

**A PHASE I PALEONTOLOGICAL RESOURCES INVENTORY FOR  
VORTEX FARMS CULTIVATION, RIVERSIDE COUNTY, CALIFORNIA**

±9.2-Acre Parcel

APN 470-070-043, **A-2-10 ZONE**, REF: **CAN190001**, **CUP200014**,  
**(HAN190029)**, **DEVELOPMENT AGREEMENT 2000004**,

St. Johns Canyon Area, Section 13 of Township 6 South, Range 1 West, USGS Hemet 7.5'  
Topographic Quadrangle Map

**Prepared For:**

Judy Bailey-Savage  
**MMJ Construction, Inc.**  
39100 Air Park Drive  
Temecula, CA 92592  
951-216-8862  
info@mmjconstruction.com

**Prepared By:**

Leslie Irish, Principal      liris@lleviroinc.com  
Hugh M. Wagner, Paleontological Investigator      hmcwagner2@gmail.com

**Report Summary:**

Results of the review of the records searches provided by the Western Science Center and the Museum of Paleontology, University of California, Berkeley indicate that there are no previously recorded paleontological resources within the parcel or within a 1-mile radius of the current project area. However, the museum reports that fossils have been found in similar deposits within ±3 miles of the project. The paleontological field survey did not identify any unknown paleontological resources on the property. Because of the high sensitivity or potential of the Quaternary old alluvial deposits to yield paleontological resources under normal or surficial earthmoving activities associated with construction, it is recommended that if excavations exceed ten (10) feet in depth a qualified paleontologist be present to monitor these activities according to the included PRIMP.

**Report Date:** November 9, 2020

\\darwin\UNIFIED PROJECTS\MMJC-19-736 Minto and Sage\2020 PRS\Report\MMJC-19-R736.PRS (draft to COUNTY).doc

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*Mailing Address: 700 East Redlands Blvd, Suite U, PMB#351, Redlands CA 92373*

*Delivery Address: 721 Nevada Street, Suite 307, Redlands, CA 92373*

*Webpage: lleviroinc.com | Phone: 909-335-9897 | FAX: 909-335-9893*

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## **MANAGEMENT SUMMARY**

The goal of this study was to identify all paleontological resources situated within the boundaries of the project area. This information is required since construction of the project could adversely affect such resources.

Results of the review of the record search provided by the Western Science Center (WSC) and the Museum of Paleontology, University of California, Berkeley (UCMP) indicate that there are no previously recorded paleontological resources within the parcel or within a 1-mile radius of the current project area. The parcel has not been previously surveyed and assessed for paleontological resources.

A paleontological field survey was conducted to determine what facies of Quaternary old alluvial fan or colluvial deposits are present at the surface or preserved in the subsurface and determine if any fossils were present at the surface or exposed in road cuts on adjacent graded surfaces of these deposits. A field survey was conducted to perform “a full paleontological assessment of the project area” by Hugh M. Wagner, PhD. The field survey found a disturbance related to road building and minor earthwork onsite within the planned development footprint. However, no fossil or evidence of fossil bearing materials were observed during the survey.

Because of the presence of mapped Qoc, (Old colluvial deposits, late to middle Pleistocene) Qof<sub>1</sub>, (Old alluvial fan deposits Unit 1, late to middle Pleistocene) and Qyf (Young alluvial fan deposits, Holocene and late Pleistocene) mitigation monitoring is recommended where excavations exceed 10 feet in depth.

## **1.0) INTRODUCTION AND SETTING**

### **1.1) Introduction**

This report provides the results of the paleontological resources inventory for a ±9.2-acre parcel where a cannabis growing facility will be built within the western portion of the parcel in Riverside County, California. State law, as set forth in the California Environmental Quality Act (CEQA) of 1970, requires public agencies not approve projects as proposed if there are feasible alternatives or mitigation measures available that would substantially lessen the significant environmental effects of such projects (Chapter 1, Section 21002). The California Public Resources Code 5097 protects vertebrate fossil sites, including fossilized footprints or any other paleontologic feature, situated on public land. Typical California requirements for paleontologic resource investigations and impact mitigation are outlined in Chapter 12.5, California Business and Professions Code, and Title 20, California Code of Regulations, Section 2012 et seq.

In compliance with CEQA and other regulations, L & L Environmental, Inc. (L&L) was retained to perform a records/literature review of paleontologic resources known to exist on or near the project area. The paleontologic resources inventory, presented herein, consists of the results of the paleontological record/literature review.

### **1.2) Project Goals**

The goal of this study was to identify all paleontological resources situated within the boundaries of the project area. This information is required since construction of the project could adversely affect such resources.

The paleontological resource study consisted of:

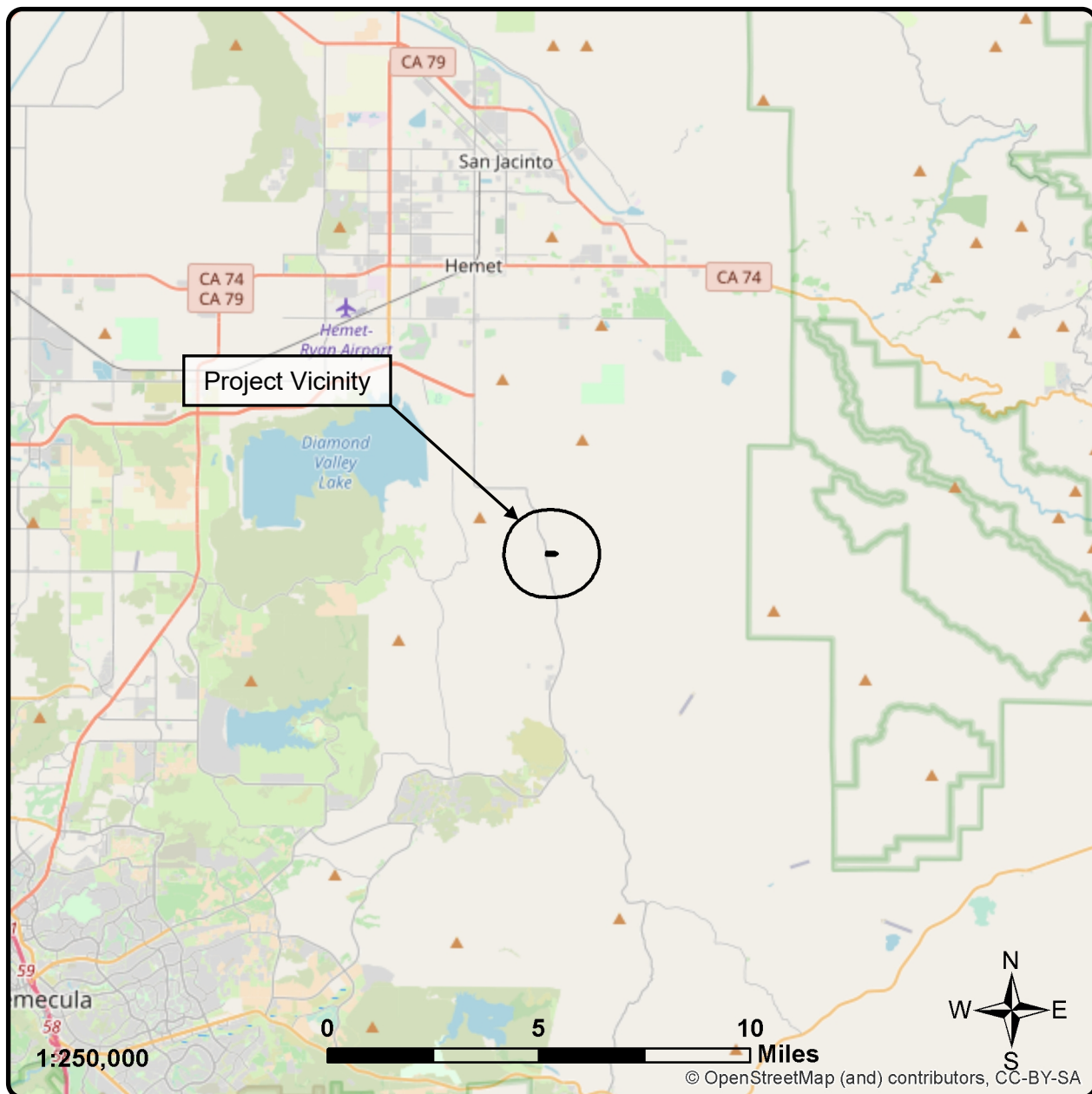
- (1) A literature review conducted to determine what geologic formations underlie the subject parcel.
- (2) A paleontological records search conducted to determine whether any previously recorded significant fossil bearing formations underlie the subject parcel.



### **1.3) Location**

The site is located in the St. Johns Canyon area (Figure 1), just southeast of the intersection of Sage Road and Minto Way. It is situated within Section 13 of Township 6 south, Range 1 west, within the USGS *Hemet, CA 7.5'* series quadrangle map (Figure 2).

The site is generally bounded as follows: to the west by Sage Road, open space, and sparse rural residences; to the east by open space and sparse rural residences; to the north by open space, and sparse rural residences; and to the south by open space, and sparse rural residences (Figure 3).



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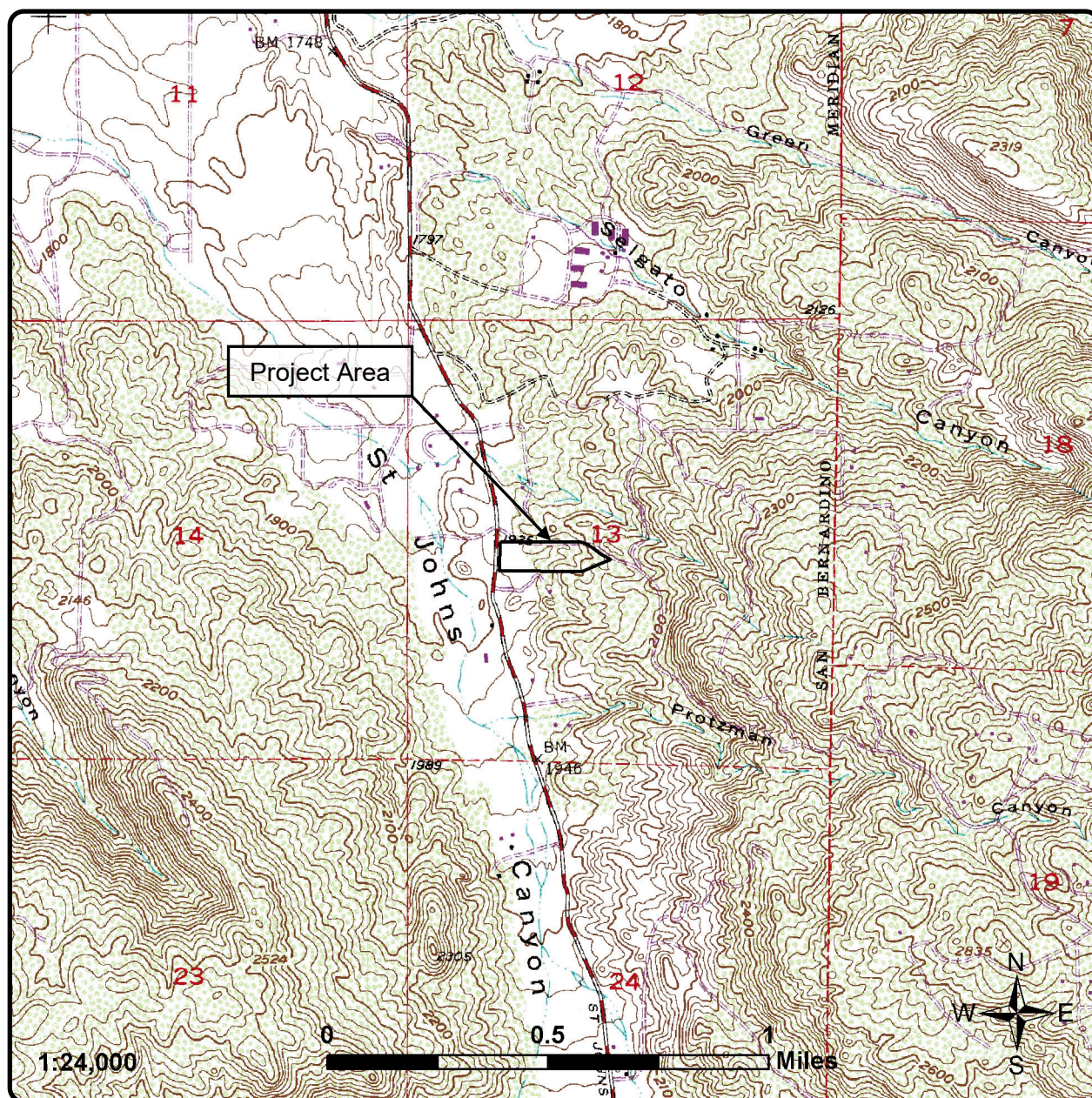
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## Figure 1

### Project Vicinity Map

Sage Road & Minto Way, St. Johns Canyon  
County of Riverside, California





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## Figure 2

### Project Location Map

(USGS Hemet [1979] quadrangle,  
Section 13, Township 6 South, Range 1 West)

Sage Road & Minto Way, St. Johns Canyon  
County of Riverside, California





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## Figure 3

### Aerial Photograph

(Aerial obtained from Google Earth, August 2018)

Sage Road & Minto Way, St. Johns Canyon  
County of Riverside, California

## **2.0) REGULATORY BACKGROUND**

The paleontological resource of a rock encompasses any evidence preserved in the rock of once living organisms. As recognized here, this pertains to fossils preserved either as impressions of soft or hard parts, mineralized remains of hard parts, tracks, burrows, or other trace fossils, coprolites, seeds or pollen, and other microfossils. These organisms may have been terrestrial, aquatic, or aerial in life habit.

Fossils are an important resource to science, as they are useful in demonstrating and documenting the evolution of particular groups of organisms. Fossil remains enable geologists to reconstruct the environment in which the organisms lived and hence the environment during deposition of the rock. Fossils are also extremely useful in determining the age of the rock in which they are preserved. Paleontological resources include fossil remains, fossil localities, and formations that have produced fossil material in other nearby areas. The paleontological resource is a limited, nonrenewable, sensitive scientific and educational resource afforded protection under federal, state, and local legislation and policies.

### **2.1) Paleontologic Resource Requirements Under CEQA**

The California Environmental Quality Act (CEQA) requires a lead agency to determine whether a project may have a significant effect on paleontological resources. State of California environmental regulations (California Environmental Quality Act [CEQA], Section 15064.5, Appendix G) address construction activities that may impact paleontological resources. Appendix G provides a checklist of questions that a lead agency should normally address if relevant to a project's environmental impacts. A relevant section of Appendix G that addresses an analysis of Geology and Paleontology is Section (V) (c), which asks if the project will directly or indirectly destroy a unique paleontological resource or site or unique geological feature.

### **2.2) Local Laws and Ordinances**

#### **2.2.1) County of Riverside Requirements**

On October 25, 2011 the Riverside County Board of Supervisors voted to approve the SABER Policy (Safeguard Artifacts Being Excavated in Riverside County). The policy mandates preferential transfer of paleontological fossils to the Western Science Center located in the City of Hemet.

The policy also directs that the following condition be implemented when applicable: “The property owner and/or applicant on whose land the paleontological fossils are discovered shall provide appropriate funding for monitoring, reporting, delivery and curating the fossils at the institution where the fossils will be placed, and will provide confirmation to the County that such funding has been paid to the institution.”

### **2.3) Professional Standards**

Within the Society of Vertebrate Paleontology (SVP) are guidelines titled, “The Assessment and Mitigation of Adverse Impacts to Non-Renewable Paleontologic Resources.” They are a set of procedures and standards for assessing and mitigating impacts to vertebrate paleontological resources (SVP 2010).

Paleontological sensitivity is defined as the potential for a geologic unit to produce scientifically significant fossils. This is determined by rock type, past history of the geologic unit in producing significant fossils, and fossil localities recorded from that unit. Paleontological sensitivity is derived from the known fossil data collected from the entire geologic unit, not just from a specific survey. In “Standard Procedures for the Assessment and Mitigation of Adverse Impacts to Paleontological Resources” the SVP (2010) defines three (3) categories of paleontological sensitivity (potential) for sedimentary rock units: high, low, and undetermined:

- **High Potential:** Rock units from which vertebrate or significant invertebrate fossils or suites of plant fossils have been recovered and are considered to have high potential for containing significant nonrenewable fossiliferous resources. These units include, but are not limited to, sedimentary formations and some volcanic formations that contain significant nonrenewable paleontological resources anywhere within their geographical extent and sedimentary rock units temporally or lithologically suitable for the preservation of fossils. Sensitivity comprises both (a) the potential for yielding abundant or significant vertebrate fossils or for yielding a few significant fossils, large or small, vertebrate, invertebrate, or botanical, and (b) the importance of recovered evidence for new and significant taxonomic, phylogenetic, ecologic, or stratigraphic data. Areas that contain potentially datable organic remains older than Recent, including deposits associated with nests or middens, and areas that may contain new vertebrate deposits, traces, or trackways are also classified as significant.
- **Low Potential:** Reports in the paleontologic literature or field surveys by a qualified vertebrate paleontologist may allow determination that some areas or units have low

potentials for yielding significant fossils. Such units will be poorly represented by specimens in institutional collections.

- **Undetermined Potential:** Specific areas underlain by sedimentary rock units for which little information is available are considered to have undetermined fossiliferous potentials.

Note that highly metamorphosed rocks and granitic rock units generally do not yield fossils and therefore have low potential to yield significant nonrenewable fossiliferous resources.

In general terms, for geologic units with high potential, full-time monitoring typically is recommended during any project-related ground disturbance. For geologic units with low potential, protection or salvage efforts typically are not required. For geologic units with undetermined potential, field surveys by a qualified paleontologist are usually recommended to specifically determine the paleontologic potential of the rock units present within the study area.



### **3.0) RESEARCH DESIGN AND METHODS**

#### **3.1) Paleontological Research Design and Goals**

The paleontologic resource of a rock encompasses any evidence preserved of once living organisms in the rock. As recognized here, this pertains to fossils preserved either as impressions of soft or hard parts, mineralized remains of hard parts, tracks, burrows, or other trace fossils, coprolites, seeds or pollen and other microfossils. These organisms may have been terrestrial, aquatic, or aerial in life habit.

Fossils are an important resource to science as they are useful in demonstrating and documenting the evolution of particular groups of organisms. Fossils also enable geologists to reconstruct the environment in which the organisms lived and the environment during deposition of the rock and are also extremely useful in determining the age of the rock in which they are preserved. Paleontologic resources include fossil remains, fossil localities, and formations that have produced fossil material in other nearby areas. The paleontologic resource is a limited, nonrenewable, sensitive scientific educational resource afforded protection under federal laws and regulations designed to preserve environmental quality. In California, the paleontologic resource is offered protection under CEQA.

Potential adverse environmental impacts that could result from excavation on the parcel and that might affect paleontologic resources (unrecorded fossil sites and remains) were assessed. Mitigation measures were then developed to reduce these impacts to an insignificant level. The assessment and mitigation measures are in compliance with 1995 Society of Vertebrate Paleontology (SVP) standard guidelines for reducing the potential adverse impact of construction on paleontologic resources.

#### **3.2) Assessment Criteria**

The paleontological sensitivity of a formation or unnamed sedimentary unit-described as high, low, unknown, or none is the measurement most conducive to assessing the sensitivity of the paleontologic resources and reflects the potential productivity and importance of the fossils produced within a study area. The procedures utilized in this study to evaluate the paleontologic resource of a rock unit are similar to those utilized by the Society of Vertebrate Paleontology guidelines (2010).



The potential productivity of a formation is measured as high, low, unknown, or none, based upon the densities of fossil specimens or localities within or near the study area. Exposures of a particular formation within a study area most likely will yield fossils similar in number and kind to those previously recorded from the formation in the surrounding area and may contain a similar density of fossil sites. The criteria for establishing the potential productivity of a formation exposed within the study area are described in the table below:

Table 1. Potential Paleontological Sensitivity Criteria

Paleontological Sensitivity	Criteria
High potential	Formation contains a high density of fossil sites and/or has produced numerous remains locally and is very likely to yield additional remains.
Low potential	Poorly exposed or studied formation that contains a very low density of recorded fossil localities and has produced little remains locally.
Unknown potential	Formations for which no data, or insufficient data is available from the immediate vicinity to allow an accurate assessment of its potential for yielding important fossil remains within the study area.
No potential	Unfossiliferous igneous and metamorphic rock units with no potential for yielding any fossil remains or Recent to sub-Recent sedimentary deposits that are too young to yield organic remains greater than 10,000 years old.

### 3.3) Literature Review

The literature review for this study included an examination of geologic maps for the Project area and encompassed the entire Project footprint and a one-mile buffer. The review included previous geologic mapping of the area. In addition to the reviewed published geologic maps, technical reports provided the basis from which the regional and Project-specific geology was derived for this Project.

Pertinent published literature and unpublished manuscripts with regard to the geology and paleontology of extreme western Riverside County were also reviewed for this Project. In the process of conducting the background literature review, existing paleontological resource data—including such published resources as books, journals, and geologic maps, as well as information available via the internet on government websites—were consulted. Furthermore, an online database search was conducted to identify previous paleontological resource assessments conducted within the Project boundaries and in the surrounding area.

### **3.4) Paleontological Records and Collections Search**

Due to the unknown nature of the fossil record, paleontologists cannot ascertain either the quality or the quantity of fossils present in a given geologic unit prior to exposure by natural erosion or human-caused disturbance. Therefore, in the absence of surface fossils it is necessary to assess the sensitivity of the rock units based on their known potential to yield scientifically significant paleontological resources elsewhere in the same geologic units (both within and outside of the study area) or a unit representative of the same depositional environment.

The paleontology impacts of the proposed project are discussed below under subheadings corresponding to each of the significance criterion presented in the preceding section. The analysis describes the impacts of the proposed project related to paleontological resources for each criterion and determines whether implementation of the proposed project would result in significant impacts by evaluating effects of earthmoving by the proposed project against the affected environment.

To evaluate potential paleontological impacts due to earthmoving associated with construction, a paleontological records and literature search was conducted at institutions and museums (Western Science Center) that house paleontological collections from the study area. Pertinent published literature and unpublished manuscripts on the geology and paleontology of St. Johns Canyon and surrounding areas were reviewed.

The geologic rock unit in the proposed project area will be rated for paleontological resources that may be present on the surface or would be exposed during ground disturbing construction activities based on the SVP Guidelines (SVP 2010).

## 4.0) RESULTS

### 4.1) Literature Review

A comprehensive literature search was conducted. The project area is underlain by Young alluvial fan deposits (Holocene and late Pleistocene) and Old colluvial deposits (late to middle Pleistocene; Morton and Matti, 2005; see Figure 4).

**Young alluvial fan deposits (Qyf):** These are unconsolidated deposits of alluvial fans and headward drainages of fans. Consists predominately of gravel, sand, and silt. Trunk drainages and proximal parts of fans contain higher percentage of coarse-grained sediment than distal parts. Three principal fans, Goodhart-St. Johns, Cactus Valley, and an unnamed, east-oriented drainage on the north side of the Santa Rosa Hills consist almost entirely of granitic (tonalite) debris. These fans are incised into dissected older alluvial fan deposits.

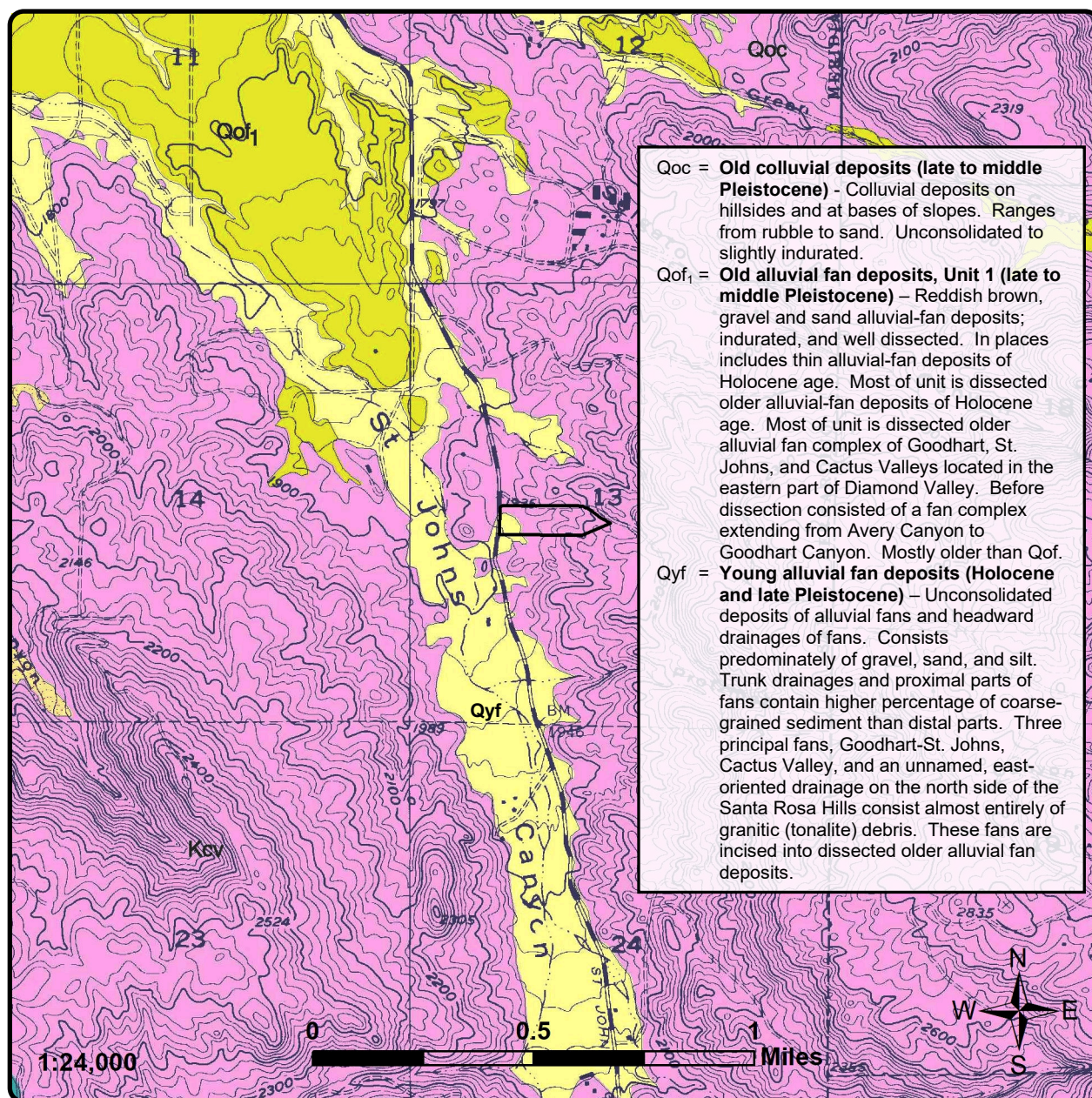
**Old colluvial deposits (Qoc):** These are composed of colluvial deposits on hillsides and at the bases of slopes. Ranges from rubble to sand. Unconsolidated to slightly indurated.

### 4.2) Paleontological Records Search

A comprehensive museum collections records search of the Western Science Center (Radford 2020, see Appendix A) and an online search of the University of California Museum of Paleontology (2020) indicated no previously recorded sites on or immediately adjacent to the property. The WSC records search response letter indicated that no vertebrate fossils have been found onsite or nearby; however, fossils have been found in similar sediments. The WSC letter includes the following regarding nearest known fossils and recommended monitoring:

The geologic unit underlying the project area is mapped primarily as late to middle Pleistocene colluvial deposits with a small segment of alluvial fan deposits dating to the Holocene and late Pleistocene epoch in the southwestern corner (Morton & Matti, 2005). Both Pleistocene alluvial and colluvial units are considered to be of high paleontological sensitivity. The Western Science Center does not have localities within the project area, but does have numerous localities within similarly mapped alluvial sediments throughout the region and as close as 3.5 miles from the project area. Pleistocene sedimentary deposits in southern California are well documented and known to contain abundant fossil resources including those associated with Columbian mammoth (*Mammuthus columbi*), Pacific mastodon (*Mammut pacificus*), Sabertooth cat (*Smilodon fatalis*), Ancient horse (*Equus* sp.) and many other Pleistocene megafauna.





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## Figure 4

### Geologic Map

(Morton and Matti. 2005. Preliminary geologic map of the Hemet 7.5' quadrangle, Riverside County, California.)

Sage Road & Minto Way, St. Johns Canyon  
County of Riverside, California

Any fossils recovered from the Sage and Minto – MMJC-19-736.PRS Project area would be scientifically significant. Excavation activity associated with development of the area has the potential to impact the paleontologically sensitive Pleistocene alluvial and colluvial units and it is the recommendation of the Western Science Center that a paleontological resource mitigation plan be put in place to monitor, salvage, and curate any recovered fossils associated with the current study area (Radford 2020, see Appendix A).

#### **4.3) Field Survey Results and Findings**

A field survey was conducted to perform “a full paleontological assessment of the project area” by Hugh M. Wagner, PhD. The field survey found a disturbance related to road building and minor earthwork onsite within the planned development footprint. However, no fossil or evidence of fossil bearing materials were observed during the survey.

Because of the presence of mapped Qoc, (Old colluvial deposits, late to middle Pleistocene) Qof<sub>1</sub>, (Old alluvial fan deposits Unit 1, late to middle Pleistocene) and Qyf (Young alluvial fan deposits, Holocene and late Pleistocene) mitigation monitoring is recommended where excavations exceed 10 feet in depth.

## 5.0) PROJECT SUMMARY WITH MITIGATION RECOMMENDATIONS

### 5.1) Paleontological Summary

The paleontologic resources records searches did not identify any previously recorded paleontological localities on or near the project area. But the potential for destruction of paleontological resources during surficial earthmoving during construction is high in Quaternary very old alluvial fan deposits (Table 2).

Table 2. Paleontological sensitivity potential of lithologic unit(s) present.

Lithologic Unit	Paleontological Sensitivity
Young alluvial fan deposits	Unknown potential
Old colluvial deposits	High potential

### 5.2) Paleontological Mitigation Recommendations

There is unknown to high potential for locating significant paleontological resources during work at depth within the project area. Because of this potential, any excavation below ten (10) feet in depth should be monitored by a qualified paleontologist, as outlined in the recommended Paleontologic Resource Impact Mitigation Plan (PRIMP) for the project included in Appendix D. Appendix B contains a Project Repository Letter provided by the WSC.

County guidelines prevent the development and submittal of a PRIMP to any but the county geologist after a BGR number has been issued. Consequently, the PRIMP which was prepared for this project is not attached to this report and will be submitted under separate cover.

## **6.0) REFERENCES**

- Jefferson, G. T. 1991a. Catalogue of Late Quaternary Vertebrates from California: Part One, Nonmarine Lower Vertebrate and Avian Taxa. Natural History Museum of Los Angeles County Technical Reports, Number 7: 1-59.
- 1991b. Catalogue of Late Quaternary Vertebrates from California: Part Two, Mammals. Natural History Museum of Los Angeles County, Technical Report Number 7: 1-129.
2008. Catalogue of Late Quaternary Vertebrates from California. Revised 01 May 2008. On file at the Stout Research Center, Anza Borrego Desert State Park.
- Miller, W. E. 1971. Pleistocene Vertebrates of the Los Angeles Basin and Vicinity (exclusive of Rancho La Brea). Bulletin of the Los Angeles County Museum of Natural History, Science. Number 10: 1-121.
- Morton, D. M. and J. C. Matti. 2005. Preliminary geologic map of the Hemet 7.5' quadrangle, Riverside County, California. Available at: [https://ngmdb.usgs.gov/Prodesc/proddesc\\_72184.htm](https://ngmdb.usgs.gov/Prodesc/proddesc_72184.htm)
- Radford, D. 2020. Records Search from the Western Science Center for the Sage and Minto Project. Report dated October 15, 2020, see Appendix A.
- Society of Vertebrate Paleontology. 2010. Standard Procedures for the Assessment and Mitigation of Adverse Impacts to Paleontological Resources. Society of Vertebrate Paleontology, 11 pp.
- University of California Museum of Paleontology. 2020. <http://paleoportal.org/portal/>

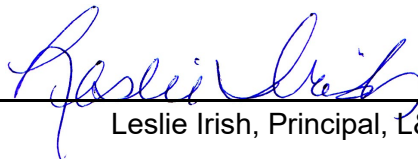


## 7.0) CERTIFICATION

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

DATE: November 9, 2020

SIGNED: \_\_\_\_\_



Leslie Irish, Principal, L&L Environmental, Inc.  
909-335-9897

DATE: November 9, 2020

SIGNED: \_\_\_\_\_



Hugh M. Wagner, Sr. Paleontologist, L&L Environmental, Inc.  
909-335-9897



## **APPENDICES**

### **Appendix A – Record Search Results**



L&L Environmental, Inc.  
Jeffrey Sonnentag  
700 East Redlands Blvd., Suite U  
Redlands, CA 92373

October 15, 2020

Dear Mr. Sonnentag,

This letter presents the results of a record search conducted for the Sage and Minto – MMJC-19-736.PRS in Riverside County, California. The project site is located east of Sage Road and south of Minto Way in Section 13 of Township 6 South and Range 1 West on the Hemet CA USGS 7.5 minute topographic quadrangle.

The geologic unit underlying the project area is mapped primarily as late to middle Pleistocene colluvial deposits with a small segment of alluvial fan deposits dating to the Holocene and late Pleistocene epoch in the southwestern corner (Morton & Matti, 2005). Both Pleistocene alluvial and colluvial units are considered to be of high paleontological sensitivity. The Western Science Center does not have localities within the project area, but does have numerous localities within similarly mapped alluvial sediments throughout the region and as close as 3.5 miles from the project area. Pleistocene sedimentary deposits in southern California are well documented and known to contain abundant fossil resources including those associated with Columbian mammoth (*Mammuthus columbi*), Pacific mastodon (*Mammut pacificus*), Sabertooth cat (*Smilodon fatalis*), Ancient horse (*Equus sp.*) and many other Pleistocene megafauna.

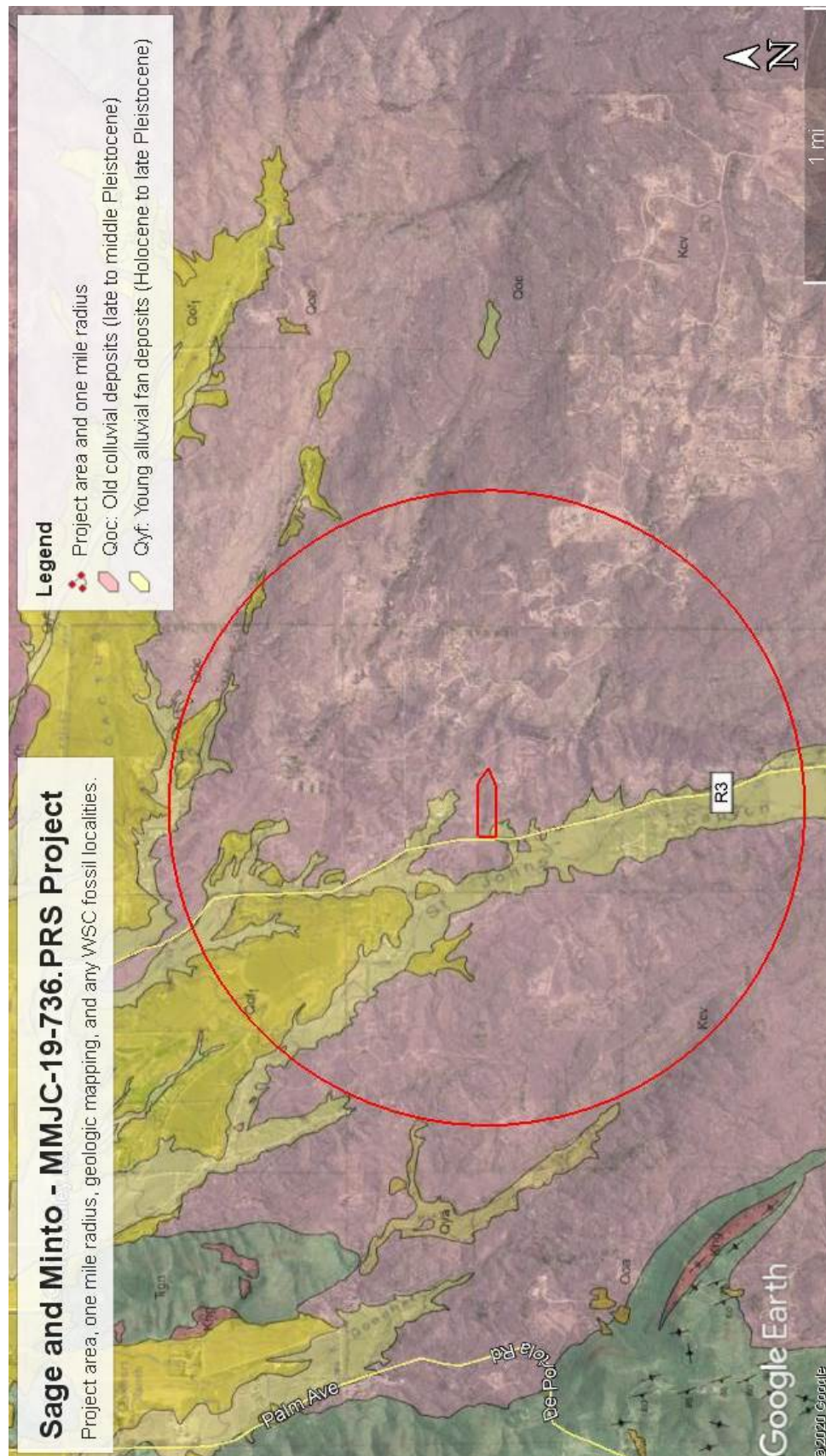
Any fossils recovered from the Sage and Minto – MMJC-19-736.PRS Project area would be scientifically significant. Excavation activity associated with development of the area has the potential to impact the paleontologically sensitive Pleistocene alluvial and colluvial units and it is the recommendation of the Western Science Center that a paleontological resource mitigation plan be put in place to monitor, salvage, and curate any recovered fossils associated with the current study area.

If you have any questions, or would like further information, please feel free to contact me at [dradford@westerncentermuseum.org](mailto:dradford@westerncentermuseum.org)

Sincerely,

A handwritten signature in black ink, appearing to read 'Darla Radford'.

Darla Radford  
Collections Manager



## **Appendix B – Project Repository Letter**



L&L Environmental, Inc.  
700 East Redlands Blvd., Suite U  
Redlands, CA 92373

October 16, 2020

RE: Curation of Fossils Associated with the Sage and Minto MMJC – 19-736.PRS Project

Fossils and objects obtained through mitigation contract activities in accordance with the California Environmental Quality Act (CEQA), the National Environmental Policy Act (NEPA), or similar state and federal requirements may be accepted by the Western Science Center (WSC) only upon prior approval in writing by the WSC Director. Collections submitted for approval must meet the following requirements:

- (1) minimum standards for specimen preparation and associated documentation
  - specimens and artifacts are prepared and labeled for curation;
  - field notes, photos, and field maps will be deposited with objects at WSC;
  - documentation includes accurate stratigraphic and geographic data that are tied to the listing of field numbers for localities and objects;
  - associated objects must be clearly marked as having been found in association;
  - use of archivally appropriate materials;
- (2) provision of associated data in electronic format;
- (3) payment of repository fees.

Upon request, the WSC can provide the current repository fee schedule; an electronic template for data (available in Excel and Access); and copies of the Society for Vertebrate Paleontology's policy and ethics statements for activities relating to collecting and documenting fossils.

Upon approval and receipt of collections, the WSC shall care for and house the collection according to standard museum protocol, and assume curatorial responsibility for such materials in pursuant to 36 CFR 79. WSC adheres to professional standards for collections stewardship, registration, conservation, access and use as recommended by professional paleontological and museum associations including the Society for Vertebrate Paleontology, the American Association of Museums, the Society for the Preservation of Natural History Collections, and the American Institute for Conservation.

Material received will be housed in the WSC Curation Repository and will be made available for scientific analysis and study. Data will be available to qualified researchers, land managers, and government officials upon request.

A handwritten signature in black ink, appearing to read 'Darla Radford'.

Darla Radford  
Collections Manager

[dradford@westerncentermuseum.org](mailto:dradford@westerncentermuseum.org)

2345 Searl Parkway ♦ Hemet, CA 92543 ♦ phone 951.791.0033 ♦ fax 951.791.0032 ♦ [westerncentermuseum.org](http://westerncentermuseum.org)

## **Appendix C – County PRIMP Condition**

This site is mapped in the County's General Plan as having a High potential for paleontological resources (fossils). Proposed project site grading/earthmoving activities could potentially impact this resource. HENCE:

**PRIOR TO ISSUANCE OF GRADING PERMITS:**

1. The applicant shall retain a qualified paleontologist approved by the County to create and implement a project-specific plan for monitoring site grading/earthmoving activities (project paleontologist).
2. The project paleontologist retained shall review the approved development plan and grading plan and conduct any pre-construction work necessary to render appropriate monitoring and mitigation requirements as appropriate. These requirements shall be documented by the project paleontologist in a Paleontological Resource Impact Mitigation Program (PRIMP). This PRIMP shall be submitted to the County Geologist for approval prior to issuance of a Grading Permit. Information to be contained in the PRIMP, at a minimum and in addition to other industry standards and Society of Vertebrate Paleontology standards, are as follows:
  1. A corresponding and active County Grading Permit (BGR) Number must be included in the title of the report. PRIMP reports submitted without a BGR number in the title will not be reviewed.
  2. PRIMP must be accompanied by the final grading plan for the subject project.
  3. Description of the proposed site and planned grading operations.
  4. Description of the level of monitoring required for all earth-moving activities in the project area.
  5. Identification and qualifications of the qualified paleontological monitor to be employed for grading operations monitoring.
  6. Identification of personnel with authority and responsibility to temporarily halt or divert grading equipment to allow for recovery of large specimens.
  7. Direction for any fossil discoveries to be immediately reported to the property owner who in turn will immediately notify the County Geologist of the discovery.
  8. Means and methods to be employed by the paleontological monitor to quickly salvage fossils as they are unearthed to avoid construction delays.
  9. Sampling of sediments that are likely to contain the remains of small fossil invertebrates and vertebrates.
  10. Procedures and protocol for collecting and processing of samples and specimens.
  11. Fossil identification and curation procedures to be employed.
  12. Identification of the permanent repository to receive any recovered fossil material. \*Pursuant the County "SABER Policy", paleontological fossils found in the County should, by preference, be directed to the Western Science Center in the City of Hemet. A written agreement between the property owner/developer and the repository must be in place prior to site grading.
  13. All pertinent exhibits, maps and references.
  14. Procedures for reporting of findings.
  15. Identification and acknowledgement of the developer for the content of the PRIMP as well as acceptance of financial responsibility for monitoring, reporting and curation fees. The property owner and/or applicant on whose land the paleontological fossils are discovered shall provide appropriate funding for monitoring, reporting, delivery and curating the fossils at the institution where the fossils will be placed, and will provide confirmation to the County that such funding has been paid to the institution.
  16. All reports shall be signed by the project paleontologist and all other professionals responsible for the report's content (eg. PG), as appropriate. One signed digital copy of the report(s) shall be submitted by email to the County Geologist (dwalsh@rivco.org) along with a copy of this condition and the grading plan for appropriate case processing and tracking. These documents should not be submitted to the project Planner, Plan Check staff, Land Use Counter or any other County office. In addition, the applicant shall submit proof of hiring (i.e. copy of executed contract, retainer agreement, etc.) a project paleontologist for the in-grading implementation of the PRIMP.

**Safeguard Artifacts Being Excavated in Riverside County (SABER)**

Riverside Office • 4080 Lemon Street, 12th Floor  
P.O. Box 1409, Riverside, California 92502-1409  
(951) 955-3200 • Fax (951) 955-3157

Desert Office • 77-588 El Duna Court, Suite H  
Palm Desert, California 92211  
(760) 863-8277 • Fax (760) 863-7040