FRENCH VALLEY AIRPORT

Initial Study

INITIAL STUDY

for

FRENCH VALLEY AIRPORT
Riverside County, California

Prepared by
Coffman Associates, Inc.

August 2010

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Murrieta, California

Initial Study

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PROJECT DESCRIPTION

FRENCH VALLEY AIRPORT MASTER PLAN UPDATE
CEQA DOCUMENTATION

Project Title:
French Valley Airport Master Plan Update

Lead Agency Name and Address:
Riverside County
Economic Development Agency
Aviation Division
37552 Winchester Road
Murrieta, CA 92563

Contact Person and Phone Number:
Mr. Chad Davies
(951) 955-9417

Project Location:
French Valley Airport
37552 Winchester Road
Murrieta, CA 92563

Project Sponsor's name and address:
Riverside County at:
Economic Development Agency
Aviation Division
3403 10th Street, 5th Floor
Riverside, CA 92501

Preparer:
Coffman Associates, Inc.
237 NW Blue Parkway, Suite 100
Lee's Summit, MO 64063

General Plan Designation:
The existing French Valley Airport is designated as a public facility in the County of Riverside General Plan. Adjacent land is designated as office/business park, public/other institutional, industrial, and commercial.

Zoning:
The existing French Valley Airport is zoned by Riverside County for Manufacturing Service Commercial (M-SC). Adjacent properties are zoned Specific Plan (SP). Specific Plan land uses adjacent to the Airport are office/business park, industrial, and commercial.

07MP01-1-10/30/09

Leon Rd.

NORTH

0 600 1200

SCALE IN FEET

PHOTO TAKEN: 9-30-08

Auld Rd.

Southwest County Justice Center

Jolynn Rd.

Borel Rd.

Future ODALS

2

Briggs Rd.

3

2 5

EXISTING/ULTIMATE RUNWAY 6,000' X 75'

4

6

1

Sky Canyon Dr.

1

7

Airport Rd.

4

3

5

Sparkman Way

Sky Canyon Dr.

Highway 79 / Winchester Rd.

Borel Rd.

LEGEND

- Airport Property Line
- Ultimate Property Line
- Existing/Future Runway Protection Zone (RPZ)
- Airfield Pavement
- Property Acquisition

Short Term Projects

1. Tie-Down Expansion
2. Install Omni Directional Approach Lighting System
3. Acquire Acreage for Hangars
4. Prepare Site for Hangar Development
5. Additional Airport Security/Fencing
6. Construct Airport Traffic Control Tower
7. Road Closure

Short Term Maintenance & Existing Facility Upgrades

1. Slurry Seal Apron Area
2. Overlay Runway/Taxiways
3. Upgrade Security Fencing
4. Update Airport Weather Observation System
5. Upgrade Runway Lighting to High Intensity Runway Lighting

FRENCH VALLEY AIRPORT

Exhibit 1
SHORT TERM PROJECTS

07MP01-2-11/2/09

Exhibit 2
INTERMEDIATE TERM PROJECTS

07MP01-3-11/2/09

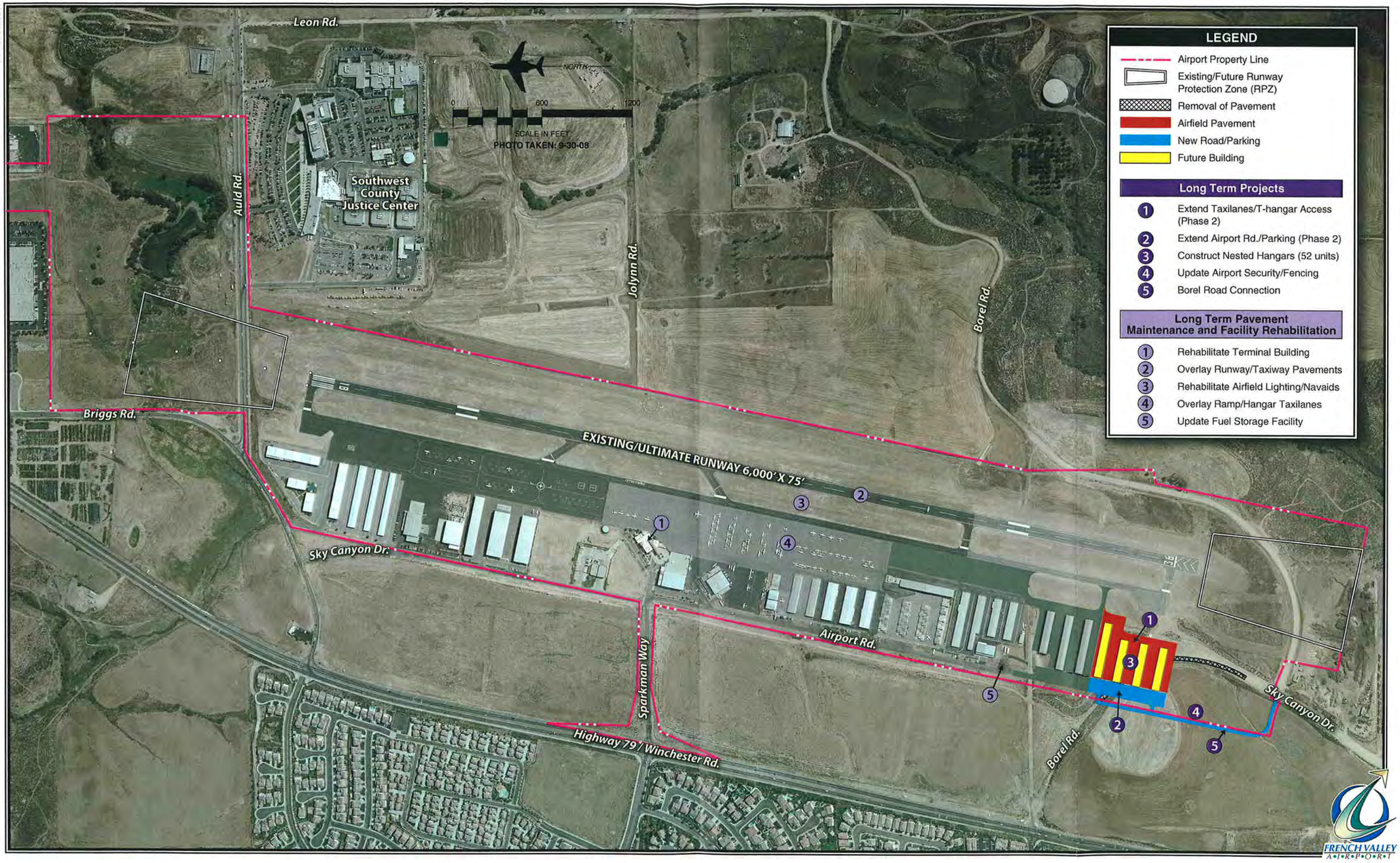

Exhibit 3
LONG TERM PROJECTS

Project Description

The *2009 French Valley Airport Master Plan Update* proposes a number of potential physical improvements (depicted on **Exhibits 1, 2,** and **3**) that will be undertaken at the airport as demand warrants. The purpose of the Master Plan is to establish an internal land use plan to support the development of general aviation uses at the airport. The *2009 French Valley Airport Master Plan Update* is a conceptual plan and not all of the improvements contained within the plan will likely be undertaken. Some of the airport improvements will be undertaken as demand warrants. The following sections provide a brief description of the improvements contained within the *2009 French Valley Airport Master Plan Update* broken down by short term, intermediate, and long term time horizons.

Short Term Improvements

Many of the projects contained in the short term involve rehabilitation or improvement of existing facilities (identified with orange numbers on **Exhibit 1**). The most significant of these are the overlay of Runway 18-36 and the slurry seal of the apron. Upgrading security fencing, airport weather observation system, and runway lighting are short term improvement projects to existing facilities. The short term also includes several projects which would add to existing facilities (identified with yellow numbers on **Exhibit 1**). These projects include apron expansion, installation of omni-directional approach lighting system (ODALS) to Runway 18, property acquisition and site preparation for future hangars, and construction of an airport traffic control tower. A gravel road crossing the southern portion airport property and runway protection zone (RPZ) is also planned for closure in the short term.

Intermediate Term Improvements

Intermediate term projects are grouped together to represent potential years 6-10 and are depicted on **Exhibit 2**. Several projects in the intermediate term include rehabilitation of existing facilities (identified with light green numbers on **Exhibit 2**). This includes overlays of the runway, taxiways, apron, and hangar taxilanes. Rehabilitation of the airfield lighting and navigational aids is also planned.

Expansion of the southern hangar area is proposed. The hangar expansion will provide for 44 nested hangars and taxilane access to proposed hangar developments. In addition, the plan proposes an extension to Airport Road and automobile parking. These improvements are identified with dark green numbers on **Exhibit 2**.

LongTerm Improvements

Long term projects are grouped together to represent potential years 10-20 and are depicted on **Exhibit 3**. Several projects in the long term also include rehabilitation of existing facilities (identified with light purple numbers on **Exhibit 3**). This includes overlays of the runway, taxiways, apron, and hangar taxilanes. Rehabilitation of the terminal building, airfield lighting, and navigational aids is planned for the long term. The fuel storage facility is also planned for updating in the long term. However, additional fuel storage capacity is not planned.

Phase 2 of the southern hangar area expansion is proposed. The hangar expansion will provide for 52 nested hangars and taxilane access to proposed hangar developments. In addition, the plan proposes an extension to Airport Road, additional automobile, relocation of Borel Road, and additional automobile parking. These improvements are identified with dark purple numbers on **Exhibit 3**. **Table 1** summarizes the improvement program schedule.

TABLE 1
Improvement Program Schedule
French Valley Airport
Riverside County, California

Short Term Program (Years 1-5)	
Year 1	Tie-Down Expansion
	Upgrade Security Fencing
	Slurry Seal Apron Area
	Road Closure
Year 2	Design/Engineering-Runway/Taxiways
	Overlay Runway/Taxiways
Year 3	Update Airport Weather Observation System
	Install Omni-Directional Approach Lighting System
	Upgrade Runway Lighting To High Intensity Runway Lighting
Year 4	Acquire Acreage for Hangars
	Prepare Site for Hangar Development
	Airport Security/Fencing Around Acquired Acreage
Year 5	Construct Control Tower Airport Traffic Control Tower
Intermediate Term Program (Years 6-10)	
	Extend Taxilanes/T-hangar Access (Phase 1)
	Extend Airport Rd./Parking (Phase 1)
	Construct Nested Hangars (44 units)
	Overlay Ramp/Hangar Taxilanes
	Acquire Airport Maintenance Equipment
	Rehabilitate Airfield Lighting/Navaids
	Overlay Runway/Taxiway Pavements
Long Term Program (Years 11-20)	
	Extend T-hangar Taxilanes (Phase 2)
	Extend Airport Rd./Parking (Phase 2)
	Construct Nested hangars (52 units)
	Update Airport Security/Fencing
	Acquire Airport Maintenance Equipment
	Update Fuel Storage Facility
	Rehabilitate Terminal Building
	Overlay Runway/Taxiway Pavements
	Rehabilitate Airfield Lighting/Navaids
	Overlay Ramp/hangar Taxilanes

Source: *2009 French Valley Airport Master Plan* prepared by Coffman Associates.

CEQA CHECKLIST

ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED

The environmental factors checked below (☑) would be potentially affected by this project, involving at least one impact that is a "Potentially Significant Impact" as indicated by the checklist on the following pages.

☐ Aesthetics	☐ Hazards & Hazardous Materials	☐ Public Services
☐ Agriculture Resources	☐ Hydrology/Water Quality	☐ Recreation
☐ Air Quality	☐ Land Use/Planning	☐ Transportation/Traffic
☐ Biological Resources	☐ Mineral Resources	☐ Utilities/Service Systems
☐ Cultural Resources	☐ Noise	☐ Mandatory Findings of Significance
☐ Geology/Soils	☐ Population/Housing	

EVALUATION OF ENVIRONMENTAL IMPACTS

Explanations of all “Potentially Significant,” “Less Than Significant with Mitigation Incorporated,” “Less than Significant Impact,” and “No Impact” answers are provided on the attached sheets.

I. AESTHETICS	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Have a substantial adverse effect on a scenic vista?				☑
b) Substantially damage scenic resources, including but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?				☑
c) Substantially degrade the existing visual character or quality of the site and its surroundings?				☑
d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?		☑		

I.a Have a substantial adverse effect on a scenic vista?

No Impact. French Valley Airport is located on a level area where the predominant land uses surrounding the airport are agricultural, public (Southwest County Justice Center), industrial, or residential. Significant scenic mountain vistas are located to the east of the airport, but the aviation-related elements of the *2010 French Valley Airport Master Plan* would occur on the airport in proximity to existing and long-established airport facilities and would not significantly affect views from the airport environs. New airport development would be compatible in size and scale with existing aviation-related uses.

I.b Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?

No Impact. No state scenic highway designations apply to State Highway 79 immediately west of French Valley Airport. No significant scenic resources such as trees, rock outcroppings, or historic buildings within a state scenic highway would be altered by the proposed project.

I.c Substantially degrade the existing visual character or quality of the site and its surroundings?

No Impact. French Valley Airport is developed with aviation-related uses. In the near-term, the new aviation-related development identified in the *2010 French Valley Airport Master Plan* would be concentrated in the vicinity of this existing development on the airport's west side (see **Exhibit 1** and **Table 1**). Over the long-term, new aviation facilities would be developed on the airport's southwest side. The proposed development would be a less than significant impact on the visual character or quality of the surrounding area.

I.d Create a new source of substantial light or glare, which would adversely affect day or nighttime views in the area?

<u>*Less than Significant Impact with Mitigation Incorporated*</u>. New light sources on the airport would include those associated with new development on the southwest side. These new light sources would primarily be from security lighting, parking, and streetlights. Riverside County Ordinance No. 655 restricts the use of certain light fixtures that could have a detrimental effect on astronomical observation and research related to the Mount Palomar Observatory. The French Valley Airport is located approximately 21 miles from the Palomar Observatory and complies with the provisions of the ordinance.

Mitigation Measure AESTHETICS-1: The County shall ensure that only low pressure sodium vapor lights will be used for non-airfield lighting in order to minimize light emissions in accordance with Ordinance No. 655.

Upgrading the Runway 18-36 lighting to high intensity runway lighting and the installation of an omni directional approach lighting system for Runway 18 would not have a significant impact, as the developments would occur totally within airport property. Moreover, the subject lighting systems are designed to be viewed from the air, and not the ground.

II. AGRICULTURE RESOURCES	**Potentially Significant Impact**	**Less Than Significant with Mitigation Incorporated**	**Less Than Significant Impact**	**No Impact**
a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?				☑
b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?				☑
c) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland to non-agricultural use?				☑
In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Dept. of Conservation as an optional model to use in assessing impacts on agriculture and farmland.				

II.a Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to a non-agricultural use?

<u>*No Impact*</u>. The area to be acquired to the southwest for future hangars and parking is not designated as prime farmland by the United States Department of Agriculture's (USDA) Natural Resources Conservation Service (NRCS).

The Multipurpose Open Space Element of the *County of Riverside General Plan* designates the area around the airport as local important farmland. Local important farmland is land determined by the County to be of significant economic importance locally. However, airport property and proposed land acquisition is not included in this classification. Therefore, no impact to farmland is anticipated.

II.b Conflict with existing zoning for agricultural use, or a Williamson Act contract?

<u>*No Impact*</u>. There are no Williamson Act properties identified on French Valley Airport or on the property to be acquired. Therefore, conflicts with agricultural farm land designated in Williamson Act are not anticipated as a result of *2010 French Valley Airport Master Plan* implementation.

II.c Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland to non-agricultural use?

<u>*No Impact*</u>. None anticipated.

III. AIR QUALITY	**Potentially Significant Impact**	**Less Than Significant with Mitigation Incorporated**	**Less Than Significant Impact**	**No Impact**
a) Conflict with or obstruct implementation of the applicable air quality plan?				☑
b) Violate any air quality standard or contribute substantially to an existing or projected air quality violation?		☑		
c) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is in non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors)?			☑	
d) Expose sensitive receptors to substantial pollutant concentrations?		☑		
e) Create objectionable odors affecting a substantial number of people?			☑	
Where available, the significance criteria established by the applicable air quality management or air pollution control district may be relied upon to make the following determinations.				

III.a Conflict with or obstruct implementation of the applicable air quality plan?

No Impact. The project is located within the South Coast Air Basin (SCAB) and is within the jurisdiction of the South Coast Air Quality Management District (SCAQMD). The SCAB is bounded by the Pacific Ocean to the west and the San Gabriel, San Bernardino, and San Jacinto Mountains to the north and east. It includes all of Orange County and the non-desert portions of Los Angeles, Riverside, and San Bernardino Counties.

The current regional air quality plan is the *2007 Air Quality Management Plan* (AQMP) adopted by the SCAQMD governing board on June 1, 2007. The SCAB is currently a Federal and State nonattainment area for $PM_{2.5}$ and ozone. The 2007 AQMP proposes attainment demonstration of the federal $PM_{2.5}$ standards through more focused control of sulfur oxides (SO_X), directly-emitted PM2.5, and nitrogen oxides (NO_X) supplemented with volatile organic compounds (VOC) by 2015. The 8-hour ozone control strategy includes additional NO_X and VOC reduction measures to meet the standard by 2024. Appendix III of the 2007 AQMD includes emissions inventories for baseline (2005) and forecast (2010, 2020, 2030) scenarios. The emissions inventories include airport related emissions for general aviation airports, such as French Valley Airport. Therefore, anticipated increases in airport-related emissions resulting from operational growth at French Valley Airport are covered under the AQMP. Implementation of the projects included in the airport master plan will not conflict with or obstruct implementation of any of the control measures in these air quality plans.

III.b Violate any air quality standard or contribute substantially to an existing or projected air quality violation?

Less than Significant Impact with Mitigation Incorporated. Temporary increases in air emissions are anticipated during construction of projects outlined in the airport master plan. Additionally, vehicle trips to the airport may increase as a result of additional improvements to the airport.

During construction activities such as clearing, excavation, and grading operations, construction vehicle traffic and wind blowing over exposed earth may generate fugitive particulate matter emissions that would temporarily affect local air quality. The effects of construction activities would be increased fugitive dust and locally elevated levels of PM_{10}. Construction dust has the potential for creating a nuisance at nearby properties. This impact is considered potentially significant during construction of airport improvements. However, these emissions will be temporary and limited to the timeframe of the construction phase of the projects outline in the airport master plan.

Adherence to the following measure will reduce potential impacts associated with this issue to a less than significant level:

Mitigation Measure AIR QUALITY-1: All construction contracts shall require that dust control practices and other construction control measures (as identified in SCAQMD rules, regulations, and CEQA guidelines) in effect at the time of the contract signing be implemented throughout all stages of construction.

New vehicle trips add to carbon monoxide concentrations near streets providing access to the site. Peak hour vehicle trip generation associated with the proposed Master Plan would be 21 trips in the p.m. peak traffic hour. The increase in trips would add to traffic volumes and resulting CO concentrations is unlikely to result in any new violations of the 8-hour standards for carbon monoxide or contribute substantially to an existing or projected violation.

III.c Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is in non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors)?

Less than Significant Impact. The Airport Master Plan demand-based forecasts indicate that annual flight operations will increase from 97,700 in 2009 to 149,200 in 2030. Additionally, the type of aircraft operating at the airport is anticipated to change. As a result of the increased operations and change in fleet mix at the airport, emissions will also increase at the airport. According to the South Coast Air Quality Management District's CEQA Air Quality Handbook, projects with daily operational emissions that exceed any of the long term operational thresholds established by the SCAQMD should be considered significant. The thresholds are outlined in **Table 2**.

TABLE 2
South Coast Air Quality Management District
Emissions Thresholds

Pollutant[1]	Threshold (Pounds Per Day)
CO	550
VOC	55
NO_X	55
SO_X	150
PM_{10}	150
$PM_{2.5}$	55
Lead	3

Source: South Coast Air Quality Management District CEQA Air Quality Handbook

The FAA-approved *Emissions and Dispersion Modeling System,* Version 5.1 (EDMS) was used to calculate existing and future airport emissions using the master plan operations forecasts. EDMS is listed among the EPA's preferred guideline models and has been identified by the FAA as the only acceptable model for estimating aircraft emissions at airports. It calculates emissions of pollutants associated with an airport, including aircraft, ground support equipment, and automobiles.

EDMS does not calculate lead emissions; therefore, an assessment of these impacts cannot be made. Additionally, ozone emissions are not calculated by EDMS; however, volatile organic compounds (VOC) and nitrogen (NO_X) are precursors to ozone. Ground-level ozone is not emitted directly into the air, but is created by chemical reactions between oxides of nitrogen (NO_X) and volatile organic compounds (VOC) in the presence of sunlight. As a result, VOC and NO_X emissions are used to estimate ozone emissions.

Automobile trips associated with the operation of French Valley Airport were also included in the analysis. For purposes of this study, the annual vehicle trips associated with the airport were calculated according to the Institute of Transportation Engineer's Trip Generation Manual, 7th Edition, based on average daily operations at the airport. Vehicle emissions associated with operation of the airport are included in the EDMS output report shown in **Attachment A**.

As previously discussed, French Valley Airport is located within the SCAB which is currently a Federal and State nonattainment area for $PM_{2.5}$ and ozone. **Table 3** provides the projected $PM_{2.5}$,NOX and VOC emissions associated with the operations at French Valley Airport under the existing condition (2009) and future condition (2030). This includes emissions from aircraft, automobiles, ground support equipment, and fueling operations.

TABLE 3
Operations Emissions (Tons Per Day)
French Valley Airport

Pollutant[1]	2007	2030	Difference	Threshold
VOC	72.9	108.54	35.64	55
NO_X	33.55	40.68	7.13	55
$PM_{2.5}$	0.65	0.78	0.13	55

[1] EDMS does not calculate emissions for lead
Source: Coffman Associates analysis.

As indicated in **Table 3**, the proposed airport improvements outlined in the airport master plan are not expected to have a notable affect on the quantity of operations at the airport in the long range condition as the estimated increase in emissions does not exceed the established thresholds for $PM_{2.5}$,NOX or VOC.

III.d Expose sensitive receptors to substantial pollutant concentrations?

Less than Significant Impact with Mitigation Incorporated. Implementation of the proposed Master Plan would result in construction-related emissions at various times. During construction activities such as clearing, excavation, and grading operations, construction vehicle traffic and wind blowing over exposed earth would generate fugitive particulate matter emissions that would temporarily affect local air quality. The effects of construction activities would be increased fugitive dust and locally elevated levels of particulate matter. Construction dust has the potential for creating a nuisance at nearby properties. This impact is considered potentially significant.

Adherence to the previously discussed mitigation measure AIR QUALITY-1 will reduce potential impacts associated with this issue to a less than significant level.

III.e Create objectionable odors affecting a substantial number of people?

Less than Significant Impact. During construction, the various diesel-powered vehicles and equipment in use on the site would create odors. These odors are temporary and not likely to be noticeable beyond the project boundaries. Airport operations could result in intermittent odors affecting a small area, but would not affect a substantial number of people.

IV. BIOLOGICAL RESOURCES	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?		☑		
b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?			☑	
c) Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?				☑
d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?		☑		
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?			☑	
f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?			☑	

IV.a Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?

Less than Significant Impact

The Western Riverside County Multiple Species Habitat Conservation Plan (WRCMSHCP) consistency analysis was prepared by the Riverside County Environmental Programs Department in July 2010. A copy of the WRCMSHCP consistency analysis can be found in **Attachment B**. The report identified the proposed property acquisition area to be within WRCMSHCP Criteria Cell 6071, which is part of Cell Group W. The remaining projects are located within the current airport property boundary and are not within a WRCMSHCP Cell.

The acquisition is within the survey area for Narrow Endemic Plant Species including, Munz's onion *(Allium munzii),* San Diego ambrosia *(Ambrosia pumila),* Many-stemmed dudleya (Dudleya multicaulis), Spreading navarretia *(Navarretia fossa lis*), California Orcutt grass *(Orcuttia californica),* and Wrights trichocoronis *(Trichocoronis wrightii).* A field survey completed July 12, 2010 found the proposed property acquisition area (a construction equipment storage yard) to be devoid of vegetation and native plant communities. The site lacks vernal pools or ephemeral depressions. Clay soils are mapped; however, the level of disturbance and compaction associated with the storage yard has altered the soil structure. The hillside to the west does not pond or hold water due to the level of topography.

The proposed acquisition area is also located within the WRCMSHCP survey area for burrowing owl *(Athene cunicularia);* therefore, a habitat assessment was conducted on July 12, 2010. The site is extremely flat and would provide foraging opportunities for the burrowing owl. However, the site does not support any small mammal burrows or areas viable for burrowing owl occupation, thus precluding suitable habitat for burrowing owl. In addition, the 150 meter buffer area was also visually inspected for the burrowing owls and suitable burrowing owl burrows. No burrowing owls or burrowing owl signs (feathers, white wash, scat) was observed on the project site or within the buffer area. The project site does not support suitable burrowing owl habitat and a focused survey was not recommended. However, the site is located in an area known to support burrowing owls, and the site could become occupied in the future. Burrowing owls are also well known to occupy and utilize airports and aviation fields. To insure that take of burrowing owls does not occur, a 30-day preconstruction survey must be completed in the proposed project area.

Finally, the site is located within WRCMSHCP Criteria Cell and Urban/Wildlands Interface Guidelines (UWIG) must be followed. Landscape plans should avoid the use of non-native plants listed in Table 6-2 of Section 6.1.4 of the WRCMSHCP. In addition, lighting should be directed away from the WRCMSHCP Conservation area or shall incorporate adequate shielding. By incorporating the appropriate UWIG Guidelines as set forth in Section 6.1.4, the proposed property acquisition area will be consistent with Section 6.1.4 of the WRCMSHCP.

Mitigation Measure BIOLOGICAL RESOURCES-1: Burrowing owls are also well known to occupy and utilize airports and aviation fields. To insure that take of burrowing owls does not occur, a 30-day preconstruction survey must be completed in the proposed project area.

Mitigation Measure BIOLOGICAL RESOURCES-2: The proposed property acquisition area is located within WRCMSHCP Criteria Cell and Urban/Wildlands Interface Guidelines (UWIG) must be followed. Landscape plans should avoid the use of non-native plants listed in Table 6-2 of Section 6.1.4 of the WRCMSHCP. In addition, lighting should be directed away from the WRCMSHCP Conservation area or shall incorporate adequate shielding.

IV.b Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, and regulations or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?

Less than Significant Impact. See response to IV.a. As discussed above, a field survey completed July 12, 2010 found the proposed property acquisition area (a construction equipment storage yard) to be devoid of vegetation and native plant communities. .

IV.c Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.). Through direct removal, filling, hydrological interruption, or other means?

No Impact. A 2003 biological survey prepared for the 2004 environmental assessment for the Runway 18-36 runway extension indicated no jurisdictional waters or wetlands are present on airport property. In addition, National Resource Conservation Service information on hydric soils for the existing and proposed French Valley Airport property boundary indicates that hydric soils are not present at the airport (See **Exhibit 4**). A combination of hydric soils, hydrophytic vegetation, and hydrology properties define wetlands as described in the National Food Security Act Manual (Soil Conservation Service, 1994) and the Corps of Engineers (COE) Wetlands Delineation Manual (Environmental Laboratory, 1987) and COE Regional Supplements. Therefore, an area that meets the hydric soil definition must also meet the hydrophytic vegetation and wetland hydrology definitions in order for it to be correctly classified as a jurisdictional wetland.

A field survey completed July 12, 2010 found the proposed property acquisition area (a construction equipment storage yard) to be devoid of vegetation and native plant communities. The site lacks vernal pools or ephemeral depressions. Clay soils are mapped; however, the level of disturbance and compaction associated with the storage yard has altered the soil structure. The hillside to the west does not pond or hold water due to the level of topography.

Impacts to wetlands are not anticipated given the determination from the 2003 biological survey, lack of hydric soils in the proposed project areas, and a July 2010 survey of the proposed property acquisition area.

IV.d Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?

Less than Significant Impact with Mitigation Incorporated. See responses to IV.a and IV.c. Implementation of BIOLOGICAL RESOURCES-2 will ensure that the project is consistent or modified in such a way that it becomes consistent with the WRCMSHCP and will reduce the severity of this impact to less than significant

IV.e Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?

Less than Significant Impact. The project site will not conflict with any local policies or ordinances protecting biological resources (e.g., tree preservation policy or ordinance). For this reason, impacts are considered to be less than significant.

French Valley Airport

LEGEND

- French Valley Airport

Soil Types

Hydric Classification

- Not hydric
- Partially hydric

Source: National Resource Conservation Service

NORTH

0 500 1,000 1,500 2,000

Feet

FRENCH VALLEY AIRPORT

Exhibit 4
HYDRIC SOILS

IV.f Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan or other approved local, regional, or state habitat conservation plan?

Less than Significant Impact. See response to IV.a. Implementation of the airport master plan will not conflict with any adopted Habitat Conservation Plan, Natural Community Conservation Plan or other approved local, regional, or state habitat conservation plan.

V. CULTURAL RESOURCES	**Potentially Significant Impact**	**Less Than Significant with Mitigation Incorporated**	**Less Than Significant Impact**	**No Impact**
a) Cause a substantial adverse change in the significance of a historical resource as defined in § 15064.5?		☑		
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to § 15064.5?		☑		
c) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?		☑		
d) Disturb any human remains, including those interred outside of formal cemeteries?		☑		

V.a Cause a substantial adverse change in the significance of a historical resource as defined in § 15064.5?

Less than Significant Impact with Mitigation Incorporated. Several cultural resource surveys have been conducted before the French Valley Airport was constructed in November 1984 and for improvement projects after it's opening in 1989. A review of these surveys indicates that, although cultural or historical resources have been located within the vicinity of the airport, no historical or cultural resources are known to exist on airport property. Copies of these surveys can be found in **Attachment C**. Field surveys may be required to determine the presence of historic properties or archaeological resources prior to acquisition of the property to the southwest.

Mitigation Measure CULTURAL RESOURCES-1: Field surveys may be required to determine the presence of historic properties or archaeological resources prior to acquisition of the property to the southwest.

Mitigation Measure CULTURAL RESOURCES-2: In the unlikely event that cultural, archaeological, or historical resources are encountered during project-related activities, work in the immediate vicinity of the discovery shall cease until the finds can be evaluated by a qualified specialist. Should human remains be encountered within the project area, the County Coroner shall be contacted immediately; if the remains are determined to be Native American, then the Native American Heritage Commission shall be contacted as well.

V.b Cause a substantial adverse change in the significance of an archaeological resource pursuant to § 15064.5?

Less than Significant Impact with Mitigation Incorporated. See response to V.a. As discussed above, cultural resource surveys have been conducted before the French Valley Airport was constructed in November 1984 and for improvement projects after it's opening in 1989. The project site is occupied by the existing airport development or cultivated farmland. No archaeological sensitive sites are located within or adjacent to the project site. While there is always the potential for archaeological resources to be uncovered during the course of ground-disturbing activities, the possibility of unearthing such resources is very low. In addition, implementation of CULTURAL RESOURCES-2 will ensure that potential archaeological resources are protected as proposed projects in the master plan developed.

V.c Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?

Less than Significant Impact with Mitigation Incorporated. No paleontological resource or site or unique geologic features were discovered during previous work. The Riverside County geographic information system identifies the southwest hangar development site as low potential/sensitivity for paleontological resources. However, implementation of CULTURAL RESOURCES-2 will ensure that potential paleontological resources or unique geologic features are protected as the southwest hangar area is developed.

V.d Disturb any human remains, including those interred outside of formal cemeteries?

Less than Significant Impact with Mitigation Incorporated. There is no indication that burials are present based on survey and document research. However, if during construction, undocumented human remains or artifacts should be unearthed, the County Coroner shall be contacted immediately; if the remains are determined to be Native American, then the Native American Heritage Commission shall be contacted as well. Also see *Mitigation Measure* CULTURAL RESOURCES-2.

VI. GEOLOGY AND SOILS	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:		☑		
i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault?Refer to Division of Mines and Geology Special Publication 42.				☑
ii) Strong seismic ground shaking?				☑
iii) Seismic-related ground failure, including liquefaction?				☑
iv) Landslides?				☑
b) Result in substantial soil erosion or the loss of topsoil?				☑
c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?				☑
d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property?				☑
e) Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?				☑

VI.a Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving: i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42; ii) Strong seismic ground shaking; iii) Seismic-related ground failure, including liquefaction; iv) Landslides?

Less than Significant Impact with Mitigation Incorporated. There are two major regional fault zones in southwest Riverside County (the Elsinore and San Jacinto Faults). There are no known faults traversing the French Valley Airport. A review of the Riverside County geographical information indicated that the project site is not located in an Alquist-Priolo Fault Hazard Zone or County Fault Hazard Zone area. Therefore, no impact related to this issue will occur. The French Valley Airport is not located within an Alquist-Priolo zone. However, seismic activity could occur at the site in association with any one of a number of faults in the Coachella Valley region. The Riverside County GIS system also indicated that the project site is located in an area of low probability for liquefaction concerns, but is susceptible to subsidence. The site is level and not subject to landslides. Conformance with the requirements of the Uniform Building Code would reduce the potential for structural damage to buildings in the event of significant seismic activity.

Mitigation Measure GEOLOGY-1: Where deemed necessary, new structural development (aircraft hangars or other airport related buildings) should be the subject of a geotechnical study prior to construction. This study shall evaluate local geologic and soil conditions and identify appropriate construction measures that should be completed in terms of building foundation design to ensure the protection of occupants of the future buildings. New buildings shall conform to the requirements of the Uniform Building Code.

VI.b Result in substantial soil erosion or the loss of topsoil?

Less than Significant Impact with Mitigation Incorporated. Some erosion and loss of topsoil could occur during construction. However, the site is generally level and this potential impact is not considered significant. Erosion control measures undertaken during construction would reduce the potential for soil erosion.

Mitigation Measure GEOLOGY-2: During construction, erosion and sedimentation shall be minimized on the site by measures such as silt fences, covering of stockpiled soil materials, and other Best Management Practices (BMPs) as identified by the San Diego Regional Water Quality Control Board.

VI.d Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?

Less than Significant Impact with Mitigation Incorporated. Landslide, lateral spreading, subsidence, liquefaction, and collapse potential are addressed under (VI.a) above.

VI.d Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code, creating substantial risks to life or property?

Less than Significant Impact with Mitigation Incorporated. Soils containing high clay content often exhibit a relatively high potential to expand when saturated, and contract when dried out. This shrink/swell movement can adversely affect building foundations, often causing them to crack or shift, with resulting damage to the buildings they support. The soils at the project site include Altamont Clay (35 to 55 percent clay content) and Bosanko Clay (35 to 50 percent clay content).

Mitigation Measure GEOLOGY-3: Detailed site-specific geotechnical investigations will be conducted prior to the development of any structures on the airport to identify the potential for geological hazards and to develop construction techniques and design solutions to minimize risks.

VI.e Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?

No Impact. This issue is not relevant to the project as septic tanks or alternative wastewater systems are not proposed for the project.

VII. HAZARDS AND HAZARDOUS MATERIALS	**Potentially Significant Impact**	**Less Than Significant with Mitigation Incorporated**	**Less Than Significant Impact**	**No Impact**
a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?			☑	
b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?			☑	
c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?			☑	
d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?				☑
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area?			☑	
f) For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area?				☑
g) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?		☑		
h) Expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?				☑

VII.a Create a significant hazard to the public or the environment through routine transport, use, or disposal of hazardous materials?

Less than Significant Impact. The proposed project envisions changes to the airport to accommodate the expected increased usage of the facility. Potentially hazardous materials such as fuel, paint products, lubricants, solvents, and cleaning products may be used during the course of daily activities at the airport. The proposed project may result in an increase in the amount of hazardous materials routinely transported to the site (more airplanes utilizing the facility may result in increased usage of fuel). The transport of hazardous materials to the site will be conducted in accordance with all applicable state and federal laws. Compliance with all applicable laws and regulations will reduce the potential impact associated with the routine transport, use, or disposal of hazardous materials to a less than significant level.

VII.b Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?

Less than Significant Impact. Due to the presence of hazardous materials on-site, the potential for an accidental release of hazardous materials into the environment is present at the airport. Hazardous materials and hazardous waste on-site will be handled in accordance with all applicable state and federal laws. The handling of hazardous materials and hazardous waste in accordance with all applicable State and federal laws will reduce the potential impacts associated with an accidental release of hazardous materials into the environment to a less than significant level.

VII.c Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?

Less than Significant Impact. The project site is not located within 0.25 mile of an existing school. The Murrieta Valley Unified School District and Temecula Valley Unified School District surround the French Valley Airport. Monte Vista Elementary School within the Murrieta Valley Unified School District located, 0.71 miles west of French Valley Airport, is the closest school. Impacts associated with this issue are considered to be less than significant.

VII.d Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?

No Impact. The Environmental Protection Agency's *Enviromapper for Envirofacts*[1] was consulted regarding the presence of regulated hazardous sites. According to the *Enviromapper* site, four hazardous waste sites were identified within the vicinity of the airport. These include a vehicle fleet service station and three manufacturing facilities that are registered with the EPA. All four sites are located north of the airport and would not be affected by the proposed developments at the airport. Therefore, there are no impacts related to this issue.

VII.*e* ***For a project located within an airport land use plan or where such a plan has not been adopted within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area?***

Less than Significant Impact. The proposed project consists of changes to French Valley Airport to accommodate increased future use of this facility. The proposed project is consistent with the *2010 French Valley Airport Master Plan*. Areas surrounding the airport do have potential risk associated with airport use. The Riverside County Airport Land Use Commission has established policies which would

[1] http://www.epa.gov/enviro/emef/, Accessed October 2009.

lead to compatible land uses in and around the airport, thereby reducing the impacts associated with the safety of people residing or working in the project area to a less than significant level.

VII.f ***For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area?***

No Impact. The project is not located within the vicinity of a private airstrip or heliport. There are no impacts associated with this issue.

VII.g ***Impair implementation of, or physically interfere with, an adopted emergency response plan or emergency evacuation plan?***

Less than Significant Impact with Mitigation Incorporated. The developers of the proposed projects will be required to design, construct, and maintain structures, roadways, and facilities to comply with applicable local, regional, state and/or federal requirements related to emergency access and evacuation plans. Construction activities which may temporarily restrict vehicular traffic will be required to implement adequate and appropriate measures to facilitate the passage of persons and vehicles through/around any required road closures. Adherence to these measures will reduce potential impacts related to this issue to a less than significant level.

Mitigation Measure HAZARDS AND HAZARDOUS MATERIALS -1: Proposed projects will be required to design, construct, and maintain structures, roadways, and facilities to comply with applicable local, regional, state and/or federal requirements related to emergency access and evacuation plans.

VII.h ***Expose people or structures to a significant risk of loss, injury or death involving wildland fires including where wildlands are adjacent to urbanized areas or where residents are intermixed with wildlands?***

Less than Significant Impact. The project site is surrounded by airport development and a construction staging/storage yard. Therefore, the project area is not readily subject to wildland fires. Impacts related to this issue have a less than significant level.

VIII. HYDROLOGY/WATER QUALITY	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Violate any water quality standards or waste discharge requirements?		☑		
b) Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted)?				☑
c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation on- or off-site?				☑
d) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site?				☑
e) Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?				☑
f) Otherwise substantially degrade water quality?				☑
g) Place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?			☑	
h) Place within a 100-year flood hazard area structures which would impede or redirect flood flows?			☑	
i) Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam?				☑
j) Inundation by seiche, tsunami, or mudflow?				☑

VIII.a Violate any water quality standards or waste discharge requirements?

Less than Significant Impact with Mitigation Incorporated. Waste discharges include discharges of storm water and construction project discharges. A construction project resulting in the disturbance of one acre or more requires an NPDES permit. Construction project proponents are required to prepare a Storm Water Pollution Prevention Plan (SWPPP). Adherence to measures included in the SWPPP will reduce potential water quality impacts to a less than significant level.

Mitigation Measure HYDROLOGY/WATER QUALITY-1: Construction of the planned improvements at the airport requires an update of the airport's SWPPP and conformance with NPDES procedures.

VIII.b Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of preexisting nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted)?

No Impact. The project site is underlain by the Temecula Groundwater Basin. The Temecula Groundwater Basin encompasses approximately 87,800 acres (137 square miles). Water to the project site is provided by Eastern Municipal Water District. Development of the proposed project will not require any additional sources of water. The installation of additional hangers, taxilanes, apron, automobile parking, road relocation, and airport traffic control tower will incrementally reduce the amount of land available for groundwater recharge. When compared to the groundwater basin's total recharge area of 87,800 acres, the loss of permeable area on the 261-acre project site is insignificant.

VIII.c Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation on- or off-site?

No Impact. Implementation of the proposed project will require the installation of impermeable surfaces, which will result in the alteration of the existing on-site drainage patterns. However, storm water flows from new development as proposed by the Master Plan will be directed to the same off-site areas as in the existing condition, with a less than significant impact on local drainage patterns. In addition, there is a very low chance that new development will produce substantial erosion or siltation, due to the generally flat terrain in the local vicinity of the airport.

VIII.d Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site?

No Impact. See response to VIII.c. The airport is surrounded by large areas of open space. Increases in storm water flow created by new development proposed by the Master Plan will not create any flooding at on-site or off-site locations.

VIII.e Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?

No Impact. See responses to VIII.c and VIII.d.

VIII.f Otherwise substantially degrade water quality?

Less than Significant Impact. The proposed project has the potential to cause changes in the quality of surface water. Construction of additional hangers, taxilanes, apron, automobile parking, road relocation, and an airport traffic control tower will require grading and excavation activities, which may allow eroded soils and other pollutants to enter drainage systems. Storm runoff from roadway surfaces tainted by sediment, petroleum products, commonly utilized construction materials, and to a lesser extent, trace metals such as zinc, copper, lead, cadmium and iron, may lead to the degradation of storm water in downstream channels. In accordance with the NPDES and as monitored by the County, planned improvements are required to comply with NPDES and SWPPP requirements regarding the implementation of BMPs during construction. Therefore, impacts to surface water quality will be less than significant.

VIII.g Place housing within a 100-year flood hazard area as mapped on a Federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazards delineation?

Less than Significant Impact. Housing construction is not part of the proposed project. Therefore, the proposed project will not place housing within a 100-year flood hazard area, as mapped on a Federal Flood Hazard Boundary or Flood Insurance Rate Map.

VIII.h Place within 100-year flood hazard area structures that would impede or redirect flood flows?

No Impact. The Federal Emergency Management Agency (FEMA) does not print floodplain maps for the area containing French Valley Airport. According to the Riverside County Flood Control and Water Conservation's Flood Zone Determination Application, the entire airport property is located in an area classified as Zone D. According to FEMA, Zone D indicates areas where there are possible, but undetermined, flood hazards. [2]

According to the *County of Riverside Comprehensive General Plan*, only the northwest corner of the airport lies within the Diamond Valley Inundation Zone from Lake Skinner. In the event of failure of the Lake Skinner Dam, this portion of airport property could be flooded. The only proposed project in this area will be the omni-directional approach light structures. Therefore, implementation of the proposed project will not substantially increase the exposure of persons or property to flood hazards.

VIII.i Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam?

No Impact. See response to VIII.h.

VIII.j Expose people or structures to inundation by seiche, tsunami, or mudflow?

No Impact. The project site is not located near or immediately adjacent to an ocean or lake; therefore, the potential for inundation of the site by a seiche, tsunami, or mudflow is very low. For this reason, impacts associated with this issue are considered to be less than significant.

[2] http://www.floodcontrol.co.riverside.ca.us accessed March 2009

IX. LAND USE/PLANNING	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Physically divide an established community?				☑
b) Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?				☑
c) Conflict with any applicable habitat conservation plan or natural community conservation plan?			☑	

IX.a Physically divide an established community?

<u>*No Impact*</u>. The site would not be located within or divide existing neighborhoods, nor would it introduce a barrier between residential uses; therefore, no impact related to this issue will occur.

IX.b Conflict with any applicable land use plan, policy or regulation of an agency with jurisdiction over the project (including but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?

<u>*No Impact*</u>. The proposed project is consistent with the current planned land uses for the site, as shown in the *County of Riverside General Plan*. The French Valley Airport is designated as public facility and is surrounded by areas planned for light industrial, commercial office, and commercial retail. In addition, the project reflects the County of Riverside's vision for the airport. For these reasons, there is no impact associated with this issue.

IX.c Conflict with any applicable habitat conservation plan or natural communities?

<u>*Less than Significant Impact with Mitigation Incorporated.*</u> See responses to IV.a and IV.f. Mitigation Measure **BIOLOGICAL RESOURCES-1** (see response to IV.a) will be applied to new development resulting from the Master Plan to ensure that the project is consistent with the MSHCP, reducing the potential impact to less than significant.

X. MINERAL RESOURCES	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?				☑
b) Result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?				☑

X.a Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the State?

No Impact. The project site is classified as Mineral Resource Zone (MRZ) 3, areas where the available geologic information indicates that mineral deposits are likely to exist, however, the significance of the deposit is undetermined. No mineral extraction has occurred on-site. Development of airport uses will not result in the loss of availability of statewide or locally important mineral resources. Adjacent properties do not include a state-classified or designated area or existing surface mine. No impact related to this issue will occur.

X.b Result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?

No Impact. The project site is not classified as an area of locally important mineral resource recovery. No mineral extraction has occurred on-site. No impact related to this issue will occur.

XI. NOISE	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?			☑	
b) Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?			☑	
c) A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?			☑	
d) A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?			☑	
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?			☑	
f) For a project within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels?				☑

XI.a Result in exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?

<u>*No Impact*.</u> Federal and state standards categorize residential uses within the 65 CNEL (or DNL) contour as incompatible. Riverside County Airport Land Use Commission (ALUC) policies for new development in the vicinity of French Valley Airport indicate that residential uses are clearly unacceptable inside the 60 CNEL contour.

The noise exposure contours were developed using the FAA-approved Integrated Noise Model (INM) which accepts inputs for several airport characteristics, including aircraft type, operations, flight tracks, time of day, and topography. For the purposes of this analysis, noise contours were prepared for the existing condition as well as the anticipated noise condition in 2030. The 2030 contours assume the operational levels described in Chapter Two of the *2010 French Airport Master Plan Update*.

Exhibit 5 depicts the existing (2008) noise condition for French Valley Airport. As shown on the exhibit, the 60 and 65 CNEL noise contours extend off airport property to the east over the Riverside County

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Exhibit 5
2008 AIRCRAFT NOISE EXPOSURE

Sheriff's Department's Southwest County Justice Center and to the west over an office/business park and an industrial storage lot. No noise-sensitive land uses are contained within this contour of significance. **Exhibit 6** depicts the ultimate condition noise contours. As shown on the exhibit, the noise exposure contours experience a general increase in size extending over more of the Southwest County Justice Center and also commercial/industrial buildings north of the airport. To the south, the contour extends off airport property, encompassing portions of an adjacent industrial storage area and office business park. To the east and west, the contour extends over undeveloped areas. No noise-sensitive land uses are contained within the 2030 60 and 65 CNEL noise contours.

All future development of sensitive receptors (e.g., residents, schools) will be located outside of the current and forecast 60 CNEL contour area. Therefore, no significant effect on future sensitive receptors will occur.

XI.b Would the project result in exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?

No Impact. No pile driving or other sources of significant ground-borne vibration is expected to occur at the airport. No impact associated with this issue will occur.

XI.c Would the project result in a substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?

Less than Significant Impact. There would be no noise-sensitive land uses located within the existing or future (2030) CNEL 65 noise contours for the airport.

XI.d Would the project result in a substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?

Less than Significant Impact. The only temporary increase in ambient noise levels would occur during construction of the airport traffic control tower, road/parking extension, hangars, taxilanes, or apron. The sensitive noise receptors (residences) nearest potential sites of hangars, taxilanes, and road and parking extension are over 1,000 feet from the construction site. Given the distance, no significant impacts are anticipated.

XI.e For a project located within an airport land use plan or where such a plan has not been adopted within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?

Less Than Significant Impact. Riverside County Airport Land Use Commission has an adopted land use compatibility plan (LUCP) for French Valley Airport. The project involves an airport traffic control tower, construction of new aircraft hangars, taxilanes, apron, extension of Airport Road, relocation of Borel Road, and automobile parking at this public airport. As discussed in the response to XI.a, residents near the airport will not be exposed to noise levels that exceed the threshold of 65 CNEL. As noted above, the same volume of future aircraft operations is anticipated with or without the proposed master plan. As a result, the proposed plan would not result in a substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project, resulting in a less than significant impact.

XI.f For a project within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels?

No impact. The project is a public airport; therefore, this checklist item does not apply.

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Exhibit 6
2030 AIRCRAFT NOISE EXPOSURE

XII. POPULATION AND HOUSING	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?			☑	
b) Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?				☑
c) Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?				☑

XII.a Induce substantial population growth in an area, either directly (e.g., by proposing new homes and businesses) or indirectly (e.g., through extension of roads or other infrastructure)?

Less than Significant Impact. The proposed project will not induce growth not anticipated in the County's General Plan Update. Additionally, the project site is located in an urbanizing area, to which roadways and utility infrastructure have already been extended and municipal services provided. The proposed changes to the airport are consistent with the Riverside County's plan for the area. As the proposed project is consistent with the Riverside County planning for the project area, no significant growth inducing impact will be associated with development of the project site.

XII.b Displace substantial amounts of existing housing, necessitating the construction of replacement housing elsewhere?

No Impact. No housing would be displaced by the proposed activities identified in the airport master plan update.

XII. Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?

No Impact. See response to XII.b.

XIII. PUBLIC SERVICES	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:				
a) Fire protection?				☑
b) Police protection?			☑	
c) Schools?				☑
d) Parks?				☑
e) Other public facilities?			☑	

XIII.a Fire Protection?

No Impact. The project site is located near areas designated as a Moderate Fire Hazard Area. Fire protection service is provided by a fire station located on the airport. Development of the proposed project will not have a significant effect on the demand for fire protection services. The proposed airport traffic control tower and hangars will be designed and constructed per applicable fire prevention/protection standards, including the determination of the water supply to meet fire flow requirements. Adherence to these standards will reduce potential impacts related to the provision of fire protection services to a less than significant level.

XIII.b Police Protection?

Less than Significant Impact. Police protection service to the project site is provided by the County Sheriffs Department. Development of the *2010 French Valley Airport Master Plan Update* will not result in a substantial increased demand for police protection services. The proposed master plan update includes security fencing that will meet all federal standards for security. Adherence to these standards will reduce potential impacts related to the provision of police protection services to a less than significant level.

XII.c Schools?

No Impact. The project consists of changes to the French Valley Airport. There will be no local population increase due to the implementation of the proposed project; therefore, there will be no impact associated with the *2010 French Valley Airport Master Plan Update* in regard to the demand for school services.

XIII.d Parks?

No Impact. Please refer to responses XIV.a and XIV.b.

XIII.e Other Public Facilities?

Less than Significant Impact. Maintenance of public facilities and infrastructure in Riverside County would not be significantly altered by development of the *2010 French Valley Airport Master Plan Update*. The services and utilities required to operate this project would be typical of other uses in the county and will not result in excessive wear and tear on the existing circulation, sewer, storm drain, or other public facilities. Therefore, a less than significant impact is expected from implementation of the proposed project.

XIV. RECREATION	**Potentially Significant Impact**	**Less Than Significant with Mitigation Incorporated**	**Less Than Significant Impact**	**No Impact**
a) Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?				☑
b) Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?				☑

XIV.a Increase the use of existing neighborhood or regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?

No Impact. The proposed project does not include a residential component. The proposed project is unlikely to significantly increase local or regional populations; therefore, the proposed project would not cause an increase in the use of existing neighborhood or regional parks or other recreational facilities in the area. No impacts associated with this issue will occur.

XIV.b Include recreational facilities or require the construction or expansion of recreational facilities that might have an adverse physical affect on the environment?

No Impact. The proposed project does not include recreational amenities or parkland. Because the proposed project does not include the construction of any housing, there will be no increase in population associated with the proposed project, and, therefore, the proposed project will not require the construction or expansion of recreational facilities in the area. No impacts associated with this issue will occur.

XV. TRANSPORATION/TRAFFIC	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Cause an increase in traffic which is substantial in relation to the existing traffic load and capacity of the street system (i.e., result in a substantial increase in either the number of vehicle trips, the volume to capacity ratio on roads, or congestion at intersections)?				☑
b) Exceed, either individually or cumulatively, a level of service standard established by the county congestion management agency for designated roads or highways?				☑
c) Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that result in substantial safety risks?				☑
d) Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?				☑
e) Result in inadequate emergency access?				☑
f) Result in inadequate parking capacity?				☑
g) Conflict with adopted policies, plans, or programs supporting alternative transportation (e.g., bus turnouts, bicycle racks)?				☑

XV.a Cause an increase in traffic which is substantial in relation to the existing traffic load and capacity of the street system (i.e., result in a substantial increase in either the number of vehicle trips, the volume to capacity ratio on roads, or congestion at intersections)?

Less than Significant Impact. Vehicular trip generation for the proposed Master Plan was estimated based on the increase in daily flights attributable to the project. Trips were estimated based on the rates contained in *Trip Generation,* 7th Edition, General Aviation Airport (Land Use 022). Implementation of the proposed Master Plan is estimated to increase annual flight operations from 97,700 to 149,200. The 51,500 flights per year increase is estimated to result in a peak day increase of 119 flights. This estimate is based on 30 percent of flights occurring during weekdays (approximately 20 percent to 30 percent of flights currently occur during weekdays) and the peak week of the flight season equivalent to twice the annual average (51,500 flights divided by 52 weeks times two). This daily increase in the number of flights will generate 234 vehicle trips daily (119 flights x 1.97 = 234), 29 trips in the a.m. peak hour (119 flights x 0.24 = 17), and 21 trips in the p.m. peak hour (119 flights x 0.30 = 36).

An assessment of a project's potential traffic impacts is conducted by examining its effect on peak hour conditions. State Highway 79, an arterial road west of the airport, currently carries approximately 5,550 vehicles during the peak hour (2,800 southbound and 2,750 northbound)[3]. The addition of 36 trips during the p.m. peak will have less than significant impact in relation to existing traffic load and capacity of the roadway, as well as the vicinity street system. Similarly, impacts to the vicinity roadway system in the future, or cumulative, conditions are considered to be less than significant due to the minimal quantity of project trip additions.

A gravel road crossing the southern portion of airport property and runway protection zone (RPZ) is planned for closure in the short term. FAA's policy is not to have public access roads through any portion of the RPZ. This road has barricades restricting public access and is not part of Riverside County's current or future road plan. Therefore, closure of this road will have a less than significant impact on traffic.

XV.b Exceed, either individually or cumulatively, a level of service standard established by the county congestion management agency for designated roads or highways?

Less than Significant Impact. As discussed above, the quantity of vehicular trips generated by the *2010 French Valley Airport Master Plan Update* 234 vehicle trips daily. This will result in a less than significant impact to the existing and future roadway system in the project vicinity. The project's impact on the existing levels of service for the designated roads and highways would be negligible. Hence, any change in traffic levels due to the project, which would lead to exceeding the levels of service standards is not perceived.

XV.c Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?

Less than Significant Impact. The *2010 French Valley Airport Master Plan Update* includes construction of an airport traffic control tower. This measure will ensure that air traffic safety measures are in place and maintained so that air traffic hazard potential is reduced to industry standards and potential impacts resulting from increased operations will remain less than significant.

XV.d Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?

Less than Significant Impact. Airport Road will have to be extended in the intermediate term and Borel Road will have to be relocated in the long term. Any on-site or off-site improvements associated with road projects would be designed and constructed in accordance with the appropriate standard plans of Riverside County. As is required in the State of California, the engineering design plans for improvements to any public streets will be prepared by a registered engineer. Potential hazards would be mitigated to less than significant as part of the design process. The project will not create incompatibility between existing and proposed uses nor will it worsen any existing incompatibility. As a result, impacts associated with land use incompatibility are considered to be less than significant.

XV.e Would the project result in inadequate emergency access?

Less than Significant Impact. The project would not result in inadequate emergency access. A fire station is located on-airport and adequate access roads serve the airport property.

XV.f Would the project result in inadequate parking capacity?

[3] www.dot.ca.gov/hq/traffops/saferesr/trafdata/2008all.htm

Less than Significant Impact. Parking to accommodate the Master Plan will be provided on-site. No off-site parking areas affected. Hence, the project will have a less than significant impact on parking capacity on-site as well as off-site.

XV.g Would the project conflict with adopted policies, plans, or programs supporting alternative transportation (e.g., bus turnouts, bicycle racks)?

Less than Significant Impact. The project would not result in conflicts with adopted policies, plans, or programs supporting alternative transportation.

XVI. UTILITIES AND SERVICE SYSTEMS	**Potentially Significant Impact**	**Less Than Significant with Mitigation Incorporated**	**Less Than Significant Impact**	**No Impact**
a) Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?			☑	
b) Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?			☑	
c) Require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?			☑	
d) Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?			☑	
e) Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?			☑	
f) Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?			☑	
g) Comply with federal, state, and local statutes and regulations related to solid waste?			☑	

XVI.a Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?

Less than Significant Impact. Under Section 402 of the Clean Water Act (CWA) the Regional Water Quality Control Board (RWQCB), Santa Ana Region, issues National Pollutant Discharge Elimination System (NPDES) permits to regulate waste discharges to "waters of the nation," which include rivers, lakes, and their tributary waters. Waste discharges include discharges of storm water and construction project discharges. A construction project resulting in the disturbance of more than one acre requires an NPDES permit. Construction project proponents are also required to prepare a Storm Water Pollution Prevention Plan (SWPPP). Furthermore, prior to the issuance of building permits, a project's applicant will be required to satisfy Eastern Municipal Water District (EMWD) requirements related to the payment of fees and/or the provision of adequate wastewater facilities. Because the project will comply with the waste discharge prohibitions and water quality objectives established by the RWCQB and EMWD, impacts related to this issue will be reduced to a less than significant level.

XVI.b Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?

Less than Significant Impact. Bathrooms will be incorporated into the airport traffic control tower and may be incorporated into a cluster of T-hangars. This may total four to six additional bathrooms for the proposed projects Wastewater conveyance and treatment services to French Valley Airport are provided by the EMWD. Typical daily flows at the Temecula Valley Water Reclamation Facility are approximately 6.0 million gallons per day (mgd). The capacity of the facility is 8.0 mgd. Due to the nature of activities conducted at the airport, the proposed project is not expected to significantly increase the flow of wastewater from the project site to the Temecula Valley Water Reclamation Facility. Due to the current existing capacity of the water reclamation facility, and the minimal increase in the flow of wastewater expected from the proposed projects, impacts associated with sewer services are considered less than significant.

XVI.c Require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?

Less than Significant Impact. Development of the proposed project will result in an increase in the amount of impermeable surfaces and, therefore, an increase in surface runoff. As previously stated in response to XVI.a, construction projects that disturb more than one acre require an NPDES permit. Under the NPDES permit, the project proponent is required to prepare a SWPPP. Adherence to BMPs specified by the NPDES permit and SWPPP are expected to reduce potential impacts associated with this issue to a less than significant level.

XVI.d Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?

Less than Significant Impact. Water is supplied to French Valley Airport from the EMWD. Due to the nature of activities conducted at the airport, the proposed project is not expected to significantly increase water usage at the project site. Impacts associated with water usage for the proposed project are considered less than significant.

XVI.e Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?

Less than Significant Impact. Please refer to response XVI.b.

XVI.f Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?

Less than Significant Impact. Solid waste collection and disposal is a "demand-responsive" service and current service levels can be expanded and funded through user fees. Since the proposed project is not expected to cause a significant increase in employment at the airport, the impacts associated with solid waste disposal are considered to be less than significant.

XVI.g Comply with federal, state, and local statutes and regulations related to solid waste?
Less than Significant Impact. The proposed project will be required to comply with applicable elements of AB 1327, Chapter 18 (California Solid Waste Reuse and Recycling Access Act of 1991) and other applicable local, state, and federal solid waste disposal standards, thereby ensuring that impacts associated with this issue are considered to be less than significant.

XVII. MANDATORY FINDINGS OF SIGNIFICANCE				
	Potentially Significant Impact	**Less Than Significant with Mitigation Incorporated**	**Less Than Significant Impact**	**No Impact**
a) Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?				☑
b) Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?				☑
c) Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?				☑

XVII.a Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?

No Impact. With implementation of project-related mitigation measures, no substantial adverse effects on the habitat of a fish or wildlife species, either direct or indirect, would result from the project.

XVII.b: Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?

No Impact. With implementation of the project-related mitigation measures contained in this Initial Study, the proposed project's cumulative impacts associated with air quality and biological resources would be mitigated to less than significant. There are no other development projects that in combination with the proposed project would create a significant environmental impact associated with aesthetics, agricultural resources, cultural resources, geology and soils, hazards and hazardous materials, hydrology and water quality, land use and planning, mineral resources, noise, population and housing, public services, recreation, transportation/traffic, and utilities and service systems.

XVII.c: Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?

No Impact. With implementation of project-related mitigation measures, no substantial adverse effects on human beings, either direct or indirect, would result from the project.

SUMMARY

A summary of recommended mitigation measures is provided in the table below. The Riverside County Economic Development Agency, Aviation Division, must agree to implement these mitigation measures and where required, agreements to implement appropriate mitigation must be secured from individual developers.

Summary of Mitigation Measures	
Mitigation Measure	**Description**
AESTHETICS-1	The County shall ensure that only low pressure sodium vapor lights will be used for non-airfield lighting in order to minimize light emissions in accordance with Ordinance No. 655.
AIR QUALITY-1	All construction contracts shall require dust control practices and other construction control measures (as identified in SCAQMD rules, regulations, and CEQA guidelines) in effect at the time of the contract signing be implemented throughout all stages of construction.
BIOLOGICAL RESOURCES-1	Burrowing owls are also well known to occupy and utilize airports and aviation fields. To insure that take of burrowing owls does not occur, a 30-day preconstruction survey must be completed in the proposed project area. .
BIOLOGICAL RESOURCES-2	The proposed property acquisition area is located within WRCMSHCP Criteria Cell and Urban/Wildlands Interface Guidelines (UWIG) must be followed. Landscape plans should avoid the use of non-native plants listed in Table 6-2 of Section 6.1.4 of the WRCMSHCP. In addition, lighting should be directed away from the WRCMSHCP Conservation area or shall incorporate adequate shielding.
CULTURAL RESOURCES-1	Field surveys may be required to determine the presence of historic properties or archaeological resources prior to acquisition of the property to the southwest.
CULTURAL RESOURCES-2	In the unlikely event that cultural, archaeological, or historical resources are encountered during project-related activities, work in the immediate vicinity of the discovery shall cease until the finds can be evaluated by a qualified specialist. Should human remains be encountered within the project area, the County Coroner shall be contacted immediately; if the remains are determined to be Native American, then the Native American Heritage Commission shall be contacted as well.
GEOLOGY-1	Where deemed necessary, new structural development should be the subject of a geotechnical study prior to construction. This study shall evaluate local geologic and soil conditions and identify appropriate construction measures that should be completed in terms of building foundation design to ensure the protection of occupants of the future buildings. New buildings shall conform to the requirements of the Uniform Building Code.
GEOLOGY-2	During construction, erosion and sedimentation shall be minimized on the site by measures such as silt fences, covering of stockpiled soil materials, and other Best Management Practices (BMPs) as identified by the **San Diego** Regional Water Quality Control Board.
GEOLOGY-3	Detailed site-specific geotechnical investigations will be conducted prior to the development of any structures on the airport to identify the potential for geological hazards and to develop construction techniques and design solutions to minimize risks.
HAZARDS AND HAZARDOUS MATERIALS -1	Proposed projects will be required to design, construct, and maintain structures, roadways, and facilities to comply with applicable local, regional, state and/or federal requirements related to emergency access and evacuation plans.
HYDROLOGY/WATER QUALITY -1	Construction of the planned improvements at the airport requires an update of the airport's SWPPP and conformance with NPDES procedures.

DETERMINATION:

☐ I find that the proposed project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared.

☒ I find that although the proposed project could have a significant effect on the environment, there will not be a significant effect in this case because revisions in the project have been made by or agreed to by the project proponent. A MITIGATED NEGATIVE DECLARATION will be prepared.

☐ I find that the proposed project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required.

☐ I find that the proposed project MAY have a "potentially significant impact" or "potentially significant unless mitigated" impact on the environment, but at least one effect: 1) has been adequately analyzed in an earlier document pursuant to applicable legal standards; and 2) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets. An ENVIRONMENTAL IMPACT REPORT is required, but it must analyze only the effects that remain to be addressed.

☐ I find that although the proposed project could have a significant effect on the environment, because all potentially significant effects: (a) have been analyzed adequately in an earlier EIR or NEGATIVE DECLARATION pursuant to applicable standards; and (b) have been avoided or mitigated pursuant to that earlier EIR or NEGATIVE DECLARATION, including revisions or mitigation measures that are imposed upon the proposed project, nothing further is required.

_____ _____

Signature Date

_____ _____

Printed Name For

REFERENCES

2008 State Highway Congestion Monitoring Program Annual Data Compilation, 2009, CALTRANS

California Groundwater Bulletin 118, 2004. Hydrologic Region South Coast Temecula Valley Ground Water Basin.

EMWD Insights, 2003. Eastern Municipal Water District Temecula Valley Regional Reclamation Facility

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ATTACHMENT A

EMISSIONS INVENTORY REPORT

Emissions Inventory Summary

(Pounds per Year)

Baseline - French Valley 2008

Category	CO2	CO	THC	NMHC	VOC	TOG	NOx	SOx	PM-10	PM-2.5
Aircraft	10,755,203.210	2,838,131.879	50,803.318	47,190.368	45,594.346	51,556.322	14,144.672	4,404.349	143.260	143.260
GSE	N/A	16,022.129	N/A	618.077	644.922	707.345	2,639.531	74.112	67.737	65.126
APUs	N/A	106.611	10.081	11.656	11.595	11.656	75.811	16.528	15.163	15.163
Parking Facilities	N/A	802.124	N/A	119.726	120.929	126.807	97.269	0.513	2.186	1.424
Roadways	N/A	246.594	N/A	19.673	19.936	21.018	36.814	0.295	1.245	0.810
Stationary Sources	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Training Fires	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Grand Total	10,755,203.210	2,855,309.337	50,813.399	47,959.499	46,391.728	52,423.148	16,994.096	4,495.798	229.591	225.783

Emissions Inventory Summary

(Pounds per Year)

Baseline - French Valley 2030

Category	CO2	CO	THC	NMHC	VOC	TOG	NOx	SOx	PM-10	PM-2.5
Aircraft	16,411,057.533	4,334,341.059	77,528.192	72,006.738	69,570.251	78,672.380	21,570.898	6,720.471	218.118	218.118
GSE	N/A	3,847.444	N/A	176.947	186.216	199.118	374.188	39.009	24.878	23.244
APUs	N/A	162.416	15.358	17.757	17.665	17.757	115.493	25.179	23.100	23.100
Parking Facilities	N/A	759.190	N/A	77.080	77.897	82.418	34.180	0.628	1.947	0.903
Roadways	N/A	237.097	N/A	12.316	12.517	13.322	12.678	0.362	1.111	0.515
Stationary Sources	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Training Fires	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Grand Total	16,411,057.533	4,339,347.206	77,543.550	72,290.838	69,864.546	78,984.995	22,107.437	6,785.649	269.154	265.880

ATTACHMENT B

WESTERN RIVERSIDE COUNTY MULTIPLE SPECIES HABITAT CONSERVATION PLAN CONSISTENCY ANALYSIS

WESTERN RIVERSIDE COUNTY MULTIPLE SPECIES HABITAT CONSERVATION PLAN CONSISTENCY ANALYSIS

For
County of Riverside
Economic Development Agency
French Valley Airport Expansion

Approximately 12.0 Acre Project Site in the French Valley Area
East of Highway 79, South of Sparkman Way, and North of Boreal Rd
APN: 957-320-021
Section 18, Township 7 South, Range 2 West

Survey Date: July 12, 2010

Prepared: July 13, 2010 by:

Jared Bond
Senior Ecological Resources Specialist
Riverside County Environmental Programs Department
(951) 955-0314
jbond@rctlma.org

PROJECT OVERVIEW

Riverside County Economic Development Agency is proposing to acquire additional property for the expansion of the existing French Valley Airport. The parcel borders the western boundary of the French Valley Airport and is located north of Borel Road in the Murrieta area of unincorporated Riverside County (Appendix A). Site specific design plans are currently being developed for the parcel.

MSHCP REVIEW

The following Western Riverside County Multiple Species Habitat Conservation Plan (WRCMSHCP) Consistency Analysis includes a habitat assessment for burrowing owl (*Athene cunicularia*). In addition, the review of this parcel includes analysis of consistency with Sections 6.1.2, 6.1.3, 6.1.4, and 6.3.2 of the WRCMSHCP. The proposed project site is located within WRCMSHCP Criteria Cell thus a Criteria Analysis is also included in this report.

INTRODUCTION and METHODOLOGY:

This site was visited by Riverside County Environmental Programs Department (EPD) biologist, Jared Bond, at 10:00 a.m. on Monday, July 12, 2010. The entire project site was walked to allow 100% visual coverage. The surrounding area, including 150 meter buffer area was visually inspected with binoculars. The burrowing owl habitat assessment was conducted in accordance with the Burrowing Owl Survey Instructions for the WRCMSHCP, dated March 29, 2006.

SITE CONDITIONS: Location, Weather, Topography and Soils

The approximately 12.0-acre project area boarders the western boundary of the French Valley Airport and is located north of the current alignment of Boreal Road. The site is located in Section 18, Township 7 South, and Range 2 West of the Murrieta USGS quadrangle. The proposed project site is comprised of APN 957-320-021 and additional area along Borel Road. Weather conditions were recorded using a Kestrel personal weather meter. The elevation of the study area is approximately 1,340 feet above sea level and the topography associated with the parcel is relatively flat. Site photos are located in Appendix B.

The subject parcel is an operating construction equipment storage yard and is highly impacted by the existing use land use. The western portion of the site that is not currently being utilized as part of the existing storage yard is relatively undisturbed other than for an access road associated with the current alignment of Borel Road and Sky Canyon Drive. Soils were evaluated based on the Natural Resource Conservation Service-Web Soil Survey (2008). Soils mapped on site consist of Bosanko Clay (BfC) and Las Posas loam (LaP2). A soil map is located in Appendix C.

OBSERVATIONS: Vegetation and Wildlife

Vegetation

The area associated with the existing equipment storage yard is devoid of vegetation and native plant communities. Only a few ornamental fan palm (*Washingtonia sp.*) trees are present within the yard. The area west of the storage yard and associated office buildings is dominated by recovering coastal sage scrub. The hill side is mainly vegetated with emergent California buckwheat (*Eriogonum fasiculatum*), black mustard (*Brassica nigra*), vinegar weed (*Trichostema lanceolatum*) and Russian thistle (*Salsola iberica*). The hillside has experienced varying levels of disturbance associated with the development of the French Valley Airport and access an along the hillside dating back to 1996. The Riverside County GIS Vegetation Map (2005) maps the area as Developed/Disturbed land.

Wildlife

Wildlife activity at the project site was relatively low. Wildlife species observed includes American crow (*Corvus brachyrhynchos*) and northern mocking bird (*Mimus polyglottos*), Mourning dove (*Zenaida marroura*), side-blotched lizard (*Uta stansburiana*), cottontail rabbit (*Sylvilagus audubonii*) and Mormon metalmark (*Apodemaia mormo*). No small mammals or small mammal burrows were observed.

MULTIPLE SPECIES HABITAT CONSERVATION PLAN AREA (MSHCP)

MSHCP CELL CRITERIA:

The proposed project is located within WRCMSHCP Criteria Cell 6071 which is part of Cell Group W in the South West Area Plan (Appendix D). Conservation within this Cell Group W will contribute to assembly of Proposed Core 2. Conservation within this Cell Group W will focus on coastal sage scrub, grassland, chaparral and Riversidean alluvial fan sage scrub habitat and agricultural land. Areas conserved within this Cell Group W will be connected to agricultural land proposed for conservation in Cell #6180 to the south and to coastal sage scrub, grassland and chaparral habitat and agricultural land proposed for conservation in Cell Group V to the north. Conservation within this Cell Group W will range from 65%-75% of the Cell Group focusing in the eastern portion of the Cell Group. The proposed project site is located in the north west corner of Cell Group W and does not contribute to the assembly of Proposed Core 2. Based on the existing land use, level of disturbance, lack of quality habitat and proximity to the French Valley Airport and Borel Road the proposed project site would not contribute to the WRCMSHCP.

Section 6.1.2 Riverine/Riparian Areas:

The project site does not support any drainage features or other protected habitats listed in Section 6.1.2 of the WRCMSHCP. The site does not contain vernal pools, ephemeral ponds or other human modified depressions or other features suitable for fairy shrimp. Clay soils are mapped

however the level of disturbance and compaction associated with the storage yard has altered the soil structure. The hill side to the west does not pond or hold water due to the level of topography. This analysis shall satisfy Section 6.1.2 of the WRCMSHCP.

Section 6.1.3 Narrow Endemic Plant Species:

The project site is within the survey area for Narrow Endemic Plant Species including, Munz's onion (*Allium munzii*), San Diego ambrosia (*Ambrosia pumila*), Many-stemmed dudleya (Dudleya multicaulis), Spreading navarretia (*Navarretia fossalis*), California Orcutt grass (*Orcuttia californica*), and Wrights trichocoronis (*Trichocoronis wrightii*). Visual inspection of the site located neither rare plant species nor the potential to support rare plant species. The site lacks vernal pools or ephemeral depressions. Clay soils are mapped on site but have been highly altered due to historic and ongoing disturbance. Focused plant surveys are not recommended at this time. This analysis shall satisfy Section 6.1.3 of the WRCMSHCP.

Section 6.1.4 Urban/Wildlands Interface Guidelines (UWIG):

There site is located within WRCMSHCP Criteria Cell thus UWIG guidelines should be followed. Landscape plans should avoid the use of non-native plants listed in Table 6-2 of Section 6.1.4 of the WRCMSHCP. In addition, lighting should be directed away from the WRCMSHCP Conservation area or shall incorporate adequate shielding. By incorporating the appropriate UWIG Guidelines as set forth in Section 6.1.4, the proposed project will be consist with Section 6.1.4 of the WRCMSHCP.

Section 6.3.2 Criteria Area Species Surveys:

The proposed project site is located within the WRCMSHCP survey area for burrowing owl (*Athene cunicularia*); therefore, a habitat assessment was conducted on July 12, 2010. The proposed project site is highly disturbed from existing operations. The site is extremely flat and would provide foraging opportunities for burrowing owl. However the site does not support any small mammal burrows or areas viable for burrowing owl occupation thus precluding suitable habitat for burrowing owl. In addition, the 150 meter buffer area was also visually inspected for burrowing owls and suitable burrowing owl burrows. No burrowing owls or burrowing owls sign (feathers, white wash, scat) was observed on the project site or within the buffer area. The project site does not support suitable burrowing owl habitat and a focused survey is not recommended. However, the site is located in an area known to support burrowing owls and the site could become occupied in the future. Burrowing owls are also well known to occupy and utilize airports and aviation fields. To insure that take of burrowing owls does not occur, a 30-day pre-construction survey is recommended.

The proposed project site is also located with theWRCMSHCP survey area for Criteria Area Plant Speceis including, Davidsons saltscale (*Atriplex serenana var. davidsonii*), Parish's brittlescale (*Atriplex parishii*), thread-leaved brodiaea (*Brodiaea filifolia*), smooth tarplant (*Centromadia pungens*), round-leaved filaree (*Erodium macrophyllum*), Coulter's goldfields (*Lasthenia glabrata* ssp. coulteri) and little mousetail (*Myosurus minimus*). Visual inspection of the site

located neither rare plant species nor the potential to support rare plant species. The site lacks vernal pools or ephemeral depressions. Clay soils are mapped on site but have been highly altered due to historic and ongoing disturbance. The site also lacks saline-alkaline soils, and seasonal drainages thus the required Narrow Endemic Plant Species are not expected to occur on site and focused surveys are not recommended.

This analysis along with implementation of a 30-day burrowing owls survey would insure that the project is consistant with Section 6.3.2 of the WRCMSHCP.

CONCLUSION:

The site does not currently support suitable habitat for burrowing owl (*Athene cunicularia*) and is thus consistant with Sections 6.3.2 of the WRCMSHCP. Though the site does not currently support suitable habitat for burrowing owl, there is potential for the species to inhabit the site in the future. Therefore, a pre-construction burrowing owl survey should be conducted no more than 30 days prior to any grading or site preparation.

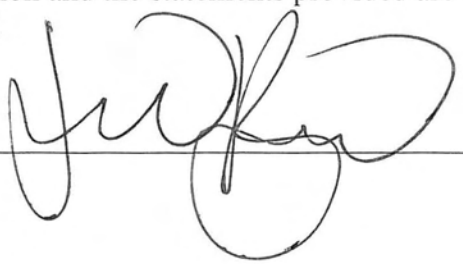
The project site does not support any Riparian/Riverine features, vernal pool or fairy shrimp habitat, as defined in Section 6.1.2 of the MSHCP. The proposed project is consistent with Section 6.1.2 of the WRCMSHCP.

Suitable habitat for the required Narrow Endemic Plant and Criteria Area Plant Species is not present. The July 12, 2010 field survey of the property confirmed absence of these species and focused survey are not recommended due to the exiting land use and highly impacted nature of the site.

Based on the analysis contained herein, implementation of a 30-day burrowing owl preconstruction survey, and implementation of UWIG Guidelines set forth in Section 6.1.4, the proposed project is consistent with the WRMSHCP.

CERTIFICATION:

I hereby certify that the statements furnished above and in the attached exhibits present the information required for this biological evaluation and the statements provided are true and correct to the best of my knowledge and belief.

DATE: 7/14/10 SIGNED: 

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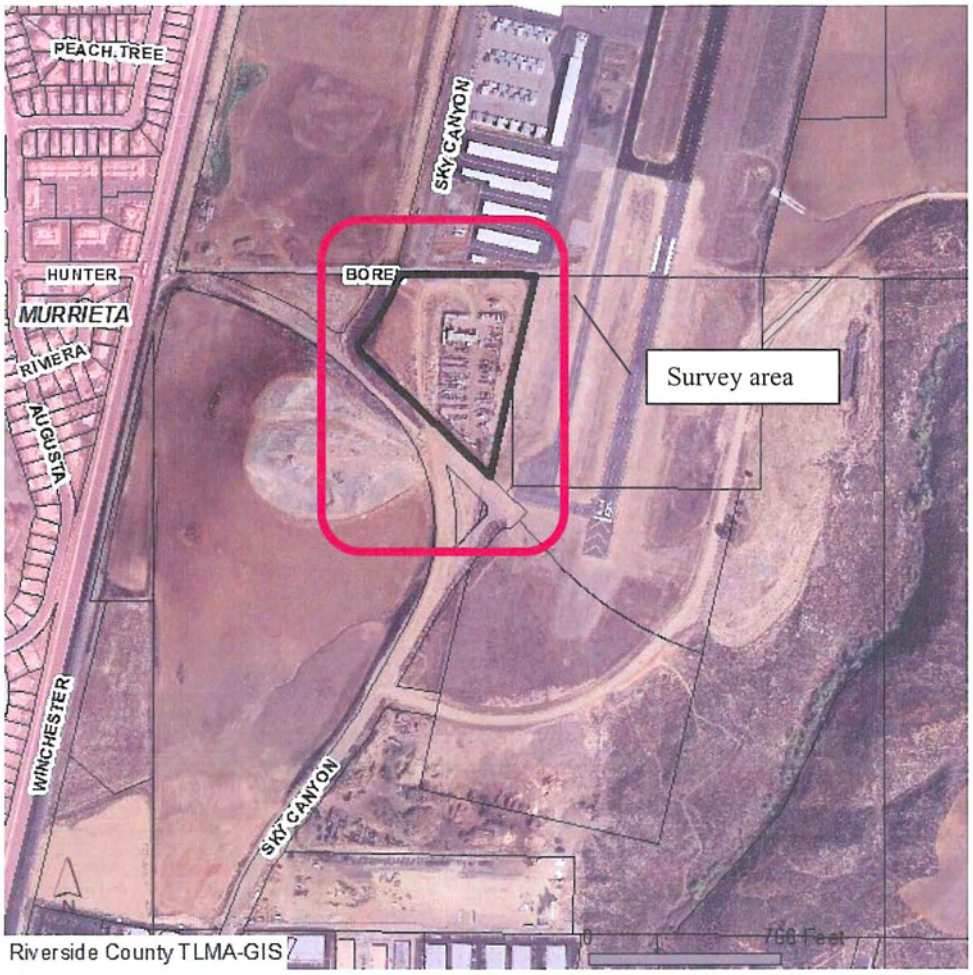
APPENDIX A – Project Site



Selected parcel(s):
957-320-021

APPENDIX B – Site Photos

Photo 1: Looking north across the project site from southeast corner of the parcel.

Photo 2: Taken along Borel Road looking east

Photo 3: Looking West from the northern boundary of parcel

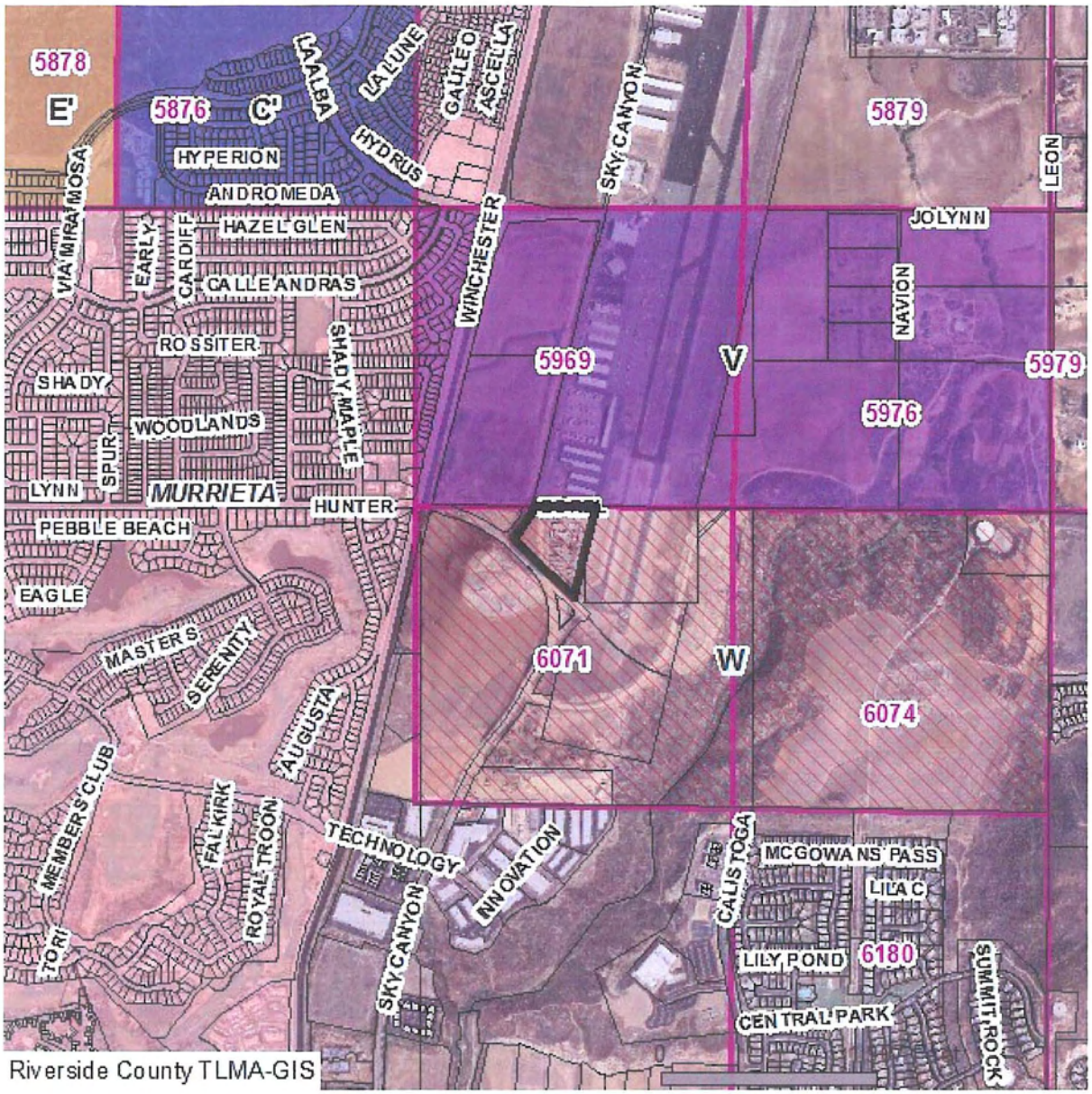
Photo 4: Looking south across equipment yard

APPENDIX C – Soil Map

Map Unit Legend
Western Riverside Area, California (CA679)

Map Unit Symbol	Map Unit Name
BfC	Bosanko clay, 2 to 8 % slopes
LaD2	Las Posas loam, 8 to 15% slopes

APPENDIX D- WRCMSHCP Criteria Cells



Selected parcel(s):
957-320-021

CRITERIA CELLS/CELL GROUPS

SELECTED PARCEL	WRCMSHCP BOUNDARY	PARCEL	36 CRITERIA CELL NUMBER
CRITERIA CELL	A CELL GROUP IDENTIFIER	C, C', AND C"	V, V', AND V"
W, W', AND W"	CITIES		

ATTACHMENT C

CULTURAL RESOURCE ASSESSMENTS

A CULTURAL RESOURCE ASSESSMENT

AIRPORT BUSINESS PARK

French Valley, Riverside County, California

for:
Mr. Richard Miklich
Ran Pac Engineering
27447 Enterprise Circle West
Temecula, California 92390

by:
Christopher E. Drover Ph.D
Consulting Archaeologist
13522 Malena Drive
Tustin, California 92680
(714) 838-2051

5 March 1990

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MANAGEMENT SUMMARY:

In September 1990, Mr. Miklich of Ran Pac Engineering requested an archaeological assessment of several study areas near Murrieta Hot Springs, California. The subject properties are planned for various development including both residential and commercial. A cultural resources assessment was necessary to satisfy the requirements of the County of Riverside with regard to identification and protection of cultural resources.

An archaeological records check and survey were undertaken in January and February 1990, for the project sites located on the Murrieta and Winchester 7.5' USGS quadrangles, to ascertain whether any cultural resources might be impacted by the proposed development. A surface survey conducted on the subject property and a check of the archaeological site records on file at the Eastern California Information Center, University of California, Riverside, were accomplished.

An 800 and 24,000-scale map of the subject property provided the boundary reference for the actual land area surveyed. The subject parcel lie northwest of Temecula, to the north of the community of Murrieta Hot Springs. Several discontiguous parcels amounting to approximately 1200 acres of land.

Archaeological records search activities indicate that portions of the project area have been previously surveyed resulting in the recordation of two archaeological sites Riv-716 and 2932). Nine additional archaeological sites have been located during the subject archaeological survey for a total of ten sites

within the project boundaries. Cultural resource constraints (mitigation measures for the proposed project are included herein).

SUMMARY OF CURRENT KNOWLEDGE:

A review of the archaeological site records on file at the ECIC showed two, previously recorded archaeological sites within the subject property boundaries Riv-716 and 2932. While one of these sites, Riv-2932, lies only partially within the project area, it is an extremely significant resource. Other sites surround the project, but are too distant to be directly impacted by the subject project.

Perhaps the most pertinent regional study of the general area regarding prehistoric land use is that accomplished at Perris Reservoir (O'Connell et al. 1974). This research took place about 15 miles north of the property, in the San Jacinto Plains. Given the similarities between the environments between the two areas the general settlement/subsistence of the Perris Reservoir project provides an excellent example of prehistoric land-use patterns in the area.

Most of the archaeological sites described in that study were late prehistoric age (pottery present) and may have resulted from population intrusions from the Coachella Valley caused by the desiccation of Lake Cahuilla (ancestral Salton Sea) (Wilke 1978). settlement patterns seem to consist of campsites (located near perennial water sources) and temporary processing locations (O'Connell et al. 1974).

Considering the topography and proximity portions of the subject parcel to water, site density may be expected to be moderate as in similar areas of the Perris Reservoir. Based on settlement/subsistence models generated by O'Connell et al. (1974), temporary food gathering/processing sites, campsites and even longer term habitation sites might be expected on the subject project given the existing environmental setting.

Through time, land use patterns at nearby Perris Reservoir changed from being rather sporadic between 2200 years ago (the earliest occupations) to about A.D. 1500 when an influx of population with different subsistence exploitation strategies (O'Connell et al. 1974).

At European contact times, the study area was within areas occupied by groups known as the Luisen˜o, named after the Mission San Luis Rey de Francia in present-day Oceanside, California, Which some of their linguistic group frequented. The Luisen˜o culture area incorporated southwestern Riverside County, northern San Diego County, eastern Orange County and was linguistically comprised of a language of the Shoshonean language family (Kroeber 1925: Plate 57). The Contact period ethnicity of the study area is clear as Luisen˜o villages such as Pechanga are relatively close to the project area. Murrieta Hot Springs was apparently utilized prehistorically and the existing site Riv-1012 may be related to such prehistoric usage. Ethnographic literature pertinent to the Luisen˜o and surrounding ethnographic groups is fairly extensive and has been collected since the 1800's (see Barrows 1900; Sparkman

1908; Kroeber 1925; White 1963 and Bean 1972).

EFFECTIVE ENVIRONMENT:

The physiography of the subject property consists of the north-south trending French Valley which joins the Tucalota Creek water course, ultimately collecting into the Santa Gertrudis Creek, and which joins Murrieta Creek south property boundary near Temecula. Soils on the property consist primarily of decomposed granitics with limited granite outcroppings visible.

Precipitation is mainly a result of winter dominant, frontal storms from the northwest, although occasional summer thundershowers result from damp air intruding from the southern (Gulf of Mexico--Sea of Cortez) monsoon season.

The property ranges from 1320 to 1440 feet above sea level. Aside from agriculturally disturbed areas, the project contains some native vegetation, a sage-scrub community, dominated by buckwheat (Eriogonum fasiculatum), and california sagebrush (Artemisia californica). Narrow riparian environments also exist along the Tucalota Creek, dominated by plant such as willow (Salix sp.) along with limited Oak Woodland plant associations. The riparian habitat may have been enhanced in recent years due to increased run-off from Lake Skinner. The above mentioned plant communities are noted as having many ethnographic uses among the neighboring Cahuilla (Bean and Saubel 1972).

RESEARCH METHODS AND STRATEGY:

Archival study of the archaeological records compiled at the Archaeological Research Unit, University of California, Riverside

was conducted by Mr. Dave Smith in February 1990. Several, small portions of the subject property had been previously surveyed and two archaeological sites had been previously recorded (Riv-716 and 2932).

Field methods consisted of an on-site, intuitive survey, conducted in January 1990. The field crew consisted of Messrs. David Smith, Terry Buckley, Radek Cecil, David Leavens and the author. Survey of the parcel included transects defined by the project boundaries, and geographical contours. Special attention was paid to bedrock granite outcrops (especially at the interface of hills and plains), the creek drainage and other, less disturbed areas. European grasses (Gramineae) and other ground cover exist in some areas but, due to the dry season, resulted in relatively good conditions for observation. Much of the subject property had been under intense cultivation in recent years, for crops such as barley (Hordeum vulgare). Such heavy cultivation provided both for excellent conditions for observation, but also for significant disturbances to several sites.

RESULTS:

The updated description of each of these sites is presented below along with nine other, newly recognized sites.

Archaeological Site Descriptions:

Riv-2932: 5,625m^2

This previously recorded site is 150m west of Borel Road, on top of a knoll 100m south of a ranch, and 40m west of a small corrugated metal tank. This is site consists of a milling station with 4 mortars, 6 slicks, 7 projectile points (Cottonwood Triangular), 1 bone or antler awl tip, 1 pestle, 3+ groundstone fragments, 6 pottery sherds, 5 biface, 100+ quartz, chalcedony, and basalt debitage. When we updated the condition of this site, several

problems were noticed. The western part of the site lies in a cultivated field. The obvious midden area had been excavated extensively by unauthorized individuals, but did not appear totally disturbed. At least two dirt roads cross the site and a burn had occurred recently throughout the site. **NOTE: THIS SITE WAS MISS-PLOTTED ON THE ORIGINAL RECORD.**

Riv-716: 150,000m^2
This site is .5km west of the intersection of S.R. 79 and Benton Road. This is a major, long-term habitation site. This site is associated with the late, ethnographic use of the springs by the Luisen˜o. Local historic literature suggest that the Temecula Massacre (a battle between the Cahuilla and Luiseno) which ended in Nigger Canyon near the presnet Vail Lake) began at this site. This site may be one of the more significant deposits, (from the perspectives of archaeology and Native American concern), to be impacted within the subject project area. It consists of numerous and extensive bedrock grinding feature, darkened soil, fire-cracked rock, debitage and well established midden. Despite the considerable unauthorized digging which has ocurred on the property much of the site is intact and should be investigated and protected.

ABP-1: 1000m^2
This site is located .5 km south of Borel Rd. and .7 km west of Leon Rd.; The site a milling station with 2 slicks 7 manos, 3 mano fragments, 6 metate fragments, 50+ pieces quartz, chert, and basalt debitage.

ABP-2: 100m^2
This site is located 100m southwest of the junction of Borel and Leon Roads. This site consists of a milling/lithic scatter site with 1 slick, and 5 pieces of debitage.

ABP-3: 400m^2
This site is located on the south side of Borel Road 50m west of Leon Road. This is a milling or vegetable processing site consisting of 2 isolated grinding slicks on 2 boulders; no artifacts were observed.

ABP-4: 100m^2
This site is located 50m south of Borel Rd. and 200m west of Leon Rd. This site is another milling station consisting of 2 isolated slicks on 2 boulders; no surface artifacts were observed.

ABP-5: 100m^2
This site is located 10m south of Borel Road and 150m west of ABP 4. This is another milling station or food processing site consisting of 1 grinding slick, and 1 piece of debitage.

ABP-6: 375m^2
This site is located .6 km south of Borel Rd. on the west bank of

the ravine that runs through the center of section 18. This site is likely a campsite or longer-term occupation site. Features and artifact observed include 2 grinding slicks, 1 bowl fragment, 3 mano fragments, 2 manos, 1 uniface, 10+ quartz and basalt debitage.

ABP-7: 250m^2
This site is located 400m west of a farmhouse and 75m south of Borel Rd. This is site appears to be a food processing or milling station. Features and surface artifacts observed include 6 slicks, 1 slab metate, 1 mano fragment. The surface artifact may indicate that the site has potential for further subsurface deposits.

ABP-8 was an unused, arbitrary site number.

ABP-9: 100m^2
This site is located 30 meters east of S.R. 79 at a point .8 km north of Borel Road. This site is likely an isolated milling station or food preparation location. The site consists of 3 grinding features or slicks on 3 boulders; no surface artifacts were observed at the site.

MITIGATION:

Ten archaeological sites exist on the subject property, Riv-716, 2932, ABP 1, 2, 3, 4, 5, 6, 7, and 9. The Airport Business Park (ABP) temporary numbers will be replaced by official Riverside County numbers. While several of these sites consist simply of bedrock grinding features, the settlement patterns within the subject project area also reflect short-term campsites and larger, longer-term habitation (village?) sites. As most of the sites have not been investigated beyond their initial recording, it is difficult to determine any chronological patterns in settlement. However, it is assumed that most of these sites are late given the research at Perris reservoir. Several of these sites, however, may have components of an earlier period (ca. 4,000 years ago) called Archaic or late Archaic in southern California (see the discussion in Drover 1986:26-27; Fig. 4, of the Santa Gertrudis Site just outside the subject property boundaries).

Ten archaeological sites may suffer direct impacts from the proposed development of the Airport Business Park, Riv-716, 2932, ABP 1, 2, 3, 4, 5, 6, 7, and 9. The appropriate mitigation measures for each of these sites are described below. Since project specific impacts are not yet distinct enough to differentiate between direct and indirect impacts, impacts will be assumed to be direct, implying actual physical damage as opposed to indirect which would include secondary disturbances by unauthorized artifact collection, grading staging or induced erosion from later phases of construction.

The mitigation recommendations discussed in this section are based on a set of general procedures which are normally carried out when mitigating archaeological sites in California.

Once a site has been located, two phases may follow: 1) boundary testing, which includes both surface collection and subsurface testing; and if depth or overall significance warrant, 2) site "salvage" (data collection) and/or preservation. The procedures outlined here are applicable to future design changes effecting the subject archaeological sites.

Whether both of these phases are implemented, and to what degree they are pursued, depends upon the nature of the cultural resource and whether a site is to be directly or indirectly impact during the course of the development of the property. If a site is to be directly impacted (i.e., physically disturbed by grading, landscaping, road or building construction, etc.), both phases are obligatory. Generally, if a site is to be directly impacted, phase

one implies a 100 percent surface collection of the site coupled with subsurface test units to determine site boundaries, approximate site chronology, site function, and cultural affiliations. Such a procedure requires site mapping using a transit. The resultant information is then used to determine whether the particular site is a unique resource for the area and should be preserved or mitigated by data collection "salvage" (Phase Two). If a site is to be salvaged, the actual percentage of the site to be excavated will depend upon the importance of the site, but will generally range between 5-20 percent, though small sites are sometimes sampled at a level of 50-100 percent. Sample size is both a reflection of the research question being asked as well as supplying an adequate sample for future inquiry after the site is destroyed. If the site is to be preserved, two alternative procedures may be followed depending upon how the site is to be preserved. If the site is to be preserved as green space, it may be fenced off and/or capped with a layer of fill to protect the site from vandalism or erosion. If development is allowed to proceed, the site may be preserved by covering it with a layer of fill prior to grading and/or construction activities. If the latter procedure is followed, additional subsurface testing is usually suggested since this type of preservation makes it very difficult for future archaeological work to be effectively accomplished and damage may occur to the resource during the course of fill operations. Where possible, preservation or avoidance is preferable to salvage.

If a site is only indirectly impacted by development, only

Phase One activities are generally implemented. The surface collection involved may range from 50 to 100 percent, but would include the collection and proveniencing of all important diagnostic artifacts. This is done to prevent the loss of such artifacts to amateur collectors. Subsurface testing would also be conducted such that enough information would exist to determine the general complexity of the resource. In most instances no salvage operations are undertaken in the case of indirect impact. If development plans were to change, however, such that the site were to be directly impacted, then the question of "salvage" (data collection) or preservation must be addressed. In rare instances, involving a rare archaeological resourse which would be subject to amateur collecting/pot hunting, a site may require protection or "salvage" even in the case of indirect impact. Protective measures might include 100 percent surface collection, the fencing off of the site and/or its capping with a layer of protective fill.

Given the scale of maps provided for the project assessment, and the present stage of planning, impact analysis is somewhat limited. Impact analysis amounts to comparing the proximity of known site location on a 7.5' map (24,000 scale), to proposed improvements shown on an 800 scale map. At these scales, errors may exist in the estimation of specific site impacts. For this reason, it is first recommended that, prior to any mitigation efforts, archaeological sites be relocated along with the surveyed flagging of proposed road alignments or development areas to specifically ascertain the nature of impacts. In some cases, sites which have

been described above as suffering direct impacts, may only suffer indirect impacts.

Assuming the ("worst case") impact scenario described above, the following mitigation measures be recommended on a site specific basis. Note that in some cases, the recommendations reflect only the first phase (testing) of the larger sites.

Riv-2932:

Site relocation and impact assessment verification; 50-100% surface collection; 10-20 subsurface test excavation units; 1-3% final salvage excavation dependant upon the findings of subsurface testing. Test level activities may require 80-100 man-days of field work effort alone.

Riv-716:

The vast majority of this site lie outside the subject property. While a small, northerly portion of the site may suffer direct impact, the southern portion of the site, outside the project area, may experience secondary (indirect) impacts as described above, ultimately requiring surface collection and protection. That portion of site which is within the boundaries of the property would undergo the following testing procedures. Site relocation and impact assessment verification; 100% surface collection; 5-10 subsurface test excavation units; 1-3% final salvage excavation dependant upon the findings of subsurface testing and the determined mitigation of the southern portion of the site. Test level activities may require 15-40 man-days of field work.

ABP-1:

Site relocation and impact assessment verification; 50-100% surface collection; 5-10 subsurface test excavation units; 1-3% final salvage excavation dependant upon the findings of subsurface testing. Test level activities may require 15-40 man-days of field work.

ABP-2:

Site relocation and impact assessment verification; photography of bedrock grinding features and mapping of spatial distribution of grinding features; 3 subsurface test excavation unit to check for depth, although it is unlikely that this site would yield any subsurface deposits. Test level activities may require 9-12 man-days of field work.

and size before the results of testing, it could safely be estimated that even the minimum-sized site would likely exceed 300-400 man-days of field and laboratory effort.

Aside from the archaeological sites described here, it is possible that archaeological materials could be found during grading activities. Should any such finds come to light, it is recommended that a qualified archaeologist be contacted to evaluate their significance prior to further grading.

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ENVIRONMENTAL IMPACT EVALUATION: An Archaeological Assessment of Several Alternate Sites for the New Rancho California Airport, Riverside County, California

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UCRARU #797

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P.O. #01061

November 1984

MAMAGEMENT SUMMARY

In October, 1984, an archaeological assessment was conducted on several locations for a proposed airport in the Rancho California area. The objective of the study was to locate, record, and evaluate archaeological resources on the subject properties, and to determine the effect of the proposed development on archaeological resources. The California Archaeological Inventory (CAI) records revealed that two (H & I) of the three proposed locations chosen for consideration had been previously surveyed and that one archaeological site (CA-RIV-856) had been previously recorded on the third location (L). An on-foot survey was conducted of alternative site L. The survey located one additional site and the previously recorded site was relocated. Given the nature of these two sites further data recovery probably would not increase our understanding of the area's prehistory. No further archaeological investigation is recommended at this time.

INTRODUCTION

At the request of Earth Metrics Inc., the Archaeological Reseach Unit (ARU), University of California, Riverside, conducted an archaeological assessment of 180 acres of land designated alternate site `L´ for the new Rancho California Airport. The purpose of this assessment was to satisfy certain requirements of the Riverside County Planning Commission concerning the identification and protection of significant archaeological and historical materials. The study included a check of the CAI records, a review of the archaeological, ethnographic, and historic literature pertinent to the study area, and an on-foot survey of the subject area. The records search at the CAI revealed that alternative sites H and I (Fig. 1) had been previously surveyed and that no archaeological sites were recorded within the areas proposed for possible construction (White 1980). Therefore, only alternative L (Fig. 2) was surveyed. The project area which comprises of approximately 180 acres is located on the rolling valley floor southeast of the Hogback Mountains 2 km northeast of Murrieta Hot Springs in southwestern Riverside County, California. The area is shown on the USGS Murrieta, California 7.5´ series quadrangle in section 7, T.7S, R.2W, SBBM.

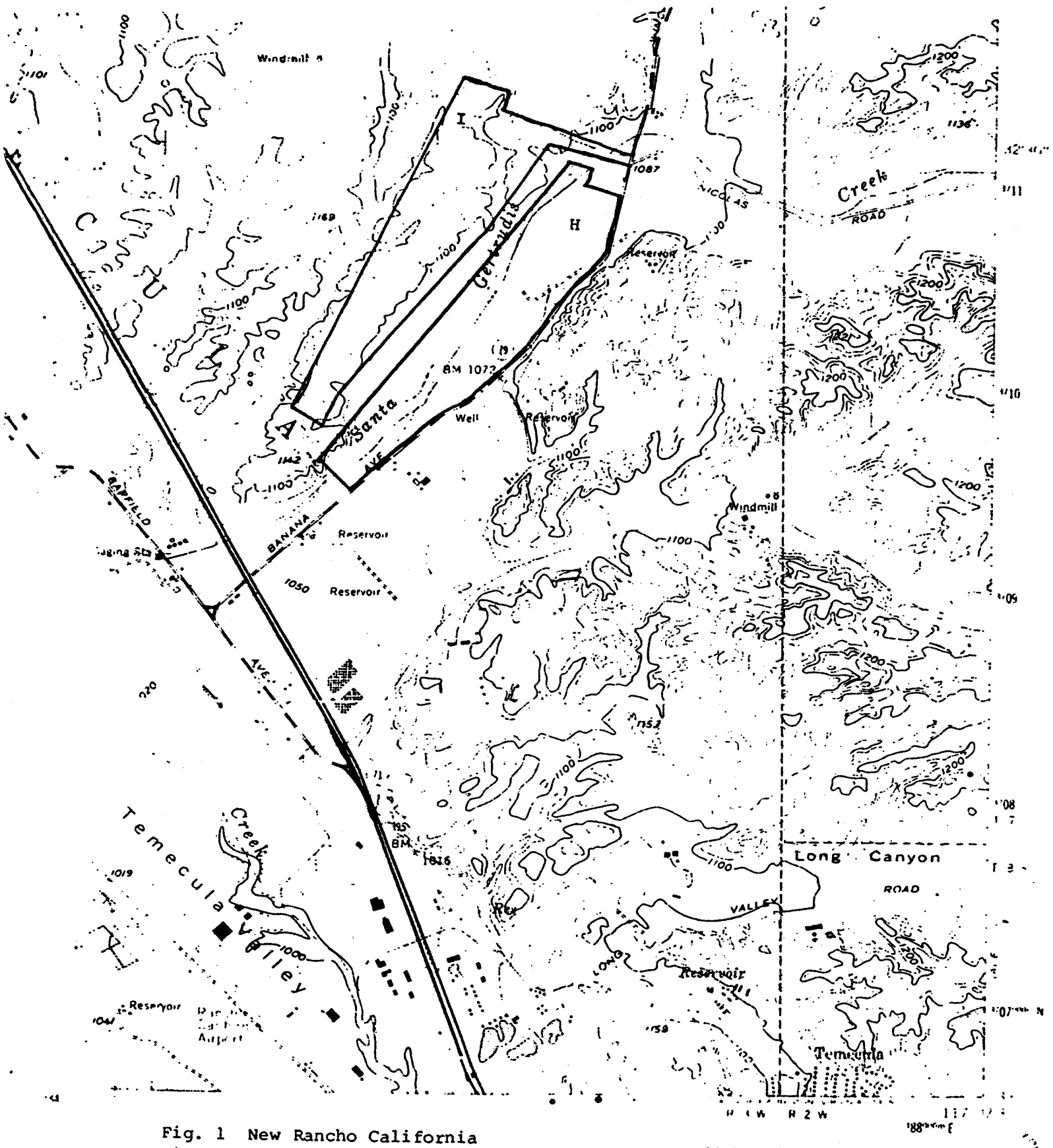

Fig. 1 New Rancho California Airport Alternative Sites H & I

ROAD CLASSIFICATION

Heavy duty ——— Light duty

Medium duty — — — Unimproved dirt

U.S. Route State Route

CALIF

MURRIETA, CALIF.

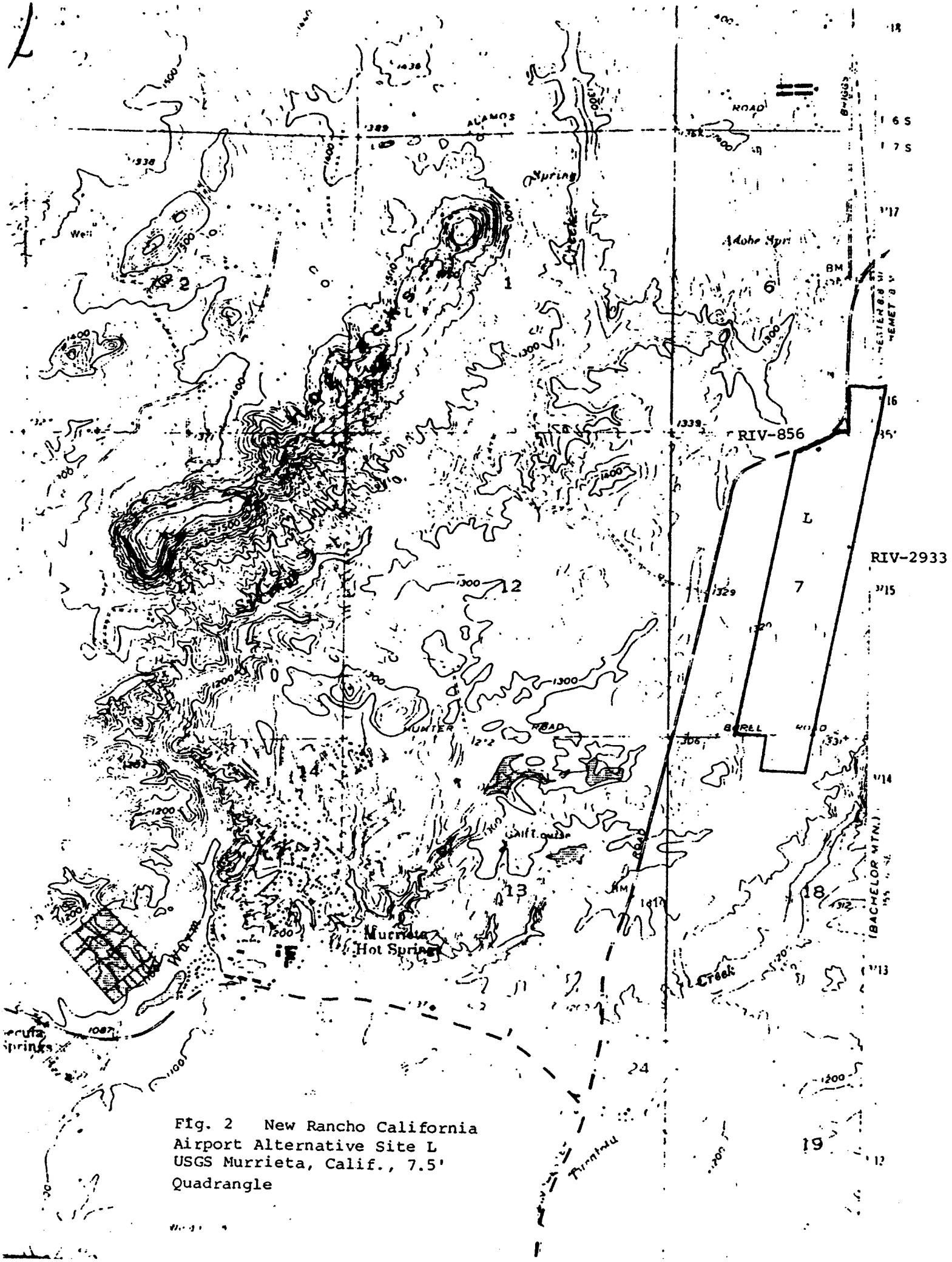

Fig. 2 New Rancho California Airport Alternative Site L USGS Murrieta, Calif., 7.5' Quadrangle

Proposed development plans call for the construction of an airport runway, parking apron, hangers, and support buildings.

SUMMARY OF CURRENT KNOWLEDGE

The review of the CAI records indicated that one known archaeological site (CA-RIV-856) is located within the north-central boundary of the property. This site, consisting of metate fragments and stone tool waste flakes, represents a temporary food processing station and has already been greatly disturbed by road building and farming activities. The CAI records also indicated the presence of a large number of other recorded archaeological sites within a 3-km radius of the subject property, some of which have midden deposits suggesting longer or more regular use of the area. Rock paintings and carvings are also known for the region.

Culture History

Human populations have occupied southern California for at least the last 12,000 years. The earliest sites can be grouped together into an Early Hunting Stage (12,000-8500 B.P. [years before present]), characterized occasionally by fluted or more often by leaf-shaped projectile points, crescents, core tools, scrapers, and choppers. The absence of milling tools suggests an orientation to hunting, possibly of the now-extinct Pleistocene megafauna. Marked increases in plant exploitation and population size signal the onset of the Early Millingstone Stage (8500-5000 B.P.). Typical artifact assemblages consist of manos, metates, choppers, and scraper planes. Projectile points are rare. In-place adaptations to various ecological niches and further population growth typify the Regional Specialization Stage (5000-300 B.P.). In southern California, a heavy dependence on both hunting and gathering of wild plant foods continued into the historic period (Meighan 1978:233-237).

Based on work in the San Luis Rey River Basin to the south of the study area, Meighan (1954) defined two late prehistoric complexes that may be applicable to the present study. His San Luis Rey I complex existed from ca. 600-250 B.P., and is typified by grinding implements, small triangular projectile points with concave bases, stone pendants, Olivella shell beads,

quartz crystals, and bone tools. The San Luis Rey II complex, lasting from ca. 250-150 B.P., is very similar, but with the addition of ceramic vessels, pictographs, glass beads, stone knives, and steatite arrow straighteners.

Information on the prehistory of the region comes primarily from excavations carried out at the Perris Reservoir (O'Connell et al. 1974). The Perris Reservoir excavations indicate that the San Jacinto Plain was inhabited at least as early as 2300 B.P. by people with a low but gradually increasing population density. Around 500 B.P., the population density increased dramatically, and it is thought that this increase represents an influx of people rather than an increase in the earlier population. This demographic shift coincided with the disappearance of freshwater Lake Cahuilla in the Salton Basin, which may have caused people to leave that area and move to more productive environments. The late prehistoric components at the Perris Reservoir sites indicate a broad pattern of resource exploitation that can best be understood with reference to ethnographic accounts of the people living in the area; these were published in the early part of this century.

At the time of historic contact, the study area was occupied by the Luiseño tribe (Sparkman 1908), whose name derived from the Spanish Mission San Luis Rey, built in their territory is 1789 on the San Luis Rey River. The subject property is in the eastern portion of the territory inhabited by the Luiseño. The remainder of their territory extended west through the mountainous areas to the Pacific Coast and south to the San Luis Rey River (Kroeber 1925). Sparkman (1908), in his ethnography of the Luiseño, states that these people shared cultural attributes with the Juaneño to the west, the Cupeño and Cahuilla to the east, and the Yuman-speaking Diegueño (Ipai-Tipai) to the south.

The Luiseño lived in permanent villages which they left periodically for the gathering of plant foods as they ripened seasonally in the various life zones within their territory. Foodstuffs maturing at different times in the various altitudinal life zones allowed for a continuing seasonal cycle of resource exploitation. Of all the plant foods used, acorns were the most important, accounting for an estimated 50 percent of the aboriginal diet. Acorns were collected from as many as six different species of oak (Quercus spp.), each of which was adapted to a slightly different environ-

ment (White 1963:116). In addition to acorns, plant foods used by the Luiseño included numerous species of berries, grapes, cactus fruit, bulbs, greens, and seeds such as chia (Salvia columbariae). Sparkman (1908:228-234) enumerates more than 100 plants known to have been used for food or medicine. Meat in the diet was provided by deer, rabbits, ducks, quail and other birds, and certain rodents and insects (Sparkman 1908:197-200).

More detailed information on the lifeways of the Luiseño tribe can be found in accounts by Sparkman (1908), DuBois (1908), Kroeber (1925), Strong (1929), White (1963), and Bean and Shipek (1978).

EFFECTIVE ENVIRONMENT

The subject property is located in the rolling valley floor 2 km southeast of the Hogbacks Mountains. Elevations range from about 1206 to 1250 m above sea level. The subject area has been farmed for several decades; consequently, very little of the native vegetation remains. Prior to modern farming the vegetation in this area may have consisted of Valley Grassland characterized by needlegrass (Stipa pulchra, S. cernua) and other grasses (Poa scabrella), and (Aristida divaricata) (Munz and Keck 1949, 1950). These and other plants have been replaced by introduced grasses and weedy annuals.

The climate of the study area is that typical of cismontane southern California and is classified as Mediterranean, or "summer-dry subtropical" (Bailey 1966). The characteristics of such a climate are a dry, warm or hot summer and a relatively mild, wet winter, a condition that prevails over only about 3 percent of the world's land surface. Total annual rainfall seldom exceeds 65 cm.

RESEARCH GOALS AND OBJECTIVES

The objectives of an archaeological assessment are to locate, interpret, and evaluate the indications of past human activities in the study area. The indicators of such activities are labeled archaeological resources and can consist of any visible remains of human use of the environment. The locations of such resources can be defined by the presence or significant occurrence of one or more of the following categories of archaeological

remains: food waste, fragmentary or whole tools, tool manufacturing waste, concentrations or alignments of stone, trails, modifications of natural rock surfaces, soil discoloration and/or its accumulation, or human skeletal remains. All such types of remains are known to exist in the project vicinity. The scope of this study concerns significant materials 100 years of age or older.

SURVEY PROCEDURE

The on-foot investigation was carried out by the author and one associate on October 31 and November 1, 1984. The property was surveyed in a series of generally north-south transects at approximately 10-meter intervals. Special attention was given to rock outcrops and the area immediatly south of Auld Road where site RIV-856 was reported. Visibility was excellent as the property had been recently plowed.

SURVEY RESULTS

Site RIV-856 was relocated just south of Auld Road and the CAI records updated accordingly. Two metate fragments were observed on the site. In addition to the previously recorded site, one additional site was located during the survey. This site, RIV-2933, consists of a single bedrock metate. This site is located approximately 600 m south of Auld Road, along the eastern boundary of the subject property.

RECOMMENDATIONS

Inasmuch as it seems unlikely that any excavations or other data gathering measures would prove productive in gleaning any additional information on the local prehistory from these sites, no additional work is recommended. The sites have been recorded and measurements of artifacts and features have been made and filed with the California Archaeological Inventory.

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State of California – The Resources Agency
DEPARTMENT OF PARKS AND RECREATION

ARCHEOLOGICAL SITE RECORD

Permanent Trinomial: CA-RIV-856 Supplement [XX]

Temporary Number:

Page 1 of ____ .

Agency Designation:

1. County: Riverside

2. USGS Quad: Murrieta, CAlif. (7.5') 53 (15') _____ Photorevised 1973

3. UTM Coordinates: Zone 11 / 4881100 Easting / 3715780 Northing ( )

4. Township 7S Range 2W ; ____ ¼ of ____ ¼ of NE ¼ of NW ¼ of Section 7 Base (Mer.) SBM ( )

5. Map Coordinates: _____ mmS _____ mmE (from NW corner of map) 6. Elevation 1320'

7. Location: 400 meters east of intersection of Winchester Road and old Winchester Road as it turns into Auld Road, on south side of road shoulder ( )

8. Prehistoric XX Historic _____ Protohistoric _____ 9. Site Description: Two metate fragments noted 100 m. apart in hay field. Site had been recorded as flake scatter, metate fragments and cores along road shoulder. These artifacts were not relocated. ( )

10. Area: 1000 m(length) x 100 m(width) 10 m^2. Method of Determination: paced ( )

11. Depth: surface cm Method of Determination: nothing seen in road cut ( )

12. Features: none ( )

13. Artifacts: two metate fragments: worked surface of each measure 11 x 20 cm & 9 x 11 cm. Both were granitic. ( )

14. Non-Artifactual Constitutients: ( )

15. Date Recorded: Nov 1, 1984 16. Recorded By: S. Wilmoth ( )

17. Affiliation and Address: Arch. Res. Unit, Univ. of California, Riverside ( )

State of California – The Resources Agency
DEPARTMENT OF PARKS AND RECREATION

ARCHEOLOGICAL SITE RECORD

Permanent Trinomial: RIV-856 / 11/84 (mo. / yr.)

Temporary Number:

Agency Designation:

18. Human Remains: none ( )

19. Site Integrity: Site area has been farmed for several decades. Several roads have been put in as has a gas pipeline. Site has little integrity left. New airport will most likely disturb remaining artifacts. ( )

20. Nearest Water (type, distance and direction): spring 100 m NW ( )

21. Largest Body of Water within 1 km (type, distance and direction): ( )

22. Vegetation Community (site vicinity): Marsh and valley grasslands [Plant List ( )] ( )

23. Vegetation Community (on site): hay crop [Plant List ( )] ( )

References for above: see report ( )

24. Site Soil: sandy loam ( ) 25. Surrounding Soil: same ( )

26. Geology: granite and quartz ( ) 27. Landform: rolling valley floor ( )

28. Slope: gentle slope facing spring 29. Exposure: open ( )

30. Landowner(s) (and/or tenants) and Address: private ( )

31. Remarks: none ( )

32. References: none ( )

33. Name of Project: New Rancho California Airport Survey ( )

34. Type of Investigation: Archaeological Assessment - See UCRARU #797. ( )

35. Site Accession Number: none Curated At: ( )

36. Photos: none Taken By: ( )

37. Photo Accession Number: none On File At: ( )

State of California – The Resources Agency
DEPARTMENT OF PARKS AND RECREATION

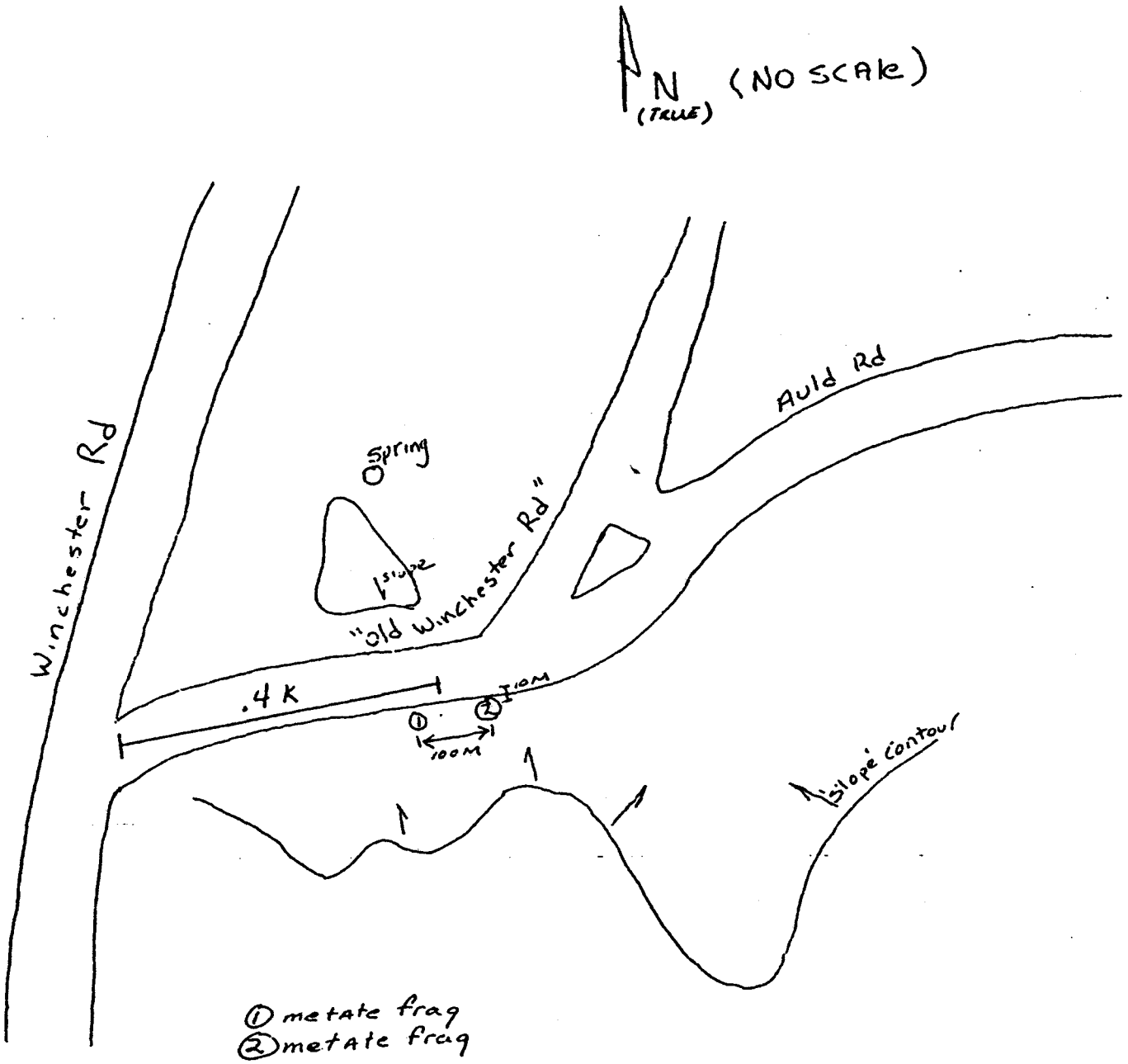
ARCHEOLOGICAL SITE MAP

Page 3 of X.

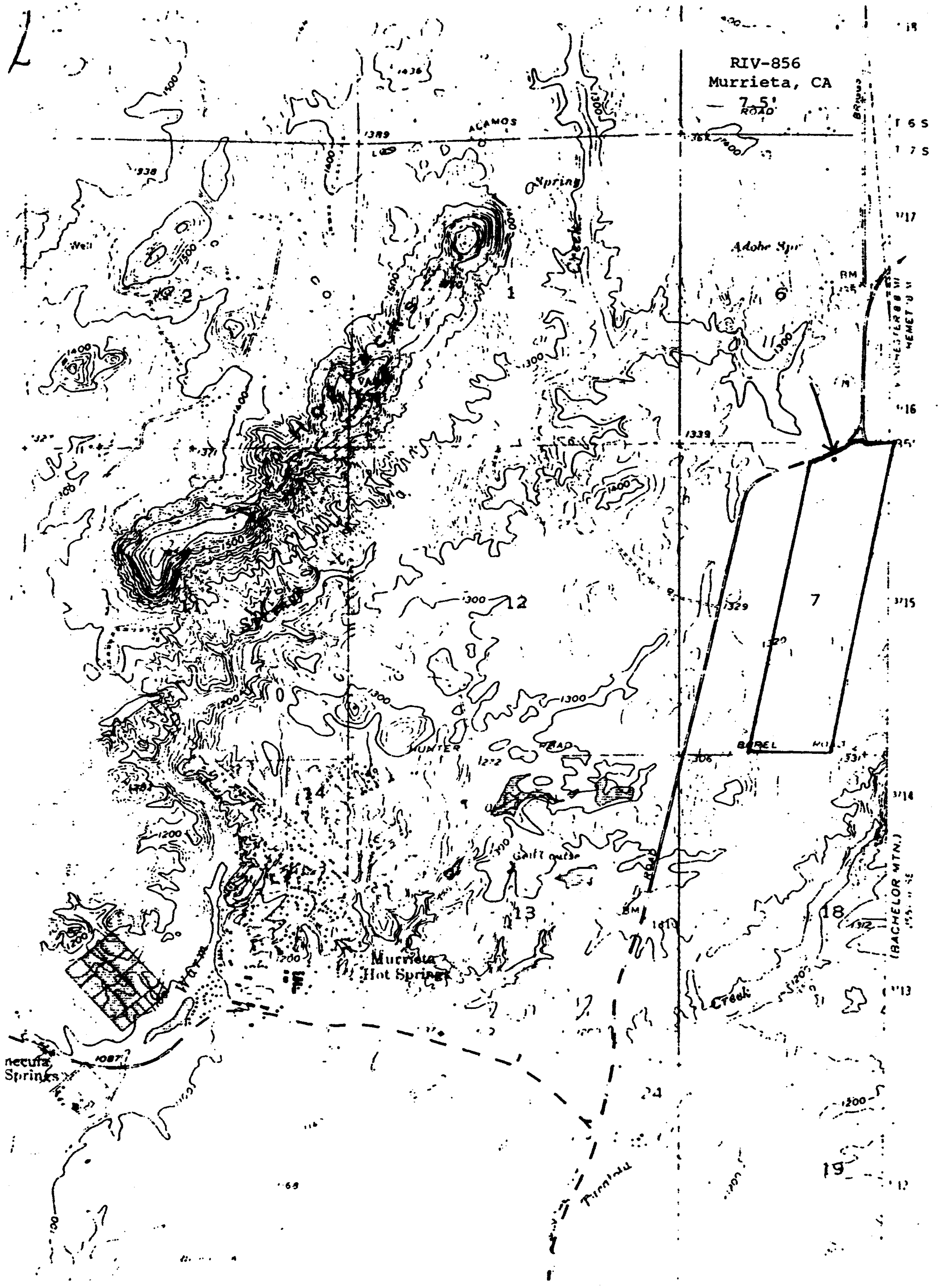
Permanent Trinomial: RIV-856 / 11-5-84 (mo. / yr.)

Temporary Number:

Agency Designation:



2


RIV-856
Murrieta, CA
7.5'
ROAD
ALAMOS
Spring
Creek
Adobe Spr
BM
HUNTER
ROAD
BOREL
ROAD
Murrieta
Hot Springs
Creek
(BACHELOR MTN.)
Springs
T 6 S
T 7 S

State of California – The Resources Agency
DEPARTMENT OF PARKS AND RECREATION

ARCHEOLOGICAL SITE RECORD

Permanent Trinomial: CA-RIV-2933 Supplement ☐

Temporary Number:

Page 1 of ____ .

Agency Designation:

1. County: Riverside

2. USGS Quad: Murrieta, CA (7.5') 1953 (15') ____ Photorevised 1973

3. UTM Coordinates: Zone 11 / 488300 Easting / 3715160 Northing ( )

4. Township 7S Range 2W ; ____ ¼ of SW ¼ of SW ¼ of NW ¼ of Section 7 Base (Mer.) SBM ( )

5. Map Coordinates: ____ mmS ____ mmE (from NW corner of map) 6. Elevation 1320'

7. Location: 600 m south of Auld Road and 670 m east of Winchester Road, rock outcroppir on level unplowed bench in hay field. ( )

8. Prehistoric xx Historic ____ Protohistoric ____ 9. Site Description: single bedrock slick on a rock outcrop surrounded by a hay field ( )

10. Area: 1 m(length)x 1 m(width) 1 m^2. Method of Determination: tape ( )

11. Depth: surface cm Method of Determination: no other indications ( )

12. Features: one slick, ground surface - 18 x 20 cm; 1-2 cm deep located on dark granitic rock about 1 x 1 m is size ( )

13. Artifacts: none ( )

14. Non-Artifactual Constitutients: none ( )

15. Date Recorded: 11-1-84 16. Recorded By: S. Wilmoth ( )

17. Affiliation and Address: Arch Res. Unit, Univ. of CAlifornia, Riverside ( )

State of California – The Resources Agency
DEPARTMENT OF PARKS AND RECREATION

ARCHEOLOGICAL SITE RECORD

Permanent Trinomial: RIV-2933 / 11/84 (mo. / yr.)

Temporary Number:

Agency Designation:

18. Human Remains: none ( )

19. Site Integrity: rock is broken and slick is battered. New airport may also disturb site ( )

20. Nearest Water (type, distance and direction): 700 m NW is spring ( )

21. Largest Body of Water within 1 km (type, distance and direction): same ( )

22. Vegetation Community (site vicinity): Valley grassland [Plant List ( )] ( )

23. Vegetation Community (on site): hay crop [Plant List ( )] ( )

References for above: none ( )

24. Site Soil: granite boulder ( ) 25. Surrounding Soil: d.g. ( )

26. Geology: granite ( ) 27. Landform: rolling valley floor ( )

28. Slope: 0% ( ) 29. Exposure: open ( )

30. Landowner(s) (and/or tenants) and Address: private ( )

31. Remarks: none ( )

32. References: none ( )

33. Name of Project: New Rancho Calirornia Airport Survey ( )

34. Type of Investigation: Archaeological Assessment - See UCRARU #797 ( )

35. Site Accession Number: none Curated At: ( )

36. Photos: none Taken By: ( )

37. Photo Accession Number: none On File At: ( )

State of California – The Resources Agency
DEPARTMENT OF PARKS AND RECREATION

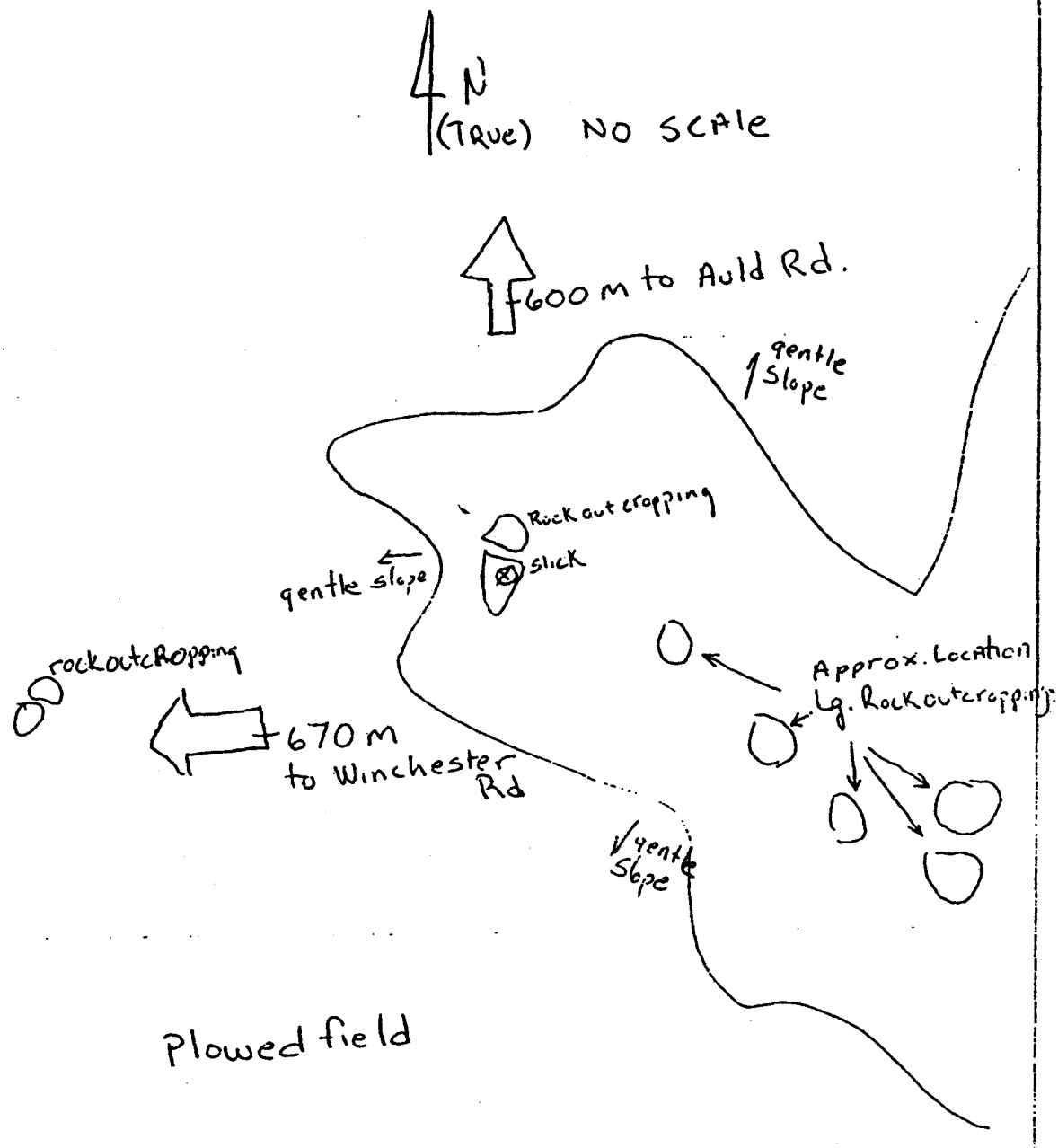
ARCHEOLOGICAL SITE MAP

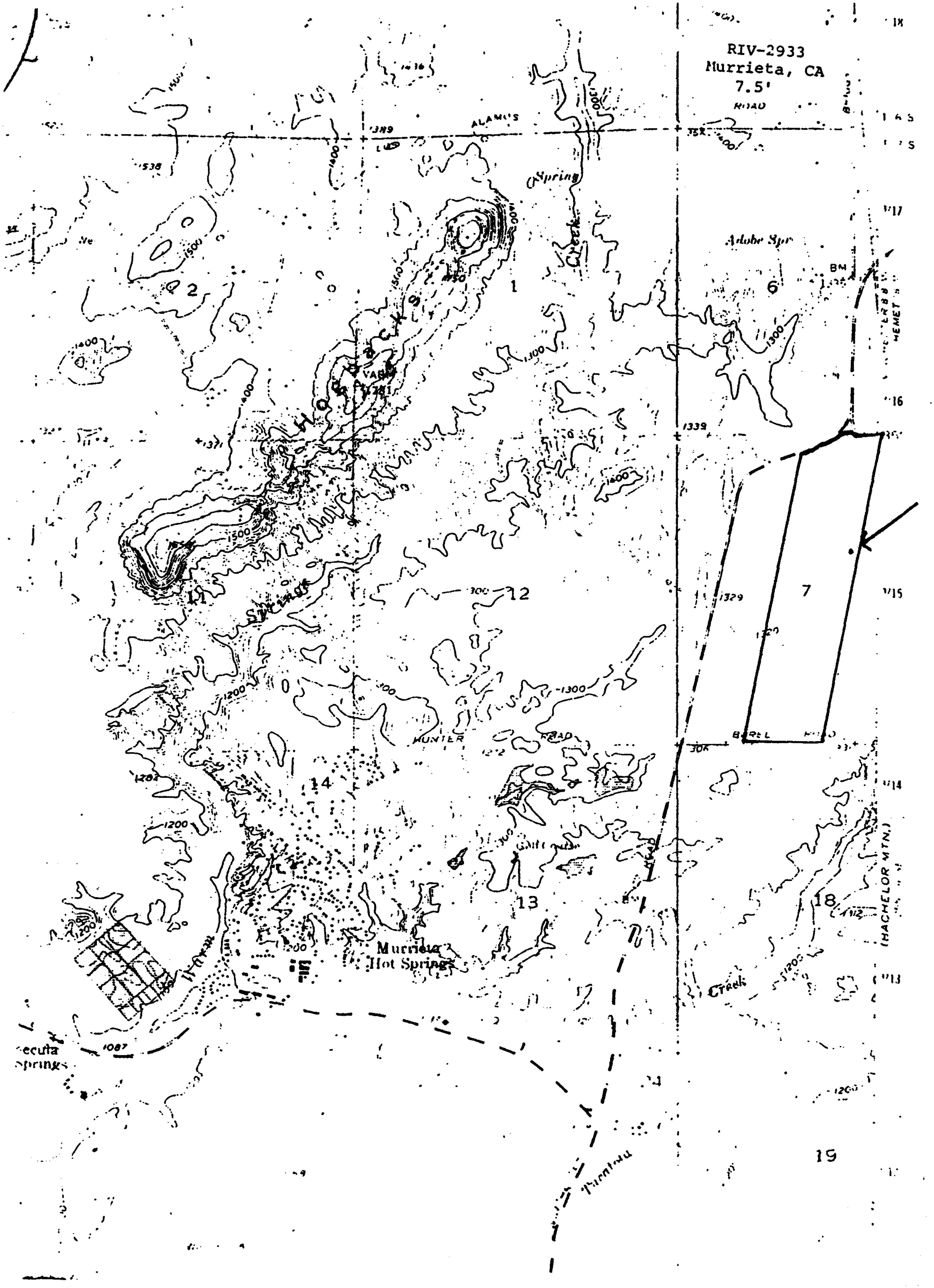
Page ___ of ___

Permanent Trinomial: RIV-2933 / 11 (mo.) 1984 (yr.)

Temporary Number: _____

Agency Designation: _____




RIV-2933
Murrieta, CA
7.5'
Adobe Spr
Spring
Creek
HOGBACKS
Murrieta
Hot Springs
HUNTER
ROAD
Creek
(HACHELOR MTN.)
HEMET
1
2
6
7
12
13
14
18
19

1084607

A CULTURAL RESOURCE ADDENDUM

AIRPORT BUSINESS PARK

French Valley, Riverside County, California

for:
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Urban Logic Consultants
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Temecula, California 92390

by:
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14 September 1993

TABLE OF CONTENTS

MANAGEMENT SUMMARY:

In September 1993, Mr. Egger of Urban Logic Consultants inquired about the previous (Drover 1990) archaeological assessment of the Airport Business Park Project on behalf of Ran Pac Engineering. A letter, authored by Bruce Love, Ph.D. and presented to the Riverside County Planning Commission during a public hearing on the project suggested that a historic site on the subject project was not recorded and that a prehistoric site was "misplaced" during the original cultural resource study (Drover 1990). The present study is prepared in response to these comments. The subject properties are planned for various development including both residential and commercial. A cultural resources assessment was prepared in 1990 to satisfy the requirements of the County of Riverside with regard to identification and protection of cultural resources.

Apparently a misunderstanding occurred between the client, consultant and existing archaeological records as to the original boundaries of the project area and what areas were to be surveyed. In fact, project area boundaries changed several times during the initial phases of the project as various land owners were included or excluded. As a result, two northern areas of the present study area were not surveyed at the time (a triangular parcel in the northwest ⅛ of the northeast ¼ of Section 6, and a "tear" shaped parcel at the intersection of Auld Road and Winchester, southeast ⅛ of the southwest ¼ of Section 6, Murrieta and Bachelor Mt. 7.5' USGS quadrangles).

An addendum archaeological records check and survey was undertaken in September 1993, for the above mentioned project portions located in Section 6 of the Murrieta and Bachelor Mt. 7.5' USGS quadrangles, to ascertain whether any other cultural resources might be impacted by the proposed development. In addition, a U-shaped parcel in the northwest corner of Section six has been omitted by amendment from the subject project. A surface survey conducted on the subject property and an update of the archaeological site records on file at the Eastern California Information Center, University of California, Riverside, were accomplished.

Archaeological records search activities indicate that while the triangular project portion was not surveyed by the author in 1990 as noted above, it had been previously surveyed with negative results as early as 1974 (SBCMA 1974). Even though the 1974 survey did not record either the prehistoric or historic sites, a topographic parcel map was included distinctly showing each of the historic structures (see appendix).

In the attempt to bring all portions of the property up to a uniform, Phase I cultural resource coverage, this study was undertaken. Upon inspection of the portions of the property which was omitted in 1990, an additional prehistoric and historic site have been located for a total of two additional sites within the larger project boundaries. Cultural resource constraints (mitigation measures for the two additional sites are included herein).

SUMMARY OF CURRENT KNOWLEDGE:

A review of the archaeological site records on file at the ECIC showed no previously recorded cultural resources within the boundaries of the subject portions of the larger project site. While the triangular portion of the project area had been studied in 1974, the historic features on the property noted by Love (1993) were not recognized as having historic significance, nor was a prehistoric archaeological site observed. It is possible that the historic features may have been overlooked in 1974 due, in general, to the fact that archaeologists often focused solely on prehistoric resources at that time. The additional prehistoric site observed may have been missed due to dense, low plant growth obscuring the surface of >90% of the property (recent sheep grazing had cleared the hilltop in question).

Perhaps the most pertinent regional study of the general area regarding prehistoric land use is that accomplished at Perris Reservoir (O'Connell et al. 1974). This research took place about 15 miles north of the property, in the San Jacinto Plains. Given the similarities between the environments between the two areas the general settlement/subsistence of the Perris Reservoir project provides an excellent example of prehistoric land-use patterns in the area.

Most of the archaeological sites described in that study were late prehistoric age (pottery present) and may have resulted from population intrusions from the Coachella Valley caused by

the desiccation of Lake Cahuilla (ancestral Salton Sea) (Wilke 1978). settlement patterns seem to consist of campsites (located near perennial water sources) and temporary processing locations (O'Connell et al. 1974).

Considering the topography and proximity portions of the subject parcel to water, site density may be expected to be moderate as in similar areas of the Perris Reservoir. Based on settlement/subsistence models generated by O'Connell et al. (1974), temporary food gathering/processing sites, campsites and even longer term habitation sites might be expected on the subject project given the existing environmental setting.

Through time, land use patterns at nearby Perris Reservoir changed from being rather sporadic between 2200 years ago (the earliest occupations) to about A.D. 1500 when an influx of population with different subsistence exploitation strategies (O'Connell et al. 1974).

At European contact times, the study area was within areas occupied by groups known as the Luiseño, named after the Mission San Luis Rey de Francia in present-day Oceanside, California, Which some of their linguistic group frequented. The Luiseño culture area incorporated southwestern Riverside County, northern San Diego County, eastern Orange County and was linguistically comprised of a language of the Shoshonean language family (Kroeber 1925: Plate 57). The Contact period ethnicity of the study area is clear as Luiseño villages such as Pechanga are relatively close to the project area. Murrieta Hot Springs was

apparently utilized prehistorically and the existing site Riv-1012 may be related to such prehistoric usage. Ethnographic literature pertinent to the Luiseño and surrounding ethnographic groups is fairly extensive and has been collected since the 1800's (see Barrows 1900; Sparkman 1908; Kroeber 1925; White 1963 and Bean 1972).

RESPONSE TO BRUCE LOVE'S COMMENTS:

Love's comments (1993), were listed as consisting of three concerns:

> 1. Site CA-RIV-716 is misplaced on the project map so that it falls outside the project boundaries when indeed it falls inside the project area (Love 1993).

This concern expressed by Love is simply wrong. The 1990 archaeological report not only indicates a **portion** of site Riv-716[1] is **clearly** within the subject project boundaries (see attached map and aerial photo), it explicitly states that "...two, previously recorded archaeological sites [are] within the subject property boundaries Riv-716 and 2932". The original statement that "The vast majority of this site lies outside the subject property" is apparently correct. Perhaps Love either misread the original document or misplotted the sites boundaries in relation to the project area. The text goes on to describe the site in detail (Drover 1990:8), and includes **detailed** mitigation measures (Drover 1990:13). The author was given project site boundaries on a 24,000 scale, USGS map, and access to the property constituting greater Riv-716 was **not** authorized at that time. Furthermore, the precise relationship of project impacts and the identification of archaeological site boundaries are issues undertaken in the Phase II testing procedures of cultural resource management.

> 2. An important historic site from the early settlement of French Valley was missed altogether by the archaeologist.

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[1] In response to comments, a review of the 1990 location and mitigation recommendations of Riv-716 were discussed, however, the project has been amended such that the property which adjoined Riv-716 is no longer part of the project.

A historic archaeological site noted by Love was missed by archaeologists in an earlier study (SBCMA 1974), on a triangular portion of the study area (northeast corner Section 6). This subject portion of the larger project area was not studied in 1990, but is included herein, as a project addendum, resulting in the recordation of the historic site in question and, an additional, prehistoric site.

> 3. The recommendations for mitigation do not follow standard archaeological phases. The survey phase, which has been completed needs to be followed by an evaluation phase to determine the sites' significance. Sites that are determined to be significant during the evaluation phase, then require some form of mitigation, with preservation being the preferred form of mitigation for significant sites. The current archaeological report makes mitigation recommendations prematurely, before the evaluation phase has been completed.

The origin of misunderstanding must have stemmed from the enumeration used in the following comment: "Once a site has been located [Phase I], two phases may follow: 1) boundary testing [Phase II], which includes both surface collection and subsurface testing; and if depth or overall significance warrant, 2) site 'salvage' [Phase III] (data collection) and/or preservation" brackets mine. In this case my enumeration 1), 2), etc., is being confused with the jargon, "Phase I, Phase II" etc., often used to describe the phases of cultural resource mitigation. A more careful reading would likely have clarified the issue. With the understanding that the survey, recordation and recommendations which are initially conducted represent "Phase I", all of the appropriate steps in resource mitigation are in agreement with general procedure with recommendations toward the next phase (Phase II evaluation), in the original report (1990:10-14).

In addition, Love makes three project recommendations,

> 1. The two sites in question, Ca-Riv-716 and the historic French ranch, be resurveyed and properly recorded.

The original plotting and record update of Riv-716[2] was "properly recorded", accomplished from aerial photographs and need not be revised for purposes of a Phase I study. At the time Phase II testing occurs, the property boundary should be flagged in the field by surveyors for a more accurate relationship. The historic site in question, located on property not surveyed in 1990, has been recorded and will warrant a further, Phase II investigation.

> 2. A Phase II evaluation of all recorded sites be performed to determine if the sites meet

---

[2] In response to comments, a review of the 1990 location and mitigation recommendations of Riv-716 were discussed, however, the project has been amended such that the property which adjoined Riv-716 is no longer part of the project.

CEQA criteria for "importance." This phase should include documentary, archival, and historical research and consultation with the Pechanga Band in addition to the normal test excavation units currently proposed.

These comments are so noted. Please see recommendations in the original report pages 10-15. As the nature of impacts were unclear in 1990, the author conservatively assumed **all** impacts would be potentially **direct**, or "worst case".

3. Phase III mitigation measures should not be agreed on until the completion of the evaluation phase.

These comments are so noted. Love may be referring to a comment regarding sites Riv-716 and Riv-2932 "...1-3% final salvage excavation dependant upon the findings of subsurface testing". This comment was designed to suggest the magnitude of work which may be necessary at these two sites if mitigation took the form of data collection.

In response to the above comments, a review of the 1990 location and mitigation recommendations of Riv-716 is presented below along with a description of the newly recognized historic and prehistoric sites located on the project addendum property.

EFFECTIVE ENVIRONMENT:

The physiography of the subject property consists of the north-south trending French Valley which joins the Tucalota Creek water course, ultimately collecting into the Santa Gertrudis Creek, and which joins Murrieta Creek south property boundary near Temecula. Soils on the property consist primarily of decomposed granitics with limited granite outcroppings visible.

Precipitation is mainly a result of winter dominant, frontal storms from the northwest, although occasional summer thundershowers result from damp air intruding from the southern (Gulf of Mexico--Sea of Cortez) monsoon season.

The property ranges from 1320 to 1440 feet above sea level. Aside from agriculturally disturbed areas, the project contains some native vegetation, a sage-scrub community, dominated by buckwheat (Eriogonum fasiculatum), and california sagebrush (Artemisia californica). Narrow riparian environments also exist along the Tucalota Creek, dominated by plant such as willow (Salix sp.) along with limited Oak Woodland plant associations. The riparian habitat may have been enhanced in recent years due to increased run-off from Lake Skinner. The above mentioned plant communities are noted as having many ethnographic uses among the neighboring Cahuilla (Bean and Saubel 1972).

RESEARCH METHODS AND STRATEGY:

Archival study of the archaeological records compiled at the Archaeological Research Unit, University of California, Riverside was conducted by the author in September 1993.

The field methods for the survey of the addendum parcel consisted of an on-site survey, conducted in September 1993. The field crew consisted of David Smith and the author. Survey of the parcel included transects defined by the project boundaries, and geographical contours, conducted on an east-west orientation approximately 10m. apart. Special attention was paid to two bedrock granite outcrops, several hilltops and a grove of pepper and Eucalyptus trees surrounding the remains of a historic residence. Dense European grasses (Gramineae) and other ground cover exists in excess of 90% of the property), resulting in

relatively poor conditions for observation, especially in low areas of the property where riparian species indicate a seasonal drainage. Much of the addendum parcel had been under intense cultivation in recent years, for crops such as barley (Hordeum vulgare). Such heavy cultivation provided both for excellent conditions for observation.

RESULTS:

A review of the 1990 description, location and mitigation recommendations of Riv-716 is presented below along with the description of the newly recognized historic and prehistoric sites located on the project addendum property.

Site Descriptions:

Riv-716: 106,200m^2 ; 21.94 acres[3]
This site is .5km west of the intersection of S.R. 79 and Benton Road. This is a major, long-term habitation site. This site is associated with the late, ethnographic use of the springs by the Luiseño. Local historic literature suggest that the Temecula Massacre (a battle between the Cahuilla and Luiseño) which ended in "Nigger Canyon" near the present Vail Lake) began at this site. This site may be one of the more significant deposits, (from the perspectives of archaeology and Native American concern), to be impacted within the subject project area. It consists of numerous and extensive bedrock grinding features, darkened soil, fire-cracked rock, debitage and well established midden. Despite the considerable unauthorized digging which has occurred on the property, much of the site is intact and should be investigated and protected.

ABP 10-H: 1414m^2
This site is located on the northern side of HWY 79 .5 kilometers south of the intersection of HWY 79 and Thompson Road. The site is situated in a prominent grove of Eucalyptus and Pepper trees.

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[3] Autocad estimate of EIC areal plot. In response to comments, a review of the 1990 location and mitigation recommendations of Riv-716 were discussed, however, the project has been amended such that the property which adjoined Riv-716 is no longer part of the project.

This site is an historic residence with a main house foundation and several other features. Features consist of a concrete house foundation, a concrete water trough, a rock oven, a rock wall, an adobe floor, a concrete foundation, a non-structural rock wall, a pile of rock, and several rubbish deposits. Numerous recent trash deposits litter the site: cans, both aluminum and steel, jugs, jars, plate glass, etc. The only remaining intact structures are the oven, and the water trough. Numerous pits exist near the foundations and oven suggesting looting activities and others have been using the site for a dumping ground. None of the historical rubbish deposits observed during this recordation were appeared to be contemporaneous with the domicile. Most appear relatively recent. Others may exist and are obscured by vegetal matter. The fact that amateur collecters have been digging near the house suggests deposits existed and still may exist that are of historical relevance to the property.

ABP 11: 1885m^2
This site is located at the end of a southwest trending ridgeline and is accessed from Los Alamos Rd. This site has milled stone and flaked stone suggesting seasonal and possibly more ephemeral use. Artifacts observed on the site consisted of 1 Bedford metasedimentary single platform core (approx. 200 g); 2 fragments granite groundstone, same piece (total wgt. approx. 1.5kg); 1 large metavolcanic groundstone frag (approx 2 kg.), and 1 possible granite fire-affected rock. The site is situated in a field used extensively for agricultural purposes. Nearly every rock inspected, and the artifacts observed, is scarred from discing or similar activities. An unnamed intermittent drainage is 50 meters southwest of the site. A sheepherder had tended his flock where this site was located just prior to the survey. This greatly facilitated the discovery of the site. The surrounding dense vegetation hindered efforts to extend this site's boundaries, or to locate other loci or sites.

Interesting similarities exist between ABP 10-H noted above and another historic site recorded by the author nearby (Dutch Valley), in which also includes a distinctive oven or "kiln". These small, domed shaped ovens are similar to the "hornos" or bread ovens characteristic of the southwestern, Spanish-Indian communities. These similarities, including the rather distinct oven features may indicate shared cultural traditions (French?) among early European inhabitants in the Valley.

MITIGATION:

Eleven archaeological sites and one historic site exist on the subject property, Riv-716, 2932, ABP 1, 2, 3, 4, 5, 6, 7, 9, 10-H and 11 (please note that ABP-8 is an unused temporary number synonymous with Riv-2932 in the original report). The new Airport Business Park (ABP) temporary numbers (ABP-10-H and ABP-11) will be replaced by official Riverside County numbers. While several of these sites consist simply of bedrock grinding features, the settlement patterns within the subject project area also reflect short-term campsites and larger, longer-term habitation (village?) sites. As most of the sites have not been investigated beyond their initial recording, it is difficult to determine any chronological patterns in settlement. However, it is assumed that most of these sites are, generally, late given the research at Perris reservoir. Several of these sites, however, may have components of an earlier period (ca. 4,000 years ago) called Archaic or late Archaic in southern California (see the discussion in Drover 1986:26-27; Fig. 4, of the Santa Gertrudis Site just outside the subject property boundaries).

Two new sites may suffer direct impacts from the proposed development of the Airport Business Park, ABP 10-H and 11. The appropriate mitigation measures for each of these sites are described below in addition to the review of mitigation measures for Riv-716. Since project specific impacts are not yet distinct enough to differentiate between direct and indirect impacts, impacts will be assumed to be <u>direct</u>, implying actual

physical damage as opposed to indirect which would include secondary disturbances by unauthorized artifact collection, grading staging or induced erosion from later phases of construction.

Given the scale of maps provided for the project assessment, and the present stage of planning, impact analysis is somewhat limited. Impact analysis amounts to comparing the proximity of known site location on a 7.5' map (24,000 scale), to proposed improvements shown on an 800 scale map to be illustrated on a 200 scale aerial photo. At these scales, errors may exist in the estimation of specific site impacts. For this reason, it is first recommended that, *prior to any mitigation efforts, archaeological sites be relocated along with the surveyed flagging of proposed road alignments or development areas to specifically ascertain the nature of impacts*. In some cases, sites which have been described above as suffering direct impacts, may only suffer indirect impacts.

With regard to mitigation recommendations, the California Environmental Quality Act (CEQA), prefers preservation, if possible of significant cultural resources:

II. Public agencies should seek to avoid damaging effects on an archaeological resource whenever feasible. If avoidance is not feasible, the importance of the site shall be evaluated using the criteria outlined in Section III.

a. In-situ preservation of a site is the preferred manner of avoiding damage to archaeological resources. Preserving the site is more important than preserving the artifacts along because the relationship of the artifacts to each other in the site provides valuable information that can be lost when the artifacts are removed. Further, preserving the site keeps it available for more sophisticated future research methods. Preservation may also avoid conflict with religious or cultural values of groups associated with the site.

b. Avoiding damage may be accomplished by many approaches, including:

1. Planning construction to miss archaeological sites;
2. Planning parks, greenspace, or other open space to incorporate archaeological sites;
3. "Capping" or covering archaeological sites with a layer of soil before building tennis courts, parking lots, or similar facilities. Capping may be used where:
    a. the soils to be covered will not suffer serious compaction;
    b. The covering materials are not chemically active;
    c. The site is one in which the natural processes of deterioration have been effectively arrested; and
    d. The site has been recorded.
4. Deeding archaeological sites into permanent conservation easements.

Assuming direct impacts as described above, the following mitigation measures are recommended on a site specific basis. Note that the recommendations reflect only the second phase (testing--information gathering) of the sites, for the purposes of determining their significance.

The significance of a cultural resources is defined in CEQA as:

III. If the Lead Agency determines that a project may effect archaeological resources, the agency shall, as part of the determination made pursuant to Section 21080.1 determine whether the effect may be a significant effect on the environment. If the project may cause damage to an important archaeological resource, the project may have a significant effect on the environment. For the purposes of CEQA, an "important archaeological resource" is one which:

a. Is associated with a theme, event, person, or group of recognized significance in California or American history;

b. Is considered by a discrete social or ethnic group to be of important traditional cultural significance;

c. Is valuable as a means of interpreting a significant aspect of California or American history or prehistory to the public;

d. Can provide information useful in addressing scientifically consequential and reasonable research questions; or

e. Has special or particular qualities such as oldest, best example, largest or last surviving example of its kind.

If a site is determined to be significant under CEQA guidelines, the following alternatives exist:

IV. If an archaeological resource is not an important archaeological resource, and the effect on it shall be noted in the Initial Study or EIR but need not be considered further in the CEQA process.

V. If avoidance of the important archaeological resource is not **feasible** (determined by the Lead Agency), the Lead Agency should include an excavation plan for mitigating the effect of the project on the qualities which make the resource important under Section III.

Phase II Significance Determination Recommendations:

Riv-716[4]:

The vast majority of this site lies outside the subject property. While a small, northerly portion of the site may suffer direct impact, the southern portion of the site, outside the project area, may experience secondary (indirect) impacts as described above, ultimately requiring surface collection and protection. That portion of site which is within the boundaries of the property would undergo the following testing procedures. Project boundary relocation and impact assessment verification; 100% surface collection; 5-10 subsurface test excavation units; Phase III recommendations dependant upon the findings of these (Phase II) subsurface findings. Test level activities may require 30-50 crew-days of field work.

ABP-10-H:

Phase II efforts at this site should consist of a formal title search to determine the era of construction and ownership, photography and mapping of architectural features; clearing of brush should commence simultaneous with the survey and mapping of historic features; test excavation should be conducted to determine if significant subsurface features (dump sites or privy) may exist as well as the collection of any period, surface artifacts. Formal liaison should be continued with appropriate Riverside County agencies, and citizen interest groups (eg. Citizens for Historic Murrieta or local residents of French Valley descent), to acquire the collective historical knowledge regarding this site. Regardless of the fact that this site may not experience direct impacts, and may remain in an area designated as OSHP land use, the protection and information gathering phase of mitigation should proceed within six months time. Fencing of the larger site area based on information gained from Phase II would help to protect the site from further vandalism

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[4] In response to comments, a review of the 1990 location and mitigation recommendations of Riv-716 were discussed, however, the project has been amended such that the property which adjoined Riv-716 is no longer part of the project.

until a time when the proposed land use, possibly including site interpretation, could occur. (Mitigation measures were suggested or agreed upon by Ms. Diana Seider of the Riverside County Parks Department and members of the Riverside County Historical Commission at an on-site visit of the property 20 October 1993).

ABP-11:
Site relocation and impact assessment verification, and mapping of spatial distribution of surface artifacts; 3-5 subsurface test excavation units to check for depth, although it is unlikely that this site would yield any significant subsurface deposits. Test level activities may require 5-10 crew-days of field work.

Archaeological efforts involving prehistoric, Native American resources should strive to include a Native American representative for monitoring. While artifactual collections derived from projects sites technically belong to private landowners, curation promising security and future scientific public access is recommended. Historic collections are recommended to be donated to the County of Riverside Parks Department at the request of Ms. Diana Seider and the Historical Commission. The preferable repository of the prehistoric artifacts would be a public (County?) institution **where security and future public and scientific access can be guaranteed** such as the Parks Department, University of California, Riverside, San Bernardino County Museum or possibly the Pechanga Indian Reservation where a cultural center and museum are planned.

Aside from the archaeological sites described here, it is possible that archaeological materials could be found during grading activities in proximity to these sites.

Additionally, grading observation (monitoring) should occur for any earth moving activities conducted within 50' of any known

archaeological or historic site, even if the site is to be "avoided" as mitigation. It is recommended that grading observation be attached as a condition to any grading permits issued for properties containing cultural resources. A pre-grading conference should be held to clarify monitoring specifications with the grading contractor and County/City Grading Inspector. Monitoring would also include observation of sites at which Phase II or Phase III mitigation activities have already been conducted. Archaeological observation then, should consist of a qualified archaeologist with a Native American representative present during all grading activities within 50' of known cultural resources to identify or ascertain significance of any potential artifacts or to aid in the avoidance of sensitive areas. While it is unlikely, the archaeologist would be empowered to stop (or relocate) excavation activities for short periods of time to conduct further, controlled excavation for evaluation of significance. Observation would not be necessary during the grading of "non-cultural" deposits, only those soils in which cultural materials are likely to be present.

In addition to the measures noted above, it is recommended that a research design be prepared prior to any Phase II data collection activities, by the consulting archaeologist, specifying the following kinds of information: specific research questions to be addressed at each archaeological/historic site (questions should be shown to be pertinent to local and regional research questions), test implications (if-then statements) for

each hypothesis (question) being addressed at a given site, a plan for the disposition of artifactual materials recovered from a site(s), a plan for addressing the potential for human remains recovered during testing procedures (such a plan should require contact of the Pechanga Band via the Native American Heritage Commission, as most likely "nearest descendants" regarding the discovery and disposition of remains), specification of field methods to be utilized, preferably including ⅛" mesh water screen recovery, discussion of proposed analytical techniques including lithic, floral, faunal, and chronometric techniques etc., and a voluntary peer review solicited of an archaeologist registered with the County of Riverside Planning Department.

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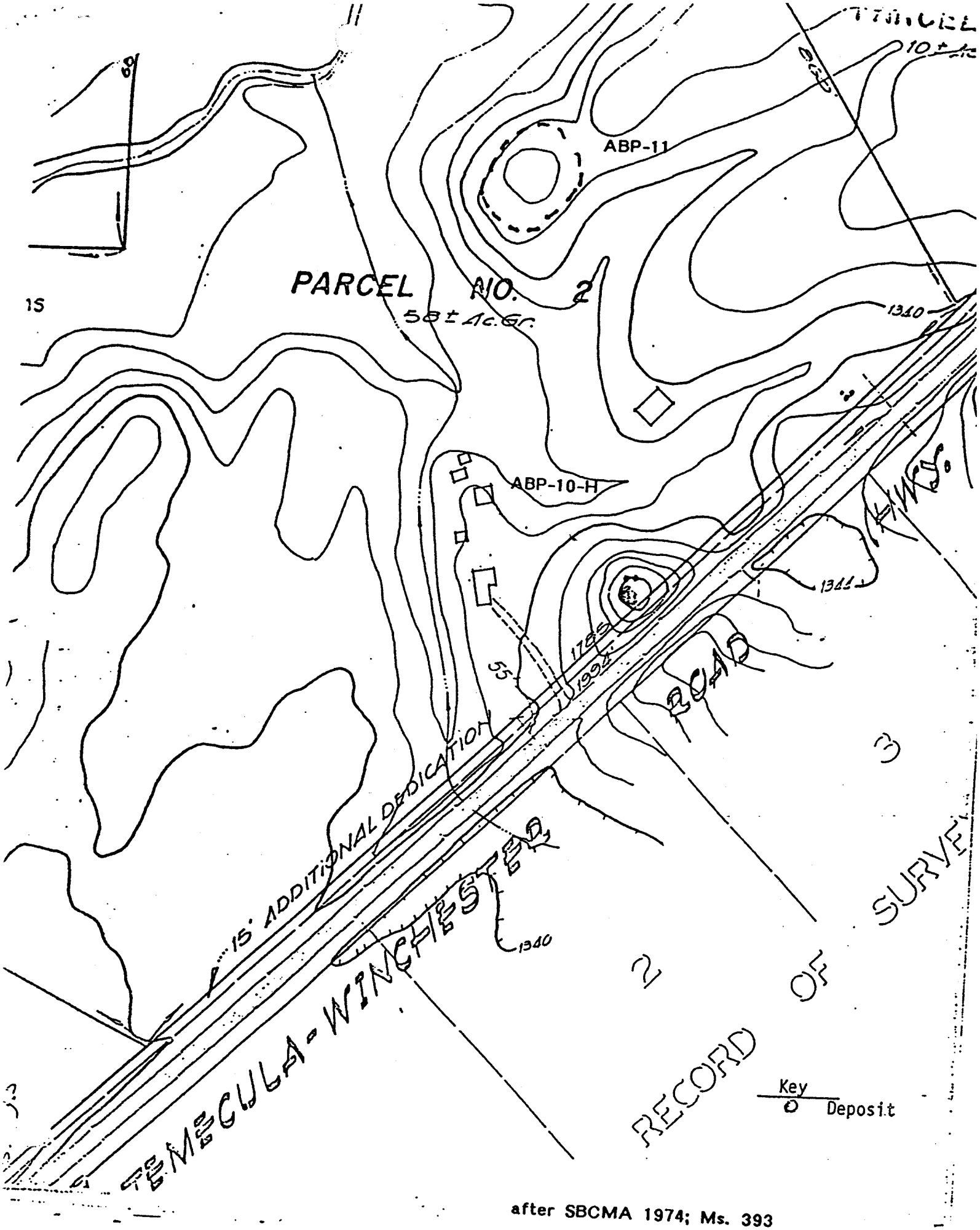


after SBCMA 1974; Ms. 393

Rupp Aerial Photography

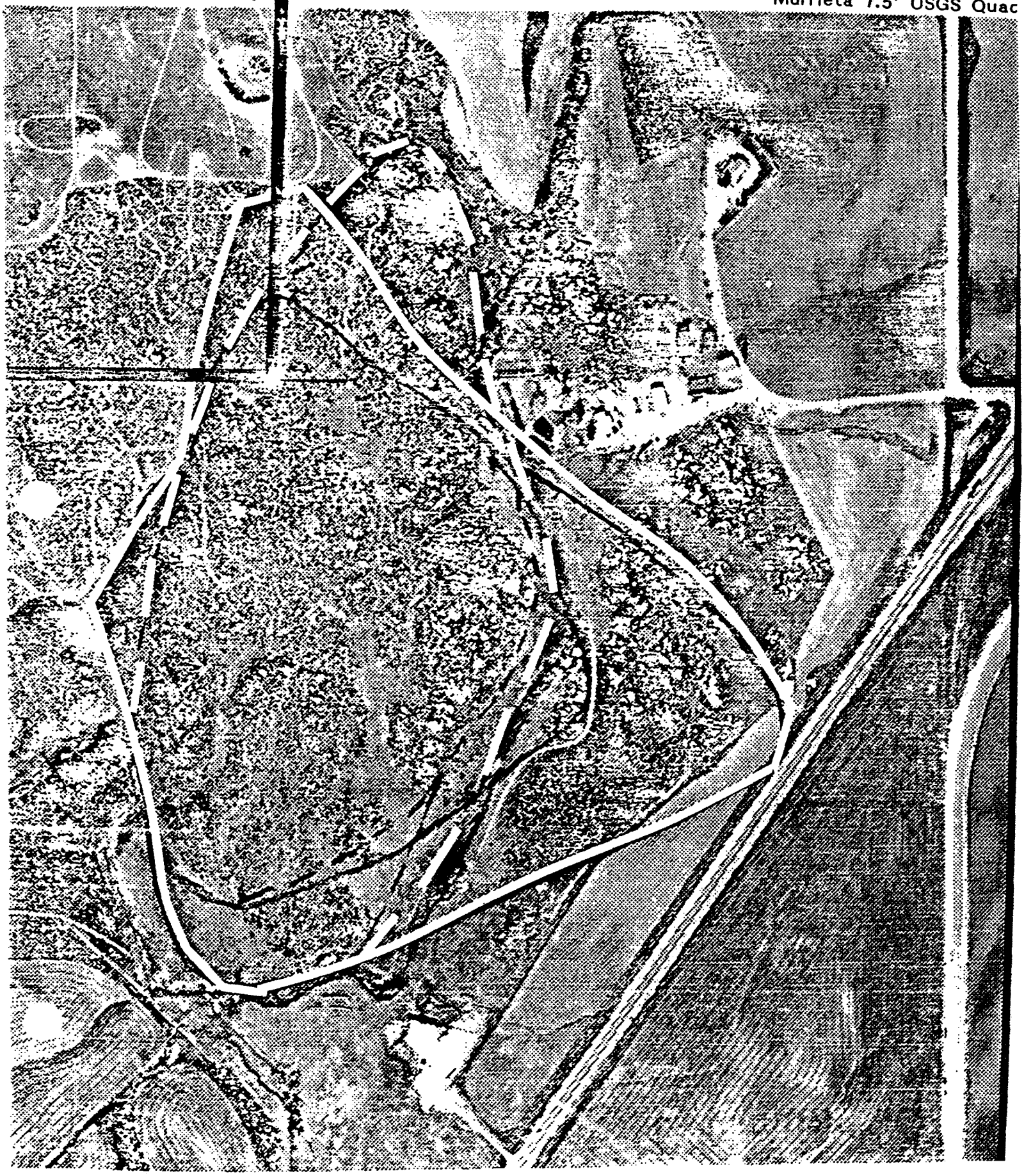
Riv-716 Estimated Boundaries

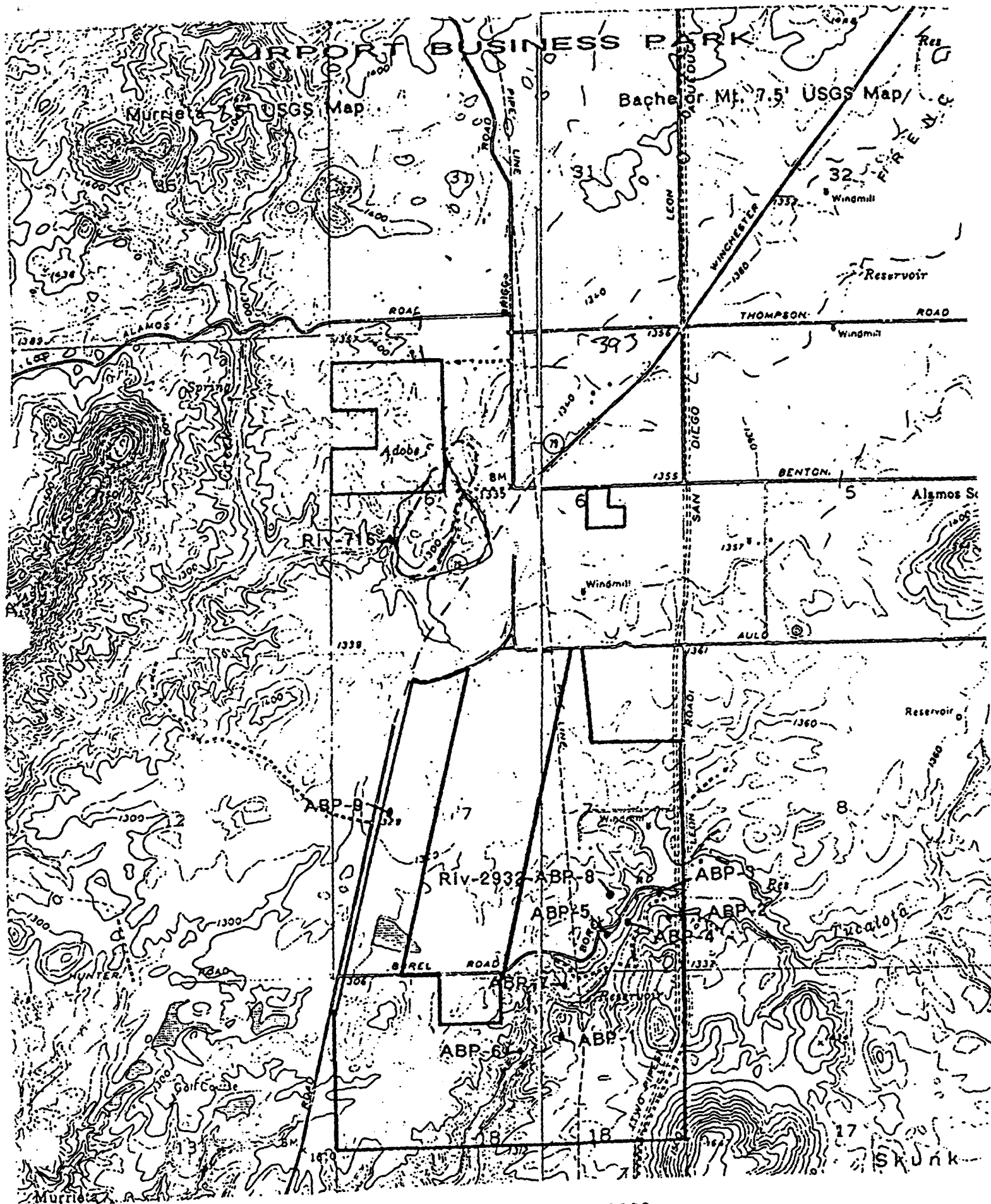
solid line--Eastern Information Center Record

dashed line--Drover 1990 estimate
(site unaccessible in 1990)

st ject property boundary

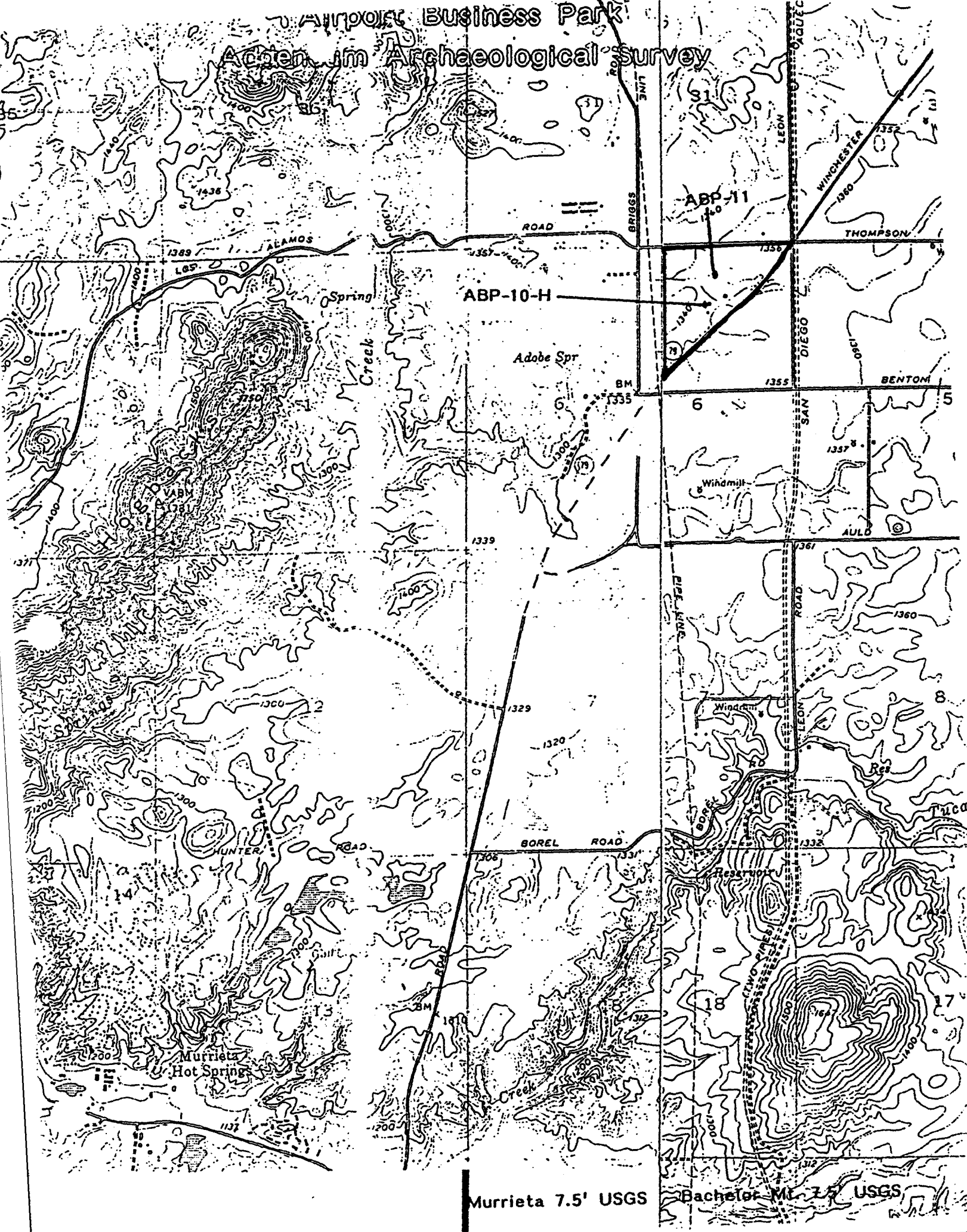
Murrieta 7.5' USGS Quac





Drover 1990; EIC Ms. 3609

Airport Business Park
Acken Jim Archaeological Survey



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