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PALEONTOLOGY - ARCHAEOLOGY - HISTORY

ARCHAEOLOGICAL AND PALEONTOLOGICAL RESOURCES ASSESSMENT REPORT FOR THE LAGUNA NIGUEL TO SAN JUAN CAPISTRANO PASSING SIDING PROJECT, CITIES OF LAGUNA NIGUEL AND SAN JUAN CAPISTRANO, CALIFORNIA

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January 2009; revised September 2011

Project Number: 1705
Type of Study: Archaeological and Paleontological Assessment (Phase I)
Sites: P-30-1338
USGS Quadrangle: San Juan Capistrano 7.5' 1981
Area: 2.2 linear miles
Key Words: Juaneño, Gabrielino, Orange County, marine shell, lithics

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SUMMARY OF FINDINGS

The purpose of this study was to determine the potential effects on archaeological and paleontological resources of proposed construction of the passing siding project located in the existing rail right-of-way from Laguna Niguel to San Juan Capistrano, Orange County, California. This study was requested by the OCTA to meet their responsibility as the lead agency under the California Environmental Quality Act (CEQA).

The record search determined that one site had previously been recorded within the project boundaries although several are adjacent. This site was amalgamated from five previously recorded sites in the mid-1990s and now consists of 13 loci. The site is on both sides of the existing railroad and may underlie the tracks. The site consists of stone tools and marine shell food debris. Many portions of the site have been previously disturbed by orange orchards. Of particular note, a prehistoric burial was recovered in 1994 during excavation for a water line within 1/8 mile of the tracks. The site has never been investigated by testing or data recovery to determine if it meets significance criteria under CEQA.

Some five prehistoric sites have been located within a 1/2 mile of the project area in addition to five historic sites within the 1/2 mile radius. As of 2009, 43 previous archaeological studies have been conducted within a one mile radius of the project.

The Native American Heritage Commission indicated that there are no known Native American cultural resources within the immediate project area and recommended that seven tribes or individuals be contacted for further information. Cogstone contacted each person by email or letter. In total, 7 responses were received. One contact had no concerns about the project. One contact specifically mentioned that burials are known along the railroad and requested that an archaeological monitor be present during ground disturbance. This contact and five others requested to be informed if cultural resources were discovered and requested a Native American monitor be consulted as the project moves forward.

Based on the results of the pedestrian survey, it is unlikely that undisturbed archaeological resources will be encountered within the immediate vicinity of the tracks. The track area has been subjected to past modification associated with the building and maintenance of the rail line over the years, and the project consists of construction within the current right of way.

No sites are recorded along most of the project alignment. However, any construction impacts with a depth of more than two feet from MP 193.9 to MP 195.7 require full time monitoring by an Orange County Certified Professional Archaeologist and a Native American monitor. Unanticipated finds during excavation on the remainder of the project requires that the project halt work in the vicinity of the find (minimum 50 foot radius) until it can be evaluated by an Orange County Certified Archaeologist or Paleontologist depending on the nature of the find. Discovery of human remains requires immediate suspension of work in that area and notification to the County Coroner.

INTRODUCTION

PURPOSE OF STUDY

The purpose of this study was to determine the potential effects on archaeological and paleontological resources of proposed construction of a passing siding project located in the existing rail right-of-way from Laguna Niguel to San Juan Capistrano, Orange County, California (Figure 1). This study was requested by the Orange County Transportation Authority (OCTA) to meet their responsibility as the lead agency under the California Environmental Quality Act (CEQA).

Figure 1. Project vicinity

PROJECT DESCRIPTION

The Orange County Transportation Authority (OCTA), in coordination with Metrolink, the City of Laguna Niguel (operated by the Southern California Regional Rail Authority), and the City of San Juan Capistrano, proposes the addition of approximately 1.8 miles of new passing siding railroad track adjacent to the existing main track between milepost (MP) 193.9 in the City of Laguna Niguel (just south of the Laguna Niguel/Mission Viejo Metrolink Station) and MP 195.7 in the City of San Juan Capistrano (approximately 500 feet north of the Trabuco Creek). A portion of the project from approximately MP 194.0 to MP 194.2 passes through the City of Laguna Niguel. The propose project is located on the San Juan Capistrano 7.5 minute quadrangle in the western ½ of Sections 1, 24, 25, and 36, Township 7 South, Range 8 West, San Bernardino Base Meridian.

The project consists of the following features:

- 1.8 miles of new passing siding railroad track
- Relocation of an existing spur track currently south of the Laguna Niguel/Mission Viejo Metrolink Station with a new spur track within the City of San Juan Capistrano at around MP 194.6
- Construction of new retaining walls.
- Relocation of existing power poles, fiber optic cables, water, and sewer lines
- Extension of existing casing for gas, water, and sewer lines
- Culvert extensions and other drainage refinements
- Addition of a railroad bridge or box culvert at MP 194.6
- Asphalt paving adjacent to Camino Capistrano to accommodate parking for use by railroad at MP 194.6
- Reprofiling of approximately 600 feet of Camino Capistrano adjacent to Rancho Capistrano in order to improve grades

PASSING SIDING AND SWITCHES

The new 1.8-mile passing siding would be located approximately 15 feet west of the existing mainline, extending southward from MP 193.9 in San Juan Capistrano to MP 195.7 in San Juan Capistrano. Switches would be located at each end such that southbound trains could be diverted from the main line to the siding to enable northbound trains to continue travelling without interruption. Southbound trains would then return to the mainline and continue their southbound journey.

The passing siding and switches would be constructed on a bed of ballast approximately 13 to 15 feet wide and 12 to 14 inches above existing grade. Altogether, the passing siding and switches would occupy about 3.2 acres within the existing right-of-way.

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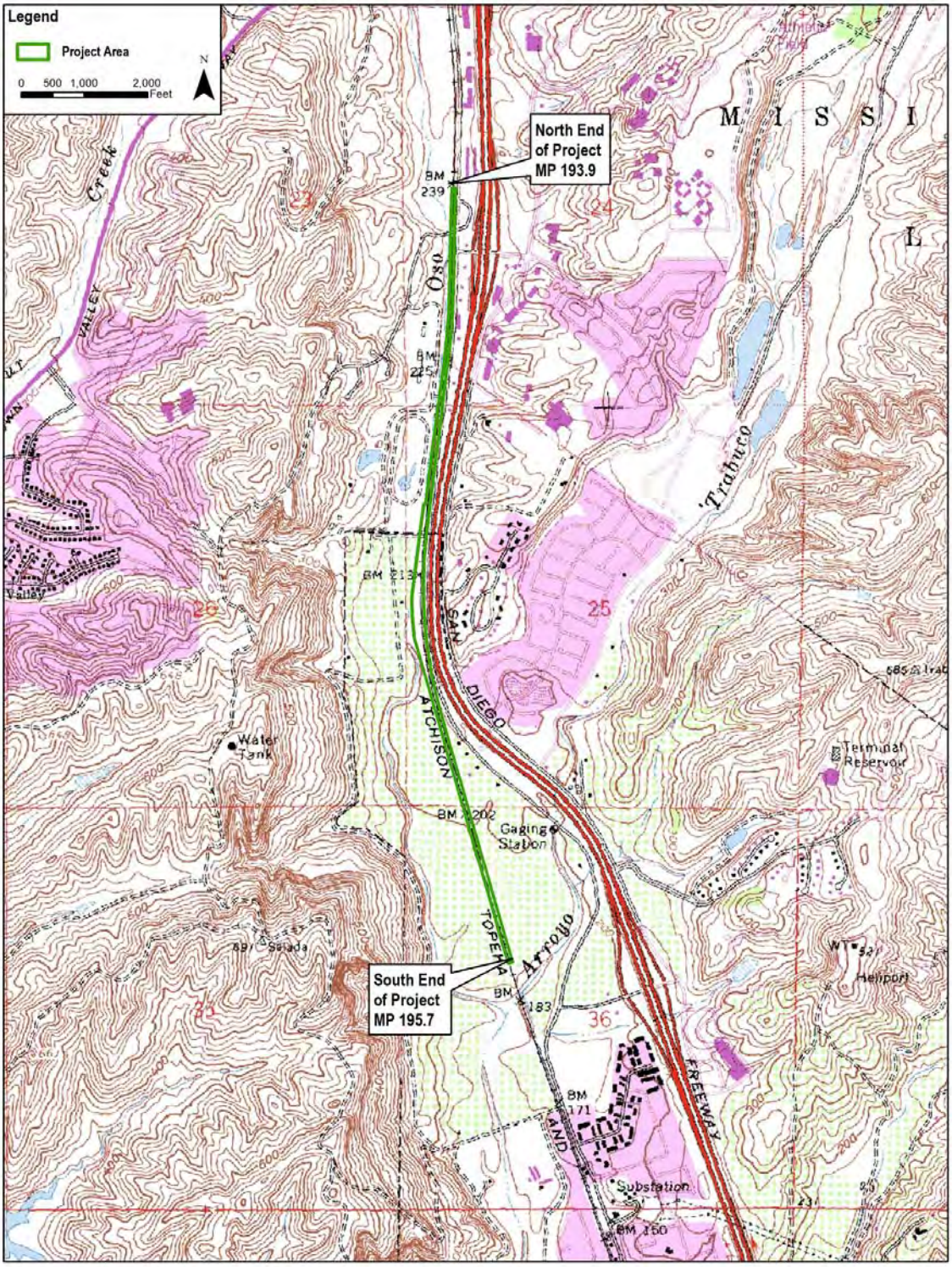

Figure 2. Project Topographic Map

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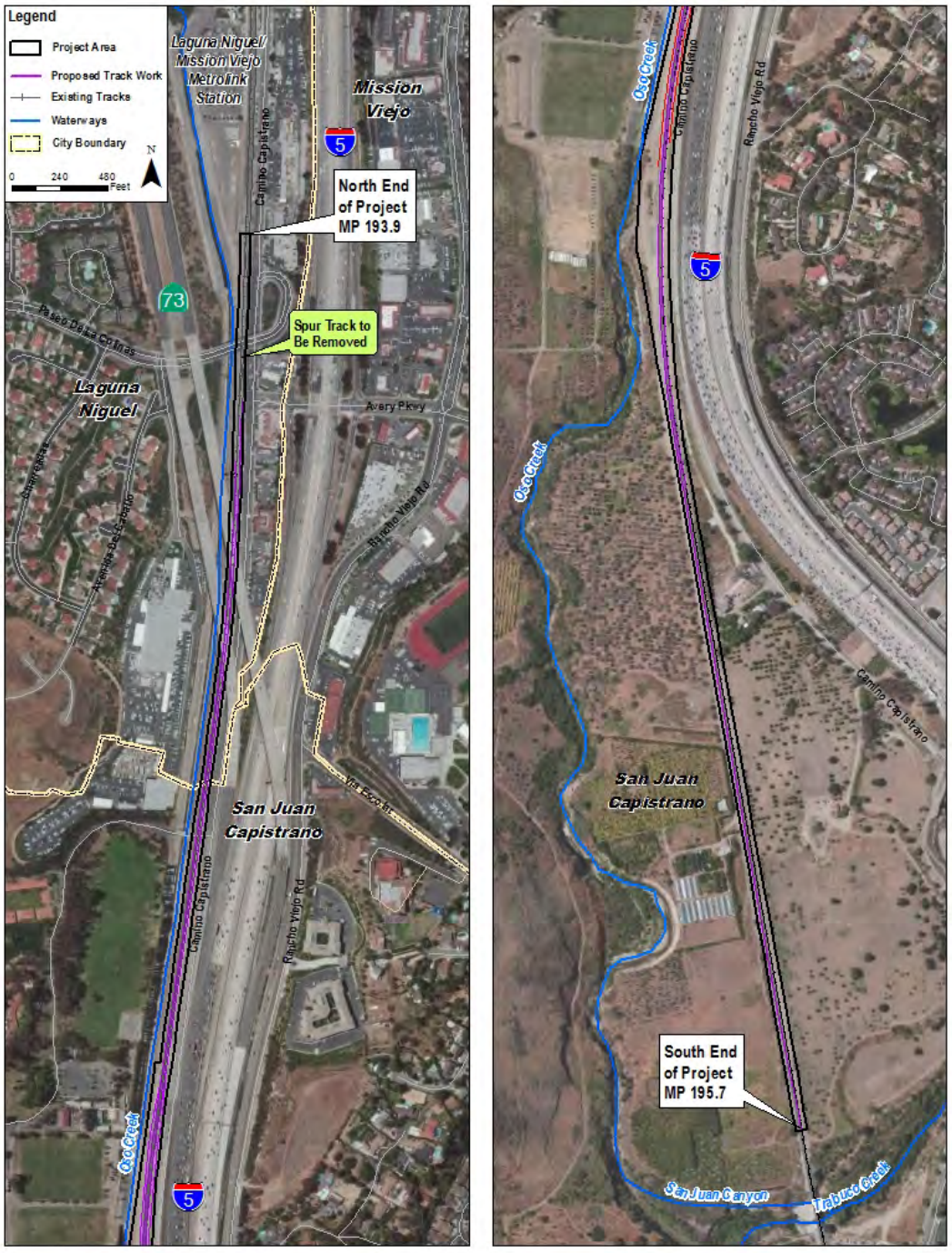

Figure 3. Project Aerial

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SPUR TRACK AND SWITCH

The existing spur track south of the Laguna Niguel Metrolink Station would be relocated to become the mainline track. The spur track would be relocated approximately MP 194.6 on the east side of the existing mainline track. The spur track would be used for Metrolink trains that terminate revenue service at the LNMV Station. After unloading all passengers, these trains would proceed southward to the spur track and switch off of the mainline. At a scheduled time, they would reverse direction to pick up passengers at the LNMV station and then continue in either a northbound or southbound direction.

The spur track and single switch would be standard railroad construction, about 1,145 feet long and 13 to 15 feet wide, and would occupy about 0.4-acre of land within the existing right-of-way. The spur track would be parallel to and approximately 15 feet east of the mainline track.

RETAINING WALLS

Three retaining walls would be provided to support the new passing siding and spur track. The retaining walls would be within existing right-of-way. The locations and characteristics of each wall are described below:

- Located east of the existing mainline and south of the crossing at Rancho Capistrano, this wall would be approximately 1,350 feet long and would have an average height of 6 feet. The wall would be within the railroad right-of-way between the tracks and Camino Capistrano.
- Located west of the existing mainline and just south of the greenhouses and orchards, this wall would be approximately 510 feet and would have an average height of 6 feet. The wall would be within the railroad right-of-way between the tracks and Oso Creek.
- Located west of the existing mainline, this wall would be approximately 700 feet long and would have an average height of 6 feet. The wall would be within the railroad right-of-way between the tracks and Oso Creek.

UTILITY RELOCATIONS

Some utilities would be relocated to accommodate the new passing siding and/or spur track. These include power poles, fiber optic cables, water and sewer lines that would be moved and re-established to provide appropriate clearance for the proposed track(s) in accordance with SCRRA and California Public Utilities Commission (CPUC) design standards. Based on current design, 18 above-ground power poles would be moved to provide adequate clearance for the passing siding.

Approximately 1,200 feet of underground fiber optic cable would be moved from its current location under the newly relocated spur track to just east of this location within the existing right of way.

DRAINAGE REFINEMENTS

As part of the proposed project, three drainage culverts underneath the existing mainline would be extended to maintain existing drainage patterns under the new passing siding and spur track. Two parallel 24-inch reinforced concrete pipes near State Highway 73 would be extended 10 feet to the east of the existing structure and the existing headwall would be removed and reconstructed. A Rail Top Ballast Deck Bridge located south of the crossing at Camino Capistrano would be extended approximately 20 feet to the east and roughly 10 feet to the west of the existing structure. A corrugated metal pipe just north of the orange groves would be extended approximately five feet to the west of the existing structure. The existing wood headwall would be removed and replaced with an inter-block headwall. The extension of these three drainage culverts is based on current design plans. These plans may be refined during final design.

PROPOSED MAINTENANCE PARKING

The project proposes approximately 1,350 square feet of asphalt concrete pavement adjacent to Camino Capistrano and the proposed spur track for Metrolink maintenance personnel parking. The proposed asphalt concrete pavement would accommodate up to four (8.5’x 18’) parking spaces and would be located outside of the existing right-of-way.

PROJECT PERSONNEL

Cogstone Resource Management conducted the cultural resource studies. Sherri Gust served as the Principal Investigator for the project, supervised all work, wrote segments of the report and edited this report. Gust is an Orange County Certified Professional Archaeologist and Paleontologist. She has an M.S. in Anatomy (Evolutionary Morphology) from the University of Southern California, a B.S. in Anthropology from the University of California at Davis and over thirty years of experience in California.

Veronica Harper performed the field survey and prepared portions of the report. Harper has a M.A. in Anthropology from California State University at Long Beach and one year of experience in Southern California archaeology. Kim Scott provided the geological section of this report. Ms. Scott holds a B.S. in Geology with an emphasis in Paleontology from the University of California, Los Angeles and has ten years of experience.

REGULATORY ENVIRONMENT

STATE LAWS AND REGULATIONS

CALIFORNIA ENVIRONMENTAL QUALITY ACT

CEQA declares that it is state policy to "take all action necessary to provide the people of this state with...historic environmental qualities." It further states that public or private projects financed or approved by the state are subject to environmental review by the state. All such projects, unless entitled to an exemption, may proceed only after this requirement has been satisfied. CEQA requires detailed studies that analyze the environmental effects of a proposed project. In the event that a project is determined to have a potential significant environmental effect, the act requires that alternative plans and mitigation measures be considered.

CEQA includes historic and archaeological resources as integral features of the environment. If paleontological resources are identified as being within the proposed project area, the sponsoring agency must take those resources into consideration when evaluating project effects. The level of consideration may vary with the importance of the resource.

CALIFORNIA REGISTER OF HISTORICAL RESOURCES

The California Register of Historical Resources is a listing of all properties considered to be significant historical resources in the state. The California Register includes all properties listed or determined eligible for listing on the National Register, including properties evaluated under Section 106, and State Historical Landmarks from No. 770 on. The criteria for listing are the same as those of the National Register. The California Register statute specifically provides that historical resources listed, determined eligible for listing on the California Register by the State Historical Resources Commission, or resources that meet the California Register criteria are resources which must be given consideration under CEQA (see above). Other resources, such as resources listed on local registers of historic registers or in local surveys, may be listed if they are determined by the State Historic Resources Commission to be significant in accordance with criteria and procedures to be adopted by the Commission and are nominated; their listing in the California Register, is not automatic.

Resources eligible for listing include buildings, sites, structures, objects, or historic districts that retain historic integrity and are historically significant at the local, state or national level under one or more of the following four criteria:

1) It is associated with events that have made a significant contribution to the broad patterns of local or regional history, or the cultural heritage of California or the United States;
2) It is associated with the lives of persons important to local, California, or national history;
3) It embodies the distinctive characteristics of a type, period, region, or method of construction, or represents the work of a master or possesses high artistic values; or
4) It has yielded, or has the potential to yield, information important to the prehistory or history of the local area, California, or the nation.

In addition to having significance, resources must have integrity for the period of significance. The period of significance is the date or span of time within which significant events transpired, or significant individuals made their important contributions. Integrity is the authenticity of a historical resource's physical identity as evidenced by the survival of characteristics or historic fabric that existed during the resource's period of significance. Alterations to a resource or changes in its use over time may have historical, cultural, or architectural significance. Simply, resources must retain enough of their historic character or appearance to be recognizable as historical resources and to convey the reasons for their significance. A resource that has lost its historic character or appearance may still have sufficient integrity for the California Register, if, under Criterion D, it maintains the potential to yield significant scientific or historical information or specific data.

PALEONTOLOGICAL SIGNIFICANCE CRITERIA

Only qualified, trained paleontologists with specific expertise in the type of fossils being evaluated can determine the scientific significance of paleontological resources. Fossils are considered to be significant if one or more of the following criteria apply:

1. The fossils provide information on the evolutionary relationships and developmental trends among organisms, living or extinct;
2. The fossils provide data useful in determining the age(s) of the rock unit or sedimentary stratum, including data important in determining the depositional history of the region and the timing of geologic events therein;
3. The fossils provide data regarding the development of biological communities or interaction between paleobotanical and paleozoological biotas;
4. The fossils demonstrate unusual or spectacular circumstances in the history of life;

5. The fossils are in short supply and/or in danger of being depleted or destroyed by the elements, vandalism, or commercial exploitation, and are not found in other geographic locations.

As so defined, significant paleontological resources are determined to be fossils or assemblages of fossils that are unique, unusual, rare, uncommon, or diagnostically important. Significant fossils can include remains of large to very small aquatic and terrestrial vertebrates or remains of plants and animals previously not represented in certain portions of the stratigraphy.

Assemblages of fossils that might aid stratigraphic correlation, particularly those offering data for the interpretation of tectonic events, geomorphologic evolution, and paleoclimatology are also critically important. Paleontological remains are recognized as nonrenewable resources significant to the history of life (Scott and Springer 2003).

BACKGROUND

REGIONAL SETTING

The project area is part of the California geomorphic province known as the Penninsular Range Province. The following discussion of this province is provided by the California Geologic Survey (Wagner 2002):

"The Penninsular Ranges are a series of ranges separated by northwest trending valleys, subparallel to faults branching from the San Andreas Fault. The trend of the topography is similar to the Coast Ranges, but the geology is more like the Sierra Nevada, with granitic rock intruding the older metamorphic rocks. The Penninsular Ranges extend into lower California and are bound by the Colorado Desert, The Los Angeles Basin and the island group (Santa Catalina, Santa Barbara, and the distinctly terraced San Clemente and San Nicholas islands), together with the surrounding continental shelf (cut by deep submarine fault troughs) are included in this province."

GEOLOGICAL SETTING

The surface of the project is mapped as young stream deposits. To the west are young landslide deposits. East of the project area are outcrops of very old alluvium. Both east and west of the proposed project are Niguel Formation and Capistrano Formation (Morton 2004).

PREHISTORIC SETTING

The prehistoric cultural chronology for the proposed project area is based on chronological information provided by Mason, Koerper and Langenwalter (1997) and Koerper, Mason and Peterson (2003). Three prehistoric periods are defined.

MILLING STONE PERIOD. The Milling Stone Period dates back well over 6000 years ago (8,000-3,000 radiocarbon years before present) and is characterized by a generalized plant collecting economy supplemented by hunting and fishing. Regional interaction is limited when compared to later periods. Sites from this period appear to be part of an expansion of settlement to take advantage of new habitats and resources that became available as sea levels stabilized between about six to five thousand years ago. Gorges were used for fishing and mano/metate pairs were used to process plant materials. Most sites were in coastal areas. Around 3500 years ago, experts feel that there was an economic shift to more reliance on hunting. Sites attributed to this period appear to have been occupied by small groups of people. This period persisted over thousands of years without great change.

INTERMEDIATE PERIOD. The Intermediate Period dates from roughly 1000 B.C. to A.D. 1000. Sites attributed to this time period indicate an increased reliance on coastal resources and with continued reliance on hunting and collecting. In addition, the advent of the bow and arrow, the appearance of increased quantities of bone tools, and increased reliance on the mortar and pestle, typify this time period. The first circular fish hooks appear in the tool kit in this period and use of plant grinding tools increases. Hunting tools consist of the atlatl and dart. Most sites were in coastal areas.

LATE PREHISTORIC PERIOD. The period dates from 1, 350 RYBP to 150 RYBP (AD 600 to AD 1769) and is characterized by an increasing political-economic-social complexity. Villages tend to be larger, with a more varied assemblage, and there appears to be an increase in smaller satellite sites, established to support the main village, and reflecting seasonal use of a particular area. There seems to be more intensive exploitation of localized resources, and social contacts and economic influences appear accelerated through trade and social interaction. There is an increase in the number of sites in the area, which some researchers believe is the result of a population increase. Leonard (1971) discusses the Late Period as a time when there are a greater number of more specialized sites in terms of their location and function, and an amplification of all aspects of the cultural system. In this period the atlatl and dart hunting tools are replaced by the bow and arrow. In addition, manos/metates were gradually replaced by pestle/mortars. Use of other traditional tools continued. Settlement was expanded into the hills and canyons inland.

ETHNOGRAPHY

Modern ethnographic data suggests that both the Acjachemen (Juaneño) and the Tongva (Gabrielino) utilized the areas surrounding the Santa Ana Mountains, including the project area (McCawley 1996) (Figure 4). The Juaneño occupied south Orange County and northern coastal San Diego County. The Gabrielino occupied most of the Los Angeles basin from the coast to the San Gabriel Mountains and extending into San Bernardino County. The two tribes are part of the same language group, have many similar customs and beliefs, and were observed to communicate freely by early European observers (McCawley 1996).

Both the Juaneño and the Gabrielino (Tongva) belong to an UtoAztecan language stock of the Shoshone. These tribes carried out exploitation strategies that utilized local resources ranging from plants to animals; coastal resources were also exploited. Artifacts associated with their occupations include a wide array of chipped stone tools, bow and arrows, bedrock and portable mortars, metates and pestles. Local vegetation was used to construct shelters as well as for medicinal purposes. Cooked foods were prepared on hearths (Bean and Smith 1978, Kroeber 1976). Following the onset of European contact, these tribes were incorporated into the Mission lifestyle.

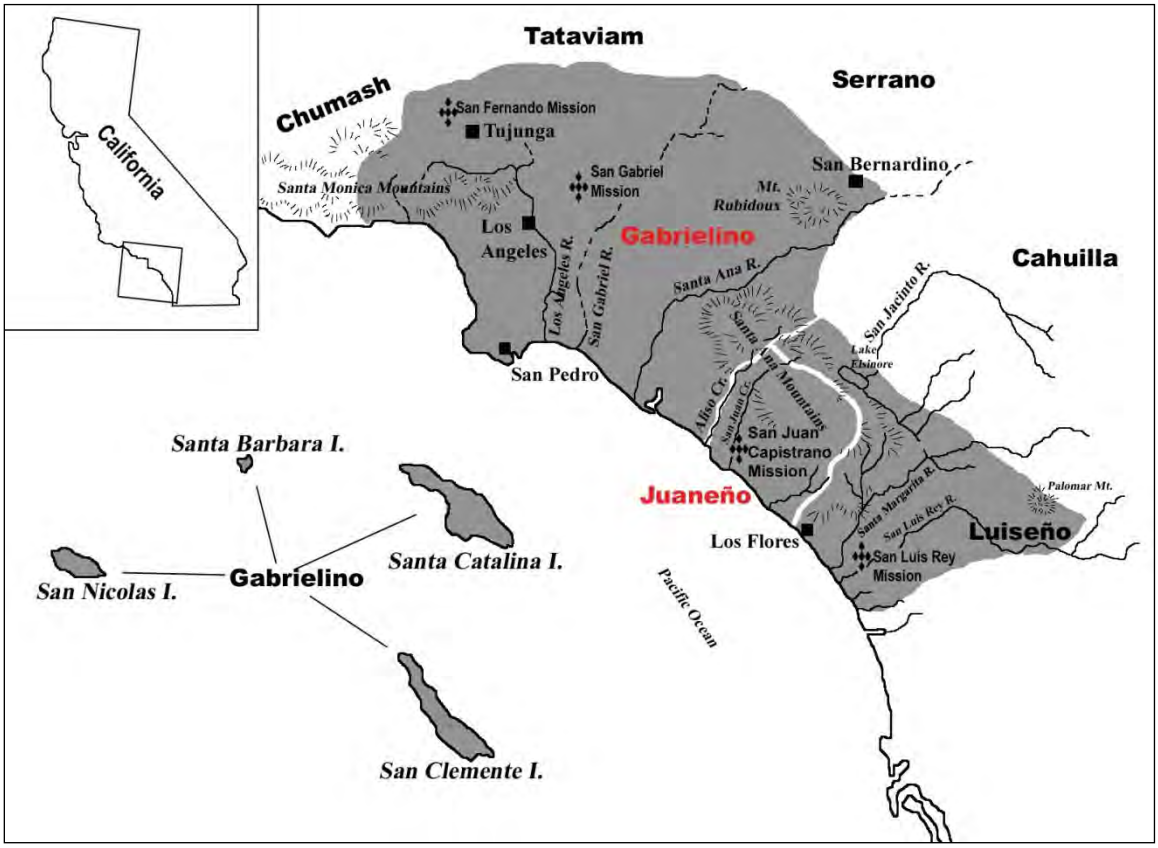

Figure 4. Juaneño and Gabrielino territory

After European contact, many Native Americans were induced to live at Missions and were referred to by a shortened version of the Mission name. Tongva and other tribal members became known as the Gabrielino. Acjachemen, Tongva and Luiseno peoples affiliated Mission San Juan Capistrano became known as the Juaneño. The Juaneño and Gabrielino suffered population decline due to introduced diseases and restrictions on their native reproductive practices by the padres (McCawley 1996). Most mission Indians were trained as vaqueros, sheepshearers, farm laborers and domestic laborers and continued in those professions after the mission were secularized (Talley 1984).

ACJACHEMEN (JUANEÑO) CULTURE

The Juaneño territory was bounded by Aliso Creek, the Santa Ana Mountains, San Onofre Creek and the coastline. Archaeologists and linguists believe the Juaneño were a subdivision of the Luiseño based on the fact that, at European contact, the Juaneño spoke a dialect of Luiseño (Kroeber 1976).

Like many southern California Indian groups the Juaneño were organized into villages of 50-150 people headed by a hereditary chief and generally located near sources of permanent water. Each village utilized a specific resource territory and included satellite locations used for seasonal food gathering. Families and groups lived seasonally in temporary camps set up to exploit specific resources such as groves of oak trees, abundant game, or source rocks for stone tools (Talley 1984).

TONGVA (GABRIELINO) CULTURE

The Tongva (Gabrielino) have overlapping ethnographic boundaries with the Juaneño to the south and Chumash to the north, but they inhabited the entire Los Angeles basin including most of Orange County (Figure 5). The name "Gabrielino" is Spanish in origin and was used in reference to the Native Americans associated with the Mission San Gabriel. It is unknown what these people called themselves before the Spanish arrived, but today they call themselves "Tongva", meaning "people of the earth" (Gabrielino/Tongva of San Gabriel n.d.).

Villages were comprised of 50-100 people. Each community included one or more patrilineal extended families or lineal kinship groups (clans) (Kroeber 1976, Johnson 1962, Bean and Smith 1978, McCawley 1996). Each village was united under the leadership of a chief who inherited the position from his father. The chief was the leader of the religious and secular life of the community and served as chief administrator, fiscal officer, war leader, legal arbitrator and religious leader (Harrington 1942, Bean and Smith 1978). The chief was assisted by a Council of Elders consisting of the heads of the lineages residing in the community. Shamans were also important as doctors, therapists, philosophers and intellectuals (Bean 1974).

Like the Juaneño, the Gabrielino tribe carried out food exploitation strategies that utilized local resources ranging from plants to animals; coastal resources were also exploited. Rabbit and deer were hunted and acorns, buckwheat, chia, berries, fruits and many other plants were collected. Artifacts associated with their occupations include a wide array of chipped stone tools including knives and projectile points, wooden tools like digging sticks and bows, and ground stone tools like bedrock and portable mortars, metates and pestles. Local vegetation was used to construct shelters as well as for medicinal purposes. Cooked foods were prepared on hearths (Kroeber 1976, Bean and Smith 1978, McCawley 1996).

Acorns were one of the most important food resources utilized by the Gabrielino and other Native American groups across California. The acorns were ground into a fine powder in order to make an acorn mush or gruel. A dietary staple, acorns provided a large number of calories and nutrients. The ability to store and create stockpiles in case of lean times also contributed to the importance of acorns as a vital natural resource. Much of the material evidence available to archaeologists concerning the Gabrielino is a result of tools and technologies related to their subsistence activities.

HISTORIC BACKGROUND

LAGUNA NIGUEL

The name "Laguna Niguel" is derived from the Spanish word "Laguna," which means lagoon, and the word "Nigueli", which was the name of a Juaneño Indian village once located near Aliso Creek. In 1821, California became Mexican territory and many rancheros were formed in Southern California, including Rancho Niguel. During this period, Rancho Niguel was primarily used as a sheep ranch. The first private landowner of the area was Juan Avila, a resident of San Juan Capistrano who obtained land through a Mexican land grant in 1842. Juan Avila re-established his title to the land after California became US territory in 1848 and remained the owner of "Rancho Niguel" until 1865.

In 1895, the "Rancho Niguel" land became part of the Moulton Company, which would eventually control over 19,000 acres of ranch land. Laguna Niguel was one of the first master planned communities in California, established by the Laguna Niguel Corporation in 1959. Land sales started to occur in 1961 in the Monarch Bay and Laguna Terrace subdivisions. Avco Community Developer acquired the Laguna Niguel Plan in 1971 and initiated development as set forth in the original Master Plan.

During the early years of development, the Laguna Niguel Homeowner Association (later to become the Laguna Niguel Community Council) served in an advisory capacity to the Orange County Board of Supervisors on land use issues. On December 1, 1989, Laguna Niguel became the 29th city in Orange County. [City of Laguna Niguel 2007]

PROJECT AREA HISTORY

The project area is located along the drainage basin at the confluence of several creeks including Oso and Trabuco Creeks in a large natural drainage channel. Natural water flow, especially of winter flooding events, would probably have made this area unsuitable for habitation in prehistory. Most local prehistoric archaeological sites are located on hilltops. Conversely, the natural water flow would have made the area very desirable for some types of agricultural crops by the late 19th Century.

Aerial photographs from 1960 illustrate that lands adjacent to the project area were still largely agricultural (Figure 5; Figure 6). Also visible in the photographs is the drainage basin of Trabuco and Oso Creeks.

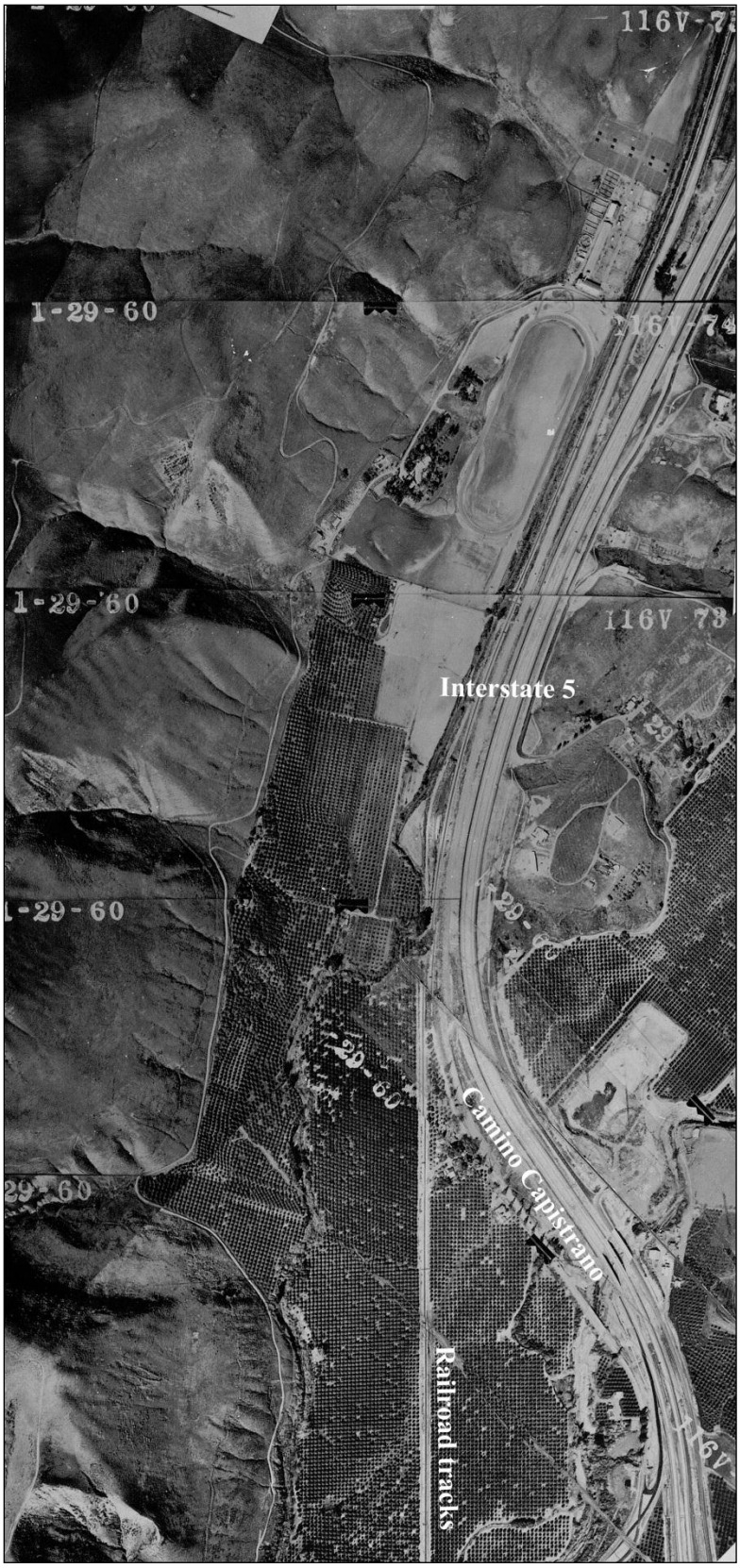

Figure 5. North project area 1960 aerial photograph

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Figure 6. South project area 1960 aerial photograph

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RECORD SEARCHES

PALEONTOLOGICAL RECORDS

A search for paleontological records was completed through the Orange County Clearinghouse for Archaeology and Paleontology (OCP numbers) and in published materials. The project area and a 10-mile radius were searched for resources. No fossils are known within or near the project area.

ARCHAEOLOGICAL RESOURCES

The record search determined that there is one recorded site within the project boundaries and six sites just adjacent to the existing rail line. One prehistoric site has been located within a 1/2 mile of the project area in addition to three historical sites within the 1/2 mile radius (Table 1). Forty-three previous archaeological studies have been conducted within a one mile radius of the project (Table 2).

Table 1. Recorded archaeological sites within a ½ mile radius of the project area

Reference	Quad	Site Type	Date	Distance from Project
ORA-855	San Juan Capistrano	Prehistoric village site	1980	Adjacent to project
ORA-963	San Juan Capistrano	Prehistoric shell and lithic scatter	1981	Adjacent to project
ORA-964	San Juan Capistrano	Prehistoric lithic scatter	1981	Within ½ mile
ORA-1338	San Juan Capistrano	Prehistoric lithic and shell scatter including 1 inhumation (includes ORA-1035 through ORA-1039)	1983	Within project area
ORA-1040	San Juan Capistrano	Prehistoric lithic scatter	1983	Adjacent to project
ORA-1278	San Juan Capistrano	Prehistoric shell scatter, midden	1991	Adjacent to project
ORA-1327H	San Juan Capistrano	Historic building and prehistoric lithics	1992	Adjacent to project
ORA-1328H	San Juan Capistrano	Historic residential complex	1992	Adjacent to project
ORA-1329H	San Juan Capistrano	Historic residential complex	1992	Within ½ mile
ORA-1330H	San Juan Capistrano	Historic residential complex	1992	Within ½ mile
ORA-1343H	San Juan Capistrano	Historic storage tank	1992	Within ½ mile

Table 2. Previous studies within a one-mile radius of the project

Author	Ref	Title	Year
Bonner, Wayne H.	OR·03470	Cultural Resource Records Search and Site Visit Results for Royal Street Communications, L1c Candidate La2766a (sce Los Altos, M16-t6 San Onofre-santiago), Los Altos at Plaza, Mission Viejo, Orange County, California	2007
Arrington, Cindy and Nancy Sikes	OR·03373	Cultural Resources Final Report of Monitoring and Findings for the Qwest Network Construction Project State of California: Volumes I and II	2006
Billat, Lorna	OR·02431	Nextel Communications Wireless Telecommunications Service Facility-Orange County	2002
Holson, John	OR·02206	Archaeological Survey and Record Search for the Worldcom Laguna Niguel Project Orange County, Ca	2001
Duke, Curt	OR·02419	Cultural Resource Assessment Cingular Wireless Facility No. Sc 039-01 Orange County, California	2001
Moleno, Adrian	OR·03150	Widening of a Segment of Crown Valley Parkway, a Local Thoroughfare, From the Intersection of Jardines to a Point Approximately 500 Feet Southwest of the Intersection of Puerta Real, in the City of Mission Viejo, Orange County, California	2001
Lapin, Philippe	OR·02083	Cultural Resource Assessment for Pacific Bell Wireless Facility Cm 400-02, County of Orange, California	2000
Lapin, Philippe	OR·02090	Cultural Resource Assessment for Pacific Bell Wireless Facility Cm 277-04, County of Orange, California	2000
Mason, Roger D.	OR·02152	Galivan Retarding Basin (phase II) and Oso Creek Channel: Results of Archaeological Monitoring	2000
Duke, Curt	OR·02412	Review of Pacific Bell Wireless Facility Cm 400-02, County of Orange, California	2000
Duke, Curt	OR·02041	Cultural Resource Assessment for Pacific Bell Mobile Services Facility Cm 336-02, County of Orange, California	1999
Mason, Roger D. & B. Brechbiel	OR-01717	San Joaquin Hills Transportation Corridor Results of Construction Monitoring for Archaeological Resources Mitigation Monitoring Measures 11-1	1997
Brown, Joan C.	OR-01473	Survey for the Rancho Capistrano Parking Lot Expansion, Located in an Unincorporated Area of Orange County, California	1996
Selverston, Mark D.	OR-01848	Monitoring Report by Mark D. Selverston, Staff Archeologist	1995
Skiles, Jeffery C.	OR-01246	Results of Archaeological Monitoring: Mobile Home Placement at 26510-A Mission Street	1993
Slawson, Dana N.	OR-01345	Archaeological Monitoring of Excavation for Proposed Railroad Passenger Loading and Waiting Platform	1993
Bissell, Ronald M.	OR-01575	Test Excavation of CA-ORA-1221H, East Coyote Hills, Fullerton, Orange County, California	1993
McKenna, Jeanette A. & P. De Barros	OR-01350	Archaeological Survey Report: Historic Sites Addendum: San Joaquin Hills Transportation Corridor 12-ORA-73, 12-102540	1993
McKenna, Jeanette A. & P. De Barros	OR-01351	Historic Study Report: San Joaquin Hills Transportation Corridor 12-ORA-73, 12-102540	1993
Jones, Carleton S.	OR-01275	The Development of Cultural Complexity Among the Luiseno	1992
Demcak, Carol R.	OR-01140	Cultural Resources Assessment for Moulton Niguel Water District (MNWD) Reclaimed water Distribution Facilities Project, South Orange County, California	1991

Author	Ref	Title	Year
Sorensen, Jerrell H.	OR-01011	Archival Research for Interstate 5, From the Confluence with I-405 to Route 1, Capistrano	1990
White, Robert S.	OR-01032	Archaeological Resource Assessment: Two Road Alignments Within Village 34 Lake Forest Drive and Bake Parkway, Orange County, California	1990
De Barros, Philip	OR-01065	A Cultural Resources Records Check and a Pedestrian Survey	1990
N/A	OR-01452	Cultural and Paleontological Resource Investigation of TM-89-435, Orange County, California	1990
De Barros, Phillip & H. Koerper	OR-01605	Final Test Investigation Report and Request for Determination of Eligibility for 23 Sites Along the San Joaquin Transportation Corridor	1990
Koerper, Henry C., P. E., Langenwalter & A. Schroth	OR-00886	The Putuidem Project: Archaeological Investigations at CA-ORA-855	1988
Cottrell, Marie G.	OR-00720	San Joaquin Transportation Corridor: An Annotated List of Archaeological Reports Referenced by Number	1983
Whitney-Desautels, Nancy A.	OR-00723	Archaeological Report on the Moulton-Niguel Water District Sewer Siphon Repair for the Oso-Trubuco Creek Interceptor Sewer	1983
N/A	OR-00729	Archaeological Report on Campeau Rock Features	1983
Van Horn, David M., Cooper, J. D., E. Crespin, & J.R. Murray	OR-00718	A Cultural / Scientific Resources Investigation of the Planned San Joaquin Hills Transportation Corridor (Phase II)	1983
Magalousis, Nicholas M.	OR-01044	Kalendarium	1981
N/A	OR-00524	Preliminary Report on Spring 1980 Test Excavations CA-ORA-855	1980
N/A	OR-01003	Draft Environmental Impact Report, Newport Dunes Redevelopment	1979
N/A	OR-00281	Appendix B Archaeological Survey	1978
Dodge, William A.,	OR-00304	An Archaeological Assessment of Eight Cultural Localities Along the San Onofre-Santiago 220 K v Transmission Line	1978
Van Horn, D. M.	OR-00381	Archaeological Report, Ultrasystems Project 4357	1978
Desautels, Roger J.	OR-00157	Archaeological Survey Report on One Acre of Land Located in the El Modena Area of the County of Orange	1977
Rice, Glen E.	OR-00370	Archaeological Investigations at CA-ORA-375	1977
Crabtree, Robert H.	OR-00708	Smith Brothers Development Land on Oso Creek	1974
Rice, Glen E.	OR-00709	Survey Results of Tract Number 7340	1974
N/A	OR-00705	A Final Report on the Scientific Resources Survey for Moulton Ranch	1973
Whitney-Desautels, Nancy A.	OR-00650	Cultural Resource Survey on the Abdelmuti Parcael, Marguerite Parkway, Mission Viejo, County of Orange, California	1962

NATIVE AMERICAN CONSULTATION

A sacred lands record search was requested from the Native American Heritage Commission on December 10, 2008. On December 18, the Commission replied that there were no known sacred lands within the project boundaries and recommended that seven tribes or individuals be contacted for further information (Appendix A). All were contacted by email or letter. In total, 7 responses were received. One contact specifically mentioned that burials are known along the railroad and requested that an archaeological monitor be present during ground disturbance. This contact and five others requested to be informed if cultural resources were discovered and requested a Native American monitor be consulted as the project moves forward. One respondent had no concerns about the project (Appendix B).

SURVEY

METHODS

The reconnaissance stage is important to verify the exact location of each cultural resource, the condition or integrity of the resource, and the proximity of the resource to areas of sensitivity. Veronica Harper conducted the survey of the proposed project area on December 19, 2008. The survey consisted of one surveyor walking in parallel transects spaced at approximately 5 meter intervals over the accessible areas of the right of way, while closely inspecting the ground surface. Visibility was excellent; however this is largely due to the modifications associated with the building and maintenance of the rail line over the years.

RESULTS

The pedestrian survey of the proposed project right of way did not reveal any new cultural or paleontological resources. Fragments of shell were noted throughout the recorded area of site P-30-1338 consistent with the site record. The track area has been subjected to serious modifications associated with the building and maintenance of the rail line. All of the bridges and overcrossings that occur along the proposed project alignment are listed as Class 5 bridges that do not meet significance criteria under CEQA (Caltrans 2007). A photo documentation of the right of way is included here (Appendix C).

CONCLUSIONS

Paleontological, archaeological and historical resources are considered to be significant if they possess integrity and may contribute information important in prehistory or history. Based on the prior research and survey results, the potential to impact resources is discussed below.

A large archaeological site (P-30-1338) is known in the southern portion of the project are that is bisected by the existing tracks and several small sites are adjacent. This large site is known to consist of marine shell and stone tools and presence was confirmed by the survey. The site has never been investigated by testing or data recovery to determine if it meets significance criteria under CEQA.

Based on the result of the pedestrian survey, it is unlikely that undisturbed archaeological resources will be encountered within the immediate vicinity of the tracks. The track area has been subjected to past modification associated with the building and maintenance of the rail line over the years, and the project consists of construction within the current right of way.

RECOMMENDATIONS

Any construction impacts with a depth of more than two feet from MP 193.9 to MP 195.7 require full time monitoring by an Orange County Certified Professional Archaeologist and a Native American monitor. A final mitigation compliance report is required and must be filed with the South Central Coastal Information Center to demonstrate that mitigation has been performed.

Unanticipated finds during excavation on the remainder of the project requires that the project halt work in the vicinity of the find (minimum 50 foot radius) until it can be evaluated by an Orange County Certified Archaeologist or Paleontologist, depending on the nature of the find.

Discovery of human remains requires immediate suspension of work in the vicinity and notification to the County Coroner. If the coroner determines the remains to be prehistoric the coroner will notify the Native American Heritage Commission who will appoint a Most Likely Descendent. The Most Likely Descendent will work with the project proponent to ensure respectful treatment of burials.

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APPENDIX A: NATIVE AMERICAN HERITAGE COMMISSION

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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

December 18, 2008

Ms. Sherri Gust
COGSTONE RESOURCE MANAGEMENT, INC.
1801 Parkcourt Place, Suite B-102
Santa Ana, CA 92701

Sent by FAX to: 714-245-0054
No. of Pages: 2

Re: Request for a Sacred Lands File records search and Native American Contacts list for the proposed **Doubletrack Project No. 1705** located along a 2.8-miles alignment south of Laguna Niguel to just north of the City of San Juan Capistrano; Orange County, California

Dear Ms. Gust:

The Native American Heritage Commission (NAHC) 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 did indicate the presence of Native American cultural resources within a mile of the immediate project area, APE.

Early consultation with Native American tribes in your project 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 (APE). A list of Native American contacts is attached to assist you. A local tribe or Native American individual may be the only source of information about a cultural resource. David Belardes, whose contact data is on the attached list, may have knowledge of the cultural resources in the APE.

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
December 19, 2008

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

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

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

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

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

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

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 Doubletrack Project No. 1705; located between Laguna Niguel and the City of San Juan Capistrano in Orange County, California for which a Sacred Lands File search and Native American Contacts list were requested.

APPENDIX B: NATIVE AMERICAN CONTACT LOG

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Native American Contact Log				
	Letters/ Email	**Written Response**	**Phone Calls**	**Phone Reponses**
David Belardes/Joyce Perry, Juaneño band of Mission Indians Acjachemen Nation	Dec 10	none	12/27/08; 12/31/08	Stated that burials are known along the railroad. Requested an archaeological monitor be present for all ground disturbance. Requested that a Native American monitor be required if Native American cultural materials are discovered.
Anthony Rivera, Juaneño Band of Mission Indians Acjachemen Nation	Dec 10	none	12/20/08	Jim Rivera responded to the mailing. Requests to be informed on all aspects of the project and stated the sensitive nature of the Laguna Niguel area for the tribe.
Alfred Cruz, Juaneño Band of Mission Indians	Dec 10	none	12/27/08	If excavation occurs a Native American monitor should be required.
Bud Sepulveda, Juaneño Band of Mission Indians	Dec 10	none	12/27/08; 12/31/08	No concerns about project.
Sonia Johnston, Juaneño Band of Mission Indians	Dec 10	none	12/27/08	Please contact if cultural resources are discovered.
Anita Espinoza, Juaneño Band of Mission Indians	Dec 10	none	12/27/08	Please contact if cultural resources are discovered. Please consult regarding Native American monitoring.
Joe Ocampo, Juaneño Band of Mission Indians	Dec 10	none	12/27/08	Please contact if cultural resources are discovered. Please consult regarding Native American monitoring.

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APPENDIX C: RIGHT OF WAY PHOTOS

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Laguna Niguel Station, view south


Station, view south


MP 193-9


DSCN4101


tracks by MP 193-3


project area, east side


DSCN4106


MP 194-3


project area, view south


DSCN4110


DSCN4111


DSCN4112


DSCN4113