

## **Phase II Evaluation of a Portion of Archaeological Site CA-SDI-12093**

### **Chollas Creek Bicycle Trail Project San Diego, California**

Prepared for

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**NATIONAL ARCHAEOLOGICAL DATABASE (NADB)  
INFORMATION SHEET**

**PHASE II EVALUATION OF A PORTION OF ARCHAEOLOGICAL SITE CA-SDI-12093  
CHOLLAS CREEK BICYCLE TRAIL PROJECT  
SAN DIEGO, CALIFORNIA**

By

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## **MANAGEMENT SUMMARY/ABSTRACT**

### **PURPOSE AND SCOPE**

The City of San Diego is planning to construct a bicycle path south of Interstate (I) 5 and east of I-15 in San Diego. Previous research indicates that the project may impact two cultural resources: CA-SDI-12093 and P-37-025680.

On November 5, 2014, Rebecca Malone from the City of San Diego completed an environmental review of the Chollas Creek Bicycle Trail and determined that additional information is required related to cultural resources. Specifically, the bike path alignment APE may lie within a portion of CA-SDI-12093 and requires further evaluation in accordance with the Historical Resource Regulations of the Land Development Code and the Historical Resources Guidelines. In addition, a portion of the AT&SF Railroad is within the project APE and will require further evaluation.

To determine the presence or absence of an archaeological deposit and to determine the significance of any portion of CA-SDI-12093 that may remain within the APE, BonTerra Psomas archaeologists drafted an Archaeological Testing Plan, approved by the City of San Diego, which describes the methods and protocols of archaeological testing and evaluations that will be completed for CA-SDI-12093. The site has been determined ineligible for listing in the National Register of Historic Places (NRHP) on at least two occasions but, because of its size, significant pockets of cultural resources could remain buried in areas not previously tested. Initial research suggests that the site will only be impacted by the project where the trail will be placed between I-15 and Chollas Creek (south of Main Street). This is a 1,000-foot-long stretch of sloped embankment above the creek. It is in this area that the archaeological testing occurred.

The historic evaluation of the railroad (P-37-025680) is being undertaken independently and will be documented in a separate, stand-alone historic resources evaluation report.

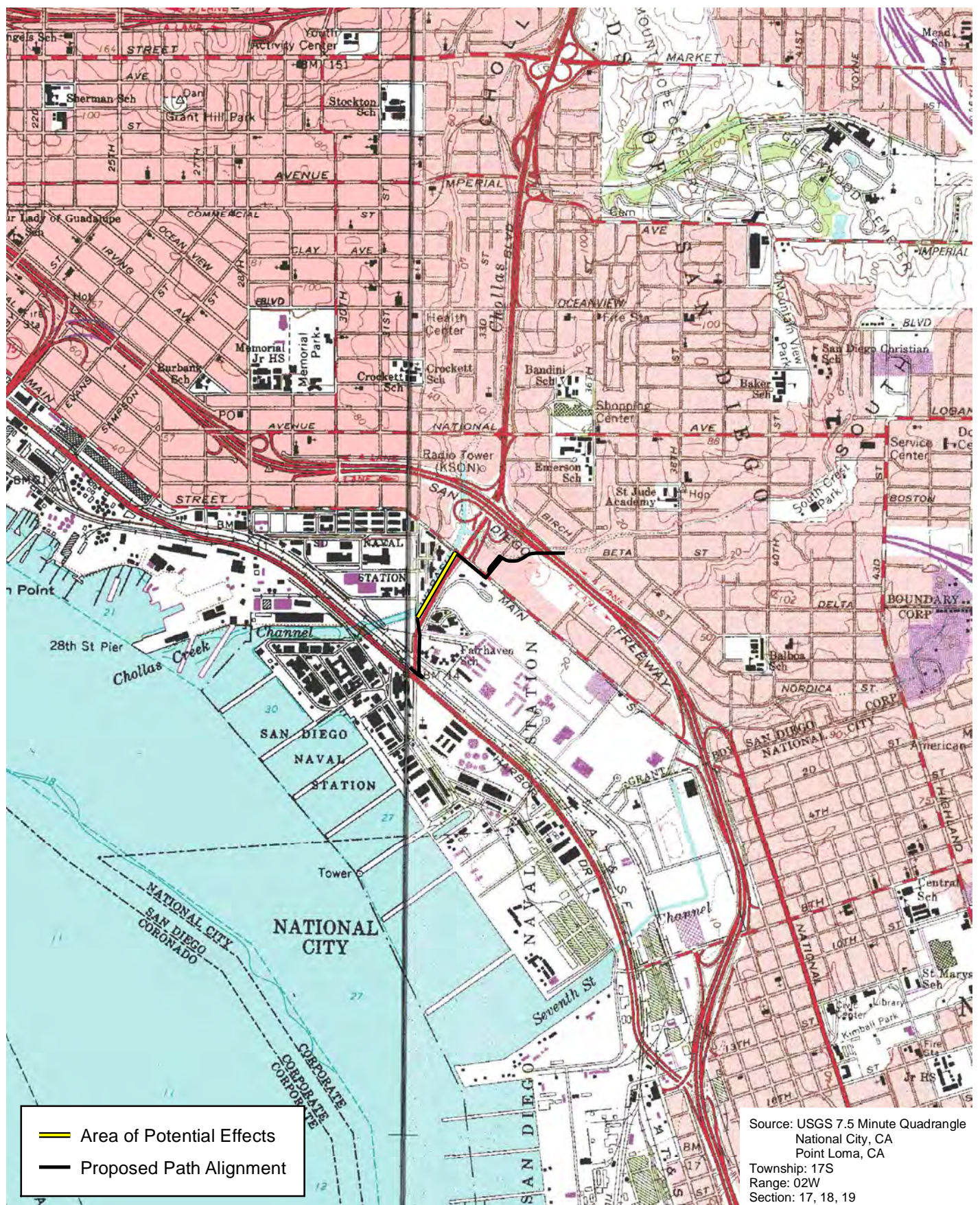
### **AREA OF POTENTIAL EFFECTS**

For the purposes of this testing plan, the Area of Potential Effects (APE) (i.e., the geographic areas within which a project may impact historic properties) is defined as the approximate 1,000-foot-long stretch of sloped embankment between I-15 and Chollas Creek, south of Main Street and north of South 32<sup>nd</sup> Street. The width of the APE is defined as the area between the curb along the street and the high water line of Chollas Creek. Exhibit 1 depicts the proposed project alignment; Exhibit 2 depicts the APE within the larger project site and shows the proposed Shovel Test Pit (STP) locations.

### **PREVIOUS INVESTIGATIONS**

A portion of one prehistoric resource is believed to lie within the APE. The site—CA-SDI-12093—was initially recorded as a temporary camp by Malcolm Rogers, who noted a relatively shallow midden, assigned the site to the Late Prehistoric Period, and noted that the site had been recently impacted by development. The first testing of the site recovered faunal materials and shell from near the 32<sup>nd</sup> Street Bridge over Chollas Creek in 1982. In 1991, a second portion of the site was tested near 32<sup>nd</sup> Street and Harbor Drive. An intact, 40-centimeter-thick midden containing debitage, fire-affected-rock, millings, and lithic tools as well as faunal remains was recovered. Despite this, that portion of the site was deemed ineligible for listing in the National Register of Historic Places (NRHP). Testing conducted in the eastern corner of the site in 1993 identified shellfish scatter and scant traces of lithics intermixed with historic debris. The site was recommended ineligible for listing on the NRHP. The State Historic Preservation Officer (SHPO) concurred with that recommendation. In 2000, the area near 32<sup>nd</sup> Street and Harbor Drive tested in 1991 was re-tested with negative results. In 2008, monitoring conducted during trenching





## Area of Potential Effects

Chollas Creek Bike Trail



Exhibit 1

**Bonterra**  
**PSOMAS**



- Approximate Shovel Test Pit Locations
- ▭ Proposed Area of Potential Effects

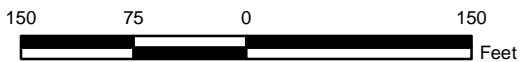


Aerial Source: ESRI 2014

## Proposed Area of Potential Effects and Approximate Shovel Test Pit Locations

*Chollas Creek Bike Trail*

Exhibit 2



**Bonterra**  
PSOMAS

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activities resulted in the discovery of an extensive scatter of shellfish in the vicinity of Harbor Drive and the Burlington Northern right-of-way near 32<sup>nd</sup> Street. Finally, ASM Affiliates completed a constraints analysis for the bike path in 2014. The analysis did not include a pedestrian survey of the alignment, but based on records, concluded that a small portion of CA-SDI-12093 could possibly exist within portions of the alignment along Chollas Creek and that archaeological testing and monitoring might be required (Scharlotta and Becker 2014).

In summary, CA-SDI-12093 has been determined ineligible for listing in the NRHP on at least two occasions, but because of its size, significant pockets of cultural resources could remain buried.

## **NATIVE AMERICAN PARTICIPATION**

The City of San Diego requires a Native American monitor to be present during archaeological investigations. BonTerra Psomas contacted Clint Linton of the Santa Ysabel Band of Diegueño Indians and proprietor of Red Tail Monitoring and Research, Inc. Mr. Linton provided two Native American monitors for the project.



## **1.0 NATURAL AND CULTURAL RESOURCES SETTINGS**

### **1.1 NATURAL SETTING**

The APE is located entirely within a built environment. Chollas Creek has been channeled and dredged; its slopes have been re-enforced with concrete and riprap in many areas and over most of the APE. With the exception of one small patch of native buckwheat on the eastern slope of Chollas Creek, both banks of the creek are covered within non-indigenous plants, dominated by iceplant. No native terrain exists anywhere within view of the APE; construction has completely altered the landscape in every direction.

### **1.2 CULTURAL SETTING**

The history of San Diego can be divided into four prehistoric periods, one ethnohistoric period and three historic periods. These periods are summarized below as discussed in Rosen (1994) and Van Wormer (1995).

#### **1.2.1 Early Man Period (Before 8500 BC)**

No firm archaeological evidence for the occupation of San Diego County before 10,500 years ago has been discovered. The myths and history that is repeated by the local Native American groups now and at the time of earlier ethnographic research indicate both their presence here since the time of creation and, in some cases, migration from other areas. There are some researchers who advocate an occupation of southern California prior to the Wisconsin Glaciation, around 80,000 to 100,000 years ago (Carter 1957, 1980; Minshall 1976). Local proposed Early Man sites include the Texas Street, Buchanan Canyon and Brown sites, as well as Mission Valley (San Diego River Valley), Del Mar and La Jolla (Bada et al. 1974; Carter 1957, 1980; Minshall 1976, 1983, 1989; Moriarty and Minshall 1972; Reeves 1985; Reeves et al. 1986). However, two problems have precluded general acceptance of these claims. First, artifacts recovered from several of the localities have been rejected by many archaeologists as natural products rather than cultural artifacts. Second, the techniques used for assigning early dates to the sites have been considered unsatisfactory (Moratto 1984; Taylor et al. 1985).

#### **1.2.2 Paleo-Indian Period (8500-6000 BC)**

The earliest generally-accepted archaeological culture of present-day San Diego County is the Paleo-Indian culture of the San Dieguito Complex. This complex is usually assigned to the Paleo-Indian Stage and dated to about 10,500 years ago. It would therefore appear to be contemporary with the better-known Fluted Point Tradition of the High Plains and elsewhere and the Western Pluvial Lakes Tradition of the Desert West. The San Dieguito Complex, is believed to represent a nomadic hunting culture by some investigators of the complex (Davis et al. 1969; Moriarty 1969; Rogers 1929, 1966; Warren 1966, 1967) characterized by the use of a variety of scrapers, choppers, bifaces, large projectile points and crescentics, a scarcity or absence of milling implements, and a preference for fine-grained volcanic rock over metaquartzite.

#### **1.2.3 Early Archaic Period (6000 BC-AD 0)**

As a result of climatic shifts and a major change in subsistence strategies, a new cultural pattern assignable to the Archaic Stage is thought by many archaeologists to have replaced the San Dieguito culture before 6000 BC. This new pattern, the Encinitas Tradition, is represented in San Diego County by the La Jolla and Pauma complexes. The coastal La Jolla Complex is characterized as a gathering culture which subsisted largely on shellfish and plant foods from the abundant littoral resources of the area. The La Jolla Complex is best known for its stone-on-stone

grinding tools (mano and metate), relatively crude cobble-based flaked lithic technology and flexed human burials. Inland Pauma Complex sites have been assigned to this period on the basis of extensive stone-on-stone grinding tools, Elko Series projectile points and the absence of remains diagnostic of later cultures.

#### **1.2.4 Late Prehistoric Period (AD 0-1769)**

The Late Prehistoric Period in San Diego County is represented by two distinct cultural patterns, the Yuman Tradition from the Colorado Desert region and the Shoshonean Tradition from the north. These cultural patterns are represented locally by the Cuyamaca Complex from the mountains of southern San Diego County and the San Luis Rey Complex of northern San Diego County. The people of the Cuyamaca and San Luis Rey complexes are ancestral to the ethnohistoric Kumeyaay (Diegueño) and Luiseño, respectively. Prehistorically, the Kumeyaay were a hunting and gathering culture that adapted to a wide range of ecological zones from the coast to the Peninsular Range. A shift in grinding technology reflected by the addition of the pestle and mortar to the mano and metate, signifying an increased emphasis on acorns as a primary food staple, as well as the introduction of the bow and arrow (i.e., small Cottonwood Triangular and Desert Side-notched projectile points), obsidian from the Obsidian Butte source in Imperial County and human cremation serve to differentiate Late Prehistoric populations from earlier peoples. Pottery is also characteristic of the Cuyamaca Complex, but is absent from the San Luis Rey Complex until relatively late (post AD 1500).

#### **1.2.5 Ethnohistoric Period**

The founding of Mission San Diego de Alcalá in 1769 by Father Junípero Serra and Mission San Luis Rey de Francia in 1798 by Father Lasuén brought about profound changes in the lives of the Yuman-speaking Kumeyaay (Diegueño) and Shoshonean-speaking Luiseño of San Diego County. The coastal Kumeyaay and Luiseño were quickly brought into their respective missions or died from introduced diseases. Ethnographic work, therefore, has concentrated on the mountain and desert peoples who were able to retain some of their aboriginal culture. As a result, ethnographic accounts of the coastal Kumeyaay and Luiseño are few. Today the descendants of the Kumeyaay bands are divided among 12 reservations in the south county; the descendants of the Luiseño bands among five reservations in the north county.

The Kumeyaay are generally considered to be a hunting-gathering society characterized by central-based nomadism. While a large variety of terrestrial and marine food sources were exploited, emphasis was placed on acorn procurement and processing as well as the capture of rabbit and deer. Shipek (1963, 1989b) has strongly suggested that the Kumeyaay, or at least some bands of the Kumeyaay, were practicing proto-agriculture at the time of Spanish contact. While the evidence is problematic, the Kumeyaay were certainly adept land and resource managers with a history of intensive plant husbandry.

#### **1.2.6 Historic Periods**

San Diego history can be divided into three periods: the Spanish, Mexican and American periods.

##### ***Spanish Period (AD 1769-1822)***

In spite of Juan Cabrillo's earlier landfall on Point Loma in 1542, the Spanish colonization of Alta California did not begin until 1769. Concerns over Russian and English interests in California motivated the Spanish government to send an expedition of soldiers, settlers and missionaries to occupy and secure the northwestern borderlands of New Spain. This was to be accomplished through the establishment and cooperative inter-relationship of three institutions: the Presidio,

Mission and Pueblo. In 1769 a land expedition led by Gaspar de Portola reached San Diego Bay, where they met those who had survived the trip by sea on the San Antonio and the San Carlos. Initially camp was made on the shore of the bay in the area that is now downtown San Diego. Lack of water at this location, however, led to moving the camp on May 14, 1769 to a small hill closer to the San Diego River and near the Kumeyaay village of Cosoy. Father Junípero Serra arrived in July of the same year to find the Presidio serving mostly as a hospital. The Spanish built a primitive mission and presidio structure on the hill near the river. The first chapel was built of wooden stakes and had a roof made of tule reeds. Brush huts and temporary shelters were also built.

### ***Mexican Period (AD 1822-1846)***

In 1822 the political situation changed. Mexico won its independence from Spain and San Diego became part of the Mexican Republic. The Mexican Government opened California to foreign ships, and a healthy trade soon developed, exchanging the fine California cattle hides for the manufactured goods of Europe and the eastern United States. Several of these American trading companies erected rough sawn wood-plank sheds at La Playa on the bay side of Point Loma. The merchants used these "hide-houses" for storing the hides before transport to the east coast (Robinson 1846:12; Smythe 1908:102). As the hide trade grew, so did the need for more grazing lands. Thus the Mexican Government began issuing private land grants in the early 1820s, creating the rancho system of large agricultural estates. Much of the land came from the Spanish missions, which the Mexican government secularized in 1833. The mission system, however, had begun to decline when the Mission Indians became eligible for Mexican citizenship and refused to work in the mission fields. The ranchos dominated California life until the American takeover in 1846 (Smythe 1908:101-106; Robinson 1948; Killea 1966; Pourade 1963). The Mexican Period brought about the continued displacement and acculturation of the native populations.

### ***American Period (AD 1846-PRESENT)***

When United States military forces occupied San Diego in July 1846, the town's residents split on their course of action. Many of the town's leaders sided with the Americans, while other prominent families opposed the United States invasion. A group of Californios under Andres Pico, the brother of the Governor Pio Pico, harassed the occupying forces in Los Angeles and San Diego during 1846. In December 1846, Pico's Californios engaged U.S. Army forces under General Stephen Kearney at the Battle of San Pasqual and inflicted many casualties. However, the Californio resistance was defeated in two small battles near Los Angeles and effectively ended by January 1847 (Harlow 1982; Pourade 1963).

The Americans raised the United States flag in San Diego in 1846, and assumed formal control with the Treaty of Guadalupe-Hidalgo in 1848. In the quarter of a century following 1848, they transformed the Hispanic community into a thoroughly Anglo-American one. They introduced Anglo culture and society, American political institutions and especially American entrepreneurial commerce. By 1872, they even relocated the center of the city and community to a new location that was more accessible to the bay and to commerce (Newland 1992:8). Expansion of trade brought an increase in the availability of building materials. Wood buildings gradually replaced adobe structures. Some of the earliest buildings to be erected in the American Period were "Pre-fab" houses which were built on the east coast of the United States and shipped in sections around Cape Horn and reassembled in San Diego.

In 1850, the Americanization of San Diego began to develop rapidly. On February 18, 1850, the California State Legislature formally organized San Diego County. The first elections were held at San Diego and La Playa on April 1, 1850 for county officers. San Diego grew slowly during the next decade. San Diegans attempted to develop the town's interests through a transcontinental railroad plan and the development of a new town closer to the bay. The failure of these plans,



added to a severe drought which crippled ranching and the onset of the Civil War, left San Diego as a remote frontier town. The troubles led to an actual drop in the town's population from 650 in 1850 to 539 in 1860 (Garcia 1975:77). Not until land speculator and developer Alonzo Horton arrived in 1867 did San Diego begin to develop fully into an active American town (MacPhail 1979).

American Period resources can be categorized into remains of the frontier era, rural farmsteads and urban environments, with different research questions applicable to each category. Important research topics for the frontier era include studying the changing function of former Mexican ranchos between 1850 and 1940 and investigating the effect on lifestyles of the change from Hispanic to Anglo-American domination of the pueblo of San Diego. Research domains for rural farmsteads include the definition of a common rural culture, comparing the definition of wealth and consumer preferences of successful rural farm families versus middle and upper-middle class urban dwellers, definition of the evolution and adaptation of rural vernacular architecture, and identification of the functions of external areas on farmsteads. Research questions for urban environments include definition of an urban subsistence pattern; definition of ethnic group maintenance and patterns of assimilation for identifiable ethnic groups; identification of specific adaptations to boom and bust cycles; definition of a common culture for working, middle and upper-middle class urban residents; identification of adaptations to building techniques, architectural styles, technological change and market fluctuations through analysis of industrial sites; and investigation of military sites to relate changes in armament technology and fortification expansion or reduction to changing priorities of national defense.

## **2.0 BACKGROUND RESEARCH**

The westernmost part of prehistoric site CA-SDI-12093 may extend into the APE. The site was initially recorded as a prehistoric temporary camp by Malcolm Rogers (no date). Rogers noted a relatively shallow midden and assigned the site to the Late Prehistoric period. Rogers further noted that the site had been impacted to an undetermined extent by development that had just occurred (Scharlotta and Becker 2014).

The first record of testing, albeit an incomplete one, was of David Van Horn recovering faunal materials and shell from somewhere near the 32<sup>nd</sup> Street Bridge over Chollas Creek in 1982.

In 1991, ERC Environmental tested a portion of the site near 32<sup>nd</sup> Street and Harbor Drive. They identified an intact, 40-centimeter-thick midden containing debitage, fire-affected-rock, millings, and lithic tools as well as faunal remains. They found that this portion of the site is ineligible for listing on the NRHP (Scharlotta and Becker 2014).

Testing conducted in the eastern corner of the site in 1993 by Broken Fragments (BF) identified a shellfish scatter and scant traces of lithics intermixed with historic debris (e.g., concrete, glass, plastic). The site was determined ineligible for listing by BF. The State Historic Preservation Officer (SHPO) concurred with that recommendation (Scharlotta and Becker 2014).

In 2000, CRM Tech revisited the area of the site tested by ERC. They re-tested the area with negative results (Scharlotta and Becker 2014).

In 2008, ASM Affiliates conducted monitoring during trenching activities and observed an extensive scatter of shellfish in the vicinity of Harbor Drive and the Burlington Northern right-of-way near 32<sup>nd</sup> Street. No cultural materials were observed in association with the shellfish (Scharlotta and Becker 2014).

In summary, portions of CA-SDI-12093 have been determined ineligible for listing in the NRHP on at least two occasions, but because of its overall size, significant pockets of cultural resources could remain buried.

### **3.0 RESEARCH DESIGN**

The focus of this investigation is to determine whether archaeological midden associated with CA-SDI-12093 is located within the proposed alignment for the bike path. If so, to determine if that midden possesses sufficient density, diversity, and integrity to address criteria under the California Environmental Quality Act (CEQA) Guidelines for inclusion on the California Register of Historic Resources (CRHR), particularly with respect to Criterion D: whether it “has yielded or is likely to yield information important to science”. It does not appear that Criteria A, B, or C are applicable to this project.

Additionally, the City of San Diego Land Development Code guidelines for Historical Resources must be considered with respect to a resource’s eligibility for inclusion on the San Diego Historical Resources Register.

#### ***City of San Diego Historical Resources Register***

Any improvement, building, structure, sign, interior element and fixture, feature, site, place, district, area or object may be designated as historic by the City of San Diego Historical Resources Board if it meets any of the following criteria:

- a. Exemplifies or reflects special elements of the City's, a community's or a neighborhood's historical, archaeological, cultural, social, economic, political, aesthetic, engineering, landscaping or architectural development;
- b. Is identified with persons or events significant in local, state or national history;
- c. Embodies distinctive characteristics of a style, type, period or method of construction or is a valuable example of the use of indigenous materials or craftsmanship;
- d. Is representative of the notable work of a master builder, designer, architect, engineer, landscape architect, interior designer, artist or craftsman;
- e. Is listed or has been determined eligible by National Park Service for listing on the National Register of Historic Places or is listed or has been determined eligible by the State Historical Preservation Office for listing on the State Register of Historical Resources; or
- f. Is a finite group of resources related to one another in a clearly distinguishable way or is a geographically definable area or neighborhood containing improvements which have a special character, historical interest or aesthetic value or which represent one or more architectural periods or styles in the history and development of the City.

#### ***Density, Diversity, and Integrity***

Density is a measure of how many artifacts are contained per cubic meter of midden. A high density midden is an indication that the site was either used over a long period of time, or used intensively over a shorter time period. A high density midden may also yield a sufficient sample of its artifactual contents to address research questions with a minimal level of effort. A low density midden would require considerably more fieldwork to obtain a viable sample.

Diversity is a measure of how many kinds of activities can be inferred from the artifactual assemblage. For example, a site containing only spent cores and debitage, representing various stages of reduction, can only address one or two site activities: raw material procurement and lithic reduction strategies. On the other hand, a site with spent cores and debitage, burned animal bone, fire hearths, projectiles, and beads can address a variety of questions regarding material procurement, reduction strategies, floral and faunal resources, and chronology, with dates derived from radiocarbon analysis (hearths), temporal indicators (projectiles and beads), and changing settlement subsistence patterns over time (floral and faunal).

Integrity is a measure of how intact an archaeological deposit. A well-stratified archaeological midden that has not been impacted by erosion or mechanical disturbances is more likely to yield reliable data than a site that has been severely degraded by time and erosion or mechanical grading or other modern excavation activities.

## **4.0 FIELD METHODS**

The excavation methods used to obtain subsurface samples consisted of traditional techniques using a shovel, dig bar, trowel, and shaking screen.

BonTerra Psomas proposed initially to excavate 20 Shovel Test Pits (STPs) at 50-foot intervals along the length of the bike path. Although the site was not visited prior to the fieldwork, the site had been described by the City as existing on a slope along Chollas Creek. That was verified using the “street view” mode on Google Earth, where it was apparent that most of the alignment would be on a steep embankment along Chollas Creek, and that it appeared to be almost entirely covered with ice plant and other vegetation.

Because of the dense ice plant, the steep slope, the necessity to backfill the STPs, and the directive from the City to avoid letting any screened sediments fall into Chollas Creek, the shaking screen was used without legs. It was then placed over a large plastic mortar mixing pan that was intended to capture all screened matrix so that it could be used to backfill the STP and be prevented from falling into Chollas Creek.

### **4.1 PERSONNEL**

BonTerra Psomas Senior Archaeologist David Smith and Staff Archaeologist Matheson Lowe conducted the fieldwork on March 9 and 10, 2015. Red Tail Monitoring and Research, Inc. provided a Native American monitor for both days. On March 9, 2015, Justin Linton monitored the excavations and on March 10, 2015, Bo Linton served as the Native American monitor.

### **4.2 SHOVEL TEST PITS**

BonTerra Psomas excavated 18 STPs along the 1,000-foot-long embankment between I-15 and Chollas Creek, south of Main Street (Exhibit 2). The placement of STP 1 roughly coincided with Station 119+50, and STPs were excavated at 50 foot intervals down through Station 115+50. STP 10 was placed approximately at Station 110 and the next 7 STPs were excavated at roughly 50-foot intervals ending at Station 113+50. Several STPs that were to be excavated near the center of the APE could not because of concrete on the slope.

STPs were excavated by hand using a round-nose shovel and a dig bar. Each STP had a circumference that was between 25 and 40 centimeters (cm) and was excavated in 20-cm increments (Figure 1). The matrix from each level was dry screened through 1/8-inch mesh. The retained matrix larger than 1/8 inch was then inspected for specific classes of material, including



stone tools, debitage, ground stone tools, miscellaneous lithics (e.g., ochre, asphaltum), non-fish and fish bone, bone tools, charcoal, fire-affected rock, or historic material.

Not all shellfish remains were collected. Since a single whole shellfish can be broken into 100s of fragments, a more precise measure for a given species is the minimum number of individuals (MNI), determined by the actual number of non-repetitive elements common to that species. In the case of bivalves, the MNI can be determined by the number of shell hinges contained in the bivalve assemblage, divided by 2 (because each whole shell has two hinges). For example, a sample of 16 *Chione* species hinges would represent 8 individuals. On the other hand, gastropods, having only one non-repetitive element, an apex, are calculated by the direct count of apices representing a given species. In this manner, fieldwork can be expedited since only non-repetitive elements are collected from the screen.

However, because of the relatively sparse shellfish representation on this project, additional shell specimens were collected that did not possess non-repetitive elements to ensure an accurate representation of the shellfish population was obtained during the test.



**FIGURE 1. STP 1 LOCATED NEAR STATION 119+50**

#### **4.3 PREVIOUS DISTURBANCES**

Given the location and history of the APE, it was anticipated that relatively recent historic materials would be recovered from many of the STPs. These would be the result of early to late 20<sup>th</sup> Century activity adjacent to Chollas Creek such as the dredging and channelization of the creek, the construction and earth-disturbing activities associated with the construction of Wabash Boulevard, and later, I-15; the construction of the concrete bridges at each end of the APE, the construction of a concrete retaining wall imbedded in the eastern bank, and other relatively recent activities that may have occurred along the eastern bank of Chollas Creek.

## 5.0 RESULTS

In all, 18 STPs were excavated on or adjacent to the proposed alignment. From these, forty-six 20-cm-deep levels were screened and sorted. The depths of the STPs varied from 10 cm to 80 cm.

The cultural materials recovered from the STPs consist of brick fragments, bottle glass fragments, plastic fragments, and concrete and asphalt fragments. Marine shellfish remains were also recovered from most of the STPs (Table 1).

**TABLE 1**  
**RESULTS OF SHOVEL TEST PIT EXCAVATIONS BY DEPTH**

| STP No. | Depth (cm) | <i>Chione</i> | <i>Pecten</i> | <i>Ostrea</i> | <i>Cerithidea</i> | <i>Mytilus</i> | Economic | Unidentified shell | Historic    |
|---------|------------|---------------|---------------|---------------|-------------------|----------------|----------|--------------------|-------------|
| 1       | 0–20       | 3             | 1             | 2             |                   |                | 1        | 2                  |             |
|         | 20–40      | 5             |               |               |                   |                |          |                    |             |
|         | 40–60      | 3             |               |               |                   |                | 2        | 6                  |             |
|         | 60–70      | 2             | 1             | 8             | 1                 |                |          | 4                  | brick       |
| 2       | 0–20       | 3             | 2             | 5             |                   | 3              |          |                    |             |
|         | 20–40      | 6             |               | 5             |                   |                |          | 4                  |             |
|         | 40–60      | 3             | 3             | 8             | 1                 | 1              | 1        | 10                 |             |
|         | 60–80      | 3             | 2             | 8             | 1                 |                | 1        | 4                  | metal/glass |
| 3       | 0–20       | 1             |               | 2             |                   |                |          |                    |             |
|         | 20–40      | 2             |               | 5             |                   |                |          |                    | brick       |
|         | 40–60      | 2             | 1             | 3             |                   |                |          | 3                  | metal       |
|         | 60–80      | 2             |               | 2             |                   |                |          | 1                  | metal       |
| 4       | 0–20       | 3             |               | 3             |                   |                |          | 4                  |             |
|         | 20–40      | 3             | 2             | 2             | 3                 |                |          | 1                  | brick       |
|         | 40–60      | 3             |               | 3             |                   |                |          | 1                  | brick       |
|         | 60–80      | 1             |               |               |                   |                |          | 1                  |             |
| 5       | 0–20       |               |               |               |                   |                |          |                    |             |
|         | 20–40      |               |               |               |                   |                |          |                    | concrete    |
| 6       | 0–20       |               |               |               |                   |                |          |                    | plastic     |
|         | 20–40      |               |               |               |                   |                |          |                    | plastic     |
|         | 40–60      |               |               |               |                   |                |          |                    | plastic     |
|         | 60–80      |               |               |               |                   |                |          |                    | plastic     |
| 7       | 0–20       | 1             |               |               |                   |                |          |                    | concrete    |
| 8       | 0–20       |               |               |               |                   |                |          |                    |             |
|         | 20–40      |               |               |               |                   |                |          |                    |             |
|         | 40–60      |               |               |               |                   |                |          |                    | concrete    |
| 9       | 0–20       |               |               |               |                   |                |          |                    |             |
|         | 20–40      |               |               |               |                   |                |          |                    | concrete    |
| 10      | 0–10       |               |               |               |                   |                |          |                    | roadbed     |
| 11      | 0–10       |               |               |               |                   |                |          |                    | roadbed     |
| 12      | 0–10       |               |               |               |                   |                |          |                    | roadbed     |
| 13      | 0–20       | 4             |               |               | 6                 |                |          |                    | tar         |
|         | 20–40      | 4             | 2             |               | 3                 |                |          |                    |             |

**TABLE 1**  
**RESULTS OF SHOVEL TEST PIT EXCAVATIONS BY DEPTH**

| STP No.       | Depth (cm) | <i>Chione</i> | <i>Pecten</i> | <i>Ostrea</i> | <i>Cerithidea</i> | <i>Mytilus</i> | Economic | Unidentified shell | Historic             |
|---------------|------------|---------------|---------------|---------------|-------------------|----------------|----------|--------------------|----------------------|
| 14            | 0–20       |               |               | 2             | 2                 |                |          |                    | glass                |
|               | 20–40      |               |               |               | 1                 |                |          |                    | glass                |
|               | 40–60      | 2             |               | 1             | 1                 |                |          |                    | glass/brick          |
|               | 60–80      |               |               |               | 1                 |                |          |                    | brick                |
| 15            | 0–20       | 2             |               |               |                   |                |          | 2                  | brick/glass/concrete |
| 16            | 0–20       | 1             |               |               | 1                 |                |          |                    |                      |
|               | 20–40      |               |               | 1             |                   |                |          |                    |                      |
|               | 40–60      |               |               |               |                   |                |          |                    | concrete             |
| 17            | 0–20       |               |               |               |                   |                |          |                    |                      |
|               | 20–40      |               |               |               |                   |                |          |                    |                      |
|               | 40–60      |               |               |               |                   |                |          |                    | concrete             |
| 18            | 0–20       | 1             |               |               |                   |                |          | 1                  | glass                |
|               | 20–40      | 2             |               |               |                   |                |          |                    | brick/concrete       |
| <b>Totals</b> |            | <b>62</b>     | <b>14</b>     | <b>60</b>     | <b>21</b>         | <b>4</b>       | <b>5</b> | <b>44</b>          |                      |

## 5.1 SHELLFISH

The testing yielded 166 specimens of bivalve shellfish representing *Chione*, *Pecten*, *Ostrea*, and *Mytilus* species, and 17 specimens of the gastropod *Cerithidea*. Numerous shellfish remains (totaling 44) were recovered that, although thought to represent bivalves, could not, because of their fragmentary nature, be speciated. These specimens will not be considered further in this analysis.

When all recovered identifiable shellfish remains are ranked by abundance, *Chione* (n=62) dominate the assemblage, followed by *Ostrea* (n=60), *Pecten* (n=14), then *Cerithidea* (n=21), and lastly, *Mytilus* (n=4).

When ranked by MNI, *Cerithidea* (n=17) dominate the ranking with *Chione* (n=14) second, and *Pecten* (n= 4) third.

However, when economical shellfish; that is, the shellfish collected prehistorically for its caloric value, is considered, the ranking is *Chione* (13), and *Pecten* (4). Although *Mytilus* and *Ostrea* are present in the overall shellfish assemblage, it is unclear from the fragmentary remains of the shellfish if they were large enough to be viable economic resources.

## 5.2 HISTORIC

Of the 18 STPs excavated, 10 contained historic artifacts consisting of brick, concrete, glass, and plastic fragments. These are thought to be associated with the construction of either Wabash Boulevard, I-15, the retaining wall in the eastern slope of Chollas Creek (unknown prior to this project), and/or the probable degradation of concrete poured down over the eastern slope of Chollas Creek, primarily along the northern half of the slope.



### 5.3 CONSTRAINTS

Two constraints were encountered that limited the ability of the field crew to completely sample the alignment in the manner originally proposed.

The first constraint consists of concrete poured from I-15 (or perhaps much earlier from Wabash Boulevard), apparently to stabilize the eastern embankment of Chollas Creek (Figure 2). In the few places where the concrete is observable through the groundcover, it was observed to have some brick in it and does not appear to have been troweled or otherwise finished. There is some evidence, particularly in the vicinity of 32<sup>nd</sup> Street at the southern end of the APE that the concrete has been poured over riprap. This may be the case everywhere the concrete exists, but could not be verified because of the groundcover and minimal subsurface excavation. The extent of the concrete could not be determined accurately because almost all of the concrete is covered by thick ice plant and sediments/soils. However, it seemed apparent that the concrete occurs somewhat intermittently within 100–200 feet of the Main Street Bridge, but thereafter may be continuous for nearly  $\frac{2}{3}$  the length of the APE. The concrete may be approximately 15 feet wide over most of its length and seems to be positioned a few feet west of the centerline of the planned bike path. The occurrence of the concrete covering much of the proposed bike path alignment impeded testing along approximately  $\frac{1}{3}$  of the APE.



**FIGURE 2. CONCRETE UNDER THE ICEPLANT ADJACENT TO STP 5**

The second constraint is the steepness of the slope, which is exacerbated by the occurrence of a previously unknown articulated concrete retaining wall, that appears approximately 300 feet south of the Main Street Bridge (Figures 3 and 4). The wall is in poor condition, as exhibited by the severe cracking of the concrete and exposure of rusted steel re-enforcement bar. Most of the wall is not visible: The base is obscured by sediments and thick ice plant and the top is obscured mostly by thick ice plant growth.

The presence of the concrete, along a significant portion of the proposed pathway, prevented the completion of the STP testing as planned. It was not possible to investigate any sediment under

the concrete. Of the 18 STPs, 6 were terminated in solid concrete, 3 in riprap, 2 in unidentified large rock (possible riprap), and 3 in graded roadbed aggregate.



**FIGURE 3. FIRST APPEARANCE OF THE RETAINING WALL. VIEW TO THE NORTHEAST FROM APPROXIMATELY STATION 116+00**

**TABLE 2  
STP DEPTHS, SOILS TYPES, BOTTOM COMPOSITION**

| Station | STP No. | Depth (cm) | Soils | Bottom | Station | STP No. | Depth (cm) | Soils | Bottom |
|---------|---------|------------|-------|--------|---------|---------|------------|-------|--------|
| 119+50  | 1       | 70         | dsl   | rr     | 114+00  | —       | —          | —     | —      |
| 119+00  | 2       | 80         | dsl   | dsl    | 113+50  | —       | —          | —     | —      |
| 118+50  | 3       | 80         | dsl   | dsl    | 113+00  | 18      | 30         | dsl   | r      |
| 118+00  | 4       | 80         | dsl   | sc     | 112+50  | 17      | 60         | dsl   | r      |
| 117+50  | 5       | 40         | dm    | sc     | 112+00  | 16      | 55         | dsl   | sc     |
| 117+00  | 6       | 80         | cl    | cl     | 111+50  | 15      | 20         | dsl   | rr     |
| 116+50  | 7       | 20         | dsl   | sc     | 111+00  | 14      | 80         | dsl   | dsl    |
| 116+00  | 8       | 45         | dsl   | sc     | 110+50  | 13      | 40         | dsl   | rr     |
| 115+50  | 9       | 45         | dsl   | sc     | 110+00  | 12      | 10         | rm    | rm     |
| 115+00  | —       | —          | —     | —      | 109+50  | 11      | 10         | rm    | rm     |
| 114+50  | —       | —          | —     | —      | 109+00  | 10      | 10         | rm    | rm     |

dsl: disturbed sandy loam; rr: riprap; r: rock; sc: solid concrete; cl: clayey loam; rm: roadbed materials..





**FIGURE 4. SOUTHERLY VIEW OF THE RETAINING WALL  
SOUTH OF STATION 116+00**

## **6.0 MANAGEMENT CONSIDERATIONS**

The only potentially prehistoric archaeological remains recovered from the STPs during this test excavation are shellfish.

It is known that the prehistoric site (CA-SDI-12093), which once covered nearly a ¼-square-mile area bordered by Chollas Creek on its western side, has been observed to contain various depths of prehistoric shellfish midden, including lithic implements, at various locations within the overall site boundaries.

As discussed in the Background Research section of this report, prehistoric cultural materials have been found in proximity to the APE. One location, near the 32<sup>nd</sup> Street Bridge over Chollas Creek, yielded shellfish remains, lithics, milling stone, and fire-affected rocks.

Testing conducted in the eastern corner of the site identified a shellfish scatter and scant traces of lithics intermixed with historic debris (e.g., concrete, glass, plastic).

Monitoring during trenching activities in the vicinity of Harbor Drive and the Burlington Northern right-of-way near 32<sup>nd</sup> Street resulted in the discovery of an extensive scatter of shellfish. No cultural materials were observed in association with the shellfish.

All of these sites were evaluated by the researchers and determined ineligible for listing in the CRHR.

## **7.0 CONCLUSION**

In light of these results, there are several factors to consider regarding the current investigation:

1. The sparse shellfish remains have been extensively reworked, resulting in heavy fragmentation, probably the result of various episodes of construction involving the sloped embankment and the I-15/Wabash Boulevard alignments.
2. The presence of intrusive historic items such as brick, concrete, glass, and plastic suggests disturbance of the site.
3. The discovery of the retaining wall and poured concrete covering a portion of the path alignment, which could not be removed during the test, prevented testing of the covered area.
4. The complete absence of any prehistoric lithic artifacts.

Given these factors, there was no evidence obtained from this test excavation that suggests the recovered shellfish are from a prehistoric archaeological midden.

The test excavation failed to demonstrate that any remnants of SDI-12093 are within the proposed bike path alignment. Absent further testing in area

The APE lacks the criteria necessary for inclusion on the California Register of Historic Resources or the City of San Diego Historical Resources Register.

## **8.0 RECOMMENDATIONS**

The unexpected discovery of concrete along the eastern slope of Chollas Creek prevented testing as originally proposed. In lieu of additional testing, it is recommended that initial excavations for the bike path are monitored by a qualified Archaeologist. If monitoring results in the discovery of intact archaeological remains, an evaluation consisting of additional STPs or formal excavation units should be conducted to determine if that portion of CA-SDI-12093 is eligible for listing in the CRHR. In the event the discovery is determined eligible, mitigation measures shall be implemented to minimize any adverse impacts to historic properties to a level considered less than significant.

### **Mitigation Measures**

- Prior to the issuance of the grading permit for the project, the applicant shall provide a letter from a qualified Archaeologist certified by the City of San Diego stating that the applicant has retained this individual, and that the Archaeologist will be present during all grading and other significant ground-disturbing activities in the Area of Potential Effects (APE). Should any cultural/scientific resources or features be discovered during grading, no further grading shall occur in the area of the discovery until the City is satisfied that adequate provisions are in place to evaluate these resources and mitigate the effects of the project on them. City of San Diego regulations also require retention of a Native American monitor during construction. These conditions and the approved recommendations shall be incorporated on the cover sheet of the Grading Plan under the general heading "Conditions of Approval".
- If potentially significant features or sites (as opposed to isolates) are discovered, testing to determine significance is required by the State in Sections 21083.2 and 21084.4 of the

*California Public Resource Code* and Section 15064.5(c) of the California Environmental Quality Act (CEQA) Guidelines, as well as by the federal government at 36 CFR 800.4 of Section 106 of the National Historic Preservation Act. If the features or sites are determined to meet significance criteria, then data recovery excavations would also be required unless the project is redesigned to avoid impacts. If significant prehistoric features or sites (but not isolates) are discovered, a Native American Monitor will be required to observe the archaeological work.

- Section 7050.5 of the *California Health and Safety Code* provides for the disposition of accidentally discovered human remains. Section 7050.5 states that, if human remains are found, no further excavation or disturbance of the site or any nearby area reasonably suspected to overlie adjacent remains shall occur until the County Coroner has determined the appropriate treatment and disposition of the human remains.
- Section 5097.98 of the *California Public Resources Code* states that, if remains are determined by the Coroner to be of Native American origin, the Coroner must notify the Native American Heritage Commission (NAHC) within 24 hours which, in turn, must identify the person or persons it believes to be the most likely descended from the deceased Native American. Once determined to be of Native American origin, the Native American Graves Protection and Repatriation Act (NAGPRA) and its implementing regulations in the *Code of Federal Regulations* (specifically, 43 CFR 10) will be followed to determine the final disposition of the remains.



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