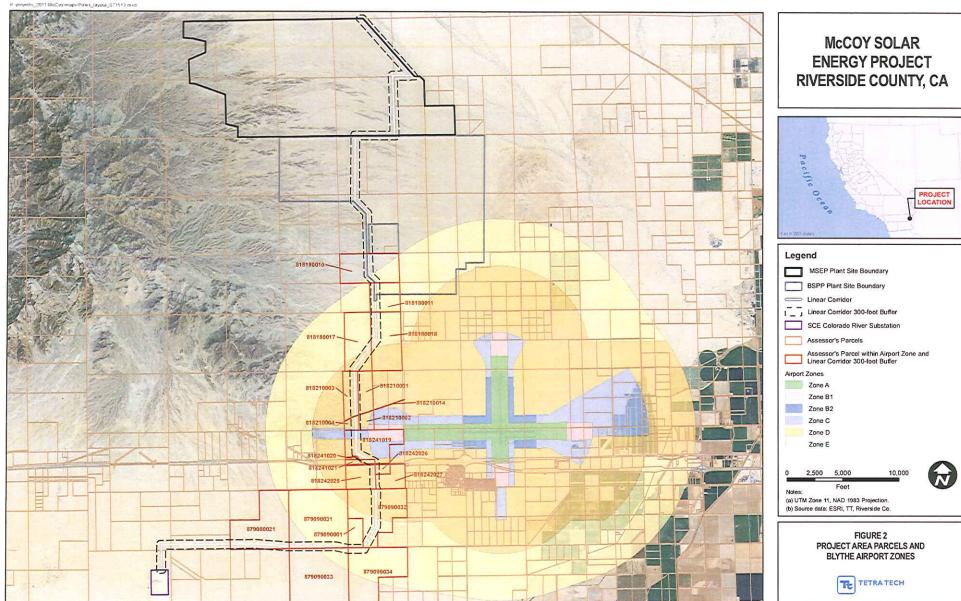
NextEra is also planning to build the Blythe Solar Power Project (BSPP) to the immediate south of the MSEP. The BSPP technology is being amended to utilize PV instead of solar thermal trough. It is important to note that the transmission corridor for both the MSEP and the approved BSPP are designed to be contained within the same right-of-way extents.

Solar Millennium previously submitted an ALUC application on the BSPP Project in March of 2010. Since that time, in coordination with the ALUC, the transmission line connecting the solar plant site to the Colorado River Substation has been redesigned. The transmission line has shifted to the west, away from the airport, in the areas where there was a potential conflict with the airport zoning for the Blythe Municipal Airport. See Figure 1. The MSEP transmission line was created to match the ALUC required modifications that were made to the approved transmission line for the BSPP, but did not necessarily match pole locations in other areas due to differing structure configurations and other various environmental constraints.

Primary Criteria Review

Compatibility Zones. The application is provided so that the ALUC can perform a land use review of the MSEP and evaluate its potential compatibility with the Master Plan for the Blythe Municipal Airport. Figure 1 presents the compatibility zones for the Blythe Airport obtained from the Riverside County Airport Land Use Compatibility Plan. Figure 1 also shows the Project's boundaries and the route of the 230-kV transmission line that will extend from the Project site to Southern California Edison's (SCE) Colorado River Substation, approximately six miles southwest of the MSEP. The new design of the transmission line has moved to stay outside of Zone C, with a slight exception for the continuation of Zone C to the west. In that location, H-frame pole structures will be used which will lower the height of the transmission lines, creating an acceptable structure height for that location.





Allowable (not prohibited) Use. The Airport Land Use Com patibility Plan identifies allowable and prohibited uses for the different compatibility zones surrounding the airport. Table 1 below, extracted from Appendix D of the Airport Land Use Compatibility Plan, summarizes the compatible land uses by Zone for Transportation, Communications, and Utilities - Electrical Substations, Power Plants, and Power Lines. The Project's proposed uses are "Generally Compatible" or "Potentially Compatible with Restrictions". Prohibited uses consist of activities that would produce haz ards to flight and require further analyses that are documented elsewhere in this Application.

Project Component	Zone A	Zone B1	Zone B2	Zone C	Zone D	Zone E	
Electrical Substations		0	0	0	0	+	
Power Plants	_	_	_	0	0	+	
Power Lines	-	0	0	0	0	+	
 Generally Inc 							
0 Potentially compatible with restrictions (see Table 2A of the Airport Land Use							
Compatibility Plan)							
+ Generally Co	mpatible						
Source: Riverside County	Airport Land	d Use Compa	atibility Plan,	Appendix D	, December	2004.	

Table 1. Compatible Land Use for the MSEP

Based on Table 2A in Volume 1 of the Airport Land Use Compatibility Plan, land uses that create "Hazards to Flight" are prohibited in Compatibility Zones B1, C, D, and E. Hazards to Flight are defined in footnote 9 to Table 2A to include physical (e.g., tall objects), visual, and electronic forms of interference with the safety of aircraft operations. Land use development that may cause an increase in the level of attraction to birds is also prohibited. Potential physical, visual, and electronic forms of interference associated with the MSEP were reviewed and it was concluded that the Project would not pose a hazard to flight safety.

Density/Intensity. There are no density/intensity criteria or open land requirements that apply to the intended land use.

Height Acceptable. The height of project structures requires §14 CFR 77 FAA and will be conducted concurrent with the ALUC review. The Project's transmission line will consist of monopoles up to 145 feet in height and h-frame structures between 70 feet and 90 feet in height. For that portion of the transmission route where FAA §14 CFR 77 Horizontal Surface restrictions limit structure height to approximately 70 feet to 90 feet, the height of the poles will be between 70 feet and 90 feet.

Form 7460 will be submitted concurrently with this application to the FAA for review for each of the Project structures that is subject to §14 CFR 77 height restrictions.

Easement/Deed Notice Provided. Easement/Deed Notice have been obtained for the transmission line corridor from the BLM, and documented with Riverside County.

Supplemental Criteria Review

A review of each of the potential hazards to flight has concluded that the proposed MSEP will not pose a significant hazard to flight at or near the Blythe Municipal airport.

Allowable Heights of Structures

The structures proposed for the MSEP would be an incompatible land use with the Blythe Municipal Airport if the heights of the structures were to pose a hazard to air navigation near the airport. To ensure that no such hazard would be created by construction of the Project, the Applicant performed a §14 CFR 77 (Objects Affecting Navigable Airspace) analysis for the MSEP. This assessment included review of the potential compliance with §14 CFR 77 of all Project structures.

There is a portion of the transmission line route that passes through the various ALUC influence zones in which the maximum allowable structure height is between 70 and 90 feet. The structures passing through these zones have been designed to remain at or below the maximum height limits set forth. Outside of these ALUC influence zones, MSEP will limit the height of transmission poles to a maximum of 145 feet above ground level. For the section of the transmission line route where the pole heights are restricted to either 70 or 90 feet, the pole spacing will be a nominal 450 feet. For the rest of the transmission line route, the pole spacing is typically between 700 feet to a maximum of 1,000 feet.

Form 7460 will be submitted concurrently with this application to the FAA for review for each of The MSEP is located approximately two miles northwest of the Blythe Municipal Airport and portions of the transmission line for the MSEP fall within the Land Use Compatibility Zone established by the Riverside County Airport Land Use Commission. Land use compatibility issues of concern to the ALCU for the MSEP include hazards to aviation consisting of electromagnetic interference, bird attraction, glare, and structure height. Structure height is addressed above. The remainder of this document addresses each of the remaining potential hazards to aviation posed by the MSEP.

Electromagnetic Interference

The MSEP proposes to construct a 230 kV double circuit transmission line to connect the MSEP to the Southern California Edison (SCE) Colorado River substation to allow interconnection with the SCE system. Potential transmission line-related radio frequency interference is a potential indirect effect of transmission line operation and is produced by the physical interactions of line electric fields. Such interference is due to the radio noise produced by the action of the electric fields on the surface of the energized conductor. The process involved is known as corona discharge and can occur within gaps between the conductor and insulators or metal fittings. Since the level of interference depends on factors such as line voltage, distance from the line to the receiving device, orientation of the antenna, signal level, line configuration and weather conditions, maximum interference levels are not specified as design criteria for modern transmission lines. The level of any such interference usually depends on the magnitude of the electric fields involved and the distance from the line. However, the potential for such impacts is minimized by reducing the line electric fields and locating the line away from inhabited areas.

The potential for such corona-related interference is usually of concern for lines of 345 kV and above. The MSEP transmission line will operate at 230 kV and will be designed in accordance with standard utility practices to reduce the electric field at energized surfaces to acceptable levels. In addition, electric field mitigation devices called corona rings will be mounted at conductor-hardware interface points at the end of the insulators to reduce the field levels at those locations. Radio frequency interference is therefore not expected to be a concern during operation of the transmission line.

Bird Attraction

Water surfaces can be attractants for migratory birds. There are small evaporation ponds associated with the MSEP but they are not expected to be attractants to migratory birds. Birds can be attracted to elevated structures for perching. While there are elevated structures associated with the operations and maintenance areas of the MSEP, the most significant ones can be easily excluded as bird attractants and birds are unlikely to be attracted to PV panels or to perch on PV panels. Additionally, the transmission line poles which can be attractive to birds for perching, will be designed to discourage perching and will adhere to the U.S. Fish and Wildlife Avian Protection Plan guidelines.

Giare

The solar plant site itself is not within the ALUC zones of consideration (See Figure 1). However, the following discussion relates to the glint and glare from the solar plant site that might be observed from overhead when departing or approaching the airport. The PV panels to be used for the MSEP have inherently low reflection characteristics due to the physical process for collecting sunlight. Glint and glare is critically dependent on the sun-reflection source-viewer geometry. Two different locations in the same project will not have the requisite geometry satisfied for a given observer, either ground based or aloft. The required geometry will exist only for a small portion of a given PV array; no other view direction will have the required sunreflection source-viewer geometry that can exist simultaneous for PV arrays.

Due to the surrounding topography, the Project would be largely invisible from public roads. Observers potentially affected by glint and glare from Project would users of off-highway vehicles, visitors to the McCoy or Big Maria Mountains or the Midland Long Term Visitor Area, and aircraft at the Blythe Municipal Airport. Again, the extent of glint and glare is dependent on the specific orientation of individual PV panels and the geometrical relationship of the sun, the PV panel, and the observer. Any such glare observed will not be significant given the low reflective nature of currently available PV solar panels.

A quantitative analysis was not performed for the Project. However, a detailed quantitative analysis of glint and glare has been performed for the Blythe Mesa Solar Project (BMSP), a nominal 485 MW PV power project proposed for construction to the east and south of the Blythe Airport. The approach end of Runway 26 is less than a half mile from the nearest PV panel. Portions of the BMSP are directly beneath the established traffic pattern for the Blythe Airport, with a significant portion of the project within the Airport Compatibility Zone (See Figure 3).

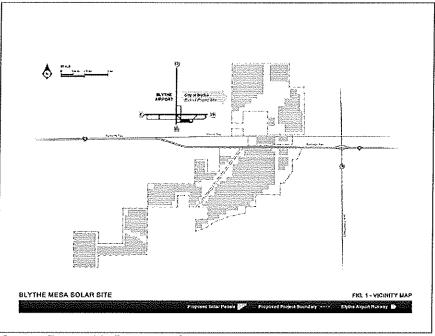


Figure 3. Proposed Blythe Mesa Solar Project located near the Blythe Airport

Source: Renewable Resources Group 2011

A ray tracking analysis was performed by the BMSP applicant to analyze the potential magnitude of glint and glare from operation of the BMSP (Renewable Resources Group 2011). Even though the project is within a half mile of the approach end of Runway 26, the most used runway at the airport, and directly under the predominant flight pattern, the potential impacts on airport operations from glint and glare from the BMSP were determined by Renewable Resources Group (RRG) to be not significant. The Riverside County Planning Department did not indicate any disagreement with these findings, and in fact provided the presentation made by RRG to the Riverside County Airport Land Use Commission for BSMP as an example of an acceptable analysis of the impacts of glint and glare on aviation activities at the Blythe Airport.

The decrease in intensity of glint and glare with distance is subject to an inverse square law, with the intensity decreasing as the square of the distance from the source of glint and glare. As the Project is at a greater distance from the airport than BMSP, the glint and glare produced by the Project PV panels would be less and certainly no worse than the negligible impacts of glint and glare from the BMSP on aviation at the Blythe Airport.

As another example, the Riverside County Board of Supervisors has acknowledged this lack of significance of the potential reflections from a PV solar array by approving on December 14, 2010 the lease of approximately 829 acres of Blythe Airport land to NRG for construction of the Solar Blythe II project. The Solar Blythe II project is a nominal 21 MW PV facility on 200 acres within the Blythe Airport Compatibility Zone (Riverside Board of Supervisors 2010).

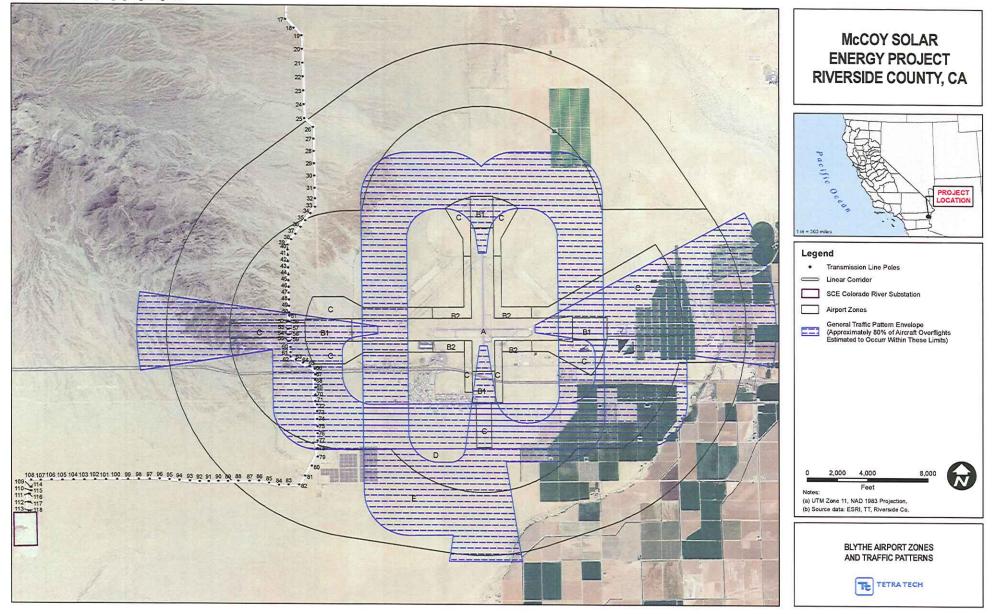
Additionally, glint and glare from the PV panels were analyzed by the BLM in the MSEP EIS, and this impact was considered to be insignificant if non-reflective coating is used (BLM 2013).

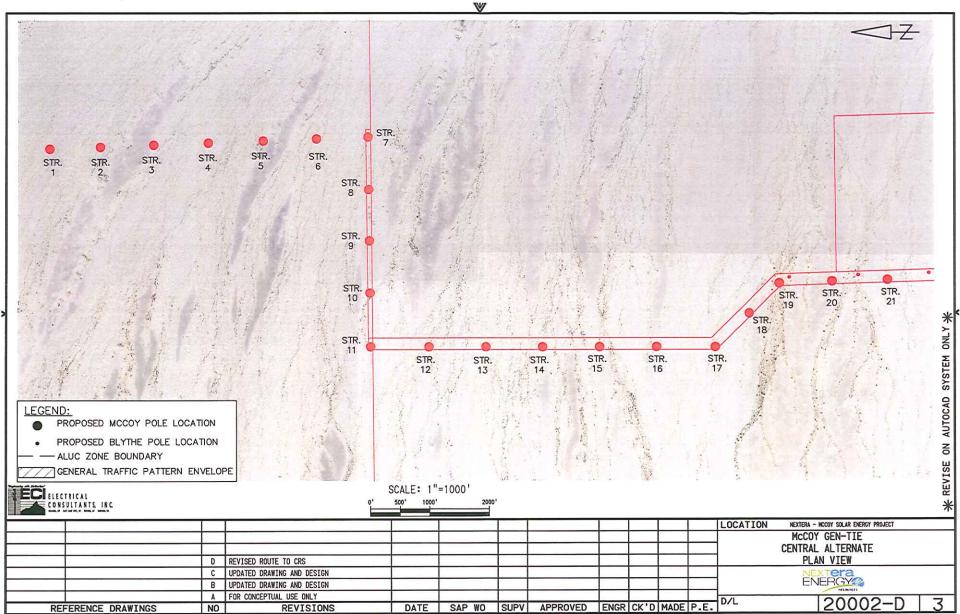
Glint and glare from other support structures and the transmission line was also analyzed by the BLM in the MSEP EIS, and this impact was not considered to be sufficient to cause an adverse change in the contrast rating.

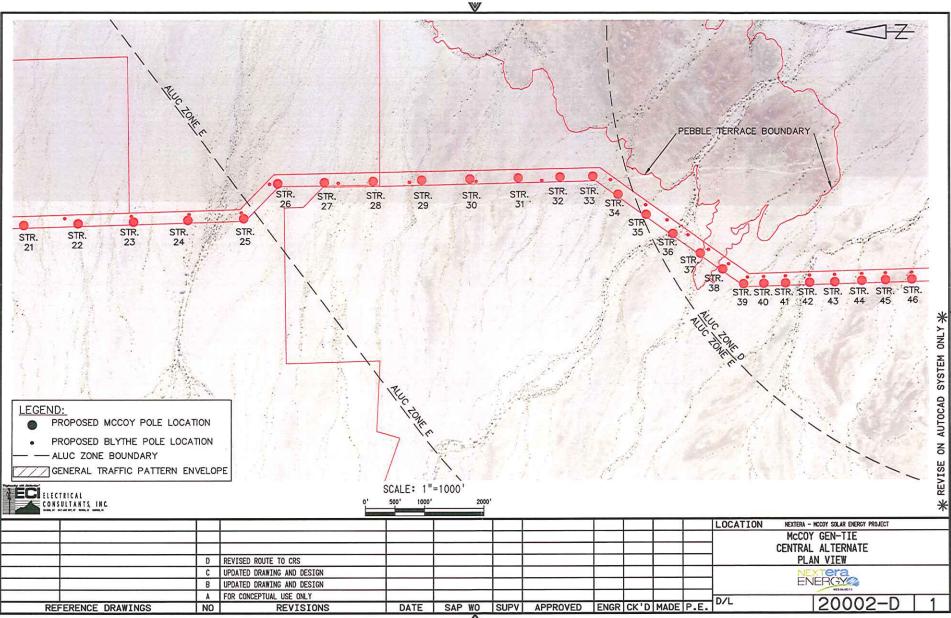
It is becoming common to install PV solar panels at airports and military installations. For example, FedEx has installed a 0.9 MW PV system at its hub at the Oakland International Airport (Power Engineers 2010). Denver International Airport has installed a 1.6 MW solar system to provide power for airport operations (Power Engineers 2010). A simple internet search identified active or proposed PV solar installations at Hickam Air Force Base (AFB), Davis-Monthan AFB, Nellis AFB, Edwards AFB, Los Angeles AFB, Peterson AFB, and Schriever AFB. The number of PV power generation systems at numerous airports around the country is strong evidence of the general consensus by the aviation community that PV electrical generation technology is not a hazard to aviation.

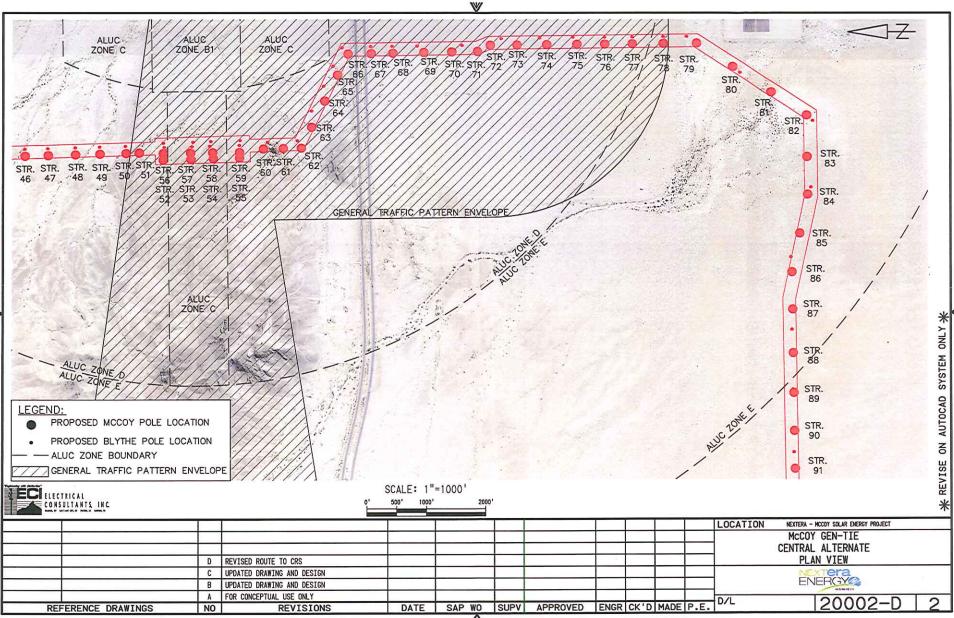
Based on the findings of the other PV projects in the immediate area of MSEP, with BSMP and Blythe Solar II Project within the Blythe Airport land use compatibility zone, as well as the now-common location of PV projects near air fields, glint and glare impacts will be insignificant.

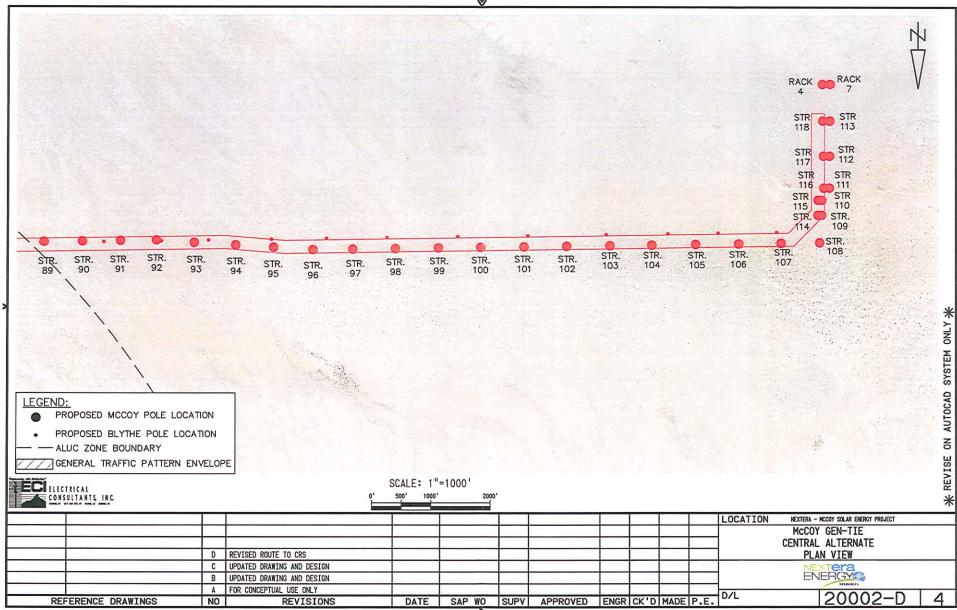
R:lprojects_2011 WcCoylmaps Wirport_Zones_and_Traffic_Patterns_detail.mxd









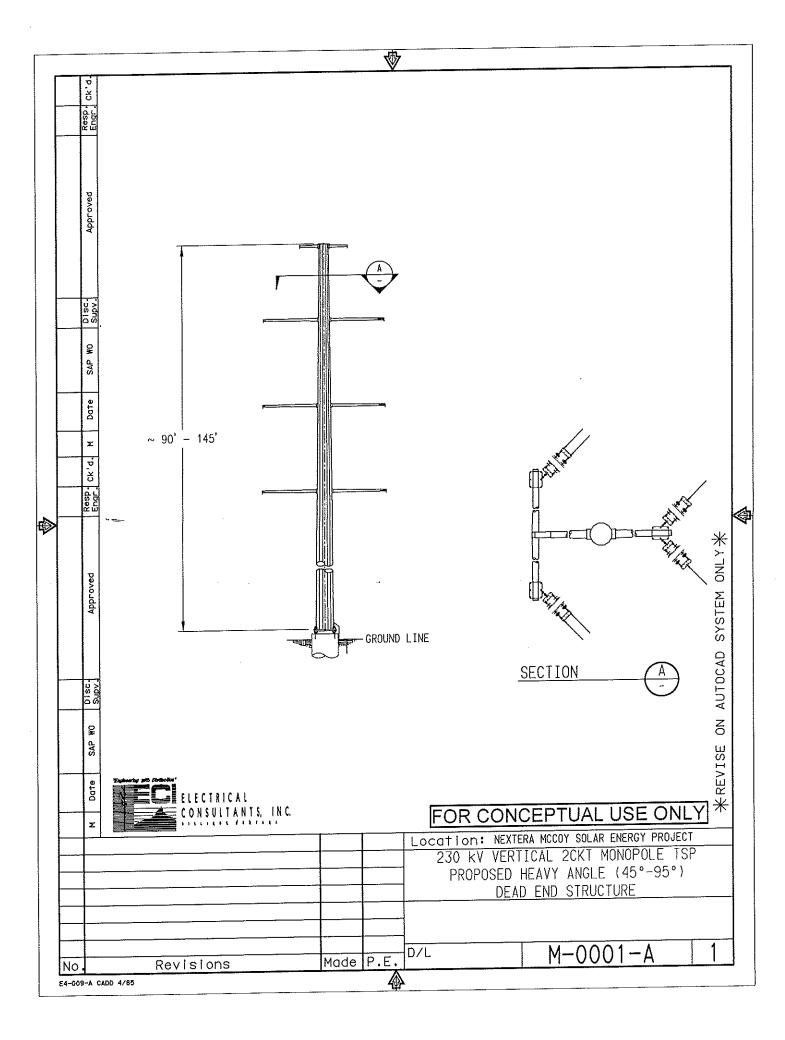


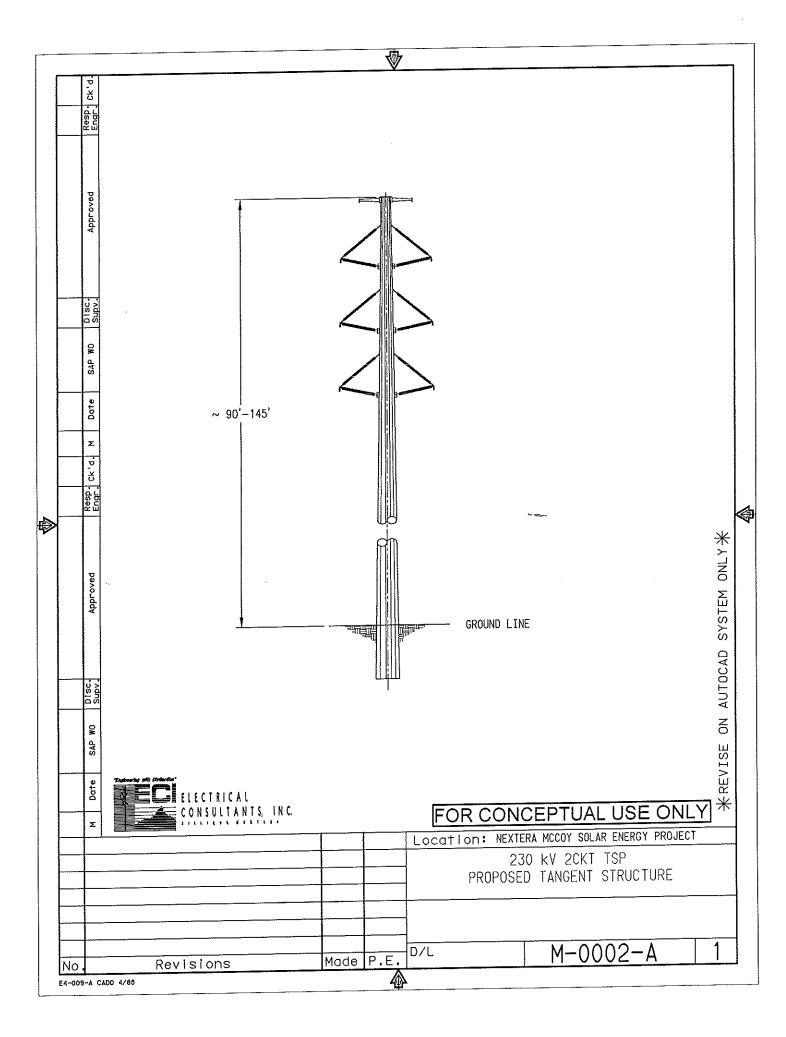
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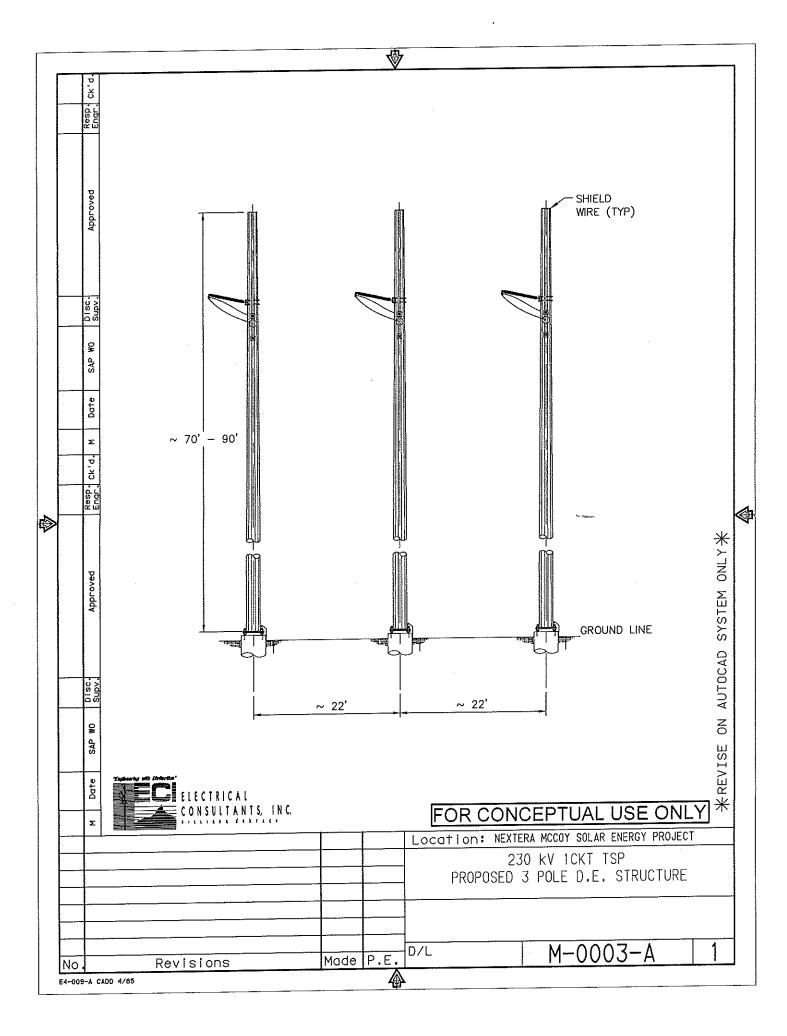
Elevations of Pole Structures

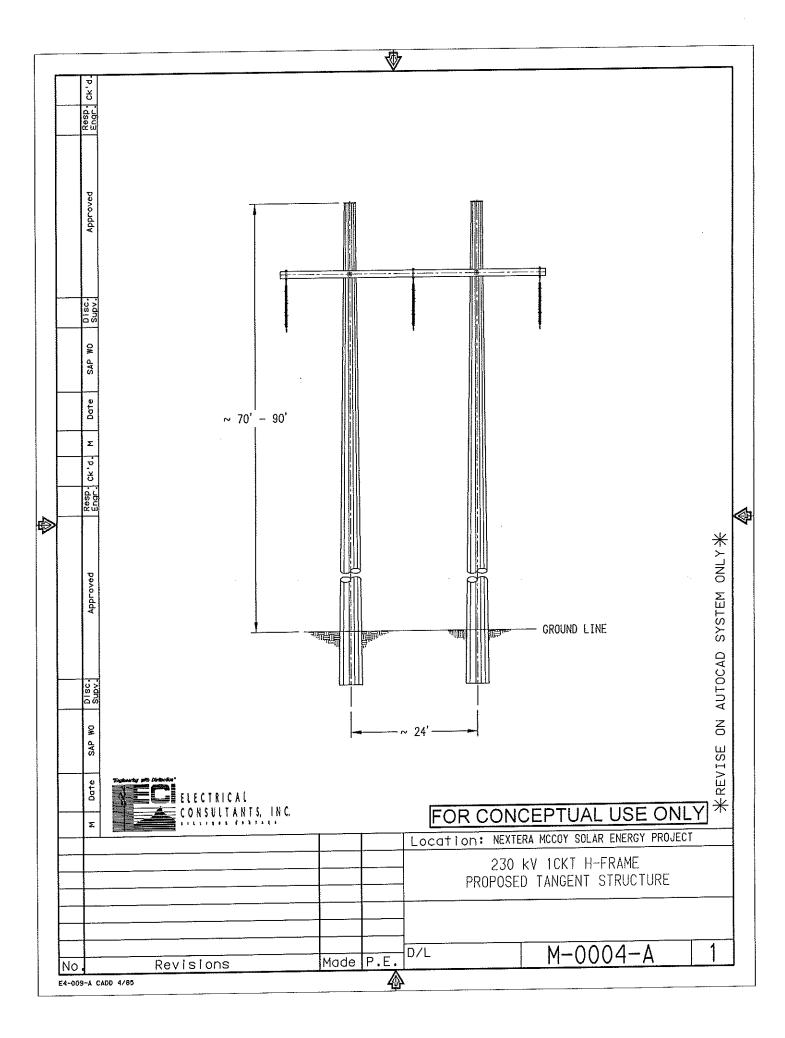
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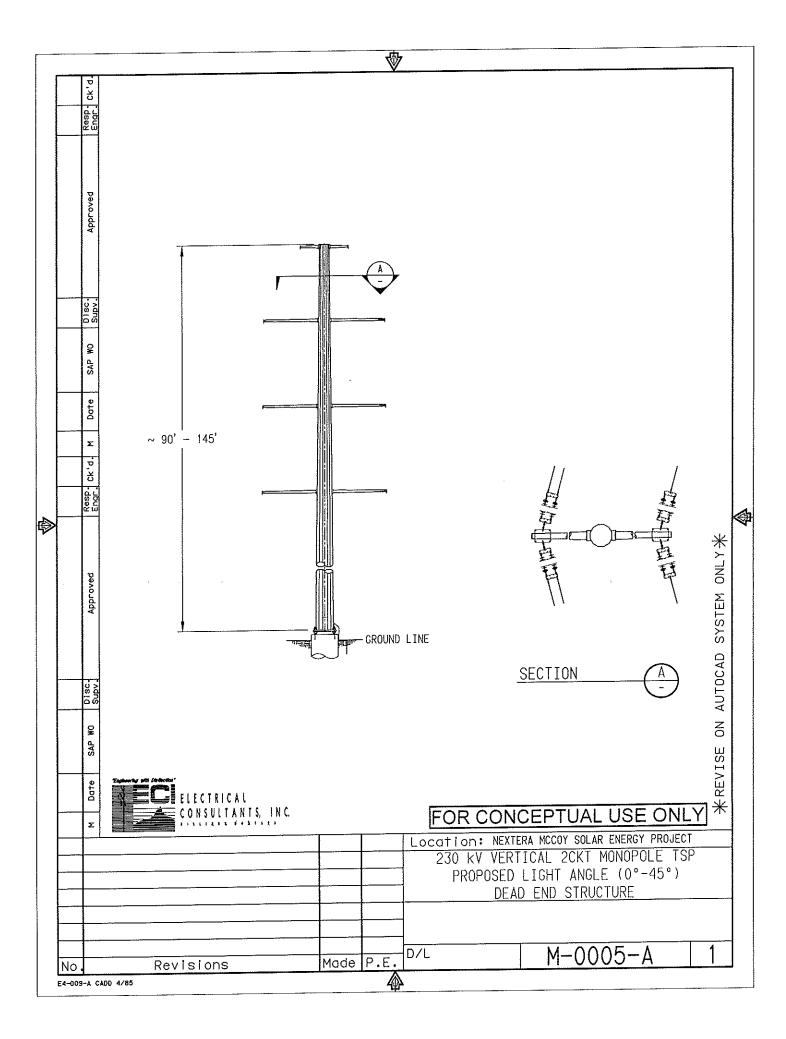
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Structure Number	Compatibility Zone	Dist from Ult. Runway (ft)	Holt Elevation	Pole Height AGL (ft)	Height (MSL+AGL) (ft)	50:1 Slope	Pole Ht v 50:1 Slope	FAA Slope 100:1	Pole Ht v FAA Slope	Adj Blythe Str Height (ft)	McCoy v Blythe Str Ht	Structure Type Drawing #
1	N/A	32,102	501.958	110	611.958	1038.035	-426.077	717.0	-105.1	en anterna en en en el en e 		M-0005-A
2	N/A	31,247	499.335	105	604.335	1020,949	-416.614	708.5	-104.1			M-0002-A
3	N/A	30,347	496.627	105	601.627	1002.935	-401.309	699.5	-97.8			M-0002-A
4	N/A	29,427	494.415	105	599.415	984.540	-385.125	690.3	-90.9	_	-	M-0002-A
5	N/A	28,502	491.736	105	596.736	966.036	-369.300	681.0	-84.3	-		M-0002-A
6	N/A	27,598	490.060	105	595.060	947.967	-352.907	672.0	-76.9	-	-	M-0002-A
7	N/A	26,732	488.312	110	598.312	930.639	-332.327	663.3	-65.0	-	-	M-0001-A
8	N/A	26,827	493.325	105	598.325	932.536	-334.211	664.3	-65.9	-	-	M-0002-A
9	N/A	26,948	498.803	105	603.803	934.951	-331.148	665.5	-61.7	-	-	M-0002-A
10	N/A	27,099	505.140	105	610.140	937.976	-327.836	667.0	-56.8	-	-	M-0002-A
11	N/A	27,284	511.765	120	631.765	941.675	-309.910	668.8	-37.1	-	-	M-0001-A
12	N/A	26,329	510.221	105	615.221	922.577	-307.356	659.3	-44.1	-	-	M-0002-A
13	N/A	25,400	509.548	105	614.548	903.996	-289.448	650.0	-35.5		-	M-0002-A
14	N/A	24,471	508.306	105	613.306	885.411	-272.105	640.7	-27.4	Ľ	-	M-0002-A
15	N/A	23,541	508.013	105	613.013	866.829	-253.816	631.4	-18.4	-	-	M-0002-A
16	N/A	22,617	509.004	105	614.004	848.344	-234.340	622.2	-8.2	-	-	M-0002-A
17	N/A	21,669	508.157	120	628.157	829.379	-201,222	612.7	192012 15.5 10213	145	-25	M-0001-A
18	N/A	20,964	502.252	105	607.252	815.278	+208.026 ·	605.6	1.6	145	-40	M-0002-A
19	N/A	20,335	496.698	110	606.698	802.708	-196.010	599.4	7.3	145	-35	M-0001-A
20	N/A	19,466	499.638	105	604.638	785.326	-180.688	590.7	14.0	145	-40	M-0002-A
21	N/A	18,561	495.681	105	600.681	767.229	-166.548	581.6	19.1	145	-40	M-0002-A
22	N/A	17,674	495.342	105	600.342	749.487	-149.145	572.7	27.6	145	-40	M-0002-A
23	N/A	16,774	493.267	105	598.267	731.488	-133.221	563.7	34.5	145	-40	M-0002-A
24	N/A	15,896	494.877	105	599.877	713.915	-114.038	555.0	44,9	145	-40	M-0002-A
25	N/A	14,992	490.594	120	610.594	695.833	-85.239	545.9	64,7	145	-25	M-0001-A
26	E	14,255	482.739	105	587.739	681.100	-93.361	538.6	49.2	145	-40	M-0001-A
27	E	13,504	480.459	100	580.459	666.085	-85.626	531.0	49,4	145	-45	M-0002-A
28	E	12,727	477,900	100	577.900	650.548	-72.648	523.3	54.6	145	-45	M-0002-A
29	E	11,952	477.776	100	577.776	635.041	-57.265	515.5	62.3	145	-45	M-0002-A
30	E	11,196	473.780	100	573.780	619.916	-46.136	508.0	65.8	145	-45	M-0002-A
31	E	10,437	472.893	100	572.893	604.748	-31.855	500.4	72.5	145	-45	M-0002-A
32	E	9,793	467.707	90	557.707	591.869	-34.162	493.9	63.8	145	-55	M-0002-A
33	E	9,296	464.839	90	554.839	581.912	-27.073	489.0	65,9	115	-25	M-0005-A
34	E	9,075	465.515	90	555.515	577.506	-21.991	486.8	68.8	115	-25	M-0002-A
35	D	8,859	465.621	90	555.621	573.180	-17.559	484.6	71.0	90	0	M-0002-A
36	D	8,687	466.221	90	556.221	569.733	-13.512	482.9	73,4	90	0	M-0002-A
37	D	8,542	467.994	90	557.994	566.844	-8.850	481.4	76,6	90	0	M-0002-A
38	D	8,451	469.588	90	559.588	565.029	-5.441	480.5	79.1	90	0	M-0002-A
39	D	8,389	468.423	90	558.423	563.779	-5.356	479.9	78.5	90	0	M-0005-A
40		8,150	466.716	85	551.716	559.000	-7.284	477.5	74.2	90	-5	M-0002-A
41	D	7,912	463.980	85	548.980	554.236	-5.256	475.1	73.9	90	-5	M-0002-A
42	D	7,652	461.479	85	546.479	549.046	-2.567	472.5	74.0	90	-5	M-0002-A



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Structure Number	Compatibility Zone	Dist from Ult. Runway (ft)	Holt Elevation	Pole Height AGL (ft)	Height (MSL+AGL) (ft)	50:1 Slope	Pole Ht v 50:1 Slope	FAA Slope 100:1	Pole Ht v FAA Slope	Adj Blythe Str Height (ft)	McCoy v Blythe Str Ht	Structure Type Drawing #
43	D	7,396	459.718	85	544,718	543.926	0.792	470.0	74.8	<u>90</u>	-5	M-0002-A
44	D	7,140	460.802	85	545.802	538.806	6,996	467.4	78.4	90	-5	M-0002-A
45	D	6,935	457.306	85	542.306	534.705	7.601	465.4	77.0	90	-5	M-0002-A
46	D	6,725	452.085	85	537,085	530.491	6.594	463.2	73.8	90	-5	M-0002-A
47	D	6,561	456.954	85	541,954	527.211	14.743	461.6	80.3	90	-5	M-0002-A
48	D	6,391	455.301	85	540.301	523.819	16.482	459.9	80.4	90	~5	M-0002-A
49	D	6,264	447.563	90	537.563	521.279	16.284	458.6	78.9	90	0	M-0002-A
50	D	6,156	441.246	90	531.246	519.127	12.119	457.6	73.7	90	0	M-0002-A
51	D	6,113	442.063	90	532.063	518.261	13.802	457.1	74,9	90	0	M-0005-A
52	D	6,187	438.411	70	508.411	519.732	-11.321	457.9	50.5	70	0	M-0003-A
53	с	6,152	434.208	70	504.208	519.043	-14.835	457.5	46.7	70	0	M-0004-A
54	с	6,150	443.036	70	513.036	519.007	-5.971	457.5	55.5	70	0	M-0004-A
55	D	6,178	433.946	70	503.946	519.557	-15.611	457.8	46.2	70	0	M-0003-A
56	D	6,074	435.570	70	505.570	517.484	-11.914	456.7	48.8	70	0	M-0003-A
57	С	6,046	433.204	70	503.204	516.927	-13.723	456.5	46.7	70	0	M-0004-A
58	с	6,050	434.905	70	504.905	516.992	-12.087	456.5	48.4	70	0	M-0004-A
59	D	6,084	431.709	70	501,709	517.687	-15.978	456.8	44,9	70	0	M-0003-A
60	D	6,092	430.984	90	520.984	517.846	3.138	456.9	64.1	90	0	M-0005-A
61	D	6,160	429.906	90	519.906	519.199	0.707	457.6	62.3	90	0	M-0002-A
62	D	6,237	427.815	90	517.815	520.737	-2.922	458.4	59.4	90	0	M-0001-A
63	D	5,953	413.781	90	503.781	515.070	-11.289	455.5	48.2	90	0	M-0002-A
64	D	5,620	409.278	90	499.278	508.407	-9.129	452.2	47.1	90	0	M-0002-A
65	D	5,316	404.974	90	494.974	502.313	-7.339	449.2	45.8	90	0	M-0002-A
66	D	5,090	410.407	90	500.407	497.797	2.610	446.9	53.5	90	0	M-0001-A
67	D	5,295	408.598	90	498.598	501.891	-3.293	448.9	49.7	90	0	M-0002-A
68	D	5,504	406.896	90	496.896	506.074	-9.178	451.0	45.9	90	0	M-0002-A
69	D	5,832	404.370	90	494.370	512.635	-18.265	454.3	40.1	120	-30	M-0002-A
70	D	6,150	402.860	90	492.860	518.995	-26.135	457.5	35,4	120	-30	M-0002-A
71	D	6,463	402.020	90	492.020	525.259	-33.239	460.6	31,4	120	-30	M-0005-A
72	D	6,557	400,809	90	490.809	527.143	-36.334	461.6	29.2	120	-30	M-0005-A
73	D	6,908	400.839	90	490.839	534.165	-43.326	465.1	25.8	120	~30	M-0002-A
74	D	7,309	400.487	90	490.487	542.179	-51.692	469.1	21,4	90	0	M-0002-A
75	D	7,728	399.349	90	489.349	550.570	-61.221	473.3	16.1	90	0	M-0002-A
76	D	8,124	398.457	90	488.457	558.486	-70.029	477.2	11.2	90	0	M-0002-A
77	D	8,524	395.716	90	485.716	566.474	-80.758	481.2	4.5	90	0	M-0002-A
78	E	8,982	394.225	90	484.225	575.637	-91.412	485.8	-1.6	90	0	M-0002-A
79	E	9,480	394.417	100	494.417	585.600	-91.183	490.8	3.6	115	-15	M-0005-A
80	E	10,200	394.524	100	494.524	600.010	-105.486	498.0	-3.5	145	-45	M-0002-A
81	ξ	10,979	397.371	100	497.371	615.571	-118.200	505.8	-8.4	145	-45	M-0002-A
82	E	11,692	394.785	100	494.785	629.840	-135.055	512.9	-18.1	145	-45	M-0001-A
83	Ε	12,044	397.341	100	497.341	636.880	-139.539	516.4	-19.1	145	-45	M-0002-A



				McCoy Sola	ar Energy Pro	ject 230	kV Gen-tie	Structu	es	·		
Structure Number	Compatibility Zone	Dist from Ult. Runway (ft)	Holt Elevation	Pole Height AGL (ft)	Height (MSL+AGL) (ft)	50:1 Slope	Pole Ht v 50:1 Slope	FAA Slope 100:1	Pole Ht v FAA Slope	Adj Blythe Str Height (ft)	McCoy v Blythe Str Ht	Structure Type Drawing #
84	E	12,385	400.244	100	500.244	643.701	-143.457	519.9	-19.6	145	-45	M-0005-A
85	E	12,645	405.227	100	505.227	648.928	-143.701	522.5	-17.2	145	-45	M-0002-A
86	E	12,936	408.480	100	508.480	654.730	-146.250	525.4	-16.9	145	-45	M-0005-A
87	Е	13,348	414.349	100	514.349	662.965	-148.617	529.5	-15.1	145	-45	M-0002-A
88	E	13,851	419.768	100	519.768	673.016	-153.248	534.5	-14.7	145	-45	M-0002-A
89	N/A	14,331	424.249	95	519.249	682.623	-163.374	539.3	-20.1	145	-50	M-0002-A
90	N/A	14,800	427.911	95	522.911	692.000	-169.089	544.0	-21.1	145	-50	M-0002-A
91	N/A	15,280	432.671	95	527.671	701.599	-173.928	548.8	-21.1	145	-50	M-0002-A
92	N/A	15,745	433.748	100	533.748	710.902	-177.154	553.5	-19.7	145	-45	M-0005-A
93	N/A	16,213	437.493	100	537.493	720.263	-182.770	558.1	-20.6	145	-45	M-0002-A
94	N/A	16,739	442.971	100	542.971	730.789	-187.818	563.4	-20.4	145	-45	M-0002-A
95	N/A	17,235	447.322	100	547.322	740.695	-193.373	568.3	-21.0	145	-45	M-0002-A
96	N/A	17,754	452.022	100	552.022	751.085	-199.063	573.5	-21.5	145	-45	M-0005-A
97	N/A	18,317	455.601	95	550.601	762.331	-211.730	579.2	-28.6	145	-50	M-0002-A
98	N/A	18,927	457.160	95	552.160	774,546	-222.386	585.3	-33.1	145	-50	M-0002-A
99	N/A	19,554	459.835	95	554.835	787.072	-232.237	591.5	-36.7	145	-50	M-0002-A
100	N/A	20,173	464.220	95	559.220	799.462	-240.242	597.7	-38.5	145	~50	M-0002-A
101	N/A	20,818	469.091	95	564.091	812,362	-248.271	604.2	-40,1	145	-50	M-0002-A
102	N/A	21,456	470.674	95	565.674	825.111	-259.437	610.6	-44.9	145	-50	M-0002-A
103	N/A	22,108	478.254	95	573.254	838.154	-264.900	617.1	-43.8	145	-50	M-0002-A
104	N/A	22,744	479.233	95	574.233	850.886	-276.653	623.4	-49.2	145	-50	M-0002-A
105	N/A	23,413	480.036	95	575.036	864.265	-289.229	630.1	-55.1	145	-50	M-0002-A
106	N/A	24,073	482.706	95	577.706	877.468	-299.762	636.7	-59.0	145	-50	M-0002-A
107	N/A	24,728	483.151	95	578.151	890.565	-312.414	643.3	-65.1	145	-50	M-0002-A
108	N/A	25,331	477.044	100	577.044	902.628	-325.584	649.3	-72.3	145	-45	M-0001-A
109	N/A	25,552	471.378	55	526.378	907.045	-380.667	651.5	-125.1	1.45	-90	M-0003-A
110	N/A	25,658	468.775	55	523.775	909.167	-385.392	652.6	-128.8	145	-90	M-0003-A
111	N/A	25,862	467.913	65	532.913	913.240	-380.327	654.6	-121.7	145	-80	M-0003-A
112	N/A	26,102	467.041	85	552.041	918.036	-365.995	657.0	-105.0	145	-60	M-0007-A
113	N/A	26,376	464.894	85	549.894	923.523	-373.629	659.8	-109.9	145	-60	M-0007-A
114	N/A	25,495	471.368	55	526.368	905.901	-379.533	651.0	-124.6	145	-90	M-0003-A
115	N/A	25,603	469.296	55	524.296	908.051	-383.755	652.0	-127.7	145	-90	M-0003-A
116	N/A	25,781	468.752	65	533.752	911.610	-377.858	653.8	-120.1	145	-80	M-0003-A
117	N/A	26,009	467.126	85	552.126	916.188	-364.062	656.1	-104.0	145	-60	M-0007-A
118	N/A	26,273	467.532	85	552.532	921.468	-368.936	658.7	-106.2	145	-60	M-0007-A



NOTICE OF PUBLIC HEARING RIVERSIDE COUNTY AIRPORT LAND USE COMMISSION

A PUBLIC HEARING has been scheduled before the Riverside County Airport Land Use Commission (ALUC) to consider the application 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. The proposed project application may be viewed at the Riverside County Administrative Center, 4080 Lemon Street, 14th Floor, Riverside, California 92501, Monday through Thursday from 8:00 a.m. to 5:00 p.m., except Monday, September 2 (Labor Day), and by appointment on Friday, September 6 from 8:30 a.m. to 5:00 p.m.

4080 L	ide County Administration Center .emon St., 1 st Floor Hearing Room ide, California
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DATE OF HEARING: September 12, 2013

TIME OF HEARING: 9:00 A.M.

CASE DESCRIPTION:

<u>ZAP1009BL13 – Next Era Energy Resources (Representative: Stuart McCurdy)</u> – County Case No.: Conditional Use Permit 3682 - A proposal to construct a 750 megawatt (MW) solar photovoltaic electric generating facility and associated facilities on 5,363 acres, primarily located northerly of the extension of 2nd Avenue/Fisher Boulevard and westerly of the extension of Mesa Drive. The majority of the project is located on federal land under the jurisdiction of the Bureau of Land Management. An approximate 50 MW portion would be located on 477 acres within the land use jurisdiction of the Blythe Airport Influence Area, but a proposed 230 kV "gen-tie" transmission line for connection to the Colorado River substation would be located partially within Compatibility Zones C, D, and E of the Blythe Airport Influence Area.

FURTHER INFORMATION: Contact Russell Brady at (951) 955-0549 or John Guerin at (951) 955-0982. The ALUC holds hearings for local discretionary permits within the Airport Influence Areas, reviewing for aeronautical safety, noise and obstructions. All other concerns should be addressed to <u>Mr. Adam Rush with the County of Riverside</u> <u>Planning Department, at (951) 955-6646 or Ms. Tamara Harrison at (951) 955-9721.</u>

APPLICATION FOR MAJOR LAND USE ACTION REVIEW RIVERSIDE COUNTY AIRPORT LAND USE COMMISSION

ALUC Identification No.

ZAP1009BL13

PROJECT PROPONENT (TO BE COMPLETED BY APPLICANT)

0								
Bureau of Land Managment - Frank McMenimen -Project Mana Phone Number 760.833.7150								
Palm Springs, CA 92262								
ssets								
The generation tie line (transmission line) for the MSEP is located primarily on BLM administered land. The land is open desert and is undeveloped.								
e MSEP to								
the north to the Colorado River Substation to the south.								
145 #								
145 ft.								
145 ft.								

REFERRING AGENC	Y (TO BE COMPLETED BY AGENCY S	TAFF)								
Date Received Agency Name	County or Livinside					_ Type of Project General Plan Amendment Zoning Amendment or Variance				
Staff Contact Phone Number Agency's Project No.	Alan Rush Cup 0.3682				Subdivision Approval Subdivis					
	D BE COMPLETED BY ALUC EXECUTIV	E DIRECTOR)								
Application Receipt	Date Received Is Application Complete? If No, cite reasons	🗌 Yes	-	By No						
Airport(s) Nearby										
Primary Criteria Review	Compatibility Zone(s) Allowable (not prohibited) Use? Density/Intensity Acceptable? Open Land Requirement Met? Height Acceptable? Easement/Deed Notice Provided?	A Yes Yes Yes Yes Yes Yes		B1 No No No No		B2				
Special Conditions	Describe:									
Supplemental Criteria Review	Noise									
	Airspace Protection Overflight									
ACTIONS TAKEN (TO BE COMPLETED BY ALUC EXECUTI	VE DIRECTOR)								
ALUC Executive Director's Action	Approve Refer to ALUC				Da	te				
ALUC Action	Consistent Date Date Consistent with Conditions (list conditions/attach additional pages if needed)									
	Inconsistent (list reasons/attaction)	ch additional p	ages	if need	led)					
August 2007										

Brady, Russell

From:	Mccurdy, Stuart [Stuart.Mccurdy@nexteraenergy.com]
Sent:	Tuesday, August 20, 2013 11:20 AM
To:	Brady, Russell
Cc:	Neville, Daniel
Subject:	RE: ZAP1009BL13 - McCoy Solar Energy Project
Attachments:	Airport_C&D_Zones_gentie_parcels.xlsx; Airport Zones and Traffic Patterns detail.pdf;
	McCoy Staking - 2013-08-15 (2).xlsx; 20002-D-SHEET 1.pdf; 20002-D-SHEET 2.pdf; 20002-
	D-SHÉET 3.pdf: 20002-D-SHÉÉT 4.pdf

Russell,

I have attached documents and provided written responses to the questions you posed below. Please follow up with me with any questions or clarifications you require.

Attached documents:

- Open space calculations spreadsheet
- Airport zones and proposed traffic pattern overlay onto the Gentie routing
- Updated staking sheet incorporating the surveyed ground elevations at pole sites.
- 2002 series drawings with traffic pattern overlay
- 1. We have adjusted the Staking sheet previously provided to add the additional information you require. All of the structures will be submitted to the FAA and as I previously indicated. I have instructed Capitol Airspace Group to submit the applications to the FAA so we should have the processing numbers sometime in the next 2 days which I will forward to you.
- 2. We have sited the McCoy GenTie line within a described corridor of width ranging between 100 and 200 feet wide that borders the Blythe, previously ALUC approved, GenTie line corridor which had a width of ranging between 120 and 250 feet wide depending on the structures to be placed. In both cases the actual area that will be used to build the lines is much smaller than the indicated widths of the corridors. The McCoy line would range between sitting immediately next to and up to approximately 200 feet west (further distance from the airport) of the Blythe line. Due to careful incorporation of ALUC approved design measures on the Blythe line, all structures that make up the McCoy line will be either equal to or shorter than adjacent Blythe poles
- 3. Although work on the access/maintenance road for the GenTie is approximated to occur from July-December 2014 the GenTie itself is approximately scheduled for December 2014-April 2015. In constructing the site the approximate max number of workers on the site would be 15.
- 4. Routine inspection would generally be performed by one person in a truck from the access road. More detailed inspections may require a bucket truck and two people. Maintenance activities, although infrequent, will include vegetation management, tower coating repairs, and other miscellaneous repairs. In general none of the maintenance activities are expected to require more than four people at any time.
- 5. As this is a relatively sparsely populated area the lowest percentage of open space that would occur once our line has been placed in that area is approximately 88%. Please see the attached excel document for the listing of affected parcels and their relative open space percentages that are within Zones C or D.

Please let me know if you have any questions or need clarification on the above information or attached documents. Thank you.

Stuart McCurdy Project Manager Development-Solar



From: Brady, Russell [mailto:rbrady@rctlma.org] Sent: Monday, August 05, 2013 7:41 PM To: Mccurdy, Stuart Cc: Neville, Daniel Subject: ZAP1009BL13 - McCoy Solar Energy Project

Hi Stuart. I had a chance today to really look over everything and start preparing our staff report for the September 12th hearing. Below is some additional information that we would need to address the typical issues we look at for transmission lines within the Airport Influence Area. I believe you said that the revised table noted below is being prepared already. It would be great to have all this information by August 21st if possible to include in the staff report. Let me know if there are any questions or concerns about the information requested below.

- Provide table (in excel format) showing the Structure distance to the Runway (ultimate location), Structure height Above Mean Sea Level, and notation of which structures have/will be submitted to FAA and the corresponding ASN #s.
- Provide analysis of how the proposed transmission line location and height compares to that of the previously proposed transmission line that the proposed line will parallel; text is helpful, but exhibits that show how the distances and heights relate to the airport are much more helpful to compare and show how they relate to a 50:1 slope ratio from the ultimate future end of the runway
- What is the anticipated construction schedule for the transmission line and what is the maximum number of construction workers that would be anticipated at any one time?
- How many workers would be expected for typical maintenance/inspection of the transmission lines?
- Provide a calculation of open space on the affected parcels for the transmission line with Zones C and D. Open Space would consist of any area with dimensions of at least 75' x 300' and free of any structure or object greater than 4' in height. Basically, calculate the area of the parcels that isn't within the proposed transmission line, other proposed transmission line, or anything else existing or proposed on these parcels. Zone C requires a minimum of 20% open area and Zone D requires a minimum of 10%.

Thanks

Russell Brady Riverside County Airport Land Use Commission ALUC Planner

4080 Lemon Street, 14th Floor Riverside, CA 92501 (951) 955-0549 (951) 955-0923 (fax) <u>rbrady@rctIma.org</u>

COUNTY OF RIVERSIDE AIRPORT LAND USE COMMISSION

STAFF REPORT

AGENDA ITEM:

HEARING DATE:	September 12, 2013
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CASE NUMBER:	ZAP1007RG13 - City of Menifee
APPROVING JURISDICTION:	City of Menifee
JURISDICTION CASE NO:	City of Menifee General Plan

2.6

MAJOR ISSUES:

The proposed land use designations do not result in any inconsistencies with existing or proposed Compatibility Plans, and the City lies entirely outside the 60 CNEL noise contour of March Air Reserve Base and the 55 CNEL noise contour of Perris Valley Airport. The proposed General Plan text will require additions and revisions, but staff anticipates that the revisions will be accepted by City officials in order to enable a consistency determination.

RECOMMENDATIONS:

Staff recommends that the Commission open the public hearing, consider testimony, and find the proposed City of Menifee General Plan, with the additions and revisions recommended by ALUC staff, <u>CONSISTENT</u> with the 1984 Riverside County Airport Land Use Plan, as applied to the March Air Reserve Base Airport Influence Area, and with the Perris Valley Airport Land Use Compatibility Plan.

PROJECT DESCRIPTION:

The City of Menifee proposes to adopt its first City General Plan. The General Plan includes the following nine elements: Land Use, Housing, Circulation, Economic Development, Community Design, Open Space and Conservation, Safety, Air Quality, and Noise. Five of these Elements (Land Use, Housing, Circulation, Safety, and Noise) are being reviewed for consistency with airport land use compatibility criteria. The City is proposing a web-based format for its General Plan. The City includes land within Area III of the March Air Reserve Base Airport Influence Area and Compatibility Zone E of the Perris Valley Airport Influence Area.

PROJECT LOCATION:

The City of Menifee is located in the west-central portion of Riverside County and is bounded by the City of Perris on the north, the City of Murrieta on the south, the Cities of Lake Elsinore and Canyon Lake on the west, and unincorporated Riverside County (including the communities of Homeland and Winchester) on the east.

Staff Report Page 2 of 5

Except for objects 200 feet or greater in height, the jurisdiction of the Airport Land Use Commission is confined to the portions of the City within the March Air Reserve Base and Perris Valley Airport Influence Areas. A substantially larger portion of the City will be located within the March Air Reserve Base Airport Influence Area once the new Compatibility Plan for the Base's environs is adopted.

ANALYSIS:

The City submitted its proposed new General Plan for formal Airport Land Use Commission review on July 30, 2013.

As the City is located at the outer edges of the Airport Influence Areas of both March Air Reserve Base and Perris Valley Airport (Airport Area III and Compatibility Zone E, respectively), the properties therein are not subject to specified restrictions on the densities and/or intensities of land use. Accordingly, no direct conflicts exist between allowable land use pursuant to the General Plan and adopted land use compatibility criteria. Furthermore, the City lies beyond the 55 dB(A) CNEL contour of Perris Valley Airport and the 60 dB(A) CNEL contour of March Air Reserve Base/Inland Port Airport. Therefore, with respect to aircraft-generated noise, there are no areas of the City where residential development would not be considered "normally acceptable," and no areas where special acoustical mitigation would be required solely to address the effects of aircraft noise.

The Land Use, Safety, and Noise Elements would all include links to ALUC's website, www.rcaluc.org.

The firm preparing the City's General Plan (The Planning Center) has placed the more substantive policy language associated with airport land use compatibility in the Noise Element. Policy N-1.20 states as follows: "Adhere to any applicable Riverside County Airport Land Use Commission land use compatibility criteria, including density, intensity, and coverage standards." This is an excellent policy, but we recommend that this commitment be moved to the Land Use Element as either a Policy or an Implementation Action.

Policy N-1.17 states as follows: "Prevent the construction of new noise-sensitive land uses within airport noise impact zones. New residential land uses within the 65dB CNEL contours of any public-use or military airports, as defined by the Riverside County Airport Land Use Commission, shall be prohibited." The use of the 65dB CNEL contour as the maximum acceptable average exterior aircraft noise level for residential development is consistent with the proposed Draft March Air Reserve Base/Inland Port Airport Land Use Compatibility Plan, but the exterior noise standard for residential uses in the vicinity of the County's general aviation airports (including Perris Valley Airport) is 60 dB CNEL or lower, as per Policy 4.1.4 of the 2004 Riverside County Airport Land Use Compatibility Plan. However, there is no real effect in this case, given that the 55, 60, and 65 CNEL contours of Perris Valley Airport are located entirely within the City of Perris.

Staff Report Page 3 of 5

Implementation Action N12 states that the City will "review development proposals to determine if they are located within an airport noise impact area, and if so, require the proposed development to comply with applicable airport land use noise compatibility criteria." We recommend that this policy be modified to read as follows: "Review development proposals to determine if they are located within an **Airport Influence Area**, and, if so, require the proposed development to comply with all applicable airport land use compatibility criteria." The revised policy should be moved to the Land Use Element.

The Land Use Element does include a single-paragraph discussion of the role of the Riverside County Airport Land Use Commission on page 3 of the background document. The document asserts that the General Plan is consistent with the Riverside County Airport Land Use Compatibility Plan Policy Document and that the City "supports the RCALUC in its regional planning efforts."

The Safety Element does not directly address the safety of residents relative to aircraft operations or the safety of air navigation, but does appear to assign ALUC a new duty, perhaps having been impressed by Commissioners' comments regarding the vital role of airports in the aftermath of disaster. Policy SE-6.3 pledges that the City will "work with the Riverside County Airport Land Use Commission to strengthen the City's disaster preparedness, response and recovery program in accordance with the Airport Land Use Plans for March Air Reserve Base and Perris Valley Airport." The associated Implementation Action S67 states that the City will "coordinate with the Riverside County Airport Land Use Commission to review the Airport Land Use Plans for March Air Reserve Base and Perris Valley Airport and incorporate applicable disaster preparedness, response, and recovery measures into City disaster planning efforts." As the Airport Land Use Plans do not specifically address disaster preparedness, response, and recovery, these provisions should likely be deleted. Alternatively, the City may wish to modify the policy and/or implementation action to state that the City will consult with the March Inland Port Airport Authority and Perris Valley Airport management as to the airports' roles in disaster response and recovery.

In order to demonstrate consistency with a Compatibility Plan, the General Plan or an implementing document such as a Zoning Code should incorporate the Plan's standards including, but not limited to (as applicable): intensity limits on nonresidential uses; identification of prohibited uses; open land requirements; infill development; height limitations; hazards to flight; buyer awareness measures; and nonconforming uses and reconstruction.

Since the City of Menifee areas are in Area III of March and Zone E of Perris Valley, there are no applicable quantitative intensity limits on nonresidential uses or open land requirements. Since there are no applicable density or intensity limits, there is no need for special policies relating to infill development, nonconforming uses, or reconstruction. However, Zone E does prohibit hazards to flight. Therefore, the Land Use Element should include the following as a Policy or Implementation Action:

"Prohibit the following uses within Airport Influence Areas in the City:

Staff Report Page 4 of 5

- (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 attract large concentrations of birds, or which may otherwise affect safe air navigation within the area, including, but not limited to, wastewater management facilities and landfills.
- (d) Any use which would generate electrical interference that may be detrimental to the operation of aircraft and/or aircraft instrumentation."

Height limitations may be addressed by adding the following Policy or Implementation Action to either the Land Use or Safety Elements:

"The development of structures located within 20,000 feet of the runway at Perris Valley Airport or within the military outer horizontal surface of March Air Reserve Base may require notification to, and review by, the Federal Aviation Administration Obstruction Evaluation Service through the Form 7460-1 process."

In order to provide for buyer awareness, add the following Policy or Implementation Action to either the Land Use or Safety Elements:

"Require that persons purchasing, leasing, or renting property within Airport Influence Areas be provided a copy of a "Notice of Airport in Vicinity" as prepared by the Riverside County Airport Land Use Commission and containing, at minimum, the text specified for such a notice by the State of California Business and Professions Code."

Pursuant to the recommendations of the California Airport Land Use Planning Handbook prepared by the State of California Department of Transportation (CALTRANS) Division of Aeronautics, the General Plan (or airport combining zoning ordinance, if one exists) "must specify the manner in which development proposals will be reviewed for consistency with the compatibility criteria." This would include: identification of the types of actions that would be required to be submitted for ALUC review; identification of the types of actions potentially subject to ALUC review; procedures that the City would use to evaluate the consistency of other projects with ALUCP compatibility criteria; variance procedures; and enforcement. The proposed General Plan is lacking in this information. Therefore, staff recommends that the following be added to the Land Use Element:

"Policy: Ensure that land use decisions within the airport influence areas are consistent with

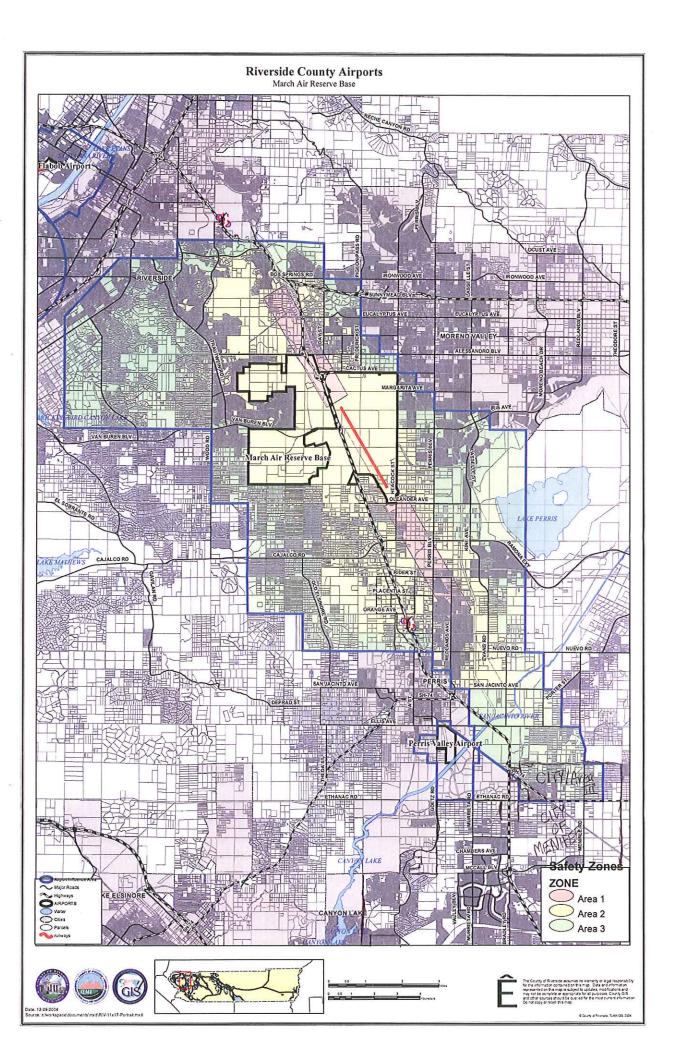
Staff Report Page 5 of 5

applicable Airport Land Use Compatibility Plans and General Plan policies. Comply with State law regarding projects subject to review by the Riverside County Airport Land Use Commission. Implementation Actions: All legislative land use proposals (general plan amendments, specific plans, specific plan amendments, zone changes, and ordinance amendments) affecting land within airport influence areas (including Citywide amendments) shall be submitted to the Riverside County Airport Land Use Commission in order to receive a determination as to consistency with the applicable adopted Airport Land Use Compatibility Plan, pursuant to the California Public Utilities Code. A determination shall be made prior to final action by the City Council. All non-legislative land use proposals that are subject to CEQA review and located within airport influence areas shall be transmitted to the ALUC staff for review and comment."

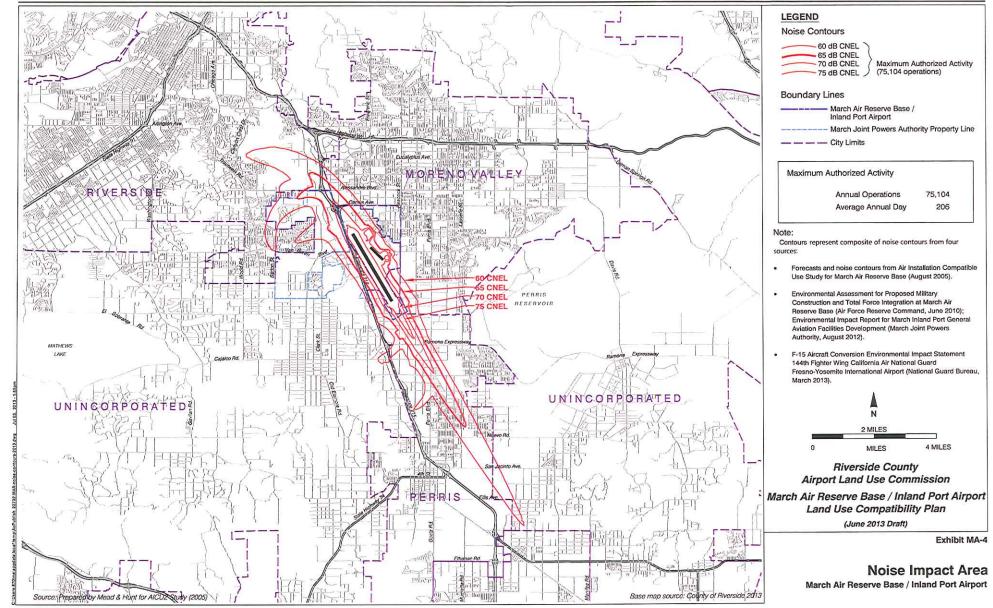
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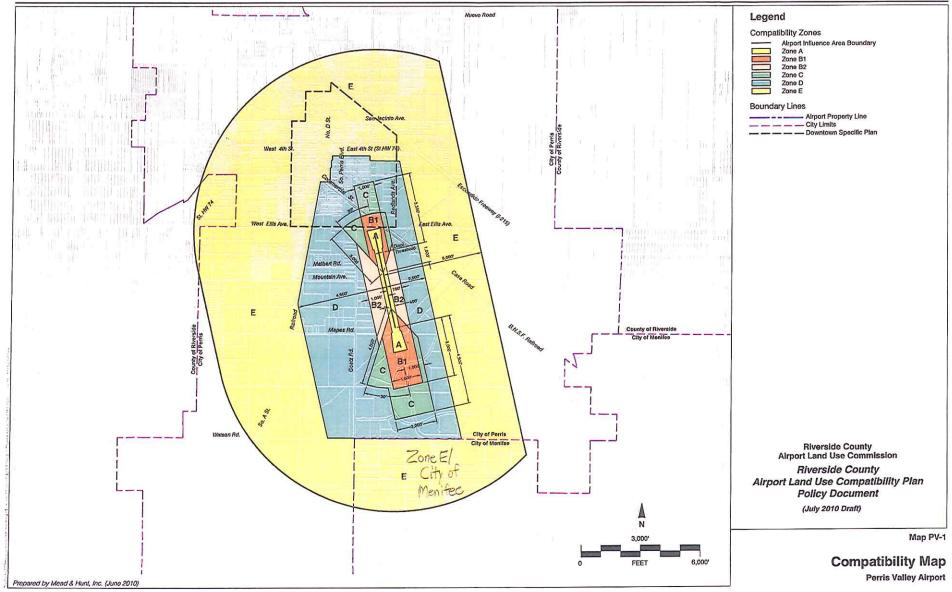
NOTICE OF AIRPORT IN VICINITY

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)



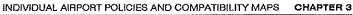


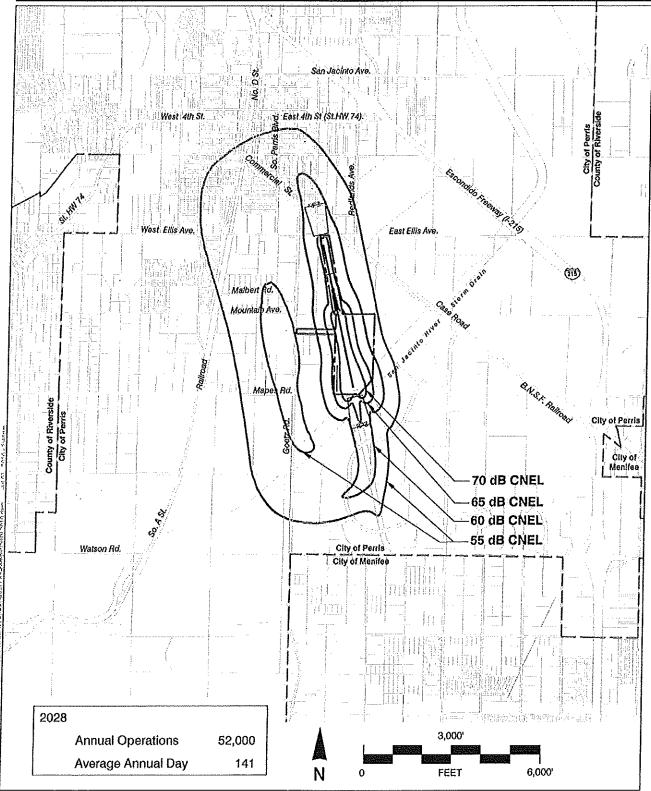




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INDIVIDUAL AIRPORT POLICIES AND COMPATIBILITY MAPS CHAPTER 3





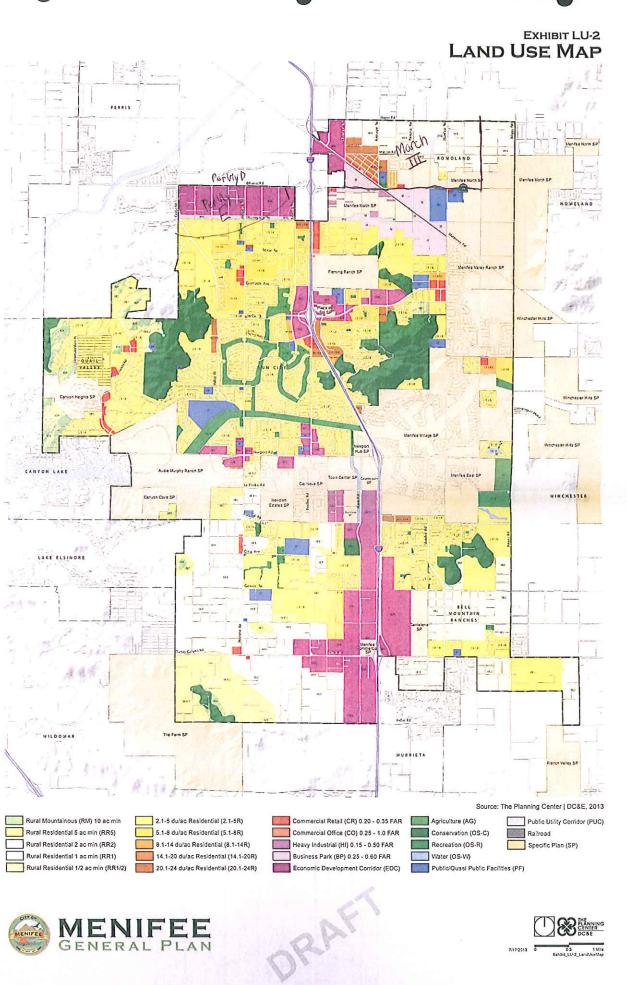
Source: Mead & Hunt, Inc. (June 2010)

Ultimate Noise Impacts

Perris Valley Airport

Map PV-3

- 4.1.3. Application of Noise Contours: The locations of CNEL contours are among the factors used to define compatibility zone boundaries and criteria. Because of the inherent variability of flight paths and other factors that influence noise emissions, the depicted contour boundaries are not absolute determinants of the compatibility or incompatibility of a given land use on a specific site or a portion thereof. Noise contours can only quantify noise impacts in a general manner. Except on large parcels or blocks of land (sites large enough to have 3 dB or more of variation in CNELs), they should *not* be used as site design criteria. (Note, though, that the airport noise contours set forth in this *Plan* are to be used as the basis for determining compliance with interior noise level criteria as listed in Policy 4.1.6.)
- 4.1.4. Noise Exposure in Residential Areas: Unless otherwise indicated in the airport-specific policies listed in Chapter 3, the maximum CNEL considered normally acceptable for new residential land uses in the vicinity of the airports covered by this *Plan* is 60 dB for all airports except low-activity outlying airports (Chiriaco Summit and Desert Center) for which the criterion is 55 dB. These standards shall be based upon noise contours calculated as described above.
- 4.1.5. Noise Exposure for Other Land Uses: Noise level compatibility standards for other types of land uses shall be applied in the same manner as the above residential noise level criteria. The extent of outdoor activity associated with a particular land use is an important factor to be considered in evaluating its compatibility with airport noise. Examples of acceptable noise levels for other land uses in an airport's vicinity are presented in Table 2B.
- 4.1.6. Interior Noise Levels: Land uses for which interior activities may be easily disrupted by noise shall be required to comply with the following interior noise level criteria.
 - (a) The maximum, aircraft-related, interior noise level that shall be considered acceptable for land uses near airports is 45 dB CNEL in:
 - > Any habitable room of single- or multi-family residences;
 - > Hotels and motels;
 - > Hospitals and nursing homes;
 - > Churches, meeting halls, theaters, and mortuaries;
 - > Office buildings; and
 - > Schools, libraries, and museums.
 - (b) The noise contours depicted in Chapter 3 of this *Plan* shall be used in calculating compliance with these criteria. The calculations should assume that windows are closed.
 - (c) When reviewed as part of a general plan or zoning ordinance amendment or as a major land use action, evidence that proposed structures will be designed to comply with the above criteria shall be submitted to the ALUC under the following circumstances:
 - (1) Any mobile home situated within an airport's 55-dB CNEL contour. [A typical mobile home has an average exterior-to-interior noise level reduction (NLR) of approximately 15 dB with windows closed.]







EXCERPTS, CITY OF MENIFEE GENERAL PLAN TEXT

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the future. Since the City of Menifee is a newly incorporated City, its SOI boundary is contiguous with the City boundary.

Over time, the City of Menifee may wish to consider annexation of adjacent unincorporated areas or engage in discussions with LAFCO and that could lead to a future revision of the City's current SOI boundaries. It should be noted that no annexations of the unincorporated County areas adjacent to the City or amendments to the SOI boundaries are proposed as part of this General Plan. Applications to amend the City's existing SOI will require appropriate California Environmental Quality Act (CEQA) review and a General Plan Amendment to update the Land Use Plan.

GENERAL PLAN EXHIBITS

Exhibit LU-1: Community Structure Exhibit LU-2: Land Use Map Exhibit LU-3: Land Use Designations Exhibit LU-4: Land Use Buildout Summary

RELATED DOCUMENTS

For detailed information related to Land Use, please refer to the following documents (weblinks to be inserted).

Exhibit bLU-1: Land Use Map with Specific Plans Exhibit bLU-2: Economic Development Corridor Subareas Land Use Background Document & Definitions Economic Development Corridors: Conceptual Master Plan Overview General Plan Vision 2035 Menifee Community Profile General Plan Environmental Impact Report Menifee Zoning Ordinance (Municipal Code) Links to Specific Plans Office of Planning and Research (OPR) Southern California Association of Governments (SCAG) Western Riverside Council of Governments (WRCOG) County of Riverside Riverside County Airport Land Use Commission

GOALS AND POLICIES

GENERAL LAND USE

Goal LU-1: Land uses and building types that result in a community where residents at all stages of life, employers, workers and visitors have a diversity of options of where they can live, work, shop and recreate within Menifee.

Policies

LU-1.1 Concentrate growth in strategic locations that help preserve rural areas, create place and identity, provide infrastructure efficiently, and foster the use of transit options.

REGIONAL PLANNING EFFORTS

The City of Menifee participates in a number of significant regional planning efforts that impact land planning in the City, including the Riverside County Airport Land Use Commission (ALUC), the Southern California Association of Governments (SCAG) Sustainable Communities Strategy (SCS), and the Riverside County Multi-Species Habitat Conservation Plan (MSHCP).

As adopted by the Riverside County Airport Land Use Commission (ALUC), this *Riverside County Airport Land Use Compatibility Plan Policy Document* establishes policies applicable to land use compatibility planning in the vicinity of airports throughout Riverside County. The basic function of airport land use compatibility plans is to promote compatibility between airports and the land uses that surround them. Although the ALUC has the sole authority to adopt this plan and to conduct compatibility reviews, the authority and responsibility for implementing the compatibility policies rests with the local governments. Portions of the City of Menifee are located in the airport influence areas of the March Air Reserve Base and the Perris Valley airport. The City of Menifee's General Plan, specifically the Land Use, Safety, Noise, and Housing Elements, are consistent with the Compatibility Plan and the City supports the RCALUC in its regional planning efforts.

On April 4, 2012, the Regional Council of the Southern California Association of Governments (SCAG) adopted the 2012-2035 Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS): Towards a Sustainable Future. The 2012–2035 RTP/SCS uses economic, regional transportation systems and land use strategies to reduce emissions from transportation sources to comply with SB 375, improve public health, and meet the National Ambient Air Quality Standards as set forth by the federal Clean Air Act. The City of Menifee Land Use and Circulation elements set the stage for significant reductions in per capita vehicle miles traveled (based upon the Riverside County Transportation Analysis Model (RivTAM) analysis results) by focusing on integrating a land use plan that improves the balance of jobs and housing locally with a layered transportation network that accommodates multiple transportation modes for pedestrians, bicycles, and neighborhood electric vehicles (NEVs) and golfcarts (see the Circulation Element Background Report for further details).

The City also participates in the County's Multi-Species Habitat Conservation Plan (MSHCP). The MSHCP is a habitat conservation plan prepared pursuant to the federal Endangered Species Act (ESA) and the state's Natural Community Conservation Plan (NCCP). The County of Riverside, along with the 16 cities in the western portion of the county, are all participants in the MSHCP, and a member from each jurisdiction sits on the Regional Conservation Authority (RCA) Board. All discretionary actions undertaken by the City, such as approving a shopping center or grading permit for a new housing subdivision, requires environmental review under the MSHCP (among other programs).

BACKGROUND

Noise is a given component of everyday activities; the sound of a popular restaurant at night, the ringing of a school bell, the horn of a train, or the rush of traffic. To ensure that noise impacts do not negatively affect the community's quality of life, special attention must be paid to providing policy direction to enhance land use compatibility and support mitigation strategies that limit noise impacts, especially on sensitive uses. As the City continues to experience new development, City leaders are also committed to maintaining the community's rural character. With new development comes the potential for new impacts, including those resulting from noise and vibration. Transitions between urban and rural and residential and nonresidential land uses become increasingly important to preserve the quality of life and typical character of the community. The Noise Element is organized around two general topics: protecting noise-sensitive land uses and limiting noise-spillover from noise-generating uses. The protection of noise-sensitive land uses is best achieved through a combination of policies related to regulation, siting and design, and transportation.

GENERAL PLAN EXHIBITS

Exhibit N-1: Future Noise Contours

RELATED DOCUMENTS

For detailed information related to Noise, please refer to the following documents (weblinks to be inserted).

Noise Background Document & Definitions Exhibit bN-1: Existing Noise Contours General Plan Environmental Impact Report Riverside County Airport Land Use Commission March Joint Powers Authority Perris Valley Link Metrolink Extension

GOALS AND POLICIES

Goal N1: Noise-sensitive land uses are protected from excessive noise and vibration exposure.

Policies: Policy and Regulation

- N-1.1 Assess the compatibility of proposed land uses with the noise environment when preparing, revising or reviewing development project applications.
- N-1.2 Require new projects to comply with the noise standards of local, regional, and state building code regulations, including but not limited to the City's Municipal Code, Title 24 of the California Code of Regulations, the California Green Building Code, and subdivision and development codes.
- N-1.3 Require noise abatement measures to enforce compliance with any applicable regulatory mechanisms, including building codes and subdivision and zoning regulations, and ensure that the recommended mitigation measures are implemented.

- N-1.4 Regulate the control of nuisances, such as residential party noise, and barking dogs, through the City's Municipal Code.
- N-1.5 Protect agricultural uses from noise complaints that may result from routine farming practices.
- N-1.6 Coordinate with the County of Riverside and adjacent jurisdictions to minimize noise impacts from adjacent land uses along the City's boundaries, especially its rural edges.
- N-1.7 Mitigate exterior and interior noises to the levels listed in the table below to the extent feasible, for stationary sources adjacent to sensitive receptors:

Table N-1 Stationary Source Noise Standards					
Land Use	Interior Standards	Exterior Standards			
Residential					
10:00 p.m. to 7:00 a.m.	40 L _{eq} (10 minute)	45 L _{εq} (10 minute)			
7:00 a.m. to 10:00 p.m.	55 L _{eg} (10 minute)	65 L _{eg} (10 minute)			

Policies: Siting and Design

- N1.8 Locate new development in areas where noise levels are appropriate for the proposed uses. Consider federal, state and City noise standards and guidelines as a part of new development review.
- N-1.9 Limit the development of new noise-producing uses adjacent to noise-sensitive receptors and require that new noise-producing land uses are designed with adequate noise abatement measures.
- N-1.10 Guide noise-tolerant land uses into areas irrevocably committed to land uses that are noiseproducing, such as transportation corridors adjacent to the I-215 or within the projected noise contours of any adjacent airports.
- N-1.11 Discourage the siting of noise-sensitive uses in areas in excess of 65 dBA CNEL without appropriate mitigation.
- N-1.12 Minimize potential noise impacts associated with the development of mixed-use projects (vertical or horizontal mixed-use) where residential units are located above or adjacent to noise-generating uses.
- N-1.13 Require new development to minimize vibration impacts to adjacent uses during demolition and construction.

Policies: Transportation Noise

N-1.14 Minimize vibration impacts on people and businesses near light and heavy rail lines or other sources of ground-borne vibration through the use of setbacks and/or structural design features that reduce vibration to levels at or below the guidelines of the Federal Transit Administration. Require new development within 100 feet of rail lines to demonstrate, prior to project approval, that vibration experienced by residents and vibration sensitive uses would not exceed these guidelines.

- N-1.15 Employ noise mitigation practices and materials, as necessary, when designing future streets and highways, and when improvements occur along existing road segments. Mitigation measures should emphasize the establishment of natural buffers or setbacks between the arterial roadways and adjoining noise-sensitive areas.
- N-1.16 Collaborate with transportation providers, including airport owners, the Federal Aviation Administration, Caltrans, Southern California Association of Governments, neighboring jurisdictions, and the Union Pacific Railroad, to prepare, maintain, and update transportation-related plans that minimize noise impacts and identify appropriate mitigation measures.
- N-1.17 Prevent the construction of new noise-sensitive land uses within airport noise impact zones. New residential land uses within the 65 dB CNEL contours of any public-use or military airports, as defined by the Riverside County Airport Land Use Commission, shall be prohibited.
- N-1.18 Work with the Southern California Regional Rail Authority and Union Pacific Railroad to reduce the noise impacts on noise-sensitive uses adjacent to railroad tracks.
- N-1.19 Monitor proposals for future transit systems and require noise control to be considered in the selection of transportation systems that may affect the City.
- N-1.20 Adhere to any applicable Riverside County Airport Land Use Commission land use compatibility criteria, including density, intensity, and coverage standards.
- Goal N2: Noise spillover from noise-generating uses, such as agriculture, commercial and industrial uses into adjoining noise-sensitive uses is minimized.

Policies

- N-2.1 Require that new developments abutting residentially designated properties that operate stationary noise sources such as industrial, commercial, entertainment, institutional uses, hospitals, large hotels, be designed to minimize noise impacts generated by loading areas, parking lots, trash enclosures, mechanical equipment, and any other noise generating features specific to the development to the extent feasible.
- N-2.2 Require commercial or industrial truck delivery hours be limited when adjacent to noise-sensitive land uses unless there is no feasible alternative or there are overriding transportation benefits.
- N-2.3 Limit the hours and/or require attenuation of commercial/entertainment operations adjacent to residential and other noise sensitive uses.

to the noise environment. Trains are required by the Federal Railroad Administration to sound a warning horn at onequarter mile from all at-grade crossings and at a maximum 110 dBA, as measured at 100 feet, except those that have established a Quiet Zone. A Quiet Zone is a segment of rail line where locomotive horns are not routinely sounded. There are no Quiet Zones established for the City of Menifee. At most crossings, warning bells generate sound levels that should not be more than 105 dBA and not less than 85 dBA. They typically operate between 30 to 60 seconds per normal through train movement. Within City limits there are several grade crossings at minor local streets; Menifee Road is currently the only grade crossing that includes warning bells and gates. The warning bells are active whenever a train is physically occupying the space where the railroad and roadway intersect. The noise contours generated from existing train activity do not extend past the rail right-of-way; however, increased activity or expanded service may result in increased impacts on the City unless mitigated property.

The San Jacinto Branch Line Commuter Rail (Perris Valley Line) Project is a 24 mile extension of the Metrolink 91 Line, currently providing service from Riverside to Fullerton and downtown Los Angeles. The extension would begin at a junction with the Burlington Northern Santa Fe line, north of the city of Riverside and turn southeast along the San Jacinto Branch Line. The terminus of the Line is in the City of Perris near Route 74 and Mapes Road, less than a quarter mile from the City of Menifee's boundary. At this time, no new noise impacts to the City of Menifee are expected as a result of this rail project. However, the City has expressed interest in exploring the possibility of extending the Metrolink 91 line beyond the South Perris station and creating an additional transit stop in Menifee. If this should occur, additional noise mitigation could be required and should be evaluated at that time.

Aircraft Noise

Portions of the City of Menifee are located in the airport influence areas of the March Air Reserve Base, and the Perris Valley airports. Aircraft overflights, takeoffs, and landings at airports and heliports in the region contribute to the ambient noise environment. According to guidelines included in the Riverside County Airport Land Use Compatibility Plan, areas exposed to aircraft noise levels above 65 dBA CNEL are considered clearly unacceptable for new residential land uses, schools, libraries, and hospitals. For churches, auditoriums, concert halls, and amphitheaters, noise levels above 70 dBA CNEL are clearly unacceptable. In addition, the maximum, aircraft-related, interior noise level that shall be considered acceptable for sensitive land uses near airports is 45 dBA CNEL. In 2012, no portions of the City are located with the 65 dBA CNEL noise contours of any airport. Aircraft overflights will be heard in the City; however, noise impacts would be minor. Please see the Airport Land Use Plans for each airport for further details related to flight patterns and noise impacts.

March Air Reserve Base

The March Air Reserve Base is an active military base that operates a wide range of military aircraft including fighters, tankers, and transport airplanes. The main tenant is the California Air National Guard; there is also civilian aircraft activity under a joint use agreement. Most operations are related to transport and refueling planes, most activities occur during the daytime, but approaches and departures also occur in the evening and nighttime. According to the Air Installation Compatible Use Zone Study (AICUZ), the airport's 65 dBA CNEL is well outside the

City of Menifee boundaries, however, the 60 dBA CNEL contour extends thru a portion of the City's limits, generally north of Watson Road and east of Sherman Road (Citizen's brochure for the March Air Reserve base, 2005). Affected land uses are low density residential uses.

A portion of Menifee, generally north of Newport Road and east of I-215, is covered by March Air Reserve Base Compatibility Zones D (Flight Corridor Buffer) or E (Other Airport Environs). Development in this area is subject to the policies of the Riverside County Airport Land Use Compatibility Plan. Neither Compatibility Zones D or E have density or height restrictions, but uses that are hazards to flight (physical, visual, and electronic forms that interfere with the safety of aircraft operations) are prohibited. Although no explicit upper limit on usage intensity is defined for Zones D or E, land uses of the types listed in the Compatibility Plan—uses that attract very high concentrations of people in confined areas—are discouraged in locations below or near the principal arrival and departure flight tracks. Additionally, major spectator-oriented sports stadiums, amphitheaters, and concert halls are discouraged beneath principal flight tracks in Zone D, and electromagnetic radiation notification and deed notice and disclosure are required in Zone D but only disclosure is required in Zone E.

Perris Valley Airport

The Perris Valley Airport, located approximately one mile northwest of the City, is a specialized facility catering predominantly to skydivers and ultralight aircraft enthusiasts. The airport operator estimates that the Airport services an annual total of 34,000 aircraft operations (averaging 94 operations per day), excluding ultralight aircraft flights. Twin-engine piston and turboprop aircraft account for approximately 80 percent of these operations.

According to the Perris Valley ALUP (RCALUC 2010), portions of the Airport Influence Area (AIA) are located within City of Menifee limits, in the northwestern portion of the City. Affected land uses within the AIA would be Economic Development Corridor (EDC) land uses, and residential land uses located north of Rouse Road and west of Barnett Road. However, the 60 dBA CNEL noise contours for future operations are outside City limits. A portion of the Perris Valley Airport Compatibility Zone E (Other Airport Environs) extends into Menifee, generally north of Rouse Road and west of I-215. See the discussion on Compatibility Zone E in the prior section on March Air Reserve Base.

Land Use Compatibility for Comn	iumty No	use	EIIVI	101					
	CNEL (dBA)								
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Table bN-3 Land Use Compatibility for Community Noise Environments

Normally Acceptable: Specified land use is satisfactory based upon the assumption that any buildings involved are of normal conventional construction, without any special noise insulation requirements.

Conditionally Acceptable:

New construction or development should be undertaken only after a detailed analysis of the noise reduction requirements is made and the needed noise insulation features included in the design. Conventional construction, but with closed windows and fresh air supply systems or air conditioning will normally suffice.



Normally Unacceptable:

New construction or development should generally be discouraged. If new construction does proceed, a detailed analysis of the noise reduction requirements must be made and needed noise insulation features included in the design.



Clearly Unacceptable:

New construction or development generally should not be undertaken.

Source: California Office of Noise Control, Guidelines for the Preparation and Content of Noise Elements of the General Plan. February 1976. Adapted from the US EPA Office of Noise Abatement Control, Washington D.C. Community Noise. Prepared by Wyle Laboratories. December 1971.

Public Hearing Draft Noise Element Implementation Actions

				tesponsible		tesources Required
		iopic i	mplementation Action	Department	Timing	o Complete
icy and Regu	ation				T	
	N-1.1, N-1.3, N-	9 12 0 0	Temporery noise attenuation fences; Preferential location of equipment; and	Community Development and Public Works		
tion N1		Policy and Reg	 Use of current noise suppression technology and equipment. 	Departments	Orgolng /	Adequate staffing
			Prepare and adopt a Local Noise Ordinance and include, at a minimum, the following components: Noise level measurement criteria • Extendor and interior noise standards • Extendor for residential noise sources such as, but not limited to, leaf blowers, mobile vendors, mobile stereos and stationary noise sources such as home appliances, air	Շօուուսուդ		
	N-1.2, N-1.4, N-			Development		
tion N2				Department	2 years	Adequate staffing
			enclosures, soundwalls, or natural barriers and landscaping including hills, berms,	Community Development		1 /
ction N3	N-1.1, N-1.3	Policy and Reg	bouiders, and dense vegetation.	Department	Ongoing	Adequate staffing
			for noise-sensitive land uses. Mitigation strategies could include selection of quieter equipment, setbacks, building design, enclosures, soundwalls, or natural barriers and	Community Development and Building and Salety		Adequate staffing
ction N4	N-1.1, N-1.3	Policy and Reg	landscaping including hills, berms, boulders, and dense vegetation.	Departments	Ongoing	Allegoaresterning
ction N5	N-1.1, N-1.3	Policy and Reg	pa part of any approvala of no aciserative projecta intere readepent of exterior reader	Community Development Department Community Development and	Ongoing	Adequate staffing
Action N6	N-1.2	Policy and Reg	65 dBA CNEL is not reasonably feasible, the developer shall be required to issue disclosure statements to be identified on all real estate transfers associated with the affected property that identifies regular exposure to noise.	Public Works Departments	Ongoing	Adequate staffing
Action N7	N-1.5	Policy and Reg	Enforce Right-to-Farm Ordinance to protect Manifee's agricultural resources from noise complaints.	Community Development Department	Ongoing	Adequate staffing
Siting and De	sign			Community		1
Action NB	N-1.11	Siting and Design	Assist the efforts of local homeowners living in high noise areas to noise attenuate their homes through funding assistance and retrofitting program development, as feasible.	Development and Building and Safety Departments	Short term (within 5 years)	Adequate staffing
Fransportatio	n Koise	1		r		
Action N9	N-1.15, N-1.16	Transportation	Work with Caltrans to evaluate the potential need for sound barriers and/or other mitigation strategies along those segments of I-215 that abut existing noise-sensitive land uses.	Community Development and Public Works Departments	Short term (within 5 years)	Adequate staffing funding to share costs associated v mitigation strateg
Action N10	N-1.14, N- 1.16, N-1.18	Transportation	Work with the Southern California Bail Authority and Union Pacific Bailroad to construct noise barriers and implement qu'at zones in areas where noise-sensitive uses exist, or are proposed, adjacent to rainoad tracks where featible.	Public Works Departments	Short term (within 5 years)	Adequate staffing funding to share costs associated s mitigation strates
	N-1.14, N-			Community Development and Public Works	Short term	Adagugto dallo-
Action N11	1.15, N-1.18	Transportation	Implement quiet zone standards for new radroad crossings.	Departments Community	(within 5 years)	Adequate staffing
Action N12	N-1.16, N- 1.17, N-1.20	Transportation	Review development proposals to determine if they are located within an airport noise impact area, and if so, require the proposed development to comply with applicable airport fand use noise compatibility criteria.	Development and Public Works Departments	Ongoing	Adequate staffin
				Community Development and Public Works	Short term	Adequate station funding to repair areas in need of
Action N13	N-1.15	Transportation	Evaluate existing roadways and repair paving in sections that need improvement.	Departments Community Development and	(within 5 years)	improvement
•			Encourage and facilitate the use of non-motorized and electric vehicles.	Public Works Departments	Origoing	Adequate staffir
Action N14	N-1.19	Transportation	Encourage and tabitate the use of non-motorized and electric vehicles.	Тесрионско	101.000.00	,
	rer			1		1
Noise Spillon Action N15	N-2.1, N-2.7,	N	Require that the parking structures, terminals, and loading docks of commercial, industrial, office, and other noise-generating land uses be designed and managed to minimize the potential noise impacts of vehicles on site as well as on adjacent land user	Community Development	Ongoing	Adequate staffi



PUBLIC HEARING DRAFT SAFETY ELEMENT

HOME PAGE

OVERVIEW

It is of fundamental importance to the City of Menifee to protect and preserve the health, safety and welfare of the community to ensure that it continues to be a place people want to live, work, and spend their time. The Safety Element of the General Plan provides a strategy for City staff, residents, developers, and business owners to effectively address natural and man-made hazards in Menifee, including seismic and geological issues, flood hazards, fire hazards, hazardous materials, wind hazards, and disaster preparedness, response, and recovery. The policies and action items provided herein can help create a community that is minimally at risk from natural hazards, and that responds quickly, effectively, and efficiently to those hazards. It is the primary goal of this document that as the policies and actions are implemented over the next twenty years, the City of Menifee will be increasingly less impacted by disasters, and in the process, become more self-reliant, sustainable, and prosperous.

The first step in hazard mitigation is to understand the community's vulnerability to the various natural and man-made hazards that can impact the region. To that end, the Safety Element identifies the potential hazards that can significantly affect the City of Menifee. More in-depth information regarding these hazards is provided in the supporting Technical Background Report.

PURPOSE OF ELEMENT

Section 65302 of the State of California Government Code identifies seven mandatory elements in a General Plan, including Safety. Section 65302 (g) defines the types of hazards that need to be identified and addressed. The following hazards, along with strong winds, hazardous materials, and critical facilities (including airports) and emergency response, are considered in Menifee's Safety Element.

- 1. seismic hazards, including strong ground shaking, surface fault rupture, and seismically induced ground failure, such as liquefaction and slope failures;
- 2. geologic hazards, including slope instability due to non-seismic causes, and subsidence;
- 3. flooding hazards, including storm-induced flooding, inundation resulting from the failure of water reservoirs, dams, and levees, and areas vulnerable to flooding after wildfires; and

RELATED DOCUMENTS

For detailed information related to Safety, please refer to the following documents (weblinks to be inserted).

Safety Background Document & Definitions Technical Background Report to the Safety Element of the General Plan for the City of Menifee (Earth Consultants International, Inc., July 2010) General Plan Environmental Impact Report Riverside County Airport Land Use Commission Exhibit bS-1: Engineering Materials Exhibit bS-2.1: Dam Exhibit bS-2.2: Diamond Valley Lake West Dam Failure Exhibit bS-2.3: Diamond Valley Lake Saddle Dam Failure Exhibit bS-2.4: Lake Perris Dam Failure Exhibit bS-2.5: Hemet Dam Failure Exhibit bS-2.6: Diamond Valley Lake East Dam Failure Exhibit bS-2.7: Diamond Valley Lake Forebay Dam Failure Exhibit bS-2.7: Diamond Valley Lake Forebay Dam Failure Exhibit bS-3: Historical Wildland Fires Exhibit bS-4: Hazardous Materials

GOALS AND POLICIES

SEISMIC AND GEOLOGIC ISSUES

The Menifee General Plan area is highly diverse geologically, the result of both the youthful seismic setting of the surrounding region, and the effects of climate. No active faults (faults that show evidence of having experienced surface displacement within the last 11,000 years) have been mapped in the Menifee General Plan area; therefore, the hazard of primary surface fault rupture is considered low to none. However, Menifee is located near several regional active faults – such as the San Jacinto and Elsinore faults – that have the potential to cause strong ground shaking in the area (Exhibit S-1; Fault Map).

Topographically, the Menifee area encompasses numerous rugged and moderately steep hills and mountains surrounded by a series of broad, nearly flat-bottomed valleys (Exhibit S-2: Slope Distribution). Most development in the area occurs in the valleys and low hillside areas, with the prominent hills and ridgelines largely undeveloped. As a result, slope instability, including rockfalls, debris flows, or ridgetop shattering, is a potential hazard only where development has encroached onto the hills or is at the base of the hills. Most slope damage in the region is likely to occur as a result of earthquake-induced shaking, or during periods of exceptional and/or prolonged rainfall.

Seismic shaking can also cause various types of ground deformation; liquefaction and slope failure are the most destructive of these. When liquefaction occurs, the soils that liquefy lose the ability to support structures; buildings may sink or tilt, with the potential for extensive structural damage. Three areas in Menifee are thought to have soils that could liquefy during an earthquake: the Salt Creek floodplain, the Warm Springs Creek floodplain, and portions of the Paloma Wash Valley (Exhibit S-3: Liquefaction and Landslides). The geology of a

HazUS (short for Hazards United States) is a methodology developed by the National Institute of Building Sciences with funding from the Federal Emergency Management Agency (FEMA) to make standardized loss estimates at a regional scale resulting from earthquakes, floods, or hurricanes. HazUS addresses nearly all aspects of the built environment and is used in planning for disaster loss mitigation, and emergency preparedness, response and recovery. HazUS breaks critical facilities into two groups: (1) essential facilities, and (2) high potential loss (HPL) facilities. Essential facilities are those parts of a community's infrastructure that must remain operational after an earthquake. Buildings that house essential services include hospitals, emergency operation centers, fire and police stations, schools, airport control towers, and communication centers. HPL or high-risk facilities are those that if severely damaged, may result in a disaster far beyond the facilities themselves. Examples include power plants, dams and flood control structures, and industrial plants that use or store explosives, extremely hazardous materials or petroleum products in large quantities; Exhibit S-7: Critical Facilities, identifies where these facilities are located in Menifee.

Goal SE 6: A City that responds and recovers in an effective and timely manner from natural disasters such as flooding, fire, and earthquakes, and as a result is not impacted by civil unrest that may occur following a natural disaster.

Policies

- SE-6.1 Continuously review, update and implement emergency preparedness, response and recovery plans that make the best use of the City- and County-specific emergency management resources available.
- SE-6.2 Ensure to the fullest possible extent that, in the event of a major disaster, critical, dependent care and high-occupancy facilities remain functional.
- SE-6.3 Work with the Riverside County Airport Land Use Commission to strengthen the City's disaster preparedness, response and recovery program in accordance with the Airport Land Use Plans for March Air Reserve Base and Perris Valley Airport.
- SE-6.4 Locate new essential or critical facilities away from areas susceptible to impacts or damage from a natural disaster.
- SE-6.5 Promote strengthening of planned and existing critical facilities and lifelines, the retrofit and rehabilitation of existing weak structures, and the relocation of certain critical facilities as necessary to adequately meet the needs of Menifee's residents and workforce.

1	Policies			Barrier Barrier	 A second s second second s second second se	Resources Required to
Actions	Policies	Tople	Implementation Action	Responsible Parties	Timing	Complete
I						
l						
ł				Community Development		
1			Require all essential and critical facilities (including but not limited to essential City offices	and Public Works		
l i			and buildings, medical facilities, schools, child care centers, and nursing homes) in or	Departments, Office of		
1			within 200 feet of Flood Zones A, AE and X, or within the dam inundation pathways, to	Emergency Management,	Short- to Long-	
1		Disaster	develop disaster response and evacuation plans that address the actions that will be	school districts, individual	Term, within five	
Action S65	SE 6.1	Response	taken in the event of flooding, or inundation due to catastrophic failure of a dam.	facilities	years	
		Disaster	Require that dependent care facilities have all flood-vulnerable electrical circuitry flood-	Building and Safety		
Action S66	SE 6.2	Response	proofed.		Ongoing	Adequate staffing
,		incoponee			U.Guild	
			Coordinate with the Riverside County Airport Land Use Commission to review the Airport			
5			Land Use Plans for March Air Reserve Base and Perris Valley Airport and incorporate			
		Disaster	applicable disaster preparedness, response, and recovery measures into City disaster	Office of Emergency	Short-Term (in the	
Action S67	SE 6.3	Response	planning efforts.	Management	next 1 to 5 years)	Adequate staffing
ļ			Evaluate proposals for new critical facilities to ensure they are located outside of			
]			hazardous areas. If the facility must be located in a hazardous area, ensure that the	Community Development		
		Disaster	project implements appropriate mitigation measures to protect the facility in the case of	and Building and Safety		
Action S68	SE 6.4	Response	damage or disaster.	Departments	Ongoing	Adequate staffing
	1					
			Coordinate with the Public Utilities Commission (PUC) and/or utilize the Capital			
					1	1
			improvement Program, to strengthen, relocate, or take other appropriate measures to	l I	1	1
			improvement Program, to strengthen, relocate, or take other appropriate measures to safeguard high-voltage lines, water, sewer, natural gas and petroleum pipelines, and	Public Works and Building		
		Disaster	improvement Program, to strengthen, relocate, or take other appropriate measures to safeguard high-voltage lines, water, sewer, natural gas and petroleum pipelines, and trunk electrical and telephone conduits that etend through areas of high liquegaction	Public Works and Building and Safety Departments		

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EXCERPTS, CHAPTER 5 CALIFORNIA AIRPORT LAND USE PLANNING HANDBOOK

Chapter 5 **Responsibilities of Local Agencies**

5.1 OVERVIEW

Effective airport land use compatibility planning is not and cannot be solely a function of airport Topics in this chapter land use commissions (ALUCs). Ideally, airport land use compatibility planning recognizes the objectives of the local municipal agency which has ultimate authority for land use planning and regulation, the airport operator which has responsibility for airport operations planning, and the ALUC which has statutory authority for preparation of airport land use compatibility plans (ALUCPs) and review of local land use plans and actions. Indeed, as outlined in Chapter 1 (pg. 1-2), state law specifically limits ALUC authority over various actions that directly affect compatibility. Much of the responsibility for airport land use compatibility clearly remains with local agencies whether in the role of controlling land use or operating an airport.

Local agency responsibility for airport land use compatibility planning is particularly critical in counties that have chosen to utilize the designated agency. As indicated in Chapter 1, • The role of airport establishment of the designated agency in a county only eliminates the requirement for formation of an airport land use commission, not the obligation to plan for and achieve compatible land uses surrounding airports. The obligation for preparation, adoption, and implementation of an ALUCP remains and rests directly and more fully upon local jurisdictions when an ALUC does not exist than when it does.

5.2 LOCAL PLANS CONSISTENCY WITH ALUCP

5.2.1 Requirements

State statutes require that, once an airport land use commission has adopted or amended an ALUCP, general plans and any applicable specific plans be amended, as necessary, in order to be consistent with the ALUCP (Government Code [Gov. Code] Section 65302.3(a)-(b)). Alternatively, local agencies have the option of taking the special steps necessary to overrule all or part of the ALUCP (id. at (c)). If a local agency fails to take either action (i.e., amend local plans to be consistent with the ALUCP or overrule), then it is required to submit all land use development actions involving property within the airport influence area to the ALUC for review (Public Utilities Code [PUC] Section 21676.5(a)).

include:

- Consistency of local plans and ordinances with ALUC plans;
- · Submitting land use actions for ALUC review:
- Compatibility planning in counties that do not have an ALUC:
- Overruling an ALUC action;
- proprietors in airport land use compatibility planning.

Counties, cities, special districts, school districts, and community college districts are collectively referred to in this Chapter as "local agencies." Additionally, all plans adopted or implemented by any of the referenced local agencies are collectively referred to in this Chapter as "local plans." This section addresses the options available to local agencies when revising their plans to be consistent with the ALUCP. The latter two topics—requirements for overruling of the ALUC and submitting actions for ALUC review—are examined later in this chapter.

5.2.2 General Plan Review and Amendment Process

Two key facets of the process by which a local agency modifies its general plan and any specific plans for consistency with the ALUCP are important to highlight.

Preliminary Review by ALUC

In conjunction with an action to prepare or amend an ALUCP, ALUCs may conduct a preliminary review of affected local plans. The review should focus on identifying any obvious direct conflicts between the plans, to the extent feasible. Equally important to note are significant omissions from the local plans with respect to compatibility criteria and review procedures. These preliminary reviews are necessary when completing an initial study or environmental impact report during the CEQA process. With this information in hand, local agencies can better understand the implications of a proposed ALUCP with respect to their own plans. Furthermore, the preliminary review may enable local agencies to be more focused in their efforts to modify their plans. The process of making the necessary changes to general plans and specific plans can thus be eased.

It is important for all parties to recognize, however, that any such reviews are preliminary. Ultimately, the onus for revising a local plan to be consistent with an ALUCP plan rests with the local agency. And, local agencies still must go through the steps of submitting the specific policy language, maps, and other plan components to the ALUC for formal review and approval.

180-Day Time Limit

State law provides that a local agency must either modify its local plan(s) or to take the steps necessary to overrule the ALUC within 180 days of when an ALUC adopts or amends its ALUCP (Gov. Code Section 65302.3(b)-(c)). As a practical matter, this time limit can be difficult to accomplish. Unless the necessary changes to the local plan(s) are minor, the time required to draft, circulate, and adopt the modifications together with essential environmental review can easily exceed 180 days. This fact notwithstanding, it is incumbent upon local agencies to move forward as expeditiously as possible to meet the deadline.

The chief consequence of not meeting this deadline is that the ALUC can begin requiring—if it is not already doing so—that all of the jurisdiction's land use actions, regulations, and permits be submitted to the commission for review (PUC Section 21676.5(a)). This requirement can continue until such time as the local agency amends its plan(s) or overrules the ALUC, which may cost more time and money on the part of applicants and local jurisdictions.

5.2.3 Means of Achieving Consistency

Making a local plan consistent with the ALUCP involves more than elimination of direct conflicts. Other aspects of compatibility planning also must be addressed. In particular, local

agencies must establish procedures that implement and ensure compliance with compatibility policies. To do this, local plans and/or policies must:

- Delineate the compatibility criteria to be applied to individual development actions;
- Identify the mechanisms to be used to ensure that applicable compatibility criteria are incorporated into site specific development projects; and
- Indicate the procedures to be followed in review and approval of development actions affecting lands within the airport influence area, recognizing that certain types of land uses are not subject to discretionary approvals (but can be subject to appropriate ministerial development standards).

As widely applied in airport land use planning, "consistency" does not require being identical. It means only that the concepts, standards, physical characteristics, and resulting consequences of a proposed action must not conflict with the intent of the law or the ALUCP to which the comparison is being made.

An expanded list of the various factors to be considered by local agencies when modifying their plans and policies is included in Table 5A. This checklist is not necessarily all-encompassing. Depending upon the nature of the policies adopted by the ALUC, other factors may need to be addressed and some of those listed may not be applicable.

The primary purpose of the checklist provided in Table 5A is to assist local agencies with necessary modifications and additions to their plans and policies. The checklist is also designed to facilitate ALUC reviews of local plans. The list will need to be modified to reflect the policies of each individual ALUC and is not intended as a state requirement.

Local plans can be made consistent with an ALUCP through various methods. The method that is most suitable to a particular local agency depends in part upon the manner in which the ALUCP criteria and maps are formatted, but even more upon choices to be made by each individual local agency as to the structure of its planning programs, policies, development regulations and review processes. As discussed in Chapter 3 (pg. 3-42), some ALUCPs rely primarily upon composite, performance-type criteria, while others use list-oriented criteria. The first key decision to be made by each affected local agency is whether to fully incorporate compatibility criteria and procedures into their land use plans, ordinances, and regulations and thus mostly internalize the project review process or to defer review of major land use actions to the ALUC. Next, the local agency needs to decide whether to incorporate compatibility criteria into its plans and ordinances in the same format (e.g., performance criteria, prescriptive regulations, or mapping) as the airport land use plan, or to adapt the format of the airport plan's compatibility criteria to better fit with the format of the local agency's plans, ordinances, and development review processes.

TABLE 5A: GENERAL PLAN CONSISTENCY CHECKLIST

For additional

guidance see: COMPATIBILITY CRITERIA

This checklist is intended to assist local agencies with modifications necessary to make their local plans and other local policies consistent with the ALUCP. It is also designed to facilitate ALUC reviews of these local plans and policies. The list will need to be modified to reflect the policies of each individual ALUC and is not intended as a state requirement. **General Plan Document** The following items typically appear directly in a general plan document. Amendment of the general plan will be required if there are any conflicts with the ALUCP Page 6-17 Land Use Map-No direct conflicts should exist between proposed new land uses indicated on a general plan land use map and the ALUC land use compatibility criteria. m VResidential densities (dwelling units per acre) should not exceed the set limits. Proposed nonresidential development needs to be assessed with respect to applicable intensity limits (see below). -No new land uses of a type listed as specifically prohibited should be shown within affected areas. Noise Element-General plan noise elements typically include criteria indicating the Pages 3-8 maximum noise exposure for which residential development is normally acceptable. This limit must be made consistent with the equivalent ALUCP criteria. Note, however, that a general plan may establish a different limit with respect to aviation-related noise than for noise from other sources (this may be appropriate in that aviation-related noise is sometimes judged to be more objectionable than other types of equally loud noises). **Zoning or Other Policy Documents** The following items need to be reflected either in the general plan or in a separate policy document such as a combining zone ordinance. If a separate policy document is adopted, modification of the general plan to achieve consistency with the ALUCP may not be required. Modifications would normally be needed only to eliminate any conflicting language which may be present and to make reference to the separate policy document. Intensity Limitations on Nonresidential Uses-ALUCPs may establish limits on the Page 4-26. Appendix G usage intensities of commercial, industrial, and other nonresidential land uses. This can be done by duplication of the performance-oriented criteria-specifically, the number of people per acre-indicated in the ALUCP. Alternatively, ALUCs may create a detailed list of land uses which are allowable and/or not allowable within each compatibility zone. For certain land uses, such a list may need to include limits on building sizes, floor area ratios, habitable floors, and/or other design parameters which are equivalent to the usage intensity criteria. Identification of Prohibited Uses-ALUCPs may prohibit schools, day care centers, Pages 3-11, 4-29, Figures 4B - G assisted living centers, hospitals, and other uses within a majority of an airport's influence area. The facilities often are permitted or conditionally permitted uses within many commercial or industrial land use designations. Page 4-31 Open Land Requirements-ALUCP requirements, if any, for assuring that a minimum amount of open land is preserved in the airport vicinity must be reflected in local policies. Normally, the locations which are intended to be maintained as open land would be identified on a map with the total acreage within each compatibility zone indicated. If some of the area included as open land is private property, then policies must be established which assure that the open land will continue to exist as the property develops. Policies specifying the required characteristics of eligible open land should also be established. Page 3-56, 4-18, 4-Infill Development-If an ALUCP contains infill policies and a jurisdiction wishes to 42 take advantage of them, the lands that meet the qualifications must be shown on a map. Pages 3-29, 4-35 Height Limitations and Other Hazards to Flight-To protect the airport airspace, limitations must be set on the height of structures and other objects near airports. These limitations are to be based upon FAR Part 77. Restrictions also must be established on other land use characteristics which can cause hazards to flight (specifically, visual or electronic interference with navigation and uses which attract birds). Note that many jurisdictions have already adopted an airport-related hazard and height limit zoning ordinance which, if up to date, will satisfy this consistency requirement.

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For additional guidance see:	COMPATIBILITY CRITERIA
Pages 3-9, 4-14	 Buyer Awareness Measures—Besides disclosure rules already required by state law, as a condition for approval of development within certain compatibility zones, some ALUCPs require either dedication of an avigation easement to the airport proprietor or placement on deeds of a notice regarding airport impacts. If so, local agency policies must contain similar requirements.
Page 4-42	 Nonconforming Uses and Reconstruction—Local agency policies regarding nonconforming uses and reconstruction must be equivalent to or more restrictive than those in the ALUCP, if any.
	REVIEW PROCEDURES
	In addition to incorporation of ALUC compatibility criteria, local agency implementing documents must specify the manner in which development proposals will be reviewed for consistency with the compatibility criteria.
Page 6-1	 Actions Always Required to be Submitted for ALUC Review—PUC Section 21676 identifies the types of actions that must be submitted for airport land use commission review. Local policies should either list these actions or, at a minimum, note the local agency's intent to comply with the state statute.
Page 6-5	 Other Land Use Actions Potentially Subject to ALUC Review—In addition to the above actions, ALUCPs may identify certain major land use actions for which referral to the ALUC is dependent upon agreement between the local agency and ALUC. If the local agency fully complies with all of the items in this general plan consistency check list or has taken the necessary steps to overrule the ALUC, then referral of the additional actions is voluntary. On the other hand, a local agency may elect not to incorporate all of the necessary compatibility criteria and review procedures into its own policies. In this case, referral of major land use actions to the ALUC is mandatory. Local policies should indicate the local agency's intentions in this regard.
Pages 5-10, 6-13	 Process for Compatibility Reviews by Local Agencies—If a local agency chooses to submit only the mandatory actions for ALUC review, then it must establish a policy indicating the procedures which will be used to assure that airport compatibility criteria are addressed during review of other projects. Possibilities include: a standard review procedure checklist which includes reference to compatibility criteria; use of a geographic information system to identify all parcels within the airport influence area; etc.
Page 6-9	 Variance Procedures—Local procedures for granting of variances to the zoning ordinance must make certain that any such variances do not result in a conflict with the compatibility criteria. Any variance that involves issues of noise, safety, airspace protection, or overflight compatibility as addressed in the ALUCP must be referred to the ALUC for review.
Page 5-10	 Enforcement—Policies must be established to assure compliance with compatibility criteria during the lifetime of the development. Enforcement procedures are especially necessary with regard to limitations on usage intensities and the heights of trees. An airport combining district zoning ordinance is one means of implementing enforcement requirements.

TABLE 5A: GENERAL PLAN CONSISTENCY CHECKLIST

Four general strategies for fully achieving consistency are outlined below.

• Incorporate policies into one or more existing general plan elements—One method of achieving the necessary planning consistency is to modify existing general plan elements. For example, (1) airport land use compatibility policies could be inserted into the land use element or (2) noise policies could be inserted into the noise element, safety policies could be placed into a safety element, and the primary compatibility criteria and associated maps plus the procedural policies might fit into the land use element. With this approach, direct conflicts would be eliminated and the majority of mechanisms and procedures to ensure compliance with compatibility criteria could be fully incorporated into a local agency's general plan.¹ The primary limitation with this approach is that ministerial development project approvals might not be specifically reviewed for consistency with the agency's General Plan, relying instead on the presumption that a ministerial project that meets the development standards set forth in its development code is consistent with the General Plan. Thus, using this approach needs to be followed up with ordinance requirements that would ensure implementation of applicable policies for ministerial development approvals.

ocal agencies cannot simply ignore the need to respond to an ALUC's adoption of an ALUCP. If a local agency neither amends its plans as necessary nor overrules the ALUC, it must cooperate with any commission request that all or selected land use actions, regulations, and permits affecting the airport influence area be submitted for review.

- Adopt a General Plan Airport Element—Another approach is to prepare a separate airport element of the general plan. Such a format may be advantageous when a community's general plan also needs to address on-airport development and operational issues. Modification of other plan elements to provide cross-referencing and eliminate conflicts would still be necessary.² As with incorporating airport compatibility policies into existing General Plan elements, care should be taken to ensure that the policies are applied to both discretionary and ministerial development reviews.
- Adopt ALUCP as Stand-Alone Document—Local agencies selecting this option could simply adopt as a local policy document the relevant portions of the ALUCP. Changes to the community's existing plan(s) would be minimal. Policy reference to the separate ALUCP document would need to be added and any direct land use or other conflicts with compatibility planning criteria would have to be removed from local plan(s). Limited discussion of compatibility planning issues could be included in the local plan(s), but the substance of most compatibility policies would appear only in the stand-alone ALUCP. The key to this method lies is ensuring that the provisions of the stand-alone document carry over to discretionary and ministerial development project approvals.
- Adopt Airport Combining District or Overlay Zoning Ordinance—Local agency adoption of an airport combining district or overlay zoning ordinance is a way to codify airport compatibility criteria identified only in concept in the local plan(s). Other than where direct conflicts need to be eliminated from the local plans, implementation of the compatibility policies would essentially be accomplished solely through the zoning ordinance. Policy reference to airport compatibility in the local plan(s) could be as simple as mentioning support for the airport land use commission and its ALUCP, stating that policy implementation is by means of the combining zone.

¹ This approach could equally apply to a specific plan, area plan, community plan or other similar land use planning document.

² This approach could equally apply to a specific plan, area plan, community plan or other similar land use planning document.

5.2.4 Land Use Compatibility Strategies

Beyond the issue of achieving mandated consistency between local plans and an ALUCP is the broader question of what local agencies can do to preserve and enhance compatibility between airport activities and the land uses around the airport. Several strategies are available to help attain this objective. If the local agency takes land use actions such as the ones discussed here, any inconsistencies between its local plan(s) and the ALUCP are likely to be few. These strategies also are appropriate for jurisdictions in counties using the alternative compatibility planning process.

f airport land use compatibility objectives are to be obtained, local agencies must take direct actions such as those described here.

Land Use Designations

If compatibility between an airport and its surroundings is to be achieved, designation of appropriate land uses in local plans is essential. This is particularly true in developing areas—good planning today can avoid significant conflicts later. The value of designating compatible land uses in built-up areas should not be overlooked, however. Appropriate designations can serve to identify already incompatible uses as nonconforming and thus limit the potential for expansion or modification of the uses to worsen the incompatibility. Designating compatible uses also can facilitate redevelopment and economic development activities and encourage eventual change of currently incompatible uses to ones that are better suited to the environs of an airport.

Overlay Zones or Combining Districts

For purposes of airport land use compatibility planning, land use plan and zoning designations as commonly adopted by local agencies have a notable shortcoming. Specifically, such plans and designations are generally intended to identify types of permitted land use and development intensities in terms of numbers of units or building area, as well as set general purpose development standards. Seldom do such plans and designations have an aviation orientation or address the specific issue of compatibility with aviation activities (i.e., noise and safety). The Table 5A checklist of factors is essential to making a local plan consistent with an ALUCP and highlights many of the reasons why consistency is seldom achieved without explicit consideration of aviation issues.

One way local agencies can address the need for an aviation orientation in basic land use designations within airport influence areas is to adopt an airport compatibility overlay zone or combining district ordinance. A combining district can supplement local land use designations by adding specific noise and, often more importantly, safety criteria (e.g., maximum number of people permitted on the site, site design and open space criteria, height restrictions, etc.) applicable to future development in the airport vicinity. Project review procedures and other implementation mechanisms specific to airport area development proposals can also be defined. Geographically, the combining district should cover at least the entire airport influence area as defined by the ALUC in its ALUCP.

Possible components of an airport compatibility combining zoning ordinance are listed in Table 5B. The compatibility concerns which form the basis for these components are described as well.

An airport overlay zoning ordinance has several important benefits. Most importantly, it permits the continued utilization of the majority of the design and use guidelines contained in the existing local plan and zoning ordinance. At the same time, it provides a mechanism for implementation of airport area related restrictions and conditions that may apply to only a few types of land uses within a given land use category or zoning district. This avoids the need for a large number of discrete zoning districts. It also enables local plans to attain consistency with an ALUCP through reference to basic compatibility criteria rather than through redefinition of existing land use designations.

Buyer Awareness Measures

Buyer awareness measures serve to alert prospective airport vicinity residents about the airport and its impacts. Three basic forms of buyer awareness measures are most common in airport land use compatibility practice:

- Recorded deed notices;
- Real estate disclosure statements; and
- Avigation easements (not recommended if intended *only* as a buyer awareness measure).

While ALUCs may define policies establishing how and where each of these measures should be used, the effectiveness of each is enhanced by actions that local agencies can take. Chapter 3 contains a discussion of the applicability of each of these measures to accomplishment of airport land use compatibility planning objectives.

5.3 SUBMITTING PROJECTS FOR REVIEW

5.3.1 Reviews by Airport Land Use Commissions

In counties where an ALUC exists, the obligations of local agencies with regard to submitting land use projects and other actions for the commission's review are well defined in state law. If local agencies choose to ignore the legal requirement for such review, ALUCs can initiate the review process on their own and seek a writ of mandate to force the local agency to provide the necessary project information.

The types of land use projects to be submitted depend upon:

- Whether an ALUCP has been adopted by the ALUC;
- What action the local agency has taken with regard to making its local plan(s) consistent with the ALUCP;
- Whether the project requires an amendment to the local plan; and
- Whether voluntary agreements for the review of projects have been established.

Note that local agencies that also are airport proprietors are obligated to submit certain airport plans for ALUC review.

TABLE 5B: POSSIBLE AIRPORT COMBINING ZONE COMPONENTS

An airport compatibility combining zoning ordinance might include some or all of the following components:

Airspace Protection—A combining district can establish restrictions on the height of buildings, antennas, trees, and other objects as necessary to protect the airspace needed for operation of the airport. These restrictions should be based upon the current version of FAR Part 77, Objects Affecting Navigable Airspace, Subpart C. Additions or adjustment to take into account TERPS surfaces should be made as necessary. Provisions prohibiting smoke, glare, bird attractions, and other hazards to flight should also be included.

FAA Notification Requirements—Combining districts also can be used to ensure that project developers are informed about the need for compliance with the notification requirements of FAR Part 77. Subpart B of the regulations requires that the proponent of any project which exceeds a specified set of height criteria submit a Notice of Proposed Construction or Alteration (Form 7460-1) to the Federal Aviation Administration prior to commencement of construction. The height criteria associated with this notification requirement are lower than those spelled out in FAR Part 77, Subpart C, which define airspace obstructions. The purpose of the notification is to determine if the proposed construction would constitute a potential hazard or obstruction to flight. Notification is not required for proposed structures that would be shielded by existing structures or by natural terrain of equal or greater height, where it is obvious that the proposal would not adversely affect air safety.

State Regulation of Obstructions—State law prohibits anyone from constructing or altering a structure or permitting an object of natural growth to exceed the heights established by FAR Part 77, Subpart C, unless the FAA has determined the object would not or does not constitute a hazard to air navigation (PUC Section 21658 and 21659).

Designation of High Noise-Impact Areas— California state statutes require that multi-family residential structures in high-noise exposure areas be constructed so as to limit the interior noise to a Community Noise Equivalent Level of no more than 45 dB. A combining district could be used to indicate the locations where special construction techniques may be necessary in order to ensure compliance with this requirement. The combining district also could extend this criterion to single-family dwellings.

Maximum Densities/Intensities-Airport noise and safety compatibility criteria are frequently expressed in terms of dwelling units per acre for residential uses and people per acre for other land uses. While general plans typically use these measures of maximum density/intensity for land uses, zoning ordinances generally use minimum lot sizes and setbacks, along with building height restrictions. These standards often supplement, but do not translate directly into general plan density/intensity standards. Incorporation of airport area-related density/intensity standards measured in the same manner as a General Plan can either be directly included in a combining zone or used to modify the underlying land use designations. For residential land uses, the correlation between the compatibility criteria and land use designations is direct. For other land uses, the method of calculating the intensity limitations needs to be defined. Alternatively, a matrix can be established indicating whether each specific type of land use is compatible with each compatibility zone. To be useful, the land use categories need to be more detailed than typically provided by general plan or zoning ordinance land use designations.

Open Areas for Emergency Landing of Aircraft—In most circumstances in which an accident involving a small aircraft occurs near an airport, the aircraft is under control as it descends. When forced to make an offairport emergency landing, pilots will usually attempt to do so in the most open area readily available. To enhance safety both for people on the ground and the occupants of aircraft, ALUCPs often contain criteria requiring a certain amount of open land near airports. These criteria are most effectively carried out by planning at the general or specific plan level, but may also need to be included in a combining district so that they will be applied to development of large parcels. Adequate open areas can often be provided by clustering of development on adjacent land.

Areas of Special Compatibility Concern—A significant drawback of standard general plan and zoning ordinance land use designations is that they can be changed. Uses that are currently compatible are not assured of staying that way in the future. Designation of areas of special compatibility concern would serve as a reminder that airport impacts should be carefully considered in any decision to change the existing land use designation. [A legal consideration that supports the value of this concept is that down-zoning of a property to a less intensive use is becoming more difficult. It is much better not to have inappropriately up-zoned the property in the first place.]

Real Estate Disclosure Policies—The geographic extent and specific language of recommended real estate disclosure statements can be described in an airport combining zone ordinance (Business and Professions Code Section 11010(a) and (b)(13) and Civil Code, Sections 1102.6, 1103.4, and 1353). The requirements for project review can be summarized as follows:

Any environmental documents prepared in conjunction with these actions affecting lands inside the AIA also should be provided to the ALUC during public review periods and submitted concurrent with submittal of the project for ALUC review.

- Local Plans, including General Plans and Specific Plans—As discussed in the preceding chapter, local agencies must refer any proposal to adopt or amend a local plan to the ALUC for review if the proposal involves land within an airport influence area defined by the ALUC (PUC Section 21676(b)). This requirement applies regardless of whether the proposal has community-wide applicability or affects only a single parcel (unless the parcel is not in the airport influence area). It also applies both to actions initiated by the local agency or a property owner or other applicant, and to amendments proposed for the purpose of making a local plan consistent with an ALUCP.
- Ordinances and Regulations—Proposed zoning ordinances and building regulations also must be submitted for ALUC review before being acted upon by the local agency if they affect the compatibility of land uses located within an airport influence area (PUC Section 21676(b)).

For example, proposed ordinances or regulations involving allowable land uses, densities, building heights, or sound insulation must be submitted for ALUC review. Other matters that clearly do not have airport land use implications need not be submitted.

Individual Development Projects—Once an ALUC has adopted an ALUCP, requirements for local agencies to submit individual development proposals for review depends upon whether the local agency either has made its plans consistent with the ALUCP or overruled the commission. Prior to when the local agency takes a consistency or overruling action, all individual development projects must be submitted for review (PUC Section 21676.5(a)). This requirement includes referral of actions that are ministerial unless the ALUC has indicated it does not want to receive them (see discussion in Chapter 6). Referral of all project proposals also continues to be mandatory if the local agency has opted not to fully incorporate essential compatibility criteria and procedures into local plans and policies, but has only eliminated the direct conflicts with the ALUCP.

Submittal of individual development projects becomes voluntary only when: (1) the local plans have been made fully consistent with the ALUC's plan or the local agency has overruled the ALUC; and (2) the action does not involve a general plan, specific plan, or zoning amendment previously reviewed by the ALUC. Even in these circumstances, however, local agencies are encouraged to form an agreement with the airport land use commission for review of major land use development project proposals—those which could have airport land use compatibility implications. A factor to be borne in mind with voluntary project-review agreements is that the ALUC's review is advisory only; the overrule procedures, which must be followed with respect to mandatory reviews, are not in effect.

 Airport Plans—Proposed airport master plans, expansion of an existing airport, and plans for construction of a new airport (or heliport) must be submitted to the ALUC for review in accordance with PUC Sections 21676(c), 21664.5, and 21661.5, respectively. This referral

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requirement is independent of whether the ALUC has previously adopted an ALUCP or the local agency has taken action with regard to the consistency of its local plan(s).

A project requiring ALUC review must be submitted to the ALUC prior to approval by the local agency. Though the State Aeronautics Act does not specify when in the planning process this should occur, agencies should, at a minimum, submit projects 60 days prior to approval in order to allow the fully allotted amount of time for ALUC review (PUC Section 21675.2(a)).

5.3.2 Reviews by other Agencies

In addition to being reviewed by the airport land use commission, certain airport-vicinity development actions also must be submitted to other agencies for review. Local agencies should be aware of the extent to which these review requirements apply within their jurisdictions and inform project proponents accordingly.

Federal Aviation Administration

The FAA's involvement in the review of local projects derives both from its authority over navigable airspace and its function as a funding agency for airport planning studies and airport improvement projects.

Aeronautical Studies—FAR Part 77 requires that anyone proposing to construct an object that could affect the navigable airspace submit information about the proposed construction to the FAA. The FAA then conducts an aeronautical study, the outcome of which is a determination as to whether the object would be a potential hazard to air navigation. If the proposed object is concluded to pose a hazard, the FAA may object to its construction, examine possible revisions of the proposal to eliminate the problem, require that the object be appropriately marked and lighted as an airspace obstruction, and/or initiate changes to the aircraft flight procedures for the airport so as to account for the object.

The FAA's review does not consider the type of land use involved. Neither does the FAA approve or disapprove the proposal; it merely evaluates and recommends.

Airport Improvement Program Grants—Through its Airport Improvement Program (AIP) grants, the FAA currently funds a vast majority of the cost of most planning studies and eligible improvement projects at airports in California. As a condition for receipt of a grant, an airport project sponsor must assure the FAA that it will take appropriate actions to restrict the use of land adjacent to or in the immediate vicinity of the airport to activities and purposes compatible with normal airport operations, including landing and takeoff of aircraft. The FAA also reviews airport layout plans and plans for federally funded construction to ensure compliance with Federal Aviation Regulations and airport design standards.

California Department of Transportation

Through its Division of Aeronautics, the California Department of Transportation has review and, in certain cases, permitting authority with respect to several types of airport and airportrelated land use actions. These include:

NOTICE OF PUBLIC HEARING RIVERSIDE COUNTY AIRPORT LAND USE COMMISSION

A PUBLIC HEARING has been scheduled before the Riverside County Airport Land Use Commission (ALUC) to consider the application 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. The proposed project application may be viewed at the Riverside County Administrative Center, 4080 Lemon Street, 14th Floor, Riverside, California 92501, Monday through Thursday from 8:00 a.m. to 5:00 p.m., except Monday, September 2 (Labor Day), and by appointment on Friday, September 6 from 8:30 a.m. to 5:00 p.m.

PLACE OF HEARING: Riverside County Administration Center 4080 Lemon St., 1st Floor Hearing Room Riverside, California

DATE OF HEARING: September 12, 2013

TIME OF HEARING: 9:00 A.M.

CASE DESCRIPTION:

ZAP1007RG13 – City of Menifee (Representatives: Charles La Claire and Lisa Gordon). A proposal by the City of Menifee to adopt its first City General Plan. The General Plan includes the following nine elements: Land Use, Housing, Circulation, Economic Development, Community Design, Open Space and Conservation, Safety, Air Quality, and Noise. Five of these Elements (Land Use, Housing, Circulation, Safety, and Noise) are being reviewed for consistency with airport land use compatibility criteria. The City is proposing a web-based format for its General Plan. The City includes land within Area III of the March Air Reserve Base Airport Influence Area and Compatibility Zone E of the Perris Valley Airport Influence Area.

FURTHER INFORMATION: Contact John Guerin at (951) 955-0982. The ALUC holds hearings for local discretionary permits within the Airport Influence Areas, reviewing for aeronautical safety, noise and obstructions. All other concerns should be addressed to <u>Ms. Lisa Gordon, Acting Planning Manager, City of Menifee, at (951) 672-6777.</u>

RIVERSID		
PROJECT PROPON	IENT (TO BE COMPLETED BY APPLICANT)	
Date of Application Property Owner Mailing Address	7/20/13 CITY OF MENIFEE 29714 HAUN ED MENIFEE, OA 925-86 Ath: CHAPLES LACLAIDE	Phone Number (951) 6
Agent (if any) Mailing Address		Phone Number
	ON (TO BE COMPLETED BY APPLICANT) led map showing the relationship of the project site to the airport boundary and	runways
Street Address	CITY OF MENIFEE	
Assessor's Parcel No.		Parcel Size
Subdivision Name	۰ ــــــــــــــــــــــــــــــــــــ	
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REFERRING AGEN	CY (TO BE COMPLETED BY AGENCY S	TAFF)				·
Date Received Agency Name Staff Contact Phone Number Agency's Project No.	City of Menifer Chartes ha Clair General Plan Element	<u>د</u>	ועש			Type of Project General Plan Amendment Zoning Amendment or Variance Subdivision Approval Use Permit Public Facility Other
ALUC REVIEW (T	O BE COMPLETED BY ALUC EXECUTIVE	E DIREC	CTOR)			
Application Receipt	Date Received Is Application Complete? If No, cite reasons		Yes		By No	
Airport(s) Nearby						
Primary Criteria Review	Compatibility Zone(s) Allowable (not prohibited) Use? Density/Intensity Acceptable? Open Land Requirement Met? Height Acceptable? Easement/Deed Notice Provided?		A Yes Yes Yes Yes Yes		B1 No No No No	
Special Conditions	Describe:					
Supplemental Criteria Review	Noise Safety Airspace Protection Overflight					
	O BE COMPLETED BY ALUC EXECUTIVE					
ALUC Executive Director's Action	Approve Date Refer to ALUC					
ALUC Action	Consistent Consistent with Conditions (list of Inconsistent (list reasons/attach					
August 2007						

COUNTY OF RIVERSIDE AIRPORT LAND USE COMMISSION

STAFF REPORT

AGENDA ITEM:	2.7
HEARING DATE:	September 12, 2013
CASE NUMBER:	ZAP1020TH13 – Thermal Operating Company, LLC (Representative: Nick Johnson)
APPROVING JURISDICTION:	County of Riverside
JURISDICTION CASE NO:	PP24690R1 (Plot Plan Revision) and PM36293M1 (Parcel Map Minor Change)

MAJOR ISSUES: Restriction on overnight stays; addition of irrigation reservoir and implications for wildlife attraction; consistency of installed landscaping with previously adopted conditions.

RECOMMENDATION: Staff recommends that the Commission consider the staff and applicant presentations, any public testimony, and make a finding of <u>CONDITIONAL</u> <u>CONSISTENCY</u>, subject to the conditions specified herein, including amended and added conditions. The use of the Conditional Consistency recommendation is based on the need to address concerns with the irrigation reservoir raised by Federal Aviation Administration officials.

PROJECT DESCRIPTION: PP24690R1 is a proposal to modify the previously approved proposal for development of a motorsports race track facility, with garage units on individual lots, within a 329.72-acre area. The proposal includes the addition of an on-site irrigation reservoir with aviary screen. The applicant is proposing to amend conditions relating to the Occupancy Type of structures on the individual (Founders') lots and conditions prohibiting overnight stays. Additional changes proposed by PP24690R1 include: (1) phasing of project development; (2) replacement of registration building with a member's private garage; (3) deletion of sidewalks along interior streets; (4) modifications to track grading; (5) allowance for on-site sewers to be private; (6) modifications to the off-site open channel; (7) provision for all runoff up to the 100-year storm to be retained on-site; and (8) deletion of all water quality swales. PM36293M1 is a proposal to reconfigure and relocate the Founders' lots within unrecorded portions of the parcel map, involving reduction of three to four such lots and siting of most of the remaining 35 lots along the east side of Goodwood Drive.

PROJECT LOCATION: The project site is located northerly of 62nd Avenue, easterly of Tyler Street, southerly of 60th Avenue, and westerly of Polk Street in the unincorporated community of Thermal, approximately 750 feet easterly and 2,700 feet southerly of the southerly terminus of Runway 17-35 at Jacqueline Cochran Regional Airport.

Staff Report Page 2 of 11

LAND USE PLAN: 2005 Jacqueline Cochran Regional Airport Land Use Compatibility Plan (last amended in 2006)

a. Airport Influence Area:	Jacqueline Cochran Regional Airport
b. Land Use Policy:	Airport Compatibility Zones B1, C, D
c. Noise Levels:	From below 55 CNEL to above 65 CNEL

BACKGROUND:

<u>Irrigation Reservoir</u>: The applicant is proposing an irrigation reservoir (456 feet by 299 feet in area) that would contain water on a permanent basis. The applicant had previously planned to use an existing reservoir closer to the airport for this function. The development of a new facility of this type at this location does not comply with the locational guidance for land use compatibility promulgated by Federal Aviation Administration (FAA) Advisory Circular 150/5200.2B, which recommends that bird attractants that "could cause hazardous wildlife movement into or across the approach or departure airspace" maintain a five mile separation from the airport.

In order to assure that the reservoir will not constitute a wildlife attractant, the applicant team is proposing that the reservoir be completely covered. The cover is to be secured on the ground and suspended over the water surface in such a manner as to provide for 100 percent coverage and containment, so as to prohibit access from the air, the ground, or the sides.

Officials at the regional FAA office have expressed a number of concerns with the proposal to develop a new reservoir at this location. Staff believes that the additional information provided by the applicant team's aviation consultant addresses these concerns; however, FAA officials have not responded to the aviation consultant's further explanation. FAA officials did suggest that a professional wildlife management biologist be consulted in the development of this facility to determine the potential for wildlife hazards and the adequacy of the proposed mitigation. Therefore, staff is recommending a condition that requires review and approval of the proposed reservoir design as to effectiveness in mitigating wildlife attraction by a qualified airport wildlife biologist as specified in FAA Advisory Circular 150/5200-36.

<u>Overnight Stays:</u> The prohibition on overnight stays has emerged as an issue, primarily as a result of various improvements required within the individual garage units as a result of the assignment of a non-residential occupancy classification. However, the fundamental problem here arises from the site's Specific Plan and zoning, which are for industrial use. At this time, there is no definition available that would allow for residential occupancy of these structures.

A portion of the site is located within Airport Compatibility Zone D. With a Specific Plan Amendment and ordinance amendment, that portion of the site could potentially be utilized for residential purposes.

Additionally, the portion of the site located within Compatibility Zone C is sufficiently large that

Staff Report Page 3 of 11

between 20 and 30 dwelling units could eventually be accommodated in that area while maintaining consistency with Compatibility Zone C density limitations (not to exceed one dwelling unit per five acres). These units could be clustered in the least hazardous portions of the site. Residential use and overnight occupancy would likely not be acceptable within the units proposed to be located adjacent to Zone A.

While the applicant has raised this issue specifically with regard to the individual garage lots, it has occurred to staff that the condition could potentially be interpreted as applying throughout the facility. However, there is nothing in the Compatibility Plan that prevents the operation of commercial and industrial uses on a round-the-clock basis. Therefore, staff is adding a clarification that the prohibition does not apply to nonresidential use of the tuning shop and vehicle storage building for vehicle repair and maintenance under Club supervision during the time period (10:00 P.M. to 6:00 A.M.) when occupancy of the individual private garages would be prohibited.

<u>Average Intensity:</u> No buildings are located within Airport Compatibility Zone B1, although a temporary sales trailer/club facility and temporary gatehouse are located just westerly of the westerly Zone B1 boundary. Non-structural uses within Airport Compatibility Zone B1 include a portion of the primary race track and the majority of the paddock/pit areas. No uses within Zone B1 have substantially been altered. The estimated number of automobiles on the primary track (40) along with the other non-structural uses would result in a minimal average intensity estimated at 3 people per acre on the 75 acres located within Airport Compatibility Zone B1. The project would thus not exceed the 25 persons per average acre criteria for Airport Compatibility Zone B1.

Buildings within Airport Compatibility Zone C include the control tower, tuning shop, member's garage, six of the team garages, 146 of the member's private garages, the fuel island, temporary gate house, and temporary sales trailer/club facility. The day garages, speed shop, and registration building previously proposed within Zone C have been removed from the plan and the number of member's private garages has been reduced by 4 from 150 previously. The temporary gate house and sales trailer/club facility have been added from the previous version of the plan. No floor plans or details of these temporary uses were provided, but it is expected that these would be minimal and would be removed and cease operation once the permanent buildings would be constructed. Nonbuilding oriented uses within Airport Compatibility Zone C include a portion of the primary race track, a small portion of the paddock/pit areas, go-kart track, parking lots, irrigation reservoir, pump station, and CVWD well site. The irrigation reservoir, pump station, and CVWD well site have been added from the previous version of the plan. The total building occupancy for Airport Compatibility Zone C is approximately 3,796 (reduced previously from 4,192) (assuming all member's private garages are occupied), which would calculate to an average intensity of 19 people per acre (previously 21) on the 195 acres located within Airport Compatibility Zone C. The estimated number of automobiles on the primary track (40) and go-karts on their track (15), along with the other non-building oriented uses would minimally increase the average intensity. The number of people anticipated with the temporary buildings either by themselves or jointly with the permanent buildings would likely not exceed the average intensity criteria for Zone C. The project would thus not exceed the 75 persons per average acre criteria for Airport Compatibility Zone C.

Staff Report Page 4 of 11

Buildings within Airport Compatibility Zone D include three of the team garages and 104 of the member's private garages. The number of member's private garages within Zone D has increased by 2 from 102 previously, although the total number of member's private garages has decreased across the entire plan by 2 from 252 to 250. Non-building oriented uses within Airport Compatibility Zone D include a small portion of the primary race track, a small portion of the paddock/pit areas, and parking lots. The total building occupancy for Airport Compatibility Zone D is approximately 2,468 (previously 2,422) (assuming all member's private garages are occupied), which would calculate to an average intensity of 40 people per acre (previously 39) on the 62 acres located within Airport Compatibility Zone D. The estimated number of automobiles on the primary track (40) along with the other non-building oriented uses would minimally increase the average intensity. The project would thus not exceed the 100 persons per average acre criteria for Airport Compatibility Zone D.

<u>Single-Acre Intensity</u>: The most intense areas of population within Compatibility Zone B1 would occur if all of the anticipated 40 automobiles for the primary track and their drivers would be located within a single acre. This would result in a calculated population intensity of 40 people, which would not exceed the single-acre intensity criteria for Airport Compatibility Zone B1 of 50 people.

The most intense areas of population within Compatibility Zone C would occur around the control tower, tuning shop, and member's private garages. The control tower would be located within its own single acre, the tuning shop is located within a single acre with the fuel island, and a single acre for the member's private garages would include approximately 5.77 garages based on typical minimum parcel sizes within Zone C at 7,540 square feet. The following calculations are based on the building code method as calculated by staff and the floor plans provided by the applicant. The total occupancy calculated for the control tower is 144 people, for the tuning shop and fuel island is 131 people, and for the member's private garages is 132 people. These would not exceed the single-acre intensity criteria for Airport Compatibility Zone C of 150 people. In addition, the number of people anticipated with the temporary buildings by themselves would likely not exceed the single-acre intensity criteria for Zone C.

The most intense areas of population within Compatibility Zone D would occur around the member's private garages. As detailed previously, total occupancy calculated for member's private garages is 132 people. This would not exceed the single-acre intensity criteria for Airport Compatibility Zone D of 300 people.

<u>Prohibited Uses:</u> The project proposes uses that are not prohibited within each of the three Airport Compatibility Zones. The proposed control tower would be a three-story structure, with the third story to be occupied by the control room and its staff. Pursuant to Table 2A of the Countywide Policies, buildings with more than three aboveground habitable floors are a prohibited use in Airport Compatibility Zone C.

<u>Noise:</u> The site is located within the area subject to average aircraft noise levels ranging from below 55 CNEL to above 65 CNEL. As a non-residential use not including any noise sensitive uses, no

Staff Report Page 5 of 11

special measures to mitigate aircraft-generated noise are required.

<u>PART 77:</u> The project consists of multiple buildings at various distances to the southerly end of Runway 17-35 at Jacqueline Cochran Regional Airport. The proposed control tower building is the tallest building with a total height of 60' 7". This building previously was submitted to Federal Aviation Administration (FAA) for Obstruction Evaluation pursuant to Aeronautical Study Numbers (ASNs) 2012-AWP-2704-OE through 2012-AWP-2707-OE and received notices of no hazard to air navigation. Conditions included in FAA's determinations are included.

The other buildings proposed do not have pad elevations and building heights that require FAA review. With the proposed conditions to require ALUC review of any future revision or proposal of pad elevations, this would ensure that FAA review is required when deemed appropriate. The founders' lots do not have specific buildings proposed at this time; however, based on the "Standard Garage" plan and the pad elevations, numerous buildings would require review by FAA. The proposed conditions would require review by FAA for individual buildings at time of building permit application based on the specific building proposed at that time and the reference table provided.

<u>Open Area:</u> Compatibility Zones B1, C and D require that 30%, 20%, and 10% of area within major projects (10 acres or larger) be set aside as open land that could potentially serve as emergency landing areas. The proposed track areas would provide the most appropriate open area given it typically provides for wide linear areas free of obstructions. The main track area makes up approximately 75 acres of open space within Zone B1 (100%). The main track area and the go-kart track make up 175.5 acres of open space within Zone C (90%). The main track area makes up approximately 51.5 acres of open space within Zone D (83%).

CONDITIONS:

- 1. Prior to the issuance of building permits, the landowner shall convey an avigation easement to Jacqueline Cochran Regional Airport, which shall be recorded, or shall provide evidence that such an easement covering the property has already been recorded. Copies of the avigation easement, upon recordation, shall be forwarded to the Riverside County Planning Department and to the Riverside County Airport Land Use Commission. [This condition shall be considered as "MET."]
- 2. Any outdoor lighting installed shall be hooded or shielded to prevent either the spillage of lumens or reflection into the sky, and shall comply with Riverside County Ordinance No. 655, as applicable. Outdoor lighting plans, if any, shall be transmitted to Riverside County Economic Development Agency Aviation Division personnel and to the Jacqueline Cochran Regional Airport for review and comment. (Failure to comment within thirty days shall be considered to constitute acceptability on the part of the airport manager.)

Staff Report Page 6 of 11

- 3. The following uses shall be prohibited:
 - (a) Any use which would direct a steady light or flashing light of red, white, green, or amber colors associated with airport operations, or any type of strobe light, 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, livestock operations, 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, incinerators, and landfills.)
 - (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, nursing homes, places of worship, highly noise-sensitive outdoor nonresidential uses, and aboveground bulk storage of 6,000 gallons or more of hazardous or flammable materials.
- 4. The attached notice shall be provided to all potential purchasers and tenants and the contents of such notice language shall also be contained in a legally recordable instrument to be recorded at time of map recordation or building permit issuance.
- 5. Any detention or retention basin shall be designed so as to provide a maximum 48-hour detention period for the design storm (may be less, but not more), and to remain totally dry between rainfalls. Vegetation in and around the retention basin that would provide food or cover for bird species that would be incompatible with airport operations shall not be utilized in project landscaping.
- 6. Noise attenuation measures shall be incorporated into the design of office areas of structures, as necessary to ensure interior noise levels from aircraft operations are at or below 45 CNEL.
- 7. No portion of any roadway or track shall be located within the Runway Protection Zone.

Staff Report Page 7 of 11

- 8. No use of the automobile racetrack for the purpose of spectator sports, in which guests pay for admission to an event or series of events, or to which the general public is invited, is included in this determination of consistency.
- 9. Development of the area addressed through Plot Plan No. 24690 **Revised Permit** Substantial Conformance No. 1 shall comply with all nonresidential intensity criteria and open area requirements of the applicable airport compatibility zones.
- 10. All structures shall maintain a minimum perpendicular distance of 750 feet from any point along the centerline of Runway 17-35 of Jacqueline Cochran Regional Airport, as the runway is depicted on the Airport's Master Plan (including any point on the centerline of the runway as extended to the southerly boundary of Airport Compatibility Zone A).
- 11. Occupancy of the 3rd floor of the Control Tower shall be limited to track control officials only or their designees.
- 12. Prior to building permit issuance on any of the Founders' Lots with a net area of 7,540 square feet or less, County Plan Check officials shall verify verification that either: (1) the proposed buildings does not exceed the "Standard Garage" plan or (2) the larger building has been submitted to the Riverside County Airport Land Use Commission staff and determined to be consistent shall be provided. The "Standard Garage" shall be defined as having a total square footage not exceeding 6,000 7,150 square feet, with office, entertainment, (and kitchen areas, as ,if applicable) area not exceeding 2,000 4,320 square feet, and the remainder of the building devoted to storage, garage, and warehousing uses (Occupancy Type S uses), and a height not exceeding two stories or 42 feet. Any building on such lots proposing either (1) a total square footage exceeding 6,000 7,150 square feet or (2) more than 2,000 4,320 square feet of uses other than storage, garage, and warehousing Occupancy Type S uses, or with a height exceeding two stories or 42 feet, shall be submitted to the Riverside County Airport Land Use Commission for review.
- 13. Development on Founders' Lots shall comply with the following standards: (1) the floor area ratio shall not exceed 0.95; (2) lot coverage shall not exceed 0.5; (3) the proportion of the building allocated to office uses or other than storage, garage, and warehousing uses whose intensity exceeds Occupancy Type S uses shall not exceed 0.6; (4) no uses more intense than office uses and no assembly uses are permitted; (5) no residential uses or overnight occupancy (occupancy between the hours of 10:00 P.M. and 6:00 A.M. between 2200 hours and 600 hours military time) is permitted; (6) the building does not exceed 42 feet in height; (7) no parking spaces are provided outside of the garage; and (8) garages contain a minimum space for two automobiles. If any of these criteria are not met, the building shall be submitted to the Riverside County Airport Land Use Commission for review.
- 14. The following special occupancy load restrictions shall be posted:

- a) The maximum number of persons permitted in the registration/administration building at any given time shall not exceed one hundred fifty (150) persons.
- b) The maximum number of persons permitted in the tower building at any given time shall not exceed one hundred fifty (150) persons.
- c) The maximum number of persons permitted in **the members' storage garage in the village area** each of the day garage structures at any given time shall not exceed seventy-five (75) persons.
- d) The maximum number of persons permitted in the tuning shop building at any given time shall not exceed one hundred fifty (150) persons.
- 15. A notice to potential purchasers of lots, indicating that no residential uses or overnight occupancy (between 10:00 P.M. and 6:00 A.M. between 2200 and 600 hours military time) shall be permitted, shall be provided in the form of a legally recordable instrument to ALUC staff for review and approval regarding content of the notice. Said instrument shall be recorded at the time of map recordation for each unit of Parcel Map No. 36293. Prior to sale of any individual lot, this notice shall be provided to potential purchasers. This restriction shall also be included within CC&Rs. This restriction does not apply to the nonresidential use of the tuning shop and members' storage garage in the village area for purposes of vehicle repair and maintenance during those hours, under the supervision of Club officials.
- 16. No trees, light poles, utility poles, fixed lighting or any other object greater than four feet in height and thicker than four inches within main track area shall be allowed within designated open areas.
- 17. Pole affixed lighting within the go-kart area shall be limited to 12-feet in height. Per the applicant's comment, racing on the track and go-kart track shall be limited to the hours of 7:00 A.M. to 7:00 P.M.
- 18. No pole affixed lighting shall be allowed on interior private streets.
- 19. The control tower shall be limited to a maximum 3 above ground habitable floors.
- 20. Development on Founders' Lots shall be reviewed for determination of whether FAA review is required for Obstruction Evaluation. The Exhibit titled Buildings Summary Table and dated March 27, 2012 shall be used as a guide for determining whether a building is required to be reviewed based on the pad elevation, building height, distance to the ultimate end of the runway, elevation of the ultimate end of the runway, and a relevant slope ratio of 1:100. ALUC staff shall be consulted if there is any issue with this determination at time of building

permit application. If FAA review is deemed to be required, the development shall comply with any subsequent determination and conditions from the FAA.

- 21. Any future revisions to the Plot Plan or any specific proposal for grading or pad elevations for Phase II as identified on the Substantial Conformance Exhibit for Plot Plan No. 24690 dated 3/20/12 shall be transmitted to ALUC staff for review to determine whether submittal to ALUC is required. This review is intended to confirm any changes in intensities proposed and to determine whether FAA review for Obstruction Evaluation may be required.
- 22. Prior to issuance of a building permit for the proposed structure, the permittee shall provide evidence that the Federal Aviation Administration has issued a "Determination of No Hazard to Air Navigation" for the proposed control tower building, filed as ASNs 2012-AWP-2704-OE through 2012-2707-OE. Once such a determination has been issued, the latitude, longitude, coordinates, and height of such structure shall not be changed, and the site elevation of the structure at top point shall not be increased without further notice to, and review by, the Federal Aviation Administration through the Form 7460-1 process. [This condition shall be considered as "MET."]
- 23. The Federal Aviation Administration has conducted an aeronautical study of the control tower building (Aeronautical Study Nos. 2012-AWP-2704-OE through 2012-AWP-2707-OE) and has determined that neither marking nor lighting of the structure 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 K Change 2 and shall be maintained in accordance therewith for the life of the project.
- 24. The maximum height of the structure, including all roof-mounted appurtenances (if any) shall not exceed 61 feet above ground level, and the maximum elevation at the top of the structure shall not exceed 82 feet below mean sea level.
- 25. The specific coordinates, height, and top point elevation of the control tower structure shall not be amended without further review by the Airport Land Use Commission and the Federal Aviation Administration; provided, however, that reduction in building height or elevation shall not require further review by the Airport Land Use Commission.
- 26. Temporary construction equipment used during actual construction of the structural improvements shall not exceed the height of the building (61 feet above ground level), unless separate notice is provided to the Federal Aviation Administration through the Form 7460-1 process.
- 27. Within five (5) days after construction of the control tower reaches its greatest height, FAA Form 7460-2, Notice of Actual Construction or Alteration, shall be completed by the project proponent or his/her designee and submitted to the Federal Aviation Administration

Southwest Regional Office Obstruction Evaluation Group, 2601 Meacham Boulevard, Fort Worth TX 76137. This requirement is also applicable in the event the project is abandoned.

- 28. The irrigation reservoir shall be completely covered at all times from top, sides, and bottom so as to prevent access by birds and other wildlife. The cover shall consist of 1" x 1" UV-protected polypropylene mesh secured at ground level around the edges and suspended four feet above the edge elevation, on steel cables spaced not greater than 30 feet apart, as depicted on the attached exhibits. The suspension design is intended to allow for the sagging of the netting material without touching the surface of the waters, so that the material stays dry. The cables and netting material shall be maintained in operable condition (no gaps or tears) throughout the life of the permit, as long as the reservoir holds water or other liquid.
- 29. Prior to issuance of a letter of consistency for this project, the applicant team shall submit to the Riverside County Airport Land Use Commission a letter from a qualified airport wildlife biologist (as specified in FAA Advisory Circular 150/5200-36) stating that he/she has reviewed the proposed reservoir design and finds that the proposed measures will be effective in mitigating wildlife attraction to the facility.
- 30. In the event that any incidence of wildlife hazard affecting the safety of air navigation occurs as a result of the presence of the irrigation reservoir on-site, upon notification to the airport operator (currently the Riverside County Economic Development Agency) of an incidence, the airport operator shall notify Thermal Operating Company, LLC (or its successor(s)-in-interest) (hereafter referred to as "owner") in writing. Within 15 days of written notice, the owner shall be required to promptly take all measures necessary to eliminate such wildlife hazard, including, if necessary, the emptying of the reservoir and replacement of the netting material. An "incidence" 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 owner shall work with the airport operator to prevent recurrence of the incidence. Suggested measures may include providing for scheduled joint inspections of the reservoir by representatives of the owner and the airport to assure that the cables and netting material continue to prevent access to the waters. For each such incidence made known to the owner, 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 owner's satisfaction.
- 31. The covenants, conditions, and restrictions established for this project shall specify that any splash pools or other water features associated with individual member garage units shall be equipped with electronic covers. The water shall not be allowed to stagnate and shall be completely covered at all times when the individual member garage unit is not in immediate use.

Staff Report Page 11 of 11

- 32. This finding of consistency does not pertain to the following notes listed on the PP24690R1 exhibit plotted on July 22, 2013:
 - (a) Note that Occupancy Type for the Members' Private Garages is R/S2.
 - (b) Note that overnight stays are permitted in the D zone.

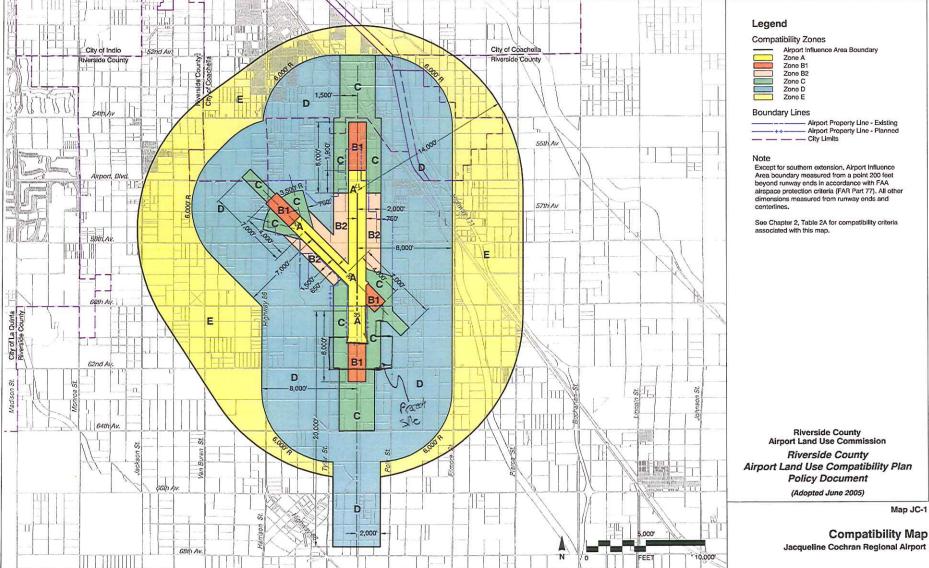
The project is located within an area designated for industrial use within Specific Plan No. 303. Prior to issuance of a letter of consistency for this project, the applicant team shall submit an amended exhibit that excises these references.

33. Prior to issuance of building permits for garage units on Lots 156 through 201, a block wall shall be constructed along the property line separating the easterly boundary of the airport property and the private street providing access to these properties.

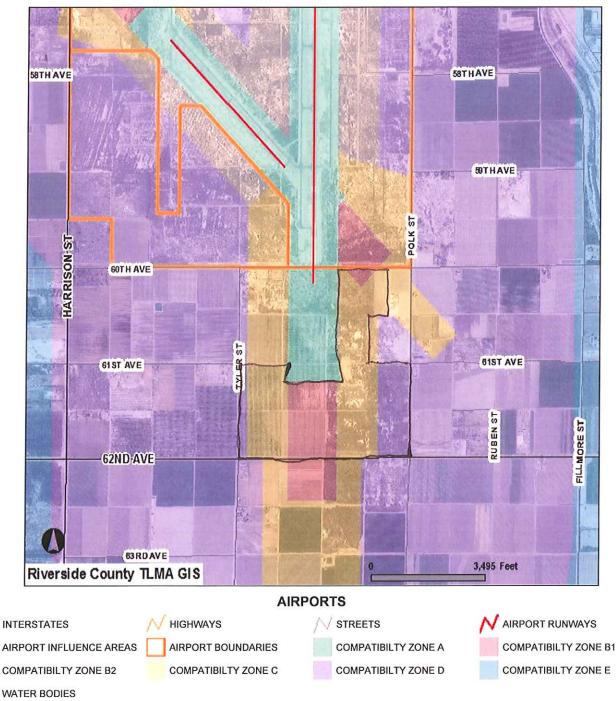
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NOTICE OF AIRPORT IN VICINITY

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 vou. Business & Professions Code Section 11010 (b)



INDIVIDUAL AIRPORT POLICIES AND COMPATIBILITY MAPS CHAPTER 3

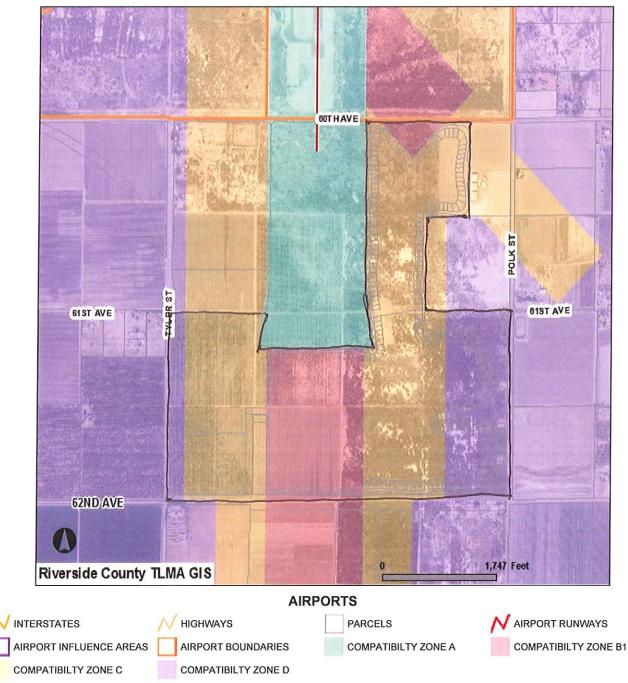


RIVERSIDE COUNTY GIS

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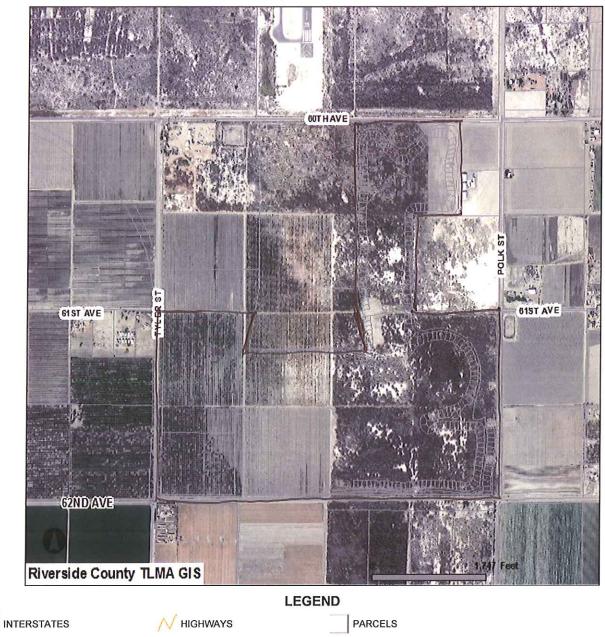


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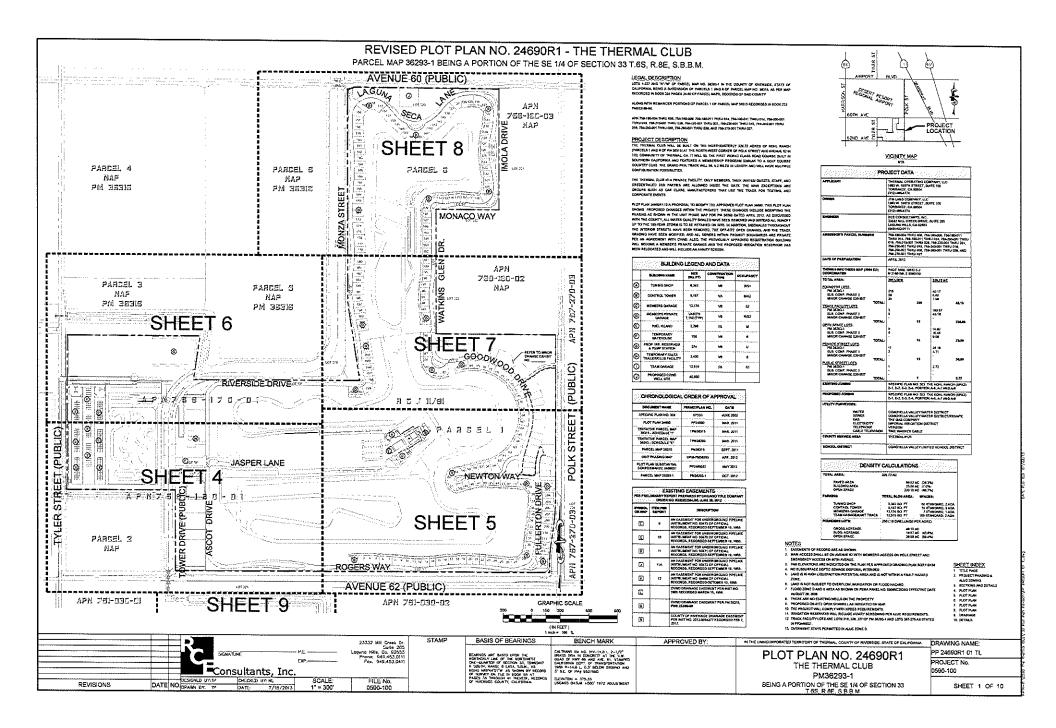


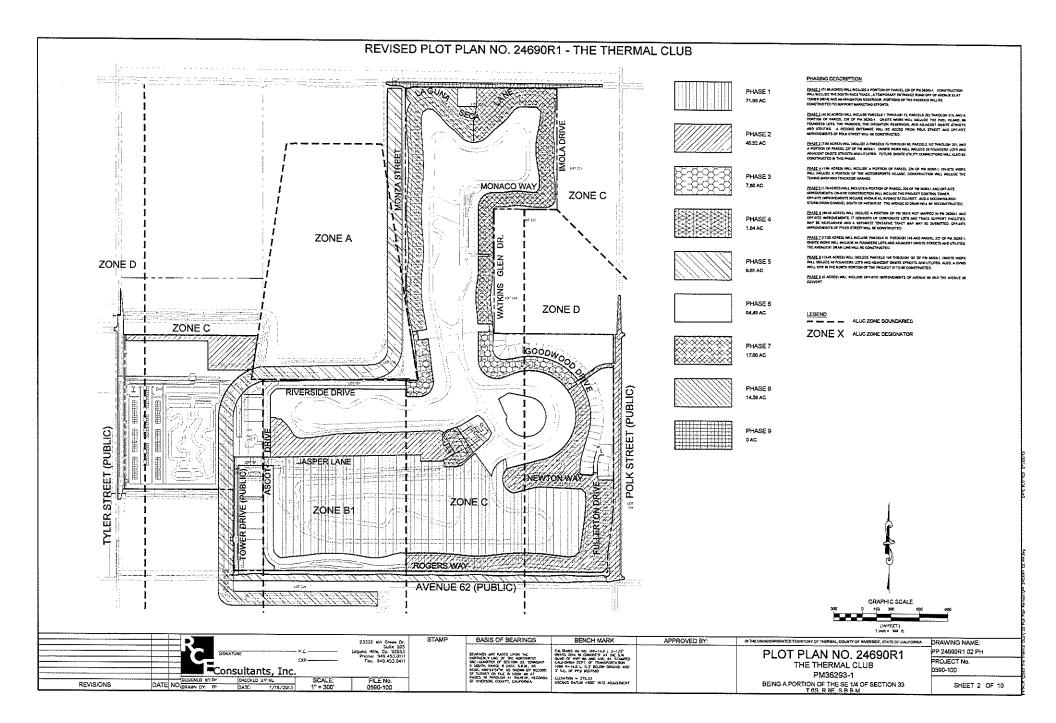
RIVERSIDE COUNTY GIS

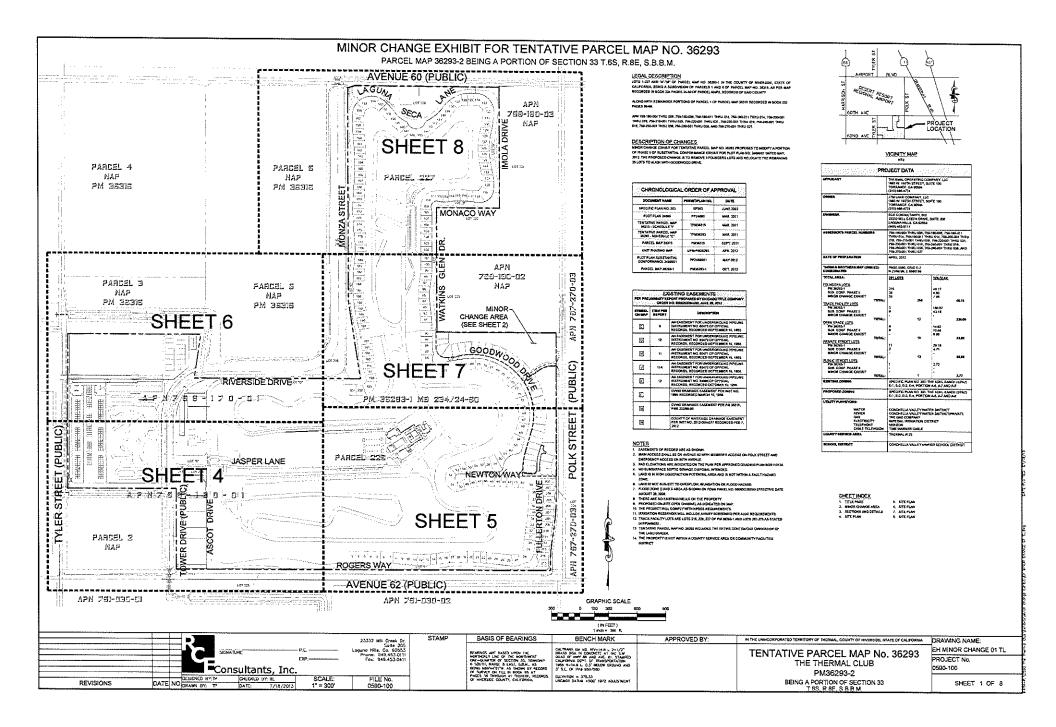
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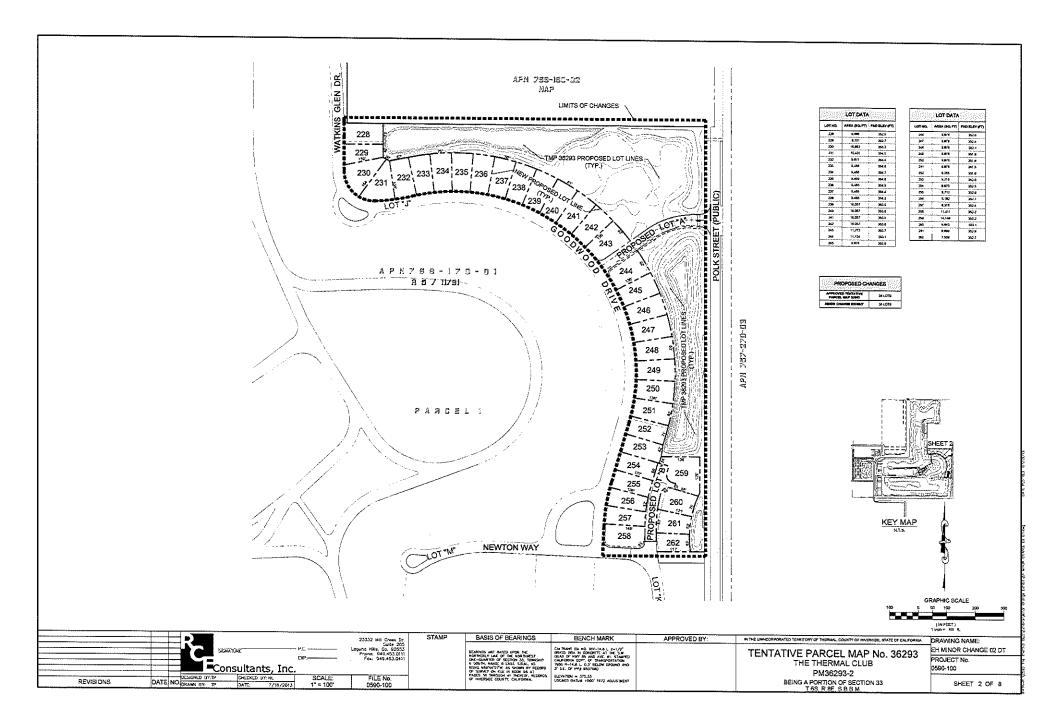
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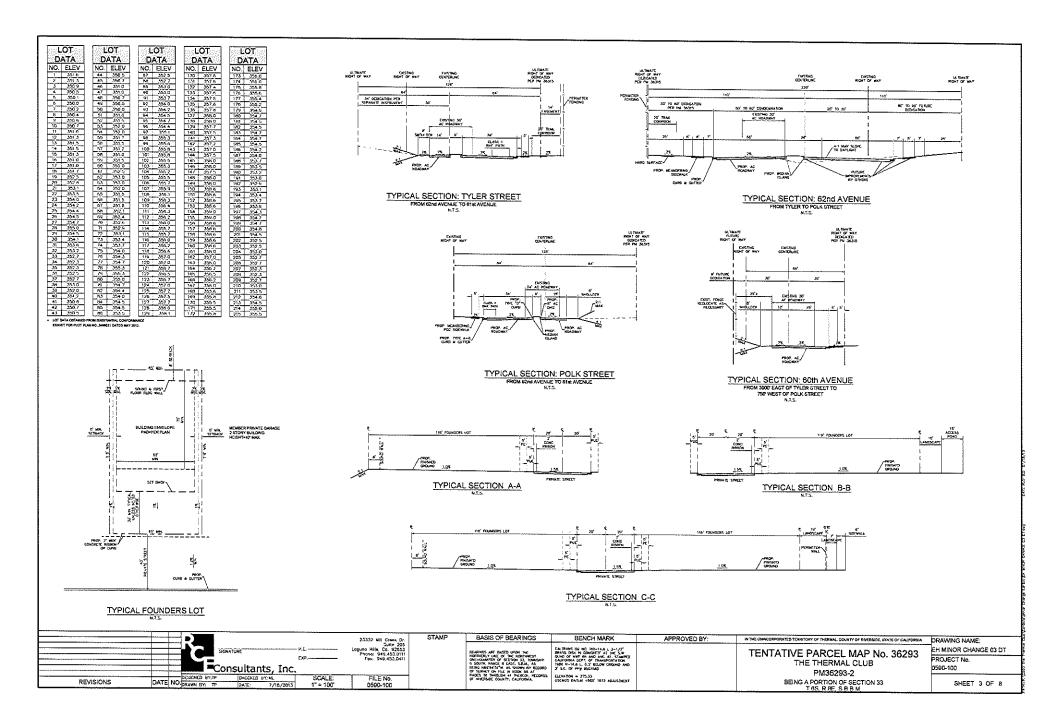
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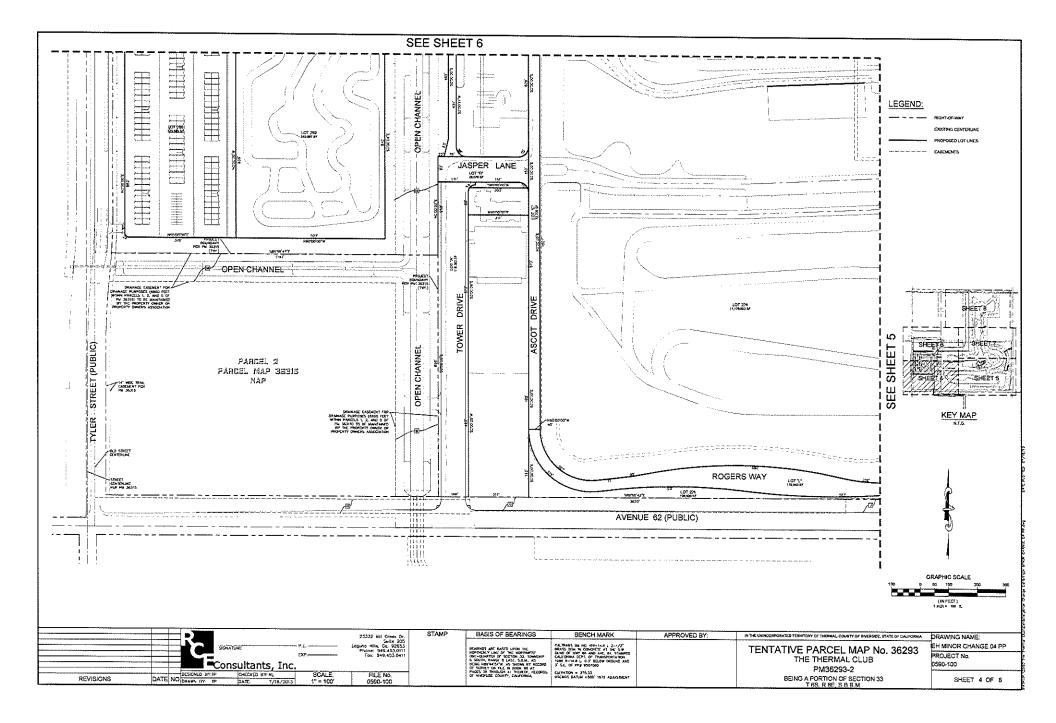


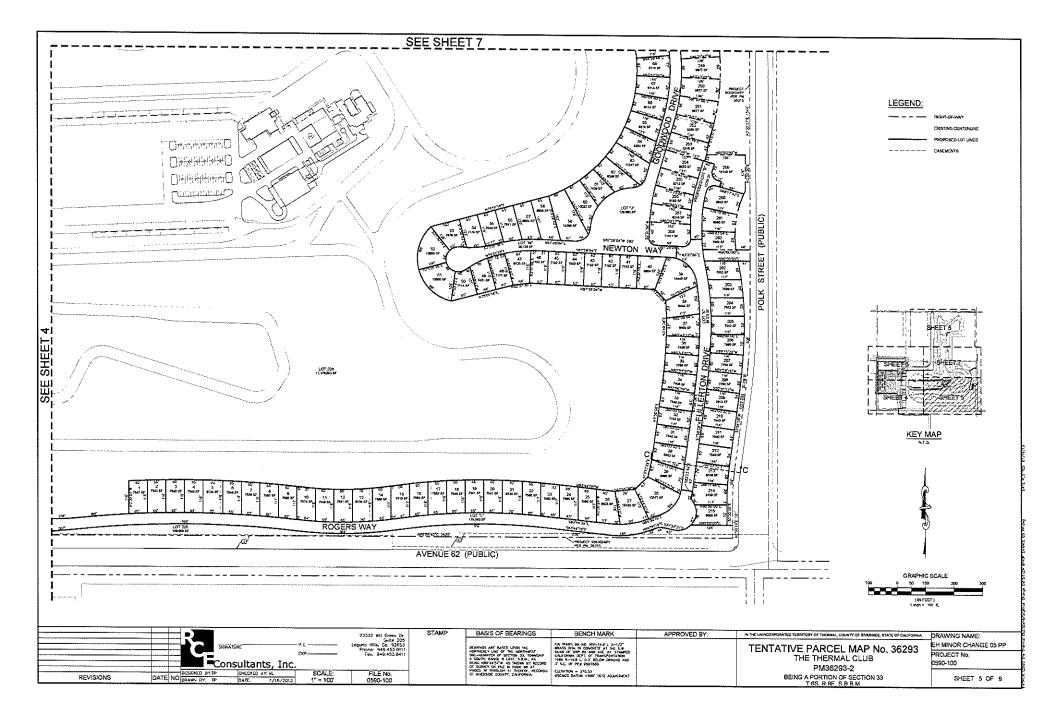


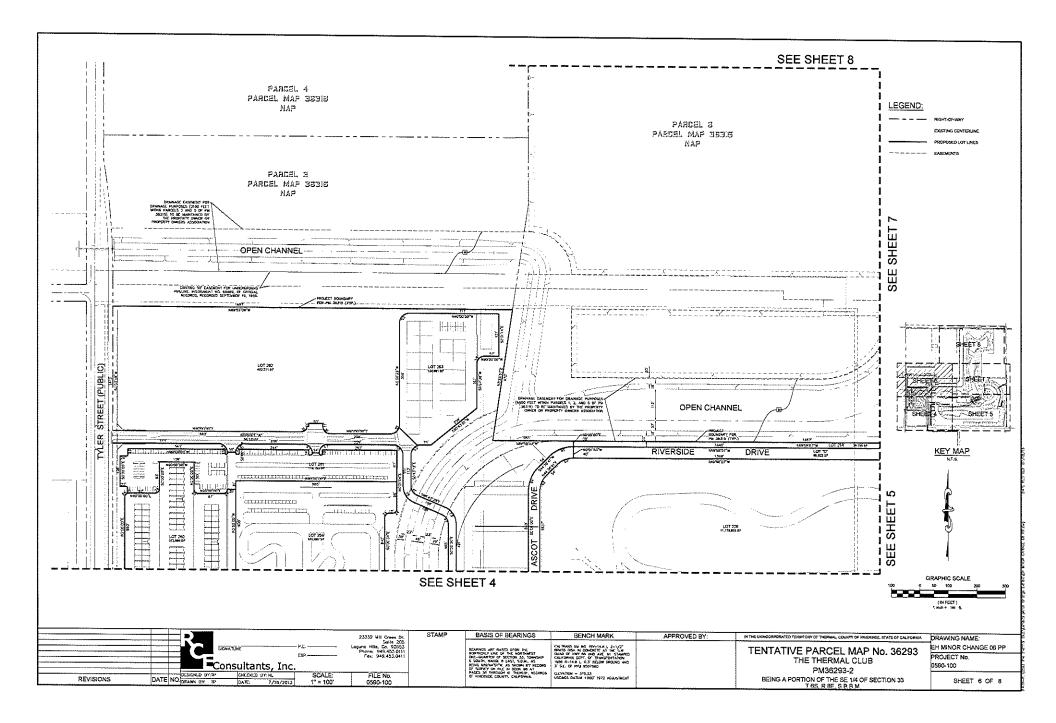


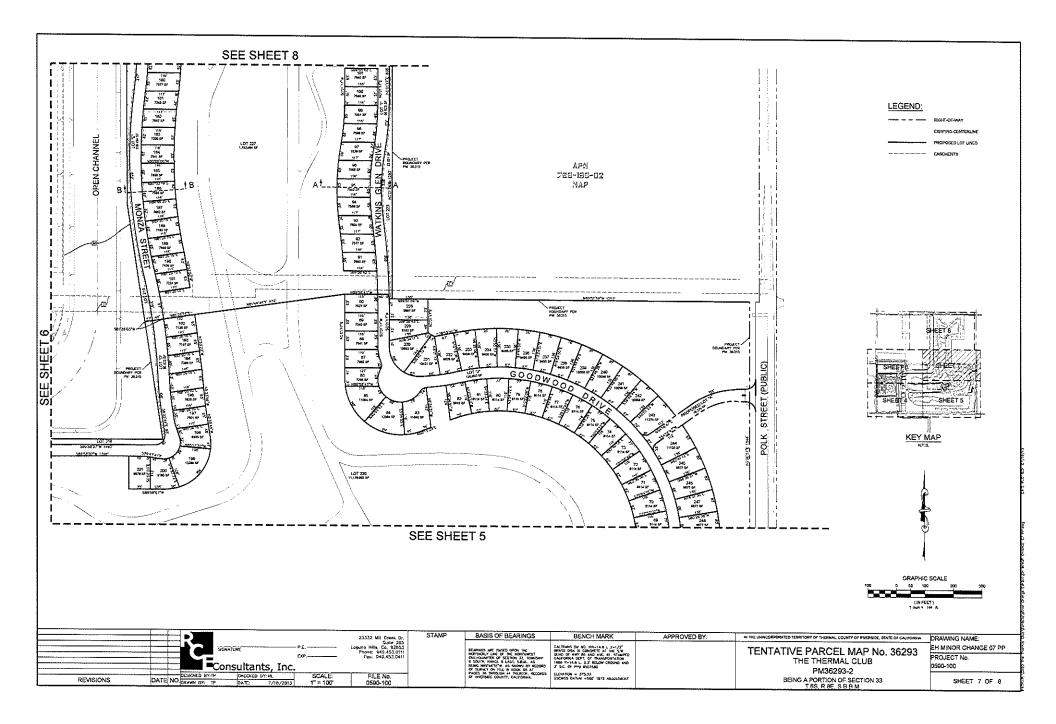


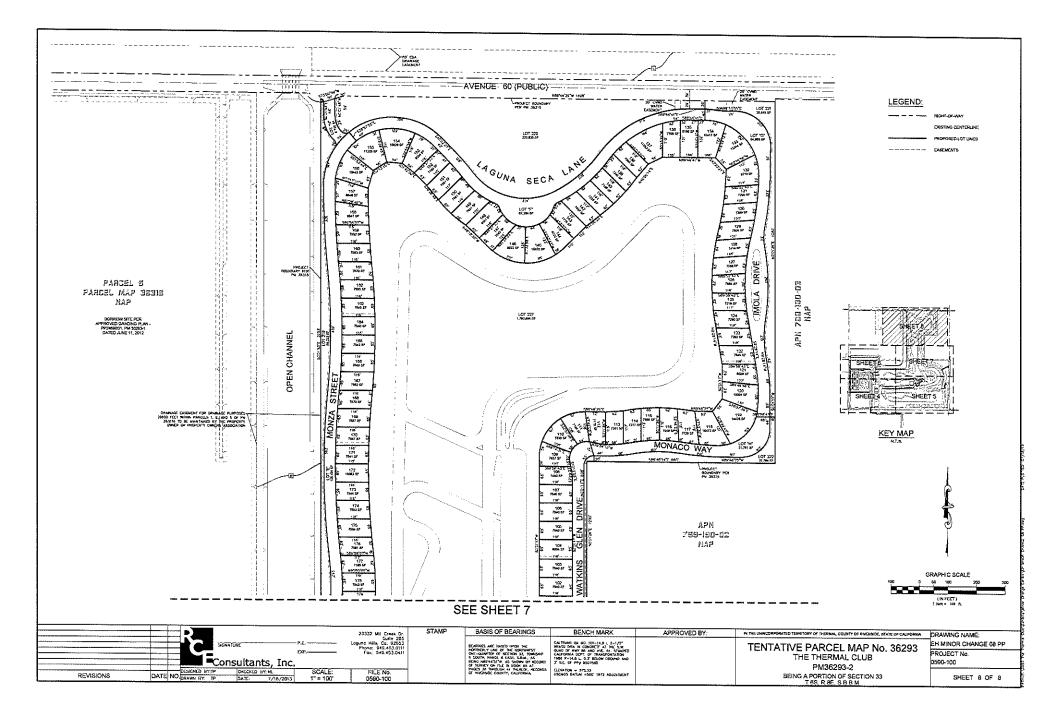


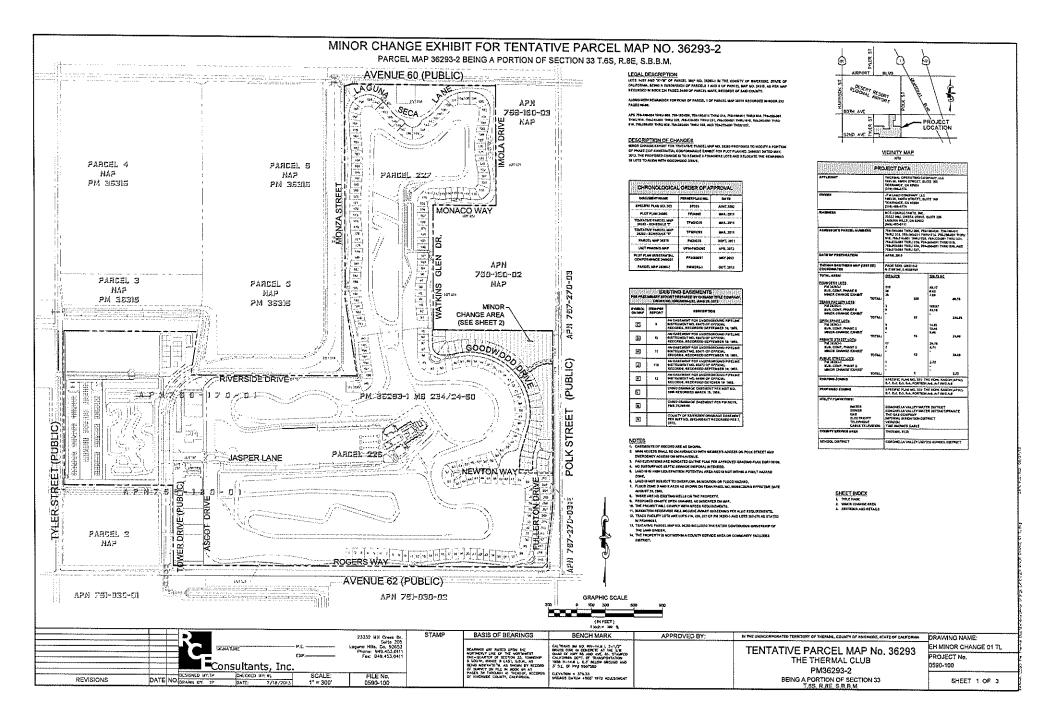


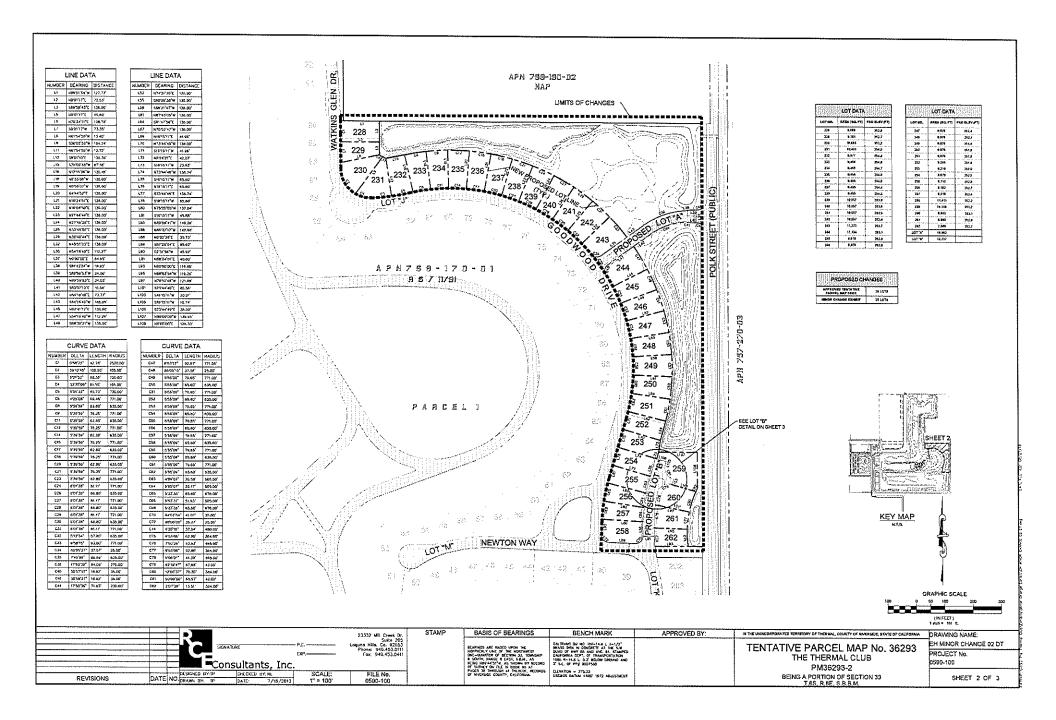


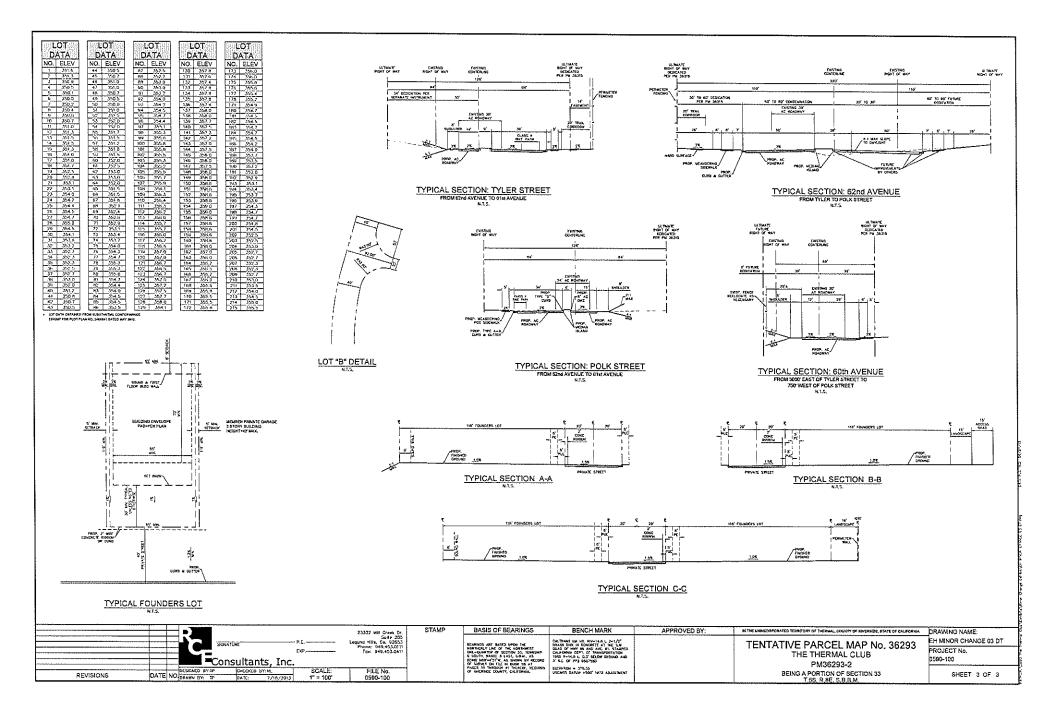


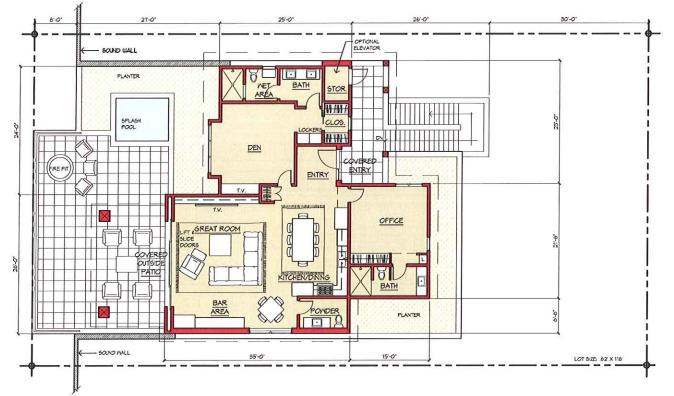




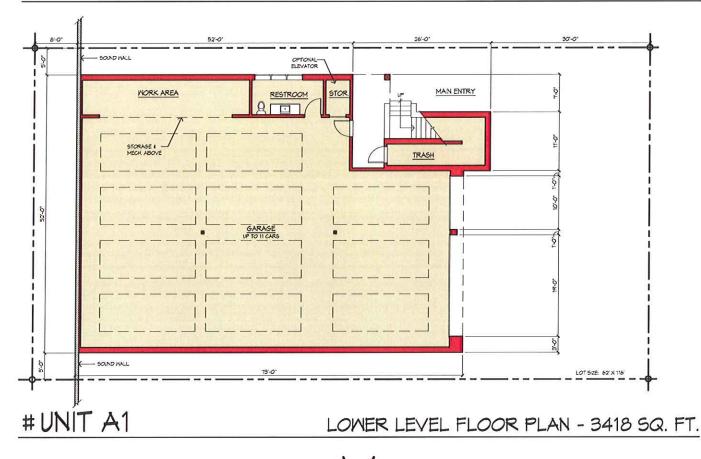




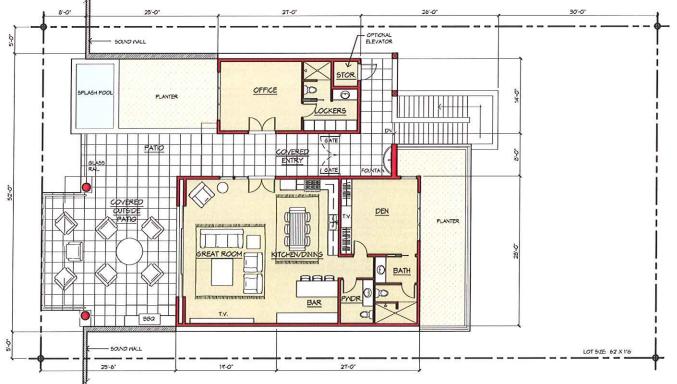




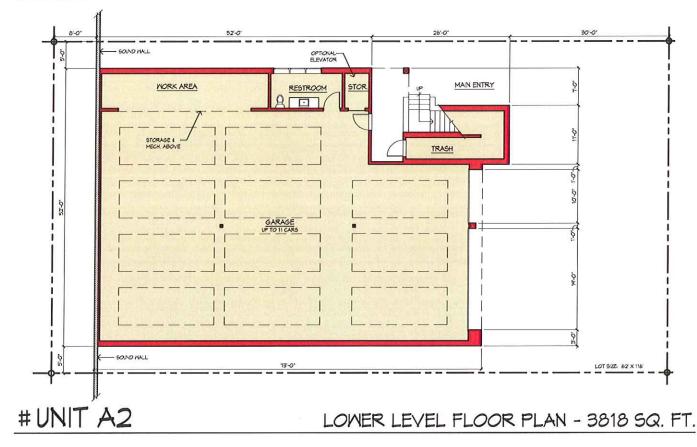
UPPER LEVEL FLOOR PLAN - 1825 SQ. FT.



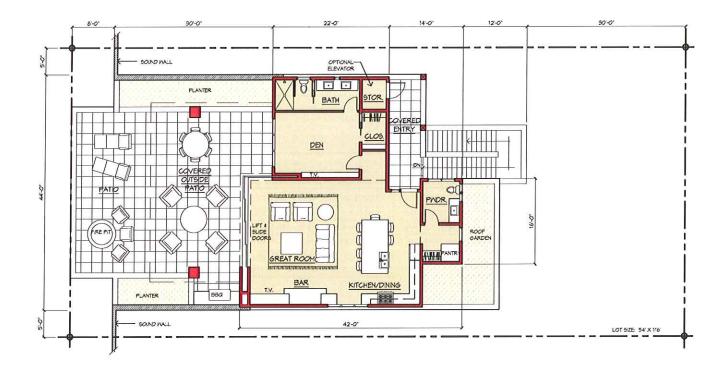




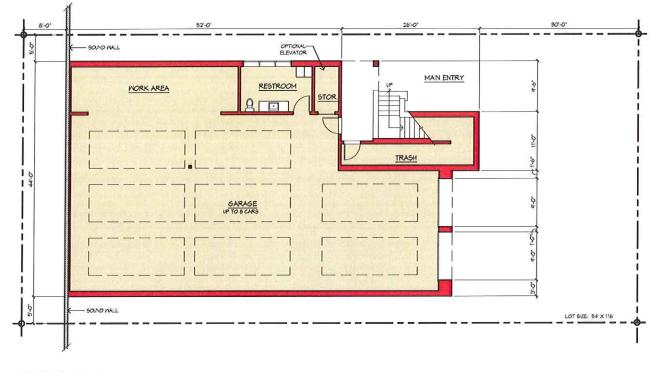
UPPER LEVEL FLOOR PLAN - 1666 SQ. FT.







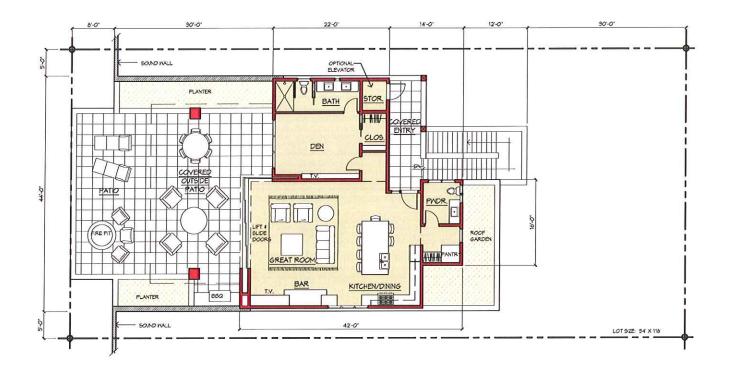
UPPER LEVEL FLOOR PLAN - 1386 SQ. FT.



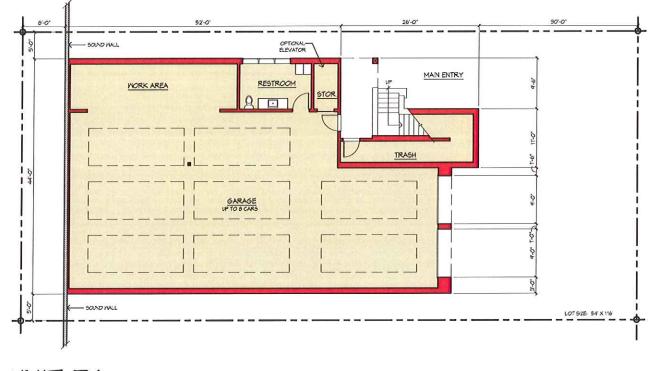
#UNIT B1

LOWER LEVEL FLOOR PLAN - 2816 SQ. FT.





UPPER LEVEL FLOOR PLAN - 1386 SQ. FT.



#UNIT B1

LOWER LEVEL FLOOR PLAN - 2816 SQ. FT.























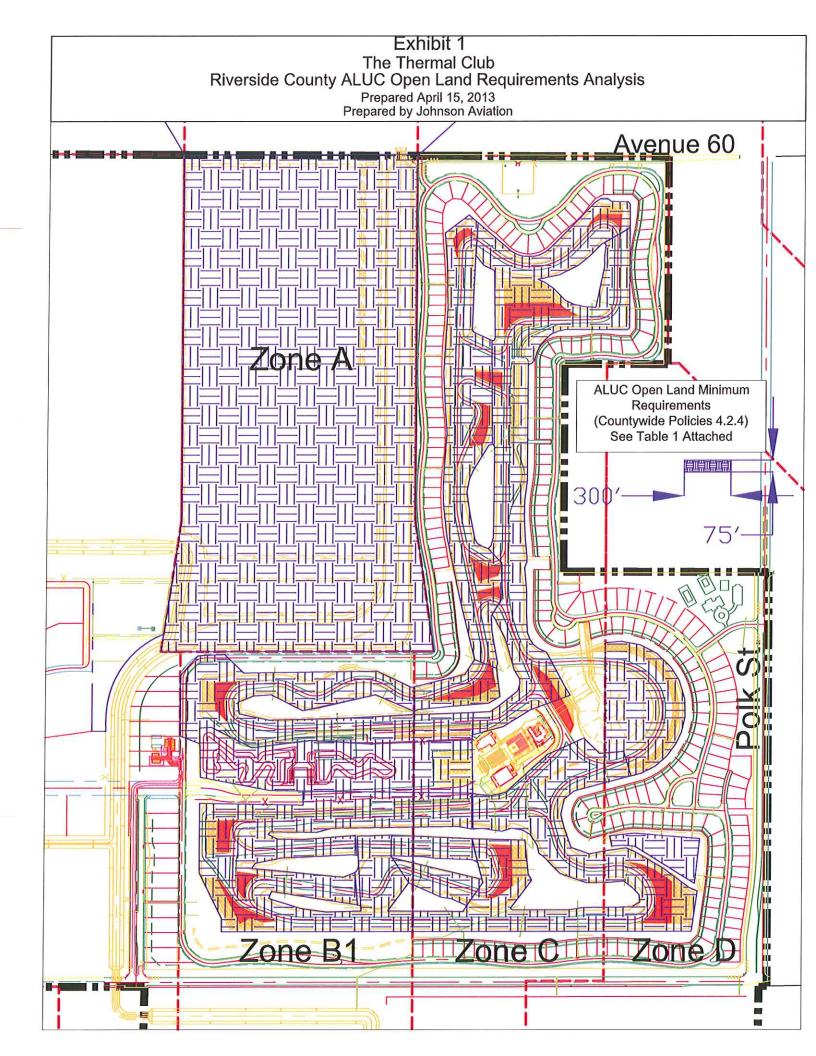
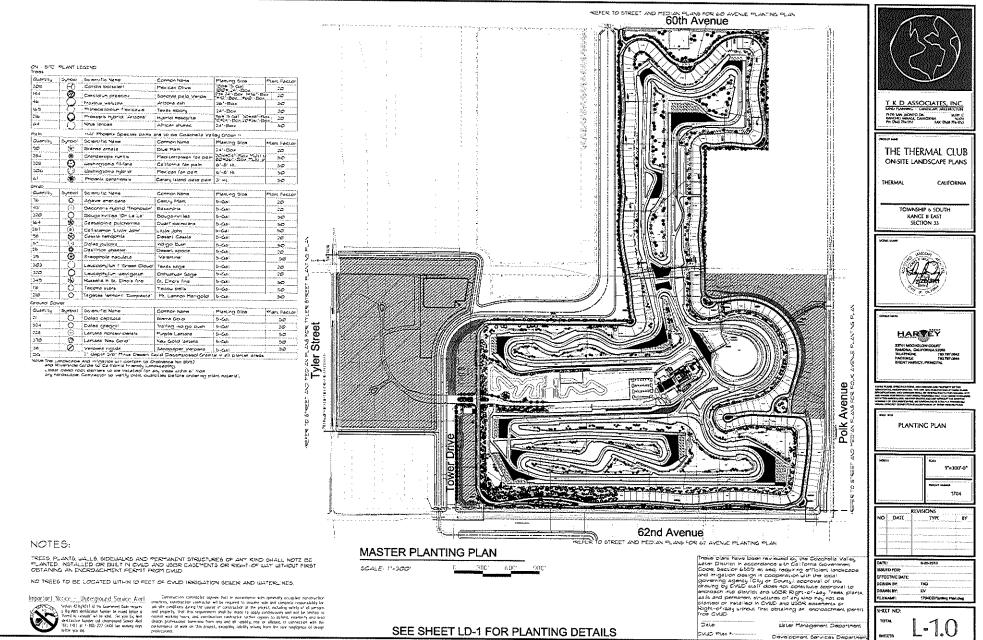
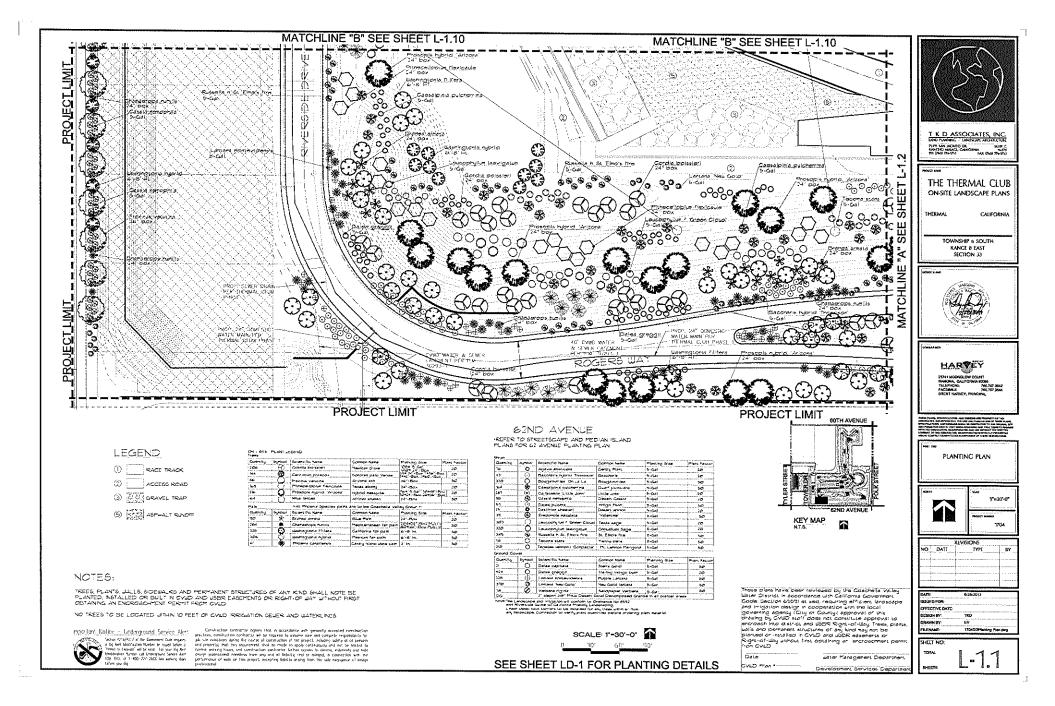
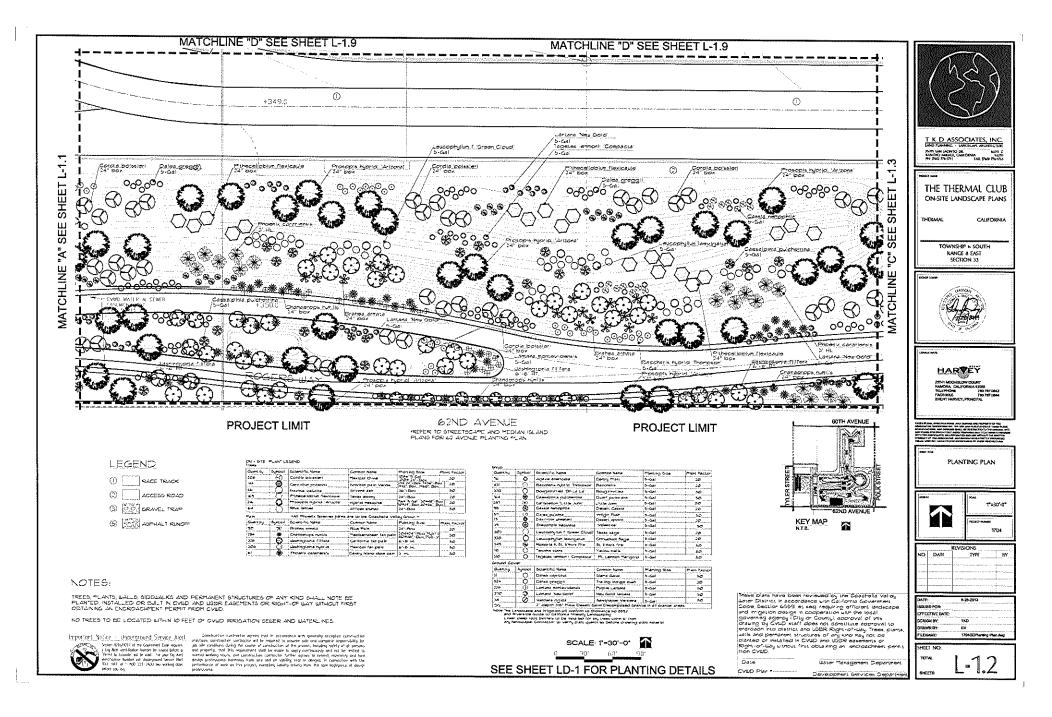
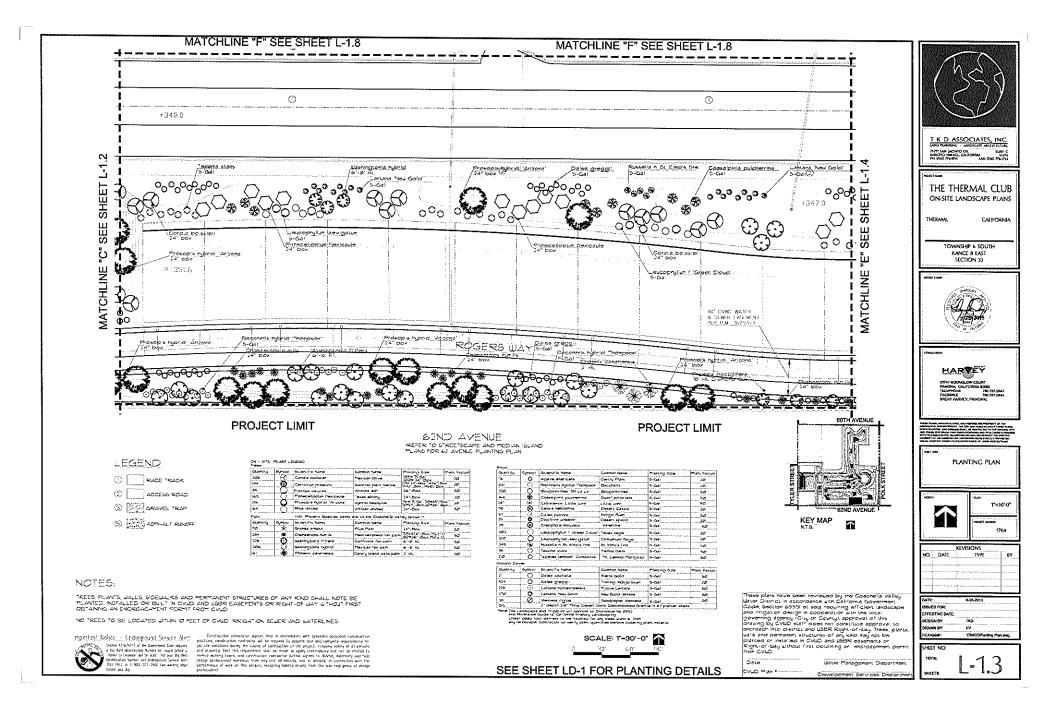


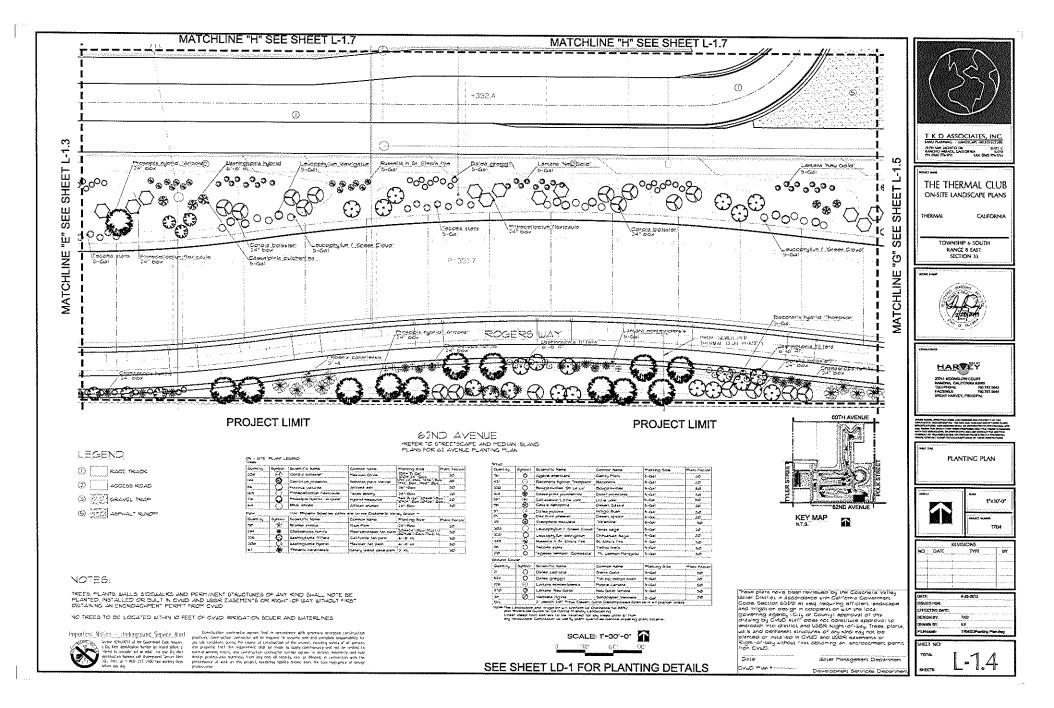
Table 1				
The Thermal Club				
Riverside County ALUC Open Land Requirements Analysis				
Prepared April 15, 2013				
Prepared by Johnson Aviation				
ALUC Zone	ALUC Open Land Requirement	TMP Plan Open Land with Landscaping	TMP Total Land within ALUC Zone	TMP Open Land Acres with Landscaping
Zone A	100%	100%	111.2	111.2
Zone B1	30%	63%	72.5	45.6
Zone C	20%	46%	150.1	68.7
Zone D	10%	25%	62.8	15.4

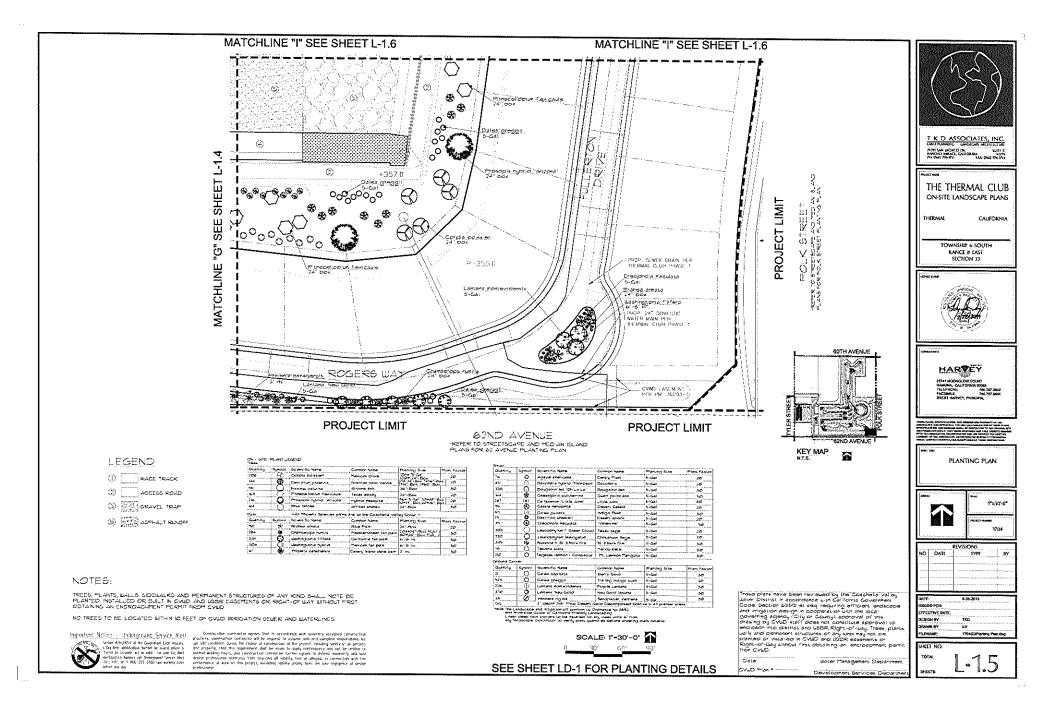


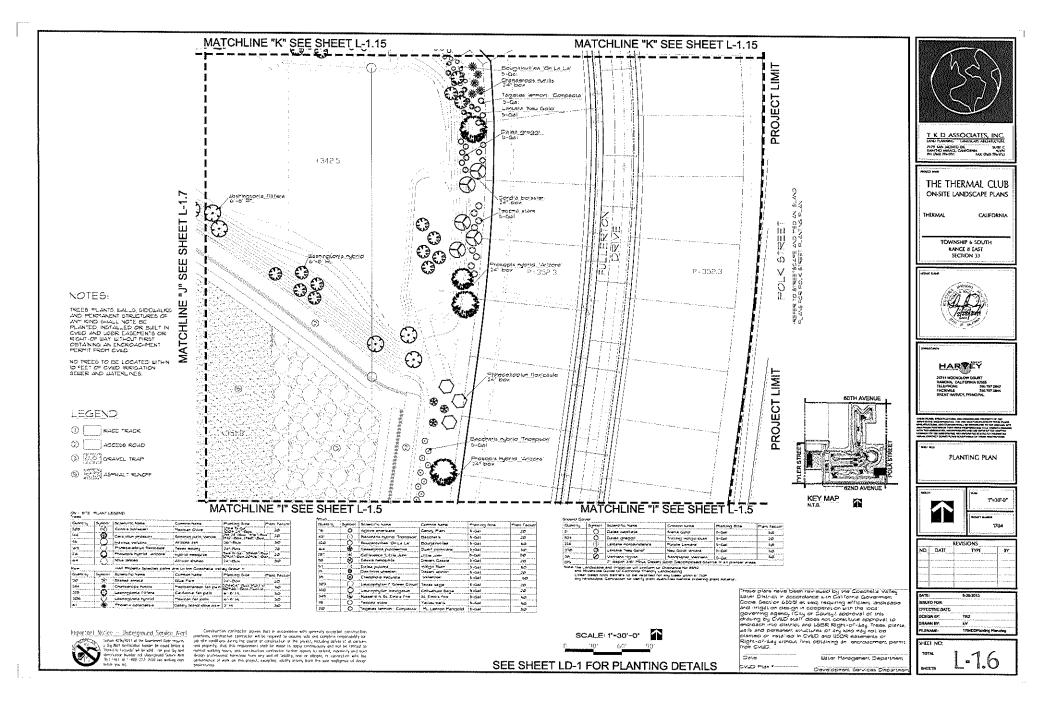


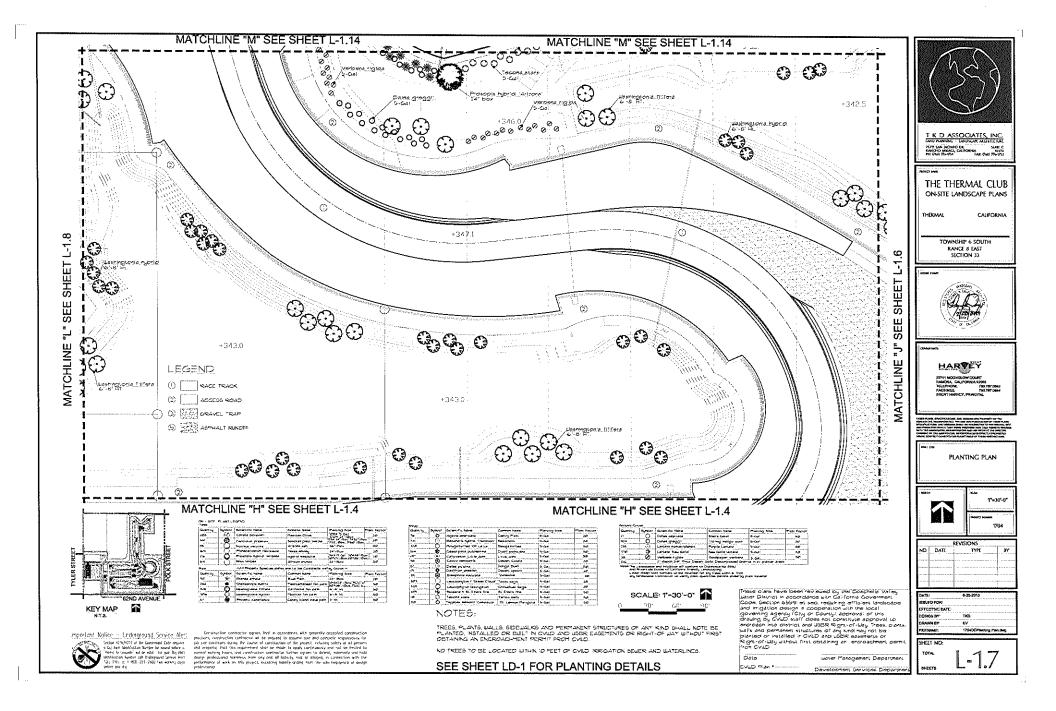


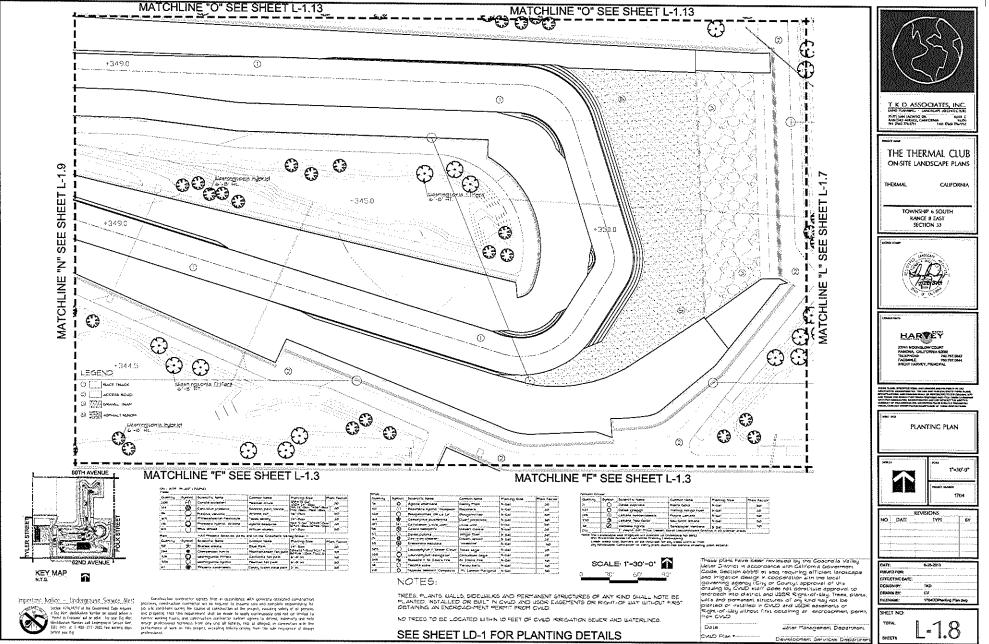


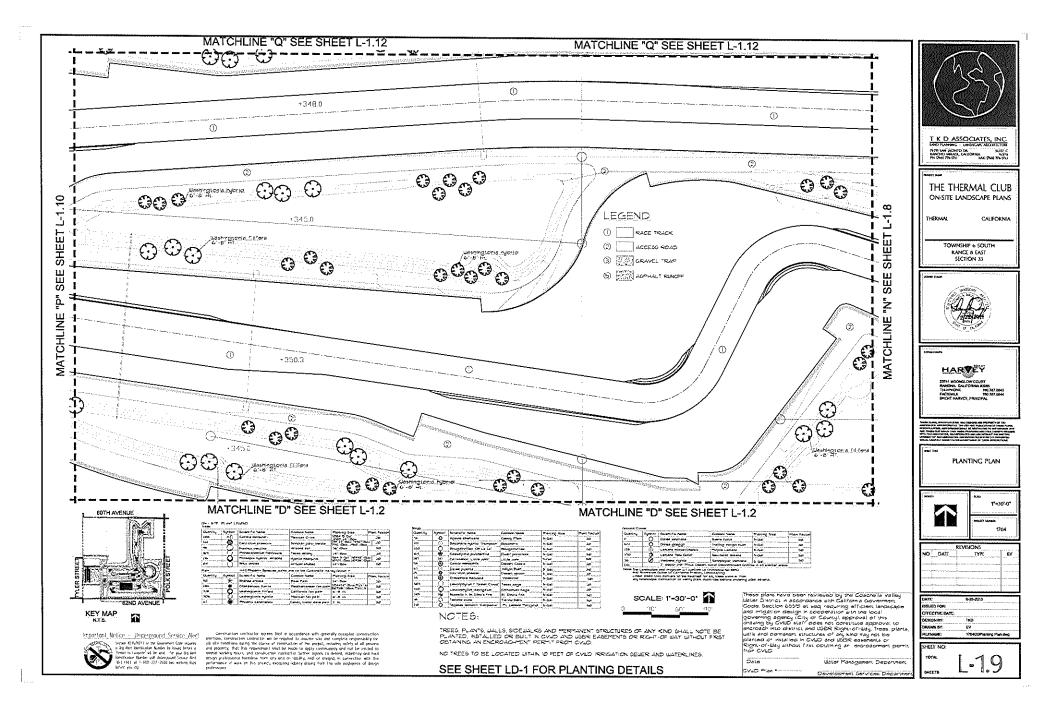


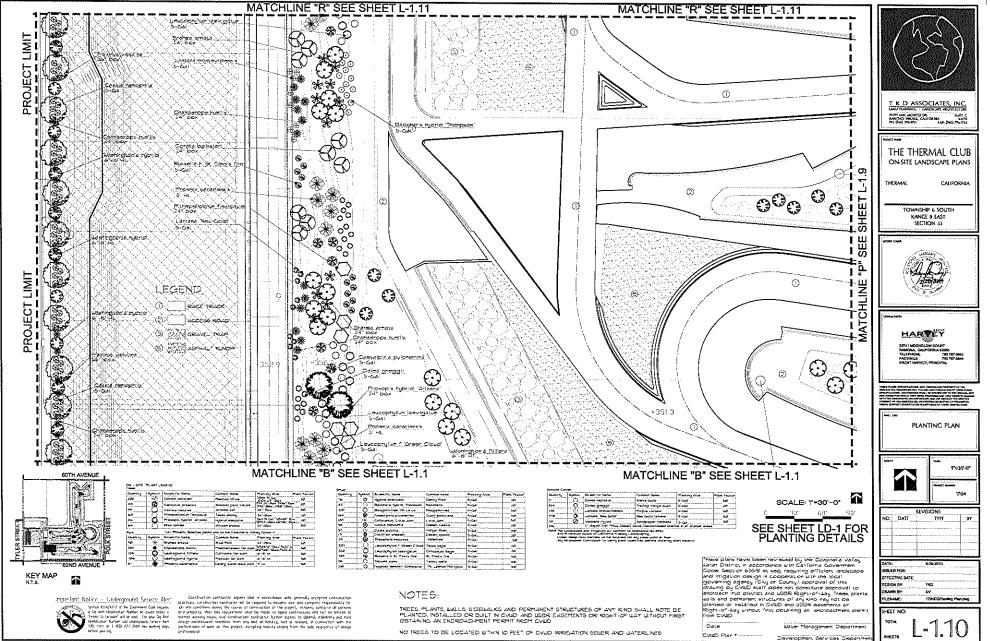




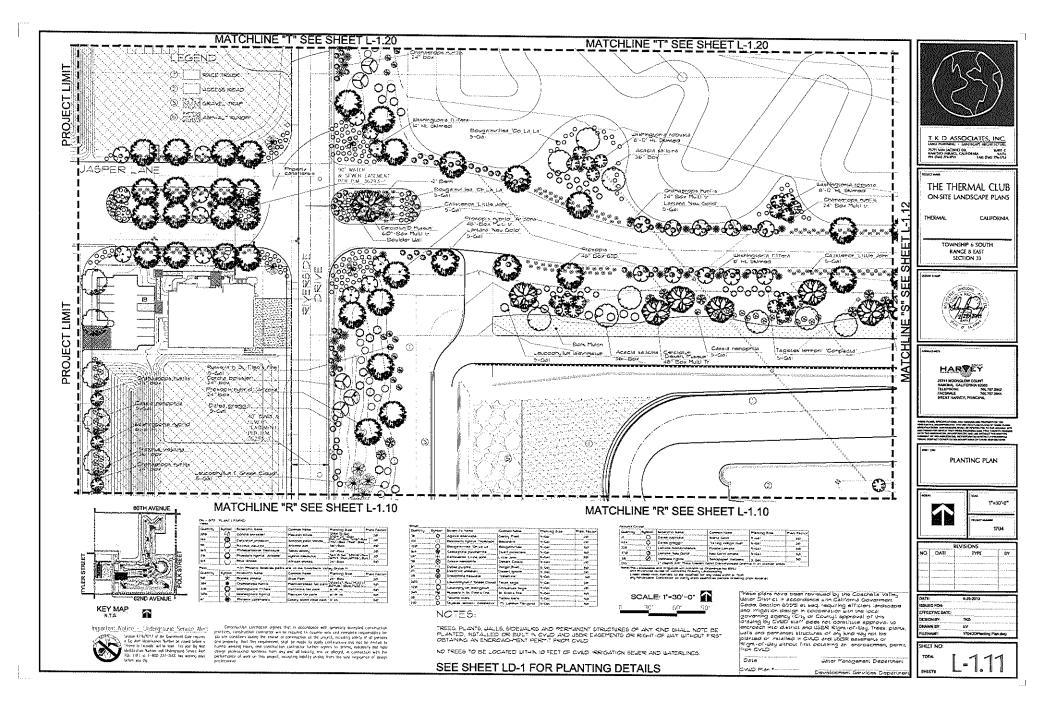


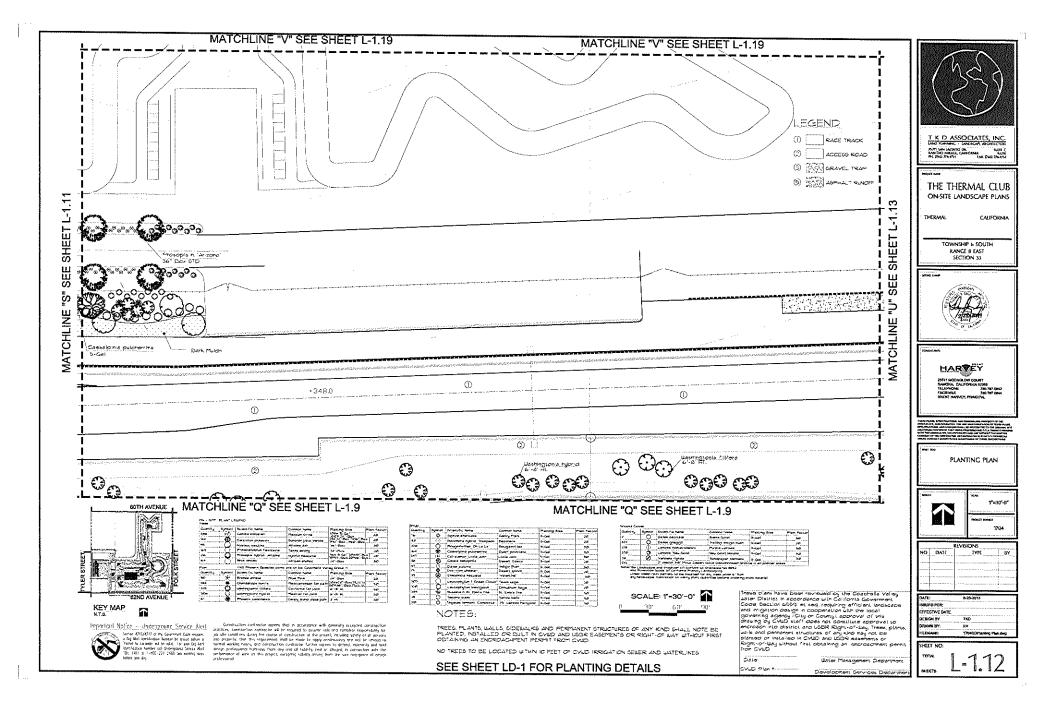


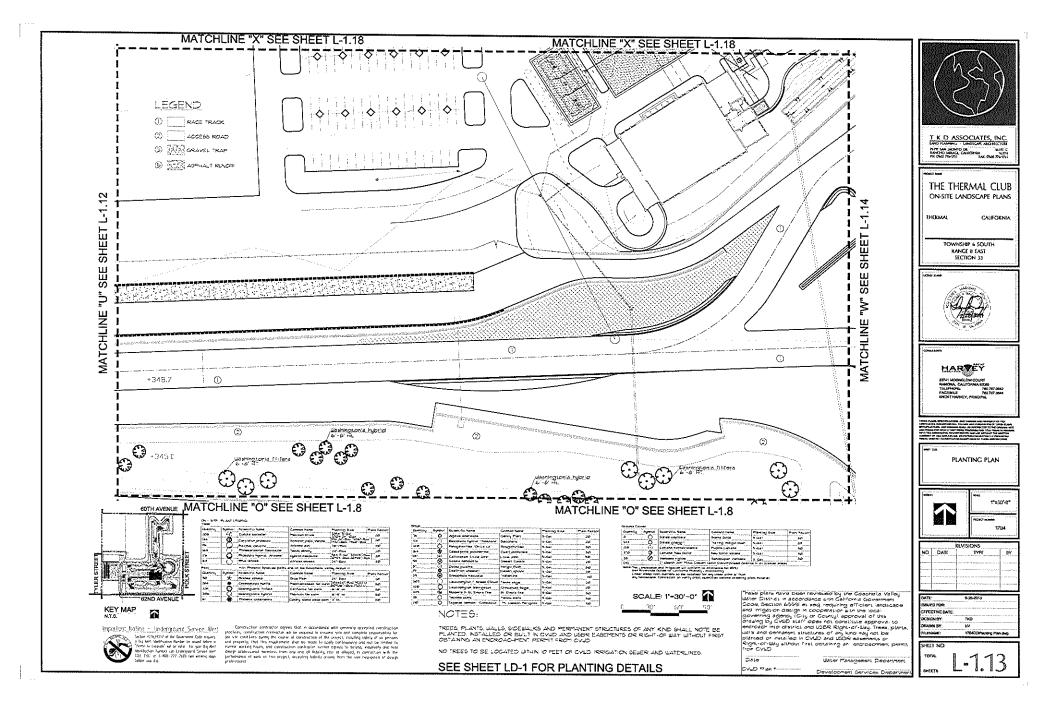


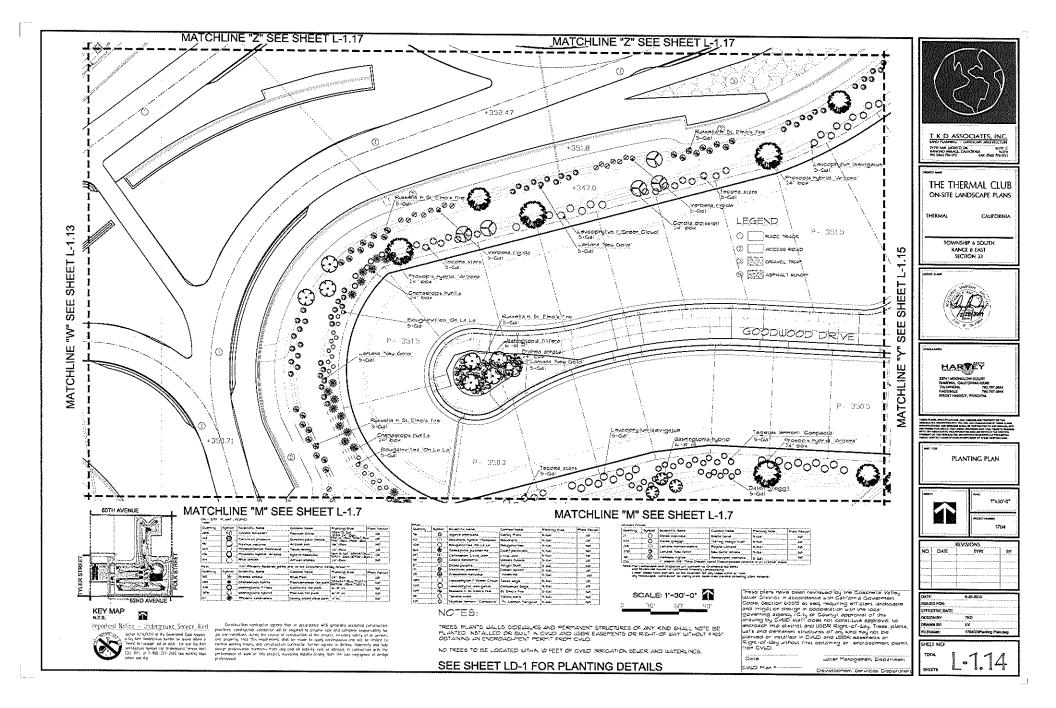


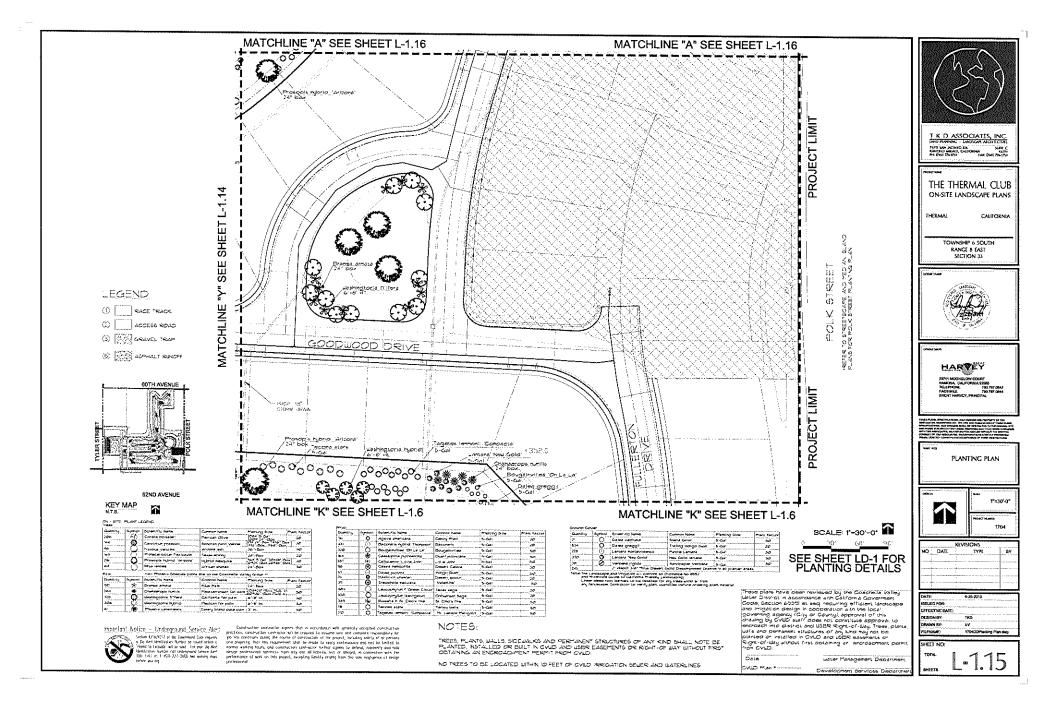
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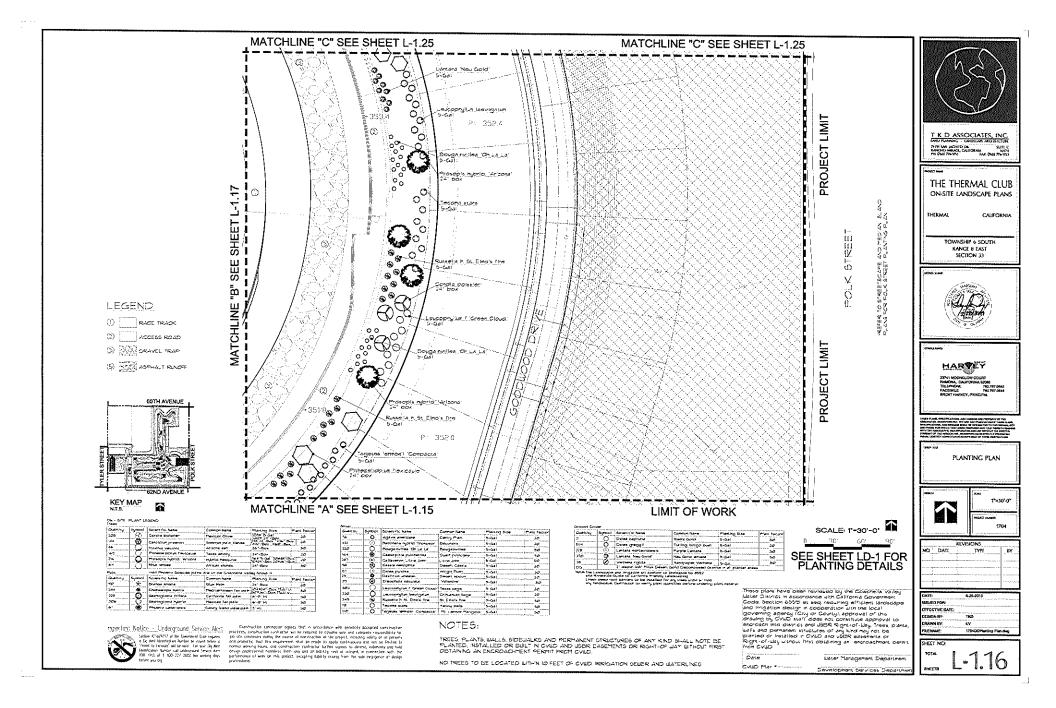


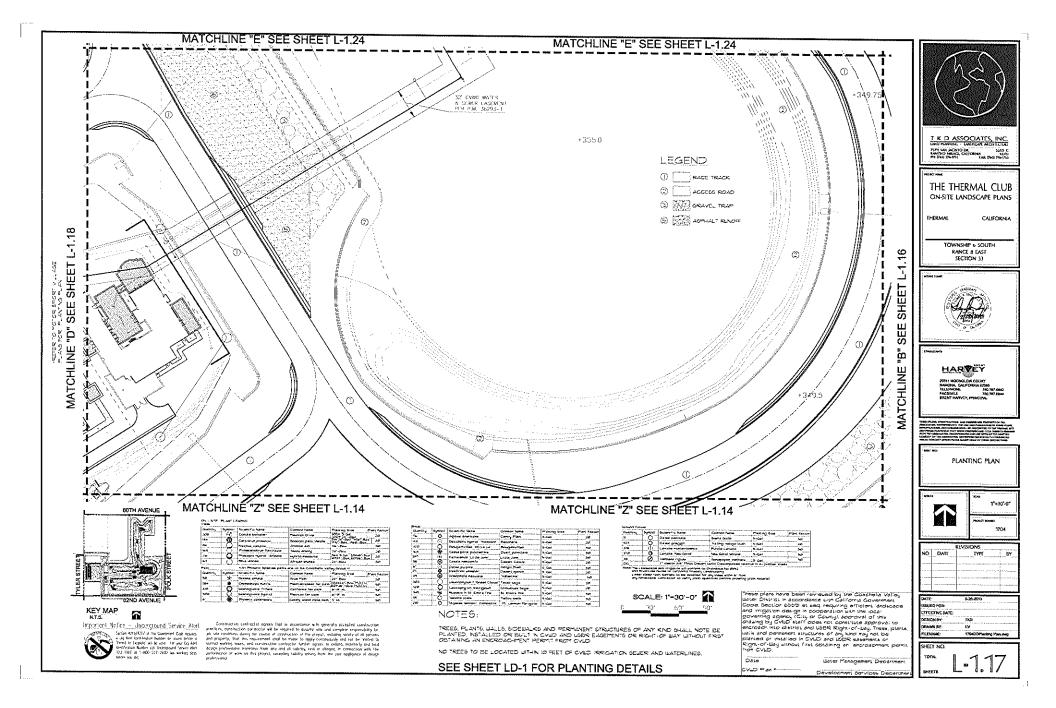


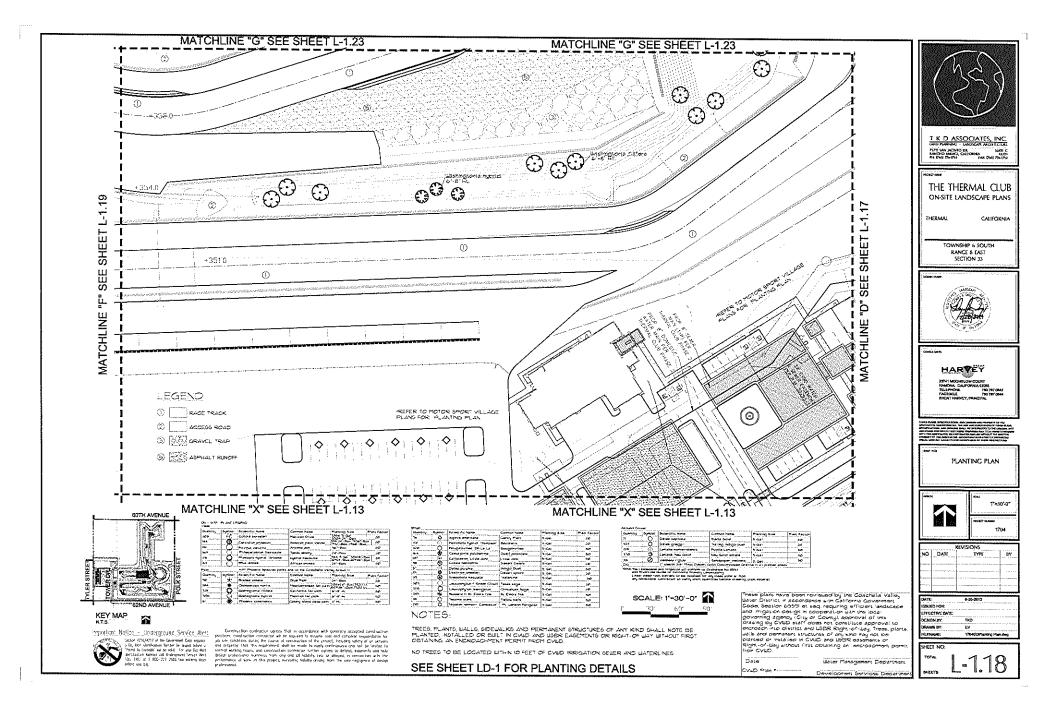


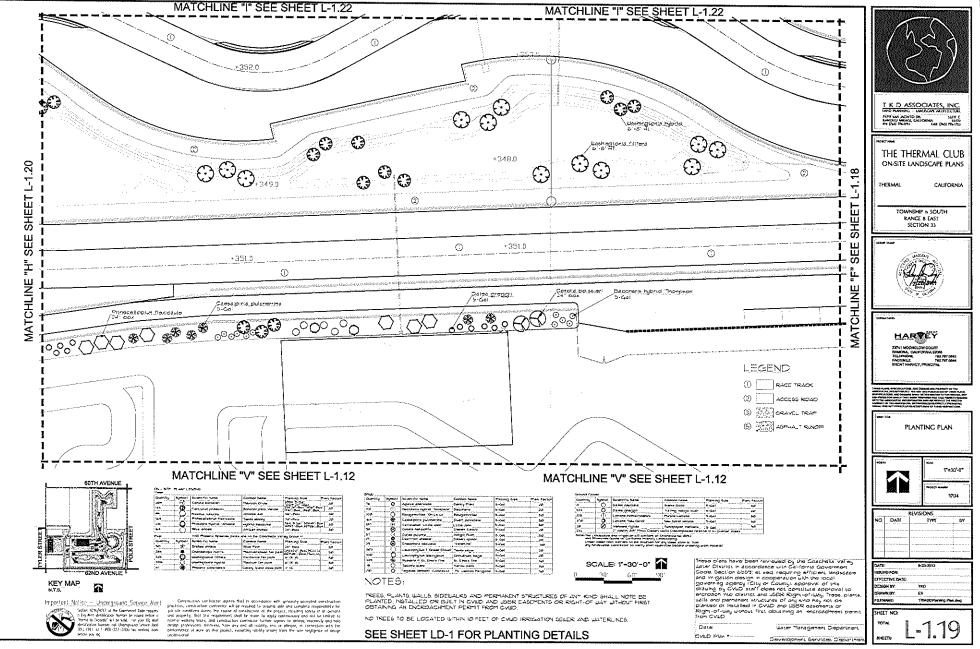


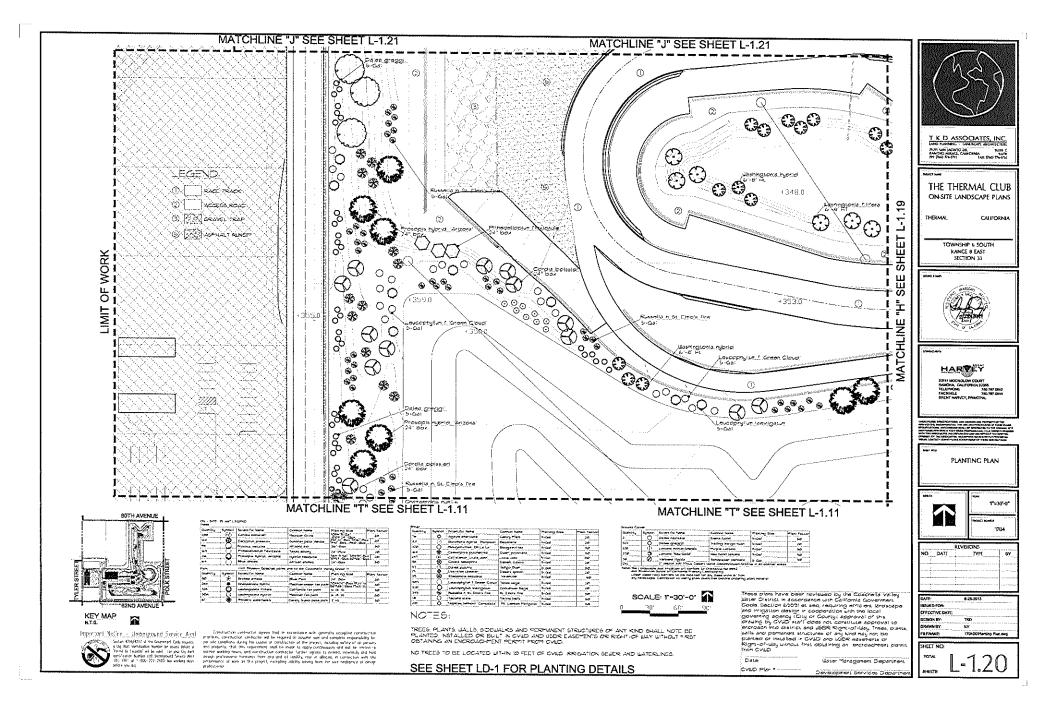


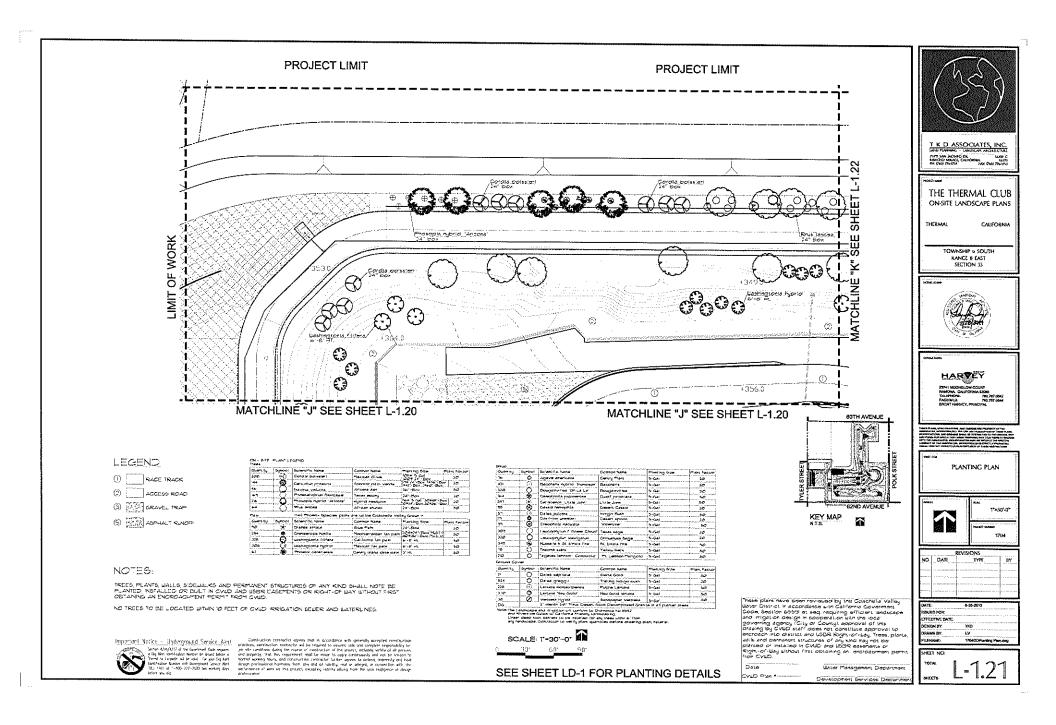


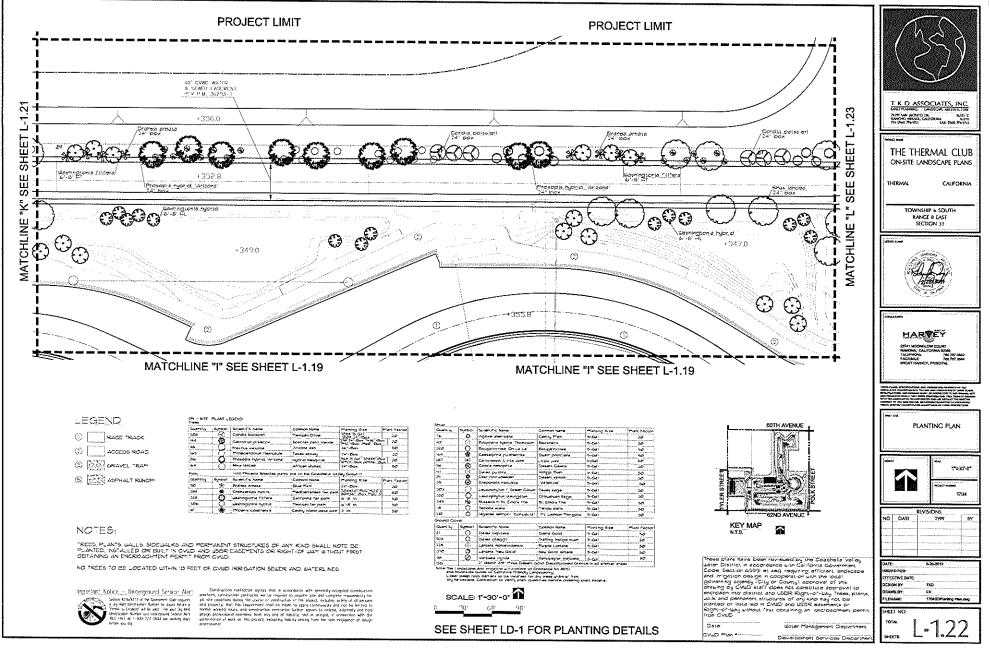






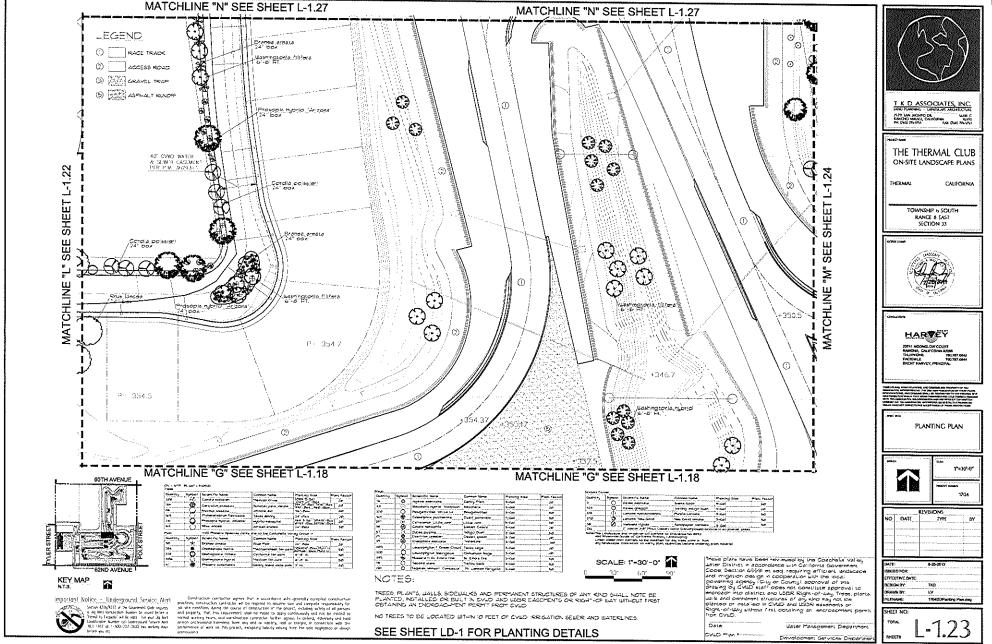




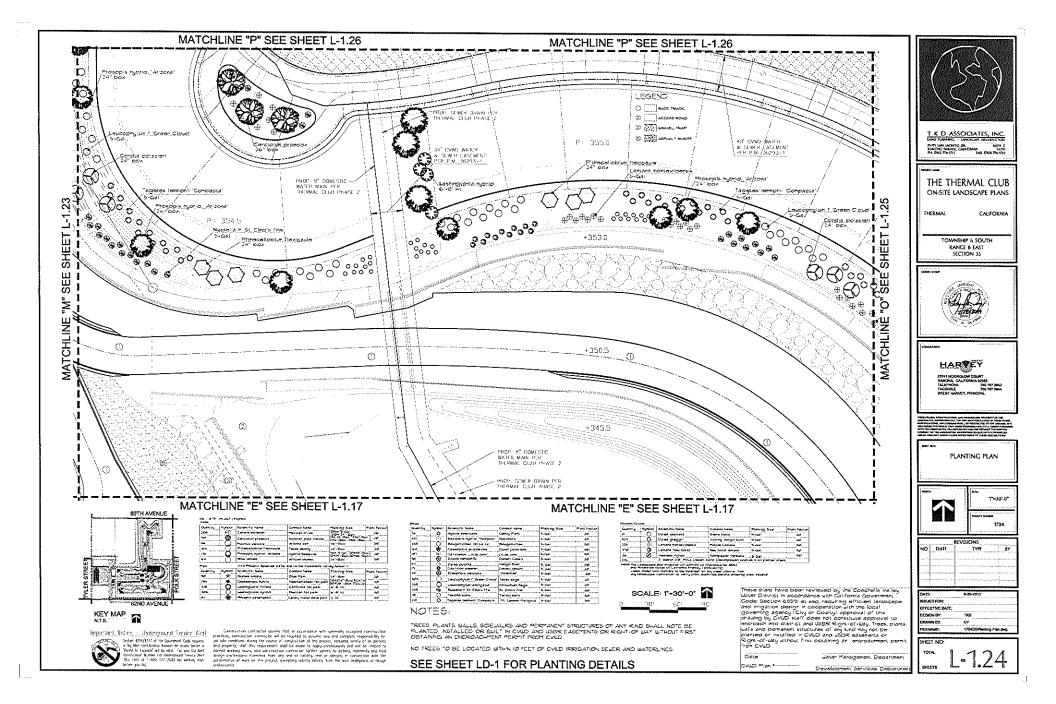


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KEY MAP

NOTES:

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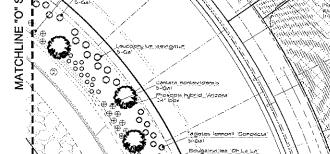
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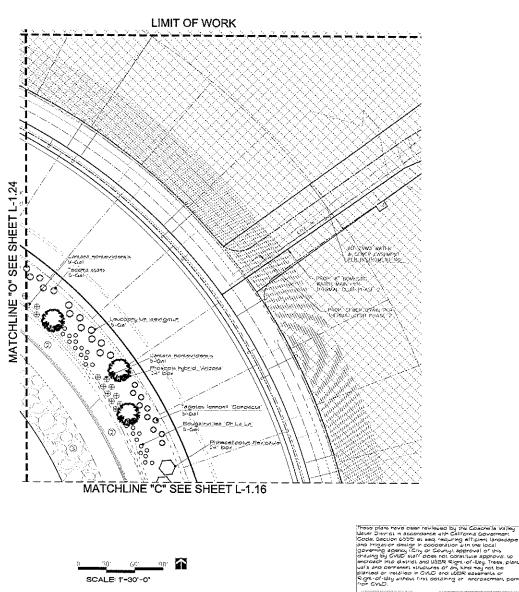
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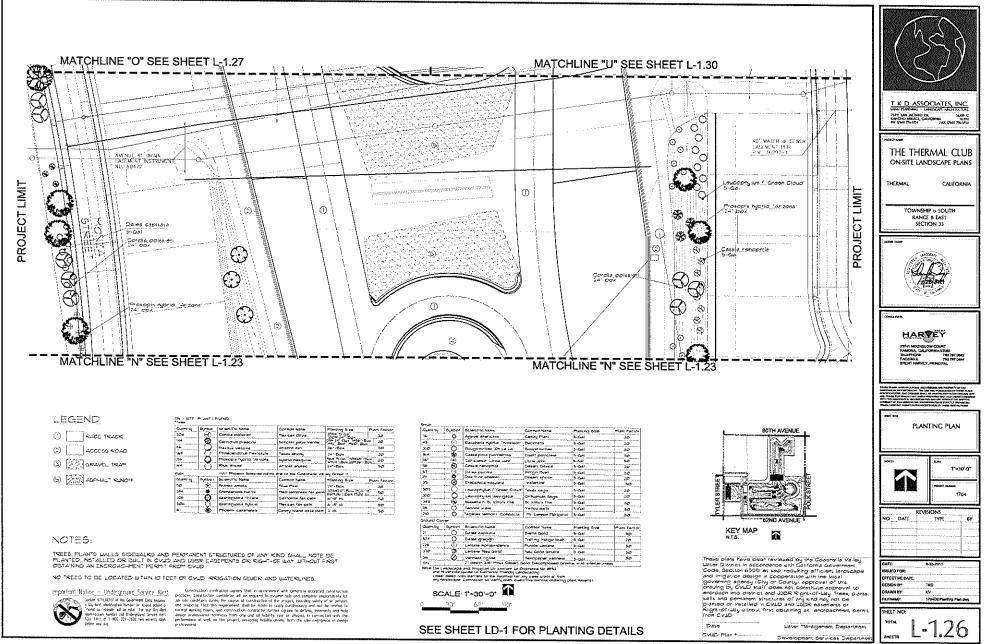
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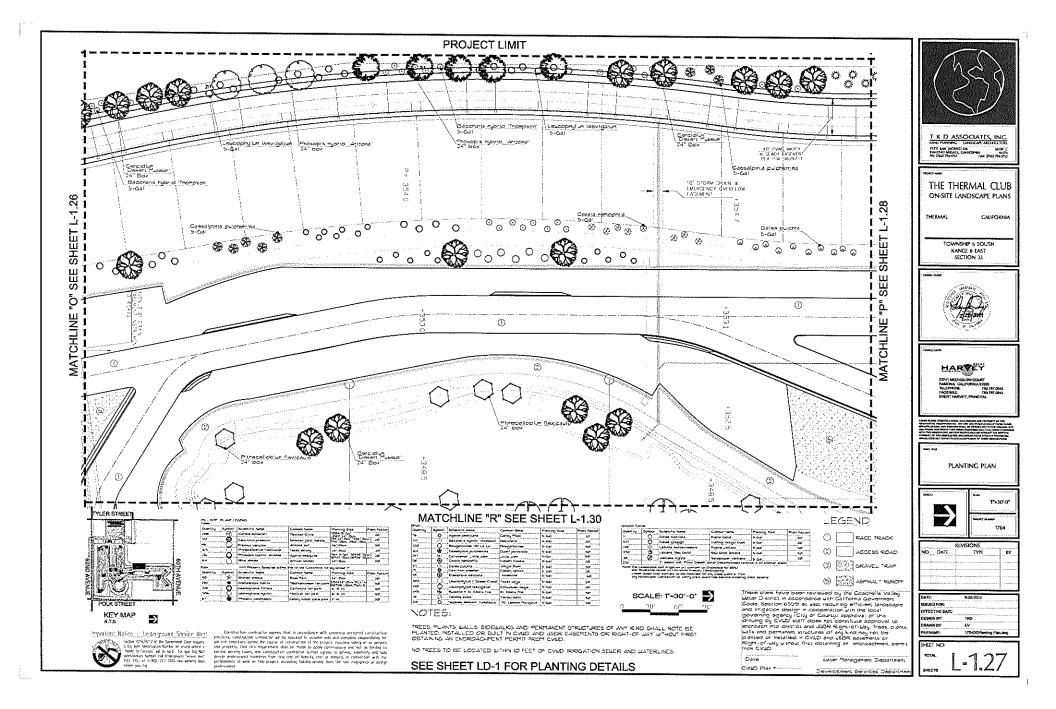
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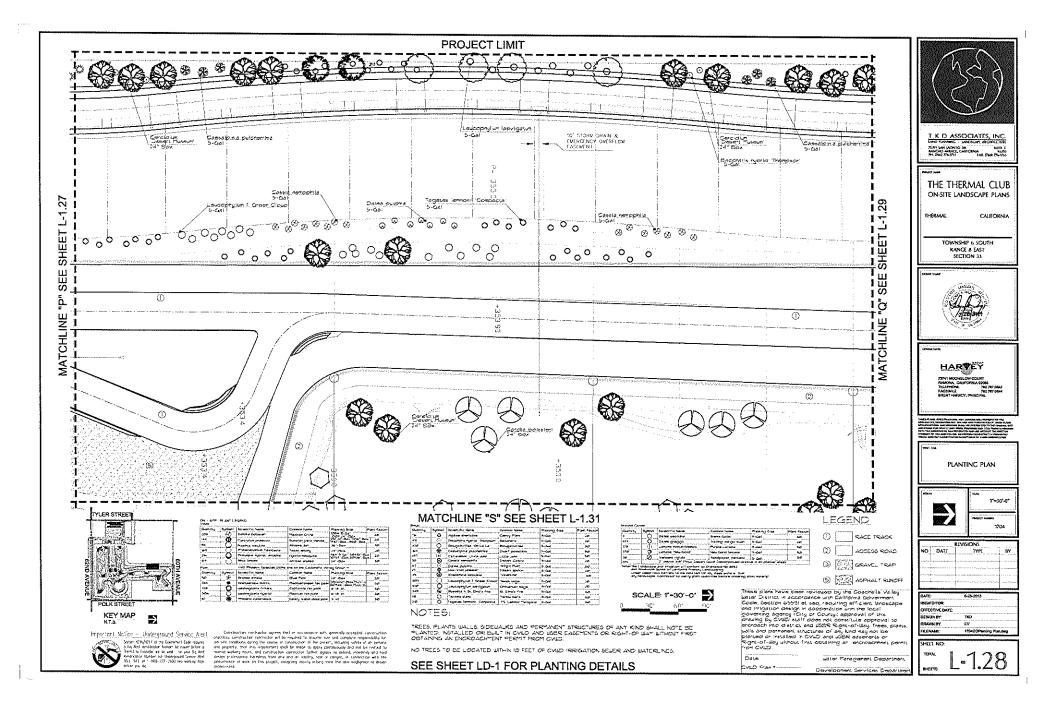
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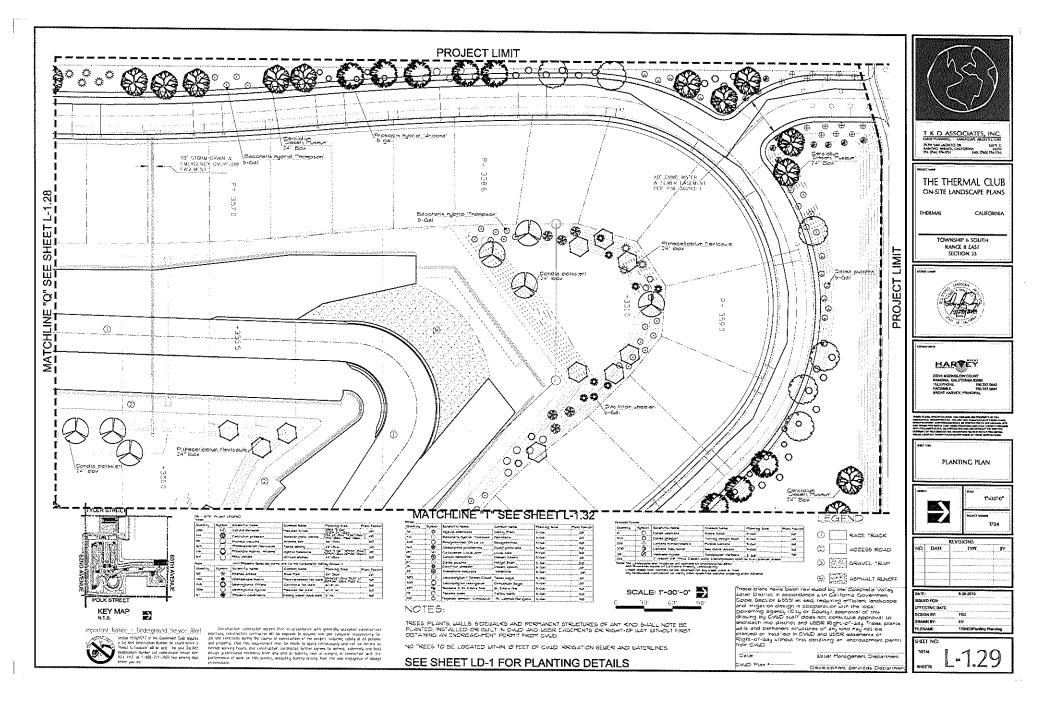
SEE SHEET LD-1 FOR PLANTING DETAILS

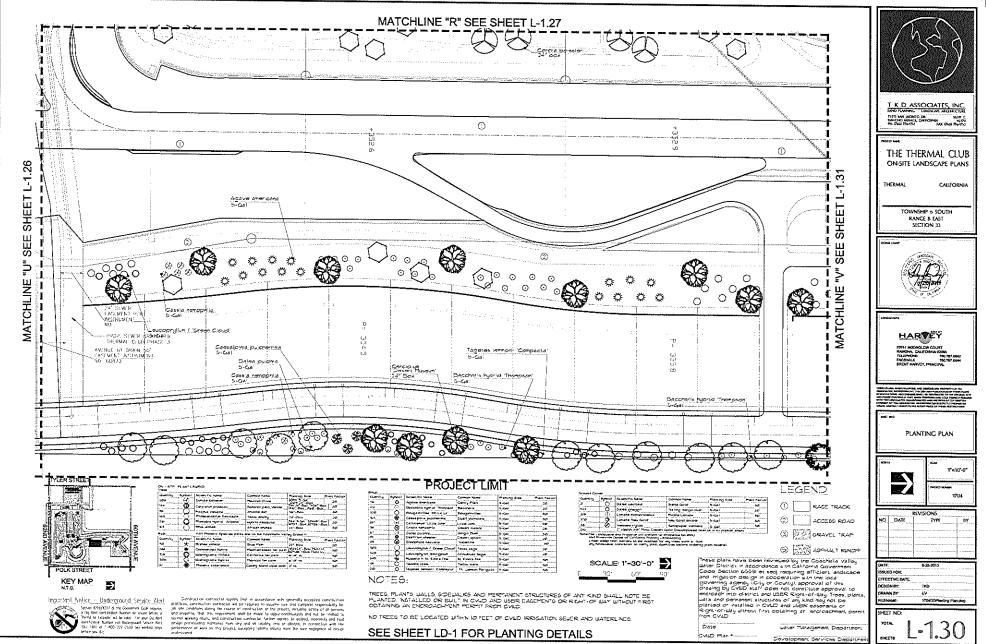
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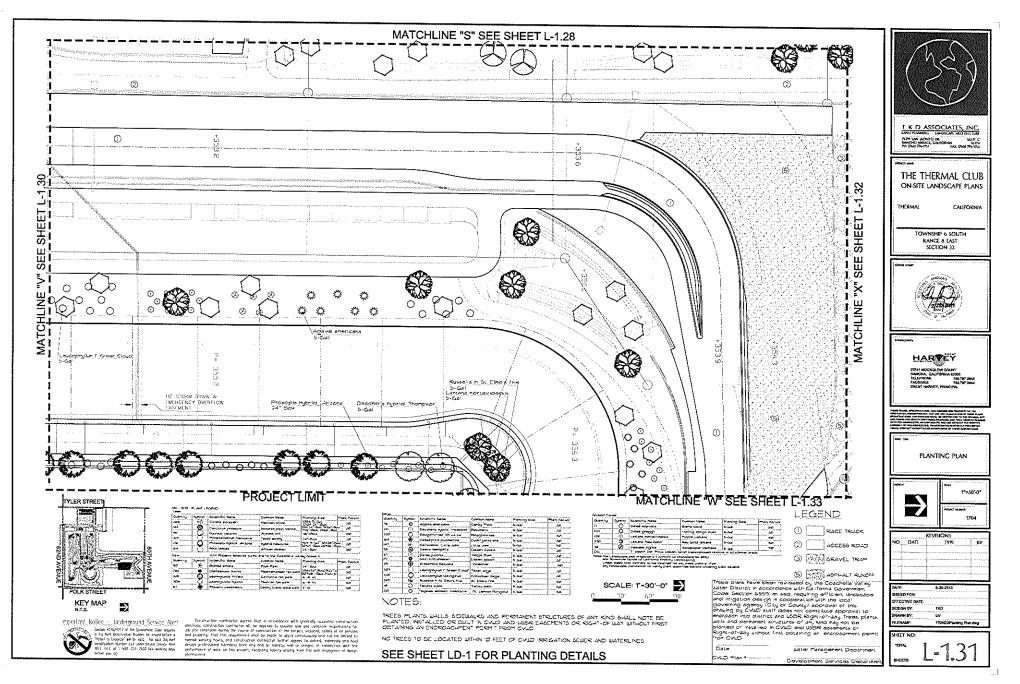


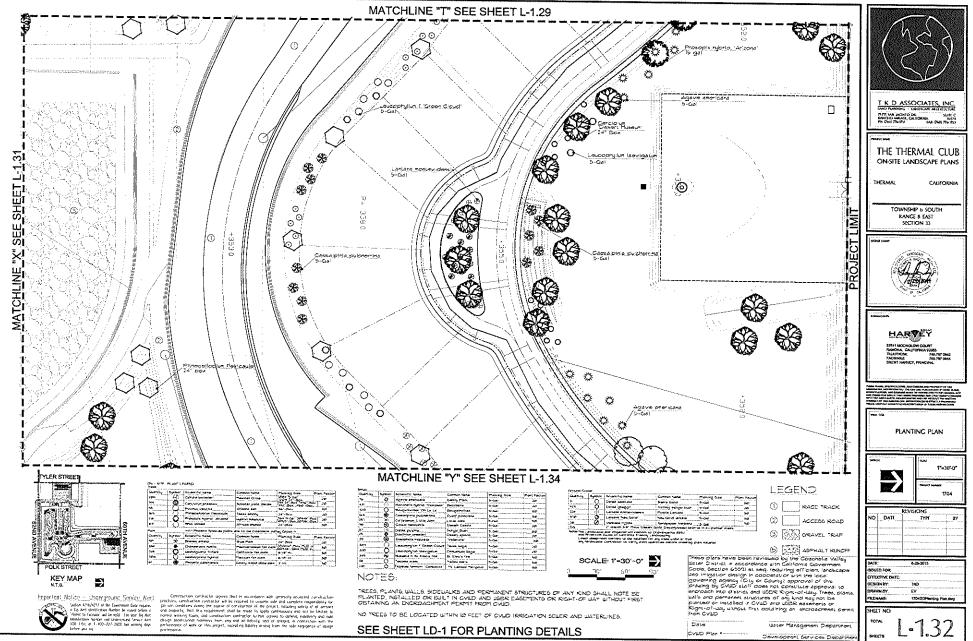


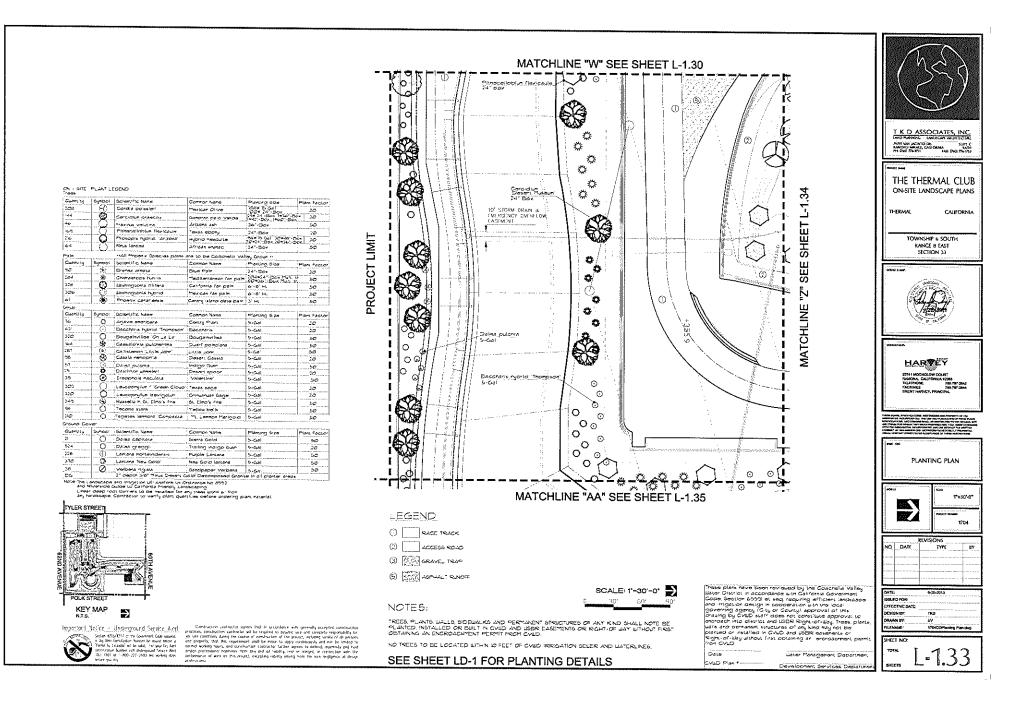


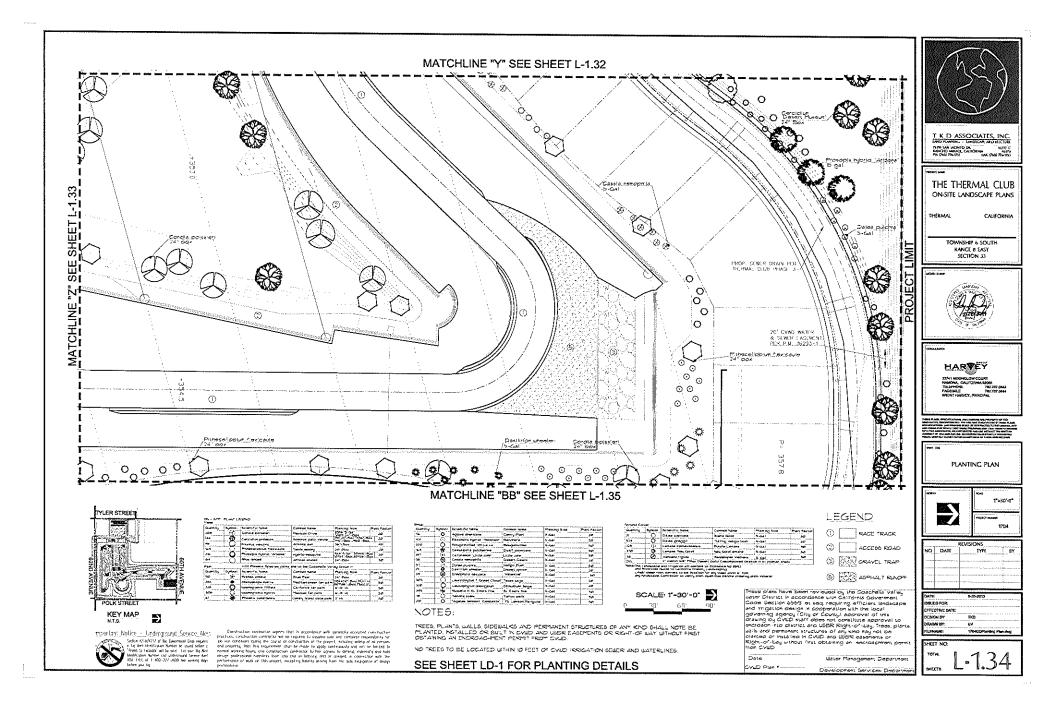


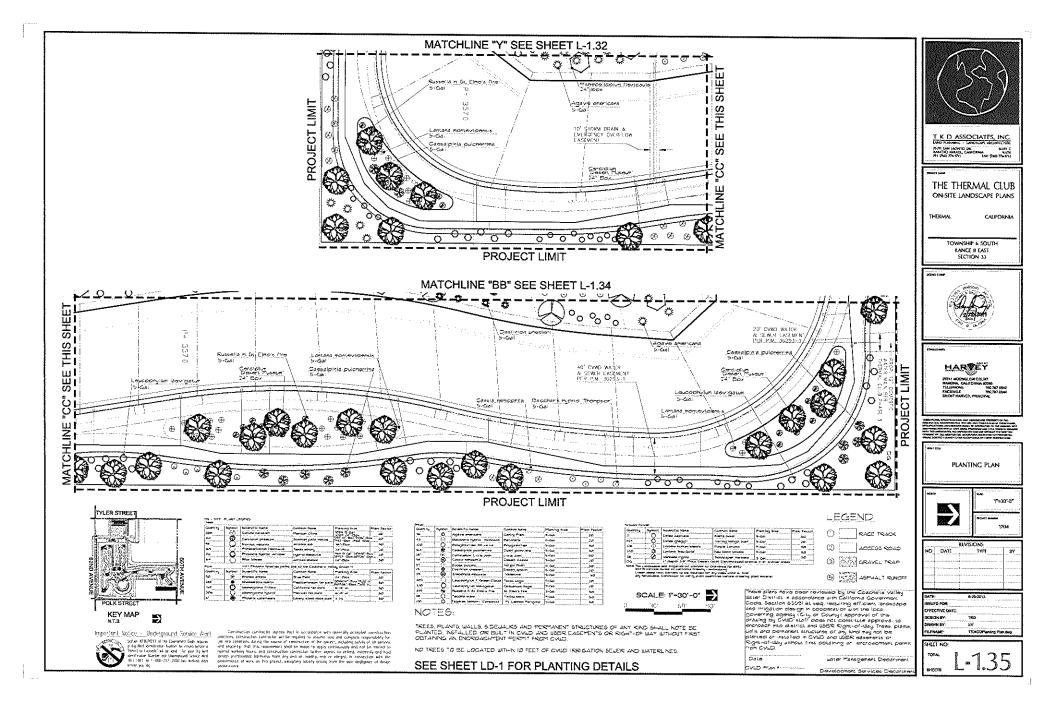
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Memorandum

То:	Margie Drilling, Aviation Planner, Federal Aviation Administration
From:	Nick Johnson, Johnson Aviation
Date:	May 17, 2013
Subject:	FAA Review of a Proposed Covered Reservoir near Jacqueline Cochran Regional Airport (TRM), Thermal, California

Purpose: The purpose of this technical memo is to provide responses and additional information to answer each of the comments/questions regarding the proposed covered irrigation reservoir near the Jacqueline Cochran Regional Airport (TRM) in Thermal, California.

Project Description & Background: The proposed project is a completely covered irrigation reservoir near Jackie Cochran Regional Airport. This reservoir is required as part of the The Thermal Club Race Track that is currently open with remainder of the track and landscaping under construction. The desert climate location of the track requires constant irrigation to protect the project landscaping. The reservoir maintains a backup supply of water to protect the landscape investment if the water supply is interrupted for an extended period of time.

The reservoir would be located outside of the ultimate RPZ for an extended Runway 35 (See attached overlay on the ALP – Figure 1). The proposed cover would consist of steel cables suspended four (4) feet above the edge elevation and spaced 30 feet apart. These steel cables would be covered on top and to the ground on all sides with 1" x 1" UV-protected polypropylene mesh as a visual and physical deterrent to birds and water fowl (See attached site plan with details – Figures 2-6). This bird mitigation is consistent with that which is recommended in AC 150/5200-33B and employed as mitigation at a site north west of TRM Runway 17-35.

<u>FAA Questions/Comments from April 29, 2013</u>: The following are the comments/questions that you provided based on review and discussion with your colleagues. After each question/comment is our answer with additional exhibits attached for reference.

Question 1: The physical location of this facility, being a NEW facility doesn't comply with FAA recommend construction guidance in regards to land use compatibility requirements as stipulated within the Advisory Circular (150/5200.2B) provided by yourself that justify the actions taken by the developer. The sections highlighted in "yellow" (Section 2-3(a) and 2.3 (b) by you within the AC are in regards to "existing storm water management

Memorandum to the FAA May 17, 2013 Page 2 of 4

facilities as well as new storm water management facilities". Yours is neither! The proposal is for an irrigation reservoir to maintain landscape on the proposed racetrack, NOT for storm water purposes. Being that this is a new facility that proposes to house over 3.2 million gallons of water the FAA would normally recommend a distance of 5 statute miles since the attractant could cause hazardous wildlife movement into or across the approach or departure airspace as identified in Section 1-4, or a separation distance of 10,000 feet as identified in Section 1-3 due to the airport serving turbine driven aircraft. Why can't the proposed facility be located at a more distant location? The physical construction should have banks on the reservoir which are fairly steep to discourage the entry of specifically wading birds.

Answer 1: The proposed landscaping reservoir is sited roughly 0.5 miles further from the airport runway than the existing approved reservoir (located at Ave 60 (1000 feet from Tyler St, Thermal Ca. – See Attached Figure 1). The proposed location was chosen as the best location due to it distance away from the runway, access to the existing water source and proximity to the dry-bottom storm water drainage channel in the event of overflow. The storm water drainage channel flows to the south away from the airport property and also provides new storm-water runoff and improved drainage protection for the Airport, which reduces the existing bird attractant from standing water directly adjacent to the south end of the existing runways during a rain event.

Question 2: Will there be fencing around the proposed irrigation reservoir? Fencing should be erected as this provides some protection from wading birds and is most effective with herons. Also a slick surface should be created over the top of the fence and/or screen to eliminate birds/fowl from clinging/perching near the water to feed or for possible drinking of the water, bathing and wading purposes.

Answer 2: The proposed construction of the reservoir cover does not include a fence but it is completely covered on the sides. The cover is secured at the ground and is suspended over the waters surface creating 100% coverage and containment. It does not allow for any wildlife to access the water from the ground or from above (See Figures 2-6).

Question 3: Why are the cables/mesh set at a 4' height? This gives the opportunity for wildlife to get access to the proposed irrigation reservoir.

Answer 3: The reason for suspended cables at 4' is to allow for sagging of the netting material without touching the surface of the water. The netting material completely covers the entire surface and surrounding area and is secured at the ground around the edges to prevent wildlife access (See Figures 2-6).

Memorandum to the FAA May 17, 2013 Page 3 of 4

Question 4: In regards to the spacing between wires. Why are the proposed steel cables separated at a 30' distance? The sides of the overhead mesh based on what has been described would allow birds to enter the system through the sides or ends where wires attach to the 4' high pedestals. These areas should be protected with netting as well to keep out the birds. Exclusion is the most effective method for small facilities of less than 5 acres. This would provide complete, long-term control which we would want to be achieved.

<u>Answer 4</u>: Please see the attached detailed plan (Figures 2–6) illustrations that depict the complete coverage of the surface area and coverage to the ground around the edges to prevent gaps or openings in the mesh netting cover as requested. The 30-foot intervals in the suspension cables provides a sufficient number of support points to fully suspend the mesh covering across the surface of the water without touching the water.

<u>Question 5</u>: What is the life expectancy of the uv polypropylene mesh? Who will be responsible for the maintenance of the facility?

Answer 5: The life expectancy of the polypropylene mesh is 10 years and will be the responsibility of the property owner to maintain, repair or replace for as long as the facility remains in place.

Question 6: The proposed emergency overflow appears to be going onto airport property. Is this correct? This would not be acceptable from our standpoint.

Answer 6: The emergency overflow goes into the existing storm water drainage channel that flows to the south away from the airport property. As stated previously, the storm water drainage channel also provides storm-water runoff and drainage protection for the Airport and is required by the Coachella Valley Water District (CVWD). The Track owner has negotiated a drainage easement with the Airport and has already constructed the drainage pipe under Avenue 60 to relieve future airport runoff and provide improved Airport drainage.

Question 7: Whose responsible for dispersing any wildlife hazards that accumulate at the proposed reservoir?

Answer 7: The intent is to design and maintain a wildlife hazard mitigation system over and around the reservoir from the beginning to ensure that it never becomes a wildlife attractant requiring dispersion.

Memorandum to the FAA May 17, 2013 Page 4 of 4

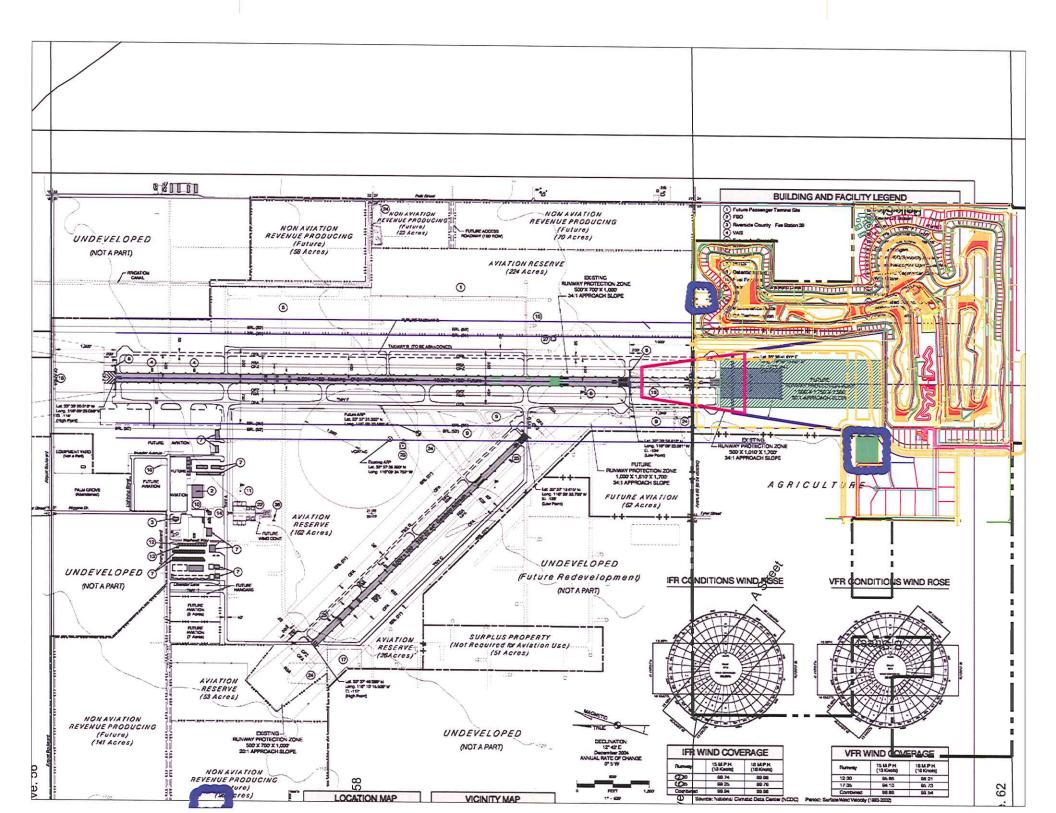
Question 8: Has a professional wildlife management biologist been consulted in the development of this facility to determine the potential for wildlife hazards and the proposed mitigation plan? Was a review of historical records of bird presence and abundance conducted? Characteristic behaviors can and do change with bird populations in response to new opportunities.

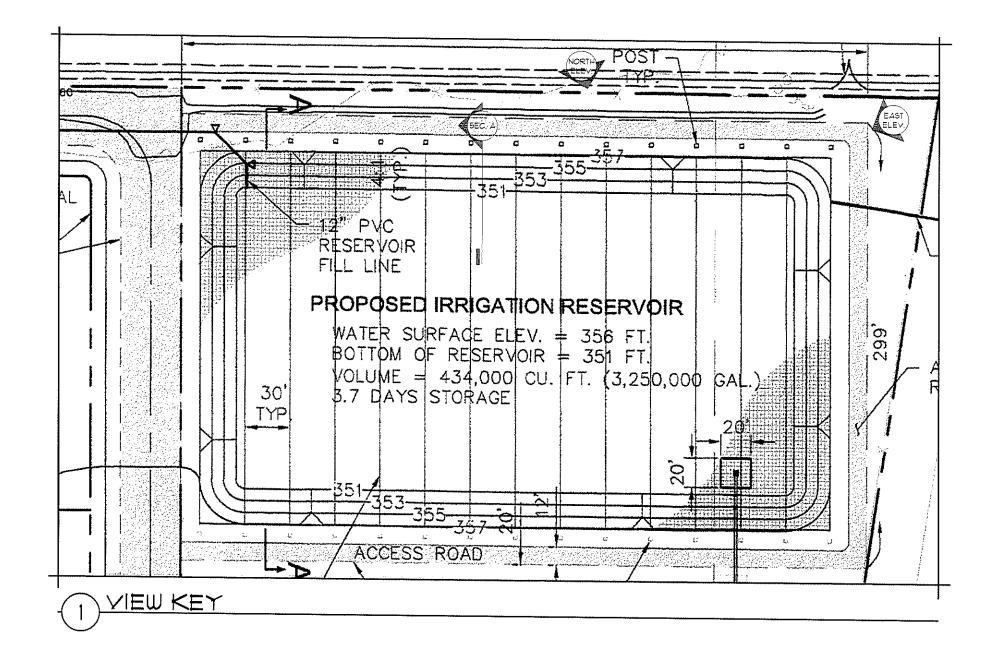
Answer 8: This mesh-netting plan was modeled from the HITS Horse Facility located at Airport Blvd and Harrison St. (0.5 miles northwest of the Jacqueline Cochran runway) that was designed in compliance with the wildlife management guidelines. We have also consulted FAA Advisory Circular 150/5200.2B and various existing airport wildlife management programs to develop the chosen mitigation measures design. Our chosen mitigation strategy is to completely eliminate access to wildlife to ensure that the site never becomes a wildlife attractant.

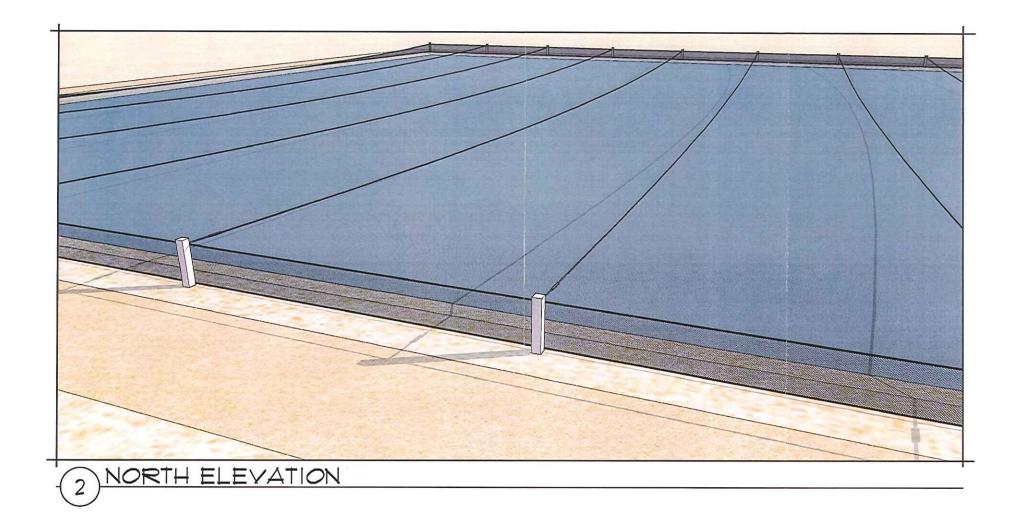
Question 9: What is the water source for the reservoir? What if any measures are there going to be incorporated into the plan for the reduction of any wildlife hazards at the source?

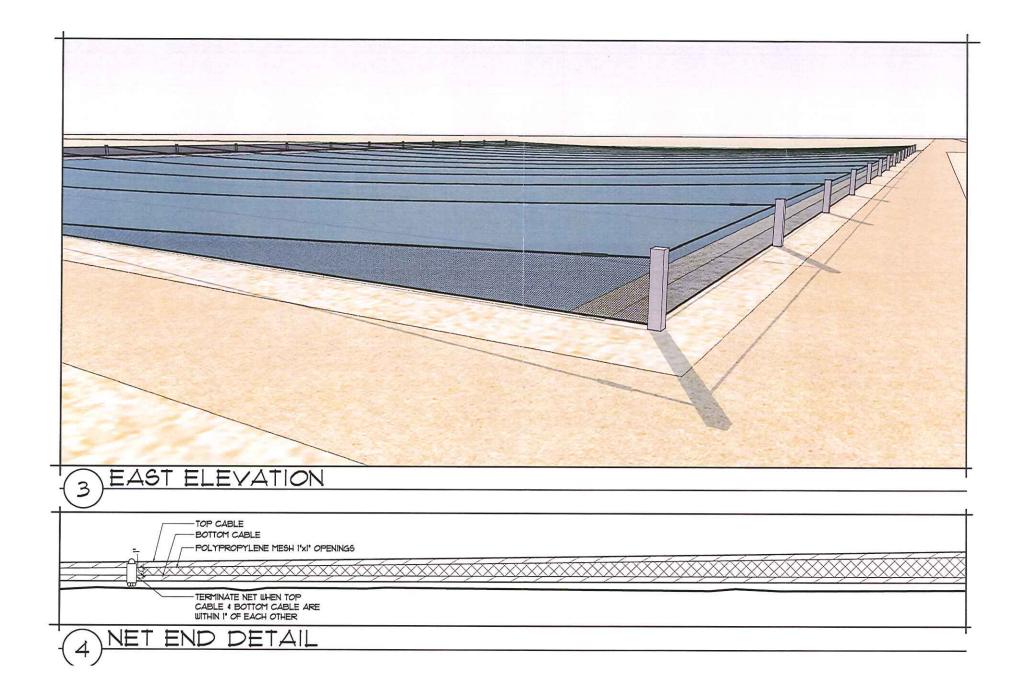
Answer 9: The water source is the local water district (Coachella Valley Water District) that delivers water via underground pipe. The attached detailed plan (See Figure 3) shows that 100% of the water access is eliminated by means of encapsulating the surface area and thus restricting any wildlife from accessing the reservoir.

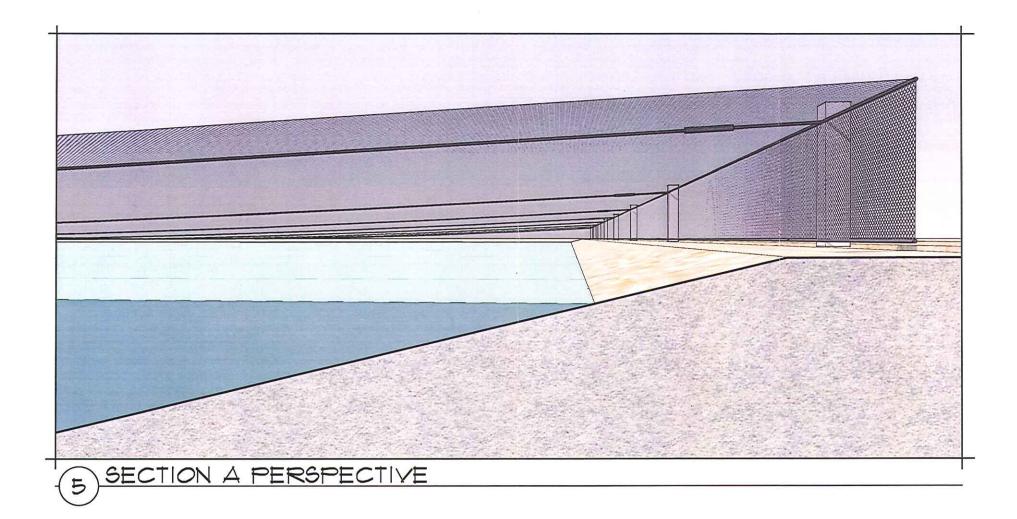
*******End of Questions and Answers*******











NOTICE OF PUBLIC HEARING RIVERSIDE COUNTY AIRPORT LAND USE COMMISSION

A PUBLIC HEARING has been scheduled before the Riverside County Airport Land Use Commission (ALUC) to consider the application 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. The proposed project application may be viewed at the Riverside County Administrative Center, 4080 Lemon Street, 14th Floor, Riverside, California 92501, Monday through Thursday from 8:00 a.m. to 5:00 p.m., except Monday, September 2 (Labor Day), and by appointment on Friday, September 6 from 8:30 a.m. to 5:00 p.m.

PLACE OF HEARING:	Riverside County Administration Center 4080 Lemon St., 1 st Floor Hearing Room Riverside, California

DATE OF HEARING: September 12, 2013

TIME OF HEARING: 9:00 A.M.

CASE DESCRIPTION:

ZAP1020TH13 - Thermal Operating Company, LLC (Representative: Nick Johnson) -County Case Nos.: PP24690R1 (Revised Plot Plan) and PM 36293M1 (Minor Change to Parcel Map). A proposal to modify the previously approved proposal for development of a motorsports race track facility, with garage units on individual lots, within a 329.72-acre area located northerly of 62nd Avenue, westerly of Polk Street, easterly of Tyler Street, and southerly of 60th Avenue in the unincorporated community of Thermal. The applicant is proposing to amend conditions relating to the Occupancy Type of structures on the individual (Founders') lots and conditions prohibiting overnight stays. The proposal also includes the addition of an on-site irrigation reservoir with aviary screen. Additional changes proposed by PP24690R1 include: (1) phasing of project development; (2) replacement of registration building with a member's private garage; (3) deletion of sidewalks along interior streets; (4) modifications to track grading; (5) allowance for on-site sewers to be private; (6) modifications to the off-site open channel; (7) provision for all run off up to the 100-year storm to be retained on-site; and (8) deletion of all water quality swales. PM36293M1 is a proposal to reconfigure and relocate the Founders' lots within unrecorded portions of the parcel map, involving reduction of three to four such lots and siting of most of the remaining 35 lots along the east side of Goodwood Drive. (Compatibility Zones B1, C and D of the Jacqueline Cochran Regional Airport Influence Area).

FURTHER INFORMATION: Contact Russell Brady at (951) 955-0549 or John Guerin at (951) 955-0982. The ALUC holds hearings for local discretionary permits within the Airport Influence Areas, reviewing for aeronautical safety, noise and obstructions. All other concerns should be addressed to <u>Mr. Jay Olivas of the County of Riverside</u> <u>Planning Department, at (951) 955-1195.</u>

APPLICATION FOR MAJOR LAND USE ACTION REVIEW NTY AIRPORT LAND USE COMMISSION

ALUC Identification No.

PROJECT PROPONI	ENT (TO BE COMPLETED BY APP	LICANT)		
		- 		
Date of Application	June 5, 2013	~		310-486-4774
Property Owner	JTM Land Company, LL	<u> </u>		0104004111
Mailing Address	<u>1983 W. 190th St.</u>			······································
	Torrance, CA 90504			
			······································	
Agent (if any)	Nick Johnson	······································	Phone Number	818-606-3560
Mailing Address	Johnson Aviation			
mannig i taarboo	6524 Deerbrook Rd.			
	Oak Park, CA 91377			
	N (TO BE COMPLETED BY APPLIC ed map showing the relationship of th	AN I) e project site to the airport boundary and runway	ys	
		ith of Jacqueline Cochran Region		f Tyler St. west
Street Address		e 62, and south of Ave 60.)		<u>, i yioi ola, noor</u>
			Parcel Size	342 acres
A 1 10 1 131-	Cas attached Exhibit 1			
	See attached Exhibit 1	rook & Club	Parcer Size	
Subdivision Name	Thermal Motorsports Tr	rack & Club	— Zoning	Specific Plan
Subdivision Name Lot Number PROJECT DESCRIP	Thermal Motorsports Tr 1 through 227 TION (TO BE COMPLETED BY API	PLICANT)	Zoning Classification	Specific Plan
Subdivision Name Lot Number PROJECT DESCRIP If applicable, attach a defe	Thermal Motorsports Tr <u>1 through 227</u> TION (TO BE COMPLETED BY API ailed site plan showing ground elevati description data as needed Generally open land. Fi		Zoning Classification water bodies, and the per Kohl Ranch	Specific Plan
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REFERRING AGEN	CY (TO BE COMPLETED BY AGENCY S	TAFF)				
Date Received Agency Name	6-6-13 County of Riversid	C				 Type of Project General Plan Amendment Zoning Amendment or Variance
Staff Contact Phone Number Agency's Project No.	Jay OLNas 955-1195 Revised PP24690 1 Revised PM36293	R1 M1				 Subdivision Approval Use Permit Public Facility Other Plan / Awcel Map
ALUC REVIEW (T	O BE COMPLETED BY ALUC EXECUTIVE		CTOR)			
Application Receipt	Date Received Is Application Complete? If No, cite reasons		Yes	-	By No	
Airport(s) Nearby						
Primary Criteria Review	Compatibility Zone(s) Allowable (not prohibited) Use? Density/Intensity Acceptable? Open Land Requirement Met? Height Acceptable? Easement/Deed Notice Provided?		A Yes Yes Yes Yes Yes		B1 No No No No	□ B2 □ C □ D □ E □ Ht.
Special Conditions	Describe:					
Supplemental Criteria Review	Noise					
	Airspace Protection Overflight					
ACTIONS TAKEN (1	TO BE COMPLETED BY ALUC EXECUTIV	E DIRE	CTOR)			
ALUC Executive Director's Action	Approve Refer to ALUC					Date
ALUC Action	Consistent Consistent with Conditions (list	conditi	ons/att	ach a	dditio	Date
	Inconsistent (list reasons/attach	additic	onal pa	ges if	need	ed)
August 2007						



Mail Processing Center Federal Aviation Administration Southwest Regional Office Obstruction Evaluation Group 2601 Meacham Boulevard Fort Worth, TX 76137

Issued Date: 04/13/2012

Tim Rogers Thermal Operating Company, LLC c/o Tower Energy Group 1983 West 190th Street Torrance, CA 90504

**** 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:Building Revised CT-1Location:Thermal, CALatitude:33-36-10.86N NAD 83Longitude:116-09-04.71WHeights:-143 feet site elevation (SE)61 feet above ground level (AGL)-82 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 completed and returned to this office any time the project is abandoned or:

_____ At least 10 days prior to start of construction (7460-2, Part I) ____X___ Within 5 days after the construction reaches its greatest height (7460-2, Part II)

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 and maintained in accordance with FAA Advisory circular 70/7460-1 K Change 2.

The structure considered under this study lies in proximity to an airport and occupants may be subjected to noise from aircraft operating to and from the airport.

This determination expires on 10/13/2013 unless:

- (a) extended, revised or terminated by the issuing office.
- (b) 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

Aeronautical Study No. 2012-AWP-2704-OE

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 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 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.

Any failure or malfunction that lasts more than thirty (30) minutes and affects a top light or flashing obstruction light, regardless of its position, should be reported immediately to (877) 487-6867 so a Notice to Airmen (NOTAM) can be issued. As soon as the normal operation is restored, notify the same number.

If we can be of further assistance, please contact our office at (310) 725-6557. On any future correspondence concerning this matter, please refer to Aeronautical Study Number 2012-AWP-2704-OE.

Signature Control No: 161510318-162653372 Karen McDonald Specialist (DNE)

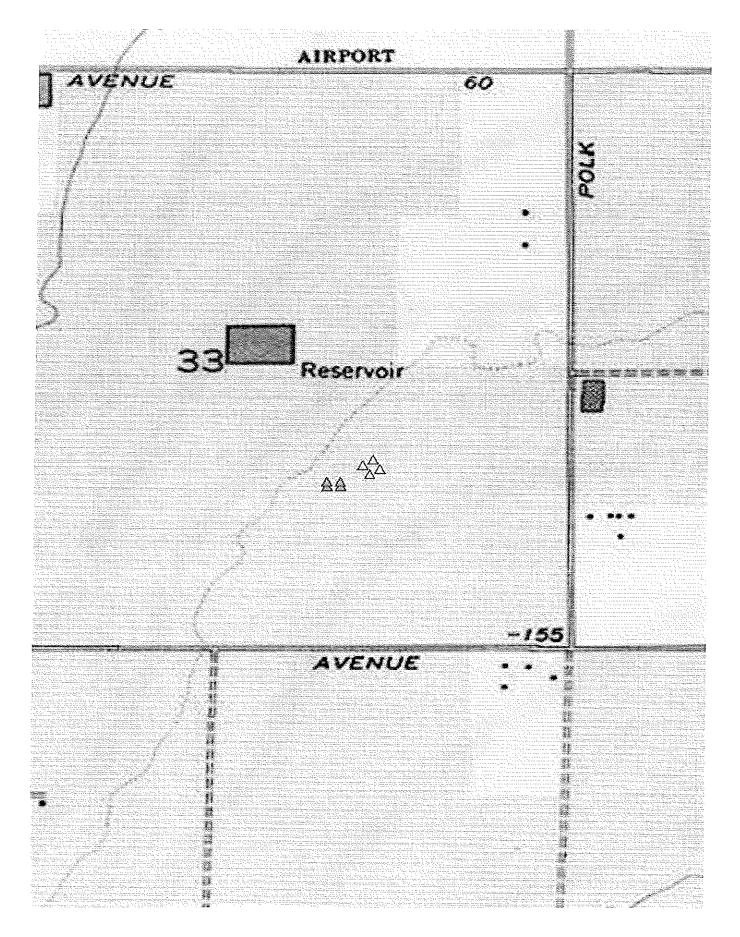
Attachment(s) Case Description Map(s)

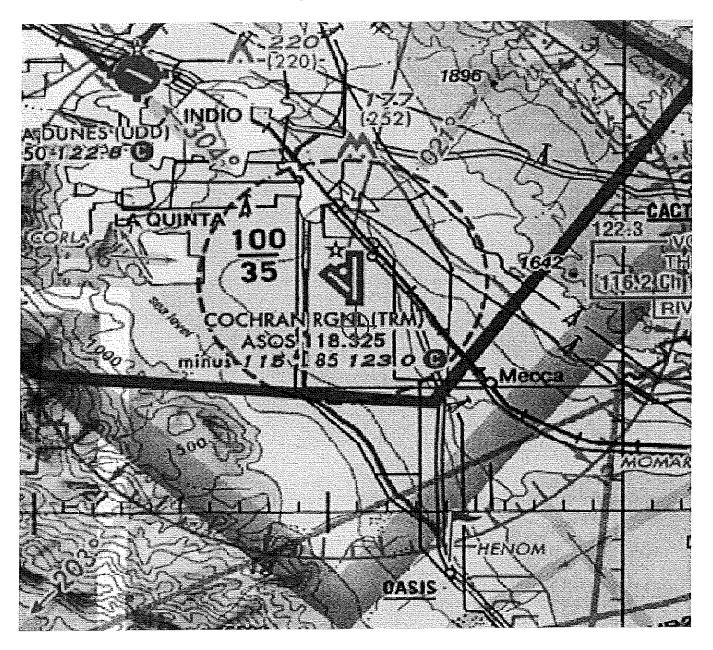
Case Description for ASN 2012-AWP-2704-OE

Corner points of revised location for private race track control tower.

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Page 4 of 6







Mail Processing Center Federal Aviation Administration Southwest Regional Office Obstruction Evaluation Group 2601 Meacham Boulevard Fort Worth, TX 76137

Issued Date: 04/13/2012

Tim Rogers Thermal Operating Company, LLC c/o Tower Energy Group 1983 West 190th Street Torrance, CA 90504

**** 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: Location: Latitude:	Building Revised CT-2 Thermal, CA 33-36-10.02N NAD 83
Longitude:	116-09-04.08W
Heights:	-143 feet site elevation (SE)
	61 feet above ground level (AGL)
	-82 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 completed and returned to this office any time the project is abandoned or:

At least 10 days prior to start of construction (7460-2, Part I) X Within 5 days after the construction reaches its greatest height (7460-2, Part II)

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 and maintained in accordance with FAA Advisory circular 70/7460-1 K Change 2.

The structure considered under this study lies in proximity to an airport and occupants may be subjected to noise from aircraft operating to and from the airport.

This determination expires on 10/13/2013 unless:

- (a) extended, revised or terminated by the issuing office.
- (b) 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 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 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.

Any failure or malfunction that lasts more than thirty (30) minutes and affects a top light or flashing obstruction light, regardless of its position, should be reported immediately to (877) 487-6867 so a Notice to Airmen (NOTAM) can be issued. As soon as the normal operation is restored, notify the same number.

If we can be of further assistance, please contact our office at (310) 725-6557. On any future correspondence concerning this matter, please refer to Aeronautical Study Number 2012-AWP-2705-OE.

Signature Control No: 161510319-162653374 Karen McDonald Specialist (DNE)

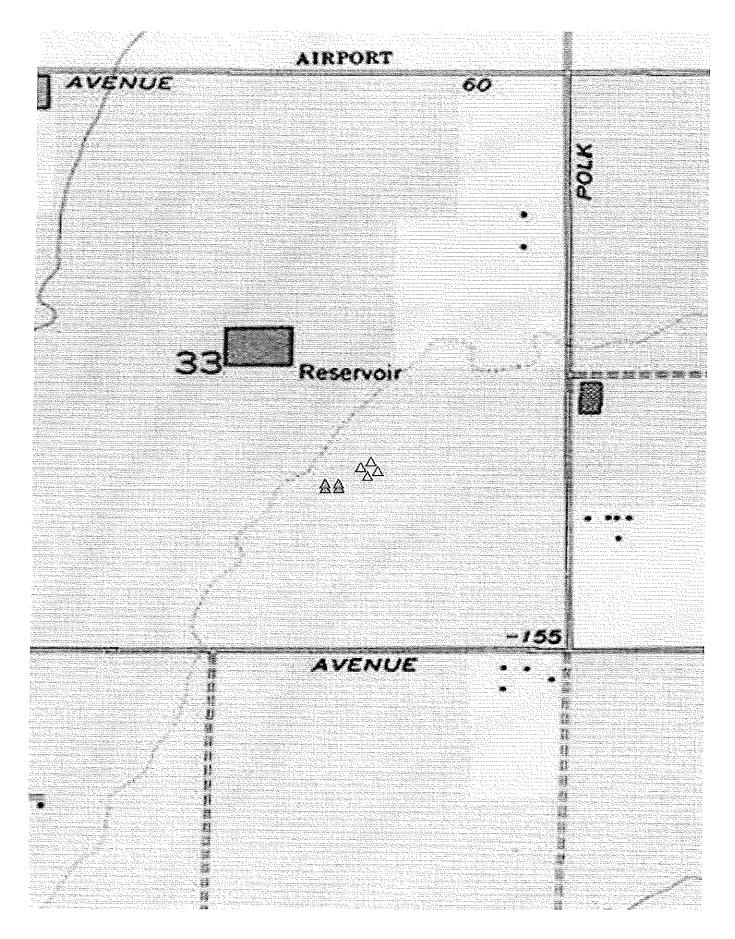
Attachment(s) Case Description Map(s)

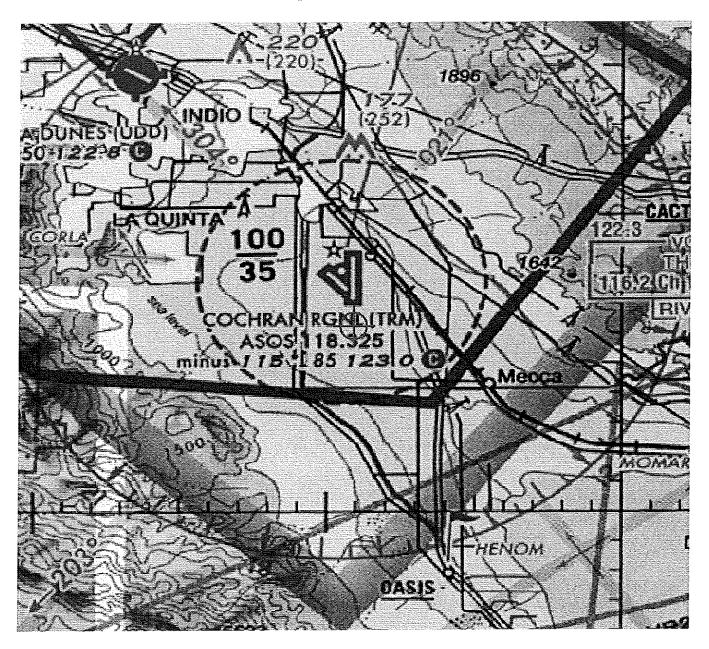
Case Description for ASN 2012-AWP-2705-OE

Corner points of revised location for private race track control tower.

Verified Map for ASN 2012-AWP-2705-OE

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Mail Processing Center Federal Aviation Administration Southwest Regional Office Obstruction Evaluation Group 2601 Meacham Boulevard Fort Worth, TX 76137

Tim Rogers Thermal Operating Company, LLC c/o Tower Energy Group 1983 West 190th Street Torrance, CA 90504

**** 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:	Building Revised CT-3
Location:	Thermal, CA
Latitude:	33-36-09.53N NAD 83
Longitude:	116-09-05.01W
Heights:	-143 feet site elevation (SE)
	61 feet above ground level (AGL)
	-82 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 completed and returned to this office any time the project is abandoned or:

_____ At least 10 days prior to start of construction (7460-2, Part I) _____X___ Within 5 days after the construction reaches its greatest height (7460-2, Part II)

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 and maintained in accordance with FAA Advisory circular 70/7460-1 K Change 2.

The structure considered under this study lies in proximity to an airport and occupants may be subjected to noise from aircraft operating to and from the airport.

This determination expires on 10/13/2013 unless:

- (a) extended, revised or terminated by the issuing office.
- (b) 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

Aeronautical Study No. 2012-AWP-2706-OE

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 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.

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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.

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If we can be of further assistance, please contact our office at (310) 725-6557. On any future correspondence concerning this matter, please refer to Aeronautical Study Number 2012-AWP-2706-OE.

Signature Control No: 161510320-162653371 Karen McDonald Specialist

(DNE)

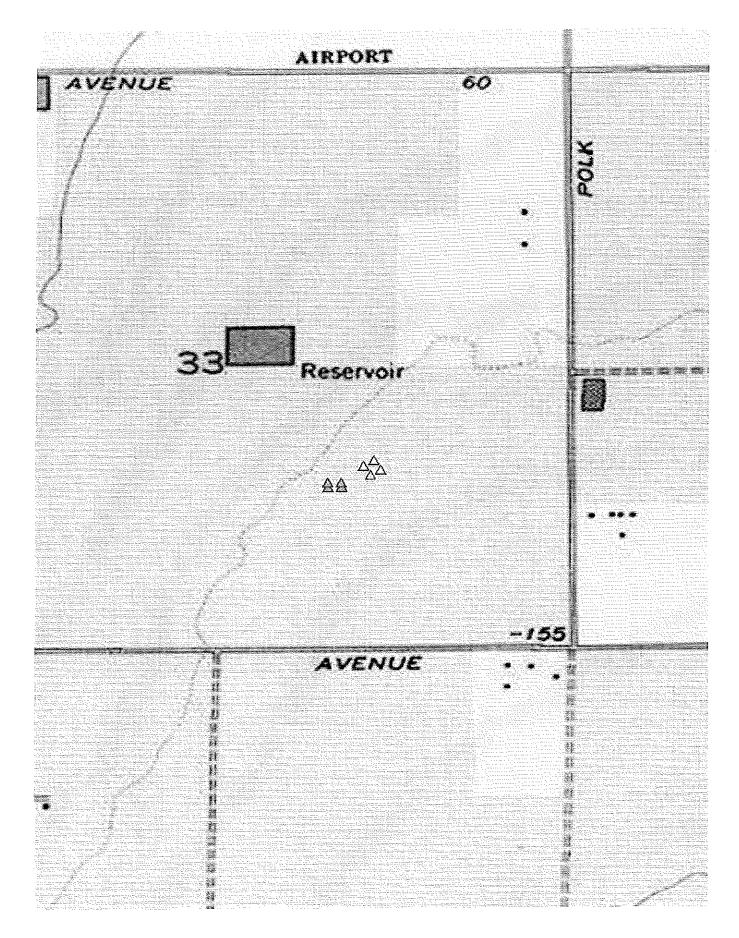
Attachment(s) Case Description Map(s)

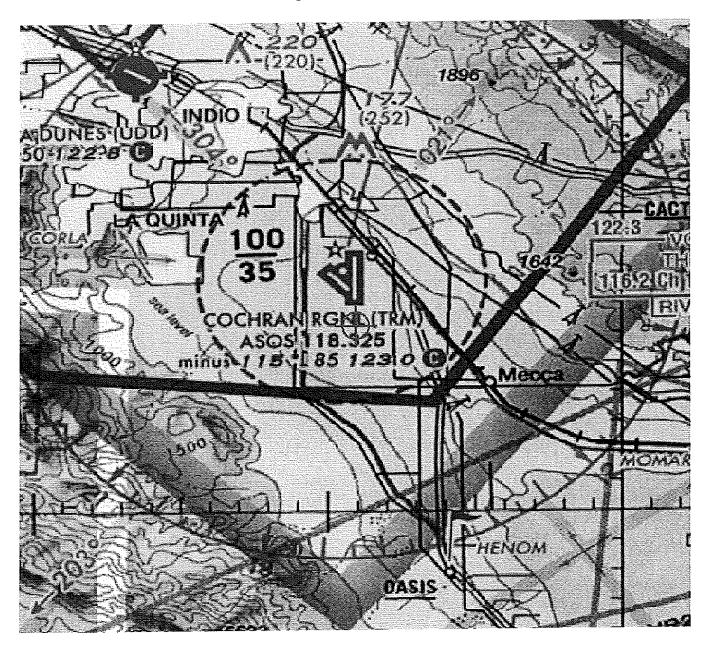
Case Description for ASN 2012-AWP-2706-OE

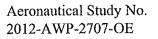
Corner points of revised location for private race track control tower.

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Verified Map for ASN 2012-AWP-2706-OE









Mail Processing Center Federal Aviation Administration Southwest Regional Office Obstruction Evaluation Group 2601 Meacham Boulevard Fort Worth, TX 76137

Issued Date: 04/13/2012

Tim Rogers Thermal Operating Company, LLC c/o Tower Energy Group 1983 West 190th Street Torrance, CA 90504

**** 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:	Building Revised CT-4
Location:	Thermal, CA
Latitude:	33-36-10.36N NAD 83
Longitude:	116-09-05.64W
Heights:	-143 feet site elevation (SE)
Ũ	61 feet above ground level (AGL)
	-82 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 completed and returned to this office any time the project is abandoned or:

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If we can be of further assistance, please contact our office at (310) 725-6557. On any future correspondence concerning this matter, please refer to Aeronautical Study Number 2012-AWP-2707-OE.

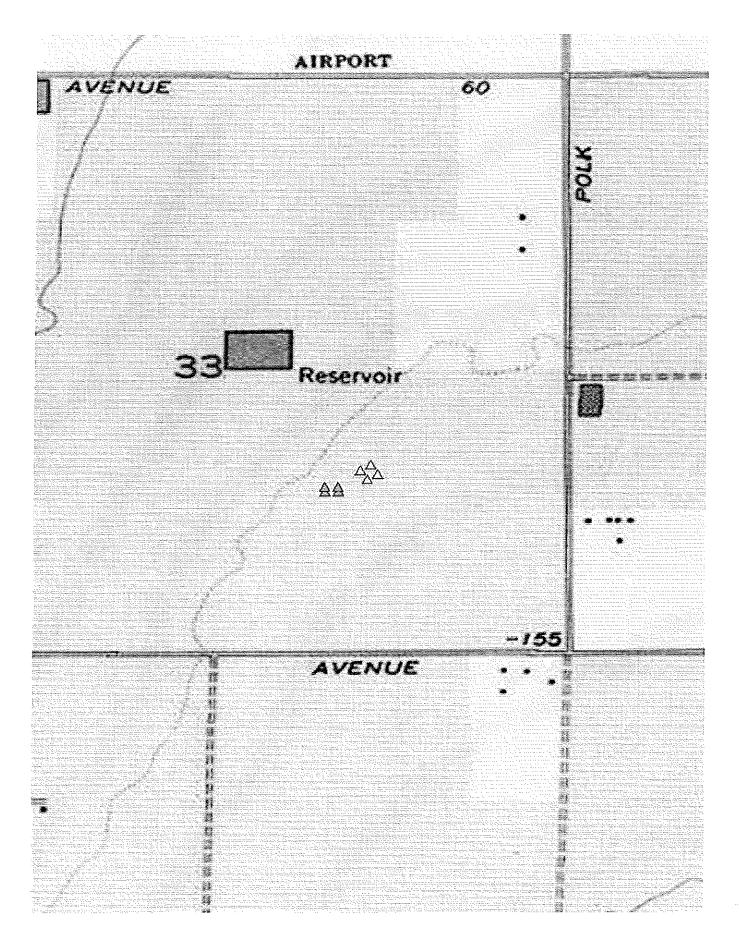
Signature Control No: 161510321-162653373 Karen McDonald Specialist (DNE)

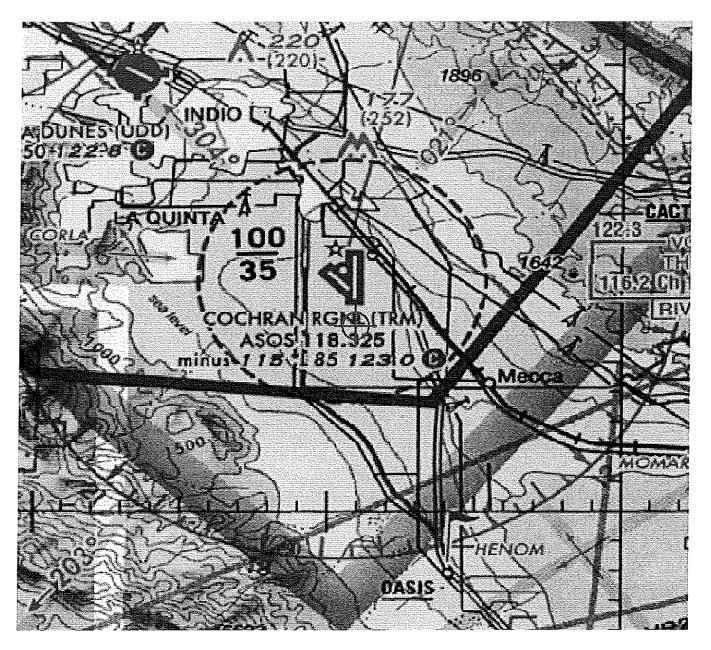
Attachment(s) Case Description Map(s)

Case Description for ASN 2012-AWP-2707-OE

Corner points of revised location for private race track control tower.

Verified Map for ASN 2012-AWP-2707-OE





RIVERSIDE COUNTY AIRPORT LAND USE COMMISSION

STAFF REPORT

ADMINISTRATIVE ITEMS

- 3.1 <u>Director's Approvals.</u> As authorized pursuant to ALUC Resolution No. 2011-02, ALUC Director Ed Cooper has reviewed one legislative case and issued a consistency letter based on the project having no possibility of being inconsistent with the land use planning guidelines contained in the applicable Airport Land Use Compatibility Plan. The specific project is an amendment to the text of the City of Riverside Zoning Code that would require the owner of a single-family residence in the City's RR, RE, R1, and MU-N zones to receive approval of a Room Rental Permit before renting a room or rooms to three or four individuals. Staff is attaching a copy of the approval letter and background information.
- **3.2** <u>Wind Turbine Aviation Safety Lighting.</u> At the August 15 Commission meeting, the Commission directed staff to investigate whether ALUC may select, or participate in the selection of, FAA-approved hazard lighting systems for wind turbines. Commissioner Betts had raised the question of whether it would be possible for the red navigation lights to be shielded from the bottom, so that they do not result in an annoyance to area residents or a distraction to motorists traveling along Interstate 10.

It does not appear that there are any provisions that specifically prohibit shielding from ground level, but staff has not had the opportunity to pursue this matter in depth and, therefore, requests that this item be carried over to the Commission's November meeting. Staff is attaching, for the Commission's information and continued discussion, a copy of FAA Advisory Circular 70/7460-1 K, as referenced by Commissioner Lyon at the August 15 meeting.

Y:\ALUC\ALUC Administrative Item&Admin. 2013\ADmin Item 09-12-13.doc



AIRPURT LAND USE COMMISS. JN **RIVERSIDE COUNTY**

August 15, 2013

Simon Housman Rancho Mirage VICE CHAIRMAN

CHAIR

Rod Ballance Riverside

COMMISSIONERS

Arthur Butler Riverside

John Lyon Riverside

Glen Holmes Hernet

Greg Pettis Cathedral City

Richard Stewart Moreno Valley

STAFF

Director Ed Cooper

John Guerin Russell Brady Barbara Santos

County Administrative Center 4060 Lemon St., 14º Floor. Riverside, CA 92501 (951) 955-5132

www.rcaluc.org

Mr. Doug Darnell, Senior Planner City of Riverside Planning Department 3900 Main Street

Riverside, CA 92522

AIRPORT LAND USE COMMISSION (ALUC) DEVELOPMENT REVIEW RE:

File No.: Related File No.: APN:

ZAP1009RG13 P11-0372 (Zoning Text Amendment) N/A. Citywide

Dear Mr. Darnell:

As authorized by the Riverside County Airport Land Use Commission (ALUC) pursuant to its Resolution No. 2011-02, as ALUC Director, I have reviewed City of Riverside Case No. P11-0372, an amendment to the text of the City's Zoning Code, and have determined that the amendment (which does not increase the density or intensity of development): (1) has no possibility for having an impact on airport land use compatibility within the Airport Influence Areas (AIAs) of Flabob Airport, Riverside Municipal Airport, and March Air Reserve Base; (2) has no potential for being inconsistent with the compatibility criteria and policies of the 1984 Riverside County Airport Land Use Plan (as applied to March Air Reserve Base), the 2004 Flabob Airport Land Use Compatibility Plan, and the 2005 Riverside Municipal Airport Land Use Compatibility Plan; and, (3) has no possibility for having an impact on the safety of air navigation within these AIAs or on the long-term viability of operations at these airports.

Therefore, I hereby find the above-referenced project, a proposal to require the owner of a single-family residence in the City's RR, RE, R1, and MU-N zones to receive approval of a Room Rental Permit before renting a room or rooms to three or four individuals,

CONSISTENT with the 2005 Riverside Municipal Airport Land Use Compatibility Plan, the 1984 Riverside County Airport Land Use Plan (as applied to the March Air Reserve Base Airport Influence Area), and the 2004 Flabob Airport Land Use Compatibility Plan.

If you have any questions, please contact Russell Brady, Contract Planner, at (951) 955-0549, or John Guerin, Principal Planner, at (951) 955-0982.

Sincerely, RIVERSIDE COUNTY AIRPORT LAND USE COMMISSION

Edward C. Cooper, Director

Planning Case P11-0372 (Zoning Code Amendment)

Project Description:

A Zoning Code Amendment to amend Article V – Incidental Uses Table, to amend Chapters 19.520 and 19.650 and add Chapter 19.895 – Room Rental Permit provisions of Title 19 (Zoning) of the Riverside Municipal Code related to rental of rooms in single-family residential dwellings.

The proposed amendment would do the following:

- Changes the current limit on rental of rooms allowed by right within any single-family residence/dwelling from four to no more than two individuals per single-family residence/dwelling. This change would apply to the Rural Residential (RR), the RE – Residential Estate, MU-N, Mixed Use Neighborhood and all R-1 Single-Family Residential Zones.
- Establishes a "Room Rental Permit Agreement" to be required for rental of rooms within a single-family residence/dwelling to three up to a maximum of four individual renters subject to compliance with certain operation related conditions of approval. This change would apply to the Rural Residential (RR), the RE – Residential Estate, MU-N, Mixed Use Neighborhood and all R-1 Single-Family Residential Zones.
- 3. The Room Rental Permit Agreement would be subject to approval by the Zoning Administrator decision. The Zoning Administrator decision would be first appealable to the City Planning Commission and then the City Council.
- 4. The Room Rental Permit Agreement would be required to renewed annually.
- 5. The Room Rental Permit Agreement provides a list of property maintenance conditions that the property owner must agree to comply with and advises the owner of grounds for revocation.
- 6. Revocation of the Room Rental Permit Agreement can occur if three or more violations of requirements from City Codes occur within any running 12-month period.
- 7. A revoked Room Rental Permit Agreement may not be re-issued for a minimum of one year from the revocation date.
- 8. Finally, if a Room Rental Permit Agreement issued to the same owner for the same property is revoked a second time, a Room Rental Permit Agreement may not be reissued for the subject property as long as it belongs to the same owner.

See proposed amendment text attached.

BELLY STREET

. cicle V – INCIDENTAL USES TABLE 19.150.020 (B)

This table identifies uses which are generally only permitted as an incidental use to some other permitted use on the property.

			1				<u>. </u>				-	÷		· · · · · · · · · · · · · · · · · · ·							· .	
Use	Residential Zones					Off	ca & Con		Zones		ed Use Zo		1		-1 7					Location of Required		
	RC** RA-5** RR RE R-1 R-3 R-4				Office & Commercial Zones						Industrial Zones			Other Zones			Standards in the Municipal Code					
Entertainment	×	x	x	X	x	X	X	+	CR	CG	CRC*	MU-N	MU-V*	MU-U*	BMP		AI	AIR	PF	RWY	DSP	
Fuel Systems - Private (Above	×	x	- Y	$\frac{1}{x}$	$\frac{1}{x}$	x	<u></u>	X	P	P	Р	<u>Р</u>	P	Р	x	X	X	X.	<u> </u>	X		
Ground Tanks)		^		^	Â	^	X	MC	MC	MC	MC	MC	MC	MC	MC	MC	MC	MC	мс	мс		19.480 – Fueling Systems – Private (Above Ground Tanks)
Home Occupations	x	x	Р	P	Р	P	ę	x	x	x	x	P P	P	P	x	x	x	x	x	x		
Mining/Mineral Extraction	×	х	c	C	С	с	с	x	c	c	x	x	x	x	x	c	x	x	x	x		
Outdoor Dining (only)	x	x		<u> </u>	<u> </u>			ļ											^	^		19.490 – MinIng/Mineral Extraction
	^	^	x	x	X	x	х	P	P	P	P	-P	P	P.	P	x	. X	Р	x	×		Restaurants - See Permitted Uses Table
Outdoor Dining and Food Preparation	x	X							<u> </u>					•								19.495 - Outdoor Dining and Food Preparation (Permanent)
(Permanent)			×	x	х	×	х	MC	MC	MC	MC	MC	MC	MC	MC	x	x	MC	х	х		19.495 – Outdoor Dining and Food Preparation (Permanent)
Outdoor Display of Incidental Plant Materials	×	×	x	×	х	х	x	x	Р	P	SP	Р	SP	SP	х	x	x	x	x	x		19.500 - Outdoor Display of
Dutdoor Display and Sales ⁴	x	x	x	x	x		·			+					ļ							Incidental Plant Materials
				Â	Ŷ	x	х	X	х	P ⁵	х	X	х	х	×	x	X	×	х	×		19.505 Outdoor Display and Sales
Ouldoor Storage	×	x	x	х	х	x	x	X	х	×	x	x	x	х	Р	P	P		x	v		19. 510 – Outdoor Storage
Play Areas Incidental to Restaurants	×	x	x	х	х	×	x	X	c	с	c	X	x	x	x	x	x	x	x	x	╶	11 ·····
Rental of Rooms 2 or fewer							·							~	<u>^</u>			Â	^	<u>^.</u>		19.515 – Play Areas Incidental Restaurants
	۳ 	P.	P	P	Р	×	х	×	x	x	х	Р	х	х	×	х	x	х	х	х		19.100 – Residential Zones 19.520 – Renlal of Rooms
Rental of Rooms to 3 or 4	P	Р	<u>RRP</u>	<u>RRP</u>	RRP	X	X	X	X	X	X	RRP	X	X	X	X	×	X	X	x	╋╊╋╋	
	ĺ		ļ			1					-		-		-	44	-	4	Δ	Δ		<u> 19.100 – Residential Zones</u> 19.520 – Rental of Rooms
econd Dwelling Units	x	x	x	P	P	×	×	~	· · · · · · · · · · · · · · · · · · ·					<u></u>								19.895 – Room Rental Permit
If all required standards cannot be met	×	x	×	MC	мс	λ (Ŷ	××	x x	××	××	x	××	X · X	X X	X X	X X	X X	X X	XX		19.525 - Second Dwelling Unit
ehicle Repair - Personal	P	Р	P	Р	P	x	x	*				mum		mam	munn			mum	ШWШ	mann		19.527 – Vehicle Repair -

⁴Outdoor Sales and Display are permitted with a TUP see 19.740.

⁵ Example: Vehicle and large equipment sales.

P - remines
 RCP = Recycling Center Permit, Chapter 19.870.
 DCP = Day Care Permit - Large Family, Chapter 19.860
 PRD = Planned Residential Development Permit, Chapter 19.780

* = For CRC, MU-U and MU-V Zones a Site Plan Review (Chapter 19.770) is required for any new or additions/changes to existing buildings or structures. P = Permitted RCP = Recycling Center Permit, Chapter 19.870. PCP = Day Care Permit Leare Permit (Core), Chapter 19.760 TUP = Temporary Use Permit, Chapter 19.740 TUP = Temporary Use Permit, Chapter 19.740 sq. ft. = Square Feet RRP = Room Rental Permit

MC = Subject to the granting of Minor Conditional Use Permit (MCUP), Chapter 19.730 X = Prohibited SP = Site Plan Review Permit, Chapter 19.770

Chapter 19.520

RENTAL OF ROOMS

19.520.010 Purpose.

19.520.020 Applicability and Permit Requirements.

19.520.030 Site Location, Operation and Development Standards.

19.520.010 Purpose.

The purpose of regulating the rental of a room or rooms is to ensure compatibility of such uses with surrounding neighborhoods and properties, to avoid any impacts associated with such uses (e.g., parking, open space, etc.) and to preserve the residential character of the neighborhood.

19.520.020 Applicability and Permit Requirements.

The rental of a room or rooms, as defined in Article X (Definitions), is permitted as set forth in Article V, Base Zones and Related Use and Development Provisions subject to the requirements contained in this Chapter.

19.520.030 Site Location, Operation and Development Standards.

Rented rooms are permitted in any single-family residence/dwelling for the occupancy of not more than four two individuals per single-family residence/dwelling.

The standards set forth in Article V, Base Zones and Related Use and Development Provisions, shall apply to rental of rooms, unless otherwise specified here.

Notwithstanding the foregoing, a Room Rental Permit Agreement may be issued for occupancy by up to four individual renters if all the following conditions are met.

A. Site Location Standards

- 1. The use shall be compatible with neighboring uses.
- 2. The establishment of the rental of rooms shall not result in harm to the health, safety or general welfare of the surrounding neighborhood or create substantial adverse impacts on adjoining properties or land uses.
- B. Operation and Development Standards
 - <u>1. Noise levels generated at the premises shall conform to Chapter 19.590 of the</u> Zoning Code and Title 7 (Noise Control) of the Riverside Municipal Code.
 - 2. Tenants shall be required to preserve and maintain neighborhood peace and order.
 - 3. Properties covered by a Room Rental Permit Agreement shall be maintained in a manner compatible with the adjacent properties and neighborhood and comply with the property maintenance provisions of "Title 6 (Health and Sanitation) of the Riverside Municipal Code." Property maintenance includes, but it not limited to, landscape maintenance, trash and debris, inoperable vehicles, parking on unimproved surfaces, failure to remove trash containers from the curb on trash collection day and improper outdoor storage.

- 4. <u>Rental of rooms shall be limited to no more than four individual renters per single-family residence/dwelling.</u>
- 5. <u>This section shall be applicable to any room rental or lease agreement signed after</u> the effective date of this Chapter.

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19.650.030 Concurrent Processing of Land Use Development Permits (LUDP).

When a proposed project requires more than one permit application with more than one Approving or Appeal Authority, all project permits shall be processed concurrently as interrelated permits for a single project. The highest designated Approving or Appeal Authority for all such requested permits shall take final action on multiple permit applications. For example, the Planning Commission takes final action on a tentative tract map. However, when processed in conjunction with a Development Agreement, the tentative tract map shall be reviewed and acted upon by the City Council in conjunction with the other application request(s). The Planning Commission provides recommendations to the City Council on both entitlement requests.

	Table 19.650.0		
	Approving and Appeal	ng and Appeal Authority	-
Type of Permit or Action	Zoning Administrator (ZA)	City Planning Commission ^(12,14)	City Counci (1,2,13,14)
	Administrative	•	
Day Care Large Family Home – Permit	F ⁽³⁾	AR	A/F
Design Review	F ⁽⁴⁾	A/AR ⁽⁴⁾	A ⁽⁴⁾ /F
Environmental Initial Study	F ^(5,6)	AR ^(5,6)	A ^(5,6,7) /F
Fair Housing and Reasonable Accommodation	F	AR	A ⁽⁷⁾ /F
Minor Conditional Use Permit	F	AR	A ⁽⁷⁾ /F
Nonconforming Determination	F	AR	A ^(/) /F
Recycling Center Permit	F		AR/A/F
Room Rental Permit	F ⁽⁵⁾	A	<u>A/F</u>
Street, Alley, & Walkway Vacations (Summary)	19)		F
Temporary Use Permit	F ⁽⁸⁾		
Time Extensions	F	AR	A/F
Transportation Demand Management Regulations	F		A/F
Variance	F	AR	A ^(/) /F
Zoning Code Interpretation	F	A/F	A/F
S	Public Hearing		
Accessibility Appeals		<u> </u>	A/F
elating to access) Airport Land Use Commission Appeals			A ⁽¹³⁾ /F
Annexation or Detachment		R ⁽⁹⁾	A/F
Conditional Use Permit		R ^(9, 12)	A/F
Condominium Conversion		R ⁽⁹⁾	A/F
Development Agreement and Amendment ⁽¹¹⁾		R ⁽⁹⁾	A/F
Design Review		F ⁽⁴⁾	A/F ⁽⁴⁾
Environmental Initial Study		R ^(6, 9)	A/F ⁽⁶⁾

	Table 19.650.0 Approving and Appea							
Approving and Appeal Authority								
Type of Permit or Action	Zoning Administrator (ZA)	City Council (1,2,13,14)						
Floodplain Approval; Floodplain Variance		F	A/F					
General Plan Text/Map Amendment		R ^(9, 12)	A/F					
Planned Residential Development Permit		R ^(9, 12)	A/F					
Site Plan Review Permit		R ⁽⁹⁾	A/F					
Specific Plan and Amendments		R ^(9, 12)	A/F					
Street, Alley, & Walkway Vacations		R ⁽⁹⁾	A/F ⁽¹⁰⁾					
Traffic Pattern Modification Measures		R ⁽⁹⁾	A/F ⁽¹⁰⁾					
Zoning Code Text/Map Amendment		R ^(9, 12)	A/F					

. .

		Table 19.650. Approving and Appea		
			ving and Appeal Authority	
7.0	be of Permit or Action	Zoning		City Council
1 1		Zoning Administrator (ZA)	City Planning Commission ^(12,14)	City Council (1,2,13,14)
	Decommanding Authority	E = Einel Approving Author	ity (unless appealable); A = A	
	Recommending Authority,	oning Administrator on Refe	ity (unless appealable), A – A	ppear Authority,
	- Approving Authority as 2	oning Administrator on Rece		
Note	s:			
1.		council are final and cannot		
2.			alendar which was originally l	heard at a public
		re-advertised for such hear		
3.	An applicant or affecte	d person(s) may request a r	hearing before the Planning C	ommission.
4.			ponsibility is limited to concu	
			on has approval authority (I	
[Commission or Zoning Admir	
			s first to the City Council Land	i Use Committee
-	with final action by the		way of a subbarity	
5.		oning Administrator has app		
6.	Per Section 9G of the C	City's CEQA Resolution 211	UD.	
7.	See Section 19.650.02	0 (C) (2) – Designated Appr	oving Authonity	agon The City
8.			nit shall be to the City Man	ager. The City
0	Manager's decision is f		is final unless appealed to	the City Council
9.		20 B – Appeal Authority).	r is fillar unless appealed to	the City Council
10.			measures require two acti	one at the City
10.	Council adoption of a	resolution of intent to b	old a public hearing and a	nublic hearing
· .	Pursuant to the Californ	a Streets and Highways C	ode (Section 8310 et seq.), th	e public hearing.
			on of the resolution of intent	
	hearing.	all to days aller the adopt		
-11,		Section 65864 for more info	ormation on Development Agr	ements.
12.	All decisions by the Pla	inning Commission to appr	ove or deny a permit or actio	n are by simple
		s present and voting, with th		······
	a. Conditional Use	Permits, including revocati	ons, and Planned Residential	Development
	Permits require	approval by a 2/3 majority	of the Planning Commission	ers present and
	voting; and		0	•
	b. Zoning Code	Text/Map Amendments, G	Seneral Plan Text/Map Am	endments, and
	Specific Plan A	Amendments require a ma	ajority vote of not less thar	four Planning
		present and voting.		-
13.			y a permit or action are by a	majority vote of ⁱ
	those present and votin	g except that a 2/3 vote of	the total membership (5 vot	es minimum) is
	required to approve an a	oppeal of a decision of the A	irport Land Use Commission	(ALUC).
14.			an application failed to be ap	
			re the City Council, the Mayo	
	voting right as any mem	ber of the City Council, an	id may cast a vote for or aga	inst an item to
	break a tie. In the Mayo	r's absence, in the event of	a tie vote, the Mayor Pro Tel	npore snali not j
	break a tie. In the Mayo have the right to cast a	r's absence, in the event of tie-breaking vote; in this ins	stance the City Council vote s	hall be treated

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Chapter 19.895

ROOM RENTAL PERMIT

<u>19.895.010 Purpose.</u> <u>19.895.020 Procedures.</u> 19.895.030 Room Rental Permit in Flow Chart Form.

<u>19.895.010 Purpose</u>

The purpose of this Chapter is to provide a procedure to permit owners of single-family residences/dwellings to rent a room or rooms to more than two but not to exceed four individuals through a room rental permit process. The Room Rental Permit is only applicable to the RR, RE and R1 Zones.

19.895.020 Procedures

The following procedures apply to applications for a Room Rental Permit:

- A. Application
 - Owners of a single family residence/dwelling wishing to rent a room or rooms to more than two, but not more than four individuals shall make written application to the Zoning Administrator, including all the material deemed necessary to demonstrate compliance with the provisions for this use in Chapter 19.520 (Rental of Rooms), including, a signed copy of the Room Rental Permit Agreement to meet the requirements for additional rentals.
- B. Approval

Upon receipt of a complete application, the Zoning Administrator shall grant the permit if all requirements of Chapter 19.520 (Rental of Rooms) are met. The Zoning Administrator shall approve the application unless findings are made that the approval would otherwise adversely affect the residential character of the neighborhood.

C. Renewal

A Room Rental Permit Agreement is effective for a period of one-year from the date of issuance and is required to be renewed on an annual basis thereafter. Renewal of a Room Rental Permit Agreement is subject to the Room Rental Permit Requirements of this Chapter.

D. Appeal

Any person may appeal the decision of the Zoning Administrator to the Planning Commission. A notice of public hearing for the appeal shall be provided pursuant to Section 19.670.030.

The decision of the Planning Commission may be appealed to the City Council. In the event of an appeal to the Planning Commission or City Council notice shall be given in the same manner as the Planning Commission appeal. The decision of the City Council shall be final.

E. Revocation.

Three or more violations of any of the operational requirements of Section 19.520.030.B (Operation and Development Standards) including extraordinary police service or response complaints as defined by Chapter 9.60 of the Riverside Municipal Code or citations for violations related to noise or property use or maintenance within any running twelve-month period, shall be grounds for revocation of the Room Rental Permit Agreement. Refer to Section 19.700.020 for revocation procedures.

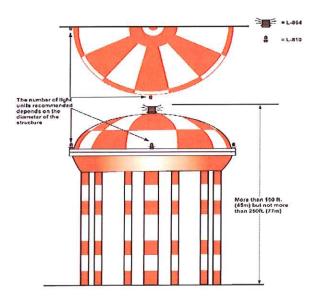
<u>A revoked Room Rental Permit Agreement may not be reissued for a minimum of one</u> year from the revocation date. If a Room Rental Permit Agreement issued to the same owner for the same property is revoked a second time a Room Rental Permit Agreement may not be reissued for the subject property as long as it belongs to the same owner.

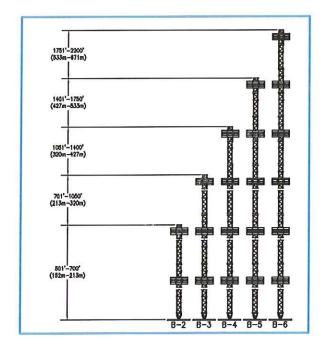


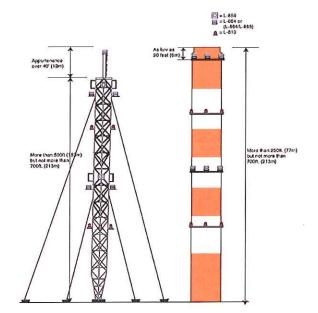
ADVISORY CIRCULAR

AC 70/7460-1K

Obstruction Marking and Lighting







 Date: 2/1/07
 AC No.: 70/7460-1K

 Initiated by: AJR-33
 Change: 2

- 1. <u>PURPOSE</u>. This change amends the Federal Aviation Administration's standards for marking and lighting structures to promote aviation safety. The change number and date of the change material are located at the top of the page.
- 2. <u>EFFECTIVE DATE</u>. This change is effective February 1, 2007.
- 3. EXPLANATION OF CHANGES.
 - a. Table of Contents. Change pages i through iii.
 - b.Pag e 1. Paragraph 1. **Reporting Requirements**. Incorporated the word "Title" in reference to the 14 Code of Federal Regulations (14 CFR part 77). FAA Regional Air Traffic Division office to read Obstruction Evaluation service (OES). FAA website to read <u>http://oeaaa.faa.gov</u>.
 - c. Page 1. Paragraph 4. **Supplemental Notice Requirement** (subpart b). FAA Regional Air Traffic Division office to read OES.
 - d.Pag e 1. Paragraph 5. Modifications and Deviations (subpart a). FAA Regional Air Traffic Division office to read OES.
 - e. Page 1. Paragraph 5. Modifications and Deviations (subpart c). FAA Regional office to read OES.
 - f. Page 2. Paragraph 5. Modifications and Deviations (subpart d). Removed period to create one sentence.
 - g.Pag e 2. Paragraph 7. Metric Units. And to read however.
 - h.Pag e 3. Paragraph 23. Light Failure Notification (subpart b). Nearest to read appropriate. FAA's website to read web. Website <u>www.faa.gov/ats/ata/ata400</u> to read <u>http://www.afss.com</u>.
 - i. Page 4. Paragraph 24. Notification of Restoration. Removed AFSS.
 - j. Page 5. Paragraph 32. Paint Standards. Removed a comma after "Since".
 - k.Pag e 5. Paragraph 33. **Paint Patterns** (subpart d. **Alternate Bands**). Removed number 6. Number 7 to read number 6.
 - 1. Page 9. Paragraph 41. **Standards**. TASC to read OTS. SVC-121.23 to read M-30.

- m. Page 14. Paragraph 55. Wind Turbine Structures. Removed. The paragraph numbers that follow have been changed accordingly.
- n.Pag e 18. Paragraph 65. Wind Turbine Structures. Removed. The paragraph numbers that follow have been changed accordingly.
- o.Pag e 20. Paragraph 77. Radio and Television Towers and Similar Skeletal Structures. Excluding to read including.
- p.Pag e 23. Paragraph 85. Wind Turbine Structures. Removed. The paragraph number that follows has been changed accordingly.
- q.Pag e 33-34. Chapter 13. Marking and Lighting Wind Turbine Farms. Added.
- r. Page A1-3. Appendix 1. Verbiage removed under first structure.

Namy B Kalinaushi

Nancy B. Kalinowski Director, System Operations Airspace and Aeronautical Information Management

PAGE CONTROL CHART

1

Remove Pages	Dated	Insert Pages	Dated
i through iii	8/1/00	i through iii	1/1/07
1-5	8/1/00	1-5	1/1/07
9	3/1/00	9	1/1/07
-	3/1/00	14	1/1/07
	3/1/00	18-34	1/1/07
		A1-3	1/1/07
9 14 18-34 A1-3		14 18-34	

AC 70/7460-1K CHG 2

TABLE OF CONTENTS

CHAPTER 1. ADMINISTRATIVE AND GENERAL PROCEDURES

1.	REPORTING REQUIREMENTS	. 1
	PRECONSTRUCTION NOTICE	
	FAA ACKNOWLEDGEMENT	
4.	SUPPLEMENTAL NOTICE REQUIREMENT	. 1
	MODIFICATIONS AND DEVIATIONS	
	ADDITIONAL NOTIFICATION	
	METRIC UNITS	

CHAPTER 2.GE NERAL

20.	STRUCTURES TO BE MARKED AND LIGHTED	. 3
	GUYED STRUCTURES.	
	MARKING AND LIGHTING EQUIPMENT	
	LIGHT FAILURE NOTIFICATION	
	NOTIFICATION OF RESTORATION	
	FCC REQUIREMENT	
MJ.		

CHAPTER 3. MARKING GUIDELINES

30. PURPOSE	5
31. PAINT COLORS	
32. PAINT STANDARDS	
33. PAINT PATTERNS	
34. MARKERS	
34. INARKERS	
36. OMISSION OR ALTERNATIVES TO MARKING	/

CHAPTER 4. LIGHTING GUIDELINE

40.	PURPOSE	9
	STANDARDS	
	LIGHTING SYSTEMS	
	CATENARY LIGHTING	
	INSPECTION, REPAIR AND MAINTENANCE	
	NONSTANDARD LIGHTS	
	PLACEMENT FACTORS	
	MONITORING OBSTRUCTION LIGHTS	
	ICE SHIELDS.	
	DISTRACTION	
···/•		

CHAPTER 5. RED OBSTRUCTION LIGHT SYSTEM

PURPOSE	13
STANDARDS	13
GROUP OF OBSTRUCTIONS	14
ALTERNATE METHOD OF DISPLAYING OBSTRUCTION LIGHTS	15
	PURPOSESTANDARDS STANDARDS CONTROL DEVICE POLES, TOWERS, AND SIMILAR SKELETAL STRUCTURES CHIMNEYS, FLARE STACKS, AND SIMILAR SOLID STRUCTURES GROUP OF OBSTRUCTIONS ALTERNATE METHOD OF DISPLAYING OBSTRUCTION LIGHTS PROMINENT BUILDINGS, BRIDGES, AND SIMILAR EXTENSIVE OBSTRUCTIONS

10

CHAPTER 6. MEDIUM INTENSITY FLASHING WHITE OBSTRUCTION LIGHT SYSTEMS

60.	PURPOSE	17
61.	STANDARDS	17
62.	RADIO AND TELEVISION TOWERS AND SIMILAR SKELETAL STRUCTURES	17
	CONTROL DEVICE	
64	CHIMNEYS, FLARE STACKS, AND SIMILAR SOLID STRUCTURES	18
65	GROUP OF OBSTRUCTIONS	18
66	SPECIAL CASES	18
60.	PROMINENT BUILDINGS AND SIMILAR EXTENSIVE OBSTRUCTIONS	18
0/.	TRUMINENT DUILDINGS AND SIMILAR EXTENSIVE ODSTRUCTIONS inamanimum	~~

CHAPTER 7. HIGH INTENSITY FLASHING WHITE OBSTRUCTION LIGHT SYSTEMS

). PURPOSE	19
I. STANDARDS	19
2. CONTROL DEVICE	19
2. CONTROL DEVICE	19
5. UNIIS PER LEVEL	10
4. INSTALLATION GUIDANCE	19
5. ANTENNA OR SIMILAR APPURTENANCE LIGHT	20
5. CHIMNEYS, FLARE STACKS, AND SIMILAR SOLID STRUCTURES	20
7. RADIO AND TELEVISION TOWERS AND SIMILAR SKELETAL STRUCTURES	20
A HYPERBOLIC COOLING TOWERS	20
). PROMINENT BUILDINGS AND SIMILAR EXTENSIVE OBSTRUCTIONS	21

CHAPTER 8. DUAL LIGHTING WITH RED/MEDIUM INTENSITY FLASHING WHITE SYSTEMS

80	PURPOSE	. 23
00.	INSTALLATION	23
ð1.	INSTALLATION	22
82.	OPERATION	, 23
83.	CONTROL DEVICE	. 23
84	ANTENNA OR SIMILAR APPURTENANCE LIGHT	. 23
	OMISSION OF MARKING	

CHAPTER 9. DUAL LIGHTING WITH RED/HIGH INTENSITY FLASHING WHITE SYSTEMS

00	PURPOSE	25
2U. 01	INSTALLATION	25
91.		25
92.	OPERATION	15
93.	CONTROL DEVICE	23
94.	ANTENNA OR SIMILAR APPURTENANCE LIGHT	25
95.	OMISSION OF MARKING	25

CHAPTER 10. MARKING AND LIGHTING OF CATENARY AND CATENARY SUPPORT STRUCTURES

100	PURPOSE	27
	CATENARY MARKING STANDARDS	
	CATENARY LIGHTING STANDARDS	
103.	CONTROL DEVICE	28
104.	AREA SURROUNDING CATENARY SUPPORT STRUCTURES	28
	THREE OR MORE CATENARY SUPPORT STRUCTURES	
105.	TIREE OR MORE CATENARY SUITORY STRUCTURES INFINIALITY AND A SUITORY STRUCTURES AND A SUITANTA SUITANTA AND A SUITORY STRUCTURES AND A SUITORY STRUCTURES AND A SUITANTA SUITANTA AND A SUITORY STRUCTURES AND A SUITORY STRUCTURES AND A SUITANTA AN	

CHAPTER 11. MARKING AND LIGHTING MOORED BALLOONS AND KITES

110.	PURPOSE	. 29
	STANDARDS	
	MARKING	
	PURPOSE	
114.	OPERATIONAL CHARACTERISTICS	. 29

CHAPTER 12. MARKING AND LIGHTING EQUIPMENT AND INFORMATION

120.	PURPOSE	31
	PAINT STANDARD	
	AVAILABILITY OF SPECIFICATIONS	
123.	LIGHTS AND ASSOCIATED EQUIPMENT	31
124.	AVAILABILITY	32

CHAPTER 13. MARKING AND LIGHTING WIND TURBINE FARMS

130.	PURPOSE	33
	GENERAL STANDARDS	
	WIND TURBINE CONFIGURATIONS	
	MARKING STANDARDS.	
	LIGHTING STANDARDS	
134.	LIGHTING STANDARDS	10

APPENDIX 1: SPECIFICATIONS FOR OBSTRUCTION LIGHTING EQUIPMENT CLASSIFICATION

APPENDIX A1-2

APPENDIX 2. MISCELLANEOUS

1.	RATIONALE FOR OBSTRUCTION LIGHT INTENSITIES.	A2	-1
	DISTANCE VERSUS INTENSITIES.		
	CONCLUSION.		
	DEFINITIONS		
5.	LIGHTING SYSTEM CONFIGURATION.	A2-	-2

CHAPTER 1. ADMINISTRATIVE AND GENERAL PROCEDURES

1. REPORTING REQUIREMENTS

A sponsor proposing any type of construction or alteration of a structure that may affect the National Airspace System (NAS) is required under the provisions of Title 14 Code of Federal Regulations (14 CFR part 77) to notify the FAA by completing the Notice of Proposed Construction or Alteration form (FAA Form 7460-1). The form should be sent to the Obstruction Evaluation service (OES). Copies of FAA Form 7460-1 may be obtained from OES, Airports District Office or FAA Website at http://oeaaa.faa.gov.

2. PRECONSTRUCTION NOTICE

The notice must be submitted:

a. At least 30 days prior to the date of proposed construction or alteration is to begin.

b. On or before the date an application for a construction permit is filed with the Federal Communications Commission (FCC). (The FCC advises its applicants to file with the FAA well in advance of the 30-day period in order to expedite FCC processing.)

3.FA A ACKNOWLEDGEMENT

The FAA will acknowledge, in writing, receipt of each FAA Form 7460-1 notice received.

4. SUPPLEMENTAL NOTICE REQUIREMENT

a. If required, the FAA will include a FAA Form 7460-2, Notice of Actual Construction or Alteration, with a determination.

b. FAA Form 7460-2 Part 1 is to be completed and sent to the FAA at least 48 hours prior to starting the actual construction or alteration of a structure. Additionally, Part 2 shall be submitted no later than 5 days after the structure has reached its greatest height. The form should be sent to the OES.

c. In addition, supplemental notice shall be submitted upon abandonment of construction.

d. Letters are acceptable in cases where the construction/alteration is temporary or a proposal is abandoned. This notification process is designed to permit the FAA the necessary time to change affected procedures and/or minimum flight altitudes, and to otherwise alert airmen of the structure's presence.

Note-

5. MODIFICATIONS AND DEVIATIONS

a. Requests for modification or deviation from the standards outlined in this AC must be submitted to the OES. The sponsor is responsible for adhering to approved marking and/or lighting limitations, and/or recommendations given, and should notify the FAA and FCC (for those structures regulated by the FCC) prior to removal of marking and/or lighting. A request received after a determination is issued may require a new study and could result in a new determination.

b. *Modifications*. Modifications will be based on whether or not they impact aviation safety. Examples of modifications that may be considered:

1. Marking and/or Lighting Only a Portion of an Object. The object may be so located with respect to other objects or terrain that only a portion of it needs to be marked or lighted.

2. No Marking and/or Lighting. The object may be so located with respect to other objects or terrain, removed from the general flow of air traffic, or may be so conspicuous by its shape, size, or color that marking or lighting would serve no useful purpose.

3. Voluntary Marking and/or Lighting. The object may be so located with respect to other objects or terrain that the sponsor feels increased conspicuity would better serve aviation safety. Sponsors who desire to voluntarily mark and/or light their structure should request the proper marking and/or lighting from the FAA to ensure no aviation safety issues are impacted.

4. Marking or Lighting an Object in Accordance with the Standards for an Object of Greater Height or Size. The object may present such an extraordinary hazard potential that higher standards may be recommended for increased conspicuity to ensure the safety to air navigation.

c. *Deviations.* The OES conducts an aeronautical study of the proposed deviation(s) and forwards its recommendation to FAA headquarters in Washington, DC, for final approval. Examples of deviations that may be considered:

1. Colors of objects.

- 2. Dimensions of color bands or rectangles.
- 3. Colors/types of lights.

4. Basic signals and intensity of lighting.

NOTIFICATION AS REQUIRED IN THE DETERMINATION IS CRITICAL TO AVIATION SAFETY.

5. Night/day lighting combinations.

6. Flash rate.

d. The FAA strongly recommends that owners become familiar with the different types of lighting systems and to specifically request the type of lighting system desired when submitting FAA Form 7460-1. (This request should be noted in "item 2.D" of the FAA form.) Information on these systems can be found in Chapter 12, Table 4 of this AC. While the FAA will make every effort to accommodate the structure sponsor's request, sponsors should also request information from system manufacturers in order to determine which system best meets their needs based on purpose, installation, and maintenance costs.

6. ADDITIONAL NOTIFICATION

Sponsors are reminded that any change to the submitted information on which the FAA has based its determination, including modification, deviation

or optional upgrade to white lighting on structures which are regulated by the FCC, must also be filed with the FCC prior to making the change for proper authorization and annotations of obstruction marking and lighting. These structures will be subject to inspection and enforcement of marking and lighting requirements by the FCC. FCC Forms and Bulletins can be obtained from the FCC's National Call Center at 1-888-CALL-FCC (1-888-225-5322). Upon completion of the actual change, notify the Aeronautical Charting office at:

NOAA/NOS

Aeronautical Charting Division Station 5601, N/ACC113 1305 East-West Highway Silver Spring, MD 20910-3233

7. METRIC UNITS

To promote an orderly transition to metric units, sponsors should include both English and metric (SI units) dimensions. The metric conversions may not be exact equivalents, however, until there is an official changeover to the metric system, the English dimensions will govern.

CHAPTER 2. GENERAL

20. STRUCTURES TO BE MARKED AND LIGHTED

Any temporary or permanent structure, including all appurtenances, that exceeds an overall height of 200 feet (61m) above ground level (AGL) or exceeds any obstruction standard contained in 14 CFR part 77, should normally be marked and/or lighted. However, an FAA aeronautical study may reveal that the absence of marking and/or lighting will not impair aviation safety. Conversely, the object may present such an extraordinary hazard potential that higher standards may be recommended for increased conspicuity to ensure safety to air navigation. Normally outside commercial lighting is not considered sufficient reason to omit recommended marking and/or lighting. Recommendations on marking and/or lighting structures can vary depending on terrain features, weather patterns, geographic location, and in the case of wind turbines, number of structures and overall layout of design. The FAA may also recommend marking and/or lighting a structure that does not exceed 200 (61m) feet AGL or 14 CFR part 77 standards because of its particular location.

21. GUYED STRUCTURES

The guys of a 2,000-foot (610m) skeletal tower are anchored from 1,600 feet (488m) to 2,000 feet (610m) from the base of the structure. This places a portion of the guys 1,500 feet (458m) from the tower at a height of between 125 feet (38m) to 500 feet (153m) AGL. 14 CFR part 91, section 119, requires pilots, when operating over other than congested areas, to remain at least 500 feet (153m) from manmade structures. Therefore, the tower must be cleared by 2,000 feet (610m) horizontally to avoid all guy wires. Properly maintained marking and lighting are important for increased conspicuity since the guys of a structure are difficult to see until aircraft are dangerously close.

22. MARKING AND LIGHTING EQUIPMENT

Considerable effort and research have been expended in determining the minimum marking and lighting systems or quality of materials that will produce an acceptable level of safety to air navigation. The FAA will recommend the use of only those marking and lighting systems that meet established technical standards. While additional lights may be desirable to identify an obstruction to air navigation and may, on occasion be recommended, the FAA will recommend minimum standards in the interest of safety, economy, and related concerns. Therefore, to provide an adequate level of safety, obstruction lighting systems should be installed, operated, and maintained in accordance with the recommended standards herein.

23. LIGHT FAILURE NOTIFICATION

a. Sponsors should keep in mind that conspicuity is achieved only when all recommended lights are working. Partial equipment outages decrease the margin of safety. Any outage should be corrected as soon as possible. Failure of a steady burning side or intermediate light should be corrected as soon as possible, but notification is not required.

b. Any failure or malfunction that lasts more than thirty (30) minutes and affects a top light or flashing obstruction light, regardless of its position, should be reported immediately to the appropriate flight service station (FSS) so a Notice to Airmen (NOTAM) can be issued. Toll-free numbers for FSS are listed in most telephone books or on the web at http://www.afss.com. This report should contain the following information:

1. Name of persons or organizations reporting light failures including any title, address, and telephone number.

2. The type of structure.

3. Location of structure (including latitude and longitude, if known, prominent structures, landmarks, etc.).

4. Height of structure above ground level (AGL)/above mean sea level (AMSL), if known.

5. A return to service date.

6. FCC Antenna Registration Number (for structures that are regulated by the FCC).

Note-

^{1.} When the primary lamp in a double obstruction light fails, and the secondary lamp comes on, no report is required. However, when one of the lamps in an incandescent L-864 flashing red beacon fails, it should be reported.

^{2.} After 15 days, the NOTAM is automatically deleted from the system. The sponsor is responsible for calling the nearest FSS to extend the outage date or to report a return to service date.

24. NOTIFICATION OF RESTORATION

As soon as normal operation is restored, notify the same FSS that received the notification of failure. The FCC advises that noncompliance with notification procedures could subject its sponsor to penalties or monetary forfeitures.

25. FCC REQUIREMENT

FCC licensees are required to file an environmental assessment with the Commission when seeking authorization for the use of the high intensity flashing white lighting system on structures located in residential neighborhoods, as defined by the applicable zoning law.

CHAPTER 3. MARKING GUIDLINES

30. PURPOSE

This chapter provides recommended guidelines to make certain structures conspicuous to pilots during daylight hours. One way of achieving this conspicuity is by painting and/or marking these structures. Recommendations on marking structures can vary depending on terrain features, weather patterns, geographic location, and in the case of wind turbines, number of structures and overall layout of design.

31. PAINT COLORS

Alternate sections of aviation orange and white paint should be used as they provide maximum visibility of an obstruction by contrast in colors.

32. PAINT STANDARDS

The following standards should be followed. To be effective, the paint used should meet specific color requirements when freshly applied to a structure. Since all outdoor paints deteriorate with time and it is not practical to give a maintenance schedule for all climates, surfaces should be repainted when the color changes noticeably or its effectiveness is reduced by scaling, oxidation, chipping, or layers of contamination.

a. *Materials and Application*. Quality paint and materials should be selected to provide extra years of service. The paint should be compatible with the surfaces to be painted, including any previous coatings, and suitable for the environmental conditions. Surface preparation and paint application should be in accordance with manufacturer's recommendations.

Note-

In-Service Aviation Orange Color Tolerance Charts are available from private suppliers for determining when repainting is required. The color should be sampled on the upper half of the structure, since weathering is greater there.

b. *Surfaces Not Requiring Paint*. Ladders, decks, and walkways of steel towers and similar structures need not be painted if a smooth surface presents a potential hazard to maintenance personnel. Paint may also be omitted from precision or critical surfaces if it would have an adverse effect on the transmission or radiation characteristics of a signal. However, the overall marking effect of the structure should not be reduced.

c. *Skeletal Structures.* Complete all marking/painting prior to or immediately upon

completion of construction. This applies to catenary support structures, radio and television towers, and similar skeletal structures. To be effective, paint should be applied to all inner and outer surfaces of the framework.

33. PAINT PATTERNS

Paint patterns of various types are used to mark structures. The pattern to be used is determined by the size and shape of the structure. The following patterns are recommended.

a. *Solid Pattern*. Obstacles should be colored aviation orange if the structure has both horizontal and vertical dimensions not exceeding 10.5 feet (3.2m).

b. *Checkerboard Pattern*. Alternating rectangles of aviation orange and white are normally displayed on the following structures:

1. Water, gas, and grain storage tanks.

2. Buildings, as required.

3. Large structures exceeding 10.5 feet (3.2m) across having a horizontal dimension that is equal to or greater than the vertical dimension.

c. Size of Patterns. Sides of the checkerboard pattern should measure not less than 5 feet (1.5m) or more than 20 feet (6m) and should be as nearly square as possible. However, if it is impractical because of the size or shape of a structure, the patterns may have sides less than 5 feet (1.5m). When possible, corner surfaces should be colored orange.

d. *Alternate Bands*. Alternate bands of aviation orange and white are normally displayed on the following structures:

1. Communication towers and catenary support structures.

2. Poles.

3. Smokestacks.

4. Skeletal framework of storage tanks and similar structures.

5. Structures which appear narrow from a side view, that are 10.5 feet (3.2m) or more across and the horizontal dimension is less than the vertical dimension.

6. Coaxial cable, conduits, and other cables attached to the face of a tower.

e. *Color Band Characteristics*. Bands for structures of any height should be:

1. Equal in width, provided each band is not less than $1^{1}/_{2}$ feet (0.5m) or more than 100 feet (31m) wide.

2. Perpendicular to the vertical axis with the bands at the top and bottom ends colored orange.

3. An odd number of bands on the structure.

4. Approximately one-seventh the height if the structure is 700 feet (214m) AGL or less. For each additional 200 feet (61m) or fraction thereof, add one (1) additional orange and one (1) additional white band.

5. Equal and in proportion to the structure's height AGL.

Example: If a Structure is:		
Greater Than	But Not More Than	Band Width
10.5 feet (3.2m)	700 feet (214m)	¹ / ₇ of height
701 feet (214m)	900 feet (275m)	¹ / ₉ of height
901 feet (275m)	1,100 feet (336m)	$1/_{11}$ of height
1,100 feet (336m)	1,300 feet (397m)	$^{1}/_{13}$ of height

Structure Height to Bandwidth Ratio

TBL 1

f. Structures With a Cover or Roof. If the structure has a cover or roof, the highest orange band should be continued to cover the entire top of the structure.

g. Skeletal Structures Atop Buildings. If a flagpole, skeletal structure, or similar object is erected on top of a building, the combined height of the object and building will determine whether marking is recommended; however, only the height of the object under study determines the width of the color bands.

h. *Partial Marking*. If marking is recommended for only a portion of a structure because of shielding by other objects or terrain, the width of the bands should be determined by the overall height of the structure. A minimum of three bands should be displayed on the upper portion of the structure. **i**. *Teardrop Pattern.* Spherical water storage tanks with a single circular standpipe support may be marked in a teardrop-striped pattern. The tank should show alternate stripes of aviation orange and white. The stripes should extend from the top center of the tank to its supporting standpipe. The width of the stripes should be equal, and the width of each stripe at the greatest girth of the tank should not be less than 5 feet (1.5m) nor more than 15 feet (4.6m).

j. *Community Names.* If it is desirable to paint the name of the community on the side of a tank, the stripe pattern may be broken to serve this purpose. This open area should have a maximum height of 3 feet (0.9m).

k. *Exceptions*. Structural designs not conducive to standard markings may be marked as follows:

1. If it is not practical to color the roof of a structure in a checkerboard pattern, it may be colored solid orange.

2. If a spherical structure is not suitable for an exact checkerboard pattern, the shape of the rectangles may be modified to fit the shape of the surface.

3. Storage tanks not suitable for a checkerboard pattern may be colored by alternating bands of aviation orange and white or a limited checkerboard pattern applied to the upper one-third of the structure.

4. The skeletal framework of certain water, gas, and grain storage tanks may be excluded from the checkerboard pattern.

34. MARKERS

Markers are used to highlight structures when it is impractical to make them conspicuous by painting. Markers may also be used in addition to aviation orange and white paint when additional conspicuity is They should be necessary for aviation safety. displayed in conspicuous positions on or adjacent to the structures so as to retain the general definition of the structure. They should be recognizable in clear air from a distance of at least 4,000 feet (1219m) and in all directions from which aircraft are likely to approach. Markers should be distinctively shaped, i.e., spherical or cylindrical, so they are not mistaken for items that are used to convey other information. They should be replaced when faded or otherwise deteriorated.

a. *Spherical Markers*. Spherical markers are used to identify overhead wires. Markers may be of another shape, i.e., cylindrical, provided the projected area of such markers will not be less than that presented by a spherical marker.

1. Size and Color.

The diameter of the markers used on extensive catenary wires across canyons, lakes, rivers, etc., should be not less than 36 inches (91cm). Smaller 20-inch (51cm) spheres are permitted on less extensive power lines or on power lines below 50 feet (15m) above the ground and within 1,500 feet (458m) of an airport runway end. Each marker should be a solid color such as aviation orange, white, or yellow.

2.I nstallations.

(a) Spacing. Markers should be spaced equally along the wire at intervals of approximately 200 feet (61m) or a fraction thereof. Intervals between markers should be less in critical areas near runway ends (i.e., 30 to 50 feet (10m to 15m)). They should be displayed on the highest wire or by another means at the same height as the highest wire. Where there is more than one wire at the highest point, the markers may be installed alternately along each wire if the distance between adjacent markers meets the spacing standard. This method allows the weight and wind loading factors to be distributed.

(b) *Pattern*. An alternating color scheme provides the most conspicuity against all backgrounds. Mark overhead wires by alternating solid colored markers of aviation orange, white, and yellow. Normally, an orange sphere is placed at each end of a line and the spacing is adjusted (not to exceed 200 feet (61m)) to accommodate the rest of the markers. When less than four markers are used, they should all be aviation orange.

b. *Flag Markers*. Flags are used to mark certain structures or objects when it is technically impractical to use spherical markers or painting. Some examples are temporary construction equipment, cranes, derricks, oil and other drilling rigs. Catenaries should use spherical markers.

1. *Minimum Size.* Each side of the flag marker should be at least 2 feet (0.6m) in length.

2. *Color Patterns*. Flags should be colored as follows:

(a) Solid. Aviation orange.

(b) *Orange and White.* Arrange two triangular sections, one aviation orange and the other white to form a rectangle.

(c) *Checkerboard.* Flags 3 feet (0.9m) or larger should be a checkerboard pattern of aviation orange and white squares, each 1 foot (0.3m) plus or minus 10 percent.

3. *Shape*. Flags should be rectangular in shape and have stiffeners to keep them from drooping in calm wind.

4. *Display*. Flag markers should be displayed around, on top, or along the highest edge of the obstruction. When flags are used to mark extensive or closely grouped obstructions, they should be displayed approximately 50 feet (15m) apart. The flag stakes should be of such strength and height that they will support the flags above all surrounding ground, structures, and/or objects of natural growth.

35. UNUSUAL COMPLEXITIES

The FAA may also recommend appropriate marking in an area where obstructions are so grouped as to present a common obstruction to air navigation.

36. OMISSION OR ALTERNATIVES TO MARKING

There are two alternatives to marking. Either alternative requires FAA review and concurrence.

a. High Intensity Flashing White Lighting Systems. The high intensity lighting systems are more effective than aviation orange and white paint and therefore can be recommended instead of marking. This is particularly true under certain ambient light conditions involving the position of the sun relative to the direction of flight. When high intensity lighting systems are operated during daytime and twilight, other methods of marking may be omitted. When operated 24 hours a day, other methods of marking and lighting may be omitted.

b. Medium Intensity Flashing White Lighting Systems. When medium intensity lighting systems are operated during daytime and twilight on structures 500 feet (153m) AGL or less, other methods of marking may be omitted. When operated 24 hours a day on structures 500 feet (153m) AGL or less, other methods of marking and lighting may be omitted.

Note-SPONSORS MUST ENSURE THAT ALTERNATIVES TO MARKING ARE COORDINATED WITH THE FCC FOR STRUCTURES UNDER ITS JURISDICTION PRIOR TO MAKING THE CHANGE.

CHAPTER 4. LIGHTING GUIDELINE

40. PURPOSE

This chapter describes the various obstruction lighting systems used to identify structures that an aeronautical study has determined will require added conspicuity. The lighting standards in this circular are the minimum necessary for aviation safety. Recommendations on lighting structures can vary depending on terrain features, weather patterns, geographic location, and in the case of wind turbines, number of structures and overall layout of design.

41.S TANDARDS

The standards outlined in this AC are based on the use of light units that meet specified intensities, beam patterns, color, and flash rates as specified in AC 150/5345-43.

These standards may be obtained from:

Department of Transportation	
OTS	
Subsequent Distribution Office, M-30	
Ardmore East Business Center	
3341 Q 75th Avenue	
Landover, MD 20785	

42. LIGHTING SYSTEMS

Obstruction lighting may be displayed on structures as follows:

a. Aviation Red Obstruction Lights. Use flashing beacons and/or steady burning lights during nighttime.

b. *Medium Intensity Flashing White Obstruction Lights.* Medium intensity flashing white obstruction lights may be used during daytime and twilight with automatically selected reduced intensity for nighttime operation. When this system is used on structures 500 feet (153m) AGL or less in height, other methods of marking and lighting the structure may be omitted. Aviation orange and white paint is always required for daytime marking on structures exceeding 500 feet (153m) AGL. This system is not normally recommended on structures 200 feet (61m) AGL or less.

c.*Hi gh Intensity Flashing White Obstruction Lights.* Use high intensity flashing white obstruction lights during daytime with automatically selected reduced intensities for twilight and nighttime operations. When this system is used, other methods of marking and lighting the structure may be omitted. This system should not be recommended on structures 500 feet (153m) AGL or less, unless an FAA aeronautical study shows otherwise.

Note-

All flashing lights on a structure should flash simultaneously except for catenary support structures, which have a distinct sequence flashing between levels.

d. *Dual Lighting*. This system consists of red lights for nighttime and high or medium intensity flashing white lights for daytime and twilight. When a dual lighting system incorporates medium flashing intensity lights on structures 500 feet (153m) or less, or high intensity flashing white lights on structures of any height, other methods of marking the structure may be omitted.

e. Obstruction Lights During Construction. As the height of the structure exceeds each level at which permanent obstruction lights would be recommended, two or more lights of the type specified in the determination should be installed at that level. Temporary high or medium intensity flashing white lights, as recommended in the determination, should be operated 24 hours a day until all permanent lights are in operation. In either case, two or more lights should be installed on the uppermost part of the structure any time it exceeds the height of the temporary construction equipment. They may be turned off for periods when they would interfere with construction personnel. If practical, permanent obstruction lights should be installed and operated at each level as construction progresses. The lights should be positioned to ensure that a pilot has an unobstructed view of at least one light at each level.

f. Obstruction Lights in Urban Areas. When a structure is located in an urban area where there are numerous other white lights (e.g., streetlights, etc.) red obstruction lights with painting or a medium intensity dual system is recommended. Medium intensity lighting is not normally recommended on structures less than 200 feet (61m).

g. Temporary Construction Equipment Lighting. Since there is such a variance in construction cranes, derricks, oil and other drilling rigs, each case should be considered individually. Lights should be installed according to the standards given in Chapters 5, 6, 7, or 8, as they would apply to permanent structures.

43.C ATENARY LIGHTING

Lighted markers are available for increased night conspicuity of high-voltage (69KV or greater) transmission line catenary wires. These markers should be used on transmission line catenary wires near airports, heliports, across rivers, canyons, lakes, etc. The lighted markers should be manufacturer certified as recognizable from a minimum distance of 4,000 feet (1219m) under nighttime conditions, minimum visual flight rules (VFR) conditions or having a minimum intensity of at least 32.5 candela. The lighting unit should emit a steady burning red light. They should be used on the highest energized line. If the lighted markers are installed on a line other than the highest catenary, then markers specified in paragraph 34 should be used in addition to the lighted markers. (The maximum distance between the line energizing the lighted markers and the highest catenary above the lighted marker should be no more than 20 feet (6m).) Markers should be distinctively shaped, i.e., spherical, cylindrical, so they are not mistaken for items that are used to convey other information. They should be visible in all directions from which aircraft are likely to approach. The area in the immediate vicinity of the supporting structure's base should be clear of all items and/or objects of natural growth that could interfere with the line-of-sight between a pilot and the structure's lights. Where a catenary wire crossing requires three or more supporting structures, the inner structures should be equipped with enough light units per level to provide a full coverage.

44. INSPECTION, REPAIR AND MAINTENANCE

To ensure the proper candela output for fixtures with incandescent lamps, the voltage provided to the lamp filament should not vary more than plus or minus 3 percent of the rated voltage of the lamp. The input voltage should be measured at the lamp socket with the lamp operating during the hours of normal operation. (For strobes, the input voltage of the power supplies should be within 10 percent of rated voltage.) Lamps should be replaced after being operated for not more than 75 percent of their rated life or immediately upon failure. Flashtubes in a light unit should be replaced immediately upon failure, when the peak effective intensity falls below specification limits or when the fixture begins skipping flashes, or at the manufacturer's recommended intervals. Due to the effects of harsh environments, beacon lenses should be visually inspected for ultraviolet damage, cracks, crazing, dirt

build up, etc., to insure that the certified light output has not deteriorated. (See paragraph 23, for reporting requirements in case of failure.)

45. NONSTANDARD LIGHTS

Moored balloons, chimneys, church steeples, and similar obstructions may be floodlighted by fixed search light projectors installed at three or more equidistant points around the base of each obstruction. The searchlight projectors should provide an average illumination of at least 15 footcandles over the top one-third of the obstruction.

46. PLACEMENT FACTORS

The height of the structure AGL determines the number of light levels. The light levels may be adjusted slightly, but not to exceed 10 feet (3m), when necessary to accommodate guy wires and personnel who replace or repair light fixtures. Except for catenary support structures, the following factors should be considered when determining the placement of obstruction lights on a structure.

a. *Red Obstruction Lighting Systems*. The overall height of the structure including all appurtenances such as rods, antennas, obstruction lights, etc., determines the number of light levels.

b. Medium Intensity Flashing White Obstruction Lighting Systems. The overall height of the structure including all appurtenances such as rods, antennas, obstruction lights, etc., determines the number of light levels.

c. High Intensity Flashing White Obstruction Lighting Systems. The overall height of the main structure including all appurtenances such as rods, antennas, obstruction lights, etc., determines the number of light levels.

d. Dual Obstruction Lighting Systems. The overall height of the structure including all appurtenances such as rods, antennas, obstruction lights, etc., is used to determine the number of light levels for a medium intensity white obstruction light/red obstruction dual lighting system. The overall height of the structure including all appurtenances is used to determine the number of light levels for a high intensity white obstruction light/red obstruction dual lighting system.

e. *Adjacent Structures.* The elevation of the tops of adjacent buildings in congested areas may be used as the equivalent of ground level to determine the proper number of light levels required.

f. *Shielded Lights*. If an adjacent object shields any light, horizontal placement of the lights should be adjusted or additional lights should be mounted on that object to retain or contribute to the definition of the obstruction.

47. MONITORING OBSTRUCTION LIGHTS

Obstruction lighting systems should be closely monitored by visual or automatic means. It is extremely important to visually inspect obstruction lighting in all operating intensities at least once every 24 hours on systems without automatic monitoring. In the event a structure is not readily accessible for visual observation, a properly maintained automatic monitor should be used. This monitor should be designed to register the malfunction of any light on the obstruction regardless of its position or color. When using remote monitoring devices, the communication status and operational status of the system should be confirmed at least once every 24 The monitor (aural or visual) should be hours. located in an area generally occupied by responsible personnel. In some cases, this may require a remote monitor in an attended location. For each structure, a log should be maintained in which daily operations status of the lighting system is recorded. Beacon

lenses should be replaced if serious cracks, crazing, dirt build up, etc., has occurred.

48. ICE SHIELDS

Where icing is likely to occur, metal grates or similar protective ice shields should be installed directly over each light unit to prevent falling ice or accumulations from damaging the light units.

49. DISTRACTION

a. Where obstruction lights may distract operators of vessels in the proximity of a navigable waterway, the sponsor must coordinate with the Commandant, U.S. Coast Guard, to avoid interference with marine navigation.

b. The address for marine information and coordination is:

Chief, Aids to Navigation Division (OPN) U.S. Coast Guard Headquarters 2100 2nd Street, SW., Rm. 3610 Washington, DC 20593-0001 *Telephone:* (202) 267-0980

CHAPTER 5. RED OBSTRUCTION LIGHT SYSTEM

50. PURPOSE

Red Obstruction lights are used to increase conspicuity during nighttime. Daytime and twilight marking is required. Recommendations on lighting structures can vary depending on terrain features, weather patterns, geographic location, and in the case of wind turbines, number of structutes and overall layout of design.

51. STANDARDS

The red obstruction lighting system is composed of flashing omnidirectional beacons (L-864) and/or steady burning (L-810) lights. When one or more levels is comprised of flashing beacon lighting, the lights should flash simultaneously.

a. *Single Obstruction Light*. A single (L-810) light may be used when more than one obstruction light is required either vertically or horizontally or where maintenance can be accomplished within a reasonable time.

1. *Top Level.* A single light may be used to identify low structures such as airport ILS buildings and long horizontal structures such as perimeter fences and building roof outlines.

2. Intermediate Level. Single lights may be used on skeletal and solid structures when more than one level of lights is installed and there are two or more single lights per level.

b. Double Obstruction Light. A double (L-810) light should be installed when used as a top light, at each end of a row of single obstruction lights, and in areas or locations where the failure of a single unit could cause an obstruction to be totally unlighted.

1. *Top Level.* Structures 150 feet (46m) AGL or less should have one or more double lights installed at the highest point and operating simultaneously.

2. Intermediate Level. Double lights should be installed at intermediate levels when a malfunction of a single light could create an unsafe condition and in remote areas where maintenance cannot be performed within a reasonable time. Both units may operate simultaneously, or a transfer relay may be used to switch to a spare unit should the active system fail.

3. Lowest Level. The lowest level of light units may be installed at a higher elevation than normal on a structure if the surrounding terrain, trees, or adjacent building(s) would obscure the lights. In certain instances, as determined by an FAA aeronautical study, the lowest level of lights may be eliminated.

52. CONTROL DEVICE

Red obstruction lights should be operated by a satisfactory control device (e.g., photo cell, timer, etc.) adjusted so the lights will be turned on when the northern sky illuminance reaching a vertical surface falls below a level of 60 foot-candles (645.8 lux) but before reaching a level of 35 foot-candles (367.7 lux). The control device should turn the lights off when the northern sky illuminance rises to a level of not more than 60 foot-candles (645.8 lux). The lights may also remain on continuously. The sensing device should, if practical, face the northern sky in the Northern Hemisphere. (See AC 150/5345-43.)

53. POLES, TOWERS, AND SIMILAR SKELETAL STRUCTURES

The following standards apply to radio and television towers, supporting structures for overhead transmission lines, and similar structures.

a. Top Moun ted Obstruction Light.

1. Structures 150 Feet (46m) AGL or Less. Two or more steady burning (L-810) lights should be installed in a manner to ensure an unobstructed view of one or more lights by a pilot.

2. Structures Exceeding 150 Feet (46m) AGL. At least one red flashing (L-864) beacon should be installed in a manner to ensure an unobstructed view of one or more lights by a pilot.

3. Appurtenances 40 Feet (12m) or Less. If a rod, antenna, or other appurtenance 40 feet (12m) or less in height is incapable of supporting a red flashing beacon, then it may be placed at the base of the appurtenance. If the mounting location does not allow unobstructed viewing of the beacon by a pilot, then additional beacons should be added.

4. Appurtenances Exceeding 40 Feet (12m). If a rod, antenna, or other appurtenance exceeding 40 feet (12m) in height is incapable of supporting a red flashing beacon, a supporting mast with one or more beacons should be installed adjacent to the appurtenance. Adjacent installations should not exceed the height of the appurtenance and be within 40 feet (12m) of the tip to allow the pilot an unobstructed view of at least one beacon.

b. *Mounting Intermediate Levels.* The number of light levels is determined by the height of the structure, including all appurtenances, and is detailed in Appendix 1. The number of lights on each level is

determined by the shape and height of the structure. These lights should be mounted so as to ensure an unobstructed view of at least one light by a pilot.

1.Ste ady Burning Lights (L-810).

(a) Structures 350 Feet (107m) AGL or Less. Two or more steady burning (L-810) lights should be installed on diagonally or diametrically opposite positions.

(b) Structures Exceeding 350 Feet (107m) AGL. Install steady burning (L-810) lights on each outside corner of each level.

2. Fl ashing Beacons (L-864).

(a) Structures 350 Feet (107m) AGL or Less. These structures do not require flashing (L-864) beacons at intermediate levels.

(b) Structure Exceeding 350 Feet (107m) AGL. At intermediate levels, two beacons (L-864) should be mounted outside at diagonally opposite positions of intermediate levels.

54. CHIMNEYS, FLARE STACKS, AND SIMILAR SOLID STRUCTURES

a. Number of Light Units.

1. The number of units recommended depends on the diameter of the structure at the top. The number of lights recommended below are the minimum.

2. When the structure diameter is:

(a) 20 Feet (6m) or Less. Three light units per level.

(b) Exceeding 20 Feet (6m) But Not More Than 100 Feet (31m). Four light units per level.

(c) Exceeding 100 Feet (31m) But Not More Than 200 Feet (61m). Six light units per level.

(d) Exceeding 200 Feet (61m). Eight light units per level.

b. Top Moun ted Obstruction Lights.

1. Structures 150 Feet (46m) AGL or Less. L-810 lights should be installed horizontally at regular intervals at or near the top.

2. Structures Exceeding 150 Feet (46m) AGL. At least three L-864 beacons should be installed.

3. Chimneys, Cooling Towers, and Flare Stacks. Lights may be displayed as low as 20 feet (6m) below the top to avoid the obscuring effect of deposits and heat generally emitted by this type of structure. It is important that these lights be readily accessible for cleaning and lamp replacement. It is understood that with flare stacks, as well as any other structures associated with the petrol-chemical industry, normal lighting requirements may not be necessary. This could be due to the location of the flare stack/structure within a large well-lighted petrol-chemical plant or the fact that the flare, or working lights surrounding the flare stack/structure, is as conspicuous as obstruction lights.

c. *Mounting Intermediate Levels*. The number of light levels is determined by the height of the structure including all appurtenances. For cooling towers 600 feet (183m) or less, intermediate light levels are not necessary. Structures exceeding 600 feet (183m) AGL should have a second level of light units installed approximately at the midpoint of the structure and in a vertical line with the top level of lights.

1. Steady Burning (L-810) Lights. The recommended number of light levels may be obtained from Appendix 1. At least three lights should be installed on each level.

2. Flashing (L-864) Beacons. The recommended number of beacon levels may be obtained from Appendix 1. At least three lights should be installed on each level.

(a) Structures 350 Feet (107m) AGL or Less. These structures do not need intermediate levels of flashing beacons.

(b) Structures Exceeding 350 Feet (107m) AGL. At least three flashing (L-864) beacons should be installed on each level in a manner to allow an unobstructed view of at least one beacon.

55. GROUP OF OBSTRUCTIONS

When individual objects, except wind turbines, within a group of obstructions are not the same height and are spaced a maximum of 150 feet (46m) apart, the prominent objects within the group should be lighted in accordance with the standards for individual obstructions of a corresponding height. If the outer structure is shorter than the prominent, the outer structure should be lighted in accordance with the for individual obstructions standards of a corresponding height. Light units should be placed to ensure that the light is visible to a pilot approaching from any direction. In addition, at least one flashing beacon should be installed at the top of a prominent center obstruction or on a special tower located near the center of the group.

56. ALTERNATE METHOD OF DISPLAYING OBSTRUCTION LIGHTS

When recommended in an FAA aeronautical study, lights may be placed on poles equal to the height of the obstruction and installed on or adjacent to the structure instead of installing lights on the obstruction.

57. PROMINENT BUILDINGS, BRIDGES, AND SIMILAR EXTENSIVE OBSTRUCTIONS

When objects within a group of obstructions are approximately the same overall height above the surface and are located a maximum of 150 feet (46m) apart, the group of obstructions may be considered an extensive obstruction. Install light units on the same horizontal plane at the highest portion or edge of prominent obstructions. Light units should be placed to ensure that the light is visible to a pilot approaching from **any** direction. If the structure is a bridge and is over navigable water, the sponsor must obtain prior approval of the lighting installation from the Commander of the District Office of the United States Coast Guard to avoid interference with marine navigation. Steady burning lights should be displayed to indicate the extent of the obstruction as follows:

a. Structures 150 Feet (46m) or Less in Any Horizontal Direction. I f the structure/bridge/extensive obstruction is 150 feet (46m) or less horizontally, at least one steady burning light (L-810) should be displayed on the highest point at each end of the major axis of the obstruction. If this is impractical because of the overall shape, display a double obstruction light in the center of the highest point.

b. Structures Exceeding 150 Feet (46m) in at Least One Horizontal Direction. If the structure/bridge/ extensive obstruction exceeds 150 feet (46m) horizontally, display at least one steady burning light for each 150 feet (46m), or fraction thereof, of the overall length of the major axis. At least one of these lights should be displayed on the highest point at each end of the obstruction. Additional lights should be displayed at approximately equal intervals not to exceed 150 feet (46m) on the highest points along the edge between the end lights. If an obstruction is located near a landing area and two or more edges are the same height, the edge nearest the landing area should be lighted.

c. Structures Exceeding 150 Feet (46m) AGL. Steady burning red obstruction lights should be installed on the highest point at each end. At intermediate levels, steady burning red lights should be displayed for each 150 feet (46m) or fraction thereof. The vertical position of these lights should be equidistant between the top lights and the ground level as the shape and type of obstruction will permit. One such light should be displayed at each outside corner on each level with the remaining lights evenly spaced between the corner lights.

d. *Exceptions.* Flashing red beacons (L-864) may be used instead of steady burning obstruction lights if early or special warning is necessary. These beacons should be displayed on the highest points of an extensive obstruction at intervals not exceeding 3,000 feet (915m). At least three beacons should be displayed on one side of the extensive obstruction to indicate a line of lights.

e. *Ice Shields.* Where icing is likely to occur, metal grates or similar protective ice shields should be installed directly over each light unit to prevent falling ice or accumulations from damaging the light units. The light should be mounted in a manner to ensure an unobstructed view of at least one light by a pilot approaching from any direction.

CHAPTER 6. MEDIUM INTENSITY FLASHING WHITE OBSTRUCTION LIGHT SYSTEMS

60. PURPOSE

Medium intensity flashing white (L-865) obstruction lights may provide conspicuity both day and night. Recommendations on lighting structures can vary depending on terrain features, weather patterns, geographic location, and in the case of wind turbines, number of structures and overall layout of design.

61. STANDARDS

The medium intensity flashing white light system is normally composed of flashing omnidirectional lights. Medium intensity flashing white obstruction lights may be used during daytime and twilight with automatically selected reduced intensity for nighttime operation. When this system is used on structures 500 feet (153m) AGL or less in height, other methods of marking and lighting the structure may be omitted. Aviation orange and white paint is always required for daytime marking on structures exceeding 500 feet (153m) AGL. This system is not normally recommended on structures 200 feet (61m) AGL or less.

The use of a 24-hour medium intensity flashing white light system in urban/populated areas in not normally recommended due to their tendency to merge with background lighting in these areas at night. This makes it extremely difficult for some types of aviation operations, i.e., med-evac, and police helicopters to see these structures. The use of this type of system in urban and rural areas often results in complaints. In addition, this system is not recommended on structures within 3 nautical miles of an airport.

62. RADIO AND TELEVISION TOWERS AND SIMILAR SKELETAL STRUCTURES

a. *Mounting Lights.* The number of levels recommended depends on the height of the structure, including antennas and similar appurtenances.

1. *Top Levels.* One or more lights should be installed at the highest point to provide 360-degree coverage ensuring an unobstructed view.

2. Appurtenances 40 feet (12m) or less. If a rod, antenna, or other appurtenance 40 feet (12m) or less in height is incapable of supporting the medium intensity flashing white light, then it may be placed at the base of the appurtenance. If the mounting location does not allow unobstructed viewing of the medium intensity flashing white light by a pilot, then additional lights should be added. 3. Appurtenances Exceeding 40 feet (12m). If a rod, antenna, or other appurtenance exceeds 40 feet (12m) above the tip of the main structure, a medium intensity flashing white light should be placed within 40 feet (12m) from the top of the appurtenance. If the appurtenance (such as a whip antenna) is incapable of supporting the light, one or more lights should be mounted on a pole adjacent to the appurtenance. Adjacent installations should not exceed the height of the appurtenance and be within 40 feet (12m) of the tip to allow the pilot an unobstructed view of at least one light.

b. *Intermediate Levels.* At intermediate levels, two beacons (L-865) should be mounted outside at diagonally or diametrically opposite positions of intermediate levels. The lowest light level should not be less than 200 feet (61m) AGL.

c. Lowest Levels. The lowest level of light units may be installed at a higher elevation than normal on a structure if the surrounding terrain, trees, or adjacent building(s) would obscure the lights. In certain instances, as determined by an FAA aeronautical study, the lowest level of lights may be eliminated.

d. Structures 500 Feet (153m) AGL or Less. When white lights are used during nighttime and twilight only, marking is required for daytime. When operated 24 hours a day, other methods of marking and lighting are not required.

e. Structures Exceeding 500 Feet (153m) AGL. The lights should be used during nighttime and twilight and may be used 24 hours a day. Marking is always required for daytime.

f. *Ice Shields*. Where icing is likely to occur, metal grates or similar protective ice shields should be installed directly over each light unit to prevent falling ice or accumulations from damaging the light units. The light should be mounted in a manner to ensure an unobstructed view of at least one light by a pilot approaching from any direction.

63. CONTROL DEVICE

The light intensity is controlled by a device that changes the intensity when the ambient light changes. The system should automatically change intensity steps when the northern sky illumination in the Northern Hemisphere on a vertical surface is as follows:

a. *Twilight-to-Night*. This should not occur before the illumination drops below five foot-candles (53.8

candles (21.5 lux).

b. *Night-to-Day*. The intensity changes listed in subparagraph 63a above should be reversed when changing from the night to day mode.

64. CHIMNEYS, FLARE STACKS, AND SIMILAR SOLID STRUCTURES

a. Number of Light Units. The number of units recommended depends on the diameter of the structure at the top. Normally, the top level is on the highest point of a structure. However, the top level of chimney lights may be installed as low as 20 feet (6m) below the top to minimize deposit build-up due to emissions. The number of lights recommended are the minimum. When the structure diameter is:

1. 20 Feet (6m) or Less. Three light units per level.

2. Exceeding 20 Feet (6m) But Not More Than 100 Feet (31m). Four light units per level.

3. Exceeding 100 Feet (31m) But Not More Than 200 Feet (61m). Six light units per level.

4. Exceeding 200 Feet (61m). Eight light units per level.

65. GROUP OF OBSTRUCTIONS

When individual objects within a group of obstructions are not the same height and are spaced a maximum of 150 feet (46m) apart, the prominent objects within the group should be lighted in accordance with the individual standards obstructions of for a corresponding height. If the outer structure is shorter than the prominent, the outer structure should be lighted in accordance with the standards for individual obstructions of a corresponding height. Light units should be placed to ensure that the light is visible to a pilot approaching from any direction. In addition, at least one medium intensity flashing white light should be installed at the top of a prominent center obstruction or on a special tower located near the center of the group.

66. SPECIAL CASES

Where lighting systems are installed on structures located near highways, waterways, airport approach areas, etc., caution should be exercised to ensure that the lights do not distract or otherwise cause a hazard to motorists, vessel operators, or pilots on an approach to an airport. In these cases, shielding may be necessary. This shielding should not derogate the intended purpose of the lighting system.

67. PROMINENT BUILDINGS AND SIMILAR EXTENSIVE OBSTRUCTIONS

When objects within a group of obstructions are approximately the same overall height above the surface and are located a maximum of 150 feet (46m) apart, the group of obstructions may be considered an extensive obstruction. Install light units on the same horizontal plane at the highest portion or edge of prominent obstructions. Light units should be placed to ensure that the light is visible to a pilot approaching from **any** direction. Lights should be displayed to indicate the extent of the obstruction as follows:

a. Structures 150 Feet (46m) or Less in Any Horizontal Direction. If the structure/extensive obstruction is 150 feet (46m) or less horizontally, at least one light should be displayed on the highest point at each end of the major axis of the obstruction. If this is impractical because of the overall shape, display a double obstruction light in the center of the highest point.

b. Structures Exceeding 150 Feet (46m) in at Least One Horizontal Direction. If the structure/extensive obstruction exceeds 150 feet (46m) horizontally, display at least one light for each 150 feet (46m) or fraction thereof, of the overall length of the major axis. At least one of these lights should be displayed on the highest point at each end of the obstruction. Additional lights should be displayed at approximately equal intervals not to exceed 150 feet (46m) on the highest points along the edge between the end lights. If an obstruction is located near a landing area and two or more edges are the same height, the edge nearest the landing area should be lighted.

c. Structures Exceeding 150 Feet (46m) AGL. Lights should be installed on the highest point at each end. At intermediate levels, lights should be displayed for each 150 feet (46m), or fraction thereof. The vertical position of these lights should be equidistant between the top lights and the ground level as the shape and type of obstruction will permit. One such light should be displayed at each outside corner on each level with the remaining lights evenly spaced between the corner lights.

CHAPTER 7. HIGH INTENSITY FLASHING WHITE OBSTRUCTION LIGHT SYSTEMS

70. PURPOSE

Lighting with high intensity (L-856) flashing white obstruction lights provides the highest degree of conspicuity both day and night. Recommendations on lighting structures can vary depending on terrain features, weather patterns, geographic location, and in the case of wind turbines, number of structutes and overall layout of design.

71. STANDARDS

Use high intensity flashing white obstruction lights during daytime with automatically selected reduced intensities for twilight and nighttime operations. When high intensity white lights are operated 24 hours a day, other methods of marking and lighting may be omitted. This system should not be recommended on structures 500 feet (153m) AGL or less unless an FAA aeronautical study shows otherwise.

72. CONTROL DEVICE

Light intensity is controlled by a device that changes the intensity when the ambient light changes. The use of a 24-hour high intensity flashing white light system in urban/populated areas is not normally recommended due to their tendency to merge with background lighting in these areas at night. This makes it extremely difficult for some types of aviation operations, i.e., med-evac, and police helicopters to see these structures. The use of this type of system in urban and rural areas often results in complaints.

The system should automatically change intensity steps when the northern sky illumination in the Northern Hemisphere on a vertical surface is as follows:

a. Day-to-Twilight. This should not occur before the illumination drops to 60 foot-candles (645.8 lux), but should occur before it drops below 35 foot-candles (376.7 lux). The illuminance-sensing device should, if practical, face the northern sky in the Northern Hemisphere.

b. *Twilight-to-Night*. This should not occur before the illumination drops below five foot-candles (53.8 lux), but should occur before it drops below two foot-candles (21.5 lux).

c. *Night-to-Day.* The intensity changes listed in subparagraph 72 a and b above should be reversed when changing from the night to day mode.

73. UNITS PER LEVEL

One or more light units is needed to obtain the desired horizontal coverage. The number of light units recommended per level (except for the supporting structures of catenary wires and buildings) depends upon the average outside diameter of the specific structure, and the horizontal beam width of the light fixture. The light units should be installed in a manner to ensure an unobstructed view of the system by a pilot approaching from any direction. The number of lights recommended are the minimum. When the structure diameter is:

a. 20 Feet (6m) or Less. Three light units per level.

b. Exceeding 20 Feet (6m) But Not More Than 100 Feet (31m). Four light units per level.

c. Exceeding 100 Feet (31m). Six light units per level.

74. INSTALLATION GUIDANCE

Manufacturing specifications provide for the effective peak intensity of the light beam to be adjustable from zero to 8 degrees above the horizon. Normal installation should place the top light at zero degrees to the horizontal and all other light units installed in accordance with Table 2:

Height of Light Unit Above Terrain	Degrees of Elevation Above the Horizonta	
Exceeding 500 feet AGL	0	
401 feet to 500 feet AGL	1	
301 feet to 400 feet AGL	2	
300 feet AGL or less	3	

Light Unit Elevation Above the Horizontal

TBL 2

a. Vertical Aiming. Where terrain, nearby residential areas, or other situations dictate, the light beam may be further elevated above the horizontal. The main beam of light at the lowest level should not strike the ground closer than 3 statute miles (5km) from the structure. If additional adjustments are necessary, the lights may be individually adjusted upward, in 1-degree increments, starting at the bottom. Excessive elevation may reduce its conspicuity by raising the beam above a collision course flight path.

b. Special Cases. Where lighting systems are installed on structures located near highways, waterways, airport approach areas, etc., caution should be exercised to ensure that the lights do not distract or otherwise cause a hazard to motorists, vessel operators, or pilots on an approach to an airport. In these cases,

shielding or an adjustment to the vertical or horizontal light aiming may be necessary. This adjustment should not derogate the intended purpose of the lighting system. Such adjustments may require review action as described in Chapter 1, paragraph 5.

c. *Relocation or Omission of Light Units*. Light units should not be installed in such a manner that the light pattern/output is disrupted by the structure.

1. Lowest Level. The lowest level of light units may be installed at a higher elevation than normal on a structure if the surrounding terrain, trees, or adjacent building(s) would obscure the lights. In certain instances, as determined by an FAA aeronautical study, the lowest level of lights may be eliminated.

2. Two Adjacent Structures. Where two structures are situated within 500 feet (153m) of each other and the light units are installed at the same levels, the sides of the structures facing each other need not be lighted. However, all lights on both structures must flash simultaneously, except for adjacent catenary support structures. Adjust vertical placement of the lights to either or both structures' intermediate levels to place the lights on the same horizontal plane. Where one structure is higher than the other, complete level(s) of lights should be installed on that part of the higher structure that extends above the top of the lower structure. If the structures are of such heights that the levels of lights cannot be placed in identical horizontal planes, then the light units should be placed such that the center of the horizontal beam patterns do not face toward the adjacent structure. For example, structures situated north and south of each other should have the light units on both structures installed on a northwest/southeast northeast/southwest and orientation.

3. Three or More Adjacent Structures. The treatment of a cluster of structures as an individual or a complex of structures will be determined by the FAA as the result of an aeronautical study, taking into consideration the location, heights, and spacing with other structures.

75. ANTENNA OR SIMILAR APPURTENANCE LIGHT

When a structure lighted by a high intensity flashing light system is topped with an antenna or similar appurtenance exceeding 40 feet (12m) in height, a medium intensity flashing white light (L-865) should be placed within 40 feet (12m) from the tip of the appurtenance. This light should operate 24 hours a day and flash simultaneously with the rest of the lighting system.

76. CHIMNEYS, FLARE STACKS, AND SIMILAR SOLID STRUCTURES

The number of light levels depends on the height of the structure excluding appurtenances. Three or more lights should be installed on each level in such a manner to ensure an unobstructed view by the pilot. Normally, the top level is on the highest point of a structure. However, the top level of chimney lights may be installed as low as 20 feet (6m) below the top to minimize deposit build-up due to emissions.

77. RADIO AND TELEVISION TOWERS AND SIMILAR SKELETAL STRUCTURES

a. *Mounting Lights.* The number of levels recommended depends on the height of the structure, including antennas and similar appurtenances. At least three lights should be installed on each level and mounted to ensure that the effective intensity of the full horizontal beam coverage is not impaired by the structural members.

b. Top Level. One level of lights should be installed at the highest point of the structure. If the highest point is a rod or antenna incapable of supporting a lighting system, then the top level of lights should be installed at the highest portion of the main skeletal structure. When guy wires come together at the top, it may be necessary to install this level of lights as low as 10 feet (3m) below the top. If the rod or antenna exceeds 40 feet (12m) above the main structure, a medium intensity flashing white light (L-865) should be mounted on the highest point. If the appurtenance (such as a whip antenna) is incapable of supporting a medium intensity light, one or more lights should be installed on a pole adjacent to the appurtenance. Adjacent installation should not exceed the height of the appurtenance and be within 40 feet (12m) of the top to allow an unobstructed view of at least one light.

c. *Ice Shields.* Where icing is likely to occur, metal grates or similar protective ice shields should be installed directly over each light unit to prevent falling ice or accumulations from damaging the light units.

78. HYPERBOLIC COOLING TOWERS

Light units should be installed in a manner to ensure an unobstructed view of at least two lights by a pilot approaching from **any** direction.

a. Number of Light Units. The number of units recommended depends on the diameter of the structure

at the top. The number of lights recommended in the following table are the minimum. When the structure diameter is:

1. 20 Feet (6m) or Less. Three light units per level.

2. Exceeding 20 Feet (6m) But Not More Than 100 Feet (31m). Four light units per level.

3. Exceeding 100 Feet (31m) But Not More Than 200 Feet (61m). Six light units per level.

4. Exceeding 200 Feet (61m). Eight light units per level.

b. Structures Exceeding 600 Feet (183m) AGL. Structures exceeding 600 feet (183m) AGL should have a second level of light units installed approximately at the midpoint of the structure and in a vertical line with the top level of lights.

79. PROMINENT BUILDINGS AND SIMILAR EXTENSIVE OBSTRUCTIONS

When objects within a group of obstructions are approximately the same overall height above the surface and are located not more than 150 feet (46m) apart, the group of obstructions may be considered an extensive obstruction. Install light units on the same horizontal plane at the highest portion or edge of prominent obstructions. Light units should be placed to ensure that the light is visible to a pilot approaching from **any** direction. These lights may require shielding, such as louvers, to ensure minimum adverse impact on local communities. Extreme caution in the use of high intensity flashing white lights should be exercised.

a. If the Obstruction is 200 feet (61m) or Less in Either Horizontal Dimension, install three or more light units at the highest portion of the structure in a manner to ensure that at least one light is visible to a pilot approaching from any direction. Units may be mounted on a single pedestal at or near the center of the obstruction. If light units are placed more than 10 feet (3m) from the center point of the structure, use a minimum of four units.

b. If the Obstruction Exceeds 200 Feet (61m) in One Horizontal Dimension, but is 200 feet (61m) or less in the other, two light units should be placed on each of the shorter sides. These light units may either be installed adjacent to each other at the midpoint of the edge of the obstruction or at (near) each corner with the light unit aimed to provide 180 degrees of coverage at each edge. One or more light units should be installed along the overall length of the major axis. These lights should be installed at approximately equal intervals not to exceed a distance of 100 feet (31m) from the corners or from each other.

c. If the Obstruction Exceeds 200 Feet (61m) in Both Horizontal Dimensions, light units should be equally spaced along the overall perimeter of the obstruction at intervals of 100 feet (31m) or fraction thereof.

Chap 7

CHAPTER 8. DUAL LIGHTING WITH RED/MEDIUM INTENSITY FLASHING WHITE SYSTEMS

80. PURPOSE

This dual lighting system includes red lights (L-864) for nighttime and medium intensity flashing white lights (L-865) for daytime and twilight use. This lighting system may be used in lieu of operating a medium intensity flashing white lighting system at night. There may be some populated areas where the use of medium intensity at night may cause significant environmental concerns. The use of the dual lighting system should reduce/mitigate those concerns. Recommendations on lighting structures can vary depending on terrain features, weather patterns, geographic location, and in the case of wind turbines, number of structutes and overall layout of design.

81. INSTALLATION

The light units should be installed as specified in the appropriate portions of Chapters 4, 5, and 6. The number of light levels needed may be obtained from Appendix 1.

82. OPERATION

Lighting systems should be operated as specified in Chapter 3. Both systems should not be operated at the same time; however, there should be no more than a 2second delay when changing from one system to the other. Outage of one of two lamps in the uppermost red beacon (L-864 incandescent unit) or outage of any uppermost red light shall cause the white obstruction light system to operate in its specified "night" step intensity.

83. CONTROL DEVICE

The light system is controlled by a device that changes the system when the ambient light changes. The system should automatically change steps when

the northern sky illumination in the Northern Hemisphere on a vertical surface is as follows:

a. *Twilight-to-Night*. This should not occur before the illumination drops below 5 foot-candles (53.8 lux) but should occur before it drops below 2 foot-candles (21.5 lux).

b. *Night-to-Day.* The intensity changes listed in subparagraph 83 a above should be reversed when changing from the night to day mode.

84. ANTENNA OR SIMILAR APPURTENANCE LIGHT

When a structure utilizing this dual lighting system is topped with an antenna or similar appurtenance exceeding 40 feet (12m) in height, a medium intensity flashing white (L-865) and a red flashing beacon (L-864) should be placed within 40 feet (12m) from the tip of the appurtenance. The white light should operate during daytime and twilight and the red light during nighttime. These lights should flash simultaneously with the rest of the lighting system.

85. OMISSION OF MARKING

When medium intensity white lights are operated on structures 500 feet (153m) AGL or less during daytime and twilight, other methods of marking may be omitted.

24

CHAPTER 9. DUAL LIGHTING WITH RED/HIGH INTENSITY FLASHING WHITE SYSTEMS

90. PURPOSE

This dual lighting system includes red lights (L-864) for nighttime and high intensity flashing white lights (L-856) for daytime and twilight use. This lighting system may be used in lieu of operating a flashing white lighting system at night. There may be some populated areas where the use of high intensity lights at night may cause significant environmental concerns and complaints. The use of the dual lighting system reduce/mitigate those concerns. should Recommendations on lighting structures can vary depending on terrain features, weather patterns, geographic location, and in the case of wind turbines, number of structutes and overall layout of design.

91. INSTALLATION

The light units should be installed as specified in the appropriate portions of Chapters 4, 5, and 7. The number of light levels needed may be obtained from Appendix 1.

92. OPERATION

Lighting systems should be operated as specified in Chapters 4, 5, and 7. Both systems should not be operated at the same time; however, there should be no more than a 2-second delay when changing from one system to the other. Outage of one of two lamps in the uppermost red beacon (L-864 incandescent unit) or outage of any uppermost red light shall cause the white obstruction light system to operate in its specified "night" step intensity.

93. CONTROL DEVICE

The light intensity is controlled by a device that changes the intensity when the ambient light changes.

The system should automatically change intensity steps when the northern sky illumination in the Northern Hemisphere on a vertical surface is as follows:

a. Day-to-Twilight. This should not occur before the illumination drops to 60 foot-candles (645.8 lux) but should occur before it drops below 35 foot-candles (376.7 lux). The illuminance-sensing device should, if practical, face the northern sky in the Northern Hemisphere.

b. *Twilight-to-Night*. This should not occur before the illumination drops below 5 foot-candles (53.8 lux) but should occur before it drops below 2 foot-candles (21.5 lux).

c. *Night-to-Day*. The intensity changes listed in subparagraph 93 a and b above should be reversed when changing from the night to day mode.

94. ANTENNA OR SIMILAR APPURTENANCE LIGHT

When a structure utilizing this dual lighting system is topped with an antenna or similar appurtenance exceeding 40 feet (12m) in height, a medium intensity flashing white light (L-865) and a red flashing beacon (L-864) should be placed within 40 feet (12m) from the tip of the appurtenance. The white light should operate during daytime and twilight and the red light during nighttime.

95. OMISSION OF MARKING

When high intensity white lights are operated during daytime and twilight, other methods of marking may be omitted.

CHAPTER 10. MARKING AND LIGHTING OF CATENARY AND CATENARY SUPPORT STRUCTURES

100. PURPOSE

This chapter provides guidelines for marking and lighting catenary and catenary support structures. The recommended marking and lighting of these structures is intended to provide day and night conspicuity and to assist pilots in identifying and avoiding catenary wires and associated support structures.

101. CATENARY MARKING STANDARDS

Lighted markers are available for increased night conspicuity of high-voltage (69KV or greater) transmission line catenary wires. These markers should be used on transmission line catenary wires near airports, heliports, across rivers, canyons, lakes, The lighted markers should be manufacturer etc. certified as recognizable from a minimum distance of 4,000 feet (1219m) under nighttime conditions, minimum VFR conditions or having a minimum intensity of at least 32.5 candela. The lighting unit should emit a steady burning red light. They should be used on the highest energized line. If the lighted markers are installed on a line other than the highest catenary, then markers specified in paragraph 34 should be used in addition to the lighted markers. (The maximum distance between the line energizing the lighted markers and the highest catenary above the lighted marker should be no more than 20 feet (6m).) Markers should be distinctively shaped, i.e., spherical, cylindrical, so they are not mistaken for items that are used to convey other information. They should be visible in all directions from which aircraft are likely to approach. The area in the immediate vicinity of the supporting structure's base should be clear of all items and/or objects of natural growth that could interfere with the line-of-sight between a pilot and the structure's lights. Where a catenary wire crossing requires three or more supporting structures, the inner structures should be equipped with enough light units per level to provide a full coverage.

a.Si ze and Color. The diameter of the markers used on extensive catenary wires across canyons, lakes, rivers, etc., should be not less than 36 inches (91cm). Smaller 20-inch (51cm) markers are permitted on less extensive power lines or on power lines below 50 feet (15m) above the ground and within 1,500 feet (458m) of an airport runway end. Each marker should be a solid color such as aviation orange, white, or yellow.

b.I nstallation.

1. *Spacing.* Lighted markers should be spaced equally along the wire at intervals of approximately 200 feet (61m) or a fraction thereof. Intervals between

markers should be less in critical areas near runway ends, i.e., 30 to 50 feet (10m to 15m). If the markers are installed on a line other than the highest catenary, then markers specified in paragraph 34 should be used in addition to the lighted markers. The maximum distance between the line energizing the lighted markers and the highest catenary above the markers can be no more than 20 feet (6m). The lighted markers may be installed alternately along each wire if the distance between adjacent markers meets the spacing standard. This method allows the weight and wind loading factors to be distributed.

2. Pattern. An alternating color scheme provides the most conspicuity against all backgrounds. Mark overhead wires by alternating solid colored markers of aviation orange, white, and yellow. Normally, an orange marker is placed at each end of a line and the spacing is adjusted (not to exceed 200 feet (61m)) to accommodate the rest of the markers. When less than four markers are used, they should all be aviation orange.

102. CATENARY LIGHTING STANDARDS

When using medium intensity flashing white (L-866), high intensity flashing white (L-857), dual medium intensity (L-866/L-885) or dual high intensity (L-857/885) lighting systems, operated 24 hours a day, other marking of the support structure is not necessary.

a. Levels. A system of three levels of sequentially flashing light units should be installed on each supporting structure or adjacent terrain. Install one level at the top of the structure, one at the height of the lowest point in the catenary and one level approximately midway between the other two light levels. The middle level should normally be at least 50 feet (15m) from the other two levels. The middle light unit may be deleted when the distance between the top and the bottom light levels is less than 100 feet (30m).

1. Top Levels. One or more lights should be installed at the top of the structure to provide 360degree coverage ensuring an unobstructed view. If the installation presents a potential danger to maintenance personnel, or when necessary for lightning protection, the top level of lights may be mounted as low as 20 feet (6m) below the highest point of the structure.

2. Horizontal Coverage. The light units at the middle level and bottom level should be installed so as to provide a minimum of 180-degree coverage centered perpendicular to the flyway. Where a catenary crossing is situated near a bend in a river, canyon, etc., or is not perpendicular to the flyway, the

horizontal beam should be directed to provide the most effective light coverage to warn pilots approaching from either direction of the catenary wires.

3. Variation. The vertical and horizontal arrangements of the lights may be subject to the structural limits of the towers and/or adjacent terrain. A tolerance of 20 percent from uniform spacing of the bottom and middle light is allowed. If the base of the supporting structure(s) is higher than the lowest point in the catenary, such as a canyon crossing, one or more lights should be installed on the adjacent terrain at the level of the lowest point in the span. These lights should be installed on the structure or terrain at the height of the lowest point in the catenary.

b. *Flash Sequence.* The flash sequence should be middle, top, and bottom with all lights on the same level flashing simultaneously. The time delay between flashes of levels is designed to present a unique system display. The time delay between the start of each level of flash duration is outlined in FAA AC 150/5345-43, Specification for Obstruction Lighting Equipment.

c. Synchronization. Although desirable, the corresponding light levels on associated supporting towers of a catenary crossing need not flash simultaneously.

d. Structures 500 feet (153m) AGL or Less. When medium intensity white lights (L-866) are operated 24 hours a day, or when a dual red/medium intensity system (L-866 daytime & twilight/L-885 nighttime) is used, marking can be omitted. When using a medium intensity while light (L-866) or a flashing red light (L-885) during twilight or nighttime only, painting should be used for daytime marking.

e. Structures Exceeding 500 Feet (153m) AGL. When high intensity white lights (L-857) are operated 24 hours a day, or when a dual red/high intensity system (L-857 daytime and twilight/L-885 nighttime) is used, marking can be omitted. This system should not be recommended on structures 500 feet (153m) or less unless an FAA aeronautical study shows otherwise. When a flashing red obstruction light (L-885), a medium intensity (L-866) flashing white lighting system or a high intensity white lighting system (L-857) is used for nighttime and twilight only, painting should be used for daytime marking.

103. CONTROL DEVICE

The light intensity is controlled by a device (photocell) that changes the intensity when the ambient light changes. The lighting system should automatically change intensity steps when the northern sky illumination in the Northern Hemisphere on a vertical surface is as follows:

a. Day-to-Twilight (L-857 System). This should not occur before the illumination drops to 60 foot-candles (645.8 lux), but should occur before it drops below 35 foot-candles (376.7 lux). The illuminant-sensing device should, if practical, face the northern sky in the Northern Hemisphere.

b. *Twilight-to-Night (L-857 System)*. This should not occur before the illumination drops below 5 foot-candles (53.8 lux), but should occur before it drops below 2 foot-candles (21.5 lux).

c. *Night-to-Day*. The intensity changes listed in subparagraph 103 a. and b. above should be reversed when changing from the night to day mode.

d. Day-to-Night (L-866 or L-885/L-866). This should not occur before the illumination drops below 5 foot-candles (563.8 lux) but should occur before it drops below 2 foot-candles (21.5 lux).

e. *Night-to-Day.* The intensity changes listed in subparagraph d. above should be reversed when changing from the night to day mode.

f. Red Obstruction (L-885). The red lights should not turn on until the illumination drops below 60 footcandles (645.8 lux) but should occur before reaching a level of 35 foot-candles (367.7 lux). Lights should not turn off before the illuminance rises above 35 footcandles (367.7 lux), but should occur before reaching 60 foot-candles (645.8 lux).

104. AREA SURROUNDING CATENARY SUPPORT STRUCTURES

The area in the immediate vicinity of the supporting structure's base should be clear of all items and/or objects of natural growth that could interfere with the line-of-sight between a pilot and the structure's lights.

105. THREE OR MORE CATENARY SUPPORT STRUCTURES

Where a catenary wire crossing requires three or more supporting structures, the inner structures should be equipped with enough light units per level to provide a full 360-degree coverage.

CHAPTER 11. MARKING AND LIGHTING MOORED BALLOONS AND KITES

110. PURPOSE

The purpose of marking and lighting moored balloons, kites, and their cables or mooring lines is to indicate the presence and general definition of these objects to pilots when converging from any normal angle of approach.

111. STANDARDS

These marking and lighting standards pertain to all moored balloons and kites that require marking and lighting under 14 CFR, part 101.

112. MARKING

Flag markers should be used on mooring lines to warn pilots of their presence during daylight hours.

a. *Display.* Markers should be displayed at no more than 50-foot (15m) intervals and should be visible for at least 1 statute mile.

b. Shape. Markers should be rectangular in shape and not less than 2 feet (0.6m) on a side. Stiffeners should be used in the borders so as to expose a large area, prevent drooping in calm wind, or wrapping around the cable.

c. *Color Patterns*. One of the following color patterns should be used:

1. Solid Color. Aviation orange.

2. Orange and White. Two triangular sections, one of aviation orange and the other white, combined to form a rectangle.

113. PURPOSE

Flashing obstruction lights should be used on moored balloons or kites and their mooring lines to warn pilots of their presence during the hours between sunset and sunrise and during periods of reduced visibility. These lights may be operated 24 hours a day.

a. Systems. Flashing red (L-864) or white beacons (L-865) may be used to light moored balloons or kites. High intensity lights (L-856) are not recommended.

b. *Display.* Flashing lights should be displayed on the top, nose section, tail section, and on the tether cable approximately 15 feet (4.6m) below the craft so as to define the extremes of size and shape. Additional lights should be equally spaced along the cable's overall length for each 350 feet (107m) or fraction thereof.

c. *Exceptions.* When the requirements of this paragraph cannot be met, floodlighting may be used.

114. OPERATIONAL CHARACTERISTICS

The light intensity is controlled by a device that changes the intensity when the ambient light changes. The system should automatically turn the lights on and change intensities as ambient light condition change. The reverse order should apply in changing from nighttime to daytime operation. The lights should flash simultaneously.

CHAPTER 12. MARKING AND LIGHTING EQUIPMENT AND INFORMATION

120. PURPOSE

This chapter lists documents relating to obstruction marking and lighting systems and where they may be obtained.

121. PAINT STANDARD

Paint and aviation colors/gloss, referred to in this publication should conform to Federal Standard FED-STD-595. Approved colors shall be formulated without the use of Lead, Zinc Chromate or other heavy metals to match International Orange, White and Yellow. All coatings shall be manufactured and labeled to meet Federal Environmental Protection Act Volatile Organic Compound(s) guidelines, including the National Volatile Organic Compound Emission Standards for architectural coatings.

a. Exterior Acrylic Waterborne Paint. Coating should be a ready mixed, 100% acrylic, exterior latex formulated for application directly to galvanized surfaces. Ferrous iron and steel or non-galvanized surfaces shall be primed with a manufacturer recommended primer compatible with the finish coat.

b. Exterior Solventborne Alkyd Based Paint. Coating should be ready mixed, alkyd-based, exterior enamel for application directly to non-galvanized surfaces such as ferrous iron and steel. Galvanized surfaces shall be primed with a manufacturer primer compatible with the finish coat.

Failt Statuarus Color Table		
NUMBER		
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17875		
13538		

Paint	Standards	Color	Table

TBL 3

Note-

1. Federal specification T1-P-59, aviation surface paint, ready mixed international orange.

2. Federal specification T1-102, aviation surface paint, oil titanium zinc.

3. Federal specification T1-102, aviation surface paint, oil, exterior, ready mixed, white and light tints.

122. AVAILABILITY OF SPECIFICATIONS

Federal specifications describing the technical characteristics of various paints and their application techniques may be obtained from:

GSA- Specification Branch	
470 L'Enfant Plaza	
Suite 8214	
Washington, DC 20407	
Telephone: (202) 619-8925	

123. LIGHTS AND ASSOCIATED EQUIPMENT

The lighting equipment referred to in this publication should conform to the latest edition of one of the following specifications, as applicable:

a. Obs truction Lighting Equipment.

1. AC 150/5345-43, FAA Specification for Obstruction Lighting Equipment.

2. Military Specifications MIL-L-6273, Light, Navigational, Beacon, Obstacle or Code, Type G-1.

3. Military Specifications MIL-L-7830, Light Assembly, Markers, Aircraft Obstruction.

b. Certified Equipment.

1. AC 150/5345-53, Airport Lighting Certification Program, lists the manufacturers that have demonstrated compliance with the specification requirements of AC 150/5345-43.

2. Other manufacturers' equipment may be used provided that equipment meets the specification requirements of AC 150/5345-43.

c.Ai rport Lighting Installation and Maintenance.

1. AC 150/5340-21, Airport Miscellaneous Lighting Visual Aids, provides guidance for the installation, maintenance, testing, and inspection of obstruction lighting for airport visual aids such as airport beacons, wind cones, etc.

2. AC 150/5340-26, Maintenance of Airport Visual Aid Facilities, provides guidance on the maintenance of airport visual aid facilities.

d. V ehicles.

1. AC 150/5210-5, Painting, Marking, and Lighting of Vehicles Used on an Airport, contains provisions for marking vehicles principally used on airports.

2. FAA Facilities. Obstruction marking for FAA facilities shall conform to FAA Drawing Number D-5480, referenced in FAA Standard FAA-STD-003, Paint Systems for Structures.

The standards and specifications listed above may be obtained free of charge from the below-indicated office:

a.Mi litary Specifications:

Standardization Document Order Desk 700 Robbins Avenue Building #4, Section D Philadelphia, PA 19111-5094

b. FAA Specifications:

Manager, ASD-110 Department of Transportation Document Control Center Martin Marietta/Air Traffic Systems 475 School St., SW. Washington, DC 20024 Telephone: (202) 646-2047 FAA Contractors Only

c. FAA Advisory Circulars:

Department of Transportation TASC Subsequent Distribution Office, SVC-121.23 Ardmore East Business Center 3341 Q 75th Avenue Landover, MD 20785 Telephone: (301) 322-4961

CHAPTER 13. MARKING AND LIGHTING WIND TURBINE FARMS

130. PURPOSE

This chapter provides guidelines for the marking and lighting of wind turbine farms. For the purposes of this advisory circular, wind turbine farms are defined as a wind turbine development that contains more than three (3) turbines of heights over 200 feet above ground level. The recommended marking and lighting of these structures is intended to provide day and night conspicuity and to assist pilots in identifying and avoiding these obstacles.

131. GENERAL STANDARDS

The development of wind turbine farms is a very dynamic process, which constantly changes based on the differing terrain they are built on. Each wind turbine farm is unique; therefore it is important to work closely with the sponsor to determine a lighting scheme that provides for the safety of air traffic. The following are guidelines that are recommended for wind turbine farms. Consider the proximity to airports and VFR routes, extreme terrain where heights may widely vary, and local flight activity when making the recommendation.

a. Not all wind turbine units within an installation or farm need to be lighted. Definition of the periphery of the installation is essential; however, lighting of interior wind turbines is of lesser importance unless they are taller than the peripheral units.

b. Obstruction lights within a group of wind turbines should have unlighted separations or gaps of no more than $\frac{1}{2}$ statute mile if the integrity of the group appearance is to be maintained. This is especially critical if the arrangement of objects is essentially linear.

c. Any array of flashing or pulsed obstruction lighting should be synchronized or flash simultaneously.

d. Nighttime wind turbine obstruction lighting should consist of the preferred FAA L-864 aviation red-colored flashing lights.

e. White strobe fixtures (FAA L-865) may be used in lieu of the preferred L-864 red flashing lights, but must be used alone without any red lights, and must be positioned in the same manner as the red flashing lights.

f. The white paint most often found on wind turbine units is the most effective daytime early warning device. Other colors, such as light gray or blue, appear to be significantly less effective in providing daytime warning. Daytime lighting of wind turbine farms is not required, as long as the turbine structures are painted in a bright white color or light off-white color most often found on wind turbines.

132. WIND TURBINE CONFIGURATIONS – Prior to recommending marking and lighting, determine the configuration and the terrain of the wind turbine farm. The following is a description of the most common configurations.

a. Linear – wind turbine farms in a line-like arrangement, often located along a ridge line, the face of a mountain or along borders of a mesa or field. The line may be ragged in shape or be periodically broke, and may vary in size from just a few turbines up to 20 miles long.

b. Cluster – turbine farms where the turbines are placed in circles like groups on top of a mesa, or within a large field. A cluster is typically characterized by having a pronounced perimeter, with various turbines placed inside the circle at various, erratic distances throughout the center of the circle.

c. Grid – turbine farms arranged in a geographical shape such as a square or a rectangle, where each turbine is set a consistent distance from each other in rows, giving the appearance that they are part of a square like pattern.

133. MARKING STANDARDS

The bright white or light off-white paint most often found on wind turbines has been shown to be most effective, and if used, no lights are required during the daytime. However, if darker paint is used, wind turbine marking should be supplemented with daytime lighting, as required.

134. LIGHTING STANDARDS

a. Flashing red (L864), or white (L-865) lights may be used to light wind turbines. Studies have shown that red lights are most effective, and should be the first consideration for lighting recommendations of wind turbines.

b. Obstruction lights should have unlighted separations or gaps of no more than $\frac{1}{2}$ mile. Lights should flash simultaneously. Should the synchronization of the lighting system fail, a lighting outage report should be made in accordance with paragraph 23 of this advisory circular. Light fixtures should be placed as high as possible on the turbine nacelle, so as to be visible from 360 degrees.

c. Linear Turbine Configuration. Place a light on each turbine positioned at each end of the line or string of turbines. Lights should be no more than $\frac{1}{2}$ statute mile, or 2640 feet from the last lit turbine. In the event the last segment is significantly short, push the lit turbines back towards the starting point to present a well balanced string of lights. High concentrations of lights should be avoided.

d. Cluster Turbine Configuration. Select a starting point among the outer perimeter of the cluster. This turbine should be lit, and a light should be placed on the next turbine so that no more than a $\frac{1}{2}$ statute mile gap exists. Continue this pattern around the perimeter. If the distance across the cluster is greater than 1 mile, and/or the terrain varies by more than 100 feet, place one or more lit turbines at locations throughout the center of the cluster. e. Grid Turbine Configuration. Select each of the defined corners of the layout to be lit, and then utilize the same concept of the cluster configuration as outlined in paragraph d.

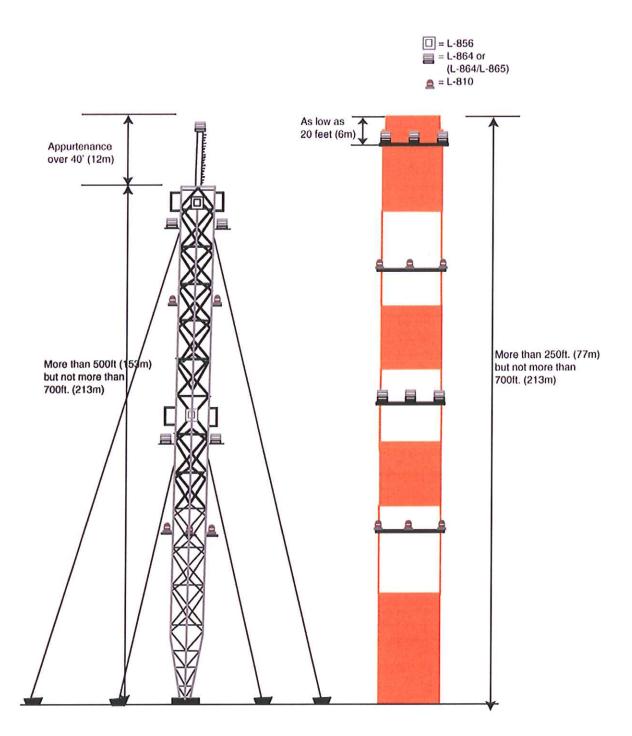
f. Special Considerations. On occasion, one or two turbines may be located apart from the main grouping of turbines. If one or two turbines protrude from the general limits of the turbine farm, these turbines should be lit.

APPENDIX 1: Specifications for Obstruction Lighting Equipment Classification

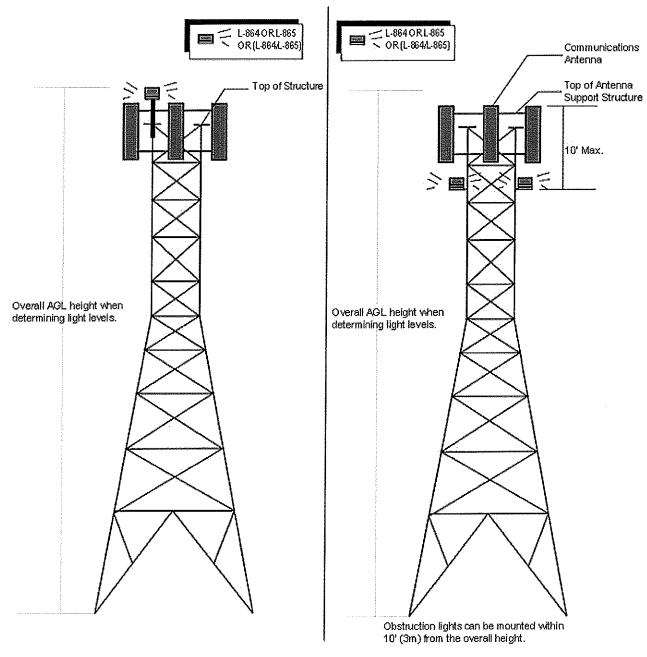
APPENDIX

Туре	Description	
L-810	Steady-burning Red Obstruction Light	
L-856	High Intensity Flashing White Obstruction Light (40 FPM)	
L-857	High Intensity Flashing White Obstruction Light (60 FPM)	
L-864	Flashing Red Obstruction Light (20-40 FPM)	
L-865	Medium Intensity Flashing White Obstruction Light (40-FPM)	
L-866	Medium Intensity Flashing White Obstruction Light (60-FPM)	
L-864/L-865	Dual: Flashing Red Obstruction Light (20-40 FPM) and Medium Intensity Flashing White Obstruction Light (40 FPM)	
L-885	Red Catenary 60 FPM	
FPM = Flashes Per Minute		

TBL 4

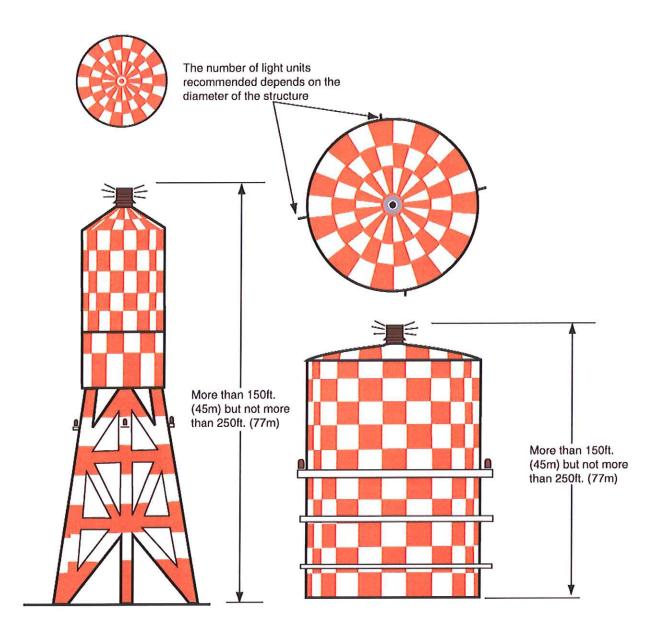


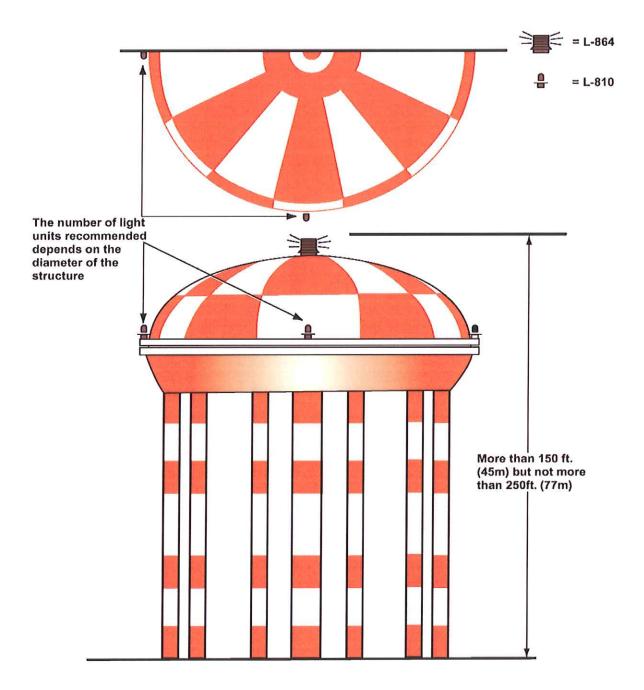
PAINTING AND/OR DUAL LIGHTING OF CHIMNEYS, POLES, TOWERS, AND SIMILAR STRUCTURES



Intermediate lighting not shown. Overall AGL height if more than 200' (61m), but not more than 500' (153m).

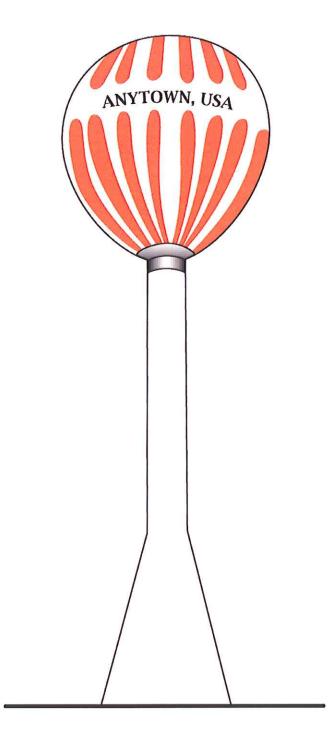
PAINTING AND LIGHTING OF WATER TOWERS, STORAGE TANKS, AND SIMILAR STRUCTURES

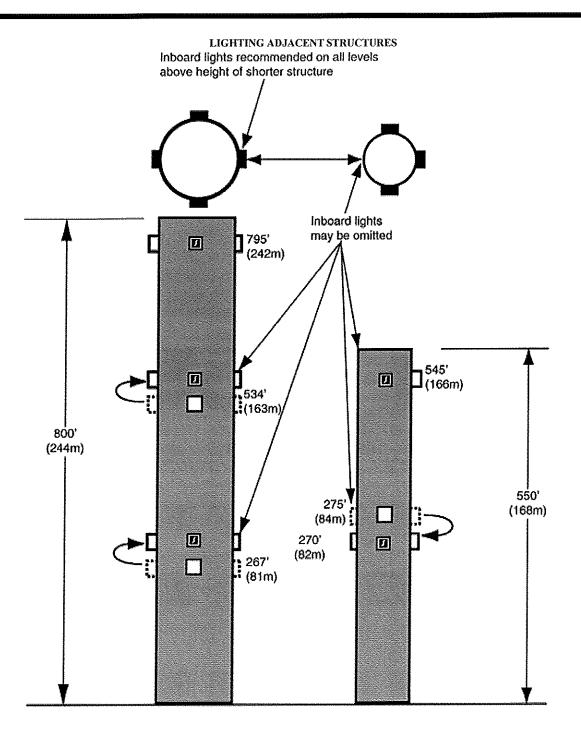




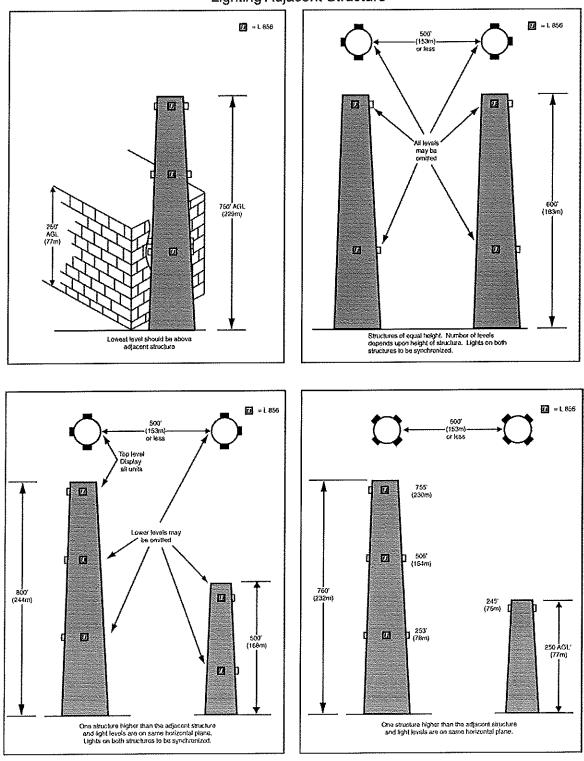
PAINTING AND LIGHTING OF WATER TOWERS ANDE SIMILAR STRUCTURES

PAINTING OF SINGLE PEDESTAL WATER TOWER BY TEARDROP PATTERN



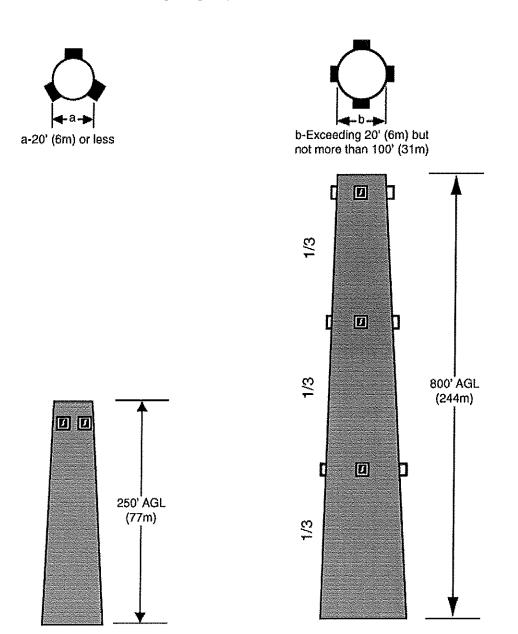


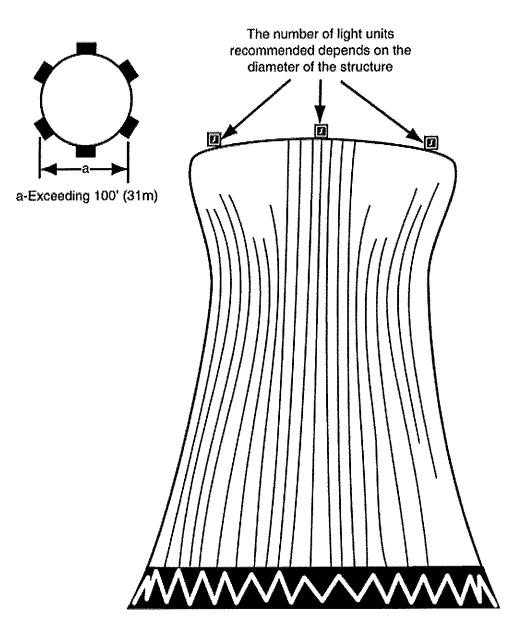
Minor adjustments in vertical placement may be made to place lights on same horizontal plane. Lights on both structures be synchronized



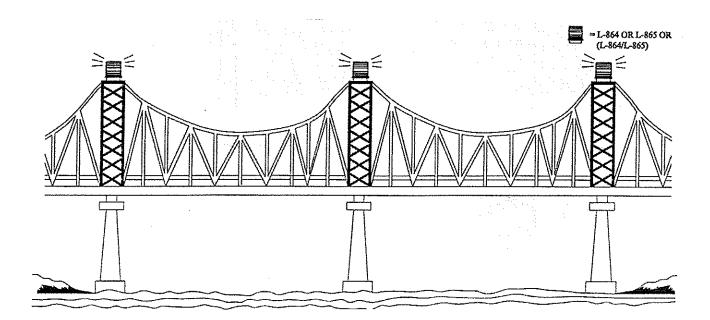
Lighting Adjacent Structure

Lighting Adjacent Structure

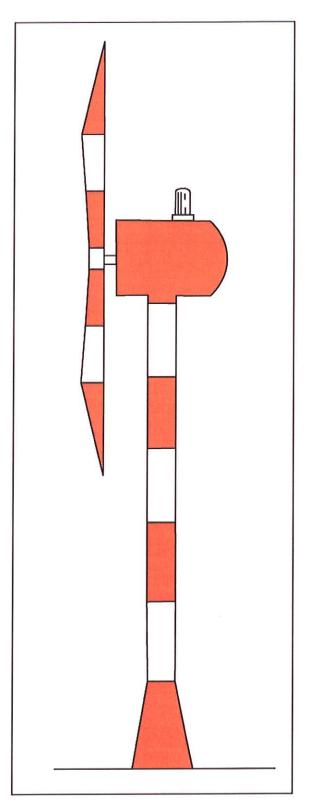


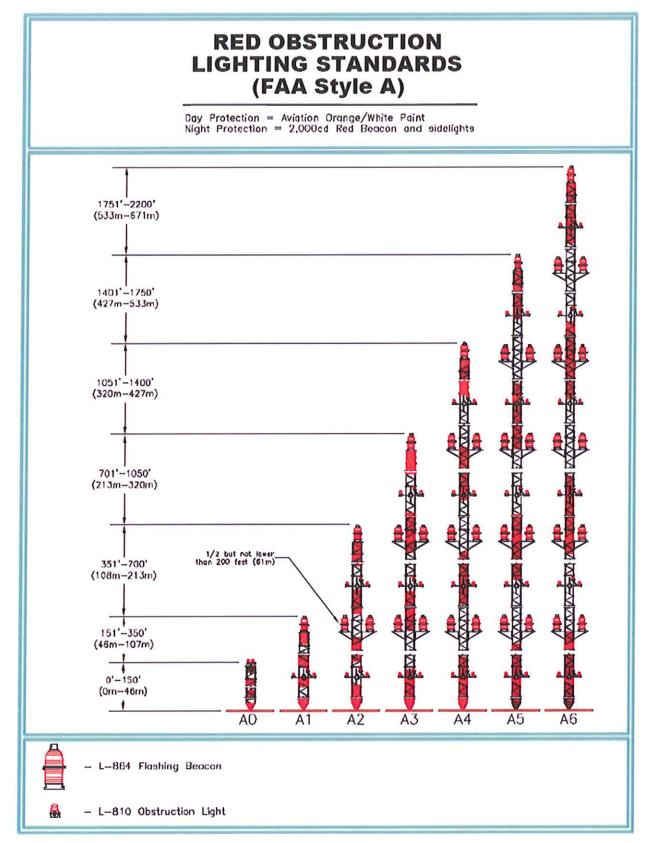


BRIDGE LIGHTING

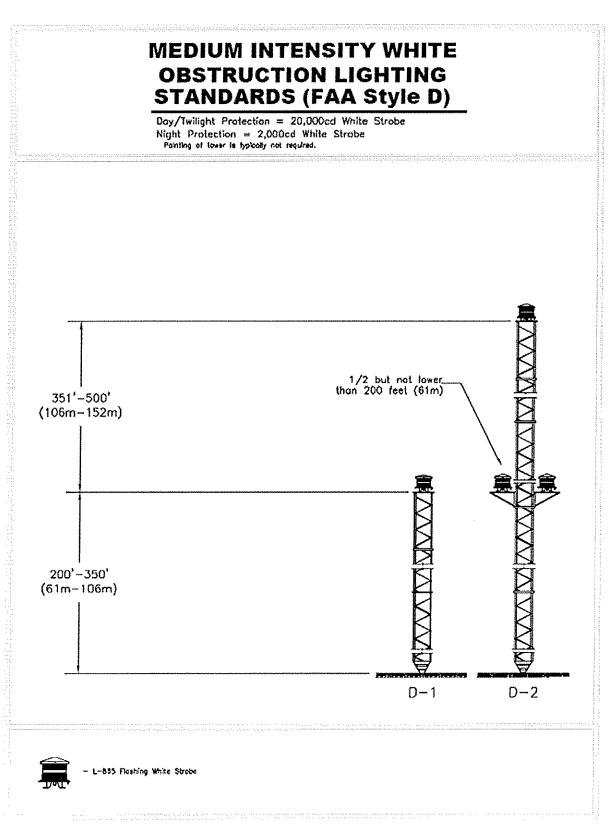


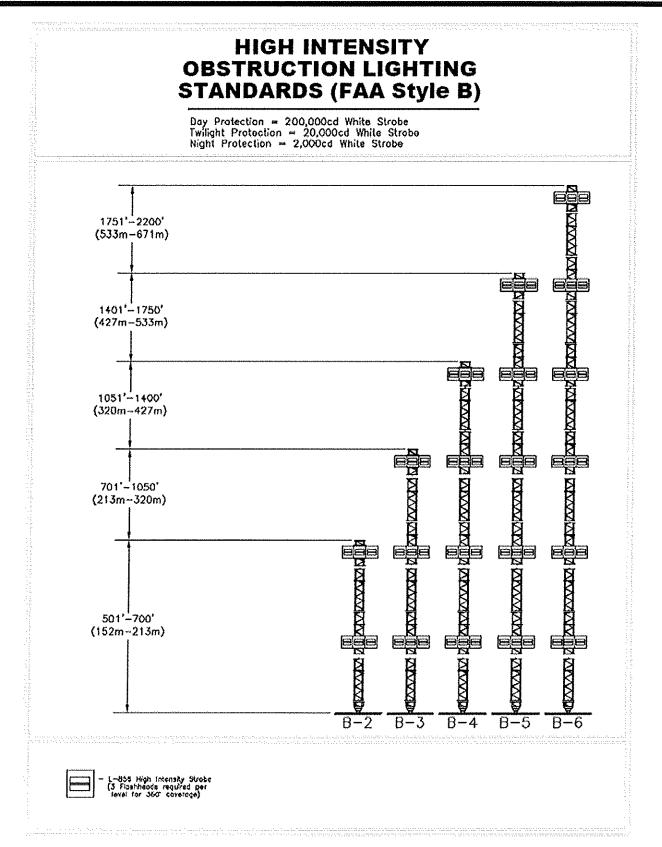
WIND TURBINE GENERATOR

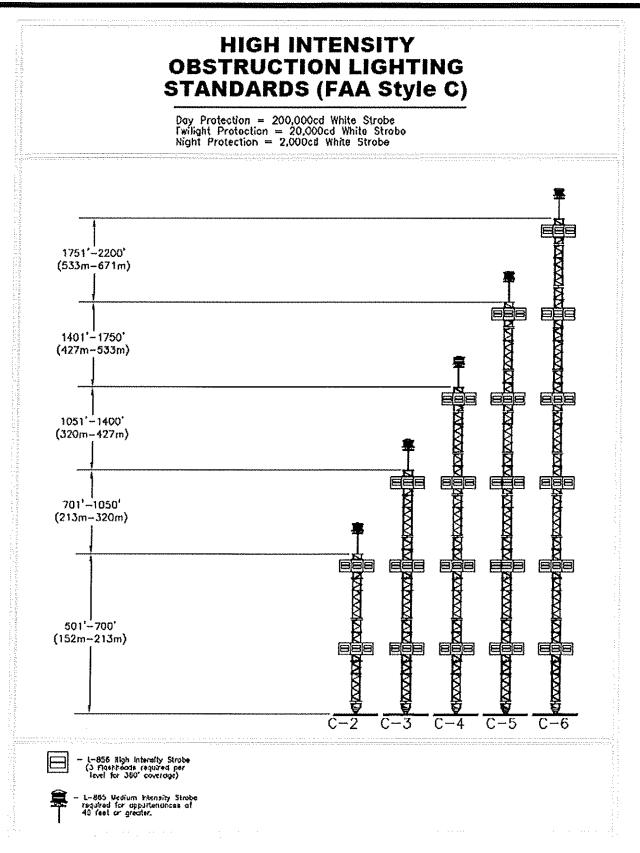


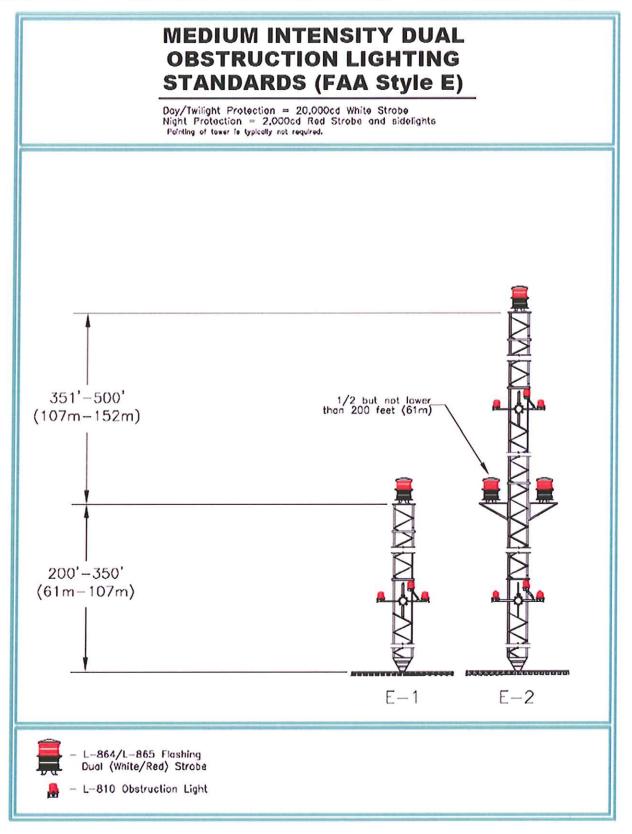


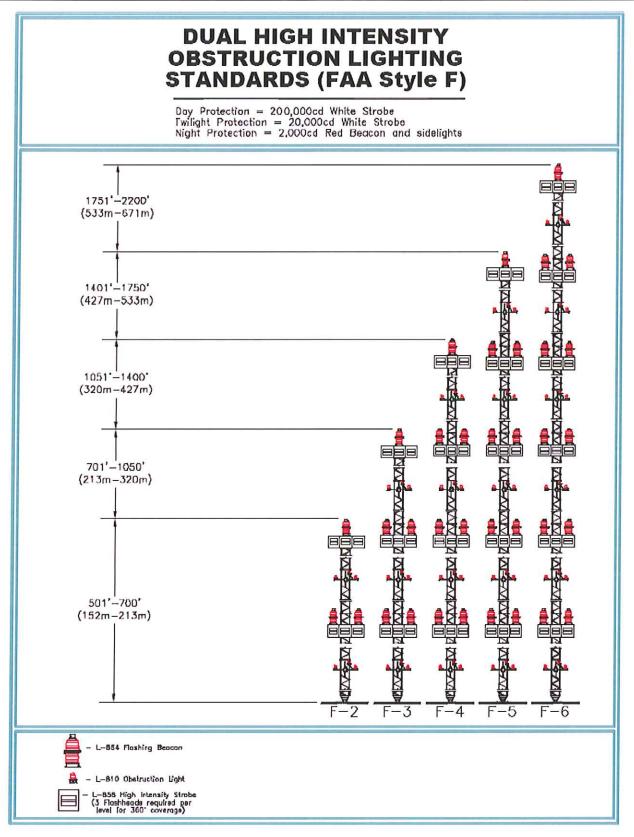












APPENDIX 2. Miscellaneous

1. RATIONALE FOR OBSTRUCTION LIGHT INTENSITIES.

Sections 91.117, 91.119 and 91.155 of the FAR Part 91, General Operating and Flight Rules, prescribe aircraft speed restrictions, minimum safe altitudes, and basic visual flight rules (VFR) weather minimums for governing the operation of aircraft, including helicopters, within the United States.

2. DISTANCE VERSUS INTENSITIES.

TBL 5 depicts the distance the various intensities can be seen under 1 and 3 statute miles meteorological visibilities:

Time Period	Meteorological Visibility Statute Miles	Distance Statute Miles	Intensity Candelas
Night		2.9 (4.7km)	1,500 (+/- 25%)
	3 (4.8km)	3.1 (4.9km)	2,000 (+/- 25%)
		1.4 (2.2km)	32
Day		1.5 (2.4km)	200,000
	1 (1.6km)	1.4 (2.2km)	100,000
		1.0 (1.6km)	20,000 (+/- 25%)
Day		3.0 (4.8km)	200,000
	3 (4.8km)	2.7 (4.3km)	100,000
		1.8 (2.9km)	20,000 (+/- 25%)
Twilight	1 (1.6km)	1.0 (1.6km) to 1.5 (2.4km)	20,000 (+/- 25%)?
Twilight	3 (4.8km)	1.8 (2.9km) to 4.2 (6.7km)	20,000 (+/- 25%)?

Note-

1. DISTANCE CALCULATED FOR NORTH SKY ILLUMINANCE.

3. CONCLUSION.

Pilots of aircraft travelling at 165 knots (190 mph/306kph) or less should be able to see obstruction lights in sufficient time to avoid the structure by at least 2,000 feet (610m) horizontally under all conditions of operation, provided the pilot is operating in accordance with FAR Part 91. Pilots operating between 165 knots (190 mph/303 km/h) and 250 knots (288 mph/463 kph) should be able to see the obstruction lights unless the weather deteriorates to 3 statute miles (4.8 kilometers) visibility at night, during which time period 2,000 candelas would be required to see the lights at 1.2 statute miles (1.9km). A higher intensity, with 3 statute miles (4.8 kilometers) visibility at night, could generate a residential annoyance factor. In addition, aircraft in these speed ranges can normally be expected to operate under instrument flight rules (IFR) at night when the visibility is 1 statute mile (1.6 kilometers).

4. DEFINITIONS.

a. Flight Visibility. The average forward horizontal distance, from the cockpit of an aircraft in flight, at which prominent unlighted objects may be seen and identified by day and prominent lighted objects may be seen and identified by night.

Reference-

AIRMAN'S INFORMATION MANUAL PILOT/CONTROLLER GLOSSARY.

b. Meteorological Visibility. A term that denotes the greatest distance, expressed in statute miles, that selected objects (visibility markers) or lights of moderate intensity (25 candelas) can be seen and identified under specified conditions of observation.

TBL 5

5. LIGHTING SYSTEM CONFIGURATION.

a. Configuration A. Red lighting system.

b. *Configuration B*. High Intensity White Obstruction Lights (including appurtenance lighting).

c. Configuration C. Dual Lighting System - High Intensity White & Red (including appurtenance lighting).

d. *Configuration D.* Medium Intensity White Lights (including appurtenance lighting).

e. *Configuration E.* Dual Lighting Systems - Medium Intensity White & Red (including appurtenance lighting).

Example-

"CONFIGURATION B 3" DENOTES A HIGH INTENSITY LIGHTING SYSTEM WITH THREE LEVELS OF LIGHT.