Appendix H

PHASE II CULTURAL RESOURCE STUDY FOR THE McELWAIN PROJECT

CITY OF MURRIETA, CALIFORNIA

Submitted to:

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June 27, 2019; Revised July 1, 2019; Revised July 25, 2019;
Revised July 31, 2019; Revised September 24, 2019; Revised October 14, 2019

Archaeological Report Summary Information

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***Report Date**:*	June 27, 2019; Revised July 1, 2019; Revised July 25, 2019; Revised July 31, 2019; Revised September 24, 2019; Revised October 14, 2019
***Report Title**:*	Phase II Cultural Resource Study for the McElwain Project, City of Murrieta, California
***Submitted to**:*	City of Murrieta 1 Town Square Murrieta, California 92562
Prepared For:	Joseph Sapp Murrieta Development II, LLC 23656 Bellwood Court Murrieta, California 92562
***Assessor's Parcel Numbers**:*	392-280-007
USGS Quadrangle:	Section 34, Township 6 South, Range 3 West, of the *Romoland* and *Murrieta, California* Quadrangles
***Study Area**:*	15.78 acres
***Key Words**:*	Archaeological testing program; City of Murrieta; project area is 15.78 acres; *Romoland* and *Murrieta* USGS topographic quadrangles; bedrock milling; historic well feature; historic trash deposit; not CRHR-eligible; cumulative impact analysis; monitoring recommended.

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1.0 MANAGEMENT SUMMARY/ABSTRACT

The following report describes the results of the cultural resources testing and evaluation program conducted by Brian F. Smith and Associates, Inc. (BFSA) for the McElwain Project. As proposed by Murrieta Development II, LLC, the project includes 15.78 acres located west of Interstate 215 at 35451 McElwain Road in the city of Murrieta, Riverside County, California. Specifically, the project can be found on the USGS *Romoland* and *Murrieta, California* topographic quadrangle maps, within Section 34, Township 6 South, Range 3 West, San Bernardino Base and Meridian. The project includes Assessor's Parcel Number (APN) 392-280-007 and proposes to develop an approximately 120-key hotel and event center with associated parking and landscaping.

BFSA conducted the archaeological assessment to locate and record any cultural resources present within the project in compliance with the California Environmental Quality Act (CEQA) and in accordance with City of Murrieta requirements. During the initial survey (Garrison and Smith 2019) survey, four previously unrecorded cultural resources were identified and recorded as sites RIV-12,942, RIV-12,943, RIV-12,944, and P-33-028892. The sites include one historic refuse dump dating from the 1930s to the 1950s (RIV-12,942), one prehistoric bedrock milling feature site (RIV-12,943), one historic well feature (RIV-12,944), and one isolated prehistoric artifact (P-33-028892), a portable basalt mortar. BFSA conducted a testing and California Register of Historical Resources (CRHR) evaluation program at sites RIV-12,942 through RIV-12,944 on June 20, 2019. Because none of the sites identified during the survey produced any significant artifacts or subsurface deposits, sites RIV-12,942 through RIV-12,944 were determined to lack significance and were determined not eligible to the CRHR. Although determined ineligible for listing on the CRHR, BFSA also completed a cumulative impact analysis in order to determine the effect of the loss of RIV-12,943 as a result of the City of Murrieta's Assembly Bill 52 consultation process (see Section 5.0). The results of the additional study found the cumulative effect of the McElwain Project to prehistoric resources in the area as not significant.

1.1 Purpose of Investigation

The purpose of this investigation was to determine if any cultural resources would be affected by the proposed land development. This study consisted of processing a records search of previously recorded archaeological sites on or near the property, the completion of an archaeological survey to identify any archaeological resources within the project, and a testing and CRHR evaluation program for any cultural resources that may be impacted by the proposed development. The project development map (see Figure 2.0–3) shows the limits of grading for the proposed McElwain Project, which constitute the limits of impact for the proposed project.

1.2 Major Findings

Previous work by Garrison and Smith (2019) reported that survey conditions were

generally good and ground visibility ranged from good to excellent throughout the survey area. The majority of the property had been disturbed, disked, or graded in the past, and dirt roads intersect various portions of the project. As a result of the 2018 Phase I survey, one prehistoric site, two historic sites, and one prehistoric isolate were discovered on the property. All site locations were mapped and recorded. BFSA conducted Phase II testing/evaluations at sites RIV-12,942 through RIV-12,944 on June 20, 2019 to identify any subsurface artifact concentrations and determine site boundaries. Shovel test pit (STP) excavations were undertaken at each RIV-12,942 and RIV-12,943 of the identified cultural resources; however, no cultural materials were recovered from the subsurface tests of RIV-12,943. Excavations at Site RIV-12,942 resulted in the recovery of a limited subsurface deposit of historic refuse. Surface examinations resulted in the recovery of historic artifacts from Site RIV-12,942 and an isolated portable basalt mortar at P-33-028892. In addition, bedrock milling features at Site RIV-12,943 and a historic well feature from Site RIV-12,944 were mapped and recorded. Because the Phase II testing program did not produce any significant surface or subsurface artifact concentrations at any of the sites, sites RIV-12,942 through RIV-12,944 and P-33-028892 were determined to be not eligible to the CRHR.

Department of Parks and Recreation (DPR) site record forms were prepared for all discovered resources and submitted to the Eastern Information Center (EIC) at the University of California at Riverside (UCR) following the archaeological testing program (Appendix B). A copy of this report will be permanently filed with the EIC at UCR. All prehistoric artifacts were prepared for curation at the Western Science Center Museum in Hemet, California. All notes, photographs, and other materials related to this project will be curated at the archaeological laboratory of BFSA in Poway, California.

1.3 Recommendation Summary

The McElwain Project will result in direct impacts to recorded cultural resources RIV-12,942 through RIV-12,944 and P-33-028892, all of which have been evaluated as not CRHR-eligible. As such, the four resources do not qualify as Historical Resources and site-specific mitigation measures are not required. However, due to the presence of cultural resources documenting the prehistoric and historic use of this property, the potential exists that other unidentified cultural resources may exist within the project area that may be exposed during grading. In order to identify any cultural resources uncovered by the development of this project, all earthwork (grading or trenching) shall be monitored by an archaeologist and a Native American representative. Further, although Site RIV-12,943 is not eligible for the CRHR and cumulative impacts associated with the McElwain Project are not considered significant, it is recognized that from the perspective of tribal representatives from the Pechanga Band of Luiseño Mission Indians, the milling features on the property do represent important elements of their past use of the property and the surrounding area. As such, measures are proposed within this report requiring attempts be made to relocate the milling features at Site RIV-12,943 from their present location to an area within the project envelope that will not be developed (see Section 6.0)

2.0 INTRODUCTION

BFSA was retained by the applicant to conduct a cultural resources testing and evaluation program for the proposed McElwain Project located west of Interstate 215 at 35451 McElwain Road in the city of Murrieta. The archaeological testing/evaluation program was conducted in order to comply with CEQA and City of Murrieta environmental guidelines with regards to development-generated impacts to cultural resources. The project is located in an area of low to moderate cultural resource sensitivity, as is suggested by known site density and predictive modeling. Sensitivity for cultural resources in a given area is usually indicated by known settlement patterns, which in the southwestern Riverside County area are focused around environments with accessible food and water.

The proposed project consists of the future development of a single 15.78-acre parcel, APN 392-280-007, located west of Interstate 215 at 35451 McElwain Road in the city of Murrieta, Riverside County, California (Figures 2.0–1 and 2.0–2). The project proposes to develop an approximately 120-key hotel and event center with associated parking and landscaping (Figure 2.0–3). Currently, the project area is vacant and can be characterized as a series of low rolling hills traversed by numerous dirt roads and trails (Plate 2.0–1).

Principal Investigator Brian Smith directed the Phase II cultural resources study for the project. Project Archaeologist Andrew Garrison and archaeological field technicians David Grabski and James Shrieve completed the Phase II testing program for sites RIV-12,942 through RIV-12,944 and P-33-028892. Brian Smith, Jillian Hahnlen, Tracy Stropes, and Andrew Garrison prepared the technical report, Tracy Stropes and Maureen Vaughan created the report graphics, and Courtney Accardy conducted technical editing and report production. Qualifications of key personnel are provided in Appendix A.

Plate 2.0–1: Overview of the project, facing north.

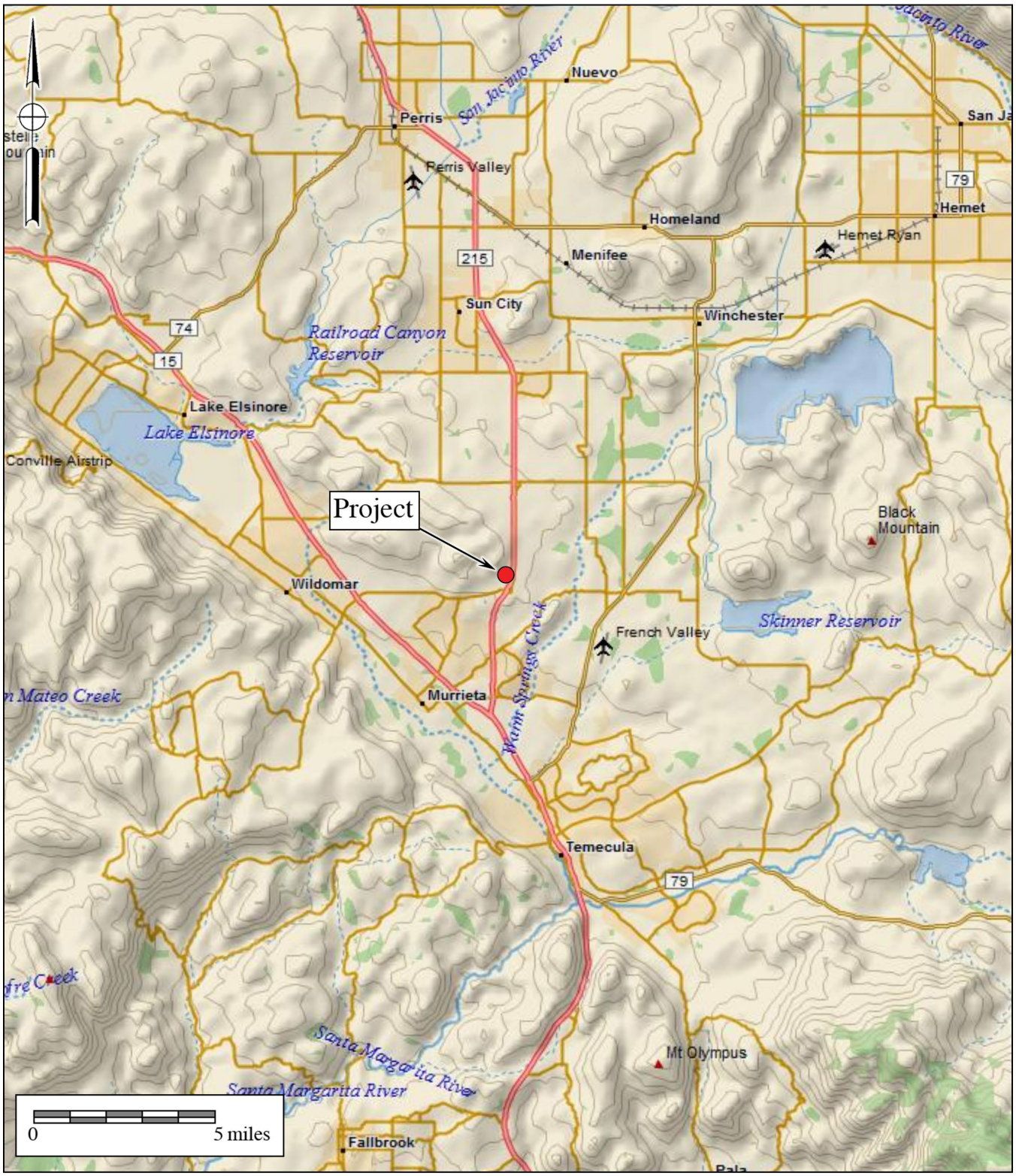


Figure 2.0–1

General Location Map

The McElwain Project

DeLorme (1:250,000)

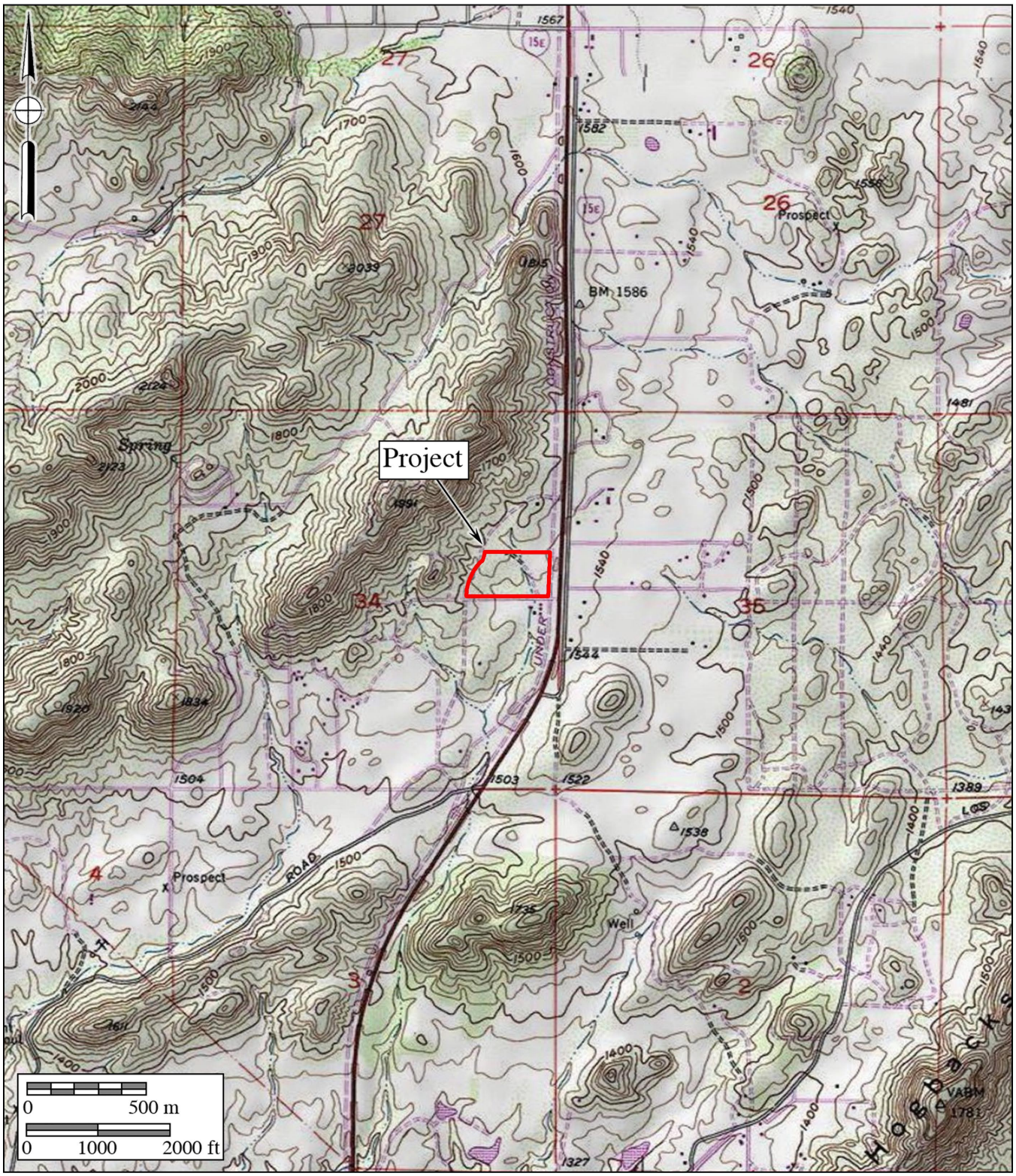


Figure 2.0–2

Project Location Map

The McElwain Project

USGS *Romoland* and *Murrieta* Quadrangles (7.5-minute series)

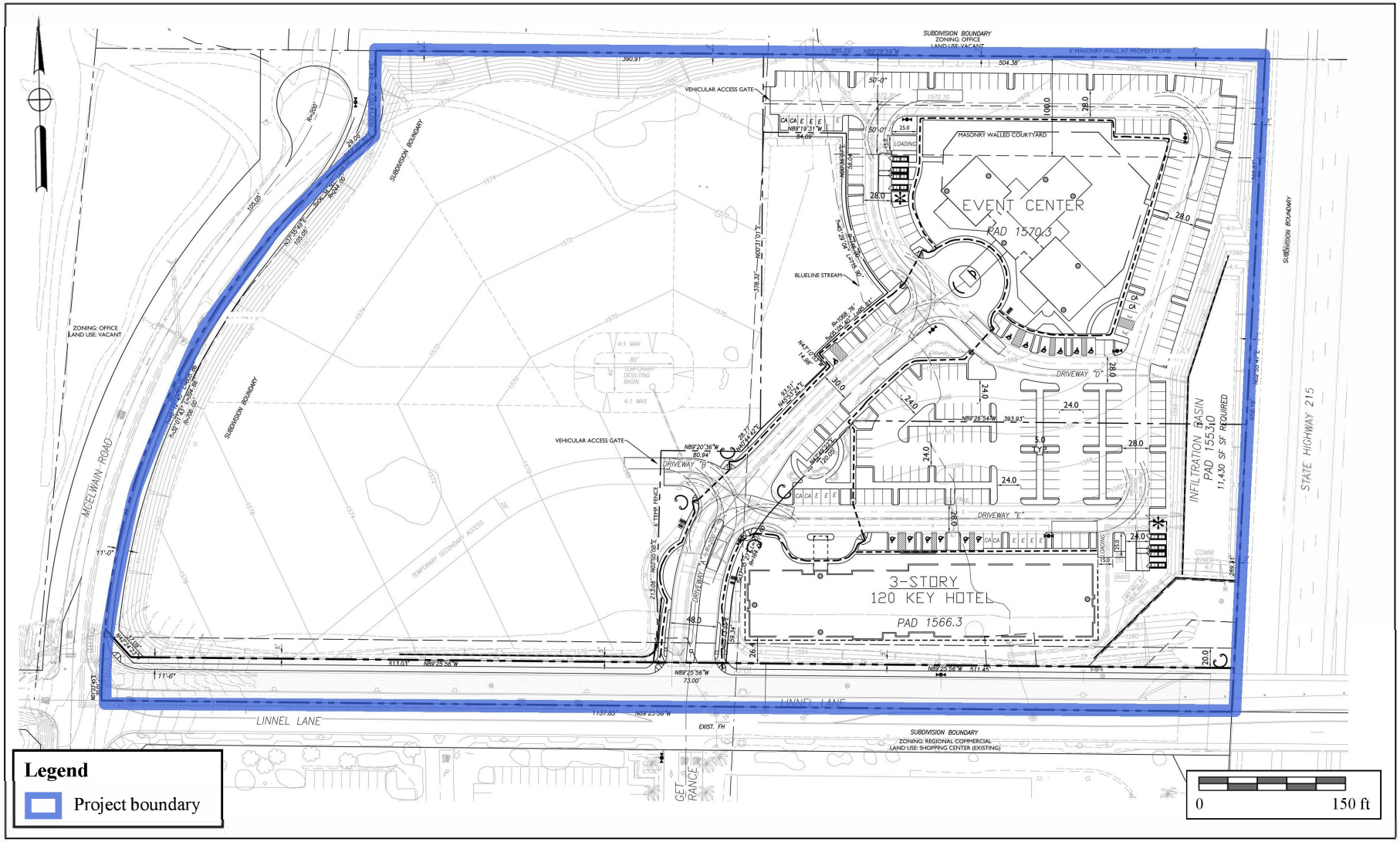


Figure 2.0–3

Site Plan

The McElwain Project

2.1 Previous Work

The records search for the property from the EIC at UCR did not report any recorded archaeological sites or previous studies within the project boundaries. However, the previous survey conducted by Garrison and Smith (2019) indicated the four newly identified resources were present within the project boundaries. During the survey conducted in November of 2018, four previously unrecorded cultural resources were identified on the property and assigned the following identifiers: RIV-12,942, RIV-12,943, RIV-12,944, and P-33-028892. The newly identified sites are described below:

- ***Site RIV-12,942:*** A historic dump site or trash deposit located within a seasonal drainage in the southeastern portion of the property. The site contains a variety of bottles, cans, and domestic refuse which appear to date as far back as the early 1940s.
- ***Site RIV-12,943:*** A prehistoric bedrock milling site situated on the western bank of the same seasonal drainage RIV-12,942 is located in. Site RIV-12,943 contains at least two milling slicks within a cluster of four boulders. No associated artifacts were identified within proximity of RIV-12,943.
- ***Site RIV-12,944:*** A historic well and associated building material located within the northwest quarter of the subject property. The well is marked with a date of 1943, and a brief review of historic maps and aerial photographs indicate this portion of the property once contained a ranch complex.
- ***Isolate P-33-028892:*** A prehistoric isolated artifact characterized as a vesicular basalt portable mortar. The isolate was identified within general vicinity of RIV-12,944 but is not associated with the historic component of the site.

2.2 Project Setting

The project setting includes the natural physical, geological, and biological contexts of the proposed project, as well as the cultural setting of prehistoric and historic human activities in the general area. The following sections discuss both the environmental and cultural settings at the subject property, the relationship between the two, and the relevance of that relationship to the project.

Riverside County is situated within the Peninsular Ranges Geologic Province of southern California. The mountain range, which traverses in a northwest to southeast trend through the county extending around 1,000 miles from the Raymond-Malibu Fault Zone in western Los Angeles County to the southern tip of Baja California. The McElwain Project is located at the southern edge of Paloma Valley, near the French Valley area of Riverside County. French Valley and the surrounding areas are defined by the margins of the Santa Ana Mountains to the west and the San Jacinto Mountains to the east. The southern portion of Paloma Valley gives way into Murrieta Valley, which is encompassed by the Santa Margarita and Agua Tibia mountains. It is the convergence of these mountains that effectively separates western Riverside County from

Orange County and the Pacific coast in general. The San Jacinto Mountains bound the general area to the east. Elevations at the project range from approximately 1,560 to 1,660 feet above mean sea level (AMSL) and the habitat in the vicinity of the project is characterized by a broad, flat valley and a series of rolling hills distinguished by scattered rock outcroppings.

The project area is characterized as series of low rolling hills situated within the Paloma Valley. The soil throughout most of the valley is fine silty loam with very little clay. The areas just northwest of the project are characterized by the boulder-covered granitic hills. The granitic hills represent Mesozoic granite, quartz monzonite, granodiorite, and quartz diorite deposits (Strand and Rogers 1977). The large hills to the far west of the project have fewer rock outcrops and represent a Jurassic formation that is part of the Southern California Batholith. These Jurassic deposits extend southwest toward Camp Pendleton and northwest toward Corona and include deposits of shale, sandstone, minor conglomerate, chert, slate, and limestone. The distribution of geologic patterns across the region is significant to prehistoric and historic land use of the area.

Prehistoric populations utilized the drainages within the granite-dominated hills surrounding the project. Granitic bedrock outcroppings and seasonal drainages are located within the property. However, the major hydrologic features in the area are Spring Creek and Tucalota Creek, which are tributaries of Murrieta Creek located approximately 4.5 miles southwest of the subject property.

The project has been previously used for agriculture and grazing. Aerial photographs available from Google Earth and Historicaerials.com indicate that a ranch complex was once located within the northwest corner of the project possibly as far back as the late 1930s. Currently much of the valley floor is used for agricultural cropland, rural home sites, and focused residential neighborhoods. In prehistoric times, the natural vegetation was likely dominated by winter annual grasses and shrubs. The natural vegetation of the project and surrounding areas includes Riversidean sage scrub. Vegetation in the nearby foothills consists mostly of xerically adapted evergreen species, chaparral vegetation dominated by chamise and scrub oak, and canyons and riparian sites producing oak and cottonwood trees. Above the 5,000-foot elevation, the mountains are dominated by stands of Jeffrey and ponderosa pine. Historically, mule deer, big horn sheep, pronghorn sheep, mountain lions, bobcats, bears, wolves, and an array of rodents would have been available resources. In addition, a range of fowl (quail, ducks, geese, raptors, sparrows, etc.), reptiles, and fish may have also been available to the early inhabitants of the region.

2.3 Cultural Setting

Paleo Indian, Archaic Period Milling Stone Horizon, and the Late Prehistoric Takic groups are the three general cultural periods represented in Riverside County. The following discussion of the cultural history of Riverside County references the San Dieguito Complex, Encinitas Tradition, Milling Stone Horizon, La Jolla Complex, Pauma Complex, and San Luis Rey Complex, since these culture sequences have been used to describe archaeological manifestations in the region. The Late Prehistoric component present in the Riverside County area was represented by

the Cahuilla, Gabrielino, and Luiseño Indians.

Absolute chronological information, where possible, will be incorporated into this discussion to examine the effectiveness of continuing to interchangeably use these terms. Reference will be made to the geological framework that divides the culture chronology of the area into four segments: the late Pleistocene (20,000 to 10,000 years before the present [YBP]), the early Holocene (10,000 to 6,650 YBP), the middle Holocene (6,650 to 3,350 YBP), and the late Holocene (3,350 to 200 YBP).

2.3.1 Paleo Indian Period (Late Pleistocene: 11,500 to circa 9,000 YBP)

The Paleo Indian Period is associated with the terminus of the late Pleistocene (12,000 to 10,000 YBP). The environment during the late Pleistocene was cool and moist, which allowed for glaciation in the mountains and the formation of deep, pluvial lakes in the deserts and basin lands (Moratto 1984). However, by the terminus of the late Pleistocene, the climate became warmer, which caused the glaciers to melt, sea levels to rise, greater coastal erosion, large lakes to recede and evaporate, extinction of Pleistocene megafauna, and major vegetation changes (Moratto 1984; Martin 1967, 1973; Fagan 1991). The coastal shoreline at 10,000 YBP, depending upon the particular area of the coast, was near the 30-meter isobath, or two to six kilometers further west than its present location (Masters 1983).

Paleo Indians were likely attracted to multiple habitat types, including mountains, marshlands, estuaries, and lakeshores. These people likely subsisted using a more generalized hunting, gathering, and collecting adaptation utilizing a variety of resources including birds, mollusks, and both large and small mammals (Erlandson and Colten 1991; Moratto 1984; Moss and Erlandson 1995).

2.3.2 Archaic Period (Early and Middle Holocene: circa 9,000 to 1,300 YBP)

Between 9,000 and 8,000 YBP, a widespread complex was established in the southern California region, primarily along the coast (Warren and True 1961). This complex is locally known as the La Jolla Complex (Rogers 1939; Moriarty 1966), which is regionally associated with the Encinitas Tradition (Warren 1968) and shares cultural components with the widespread Milling Stone Horizon (Wallace 1955). The coastal expression of this complex appeared in the southern California coastal areas and focused upon coastal resources and the development of deeply stratified shell middens that were primarily located around bays and lagoons. The older sites associated with this expression are located at Topanga Canyon, Newport Bay, Agua Hedionda Lagoon, and some of the Channel Islands. Radiocarbon dates from sites attributed to this complex span a period of over 7,000 years in this region, beginning over 9,000 YBP.

The Encinitas Tradition is best recognized for its pattern of large coastal sites characterized by shell middens, grinding tools that are closely associated with the marine resources of the area, cobble-based tools, and flexed human burials (Shumway et al. 1961; Smith and Moriarty 1985). While ground stone tools and scrapers are the most recognized tool types, coastal Encinitas

Tradition sites also contain numerous utilized flakes, which may have been used to pry open shellfish. Artifact assemblages at coastal sites indicate a subsistence pattern focused upon shellfish collection and nearshore fishing. This suggests an incipient maritime adaptation with regional similarities to more northern sites of the same period (Koerper et al. 1986). Other artifacts associated with Encinitas Tradition sites include stone bowls, doughnut stones, discoidals, stone balls, and stone, bone, and shell beads.

The coastal lagoons in southern California supported large Milling Stone Horizon populations circa 6,000 YBP, as is shown by numerous radiocarbon dates from the many sites adjacent to the lagoons. The ensuing millennia were not stable environmentally, and by 3,000 YBP, many of the coastal sites in central San Diego County had been abandoned (Gallegos 1987, 1992). The abandonment of the area is usually attributed to the sedimentation of coastal lagoons and the resulting deterioration of fish and mollusk habitat, which is a well-documented situation at Batiquitos Lagoon (Miller 1966; Gallegos 1987). Over a 2,000-year period at Batiquitos Lagoon, dominant mollusk species occurring in archaeological middens shift from deep-water mollusks (*Argopecten* sp.) to species tolerant of tidal flat conditions (*Chione* sp.), indicating water depth and temperature changes (Miller 1966; Gallegos 1987).

This situation likely occurred for other small drainages (Buena Vista, Agua Hedionda, San Marcos, and Escondido creeks) along the central San Diego coast, where low flow rates did not produce sufficient discharge to flush the lagoons they fed (Buena Vista, Agua Hedionda, Batiquitos, and San Elijo lagoons) (Byrd 1998). Drainages along the northern and southern San Diego coastline were larger and flushed the coastal hydrological features they fed, keeping them open to the ocean and allowing for continued human exploitation (Byrd 1998). Peñasquitos Lagoon exhibits dates of occupation as late as 2,355 YBP (Smith and Moriarty 1985) and San Diego Bay showed continuous occupation until the close of the Milling Stone Horizon (Gallegos and Kyle 1988). Additionally, data from several drainages in Camp Pendleton indicate a continued occupation of shell midden sites until the close of the period, indicating that coastal sites were not entirely abandoned during this time (Byrd 1998).

By 5,000 YBP, an inland expression of the La Jolla Complex is evident in the archaeological record, exhibiting influences from the Campbell Tradition from the north. These inland Milling Stone Horizon sites have been termed "Pauma Complex" (True 1958; Warren et al. 1961; Meighan 1954). By definition, Pauma Complex sites share a predominance of grinding implements (manos and metates), lack mollusk remains, have greater tool variety (including atlatl dart points, quarry-based tools, and crescentics), and seem to express a more sedentary lifestyle with a subsistence economy based upon the use of a broad variety of terrestrial resources. Although originally viewed as a separate culture from the coastal La Jolla Complex (True 1980), it appears that these inland sites may be part of a subsistence and settlement system utilized by the coastal peoples. Evidence from the 4S Project in inland San Diego County suggests that these inland sites may represent seasonal components within an annual subsistence round by La Jolla Complex populations (Raven-Jennings et al. 1996). Including both coastal and inland sites of this

time period in discussions of the Encinitas Tradition, therefore, provides a more complete appraisal of the settlement and subsistence system exhibited by this cultural complex.

More recent work by Sutton has identified a more localized complex known as the Greven Knoll Complex. The Greven Knoll Complex is a redefined northern inland expression of the Encinitas Tradition first put forth by Mark Sutton and Jill Gardener (2010). Sutton and Gardener (2010:25) state that "[t]he early millingstone archaeological record in the northern portion of the interior southern California was not formally named but was often referred to as 'Inland Millingstone,' 'Encinitas,' or even 'Topanga.'" Therefore, they proposed that all expressions of the inland Milling Stone in southern California north of San Diego County be grouped together in the Greven Knoll Complex.

The Greven Knoll Complex, as postulated by Sutton and Gardener (2010), is broken into three phases and obtained its name from the type-site Greven Knoll located in Yucaipa, California. Presently, the Greven Knoll Site is part of the Yukaipa't Site (SBR-1000) and was combined with the adjacent Simpson Site. Excavations at Greven Knoll recovered manos, metates, projectile points, discoidal cogged stones, and a flexed inhumation with a possible cremation (Kowta 1969:39). It is believed that the Greven Knoll Site was occupied between 5,000 and 3,500 YBP. The Simpson Site contained mortars, pestles, side-notched points, and stone and shell beads. Based upon the data recovered at these sites, Kowta (1969:39) suggested that "coastal Milling Stone Complexes extended to and interdigitated with the desert Pinto Basin Complex in the vicinity of the Cajon Pass."

Phase I of the Greven Knoll Complex is generally dominated by the presence of manos and metates, core tools, hammerstones, large dart points, flexed inhumations, and occasional cremations. Mortars and pestles are absent from this early phase, and the subsistence economy emphasized hunting. Sutton and Gardener (2010:26) propose that the similarity of the material culture of Greven Knoll Phase I and that found in the Mojave Desert at Pinto Period sites indicates that the Greven Knoll Complex was influenced by neighbors to the north at that time. Accordingly, Sutton and Gardener (2010) believe that Greven Knoll Phase I may have appeared as early as 9,400 YBP and lasted until about 4,000 YBP.

Greven Knoll Phase II is associated with a period between 4,000 and 3,000 YBP. Artifacts common to Greven Knoll Phase II include manos and metates, Elko points, core tools, and discoidals. Pestles and mortars are present, albeit in small numbers. Finally, there is an emphasis upon hunting and gathering for subsistence (Sutton and Gardener 2010:8).

Greven Knoll Phase III includes manos, metates, Elko points, scraper planes, choppers, hammerstones, and discoidals. Again, small numbers of mortars and pestles are present. Greven Knoll Phase III spans from approximately 3,000 to 1,000 YBP and shows a reliance upon seeds and yucca. Hunting is still important, but bones seem to have been processed to obtain bone grease more often in this later phase (Sutton and Gardener 2010:8).

The shifts in food processing technologies during each of these phases indicate a change in subsistence strategies; although people were still hunting for large game, plant-based foods

eventually became the primary dietary source (Sutton 2011a). Sutton's (2011b) argument posits that the development of mortars and pestles during the middle Holocene can be attributed to the year-round exploitation of acorns as a main dietary provision. Additionally, the warmer and drier climate may have been responsible for groups from the east moving toward coastal populations, which is archaeologically represented by the interchange of coastal and eastern cultural traits (Sutton 2011a).

2.3.3 Late Prehistoric Period (Late Holocene: 1,300 YBP to 1790)

Based on the Luiseño beliefs, the world was created in what is now known as Temecula; however, archaeological and anthropological data proposes a distinct scientific perspective. Archaeological and anthropological evidence suggests that at approximately 1,350 YBP, Takic-speaking groups from the Great Basin region moved into Riverside County, marking the transition to the Late Prehistoric Period. An analysis of the Takic expansion by Sutton (2009) indicates that inland southern California was occupied by "proto-Yuman" populations before 1,000 YBP. The comprehensive, multi-phase model offered by Sutton (2009) employs linguistic, ethnographic, archaeological, and biological data to solidify a reasonable argument for population replacement of Takic groups to the north by Penutians (Laylander 1985). As a result, it is believed that Takic expansion occurred starting around 3,500 YBP moving toward southern California, with the Gabrielino language diffusing south into neighboring Yuman (Hokan) groups around 1,500 to 1,000 YBP, possibly resulting in the Luiseño dialect.

Based upon Sutton's model, the final Takic expansion would not have occurred until about 1,000 YBP, resulting in Vanyume, Serrano, Cahuilla, and Cupeño dialects. The model suggests that the Luiseño did not simply replace Hokan speakers, but were rather a northern San Diego County/southern Riverside County Yuman population who adopted the Takic language. This period is characterized by higher population densities and elaborations in social, political, and technological systems. Economic systems diversified and intensified during this period with the continued elaboration of trade networks, the use of shell-bead currency, and the appearance of more labor-intensive, yet effective, technological innovations. Technological developments during this period included the introduction of the bow and arrow between A.D. 400 and 600 and the introduction of ceramics. Atlatl darts were replaced by smaller arrow darts, including Cottonwood series points. Other hallmarks of the Late Prehistoric Period include extensive trade networks as far-reaching as the Colorado River Basin, and cremation of the dead.

2.3.4 Protohistoric Period (Late Holocene: 1790 to Present)

Ethnohistoric and ethnographic evidence indicates that three Takic-speaking groups occupied portions of Riverside County: the Cahuilla, the Gabrielino, and the Luiseño. The geographic boundaries between these groups in pre- and proto-historic times are difficult to place, but the project is located well within the borders of ethnographic Luiseño territory. This group was a seasonal hunting and gathering people with cultural elements that were very distinct from

Archaic Period peoples. These distinctions include cremation of the dead, the use of the bow and arrow, and exploitation of the acorn as a main food staple (Moratto 1984). Along the coast, the Luiseño made use of available marine resources by fishing and collecting mollusks for food. Seasonally available terrestrial resources, including acorns and game, were also sources of nourishment for Luiseño groups. Elaborate kinship and clan systems between the Luiseño and other groups facilitated a wide-reaching trade network that included trade of Obsidian Butte obsidian and other resources from the eastern deserts, as well as steatite from the Channel Islands.

According to Charles Handley (1967), the primary settlements of Late Prehistoric Luiseño Indians in the San Jacinto Plain were represented by Ivah and Soboba near Soboba Springs, Jusipah near the town of San Jacinto, Ararah in Webster's Canyon en route to Idyllwild, Pahsitha near Big Springs Ranch southeast of Hemet, and Corova in Castillo Canyon. These locations share features such as the availability of food and water resources. Features of this land use include petroglyphs and pictographs, as well as widespread milling, which is evident in bedrock and portable implements. Groups in the vicinity of the project, neighboring the Luiseño, include the Cahuilla and the Gabrielino.

Luiseño

When contacted by the Spanish in the sixteenth century, it has been noted that the Luiseño occupied a territory bounded on the west by the Pacific Ocean, on the east by the Peninsular Ranges mountains at San Jacinto (including Palomar Mountain to the south and Santiago Peak to the north), on the south by Agua Hedionda Lagoon, and on the north by Aliso Creek in present-day San Juan Capistrano (Bean and Shipek 1978). However, the Pechanga Band of Luiseño Mission Indians have put forth a larger geographical area identified as their ancestral territory. Based on accounts from the Pechanga Band, Luiseño ancestral territory reached as far northeast as the Santa Ana River and Box Springs Mountain Range, as far east as Mount San Jacinto, as far southeast as Lake Henshaw, and to the west, including the southern Channel Islands. As such, the current project is located firmly within the ancestral territory of the Luiseño.

The Luiseño were a Takic-speaking people more closely related linguistically and ethnographically to the Cahuilla, Gabrielino, and Cupeño to the north and east rather than the Kumeyaay who occupied territory to the south. The Luiseño differed from their neighboring Takic speakers in having an extensive proliferation of social statuses, a system of ruling families that provided ethnic cohesion within the territory, and an elaborate religion that included the creation of sacred sand paintings depicting the deity *Chingichngish* (Bean and Shipek 1978; Kroeber 1976).

Subsistence and Settlement

The Luiseño occupied sedentary villages most often located in sheltered areas in valley bottoms, along streams, or along coastal strands near mountain ranges. Villages were located near water sources to facilitate acorn leaching and in areas that offered thermal and defensive protection. Villages were composed of areas that were publicly and privately (by family) owned.

Publicly owned areas included trails, temporary campsites, hunting areas, and quarry sites. Inland groups had fishing and gathering sites along the coast that were used intensively from January to March when inland food resources were scarce. During October and November, most of the village would relocate to mountain oak groves to harvest acorns. The Luiseño remained at village sites for the remainder of the year, where food resources were within a day's travel (Bean and Shipek 1978; Kroeber 1976).

The most important food source for the Luiseño was the acorn, six different species of which were used (*Quercus californica, Quercus agrifolia, Quercus chrysolepis, Quercus dumosa, Quercus engelmannii,* and *Quercus wislizenii*). Seeds, particularly of grasses, composites, and mints, were also heavily exploited. Seed-bearing species were encouraged through controlled burns, which were conducted at least every third year. A variety of other stems, leaves, shoots, bulbs, roots, and fruits were also collected. Hunting augmented this vegetal diet. Animal species taken included deer, rabbit, hare, woodrat, ground squirrel, antelope, quail, duck, freshwater fish from mountain streams, marine mammals, and other sea creatures such as fish, crustaceans, and mollusks (particularly abalone, or *Haliotis* sp.). In addition, a variety of snakes, small birds, and rodents were eaten (Bean and Shipek 1978; Kroeber 1976).

Social Organization

Social groups within the Luiseño nation consisted of patrilinear families or clans, which were politically and economically autonomous. Several clans comprised a religious party, or *nota,* which was headed by a chief who organized ceremonies and controlled economics and warfare. The chief had assistants who specialized in particular aspects of ceremonial or environmental knowledge and who, with the chief, were part of a religion-based social group with special access to supernatural power, particularly that of *Chingichngish*. The positions of chief and assistants were hereditary, and the complexity and multiplicity of these specialists' roles likely increased in coastal and larger inland villages (Bean and Shipek 1978; Kroeber 1976; Strong 1929).

Marriages were arranged by the parents, often made to forge alliances between lineages. Useful alliances included those between groups of differing ecological niches and those that resulted in territorial expansion. Residence was patrilocal (Bean and Shipek 1978; Kroeber 1976). Women were primarily responsible for plant gathering, and men principally hunted, although at times, particularly during acorn and marine mollusk harvests, there was no division of labor. Elderly women cared for children and elderly men participated in rituals, ceremonies, and political affairs. They were also responsible for manufacturing hunting and ritual implements. Children were taught subsistence skills at the earliest age possible (Bean and Shipek 1978; Kroeber 1976).

Material Culture

House structures were conical, partially subterranean, and thatched with reeds, brush, or bark. Ramadas were rectangular, protected workplaces for domestic chores such as cooking. Ceremonial sweathouses were important in purification rituals; these were round and partially

subterranean thatched structures covered with a layer of mud. Another ceremonial structure was the *wámkis* (located in the center of the village, serving as the place of rituals), where sand paintings and other rituals associated with the *Chingichngish* religious group were performed (Bean and Shipek 1978; Kroeber 1976).

Clothing was minimal; women wore a cedar-bark and netted twine double apron and men wore a waist cord. In cold weather, cloaks or robes of rabbit fur, deerskin, or sea otter fur were worn by both sexes. Footwear included deerskin moccasins and sandals fashioned from yucca fibers. Adornments included bead necklaces and pendants made of bone, clay, stone, shell, bear claw, mica, deer hooves, and abalone shell. Men wore ear and nose piercings made from cane or bone, which were sometimes decorated with beads. Other adornments were commonly decorated with semiprecious stones including quartz, topaz, garnet, opal, opalite, agate, and jasper (Bean and Shipek 1978; Kroeber 1976).

Hunting implements included the bow and arrow. Arrows were tipped with either a carved, fire-hardened wooden tip or a lithic point, usually fashioned from locally available metavolcanic material or quartz. Throwing sticks fashioned from wood were used in hunting small game, while deer head decoys were used during deer hunts. Coastal groups fashioned dugout canoes for nearshore fishing and harvested fish with seines, nets, traps, and hooks made of bone or abalone shell (Bean and Shipek 1978; Kroeber 1976).

The Luiseño had a well-developed basket industry. Baskets were used in resource gathering, food preparation, storage, and food serving. Ceramic containers were shaped by paddle and anvil and fired in shallow, open pits to be used for food storage, cooking, and serving. Other utensils included wood implements, steatite bowls, and ground stone manos, metates, mortars, and pestles (Bean and Shipek 1978; Kroeber 1976). Additional tools such as knives, scrapers, choppers, awls, and drills were also used. Shamanistic items include soapstone or clay smoking pipes and crystals made of quartz or tourmaline (Bean and Shipek 1978; Kroeber 1976).

2.3.5 Ethnohistoric Period (1769 to Present)

European exploration along the California coast began in 1542 with the landing of Juan Rodriguez Cabrillo and his men at San Diego Bay. Sixty years after the Cabrillo expeditions, an expedition under Sebastian Viscaíno made an extensive and thorough exploration of the Pacific coast. Although the voyage did not extend beyond the northern limits of the Cabrillo track, Viscaíno had the most lasting effect on the nomenclature of the coast. Many of the names he gave to various locations have survived, whereas practically every one of the names given by Cabrillo has faded from use. For instance, Cabrillo gave the name “San Miguel” to the first port he stopped at in what is now the United States; 60 years later, Viscaíno changed it to “San Diego” (Rolle 1969). The early European voyages observed Native Americans living in villages along the coast but did not make any substantial, long-lasting impact. At the time of contact, the Luiseño population was estimated to have ranged from 4,000 to as many as 10,000 individuals (Bean and Shipek 1978; Kroeber 1976).

2.3.6 Historic Period

The historic background of the project area began with the Spanish colonization of Alta California. The first Spanish colonizing expedition reached southern California in 1769 with the intention of converting and civilizing the indigenous populations, as well as expanding the knowledge of and access to new resources in the region (Brigandi 1998). In the late eighteenth century, the San Gabriel (Los Angeles County), San Juan Capistrano (Orange County), and San Luis Rey (San Diego County) missions began colonizing southern California and gradually expanded their use of the interior valley (into what is now western Riverside County) for raising grain and cattle to support the missions (Riverside County n.d.). The San Gabriel Mission claimed lands in what is now Jurupa, Riverside, San Jacinto, and the San Gorgonio Pass, while the San Luis Rey Mission claimed land in what is now Lake Elsinore, Temecula, and Murrieta (American Local History Network: Riverside County, California 1998). The indigenous groups who occupied these lands were recruited by missionaries, converted, and put to work in the missions (Pourade 1964). Throughout this period, the Native American populations were decimated by introduced diseases, a drastic shift in diet resulting in poor nutrition, and social conflicts due to the introduction of an entirely new social order (Cook 1976).

In the mid- to late 1770s, Juan Bautista de Anza passed through much of Riverside County while searching for an overland route from Sonora, Mexico to San Gabriel and Los Angeles, describing fertile valleys, lakes, and sub-desert areas (American Local History Network: Riverside County, California 1998; Riverside County n.d.). In 1797, Father Presidente Lausen, Father Norberto de Santiago, and Corporal Pedro Lisalde led an expedition from Mission San Juan Capistrano through southwestern Riverside County in search of a new mission site before constructing Mission San Luis Rey in northern San Diego County (Brigandi 1998).

While no missions were ever built in what would become Riverside County (American Local History Network: Riverside County, California 1998), many mission outposts, or *asistencias,* were established in the early years of the nineteenth century to extend the missions' influence to the backcountry (Brigandi 1998). Two outposts located in Riverside County include San Jacinto and Temecula.

Mexico gained independence in 1822 and desecularized the missions in 1832, signifying the end of the Mission Period (Brigandi 1998; Riverside County n.d.). By this time, the missions owned some of the best and most fertile land in southern California. In order for California to develop, the land would have to be made productive enough to turn a profit (Brigandi 1998). The new government began distributing the vast mission holdings to wealthy and politically connected Mexican citizens. The "grants" were called "ranchos," of which Jurupa, El Rincon, La Sierra, El Sobrante de San Jacinto, La Laguna (Lake Elsinore), Santa Rosa, Temecula, Pauba, San Jacinto Nuevo y Potrero, and San Jacinto Viejo were located in present-day Riverside County. Many of these ranchos have lent their names to modern-day locales (American Local History Network: Riverside County, California 1998). The first grant in present-day Riverside County, Rancho Jurupa, was given to Juan Bandini in 1838. These ranchos were all located in the valley

environments typical of western Riverside County.

The treatment of Native Americans grew worse during the Rancho Period. Most of the Native Americans were forced off of their land or put to work on the now privately owned ranchos, most often as slave labor. In light of the brutal ranchos, the degree to which Native Americans had become dependent upon the mission system is evident when, in 1838, a group of Native Americans from the San Luis Rey Mission petitioned government officials in San Diego to relieve suffering at the hands of the rancheros:

> We have suffered incalculable losses, for some of which we are in part to be blamed for because many of us have abandoned the Mission … We plead and beseech you … to grant us a Rev. Father for this place. We have been accustomed to the Rev. Fathers and to their manner of managing the duties. We labored under their intelligent directions, and we were obedient to the Fathers according to the regulations, because we considered it as good for us. (Brigandi 1998:21)

Native American culture had been disrupted to the point where they could no longer rely upon prehistoric subsistence and social patterns. Not only does this illustrate how dependent the Native Americans had become upon the missionaries, but it also indicates a marked contrast in the way the Spanish treated the Native Americans compared to the Mexican and United States ranchers. Spanish colonialism (missions) is based upon utilizing human resources while integrating them into their society. The Mexican and American ranchers did not accept Native Americans into their social order and used them specifically for the extraction of labor, resources, and profit. Rather than being incorporated, they were either subjugated or exterminated (Cook 1976).

In 1846, war erupted between Mexico and the United States. In 1848, with the signing of the Treaty of Guadalupe Hidalgo, the region was annexed as a territory of the United States, leading to California became a state in 1850. These events generated a steady flow of settlers into the area, including gold miners, entrepreneurs, health-seekers, speculators, politicians, adventurers, seekers of religious freedom, and individuals desiring to create utopian colonies.

In early 1852, the Native Americans of southern Riverside County, including the Luiseño and the Cahuilla, thought they had signed a treaty resulting in their ownership of all lands from Temecula to Aguanga east to the desert, including the San Jacinto Valley and the San Gorgonio Pass. The Temecula Treaty also included food and clothing provisions for the Indians. However, Congress never ratified the treaties, and the promise of one large reservation was rescinded (Brigandi 1998).

With the completion of the transcontinental railroad in 1869, land speculators, developers, and colonists began to invest in southern California. The first colony in what was to become Riverside County was Riverside itself. Judge John Wesley North, an abolitionist from Tennessee, brought a group of associates and co-investors out to southern California and founded Riverside

on part of the Jurupa Rancho. A few years after, the navel orange was planted and found to be such a success that it quickly became the agricultural staple of the region (American Local History Network: Riverside County, California 1998).

By the late 1880s and early 1890s, there was growing discontent between Riverside and San Bernardino, its neighbor 10 miles to the north, due to differences in opinion concerning religion, morality, the Civil War, politics, and fierce competition to attract settlers. After a series of instances in which charges were claimed about unfair use of tax monies to the benefit of the city of San Bernardino only, several people from Riverside decided to investigate the possibility of a new county. In May of 1893, voters living within portions of San Bernardino County (to the north) and San Diego County (to the south) approved the formation of Riverside County. Early business opportunities were linked to the agriculture industry but commerce, construction, manufacturing, transportation, and tourism also provided a healthy local economy. By the time of Riverside County's formation, Riverside had grown to become the wealthiest city per capita in the country due to the successful cultivation of the navel orange (American Local History Network: Riverside County, California 1998; Riverside County n.d.).

2.3.7 General History of Murrieta

After Mexico achieved its independence from Spain in 1821, Alta California became the northern frontier of Mexico and secularization of the missions took place throughout the next decade. The former mission lands were transferred to prominent Mexican families and the subdivision of former mission rancho lands was common during the ensuing years. The Murrieta area was eventually split into Rancho Temecula, Rancho Santa Rosa, and San Jacinto Rancho, and further divided into Pauba Rancho, La Laguna Rancho, and Little Temecula Rancho.

In 1873, Ezekial (Esquial) Murrieta came to the area from central California where he was a successful sheep rancher. He purchased Rancho Pauba and Rancho Temecula (52,000 acres) for $52,000 because the land reminded him of his Basque homeland and he was impressed with its potential for his sheep ranching endeavors. After Ezekiel Murrieta returned to Spain, married, and decided not to return to California, his brother Juan Murrieta, along with several business partners, brought 100,000 sheep to the area (City of Murrieta 2015).

The Southern Emigrant Trail, and later, the Butterfield Overland Stage, bisected Murrieta's land. In 1882, the Murrieta brothers deeded the Right-of-Way to the Southern Pacific Railroad. In 1884, the Temecula Land and Water Company bought and subdivided the land into 40-acre parcels. The railroad brought settlers to the area, spurring its growth. Settlers were attracted to the inexpensive land, which was often as low as five dollars per acre, and the valley soon reached a population of 800. These first pioneers also brought with them knowledge of farming fruit orchards and growing vast grain crops. Social activity centered on the Fountain House Hotel and the Guenther Family's Murrieta Hot Springs Resort, which once served as the sheep dip for Murrieta's flock (City of Murrieta 2015).

Eventually, the Santa Fe Railroad purchased the railroad; however, it was rerouted due to a decade of flooding, and Murrieta became a spur from Corona. The railroad was then closed and the last train left Murrieta in 1935 (City of Murrieta 2015).

While ending the local boom, the absence of a rail line did not hinder the influx of residents settling in the area and Murrieta continued to grow. In just over 50 years, the population increased from 800 in 1890 to 1,200 in 1947. Very little changed in Murrieta until 1980, when a large influx of people came to settle in Temecula and the surrounding areas. A push was made for Murrieta to become an official city. Nearly 120 years after Juan Murrieta inhabited the area, Murrieta became an officially recognized city in 1991 (City of Murrieta 2015).

2.4 Research Goals

The questions outlined in the research design include relevant topics that help facilitate a greater understanding of what the residents of the project area did during the historic period of the early to mid-twentieth century, and how they changed throughout time, as well as of the prehistoric occupation of the Paloma and Murrieta Valleys. Archaeological methods and archival research are used to retrieve and analyze portions of this evidence to reconstruct past lifeways. This type of inquiry is part of the cultural resources management aspect of environmental conformance studies. Questions of how the prehistoric and historic inhabitants of the region related to the environment, how they arranged themselves in space, and settlement and subsistence strategies all contribute details to reconstructing and interpreting the archaeological record. These studies not only contribute to the reconstruction of the region's history, but also to broader research topics currently being pursued in southern California in general. These questions help to answer the larger anthropological questions regarding how people adapt to and organize themselves under different social, economic, and environmental conditions.

The testing program for the McElwain Project included historic research, test excavations, and the mapping of any features or artifacts and the locations of subsurface archaeological tests. Primary objectives, such as the determination of the boundaries of any discoveries, depth of any archaeological deposits, stratigraphy, integrity, content, and spatial distribution of any subsurface artifacts and cultural ecofacts, is essential to the current testing phase of the program. Normally, a research orientation transcends these goals by expanding the meaning of information extracted from a site through the use of archaeological questions important in current scientific research. Regional and temporal research issues should be taken into consideration when posing such questions. However, because the presence of buried cultural resources is uncertain, the research design for the current project is limited in scope. The topics and associated research questions provided below address concerns specific to the project.

The primary goal of the research design is to attempt to understand the way in which people have used the land and resources within the project area through time, as well as to aid in the determination of resource significance. As the main objective of the investigation is to identify the presence/absence and potential site significance of any cultural resources located within the

designated impact areas, the goal of the research design is to investigate the role and importance of on-site cultural resources and determine if further mitigation measures are warranted. The following discussion presents relatively focused research questions that are guided by previous archaeological investigations conducted in the region as identified within the records search. The discussion includes a consideration of the types of data necessary in order to address the relevant research questions pertaining to the past use of the project area. Therefore, the testing program focused upon determining the role of the project and any identified cultural deposits within the context of Riverside County with an emphasis on the Paloma and Murrieta Valleys. Specifically, investigation of cultural remains focused upon the origin, association, and content of the deposits as they relate to the known history and prehistoric occupation of the project area.

Research Questions:

- If artifact deposits are identified, under what circumstances was the material discarded?
- Can deposits be situated with a specific time period, population, or individual?
- Do the types of located deposits allow a site activity/function to be determined from a preliminary investigation? What are the site activities? What is the site function? What resources were exploited?
- If historic artifact deposits are identified, do these deposits reflect specific information such as gender, age, socioeconomic status, or ethnicity regarding the people who lived or worked the area?
- In terms of potential historic deposits identified within the impact areas of the subject parcel, can a distinction be made between domestic and commercial deposition on the property?
- How do the located deposits compare to those identified during other archaeological investigations conducted in the area?
- If prehistoric deposits are identified, how do materials fit in with existing models of settlement and subsistence for the region?

Integrity

In order for a site to be considered significant, it must be established that enough of the deposit remains within the impact areas in order for it to retain integrity. This is particularly true where previous disturbances within the project may have had impacts to site integrity. According to the CRHR, "integrity" is defined as "the authenticity of an historical resource's physical identity evidenced by the survival of characteristics that existed during the resource's period of significance."

Once the ground surface of the property is exposed, the area should be investigated for any evidence of previous grading or ground disturbances, perhaps resulting in uneven ground surfaces compared to adjacent lots, evidence of the movement of soil, or vehicle activity. All subsurface excavations should be thoroughly investigated and their profiles and soil descriptions compared to

ascertain the existing state of the stratigraphy of the site. Any observed disturbances should be weighed against the quality and quantity of data that was gathered during the proposed testing program. Therefore, the following research questions must be addressed with regards to site integrity.

Research Questions:

- Where are the sites located within the project chronologically placed in the overall pattern for Riverside County?
- How have the property and any deposits or features been disturbed?
- Do the resources retain adequate integrity to yield important information?
- How does the existing topography compare to adjacent properties in terms of cut or fill?
- Have any disturbances compromised the ability to analyze material culture contextually?

The research questions presented here will be used to guide the accumulation of data at both the archival and archaeological levels, as well as the subsequent analysis of any recovered material. The results of the archival research, field investigation, and laboratory analysis will then be used to evaluate the significance of the identified deposits. The basic data requirements for the study of historic economic practices include site features, site assemblages, and archival information on the time and type of occupation, origin of deposits, household composition, ethnicity of occupants, technology, and land ownership.

3.0 METHODOLOGY

The archaeological program for the McElwain Project consisted of an institutional records search, and testing/evaluation program for sites RIV-12,942 through RIV-12,944 and P-33-028892 within the project area, and preparation of this technical report. This archaeological study conformed to the City of Murrieta guidelines and the statutory requirements of CEQA Section 15064.5. Specific definitions for archaeological resource type(s) used in this report are those established by the State Historic Preservation Office (SHPO March, 1995).

3.1 Archaeological Records Search

The records search conducted by the EIC at UCR was reviewed for an area of one mile surrounding the project in order to determine the presence of any previously recorded sites. Results of the records search are provided in Appendix C and discussed in Section 4.1. The EIC also provided the standard review of the National Register of Historic Places and the Office of Historic Preservation Historic Property Directory. Land patent records, held by the BLM and accessible through the BLM General Land Office website, were also reviewed for pertinent project information. In addition, the BFSA research library was consulted for any relevant historical information.

3.2 Field Methodology

The Phase II testing/evaluation program for the four identified cultural resource sites took place from June 20, 2019. The cultural resource test strategy employed for sites RIV-12,942 and RIV-12,943 included the collection of surface artifacts (when present), the completion of subsurface investigations, and CRHR eligibility evaluations. The cultural resource test strategy employed for sites RIV-12,942 and RIV-12,944 consisted of the detailed recordation of bedrock milling features and a well feature. Documentation of P-33-028892 included the photographing, mapping, and recording of the isolate on the appropriate DPR forms. All features, surface artifacts, and STP locations within the project boundaries were mapped using a Trimble Geo XT Global Positioning System (GPS) unit equipped with TerraSync software.

Documentation of surface features included mapping each feature with the GPS instrument and recording the measurements of each feature and in the case of bedrock milling features, each milling surface. The attributes of each surface were recorded on data forms developed specifically for the recordation of milling surfaces; the length, width, and depth of each surface was noted, in addition to the general overall characteristic of the surface (*i.e.,* slick, oval, mortar, etc.). All features were sketched and photographed as part of the recordation process.

Subsurface testing was completed at sites RIV-12,942 and RIV-12,943 because of the potential to be directly or indirectly impacted by development, and to evaluate each site for CRHR eligibility. Subsurface examinations were conducted through the excavation of a series of STPs to determine if cultural deposits were present. Placement of the STPs was dependent upon

locations of milling features, areas of soil accumulation, and/or distribution of surface artifacts. The shovel test series consisted of 30x30-centimeter excavations, which proceeded in decimeter levels downward a minimum depth of 30 centimeters where sufficient soils remained. All excavated soils were sifted through one-eighth-inch mesh hardware cloth.

3.3 Laboratory Methods

In keeping with generally accepted archaeological procedures and utilizing a classification system commonly employed in this region, the collected artifacts were categorized as to artifact class, material class, and technological class. Comparative collections at the BFSA laboratory were employed in identifying the unusual or highly fragmentary specimens as necessary. After cataloging and identification, the collections were marked with the appropriate provenience and catalog information, and then packaged for permanent curation. No radiocarbon dating or other specialized studies were conducted based upon the limits of the materials recovered from across the project. All artifacts were prepared for curation with Western Science Center Museum in Hemet, California.

Historic Artifact Sorting and Analysis

The sorting technique for the historic artifact collection included the sorting, identification, and cataloging of all materials returned to the BFSA laboratory. Bulk items such as small fragments of ceramic and nondescript glass and metal were weighed and cataloged en masse, by material type, for each level. All remaining artifacts were separated by class and type, and bagged accordingly. All artifacts were identified and entered into a database to produce an artifact catalog.

Historic Artifact Functional Categories

Artifacts were prepared for cataloging according to standard laboratory practices. Items that were covered in dirt to the point of obscuring relevant characteristics were dry-brushed or wiped with a damp cloth in order to enhance the artifact description. Each catalog entry was bagged in a two-millimeter-thick archival quality bag labeled with location and catalog number information. Information recorded about cataloged artifacts includes provenience and depth, material, quantity and/or weight, artifact type, functional category, and a brief description of the artifact(s), which includes any diagnostic information about manufacturing methods, brand or product marks, and manufacturers' marks. Artifacts sharing the same provenience, material, and color characteristics, but that were fragmentary, were assigned a single catalog number. Artifacts were classified by functional category for purposes of analysis. These functional categories have been outlined by Van Wormer et al. (2005) and include:

- *Consumer Items* – Consumer items consist of packaged items purchased and consumed on a regular basis. Generally, these include groceries such as condiments, other preserved foods, and beverages. Under most conditions, consumer items recovered

from archaeological deposits came in containers that do not deteriorate over time, such as glass or ceramic bottles and jars, and in some instances, tin cans.

- *Kitchen Items* – Kitchen items are defined as objects used in tasks of food preparation, serving, and consumption. These types of artifacts may include ceramic kitchen and tableware, glass tableware, canning jars, canning jar lids and related items, cooking utensils, and flatware.

- *Food Items* – Food items include butchered bone, fish bone, shellfish, and seeds.

- *Household Items* – Household items are mainly related to a house structure and its furnishings, and non-food-related items used by the inhabitants. Artifact classes and types considered part of this category include lamps, medicines, household ceramics, batteries, and household glassware.

- *Garment Items and Tools* – Garment items and tools include all items related to clothing, including objects such as buckles, buttons, shoe parts, safety pins, and sewing scissors.

- *Personal Items* – Personal items are associated with an individual rather than a household, and are therefore not generally shared. Artifact classes and types in this category include grooming and hygiene products, cosmetic/beauty products, clothing, bicycles, items, personal adornment items such as currency, jewelry, eyeglasses, and hair adornment, keys, pocket tools, purses, smoking-related items, and portable musical instruments.

- *Livery Items* – Livery items are primarily concerned with the use and maintenance of horses and horse-drawn vehicles. This may include a range of items from common horseshoes to saddle and buggy parts.

- *Munitions Items* – Munitions items are related to the use, maintenance, and repair of firearms. This may include a range of items from the firearm itself, spent cartridges, gunflints, musket balls, and fragmented parts.

- *Hardware Items* – Hardware items are manufactured items used in the construction or maintenance of a residence and include screws, nails, hinges, handles, and plumbing or electric parts.

- *Building Materials and Architecture Items* – Building materials and architecture items

include all items related to the construction and maintenance of buildings and structures. This includes items such as door and lock parts, nails, window glass, concrete, electrical hardware, etc.

- *Furniture Items* – Furniture items include all items related to the hardware and construction of household furniture. This includes items such as bed frames and springs, cabinet hinges, drawer pulls, scroll trim, trunk parts, and upholstery tacks.

- *Machinery Items* – Machinery items include all machine parts that are not directly related to agricultural activities.

- *Tools* – Tools are generally any hand tool used to build or maintain a structure or operate a business. Hammers, saws, wrenches, and screwdrivers are all common tools that would fall into this category.

- *Transportation Items* – Transportation items include artifacts beyond those items that would otherwise be associated with livery items. Transportation artifacts are associated with the advent of mass transportation or mechanical advances associated with the automobile.

- *Unidentifiable Items* – Unidentifiable items are too small or fragmentary to identify to artifact type.

3.4 Report Preparation and Recordation

This report contains information regarding previous studies, statutory requirements for the project, a brief description of the setting, research methods employed, and the overall results of the survey and testing program. The report includes all appropriate illustrations and tabular information needed to make a complete and comprehensive presentation of these activities, including the methodologies employed and the personnel involved. A copy of the final technical report will be placed at the EIC at UCR. Any newly recorded sites or sites requiring updated information will be recorded on the appropriate DPR forms, which will be filed with the EIC.

3.5 Native American Consultation

A SLF search was also requested from the NAHC. The SLF search results were positive for resources within the general area of the project. In accordance with the recommendations of the NAHC, BFSA contacted all Native American consultants listed in the NAHC response letter. All correspondence with the tribes is summarized within Section 4.0 and provided in Appendix D.

3.6 Applicable Regulations

Resource importance is assigned to districts, sites, buildings, structures, and objects that possess exceptional value or quality illustrating or interpreting the heritage of Riverside County in history, architecture, archaeology, engineering, and culture. A number of criteria are used in demonstrating resource importance. Specifically, criteria outlined in CEQA provide the guidance for making such a determination. The following sections detail the CRHR criteria that a resource must meet in order to be determined important.

3.6.1 California Environmental Quality Act

According to CEQA (§15064.5a), the term "historical resource" includes the following:

1) A resource listed in, or determined to be eligible by the State Historical Resources Commission for listing in, the California Register of Historical Resources (CRHR) (Public Resources Code [PRC] SS5024.1, Title 14 CCR. Section 4850 et seq.).
2) A resource included in a local register of historical resources, as defined in Section 5020.1(k) of the PRC or identified as significant in an historical resource survey meeting the requirements of Section 5024.1(g) of the PRC, shall be presumed to be historically or culturally significant. Public agencies must treat any such resource as significant unless the preponderance of evidence demonstrates that it is not historically or culturally significant.
3) Any object, building, structure, site, area, place, record, or manuscript, which a lead agency determines to be historically significant or significant in the architectural, engineering, scientific, economic, agricultural, educational, social, political, military, or cultural annals of California may be considered to be an historical resource, provided the lead agency's determination is supported by substantial evidence in light of the whole record. Generally, a resource shall be considered by the lead agency to be "historically significant" if the resource meets the criteria for listing on the CRHR (PRC SS5024.1, Title 14, Section 4852) including the following:

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

4) The fact that a resource is not listed in, or determined eligible for listing in the CRHR,

not included in a local register of historical resources (pursuant to Section 5020.1(k) of the PRC), or identified in an historical resources survey (meeting the criteria in Section 5024.1(g) of the PRC) does not preclude a lead agency from determining that the resource may be an historical resource as defined in PRC Section 5020.1(j) or 5024.1.

According to CEQA (§15064.5b), a project with an effect that may cause a substantial adverse change in the significance of an historical resource is a project that may have a significant effect on the environment. CEQA defines a substantial adverse change as:

1) Substantial adverse change in the significance of an historical resource means physical demolition, destruction, relocation, or alteration of the resource or its immediate surroundings such that the significance of an historical resource would be materially impaired.
2) The significance of an historical resource is materially impaired when a project:

    a) Demolishes or materially alters in an adverse manner those physical characteristics of an historical resource that convey its historical significance and that justify its inclusion in, or eligibility for, inclusion in the CRHR; or
    b) Demolishes or materially alters in an adverse manner those physical characteristics that account for its inclusion in a local register of historical resources pursuant to Section 5020.1(k) of the PRC or its identification in an historical resources survey meeting the requirements of Section 5024.1(g) of the PRC, unless the public agency reviewing the effects of the project establishes by a preponderance of evidence that the resource is not historically or culturally significant; or,
    c) Demolishes or materially alters in an adverse manner those physical characteristics of an historical resource that convey its historical significance and that justify its eligibility for inclusion in the CRHR as determined by a lead agency for purposes of CEQA.

Section 15064.5(c) of CEQA applies to effects on archaeological sites and contains the following additional provisions regarding archaeological sites:

1) When a project will impact an archaeological site, a lead agency shall first determine whether the site is an historical resource, as defined in subsection (a).
2) If a lead agency determines that the archaeological site is an historical resource, it shall refer to the provisions of Section 21084.1 of the PRC, Section 15126.4 of the guidelines, and the limits contained in Section 21083.2 of the PRC do not apply.
3) If an archaeological site does not meet the criteria defined in subsection (a), but does meet the definition of a unique archaeological resource in Section 21803.2 of the PRC,

the site shall be treated in accordance with the provisions of Section 21083.2. The time and cost limitations described in PRC Section 21083.2 (c-f) do not apply to surveys and site evaluation activities intended to determine whether the project location contains unique archaeological resources.

4) If an archaeological resource is neither a unique archaeological nor historical resource, the effects of the project on those resources shall not be considered a significant effect on the environment. It shall be sufficient that both the resource and the effect on it are noted in the Initial Study or Environmental Impact Report, if one is prepared to address impacts on other resources, but they need not be considered further in the CEQA process.

Section 15064.5 (d) and (e) contain additional provisions regarding human remains. Regarding Native American human remains, paragraph (d) provides:

(d) When an initial study identifies the existence of, or the probable likelihood, of Native American human remains within the project, a lead agency shall work with the appropriate Native Americans as identified by the NAHC as provided in PRC SS5097.98. The applicant may develop an agreement for treating or disposing of, with appropriate dignity, the human remains and any items associated with Native American burials with the appropriate Native Americans as identified by the NAHC. Action implementing such an agreement is exempt from:

1) The general prohibition on disinterring, disturbing, or removing human remains from any location other than a dedicated cemetery (Health and Safety Code Section 7050.5).
2) The requirement of CEQA and the Coastal Act.

4.0 RESULTS

4.1 Records Search Results

BFSA reviewed the results of a records search completed at EIC at UCR for the project to determine the presence of any previously recorded cultural resources. The results of the records search indicate that no previously recorded archaeological sites exist within the project area. However, the results of the records search indicate that 78 cultural resources have been recorded within one mile of the project (Table 4.1–1). The majority of the recorded resources within a one-mile radius are prehistoric (N=73), and consist of 22 prehistoric bedrock milling feature sites; five prehistoric bedrock milling feature sites with associated lithic scatters; one prehistoric bedrock milling feature site with associated lithics, ground stone, and shell; one prehistoric bedrock milling feature site with an extensive artifact scatter and associated rock shelters; one prehistoric temporary camp site; eight prehistoric lithic scatters; one prehistoric lithic scatter with associated ground stone; one prehistoric rock feature; and 33 prehistoric isolated artifacts. Four of the resources are historic and consist of two historic trash deposits and two historic single-family residences. The remaining resource is multicomponent consisting of prehistoric bedrock milling features and a single isolated historic adobe brick.

Table 4.1–1
Archaeological Sites Located Within a
One-Mile Radius of the McElwain Project

Site	Description
RIV-646; RIV-1364; RIV-1366; RIV-1372; RIV-1373; RIV-1374; RIV-1375; RIV-1376; RIV-1377*; P-33-011238; RIV-7424; RIV-7425; RIV-7426**; RIV-7427; RIV-7852; RIV-7853; RIV-8055; P-33-024579; P-33-024580; P-33-024620; RIV-12,540; and RIV-12,714	Prehistoric bedrock milling feature site
RIV-629; RIV-7405; RIV-12,195; RIV-12,245; and RIV-12,509	Prehistoric bedrock milling feature site with an associated lithic scatter
RIV-10,075	Prehistoric bedrock milling feature site with associated lithics, ground stone, and shell
RIV-645	Prehistoric bedrock milling feature site, extensive artifact scatter, and rock shelters
RIV-2190	Prehistoric temporary camp site
RIV-3684; P-33-011241; RIV-10,098; RIV-10,892; RIV-11,778; RIV-12,196; RIV-12,197; and RIV-12,198	Prehistoric lithic scatter

Site	Description
RIV-11,739	Prehistoric lithic scatter and associated ground stone
P-33-024582	Prehistoric rock feature
P-33-013363; RIV-013976; P-33-014358; P-33-023973; P-33-024574; P-33-024577; P-33-024578; P-33-024595; P-33-024611; P-33-024612; P-33-024613; P-33-024614; P-33-024615; P-33-024616; P-33-024617; P-33-024618; P-33-024619; P-33-024621; P-33-024622; P-33-024623; P-33-024624; P-33-024625; P-33-024626; P-33-024627; P-33-024629; P-33-024630; P-33-024631; P-33-024632; P-33-024633; P-33-024634; P-33-024635; P-33-024636; and P-33-024368	Prehistoric isolate
RIV-12,566	Prehistoric bedrock milling feature site with an isolated historic adobe brick fragment
RIV-11,777 and RIV-11,871	Historic trash deposit
P-33-015330 and P-33-015331	Historic single-family residence

**Could not be relocated in 2007*

***Could not be relocated in 2004*

Many of the recorded resources within the area are prehistoric with bedrock milling features like Site RIV-12,943 and are located within similar terrain as that found on the project near readily accessible sources of food and water. Although prehistoric resources are the most common in the area, the four closest resources, situated just southeast and southwest of the subject property, consist of historic 1940s-era ranch properties, similar to Site RIV-12,944, and historic trash deposits, similar to Site RIV-12,942.

The record search also identified a total of 74 previous investigations that have been conducted within a mile of the proposed project, none of which included the subject property.

The EIC also reviewed the following historic sources:

- The National Register of Historic Places Index
- The Office of Historic Preservation, Archaeological Determinations of Eligibility
- The Office of Historic Preservation, Directory of Properties in the Historic Property Data File
- The 30' USGS *Elsinore* topographic map (1901)

These sources did not indicate the presence of archaeological resources within the project. However, for records searches and background research, the absence of positive results does not

necessarily indicate the absence of cultural resources. The records search did denote the presence of recorded sites in the vicinity of the project. Given the historic settlement of the region and the frequency of sites known to be surrounding the project, there is a moderate potential for archaeological discoveries. The largest number of sites indicated by the records search suggests that bedrock milling features should be the primary site type within the property. The large number of dirt roads next to canyons also suggests potential for historic dumping sites. The complete records search results are provided in Appendix C.

A SLF search was also requested from the NAHC. The SLF search results were positive for resources within the general area of the project. In accordance with the recommendations of the NAHC, BFSA contacted all Native American consultants listed in the NAHC response letter and has received two responses. The Rincon Band of Luiseño Indians requested a cultural study be completed for the project and stated that one documented Luiseño Place Name is within one mile of the project. The Soboba Band of Luiseño Indians indicated that the general area is considered sensitive to them and requested a native monitor be present during any ground disturbing activities and to consult on the project. All correspondence with the tribes is provided in Appendix D.

4.1.1 Historic Research Results

Based on General Land Office (GLO) records available from the Bureau of Land Management (BLM), the subject property was granted to Richard Taylor in 1889. However, according to readily available historic aerial photographs and maps, it does not appear that any structures were constructed until the early twentieth century. The 1901 *Elsinore* 30' quadrangle map does not show any structures on the property, while an aerial photograph from 1938 does show structures within the northwest corner of the property in the location of RIV-12,944. The 1938 aerial photograph also shows a dirt access road originating at the structures and traversing across the property towards the southeast, appearing to pass by the drainage in which RIV-12,942 was identified. These features as well as a steady increase to the number of structures in the northwest of the project are present on subsequent aerial photographs throughout the twentieth century until the early 2000s when all structures appear to have been removed. Based on the preliminary field survey and review of aerial photographs, there may be a connection between the early to mid-twentieth century inhabitants of the property and the trash deposit identified within the project.

4.2 Previous Studies

Principal Investigator Brian F. Smith directed the pedestrian survey of the McElwain Project with the assistance of Project Archaeologist Andrew Garrison and field archaeologist James Shrieve on November 26 and 27, 2018 (Garison and Smith 2019). During the survey, four previously unrecorded cultural resources were identified on the property and assigned the following identifiers: RIV-12,942, RIV-12,943, RIV-12,944, and P-33-028892. The configuration of the sites on the property is presented in Figure 4.2–1. The archaeological survey of the property was an intensive reconnaissance consisting of a series of parallel survey transects spaced at approximately five- to 15-meter intervals.

The survey noted disturbance from the construction and subsequent demolition of a previous residence, by past agricultural use, disturbances from rural residential dumping, and the grading of roads. This characterization of the property as moderately to severely surficially disturbed is relevant to the consideration of previous impacts to the cultural resources within the project.

Figure 4.2–1
Cultural Resource Location Map

(Deleted for Public Review; Bound Separately)

4.3 Results of Significance Testing – Site RIV-12,942

4.3.1 Site Description

Site RIV-12,942 was identified during the Phase I archaeological survey as a historic refuse scatter located approximately 100 meters west of Interstate Highway 215 and approximately 75 meters north of Linnel Lane in the southeast quadrant of the project (see Figure 4.2–1). The approximately 105-square-meter site is situated at 1,564 feet AMSL, within a roughly north-to-south trending seasonal drainage. Site RIV-12,942 likely developed as a result of residential trash dumping in the mid-twentieth century. The only disturbance impacting the site includes erosion associated with the seasonal drainage. Vegetation cover at the site during the survey was approximately 80 percent, which allowed for good surface visibility. The setting of the site is shown in Plate 4.3–1.

Plate 4.3–1: Overview of Site RIV-12,942, facing southeast.

4.3.2 Description of Field Investigations

The field investigations at RIV-12,942 were conducted using the standard methodologies described in Section 3.0. Testing of the site was conducted on June 20, 2019 and involved collecting select surface artifacts and excavating eight STPs. Of the shovel tests excavated, STP 2, STP 4, STP 5 and STP 6 were positive for cultural materials. As determined by the positive shovel tests and surface collections, the site measures approximately 23 meters from north to south and 5.5 meters from east to west, covering an area of approximately 105 square meters. The configuration of the site is shown on Figure 4.3–1.

Figure 4.3–1
Excavation Location Map
Site RIV-12,942

(Deleted for Public Review; Bound Separately)

Surface Recordation

The entire surface of the site was inspected for artifacts. Because many of the artifacts were fragmented or redundant in nature, only a representative sample of artifacts diagnostic as to origin, function, or date was collected. The site area was divided into three surface collection (SC) areas; North (SC-1), Center (SC-2), and South (SC-3). Each collection area was recorded using sub-meter GPS technology, provenienced from the nearest STP, collected in bags labeled with provenience information, and returned to the BFSA laboratory. The surface collection consisted of a total of 74 ceramic, glass, leather, and metal artifacts in addition to 189.4 grams of saw cut faunal bone. A majority of the artifacts were recovered from SC-2 (N=32; 43.24 percent), followed by SC-3 (N=29; 39.19 percent), and finally SC-1 (N=13; 17.57 percent). Artifacts recovered include ceramic hardware and tableware, glass automotive, bottle, container, glassware, jar and jug items, shoe leather, and metal automotive, can, and hardware items. The surface collection data is presented in Table 4.3–1.

Table 4.3–1
Surface Collection Data
Site RIV-12,942

Surface Collection	Object Type	Cultural Material	Quantity	Cat. No(s).
1	Engine Part	Metal, Non-ferrous	1	12
	Alcohol Bottle	Glass, Amber	1	4
			1	5
		Glass, Aqua	1	2
	Soda Bottle	Glass, Green	1	3
	Toiletry Bottle	Glass, Amber	1	6
	Food Can	Metal, Ferrous	2	10-11
	Serving Bowl	Glass, Milk	1	1
	Hardware, Tile	Ceramic, Porcelain	1	7
	Hardware, Vent	Metal, Non-ferrous	1	13
	Tableware Bowl	Ceramic, Stoneware	2	8-9
2	Alcohol Bottle	Glass, Amber	1	16
			1	17
		Glass, Colorless	1	21
	Beverage Bottle	Glass, Amber	1	18
		Glass, Colorless	1	19
	Soda Bottle		1	20
	Toiletry Bottle		1	37
	Food Can	Metal, Ferrous	1	44
	Faunal Bone	Bone, Mammal	70.8 grams	46
	Tableware Bowl	Glass, Green	1	15

Surface Collection	Object Type	Cultural Material	Quantity	Cat. No(s).
		Glass, Milk	1	14
	Measuring Cup	Glass, Colorless	1	39
	Serving Bowl		1	41
	Glassware Tumbler		1	40
	Condiment Har		14	23-36
	Alcohol Bottle		1	22
	Water Jug		1	38
	Shoe Upper	Leather, Mammal	1	45
	Tableware Bowl	Ceramic, Stoneware	1	43
	Tableware Mug		1	42
3	Tractor Head Lamp	Glass, Colorless	1	75
	Alcohol Bottle	Glass, Amber	1	48
		Glass, Colorless	2	66-67
	Beverage Bottle	Glass, Green	1	47
	Dairy Bottle	Glass, Colorless	1	69
	Condiment Bottle	Glass, Aqua	1	51
	Indeterminate Bottle		1	49
		Glass, Colorless	1	68
	Medicine Bottle		2	64-65
	Beverage Can	Metal, Ferrous	1	74
	Indeterminate Container	Glass, Colorless	1	73
	Faunal Bone	Bone, Mammal	118.6 grams	76
	Glassware Compote	Glass, Colorless	1	72
	Glassware Tumbler		2	70-71
	Canning Jar		2	60-61
	Food Jar		7	52-57, 62
	Kitchen Storage Jar		2	58-59
	Medicine Jar		1	63
	Water Jug	Glass, Aqua	1	50
		Total*	74	

**Total does not include weight in grams*

Subsurface Excavation

The potential for subsurface archaeological deposits at Site RIV-12,942 was investigated by excavating eight STPs throughout the known site area (see Figure 4.3–1). All of the shovel tests were excavated in decimeter levels to a minimum of 30 centimeters or until bedrock was encountered. The soil from the shovel tests can be characterized as reddish brown (5YR 4/4), sandy loam with decomposed granite throughout. No artifacts were recovered from STP 1, STP 3, STP 7, and STP 8. STPs 1, 7, and 8 were excavated to 30 centimeters, while STP 3 was excavated to bedrock at 10 centimeters.

Artifacts were recovered from STP 2, STP 4, STP 5, and STP 6. A majority of the artifacts were recovered from STP 4 (N=90; 77.59 percent), which was excavated to bedrock at 40 centimeters. A total of 12 artifacts (10.34 percent) were recovered from STP 5, seven artifacts (6.03 percent) were recovered from STP 2, and seven artifacts were recovered from STP 6 (6.03 percent). STPs 2, 5, and 6 were each excavated to bedrock at 30 centimeters. Artifacts recovered from shovel tests include ceramic kitchen and tableware, glass bottles, containers, glassware, jars, and jugs, shoe leather, metal bottle closures, buttons, garment items, hardware, jar closures, munitions, and toothpaste tubes, plastic bottle closure, buttons, and electrical items, seed fragments, shell buttons, and composite metal and glass light bulb (Table 4.3−2).

Table 4.3–2
Shovel Test Excavation Data
Site RIV-12,942

Shovel Test	Depth (cm)	Object Type	Cultural Material	Quantity	Cat. No(s).
1	0-10	No Recovery			
	10-20				
	20-30				
2	0-10	Alcohol Bottle	Glass, Colorless	1	77
	10-20			1	78
		Indeterminate Container		2	79
	20-30			3	80
3	0-10	No Recovery			
4	0-10	Window Glass	Glass, Aqua Tint	131.5 grams	114
		Bottle Closure, Crown	Metal, Ferrous	3	136
		Bottle Closure, Internal Thread	Plastic, Undifferentiated	1	143
		Alcohol Bottle	Glass, Olive	1	116
		Beverage Bottle	Glass, Colorless	2	120-121
			Glass, Green	1	117
		Soda Bottle	Glass, Colorless	1	119
		Bleach Bottle	Glass, Amber	1	110
		Indeterminate Bottle	Glass, Colorless	2	124, 127
		Snap Button	Metal, Non-ferrous	1	138
		Sanitary Can	Metal, Ferrous	111.7 grams	140
		Indeterminate Container	Glass, Amber	33.3 grams	111
			Glass, Aqua	31.3 grams	113
			Glass, Colorless	1	125
				512.6 grams	131
		Faunal Bone	Bone, Undifferentiated	5.1 grams	144

Shovel Test	Depth (cm)	Object Type	Cultural Material	Quantity	Cat. No(s).
		Marine Shell	Shell, *Mytilus* sp.	1.8 grams	145
		Garment Rivet	Metal, Non-ferrous	1	137
		Garment Zipper		1	139
		Glassware Vessel	Glass, Milk Green	1	118
		Hardware Strap	Metal, Ferrous	1	134
		Canning Jar	Glass, Aqua	1	112
		Condiment Jar	Glass, Colorless	8	122-123, 128
		Indeterminate Jar		1	126
		Medicine Jar	Glass, Cobalt	1	115
		Water Jug	Glass, Colorless	1	129
		Light Bulb		3.6 grams	130
		Indeterminate Metal	Metal, Ferrous	1,314.8 grams	141
		Wire Nail		26.0 grams	135
		Shoe Upper	Leather, Mammal	1	142
		Tableware Plate	Ceramic, Stoneware	1	132
		Toothpaste Tube	Metal, Non-ferrous	1	133
	10-20	Window Glass	Glass, Aqua Tint	37.3 grams	148
		Beverage Bottle	Glass, Green	1	149
		Bleach Bottle	Glass, Amber	1	146
		Indeterminate Bottle	Glass, Aqua	1	147
			Glass, Colorless	1	151
		Sew-Through Button	Shell, Undifferentiated	1	168
		Snap Button	Metal, Non-ferrous	1	159
		Food Can	Metal, Ferrous	125.5 grams	164
		Indeterminate Container	Glass, Colorless	455.9 grams	154
		Faunal Bone	Bone, Undifferentiated	1.2 grams	169
		Seed	Seed, Fruit	1	167
		Garment Rivet	Metal, Ferrous	1	160
		Glassware Tumbler	Glass, Colorless	1	155
		Glassware Vessel	Glass, Teal	1	150
		Indeterminate Hardware	Metal, Ferrous	2	162
		Jar Closure, Internal Thread		1	163
		Canning Jar	Glass, Colorless	1	152
		Condiment Jar		4	153
		Light Bulb		0.4 gram	156
		Indeterminate Metal	Metal, Ferrous	968.2 grams	165
		Wire Nail		7.0 grams	161

Shovel Test	Depth (cm)	Object Type	Cultural Material	Quantity	Cat. No(s).
		Shoe Upper	Leather, Mammal	138.9 grams	166
		Tableware Plate	Ceramic, Stoneware	1	157
		Toothpaste Tube	Metal, Non-ferrous	1	158
	20-30	Window Glass	Glass, Aqua Tint	148.3 grams	175
		Bottle Closure, Crown	Metal, Ferrous	6	197
		Beverage Bottle	Glass, Green	3	176, 178
		Soda Bottle		1	177
		Indeterminate Bottle	Glass, Amber	3	170-172
				31.8 grams	173
		Loop Button	Shell, Undifferentiated	1	201
		Sew-Through Button	Metal, Ferrous	1	195
			Metal, Non-ferrous	1	194
			Plastic, Undifferentiated	2	189-190
		Indeterminate Container	Glass, Aqua	38.3 grams	174
			Glass, Colorless	2	179, 182
				377.8 grams	184
		Electrical Clamp	Plastic, Undifferentiated	1	188
		Faunal Bone	Bone, Mammal	7.3 grams	200
		Garment Clasp	Metal, Non-ferrous	1	196
		Garment Rivet		2	193
		Glassware Tumbler	Glass, Colorless	1	183
		Indeterminate Hardware	Metal, Ferrous	1	198
		Condiment Jar	Glass, Colorless	5	180-181
		Light Bulb	Composite, Glass, Metal	1	191
			Glass, Colorless	0.8 gram	185
		Indeterminate Metal	Metal, Ferrous	1,323.4 grams	199
		Tableware Bowl	Ceramic, Stoneware	1	187
		Tableware Saucer		1	186
		Toothpaste Tumbler	Metal, Non-ferrous	1	192
	30-40	Window Glass	Glass, Aqua Tint	58.0 grams	203
		Indeterminate Bottle	Glass, Amber	2.3 grams	202
		Sew-Through Button	Shell, Undifferentiated	1	212
		Food Can	Metal, Ferrous	6.1 grams	207
		Indeterminate Container	Glass, Colorless	79.6 grams	204
		Faunal Bone	Bone, Avian	0.8 gram	211
		Wire Hardware	Metal, Ferrous	19.2 grams	205

Shovel Test	Depth (cm)	Object Type	Cultural Material	Quantity	Cat. No(s).
		Indeterminate Metal		243.0 grams	209
		Bullet Casing	Metal, Non-ferrous	1	208
		Wire Nail	Metal, Ferrous	4.5 grams	206
		Shoe Upper	Leather, Mammal	1.7 grams	210
5	0-10	Beverage Bottle	Glass, Amber	1	83
			Glass, Green	1	81
		Indeterminate Container	Glass, Amber	1	82
			Glass, Colorless	2	84-85
				57.6 grams	86
		Indeterminate Metal	Metal, Ferrous	11.3 grams	88
		Tableware Vessel	Ceramic, Stoneware	1	87
	10-20	Beverage Bottle	Glass, Green	1	89
		Indeterminate Container	Glass, Colorless	18.1 grams	92
		Condiment Jar	Glass, Amber	1	90
			Glass, Colorless	1	91
		Food Storage Container	Ceramic, Earthenware	1	93
		Indeterminate Metal	Metal, Ferrous	2.2 grams	94
	20-30	Window Glass	Glass, Aqua Tint	6.8 grams	98
		Indeterminate Container	Glass, Aqua	1	95
			Glass, Colorless	80.2 grams	96
		Condiment Jar	Glass, Amber	1	97
		Indeterminate Metal	Metal, Ferrous	2.4 grams	99
6	0-10	Indeterminate Container	Glass, Amber	10.9 grams	104
			Glass, Colorless	3	100-102
				51.7 grams	103
	10-20		Glass, Amber	2	105-106
			Glass, Colorless	49.3 grams	108
		Glassware Tumbler		1	109
		Condiment Jar		1	107
	20-30	No Recovery			
7	0-10	No Recovery			
	10-20				
	20-30				
8	0-10	No Recovery			
	10-20				
	20-30				
			Total*	116	

**Total does not include weight in grams*

4.3.3 Discussion

A total of 190 identifiable cultural materials were recovered during the testing program at Site RIV-12,942 (Table 4.3–3). Of the identifiable items recovered, most are glass (N=134; 70.53 percent), metal (N=34; 17.89 percent), and ceramic (N=11; 5.79 percent). Additionally, 4,165.4 grams of bulk metal fragments, 2,217.4 grams of bulk glass fragments, 203.8 grams of faunal bone, 140.6 grams of leather fragments, and 1.8 grams of marine shell were recovered.

Table 4.3−3
Cultural Materials Recovered From
Site RIV-12,942

Cultural Material	Quantity	Percent
Ceramic	11	5.79
Composite	1	0.53
Glass	134	70.53
Leather	2	1.05
Metal	34	17.89
Plastic	4	2.11
Seed	1	0.53
Shell	3	1.58
Bulk Items (in grams)		
Glass	2,217.4	-
Leather	140.6	
Metal	4,165.4	
Faunal Bone	203.8	
Marine Shell	1.8	
Total	190	100.00†

**Totals do not include weight in grams*
†Rounded totals may not equal 100.00 percent

All 190 identifiable artifacts recovered from the project were also identifiable to various functional categories (Table 4.3–4). The majority of the diagnostic items recovered from Site RIV-12,942 were classified as consumer items (N=116; 61.05 percent), kitchen items (N=32; 16.84 percent), and garment items (N=17; 8.95 percent). Building materials, food items, hardware items, household items, personal items, transportation items, munitions, and unidentifiable items were also recovered from RIV-12,942. The wide variety of artifacts recovered is consistent with collections that are associated with the function of a household, as each type of item represents a different aspect of a working home. For example, consumer and food items are associated with food and beverage consumption, household and kitchen items are associated with the daily care

and function of a household, garment and personal items are associated with specific people within a household, and building materials and hardware items are associated with the construction and maintenance of a household. Given this wide variety of artifacts, it is likely that this deposit represents the domestic refuse of a nearby residence.

Table 4.3–4
Functional Categories Represented by
Cultural Materials Recovered From Site RIV-12,942

Functional Category	Quantity	Percent
Building Material	2	1.05
Consumer Items	116	61.05
Food Items	1	0.53
Garment Items	17	8.95
Hardware Items	4	2.11
Household Items	13	6.84
Kitchen Items	32	16.84
Munitions	1	0.53
Personal Items	1	0.53
Transportation Items	3	1.58
Bulk Items (in grams)		
Building Material	419.5	-
Consumer Items	2,073.9	
Food Items	205.6	
Garment Items	140.6	
Hardware Items	19.2	
Household Items	4.8	
Unidentifiable Items	3,865.3	
Total*	190	100.00†

**Totals do not include weight in grams*
†Rounded totals may not equal 100.00 percent

Temporally Diagnostic Artifacts

In order to more accurately date the assemblage recovered from Site RIV-12,942, only expendable consumer, household (cleaning and medicinal), and personal (toiletry) items were used in assigning a date range to the site because they are only used for a brief period of time and are then discarded. Although some recycling behaviors did occur historically, when several items are taken together as a group, a greater level of confidence can be achieved when examining date ranges and period of occupation. Upon review of the 48 temporally diagnostic artifacts from Site

RIV-12,942 (Table 4.3–5), they appear to represent a period between the 1930s and the 1940s, where most manufacture date ranges overlap. While the earliest potential manufacture date of the items is 1905, and the latest potential manufacture date is 1989, the mean date range of the items is 1930 (-16) and 1958 (+13). It is likely that the items recovered from RIV-12,942 were discarded sometime in the 1930s to the 1950s at the latest.

Table 4.3–5
Temporally Diagnostic Items Recovered
Site RIV-12,942

Date Range	Object Type	Manufacturer / Company	Quantity	Cat. No(s).
1905-1959	Beverage Bottle	-	3	47, 176
	Food/Condiment Jar		1	122
	Indeterminate Bottle		2	170-171
1905-1960	Medicine Jar (Menthol [VapoRub])	Vick Chemical Co.	1	115
1905-1964	Food/Condiment Jar	Hazel-Atlas Glass Co.	2	25, 30
	Toiletry Bottle		1	6
1905-1978	Alcohol Bottle (Beer)	Obear-Nester Glass Co.	1	17
1910-1964	Food/Condiment Jar	Hazel-Atlas Glass Co.	2	29, 36
1914-1959	Alcohol Bottle (Liquor)	-	1	5
1925-1959	Indeterminate Container	W.J. Latchford Glass Co.	1	105
1925-1989	Food/Condiment Jar		1	52
1932-1937	Beverage Bottle	Owens-Illinois Glass Co.	1	83
1933-1943	Food/Condiment Jar		1	107
1933-1959	Alcohol Jug (Wine)	Glass Containers Corp.	1	22
	Beverage Bottle (Soda [Seven-Up])	The Seven Up Co.	1	177
1933-1984	Food/Condiment Jar	Glass Containers Corp.	1	26
1935-1959	Alcohol Bottle		1	48
1938-1948	Food/Condiment Jar	Owens-Illinois Glass Co.	1	56
1938-1956	Beverage Bottle (Soda [Eastside Cherry Keeno])	Latchford-Marble Glass Co. / Los Angeles Brewing Co.	2	20, 119
1939-1949	Food/Condiment Jar	Owens-Illinois Glass Co.	1	91
1940			1	54
1940-1954			1	35
1940-1959	Alcohol Bottle (Wine)	Maywood Glass Co.	1	2
	Food/Condiment Jar		1	23
1940-1964		Hazel-Atlas Glass Co.	1	24
1940-1969	Cleaning Bottle (Bleach)	-	1	110
1940-1984	Food/Condiment Bottle	Glass Containers Corp.	1	51

Date Range	Object Type	Manufacturer / Company	Quantity	Cat. No(s).
1941-1944	Beverage Bottle (Soda [Seven-Up])	Owens-Illinois Glass Co. / The Seven Up Co.	1	3
1942	Food/Condiment Jar	Owens-Illinois Glass Co.	1	53
1942-1959	Alcohol Bottle (Beer)	Foster-Forbes Glass Co.	1	4
1943	Beverage Bottle	Owens-Illinois Glass Co.	1	18
	Food/Condiment Jar		2	28, 32
1944		Owens-Illinois Glass Co. / Golden West Peanut Butter	1	57
1945	Alcohol Bottle (Wine)	Owens-Illinois Glass Co.	1	21
	Food/Condiment Jar	Owens-Illinois Glass Co.	1	33
1946	Toiletry Bottle (Dandruff Cure)	Owens-Illinois Glass Co. / The Fitch Dandruff Cure Co.	1	37
1948	Food/Condiment Jar	Owens-Illinois Glass Co.	1	55
1954			1	34
1944-1985	Alcohol Bottle (Beer [Anheuser-Busch])	Thatcher Manufacturing Co. / Anheuser Busch Inc.	1	16
	Food/Condiment Jar	Thatcher Manufacturing Co.	1	27
		Total	48	

4.3.4 Summary

The investigation of Site RIV-12,942 revealed that the site was used on a limited basis for the dumping of household refuse. The artifacts suggest that the dumping occurred beginning in the 1930s until the 1950s. The assemblage was spread out within a north-to-south trending seasonal drainage in the southeast portion of the property. Of the eight shovel tests excavated, four were positive to cultural materials, effectively establishing the subsurface extent of the site to bedrock from 10- to 40-centimeters below ground surface. Historic aerials consulted indicate that an access road was created along the drainage to access a house that was constructed sometime between 1938 and 1967. The road was still in use until at least 1978, and by 1996, it had been abandoned. As roadside refuse dumping was common in rural communities in the mid-twentieth century, it is likely that the artifacts were deposited in the drainage by residents of the household during the time the road was in use, circa 1938 to 1978. As a result of archival research and artifact analysis, the deposit was likely created circa the late 1930s to the early 1950s.

Due to a lack of unique elements at Site RIV-12,942, according to the criteria listed in CEQA, Section 15064.5, the site is evaluated as not eligible for listing on the CRHR. The level of information already obtained from this site, including documentation of boundaries, collection of a sample of the artifacts present, and dating analysis of the recovered artifacts, has exhausted the research potential of the site. No further archaeological investigations are recommended for Site RIV-12,942.

4.4 Results of Significance Testing – Site RIV-12,943

4.4.1 Site Description

Site RIV-12,943 was identified during the Phase I archaeological survey (Garrison and Smith 2019) as a prehistoric bedrock milling site located in the southern portion of the project, in direct proximity to an unnamed drainage that runs along the southern and western boundaries of the project area (see Figure 4.2–1). The approximately 16-square-meter site consists of two bedrock milling features with a total of three milling slicks. Disturbances at the site include natural erosion, bioturbation in the form of small mammal burrows, impacts from previous grading for agricultural activities. The exposed boulders throughout the site area have undergone various degrees of deterioration and exfoliation, which may affect the observable pattern of prehistoric use. The setting of the site is shown in Plate 4.4–1.

Plate 4.4–1: Overview of Site RIV-12,943, facing east.

4.4.2 Description of Field Investigations

The field investigations at RIV-12,943 were conducted using the standard methodologies described in Section 3.0. The field investigations were conducted on June 20, 2019 and consisted of recording the bedrock milling features and excavating six shovel tests. The area of the site was defined based upon the bedrock milling feature locations, measuring approximately 5.3 meters from north to south and 3.5 meters from east to west, covering an area of approximately 16 square meters. The configuration of the site is shown on Figure 4.4–1.

Surface Recordation

The entire surface of the site was inspected for artifacts and milling features. Two bedrock milling features (BMFs A and B) with two slicks on BMF A and one slick on BMF B were identified (see Figure 4.4–1). No artifacts were observed in the area surrounding the milling features. The slicks range in length from 21.0 to 30.0 centimeters, with widths between 14.0 and 26.0 centimeters and depths all at zero centimeters (Table 4.4–1). The individual milling surfaces on each feature are shown in Plates 4.4–2 through 4.4–3 and Figures 4.4–2 through 4.4–3.

Table 4.4–1
Bedrock Milling Feature Data
Site RIV-12,943

Feature No.	Surface No.	Milling Type	Dimensions (cm)		
			Length	Width	Depth
A	1	Slick	30.0	26.0	0.0
	2		21.0	17.0	0.0
B	1		28.0	14.0	0.0

Figure 4.4–1
Excavation Location Map
Site RIV-12,943

(Deleted for Public Review; Bound Separately)

Plate 4.4–2: Overview of BMF A at Site RIV-12,943, facing east.

Plate 4.4–3: Overview of BMF B at Site RIV-12,943, facing east.

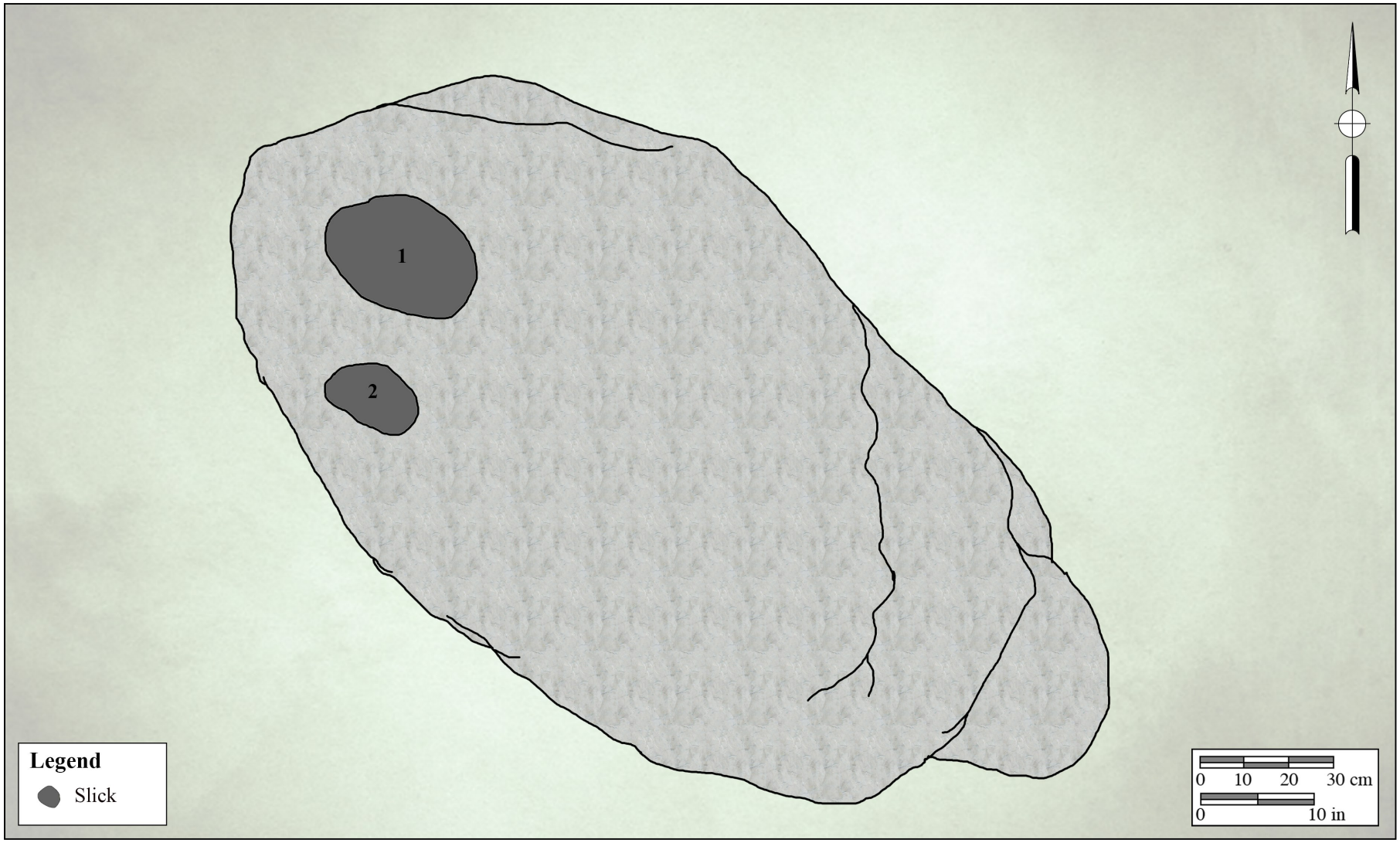


Figure 4.4–2

Bedrock Milling Feature A

Site RIV-12,943

The McElwain Project

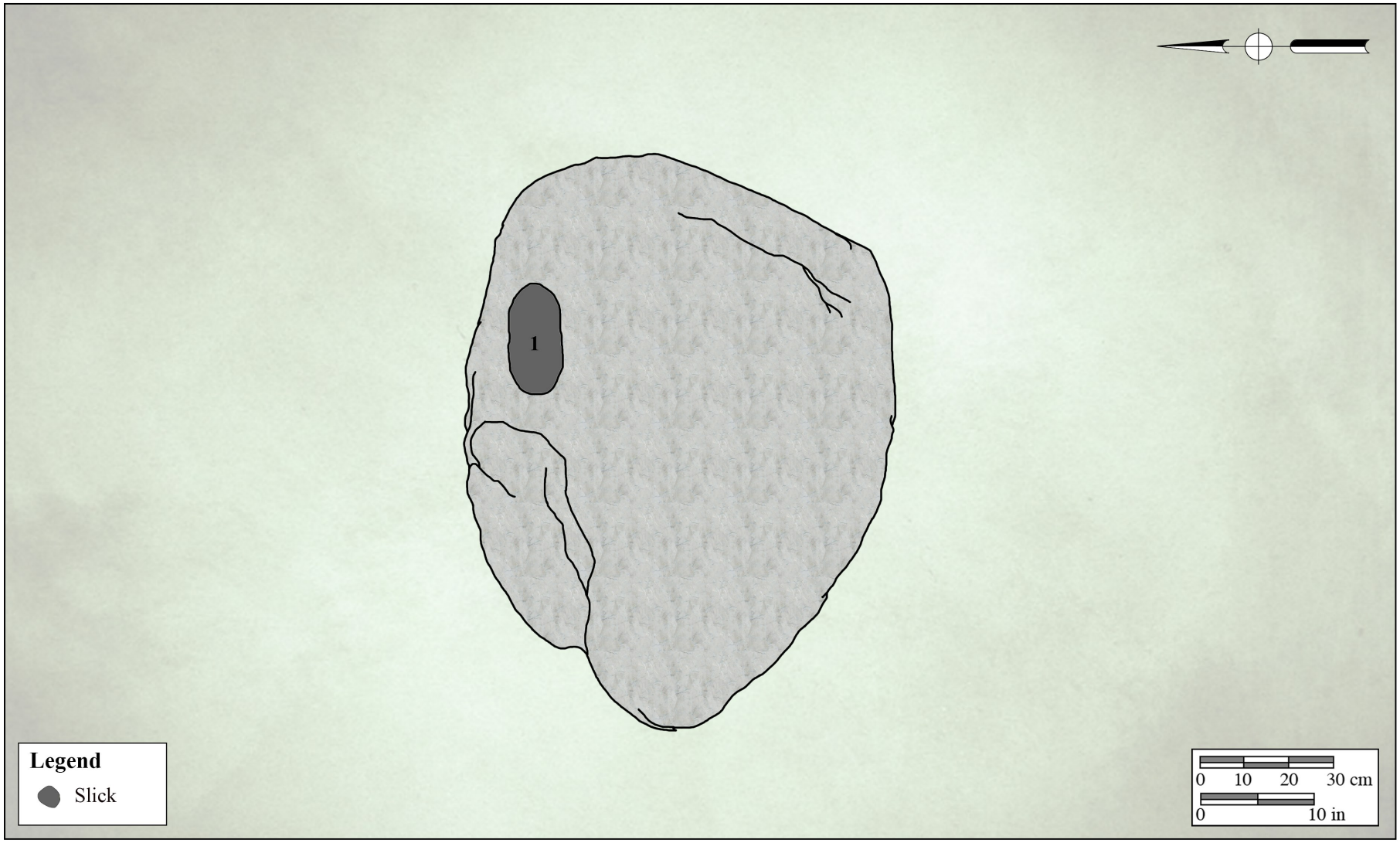


Figure 4.4–3

Bedrock Milling Feature B

Site RIV-12,943

The McElwain Project

Subsurface Excavation

The potential for subsurface archaeological deposits at Site RIV-12,943 was investigated by excavating six STPs throughout the known site area in a radial pattern around the milling features (see Figure 4.4–1). All of the shovel tests were excavated in decimeter levels to a minimum of 30 centimeters or until bedrock was encountered. The soil from the STPs 1, 3, and 5 can be characterized as reddish brown (5YR 4/4), sandy loam with decomposed granite throughout. The soil from the shovel tests 2, 4, and 6 can be characterized as reddish brown (5YR 4/4), silty loam. No artifacts were recovered from the STPs excavated at Site RIV-12,943 (Table 4.4–2).

Table 4.4–2
Shovel Test Excavation Data
Site RIV-12,943

Shovel Test	Depth (cm)	Object Type	Cultural Material	Quantity	Cat. No.(s)
1	0-10	No Recovery			
	10-20				
	20-30				
2	0-10	No Recovery			
	10-20				
3	0-10	No Recovery			
	10-20				
	20-30				
4	0-10	No Recovery			
	10-20				
	20-30				
5	0-10	No Recovery			
	10-20				
	20-25				
6	0-10	No Recovery			
	10-20				
	20-30				
			Total	-	

4.4.3 Discussion

Site RIV-12,943 is a small bedrock milling site that encompasses approximately 16 square meters in the central portion of the project area, directly adjacent to an unnamed drainage. No cultural materials were identified on the surface of the site or in any of the subsurface excavations; however, two bedrock milling features, one with two milling slicks (BMF A) and one with a single

milling slick (BMF B) were identified and recorded. Because of the minimally used milling surfaces and the lack of surface or subsurface cultural materials, it is likely that Site RIV-12,943 was a minimally used prehistoric food processing site.

4.4.4 Summary

The investigation of Site RIV-12,943 revealed that the site was a minimally used bedrock milling site. The identified features indicate that site activities focused primarily upon floral and/or faunal food processing. The integrity of the site appears to have been impacted by the historic use of this property. Shovel test investigations did not identify any subsurface deposits at the site. Due to a lack of research potential, the site is evaluated as not CRHR-eligible. The level of information already obtained from this site, including documentation of boundaries and milling features, has exhausted its research potential. No further archaeological investigations are recommended for Site RIV-12,943.

4.5 Results of Significance Evaluation – Site RIV-12,944

4.5.1 Site Description

Site RIV-12,944 was identified during the Phase I archaeological survey as a historic well feature located in the north-central portion of the project area, approximately 250 meters northeast of the intersection of McElwain Road and Linnel Lane (see Figure 4.2–1). The site consists of a historic-period cement well feature associated with the historic structure that was demolished at the property in the 2000s. Disturbances at the site include previous construction and demolition of a single-family structure. Vegetation at the site during survey was minimal, which allowed for excellent surface visibility. The setting of the site is shown in Plate 4.5–1.

Plate 4.5–1: Overview of Site RIV-12,944, facing east.

4.5.2 Description of Field Investigations

The field investigations at Site RIV-12,944 were conducted using the standard methodologies described in Section 3.0. The field investigations were conducted on June 20, 2019 and consisted of the documentation of the existing well feature. The area of the site was defined by the circular feature, measuring approximately 1.8 meters across. The configuration of the site is shown on Figure 4.5–1.

Figure 4.5–1
Feature Location Map
Site RIV-12,944

(Deleted for Public Review; Bound Separately)

Surface Recordation

The entire surface of the site was inspected for artifacts and additional features. One well feature (Feature A) was identified (Figure 4.5–2 and Plate 4.5–2). No artifacts were observed in the area surrounding the well feature. The circular well feature measures approximately 1.8 meters across. The feature is primarily cement construction with a lid constructed of five formed cement planks with integrated pipes and rebar loops to likely facilitate lid removal as necessary. The well is surrounded by three anchor points with metal bands protruding from each that may have served to hold a windmill. The northernmost footer is stamped with the number "1943," which may indicate the date of construction for Feature A. This is consistent with the estimated construction date range for the residence that once occupied the property. This is also temporally consistent with the historic materials identified at Site RIV-12,942. Visual estimates suggest that Feature A is approximately 30 to 40 feet in depth to standing water. How far it extends beyond that point was currently undeterminable.

Plate 4.5–2: Overview of Feature A at Site RIV-12,944, facing north.

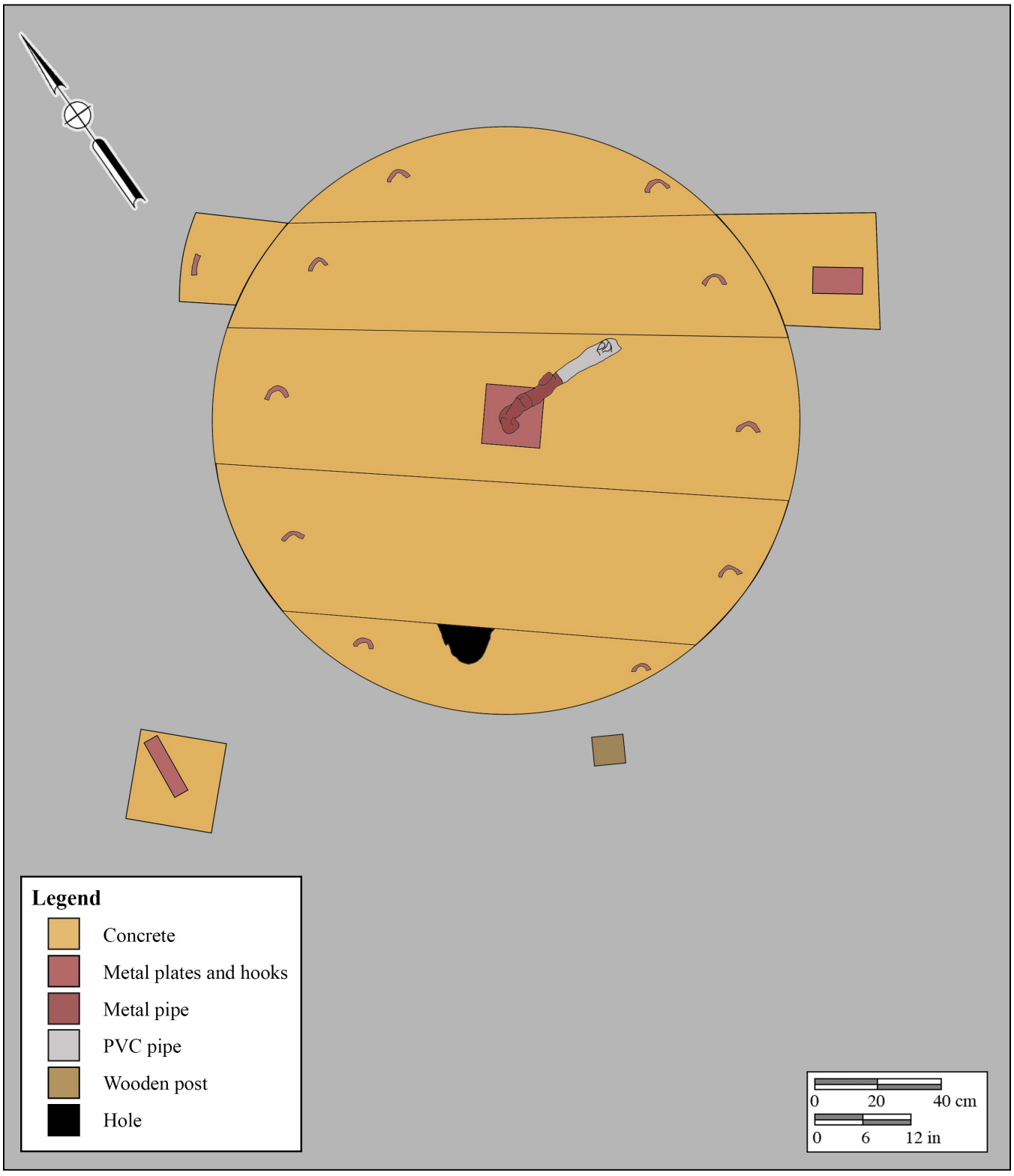


Figure 4.5–2
Plan View of Feature A
Site RIV-12,944
The McElwain Project

4.5.3 Summary

The investigation of Site RIV-12,944 revealed that the site was used on a limited basis to supply water for the former occupants of the property prior to the availability of municipal water services. The review of the feature suggests that the well was in service sometime in the early-1940s. No associated surface artifacts were identified in the vicinity of the well. The documentation of the feature has exhausted the research potential of the site. Due to a lack of unique elements, according to the criteria listed in CEQA, Section 15064.5, the site is evaluated as not CRHR-eligible. No further archaeological investigations are recommended for Site RIV-12,944.

4.6 Isolate

4.6.1 P-33-028892

P-33-028892 was identified during the Phase I archaeological survey as a fragmented basalt portable mortar located in the north/central portion of the project, approximately 273 meters northeast of the intersection of McElwain Road and Linnel Lane (see Figure 4.2–1). The isolate was found in conjunction with discarded modern building materials and trash (Plate 4.6–1). Although the object in question are referred to as a "portable mortar," they are portable only in comparison to bedrock-based mortars that are integral to bedrock exposures within the landscape. Although fragmentary, the portable mortar recovered from the poject area (if complete) would have likely weighed upwards of 40 pounds or more and is considered site furniture. A close up view of P-33-028892 is presented in Plate 4.6–2.

The recovery of portable mortars is somewhat rare, especially in a natural setting where granite bedrock is exposed and accessible immediately within the site area. Portable mortars, in comparison to bedrock mortars, are semi-circular to circular bowl-like stones that were produced through design and manufacture rather than simply the process of use. Bowl and mortar fragments are differentiated from metate fragments by the curvature of the base in comparison to the basin, by the high degree of curvature parallel to the rim, and by the volume of materials that a portable mortar could hold. Generally, bowls and mortars are differentiated by the thickness of the wall of the item. Bowls tend to be thinner than mortars. Mortars need to be thick to withstand constant pounding by the pestle. Mortars are typically designed so that the basin may confine the intermediate substance to be processed by the crushing, stirring, or pounding of the pestle. It has been suggested that the shape of the bottom of the mortar (*i.e.,* conical or cup-shaped) may relate to the morphology of the pestle. However, unlike metates and manos, this assumption is uncertain because unlike a mano, pestles have been identified ethnographically as being produced from wood in addition to stone. Therefore, it is possible that the morphology of the mortar may relate to function rather than as a result of the impact of its counterpart, the pestle. For the mortar fragment P-33-028892, evidence of shaping and pecking from manufacture was visible on the specimen. In comparison to true bowls, portable mortars are not evenly thick in cross-section. Rather, due to the stress requirements of the percussive force from a heavy pestle, portable mortars are designed to become gradually thicker as one moves from the basin opening toward the base. P-33-028892 meets these criteria. The isolate was collected and will be curated in accordance with project requirements. The identified isolate, and isolates in general, are not considered CRHR-eligible resources. Analysis indicates that the isolate is not significant and does not satisfy the criteria for significance or eligibility to the CRHR. No further archaeological investigations are recommended for P-33-028892.

Plate 4.6–1: Overview of the location where P-33-028892 was discovered, facing south. Note the presence of modern building materials and trash.

Plate 4.6–2: Close-up view of P-33-028892.

5.0 CUMULATIVE IMPACT ANALYSIS

A cumulative impact, in terms of cultural resources, refers to the mounting aggregate effect upon cultural resources due to modern or recent historic land use, such as residential development, agriculture, and natural processes such as erosion, which result from acts of man. The key to assessing cumulative impacts to archaeological sites is the recognition that these resources are not renewable nor can they be replaced. The importance and significance of cultural resources comes from their association with our heritage, as well as the research value and the information that they contain. Hence, the issue that must be explored in a cumulative impact analysis is the aggregate loss of information, as well as the loss of recognized cultural landmarks and vestiges of our community's cultural history. The CEQA definition of a cumulative impact from the California Governor's Office of Planning and Research, Section 15355 is:

> …[T]wo or more individual effects, which when analyzed together, are considerable or which compound or increase other environmental impacts. Furthermore:
>
> (a) The individual effect may be changes resulting from a single project or a number of separate projects.
> (b) The cumulative impact from several projects is the change in the environment, which results from the incremental impacts of the project when added to other closely related past, present, and reasonably foreseeable probable future projects. Cumulative impacts can result from individually minor but collectively significant projects taking place over a period of time.

A cumulative impact analysis typically considers the development of the proposed project in conjunction with other modern development or land uses, such as farming, in the vicinity, as well as the effects of natural events on cultural resources. The potential cumulative effect of modern land use is the loss of cultural resources, which would collectively contribute to the loss of Murrieta and Riverside County prehistory. However, project-specific mitigation can be implemented to reduce the effect of development by ensuring the scientific recovery, study, and curation of important cultural resources.

Methods

In order to assess the potential cumulative impacts to resources associated with the McElwain Project, a focused research effort was initiated to analyze the effect of the loss of RIV-12,943 as a result of the consultation process. As a reference point, RIV-12,943 is part of a Native American complex of sites situated within the foothills surrounding Paloma Valley and near the

French Valley area of Riverside County, most of which are located north and northwest of the current project. French Valley and the surrounding areas are defined by the margins of the Santa Ana Mountains to the west and the San Jacinto Mountains to the east. The southern portion of Paloma Valley gives way into Murrieta Valley, which is encompassed by the Santa Margarita and Agua Tibia mountains. It is the convergence of these mountains that effectively separates western Riverside County from Orange County and the Pacific coast in general. The San Jacinto Mountains bound the general area to the east. Elevations at the project range from approximately 1,560 to 1,660 feet AMSL and the habitat in the vicinity of the project is characterized by a broad, flat valley and a series of rolling hills distinguished by scattered rock outcroppings. Prehistoric populations utilized the drainages within the granite-dominated hills surrounding the project. Seasonal drainages, like those within the current project, provided access to water. The major hydrologic features in the area are Spring Creek and Tucalota Creek, which are tributaries of Murrieta Creek located approximately 4.5 miles southwest of the subject property.

The geographic setting of the area in which RIV-12,943 is located is important to the prehistoric occupation pattern. The areas just northwest of the project are characterized by the boulder-covered granitic hills. The granitic hills represent Mesozoic granite, quartz monzonite, granodiorite, and quartz diorite deposits (Strand and Rogers 1977). The large hills to the far west of the project have fewer rock outcrops and represent a Jurassic formation that is part of the Southern California Batholith. These Jurassic deposits extend southwest toward Camp Pendleton and northwest toward Corona and include deposits of shale, sandstone, minor conglomerate, chert, slate, and limestone. The distribution of geologic patterns across the region is significant to prehistoric land use of the area. Granitic bedrock outcroppings served as milling stations while quartz and other tool stone outcroppings provided material for tool stones. Thus, the intersection of topography and hydrology resulted in an enhanced opportunity for human occupation during the Archaic and Late Prehistoric periods. As such, local Native American groups recognize the area as sensitive for resources to which they have ancestral ties. The Pechanga Band of Luiseño Mission Indians has registered much of the surrounding area in the SLF at the NAHC. Further, the Rincon Band of Luiseño Mission Indians reference one documented Luiseño Place Name within one mile of the project. In addition, the location of the Pechanga Band of Luiseño Mission Indians origin story is just under 10 miles south of the project.

The purpose of a cumulative impact analysis is to evaluate the loss of a resource in the context of the ever-dwindling population of similar sites within a defined region. The cumulative impact analysis for the McElwain Project and RIV-12,943 was conducted for an area of three miles surrounding the project. The boundaries of the study area are illustrated on Figure 5.0–1. From the perspective of analyzing the pattern of prehistoric occupation, including habitation sites and subsistence gathering sites, the same geographic setting that resulted in focused water resources that supported abundant plant and animal resources, also focused human attention in these areas. Therefore, a cumulative analysis of impacts has a sample universe that is confined by the geographic setting.

Figure 5.0–1
Cumulative Impact Cultural Resource Distribution Map

(Deleted for Public Review; Bound Separately)

To establish the population of prehistoric sites within the study area, archaeological site records were accessed from the EIC at UCR. The listing of prehistoric sites recorded in the study area are provided in Table 5.0–1 (Appendix F). For this analysis, the tabulation of data from each site recorded was focused on the site type, significance determination, and status. The "site type" category is important to the analysis because there are more common site types, such as milling stations, and less common site types, such as pictograph sites.

The significance rating listed for the sites was focused upon either the stated significance provided on the site records or the significance as deduced by BFSA based on the recorded information included in the site form. Sites with no information were listed as "unknown" under the "significance" and "site type" table columns.

The cumulative analysis utilized current Google Earth imagery to determine which resources were located in developed lands and no longer present. Site locations that appear to be in undeveloped or agricultural land were assumed to be "not impacted."

Results

Within the designated study area, a total of 240 prehistoric, five multicomponent, and 45 historic resources have previously been recorded. For the current analysis, multicomponent resources were analyzed by their prehistoric components, while the historic resources have been excluded. The prehistoric resources consist of 80 isolated artifacts, while the remaining 165 are classified as archaeological sites. Although shown on Figure 5.0–1, isolates were also removed from any further data analysis because an overwhelming number (N=60; 75.00 percent) are located within areas that have not been impacted by development. As such, the inclusion of isolate counts within the analysis would skew the data to falsely indicate more prehistoric resources remain unimpacted than actually exist.

As listed in Table 5.0–1, the prehistoric sites consist of 88 bedrock milling feature sites without any associated artifacts, 21 bedrock milling feature sites with associated lithic and/or artifact scatters, four rock art sites (one with habitation debris), 17 habitation sites, 28 artifact scatters, three quarry sites, three sites that lack any descriptive data, and one potentially prehistoric rock feature. Within the group of 165 prehistoric sites, 29 sites are listed as not significant or not eligible for the CRHR and/or the National Register of Historic Places (NRHP). Seventeen sites are listed as significant, potentially significant, or, based upon the site form data, appear potentially significant, and may be eligible for CRHR and/or the NRHP. The remaining 119 sites were not evaluated under CRHR or NRHP criteria. The table further illustrates that 75 of the sites have been impacted to some degree, while 90 sites appear to remain undisturbed or only marginally disturbed. The majority of sites that have been impacted are generally located in areas where commercial and residential development has occurred. The impact areas correspond to locations where the city of Murrieta and neighboring Wildomar and Menifee have expanded, while the areas within the unincorporated county of Riverside have remained primarily undeveloped or limited to rural homes or ranches. The exception to this would be the French Valley/Spencer's Crossing

development area of the county of Riverside in the far eastern portion of the search area.

As identified, by the resources found within the sample universe, the majority are bedrock milling sites with either no associated artifacts or signs of long-term habitation. Prehistoric bedrock milling features are the most ubiquitous archaeological features found in the region due to the flat exposure of granitic bedrock common to the southern California batholiths. As discussed by Parr and Wilke (1989), "almost no archaeological survey conducted in an area of reasonable size and containing bedrock outcrops fails to result in the discovery of additional milling slicks." Bedrock milling sites absent of any associated artifacts or signs of long term use are so common in the area because they represent the tangible evidence of the expedient utilization of natural resources by the prehistoric inhabitants of the region.

The cumulative impact assessment has confirmed the following facts:

1. The study area has been affected by development, resulting in approximately 55.00 percent of the area no longer displaying natural land forms.
2. The study area demonstrated that development impacts have mainly taken place to the southwest and northeast of the project site. Conversely, more open space or marginally developed land is present to the west, northwest, east, and southeast.
3. Of the group of seventeen sites identified as significant or potentially significant prehistoric sites, 12 (70.00 percent) are listed as not impacted.
4. Of the 75 sites previously impacted, the majority (N=49; 65.00 percent) are milling sites without any associated artifacts, similar to RIV-12,943, and either documented as or assumed to be not significant.
5. Of the 90 sites in the study area identified as not impacted (55.00 percent of the total), 49 are milling sites without any associated artifacts, nine are milling feature and artifact sites, four are rock art sites (one with habitation debris), nine are habitation sites, 16 are artifact scatters, two are quarry sites, and one is the potentially prehistoric rock feature.

To address the issue of cumulative impacts, the key point to establish is that modern development has encroached into approximately 55.00 percent of the study area, impacting 45.00 percent (N=76) of the recorded prehistoric sites. In reference to the McElwain Project, the question at hand is whether or not the potential impacts to RIV-12,943 associated with the currently proposed development constitutes a significant cumulative impact. Any destruction of a cultural resource represents a cumulative impact to a non-renewable resource. Whether or not the cumulative impact is significant is dependent on the type of site to be impacted compared to the remaining unimpacted resources. Therefore, the documentation of RIV-12,943, which is identified as a bedrock milling site that is not eligible for the CRHR, brings the total of currently undisturbed bedrock milling sites without any associated artifacts from 49 to 50. As such, the loss of Site RIV-12,943 would reduce the total of undisturbed similar sites in the study area by 2.00 percent.

Further, from the perspective of the total sample universe within the study area, the removal of the RIV-12,943 would reduce the population of unimpacted prehistoric sites by 1.00 percent.

Conclusion

Site RIV-12,943 is one of many similar bedrock milling sites without any associated artifacts found within the vicinity of the McElwain Project. As with many similar sites in the region, RIV-12,943 is evaluated individually as not eligible for the CRHR. As such, impacts to the site are not considered significant because the site is not considered an historical resource under CEQA. However, when put into context with similar site types in the area, the removal of Site RIV-12,943 would only reduce the population of unimpacted prehistoric sites within the sample universe by 1.00 percent. This is not considered a significant reduction within the sample universe of remaining prehistoric sites. Further, as bedrock milling sites are the most ubiquitous resource found in the area, the impacts associated with the removal of a site such as RIV-12,943 does not diminish the ability to study the prehistoric land-use of the region. The site and all its elements have been recorded, which can be utilized in any future data analysis of the prehistoric landscape. Therefore, the cumulative effect of the McElwain Project to prehistoric resources in the area is not considered significant.

Although Site RIV-12,943 is not eligible for the CRHR and cumulative impacts associated with the McElwain Project are not considered significant, it is recognized that from the perspective of tribal representatives from the Pechanga Band of Luiseño Mission Indians, the milling features on the property do present important elements of their past use of the property and the surrounding area. As such, measures are proposed within this report in Section 6.0 requiring attempts be made to relocate the milling features at Site RIV-12,943 from their present location to an area within the project envelope that will not be developed. As such, these efforts will further reduce any impacts to the prehistoric sites in region as attempts will be made to preserve all of the prehistoric elements of the site.

6.0 RECOMMENDATIONS

The cultural resources study for the McElwain Project resulted in the identification of four archaeological sites: one historic refuse deposit dating from the 1930s to the 1950s (RIV-12,942); one prehistoric bedrock milling feature site (RIV-12,943); one historic period well (RIV-12,944); and one prehistoric isolated portable mortar (P-33-028892). In order to accurately evaluate the archaeological sites and potential impacts of the project development on these resources, an archaeological testing/evaluation program was required to augment the level of work completed as part of the Phase I survey. The archaeological study was completed in accordance with CEQA (Section 15064.5) and CRHR significance evaluation criteria. These guidelines allow an archaeological/historical resource to be identified as important if it can be demonstrated that the area, or persons associated with that area, exemplifies or reflects significant aspects of the cultural, political, economic, or social history of the nation, state, or local area. Due to the lack of any CRHR-eligible subsurface deposits at any of the sites, all of the identified resources were determined to retain no further research potential beyond recording their locations and attributes, which has been completed. The evaluation of the subsurface tests provides the foundation from which to state that the potential for buried CRHR-eligible cultural deposits at all of the sites is unlikely and no significantly different information would be gathered from further investigations. However, due to the potential to encounter buried cultural materials during grading, it is recommended that all earth disturbance associated with the development of the project be monitored by an archaeologist and a Native American representative during any grading activity. In addition, although Site RIV-12,943 is not eligible for inclusion on the CRHR, due to concerns of the Native American representatives consulted, it is recommended, if possible, that the milling features be relocated during project development. Every effort should be made to relocate the bedrock milling features, but if relocation is not feasible, the features will be removed as part of the grading process.

6.1 Mitigation Monitoring

Monitoring during ground-disturbing activities, such as grading or trenching, by a qualified archaeologist is recommended to ensure that if buried cultural resources (*i.e.,* human remains, hearths, or cultural deposits) are encountered during construction, they will be handled in a timely and proper manner. The City of Murrieta will require an MMRP measures to present the protocol for the proper treatment of inadvertent finds. As such, it is recommended those measures, presented below, be included within the Conditions of Approval or MMRP for the project.

Mitigation Measures

CUL-1: The project permittee/owner shall retain a Riverside County-certified archaeological monitor to observe all ground-disturbing activities in an effort to identify any unknown

cultural resources.

1. Prior to grading, the project permittee/owner shall provide to the City verification that a certified archaeological monitor has been retained.

2. Prior to the initiation of grading, the Native American representative(s), the project construction manager, and the consulting archaeologist shall meet on site to inspect all milling features that fall within the grading envelope in order to determine which milling features are candidates for relocation. All relocation work should be directed by an archaeological monitor and a Native American representative. The relocated bedrock milling features would be mapped by GPS and these locations will be recorded on site maps that will be filed with the updated site forms submitted to the EIC at UCR.

3. The archaeological monitor shall attend a pre-construction meeting to review discovery protocol with construction personnel.

    a. The archaeological monitoring shall be on-site for all earth-disturbing actions, including grading, clearing, or trenching, to observe soil movement and to identify any cultural materials uncovered.

    b. Any cultural resources encountered during grading shall be recorded following standard archaeological protocol and subjected to a cultural resources evaluation. Should the discovered resource prove to be significant based on CEQA criteria, subsequent mitigation measures developed by the Project Archaeologist and reviewed by the City and Tribal representatives may be required to mitigate potential impacts from the grading program.

CUL-2: ***Archaeological Monitoring:*** At least 30 days prior to grading permit issuance and before any grading, excavation, and/or ground-disturbing activities on the site take place, the project permittee/owner shall retain a Riverside County-certified archaeological monitor to observe all ground-disturbing activities in an effort to identify any unknown archaeological resources.

1. The Project Archaeologist, in consultation with consulting tribes, the permittee/owner, and the City, shall develop and submit to the City an Archaeological Monitoring Plan to address the details, timing, and responsibility of all archaeological and cultural activities that will occur on the project site. Details

in the plan shall include:

a. Project grading and development scheduling;

b. If feasible, the methods to be used for milling feature relocation and the designation of the proposed location where the milling features may be relocated.

c. The development of a schedule in coordination with the permittee/owner and the Project Archeologist for designated Native American Tribal monitors from the consulting tribes during grading, excavation and ground-disturbing activities on the site: including the scheduling, safety requirements, duties, scope of work, and Native American Tribal monitors' authority to stop and redirect grading activities in coordination with all project archaeologists; and,

d. The protocols and stipulations that the permittee/owner, City, tribes, and Project Archaeologist will follow in the event of inadvertent cultural resources discoveries, including any newly discovered cultural resource deposits that shall be subject to a cultural resources evaluation.

2. A final report documenting the monitoring activity and disposition of any recovered cultural resources shall be submitted to the City of Murrieta, Eastern Information Center, and the consulting tribes within 60 days of completion of monitoring.

CUL-3: ***Native American Monitoring:*** Native American Tribal monitors shall also participate in monitoring of ground-disturbing activity. At least 30 days prior to issuance of grading permits, agreements between the permittee/owner and a Native American monitor shall be developed regarding prehistoric cultural resources and shall identify any monitoring requirements and treatment of Tribal Cultural Resources so as to meet the requirements of CEQA. The monitoring agreement shall address the treatment of known Tribal Cultural Resources; the designation, responsibilities, and participation of professional Native American Tribal monitors during grading, excavation, and ground-disturbing activities; and project grading and development scheduling.

CUL-4: ***Disposition of Cultural Resources:*** All Native American cultural resources recovered throughout the course of the project, including those discovered during the grading for this project, will be subject to one or more of the following treatments, in order of preference, which shall be employed under consultation of the participating tribes.

Evidence of such shall be submitted to the City of Murrieta Planning Department:

1. Preservation-in-place means avoiding the resources, leaving them in the place where they were found with no development affecting the integrity of the resource.

2. On-site reburial of the discovered items as detailed in the Monitoring Plan required pursuant to Mitigation Measure CUL-2. This shall include measures and provisions to protect the future reburial area from any future impacts in perpetuity. Reburial shall not occur until all legally required cataloging and basic recordation have been completed. No analysis of sacred items is permitted without the written consent of all Consulting Native American Tribal Governments.

3. The permittee/owner shall relinquish ownership of all cultural resources, including sacred items, burial goods, and all archaeological artifacts and non-human remains following the mandated laboratory analysis and cataloging of the collection by the Project Archaeologist. As part of the required mitigation for impacts to cultural resources, the following shall be completed:

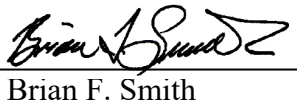
    a. A curation agreement shall be submitted to the City listing an appropriate qualified repository within Riverside County that meets federal standards per 36 Code of Federal Regulations 800 Part 79 where collections would be curated and made available to other archaeologists/researchers for further study. The collections and associated records shall be transferred, including title, to an appropriate curation facility within Riverside County, to be accompanied by payment of the fees necessary for permanent curation; and,

    b. At the completion of grading, excavation, and ground disturbing activities on-site, a Phase IV Monitoring Report shall be submitted to the City documenting monitoring activities conducted by the Project Archaeologist and Native American Tribal monitors within 60 days of completion of grading. This report shall document the impacts to cultural resources on the property; describe how each mitigation measure was fulfilled; document the type of cultural resources recovered and the disposition of such resources; provide evidence of the required cultural sensitivity training for the construction staff held during the required pre-grade meeting; and, in a confidential appendix, include the daily/weekly monitoring notes from the archaeologist. All reports produced will be submitted to the City of Murrieta, Eastern Information Center, and Consulting tribes.

CUL-5: ***Human remains:*** If human remains are encountered, California Health and Safety Code Section 7050.5 states that no further disturbance shall occur until the Riverside County Coroner has made the necessary findings as to origin. Further, pursuant to California Public Resources Code Section 5097.98(b), remains shall be left in place and free from disturbance until a final decision as to the treatment and disposition has been made. If the Riverside County Coroner determines the remains to be Native American, the Native American Heritage Commission must be contacted within 24 hours. The Native American Heritage Commission must then immediately identify the "most likely descendants(s)" for purposes of receiving notification of discovery. The most likely descendant(s) shall then make recommendations within 48 hours and engage in consultation concerning the treatment of the remains as provided in Public Resources Code Section 5097.98.

7.0 CERTIFICATION

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



October 14, 2019

Brian F. Smith
Principal Investigator

Date

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Brian F. Smith and Associates

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APPENDIX A

Qualifications of Key Personnel

Brian F. Smith, MA

Owner, Principal Investigator

Brian F. Smith and Associates, Inc.
14010 Poway Road • Suite A •
Phone: (858) 679-8218 • Fax: (858) 679-9896 • E-Mail: bsmith@bfsa-ca.com

Education

Master of Arts, History, University of San Diego, California **1982**

Bachelor of Arts, History, and Anthropology, University of San Diego, California **1975**

Professional Memberships

Society for California Archaeology

Experience

Principal Investigator **1977–Present**
Brian F. Smith and Associates, Inc. **Poway, California**

Brian F. Smith is the owner and principal historical and archaeological consultant for Brian F. Smith and Associates. Over the past 32 years, he has conducted over 2,500 cultural resource studies in California, Arizona, Nevada, Montana, and Texas. These studies include every possible aspect of archaeology from literature searches and large-scale surveys to intensive data recovery excavations. Reports prepared by Mr. Smith have been submitted to all facets of local, state, and federal review agencies, including the US Army Crops of Engineers, the Bureau of Land Management, the Bureau of Reclamation, the Department of Defense, and the Department of Homeland Security. In addition, Mr. Smith has conducted studies for utility companies (Sempra Energy) and state highway departments (CalTrans).

Professional Accomplishments

These selected major professional accomplishments represent research efforts that have added significantly to the body of knowledge concerning the prehistoric life ways of cultures once present in the Southern California area and historic settlement since the late 18th century. Mr. Smith has been principal investigator on the following select projects, except where noted.

Downtown San Diego Mitigation and Monitoring Reporting Programs: Large numbers of downtown San Diego mitigation and monitoring projects submitted to the Centre City Development Corporation, some of which included Strata (2008), Hotel Indigo (2008), Lofts at 707 10th Avenue Project (2007), Breeza (2007), Bayside at the Embarcadero (2007), Aria (2007), Icon (2007), Vantage Pointe (2007), Aperture (2007), Sapphire Tower (2007), Lofts at 655 Sixth Avenue (2007), Metrowork (2007), The Legend (2006), The Mark (2006), Smart Corner (2006), Lofts at 677 7th Avenue (2005), Aloft on Cortez Hill (2005), Front and

Beech Apartments (2003), Bella Via Condominiums (2003), Acqua Vista Residential Tower (2003), Northblock Lofts (2003), Westin Park Place Hotel (2001), Parkloft Apartment Complex (2001), Renaissance Park (2001), and Laurel Bay Apartments (2001).

Archaeology at the Padres Ballpark: Involved the analysis of historic resources within a seven-block area of the "East Village" area of San Diego, where occupation spanned a period from the 1870s to the 1940s. Over a period of two years, BFSA recovered over 200,000 artifacts and hundreds of pounds of metal, construction debris, unidentified broken glass, and wood. Collectively, the Ballpark Project and the other downtown mitigation and monitoring projects represent the largest historical archaeological program anywhere in the country in the past decade (2000-2007).

4S Ranch Archaeological and Historical Cultural Resources Study: Data recovery program consisted of the excavation of over 2,000 square meters of archaeological deposits that produced over one million artifacts, containing primarily prehistoric materials. The archaeological program at 4S Ranch is the largest archaeological study ever undertaken in the San Diego County area and has produced data that has exceeded expectations regarding the resolution of long-standing research questions and regional prehistoric settlement patterns.

Charles H. Brown Site: Attracted international attention to the discovery of evidence of the antiquity of man in North America. Site located in Mission Valley, in the city of San Diego.

Del Mar Man Site: Study of the now famous Early Man Site in Del Mar, California, for the San Diego Science Foundation and the San Diego Museum of Man, under the direction of Dr. Spencer Rogers and Dr. James R. Moriarty.

Old Town State Park Projects: Consulting Historical Archaeologist. Projects completed in the Old Town State Park involved development of individual lots for commercial enterprises. The projects completed in Old Town include Archaeological and Historical Site Assessment for the Great Wall Cafe (1992), Archaeological Study for the Old Town Commercial Project (1991), and Cultural Resources Site Survey at the Old San Diego Inn (1988).

Site W-20, Del Mar, California: A two-year-long investigation of a major prehistoric site in the Del Mar area of the city of San Diego. This research effort documented the earliest practice of religious/ceremonial activities in San Diego County (circa 6,000 years ago), facilitated the projection of major non-material aspects of the La Jolla Complex, and revealed the pattern of civilization at this site over a continuous period of 5,000 years. The report for the investigation included over 600 pages, with nearly 500,000 words of text, illustrations, maps, and photographs documenting this major study.

City of San Diego Reclaimed Water Distribution System: A cultural resource study of nearly 400 miles of pipeline in the city and county of San Diego.

Master Environmental Assessment Project, City of Poway: Conducted for the City of Poway to produce a complete inventory of all recorded historic and prehistoric properties within the city. The information was used in conjunction with the City's General Plan Update to produce a map matrix of the city showing areas of high, moderate, and low potential for the presence of cultural resources. The effort also included the development of the City's Cultural Resource Guidelines, which were adopted as City policy.

Draft of the City of Carlsbad Historical and Archaeological Guidelines: Contracted by the City of Carlsbad to produce the draft of the City's historical and archaeological guidelines for use by the Planning Department of the City.

The Mid-Bayfront Project for the City of Chula Vista: Involved a large expanse of undeveloped agricultural land situated between the railroad and San Diego Bay in the northwestern portion of the city. The study included the analysis of some potentially historic features and numerous prehistoric sites.

Cultural Resources Survey and Test of Sites Within the Proposed Development of the Audie Murphy Ranch, Riverside County, California: Project manager/director of the investigation of 1,113.4 acres and 43 sites, both prehistoric and historic—included project coordination; direction of field crews; evaluation of sites for significance based on County of Riverside and CEQA guidelines; assessment of cupule, pictograph, and rock shelter sites, co-authoring of cultural resources project report. February-September 2002.

Cultural Resources Evaluation of Sites Within the Proposed Development of the Otay Ranch Village 13 Project, San Diego County, California: Project manager/director of the investigation of 1,947 acres and 76 sites, both prehistoric and historic—included project coordination and budgeting; direction of field crews; assessment of sites for significance based on County of San Diego and CEQA guidelines; co-authoring of cultural resources project report. May-November 2002.

Cultural Resources Survey for the Remote Video Surveillance Project, El Centro Sector, Imperial County: Project manager/director for a survey of 29 individual sites near the U.S./Mexico Border for proposed video surveillance camera locations associated with the San Diego Border barrier Project—project coordination and budgeting; direction of field crews; site identification and recordation; assessment of potential impacts to cultural resources; meeting and coordinating with U.S. Army Corps of Engineers, U.S. Border Patrol, and other government agencies involved; co-authoring of cultural resources project report. January, February, and July 2002.

Cultural Resources Survey and Test of Sites Within the Proposed Development of the Menifee West GPA, Riverside County, California: Project manager/director of the investigation of nine sites, both prehistoric and historic—included project coordination and budgeting; direction of field crews; assessment of sites for significance based on County of Riverside and CEQA guidelines; historic research; co-authoring of cultural resources project report. January-March 2002.

Mitigation of An Archaic Cultural Resource for the Eastlake III Woods Project for the City of Chula Vista, California: Project archaeologist/ director—included direction of field crews; development and completion of data recovery program including collection of material for specialized faunal and botanical analyses; assessment of sites for significance based on CEQA guidelines; management of artifact collections cataloging and curation; data synthesis; co-authoring of cultural resources project report, in prep. September 2001-March 2002.

Cultural Resources Survey and Test of Sites Within the Proposed French Valley Specific Plan/EIR, Riverside County, California: Project manager/director of the investigation of two prehistoric and three historic sites—included project coordination and budgeting; survey of project area; Native American consultation; direction of field crews; assessment of sites for significance based on CEQA guidelines; cultural resources project report in prep. July-August 2000.

Cultural Resources Survey and Test of Sites Within the Proposed Lawson Valley Project, San Diego County, California: Project manager/director of the investigation of 28 prehistoric and two historic sites—included project coordination; direction of field crews; assessment of sites for significance based on CEQA guidelines; cultural resources project report in prep. July-August 2000.

Cultural Resource Survey and Geotechnical Monitoring for the Mohyi Residence Project, La Jolla, California: Project manager/director of the investigation of a single-dwelling parcel—included project coordination; field survey; assessment of parcel for potentially buried cultural deposits; monitoring of geotechnichal borings; authoring of cultural resources project report. Brian F. Smith and Associates, San Diego, California. June 2000.

Enhanced Cultural Resource Survey and Evaluation for the Prewitt/Schmucker/Cavadias Project, La Jolla, California: Project manager/director of the investigation of a single-dwelling parcel—included project coordination; direction of field crews; assessment of parcel for potentially buried cultural deposits; authoring of cultural resources project report. June 2000.

Cultural Resources Survey and Test of Sites Within the Proposed Development of the Menifee Ranch, Riverside County, California: Project manager/director of the investigation of one prehistoric and five historic sites—included project coordination and budgeting; direction of field crews; feature recordation; historic structure assessments; assessment of sites for significance based on CEQA guidelines; historic research; co-authoring of cultural resources project report. February-June 2000.

Salvage Mitigation of a Portion of the San Diego Presidio Identified During Water Pipe Construction for the City of San Diego, California: Project archaeologist/director—included direction of field crews; development and completion of data recovery program; management of artifact collections cataloging and curation; data synthesis and authoring of cultural resources project report in prep. April 2000.

Enhanced Cultural Resource Survey and Evaluation for the Tyrian 3 Project, La Jolla, California: Project manager/director of the investigation of a single-dwelling parcel—included project coordination; assessment of parcel for potentially buried cultural deposits; authoring of cultural resources project report. April 2000.

Enhanced Cultural Resource Survey and Evaluation for the Lamont 5 Project, Pacific Beach, California: Project manager/director of the investigation of a single-dwelling parcel—included project coordination; assessment of parcel for potentially buried cultural deposits; authoring of cultural resources project report. April 2000.

Enhanced Cultural Resource Survey and Evaluation for the Reiss Residence Project, La Jolla, California: Project manager/director of the investigation of a single-dwelling parcel—included project coordination; assessment of parcel for potentially buried cultural deposits; authoring of cultural resources project report. March-April 2000.

Salvage Mitigation of a Portion of Site SDM-W-95 (CA-SDI-211) for the Poinsettia Shores Santalina Development Project and Caltrans, Carlsbad, California: Project achaeologist/ director—included direction of field crews; development and completion of data recovery program; management of artifact collections cataloging and curation; data synthesis and authoring of cultural resources project report in prep. December 1999-January 2000.

Survey and Testing of Two Prehistoric Cultural Resources for the Airway Truck Parking Project, Otay Mesa, California: Project archaeologist/director—included direction of field crews; development and completion of testing recovery program; assessment of site for significance based on CEQA guidelines; authoring of cultural resources project report, in prep. December 1999-January 2000.

Cultural Resources Phase I and II Investigations for the Tin Can Hill Segment of the Immigration and Naturalization Services Triple Fence Project Along the International Border, San Diego County, California: Project manager/director for a survey and testing of a prehistoric quarry site along the border—NRHP eligibility assessment; project coordination and budgeting; direction of field crews; feature recordation; meeting and coordinating with U.S. Army Corps of Engineers; co-authoring of cultural resources project report. December 1999-January 2000.

Mitigation of a Prehistoric Cultural Resource for the Westview High School Project for the City of San Diego, California: Project archaeologist/ director—included direction of field crews; development and completion of data recovery program including collection of material for specialized faunal and botanical analyses; assessment of sites for significance based on CEQA guidelines; management of artifact collections cataloging and curation; data synthesis; co-authoring of cultural resources project report, in prep. October 1999-January 2000.

Mitigation of a Prehistoric Cultural Resource for the Otay Ranch SPA-One West Project for the City of Chula Vista, California: Project archaeologist/director—included direction of field crews; development of data recovery program; management of artifact collections cataloging and curation; assessment of

site for significance based on CEQA guidelines; data synthesis; authoring of cultural resources project report, in prep. September 1999-January 2000.

Monitoring of Grading for the Herschel Place Project, La Jolla, California: Project archaeologist/ monitor—included monitoring of grading activities associated with the development of a single-dwelling parcel. September 1999.

Survey and Testing of a Historic Resource for the Osterkamp Development Project, Valley Center, California: Project archaeologist/ director—included direction of field crews; development and completion of data recovery program; budget development; assessment of site for significance based on CEQA guidelines; management of artifact collections cataloging and curation; data synthesis; authoring of cultural resources project report. July-August 1999.

Survey and Testing of a Prehistoric Cultural Resource for the Proposed College Boulevard Alignment Project, Carlsbad, California: Project manager/director —included direction of field crews; development and completion of testing recovery program; assessment of site for significance based on CEQA guidelines; management of artifact collections cataloging and curation; data synthesis; authoring of cultural resources project report, in prep. July-August 1999.

Survey and Evaluation of Cultural Resources for the Palomar Christian Conference Center Project, Palomar Mountain, California: Project archaeologist—included direction of field crews; assessment of sites for significance based on CEQA guidelines; management of artifact collections cataloging and curation; data synthesis; authoring of cultural resources project report. July-August 1999.

Survey and Evaluation of Cultural Resources at the Village 2 High School Site, Otay Ranch, City of Chula Vista, California: Project manager/director —management of artifact collections cataloging and curation; assessment of site for significance based on CEQA guidelines; data synthesis; authoring of cultural resources project report. July 1999.

Cultural Resources Phase I, II, and III Investigations for the Immigration and Naturalization Services Triple Fence Project Along the International Border, San Diego County, California: Project manager/director for the survey, testing, and mitigation of sites along border—supervision of multiple field crews, NRHP eligibility assessments, Native American consultation, contribution to Environmental Assessment document, lithic and marine shell analysis, authoring of cultural resources project report. August 1997-January 2000.

Phase I, II, and II Investigations for the Scripps Poway Parkway East Project, Poway California: Project archaeologist/project director—included recordation and assessment of multicomponent prehistoric and historic sites; direction of Phase II and III investigations; direction of laboratory analyses including prehistoric and historic collections; curation of collections; data synthesis; coauthorship of final cultural resources report. February 1994; March-September 1994; September-December 1995.

Archaeological Evaluation of Cultural Resources Within the Proposed Corridor for the San Elijo Water Reclamation System Project, San Elijo, California: Project manager/director —test excavations; direction of artifact identification and analysis; graphics production; coauthorship of final cultural resources report. December 1994-July 1995.

Evaluation of Cultural Resources for the Environmental Impact Report for the Rose Canyon Trunk Sewer Project, San Diego, California: Project manager/Director —direction of test excavations; identification and analysis of prehistoric and historic artifact collections; data synthesis; co-authorship of final cultural resources report, San Diego, California. June 1991-March 1992.

Reports/Papers

Author, coauthor, or contributor to over 2,500 cultural resources management publications, a selection of which are presented below.

2015 An Archaeological/Historical Study for the Safari Highlands Ranch Project, City of Escondido, County of San Diego.

2015 A Phase I and II Cultural Resources Assessment for the Decker Parcels II Project, Planning Case No. 36962, Riverside County, California.

2015 A Phase I and II Cultural Resources Assessment for the Decker Parcels I Project, Planning Case No. 36950, Riverside County, California.

2015 Cultural Resource Data Recovery and Mitigation Monitoring Program for Site SDI-10,237 Locus F, Everly Subdivision Project, El Cajon, California.

2015 Phase I Cultural Resource Survey for the Woodward Street Senior Housing Project, City of San Marcos, California (APN 218-120-31).

2015 An Updated Cultural Resource Survey for the Box Springs Project (TR 33410), APNs 255-230-010, 255-240-005, 255-240-006, and Portions of 257-180-004, 257-180-005, and 257-180-006.

2015 A Phase I and II Cultural Resource Report for the Lake Ranch Project, TR 36730, Riverside County, California.

2015 A Phase II Cultural Resource Assessment for the Munro Valley Solar Project, Inyo County, California.

2014 Cultural Resources Monitoring Report for the Diamond Valley Solar Project, Community of Winchester, County of Riverside.

2014 National Historic Preservation Act Section 106 Compliance for the Proposed Saddleback Estates Project, Riverside County, California.

2014 A Phase II Cultural Resource Evaluation Report for RIV-8137 at the Toscana Project, TR 36593, Riverside County, California.

2014 Cultural Resources Study for the Estates at Del Mar Project, City of Del Mar, San Diego, California (TTM 14-001).

2014 Cultural Resources Study for the Aliso Canyon Major Subdivision Project, Rancho Santa Fe, San Diego County, California.

2014 Cultural Resources Due Diligence Assessment of the Ocean Colony Project, City of Encinitas.

2014 A Phase I and Phase II Cultural Resource Assessment for the Citrus Heights II Project, TTM 36475, Riverside County, California.

2013 A Phase I Cultural Resource Assessment for the Modular Logistics Center, Moreno Valley, Riverside County, California.

2013 A Phase I Cultural Resources Survey of the Ivey Ranch Project, Thousand Palms, Riverside County, California.

2013 Cultural Resources Report for the Emerald Acres Project, Riverside County, California.

2013 A Cultural Resources Records Search and Review for the Pala Del Norte Conservation Bank Project, San Diego County, California.

2013 An Updated Phase I Cultural Resources Assessment for Tentative Tract Maps 36484 and 36485, Audie Murphy Ranch, City of Menifee, County of Riverside.

2013 El Centro Town Center Industrial Development Project (EDA Grant No. 07-01-06386); Result of Cultural Resource Monitoring.

2013 Cultural Resources Survey Report for the Renda Residence Project, 9521 La Jolla Farms Road, La Jolla, California.

2013 A Phase I Cultural Resource Study for the Ballpark Village Project, San Diego, California.

2013 Archaeological Monitoring and Mitigation Program, San Clemente Senior Housing Project, 2350 South El Camino Real, City of San Clemente, Orange County, California (CUP No. 06-065; APN-060-032-04).

2012 Mitigation Monitoring Report for the Los Peñasquitos Recycled Water Pipeline.

2012 Cultural Resources Report for Menifee Heights (Tract 32277).

2012 A Phase I Cultural Resource Study for the Altman Residence at 9696 La Jolla Farms Road, La Jolla, California 92037.

2012 Mission Ranch Project (TM 5290-1/MUP P87-036W3): Results of Cultural Resources Monitoring During Mass Grading.

2012 A Phase I Cultural Resource Study for the Payan Property Project, San Diego, California.

2012 Phase I Archaeological Survey of the Rieger Residence, 13707 Durango Drive, Del Mar, California 92014, APN 300-369-49.

2011 Mission Ranch Project (TM 5290-1/MUP P87-036W3): Results of Cultural Resources Monitoring During Mass Grading.

2011 Mitigation Monitoring Report for the 1887 Viking Way Project, La Jolla, California.

2011 Cultural Resource Monitoring Report for the Sewer Group 714 Project.

2011 Results of Archaeological Monitoring at the 10th Avenue Parking Lot Project, City of San Diego, California (APNs 534-194-02 and 03).

2011 Archaeological Survey of the Pelberg Residence for a Bulletin 560 Permit Application; 8335 Camino Del Oro; La Jolla, California 92037 APN 346-162-01-00 .

2011 A Cultural Resources Survey Update and Evaluation for the Robertson Ranch West Project and an Evaluation of National Register Eligibility of Archaeological sites for Sites for Section 106 Review (NHPA).

2011 Mitigation Monitoring Report for the 43rd and Logan Project.

2011 Mitigation Monitoring Report for the Sewer Group 682 M Project, City of San Diego Project #174116.

2011 A Phase I Cultural Resource Study for the Nooren Residence Project, 8001 Calle de la Plata, La Jolla, California, Project No. 226965.

2011 A Phase I Cultural Resource Study for the Keating Residence Project, 9633 La Jolla Farms Road, La Jolla, California 92037.

2010 Mitigation Monitoring Report for the 15th & Island Project, City of San Diego; APNs 535-365-01, 535-365-02 and 535-392-05 through 535-392-07.

2010 Archaeological Resource Report Form: Mitigation Monitoring of the Sewer and Water Group 772 Project, San Diego, California, W.O. Nos. 187861 and 178351.

2010 Pottery Canyon Site Archaeological Evaluation Project, City of San Diego, California, Contract No. H105126.

2010 Archaeological Resource Report Form: Mitigation Monitoring of the Racetrack View Drive Project, San Diego, California; Project No. 163216.

2010 A Historical Evaluation of Structures on the Butterfield Trails Property.

2010 Historic Archaeological Significance Evaluation of 1761 Haydn Drive, Encinitas, California (APN 260-276-07-00).

2010 Results of Archaeological Monitoring of the Heller/Nguyen Project, TPM 06-01, Poway, California.

2010 Cultural Resource Survey and Evaluation Program for the Sunday Drive Parcel Project, San Diego County, California, APN 189-281-14.

2010 Archaeological Resource Report Form: Mitigation Monitoring of the Emergency Garnet Avenue Storm Drain Replacement Project, San Diego, California, Project No. B10062

2010 An Archaeological Study for the 1912 Spindrift Drive Project

2009 Cultural Resource Assessment of the North Ocean Beach Gateway Project City of San Diego #64A-003A; Project #154116.

2009 Archaeological Constraints Study of the Morgan Valley Wind Assessment Project, Lake County, California.

2008 Results of an Archaeological Review of the Helen Park Lane 3.1-acre Property (APN 314-561-31), Poway, California.

2008 Archaeological Letter Report for a Phase I Archaeological Assessment of the Valley Park Condominium Project, Ramona, California; APN 282-262-75-00.

2007 Archaeology at the Ballpark. Brian F. Smith and Associates, San Diego, California. Submitted to the Centre City Development Corporation.

2007 Result of an Archaeological Survey for the Villages at Promenade Project (APNs 115-180-007-3,115-180-049-1, 115-180-042-4, 115-180-047-9) in the City of Corona, Riverside County.

2007 Monitoring Results for the Capping of Site CA-SDI-6038/SDM-W-5517 within the Katzer Jamul Center Project; P00-017.

2006 Archaeological Assessment for The Johnson Project (APN 322-011-10), Poway, California.

2005 Results of Archaeological Monitoring at the El Camino Del Teatro Accelerated Sewer Replacement Project (Bid No. K041364; WO # 177741; CIP # 46-610.6.

2005 Results of Archaeological Monitoring at the Baltazar Draper Avenue Project (Project No. 15857; APN: 351-040-09).

2004 TM 5325 ER #03-14-043 Cultural Resources.

2004 An Archaeological Survey and an Evaluation of Cultural Resources at the Salt Creek Project. Report on file at Brian F. Smith and Associates.

2003 An Archaeological Assessment for the Hidden Meadows Project, San Diego County, TM 5174, Log No. 99-08-033. Report on file at Brian F. Smith and Associates.

2003 An Archaeological Survey for the Manchester Estates Project, Coastal Development Permit #02-009, Encinitas, California. Report on file at Brian F. Smith and Associates.

2003 Archaeological Investigations at the Manchester Estates Project, Coastal Development Permit #02-009, Encinitas, California. Report on file at Brian F. Smith and Associates.

2003 Archaeological Monitoring of Geological Testing Cores at the Pacific Beach Christian Church Project. Report on file at Brian F. Smith and Associates.

2003 San Juan Creek Drilling Archaeological Monitoring. Report on file at Brian F. Smith and Associates.

2003 Evaluation of Archaeological Resources Within the Spring Canyon Biological Mitigation Area, Otay Mesa, San Diego County, California. Brian F. Smith and Associates, San Diego, California.

2002 An Archaeological/Historical Study for the Otay Ranch Village 13 Project (et al.). Brian F. Smith and Associates, San Diego, California.

2002 An Archaeological/Historical Study for the Audie Murphy Ranch Project (et al.). Brian F. Smith and Associates, San Diego, California.

2002 Results of an Archaeological Survey for the Remote Video Surveillance Project, El Centro Sector, Imperial County, California. Brian F. Smith and Associates, San Diego, California.

2002 A Cultural Resources Survey and Evaluation for the Proposed Robertson Ranch Project, City of Carlsbad. Brian F. Smith and Associates, San Diego, California.

2002 Archaeological Mitigation of Impacts to Prehistoric Site SDI-7976 for the Eastlake III Woods Project, Chula Vista, California. Brian F. Smith and Associates, San Diego, California.

2002 An Archaeological/Historical Study for Tract No. 29777, Menifee West GPA Project, Perris Valley, Riverside County. Brian F. Smith and Associates, San Diego, California.

2002 An Archaeological/Historical Study for Tract No. 29835, Menifee West GPA Project, Perris Valley, Riverside County. Brian F. Smith and Associates, San Diego, California.

2001 An Archaeological Survey and Evaluation of a Cultural Resource for the Moore Property, Poway. Brian F. Smith and Associates, San Diego, California.

2001 An Archaeological Report for the Mitigation, Monitoring, and Reporting Program at the Water and Sewer Group Job 530A, Old Town San Diego. Brian F. Smith and Associates, San Diego, California.

2001 A Cultural Resources Impact Survey for the High Desert Water District Recharge Site 6 Project, Yucca Valley. Brian F. Smith and Associates, San Diego, California.

2001 Archaeological Mitigation of Impacts to Prehistoric Site SDI-13,864 at the Otay Ranch SPA-One West Project. Brian F. Smith and Associates, San Diego, California.

2001 A Cultural Resources Survey and Site Evaluations at the Stewart Subdivision Project, Moreno Valley, County of San Diego. Brian F. Smith and Associates, San Diego, California.

2000 An Archaeological/Historical Study for the French Valley Specific Plan/EIR, French Valley, County of Riverside. Brian F. Smith and Associates, San Diego, California.

2000 Results of an Archaeological Survey and the Evaluation of Cultural Resources at The TPM#24003– Lawson Valley Project. Brian F. Smith and Associates, San Diego, California.

2000 Archaeological Mitigation of Impacts to Prehistoric Site SDI-5326 at the Westview High School Project for the Poway Unified School District. Brian F. Smith and Associates, San Diego, California.

2000 An Archaeological/Historical Study for the Menifee Ranch Project. Brian F. Smith and Associates, San Diego, California.

2000 An Archaeological Survey and Evaluation of Cultural Resources for the Bernardo Mountain Project, Escondido, California. Brian F. Smith and Associates, San Diego, California.

2000 A Cultural Resources Impact Survey for the Nextel Black Mountain Road Project, San Diego, California. Brian F. Smith and Associates, San Diego, California.

2000 A Cultural Resources Impact Survey for the Rancho Vista Project, 740 Hilltop Drive, Chula Vista, California. Brian F. Smith and Associates, San Diego, California.

2000 A Cultural Resources Impact Survey for the Poway Creek Project, Poway, California. Brian F. Smith and Associates, San Diego, California.

2000 Cultural Resource Survey and Geotechnical Monitoring for the Mohyi Residence Project. Brian F. Smith and Associates, San Diego, California.

2000 Enhanced Cultural Resource Survey and Evaluation for the Prewitt/Schmucker/ Cavadias Project. Brian F. Smith and Associates, San Diego, California.

2000 Enhanced Cultural Resource Survey and Evaluation for the Lamont 5 Project. Brian F. Smith and Associates, San Diego, California.

2000 Salvage Excavations at Site SDM-W-95 (CA-SDI-211) for the Poinsettia Shores Santalina Development Project, Carlsbad, California. Brian F. Smith and Associates, San Diego, California.

2000 Enhanced Cultural Resource Survey and Evaluation for the Reiss Residence Project, La Jolla, California. Brian F. Smith and Associates, San Diego, California.

2000 Enhanced Cultural Resource Survey and Evaluation for the Tyrian 3 Project, La Jolla, California. Brian F. Smith and Associates, San Diego, California.

2000 A Report for an Archaeological Evaluation of Cultural Resources at the Otay Ranch Village Two SPA, Chula Vista, California. Brian F. Smith and Associates, San Diego, California.

2000 An Archaeological Evaluation of Cultural Resources for the Airway Truck Parking Project, Otay Mesa, County of San Diego. Brian F. Smith and Associates, San Diego, California.

2000 Results of an Archaeological Survey and Evaluation of a Resource for the Tin Can Hill Segment of the Immigration and Naturalization and Immigration Service Border Road, Fence, and Lighting Project, San Diego County, California. Brian F. Smith and Associates, San Diego, California.

1999 An Archaeological Survey of the Home Creek Village Project, 4600 Block of Home Avenue, San Diego, California. Brian F. Smith and Associates, San Diego, California.

1999 An Archaeological Survey for the Sgobassi Lot Split, San Diego County, California. Brian F. Smith and Associates, San Diego, California.

1999 An Evaluation of Cultural Resources at the Otay Ranch Village 11 Project. Brian F. Smith and Associates, San Diego, California.

1999 An Archaeological/Historical Survey and Evaluation of a Cultural Resource for The Osterkamp Development Project, Valley Center, California. Brian F. Smith and Associates, San Diego, California.

1999 An Archaeological Survey and Evaluation of Cultural Resources for the Palomar Christian Conference Center Project, Palomar Mountain, California. Brian F. Smith and Associates, San Diego, California.

1999 An Archaeological Survey and Evaluation of a Cultural Resource for the Proposed College Boulevard Alignment Project. Brian F. Smith and Associates, San Diego, California.

1999 Results of an Archaeological Evaluation for the Anthony's Pizza Acquisition Project in Ocean Beach, City of San Diego (with L. Pierson and B. Smith). Brian F. Smith and Associates, San Diego, California.

1996 An Archaeological Testing Program for the Scripps Poway Parkway East Project. Brian F. Smith and Associates, San Diego, California.

1995 Results of a Cultural Resources Study for the 4S Ranch. Brian F. Smith and Associates, San Diego, California.

1995 Results of an Archaeological Evaluation of Cultural Resources Within the Proposed Corridor for the San Elijo Water Reclamation System. Brian F. Smith and Associates, San Diego, California.

1994 Results of the Cultural Resources Mitigation Programs at Sites SDI-11,044/H and SDI-12,038 at the Salt Creek Ranch Project . Brian F. Smith and Associates, San Diego, California.

1993 Results of an Archaeological Survey and Evaluation of Cultural Resources at the Stallion Oaks Ranch Project. Brian F. Smith and Associates, San Diego, California.

1992 Results of an Archaeological Survey and the Evaluation of Cultural Resources at the Ely Lot Split Project. Brian F. Smith and Associates, San Diego, California.

1991 The Results of an Archaeological Study for the Walton Development Group Project. Brian F. Smith and Associates, San Diego, California.

Tracy A. Stropes, MA, RPA

Senior Project Archaeologist

Brian F. Smith and Associates, Inc.
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Education

Master of Arts, Anthropology, San Diego State University, California **2007**

Bachelor of Science, Anthropology, University of California, Riverside **2000**

Professional Memberships

Register of Professional Archaeologists
Society for California Archaeology
Archaeological Institute of America

Experience

Project Archaeologist **March 2009–Present**
Brian F. Smith and Associates, Inc. **Poway, California**

Project Management of all phases of archaeological investigations for local, state, and federal agencies, field supervision, lithic analysis, National Register of Historic Places (NRHP) and California Environmental Quality Act (CEQA) site evaluations, and authoring/coauthoring of cultural resource management reports.

Archaeological Principal Investigator **June 2008–February 2009**
TRC Solutions **Irvine, California**

Cultural resource segment of Natural Sciences and Permitting Division; management of archaeological investigations for private companies and local, state, and federal agencies, personnel management, field and laboratory supervision, lithic analysis, Native American consultation and reporting, MRHP and CEQA site evaluations, and authoring/coauthoring cultural resource management reports.

Principal Investigator and Project Archaeologist **June 2006–May 2008**
Archaeological Resource Analysts **Oceanside, California**

As a sub consultant, served as Principal Investigator and Project Archaeologist for several projects for SRS Inc., including field direction, project and personnel management, lab analysis, and authorship of company reports.

Project Archaeologist **September 1996–June 2006**
Gallegos & Associates **Carlsbad, California**

Project management, laboratory management, lithic analysis, field direction, Native American consultation, report authorship/technical editing, and composition of several data recovery/preservation programs for both CEQA and NEPA level compliance.

Project Archaeologist **September 1993–September 1996**
Macko Inc. **Santa Ana, California**

Project management, laboratory management, lithic analysis, field supervision, and report authorship/technical editing.

Archaeological Field Technician **January 1993–September 1993**
Chambers Group Inc. **Irvine, California**

Archaeological excavation, surveying, monitoring, wet screen facilities management, and project logistics.

Archaeological Field Technician **May 1992–September 1992**
John Minch and Associates **San Juan Capistrano, California**

Archaeological excavation, surveying, monitoring, wet screen facilities management, and project logistics.

Reports/Papers

Principal Author

2012 A Class III Cultural Resources Study for the USGS Creepmeter Project; July 20, 2012; Tracy Stropes and Brian Smith.

2011 Results of the Mitigation Monitoring Program for the Mission Brewery Villas Project City of San Diego (Project No. 52078) / April 9, 2012 / Tracy A. Stropes.

2011 Mitigation Monitoring Report for the 43rd and Logan Project; June 7, 2012; Tracy A. Stropes and Brian F. Smith.

2011 Mitigation Monitoring Report for the Sewer and Water Group 768 Project; April 10, 2012; Tracy A. Storpes and Brian F. Smith.

2010 A Phase I Cultural Resource Study for the Butterfield Residence Project, La Jolla, California / January 17, 2011 / Tracy A. Stropes and Brian F. Smith.

2010 A Cultural Resources Literature Review for the 11099 North Torrey Pines Road Project, San Diego, California; November 17, 2010; Tracy A. Stropes and Brian F. Smith.

2010 A Cultural Resource Monitoring Report for the Eichen Residence Project, San Diego, California, Project No. 191775 / August 17, 2011 / Tracy A. Stropes.

2010 Phase I Cultural Resources Survey for the San Jacinto Poultry Ranch Storage Building Project; November 11, 2010; Tracy Stropes and Brian Smith.

2010 Cultural Resource Monitoring Report for the Salvation Army Vehicle Storage Area Project; 1015 West 12th Street, City of San Diego; Project #217113; December 5, 2011, Tracy A. Stropes, Principal Investigator.

2010 Cultural Resource Monitoring Report for the Sunset Cliffs Trunk Sewer Project, City of San Diego, Project No. 178901, January 5, 2012, Tracy A. Stropes.

2010 Mitigation Monitoring Report for the Sewer Group 682 Project; April 16, 2012; Tracy A. Stropes and Brian F. Smith.

2010 A Phase III Cultural Resource Data Recovery Program for CA-SDI-16986, Hidden Meadows, San Diego County, California (TPM 20794) Tracy A. Stropes and Brian F. Smith.

2010 Research Design, Data Recovery Program, and Mitigation, Monitoring, and Reporting Program for 1900 Spindrift Drive La Jolla, California; APN 346-44-05; January 26, 2011; Tracy Stropes and Brian F. Smith.

2010 An Archaeological Study for the 1912 Spindrift Drive Project La Jolla California, Project No. 214654; L64A-003A; APN 346-44-04; January 26, 2011; Tracy Stropes and Brian F. Smith.

2009 An Archaeological Assessment for the Rivera-Placentia Project, City of Riverside, California. Prepared for Riverside Construction Company.

2009 Cultural Resource Data Recovery Plan for the North Ocean Beach Gateway Project. Prepared for the City of San Diego and KTU+A.

2009 Cultural Resource Letter Report for the Borrego Substation Feasibility Study, Borrego Springs, California. Prepared for RBF Consulting.

2009 A Cultural Resource Study for the Gatto Residence Project, La Jolla, California. Prepared for Marengo Martin Architects Inc.

2008 Phase I Cultural Resource Survey for the 28220 Highridge Road Development Project, Rancho Palos Verdes, California. Prepared for REC Development.

2008 Wild Goose Expansion 3 Project Butte County, California Colusa County, California. Prepared for Niska Gas Storage LLC.

2008 Class III Cultural Resource Survey for the Burlington Northern Santa Fe Four Railway Bridge Renewal Project San Bernardino County, California. Prepared for BNSF Railway Company.

2008 I-80 Colfax Site Cultural Resource Records Search Report, Placer County California. Prepared for Granite Construction Company.

2008 I-80 Gold Run Site Cultural Resource Records Search Report, Placer County California. Prepared for Granite Construction Company.

2008 Cultural Resource Monitoring at 31431 Camino Capistrano, San Juan Capistrano California. Prepared for Herman Weissker, Inc.

2008 Cultural Resource Inventory for the Snow White Pumice Mine, Hinkley California. Prepared for U.S. Mining and Minerals Corporation.

2007 Nodule Industries of North Coastal San Diego: Change and Stasis in 10,000 Years of Lithic Technology. Masters Thesis on file, San Diego State University.

2007 Cultural Resource Inventory for Empire Homes (APN 104-180-04), Lake Forest, California. Prepared for Empire Homes.

2007 Phase I Archaeological Assessment for APN 104-200-09, Beumont, California. Prepared for Mary Chan.

2007 Cultural Resource Inventory for Empire Homes (APN 104-180-04), Lake Forest, California. Prepared for Empire Homes.

2006 Carlsbad Municipal Golf Course Data Recovery Program for CA-SDI-8694, and Indexing and Preservation Program Study for CA-SDI-8303 and CA-SDI-8797 Locus C, City of Carlsbad, CA. Prepared for City of Carlsbad.

2005 Grand Pacific Resorts Data Recovery and Index Sample Program for CA-SDI-8797, Area A, City of Carlsbad, CA. Prepared for Grand Pacific Resorts Inc.

2004 "Near the Harris Site Quarry" Cultural Resource Data Recovery and Preservation Program for CA-SDI-13028, San Diego County, California. Prepared for Harbrecht Development, L.P.

2004 Cultural Resource Survey and Boundary Test Report for the Lilac Ranch Project, San Diego County, California. Prepared for Empire Companies.

2003 Cultural Resource Data Recovery and Preservation Program for CA-SDI-12027, San Diego County, California. Prepared for Harbrecht Development Inc.

2002 Data Recovery Program for the Pacbell Site CA-SDI-5633, San Marcos, California. Prepared for Joseph Wong Design Associates.

2001 McCrink Ranch Cultural Resource Test Program Additional Information for Selected Sites, San Diego County, California. Prepared for Shapouri & Associates.

2001 The Quail Ridge Project Cultural Resource Test Program, San Diego County, California. Prepared for Helix Environmental Planning, Inc.

2000 Cultural Resource Survey and Evaluation for the North Sand Sheet Full Buildout Program, Owens Lake, California. Prepared for CH2MHill.

1995 Final Report: Archaeological Investigations Conducted for the Abalone Cove Dewatering Wells, City of Rancho Palos Verdes Los Angeles County, California. Prepared for the City of Rancho Palos Verdes, Environmental Services.

1995 Final Report: A Class III Intensive Survey of a 100-Acre Sand and Gravel Mining Area, Imperial County, California. Prepared for the Lilburn Corporation.

1994 Final Report: Data Recovery Excavations at Five Late Prehistoric Archaeological Sites Along the Los Trancos Access Road, Newport Coast Planned Community, Orange County, California. Prepared for the Coastal Community Builders, a division of The Irvine Company.

Contributing Author

2008 Lithic Analysis for Thirteen Sites Along the Transwestern Phoenix Expansion Project, Loops A and B. Prepared for Transwestern Pipeline Company, LLC.

2005 Cultural Resource Survey and Testing for the Star Ranch Property, San Diego, California.

2004 Cultural Resource Test Report for the Palomar Point Project: Site CA-SDI-16205, Carlsbad, California. Prepared for Lanikai Management Corp.

2004 Cultural Resource Survey and Test Report for the Canyon View Project, Carlsbad, California. Prepared for Shapouri & Associates.

2004 Cultural Resource Test Report for the Yamamoto Property: Site SDM-W-2046, Carlsbad, California. Prepared for Cunningham Consultants, Inc.

2004 Historical Resources Report for the Kuta and Mascari Properties, Otay Mesa, California. Prepared for Centex Homes.

2004 Cultural Resource Monitor and Test Report for the Encina Power Plant Project, Carlsbad, California. Prepared for Haley & Aldrich, Inc.

2004 Cultural Resource Test Report for Site CA-SDI-16788, Otay Mesa, California. Prepared for Otay Mesa Property, L.P.

2004 Cultural Resource Survey and Test Report for the Lonestar Project, Otay Mesa, San Diego County, California. Prepared for Otay Mesa Property, L.P.

2003 Cultural Resource Mitigation Program for the Torrey Ranch Site CA-SDI-5325, San Diego, California. Prepared for Garden Communities.

2003 Cultural Resource Survey and Test Report for the Johnson Canyon Parcel, Otay Mesa, San Diego County, California. Prepared for Otay Mesa Property, L.P.

2002 Cultural Resource Data Recovery Plan for the Shaw Project: Sites CA-SDI-13025 and CA-SDI-13067, San Diego County, California. Prepared for Shapouri & Associates.

2001 Archaeological Test Program for CA-SDI-14112 Mesa Norte Project, San Diego, California. Prepared for Hunsaker & Associates.

2001 The Vista-Oceanside Cultural Resource Survey and Test Program, Vista, California. Prepared for Shapouri & Associates.

2001 Cultural Resource Test Program for the Wilson Property, Carlsbad, California. Prepared for the City of Carlsbad.

2001 Cultural Resource Test Plan for the Oceanside-Escondido Project, County of San Diego, California. Prepared for Dudek & Associates.

2001 Cultural Resource Test Program for the Kramer Junction Expansion Project Adelanto, California. Prepared for AMEC.

2001 Cultural Resource Test Program for CA-SDI-12508 San Diego, California (LDR. No. 99-1331). Prepared for Garden Communities.

2000 Archaeological Testing of Prehistoric Sites CASDI-14115 and CA-SDI-14116 for The Mesa Grande Project, San Diego, California. Prepared for Solana Mesa Partners, LLC.

2000 Cultural Resource Survey and Test Report for the Wetmore Property, Otay Mesa, San Diego County, California. Prepared for Mr. Andy Campbell.

2000 The Torrey Ranch Cultural Resource Test Program, San Diego County, California. Prepared for Garden Communities.

2000 Cultural Resource Test Results for the Otay Mesa Generating Project. Prepared for the California Energy Commission and Otay Mesa Generating Company, LCC.

2000 The Eternal Hills Cultural Resource Survey and Test Program, City of Oceanside, California. Prepared for Eternal Hills Memorial Park.

2000 The Quail Ridge Cultural Resource Test Program, San Diego County, California. Prepared for Helix Environmental Planning Inc.

2000 Cultural Resource Testing Program for CA-SDI-5652/H and CA-SDI-9474H SR 78/Rancho Del Oro Interchange Project, Oceanside, California. Prepared for Tetratech Inc.

2000 Cultural Resource Test Results for a Portion of CA-SDI-8654 (Kuebler Ranch) Otay Mesa, San Diego County, California. Prepared for Shapouri & Associates.

2000 Historical/Archaeological Monitoring and Data Recovery Program for Prehistoric Site CA-SDI-48, Locus C Naval Base Point Loma, San Diego, California. Prepared for Department of the Navy, Southwest Division.

2000 Cultural Resource Evaluation Report for the Palomar College Science Building Project San Marcos, California. Prepared for Parsons Engineering Science Inc.

1999 Cultural Resource Monitoring Report for the Village of Ystagua Water Main Break City of San Diego, California. Prepared for the City of San Diego Water Department.

1999 The Effect of Projectile Point Size on Atlatl Dart Efficiency in Lithic Technology Vol. 24, No 1 p (27-37).

1999 Cultural Resource Evaluation Report for the Oceanside-Escondido Bikeway Project, San Marcos, California. Prepared for City of San Marcos.

1999 5000 Years of Occupation: Cultural Resource Inventory and Assessment Program for the Carlsbad Municipal Golf Course Project City of Carlsbad, California. Prepared or Cotton/Beland/Associates, Inc.

1999 Silver Oaks Estates Cultural Resource Enhanced Survey and Test Report for a Portion of CA-SDI-7202 San Diego, California. Prepared for Helix Environmental Planning Inc.

1999 Historical Archaeological Test of a portion of CA-SDI-8303 for the Faraday Road Extension Carlsbad, California. Prepared for the City of Carlsbad.

1999 Cultural Resource Literature Review for the North Coast Transportation Study Arterial Streets Alternative San Diego County, California. Prepared for MLF/San Diego Association of Govt.

1998 Archaeological Test Report for a Portion of CA-SDI-9115/SDM-W-122 Carlsbad, California. Prepared for Industrial Developments International.

1998 Rainforest Ranch Cultural Resource Survey and Significance Test for Prehistoric Sites CA-SDI-14932, CA-SDI-14937, CA-SDI-14938, and CA-SDI-14946 County of San Diego, California. Prepared for Boys and Girls Club of Inland North County.

1998 Cultural Resource Evaluation Report for the Oceanside-Escondido Bikeway Project San Marcos, California.

1998 Final Report: Cultural Resource Survey Report for the Sterling Property, Carlsbad, California. Prepared for SPT Holdings LCC.

1996 Final Report: Archaeological Survey and Test for the Huber Property Carlsbad, California. Prepared for Gene Huber.

1996 Final Report: Results of Phase II Test Excavations and Phase III Data Recovery Excavations at Nine Archaeological Sites Within the Newport Coast Planned Community Phase III Entitlement Area, San Joaquin Hills, Orange County, California. Prepared for Coastal Community Builders, a division of The Irvine Company.

1995 Preliminary Report: Phase II Test Results From Nine Prehistoric Archaeological Sites Within The Proposed Upper Newport Bay Regional County Park. Prepared for EDAW, Inc.

1995 Final Report: A Phase II Test Excavation at CA-ORA-136, Block 800 City of Newport Beach, Orange County California. Prepared for the Irvine Apartment Communities, a division of The Irvine Company.

Presentations

2004 Guest Lecturer and Flintknapping Demonstration Mission San Luis Rey Band of Mission Indians Annual Inter-tribal Pow-Wow. Mark Mojado, Tribal Contact.

2003 Steep Edge Unifacial Tools of Otay Mesa: An Analysis of Edge Types from CA SDI-7215 SCA Southern California Data Sharing Meetings

2001 Identification of Late Period Behavior Patterns in Elfin Forest: Three Sites in Northern San Diego County.

2001 Society for California Archaeology Data Sharing Meetings, San Luis Obispo, California.

1996 Trans-Tehachapian Lithic Trade at the Canebreak/Sawtooth Transition. Thirteenth Annual Meeting, Society of California Archaeology, Bakersfield, California.

1994 Point Size and Atlatl Dart Efficiency. Twenty Fourth Annual Meeting, Great Basin Anthropological Conference, Elko, Nevada.

1994/96 Guest Lecturer and Flint Knapping Instruction - Archaeological Field Class Fall Semester ,Cypress College, Cypress, California. Paul Langenwalter/Henry C. Koerper, Directors.

1994/95 Annual Guest Lecturer - "Living History Days" at the Mission, Mission San Juan Capistrano, San Juan Capistrano, California.

Andrew J. Garrison, M.A., RPA

Senior Project Archaeologist

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Education

Master of Arts, Public History, University of California, Riverside **2009**

Bachelor of Science, Anthropology, University of California, Riverside **2005**

Bachelor of Arts, History, University of California, Riverside **2005**

Professional Memberships

Register of Professional Archaeologists
Society for California Archaeology
Society for American Archaeology
California Council for the Promotion of History
Society of Primitive Technology
Lithic Studies Society
California Preservation Foundation
Pacific Coast Archaeological Society

Experience

Senior Project Archaeologist **June 2017–Present**
Brian F. Smith and Associates, Inc. **Poway, California**

Project management of all phases of archaeological investigations for local, state, and federal agencies including National Register of Historic Places (NRHP) and California Environmental Quality Act (CEQA) level projects interacting with clients, sub-consultants, and lead agencies. Supervise and perform fieldwork including archaeological survey, monitoring, site testing, comprehensive site records checks, and historic building assessments. Perform and oversee technological analysis of prehistoric lithic assemblages. Author or co-author cultural resource management reports submitted to private clients and lead agencies.

Senior Archaeologist and GIS Specialist **2009–2017**
Scientific Resource Surveys, Inc. **Orange, California**

Served as Project Archaeologist or Principal Investigator on multiple projects, including archaeological monitoring, cultural resource surveys, test excavations, and historic building assessments. Directed projects from start to finish, including budget and personnel hours proposals, field and laboratory direction, report writing, technical editing, Native American consultation, and final report submittal. Oversaw all GIS projects including data collection, spatial analysis, and map creation.

Preservation Researcher **2009**
City of Riverside Modernism Survey **Riverside, California**

Completed DPR Primary, District, and Building, Structure and Object Forms for five sites for a grant-funded project to survey designated modern architectural resources within the City of Riverside.

Information Officer **2005, 2008–2009**
Eastern Information Center (EIC), University of California, Riverside **Riverside, California**

Processed and catalogued restricted and unrestricted archaeological and historical site record forms. Conducted research projects and records searches for government agencies and private cultural resource firms.

Reports/Papers

2017 A Phase I Cultural Resources Assessment for the Marbella Villa Project, City of Desert Hot Springs, Riverside County, California. Brian F. Smith and Associates, Inc.

2017 Phase I Cultural Resources Survey for TTM 37109, City of Jurupa Valley, County of Riverside. Brian F. Smith and Associates, Inc.

2017 A Phase I Cultural Resources Survey for the Jefferson & Ivy Project, City of Murrieta, California. Brian F. Smith and Associates, Inc.

2017 A Phase I Cultural Resources Assessment for the Nuevo Dollar General Store Project, Riverside County, California. Brian F. Smith and Associates, Inc.

2017 A Phase I Cultural Resource Study for the Westmont Project, Encinitas, California. Brian F. Smith and Associates, Inc.

2017 A Phase I Cultural Resources Assessment for the Winchester Dollar General Store Project, Riverside County, California. Brian F. Smith and Associates, Inc.

2017 Phase I Cultural Resource Assessment for TTM 31810 (42.42 acres) Predico Properties Olive Grove Project. Scientific Resource Surveys, Inc.

2016 John Wayne Airport Jet Fuel Pipeline and Tank Farm Archaeological Monitoring Plan. Scientific Resource Surveys, Inc. On file at the County of Orange, California.

2016 Phase I Cultural Resources Assessment: All Star Super Storage City of Menifee Project, 2015-156. Scientific Resource Surveys, Inc. On file at the Eastern Information Center, University of California, Riverside.

2016 Historic Resource Assessment for 220 South Batavia Street, Orange, CA 92868 Assessor's Parcel Number 041-064-4. Scientific Resource Surveys, Inc. Submitted to the City of Orange as part of Mills Act application.

2015 Historic Resource Report: 807-813 Harvard Boulevard, Los Angeles. Scientific Resource Surveys, Inc. On file at the South Central Coastal Information Center, California State University, Fullerton.

2015 Exploring a Traditional Rock Cairn: Test Excavation at CA-SDI-13/RBLI-26: The Rincon Indian Reservation, San Diego County, California. Scientific Resource Surveys, Inc.

2015 Class III Scientific Resource Surveys, Inc. Survey for The Lynx Cat Granite Quarry and Water Valley Road Widening Project County of San Bernardino, California, Near the Community of Hinkley. Scientific Resource Surveys, Inc. On file at the South Central Coastal Information Center, California State University, Fullerton.

2014 Archaeological Phase I: Cultural Resource Survey of the South West Quadrant of Fairview Park, Costa Mesa. Scientific Resource Surveys, Inc. On file at the South Central Coastal Information Center, California State University, Fullerton.

2014 Archaeological Monitoring Results: The New Los Angeles Federal Courthouse. Scientific Resource Surveys, Inc. On file at the South Central Coastal Information Center, California State University, Fullerton.

2012 Bolsa Chica Archaeological Project Volume 7, Technological Analysis of Stone Tools, Lithic Technology at Bolsa Chica: Reduction Maintenance and Experimentation. Scientific Resource Surveys, Inc.

2010 Phase II Cultural Resources Report Site CA=RIV-2160 PM No. 35164. Scientific Resource Surveys, Inc. On file at the Eastern Information Center, University of California, Riverside.

2009 Riverside Modernism Context Survey, contributing author. Available online at the City of Riverside.

Presentations

2017 "Repair and Replace: Lithic Production Behavior as Indicated by the Debitage Assemblage from CA-MRP-283 the Hackney Site." Presented at the Society for California Archaeology Annual Meeting, Fish Camp, California.

2016 "Bones, Stones, and Shell at Bolsa Chica: A Ceremonial Relationship?" Presented at the Society for California Archaeology Annual Meeting, Ontario, California.

2016 "Markers of Time: Exploring Transitions in the Bolsa Chica Assemblage." Presented at the Society for California Archaeology Annual Meeting, Ontario, California.

2016 "Dating Duress: Understanding Prehistoric Climate Change at Bolsa Chica." Presented at the Society for California Archaeology Annual Meeting, Ontario, California.

2015 "Successive Cultural Phasing Of Prehistoric Northern Orange County, California." Presented at the Society for California Archaeology Annual Meeting, Redding, California.

2015 "Southern California Cogged Stone Replication: Experimentation and Results." Presented at the Society for California Archaeology Annual Meeting, Redding, California.

2015 "Prehistoric House Keeping: Lithic Analysis of an Intermediate Horizon House Pit." Presented at the Society for California Archaeology Annual Meeting, Redding, California.

2015 "Pits and Privies: The Use and Disposal of Artifacts from Historic Los Angeles." Presented at the Society for California Archaeology Annual Meeting, Redding, California.

2015 "Grooving in the Past: A Demonstration of the Manufacturing of OGR beads and a look at Past SRS, Inc. Replicative Studies." Demonstration of experimental manufacturing techniques at the January meeting of The Pacific Coast Archaeological Society, Irvine, California.

2014 "From Artifact to Replication: Examining *Olivella* Grooved Bead Manufacturing." Presented at the Society for California Archaeology Annual Meeting, Visalia, California.

2014 "New Discoveries from an Old Collection: Comparing Recently Identified OGR Beads to Those Previously Analyzed from the Encino Village Site." Presented at the Society for California Archaeology Annual Meeting, Visalia, California.

2012 Bolsa Chica Archaeology: Part Seven: Culture and Chronology. Lithic demonstration of experimental manufacturing techniques at the April meeting of The Pacific Coast Archaeological Society, Irvine, California.

2012 "Expedient Flaked Tools from Bolsa Chica: Exploring the Lithic Technological Organization." Presented at the Society for California Archaeology Annual Meeting, San Diego, California.

2012 "Utilitarian and Ceremonial Ground Stone Production at Bolsa Chica Identified Through Production Tools." Presented at the Society for California Archaeology Annual Meeting, San Diego, California.

2012 "Connecting Production Industries at Bolsa Chica: Lithic Reduction and Bead Manufacturing." Presented at the Society for California Archaeology Annual Meeting, San Diego, California.

2011 Bolsa Chica Archaeology: Part Four: Mesa Production Industries. Co-presenter at the April meeting of The Pacific Coast Archaeological Society, Irvine, California.

2011 "Hammerstones from Bolsa Chica and Their Relationship towards Site Interpretation." Presented at the Society for California Archaeology Annual Meeting, Rohnert Park, California.

2011 "Exploring Bipolar Reduction at Bolsa Chica: Debitage Analysis and Replication." Presented at the Society for California Archaeology Annual Meeting, Rohnert Park, California.

APPENDIX B

Site Record Forms

(Deleted for Public Review; Bound Separately)

APPENDIX C

Archaeological Records Search Results

(Deleted for Public Review; Bound Separately)

APPENDIX D

NAHC Sacred Lands File Search Results

(Deleted for Public Review; Bound Separately)

APPENDIX E

Artifact Catalogs

Site No	Year	Cat No	Unit Type	Unit No	Depth (cm)	Object Type	Object Subtype	Product	Material Type	Material Subtype	Functional Category	Mold Manu.	Mold Style	Finish Style	Diagnostic Elements	Maker's Mark / Backstamp	Manufacturer	Company	Place of Origin	Date (min)	Date (Max)	Dating Source	Condition	Portion	Qty	Wgt (g)
RIV-12,942	2019	1	SC	1	Surface	Glassware	Serving Bowl	-	Glass	Milk	Kitchen Items	ABM	-	-	Lavender tint	-	-	-	-	1905	1969	Lindsey 2015	Fragment	Rim	1	128.25
RIV-12,942	2019	2	SC	1	Surface	Bottle	Alcohol	Wine	Glass	Aqua	Consumer Items	ABM	Kick-up	-	EMB: (heel) "4/5 QUART" repeating; Stippling	[52] [7272] [MG] [6]	Maywood Glass Co.	-	Compton, CA	1940	1959	Whitten 2005	Fragment	Base	1	283.25
RIV-12,942	2019	3	SC	1	Surface	Bottle	Beverage	Soda [Seven-Up]	Glass	Green	Consumer Items	ABM	-	Crown	ACL: "7up"; Stippling	4285 G / 23 <(I)> 1 / 11	Owens-Illinois Glass Co.	The Seven Up Co.	Los Angeles, CA	1941	1944	Lockhart & Hoenig 2015; Lockhart 2005	Fragment	75-100%	1	321.38
RIV-12,942	2019	4	SC	1	Surface	Bottle	Alcohol	Beer	Glass	Amber	Consumer Items	ABM	Owens Suction Scar	-	Ghost seam	(ff) / 3 50 / 95	Foster-Forbes Glass Co.	-	Marion, IN	1942	1959	Lindsey 2015	Fragment	75-100%	1	234.86
RIV-12,942	2019	5	SC	1	Surface	Bottle	Alcohol	Liquor	Glass	Amber	Consumer Items	ABM	Owens Suction Scar	Small External Thread with Ring	EMB: (shoulder) "ONE PINT"	-	-	-	-	1914	1959	Lindsey 2015	Fragment	50-75%	1	262.00
RIV-12,942	2019	6	SC	1	Surface	Bottle	Toiltery	-	Glass	Amber	Household Items	ABM	-	-	Triagular shape, molded markings along body	HA / 4-K-4814	Hazel-Atlas Glass Co.	-	Oakland, CA	1905	1964	Lindsey 2015	Fragment	Base, Body	1	172.64
RIV-12,942	2019	7	SC	1	Surface	Hardware	Tile	-	Ceramic	Porcelain	Building Material	-	-	-	Hexagone, blue glaze	-	-	-	-	-	-	-	Complete	-	1	116.75
RIV-12,942	2019	8	SC	1	Surface	Tableware	Bowl	-	Ceramic	Stoneware	Kitchen Items	-	-	-	TP: Silver gilded line over clear glaze	HL / HOMER LAUGHLIN / MADE IN U.S.A. / F 38 N 8	Homer Laughlin China Co.	-	Newell, WV	1938	1938	http://www.laurelhollowpark.net/hlc/hlcbackstamps.html	Fragment	50-75%	1	154.17
RIV-12,942	2019	9	SC	1	Surface	Tableware	Bowl	-	Ceramic	Stoneware	Kitchen Items	-	-	-	TP: Polychrome floral motif and gold gilding along rim over clear glaze, molded/scalloped rim	…GOLD	-	-	U.S.A. / Europe	-	-	-	Fragment	50-75%	1	87.86
RIV-12,942	2019	10	SC	1	Surface	Can	Sanitary	Food	Metal	Ferrous	Consumer Items	-	-	-	-	-	-	-	-	-	-	-	Fragment	75-100%	1	73.19
RIV-12,942	2019	11	SC	1	Surface	Can	Sanitary	Food	Metal	Ferrous	Consumer Items	-	-	-	-	-	-	-	-	-	-	-	Fragment	75-100%	1	45.81
RIV-12,942	2019	12	SC	1	Surface	Automotive	Combustion Chamber	-	Metal	Non-ferrous	Transportation Items	-	-	-	"CRAVEROILER / …LUBRICATOR / CRAVE..R CO.. OF AMERICA / MFD.D. … TOWNE MFG. CO. PHILA. U.S.A. / WARN…G - USE ONLY CRAVEROIL"	CRAVEROILER	The Yale & Towne MFG. Co.	Craveroiler Co. of America	Philadelphia, PA	1925	2019	U.S. Patent Office	Fragment	75-100%	1	213.15
RIV-12,942	2019	13	SC	1	Surface	Hardware	Vent	-	Metal	Non-ferrous	Transportation Items	-	-	-	-	-	-	Ames Co.	-	-	-	-	Fragment	75-100%	1	55.02
RIV-12,942	2019	14	SC	2	Surface	Glassware	Bowl	-	Glass	Milk	Kitchen Items	ABM	-	-	EMB: Floral motif along rim	-	-	-	-	1905	1969	Lindsey 2015	Fragment	75-100%	1	310.94
RIV-12,942	2019	15	SC	2	Surface	Glassware	Bowl	-	Glass	Green	Kitchen Items	ABM	-	-	EMB: Star motif	-	-	-	-	1905	2019	Lindsey 2015	Fragment	25-50%	1	46.51
RIV-12,942	2019	16	SC	2	Surface	Bottle	Alcohol	Beer [Anheuser-Busch]	Glass	Amber	Consumer Items	ABM	Stubbie	Small External Thread	EMB: Eagle within A; Stippling	C / mTc 18 / F / 77	Thatcher Manufacturing Co.	Anheuser Busch Inc.	Saugus, CA	1944	1985	Lockhart et al. 2007	Fragment	75-100%	1	184.62
RIV-12,942	2019	17	SC	2	Surface	Bottle	Alcohol	Beer	Glass	Amber	Consumer Items	ABM	-	-	-	[N] 21 / 36	Obear-Nester Glass Co.	-	East St. Louis, MO	1905	1978	Whitten 2005	Fragment	75-100%	1	331.76
RIV-12,942	2019	18	SC	2	Surface	Bottle	Beverage	-	Glass	Amber	Consumer Items	ABM	Owens Suction Scar	-	-	GB 2245 // 9 <(I)> 3. / 7	Owens-Illinois Glass Co.	-	Streator, IL	1943	1943	Lockhart & Hoenig 2015	Fragment	Base	1	197.06
RIV-12,942	2019	19	SC	2	Surface	Bottle	Beverage	-	Glass	Colorless	Consumer Items	ABM	-	Crown	-	-	-	-	-	1905	2019	Lindsey 2015	Fragment	Finish	1	123.61
RIV-12,942	2019	20	SC	2	Surface	Bottle	Beverage	Soda [Eastside Cherry Keeno]	Glass	Colorless	Consumer Items	ABM	-	-	ACL: Blue and White "<eagle> EASTSIDE / CHERRY / KEENO / U.S. REG. PAT. OFF."	L.A. BREWING CO. / SAN / BERNARDINO / CAL. / 365 (L) 7	Latchford-Marble Glass Co.	Los Angeles Brewing Co.	San Bernardino, CA	1938	1956	Whitten 2005	Fragment	50-75%	1	255.46
RIV-12,942	2019	21	SC	2	Surface	Bottle	Alcohol	Wine	Glass	Colorless	Consumer Items	ABM	Owens Suction Scar	Small External Thread	EMB: (heel) "4/5 QUART" repeating / "Duraglas <script>; Stippling	7 <(I)> 5. / 15	Owens-Illinois Glass Co.	-	Alton, IL	1945	1945	Lockhart & Hoenig 2015	Complete	-	1	533.48
RIV-12,942	2019	22	SC	2	Surface	Jug	Alcohol	Wine	Glass	Colorless	Consumer Items	ABM	Owens Suction Scar	Small External Thread	EMB: (shoulder) "FEDERAL LAW…" (heel) "HALF …"	GC / WINE / 3422	Glass Containers Corp.	-	Fullerton, CA	1933	1959	Whitten 2005	Fragment	25-50%	1	464.31
RIV-12,942	2019	23	SC	2	Surface	Jar	Food / Condiment	-	Glass	Colorless	Consumer Items	ABM	Valve Ejection Mark	-	Stippling	10-75 / MG / 1	Maywood Glass Co.	-	Compton, CA	1940	1959	Whitten 2005	Fragment	Base	1	132.34
RIV-12,942	2019	24	SC	2	Surface	Jar	Food / Condiment	-	Glass	Colorless	Consumer Items	ABM	-	-	Stippling	HA	Hazel-Atlas Glass Co.	-	Oakland, CA	1940	1964	Whitten 2005	Fragment	Base	1	254.66
RIV-12,942	2019	25	SC	2	Surface	Jar	Food / Condiment	-	Glass	Colorless	Consumer Items	ABM	-	-	-	HA / 0 - 7399 / 13	Hazel-Atlas Glass Co.	-	Oakland, CA	1905	1964	Whitten 2005	Fragment	Base	1	239.19
RIV-12,942	2019	26	SC	2	Surface	Jar	Food / Condiment	-	Glass	Colorless	Consumer Items	ABM	-	-	-	A GC 66 / OB 4704	Glass Containers Corp.	-	Fullerton, CA	1933	1984	Whitten 2005	Fragment	Base	1	196.04
RIV-12,942	2019	27	SC	2	Surface	Jar	Food / Condiment	-	Glass	Colorless	Consumer Items	ABM	-	-	Stippling	3402 / C mTc 6 / 57	Thatcher Manufacturing Co.	-	Saugus, CA	1944	1985	Lockhart et al. 2007	Fragment	Base	1	125.72
RIV-12,942	2019	28	SC	2	Surface	Jar	Food / Condiment	-	Glass	Colorless	Consumer Items	ABM	Owens Suction Scar	-	EMB: (heel) "Duraglas <script>"	3 <(I)> 3 / 4	Owens-Illinois Glass Co.	-	Fairmont, WV	1943	1943	Lockhart & Hoenig 2015	Fragment	Base	1	259.39
RIV-12,942	2019	29	SC	2	Surface	Jar	Food / Condiment	-	Glass	Colorless	Consumer Items	ABM	Valve Ejection Mark	-	EMB: (base) "DESIGN PATENTED"	HA	Hazel-Atlas Glass Co.	-	Oakland, CA	1910	1964	Lindsey 2015	Fragment	Base	1	52.49
RIV-12,942	2019	30	SC	2	Surface	Jar	Food / Condiment	-	Glass	Colorless	Consumer Items	ABM	-	-	-	0 9374 / HA 9 / PAT.	Hazel-Atlas Glass Co.	-	Oakland, CA	1905	1964	Lindsey 2015	Fragment	Base	1	67.57
RIV-12,942	2019	31	SC	2	Surface	Jar	Food / Condiment	-	Glass	Colorless	Consumer Items	ABM	Valve Ejection Mark	-	-	5341A / 3 <anchor> 3	Anchor Hocking Glass Co.	-	Lancaster, OH	1937	2019	Whitten 2005	Fragment	Base	1	333.18
RIV-12,942	2019	32	SC	2	Surface	Jar	Food / Condiment	-	Glass	Colorless	Consumer Items	ABM	-	Wide External Thread	Stippling	23 <(I)> 3 / 11 / 7106-C	Owens-Illinois Glass Co.	-	Los Angeles, CA	1943	1943	Lockhart & Hoenig 2015	Complete	-	1	342.93
RIV-12,942	2019	33	SC	2	Surface	Jar	Food / Condiment	-	Glass	Colorless	Consumer Items	ABM	-	Wide External Thread	EMB: (heel) "Duraglas <script>"; Stippling	20 <(I)> 5 / 2B / 3417-C	Owens-Illinois Glass Co.	-	Oakland, CA	1945	1945	Lockhart & Hoenig 2015	Complete	-	1	207.08
RIV-12,942	2019	34	SC	2	Surface	Jar	Food / Condiment	-	Glass	Colorless	Consumer Items	ABM	-	Wide External Thread	-	23 (I) 4 / 3B / 5130-C	Owens-Illinois Glass Co.	-	Los Angeles, CA	1954	1954	Lockhart & Hoenig 2015	Complete	-	1	255.34

Site No	Year	Cat No	Unit Type	Unit No	Depth (cm)	Object Type	Object Subtype	Product	Material Type	Material Subtype	Functional Category	Mold Manu.	Mold Style	Finish Style	Diagnostic Elements	Maker's Mark / Backstamp	Manufacturer	Company	Place of Origin	Date (min)	Date (Max)	Dating Source	Condition	Portion	Qty	Wgt (g)
RIV-12,942	2019	35	SC	2	Surface	Jar	Food / Condiment	-	Glass	Colorless	Consumer Items	ABM	Valve Ejection Mark	Wide External Thread	EMB: (heel) "Duraglas <script>"	20 <(I)> … / 14	Owens-Illinois Glass Co.	-	Oakland, CA	1940	1954	Lockhart & Hoenig 2015	Complete	-	1	142.21
RIV-12,942	2019	36	SC	2	Surface	Jar	Food / Condiment	-	Glass	Colorless	Consumer Items	ABM	Valve Ejection Mark	Wide External Thread	-	14 / 2 / HA	Hazel-Atlas Glass Co.	-	Oakland, CA	1910	1964	Whitten 2005	Complete	-	1	143.99
RIV-12,942	2019	37	SC	2	Surface	Bottle	Toiltery	Dandruff Cure	Glass	Colorless	Personal Items	ABM	Owens Suction Scar	-	Stippling	2 <(I)> 6 / Fitch's	Owens-Illinois Glass Co.	The Fitch Dandruff Cure Co.	Huntington, WV	1946	1946	Lockhart & Hoenig 2015	Fragment	75-100%	1	78.54
RIV-12,942	2019	38	SC	2	Surface	Jug	Water	-	Glass	Colorless	Kitchen Items	ABM	-	Wide Lightning	EMB: (base) "2 / 28 OUNCES"	-	-	-	-	1905	2019	Lindsey 2015	Fragment	0-25%	1	720.74
RIV-12,942	2019	39	SC	2	Surface	Glassware	Measuring Cup	-	Glass	Colorless	Kitchen Items	ABM	-	-	EMB: Graduated markings	F <in a shield>	Federal Glass Co.	-	Columbus, OH	1932	1958	Whitten 2005	Fragment	75-100%	1	196.85
RIV-12,942	2019	40	SC	2	Surface	Glassware	Tumbler	-	Glass	Colorless	Kitchen Items	ABM	-	-	-	-	-	-	-	1905	2019	Lindsey 2015	Fragment	75-100%	1	105.94
RIV-12,942	2019	41	SC	2	Surface	Glassware	Serving Bowl	-	Glass	Colorless	Kitchen Items	ABM	-	-	-	-	-	-	-	1905	2019	Lindsey 2015	Fragment	Rim	1	283.61
RIV-12,942	2019	42	SC	2	Surface	Tableware	Mug	-	Ceramic	Stoneware	Kitchen Items	-	-	-	TP: Polychrome floral motif and gold gilding along rim over clear glaze	-	-	-	-	-	-	-	Fragment	50-75%	1	54.32
RIV-12,942	2019	43	SC	2	Surface	Tableware	Bowl	-	Ceramic	Stoneware	Kitchen Items	-	-	-	TP: Polychrome floral motif and gold gilding along rim over clear glaze, molded/scalloped rim	22 KARAT GOLD	-	-	-	-	-	-	Fragment	50-75%	1	249.29
RIV-12,942	2019	44	SC	2	Surface	Can	Sanitary	Food	Metal	Ferrous	Consumer Items	-	-	-	-	-	-	-	-	-	-	-	Fragment	75-100%	1	123.56
RIV-12,942	2019	45	SC	2	Surface	Shoe	Upper	-	Leather	Mammal	Garment Items	-	-	-	-	-	-	-	-	-	-	-	Fragment	-	1	46.79
RIV-12,942	2019	46	SC	2	Surface	Fauna	Bone	-	Bone	Mammal	Food Items	-	-	-	Saw cut; MNI = 1	-	-	-	-	-	-	-	Fragment	-	-	70.83
RIV-12,942	2019	47	SC	3	Surface	Bottle	Beverage	-	Glass	Green	Consumer Items	ABM	Owens Suction Scar	-	-	-	-	-	-	1905	1959	Lindsey 2015	Fragment	Base	1	83.54
RIV-12,942	2019	48	SC	3	Surface	Bottle	Alcohol	-	Glass	Amber	Consumer Items	ABM	-	Small External Thread	EMB: (heel) "SUNLAND VINTAGE CO. INC.	GC / 4153 / 4	Glass Containers Corp.	-	Fullerton, CA	1935	1959	Whitten 2005; https://www.sunlandvintagewinery.com/our-story	Fragment	75-100%	1	536.75
RIV-12,942	2019	49	SC	3	Surface	Bottle	Indeterminate	-	Glass	Aqua	Consumer Items	ABM	-	-	EMB: Arrow in circle, wood texture on exterior	-	-	-	-	1905	2019	Lindsey 2015	Fragment	Body	1	54.02
RIV-12,942	2019	50	SC	3	Surface	Jug	Water	-	Glass	Aqua	Kitchen Items	ABM	-	-	-	L / 27 <in a shield>	W.J. Latchford Glass Co.	Puritas Water Co.	Los Angeles, CA	1925	1938	Whitten 2005	Fragment	Base	1	1137.62
RIV-12,942	2019	51	SC	3	Surface	Bottle	Food / Condiment	-	Glass	Aqua	Consumer Items	ABM	-	-	Stippling	V GC 6 / 3878 / 4	Glass Containers Corp.	-	Fullerton, CA	1940	1984	Whitten 2005	Fragment	Base	1	45.50
RIV-12,942	2019	52	SC	3	Surface	Jar	Food / Condiment	-	Glass	Colorless	Consumer Items	ABM	-	Wide External Thread	-	294 / (L) / 0	W.J. Latchford Glass Co.	-	Los Angeles, CA	1925	1989	Whitten 2005	Fragment	50-75%	1	244.39
RIV-12,942	2019	53	SC	3	Surface	Jar	Food / Condiment	-	Glass	Colorless	Consumer Items	ABM	-	-	Stippling	23 <(I)> 2 / 2A / 5403-C	Owens-Illinois Glass Co.	-	Los Angeles, CA	1942	1942	Lockhart & Hoenig 2015	Fragment	Base	1	50.07
RIV-12,942	2019	54	SC	3	Surface	Jar	Food / Condiment	-	Glass	Colorless	Consumer Items	ABM	-	-	Stippling	20 <(I)> 0 / 13	Owens-Illinois Glass Co.	-	Oakland, CA	1940	1940	Lockhart & Hoenig 2015	Fragment	Base	1	90.95
RIV-12,942	2019	55	SC	3	Surface	Jar	Food / Condiment	-	Glass	Colorless	Consumer Items	ABM	-	-	EMB: (heel) "Duraglas <script>"	20 <(I)> 8 / 3078-C 2-A	Owens-Illinois Glass Co.	-	Oakland, CA	1948	1948	Lockhart & Hoenig 2015	Fragment	Base	1	94.32
RIV-12,942	2019	56	SC	3	Surface	Jar	Food / Condiment	-	Glass	Colorless	Consumer Items	ABM	-	-	-	2 <(I)> 8 / 3	Owens-Illinois Glass Co.	-	Huntington, WV	1938	1948	Lockhart & Hoenig 2015	Fragment	Base	1	159.87
RIV-12,942	2019	57	SC	3	Surface	Jar	Food / Condiment	-	Glass	Colorless	Consumer Items	ABM	Owens Suction Scar	-	EMB: (body) Peanuts	GOLDEN WEST / 23 <(I)> 4 / 3 / PEANUT BUTTER	Owens-Illinois Glass Co.	Golden West Peanut Butter	Los Angeles, CA	1944	1944	Lockhart & Hoenig 2015	Fragment	Base	1	159.23
RIV-12,942	2019	58	SC	3	Surface	Jar	Food Storage	-	Glass	Colorless	Kitchen Items	ABM	-	-	-	-	-	-	-	1905	2019	Lindsey 2015	Fragment	Base	1	401.07
RIV-12,942	2019	59	SC	3	Surface	Jar	Food Storage	-	Glass	Colorless	Kitchen Items	ABM	-	-	-	(L) / 16	W.J. Latchford Glass Co.	-	Los Angeles, CA	1925	1989	Whitten 2005	Fragment	Base	1	411.98
RIV-12,942	2019	60	SC	3	Surface	Jar	Canning	-	Glass	Colorless	Kitchen Items	ABM	Valve Ejection Mark	-	-	KERR GLASS MFG CO. / PAT 10 / AUG 31 / 1915 / SAND SPRINGS OKLA	Kerr Glass Mfg Co.	-	-	1915	1992	Whitten 2005	Fragment	Base	1	80.08
RIV-12,942	2019	61	SC	3	Surface	Jar	Canning	-	Glass	Colorless	Kitchen Items	ABM	-	-	-	…PERFECT / MASON	Ball Brother's Glass Co.	-	Muncie, IN	1933	1962	Whitten 2005	Fragment	Body	1	164.14
RIV-12,942	2019	62	SC	3	Surface	Jar	Food / Condiment	-	Glass	Colorless	Consumer Items	ABM	-	Wide Patent	-	-	-	-	-	1905	2019	Lindsey 2015	Fragment	Finish	1	198.24
RIV-12,942	2019	63	SC	3	Surface	Jar	Medicine	-	Glass	Colorless	Household Items	ABM	-	Wide External Thread	-	-	-	-	-	1905	2019	Lindsey 2015	Fragment	Finish	1	43.10
RIV-12,942	2019	64	SC	3	Surface	Bottle	Medicine	-	Glass	Colorless	Household Items	ABM	-	Patent with ring	-	-	-	-	-	1905	2019	Lindsey 2015	Fragment	Finish	1	70.88
RIV-12,942	2019	65	SC	3	Surface	Bottle	Medicine	-	Glass	Colorless	Household Items	ABM	-	Rolled	-	-	-	-	-	1905	2019	Lindsey 2015	Fragment	Finish	1	23.21
RIV-12,942	2019	66	SC	3	Surface	Bottle	Alcohol	Spirits	Glass	Colorless	Consumer Items	ABM	-	Small External Thread	-	-	-	-	-	1905	2019	Lindsey 2015	Fragment	Finish	1	118.11
RIV-12,942	2019	67	SC	3	Surface	Bottle	Alcohol	Spirits	Glass	Colorless	Consumer Items	ABM	-	Small External Thread	-	-	-	-	-	1905	2019	Lindsey 2015	Fragment	Finish	1	52.51
RIV-12,942	2019	68	SC	3	Surface	Bottle	Indeterminate	-	Glass	Colorless	Consumer Items	ABM	-	-	-	-	-	-	-	1905	2019	Lindsey 2015	Fragment	Finish	1	135.48
RIV-12,942	2019	69	SC	3	Surface	Bottle	Dairy	Milk	Glass	Colorless	Kitchen Items	ABM	-	Capseat	ACL: White lettering	23 <(I)> 2 / D.A. / RIVERSIDE / CALIF.	Owens-Illinois Glass Co.	Dairyman's Association	Riverside, CA	1932	1942	Lockhart & Hoenig 2015	Fragment	50-75%	1	515.86
RIV-12,942	2019	70	SC	3	Surface	Glassware	Tumbler	-	Glass	Colorless	Kitchen Items	ABM	-	-	-	-	-	-	-	1905	2019	Lindsey 2015	Fragment	50-75%	1	174.68
RIV-12,942	2019	71	SC	3	Surface	Glassware	Tumbler	-	Glass	Colorless	Kitchen Items	ABM	-	-	-	HA / 1319	Hazel-Atlas Glass Co.	-	Oakland, CA	1905	1964	Whitten 2005	Fragment	75-100%	1	406.35
RIV-12,942	2019	72	SC	3	Surface	Glassware	Compote	-	Glass	Colorless	Kitchen Items	ABM	-	-	-	-	-	-	-	1905	2019	Lindsey 2015	Fragment	Base	1	121.65

Site No	Year	Cat No	Unit Type	Unit No	Depth (cm)	Object Type	Object Subtype	Product	Material Type	Material Subtype	Functional Category	Mold Manu.	Mold Style	Finish Style	Diagnostic Elements	Maker's Mark / Backstamp	Manufacturer	Company	Place of Origin	Date (min)	Date (Max)	Dating Source	Condition	Portion	Qty	Wgt (g)
RIV-12,942	2019	73	SC	3	Surface	Container	Indeterminate	-	Glass	Colorless	Consumer Items	-	-	-	-	-	-	-	-	-	-	-	Fragment	Body	1	1.97
RIV-12,942	2019	74	SC	3	Surface	Can	Sanitary	Beverage	Metal	Ferrous	Consumer Items	-	-	-	Church key opening	-	-	-	-	1935	1979	Rock 1989	Complete	-	1	85.44
RIV-12,942	2019	75	SC	3	Surface	Automotive	Tractor Head Light	-	Glass	Colorless	Transportation Items	-	-	-	-	US / TUNG-SOL / SEALED BEAM	Tung-Sol	-	-	-	-	-	Complete	-	1	343.21
RIV-12,942	2019	76	SC	3	Surface	Fauna	Bone	-	Bone	Mammal	Food Items	-	-	-	Saw cut; MNI = 1	-	-	-	-	-	-	-	Fragment	-	-	118.58
RIV-12,942	2019	77	STP	2	0-10	Bottle	Alcohol	Spirits	Glass	Colorless	Consumer Items	ABM	-	Small External Thread	-	-	-	-	-	1905	2019	Lindsey 2015	Fragment	Finish	1	117.54
RIV-12,942	2019	78	STP	2	10-20	Bottle	Alcohol	Spirits	Glass	Colorless	Consumer Items	ABM	-	-	Stippling	-	-	-	-	1940	2019	Lindsey 2015	Fragment	Heel	1	11.48
RIV-12,942	2019	79	STP	2	10-20	Container	Indeterminate	-	Glass	Colorless	Consumer Items	ABM	-	-	Stippling	-	-	-	-	1940	2019	Lindsey 2015	Fragment	Body	2	1.06
RIV-12,942	2019	80	STP	2	20-30	Container	Indeterminate	-	Glass	Colorless	Consumer Items	-	-	-	-	-	-	-	-	1905	2019	Lindsey 2015	Fragment	Body	3	5.92
RIV-12,942	2019	81	STP	5	0-10	Bottle	Beverage	-	Glass	Green	Consumer Items	-	-	-	-	-	-	-	-	-	-	-	Fragment	Body	1	3.40
RIV-12,942	2019	82	STP	5	0-10	Container	Indeterminate	-	Glass	Amber	Consumer Items	ABM	-	-	Stippling	-	-	-	-	1940	2019	Lindsey 2015	Fragment	Heel	1	2.64
RIV-12,942	2019	83	STP	5	0-10	Bottle	Beverage	-	Glass	Amber	Consumer Items	ABM	-	-	-	22 <(I)> … / 10 / 4602-GB	Owens-Illinois Glass Co.	-	San Francisco, CA	1932	1937	Lockhart & Hoenig 2015	Fragment	Base	1	122.04
RIV-12,942	2019	84	STP	5	0-10	Container	Indeterminate	-	Glass	Colorless	Consumer Items	ABM	-	-	Stippling	-	-	-	-	1940	2019	Lindsey 2015	Fragment	Body	1	8.78
RIV-12,942	2019	85	STP	5	0-10	Container	Indeterminate	-	Glass	Colorless	Consumer Items	ABM	-	-	Stippling	-	-	-	-	1940	2019	Lindsey 2015	Fragment	Base	1	1.64
RIV-12,942	2019	86	STP	5	0-10	Container	Indeterminate	-	Glass	Colorless	Consumer Items	-	-	-	-	-	-	-	-	-	-	-	Fragment	Body	-	57.61
RIV-12,942	2019	87	STP	5	0-10	Tableware	Vessel	-	Ceramic	Stoneware	Kitchen Items	-	-	-	Clear glaze	-	-	-	-	-	-	-	Fragment	Body	1	9.26
RIV-12,942	2019	88	STP	5	0-10	Metal	Indeterminate	-	Metal	Ferrous	Unknown Items	-	-	-	-	-	-	-	-	-	-	-	Fragment	Body	-	11.28
RIV-12,942	2019	89	STP	5	10-20	Bottle	Beverage	-	Glass	Green	Consumer Items	ABM	-	-	-	-	-	-	-	1905	2019	Lindsey 2015	Fragment	Heel	1	41.23
RIV-12,942	2019	90	STP	5	10-20	Jar	Food / Condiment	-	Glass	Amber	Consumer Items	ABM	-	Wide External Thread	-	-	-	-	-	1905	2019	Lindsey 2015	Fragment	Finish	1	3.03
RIV-12,942	2019	91	STP	5	10-20	Jar	Food / Condiment	-	Glass	Colorless	Consumer Items	ABM	-	-	-	3957-E / 20 <(I)> 9 / 2	Owens-Illinois Glass Co.	-	Oakland, CA	1939	1949	Lockhart & Hoenig 2015	Fragment	Base	1	112.22
RIV-12,942	2019	92	STP	5	10-20	Container	Indeterminate	-	Glass	Colorless	Consumer Items	-	-	-	-	-	-	-	-	-	-	-	Fragment	Body	-	18.07
RIV-12,942	2019	93	STP	5	10-20	Kitchenware	Food Storage	-	Ceramic	Earthenware	Kitchen Items	-	-	-	Clear glaze	-	-	-	-	-	-	-	Fragment	Body	1	250.37
RIV-12,942	2019	94	STP	5	10-20	Metal	Indeterminate	-	Metal	Ferrous	Unknown Items	-	-	-	-	-	-	-	-	-	-	-	Fragment	Body	-	2.24
RIV-12,942	2019	95	STP	5	20-30	Container	Indeterminate	-	Glass	Aqua	Consumer Items	-	-	-	-	-	-	-	-	-	-	-	Fragment	Body	1	24.67
RIV-12,942	2019	96	STP	5	20-30	Container	Indeterminate	-	Glass	Colorless	Consumer Items	-	-	-	-	-	-	-	-	-	-	-	Fragment	Body	-	80.18
RIV-12,942	2019	97	STP	5	20-30	Jar	Food / Condiment	-	Glass	Amber	Consumer Items	ABM	-	Wide External Thread	-	-	-	-	-	1905	2019	Lindsey 2015	Fragment	Finish	1	41.10
RIV-12,942	2019	98	STP	5	20-30	Architecture	Window	-	Glass	Aqua Tint	Building Material	-	-	-	-	-	-	-	-	-	-	-	Fragment	-	-	6.84
RIV-12,942	2019	99	STP	5	20-30	Metal	Indeterminate	-	Metal	Ferrous	Unknown Items	-	-	-	-	-	-	-	-	-	-	-	Fragment	-	-	2.35
RIV-12,942	2019	100	STP	6	0-10	Container	Indeterminate	-	Glass	Colorless	Consumer Items	ABM	-	-	EMB: (heel) "…VERY…"	-	-	-	-	1905	2019	Lindsey 2015	Fragment	Body	1	79.03
RIV-12,942	2019	101	STP	6	0-10	Container	Indeterminate	-	Glass	Colorless	Consumer Items	-	-	-	EMB: ridges	-	-	-	-	1905	2019	Lindsey 2015	Fragment	Body	1	6.13
RIV-12,942	2019	102	STP	6	0-10	Container	Indeterminate	-	Glass	Colorless	Consumer Items	ABM	-	-	EMB: concentric rings	-	-	-	-	1905	2019	Lindsey 2015	Fragment	Heel	1	16.32
RIV-12,942	2019	103	STP	6	0-10	Container	Indeterminate	-	Glass	Colorless	Consumer Items	-	-	-	-	-	-	-	-	-	-	-	Fragment	Body	-	51.69
RIV-12,942	2019	104	STP	6	0-10	Container	Indeterminate	-	Glass	Amber	Consumer Items	-	-	-	-	-	-	-	-	-	-	-	Fragment	Body	-	10.87
RIV-12,942	2019	105	STP	6	10-20	Container	Indeterminate	-	Glass	Amber	Consumer Items	ABM	Owens Suction Scar	-	-	(L) / 18	W.J. Latchford Glass Co.	-	Los Angeles, CA	1925	1959	Whitten 2005	Fragment	Base	1	235.00
RIV-12,942	2019	106	STP	6	10-20	Container	Indeterminate	-	Glass	Amber	Consumer Items	-	-	-	-	-	-	-	-	-	-	-	Fragment	Body	1	40.04
RIV-12,942	2019	107	STP	6	10-20	Jar	Food / Condiment	-	Glass	Colorless	Consumer Items	ABM	Owens Suction Scar	-	-	23 <(I)> 3	Owens-Illinois Glass Co.	-	Los Angeles, CA	1933	1943	Lockhart & Hoenig 2015	Fragment	Base	1	178.63
RIV-12,942	2019	108	STP	6	10-20	Container	Indeterminate	-	Glass	Colorless	Consumer Items	-	-	-	-	-	-	-	-	-	-	-	Fragment	Body	-	49.34
RIV-12,942	2019	109	STP	6	10-20	Glassware	Tumbler	-	Glass	Colorless	Kitchen Items	ABM	-	-	-	-	-	-	-	1905	2019	Lindsey 2015	Fragment	Rim	1	18.65
RIV-12,942	2019	110	STP	4	0-10	Bottle	Cleaning	Bleach	Glass	Amber	Household Items	ABM	-	-	EMB: "…O…"; Stippling	-	-	-	-	1940	1969	Lindsey 2015	Fragment	Body	1	6.49
RIV-12,942	2019	111	STP	4	0-10	Container	Indeterminate	-	Glass	Amber	Consumer Items	-	-	-	-	-	-	-	-	-	-	-	Fragment	Body	-	33.31
RIV-12,942	2019	112	STP	4	0-10	Jar	Canning	-	Glass	Aqua	Kitchen Items	ABM	-	Wide External Thread	-	-	-	-	-	1905	2019	-	Fragment	Heel, Rim	1	4.82
RIV-12,942	2019	113	STP	4	0-10	Container	Indeterminate	-	Glass	Aqua	Consumer Items	-	-	-	-	-	-	-	-	-	-	-	Fragment	Body	-	31.32
RIV-12,942	2019	114	STP	4	0-10	Architecture	Window	-	Glass	Aqua Tint	Building Material	-	-	-	-	-	-	-	-	-	-	-	Fragment	Body	-	131.46
RIV-12,942	2019	115	STP	4	0-10	Jar	Medicine	Menthol [VapoRub]	Glass	Cobalt	Household Items	ABM	-	-	-	VICKS VAPORUB / VVV	-	Vick Chemical Co.	-	1905	1960	Vick Chemical Co	Fragment	Base	1	25.78

Site No	Year	Cat No	Unit Type	Unit No	Depth (cm)	Object Type	Object Subtype	Product	Material Type	Material Subtype	Functional Category	Mold Manu.	Mold Style	Finish Style	Diagnostic Elements	Maker's Mark / Backstamp	Manufacturer	Company	Place of Origin	Date (min)	Date (Max)	Dating Source	Condition	Portion	Qty	Wgt (g)
RIV-12,942	2019	116	STP	4	0-10	Bottle	Alcohol	Wine	Glass	Olive	Consumer Items	ABM	-	-	-	-	-	-	-	1905	2019	-	Fragment	Body	1	6.22
RIV-12,942	2019	117	STP	4	0-10	Bottle	Beverage	-	Glass	Green	Consumer Items	-	-	-	-	-	-	-	-	-	-	-	Fragment	Body	1	7.90
RIV-12,942	2019	118	STP	4	0-10	Glassware	Vessel	-	Glass	Milk Green	Household Items	-	-	-	-	-	-	-	-	-	-	-	Fragment	Body	1	5.41
RIV-12,942	2019	119	STP	4	0-10	Bottle	Beverage	Soda [Eastside Cherry Keeno]	Glass	Colorless	Consumer Items	ABM	-	-	EMB: (neck) "EASTSI…"	-	Latchford-Marble Glass Co.	Los Angeles Brewing Co.	San Bernardino, CA	1938	1956	Whitten 2005	Fragment	Neck	1	14.80
RIV-12,942	2019	120	STP	4	0-10	Bottle	Beverage	-	Glass	Colorless	Consumer Items	ABM	-	-	EMB: "…ON"	-	-	-	-	1914	2019	Lindsey 2015	Fragment	Body	1	0.57
RIV-12,942	2019	121	STP	4	0-10	Bottle	Beverage	-	Glass	Colorless	Consumer Items	ABM	-	-	EMB: "12 FL…"; Stippling	-	-	-	-	1940	2019	Lindsey 2015	Fragment	Body	1	2.71
RIV-12,942	2019	122	STP	4	0-10	Jar	Food / Condiment	-	Glass	Colorless	Consumer Items	ABM	Owens Suction Scar	-	-	-	-	-	-	1905	1959	Lindsey 2015	Fragment	Base	1	14.98
RIV-12,942	2019	123	STP	4	0-10	Jar	Food / Condiment	-	Glass	Colorless	Consumer Items	ABM	-	-	Stippling	376…	-	-	-	1940	2019	Lindsey 2015	Fragment	Base	1	4.25
RIV-12,942	2019	124	STP	4	0-10	Bottle	Indeterminate	-	Glass	Colorless	Consumer Items	ABM	-	-	Stippling	-	-	-	-	1940	2019	Lindsey 2015	Fragment	Base	1	1.36
RIV-12,942	2019	125	STP	4	0-10	Container	Indeterminate	-	Glass	Colorless	Consumer Items	ABM	-	-	-	-	-	-	-	1905	2019	Lindsey 2015	Fragment	Heel	1	41.14
RIV-12,942	2019	126	STP	4	0-10	Jar	Indeterminate	-	Glass	Colorless	Consumer Items	ABM	-	Wide Internal Thread	-	-	-	-	-	1905	2019	Lindsey 2015	Fragment	Finish	1	6.81
RIV-12,942	2019	127	STP	4	0-10	Bottle	Indeterminate	-	Glass	Colorless	Consumer Items	ABM	-	Small External Thread	-	-	-	-	-	1905	2019	Lindsey 2015	Fragment	Finish	1	1.00
RIV-12,942	2019	128	STP	4	0-10	Jar	Food / Condiment	-	Glass	Colorless	Consumer Items	ABM	-	Wide External Thread	-	-	-	-	-	1905	2019	Lindsey 2015	Fragment	Finish	6	59.36
RIV-12,942	2019	129	STP	4	0-10	Jug	Water	-	Glass	Colorless	Kitchen Items	ABM	-	-	EMB: (shoulder) "…ALLON"	-	-	-	-	1914	2019	Lindsey 2015	Fragment	Shoulder	1	121.66
RIV-12,942	2019	130	STP	4	0-10	Lamp	Light Bulb	-	Glass	Colorless	Household Items	-	-	-	-	-	-	-	-	-	-	-	Fragment	Body	-	3.64
RIV-12,942	2019	131	STP	4	0-10	Container	Indeterminate	-	Glass	Colorless	Consumer Items	-	-	-	-	-	-	-	-	-	-	-	Fragment	Body	-	512.64
RIV-12,942	2019	132	STP	4	0-10	Tableware	Plate	-	Ceramic	Stoneware	Kitchen Items	-	-	-	Blue glaze	-	-	-	-	-	-	-	Fragment	Rim	1	34.52
RIV-12,942	2019	133	STP	4	0-10	Toothpaste	Tube	-	Metal	Non-ferrous	Household Items	-	-	-	-	-	-	-	-	-	-	-	Fragment	50-75%	1	6.39
RIV-12,942	2019	134	STP	4	0-10	Hardware	Strap	-	Metal	Ferrous	Hardware Items	-	-	-	-	-	-	-	-	-	-	-	Fragment	-	1	0.72
RIV-12,942	2019	135	STP	4	0-10	Nail	Wire	-	Metal	Ferrous	Building Material	-	-	-	-	-	-	-	-	-	-	-	Fragment	-	-	26.04
RIV-12,942	2019	136	STP	4	0-10	Bottle Closure	Crown	-	Metal	Ferrous	Consumer Items	-	-	-	-	-	-	-	-	-	-	-	Fragment	-	3	11.85
RIV-12,942	2019	137	STP	4	0-10	Garment	Rivet	-	Metal	Non-ferrous	Garment Items	-	-	-	-	-	-	-	-	-	-	-	Complete	-	1	0.15
RIV-12,942	2019	138	STP	4	0-10	Button	Snap	-	Metal	Non-ferrous	Garment Items	-	-	-	-	-	-	-	-	-	-	-	Complete	-	1	0.45
RIV-12,942	2019	139	STP	4	0-10	Garment	Zipper	-	Metal	Non-ferrous	Garment Items	-	-	-	-	-	-	-	-	-	-	-	Complete	-	1	2.13
RIV-12,942	2019	140	STP	4	0-10	Can	Sanitary	-	Metal	Ferrous	Consumer Items	-	-	-	-	-	-	-	-	-	-	-	Fragment	-	-	111.65
RIV-12,942	2019	141	STP	4	0-10	Metal	Indeterminate	-	Metal	Ferrous	Unknown Items	-	-	-	-	-	-	-	-	-	-	-	Fragment	-	-	1314.82
RIV-12,942	2019	142	STP	4	0-10	Shoe	Upper	-	Leather	Mammal	Garment Items	-	-	-	-	-	-	-	-	-	-	-	Fragment	-	1	0.35
RIV-12,942	2019	143	STP	4	0-10	Bottle Closure	Internal Thread	-	Plastic	Undifferentiated	Consumer Items	-	-	-	-	-	-	-	-	-	-	-	Complete	-	1	5.28
RIV-12,942	2019	144	STP	4	0-10	Fauna	Bone	-	Bone	Undifferentiated	Food Items	-	-	-	-	-	-	-	-	-	-	-	Fragment	-	-	5.11
RIV-12,942	2019	145	STP	4	0-10	Fauna	Shell	-	Shell	Mytilus sp.	Food Items	-	-	-	-	-	-	-	-	-	-	-	Fragment	-	-	1.80
RIV-12,942	2019	146	STP	4	10-20	Bottle	Clean	Bleach	Glass	Amber	Household Items	ABM	-	-	-	-	-	-	-	-	-	-	Fragment	Body	1	41.81
RIV-12,942	2019	147	STP	4	10-20	Bottle	Indeterminate	-	Glass	Aqua	Consumer Items	-	-	-	-	-	-	-	-	-	-	-	Fragment	Body	1	2.47
RIV-12,942	2019	148	STP	4	10-20	Architecture	Window	-	Glass	Aqua Tint	Building Material	-	-	-	-	-	-	-	-	-	-	-	Fragment	Body	-	37.30
RIV-12,942	2019	149	STP	4	10-20	Bottle	Beverage	-	Glass	Green	Consumer Items	-	-	-	-	-	-	-	-	-	-	-	Fragment	Neck	1	24.83
RIV-12,942	2019	150	STP	4	10-20	Glassware	Vessel	-	Glass	Teal	Household Items	-	-	-	-	-	-	-	-	-	-	-	Fragment	Body	1	1.35
RIV-12,942	2019	151	STP	4	10-20	Bottle	Indeterminate	-	Glass	Colorless	Consumer Items	-	-	-	EMB: (shoulder) "ONE GAL…"	-	-	-	-	1914	2019	Lindsey 2015	Fragment	Body	1	8.59
RIV-12,942	2019	152	STP	4	10-20	Jar	Canning	-	Glass	Colorless	Kitchen Items	ABM	-	Lightning	-	B… / P…	Ball Brother's Glass Co.	-	Muncie, IN	1933	1962	Whitten 2005	Fragment	Body, Finish	1	14.22
RIV-12,942	2019	153	STP	4	10-20	Jar	Food / Condiment	-	Glass	Colorless	Consumer Items	ABM	-	-	-	-	-	-	-	1905	2019	Lindsey 2015	Fragment	Base	4	38.33
RIV-12,942	2019	154	STP	4	10-20	Container	Indeterminate	-	Glass	Colorless	Consumer Items	-	-	-	-	-	-	-	-	-	-	-	Fragment	Body	-	455.93
RIV-12,942	2019	155	STP	4	10-20	Glassware	Tumbler	-	Glass	Colorless	Kitchen Items	ABM	-	-	-	-	-	-	-	1905	2019	Lindsey 2015	Fragment	Rim	1	51.11
RIV-12,942	2019	156	STP	4	10-20	Lamp	Light Bulb	-	Glass	Colorless	Household Items	-	-	-	-	-	-	-	-	-	-	-	Fragment	Body	-	0.40
RIV-12,942	2019	157	STP	4	10-20	Tableware	Plate	-	Ceramic	Stoneware	Kitchen Items	-	-	-	Blue glaze	-	-	-	-	-	-	-	Fragment	Rim	1	15.15

Site No	Year	Cat No	Unit Type	Unit No	Depth (cm)	Object Type	Object Subtype	Product	Material Type	Material Subtype	Functional Category	Mold Manu.	Mold Style	Finish Style	Diagnostic Elements	Maker's Mark / Backstamp	Manufacturer	Company	Place of Origin	Date (min)	Date (Max)	Dating Source	Condition	Portion	Qty	Wgt (g)
RIV-12,942	2019	158	STP	4	10-20	Toothpaste	Tube	-	Metal	Non-ferrous	Household Items	-	-	-	"… SHEFFIELD / TRIPLEMINT / REG. U.S. PAST. OFF. / TOOTHPASTE…"	-	Sheffield Dentifrice Co.	-	New London, CN	-	-	-	Complete	-	1	16.79
RIV-12,942	2019	159	STP	4	10-20	Button	Snap	-	Metal	Non-ferrous	Garment Items	-	-	-	-	-	-	-	-	-	-	-	Complete	-	1	1.78
RIV-12,942	2019	160	STP	4	10-20	Garment	Rivet	-	Metal	Ferrous	Garment Items	-	-	-	-	-	-	-	-	-	-	-	Complete	-	1	0.42
RIV-12,942	2019	161	STP	4	10-20	Nail	Wire	-	Metal	Ferrous	Building Material	-	-	-	-	-	-	-	-	-	-	-	Complete	-	-	7.02
RIV-12,942	2019	162	STP	4	10-20	Hardware	Indeterminate	-	Metal	Ferrous	Hardware Items	-	-	-	-	-	-	-	-	-	-	-	Fragment	-	2	2.56
RIV-12,942	2019	163	STP	4	10-20	Jar Closure	Internal Thread	-	Metal	Ferrous	Consumer Items	-	-	-	-	-	-	-	-	-	-	-	Fragment	-	1	7.29
RIV-12,942	2019	164	STP	4	10-20	Can	Sanitary	Food	Metal	Ferrous	Consumer Items	-	-	-	-	-	-	-	-	-	-	-	Fragment	-	-	125.50
RIV-12,942	2019	165	STP	4	10-20	Metal	Indeterminate	-	Metal	Ferrous	Unknown Items	-	-	-	-	-	-	-	-	-	-	-	Fragment	-	-	968.24
RIV-12,942	2019	166	STP	4	10-20	Shoe	Upper	-	Leather	Mammal	Garment Items	-	-	-	-	-	-	-	-	-	-	-	Fragment	-	-	138.90
RIV-12,942	2019	167	STP	4	10-20	Flora	Seed	-	Seed	Fruit	Food Items	-	-	-	-	-	-	-	-	-	-	-	Fragment	-	1	0.12
RIV-12,942	2019	168	STP	4	10-20	Button	Sew-Through	-	Shell	Undifferentiated	Garment Items	-	-	-	-	-	-	-	-	-	-	-	Complete	-	1	0.08
RIV-12,942	2019	169	STP	4	10-20	Fauna	Bone	-	Bone	Undifferentiated	Food Items	-	-	-	-	-	-	-	-	-	-	-	Fragment	-	-	1.23
RIV-12,942	2019	170	STP	4	20-30	Bottle	Indeterminate	-	Glass	Amber	Consumer Items	ABM	Owens Suction Scar	-	-	-	-	-	-	1905	1959	Lindsey 2015	Fragment	Heel	1	12.28
RIV-12,942	2019	171	STP	4	20-30	Bottle	Indeterminate	-	Glass	Amber	Consumer Items	ABM	Owens Suction Scar	-	-	-	-	-	-	1905	1959	Lindsey 2015	Fragment	Heel	1	28.30
RIV-12,942	2019	172	STP	4	20-30	Bottle	Indeterminate	-	Glass	Amber	Consumer Items	-	-	-	Stippling	-	-	-	-	1940	2019	Lindsey 2015	Fragment	Body	1	3.94
RIV-12,942	2019	173	STP	4	20-30	Bottle	Indeterminate	-	Glass	Amber	Consumer Items	-	-	-	-	-	-	-	-	-	-	-	Fragment	Body	-	31.84
RIV-12,942	2019	174	STP	4	20-30	Container	Indeterminate	-	Glass	Aqua	Consumer Items	-	-	-	-	-	-	-	-	-	-	-	Fragment	Body	-	38.25
RIV-12,942	2019	175	STP	4	20-30	Architecture	Window	-	Glass	Aqua Tint	Building Material	-	-	-	-	-	-	-	-	-	-	-	Fragment	Body	-	148.31
RIV-12,942	2019	176	STP	4	20-30	Bottle	Beverage	-	Glass	Green	Consumer Items	ABM	Owens Suction Scar	-	-	-	-	-	-	1905	1959	Lindsey 2015	Fragment	Base	2	8.38
RIV-12,942	2019	177	STP	4	20-30	Bottle	Beverage	Soda [Seven-Up]	Glass	Green	Consumer Items	ABM	-	-	ACL: White and Red	-	-	The Seven Up Co.	Los Angeles, CA	1933	1959	Horn 2005	Fragment	Body	1	9.34
RIV-12,942	2019	178	STP	4	20-30	Bottle	Beverage	-	Glass	Green	Consumer Items	ABM	-	-	EMB: "RE…"; Stippling	-	-	-	-	1940	2019	Lindsey 2015	Fragment	Heel	1	11.21
RIV-12,942	2019	179	STP	4	20-30	Container	Indeterminate	-	Glass	Colorless	Consumer Items	ABM	-	-	EMB: "…UA…"	-	-	-	-	1914	2019	Lindsey 2015	Fragment	Body	1	1.28
RIV-12,942	2019	180	STP	4	20-30	Jar	Food / Condiment	-	Glass	Colorless	Consumer Items	ABM	-	Wide External Thread	-	-	-	-	-	1905	2019	Lindsey 2015	Fragment	Finish	3	32.77
RIV-12,942	2019	181	STP	4	20-30	Jar	Food / Condiment	-	Glass	Colorless	Consumer Items	ABM	-	-	Stippling	-	-	-	-	1940	2019	Lindsey 2015	Fragment	Heel	2	6.35
RIV-12,942	2019	182	STP	4	20-30	Container	Indeterminate	-	Glass	Colorless	Consumer Items	ABM	-	-	Stippling	21…	-	-	-	1940	2019	Lindsey 2015	Fragment	Base	1	12.29
RIV-12,942	2019	183	STP	4	20-30	Glassware	Tumbler	-	Glass	Colorless	Kitchen Items	ABM	-	-	-	-	-	-	-	1905	2019	Lindsey 2015	Fragment	Finish	1	9.00
RIV-12,942	2019	184	STP	4	20-30	Container	Indeterminate	-	Glass	Colorless	Consumer Items	-	-	-	-	-	-	-	-	-	-	-	Fragment	Body	-	377.81
RIV-12,942	2019	185	STP	4	20-30	Lamp	Light Bulb	-	Glass	Colorless	Household Items	-	-	-	-	-	-	-	-	-	-	-	Fragment	Body	-	0.78
RIV-12,942	2019	186	STP	4	20-30	Tableware	Saucer	-	Ceramic	Stoneware	Kitchen Items	-	-	-	Blue glaze	-	-	-	-	-	-	-	Fragment	Rim	1	40.08
RIV-12,942	2019	187	STP	4	20-30	Tableware	Bowl	-	Ceramic	Stoneware	Kitchen Items	-	-	-	Clear glaze	-	-	-	-	-	-	-	Fragment	Rim	1	3.68
RIV-12,942	2019	188	STP	4	20-30	Electrical	Clamp	-	Plastic	Undifferentiated	Building Material	-	-	-	-	-	-	-	-	-	-	-	Fragment	50-75%	1	7.46
RIV-12,942	2019	189	STP	4	20-30	Button	Sew-Through	-	Plastic	Undifferentiated	Garment Items	-	-	-	4-hole	-	-	-	-	-	-	-	Complete	-	1	0.22
RIV-12,942	2019	190	STP	4	20-30	Button	Sew-Through	-	Plastic	Undifferentiated	Garment Items	-	-	-	2-hole	-	-	-	-	-	-	-	Complete	-	1	0.24
RIV-12,942	2019	191	STP	4	20-30	Lamp	Light Bulb	-	Composite	Glass, Metal	Household Items	-	-	-	-	-	-	-	-	-	-	-	Complete	-	1	1.36
RIV-12,942	2019	192	STP	4	20-30	Toothpaste	Tumbler	-	Metal	Non-ferrous	Household Items	-	-	-	-	-	-	-	-	-	-	-	Fragment	Finish	1	1.74
RIV-12,942	2019	193	STP	4	20-30	Garment	Rivet	-	Metal	Non-ferrous	Garment Items	-	-	-	-	-	-	-	-	-	-	-	Complete	-	2	0.04
RIV-12,942	2019	194	STP	4	20-30	Button	Sew-Through	-	Metal	Non-ferrous	Garment Items	-	-	-	4-hole	-	-	-	-	-	-	-	Complete	-	1	1.28
RIV-12,942	2019	195	STP	4	20-30	Button	Sew-Through	-	Metal	Ferrous	Garment Items	-	-	-	2-hole	-	-	-	-	-	-	-	Complete	-	1	0.73
RIV-12,942	2019	196	STP	4	20-30	Garment	Clasp	-	Metal	Non-ferrous	Garment Items	-	-	-	-	-	-	-	-	-	-	-	Complete	-	1	1.01
RIV-12,942	2019	197	STP	4	20-30	Bottle Closure	Crown	-	Metal	Ferrous	Consumer Items	-	-	-	-	-	-	-	-	-	-	-	Complete	-	6	21.38
RIV-12,942	2019	198	STP	4	20-30	Hardware	Indeterminate	-	Metal	Ferrous	Hardware Items	-	-	-	-	-	-	-	-	-	-	-	Fragment	-	1	79.10
RIV-12,942	2019	199	STP	4	20-30	Metal	Indeterminate	-	Metal	Ferrous	Unknown Items	-	-	-	-	-	-	-	-	-	-	-	Fragment	-	-	1323.37

Site No	Year	Cat No	Unit Type	Unit No	Depth (cm)	Object Type	Object Subtype	Product	Material Type	Material Subtype	Functional Category	Mold Manu.	Mold Style	Finish Style	Diagnostic Elements	Maker's Mark / Backstamp	Manufacturer	Company	Place of Origin	Date (min)	Date (Max)	Dating Source	Condition	Portion	Qty	Wgt (g)
RIV-12,942	2019	200	STP	4	20-30	Fauna	Bone	-	Bone	Mammal	Food Items	-	-	-	Saw-cut	-	-	-	-	-	-	-	Fragment	-	-	7.34
RIV-12,942	2019	201	STP	4	20-30	Button	Loop	-	Shell	Undifferentiated	Garment Items	-	-	-	-	-	-	-	-	-	-	-	Complete	-	1	1.19
RIV-12,942	2019	202	STP	4	30-40	Bottle	Indeterminate	-	Glass	Amber	Consumer Items	-	-	-	-	-	-	-	-	-	-	-	Fragment	Body	-	2.26
RIV-12,942	2019	203	STP	4	30-40	Architecture	Window	-	Glass	Aqua Tint	Building Material	-	-	-	-	-	-	-	-	-	-	-	Fragment	Body	-	58.01
RIV-12,942	2019	204	STP	4	30-40	Container	Indeterminate	-	Glass	Colorless	Consumer Items	-	-	-	-	-	-	-	-	-	-	-	Fragment	Body	-	79.58
RIV-12,942	2019	205	STP	4	30-40	Hardware	Wire	-	Metal	Ferrous	Hardware Items	-	-	-	Barbed	-	-	-	-	-	-	-	Fragment	-	-	19.24
RIV-12,942	2019	206	STP	4	30-40	Nail	Wire	-	Metal	Ferrous	Building Material	-	-	-	-	-	-	-	-	-	-	-	Fragment	-	-	4.53
RIV-12,942	2019	207	STP	4	30-40	Can	Sanitary	Food	Metal	Ferrous	Consumer Items	-	-	-	-	-	-	-	-	-	-	-	Fragment	-	-	6.06
RIV-12,942	2019	208	STP	4	30-40	Munitions	Bullet Casing	-	Metal	Non-ferrous	Munitions	-	-	-	-	WESTERN 40 / MADE IN USA	Western Cartridge Co.	-	East Alton, IL	1898	1969	http://www.rbs0.com/shotshell.htm	Fragment	-	1	2.25
RIV-12,942	2019	209	STP	4	30-40	Metal	Indeterminate	-	Metal	Ferrous	Unknown Items	-	-	-	-	-	-	-	-	-	-	-	Fragment	-	-	243.01
RIV-12,942	2019	210	STP	4	30-40	Shoe	Upper	-	Leather	Mammal	Garment Items	-	-	-	-	-	-	-	-	-	-	-	Fragment	-	-	1.74
RIV-12,942	2019	211	STP	4	30-40	Fauna	Bone	-	Bone	Avian	Food Items	-	-	-	MNI=1	-	-	-	-	-	-	-	Fragment	-	-	0.75
RIV-12,942	2019	212	STP	4	30-40	Button	Sew-Through	-	Shell	Undifferentiated	Garment Items	-	-	-	2-hole	-	-	-	-	-	-	-	Complete	-	1	0.47

McElwain Phase II (18-264)
P-33-028892
2019 Field Year
Master Artifact Catalog

Site No.	Year	Cat. No.	Unit Type	Unit No.	Depth	Artifact Class	Object Type	Object Subtype	Material Type	L (mm)	W (mm)	Th (mm)	Condition	Portion	Qty	Wgt (g)
P-33-028892	2019	1	SC	1	Surface	Ground Stone	Mortar	Portable	Basalt	275.00	245.00	280.00	Fragment	75-100%	1	14295.10

APPENDIX F

Table 5.0–1

Table 5.0–1

Prehistoric Sites Within the Cumulative Impact Study Area

Site No.	Description	Significance Evaluation	Impact Status
RIV-629	Prehistoric bedrock milling feature site with associated lithic scatter	Not Evaluated	Impacted
RIV-635	Prehistoric bedrock milling feature site	Not Evaluated	Impacted
RIV-637	Prehistoric lithic scatter	Not Evaluated	Impacted
RIV-638	Prehistoric bedrock milling feature site with associated lithic scatter	Not Evaluated	Impacted
RIV-645	Prehistoric bedrock milling feature site, extensive artifact scatter, and rock shelters	Significant	Not Impacted
RIV-646	Prehistoric bedrock milling feature site	Not Evaluated	Not Impacted
RIV-647	Prehistoric bedrock milling feature site	Not Evaluated	Impacted
RIV-716	Prehistoric habitation site	Potentially Significant	Not Impacted
RIV-722	Unknown prehistoric site	Unknown	Impacted
RIV-856	Prehistoric lithic scatter	Not Evaluated	Not Impacted
RIV-977	Prehistoric habitation site	Not Evaluated	Not Impacted
RIV-1005	Prehistoric habitation site	Not Evaluated	Not Impacted
RIV-1006	Prehistoric bedrock milling feature site	Not Evaluated	Impacted
RIV-1007	Prehistoric bedrock milling feature site	Not Evaluated	Impacted
RIV-1008	Prehistoric habitation site	Potentially Significant	Impacted
RIV-1009	Prehistoric bedrock milling feature site	Not Evaluated	Not Impacted
RIV-1010	Prehistoric artifact scatter	Not Evaluated	Impacted
RIV-1062	Prehistoric lithic scatter	Not Significant	Impacted
RIV-1072	Prehistoric habitation site	Not Evaluated	Impacted
RIV-1074	Prehistoric habitation site	Not Evaluated	Not Impacted
RIV-1076	Prehistoric habitation site	Not Evaluated	Not Impacted
RIV-1077	Prehistoric habitation site with pictograph and cupules	Not Evaluated	Not Impacted
RIV-1079	Prehistoric bedrock milling feature site	Not Evaluated	Not Impacted
RIV-1309	Prehistoric bedrock milling feature site with associated lithic scatter	Not Significant	Not Impacted
RIV-1359	Prehistoric bedrock milling feature site	Not Evaluated	Not Impacted
RIV-1361	Prehistoric bedrock milling feature site	Not Evaluated	Not Impacted
RIV-1364	Prehistoric bedrock milling feature site	Not Evaluated	Not Impacted
RIV-1366	Prehistoric bedrock milling feature site	Not Evaluated	Not Impacted
RIV-1370	Prehistoric bedrock milling feature site	Not Evaluated	Not Impacted
RIV-1371	Prehistoric bedrock milling feature site	Not Evaluated	Not Impacted
RIV-1372	Prehistoric bedrock milling feature site	Not Evaluated	Not Impacted
RIV-1373	Prehistoric bedrock milling feature site	Not Evaluated	Not Impacted

Site No.	Description	Significance Evaluation	Impact Status
RIV-1374	Prehistoric bedrock milling feature site	Not Evaluated	Not Impacted
RIV-1375	Prehistoric bedrock milling feature site	Not Evaluated	Impacted
RIV-1376	Prehistoric bedrock milling feature site	Not Evaluated	Impacted
RIV-1377	Prehistoric bedrock milling feature site	Not Evaluated	Impacted
RIV-1379	Prehistoric bedrock milling feature site	Not Evaluated	Not Impacted
RIV-1558	Prehistoric bedrock milling feature site with associated lithic scatter	Not Significant	Impacted
RIV-1072	Prehistoric bedrock milling feature site	Not Evaluated	Impacted
RIV-1802	Prehistoric bedrock milling feature site	Not Evaluated	Impacted
RIV-1803	Prehistoric bedrock milling feature site with associated lithic scatter	Not Evaluated	Not Impacted
RIV-1826	Prehistoric temporary camp	Not Evaluated	Not Impacted
RIV-2081	Prehistoric artifact scatter	Not Evaluated	Impacted
RIV-2151	Prehistoric bedrock milling feature site	Not Evaluated	Impacted
RIV-2152	Prehistoric bedrock milling feature site	Not Evaluated	Impacted
RIV-2153	Prehistoric lithic scatter	Not Evaluated	Impacted
RIV-2154	Prehistoric bedrock milling feature site	Not Evaluated	Impacted
RIV-2155	Prehistoric bedrock milling feature site	Not Evaluated	Impacted
RIV-2156	Prehistoric bedrock milling feature site	Not Evaluated	Impacted
RIV-2190	Prehistoric temporary camp site	Not Significant	Impacted
RIV-2210	Prehistoric bedrock milling feature site	Not Significant	Impacted
RIV-2220	Prehistoric bedrock milling feature site	Not Significant	Impacted
RIV-2228	Prehistoric bedrock milling feature site	Not Evaluated	Impacted
RIV-2229	Prehistoric habitation site	Not Evaluated	Impacted
RIV-3056	Prehistoric bedrock milling feature site with associated lithic scatter	Not Significant	Impacted
RIV-3335	Prehistoric habitation site	Significant	Not Impacted
RIV-3336	Prehistoric habitation site	Not Significant	Not Impacted
RIV-3339	Prehistoric habitation site	Significant	Not Impacted
RIV-3405	Prehistoric bedrock milling feature site	Not Evaluated	Impacted
RIV-3413	Prehistoric artifact scatter	Not Evaluated	Not Impacted
RIV-3684	Prehistoric lithic scatter	Not Evaluated	Impacted
RIV-3956H	Prehistoric artifact scatter	Not Significant	Not Impacted
RIV-4104	Prehistoric artifact scatter	Not Evaluated	Not Impacted
RIV-4662	Prehistoric bedrock milling feature site	Not Significant	Not Impacted
RIV-4788	Prehistoric bedrock milling feature site	Not Evaluated	Impacted
RIV-5327	Prehistoric artifact scatter	Not Evaluated	Impacted
P-33-007881	Prehistoric isolate	Not Applicable	Not Impacted
RIV-6168	Prehistoric lithic scatter	Not Significant	Impacted
RIV-6169	Prehistoric lithic scatter	Not Evaluated	Not Impacted
RIV-6183	Prehistoric bedrock milling feature site	Not Significant	Impacted

Site No.	Description	Significance Evaluation	Impact Status
RIV-6184	Prehistoric bedrock milling feature site	Not Significant	Impacted
P-33-008948	Prehistoric isolate	Not Applicable	Impacted
RIV-6350	Prehistoric lithic scatter with rock feature	Not Evaluated	Impacted
RIV-6469	Prehistoric bedrock milling feature site	Not Evaluated	Impacted
RIV-6470	Prehistoric bedrock milling feature site	Not Evaluated	Impacted
RIV-6471	Prehistoric bedrock milling feature site	Not Evaluated	Impacted
RIV-6505	Prehistoric bedrock milling feature site with a pictograph and habitation debris	Significant	Not Impacted
RIV-6662	Prehistoric bedrock milling feature site	Not Significant	Not Impacted
P-33-011236	Prehistoric bedrock milling feature site	Potentially Significant	Not Impacted
P-33-011238	Prehistoric bedrock milling feature site	Not Evaluated	Not Impacted
P-33-011239	Prehistoric lithic scatter	Not Evaluated	Not Impacted
P-33-011241	Prehistoric lithic scatter	Not Evaluated	Not Impacted
P-33-011243	Prehistoric bedrock milling feature site	Not Evaluated	Not Impacted
P-33-011244	Prehistoric bedrock milling feature site	Not Evaluated	Not Impacted
P-33-011245	Prehistoric bedrock milling feature site	Not Evaluated	Impacted
P-33-011246	Prehistoric bedrock milling feature site	Not Evaluated	Impacted
P-33-011247	Prehistoric isolate	Not Applicable	Impacted
P-33-011248	Prehistoric isolate	Not Applicable	Impacted
P-33-011253	Prehistoric isolate	Not Applicable	Impacted
RIV-6806	Prehistoric bedrock milling feature site	Not Significant	Impacted
RIV-6807	Prehistoric bedrock milling feature site	Not Significant	Impacted
RIV-6808	Prehistoric bedrock milling feature site	Not Significant	Impacted
RIV-6809	Prehistoric bedrock milling feature site	Not Significant	Impacted
RIV-6810	Prehistoric bedrock milling feature site	Not Significant	Impacted
RIV-6811	Prehistoric bedrock milling feature site	Not Significant	Impacted
RIV-6812	Prehistoric bedrock milling feature site	Not Significant	Impacted
-	Prehistoric isolate	Not Applicable	Impacted
RIV-7032	Prehistoric bedrock milling feature site with associated lithic scatter	Significant	Impacted
P-33-012699	Prehistoric isolate	Not Applicable	Not Impacted
P-33-012770	Prehistoric isolate	Not Applicable	Not Impacted
P-33-012771	Prehistoric isolate	Not Applicable	Impacted
P-33-012772	Prehistoric isolate	Not Applicable	Impacted
P-33-012773	Prehistoric isolate	Not Applicable	Not Impacted
P-33-012774	Prehistoric isolate	Not Applicable	Not Impacted
RIV-7334	Prehistoric bedrock milling feature site	Not Evaluated	Not Impacted
RIV-7335	Prehistoric bedrock milling feature site	Not Evaluated	Not Impacted
RIV-7336	Prehistoric bedrock milling feature site	Not Evaluated	Not Impacted
RIV-7410	Prehistoric bedrock milling feature site with associated lithic scatter	Not Significant	Impacted

Site No.	Description	Significance Evaluation	Impact Status
RIV-7400	Prehistoric bedrock milling feature site	Not Evaluated	Not Impacted
RIV-7405	Prehistoric bedrock milling feature site with associated lithic scatter	Not Evaluated	Impacted
RIV-7409	Prehistoric bedrock milling feature site with associated lithic scatter	Not Evaluated	Impacted
RIV-7424	Prehistoric bedrock milling feature site	No	Not Impacted
RIV-7425	Prehistoric bedrock milling feature site	No	Not Impacted
RIV-7426	Prehistoric bedrock milling feature site	Not Evaluated	Impacted
RIV-7427	Prehistoric bedrock milling feature site	Not Evaluated	Not Impacted
P-33-013363	Prehistoric isolate	Not Applicable	Not Impacted
P-33-013364	Prehistoric isolate	Not Applicable	Impacted
P-33-013397	Prehistoric isolate	Not Applicable	Impacted
P-33-013398	Prehistoric isolate	Not Applicable	Impacted
RIV-7566	Prehistoric quarry	Not Evaluated	Impacted
RIV-7612	Prehistoric habitation site	Not Evaluated	Impacted
RIV-7613	Prehistoric habitation site	Not Evaluated	Impacted
RIV-7614	Unknown prehistoric site	Unknown	Impacted
RIV-7615	Unknown prehistoric site	Unknown	Impacted
P-33-013976	Prehistoric isolate	Not Applicable	Impacted
P-33-014358	Prehistoric isolate	Not Applicable	Not Impacted
RIV-7852	Prehistoric bedrock milling feature site	Not Evaluated	Not Impacted
RIV-7853	Prehistoric bedrock milling feature site	Not Evaluated	Not Impacted
RIV-7964	Prehistoric bedrock milling feature site	No	Not Impacted
RIV-7965	Prehistoric bedrock milling feature site	No	Not Impacted
RIV-8055	Prehistoric bedrock milling feature site	Not Evaluated	Not Impacted
RIV-8083	Prehistoric bedrock milling feature site	Not Evaluated	Impacted
RIV-8085	Prehistoric bedrock milling feature site	Not Evaluated	Not Impacted
P-33-015463	Prehistoric isolate	Not Applicable	Not Impacted
RIV-8290	Prehistoric bedrock milling feature site	No	Not Impacted
RIV-8749	Prehistoric bedrock milling feature site with associated lithic scatter	Not Evaluated	Not Impacted
P-33-016989	Prehistoric lithic scatter	Not Evaluated	Impacted
RIV-11,585	Prehistoric bedrock milling feature site	No	Not Impacted
RIV-9111	Prehistoric bedrock milling feature site	Not Evaluated	Not Impacted
RIV-10,075	Prehistoric bedrock milling feature site with associated lithics, ground stone, and shell	Not Evaluated	Impacted
RIV-10,098	Prehistoric lithic scatter	No	Impacted
RIV-10,892	Prehistoric lithic scatter	Not Evaluated	Not Impacted
RIV-10,893	Prehistoric lithic scatter	Not Evaluated	Impacted
RIV-11,571/H	Prehistoric bedrock milling feature site and associated lithic scatter	Significant	Not Impacted

Site No.	Description	Significance Evaluation	Impact Status
RIV-11,572	Prehistoric bedrock milling feature site with associated lithic scatter	Significant	Impacted
RIV-11,573	Prehistoric bedrock milling feature site	Significant	Impacted
RIV-11,574/H	Prehistoric bedrock milling feature sites	Significant	Not Impacted
RIV-11,575	Prehistoric bedrock milling feature site with associated lithic scatter	Significant	Impacted
RIV-11,576	Prehistoric bedrock milling feature site	No	Impacted
RIV-11,707	Prehistoric bedrock milling feature site	Not Evaluated	Not Impacted
RIV-11,708	Prehistoric bedrock milling feature site	Not Evaluated	Not Impacted
RIV-11,739	Prehistoric lithic scatter and associated ground stone	Not Evaluated	Not Impacted
RIV-11,740	Prehistoric bedrock milling feature site	Not Evaluated	Not Impacted
RIV-11,778	Prehistoric lithic scatter	Not Evaluated	Not Impacted
P-33-023973	Prehistoric isolate		Not Impacted
P-33-024002	Prehistoric bedrock milling feature site, rock shelter, and lithic scatter	Not Evaluated	Impacted
RIV-11,886	Prehistoric habitation site	Significant	Impacted
P-33-024574	Prehistoric isolate	Not Applicable	Not Impacted
P-33-024577	Prehistoric isolate	Not Applicable	Not Impacted
P-33-024578	Prehistoric isolate	Not Applicable	Not Impacted
P-33-024579	Prehistoric bedrock milling feature site	Not Evaluated	Not Impacted
P-33-024580	Prehistoric bedrock milling feature site	Not Evaluated	Not Impacted
P-33-024581	Prehistoric isolate	Not Applicable	Not Impacted
P-33-024582	Potentially prehistoric rock feature	Not Evaluated	Not Impacted
P-33-024583	Prehistoric isolate	Not Applicable	Not Impacted
P-33-024584	Prehistoric isolate	Not Applicable	Not Impacted
P-33-024590	Prehistoric isolate	Not Applicable	Not Impacted
P-33-024591	Prehistoric isolate	Not Applicable	Not Impacted
P-33-024592	Prehistoric bedrock milling feature site	Not Evaluated	Not Impacted
P-33-024593	Prehistoric isolate	Not Applicable	Not Impacted
P-33-024594	Prehistoric isolate	Not Applicable	Not Impacted
P-33-024595	Prehistoric isolate	Not Applicable	Not Impacted
P-33-024596	Prehistoric isolate	Not Applicable	Not Impacted
P-33-024597	Prehistoric isolate	Not Applicable	Not Impacted
P-33-024598	Prehistoric isolate	Not Applicable	Not Impacted
P-33-024599	Prehistoric isolate	Not Applicable	Not Impacted
P-33-024600	Prehistoric isolate	Not Applicable	Not Impacted
P-33-024601	Prehistoric isolate	Not Applicable	Not Impacted
P-33-024602	Prehistoric isolate	Not Applicable	Not Impacted
P-33-024603	Prehistoric isolate	Not Applicable	Impacted

Site No.	Description	Significance Evaluation	Impact Status
P-33-024604	Prehistoric isolate	Not Applicable	Not Impacted
P-33-024605	Prehistoric isolate	Not Applicable	Not Impacted
P-33-024606	Prehistoric petroglyph	Not Evaluated	Not Impacted
P-33-024607	Prehistoric petroglyph	Not Evaluated	Not Impacted
P-33-024608	Prehistoric isolate	Not Applicable	Not Impacted
P-33-024609	Prehistoric isolate	Not Applicable	Not Impacted
P-33-024610	Prehistoric bedrock milling feature site	Not Evaluated	Not Impacted
P-33-024611	Prehistoric isolate	Not Applicable	Not Impacted
P-33-024612	Prehistoric isolate	Not Applicable	Not Impacted
P-33-024613	Prehistoric isolate	Not Applicable	Not Impacted
P-33-024614	Prehistoric isolate	Not Applicable	Not Impacted
P-33-024615	Prehistoric isolate	Not Applicable	Not Impacted
P-33-024616	Prehistoric isolate	Not Applicable	Not Impacted
P-33-024617	Prehistoric isolate	Not Applicable	Not Impacted
P-33-024618	Prehistoric isolate	Not Applicable	Not Impacted
P-33-024619	Prehistoric isolate	Not Applicable	Not Impacted
P-33-024620	Prehistoric bedrock milling feature site	Not Evaluated	Not Impacted
P-33-024621	Prehistoric isolate	Not Applicable	Not Impacted
P-33-024622	Prehistoric isolate	Not Applicable	Not Impacted
P-33-024623	Prehistoric isolate	Not Applicable	Not Impacted
P-33-024624	Prehistoric isolate	Not Applicable	Not Impacted
P-33-024625	Prehistoric isolate	Not Applicable	Not Impacted
P-33-024626	Prehistoric isolate	Not Applicable	Not Impacted
P-33-024627	Prehistoric isolate	Not Applicable	Not Impacted
P-33-024638	Prehistoric isolate	Not Applicable	Not Impacted
P-33-024629	Prehistoric isolate	Not Applicable	Not Impacted
P-33-024630	Prehistoric isolate	Not Applicable	Not Impacted
P-33-024631	Prehistoric isolate	Not Applicable	Not Impacted
P-33-024632	Prehistoric isolate	Not Applicable	Not Impacted
P-33-024633	Prehistoric isolate	Not Applicable	Not Impacted
P-33-024634	Prehistoric isolate	Not Applicable	Not Impacted
P-33-024635	Prehistoric isolate	Not Applicable	Not Impacted
P-33-024636	Prehistoric isolate	Not Applicable	Not Impacted
P-33-024639	Prehistoric bedrock milling feature site	Not Evaluated	Not Impacted
P-33-024641	Prehistoric bedrock milling feature site	Not Evaluated	Not Impacted
P-33-024642	Prehistoric isolate	Not Applicable	Not Impacted
P-33-024643	Prehistoric isolate	Not Applicable	Not Impacted
RIV-12,193	Prehistoric bedrock milling feature site with associated lithic scatter	Significant	Not Impacted
RIV-12,195	Prehistoric bedrock milling feature site with	Not Evaluated	Not Impacted

Site No.	Description	Significance Evaluation	Impact Status
	associated lithic scatter		
RIV-12,196	Prehistoric lithic scatter	Not Evaluated	Not Impacted
RIV-12,197	Prehistoric lithic scatter	Not Evaluated	Not Impacted
RIV-12,198	Prehistoric lithic scatter	Not Evaluated	Not Impacted
RIV-12,199	Prehistoric quarry	No	Not Impacted
RIV-12,200	Prehistoric lithic scatter	Not Evaluated	Not Impacted
RIV-12,242	Prehistoric lithic scatter	No	Not Impacted
RIV-12,243	Prehistoric bedrock milling feature site with associated lithic scatter	Significant	Not Impacted
RIV-12,244	Prehistoric artifact scatter	Significant	Not Impacted
RIV-12,245	Prehistoric bedrock milling feature site with associated lithic scatter	No	Not Impacted
RIV-12,505	Prehistoric bedrock milling feature site	No	Impacted
RIV-12,509	Prehistoric bedrock milling feature site with associated lithic scatter	Not Evaluated	Impacted
RIV-12,540	Prehistoric bedrock milling feature site	No	Not Impacted
P-33-026673	Prehistoric isolate	Not Applicable	Impacted
RIV-12,566	Prehistoric bedrock milling feature site	No	Not Impacted
P-33-028065	Prehistoric isolate	Not Applicable	Impacted
RIV-12,671	Prehistoric isolate	Not Applicable	Impacted
P-33-028067	Prehistoric isolate	Not Applicable	Impacted
P-33-028068	Prehistoric isolate	Not Applicable	Impacted
RIV-12,714	Prehistoric bedrock milling feature site	No	Impacted
P-33-028257	Prehistoric isolate	Not Applicable	Impacted
P-33-028259	Prehistoric isolate	Not Applicable	Impacted
P-33-028531	Prehistoric isolate	Not Applicable	Impacted
RIV-12,932	Prehistoric quarry	Not Evaluated	Not Impacted
P-33-028550	Prehistoric isolate	Not Applicable	Not Impacted
P-33-028551	Prehistoric isolate	Not Applicable	Not Impacted
P-33-028615	Prehistoric bedrock milling feature site	Not Evaluated	Not Impacted

APPENDIX G

Confidential Maps

(Deleted for Public Review; Bound Separately)