

**Appendix H:
Cultural Resources Assessment**

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H.1 - Phase I Cultural Resources Assessment and Paleontological Records Review

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**Phase I Cultural Resources Assessment and
Paleontological Records Review
Rio Santiago Specific Plan Project
City of Orange, Orange County, California**

Orange, California, USGS 7.5-minute Topographic Quadrangle Map
Township 4 South, Range 9 West,
Unsectioned portion of the Santiago de Santa Ana Land Grant
APNs 909-180-011, 909-170-023, 909-060-021, 909-060-066, and 909-060-020
110-Acre Study Area

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MANAGEMENT SUMMARY

This report documents a California Environmental Quality Act (CEQA)-level Phase I archaeological survey and paleontological resource assessment for 110 acres located in the City of Orange, Orange County, California. Michael Brandman Associates (MBA) has performed this investigation for JMI Properties/ Santiago Partners, LLC. The Rio Santiago Specific Plan is a 110-acre senior living complex encompassing Assessor Parcel Numbers 909-180-011, 909-170-023, 909-060-021, 909-060-066, and 909-060-020. The purpose of the study was to determine if cultural resources more than 45 years old were visible within a specific project area, and to determine the cultural resource sensitivity to generate mitigation measures consistent with the provisions of CEQA.

A cultural resource literature search was conducted by MBA Project Archaeologist Jennifer M. Sanka at the South Central Coastal Information Center (SCCIC), which is located on the campus of California State University, Fullerton on October 7, 2008. A search radius of 1 mile was used surrounding the project area boundaries. This search indicated that the majority of the project area had been previously surveyed, and that certain portions were the subject of several archaeological studies. One previously recorded prehistoric age resource is known within the project area (CA-Ora-369), and this site has been tested for the presence of subsurface deposits. The results of this testing program yielded minimal lithic debitage, and no diagnostic artifacts were recovered. This study concluded that the site consisted of a surface artifact scatter with little to no depth, no midden deposits and a lack of interpretive data (APC 1979).

MBA contacted the Native American Heritage Commission (NAHC) on October 6, 2008 requesting a Sacred Lands File search for traditional cultural properties. The response from the NAHC was received on October 10, 2008. The NAHC response indicated that no sacred lands or traditional cultural properties are known for the project area. MBA subsequently sent information-request letters to each tribal entity named by the NAHC on November 3, 2008. MBA received an emailed response from JohnTommy Rosas, the Tribal Administrator for the Tongva Ancestral Territorial Tribal Nation. The results of the information scoping process is discussed in detail in Section 4 and all written correspondence is included in Appendix A.

MBA contacted Dr. Samuel McLeod of the Natural History Museum of Los Angeles County on October 6, 2008 requesting a paleontological records check. The response was received on October 31, 2008. The paleontological review indicated that the lowest lying portions of the Santiago Creek drainage consist of younger Quaternary alluvium, while the majority of the surrounding acreage has surficial deposits of older Quaternary terrace sediments. The exception is an area found on the north side of Santiago Creek that has exposures of undifferentiated deposits of the Oligo-Miocene Sespe/ Vaqueros Formations. These exposures have marine and non-marine components. The younger Quaternary alluvial deposits do not typically contain fossil resources, and no localities are known from such deposits or similar deposits nearby. In contrast, localities are known within the City of

Orange from older Quaternary deposits at depth, and one locality is recorded within the project area boundaries from the Sespe/ Vaqueros Formations. Thus, there is varied potential for adverse impacts to buried paleontological resources, ranging from low to high. This potential would be considered low in the younger Quaternary deposits, and high for older Quaternary terrace deposits at depth and for any exposures of the Sespe/ Vaqueros Formations.

The Phase I survey was performed on October 9, 2008 with positive results for historic age resources. During the pedestrian survey, no prehistoric age resources and one potentially historic age foundation and an adjacent asphalt and concrete lot were detected. Portions of the concrete and asphalt lot may be of historic age, and were recorded in conjunction with the foundation. These features presumably relate to the previous use of the project area as a sand and gravel surface mining and processing center. The foundation may also relate to the citrus groves that once occupied portions of the project area. This resource was recorded onto a Department of Parks and Recreation (DPR) 523 Form and was submitted to the SCCIC for assignment of a primary number. The site does not appear to be significant and is considered neither a historical nor an archaeological resource for the purposes of CEQA. Therefore, the creation and submittal of the DPR 523 Form for this resource fully suffices for mitigating potential impacts associated with the proposed project. An additional DPR 523 Update Form was created for previously recorded resource CA-Ora-369, in an effort to keep their files current. This resource could not be relocated during the present survey or during previous surveys (LSA 1994; McKenna et al. 2000). This is presumably due to the negligible surface visibility at the mapped location, and to the collection of some or all of the surface artifacts during a subsurface testing program (APC 1979). This testing program yielded a small amount of debitage, no diagnostic artifacts and no observable midden deposits. The site was determined to be a surface scatter with little to no depth, and of no interpretive value for the prehistory of the area. Based upon these findings, it appears that CA-Ora-369 is not considered significant under the provisions of CEQA. Presently, the mapped location of the site is within the portion of the project area proposed as open space. Therefore, minimal impacts would occur to the remnants of the site, as its location would be entirely avoided by development.

Based upon the results of the records search, where a previously recorded resource is known within the project area, the location along Santiago Creek, which exhibits numerous prehistoric age sites in the region, and the negligible surface visibility during the pedestrian survey, MBA finds a high probability that significant, intact subsurface deposits could be uncovered during development. This potential is considered especially high within undisturbed or minimally disturbed portions of the project area, and is significantly lower in areas that have been subject to historic-era surface mining and processing activities. Therefore, the project area has been generally assigned high cultural resource sensitivity, and MBA recommends archaeological monitoring in specific portions during development.

When development of the property takes place, archaeological and paleontological monitoring are required, and such monitoring programs must take place under restricted conditions. Specific monitoring recommendations are carefully detailed in this report.

SECTION 1: INTRODUCTION

At the request of JMI Properties / Santiago Partners, LLC, MBA conducted a cultural resources assessment, including an archaeological pedestrian survey and a paleontological literature and records review. Totalling approximately 110 acres, the proposed use of the Rio Santiago Specific Plan project area is for the construction of a senior living complex, and the establishment of recreational open space and dedicated passive open space.

The purpose of this report is to identify the presence or absence of potentially significant cultural and, paleontological resources, and to determine the probability for encountering subsurface cultural resources within a specific project area. This report includes recommendations for cultural and paleontological mitigation programs, where necessary.

Federal, State, and local agencies have developed laws and regulations designed to protect significant cultural resources that may be affected by projects regulated, funded, or undertaken by an agency. These laws govern the preservation of historic and archaeological resources of national, state, regional, and local significance. This cultural resources assessment was performed in compliance with CEQA, and is consistent with the provisions of the City of Orange Local CEQA Guidelines (COOCDD 2006).

This report closely follows the California Office of Historic Preservation (OHP) procedures for cultural resource surveys and the OHP's Archaeological Resource Management Report (ARMR) reporting format for archaeological reports. This report is organized into sections and appendices, which are summarized as follows:

- Section 1 introduces the project, the location, and the cultural resources team.
- Section 2 presents the investigative methods and scope of work.
- Section 3 summarizes cultural setting.
- Section 4 provides cultural resource survey and paleontological records search results.
- Section 5 provides management recommendations.
- Section 6 contains the project certification.
- Section 7 presents a reference list.
- Appendix A provides required cultural resource compliance documents.
- Appendix B provides personnel qualifications.
- Appendix C presents the regulatory framework.
- Appendix D provides recent photographs of the project area.

1.1 - Project Location

Situated in the eastern portion of the City of Orange in the northern half of Orange County, California, the project area is located north of Interstate 5 (Santa Ana Freeway), south of State

Route 91, east of State Route 55 and west of State Route 261 (Exhibit 1). It can be found on the Orange, California, United States Geological Survey (USGS) 7.5-minute topographic quadrangle map, in an unsectioned portion of the Santiago De Santa Ana Land Grant in Township 4 South, Range 9 West (Exhibit 2). Specifically, the project area is located immediately north of Santiago Canyon Road, between Orange Park Boulevard to the east and Cannon Street to the west (Exhibit 3). The project site consists of Assessor's Parcel Numbers (APN) 909-180-011, 909-170-023, 909-060-021, 909-060-066, and 909-060-020.

1.2 - Project Description

JMI Properties/ Santiago Partners, LLC propose the development of a senior living complex, active recreational open space, dedicated passive open space, and related site amenities within the southern portions of the project area. As currently proposed, all construction related impacts and development are located in the portion of the project area, to the south of Santiago Creek. The northern portion of the project area, including the entire length of Santiago Creek will be conserved in dedicated open space (Exhibit 4).

1.3 - Environmental Setting

1.3.1 - Topography, Geology, and Soils

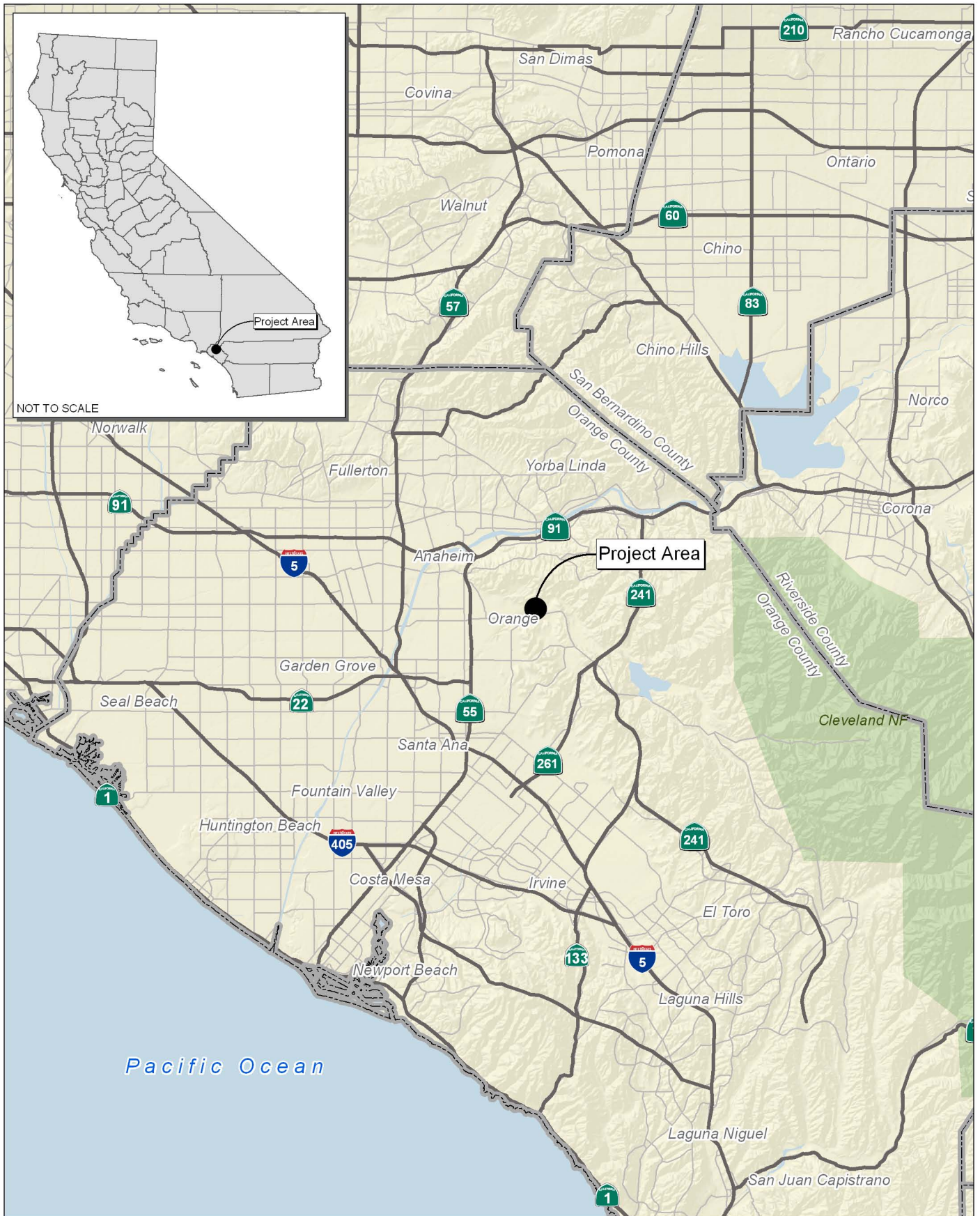
The project area is situated to the south of the Peralta Hills, north of the Tustin Foothills with Santiago Creek trending east-west through the northern portion. The elevation ranges from about 380 to 410 feet above mean sea level, and the project area is relatively flat. The topography has been altered by human-related disturbances, and the majority of the southern portion of the project area has been re-contoured due to previous sand and gravel mining operations. The southeastern corner of the project area continues to be shaped by concrete recycling activities, and this area had piles of imported materials and heavy machinery during the pedestrian survey.

Five soil mapping units are found within the project area, including the Botella, Modjeska, and Soboba soils series, and two soil mapping units associated with Pits and Riverwash land features (MBA JD 2008).

Previous geologic mapping indicates that the lowest lying portions of the Santiago Creek drainage consist of younger Quaternary alluvium, while the majority of the surrounding acreage has surficial deposits of older Quaternary terrace sediments. The exception is an area found on the north side of Santiago Creek that has exposures of undifferentiated deposits of the Oligo-Miocene Sespe/ Vaqueros Formations. These exposures have marine and non-marine components (McLeod 2008).

1.3.2 - Vegetation

MBA Natural Resources staff have identified a total of 10 vegetation communities/ habitat types that occur within the project area, including: Urban/ Developed, Disturbed Habitat/ Ruderal, Non-Native

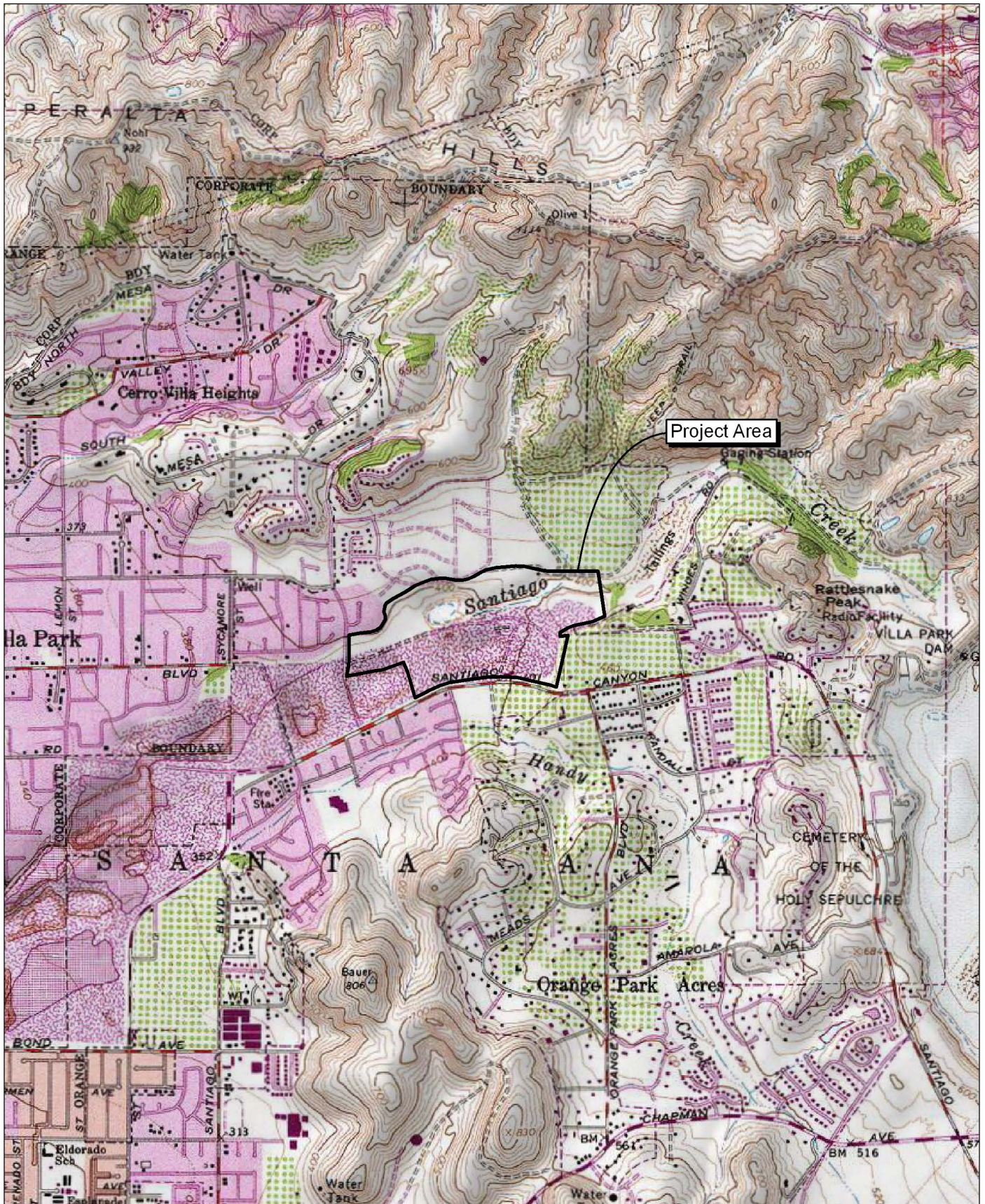


Source: Census 2000 Data, The CaSIL, MBA GIS 2008.



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Exhibit 1 Regional Location Map



Source: TOPO! USGS "Orange" (1996) 7.5' DRG.

Exhibit 2

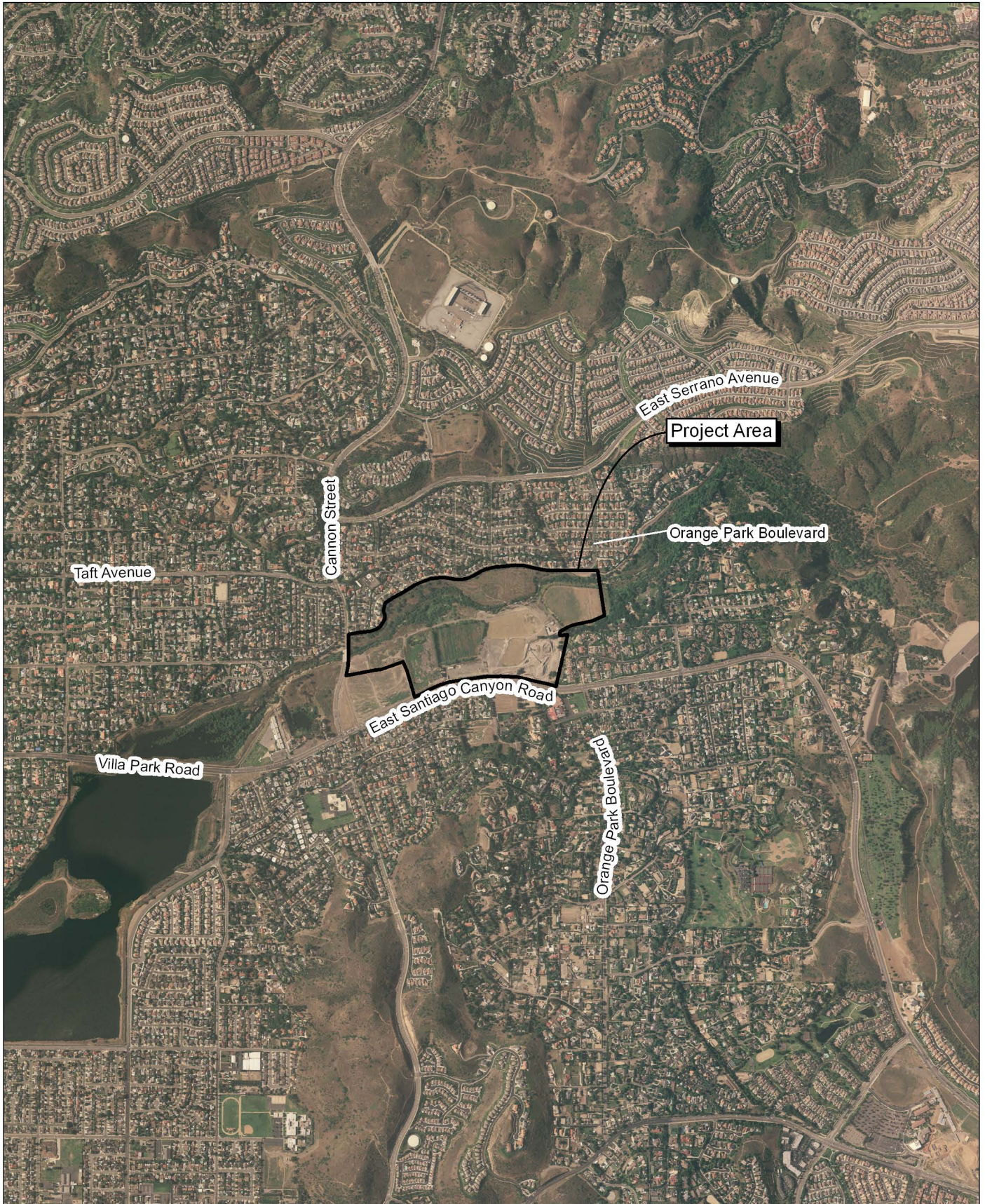
Local Vicinity Map Topographic Base



Michael Brandman Associates

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Source: National Agriculture Imagery Program for Orange County (2005).

Exhibit 3

Local Vicinity Map

Aerial Base



Michael Brandman Associates

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Source: JMI Properties/ Santiago Partners, LLC.



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Exhibit 4 Conceptual Site Plan

JMI PROPERTIES / SANTIAGO PARTNERS, LLC • RIO SANTIAGO SPECIFIC PLAN
PHASE I CULTURAL RESOURCES ASSESSMENT

Grassland, Ornamental, Coastal Sage Scrub, Southern Willow Scrub, Eucalyptus Woodland, Undifferentiated Open Woodland, Coast Live Oak Forest, and Southern-Cottonwood Willow Riparian Forest. The southern portion of the project area, which includes the majority of direct project related impacts exhibits habitat types or vegetation communities consistent with Disturbed Habitat/ Ruderal, Ornamental, Urban/ Developed Land and Non-native Grasslands. The remaining vegetation communities/ habitat types are generally found in the northern portion of the project area (MBA BIO 2008).

1.3.3 - Wildlife

Several avian species and isolated reptiles were observed during the archaeological pedestrian survey. In addition, scat was observed that appeared to be consistent with domestic canines.

1.3.4 - Land Use

The majority of the project area consists of previously disturbed land that was subject to historic era surface mining and processing activities. An active concrete recycling plant is located in the southeastern corner, and several abandoned concrete pads and metal tanks are located directly north of this area. Additional concrete pads and asphalt surfaces are surrounded by a chain-link fence within the southwestern project corner. This asphalt and concrete lot is found directly east of a concrete foundation of a no longer extant structure. The concrete and asphalt lot and the foundation are located directly to the north of Santiago Canyon Road. Single-family residences of relatively recent construction are situated to the north, northeast and northwest of the project area boundaries. Single-family residences are also found to the south, across Santiago Canyon Road. Santiago Oaks Regional Park and single-family estate style residences are located to the east, and the closed Villa Park Landfill is situated to the west.

1.4 - Assessment Team

MBA Project Archaeologist Jennifer M. Sanka, M.A. conducted the cultural resources existing literature search at the SCCIC on October 7, 2008. Ms. Sanka and MBA Senior Archaeologist Michael H. Dice, M.A. performed the pedestrian survey on October 9, 2008. Ms. Sanka compiled the findings and authored the cultural resources assessment. Professional qualifications for all team members are located in Appendix B.

SECTION 2: METHODS AND SCOPE OF WORK

The primary purpose of this cultural resources assessment is to determine whether cultural resources are located within the project area, determine whether or not any existing cultural resources should be considered significant resources, and develop specific mitigation measures that will address potential impacts to existing or potential resources. Thus, this study consists of nine distinct efforts:

1. Request of NAHC Sacred Lands File record search and contact with appropriate tribal groups and individuals.
2. Request review of existing paleontological records and assessment of paleontological sensitivity.
3. Review of previous cultural resource sites and studies in the region.
4. Examination of archived topographic maps and road maps.
5. Conduct a transect survey of the project area.
6. Completion of DPR 523 Forms for previously unrecorded archaeological sites, historic-age structures and/or isolated finds, and completion of updated forms for previously recorded resources.
7. Evaluation of the detected historic age site.
8. Evaluation of cultural resource sensitivity.
9. Development of recommendations associated with mitigation monitoring and/or impacts to existing cultural resources following CEQA Guidelines.

2.1 - Records Searches

2.1.1 - Information Center Search

The primary purpose of a cultural resource record search is to determine what cultural resources more than 45 years old have been recorded in the vicinity of or within the project area, and whether such resources will be or could be impacted by development. A records search was conducted at the SCCIC, which is located at California State University, Fullerton, to determine the existence of previously documented cultural resources in this portion of the City of Orange. This records search included reviews of archival maps and examinations of current inventories of the:

- National Register of Historic Places (NRHP)
- California Register of Historical Resources (CR)
- California Historical Landmarks (CHL)
- California Points of Historical Interest (CPHI)
- California State Historic Resources Inventory (HRI)

2.1.2 - Native American Heritage Commission Record Search

A Sacred Lands File search request was sent to the NAHC to determine whether any sacred sites are recorded within the project area or in the general vicinity. Information request letters were sent to the tribal groups and individuals named by the NAHC as having potential knowledge of sacred properties. These information request letters were associated with CEQA-level information scoping only, and were not affiliated with formal, government-to-government SB 18 consultations.

Tribal Consultation Overview and Responsibilities

The following overview is provided to assist the City in meeting its responsibilities for compliance with Tribal Consultation legislation, which is required when a project results in adopting a Specific Plan or a General Plan Amendment.

As of March 1, 2005, California Government Codes 65092, 65351, 65352, 65352.3, 65352.4, 65352.5, and 65560, formerly known as Senate Bill (SB) 18, require city and county governments to consult with California Native American tribes before individual site-specific, project-level land use decisions are made. In particular, this process applies to General Plan Amendments and adoptions of Specific Plans. The intent of this legislation is to provide all tribes, whether federally recognized or not, an opportunity to consult with local governments for the purpose of preserving and protecting their sacred places. See Appendix C for more information.

2.1.3 - Paleontological Records Search

The primary purpose of a paleontological analysis is to determine the potential for impacts to significant paleontological resources in the project area. Thus, an information request was made to the Vertebrate Paleontology Section at the Natural History Museum of Los Angeles. The results of the paleontology literature and records review assist in determining the need or lack thereof for additional paleontological studies or mitigation measures.

2.2 - Pedestrian Survey

The purpose of the archaeological pedestrian survey is to locate and document previously recorded or new cultural resource sites or isolates that are more than 45 years old within the project area, and to determine whether such resources will be or could be impacted by development. The project area was examined using a block-transect technique, where appropriate. Transect size was increased to the north of Santiago Creek, in the western-most portion and in the southwestern project corner due to the presence of thicker ruderal vegetation, which resulted in lower accessibility and negligible surface visibility. Santiago Creek could not be surveyed due to the presence of water and thick vegetation; however, the sides of the bluffs were visually scrutinized in areas exhibiting visibility. The southeastern corner of the project area was not surveyed due to active concrete recycling activities. Transect size was decreased to about 5 meter spacing near the recorded location of CA-Ora-369.

2.3 - Sites and Isolates

Prehistoric age and historic age archaeological resources can vary from area to area. Prehistoric age and historic age resources are defined as three or more items, such as lithics, stone tools, glass, cans, etc., that are not from a single source or material found within a 10-square-meter area. Historic age items must be more than 45 years old or have the potential to be more than 45 years old. This definition assumes that items found in an area with a diversity of materials represent more than a single activity at a location. Sites could also be loci if they presumably represent repeated discrete activity, such as a milling station, hearth, or isolated structure.

All resources that cannot meet the minimum requirements to be considered an archaeological site are termed as isolates or isolated finds.

2.4 - Local Cultural Resource Guidelines

The City has posted City of Orange Local CEQA Guidelines on the City website to provide the requirements of the environmental review process according to State law, local ordinance, and City practices. These Local CEQA Guidelines serve to augment CEQA Statutes and Guidelines (COOCDD 2006).

Section IV of this document addresses Historical Resources and Environmental Review, and discusses the identification of historical resources and districts, the definition of impacts to such resources and the assessment of cumulative impacts to historical resources. This document supplements CEQA law with provisions for resources considered significant at the local level, and provides guidelines for nominating resources for eligibility in the local register.

Any detected resources within the project area should be evaluated by the standards contained in Section IV, Subsection A, and the potential for a proposed project to adversely impact a historical resource or district should be assessed in accordance with the provisions of Section IV, Subsection B.

See Appendix C, Regulatory Framework, for further regulatory requirements.

SECTION 3: CULTURAL SETTING

The following is a brief overview of the prehistoric and historic context in which to understand the relevance of sites found in the general vicinity of the project area. This section is not intended to be a comprehensive review of the current resources available; rather to serve as a generalized overview. Descriptions that are more detailed can be found in ethnographic studies, mission records, and major published sources including Kroeber (1925), Wallace (1955), Warren (1968), Heizer (1978), Moratto (1984), and Chartkoff and Chartkoff (1984).

3.1 - Prehistoric Background

The ultimate purpose of establishing a cultural sequence is to allow for the meaningful comparison of material culture attributes on an intra- and inter-site basis, and to provide the basis for culture-model building. To this end, regional archaeologists generally follow Wallace's Southern California format (1955 and 1978) for discussing the prehistoric chronology of the project area. However, the established chronologies are often augmented or even abandoned. For example, Fagan (2003) does not use the traditional archaeological cultural sequences for his regional analysis, instead he describes the stages as generalized models related to recent environmental change and socio-economic models, all associated with an ever-changing environment. Thusly, it should be noted that all of the presented cultural sequences are regularly challenged, as are the meanings of the individual frames of reference. Wallace's prehistoric format is as follows:

- Early Period (before 6000 B.C.)
- Millingstone Period (6000 to 3000 B.C.)
- Intermediate Period (3000 B.C. to A.D. 500)
- Late Prehistoric Period (A.D. 500 to A.D. 1769)

Wallace also argued (Wallace, in Heizer 1978) that the stages prior to 2000 B.C. in southern California could be assigned to:

- San Dieguito Period (Period I: 9000 to 6000 B.C.)
- Standard Millingstone Period (Period II: 6000 to 3000 B.C.)
- Modified Millingstone Period (Period III: 3000 to 2000 B.C.)

Warren (1968) uses the following terms to subdivide the periods.

- San Dieguito Tradition (before 5500 B.C.)
- Encinitas Tradition (5500 B.C. to A.D. 600)
- Shoshonean Tradition (A.D. 600 to A.D. 1769)

The Late Period has been further subdivided into the San Luis Rey I (A.D.500 to A.D. 1500) and the San Luis Rey II (post 1500). The difference between the latter two is the introduction of locally made brownware pottery, the first indigenous pottery in southern California (Cameron 1999).

3.1.1 - Early Period (before 6000 B.C.)

Beginning with the first human presence in California, prehistoric artifacts and cultural activities appear to represent a big-game hunting tradition. Very few sites from the Early Period exist, especially in inland areas. Of the Early Period sites that have been excavated and dated, most exhibit a refuse assemblage suggesting short-term occupation. Such sites have been detected in caves and around fluvial lakes fed by streams that existed near the end of the last glaciation. Chipped stone tools at these sites are surmised to reflect a specialized tool kit used by hunters. Large-stemmed bifaces are common. Millingstones and dart points are not part of the Early Period tool assemblage.

3.1.2 - Millingstone Period (6000 to 3000 B.C.)

The onset of the Millingstone Period appears to correspond with an interval of warm and dry weather known as the Altithermal (Wallace 1978). Artifact assemblages begin to reflect an emphasis on plant foods and foraging subsistence systems, as evidenced by the grinding tools found at these sites, and including choppers and scraper planes. Notably, there is a reduced number of large bifaces in the excavated assemblages. Sites are occupied for a greater duration than Early Period sites, based on an increase in occupational debris.

Although numerous Millingstone sites have been identified in Orange County, few are actually dated. The best understood of these is CA-ORA-64, which has been radiometrically dated to about 6000 B.C. (Breece et al. 1988 and 1989). Excavations at this site located near Newport Bay, have been essential to the formulation of local research models (Koerper 1981). Research at this site suggests a settlement-subsistence system during the Millingstone Period reflecting a semi-sedentary lifestyle. The regional distribution of Millingstone sites reflects the theory that aboriginal groups may have followed a modified central-based wandering settlement pattern. Under this model, large groups would have occupied a base camp for a portion of the year, with smaller bands occupying subsidiary camps in order to exploit resources not generally available near the base camp. Sedentism apparently increased in areas possessing an abundance of resources that were available for longer periods. Arid inland regions would have provided a seasonally and spatially dispersed resource base, restricting sedentary occupation, compared to the coastal areas. Generally, the Millingstone assemblage in the Los Angeles basin is typified by large and heavy deep-basin metates, wedge-shaped manos and large choppers and scrapers. Flaked lithic tools are slightly larger and cruder than in later periods, and cogstones begin to appear.

3.1.3 - Intermediate Period (3000 B.C. to A.D. 500)

Dating between roughly 3000 B.C. and A.D. 500, the Intermediate Period represents a slow technological transition, which is presumably related to the slowly drying and warming climate. Site

artifact assemblages retain many attributes of the Millingstone Period. Technologically speaking, these sites are difficult to distinguish from earlier sites in the absence of radiometric dates. Additionally, these sites generally contain a reduced number of large-stemmed or notched projectile points but with an increase in portable mortars and pestles. The lack of large points combined with the mortars and pestles suggest that the indigenous populations may have preferred harvesting, processing, and consuming acorns and other seeds over hunting. Due to a general lack of data, neither the settlement and subsistence systems nor the cultural evolution of this period are well understood. It has been proposed by some researchers that group sedentarism increased with the exploitation of storable, high-yield plant food resources such as acorns. The duration and intensity of occupation at base camps increased during this period, especially in the later part of the period. Generally, the Intermediate Period artifact assemblage in the Los Angeles basin is vague, including elements of the Late Prehistoric Period and Millingstone Period, such as heavy grinding implements. A higher percentage of projectile points occur and smaller chipped stone tools are used.

3.1.4 - Late Prehistoric Period (A.D. 500 to A.D. 1769)

Extending from about A.D. 500 to Spanish contact in A.D. 1769, the Late Prehistoric Period reflects an increased sophistication and diversity in technology. Village sites are common. Late assemblages characteristically contain small projectile or dart points, which imply the use of the bow and arrow. In addition, assemblages include steatite bowls, asphaltum artifacts, grave goods, and elaborate shell ornaments. Use of bedrock milling stations is purported to have been widespread during this period, as it was in the previous period. Increased hunting efficiency and widespread exploitation of acorns provided reliable and storable food resources. Pottery, previously traded into the area, is made locally during the latest stage of this Period and is of simple construction technology. Cameron (1999) names several village sites in inland Orange County that are located within Gabrieliño territory. These exhibited pottery, which suggests that the pre-contact Gabrieliño may have used pottery as a part of their lifestyle. One of these Late Prehistoric Period sites, Tomato Springs (CA-Ora-244), has been the subject of numerous excavations (Cottrell 1985) that have continued into the 21st century.

3.2 - Native American Background

The project area is situated within an area that has been ethnographically mapped as the Gabrieliño traditional use area. The Gabrieliño tribal territory is mapped as extending north from Aliso Creek to just beyond Topanga Canyon along the Pacific Coast, and inland to the City of San Bernardino (Bean and Smith 1978). Their territory would have included portions of the Santa Ana River, and several islands, such as Catalina. It is likely that these tribal boundaries were fluid, and allowed for contact, trade, and diffusion of ideas between neighboring groups, such as the Juaneño to the south.

3.2.1 - The Gabrieliño

Kroeber (1925) and Bean and Smith (1978) form the primary historical references for this tribal group. The arrival of Spanish explorers and the establishment of missions and outposts during the

eighteenth century ended the prehistoric period in California. At this time, traditional Gabrieliño society began to fragment as a result of foreign diseases and the mass removal of local Indian groups to the Mission San Gabriel and Mission San Juan Capistrano.

The Gabrieliño spoke a language that belongs to the Cupan group of the Takic subfamily of the Uto-Aztecan language family (a language family that includes the Shoshonean groups of the Great Basin). The total Gabrieliño population in about 1770 AD was roughly 5,000 persons, based on an estimate of 100 small villages, with approximately 50 to 200 people per village. Their range is generally thought to have been located along the Pacific coast from Malibu to San Pedro Bay, south to Aliso Creek, then east to Temescal Canyon, then north to the headwaters of the San Gabriel River. Also included were several islands, including Catalina. This large area encompasses the City of Los Angeles, much of Rancho Cucamonga, Corona, Glendale, and Long Beach. By 1800, most traditional Gabrieliños had either been killed, or subjugated by the Spanish.

The first modern social analyses of Gabrieliño culture took place in the early part of the twentieth century (Kroeber 1925). By this time, acculturation and disease had devastated this group, and the population studied was a remnant of their pre-contact form. Nonetheless, the early ethnographers viewed the Gabrieliño as a chief-oriented society of semi-sedentary hunter-gatherers. Influenced by coastal and interior environmental settings, their material culture was quite elaborate and consisted of well-made wood, bone, stone, and shell items. Included among these was a hunting stick made to bring down numerous types of game.

Located in an area of extreme environmental diversity, large villages may have been permanent, such as that found on or near Red Hill in Rancho Cucamonga, with satellite villages utilized seasonally. Their living structures were large, domed, and circular thatched rooms that may have housed multiple families. The society exhibited ranked individuals, possibly chiefs, who possessed a much higher level of economic power than unranked persons.

3.3 - Historic Background: The City of Orange

The earliest European explorers to enter the Alta California region were the Spanish who navigated along the Pacific coast during the 17th and 18th centuries. During the latter portion of the 18th century, the Spanish sent Father Junipero Serra to Alta California to create a chain of Missions and Mission outposts to bring Christianity to the indigenous population, and create a foundation for colonization of the region. Between 1769 and 1823, Spanish explorers and missionaries established 21 missions, four presidios, and four pueblos between San Diego and Sonoma. Also during this period, American explorations occurred when trappers traveled west in search of abundant sea otter and beaver pelts. In 1805, when Lewis and Clark crossed the Rocky Mountains and continued on to the Pacific coast, they reported that the area was richer in beaver and otter than any other country on earth. The fur trappers were close behind the explorers, and by 1840, the beaver was over-exploited and was no longer worth hunting (Bean and Rawls 1983).

By the early decades of the 19th century, the Missions began establishing ranchos for the purpose of expanding their agricultural holdings. According to the history provided on the City of Orange website, the first landowner in this area was a retired Spanish soldier named Juan Pablo Grijalva. Grijalva was granted permission to ranch “the place of the Arroyo de Santiago” by the Spanish colonial government in 1801. This land ran from the Santa Ana River and the foothills above Villa Park, to the sea at Newport Beach. Though Grijalva lived in San Diego, he built an adobe ranch house on what is now Hoyt Hill, at the corner of Hewes and Santiago Canyon Road (City of Orange History 2008).

Following Grijalva’s death, the rancho was taken over by his son-in-law, Jose Antonio Yorba, and grandson, Juan Pablo Peralta. These lands then became known as the Rancho Santiago de Santa Ana, and were granted to Yorba and Peralta on July 1, 1810. This 75,000-acre grant was made by Governor Arrellaga, and encompassed the majority of the Santa Ana Canyon of eastern Orange County, as well as much of northern Orange County and Newport Bay (Lech 2004). The children and grandchildren of Yorba and Peralta moved to various parts of the sizable rancho, and through time the descendants absorbed additional acreage. The family holdings eventually encompassed lands extending from Riverside to the ocean.

In the early 1860s, Leonardo Cota, an extended family member, borrowed money from the largest landowner in southern California. Abel Stearns lent Cota money, and held his share of the Rancho as collateral. When Cota defaulted on his loan in 1866, Stearns filed a lawsuit in the Los Angeles Superior Court to demand a partition of the land, in order to claim Cota’s section. It took two years to determine how much land was due to each family member, and the rancho was then divided into 1,000 units for the heirs and the claimants in the lawsuit (City of Orange 2008).

The Los Angeles attorneys involved in the lawsuit, Alfred Chapman and Andrew Glassell, received a portion of the Rancho Santiago de Santa Ana as payment for their services. They quickly subdivided their land into a 1-square-mile town, with surrounding 10-acre farm lots. This community was named Richland until 1873, when the town’s application for a post office was denied due to the existence of another Richland in Sacramento County. According to local legend, Richland was renamed Orange after a poker game where Glassell, Chapman, and two other men allowed the winner to decide the new town name. Though the winner is not recorded, Richland was named Orange in January of 1875.

By 1873 Richland/Orange was beginning to grow by opening the first local store, named Fisher Brothers, a civic organization, called the Orange Grange, and the first church, which was of the Methodist Episcopal denomination. This was also the year that local farmers began planting orange groves in the area. The area then continued to grow when the Southern Pacific Railroad built a depot in Orange, in 1880, and again with the arrival of the Santa Fe railroad in 1887.

During the land boom of the 1880s, Orange attracted many travelers, founded local newspapers, built a public library, a bank and incorporation occurred on April 6, 1888. When the boom ended, local

farmers continued to plant orange trees. By 1929, Orange County produced more than \$12 million from the sale of oranges. However, with the depression and inclement weather in the 1930s, the industry fell into economic decline (City of Orange 2008).

By the 1950s, a second real estate boom occurred, and large tracts of houses were constructed into the 1970s. Thereafter the City of Orange continued to grow at a steady pace, and development is still occurring, especially at the eastern edge of the city.

3.4 - Historic Era Aerial Photograph Review

MBA additionally conducted a historic era aerial photograph review (Exhibit 5), from an image taken from the National Imagery Program for Orange County. This photograph was taken on December 12, 1952. During the historic era, the project area was part of an extensive sand and gravel mining operation, which began in approximately 1952 (LSA 1992). This process removed sand and gravel from alluvial deposits, and then processed the sediments in an open area located to the south of Santiago Creek. Evidence of the surface mining activity is observable in this photograph in the central portion of the project area, to the south of Santiago Creek. In this area, there is an absence of vegetation, multiple piles of soil, and numerous dirt tracks and/or unimproved access roads. Santiago Creek borders the surface mining area to the north, and numerous citrus groves are found to the southeast, south and southwest along Santiago Canyon Road. In the southwestern corner of the project area, to the north of Santiago Canyon Road, and at the southern terminus of a windrow of eucalyptus trees is a clearing with apparent structures. These structures are situated between citrus groves, and appear to coincide with the location of a concrete foundation and an asphalt and concrete lot recorded during the pedestrian survey as Site 001. Additional citrus groves are found within the project area boundaries, to the north of Santiago Creek. These citrus groves appear to cover the recorded location of prehistoric age site CA-Ora-369, which was detected during the cultural resources literature search at the SCCIC.



Source: National Agriculture Imagery Program for Orange County (2005).



Michael Brandman Associates

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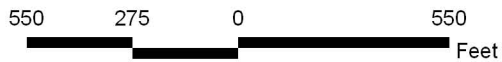


Exhibit 5 Historical Era Aerial Photograph

JMI PROPERTIES / SANTIAGO PARTNERS, LLC • RIO SANTIAGO SPECIFIC PLAN
PHASE I CULTURAL RESOURCES ASSESSMENT

SECTION 4: RESULTS

4.1 - Record Search

4.1.1 - Information Center Search

On October 7, 2008, MBA Project Archaeologist Jennifer M. Sanka conducted a records search at the SCCIC, which is located at California State University, Fullerton. To identify any historical or archaeological resources or historic properties, Ms. Sanka examined the current inventories of the NRHP, CR, CHL, and CPHI. In addition, Ms. Sanka reviewed the HRI and archival maps for the County and the City to determine the existence of previously documented local historical resources.

Review of the 1896 United States Geological Survey (USGS) Anaheim, CA 30-minute and the 1902 (reprinted 1946) 30-minute Corona, Calif. Quadrangle maps revealed neither structures nor any other development within the project area boundaries. Both maps depict Santiago Canyon Road in its present location as an unnamed road, and both maps show a moderate amount of development associated with areas labeled Villa Park, El Modena and Orange to the west. The mountainous lands to the east are comparatively undeveloped. The 1942 USGS Anaheim, Calif. 15-minute Quadrangle map shows four structures along Santiago Canyon Road, alongside the southern project area boundary. Four additional structures are depicted in the southeastern corner of the project area, adjacent to a hammer and pick symbol. At this time, the lands to the west show an increased amount of development in comparison to earlier maps, and the lands to the east remain minimally developed.

According to SCCIC files, the majority of the project area has been previously surveyed, and portions exhibit numerous archaeological studies. A linear study was conducted along Santiago Canyon Road, and this extended across the majority of the southern project area boundary (ARMC 1999). This study returned negative results for cultural resources near the Rio Santiago project area. Two studies have been conducted that assessed Santiago Creek (Drover 1976 and ECOS 1985). The ECOS (1985) testing program did not address any resources within the project area, while Drover (1976) detected one resource in the Rio Santiago project area (CA-Ora-369). McKenna et al. assessed a similar project area to the present Rio Santiago Specific Plan project area in 1999 (McKenna et al. 2000). The McKenna et al. project area appears to have excluded a negligible amount of Rio Santiago Specific Plan Project acreage in the western-most and eastern-most extensions of the project area, based upon mapped location at the SCCIC and within their report. This study discussed the existence of previously recorded resource CA-Ora-369 in the northern portion of the project area, and that this resource could not be relocated in 1999. The study returned negative results for cultural resources within their project area.

Previously recorded resource CA-Ora-369 has been the subject of several studies, and was mentioned in numerous reports. Drover (1976) located numerous shell fragments at the recorded site location, and found the site to be a minimal deposit with no interpretive use. APC (1979) collected surface

artifacts and tested the resource for subsurface deposits. This study found that CA-Ora-369 did not exhibit sufficient depth, midden deposits or interpretive data to warrant additional studies. LSA (1994) and McKenna et al. (2000) could not relocate CA-Ora-369. Including all of the aforementioned studies, a total of 36 studies have been conducted within a 1-mile radius. Despite the high number of studies conducted, less than 50 percent of the acreage within the search radius has been assessed for cultural resources. The majority of the unexamined areas are urbanized, and were presumably developed prior to the more stringent cultural resource assessment requirements that currently exist.

In addition, the SCCIC records search indicated that there is one previously recorded prehistoric age resource mapped within the project area boundaries, and one resource mapped adjacent to the eastern-most portion of the project area. CA-Ora-1172 is a prehistoric age artifact scatter mapped by the SCCIC as potentially extending into the eastern portion of the project area. However, the DPR 523 Form and the corresponding report map the resource on a knoll to the southeast of the project area boundaries (Hatheway and McKenna 1988). Thus, it does not appear that this site should extend into the present project area, and no artifacts were observed near the eastern-most portion during the pedestrian survey. CA-Ora-369 is mapped in the northeastern portion of the project area, and this site has been tested for subsurface deposits (APC 1979). Including these resources, there are eleven cultural resources known within the 1-mile search radius, including eight prehistoric age and three historic age resources. Two of the historic age resources are NRHP listed properties, and these are located more than 0.25 mile from the project area. The following table outlines these previously recorded resources, as found in the 1-mile search radius on the Orange, California topographic quadrangle.

Table 1: Previously Recorded Cultural Resources

Site Name	Type	Within ~1-mile radius	Within ~0.5-mile radius	Within ~0.25-mile radius	On Site?
30-179872	Historic age - A single-family Craftsman-style residence built in ca. 1940. This structure was found not significant under CEQA through evaluation by the recorder.	●	—	—	No
CA-Ora-1017	Prehistoric age - Artifact scatter consisting of flakes, hammerstones, a chopper, a metate and a core.	●	—	—	No
CA-Ora-1018	Prehistoric age - Artifact scatter consisting of manos, metates, a hammerstone and a possible stone ball.	●	—	—	No

Table 1 (Cont.): Previously Recorded Cultural Resources

Site Name	Type	Within ~1-mile radius	Within ~0.5-mile radius	Within ~0.25-mile radius	On Site?
CA-Ora-1019	Prehistoric age - Artifact scatter consisting of manos, metates, hammerstones, flakes and a core.	●	—	—	No
CA-Ora-1020	Prehistoric age - Lithic scatter containing approximately 10 to 15 flakes.	●	—	—	No
CA-Ora-1273	Prehistoric age - Artifact scatter and a rock ring. Noted artifacts include mano fragments, metate fragments, cores and flakes. Site was excavated in 1991.	—	●	—	No
CA-Ora-1172	Prehistoric age - Artifact scatter consisting of flakes, hammerstones, manos, metates and a “donut stone”.	—	—	●	The site is mapped at the SCCIC as potentially extending into the eastern project area boundary. The site record does not map the site adjacent to the present project area boundary.
CA-Ora-369	Prehistoric age - Artifact scatter consisting of cores, shells and flakes.	—	—	—	Yes. This resource is mapped near the northern project area boundary.
CA-Ora-702	Prehistoric age - A scraper, a mano and a chopper found at the surface with indications of subsurface component.	—	●	—	No
30-176770/ NR-02001725	Historic age - NRHP listed property (Historic Property) - Villa Park School.	●	—	—	No
30-160083/ NR-83001212	Historic age - NRHP listed property (Historic Property) - Smith and Clark Brothers Ranch.	—	●	—	No

4.1.2 - Native American Heritage Commission Record Search

On October 6, 2008, MBA sent a letter to the NAHC in an effort to determine whether any sacred sites are listed in their Sacred Lands File for this portion of the City of Orange. Our efforts were associated with CEQA-level information scoping only. The response from the NAHC was received

on October 10, 2008. To ensure that all potential Native American resources are adequately addressed, letters to each of the 12 listed tribal contacts were sent on November 3, 2008. MBA received an emailed response from JohnTommy Rosas, the Tribal Administrator for the Tongva Ancestral Territorial Tribal Nation on November 3, 2008. Mr. Rosas indicated that the Tribe objected to the project, and that development in that area violated their indigenous rights. He cited the project location along Santiago Creek as an especially sensitive issue. Further, he noted the need for additional consultation efforts as required by law, including Section 106 of the NHPA and SB 18. He also requested additional information on the proposed project. MBA Project Archaeologist Jennifer M. Sanka replied to this email, providing additional information on the Conceptual Development Plan and asking for any information that could be included in the Cultural Resources Assessment regarding the sanctity of Santiago Creek. This information was requested, as MBA was aware that Santiago Creek and adjacent environs would be considered a culturally sensitive area to local Tribes. This assumption is based upon the presence of numerous prehistoric age sites along the Creek and a known reliance on its resources by the indigenous people as outlined in ethnographic studies. A copy of the email conversations with Mr. Rosas and all written correspondence is included in Appendix A.

4.1.3 - Paleontological Records Search

The paleontological records check was requested on October 6, 2008. A response was received on October 31, 2008 from Dr. Samuel McLeod of the Vertebrate Paleontology Section of the Natural History Museum of Los Angeles County (Appendix A). The paleontological review indicated that the lowest lying portions of the Santiago Creek drainage consist of younger Quaternary alluvium, while the majority of the surrounding acreage has surficial deposits of older Quaternary terrace sediments. The exception is an area found on the north side of Santiago Creek that has exposures of undifferentiated deposits of the Oligo-Miocene Sespe/ Vaqueros Formations. These exposures have marine and non-marine components (McLeod 2008).

Younger Quaternary alluvial deposits do not typically contain fossil resources, and no localities are known from such deposits or similar deposits nearby. In contrast, localities are known within the City of Orange from older Quaternary deposits at depth, and numerous localities are known within the general vicinity, as well as within the project area from the Sespe/ Vaqueros Formations. The nearest locality from older Quaternary deposits is LACM 4943. This locality is recorded between State Route 55 and the Santa Ana River, near the intersection of Glassell Street and Fletcher Avenue. This locality yielded the fossilized remains of a horse (*Equus*) at depths of about 8 to 10 feet from the modern ground surface. LACM 5449 is recorded in the northeastern portion of the project area from exposures of the Sespe/ Vaqueros Formations. This locality yielded the fossilized remains of an undetermined carnivore (*Carnivora*) and camel (*Camelidae*). LACM 5450, 5451, and 6927 to 6930 are all known from the Sespe/ Vaqueros Formations, and are found near the project area boundaries. These localities have produced the fossil remains of an undetermined camel, skunk, rabbit, horse, peccary and oreodont. The presence of one locality within the project area and numerous localities in

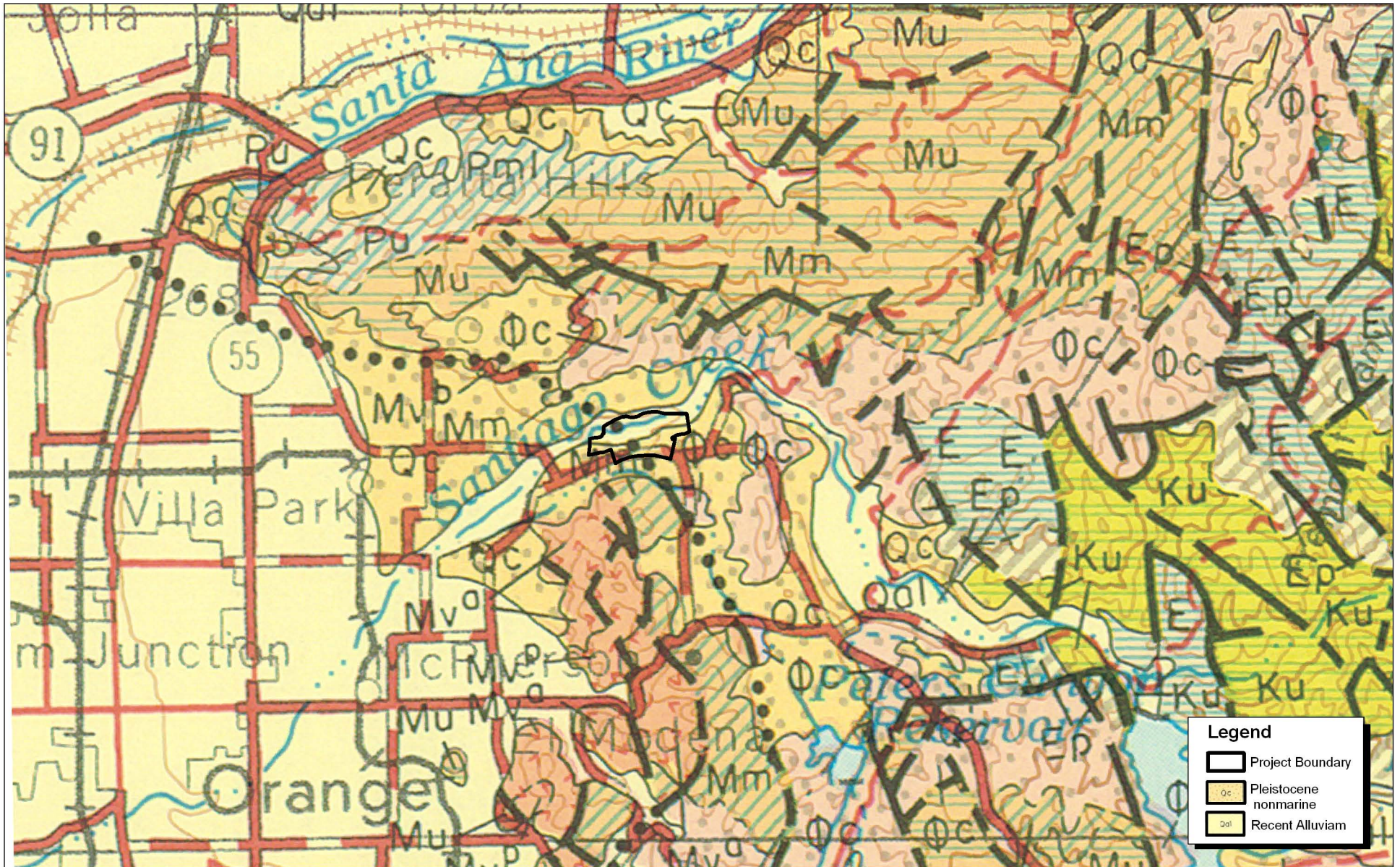
the vicinity from sediments similar to those found within the project area aptly demonstrate the fossil bearing potential of these sediments.

Based upon the results of this review, it is possible that significant paleontological resources may be adversely impacted by development-related ground disturbance. Therefore, MBA has determined that the project area has varied paleontologic sensitivity, ranging from low to high. This potential is considered low in the younger Quaternary deposits, and high for older Quaternary terrace deposits at depth and for any exposures of the Sespe/ Vaqueros Formations. The locations of these deposits are outlined in Exhibit 6 with reference to the Santa Ana, California Quadrangle. The recent alluvial deposits correspond to the younger Quaternary alluvium and the Pleistocene alluvium to the older Quaternary terrace deposits. The exposures of the Sespe/ Vaqueros Formations are not represented on this geologic map, but are known to occur in the northeastern corner of the project area, to the north of Santiago Creek. Their location has been documented by previous paleontologic assessments as outlined by McLeod (2008). Exhibit 6 can assist in determining those portions in the southern half of the project area that will require monitoring efforts at depth, including those areas mapped as Pleistocene alluvium. As noted, a paleontologic monitoring program is recommended by MBA to mitigate potential adverse impacts to paleontological resources in the older Quaternary terrace deposits at depth and in any exposures of the Sespe/ Vaqueros Formations. A monitoring program for excavation should be developed prior to any grading within the project area, and should be consistent with the provisions of CEQA.

4.2 - Pedestrian Survey

MBA Project Archaeologist Jennifer M. Sanka, M.A. and MBA Senior Archaeologist Michael H. Dice, M.A. surveyed the project area on October 9, 2008. The site was examined using a block-transect technique, with 10 to 15 meter spacing, where appropriate. Transect size was increased to the north of Santiago Creek, in the western-most portion and in the southwestern project corner because of the presence of thicker ruderal vegetation, which resulted in lower accessibility and negligible surface visibility. Santiago Creek could not be surveyed due to the presence of water and thick vegetation; however, the sides of the bluffs were visually scrutinized in areas exhibiting visibility. The southeastern corner of the project area was not surveyed due to active concrete recycling activities. Transect size was decreased to about 5 meter spacing near the recorded location of CA-Ora-369.

The majority of the project area consists of previously disturbed soils that have been subject to historic era sand and gravel mining operations, as well as processing activities. Santiago Creek trends east-west through the northern portion of the project area (Appendix D: Photographs 2 and 6), and the remains of a concrete bridge are found in the central portion, crossing the Creek (Appendix D: Photograph 14). An active concrete recycling plant is located in the southeastern corner (Appendix D: Photographs 11 and 12), and several abandoned concrete pads and metal tanks are located directly north of this area (Appendix D: Photographs 9 and 10). Additional concrete pads and asphalt



Source: Williams & Heintz Map Corporation, Wash., D.C. 20027 (1985).



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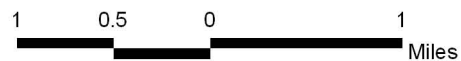


Exhibit 6 Geological Map

surfaces are surrounded by a chain-link fence within the southwestern project corner. This asphalt and concrete lot is found directly east of a concrete foundation of a no longer extant structure. The concrete and asphalt lot and the foundation are found directly to the north of Santiago Canyon Road. The project area was easily accessible from the entrance to the concrete recycling facility along Santiago Canyon Road. Access could also be obtained through a chain-link fence gate and a dirt access road found along the northern project boundary (Appendix D: Photograph 3).

The project area exhibited varied surface visibility, ranging from poor to good. The surface visibility was very poor in the northern portion (Appendix D: Photographs 1, 4, and 5), in Santiago Creek (Appendix D: Photographs 2 and 6), in the eastern-most and western-most extensions (Appendix D: Photographs 7, 8, 19 and 20), and in the southern-most, western corner (Appendix D: Photograph 17). In these areas, visibility ranged from about 0 percent to 10 percent, due to the presence of dense vegetation. Visibility increased to about 50 percent in the central portion of the project area (Appendix D: Photograph 13, 15 and 16), and to about 100 percent along the dirt access roads found throughout (Appendix D: Photographs 3 and 18).

The soils observed in the project area along the dirt access roads consisted of small gravels not more than 3 centimeters in diameter, found within a light brown alluvium. Numerous rock inclusions were noted throughout, ranging in size from pebbles to cobbles. These inclusions were rounded due to water-related erosion and some were angular. Concentrations of imported angular materials were noted in the northeast corner, to the north of Santiago Creek, in the central portion of the project area (Appendix D: Photograph 13), and along the access roads in the southwestern-most project corner, western-most extension and to the north of the active concrete recycling facility. Additional angular rocks were noted along the other access roads, and appeared to have been altered due to vehicular activity. A concentration of concrete fragments was observed in the central portion of the project area (Appendix D: Photograph 16). The surface soils have been adversely impacted by vehicular activity, heavy machinery (Appendix D: Photograph 16), historic-era sand and gravel mining operations, active concrete recycling activities, and historic-era citrus cultivation. Furrows were observed in the northern and eastern-most extensions of the project area, and these presumably relate to the past use of the project area for the production of citrus crops.

Relatively minimal modern refuse was noted throughout the project area, and was more prevalent in the northern portion, along the northern boundary and in a vegetation-laden field in the southern-central portion. Observed refuse included plastic oil containers, clothing, a Christmas ornament, and several full plastic trash bags presumably containing modern, domestic refuse.

During the pedestrian survey, no prehistoric age resources and one potentially historic age foundation and an adjacent asphalt and concrete lot were detected. Portions of the concrete and asphalt lot may be of historic age, and were recorded in conjunction with the foundation as Site 001. In addition, previously recorded prehistoric-age resource CA-Ora-369 could not be relocated.

4.2.1 - CA-Ora-369

CA-Ora-369 was originally recorded on October 13, 1972 by A. Marquette and J. Houser as a prehistoric-age artifact scatter within an area cleared of vegetation (Marquette and Houser 1972). At that time, the site consisted of a polyhedral core, shell scatter, flake waste and additional cores, and measured approximately 300 meters by 300 meters. The mapped location of this site is found in the northeastern quarter of the project area, to the north of Santiago Creek. The site was relocated in 1976 by Drover as an extremely minimal prehistoric deposit (Drover 1976). Drover notes that the site lacks interpretive data, and that it should be subsurface tested prior to any disturbance. This site was then surface collected and tested for the presence of subsurface artifact deposits in 1979 (APC 1979). The Archaeological Planning Collaborative (APC) mapped the presence of surface artifacts, conducted soil pH analysis, and then excavated two test units in areas proposed to be impacted by the Deimer Pipeline Project. A total of 11 lithics, 12 shell fragments, 3 fire-affected rocks and one hammerstone were collected at the surface. Two lithics were recovered from the subsurface, and no diagnostic artifacts or midden deposits were detected. Based upon this data, the site was determined to be a surface scatter with little to no depth, and of no interpretive value for the prehistory of the area. Rather, the site appeared to be a peripheral site related to the more permanent sites found elsewhere along Santiago Creek. For this reason, the construction of the pipeline was found to result in no significant loss of archaeological data and APC suggested that the site be avoided as much as possible during the installation of the pipeline (APC 1979). Based upon the results of this subsurface testing program the interpretation of the data, the site does not appear to be significant under the provisions of CEQA.

This resource could not be relocated during the present survey or during previous surveys (LSA 1994; McKenna et al. 2000). This is presumably due to the negligible surface visibility at the mapped location (Appendix D: Photograph 21), and to the collection of some or all of the surface artifacts during the subsurface testing program (APC 1979).

A DPR 523 Update Form was created for this previously recorded resource, in an effort to keep the SCCIC files current. Presently, the mapped location of CA-Ora-369 is within the portion of the project area proposed as open space. Therefore, minimal impacts would occur to the remnants of the site, as its location would be entirely avoided by development. For this reason, the creation of the DPR 523 Update Form suffices for mitigating potential adverse impacts relating to the Rio Santiago Specific Plan Project.

4.2.2 - Historic Age Foundation/ Concrete and Asphalt Lot (Site 001)

Located in the southwestern corner of the project area is a concrete foundation from a no longer extant building and an adjacent concrete and asphalt lot surrounded by a chain-link fence. These features are found directly to the north of Santiago Canyon Road, and presumably relate to the previous use of portions of the project area for the production of citrus, and then as a sand and gravel surface mining and processing center. The foundation and some of the concrete pads may relate to

the citrus groves that once occupied portions of the project area, and structures appear to be present at this location in the Historic Era Aerial Photograph presented as Exhibit 5. The exact date of the currently observable features are unknown, but portions of the site are of historic age based upon the results of the aerial photograph review. For this reason, all of the existing features were recorded as constituents of an archaeological site.

The concrete foundation is currently surrounded by vegetation and filled with cut eucalyptus trees and other assorted vegetation waste (Appendix D: Photograph 22). Three of the four sides of the foundation are still extant, as the northern side appears to be missing. Modern refuse was noted to the north of the foundation, and a dirt road is found to the east. Eucalyptus windrows are found trending north-south, within the general vicinity of the site. A concrete pad is located approximately 15 to 20 meters to the southeast of the foundation, and no evidence of a date stamp was observed. A utility pole is also located near this concrete pad, and the pole exhibits the identification number 718839E. This pole also exhibits two nails, reading 25 and 48, from left to right. These presumably indicate that the pole is 25 feet tall, and was either erected or inspected in (19)48 (Appendix D: Photograph 24). It is probable that these features are represented in Exhibit 5, at the southern terminus of a north-south trending eucalyptus windrow. Their presence in Exhibit 5 indicates that at least some of the features in this area were present by 1952, and may indicate their association with citrus production within the project area. Additional concrete pads were also noted to the east of the foundation and utility pole, and some or all of these concrete pads may have been contemporaneous to the foundation. These pads may have been reused, as they could have been incorporated into the existing concrete and asphalt lot.

Located to the east of the concrete foundation and utility pole is a concrete and asphalt lot surrounded by a chain-link fence (Appendix D: Photograph 23). No date stamps could be located within this lot, despite the visual scrutiny of the entire surface. This area has painted parking spaces in the western portion, a concrete ramp/roll-off in the southwestern corner, and abandoned soil sorting equipment in the central portion. One of the machines exhibits a conveyor belt, presumably used to sort the aggregate (Appendix D: Photograph 26), and the other machine retained a brand-name, reading: Product of Deister Machine Company, Fort Wayne, Indiana (Appendix D: Photograph 25).

According to the Deister Machine, Inc. website, Deister Machine is a family owned business that began in Fort Wayne, Indiana in 1912. The company began with the construction of a separating table, which used differential motion to separate ore from lighter particles. The ridges found on the separating table caught the heavier ore, and then water was used to wash away the lighter soil particles (Deister Machine, Inc. 2008). The machine present within the concrete and asphalt lot is presumably a separating machine, and appears to be consistent with a product known as a base-mounted, step-deck vibrating grizzly. The product label present within the project area appears to be consistent with relatively modern Deister product labels. However, the website does not provide any information on the evolution of the Deister Machine, Inc. brand-name label.

This resource was recorded onto a Department of Parks and Recreation (DPR) 523 Form and was submitted to the SCCIC for the assignment of a primary number. The site does not appear to be significant and is considered neither a historical or archaeological resource for the purposes of CEQA. Therefore, the creation and submittal of the DPR 523 Form for this resource fully suffices for mitigating potential impacts associated with the proposed project.

Statement of Significance

An archaeological site may be considered an historical resource if it is significant in the architectural, engineering, scientific, economic, agricultural, educational, social, political, military or cultural annals of California pursuant to PRC § 5020.1(j), or if it meets the criteria for listing on the CR pursuant to California Code of Regulations (CCR) at Title 14 CCR § 4850. In order for a resource to be considered eligible for listing in the CR, the resource must demonstrate fulfillment of one or more of the following criteria:

- A. Is associated with events that have made a significant contribution to the broad patterns of California's history and cultural heritage.
- B. Is associated with the lives of persons important in our past.
- C. Embodies the distinctive characteristics of a type, period, region, or method of construction, or represents the work of an important creative individual, or possesses high artistic values.
- D. Has yielded, or may be likely to yield, information important in prehistory or history.

The most recent amendments to the CEQA guidelines direct lead agencies to first evaluate an archaeological site to determine if it meets the criteria for listing in the CR. If an archaeological site is an historical resource, in that it is listed or eligible for listing in the CR, potential adverse impacts to it must be considered as stated in PRC §§ 21084.1 and 21083.2(l). If an archaeological site is considered not to be an historical resource but meets the definition of a "unique archeological resource" as defined in PRC § 21083.2, then it would be treated in accordance with the provisions of that section.

A non-unique archaeological resource means an archaeological artifact, object, or site does not meet the criteria for eligibility for listing on the CR, as noted in subdivision (g) of PRC § 21083.2. A non-unique archaeological resource requires no further consideration, other than the recording of its components and features.

The foundation and concrete and asphalt lot are of an undetermined age, and they do not appear to offer additional interpretive data to the history of this region beyond the information gathered during this study. None of the components of the resource appears to be historically or architecturally significant; therefore, they are considered a non-unique resource. For this reason, the recordation of the site and the submittal of the DPR 523 Form to the SCCIC for the assignment of a primary number

suffices for mitigating potential adverse impacts. No additional work is recommended for this resource.

SECTION 5: SUMMARY AND RECOMMENDATIONS

5.1 - Summary

In accordance with CEQA and the provisions of the City of Orange Local CEQA Guidelines, MBA assessed the effects of the proposed project on cultural resources. The results of the cultural resource record search indicate that there is one previously recorded resource within the project area boundaries, and a total of eleven resources within the search radius. Eight prehistoric age and three historic age resources are recorded within 1-mile of the project area. Two of the historic age resources are NRHP listed properties, and these are located more than 0.25 mile from the project area. These resources will not be affected by the proposed project. In addition, the record search revealed that the project area has been previously surveyed, and that portions of the project have been the subject of numerous studies. A linear study was conducted along Santiago Canyon Road with negative results for the Rio Santiago Specific Plan project area (ARMC 1999). Two studies have been conducted that assessed Santiago Creek (Drover 1976 and ECOS 1985). The ECOS (1985) testing program did not address any resources within the project area, while Drover (1976) detected one resource in the Rio Santiago project area (CA-Ora-369). CA-Ora-369 could not be relocated by later studies conducted by LSA (1994) and McKenna et al. (2000). McKenna et al. (2000) assessed a similar project area to the present Rio Santiago Specific Plan project area in 1999, returning negative results for cultural resources within their project area. Including these studies, a total of 36 archaeological reports have been produced for the acreage within the search radius.

Review of the 1896 United States Geological Survey (USGS) Anaheim, CA 30-minute and the 1902 (reprinted 1946) 30-minute Corona, Calif. Quadrangle maps revealed neither structures nor any other development within the project area boundaries. The 1942 USGS Anaheim, Calif. 15-minute Quadrangle map shows four structures along Santiago Canyon Road, along the southern project area boundary. Four additional structures are depicted in the southeastern corner of the project area, adjacent to a hammer and pick symbol. With the exception of one potentially historic age foundation and an adjacent concrete and asphalt lot, no evidence of these structures were detected during the pedestrian survey.

During the pedestrian survey, no prehistoric age resources and one potentially historic age foundation and an adjacent asphalt and concrete lot were detected. Portions of the concrete and asphalt lot may be of historic age, and were recorded in conjunction with the foundation as Site 001. These features presumably relate to the previous use of the project area for citrus production and as a surface mining and processing center. This resource was recorded onto a Department of Parks and Recreation (DPR) 523 Form and was submitted to the SCCIC for the assignment of a primary number. The site does not appear to be significant and is considered neither a historical nor an archaeological resource for the purposes of CEQA. Therefore, the creation and submittal of the DPR 523 Form for this resource fully suffices for mitigating potential impacts associated with the proposed project. An additional

DPR 523 Update Form was created for previously recorded resource CA-Ora-369, in an effort to keep their files current. This resource could not be relocated during the present survey or during previous surveys (LSA 1994; McKenna et al. 2000). This is presumably due to the negligible surface visibility at the mapped location, and to the collection of some or all of the surface artifacts during a subsurface testing program (APC 1979). This testing program yielded a small amount of debitage, no diagnostic artifacts and no observable midden deposits. The site was determined to be a surface scatter with little to no depth, and of no interpretive value for the prehistory of the area. Based upon the results of this subsurface testing program and the interpretation of the data, the site does not appear to be significant under the provisions of CEQA. Presently, the mapped location of the site is within the portion of the project area proposed as open space. Therefore, minimal impacts would occur to the remnants of the site, as its location would be entirely avoided by development.

Based upon the results of the records search, where a previously recorded resource is known within the project area, the location along Santiago Creek, which exhibits numerous prehistoric age sites in the region, and the negligible surface visibility during the pedestrian survey, MBA finds a high probability that significant, intact subsurface deposits could be uncovered during development. This potential is high within undisturbed or minimally disturbed portions of the project area and significantly lower in areas that have been subject to historic-era surface mining and processing activities. Therefore, the project area has been generally assigned high cultural resource sensitivity, and MBA recommends archaeological monitoring in specific portions during development.

The potential for impacts to significant paleontological resources is considered varied, ranging from low to high. This is based upon a low sensitivity designation within younger Quaternary alluvium, and a high sensitivity designation in older Quaternary terrace deposits at depth and any exposures of the Sespe/ Vaqueros Formations. The high paleontologic sensitivity of the Sespe/ Vaqueros Formations is demonstrated by the presence of a locality within the northeastern corner of the project area, and numerous localities nearby from these deposits. Consequently, MBA recommends a monitoring program during development activities.

5.2 - Recommendations

5.2.1 - Cultural Resources Recommendations

The potential for impacts to significant cultural resources is considered high within the project area, due to the presence of a previously recorded resource within the project boundaries and the number of known resources along Santiago Creek. This potential is high within undisturbed or minimally disturbed portions of the project area is significantly lower in areas that have been subject to historic-era surface mining and processing activities. Therefore, MBA recommends archaeological monitoring during all ground disturbing activities, commencing with a site visit between a qualified archaeologist and the development crew. Monitoring may be reduced or eliminated based upon the parameters of the development program, and at the discretion of the qualified archaeologist. Monitoring is not required in the central portion of the project area which has been adversely impacted by historic age

surface mining and processing activities due to a decreased potential for yielding intact cultural deposits.

Table 2: Recommended Cultural Resource Mitigation Measures

Mitigation No.	Mitigation Text
CR-1	MBA recommends an archaeological resources mitigation-monitoring program, commencing with a site visit. This site visit would allow the retained, qualified archaeologist to examine the project area sediments in relation to the parameters of the grading/ excavation program.
CR-2	<p>Full-time archaeological monitoring should be conducted throughout the entire project area, with the exception of the central portion that has been subject to historic-era surface mining operations. Full-time monitoring should continue until the project archaeologist determines that the overall sensitivity of the project area has been reduced from high to low, as a result of mitigation monitoring. Should the monitor determine that there are no cultural resources within the impacted areas, or should the sensitivity be reduced to low during monitoring, all monitoring should cease.</p> <p>Specifically, prior to issuance of the first preliminary or precise grading permit, and for any subsequent permit involving excavation to increased depth, the landowner or subsequent project applicant shall provide evidence that a qualified archaeologist has been retained by the landowner or subsequent project applicant, and that the consultant(s) will be present during all grading and other significant ground disturbing activities at or below 4 feet from the modern ground surface.</p>

5.2.2 - Accidental Discovery of Human Remains

There is always the small possibility that ground-disturbing activities during construction may uncover previously unknown buried human remains. Should this occur, Federal laws and standards apply including Native American Graves Protection and Repatriation Act (NAGPRA) and its regulations found in the Code of Federal Regulations at 43 CFR 10.

In the event of an accidental discovery or recognition of any human remains, California State Health and Safety Code § 7050.5 dictates that no further disturbance shall occur until the County Coroner has made the necessary findings as to origin and disposition pursuant to CEQA regulations and Public Resources Code (PRC) § 5097.98.

5.2.3 - Accidental Discovery of Cultural Resources

It is always possible that ground-disturbing activities during construction may uncover previously unknown, buried cultural resources. In the event that buried cultural resources are discovered during construction, operations shall stop in the immediate vicinity of the find and a qualified archaeologist shall be consulted to determine whether the resource requires further study. The qualified archeologist shall make recommendations to the Lead Agency on the measures that shall be implemented to protect the discovered resources, including but not limited to excavation of the finds and evaluation of the finds in accordance with § 15064.5 of the CEQA Guidelines. Potentially significant cultural resources consist of, but are not limited to, stone, bone, fossils, wood, or shell

artifacts or features, including hearths, structural remains, or historic dumpsites. Any previously undiscovered resources found during construction within the project area should be recorded on appropriate Department of Parks and Recreation (DPR) forms and evaluated for significance in terms of CEQA criteria

If the resources are determined to be unique historic resources as defined under § 15064.5 of the CEQA Guidelines, mitigation measures shall be identified by the monitor and recommended to the Lead Agency. Appropriate mitigation measures for significant resources could include avoidance or capping, incorporation of the site in green space, parks, or open space, or data recovery excavations of the finds.

No further grading shall occur in the area of the discovery until the Lead Agency approves the measures to protect these resources. Any archaeological artifacts recovered as a result of mitigation shall be donated to a qualified scientific institution approved by the Lead Agency where they would be afforded long-term preservation to allow future scientific study.

In addition, reasonable efforts to avoid, minimize, or mitigate adverse effects to the property will be taken and the State Historic Preservation Officer (SHPO) and Native American tribes with concerns about the property, as well as the Advisory Council on Historic Preservation (ACHP) will be notified within 48 hours in compliance with 36 CFR 800.13(b)(3).

5.2.4 - Paleontological Recommendations

The potential for impacts to significant paleontological resources within the project area is considered varied, ranging from low to high. The potential is considered low in younger Quaternary alluvial deposits, and high in older Quaternary terrace deposits at depth and within any exposures of the Sespe/ Vaqueros Formations. Thus, undisturbed older Quaternary terrace deposits and all exposures of the Sespe/ Vaqueros Formations are assigned high paleontologic sensitivity. Therefore, MBA recommends a mitigation-monitoring program during development. This program should include a preliminary site assessment by a qualified paleontologist prior to ground disturbing activities. The results of this preliminary assessment will assist in determining the intensity and duration of monitoring, and may include full-time paleontologic monitoring during development. Monitoring may be reduced or eliminated based upon the parameters of the development program, at the discretion of the qualified paleontologist.

Table 3: Recommended Paleontological Resource Mitigation Measures

Mitigation No.	Mitigation Text
PR-1	<p>Monitoring of excavation in areas identified as likely to contain paleontologic resources by a qualified paleontologic monitor, and based upon the results of a preliminary site assessment conducted by qualified paleontologic personnel. Based upon this review, areas of concern include undisturbed older Quaternary terrace deposits and any and all exposures of the Sespe/ Vaqueros Formations. Paleontologic monitors should be equipped to salvage fossils, as they are unearthed, to avoid construction delays, and to remove samples of sediments likely to contain the remains of small fossil invertebrates and vertebrates. Monitors must be empowered to temporarily halt or divert equipment to allow removal of abundant or large specimens. Monitoring may be reduced or eliminated if the potentially fossiliferous units described herein are determined upon exposure and examination by qualified paleontologic personnel to have low potential to contain fossil resources, or if the parameters of the proposed project will not impact potentially fossiliferous units. This decision is at the discretion of the qualified paleontologic monitor.</p> <p>If the monitoring program results in positive findings, then refer to PR-2 to PR-4.</p>
PR-2	<p>Preparation of recovered specimens to a point of identification and permanent preservation, including washing of sediments to recover small invertebrates and vertebrates. Preparation and stabilization of all recovered fossils are essential in order to fully mitigate adverse impacts to the resources.</p>
PR-3	<p>Identification and curation of specimens into an established, accredited museum repository with permanent retrievable paleontologic storage. These procedures are also essential steps in effective paleontologic mitigation and CEQA compliance. The paleontologist must have a written repository agreement in hand prior to the initiation of mitigation activities. Mitigation of adverse impacts to significant paleontologic resources is not complete until such curation into an established museum repository has been fully completed and documented.</p>
PR-4	<p>Preparation of a report of findings with an appended itemized inventory of specimens. The report and inventory, when submitted to the appropriate Lead Agency along with confirmation of the curation of recovered specimens into an established, accredited museum repository, will signify completion of the program to mitigate impacts to paleontologic resources.</p>

SECTION 6: CERTIFICATION

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

Date: December 3, 2008

Signed: _____



Jennifer M. Sanka, M.A., RPA
Michael Brandman Associates
Irvine, California

SECTION 7: REFERENCES

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Appendix A: Cultural Resources Correspondence

A-1: Native American Heritage Commission Sacred Lands File Search



October 6, 2008

Native American Heritage Commission
915 Capitol Mall, Suite 364
Sacramento, CA 95814-4801

VIA EMAIL: gtomei_nahc@pacbell.net

Subject: **Request for a Sacred Lands File Search for the Rio Santiago Specific Plan Project, located on about 110-Acres, City of Orange, County of Orange, California (USGS Orange, CA. topographic quadrangle)**

Bakersfield
661.334.2755

Fresno
559.497.0310

Irvine
714.508.4100

Palm Springs
760.322.8847

Sacramento
916.447.1100

San Bernardino
909.884.2255

San Ramon
925.830.2733

To Whom It May Concern:

Michael Brandman Associates (MBA) would like to determine whether any listed sacred sites are located within or near a ~110-acre project area in the City of Orange, County of Orange.

As seen in the provided topographic map, the project area is located in Orange County, and is found on USGS Orange, CA. 7.5' topographic quadrangle, Township 4 South, Range 9 West, in an unsectioned portion of the Santiago de Santa Ana land grant.

Please notify us of any sacred Native American sites that may be affected by the undertaking. A full description of this project can be found in our archaeological survey report, which is forthcoming.

Sincerely,

Jennifer M. Sanka, M.A., RPA
Project Archaeologist
Michael Brandman Associates
220 Commerce, Suite 200
Irvine, CA. 92602

Enclosures: Exhibit 1: USGS Topo Map

S:\JenSanka\341200020 Rio Santiago Specific Plan EIR\Appendices\341200010_NAHC Request Letter.doc

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STATE OF CALIFORNIA

Arnold Schwarzenegger, Governor

NATIVE AMERICAN HERITAGE COMMISSION

915 CAPITOL MALL, ROOM 364
SACRAMENTO, CA 95814
(916) 653-6251
Fax (916) 657-5390
Web Site www.nahc.ca.gov
e-mail: ds_nahc@pacbell.net



October 10, 2008

Ms. Jennifer Sanka, M.A., RPA
Michael Brandman Associates
220 Commerce, Suite 200
Irvine, CA 92602

Sent by FAX to: 714-508-4110
No. of Pages: 3

Re: Request for a Sacred Lands File records search and Native American Contacts list for the proposed Santiago Specific Plan Project; located on about 110-acres in the City of Orange; Orange County, California

Dear Ms. Sanka:

The Native American Heritage Commission was able to perform a record search of its Sacred Lands File (SLF) for the affected project area/area of potential effect (APE). The SLF failed to indicate the presence of Native American cultural resources in the immediate project area. The absence of specific site information in the Sacred Lands File does not guarantee the absence of cultural resources in any project area.

Early consultation with Native American tribes in your area is the best way to avoid unanticipated discoveries once a project is underway. Enclosed are the names of culturally-affiliated Native American Contacts that may have knowledge of cultural resources in the project area. A list of Native American contacts is attached to assist you. It is advisable to contact the persons listed; if they cannot supply you with specific information about the impact on cultural resources, they may be able to refer you to another tribe or person knowledgeable of the cultural resources in or near the affected project area. A local tribe or Native American individual may be the only source of a Native American cultural resource.

Lead agencies should consider avoidance, as defined in Section 15370 of the California Environmental Quality Act (CEQA) when significant cultural resources could be affected by a project. Also, Public Resources Code Section 15064.5(f) and Section 15097.98 and Health & Safety Code Section 7050.5 provide for provisions for accidentally discovered archeological resources during construction and mandate the processes to be followed in the event of an accidental discovery of any human remains in a project location other than a 'dedicated cemetery'. Discussion of these should be included in your environmental documents, as appropriate.

If you have any questions about this response to your request, please do not hesitate to contact me at (916) 653-6251.

Sincerely,


Dave Singleton, Program Analyst

Attachment: Native American Contact List

**Native American Contacts
Orange County
October 10, 2008**

Ti'At Society
Cindi Alvitre
6515 E. Seaside Walk, #C
Long Beach , CA 90803
calvitre@yahoo.com
(714) 504-2468 Cell

Gabrielino

Gabrielino/Tongva Council / Gabrielino Tongva Nation
Sam Dunlap, Tribal Secretary
761 Terminal Street; Bldg 1, 2nd floor
Los Angeles , CA 90021
office @tongvatribes.net
(213) 489-5001 - Office
(909) 262-9351 - cell
(213) 489-5002 Fax

Juaneno Band of Mission Indians Acjachemen Nation
David Belardes, Chairperson
31742 Via Belardes
San Juan Capistrano , CA 92675
DavidBelardes@hotmail.com
(949) 493-0959
(949) 493-1601 Fax

Juaneno

Juaneno Band of Mission Indians Acjachemen Nation
Anthony Rivera, Chairman
31411-A La Matanza Street
San Juan Capistrano , CA 92675-2674
arivera@juaneno.com
949-488-3484
949-488-3294 Fax

Tongva Ancestral Territorial Tribal Nation
John Tommy Rosas, Tribal Admin.
tattnlaw@gmail.com
310-570-6567

Gabrielino Tongva

Gabrielino Tongva Indians of California Tribal Council
Robert Dorame, Tribal Chair/Cultural Resources
P.O. Box 490
Bellflower , CA 90707
gtongva@verizon.net
562-761-6417 - voice
562-925-7989 - fax

Gabrielino Tongva

Gabrielino/Tongva San Gabriel Band of Mission
Anthony Morales, Chairperson
PO Box 693
San Gabriel , CA 91778
ChiefRBwife@aol.com
(626) 286-1632
(626) 286-1758 - Home
(626) 286-1262 Fax

Gabrielino Tongva

Juaneno Band of Mission Indians
Alfred Cruz, Cultural Resources Coordinator
P.O. Box 25628
Santa Ana , CA 92799
alfredgcruz@sbcglobal.net
714-998-0721
alfredgcruz@sbcglobal.net

Juaneno

This list is current only as of the date of this document.

Distribution of this list does not relieve any person of statutory responsibility as defined in Section 7050.5 of the Health and Safety Code, Section 5097.94 of the Public Resources Code and Section 5097.98 of the Public Resources Code.

This list is only applicable for contacting local Native Americans with regard to cultural resources for the proposed Santiago Specific Plan; located in the City of Orange on about 110-acres; City of Orange; Orange County, California for which a Sacred Lands File search and Native American Contacts list were requested.

**Native American Contacts
Orange County
October 10, 2008**

Juaneno Band of Mission Indians
Adolph "Bud" Sepulveda, Chairperson
P.O. Box 25828 Juaneno
Santa Ana , CA 92799
bssepul@yahoo.net
714-838-3270
714-914-1812 - CELL
bsepul@yahoo.net

Sonia Johnston, Tribal Vice Chairperson
Juaneño Band of Mission Indians
P.O. Box 25628 Juaneno
Santa Ana , CA 92799
sonia.johnston@sbcglobal.net
(714) 323-8312

Juaneno Band of Mission Indians
Anita Espinoza
1740 Concerto Drive Juaneno
Anaheim , CA 92807
(714) 779-8832

Juaneno Band of Mission Indians
Joe Ocampo, Chairperson
1108 E. 4th Street Juaneno
Santa Ana , CA 92701
(714) 547-9676
(714) 623-0709-cell

This list is current only as of the date of this document.

Distribution of this list does not relieve any person of statutory responsibility as defined in Section 7050.5 of the Health and Safety Code, Section 5097.94 of the Public Resources Code and Section 5097.98 of the Public Resources Code.

This list is only applicable for contacting local Native Americans with regard to cultural resources for the proposed Santiago Specific Plan; located in the City of Orange on about 110-acres; City of Orange, Orange County, California for which a Sacred Lands File search and Native American Contacts list were requested.



November 3, 2008

SAMPLE ADDRESS

**Subject: Native American Consultation Letter associated with one Cultural Resource Survey:
The Rio Santiago Specific Plan Project located in the City of Orange, Orange County,
California. (USGS Orange, CA. quad)**

Bakersfield
661.334.2755

Fresno
559.497.0310

Irvine
714.508.4100

Palm Springs
760.322.8847

Sacramento
916.383.0944

San Bernardino
909.884.2255

San Ramon
925.830.2733

Dear SAMPLE RECIPIENT:

Michael Brandman Associates has completed an archaeological resource survey for a project on about 110 acres located in the City of Orange in Orange County. One potential historic age foundation and associated concrete pads were found on-site, and no prehistoric age resources were observed during the pedestrian survey. The proposed project is the development of a senior living complex, active recreational open space, dedicated passive open space, and related site amenities. The northern portion of the project area, including the entire length of Santiago Creek will be conserved as dedicated open space. This consultation letter is **not associated with the SB18 process**, but is an information request that shall be included in our cultural resource survey document.

Section 106 of the National Historic Preservation Act of 1966 (NHPA) and CEQA consider the effects a project may have on historic properties. The definition of "historic properties" can include properties of traditional religious and cultural significance to Native American groups.

To determine whether the proposed project may impact any historic properties, including traditional cultural properties, MBA has reviewed background information and consulted with entities such as the Native American Heritage Commission. The NAHC does not indicate that Native American cultural resources are present in the immediate vicinity of the project area, but has listed you as a tribal contact.

We have attached a location map of the project area location with reference to the *Orange, CA* topographic map. Generally, the project area is located north of Interstate 5, south of State Route 91, east of State Route 55 and west of State Route 261. Specifically, the project area is located immediately north of East Santiago Canyon Road, east of Cannon Street and west of Orange Park Avenue. The majority of the project area consists of previously disturbed land, and an active concrete recycling plant is currently located in the southeast corner.

We wish to ask if you have any information or concerns about this project area, and/or if the proposed project may have an impact on cultural resources that are important to you. Please feel free to contact me at 714.508.4100 ext. 1065 or 714.742.5636 if you have any questions or information, or you may address and mail a response to my attention at the address below.

Sincerely,

Jennifer M. Sanka, M.A., RPA
Project Archaeologist
Michael Brandman Associates
220 Commerce, Suite 200
Irvine, CA. 92602

Enclosures: USGS Topo Map



From: Jennifer Sanka
To: tattnlaw@gmail.com
Date: 11/11/2008 2:21 PM
Subject: Re: Response to the Santiago Creek Specific Plan Project

Hi again JohnTommy:

Right now, the area has a chain-link fence along the majority of the acreage. I presume this results from the past use of the project area as a mining facility as well as the current use of the southeastern corner as an active concrete recycling facility.

As for their construction plans, they are currently conceptual development plans..... So nothing specific has been determined or designed. I will try to keep you updated if new plans are provided to me. And in the meantime, I will enter your comments into the report.

Thanks again for your discussion on the project.

Jen.
Jennifer M. Sanka, M.A., RPA
Project Manager/ Archaeologist
Michael Brandman Associates
220 Commerce, Suite 200
Irvine, CA 92602

Via Blackberry Wireless

-----Original Message-----

From: "Johntommy Rosas" <tattnlaw@gmail.com>

To: Jennifer Sanka <JSanka@brandman.com>

Sent: 11/5/2008 6:31:00 PM

Subject: Re: Response to the Santiago Creek Specific Plan Project

WOW THATS A LOT OF TYPING ON A BLACK BERRY, THANKS , I AM GOING TO WAIT TILL WE GET MORE INFORMATION AS TO DESIGN FOOTPRINT, THE PROJECT IS TAKING AWAY VITAL HABITAT AND WE NEED ALL THAT, THE SITES ARE THERE, AS YOU MAY KNOW, WHATS THE PROTECTION RIGHT NOW, ?? IS ANY SECURITY FENCE IN PLACE?, THANKS JOHNTOMMY

On Wed, Nov 5, 2008 at 6:22 PM, Jennifer Sanka <JSanka@brandman.com> wrote:

> Hi JohnTommy:

>

> I have received you initial response, and will await additional comments to include in the archaeological survey report.

>

> With regard to the Section 106, 404, etc.... I understand that this will likely occur during the course of the proposed project. In addition, I have advised the City (via our project manager) that SB18 consults will need to occur. I do not know where they are in that process.

>

> And I understand the sanctity of Santiago Creek, and have mentioned that in my report in terms of its high cultural resource sensitivity. With that in mind, the proposed project currently proposes to leave the entirety of the creek and the northern portion of the project area (to the north of the creek) as dedicated open space. No development is set to occur there. I have suggested that this remain as such.

>

> The remainder of the project area is supposed to be used for the
> construction of a senior living complex (in the southeastern corner), and
> then open recreational areas in the form of tennis/ basketball courts in the
> southwestern corner. Presently, the southern portion of the project area (to
> the south of the creek) is a disused surface mining facility, where the
> surface soils were removed and processed beginning in the 1950s. The
> southeastern project corner is presently an active concrete reclamation
> facility.
>
> I hope that further explains the project, but please feel free to contact
> me with additional questions via email or at 7147425636. And, as I said I
> will await additional comments from you. Any information you wish to provide
> will assist in explaining why the Santiago Creek is important to the
> indigenous population, and will help the argument for high cultural resource
> sensitivity within that project area.
>
> Thank you for your response.
>
> Jen.
> Jennifer M. Sanka, M.A., RPA
> Project Manager/ Archaeologist
> Michael Brandman Associates
> 220 Commerce, Suite 200
> Irvine, CA 92602
> Via Blackberry Wireless
>

--

JOHN TOMMY ROSAS
TRIBAL ADMINISTRATOR
TRIBAL LITIGATOR
TONGVA ANCESTRAL TERRITORIAL TRIBAL NATION
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TRUTH IS OUR VICTORY AND HONOR IS OUR PRIZE >TATTN (c)

Carmen Hernandez - Re: Native American Consultation Letter associated with one Cultural - The Rio Santiago Specific Plan Project

From: "Johntommy Rosas" <tattnlaw@gmail.com>
To: "Carmen Hernandez" <CHernandez@brandman.com>
Date: 11/5/2008 5:46 PM
Subject: Re: Native American Consultation Letter associated with one Cultural - The Rio Santiago Specific Plan Project

WE OBJECT TO THIS PROJECT, IT VIOLATES OUR INDIGENOUS RIGHTS AND IT ALSO INVOLVES WATER, OUR WATER , SEE THE CREEK AND WETLANDS ON YOUR MAP, I WILL SEND MORE COMMENTS LATER, ALSO FOR YOUR INFORMATION, ANY SPECIFIC PLAN CHANGES REQUIRE SB 18 CONSULTATION, AND THE WATERS WILL REQUIRE 404 ACOE PERMIT APP, NEPA SEC 7, 106 SEC NHPA CONSULTATIONS, SO WE EXPECT ALL THOSE TO HAPPEN AND THAT WE ARE CONSULTED WITH THOSE GUIDELINES FOLLOWED, ALSO WE NEED TO KNOW WHAT THE PROPOSED PROJECT IS? THANKS JOHNTOMMY

On Wed, Nov 5, 2008 at 5:30 PM, Carmen Hernandez <CHernandez@brandman.com> wrote:

Hi Mr. Rosas:

Please find attached the above mentioned for your reference, as requested by Jen Sanka, Archaeologist for said project.

We wish to ask if you have any information or concerns about this project area, and/or if the proposed project may have an impact on cultural resources that are important to you. Please feel free to contact Jen at 714.508.4100 ext. 1065 or 714.742.5636 if you have any questions or information.

Kind regards,

Carmen Hernandez
Administrative Assistant
Michael Brandman Associates
220 Commerce, Suite 200
Irvine CA 92602
714.508.4100, Ext. 1071
Fax 714.508.4110

www.brandman.com

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--

JOHN TOMMY ROSAS
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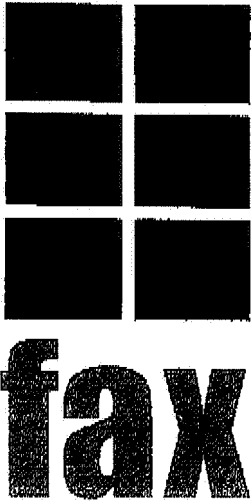
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TRUTH IS OUR VICTORY AND HONOR IS OUR PRIZE >TATTN ©

A-2: Paleontological Records Search

TRANSMISSION VERIFICATION REPORT

TIME : 10/06/2008 14:02
NAME : MBA
FAX : 17145084173
TEL : 17145084100
SER.# : BROG4J715700

DATE, TIME : 10/06 13:58
FAX NO./NAME : 12137467431
DURATION : 00:04:17
PAGE(S) : 03
RESULT : OK
MODE : STANDARD
ECM



To: DR Samuel A. McLEDD
Fax Number: (213) 746-7431

From: J.M. SAIKA
Fax Number: (714) 508-4110

Date: 10/06/08

Regarding: RQST. RECORDS SEARCH
Total Pages: 3

FRESNO
2444 Main Street, Suite 215
Fresno, CA 93721
559.497.0310
559.497.0319 Fax

IRVINE
220 Commerce, Suite 200
Irvine, CA 92602
714.508.4100
714.508.4110 Fax

PALM SPRINGS
340 S. Farrell Drive, Suite A210
Palm Springs, CA 92262
760.322.8847
760.322.8893 Fax

SACRAMENTO
2000 'O' Street, Suite 200
Sacramento, CA 95811
916.447.1100
916.447.1210 Fax

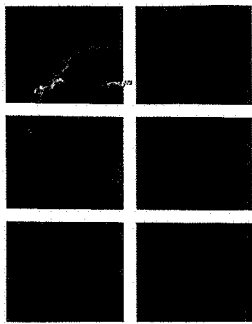
Action: Per Your Request; Return with Changes
 For Review; Please File

Comments:

RQST RECORDS SEARCH FOR PALED
RESOURCES. MAP ATTACHED.

PLEASE CALL/EMAIL WITH ANY
QUESTIONS.

THANKS.



fax

To: DR SAMUEL A. McLEDD
Fax Number: (213) 746-7431

From: J.M. SANKA
Fax Number: (714) 508-4110

Date: 10/06/08

Regarding: RQST. RECORDS SEARCH
Total Pages: 3

FRESNO
2444 Main Street, Suite 215
Fresno, CA 93721
559.497.0310
559.497.0319 Fax

Action: Per Your Request Return with Changes
 For Review Please File

IRVINE
220 Commerce, Suite 200
Irvine, CA 92602
714.508.4100
714.508.4110 Fax



Comments:

RQST RECORDS SEARCH FOR PALED
RESOURCES. MAP ATTACHED.

PALM SPRINGS
340 S. Farrell Drive, Suite A210
Palm Springs, CA 92262
760.322.8847
760.322.8893 Fax

PLEASE CALL/EMAIL WITH ANY
QUESTIONS.

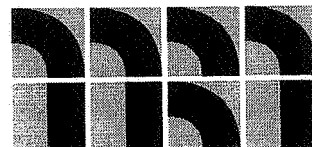
SACRAMENTO
2000 'O' Street, Suite 200
Sacramento, CA 95811
916.447.1100
916.447.1210 Fax

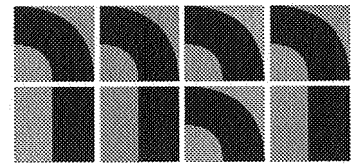
THANKS.

SAN BERNARDINO
621 E. Carnegie Drive, Suite 100
San Bernardino, CA 92408
909.884.2255
909.884.2113 Fax

JEN SANKA

SAN RAMON
Bishop Ranch 3
2633 Camino Ramon, Suite 460
San Ramon, CA 94583
925.830.2733
925.830.2715 Fax





Michael Brandman Associates

October 6, 2008

Dr. Samuel A. McLeod
The Natural History Museum of Los Angeles County
900 Exposition Blvd.
Los Angeles, CA 90007

Bakersfield
661.334.2755

Fresno
559.497.0310

Irvine
714.508.4110

Palo Springs
760.302.8847

Sacramento
916.383.0944

San Bernardino
909.884.2255

San Ramon
925.830.2733

Via Fax: 213-746-7431

Subject: Request for a Paleontological Resources Records Search for the Rio Santiago Specific Plan Project located on about 110 acres in the City of Orange, County of Orange, California. (USGS Orange, CA. quad)

Dear Dr. McLeod:

I am in need of a paleontological records search on a project area located in an unsectioned portion of the Santiago de Santa Ana land grant within T.4S R.9W, as found on the USGS Orange, CA. 7.5' topographic quadrangle.

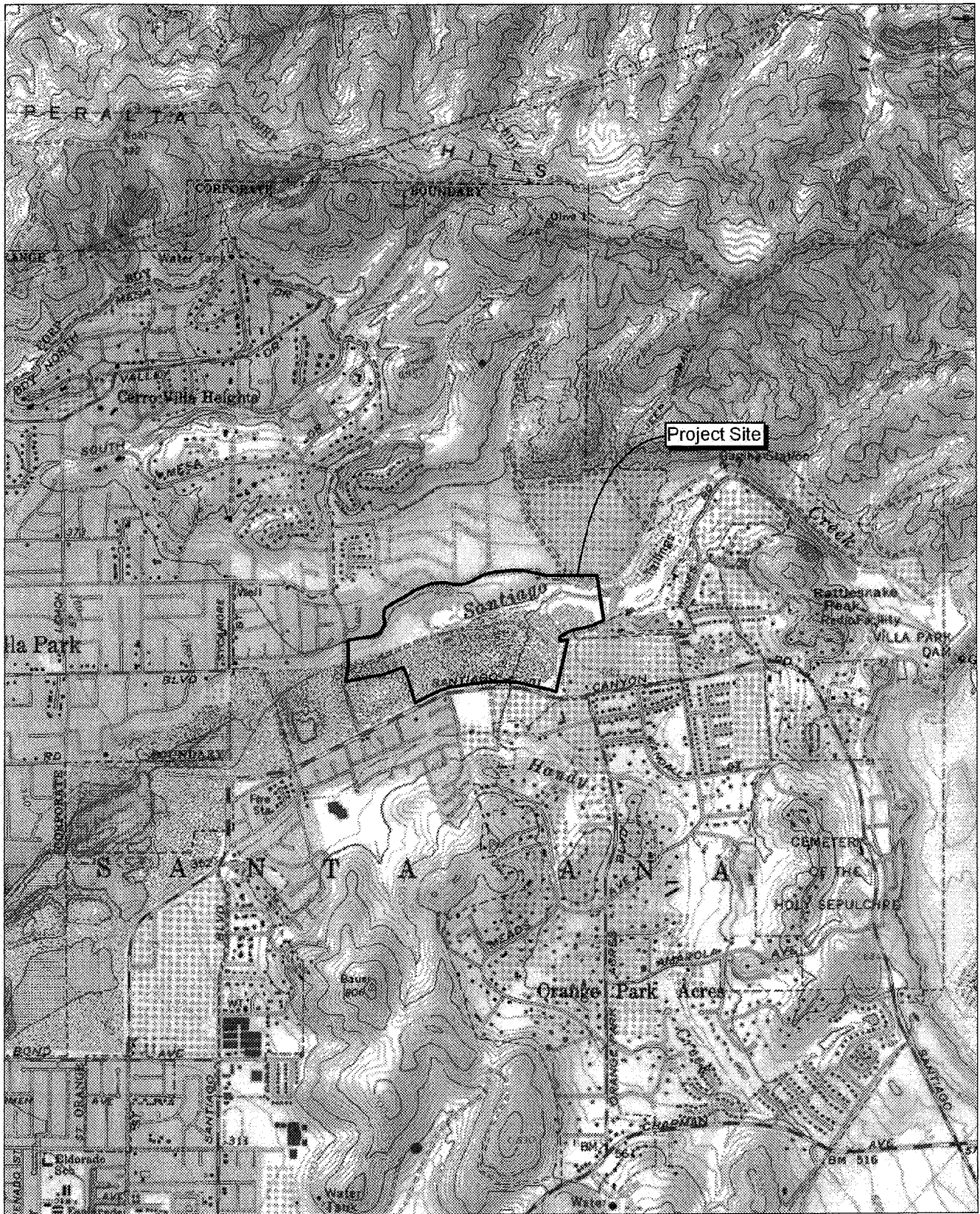
Once the results have been determined, please fax the results to our office 714.508.4110 or email a PDF version to jsanka@brandman.com and mail MBA a hard copy with the invoice. If you have any questions or need to speak with me, please feel free to call me at 714.508.4100 ext 1065. Thank you for your time and effort.

Sincerely,

Jennifer M. Sanka M.A., R.P.A.
Project Archaeologist
Michael Brandman Associates
220 Commerce, Suite 200
Irvine, CA. 92602

S:\JenSanka\341200020 Rio Santiago Specific Plan EIR\Appendices\341200010_Paleo Request Letter.doc





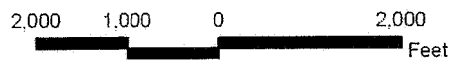
Source: Orange County NAIP, 2005.

Exhibit 2 Local Vicinity Map Topographic Base



Michael Brandman Associates

34120001 • 08/2008 | 2_local_topo.mxd



JMI PROPERTIES / SANTIAGO PARTNERS, LLC • RIO SANTIAGO SPECIFIC PLAN
DELINEATION OF JURISDICTIONAL WATERS AND WETLANDS

31 October 2008

Michael Brandman Associates
220 Commerce, Suite 200
Irvine, CA 92602

Attn: Jennifer M. Sanka, Project Archaeologist

re: Paleontological Resources for the proposed Rio Santiago Specific Plan, in the City of Orange,
Orange County, project area

Dear Jennifer:

I have conducted a thorough search of our vertebrate paleontology records for the locality and specimen data for the proposed Rio Santiago Specific Plan, in the City of Orange, Orange County, project area as outlined on the portion of the Orange USGS topographic quadrangle map that you sent to me via fax 6 October 2008. We have one vertebrate fossil locality that lies directly within the proposed project boundaries, and we have additional localities nearby from the same sedimentary units that occur in the proposed project area.

Surficial deposits in the lowest lying portions of the Santiago Creek drainage that runs through the proposed project area consist of younger Quaternary Alluvium. The surrounding terrain has surficial deposits that consist of older Quaternary terrace deposits, but there is one pocket in the northeastern portion of the proposed project area on the northern side of Santiago Creek that has exposures of undifferentiated deposits of the Oligo-Miocene Sespe / Vaqueros Formations that have marine and non-marine components.

The younger Quaternary deposits surficially exposed in the lowest lying portions of the proposed project area typically do not contain significant vertebrate fossils, at least in the uppermost layers, and we have no vertebrate fossil localities anywhere nearby from these or similar deposits. Our closest vertebrate fossil locality in older Quaternary sediments is LACM 4943, just north of west of the proposed project area in the City of Orange between the Newport Freeway (Highway 55) and the Santa Ana River near the intersection of Glassell Street and Fletcher Avenue. LACM 4943 is lower in elevation than the proposed project site area, but produced fossil horse, *Equus*, at a depth of 8-10 feet below the surface. We have one vertebrate fossil locality in the Sespe / Vaqueros undifferentiated Formations that occurs in the pocket

exposures of these rock units in the northeastern portion of the proposed project area, LACM 5449, that produced fossil specimens of undetermined carnivore, Carnivora, and camel, Camelidae. Our localities LACM 5450, just northeast of the northeastern border of the proposed project area, and LACM 5451, at the base of the hills directly north of the eastern portion of the proposed project area, are also from the Sespe / Vaqueros undifferentiated Formations and produced fossil specimens of undetermined camel, Camelidae. Higher in elevation and just northeast of locality LACM 5451, directly north of the eastern portion of the proposed project area in the lower reaches of the Peralta Hills, we have the additional vertebrate fossil localities LACM 6927-6930. These localities are all from the terrestrial facies of the Sespe / Vaqueros undifferentiated Formations and produced fossil specimens of skunk, Mustelidae, rabbit, Leporidae, horse, *Parahippus*, peccary, Tayassuidae, oreodont, Merycoidodontidae, and camel, Camelidae.

Shallow excavations in the younger Quaternary Alluvium exposed in the lowest lying portions of the proposed project area probably will not encounter significant vertebrate fossils. Deeper excavations that extend into older Quaternary deposits, as well as any excavations in the exposures of the older Quaternary terrace deposits or the undifferentiated Sespe / Vaqueros Formations, may well encounter significant fossil vertebrate remains. Any substantial excavations in the proposed project area, therefore, should be closely monitored to quickly and professionally collect any specimens without impeding development. Any fossils recovered during mitigation should be deposited in an accredited and permanent scientific institution for the benefit of current and future generations.

This records search covers only the vertebrate paleontology records of the Natural History Museum of Los Angeles County. It is not intended to be a thorough paleontological survey of the proposed project area covering other institutional records, a literature survey, or any potential on-site survey.

Sincerely,



Samuel A. McLeod, Ph.D.
Vertebrate Paleontology

enclosure: draft invoice

Appendix B: Personnel Qualifications



Jennifer M. Sanka, M.A.
Project Manager, Archaeologist

Overview

- 11 Years Experience
- Master's degree, Hebrew Bible and Archaeology – Duke University, Durham, North Carolina
- Graduate Certification in Women's Studies – Duke University, Durham, North Carolina
- Bachelor's degree, Anthropology, Comparative Religion (with Honors), and Classical Humanities – Miami University, Oxford, Ohio

Jennifer Sanka, MA, RPA has been working in the archaeological field since 1997 and is experienced in both the New and Classical Worlds. She has conducted numerous pre-field assessments, archival research, pedestrian field surveys, site evaluation and testing and data recovery and analyses. She has managed, authored and certified numerous CEQA, NEPA and Section 106 compliant cultural assessments. These projects have required building and maintaining relationships with a variety of federal and state level entities including Bureau of Land Management (BLM), the United States Forest Service (USFS), the National Parks Service (NPS), the Bureau of Reclamation (BOR), County and City planning departments, County and City cultural resources managers, and Southern California Native American groups. Her projects have included residential, commercial, and mixed use developments, public schools, transportation expansions, and military training facilities throughout Southern California.

Related Experience

Environmental Documents (CEQA and NEPA)

Public Safety Enterprise Communication (PSEC) Project, Riverside County. Project Archaeologist/ Project Manager for the cultural resources constraints analysis, as well as the author of the Cultural Resources Assessment in support of an EIR/EA. Included conducting and managing Class I and Class III intensive pedestrian surveys/ Phase I surveys for over 100 proposed emergency radio tower facilities throughout Riverside County, and along the Riverside County borders in Orange, Imperial, San Bernardino and San Diego Counties. Included collaboration with the BLM, NPS, USFS, County resource agencies and Native American Tribal groups and individuals.

Blythe Mining Project Cultural Resources Assessment and Class III intensive Pedestrian Survey Results, Big Maria Mountains, Riverside County, Blythe. Project Archaeologist and Author of a Cultural Resources Assessment for Collective Asset Partners, LLC for a Surface Mining Project on BLM lands near Blythe, Riverside County, CA.

Tentative Tract Map No. 32270 Phase I Cultural Resources Assessment and Phase II Cultural Resources Testing, City of Riverside, Riverside County. Project Archaeologist/ Project Manager for the Phase I and Phase II Cultural Resources Assessment and Significance Evaluation for the Hawarden Development Corporation for a residential development in the City of Riverside, Riverside County, CA.

Silverlakes Recreation Complex Project, Norco. Project Archaeologist and Author of Phase I Cultural Resources Assessment and Significance Evaluation document completed in accordance with Section 106 of the NHPA for the City of Norco Silverlakes Recreation Complex Project, City of Norco, Riverside County, CA.

Marina Park Project, Newport Beach. Project Archaeologist and Author of Phase I Cultural Resources Assessment and Significance Evaluation document completed in accordance with Section 106 of the NHPA for the City of Newport Beach Marina Park Project, City of Newport Beach, Orange County, CA.

Brookside South Streambed Recharge Project, Beaumont. Project Archaeologist and Author of Phase I Cultural Resources Assessment for the San Geronio Pass Water Agency Noble Creek Recharge Project, City of Beaumont, Riverside County, CA.

Stagecoach Park Project, Corona. Project Archaeologist and Author of Phase I Cultural Resources Assessment/ Project Manager for the Paleontologic monitoring program for the City of Corona Stagecoach Park Project, City of Corona, Riverside County, CA.

Highgrove Business Center Project, Highgrove. Project Archaeologist and Author of Phase I Cultural Resources Assessment for the Bixby Land Company Highgrove Business Center Project, Highgrove, Unincorporated Riverside County, CA.

Temescal Plaza Project, near Corona. Project Archaeologist and Author of Phase I Cultural Resources Assessment for the Temescal-Leroy, LLC Temescal Plaza Project, Corona, Unincorporated Riverside County, CA.

Almond Plaza Project, Redlands. Project Archaeologist and Author of Phase I Cultural Resources Assessment for the Urban Environs Almond Plaza Project, City of Redlands, San Bernardino County, CA.

Holy Name of Jesus Catholic Church Project, Redlands. Project Archaeologist and Author of Phase I Cultural Resources Assessment for the Urban Environs Holy Name of Jesus Catholic Church Project, City of Redlands, San Bernardino County, CA.

Stetson Crossing Project, Hemet. Project Archaeologist and Author of Phase I Cultural Resources Assessment for the Stetson Crossing Partners, LLC Stetson Crossing Project, City of Hemet, Riverside County, CA.

Alessandro Boulevard Retail Building Project, Moreno Valley. Project Archaeologist and Author of Phase I Cultural Resources Assessment for the Terracon Alessandro Boulevard Retail Project, City of Moreno Valley, Riverside County, CA.

Desert Oasis Project, Victorville. Project Archaeologist and Author of Phase I Cultural Resources Assessment/ Project Manager for the Paleontologic monitoring program for the Hall and Foreman, Inc. Desert Oasis Project, City of Victorville, San Bernardino County, CA.

San Luis Springs Estates Project, Oceanside. Project Archaeologist and Author of Phase I Cultural Resources Assessment for the Time Out Holding, LLC San Luis Springs Estates Project, City of Oceanside, San Diego County, CA.

Muroya Project, Carlsbad. Staff Archaeologist and Author of Phase I Cultural Resources Assessment for the Taylor-Woodrow Homes, Inc. Muroya Project, City of Carlsbad, San Diego County, CA.

Sempre North Montebello Boulevard Project, Montebello. Staff Archaeologist and Author of Phase I Cultural Resources Assessment for the Sempra North Montebello Boulevard Project, Montebello, CA.

Industrial Park Project, Redlands. Staff Archaeologist and Author of Phase I Cultural Resources Assessment for the IDS Real Estate Group Iowa Industrial Park Project, Redlands, CA.

Professional Affiliations

- American Schools of Oriental Research
- Archaeological Institute of America
- Register of Professional Archaeologists



Michael H. Dice, M.A.

Project Scientist/Senior Archaeologist

Overview

- M.A., Anthropology, Arizona State University, Tempe, Arizona
- B.A., Anthropology, Washington State University, Pullman, Washington
- Anthropology Track, University of Washington, Seattle, Washington

Michael H. Dice, M.A., RPA is a Certified Archaeologist with more than eighteen years of experience performing records searches, archaeological surveys, archaeological site testing (Phase II) and data collection (Phase III) projects on private and public lands in the Southwestern United States and Southern California. During his career, he has authored or co-authored more than 150 CEQA and/or NEPA level documents including several manuscripts for the National Park Service. Mr. Dice is a member of the California Historical Society, a Registered Professional Archaeologist (RPA), and is a member of the National Trust for Historic Preservation.

Related Experience

Transportation

Santa Ana Art Wall Project (Santa Ana, CA), OCTA Tracks/Santa Ana Depot at Santiago Street. Serviced as senior project archaeologist to perform an ASR/HRER/HPSR package for the City of Santa Ana for its Caltrans District 12 submission. Construction of the Art Wall was funded by, in part, by the Federal Highway Administration (FHWA). The project was not considered an undertaking exempt from federal cultural resource compliance as governed by Caltrans-FHWA Programmatic Agreement (PA) associated with Section 106 of the National Historic Preservation Act (36 CFR §800). The APE was established in consultation with Cheryl Sinopoli of District 12. Once the APE had been approved by Rail HQ, several unrecorded historic properties were evaluated. Work progressed with Caltrans staff guidance in a reasonable and responsive fashion. Our historic architectural specialist and co-author, Christeen Taniguchi, is now an employee of Galvin and Associates. The project allowed interaction between MBA, Caltrans and SHPO, with successful results.

Nation Park Service

Project Archaeologist/Database Manager for the emergency Chapin-5 Fire Rehabilitation Project, Mesa Verde National Park, Colorado (1996-1999). Began as field crew chief (GS-7) and finished with the Park as a GS-9 Database manager. Created an ACCESS 6.0 database for the recordation or re-recordation of more than 500 archaeological sites within the rehabilitation area.

Telecommunication

NEPA Compliance/Telecommunication Facilities. Serving as project scientist for a variety of telecommunication providers throughout California in complying with the National Environmental Policy Act (NEPA) for the implementation of cellular communication facilities. This project includes the preparation of NEPA compliance documents in accordance with the Federal Communication Commissions regulations pertaining to telecommunication facilities, biological surveys, including focused, sensitive species surveys and wetland delineations and permitting, cultural resource records searches and Phase I surveys, including architectural/historical evaluations and construction monitoring, and arborist surveys.

Water

Victor Valley Recycled Water Project. Project manager to perform a program-level Section 106/CEQA analysis for the Victor Valley Recycled Water Project through Bauer Environmental. Our project consisted of the analysis of a series of alternative recycled water facility locations and main-line pipeline routes in the County of San Bernardino, the City of Victorville, the City of Hesperia, and the City of Apple Valley. The VVRW project will eventually exhibit four recycled water treatment plants, several pumping stations, numerous main-line recycled water pipelines and numerous secondary pipelines. Four project footprints were evaluated for potential impacts to cultural resources. The results showed that the majority of the project area held "low" sensitivity for cultural resources, there was a minor amount of "medium" sensitivity, while those areas near the Mojave River held "high" sensitivity. We recommended that cultural resource testing take place along the Mojave River if those alternatives are chosen. Specific mitigation-monitoring recommendations will be recommended once the project reaches the "project-level"

Final Phase I Cultural Resources Survey Report for the Coachella Aggregates Expansion Project, Riverside County. Cultural survey report for planned mining development in the County of Riverside. 2003.

Utilities

Cultural Resource Records Search Results and Sensitivity Evaluation for the Palm Springs and Desert Hot Springs Master Drainage Plan Project. Cultural evaluation report for planned utility construction in the Coachella Valley.

Recreation & Community Complexes

Cultural Survey Report, Bakersfield State Vehicular Recreation Area (SVRA), Kern County. Cultural survey report for planned State Park north of Bakersfield, in Kern County. 2006.

Planned Development

Over 200 reports available dated from 1999 to 2006.

Schools

Cultural Resource Survey Report and Paleontological Records Review for the Chaffey School District #9 High School Project located west of San Sevane and north of Walnut Avenue, Fontana, San Bernardino County. Cultural survey report for planned school development in the City of Fontana.

Retail

Phase 1 Cultural Resource Survey: The Yucca Valley Home Depot Retail Center (APN#0601-201-31, -32 and -37), Town of Yucca Valley. Cultural survey for a planned development in the Town of Yucca Valley

Airport

Cultural Resource Records Search and Site Visit Results for the Proposed Ontario Airport TIS Transmitter Site, located near Parking Lot D and F of the Ontario International Airport, Ontario, San Bernardino County. Cultural survey for a planned transmitter within the Ontario International Airport. Section 106 Study for Airport.

Professional Affiliations

- Member, California Historical Society
- Member, National Trust for Historic Preservation
- Registered Professional Archaeologist (RPA)
- Registered Archaeologist, Orange County

Appendix C: Regulatory Framework

REGULATORY FRAMEWORK

Government agencies, including federal, state, and local agencies, have developed laws and regulations designed to protect significant cultural resources that may be affected by projects regulated, funded, or undertaken by the agency. Federal and state laws that govern the preservation of historic and archaeological resources of national, state, regional, and local significance include the National Environmental Policy Act (NEPA), the National Historic Preservation Act (NHPA), and the California Environmental Quality Act (CEQA). In addition, laws specific to work conducted on federal lands includes the Archaeological Resources Protection Act (ARPA), the American Antiquities Act, and the Native American Graves Protection and Repatriation Act (NAGPRA).

The following federal or CEQA criteria were used to evaluate the significance of potential impacts on cultural resources for the proposed project. An impact would be considered significant if it would affect a resource eligible for listing in the National Register of Historic Places (NRHP) or the California Register of Historical Resources (CR), or if it is identified as a unique archaeological resource.

Federal-Level Evaluations

Federal agencies are required to consider the effects of their actions on historic properties and afford the Advisory Council on Historic Preservation (ACHP) a reasonable opportunity to comment on such undertakings under NEPA § 106. Federal agencies are responsible for initiating NEPA § 106 review and completing the steps in the process that are outlined in the regulations. They must determine if NHPA § 106 applies to a given project and, if so, initiate a review in consultation with the State Historic Preservation Officer (SHPO) and/or Tribal Historic Preservation Officer (THPO). Federal agencies are also responsible for involving the public and other interested parties. Furthermore, NHPA § 106 requires that any federal or federally assisted undertaking, or any undertaking requiring federal licensing or permitting, consider the effect of the action on historic properties listed in or eligible for the NRHP. Under the Code of Federal Regulations (CFR), 36 CFR Part 800.8, federal agencies are specifically encouraged to coordinate compliance with NEPA § 106 and the NEPA process. The implementing regulations “Protection of Historic Properties” are found in 36 CFR Part 800. Resource eligibility for listing on the NRHP is detailed in 36 CFR Part 63 and the criteria for resource evaluation are found in 36 CFR Part 60.4 [a-d].

The NHPA established the NRHP as the official federal list for cultural resources that are considered important for their historical significance at the local, state, or national level. To be determined eligible for listing in the NRHP, properties must meet specific criteria for historic significance and possess certain levels of integrity of form, location, and setting. The criteria for listing on the NRHP are significance in American history, architecture, archaeology, engineering, and culture as present in districts, sites, buildings, structures and objects that possess integrity of location, design, setting,

materials, workmanship, feeling, and association. In addition, a resource must meet one or all of these eligibility criteria:

- a.) Is associated with events that have made a significant contribution to the broad patterns of our history.
- b.) Is associated with the lives of persons significant in our past.
- c.) Embodies the distinctive characteristics of a type, period, or method of construction; represent the work of a master; possess high artistic values; or represent a significant and distinguishable entity whose components may lack individual distinction.
- d.) That have yielded, or may be likely to yield, information important in prehistory or history.

Criterion D is usually reserved for archaeological resources. Eligible properties must meet at least one of the criteria and exhibit integrity, measured by the degree to which the resource retains its historical properties and conveys its historical character.

Criteria Considerations

Ordinarily cemeteries, birthplaces, graves of historical figures, properties owned by religious institutions or used for religious purposes, buildings that have been moved from their original locations, reconstructed historic buildings, properties primarily commemorative in nature, and properties that have achieved significance within the past 50 years shall not be considered eligible for the NRHP. However, such properties will qualify if they are integral parts of districts that do meet the criteria or if they fall within the following categories:

- a.) A religious property deriving primary significance from architectural or artistic distinction or historical importance.
- b.) A building or structure removed from its original location but which is primarily significant for architectural value, or which is the surviving structure most importantly associated with a historic person or event.
- c.) A birthplace or grave of a historical figure of outstanding importance if there is no appropriate site or building associated with his or her productive life.
- d.) A cemetery that derives its primary importance from graves of persons of transcendent importance, from age, from distinctive design features, or from association with historic events.
- e.) A reconstructed building when accurately executed in a suitable environment and presented in a dignified manner as part of a restoration master plan, and when no other building or structure with the same association has survived.

- f.) A property primarily commemorative in intent if design, age, tradition, or symbolic value has invested it with its own exceptional significance.
- g.) A property achieving significance within the past 50 years if it is of exceptional importance.

Thresholds of Significance

In consultation with the SHPO/THPO and other entities that attach religious and cultural significance to identified historic properties, the Agency shall apply the criteria of adverse effect to historic properties within the Area of Potential Effect (APE). The Agency official shall consider the views of consulting parties and the public when considering adverse effects.

Federal Criteria of Adverse Effects

Under federal regulations, 36 CFR Part 800.5, an adverse effect is found when an undertaking alters, directly or indirectly, any of the characteristics of a historic property that qualifies the property for inclusion in the NRHP in a manner that diminishes the integrity of the property's location, design, setting, materials, workmanship, feeling, or association. Consideration will be given to all qualifying characteristics of a historic property, including those that may have been identified subsequent to the original evaluation of the property's eligibility for listing in the NRHP. Adverse effects may include reasonably foreseeable effects caused by the undertaking that may occur later in time, be farther removed in distance, or be cumulative.

According to 36 CFR Part 800.5, adverse effects on historic properties include, but are not limited to, those listed below:

- Physical destruction of or damage to all or part of the property.
- Alteration of a property, including restoration, rehabilitation, repair, maintenance, stabilization, hazardous material remediation, and provision of handicapped access, that is not consistent with the U.S. Secretary of the Interior's Standards for the Treatment of Historic Properties per 36 CFR Part 68 and applicable guidelines.
- Removal of the property from its historic location.
- Change of the character of the property's use or of physical features within the property's setting that contribute to its historic significance.
- Introduction of visual, atmospheric, or audible elements that diminish the integrity of the property's significant historic features.
- Neglect of a property that causes its deterioration, except where such neglect and deterioration are recognized qualities of a property of religious and cultural significance to an Indian tribe or Native Hawaiian organization.

- Transfer, lease, or sale of property out of federal ownership or control without adequate and legally enforceable restrictions or conditions to ensure long term preservation of the property's historic significance.

If Adverse Effects Are Found

If adverse effects are found, the agency official shall continue consultation as stipulated at 36 CFR Part 800.6. The agency official shall consult with the SHPO/THPO and other consulting parties to develop alternatives to the undertaking that could avoid, minimize, or mitigate adverse effects to historic resources. According to 36 CFR Part 800.14(d), if adverse effects cannot be avoided then standard treatments established by the ACHP may be used as a basis for a Memorandum of Agreement (MOA).

According to 36 CFR Part 800.11(e), the filing of an approved MOA, and appropriate documentation, concludes the § 106 process. The MOA must be signed by all consulting parties and approved by the ACHP prior to construction activities. If no adverse affects are found and the SHPO/THPO or the ACHP do not object within 30 days of receipt, the agencies' responsibilities under § 106 will be satisfied upon completion of report and documentation as stipulated in 36 CFR Part 800.11. The information must be made available for public review upon request, excluding information covered by confidentiality provisions.

State-Level Evaluation Processes

An archaeological site may be considered an historical resource if it is significant in the architectural, engineering, scientific, economic, agricultural, educational, social, political, military or cultural annals of California per PRC § 5020.1(j) or if it meets the criteria for listing on the CR per California Code of Regulations (CCR) at Title 14 CCR § 4850.

The most recent amendments to the CEQA guidelines direct lead agencies to first evaluate an archeological site to determine if it meets the criteria for listing in the CR. If an archeological site is an historical resource, in that it is listed or eligible for listing in the CR, potential adverse impacts to it must be considered as stated in PRC §§ 21084.1 and 21083.2(l). If an archeological site is considered not to be an historical resource, but meets the definition of a "unique archeological resource" as defined in PRC § 21083.2, then it would be treated in accordance with the provisions of that section.

With reference to PRC § 21083.2, each site found within a project area will be evaluated to determine if it is a unique archaeological resource. A unique archaeological resource is described as an archaeological artifact, object, or site about which it can be clearly demonstrated that, without merely adding to the current body of knowledge, there is a high probability that it meets one or more of the following criteria:

1. Contains information needed to answer important scientific research questions and that there is a demonstrable public interest in that information.
2. Has a special and particular quality such as being the oldest of its type or the best available example of its type.
3. Is directly associated with a scientifically recognized important prehistoric or historic event or person.

As used in this report, “non-unique archaeological resource” means an archaeological artifact, object, or site that does not meet the criteria for eligibility for listing on the CR, as noted in subdivision (g) of PRC § 21083.2. A non-unique archaeological resource requires no further consideration, other than simple recording of its components and features. Isolated artifacts are typically considered non-unique archaeological resources. Historic structures that have had their superstructures demolished or removed can be considered historic archaeological sites and are evaluated following the processes used for prehistoric sites. Finally, OHP recognizes an age threshold of 45 years. Cultural resources built less than 45 years ago may qualify for consideration, but only under the most extraordinary circumstances.

Title 14, CCR, Chapter 3 § 15064.5 is associated with determining the significance of impacts to archeological and historical resources. Here, the term historical resource includes the following:

1. A resource listed in, or determined eligible by the State Historical Resources Commission, for listing in the CR (PRC § 5024.1; Title 14 CCR, § 4850 et seq.).
2. A resource included in a local register of historical resources, as defined in PRC § 5020.1(k) or identified as significant in an historical resource survey meeting the PRC § 5024.1(g) requirements, shall be presumed to be historically or culturally significant. Public agencies must treat any such resource as significant unless the preponderance of evidence demonstrates that it is not historically or culturally significant.
3. Any object, building, structure, site, area, place, record, or manuscript, which a lead agency determines to be historically significant or significant in the architectural, engineering, scientific, economic, agricultural, educational, social, political, military, or cultural annals of California may be considered a historical resource, provided the lead agency’s determination is supported by substantial evidence in light of the whole record. Generally, a resource shall be considered by the lead agency to be historically significant if the resource meets the criteria for listing on the California Register of Historical Resources (PRC § 5024.1; Title 14 CCR § 4852) including the following:
 - A. Is associated with events that have made a significant contribution to the broad patterns of California’s history and cultural heritage.
 - B. Is associated with the lives of persons important in our past.

- C. Embodies the distinctive characteristics of a type, period, region, or method of construction, or represents the work of an important creative individual, or possesses high artistic values.
- D. Has yielded, or may be likely to yield, information important in prehistory or history.

Typically, archaeological sites exhibiting significant features qualify for the CR under Criterion D because such features have information important to the prehistory of California. A lead agency may determine that a resource may be a historical resource as defined in PRC §§ 5020.1(j) or 5024.1 even if it is:

- Not listed in or determined to be eligible for listing in the CR.
- Not included in a local register of historical resources pursuant to PRC § 5020.1(k).
- Identified in an historical resources survey per PRC § 5024.1(g).

Threshold of Significance

If a project will have a significant impact on a cultural resource, several steps must be taken to determine if the cultural resource is a “unique archaeological resource” under CEQA. If analysis and/or testing determine that the resource is a unique archaeological resource and therefore subject to mitigation prior to development, a threshold of significance should be developed. The threshold of significance is a point where the qualities of significance are defined and the resource is determined to be unique under CEQA. A significant impact is regarded as the physical demolition, destruction, relocation, or alteration of the resource or its immediate surroundings such that the significance of the resource will be reduced to a point that it no longer meets the significance criteria. Should analysis indicate that project development will destroy the unique elements of a resource; the resource must be mitigated for under CEQA regulations. The preferred form of mitigation is to preserve the resource in-place, in an undisturbed state. However, as that is not always possible or feasible, appropriate mitigation measures may include, but are not limited to:

1. Planning construction to avoid the resource.
2. Deeding conservation easements.
3. Capping the site prior to construction.

If a resource is determined to be a “non-unique archaeological resource,” no further consideration of the resource by the lead agency is necessary.

Tribal Consultation

The following serves as an overview of the procedures and timeframes for the Tribal Consultation process. For the complete Tribal Consultation Guidelines, please refer to the State of California Office of Planning and Research web site.

Prior to the amendment or adoption of general or specific plans, local governments must notify the appropriate tribes of the opportunity to conduct consultation for the purpose of preserving or mitigating impacts to cultural places located on land within the local government's jurisdiction that is affected by the plan adoption or amendment. The tribal contacts for this list are maintained by the NAHC and are distinct from the Most Likely Descendent (MLD) list. It is suggested that local governments send written notice by certified mail with return receipt requested. The tribes have 90 days from the date they receive notification to request consultation. Prior to adoption or amendment of a general or specific plan, local government must refer the proposed action to tribes on the NAHC list that have traditional lands located within the city or county's jurisdiction. Notice must be sent regardless of prior consultation. The referral must allow a 45-day comment period.

In brief, notices from government to the tribes should include:

- A clear statement of purpose.
- A description of the proposed general or specific plan, the reason for the proposal, and the specific geographic areas affected.
- Detailed maps to accompany the description.
- Deadline date for the tribes to respond.
- Government representative(s) contact information.
- Contact information for the project proponent/applicant, if applicable.

The basic schedule for this process is:

- 30 days: time NAHC has to provide tribal contact information to the local government; this is recommended not mandatory.
- 90 days: time tribe has to respond indicating whether or not they want to consult. Note: tribes can agree to a shorter timeframe. Consultation does not begin until/unless requested by the tribe within 90 days of receiving notice of the opportunity to consult. The consultation period, if requested, is open-ended. The tribes and local governments can discuss issues for as long as necessary, or productive, and need not result in agreement.

- 45 days: time local government has to refer proposed action, such as adoption or amendment to a general plan or specific plan, to agencies, including the tribes. A referral is required even if there has been prior consultation. This opens the 45-day comment period.
- 10 days: time local government has to provide tribes of a notice of public hearing.

Appendix D: Project Area Photographs



Photograph 1. Overview of the northern project area boundary, taken from near the northeastern project corner. View to the west.



Photograph 2. Overview of the northeastern portion of the project area and Santiago Creek, taken from near the northeastern project corner. View to the south.

Source: Michael Brandman Associates, 2008



Michael Brandman Associates

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Appendix D: Project Area Photographs Rio Santiago Specific Plan Project



Photograph 3. Overview of the northern portion of the project area and a dirt access road, taken from the northern boundary. View to the south.



Photograph 4. Overview of the northern-central portion of the project area, taken from the northern boundary. View to the southwest.

Source: Michael Brandman Associates, 2008



Michael Brandman Associates

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Appendix D: Project Area Photographs Rio Santiago Specific Plan Project



Photograph 5. Overview of the northern project area boundary, taken from near the northwestern project corner. View to the east.



Photograph 6. Overview of the northwestern portion of the project area, taken from near the northwestern project corner. View to the south.

Source: Michael Brandman Associates, 2008



Michael Brandman Associates

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Appendix D: Project Area Photographs Rio Santiago Specific Plan Project



Photograph 7. Overview of the eastern-most project area boundary. View to the north.



Photograph 8. Overview of the eastern-most portion of the project area. View to the northwest.

Source: Michael Brandman Associates, 2008



Michael Brandman Associates

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Appendix D: Project Area Photographs Rio Santiago Specific Plan Project



Photograph 9. Overview of the concrete pads and fuel tanks located in the southeastern portion of the project area. This area is situated to the west of the lands depicted in Photographs 7 and 8. View to the southeast.



Photograph 10. Overview of the concrete pads and fuel tanks located in the southeastern portion of the project area. This area is situated to the west of the lands depicted in Photographs 7 and 8. View to the southeast.

Source: Michael Brandman Associates, 2008



Michael Brandman Associates

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Appendix D: Project Area Photographs Rio Santiago Specific Plan Project



Photograph 11. Overview of the active reclamation activities located in the southeastern portion of the project area. This facility is found to the south of the tanks depicted in Photographs 9 and 10. View to the southeast.



Photograph 12. Overview of the active reclamation activities located in the southeastern corner of the project area, taken from the central portion. View to the southeast.

Source: Michael Brandman Associates, 2008



Michael Brandman Associates

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Appendix D: Project Area Photographs Rio Santiago Specific Plan Project



Photograph 13. Overview of the southern-central portion of the project area. View to the south.



Photograph 14. View of a no longer extant concrete road over a culvert in Santiago Creek, located in the central portion of the project area. View to the north.

Source: Michael Brandman Associates, 2008



Michael Brandman Associates

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Appendix D: Project Area Photographs Rio Santiago Specific Plan Project



Photograph 15. Overview of the southern-central portion of the project area. View to the southwest.



Photograph 16. Overview of the central portion of the project area. This concrete debris pile is also observable on the right side of Photograph 15. View to the northeast.

Source: Michael Brandman Associates, 2008



Michael Brandman Associates

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Appendix D: Project Area Photographs Rio Santiago Specific Plan Project



Photograph 17. Overview of the southwestern portion of the project area. This land is located to the west of the concrete debris depicted in Photograph 16. View to the southeast.



Photograph 18. Overview of the southwestern portion of the project area, facing toward Santiago Canyon Road. View to the south.

Source: Michael Brandman Associates, 2008



Michael Brandman Associates

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Appendix D: Project Area Photographs Rio Santiago Specific Plan Project



Photograph 19. Overview of the western-most project area boundary. View to the north.



Photograph 20. Overview of the western-most portion of the project area. View to the northeast.

Source: Michael Brandman Associates, 2008



Michael Brandman Associates

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Appendix D: Project Area Photographs Rio Santiago Specific Plan Project



Photograph 21. Overview of the mapped location of CA-Ora-369, plotted in the northern-central portion of the project area. View to the north.



Photograph 22. Overview of the concrete foundation from Site 001, facing west.

Source: Michael Brandman Associates, 2008



Michael Brandman Associates

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Appendix D: Project Area Photographs Rio Santiago Specific Plan Project



Photograph 23. Overview of the vacant asphalt and concrete lot found to the east of the concrete foundation in Photograph 22. View to the east.



Photograph 24. Close-up of the height and date nails in utility pole 718839E. This utility pole is found to the southeast of the concrete foundation in Photograph 22 and to the west of the lot depicted in Photograph 23.

Source: Michael Brandman Associates, 2008



Michael Brandman Associates

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Appendix D: Project Area Photographs Rio Santiago Specific Plan Project



Photograph 25. Overview of the vacant asphalt and concrete lot found to the east of the concrete foundation in Photograph 22. View to the southwest.



Photograph 26. Overview of the vacant asphalt and concrete lot found to the east of the concrete foundation. View to the southeast.

Source: Michael Brandman Associates, 2008



Michael Brandman Associates

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Appendix D: Project Area Photographs Rio Santiago Specific Plan Project

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**H.2 - Addendum to a Phase I Cultural
Resources Assessment and
Paleontological Records Review**

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**ADDENDUM TO A PHASE I CULTURAL
RESOURCES ASSESSMENT AND
PALEONTOLOGICAL RECORDS REVIEW**

Rio Santiago Specific Plan Project

City of Orange, Orange County, California

Prepared for:

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Project No. JMI1001

March 25, 2011



BCRCONSULTING

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INTRODUCTION

Brunzell Cultural Resource Consulting (BCR Consulting) is under contract to JMI Real Estate to complete this *Addendum to Phase I Cultural Resources Assessment and Paleontological Records Review of the Rio Santiago Specific Plan Project in the City of Orange, Orange County, California*. The original assessment report was completed per City of Orange (City) requirements pursuant to the California Environmental Quality Act (CEQA), and the purpose of this addendum is to incorporate the subsequent peer review comments to the report submitted to the City. These comments have recommended a revised project description, updated information on local prehistoric cultural sequence and villages, expanded City history, and more explicitly defined recommendations with a figure depicting monitoring areas. Capitalization and spelling corrections will also be observed here as recommended. All of the peer review comments are addressed within this addendum, and summarized in a comments matrix (Appendix A). Subsequent to the peer review comments, planning areas have shifted, and are reflected in the revised project description, figures, and appendices. Since these shifts have not presented new areas of proposed ground disturbance, additional revisions to the cultural resources assessment will not be necessary.

REVISED PROJECT DESCRIPTION

JMI Properties/Santiago Partners, LLC propose the development of the following planning areas (see also Appendix B):

- Planning Area A (48 Gross Acres)
- Planning Area B (10 Gross Acres)
- Planning Area C (17 Gross Acres)
- Planning Area D (35 Gross Acres).

As currently proposed, all construction related impacts and development will take place in the portion of the project area to the south of Santiago Creek, which excludes Planning Area A. Planning Areas B, C, and D will be subject to over-excavation disturbance and earthwork disturbance, including cut excavation and fill placement. Depths vary by location but generally could reach a maximum of 25 feet including a combination of over-excavation and earthwork cut. Planning Area A, including the entire length of Santiago Creek, will be conserved in dedicated open space.

CULTURAL SETTING

Prehistory

Various regional syntheses have been commonly utilized in the archaeological literature for southern California. The most widely cited include Wallace (1955) and Warren (1968 and 1986). Wallace defines four cultural horizons, each with characteristic local variations:

- Early Period (before 6000 B.C.)
- Milling Stone (6000 to 3000 B.C.)
- Intermediate (3000 B.C. to A.D. 500)
- Late Prehistoric (A.D. 500 to A.D. 1769).

Employing a more ecological model Warren (1968) defined three traditions, including:

- San Dieguito (pre 5500 B.C.)
- Encinitas (5500 B.C. to A.D. 600)
- Shoshonean (A.D. 600 to A.D. 1769).

Relying on data from more desert-based groups Warren defined five periods in his 1986 study:

- Lake Mojave (8000 to 5000 B.C.)
- Pinto (5000 to 2000 B.C.)
- Gypsum (2000 B.C. to A.D. 500)
- Saratoga Springs (A.D. 500 to 1200)
- Protohistoric (A.D. 1200 to 1769).

Although these references have provided useful overviews for southern California, updated studies more specific to the prehistory of coastal southern California (see Arnold 1990, 1991, 1992, 1995; Arnold et al. 1997; Raab and Larson 1997) are relevant to the current project area. The current study is synthesized from Mason et al. (1997), and Koerper et al. (2002) who make use of the above-cited resources combined with data from archaeological sites largely concentrated around Newport Bay. This regional focus is considered vital to Orange County prehistory because of the wealth of reliably dated prehistoric sites recorded in the Newport Bay and Bolsa Chica Mesa areas, ranging from 7550 B.C. to the late Late Prehistoric (Mason et al. 1997:35; Koerper et al. 2002:68). A temporal scheme has been formulated from data utilized by both studies, and is provided below in Table A.

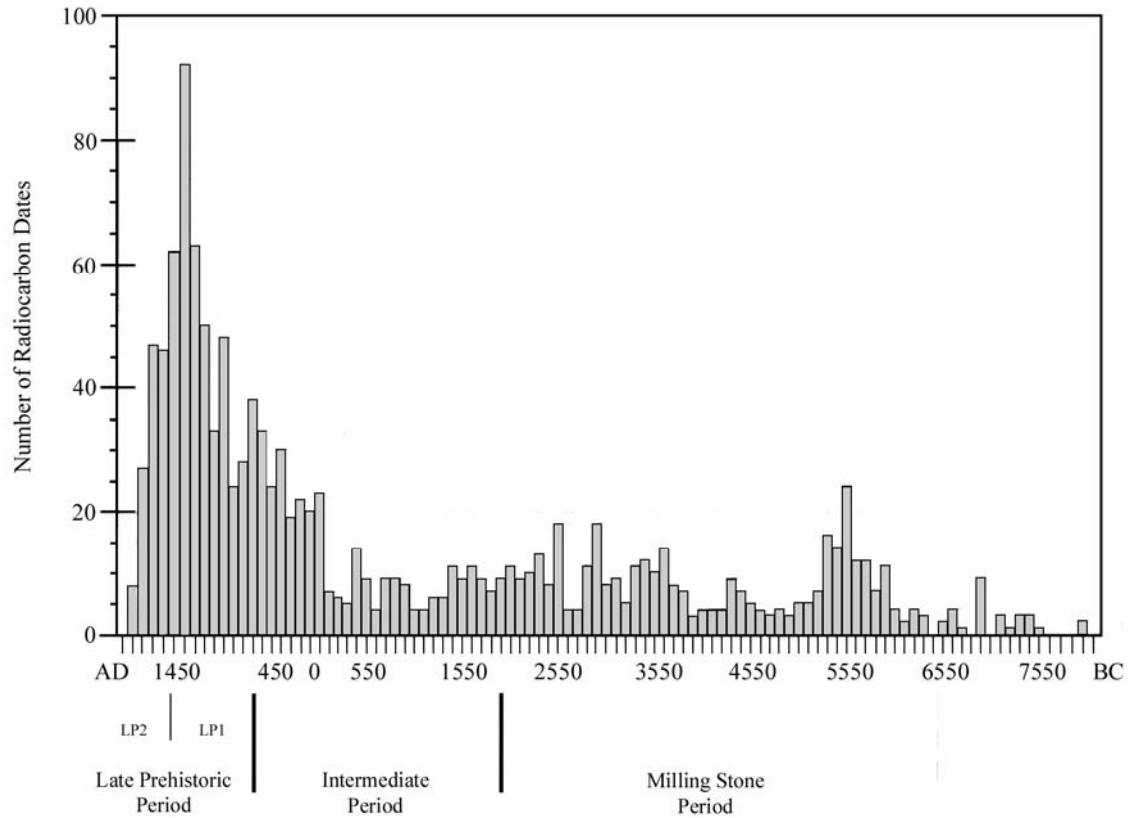
Mason et al. (1997) combine data from six sites excavated during the Newport Coast Archaeological Project (NCAP) with climatic and biogeographical information collected within the greater Orange County area to address the importance of:

- terrestrial/marine vertebrates versus shell-fish/plant utilization by Millingstone populations
- significant population fluctuations during the Early to Middle Holocene
- settlement transition and other adaptive strategies at the end of the Middle Holocene
- issues of prehistoric lithic trade.

They conclude that Middle Holocene site expansion along the Newport coast is the result of new habitats containing important prehistoric food sources that flourished due to stabilizing sea levels between five and six thousand years ago (Mason et al. 1997:58). These habitats particularly included kelp beds containing sheephead fish, and sandy and muddy substrates that encouraged proliferation of cockles, scallops, oysters, bat rays, and guitar fish -each of which has been found in significant numbers during this era at various sites within NCAP (Mason et al. 1997:40-41). During the late Holocene population increase resulting from access to these food sources as well as terrestrial resources allowed further expansion into Orange County's interior.

As prehistoric populations spread throughout the Orange County area, their tool types and site remains indicate two settlement strategies. The first, known as the forager model, enabled whole groups to mobilize between residential bases as part of a seasonal round. This was commonly practiced during the Millingstone and early Intermediate Period. During the late Intermediate Period and the early Late Prehistoric Period, a functional hierarchy of site types appear, containing multi-season residential bases, minor residential bases, and single gender specialized activity locations. This

Table A. Radiocarbon Dates/Periods from Sites in Orange County (Koerper et al. 2002:68)



indicates the second model, known as the collector (or village) model, in which residential bases remain the same or seasonal, while specialized procurement parties are deployed to collect resources and bring them back to base (Mason et al. 1997:52, 56; see also Binford 1980, and Thomas 1983).

In addition to site data, Koerper et al. (2002) utilize information from wetland salinity, climatic and hydrologic conditions, and artificial and natural resource depletion studies which link "demographic dynamics to subsistence intensification, territoriality, violent behavior, trade, and the further elaboration of status hierarchies during the late Holocene in Orange County" (Koerper et al. 2002:63). This approach has underscored the importance of punctuated environmental events, such as the capricious coursing of local drainage systems (particularly the Santa Ana River) often catalyzed by the commencement and/or termination of droughts (i.e. the Medieval Climatic Anomaly and the Little Ice Age). Having occurred within relatively short time frames, these events are posited to give rise to a model of dramatic cultural shift rather than one of gradualism, and have been confirmed by correlating radiocarbon dates utilized in the local prehistoric chronology (Table A).

Dramatic shift is particularly evident between ca. 2000 and 1000 B.C. when a decline in carbon-fourteen dates from the Newport Bay area indicated the disappearance of a population practicing a residential mobility pattern of foraging, the predominant adaptive strategy practiced during the mid-Holocene. The disappearance of this Newport Bay group is highly correlated with very dry conditions, as indicated by pollen studies (Koerper et al. 2002:79), and people do not reappear in this area in significant numbers until circa 1000 B.C., at which point fewer, more highly concentrated

settlements appear. Some resource intensification is apparent during the ensuing generations, and by the beginning of the Late Prehistoric is confirmed by the expanding use of shellfish recovered in context as far as six kilometers from its origin at Newport Bay. Resource intensification is often a sign of a shortage of preferred or customary resources brought about by a rise in population and/or other factors. Such a rise in population certainly occurred by A.D. 600, peaking circa A.D. 1300 (see Table A), and is correlated with the local advent of the bow and arrow, which may have been brought by Gabrielino ancestors, Takic speakers from the Southwest (Koerper et al. 2002:80). Native Orange County populations began to decline during the late Late Prehistoric (LP2) prior to any likely effects of European disease. Koerper et al. suggests that rather than exceeding the land's carrying capacity, this decline in the Orange County area was due to a failure of "food yields...to increase in proportion to the additional investments of energy expended in subsistence labor" (Koerper et al. 2002:80; see also Halstead and O'Shea 1989; Hayden 1990). This has been further supported by oral tradition, which suggests that people were driven to leave food procurement areas due to incongruities between population and resources (ibid), which gave rise to the patterns whose rudiments remained at the time of European contact (see also Ethnography).

Ethnography

The Gabrielino probably first encountered Europeans when Spanish explorers reached California's southern coast during the 15th and 16th centuries (Bean and Smith 1978; Kroeber 1925). The first documented encounter, however, occurred in 1769 when Gaspar de Portola's expedition crossed Gabrielino territory (Bean and Smith 1978). Other brief encounters took place over the years, and are documented in McCawley 1996 (citing Woodward 1959, Vizcaino 1959, Priestley 1937, Shaler 1935, Geiger 1976, Kroeber 1925, Hudson and Blackburn 1978, Boscana 1933, Wilbur 1937, Heizer 1968 and 1976, Dakin 1939, Hoffman 1885, King 1899, Harrington 1986, and others).

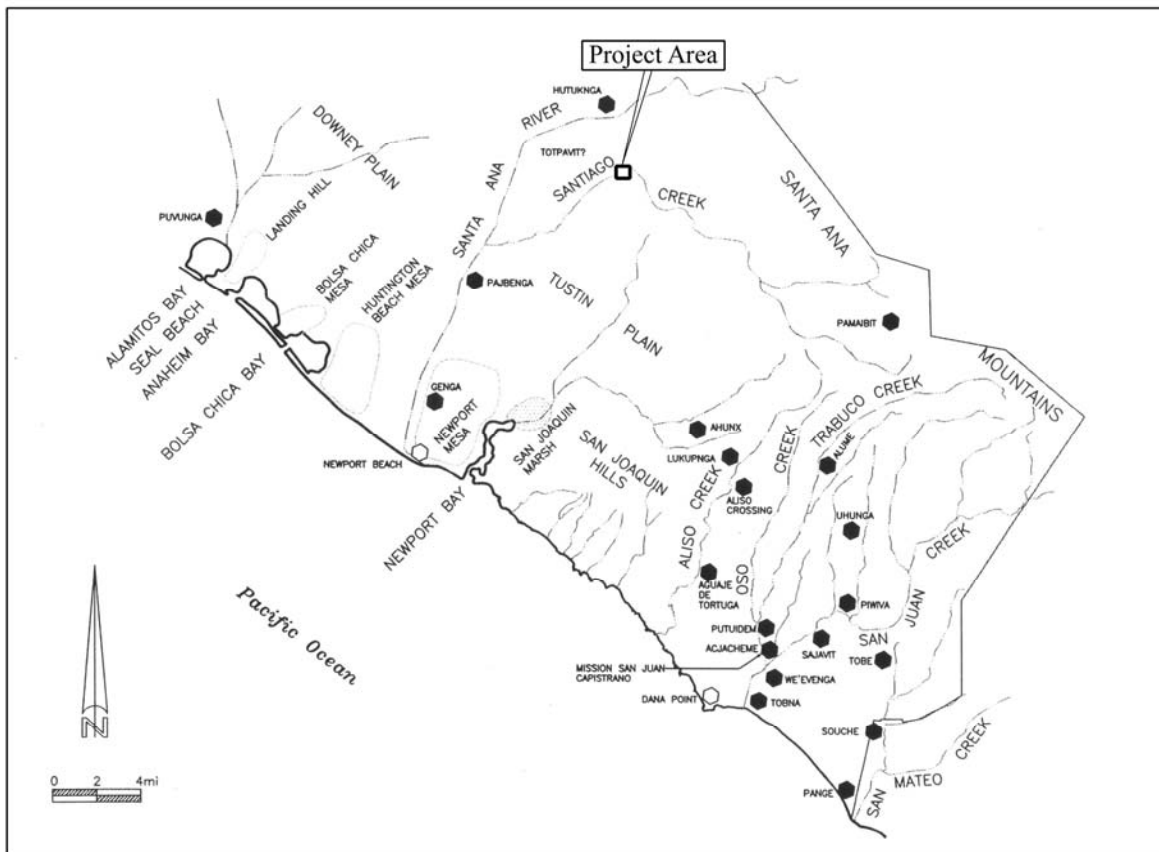
The project area is situated within the traditional boundaries of the Gabrielino (Tongva; see McCawley 1996, Heizer 1978, and Kroeber 1925). The Gabrielino were originally studied using ethnography, particularly during the early 20th century, although their decimation through acculturation and disease has necessitated supplementing any social analysis with archaeological data. The Gabrielino name has been attributed by association with the Spanish mission of San Gabriel, and refers to a subset of people sharing speech and customs with other Cupan speakers (such as the Juaneño/Ajachemem) from the greater Takic branch of the Uto-Aztecan language family (Bean and Smith 1978, Shipley 1978). The Gabrielino were semi-nomadic hunter-gatherers who subsisted by exploitation of seasonably available plant and animal resources. Plants utilized for food were heavily relied upon and included acorn-producing oaks, as well as seed-producing grasses and sage. Animal protein was commonly derived from rabbits and deer in inland regions, while coastal populations supplemented their diets with fish, shellfish, and marine mammals (Boscana 1933, Heizer 1968, Johnston 1962, McCawley 1996). Dog, coyote, bear, tree squirrel, pigeon, dove, mud hen, eagle, buzzard, raven, lizards, frogs, and turtles were specifically not utilized as a food source (Kroeber 1976:652).

Socially, the Gabrielino were organized by lineage group headed by a *tomyaar* or chief. Communities contained one or more lineage groups, and were frequently allied by marriage. Ritual and economic trade and exchange as well as marriage formed fluid bonds between the Gabrielino, and the Juaneño, Cahuilla, Chumash, Serrano, and Luiseño (McCawley 1996:10). Prior to the establishment of the Mission system, populations tended to live in larger villages constructed to easily access a reliable fresh water supply. The villages were associated with temporary outliers or camps that performed

specialized functions indicative of a collector (or village) settlement model (see also Prehistory above). Habitation structures were dome shaped and constructed of branches, grasses, and mud. Interior hearths were used for heat, while cooking usually occurred at outdoor hearths. The Gabrielino formed numerous styles of bow, portable and bedrock mortars, manos, metates, basketry, pipes, chisels, and many classes of chipped stone tools.

Named Gabrielino villages near the project area include Hutuknga and Pajbengna, located on the Santa Ana River approximately three miles northwest and seven miles southwest, respectively (see Figure 2). The Santiago Creek crosses the current project from east to west, and although no villages have been recorded along its banks, a number of sites indicative of a Late Prehistoric (i.e. Gabrielino) occupation have been noted in the immediate vicinity. These include CA-ORA-369/P-30-000369, recorded within the northern project area boundary (Sanka 2008:23), and CA-ORA-1172/P-30-001172, as "potentially extending into the eastern project area boundary" (ibid.) and probably represent temporary outliers or camps associated with one or more of the larger named Gabrielino villages.

Figure 1. Mission Period Villages of Orange County (Koerper et al. 2002:65)

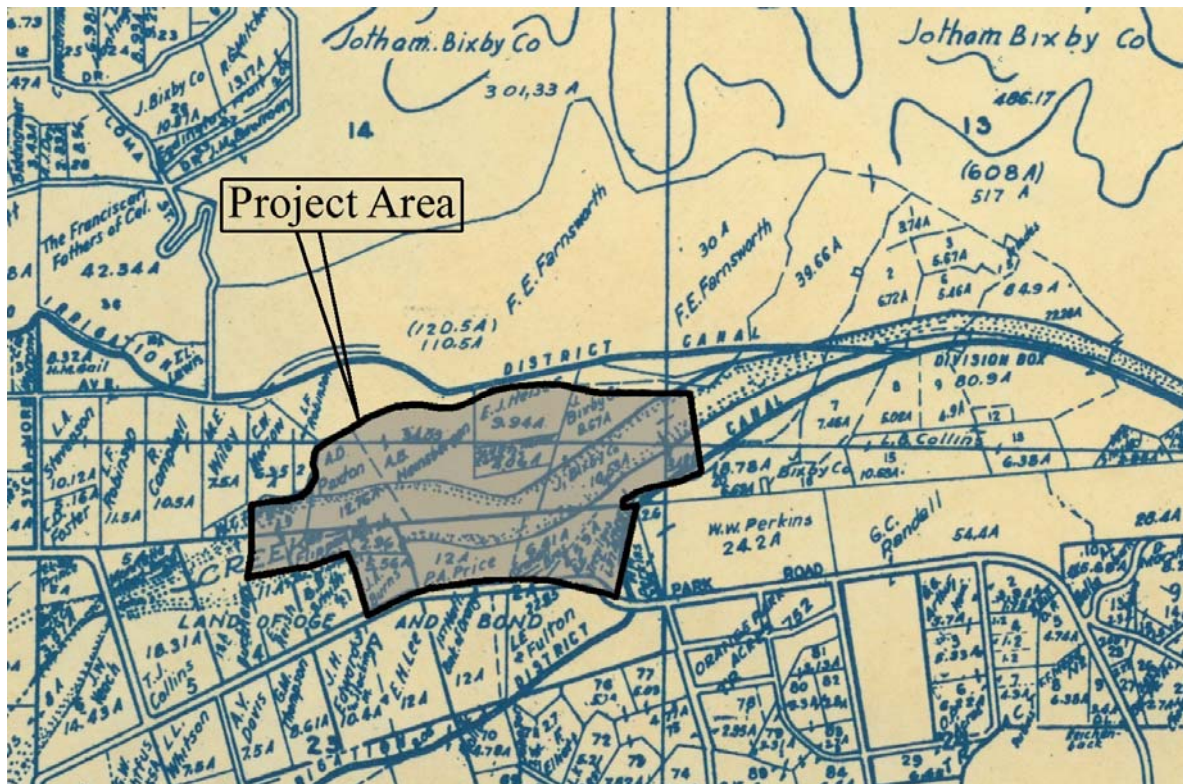


History

Similar to most southern California cities, the early years in the City of Orange are defined by themes of settlement and agriculture. Grain crops were the first agricultural endeavors in the area, followed by grapevine planting for raisin production. A county-wide blight destroyed the vines in 1887 and 1888 prompting the planting of walnut, apricot, and finally orange groves during the 1890s (Brigandi 1988:153). The competing Southern Pacific and Santa Fe Railroads both built depots in Orange in the 1880s. The Southern Pacific opened the first depot in 1880, and the Santa Fe depot opened in 1887. As a city with an area of approximately three square miles and a population of about 600 people, Orange experienced a boom resulting in incorporation on April 6, 1888 (Armor 1911; Brigandi 1988:153). A year later, the southern half of Los Angeles County was divided to form Orange County, with Santa Ana chosen as County Seat.

During the early portion of the 20th century local farmers experimented with a variety of crops and fruit-bearing trees, but by 1920 oranges had become the area's most prolific and profitable crop. By 1929, Orange County was producing more than \$12 million in oranges annually with a large percentage coming from the City of Orange. Although the project area remained undeveloped during the early part of the century (see Santos 2008:32), Orange County ownership maps show a number of owners within its boundaries by 1930 (see Figure 2). The large number of parcels and the unaltered alignment of Santiago Creek indicates that, reflexive of the greater community, orchards were active within the project area during this period (see also Santos 2008:32).

Figure 2: Project Area Overlaid on Historic Ownership Parcels (Not to Scale; Blackburn 1930)



A catastrophic freeze and flood in 1937-38, combined with the economic hardships nationally felt from the Great Depression brought an economic decline to Orange that lasted until World War II. Plummeting crop prices caused the working class character of the region to shift from agriculture, and emphasize Works Progress Administration (WPA)-related efforts. Within the City of Orange, these included the construction of Hart Park, a new post office, and a high school stadium. The 1940s ushered in another notable shift during which the local economic infrastructure accommodated an influx of military personnel preparing to enter the Pacific campaign during World War II. When the war and its accompanying opportunities ended, new federal expenditures caused Orange County's manufacturing base, banking system, and transportation infrastructure to expand dramatically (Marsh 1988:55).

Since the area contained more undeveloped land and a milder climate than much of the country the new economic opportunities attracted service personnel from a variety of backgrounds, seeking to start careers and families. New real estate and construction developments punctuated the continuing transformation from a rural to suburban character during the 1950s, and between 1940 and 1960 the City of Orange's population expanded from 7,900 to 26,000 (Brigandi 1988:154). Aerial photos of the project area show extensive grading related to sand and gravel surface mining and processing by 1952 (see Appendix C and Santos 2008:19, 28-29, Exhibit 5), indicative of aggregate acquisition and processing necessary to accommodate the post-War construction boom.

Advance planning facilitated by such 1950s civic leaders as City Manager George Weimer enabled the City to keep pace with its expanding tax base by forming policies that encouraged a mix of residential, commercial, and industrial development (Brigandi 1988:154). New neighborhood design models accompanied the exploding population in which features such as detached garages, built-in appliances, carpets, fences, second stories and other amenities gave way to single story, horizontally-oriented, ranch-style residences (Marsh 1988:57). The new tract-style homes were larger and less expensive to build, and by the 1960s two-story and split-level homes began to emphasize the increasing importance of the automobile and commuter culture with designs dominated by large two-car attached garages, easily accessed from the street (ibid.). Although suburban development dominated the post-War settlement pattern, civic expansion had to keep up and during the 1960s a new fire department headquarters, a new main library, and a new civic center. Although the suburban theme remains pervasive, the City of Orange did not demolish its historic town center to make way, and largely retains its central historic character to this day.

REVISED RECOMMENDATIONS

Cultural Resource Recommendations

Archaeological monitoring shall take place per recommendations presented in Sanka 2008:33-35, with the below revisions. The existing recommendations do not require monitoring within the central portion of the project area "that has been subject to historic-era surface mining operations" (Sanka 2008:34). Per the peer review comments, the portion of the project area that will be subject to project-related excavation (see Revised Project Description) and was not subject to historic-era surface mining operations (see Appendix C) is indicated by red shading in Figure 3, and shall be subject to archaeological monitoring during all ground disturbing activities.

Also, per the peer review comments, post discovery recommendations for archaeological resources are added to the existing mitigation text (see Sanka 2008:34) as follows:

If any archaeological artifacts are collected during construction monitoring, they shall be identified, photographed, measured, and temporarily housed as appropriate under the supervision of the project archaeologist at a laboratory or facility maintained by the firm or group represented by the project archaeologist, and as approved by the lead agency. Any artifacts recovered shall be described for the technical report to fully exhaust the artifact's data potential as it relates to significance of the greater resource or site with which the artifact is associated, per CEQA Guideline §15064.5. All collected artifacts shall be inventoried and catalogued per curation requirements consistent with those of an established, accredited museum repository. The project archaeologist must have a written repository agreement in hand prior to the initiation of mitigation activities.

Paleontological Resource Recommendations

Paleontological monitoring shall also take place per recommendations presented in Sanka 2008:33-35. Per the recommendations and upon a preliminary site assessment and approval by a qualified paleontologist prior to ground disturbing activities, the portion of the project that will be subject to paleontological monitoring shall include any areas within older Quaternary terrace deposits at depth, which include any ground disturbing activities within Planning Areas B, C, or D (see Figure 3).

Figure 3. Planning Areas/Areas Recommended for Archaeological Monitoring in Red



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APPENDIX A

PEER REVIEW COMMENTS MATRIX

Comments Matrix

Comments and response summary from Peer Review of *Phase I Cultural Resources Assessment and Paleontological Records Review, Rio Santiago Specific Plan Project, City of Orange, Orange County, California*

Comment	Response Summary
<p>The project description needs to be slightly revised to indicate whether Area A is the only parcel that will be subjected to grading and other earthmoving or if B, C, or D will also be subjected to any amount of excavation. This could be reflected on Exhibit 4 as well for clarity. What is the maximum depth of impacts expected in each area?</p>	<p>The project description has been rewritten to indicate where grading and earthmoving will take place within Planning Areas A, B, C, and D. Expected maximum depth is included. An updated Conceptual Site plan (no longer Exhibit 4) reflecting the new planning area boundaries is provided in Figure 3 and Appendix B.</p>
<p>Information cited under Prehistoric Background is dated. Please provide updated cultural sequence information using Mason, Koerper, and Langenwalter (1997) and Koerper, Mason, and Peterson (2003) or similar sources.</p>	<p>The recommended sources and others have been cited to develop a completely revised and updated Prehistoric Background under the heading "Cultural Setting" sub-heading "Prehistory". A figure is included to illustrate a prehistoric chronology specifically relevant to Orange County.</p>
<p>There is no ñ in Gabrielino. Please remove throughout.</p>	<p>The outdated spelling is acknowledged and has not been used in the addendum document.</p>
<p>Also this section gives the territory of the Gabrielino but no real information to provide context on how this area might have been utilized in prehistory. All major villages known are in areas with permanent fresh water while seasonal or temporary camps may have been present near sources such as Santiago Creek. There are known villages much closer to Orange than Rancho Cucamonga is. Check McCawley.</p>	<p>A Gabrielino section has been included under the heading "Ethnography". The purpose of rewriting this section was to provide contextual information on the area's use by the Gabrielino during prehistory, and how that use relates to regional prehistory. Seasonal and temporary camps, or outliers, are attributed to the appropriate known non-village sites along Santiago Creek near the project area. A figure has been included to show the current project area's location in relation to known prehistoric Gabrielino villages. McCawley 1996 and others are referenced.</p>
<p>There are also better sources on the history of Orange than the City website. In particular, since you show that there were extensive impacts to the project in the 1950s, more history from 1950 to present would be appropriate. Try these for starters: [recommends Blackburn 1930, Cramer et al. 1988].</p>	<p>The history of Orange is rewritten under the heading "History". Per the peer review comments, greater emphasis is placed on 1950-present, although extensive research revealed that the theme of post-World War II development was the most relevant to the project area. The addendum references and includes a figure from Blackburn 1930, and references</p>

Comment	Response Summary
	Cramer et al. 1988, and others as appropriate.
<p>Information Center Search. Just a point of correction. The Information Centers went from using CA-Ora-xxx to CA-ORA-xxx more than 20 years ago. In addition, since sites are filed by primary number that should also be included. Fullerton's records are easy to translate -just P-30-001017 instead of CA-ORA-1017.</p>	<p>Correct capitalization and trinomial/primary number usage is acknowledged and appropriately applied in the addendum.</p>
<p>Given the extent of grading this portion of Santiago Creek was subjected to, it is exceptionally unlikely that the stream area will yield any cultural resources.</p>	<p>Clarification of monitoring requirements specifies the areas recommended for monitoring, which excludes the Area A and Santiago Creek (see "Revised Recommendations" and Figure 3 of the addendum).</p>
<p>I object to the fuzziness of recommendations like full-time archaeological monitoring should be conducted with the exception of the central portion. A map clearly demarcating areas to be specifically monitored for archaeology and for paleontology would be much more useful and precise. It should take into account information on past impacts to the project like your historic aerial.</p>	<p>A Revised Recommendations section is included with a figure clearly depicting areas to be specifically monitored for archaeology. These were developed by overlaying undisturbed portions indicated by the Historic Era Aerial Photograph (see Appendix C of addendum/Santos 2008:Exhibit 5) on the Conceptual Site Plan (see Figure 3). Paleontological monitoring is recommended within Planning Areas B, C, and D, referencing Figure 3.</p>
<p>There is a large disconnect between the cultural and paleontological mitigation plans in terms of post-discovery requirements. Even archaeological resources need lab work, analysis, a repository to go to, etc. Please add appropriate measures.</p>	<p>A mitigation measure has been included within the Revised Recommendations section to address post-discovery requirements, including lab work and analysis, and specifying curation facility and repository requirements.</p>
<p>The use of the word (?) paleontologic only in the mitigation measures seems strange. Please change to paleontological to match rest of document.</p>	<p>This inconsistency is acknowledged, and is not used in the addendum.</p>

APPENDIX B

CONCEPTUAL SITE PLAN



Legend	
 LDR	Low Density Residential
 MDR	Medium Density Residential
 OS	Open Space - Natural
 OS-A	Open Space - Active Recreation

SOURCE: KTG.

CONCEPTUAL SITE PLAN

RIO SANTIAGO PROJECT - CITY OF ORANGE

VISTA
NO SCALE



FIGURE 4

APPENDIX C

HISTORICAL ERA AERIAL PHOTOGRAPH



Source: National Agriculture Imagery Program for Orange County (2005).



Michael Brandman Associates

34120002 • 11/2008 | 5_historical_aerial.mxd

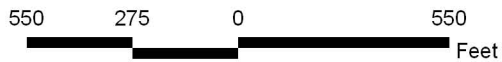


Exhibit 5 Historical Era Aerial Photograph

JMI PROPERTIES / SANTIAGO PARTNERS, LLC • RIO SANTIAGO SPECIFIC PLAN
PHASE I CULTURAL RESOURCES ASSESSMENT

H.3 - Updated Native American Consultation for the Rio Santiago Specific Plan

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May 12, 2011

Mr. John Martin
JMI Real Estate
10632 South Mead
Orange, California 92867

Subject: Updated Native American Consultation for the Rio Santiago Specific Plan Project, City of Orange, Orange County, California (BCR Consulting Project Number JMI1001).

Dear Mr. Martin:

Brunzell Cultural Resource Consulting (BCR Consulting) was retained by JMI Real Estate to initiate Native American Consultation on behalf of the City of Orange (City) for the Rio Santiago Specific Plan Project, City of Orange, Orange County, California. This letter and attachments present those results. Native American Consultation was previously conducted by Michael Brandman Associates in December, 2008 as part of the *Phase I Cultural Resources Assessment and Paleontological Records Review Rio Santiago Specific Plan Project, City of Orange, Orange County, California*. Changes to the project have necessitated updating the consultation task.

Native American Consultation

In response to an invitation from the City to comment on the current project, Mr. David Singleton of the Native American Heritage Commission (NAHC) completed and submitted a letter containing the updated Sacred Lands File search, and a list of potentially concerned Native American Tribes and individuals to contact regarding the project. The Sacred Lands File search failed to reveal any record of Native American cultural resources within the project boundaries. Upon receiving Mr. Singleton's letter, and with permission from City Senior Planner, Mr. Chad Ortlieb, BCR Consulting has communicated with potentially concerned tribes and individuals on the City's behalf via certified letters, emails, and phone calls. A record of all communications is provided in an attachment to this letter. BCR Consulting will forward any additional responses upon receipt.

Please contact me by phone at 909/525-7078 or e-mail at david.brunzell@yahoo.com with any questions or comments.

Sincerely,

David Brunzell, M.A./RPA
Principal Investigator/Archaeologist

Attachment A: Native American Consultation Correspondence

ATTACHMENT A:
NATIVE AMERICAN CONSULTATION CORRESPONDENCE

NATIVE AMERICAN HERITAGE COMMISSION

915 CAPITOL MALL, ROOM 364
SACRAMENTO, CA 95814
(916) 653-6251
Fax (916) 657-5390
Web Site www.nahc.ca.gov
ds_nahc@pacbell.net



April 25, 2011

Mr. Chad Ortlieb, Senior Planner

City of Orange Community Development Department

300 E. Chapman Avenue
Orange, CA 92666

Re: SCH#2011041029 CEQA Notice of Preparation (NOP); draft Environmental Impact Report (DEIR); for the: "Rio Santiago Project;" located in the City of Orange; Orange County, California

Dear Mr. Ortlieb:

The Native American Heritage Commission (NAHC), the State of California 'Trustee Agency' for the protection and preservation of Native American cultural resources. The NAHC wishes to comment on the above-referenced proposed Project.

This letter includes state and federal statutes relating to Native American historic properties of religious and cultural significance to American Indian tribes and interested Native American individuals as 'consulting parties' under both state and federal law. State law also addresses the freedom of Native American Religious Expression in Public Resources Code §5097.9.

The California Environmental Quality Act (CEQA – CA Public Resources Code 21000-21177, amendments effective 3/18/2010) requires that any project that causes a substantial adverse change in the significance of an historical resource, that includes archaeological resources, is a 'significant effect' requiring the preparation of an Environmental Impact Report (EIR) per the CEQA Guidelines defines a significant impact on the environment as 'a substantial, or potentially substantial, adverse change in any of physical conditions within an area affected by the proposed project, including ... objects of historic or aesthetic significance.' In order to comply with this provision, the lead agency is required to assess whether the project will have an adverse impact on these resources within the 'area of potential effect (APE), and if so, to mitigate that effect. The NAHC Sacred Lands File (SLF) search resulted in; **Native American cultural resources were not identified** within the 'area of potential effect (APE), based on the USGS coordinates of the project location, based on the project information provided. The NAHC "Sacred Sites," as defined by the Native American Heritage Commission and the California Legislature in California Public Resources Code §§5097.94(a) and 5097.96. Items in the NAHC Sacred Lands Inventory are confidential and exempt from the Public Records Act pursuant to California Government Code §6254.10.

Early consultation with Native American tribes in your area is the best way to avoid unanticipated discoveries of cultural resources or burial sites once a project is underway. Culturally affiliated tribes and individuals may have knowledge of the religious and cultural significance of the historic properties in the project area (e.g. APE). We strongly urge that you make contact with the list of Native American Contacts on the attached list of Native American contacts, to see if your proposed project might impact Native American cultural resources and to obtain their recommendations concerning the proposed project. Consultation with Native

American communities is also a matter of environmental justice as defined by California Government Code §65040.12(e). The NAHC recommends *avoidance* as defined by CEQA Guidelines §15370(a) to pursuing a project that would damage or destroy Native American cultural resources.

Furthermore we recommend, also, that you contact the California Historic Resources Information System (CHRIS)/ California Office of Historic Preservation for pertinent archaeological data within or near the APE, at (916) 445-7000 for the nearest Information Center in order to learn what archaeological fixtures may have been recorded in the APE.

Consultation with tribes and interested Native American consulting parties, on the NAHC list, should be conducted in compliance with the requirements of federal NEPA (42 U.S.C 4321-43351) and Section 106 and 4(f) of federal NHPA (16 U.S.C. 470 *et seq.*, 36 CFR Part 800.3 (f) (2) & .5, the President's Council on Environmental Quality (CSQ, 42 U.S.C 4371 *et seq.* and NAGPRA (25 U.S.C. 3001-3013) as appropriate. The 1992 *Secretary of the Interiors Standards for the Treatment of Historic Properties* were revised so that they could be applied to all historic resource types included in the National Register of Historic Places and including cultural landscapes. Also, federal Executive Orders Nos. 11593 (preservation of cultural environment), 13175 (coordination & consultation) and 13007 (Sacred Sites) are helpful, supportive guides for Section 106 consultation.

Furthermore, Public Resources Code Section 5097.98, California Government Code §27491 and Health & Safety Code Section 7050.5 provide for provisions for accidentally discovered archeological resources during construction and mandate the processes to be followed in the event of an accidental discovery of any human remains in a project location other than a 'dedicated cemetery'.

To be effective, consultation on specific projects must be the result of an ongoing relationship between Native American tribes and lead agencies, project proponents and their contractors, in the opinion of the NAHC. Regarding tribal consultation, a relationship built around regular meetings and informal involvement with local tribes will lead to more qualitative consultation tribal input on specific projects.

The response to this search for Native American cultural resources is conducted in the NAHC Sacred Lands Inventory, established by the California Legislature (CA Public Resources Code 5097.94(a) and is exempt from the CA Public Records Act (c.f. California Government Code 6254.10) although Native Americans on the attached contact list may wish to reveal the nature of identified cultural resources/historic properties. Confidentiality of "historic properties of religious and cultural significance" may also be protected under Section 304 of the NHA or at the Secretary of the Interior discretion if not eligible for listing on the National Register of Historic Places. The Secretary may also be advised by the federal Indian Religious Freedom Act (cf. 42 U.S.C., 1996) in issuing a decision on whether or not to disclose items of religious and/or cultural significance identified in or near the APEs and possibility threatened by proposed project activity.

If you have any questions about this response to your request, please do not hesitate to contact me at (916) 653-6251.

Sincerely,


Dave Singleton, Program Analyst
Cc: State Clearinghouse

Native American Contact List

Orange County

April 25, 2011

Ti'At Society/Inter-Tribal Council of Pimu
Cindi M. Alvitre, Chairwoman-Manisar
6515 E. Seaside Walk, #C Gabrielino
Long Beach , CA 90803
calvitre@yahoo.com
(714) 504-2468 Cell

Juaneno Band of Mission Indians Acjachemen Nation
David Belardes, Chairperson
32161 Avenida Los Amigos Juaneno
San Juan Capistrano CA 92675
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chiefdavidbelardes@yahoo.
com
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Tongva Ancestral Territorial Tribal Nation
John Tommy Rosas, Tribal Admin.
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Gabrielino/Tongva San Gabriel Band of Mission
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Gabrielino Tongva Indians of California Tribal Council
Robert F. Dormae, Tribal Chair/Cultural Resources
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714-998-0721 - FAX
714-321-1944 - cell

This list is current only as of the date of this document.

Distribution of this list does not relieve any person of the statutory responsibility as defined in Section 7050.5 of the Health and Safety Code, Section 5097.94 of the Public Resources Code and Section 5097.98 of the Public Resources Code.

This list is only applicable for contacting local Native Americans with regard to cultural resources for the proposed SCH#2011041029; CEQA Notice of Preparation (NOP); draft Environmental Impact Report (DEIR) for the Rio Santiago Project; located within the City of Orange; Orange County, California.

Native American Contact List

Orange County

April 25, 2011

Juaneño Band of Mission Indians
Sonia Johnston, Tribal Chairperson
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net
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1875 Century Pk East #1500 Gabrielino
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(310) 587-0170 - FAX
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Juaneno Band of Mission Indians Acjachemen Nation
Joyce Perry; Representing Tribal Chairperson
4955 Paseo Segovia Juaneno
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949-293-8522

Gabrielino-Tongva Tribe
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(310) 587-0170 - FAX
760-904-6533-home

This list is current only as of the date of this document.

Distribution of this list does not relieve any person of the statutory responsibility as defined in Section 7050.5 of the Health and Safety Code, Section 5097.94 of the Public Resources Code and Section 5097.98 of the Public Resources Code.

This list is only applicable for contacting local Native Americans with regard to cultural resources for the proposed SCH#2011041029; CEQA Notice of Preparation (NOP); draft Environmental Impact Report (DEIR) for the Rio Snatiago Project; located within the City of Orange; Orange County, California.

Native American Consultation Summary: Updated Native American Consultation for the Rio Santiago Specific Plan Project, City of Orange, Orange County, California. Native American Heritage Commission replied to BCR Consulting Request on April 25, 2011. Results of Sacred Land File Search did not indicate presence of Native American cultural resources, and recommended contacting the below groups.

Groups Contacted	Date Letter/ Email Sent	Response from Tribes	Follow Up Phone Calls
Ti-At Society/Inter-Tribal Council of Pimu Cindi M. Alvitre, Chairwoman-Manisar	Letter: 5/9/11 Email: 5/9/11	None	5/12/11: Left message
Gabrielinon Tongva Nation Sam Dunlap, Chairperson	Letter: 5/9/11 Email: 5/9/11	None	5/12/11: Sam will respond via email with any concerns.
Juaneño Band of Mission Indians Acjachemen Nation David Belardes, Chairperson	Letter: 5/9/11 Email: 5/9/11	None	5/12/11: Left message.
Juaneño Band of Mission Indians Acjachemen Nation Anthony Rivera, Chairman	Letter: 5/9/11 Email: 5/9/11	None	5/12/11: Cell number was for Juaneño representative Chris Lobo, who said Mr. Rivera would email any concerns.
Tongva Ancestral Territorial Tribal Nation John Tommy Rosas, Tribal Admin.	Letter: 5/9/11 Email: 5/9/11	None	5/12/11: Left message.
Gabrielino Tongva Indians of California Tribal Council Robert F. Doramae, Tribal Chair-Cultural Resources	Letter: 5/9/11 Email: 5/9/11	None	5/12/11: Left message.
Gabrieleno/Tongva San Gabriel Band of Mission Indians Anthony Morales, Chairperson	Letter: 5/9/11 Email: 5/9/11	5/10/11: Mr. Morales responded by phone. He considers the area sensitive for prehistoric resources and recommends Native American and archaeological Monitoring of all ground disturbing.	N/A
Juaneño Band of Mission Indians Alfred Cruz, Cultural Coordinator	Letter: 5/9/11 Email: 5/9/11	None	5/12/11: Left message.
Juaneño Band of Mission Indians Sonia Johnston, Tribal Chairperson	Letter: 5/9/11 Email: 5/9/11	None	5/12/11: Ms. Johnston has no specific concerns but would like to be notified of any cultural resources discovered during project activities.
Gabrielino-Tongva Tribe Bernie Acuna	Letter: 5/9/11 Email: 5/9/11	None	5/12/11: No answer.
Juaneño Band of Mission Indians Acjachemen Nation Jorce Perry; Representing Tribal Chairperson	Letter: 5/9/11 Email: N/A	None	5/12/11: Left message.
Gabrielino-Tongva Tribe Linda Candelaria, Chairwoman	Letter: 5/9/11 Email: 5/9/11	None	5/12/11: Left message.



May 9, 2011

Ti-At Society/Inter-Tribal Council of Pimu
Cindi M. Alvitre, Chairwoman
6515 E. Seaside Walk, #C
Long Beach, California 90803

Subject: Updated Tribal Consultation for the Rio Santiago Specific Plan Project, City of Orange, Orange County, California

Dear Cindi:

This is an invitation to consult on a proposed development project at locations with which you have tribal cultural affiliation. The purpose of the consultation is to ensure the protection of Native American cultural resources on which the proposed undertaking may have an impact. In the tribal consultation process, early consultation is encouraged in order to provide for full and reasonable public input from Native American Groups and Individuals, as consulting parties, on potential effect of the development project and to avoid costly delays. Further, we understand that much of the content of the consultation will be confidential and will include, but not be limited to, the relationship of proposed project details to Native American Cultural Historic Properties, such as burial sites, known or unknown, architectural features and artifacts, ceremonial sites, sacred shrines, cultural landscapes including traditional beliefs and practices. A letter regarding this project was sent to your attention by Michael Brandman Associates on November 3, 2008. The planning areas have been subsequently reconfigured, and as a result Tribal Consultation is being re-initiated by BCR Consulting on behalf of the City of Orange. JMI Properties/Santiago Partners, LLC propose the development of the following (reconfigured) planning areas (see also attached Conceptual Site Plan):

- Planning Area A (48 Gross Acres)
- Planning Area B (10 Gross Acres)
- Planning Area C (17 Gross Acres)
- Planning Area D (35 Gross Acres).

The project occupies 110 acres within an unsectioned portion of the Santiago De Santa Ana Land Grant in Township 4 South, Range 9 West, San Bernardino Baseline and Meridian (SBBM; see attached Conceptual Site Plan). As currently proposed, all construction related impacts and development will take place in the portion of the project area to the south of Santiago Creek, which excludes Planning Area A. Planning Areas B, C, and D will be subject to over-excavation disturbance and earthwork disturbance, including cut excavation and fill placement. Depths vary by location but generally could reach a maximum of 25 feet including a combination of over-excavation and earthwork cut. Planning Area A, including the entire length of Santiago Creek, will be conserved in dedicated open space.

If you know of any cultural resources in the vicinity that may be of religious and/or cultural significance to your community or if you would like more information, please contact me at 909-525-7078 or david.brunzell@yahoo.com. Correspondence can also be sent to BCR Consulting, Attn: David Brunzell, 440 West 7th Street, Claremont, California 91711. I request a response by May 25, 2011, so that your input can be included. If you require more time, please let me know. I will also contact you by telephone to discuss any comments or concerns you may have. Thank you for your involvement in this process.

Sincerely,

BCR Consulting

A handwritten signature in black ink, appearing to read 'David Brunzell', written in a cursive style.

David Brunzell, M.A./RPA
Principal Investigator/Archaeologist
Attachment: Conceptual Site Plan



Legend	
	LDR Low Density Residential
	MDR Medium Density Residential
	OS Open Space - Natural
	OS-A Open Space - Active Recreation

SOURCE: KTG.

CONCEPTUAL SITE PLAN

RIO SANTIAGO PROJECT - CITY OF ORANGE

VISTA
NO SCALE



FIGURE 4



May 9, 2011

Gabrielino Tongva Nation
Sam Dunlap, Chairperson
P.O. Box 86908
Los Angeles, California 90086

Subject: Updated Tribal Consultation for the Rio Santiago Specific Plan Project, City of Orange, Orange County, California

Dear Sam:

This is an invitation to consult on a proposed development project at locations with which you have tribal cultural affiliation. The purpose of the consultation is to ensure the protection of Native American cultural resources on which the proposed undertaking may have an impact. In the tribal consultation process, early consultation is encouraged in order to provide for full and reasonable public input from Native American Groups and Individuals, as consulting parties, on potential effect of the development project and to avoid costly delays. Further, we understand that much of the content of the consultation will be confidential and will include, but not be limited to, the relationship of proposed project details to Native American Cultural Historic Properties, such as burial sites, known or unknown, architectural features and artifacts, ceremonial sites, sacred shrines, cultural landscapes including traditional beliefs and practices. A letter regarding this project was sent to your attention by Michael Brandman Associates on November 3, 2008. The planning areas have been subsequently reconfigured, and as a result Tribal Consultation is being re-initiated by BCR Consulting on behalf of the City of Orange. JMI Properties/Santiago Partners, LLC propose the development of the following (reconfigured) planning areas (see also attached Conceptual Site Plan):

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If you know of any cultural resources in the vicinity that may be of religious and/or cultural significance to your community or if you would like more information, please contact me at 909-525-7078 or david.brunzell@yahoo.com. Correspondence can also be sent to BCR Consulting, Attn: David Brunzell, 440 West 7th Street, Claremont, California 91711. I request a response by May 25, 2011, so that your input can be included. If you require more time, please let me know. I will also contact you by telephone to discuss any comments or concerns you may have. Thank you for your involvement in this process.

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Principal Investigator/Archaeologist
Attachment: Conceptual Site Plan



SOURCE: KTG.

CONCEPTUAL SITE PLAN

RIO SANTIAGO PROJECT - CITY OF ORANGE

VISTA
NO SCALE



FIGURE 4



May 9, 2011

Juaneno Band of Mission Indians Acjachemen Nation
David Belardes, Chairperson
32161 Avenida Los Amigos
San Juan Capistrano, California 92675

Subject: Updated Tribal Consultation for the Rio Santiago Specific Plan Project, City of Orange, Orange County, California

Dear David:

This is an invitation to consult on a proposed development project at locations with which you have tribal cultural affiliation. The purpose of the consultation is to ensure the protection of Native American cultural resources on which the proposed undertaking may have an impact. In the tribal consultation process, early consultation is encouraged in order to provide for full and reasonable public input from Native American Groups and Individuals, as consulting parties, on potential effect of the development project and to avoid costly delays. Further, we understand that much of the content of the consultation will be confidential and will include, but not be limited to, the relationship of proposed project details to Native American Cultural Historic Properties, such as burial sites, known or unknown, architectural features and artifacts, ceremonial sites, sacred shrines, cultural landscapes including traditional beliefs and practices. A letter regarding this project was sent to your attention by Michael Brandman Associates on November 3, 2008. The planning areas have been subsequently reconfigured, and as a result Tribal Consultation is being re-initiated by BCR Consulting on behalf of the City of Orange. JMI Properties/Santiago Partners, LLC propose the development of the following (reconfigured) planning areas (see also attached Conceptual Site Plan):

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If you know of any cultural resources in the vicinity that may be of religious and/or cultural significance to your community or if you would like more information, please contact me at 909-525-7078 or david.brunzell@yahoo.com. Correspondence can also be sent to BCR Consulting, Attn: David Brunzell, 440 West 7th Street, Claremont, California 91711. I request a response by May 25, 2011, so that your input can be included. If you require more time, please let me know. I will also contact you by telephone to discuss any comments or concerns you may have. Thank you for your involvement in this process.

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David Brunzell, M.A./RPA
Principal Investigator/Archaeologist
Attachment: Conceptual Site Plan



Legend	
	LDR Low Density Residential
	MDR Medium Density Residential
	OS Open Space - Natural
	OS-A Open Space - Active Recreation

SOURCE: KTG.

CONCEPTUAL SITE PLAN

RIO SANTIAGO PROJECT - CITY OF ORANGE

VISTA
NO SCALE



FIGURE 4



May 9, 2011

Juaneno Band of Mission Indians Acjachemen Nation
Anthony Rivera, Chairman
31411-A La Matanza Street
San Juan Capistrano, California 92675-2674

Subject: Updated Tribal Consultation for the Rio Santiago Specific Plan Project, City of Orange, Orange County, California

Dear Anthony:

This is an invitation to consult on a proposed development project at locations with which you have tribal cultural affiliation. The purpose of the consultation is to ensure the protection of Native American cultural resources on which the proposed undertaking may have an impact. In the tribal consultation process, early consultation is encouraged in order to provide for full and reasonable public input from Native American Groups and Individuals, as consulting parties, on potential effect of the development project and to avoid costly delays. Further, we understand that much of the content of the consultation will be confidential and will include, but not be limited to, the relationship of proposed project details to Native American Cultural Historic Properties, such as burial sites, known or unknown, architectural features and artifacts, ceremonial sites, sacred shrines, cultural landscapes including traditional beliefs and practices. A letter regarding this project was sent to your attention by Michael Brandman Associates on November 3, 2008. The planning areas have been subsequently reconfigured, and as a result Tribal Consultation is being re-initiated by BCR Consulting on behalf of the City of Orange. JMI Properties/Santiago Partners, LLC propose the development of the following (reconfigured) planning areas (see also attached Conceptual Site Plan):

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Legend	
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SOURCE: KTG.

CONCEPTUAL SITE PLAN

RIO SANTIAGO PROJECT - CITY OF ORANGE

VISTA
NO SCALE



FIGURE 4



May 9, 2011

Tongva Ancestral Territorial Tribal Nation
John Tommy Rosas, Tribal Admin.
tattnlaw@gmail.com

Subject: Updated Tribal Consultation for the Rio Santiago Specific Plan Project, City of Orange, Orange County, California

Dear John Tommy:

This is an invitation to consult on a proposed development project at locations with which you have tribal cultural affiliation. The purpose of the consultation is to ensure the protection of Native American cultural resources on which the proposed undertaking may have an impact. In the tribal consultation process, early consultation is encouraged in order to provide for full and reasonable public input from Native American Groups and Individuals, as consulting parties, on potential effect of the development project and to avoid costly delays. Further, we understand that much of the content of the consultation will be confidential and will include, but not be limited to, the relationship of proposed project details to Native American Cultural Historic Properties, such as burial sites, known or unknown, architectural features and artifacts, ceremonial sites, sacred shrines, cultural landscapes including traditional beliefs and practices. A letter regarding this project was sent to your attention by Michael Brandman Associates on November 3, 2008. The planning areas have been subsequently reconfigured, and as a result Tribal Consultation is being re-initiated by BCR Consulting on behalf of the City of Orange. JMI Properties/Santiago Partners, LLC propose the development of the following (reconfigured) planning areas (see also attached Conceptual Site Plan):

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BCR Consulting

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Principal Investigator/Archaeologist
Attachment: Conceptual Site Plan



SOURCE: KTG.

CONCEPTUAL SITE PLAN

RIO SANTIAGO PROJECT - CITY OF ORANGE

VISTA
NO SCALE



FIGURE 4



May 9, 2011

Gabrielino Tongva Indians of California Tribal Council
Robert F. Doramae, Tribal Chair/Cultural Resources
P.O. Box 490
Bellflower, California 90707

Subject: Updated Tribal Consultation for the Rio Santiago Specific Plan Project, City of Orange, Orange County, California

Dear Robert:

This is an invitation to consult on a proposed development project at locations with which you have tribal cultural affiliation. The purpose of the consultation is to ensure the protection of Native American cultural resources on which the proposed undertaking may have an impact. In the tribal consultation process, early consultation is encouraged in order to provide for full and reasonable public input from Native American Groups and Individuals, as consulting parties, on potential effect of the development project and to avoid costly delays. Further, we understand that much of the content of the consultation will be confidential and will include, but not be limited to, the relationship of proposed project details to Native American Cultural Historic Properties, such as burial sites, known or unknown, architectural features and artifacts, ceremonial sites, sacred shrines, cultural landscapes including traditional beliefs and practices. A letter regarding this project was sent to your attention by Michael Brandman Associates on November 3, 2008. The planning areas have been subsequently reconfigured, and as a result Tribal Consultation is being re-initiated by BCR Consulting on behalf of the City of Orange. JMI Properties/Santiago Partners, LLC propose the development of the following (reconfigured) planning areas (see also attached Conceptual Site Plan):

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BCR Consulting

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David Brunzell, M.A./RPA
Principal Investigator/Archaeologist
Attachment: Conceptual Site Plan



SOURCE: KTG.

CONCEPTUAL SITE PLAN

RIO SANTIAGO PROJECT - CITY OF ORANGE

VISTA
NO SCALE



FIGURE 4



May 9, 2011

Gabrielino/Tongva San Gabriel Band of Mission Indians
Anthony Morales, Chairperson
P.O. Box 693
San Gabriel, California 91778

Subject: Updated Tribal Consultation for the Rio Santiago Specific Plan Project, City of Orange, Orange County, California

Dear Anthony:

This is an invitation to consult on a proposed development project at locations with which you have tribal cultural affiliation. The purpose of the consultation is to ensure the protection of Native American cultural resources on which the proposed undertaking may have an impact. In the tribal consultation process, early consultation is encouraged in order to provide for full and reasonable public input from Native American Groups and Individuals, as consulting parties, on potential effect of the development project and to avoid costly delays. Further, we understand that much of the content of the consultation will be confidential and will include, but not be limited to, the relationship of proposed project details to Native American Cultural Historic Properties, such as burial sites, known or unknown, architectural features and artifacts, ceremonial sites, sacred shrines, cultural landscapes including traditional beliefs and practices. A letter regarding this project was sent to your attention by Michael Brandman Associates on November 3, 2008. The planning areas have been subsequently reconfigured, and as a result Tribal Consultation is being re-initiated by BCR Consulting on behalf of the City of Orange. JMI Properties/Santiago Partners, LLC propose the development of the following (reconfigured) planning areas (see also attached Conceptual Site Plan):

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David Brunzell, M.A./RPA
Principal Investigator/Archaeologist
Attachment: Conceptual Site Plan



SOURCE: KTG.

CONCEPTUAL SITE PLAN

RIO SANTIAGO PROJECT - CITY OF ORANGE

VISTA
NO SCALE



FIGURE 4



May 9, 2011

Juaneno Band of Mission Indians
Alfred Cruz, Cultural Resources Coordinator
P.O. Box 25628
Santa Ana, California 92799

Subject: Updated Tribal Consultation for the Rio Santiago Specific Plan Project, City of Orange, Orange County, California

Dear Alfred:

This is an invitation to consult on a proposed development project at locations with which you have tribal cultural affiliation. The purpose of the consultation is to ensure the protection of Native American cultural resources on which the proposed undertaking may have an impact. In the tribal consultation process, early consultation is encouraged in order to provide for full and reasonable public input from Native American Groups and Individuals, as consulting parties, on potential effect of the development project and to avoid costly delays. Further, we understand that much of the content of the consultation will be confidential and will include, but not be limited to, the relationship of proposed project details to Native American Cultural Historic Properties, such as burial sites, known or unknown, architectural features and artifacts, ceremonial sites, sacred shrines, cultural landscapes including traditional beliefs and practices. A letter regarding this project was sent to your attention by Michael Brandman Associates on November 3, 2008. The planning areas have been subsequently reconfigured, and as a result Tribal Consultation is being re-initiated by BCR Consulting on behalf of the City of Orange. JMI Properties/Santiago Partners, LLC propose the development of the following (reconfigured) planning areas (see also attached Conceptual Site Plan):

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David Brunzell, M.A./RPA
Principal Investigator/Archaeologist
Attachment: Conceptual Site Plan



SOURCE: KTG.

CONCEPTUAL SITE PLAN

RIO SANTIAGO PROJECT - CITY OF ORANGE

VISTA
NO SCALE



FIGURE 4



May 9, 2011

Juaneño Band of Mission Indians
Sonia Johnston, Tribal Chairperson
P.O. Box 25628
Santa Ana, California 92799

Subject: Updated Tribal Consultation for the Rio Santiago Specific Plan Project, City of Orange, Orange County, California

Dear Sonia:

This is an invitation to consult on a proposed development project at locations with which you have tribal cultural affiliation. The purpose of the consultation is to ensure the protection of Native American cultural resources on which the proposed undertaking may have an impact. In the tribal consultation process, early consultation is encouraged in order to provide for full and reasonable public input from Native American Groups and Individuals, as consulting parties, on potential effect of the development project and to avoid costly delays. Further, we understand that much of the content of the consultation will be confidential and will include, but not be limited to, the relationship of proposed project details to Native American Cultural Historic Properties, such as burial sites, known or unknown, architectural features and artifacts, ceremonial sites, sacred shrines, cultural landscapes including traditional beliefs and practices. A letter regarding this project was sent to your attention by Michael Brandman Associates on November 3, 2008. The planning areas have been subsequently reconfigured, and as a result Tribal Consultation is being re-initiated by BCR Consulting on behalf of the City of Orange. JMI Properties/Santiago Partners, LLC propose the development of the following (reconfigured) planning areas (see also attached Conceptual Site Plan):

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BCR Consulting

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David Brunzell, M.A./RPA
Principal Investigator/Archaeologist
Attachment: Conceptual Site Plan



Legend	
	LDR Low Density Residential
	MDR Medium Density Residential
	OS Open Space - Natural
	OS-A Open Space - Active Recreation

SOURCE: KTG.

CONCEPTUAL SITE PLAN

RIO SANTIAGO PROJECT - CITY OF ORANGE

VISTA
NO SCALE



FIGURE 4



May 9, 2011

Gabrielino-Tongva Tribe
Bernie Acuna
1875 Century Park East #1500
Los Angeles, California 90067

Subject: Updated Tribal Consultation for the Rio Santiago Specific Plan Project, City of Orange, Orange County, California

Dear Bernie:

This is an invitation to consult on a proposed development project at locations with which you have tribal cultural affiliation. The purpose of the consultation is to ensure the protection of Native American cultural resources on which the proposed undertaking may have an impact. In the tribal consultation process, early consultation is encouraged in order to provide for full and reasonable public input from Native American Groups and Individuals, as consulting parties, on potential effect of the development project and to avoid costly delays. Further, we understand that much of the content of the consultation will be confidential and will include, but not be limited to, the relationship of proposed project details to Native American Cultural Historic Properties, such as burial sites, known or unknown, architectural features and artifacts, ceremonial sites, sacred shrines, cultural landscapes including traditional beliefs and practices. A letter regarding this project was sent to your attention by Michael Brandman Associates on November 3, 2008. The planning areas have been subsequently reconfigured, and as a result Tribal Consultation is being re-initiated by BCR Consulting on behalf of the City of Orange. JMI Properties/Santiago Partners, LLC propose the development of the following (reconfigured) planning areas (see also attached Conceptual Site Plan):

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- Planning Area C (17 Gross Acres)
- Planning Area D (35 Gross Acres).

The project occupies 110 acres within an unsectioned portion of the Santiago De Santa Ana Land Grant in Township 4 South, Range 9 West, San Bernardino Baseline and Meridian (SBBM; see attached Conceptual Site Plan). As currently proposed, all construction related impacts and development will take place in the portion of the project area to the south of Santiago Creek, which excludes Planning Area A. Planning Areas B, C, and D will be subject to over-excavation disturbance and earthwork disturbance, including cut excavation and fill placement. Depths vary by location but generally could reach a maximum of 25 feet including a combination of over-excavation and earthwork cut. Planning Area A, including the entire length of Santiago Creek, will be conserved in dedicated open space.

If you know of any cultural resources in the vicinity that may be of religious and/or cultural significance to your community or if you would like more information, please contact me at 909-525-7078 or david.brunzell@yahoo.com. Correspondence can also be sent to BCR Consulting, Attn: David Brunzell, 440 West 7th Street, Claremont, California 91711. I request a response by May 25, 2011, so that your input can be included. If you require more time, please let me know. I will also contact you by telephone to discuss any comments or concerns you may have. Thank you for your involvement in this process.

Sincerely,

BCR Consulting

A handwritten signature in black ink, appearing to read 'David Brunzell', written in a cursive style.

David Brunzell, M.A./RPA
Principal Investigator/Archaeologist
Attachment: Conceptual Site Plan



Legend	
	LDR Low Density Residential
	MDR Medium Density Residential
	OS Open Space - Natural
	OS-A Open Space - Active Recreation

SOURCE: KTG.

CONCEPTUAL SITE PLAN

RIO SANTIAGO PROJECT - CITY OF ORANGE

VISTA
NO SCALE



FIGURE 4



May 9, 2011

Juaneno Band of Mission Indians Acjachemen Nation
Joyce Perry; Representing Tribal Chairperson
4955 Paseo Segovia
Irvine, California 92612

Subject: Updated Tribal Consultation for the Rio Santiago Specific Plan Project, City of Orange, Orange County, California

Dear Joyce:

This is an invitation to consult on a proposed development project at locations with which you have tribal cultural affiliation. The purpose of the consultation is to ensure the protection of Native American cultural resources on which the proposed undertaking may have an impact. In the tribal consultation process, early consultation is encouraged in order to provide for full and reasonable public input from Native American Groups and Individuals, as consulting parties, on potential effect of the development project and to avoid costly delays. Further, we understand that much of the content of the consultation will be confidential and will include, but not be limited to, the relationship of proposed project details to Native American Cultural Historic Properties, such as burial sites, known or unknown, architectural features and artifacts, ceremonial sites, sacred shrines, cultural landscapes including traditional beliefs and practices. A letter regarding this project was sent to your attention by Michael Brandman Associates on November 3, 2008. The planning areas have been subsequently reconfigured, and as a result Tribal Consultation is being re-initiated by BCR Consulting on behalf of the City of Orange. JMI Properties/Santiago Partners, LLC propose the development of the following (reconfigured) planning areas (see also attached Conceptual Site Plan):

- Planning Area A (48 Gross Acres)
- Planning Area B (10 Gross Acres)
- Planning Area C (17 Gross Acres)
- Planning Area D (35 Gross Acres).

The project occupies 110 acres within an unsectioned portion of the Santiago De Santa Ana Land Grant in Township 4 South, Range 9 West, San Bernardino Baseline and Meridian (SBBM; see attached Conceptual Site Plan). As currently proposed, all construction related impacts and development will take place in the portion of the project area to the south of Santiago Creek, which excludes Planning Area A. Planning Areas B, C, and D will be subject to over-excavation disturbance and earthwork disturbance, including cut excavation and fill placement. Depths vary by location but generally could reach a maximum of 25 feet including a combination of over-excavation and earthwork cut. Planning Area A, including the entire length of Santiago Creek, will be conserved in dedicated open space.

If you know of any cultural resources in the vicinity that may be of religious and/or cultural significance to your community or if you would like more information, please contact me at 909-525-7078 or david.brunzell@yahoo.com. Correspondence can also be sent to BCR Consulting, Attn: David Brunzell, 440 West 7th Street, Claremont, California 91711. I request a response by May 25, 2011, so that your input can be included. If you require more time, please let me know. I will also contact you by telephone to discuss any comments or concerns you may have. Thank you for your involvement in this process.

Sincerely,

BCR Consulting

A handwritten signature in black ink, appearing to read 'David Brunzell', written in a cursive style.

David Brunzell, M.A./RPA
Principal Investigator/Archaeologist
Attachment: Conceptual Site Plan



SOURCE: KTG.

CONCEPTUAL SITE PLAN

RIO SANTIAGO PROJECT - CITY OF ORANGE

VISTA
NO SCALE



FIGURE 4



May 9, 2011

Gabrielino-Tongva Tribe
Linda Candelaria, Chairwoman
1875 Century Park East, Suite 1500
Los Angeles, California 90067

Subject: Updated Tribal Consultation for the Rio Santiago Specific Plan Project, City of Orange, Orange County, California

Dear Linda:

This is an invitation to consult on a proposed development project at locations with which you have tribal cultural affiliation. The purpose of the consultation is to ensure the protection of Native American cultural resources on which the proposed undertaking may have an impact. In the tribal consultation process, early consultation is encouraged in order to provide for full and reasonable public input from Native American Groups and Individuals, as consulting parties, on potential effect of the development project and to avoid costly delays. Further, we understand that much of the content of the consultation will be confidential and will include, but not be limited to, the relationship of proposed project details to Native American Cultural Historic Properties, such as burial sites, known or unknown, architectural features and artifacts, ceremonial sites, sacred shrines, cultural landscapes including traditional beliefs and practices. A letter regarding this project was sent to your attention by Michael Brandman Associates on November 3, 2008. The planning areas have been subsequently reconfigured, and as a result Tribal Consultation is being re-initiated by BCR Consulting on behalf of the City of Orange. JMI Properties/Santiago Partners, LLC propose the development of the following (reconfigured) planning areas (see also attached Conceptual Site Plan):

- Planning Area A (48 Gross Acres)
- Planning Area B (10 Gross Acres)
- Planning Area C (17 Gross Acres)
- Planning Area D (35 Gross Acres).

The project occupies 110 acres within an unsectioned portion of the Santiago De Santa Ana Land Grant in Township 4 South, Range 9 West, San Bernardino Baseline and Meridian (SBBM; see attached Conceptual Site Plan). As currently proposed, all construction related impacts and development will take place in the portion of the project area to the south of Santiago Creek, which excludes Planning Area A. Planning Areas B, C, and D will be subject to over-excavation disturbance and earthwork disturbance, including cut excavation and fill placement. Depths vary by location but generally could reach a maximum of 25 feet including a combination of over-excavation and earthwork cut. Planning Area A, including the entire length of Santiago Creek, will be conserved in dedicated open space.

If you know of any cultural resources in the vicinity that may be of religious and/or cultural significance to your community or if you would like more information, please contact me at 909-525-7078 or david.brunzell@yahoo.com. Correspondence can also be sent to BCR Consulting, Attn: David Brunzell, 440 West 7th Street, Claremont, California 91711. I request a response by May 25, 2011, so that your input can be included. If you require more time, please let me know. I will also contact you by telephone to discuss any comments or concerns you may have. Thank you for your involvement in this process.

Sincerely,

BCR Consulting

A handwritten signature in black ink, appearing to read 'David Brunzell', written in a cursive style.

David Brunzell, M.A./RPA
Principal Investigator/Archaeologist
Attachment: Conceptual Site Plan



SOURCE: KTG.

CONCEPTUAL SITE PLAN

RIO SANTIAGO PROJECT - CITY OF ORANGE

VISTA
NO SCALE



FIGURE 4

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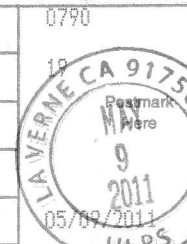
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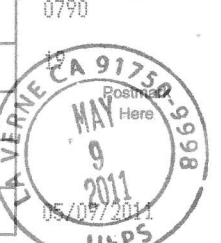
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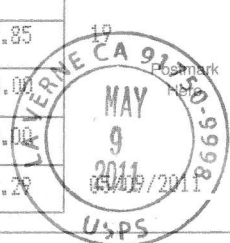
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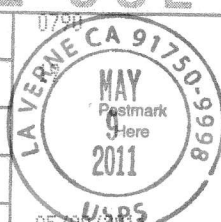
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