

Appendix D.3

Phase II Archaeological
Testing
CRM Tech

**CRM TECH**

1016 E. Cooley Drive, Suite A/B
Colton, CA 92324

March 25, 2024

Pam Steele, Principal
MIG, Inc.
1650 Spruce Street, Suite 102
Riverside, CA 92507

Re: Phase II Archaeological Testing at Sites 3908-1, 3908-6, and 3908-7 (Temporary Designations)
BH Properties Specific Plan; Assessor's Parcel Numbers 610-020-001, -012, -013, and -036
City of Indio, Riverside County, California
CRM TECH Project No. 4079

Dear Ms. Steele:

At your request, CRM TECH has completed a Phase II archaeological testing and evaluation program on three prehistoric sites within the area designated for the proposed BH Properties Specific Plan Project, consisting of approximately 160 acres of vacant land in the City of Indio, Riverside County, California. The project area encompasses four parcels, Assessor's Parcel Numbers 610-020-001, -012, -013, and -036, located on the south side of Avenue 42 between Madison Street and Monroe Street, in the north half of Section 15, T5S R7E, San Bernardino Baseline and Meridian (Figures 1, 2).

BACKGROUND

As you know, three archaeological sites and four isolates, all of them prehistoric (i.e., Native American) in origin, were recorded in the project area during a Phase I survey in August and September 2022 and designated temporarily as Sites 3908-1, 3908-6, and 3908-7 and Isolates 3908-2, 3908-3, 3908-4, and 3908-5, pending assignment of permanent identification numbers in the California Historical Resources Inventory (Ballester et al. 2022). Among these seven resources, the four isolates, or localities with fewer than three artifacts, did not meet CEQA definition of "historical resources" and thus required no further study. Due to the possibility of additional cultural remains in subsurface deposits, however, the significance of the three sites—and their qualification as "historical resources"—could not be ascertained without further archaeological investigations (*ibid.*:14-15). Therefore, a Phase II archaeological testing program was recommended for the sites at the time. The recommendation was adopted by the lead agency for this project, namely the City of Indio, and implemented during this study.

The purpose of the testing program was to determine the horizontal and vertical extent of Sites 3908-1, 3908-6, and 3908-7, to ascertain whether the sites have an intact subsurface deposit and, if so, to assess the nature and integrity of the deposit. To accomplish these objectives, CRM TECH performed a series of standard Phase II archaeological field procedures, including a systematic re-survey of the sites, collection of surface artifacts, and the excavation of surface scrapes, shovel test pits, and test units, as well as laboratory analyses of the recovered artifacts. A summary of these research procedures and the findings is presented in the sections below, along with the final conclusion of the study.

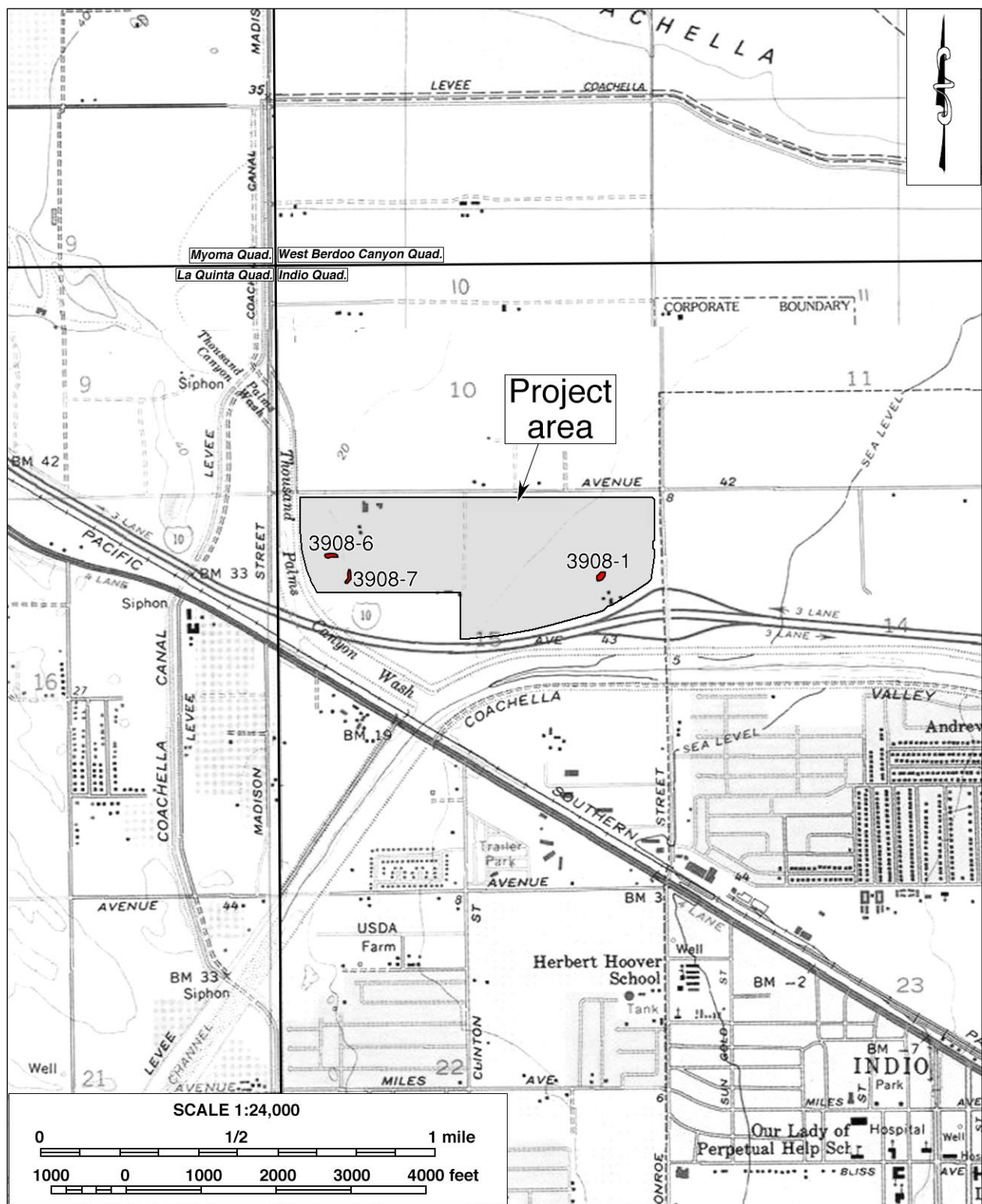


Figure 1. The project area and locations of the archaeological sites tested, based on USGS 7.5' topographic maps.



Figure 2. The project area and site locations (detail), based on Google Earth imagery.

ARCHAEOLOGICAL FIELD PROCEDURES

Re-Survey and Surface Collection

The fieldwork for this study was carried out on February 13-15, 2024, by CRM TECH field director Daniel Ballester, crew chief Hunter O'Donnell, and project archaeologists Michael Richards, Ashley Conner-Ayala, Cristal Conner-Ayala, and Nicolena Berry, under the direction of principal investigator Michael Hogan (see Attachment 1 for qualifications). The testing program was designed and implemented in coordination with the Agua Caliente Band of Cahuilla Indians, and tribal representatives Daniel Mirelez, Cierra Teel, and Kerri Pollard monitored the excavations. Before the excavations began, the previously recorded locations of Sites 3908-1, 3908-6, and 3908-7, along with the surrounding areas, were re-surveyed at an intensive level to look for additional surface artifacts (Fig. 3). The locations of surface artifacts encountered were then recorded using the Trimble Yuma Tablet, and all of them were subsequently collected (see Attachments 2, 3).

The re-survey of Site 3908-1 yielded additional surface artifacts that had been uncovered by shifting sands since the Phase I survey. These artifacts consisted of worked lithic materials, ceramic sherds, and fire-affected clay, similar to what had been recorded at the site before (Fig. 4). Upon conclusion of laboratory analysis of the collected materials, the final count of the surface collection was a total of 7 lithic flakes, 4 buffware ceramic sherds, and 13 pieces of fire-affected clay, an increase from the previously recorded 3 surface lithic artifacts and 1 fragment of fire-affected clay. The originally recorded projectile point and single piece of fire-affected clay were re-located and collected during the survey, but the two lithic flakes previously observed on the surface were not.



Figure 3. Typical landscape in the project area at the time of the testing program. (Photograph taken on February 14, 2024; view to the north.)



Figure 4. Surface procedures. *Left*: ceramic sherds on surface at 3809-6; *right*: surface scrape at 3809-1. (Photographs taken on February 13 and 15, 2024)

Newly revealed surface artifacts were also found during the re-survey of Site 3908-6, including 1 schist metate fragment, 1 fire-affected andesite mano fragment, 6 lithic flakes, and 5 ceramic sherds. Only two of the three originally recorded ceramic sherds were re-located. Similarly, 51 additional artifacts were found during the re-survey of Site 3908-7, a notable increase from the 5 buffware ceramic body sherds that were originally recorded. The newly revealed artifacts include 1 shaped granitic mano, 1 quartzitic mano, 1 quartzite flake, 1 crystal quartz flake, 1 fire-affected faunal fragment, and 46 buffware ceramic sherds. Only one out of the five previously recorded ceramic sherds was re-located.

In addition to the sites, the locations of surface artifacts previously recorded as Isolates 3908-2, 3908-3, 3908-4, and 3908-5 were also revisited. Isolates 3908-2 and 3908-4, consisting of a small piece of fire-affected clay and a black metavolcanic interior flake, respectively, were re-located and collected, while Isolates 3908-3 and 3908-5, consisting of three fire-affected buffware sherds and a quartz crystal flake, could no longer be found. Field observations suggest that the ceramic sherds at 3908-3 may have been displaced by recent alluvial activities.

Surface Scrapes

Surface scrapes (SSs) are used as a recovery method in areas where artifacts are noted on the surface but where the deposit appears to have little depth. The strategy is to excavate horizontally rather than vertically and to recover as much cultural material as possible. Based on the size of the site and the density of surface artifacts, one surface scrape was excavated during this testing program at Site 3908-1 and none at either of the other two sites. The surface scrape measured 1x2 m in size and was dug 20 cm deep in the northern half and 30 cm deep in the southern half (Fig. 4). Soil from the SS was screened through an 1/8-inch hardware mesh and any cultural material recovered was bagged and labeled with the appropriate provenience information. The bags were later taken to the CRM TECH laboratory for sorting, counting, and cataloging. The SS produced two quartzite secondary flakes in its southern half, at the depth of 0-10 cm (see Attachments 2, 3).



Figure 5. Subsurface excavation procedures. *Left*: shovel test pit at 3809-6; *right*: test unit at 3809-7. (Photographs taken on February 13-14, 2024)

Shovel Test Pits

Shovel test pits (STPs) are used to detect the presence of subsurface deposits and determine the placement of test units. During the current investigation, a total of 10 STPs were excavated, 3 at 3908-1, 3 at 3908-6, and 4 at 3908-7. These STPs were rectangular pits excavated in 10-cm levels and measuring 0.5x0.5 m in size (Fig. 5). The excavated soils were also screened through 1/8-inch hardware mesh and all recovered cultural materials were bagged and labeled with the appropriate provenience information. The STPs were terminated after excavating a minimum of 50 cm without evidence of substantial subsurface deposits.

No subsurface artifacts were recovered from two of the three STPs placed within Site 3908-1, and the third produced a single aqua glass body fragment of possible historical origin at 10-20 cm below the engineered ground surface (BEGS; see Attachments 2, 3). Similarly, two of the three STPs placed within Site 3908-6 yielded no artifacts, while STP #1 produced a single slate grey chert flake from a sidewall between 0-30 cm BEGS. At Site 3908-7, three of the four STPs produced negative finding but the other yielded four fragments of fire-affected granitic rock at the depth of 10-20 cm BEGS.

Excavation Units

The purpose of the excavation units during testing is to recover a quantitative amount of data with very minimal destruction to the site. The excavation units provide important information regarding soil types and stratigraphy while allowing archaeologists to explore the subsurface sediments for cultural deposits. During this study, excavation units were placed in areas where the presence of subsurface cultural deposits was deemed likely. All of the units measured 1x1 m and were hand-excavated in 10 cm levels to the depth of 100 cm (Fig. 5). The soil from these units was screened through 1/8-inch hardware mesh, with any cultural material recovered bagged and labeled with the appropriate provenience information. Stratigraphic drawings of the sidewalls of all the units were completed to interpret past site depositional processes. One excavation unit was dug at each of the three sites.

No prehistoric artifacts were recovered from the unit at 3908-1. Four glass fragments were found, including one fragment of colorless plate glass, one colorless glass body fragment, and one amber glass body fragment from 20-30 cm BEGS and one small amber glass body fragment at 60-70 cm BEGS. The excavation unit placed within Site 3908-6 produced no artifacts, while the unit dug within Site 3908-7 produced three fragments of ceramic body sherds at the depth of 30-40 cm BEGS (see Attachments 2, 3).

LABORATORY ANALYSIS METHODS

All artifacts recovered from the field procedures were taken to CRM TECH's laboratory for cleaning as appropriate, sorting, counting, bagging, and cataloguing (see Attachment 2). The artifacts were initially sorted into two respective categories, namely prehistoric or historical in origin, and then sorted by type. Within the category of prehistoric artifacts, all were further categorized according to artifact nature (e.g., flaked-stone, ceramic, and groundstone). Further analysis was then conducted by CRM TECH archaeologist Salvadore Z. Boites.

Ceramics

In general, Native Americans used two types of clay, residual and sedimentary, to make pottery. Residual clays originate from mountain sources and produce pottery referred to as brownware. The color of brownware sherds generally ranges from red to brown due to high iron content. Sedimentary clays are secondary sources originating in flood plains, basins, and lakebeds producing pottery referred to as buffware. The color of buffware sherds has a wider range of colors, and in many cases results in gray, and even black-colored pottery. Gray or black pottery may be a result of carbonaceous matter that could be embedded in the clay, or the kiln environment, which produces an oxidized environment causing changes in color (Shepard 1956).

The gray or blackish exterior on the surface of pottery sherds can result from a number of variables, including high salinity paste, low oxygen kiln, overall environment, or a high carbon kiln environment caused by firing wood. Regarding temper, residual clays do not require the addition of temper materials because they occur naturally within the clay. Sedimentary clays do require temper materials, such as crushed sand, seashells, and in some cases bone, as binding agents. Sherds recovered during this study were categorized as either brownware or buffware. When possible, each sherd was further assigned a functional class, such as water jar, mug, storage vessel, or cooking pot. Classifications were based on the following: (1) sherd portion, thickness, and surface texture, (2) curvature of rim sherds, (3) body shapes on the vertical plane to determine the relative height of the represented vessel, and (4) other diagnostic attributes such as charred or calcified surfaces.

In general, cooking pots are distinguishable by having thicker walls, coarser paste, larger temper, and heavy exterior charring. The larger temper, combined with increased thickness, helped prevent breakage during heating over cooking fires. In addition, stucco is often applied to the basal portion of cooking vessels to further protect them from fracturing. Because of their larger opening, they are usually well finished on both the exterior and interior. Storage vessels on the other hand tend to have medium thickness with mid-sized temper and may have visible oily residues accumulated on sherd walls (Reber and Hart 2008). These vessels frequently have wide bodies and narrow mouths and, because of the small opening, are commonly not as well finished on the inside as bowls and cooking vessels. The interior surfaces may exhibit finger marks and even palm prints.

Water jars generally have relatively thicker bottoms, thinner sides, medium to thick shoulders, and medium to thin necks and rims. Although the temper size for water jars can range from very fine to coarse, water jars and small pinch pot bowls generally have fine temper. The principal reason for the thinness of the water jar vessel walls and fine temper is to reduce weight for carrying purposes and to allow for evaporative cooling, but the areas in need of strength, such as the bottom, are commonly thickened. Since these jars have very small mouths the interior walls are also not typically well finished. Finger marks are often well preserved on the interior surfaces of water jars, especially on the thin walls and shoulder areas.

After classifying the sherds in this assemblage, the resulting data were tabulated and used for comparisons in the interpretive analysis. In terms of classification, sherds that did not provide enough attributes to determine vessel type were classified as indeterminable. This category was based primarily on physical attributes; i.e., the sherds are too small to yield diagnostic data such as vessel shape and height, and the surfaces are missing attributes, such as stucco, oily residue, charring, or calcification, necessary for distinguishing one vessel type from another.

Groundstone

Dating to the Late Archaic Period, groundstone implements in the Coachella Valley were generally well-shaped, highly polished tools that were typically fashioned from consolidated raw materials such as quartzites and fine-grain granites. Well-defined deep basin metates with shaped and grounded lateral edges were common during this period, as were the manos that were used with the metates. Manos during this period were symmetrically ground to have smooth-rounded lateral edges. The tools associated with the Late Archaic Period are in sharp contrast to the tools manufactured during the Late Prehistoric Period.

During the later period expedient tools dominated the manufacturing process. Tools from this period were made rather quickly and left somewhat unshaped. Metates were made from a variety of tabular rocks, although granites and schists were frequently used, and they were minimally shaped with little to no margins. Likewise, manos were typically fashioned from already rounded river cobbles, and granites and quartzites were common materials for these hand stones. In addition to manos and metates, mortars and pestles were common implements during the Late Prehistoric Period. Mortars were typically fashioned from wood of cottonwood or mesquite trees and elongated pestles were made of schist rocks.

Flaked-stone (Lithics)

Lithic analysis includes examining debitage, defined as waste product flakes that accumulate during the process of tool making. The analysis of flaked-stone debitage and tools such as projectile points includes identification of material type, e.g., chert, jasper, quartzite, and wonderstone. Material classification can yield information about geographical sources for stone used by Native Americans, which in turn may indicate trade and travel behaviors. Lithic flakes are also classified on the basis of technology and production stage, such as whether the flake was produced by percussion or pressure technology and at what stage of reduction the flake was produced. Larger primary flakes with original cortex made by percussion technology usually represent earlier stages of reduction, while smaller percussion secondary flakes, with little to no cortex, are part of the early-stage production.

They are usually more defined and exhibit flake scars on both surfaces. Later-stage production flakes include tertiary flakes and pressure flakes. Tertiary flakes are more refined, with no cortex, and exhibit well-defined flake scars on the ventral and dorsal surfaces. Pressure flakes are associated with the final stage of tool production, specifically the process of creating sharp, finished edges on tools.

LABORATORY ANALYSIS RESULTS: SITE 3908-1

A total of 49 artifacts were recovered from this site and analyzed. The assemblage includes 4 ceramic sherds, 7 lithic flakes, 1 projectile point, 5 glass fragments, 13 pieces of fire-affected clay, and 19 small faunal fragments. Among these artifacts, 23 were collected from the surface and 26 from below the surface.

Ceramics

The four ceramic sherds are of the buffware variety and were tempered with sand. All sherds are body sherds, two exhibiting thin walls, and the other two exhibiting medium walls. Although none of the sherds retained enough attributes to determine vessel types, one sherd (Cat. #46) is of note as its exterior surfaces exhibited a slip.

Lithics

Among the lithic artifacts present at Site 3908-1 was a complete wonderstone Cottonwood projectile point, which dates the site to between 200 and 900 years before present (BP). Other lithics recovered and analyzed included two pieces of the same small quartzite pressure flake. One exhibits a well-defined platform and feathered termination, with the lateral portion missing, while the second piece is the distal end with the proximal end missing. Two small core reduction primary flakes were also recovered, including one quartzite with the proximal end missing and one of jasper exhibiting cortex on its proximal end and with a feathered termination.

Two secondary flakes included a rose-colored wonderstone core reduction flake with a well-defined platform and a dorsal surface that exhibits cortical spotting and impurities. The other is a mid-size biface reduction quartzite secondary flake with a small amount of cortex visible on its dorsal surface and inclusions and impurities visible on its dorsal and ventral surfaces. One small quartz crystal waste flake was also recovered.

Faunal and Fire-affected Clay (Non-cultural)

Nineteen small bone fragments, likely from small rodents, were recovered from Site 3908-1. These faunal remnants have been determined to be non-cultural as they do not appear to have been altered by humans. A total of 13 small nodules of clay that were either affected by fire or naturally baked in the sun were recovered from the site. These items were also determined non-cultural. The two elements that typically would define fire-affected clay as cultural, namely a cooking unit (hearth) or burial (cremation), were not present.

Historical Artifacts

Five glass bottle shards were recovered from the site, all of them from below the surface. None of the shards exhibits the attributes necessary to determine manufacture, bottle type, and provide a date range.

LABORATORY ANALYSIS RESULTS: SITE 3908-6

A total of 24 artifacts were analyzed from Site 3908-6, including 7 ceramic sherds, 7 lithic flakes, 2 groundstone artifacts, and 8 small faunal fragments. Fifteen of the artifacts were collected from the surface, and nine from below the surface.

Ceramics

Six of the seven ceramic pieces are buffware body sherds tempered with granitic sand ranging from medium to coarse grain. The other is a medium-walled brownware pinch-pot sherd that eventually broke into two. This sherd has a finished exterior wall and an unfinished interior wall with thumbprints and fingerprints.

Lithics

All of the lithic artifacts were collected from the surface except for Catalogue #01, a small chert secondary core reduction flake with a platform but missing the distal end. The flake appears to have suffered from step termination; not enough force was used during percussion strike. One of the other lithic artifacts, initially classified in the field as an andesite interior flake, was determined non-cultural upon further analysis as it did not exhibit attributes associated with lithic technology.

Two secondary lithic flakes were recovered, including one of quartzite with its proximal end missing and a step termination. The other secondary flake is the distal end of a small tan-colored jasper flake with minimal cortex. Three tertiary flakes were identified. Among them are an intact chert tertiary pressure flake with a defined platform, an obsidian tertiary core reduction flake exhibiting a hinge termination characterized by a curved distal end, and a quartzite distal end of a tertiary biface reduction flake that extended to the margin with feathered termination.

Groundstone

Two groundstone fragments were present at Site 3908-6. Catalogue #05 is a small, unshaped uniface schist tabular metate fragment with an angular margin and minimal polish. The other groundstone fragment is a small, unshaped andesite mano fragment with sub-angular margin. As the top portion of the mano is missing, it cannot be determined if it was biface.

Faunal (Non-cultural)

Eight small bone fragments, likely from small rodents, were recovered from Site 3908-6. The faunal fragments have been determined non-cultural as they do not appear to have been altered by humans.

LABORATORY ANALYSIS RESULTS: SITE 3908-7

A total of 62 artifacts were analyzed. The assemblage includes 54 ceramic sherds, 2 lithic flakes, 2 groundstone artifacts, 3 fire-affected rocks, and 1 small faunal fragment. Six of these artifacts were found below the surface, and the other 56 were collected from the surface.

Ceramics

With the exception of one small brownware ceramic sherd, all of the ceramic sherds recovered from 3908-7 are of the buffware variety. The collection includes 45 sherds that were tempered with granitic sand, 6 with crushed milky quartz, 1 with quartz rock grains, and 2 with no temper. Forty-six are body sherds, 5 are rim sherds, 1 is a base sherd, and 2 sherds did not exhibit attributes associated with prehistoric or historic ceramic technology and have been identified as fragments of modern terracotta tile.

It was not possible to determine vessel type for 47 of the ceramic sherds as they lacked sufficient diagnostic attributes, 4 have the characteristics of storage vessels, and 1 has the characteristics of a cooking vessel. The curvature of the last sherd indicates that the vessel had an opening ranging from 17.5 to 22.5 centimeters. The sherds from storage vessels include a small buffware sherd exhibiting smooth finished exterior and an unfinished interior with a faint oily surface. The other three are evidently from the same vessel and exhibit medium thickness with unfinished interior walls. A portion of the interior surface on two of the sherds has glossy oily residue. These traits are consistent with a storage vessel.

Lithics

The lithics recovered from Site 3908-7 included two secondary flakes. One flake is the proximal end of a secondary crystal quartz flake that exhibits a step termination. It appears that not enough force was used during the percussion strike, and the platform is intact. The other is a small brown jasper secondary flake with four detachment scars on the dorsal surface and a slight bulb of percussion on the ventral surface near the platform.

Groundstone

Two pieces of groundstone were found at Site 3908-7. Among them is a small, nearly complete biface mano. One side is more polished than the other, and the less polished side only has polishing on a lateral edge. It appears to have sub-angular margins and to have been shaped. The less polished side shows signs of pecking and exhibits scarring. The other groundstone artifact is a nearly complete tonalite biface mano with rounded margins. On one side of the mano the polishing is invasive. This mano has been shaped.

Faunal

One small robust bone fragment was catalogued. It exhibits linear scratches on the surface, but the species and possible human manipulation could not be determined.

Fire-affected Rock

Four fire-affected rock fragments were found at Site 3908-7. Although a larger fragment has a scar, the cultural significance was indeterminable. Associated elements that could prove diagnostic such as a hearth, fire ring, or cremation, are not present.

LABORATORY ANALYSIS RESULTS: ISOLATED ARTIFACTS

Catalogue #19, corresponding to Isolate 3908-2, was originally recorded as a small nodule of fire-affected clay. However, further analysis suggests that it is in fact sunbaked clay and therefore non-cultural. Catalogue #20, corresponding to Isolate 3908-4, was originally recorded as a metavolcanic interior flake. As a result of the laboratory analysis, it has been reclassified as a nearly complete quartzite tertiary core reduction flake with missing platform.

DISCUSSION

The re-survey of Sites 3908-1, 3908-6, and 3908-7 encountered additional prehistoric surface artifacts besides those recorded during the Phase I study. All of the artifacts recovered from the surface, surface scrapes, shovel test pits, and excavation units are listed in the attached artifact catalogue (see Attachment 2). The majority of the artifacts collected (52%) were ceramic sherds, of which 89% were indeterminable in terms of vessel type. Meanwhile, 33% of the artifacts collected, including faunal, ceramics, and clay, were determined to be non-cultural or non-historical upon further analysis. Lithics accounted for 15% of the artifacts collected, while groundstone and fire-affected rocks together accounted for less than 1%. Two artifacts were able to provide an approximate temporal frame. Catalogue #05 is a tabular metate fragment found on the surface of Site 3908-6. Tabular metates are associated with the Late Prehistoric Period (150 to 1,800 BP). The second artifact that dates to the Late Prehistoric Period is Catalogue #43, a small cottonwood series projectile point (200 to 900 BP).

Information recovered from Sites 3908-1, 3908-6, and 3908-7 indicates that the sites likely represent tool production and resource procurement and/or processing activities. Based on the stratigraphy and lack of depth to the sites, it is likely that they date to or are slightly more recent than the last high stand of Holocene Lake Cahuilla. Prehistoric archaeological sites have been well-documented in the area, from the highwater mark of the last lake stand (the 42-foot contour) and below as the lake receded. As noted in the Phase I survey report, the sites occur in relatively close proximity to the former shoreline of Holocene Lake Cahuilla during its last high stand in the 17th-18th century (Ballester et al. 2022:14). The data from the testing and evaluation program at Sites 3908-1, 3908-6, and 3908-7 does not provide any new or important information regarding the chronology, subsistence strategies, settlement patterns, technologies, or any other aspect of the culture of the Native people who occupied this area.

CONCLUSION AND RECOMMENDATIONS

In summary of the findings and discussion presented above, Sites 3908-1, 3908-6, and 3908-7 contained limited prehistoric cultural materials and were found not to contain substantial subsurface components. No evidence of long-term occupation was found at the sites. Altogether, the sites have

yielded little data, and essentially no new or important data, to add to existing knowledge of prehistoric lifeways in this region. Without substantial subsurface cultural deposits, the sites lack sufficient archaeological data potential to be considered eligible for listing in the California Register of Historical Resources, and thus do not meet the statutory definition of “historical resources,” as provided by CEQA and associated regulations (PRC §5020.1(j); Title 14 CCR §15064.5(a)(1)-(3)).

Based on the combined results of the Phase I study of the project area (Ballester et al. 2022) and the current archaeological testing program, CRM TECH concludes that no known significant “historical resources” exist within the project area. However, the project area does retain a demonstrated sensitivity for cultural remains from the prehistoric period. Therefore, CRM TECH recommends to the City of Indio that the proposed project may be cleared to proceed in compliance with CEQA provisions on cultural resources under the conditions that all earth-moving operations impacting the relatively undisturbed native soils be monitored by a qualified archaeologist and a Native American monitor from the local tribes, such as the Cabazon Band of Mission Indians or the Torres Martinez Desert Cahuilla Indians.

Thank you for this opportunity to be of service. If you have any questions or need further information regarding the research results presented above, please do not hesitate to contact our office.

Sincerely,



Deirdre Encarnación, M.A.
CRM TECH

References Cited

- Ballester, Daniel, Terri Jacquemain, and Ashley Connor-Ayala
2022 Historical/Archaeological Resources Survey Report: BH Properties Specific Plan, Assessor’s Parcel Numbers 610-020-001, -010, -012, -013, -021, -034, and -036, City of Indio, Riverside County, California. Manuscript report prepared by CRM TECH, Colton, California.
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2008 Visible Clues: The Analysis of Visible Pottery Residues from New York State with Gas Chromatography/Mass Spectrometry. In John P. Hart (ed.): *Current Northeast Paleoethnobotany II*; pp.129-139. New York State Museum Bulletin 512. The University of the State of New York, Albany, New York.
- Shepard, Anna O.
1956 *Ceramics for the Archaeologist*. Publication No. 609. Carnegie Institute of Washington, Washington, D.C.

ATTACHMENT 1
PERSONNEL QUALIFICATIONS

PRINCIPAL INVESTIGATOR/ARCHAEOLOGIST
Michael Hogan, Ph.D., RPA (Registered Professional Archaeologist)

Education

- 1991 Ph.D., Anthropology, University of California, Riverside.
1981 B.S., Anthropology, University of California, Riverside; with honors.
1980-1981 Education Abroad Program, Lima, Peru.
- 2002 “Section 106—National Historic Preservation Act: Federal Law at the Local Level,”
UCLA Extension Course #888.
2002 “Recognizing Historic Artifacts,” workshop presented by Richard Norwood,
Historical Archaeologist.
2002 “Wending Your Way through the Regulatory Maze,” symposium presented by the
Association of Environmental Professionals.
1992 “Southern California Ceramics Workshop,” presented by Jerry Schaefer.
1992 “Historic Artifact Workshop,” presented by Anne Duffield-Stoll.

Professional Experience

- 2002- Principal Investigator, CRM TECH, Riverside/Colton, California.
1999-2002 Project Archaeologist/Field Director, CRM TECH, Riverside, California.
1996-1998 Project Director and Ethnographer, Statistical Research, Inc., Redlands, California.
1992-1998 Assistant Research Anthropologist, University of California, Riverside.
1992-1995 Project Director, Archaeological Research Unit, U.C. Riverside.
1993-1994 Adjunct Professor, Riverside Community College, Mt. San Jacinto College, U.C.
Riverside, Chapman University, and San Bernardino Valley College.
1991-1992 Crew Chief, Archaeological Research Unit, U.C. Riverside.
1984-1998 Project Director, Field Director, Crew Chief, and Archaeological Technician for
various southern California cultural resources management firms.

Research Interests

Cultural Resource Management, Southern Californian Archaeology, Settlement and Exchange
Patterns, Specialization and Stratification, Culture Change, Native American Culture, Cultural
Diversity.

Cultural Resources Management Reports

Principal investigator for, author or co-author of, and contributor to numerous cultural resources
management study reports since 1986.

Memberships

Society for American Archaeology; Society for California Archaeology; Pacific Coast
Archaeological Society; Coachella Valley Archaeological Society.

PROJECT ARCHAEOLOGIST/FIELD DIRECTOR
Daniel Ballester, M.S., RPA (Registered Professional Archaeologist)

Education

- 2013 M.S., Geographic Information System (GIS), University of Redlands, California.
- 1998 B.A., Anthropology, California State University, San Bernardino.
- 1997 Archaeological Field School, University of Las Vegas and University of California, Riverside.
- 1994 University of Puerto Rico, Rio Piedras, Puerto Rico.

- 2007 Certificate in Geographic Information Systems (GIS), California State University, San Bernardino.
- 2002 “Historic Archaeology Workshop,” presented by Richard Norwood, Base Archaeologist, Edwards Air Force Base; presented at CRM TECH, Riverside, California.

Professional Experience

- 2002- Field Director/GIS Specialist, CRM TECH, Riverside/Colton, California.
- 2011-2012 GIS Specialist for Caltrans District 8 Project, Garcia and Associates, San Anselmo, California.
- 2009-2010 Field Crew Chief, Garcia and Associates, San Anselmo, California.
- 2009-2010 Field Crew, ECorp, Redlands.
- 1999-2002 Project Archaeologist, CRM TECH, Riverside, California.
- 1998-1999 Field Crew, K.E.A. Environmental, San Diego, California.
- 1998 Field Crew, A.S.M. Affiliates, Encinitas, California.
- 1998 Field Crew, Archaeological Research Unit, University of California, Riverside.

Cultural Resources Management Reports

Field Director, co-author, and contributor to numerous cultural management reports since 2002.

PROJECT ARCHAEOLOGIST/REPORT WRITER
Deirdre Encarnación, M.A.

Education

- 2003 M.A., Anthropology, San Diego State University, California.
2000 B.A., Anthropology, minor in Biology, San Diego State University, California; with honors.
- 2021 Certificate of Specialization, Kumeyaay Studies, Cuyamaca College, California.
2001 Archaeological Field School, San Diego State University.
2000 Archaeological Field School, San Diego State University.

Professional Experience

- 2016- Archaeological Consultant, Friends of Maha'u lepu, Koloa, Hawai'i.
2004- Project Archaeologist/Report Writer, CRM TECH, Riverside/Colton, California.
2001-2003 Part-time Lecturer, San Diego State University, California.
2001 Research Assistant for Dr. Lynn Gamble, San Diego State University.
2001 Archaeological Collection Catalog, San Diego State University Foundation.

Presentations

- 2023 "The Kumeyaay-Critical Awareness, Critical Activation," Salaam, San Diego College of Continuing Education.
2023 "A Look at the Three Wise Men and Their Global Celebrations," The Epiphany Project.
2022 "Voices: A Latina Advocate Shares about Life, Stereotypes, & Rising Above," Salaam online event.
2022 "The Original Beach Town: San Diego's Coastal Heritage," San Diego Archaeological Center Living Room Lecture.

Memberships

Society for California Archaeology; Society for Hawaiian Archaeology; California Native Plant Society.

PROJECT ARCHAEOLOGIST/FIELD CREW CHIEF
Hunter C. O'Donnell, B.A.

Education

- 2016-2015 M.A. Program, Applied Archaeology, California State University, San Bernardino.
2015 B.A. (*cum laude*), Anthropology, California State University, San Bernardino.
2012 A.A., Social and Behavioral Sciences, Mt. San Antonio College, Walnut, California.
2011 A.A., Natural Sciences and Mathematics, Mt. San Antonio College, Walnut, California.
- 2014 Archaeological Field School, Santa Rosa Mountains; supervised by Bill Sapp of the United States Forest Service and Daniel McCarthy of the San Manuel Band of Mission Indians.

Professional Experience

- 2022-2017- Field Crew Chief, CRM TECH, Colton, California.
2017- Project Archaeologist, CRM TECH, Colton, California.
2016-2018 Graduate Research Assistant, Applied Archaeology, California State University, San Bernardino.
2016-2017 Cultural Intern, Cultural Department, Pechanga Band of Luiseño Indians, Temecula, California.
2015 Archaeological Intern, U.S. Bureau of Land Management, Barstow, California.
2015 Peer Research Consultant: African Archaeology, California State University, San Bernardino.

PROJECT ARCHAEOLOGIST
Salvadore Z. Boites, M.A.

Education

- 2013 M.A., Applied Anthropology, California State University, Long Beach.
2003 B.A., Anthropology/Sociology, University of California, Riverside.
1996-1998 Archaeological Field School, Fullerton Community College, Fullerton, California.

Professional Experience

- 2014-2010-2011 Project Archaeologist, CRM TECH, Colton, California.
2010-2011 Adjunct Instructor, Anthropology, Everest College, Anaheim, California.
2003-2008 Project Archaeologist, CRM TECH, Riverside/Colton, California.
2001-2002 Teaching Assistant, Moreno Elementary School, Moreno Valley, California.
1999-2003 Research Assistant, Anthropology Department, University of California, Riverside.

PROJECT ARCHAEOLOGIST

Michael D. Richards, M.A., Registered Professional Archaeologist

Education

- 2002 M.A., Anthropology, California State University, Northridge (CSUN).
1986 B.A., Anthropology: University of California, Los Angeles (UCLA).
1982 A.A., Los Angeles Valley College, Los Angeles, California.
- 2015 Section 106 workshop.
2000 CSUN “Olmec” field excavation and lab analysis; La Venta, Mexico.
1999 Rock art recording, UCLA Extension; Little Lake, California.
1998 Rock art symposium, UCLA Extension.

Professional Experience

- 2018- Project Archaeologist/Paleontologist, CRM TECH, Colton, Calif.
2016-2018 Co-Principal Investigator/Archaeologist, LSA Associates Inc.
2012-2016 Co-Principal Investigator/Archaeologist, ICF International (Jones & Stokes).
2010-2012 Co-Principal Investigator/Archaeologist, various CRM firms (on call).
2007-2010 Principal Investigator/Field Director/Crew Chief, ASM Affiliates, Inc.
2004-2007 Project Manager/Co-Principal Investigator, ArchaeoPaleo Resource Management, Inc.
2003-2004 Staff Archaeologist/Crew Chief, SRI, Inc.
2000-2003 Project Archaeologist/Field Director, Ancient Enterprises (Clewlow, Jr.).
1999-2000 Staff Archaeologist/Lab Crew Chief, CSC/Edwards Air Force Base.

Research Interests

Pottery and rock art analysis; prehistory the American southwest; Mesoamerica; Japan.

Cultural Resources Management Reports

Author and co-author of, contributor to, and principal investigator for numerous cultural resources management study reports since 1999.

Memberships

Society for American Archaeology; Society for California Archaeology; Archaeological Institute of America; Conejo Open Space Trails Advisory Committee; Conejo Valley Historical Society.

PROJECT ARCHAEOLOGIST
Ash Conner-Ayala, B.S.

Education

2022 Paleanthropology Field School, Orzomani, Republic of Georgia.
2021 GIS Certification, Pasadena City College, Pasadena, California.
2020 B.S., Anthropology, University of California, Riverside.
2019 F.A.C.T.S. Forensics Osteology Course, Texas State University.
2019 Paleanthropology Field School, Dmanisi, Republic of Georgia.
2019 M.A.R.I. CRM Field School, Milford, Utah.

Professional Experience

2021- Project Archaeologist, CRM TECH, Colton, California.
2021 Field Technician, Bruce Love Consulting, Littlerock, California.
2020 Archaeological Monitor and Field Technician, McKenna et al., Whittier, California.
2019 Graduate Research Assistant, DZC Archaeology and Cultural Resource Management, Riverside, California.

PROJECT ARCHAEOLOGIST
Cristal Conner-Ayala

Education

2022 Paleanthropology Field School, Orzomani, Republic of Georgia.
2021- A.A., Anthropology, Norco City College, Norco, California.
2019 M.A.R.I. CRM Field School, Milford, Utah.

Professional Experience

2021- Project Archaeologist, CRM TECH, Colton, California.
2020 Field Technician, McKenna et al., Whittier, California.

ATTACHMENT 2
ARCHAEOLOGICAL CATALOGUE

**Archaeological Catalogue
CRM TECH Project No. 4079**

Cat. #	Location 1	Location 2	Date	Artifact Type	Material	Qty.	Depth (cm)
4079-01	3908-06	STP-01	2/13/24	Lithic flake	Rock	1	0-30
4079-02	3908-06	STP-01	2/13/24	Faunal	Bone	3	40-50
4079-03	3908-06	STP-01	2/13/24	Faunal	Bone	4	30-40
4079-04	3908-06	STP-01	2/13/24	Faunal	Bone	1	10-20
4079-05	3908-06	GS-01	2/13/24	Metate fragment	Rock	1	Surface
4079-06	3908-06	GS-02	2/13/24	Mano fragment	Rock	1	Surface
4079-07	3908-06	C-04	2/13/24	Pottery sherd	Clay	1	Surface
4079-08	3908-06	C-06	2/13/24	Pottery sherd	Clay	1	Surface
4079-09	3908-06	C-07	2/13/24	Pottery sherd	Clay	1	Surface
4079-10	3908-06	C-05	2/13/24	Pottery sherd	Clay	1	Surface
4079-11	3908-06	C-01	2/13/24	Pottery sherd	Clay	1	Surface
4079-12	3908-06	L-03	2/13/24	Lithic flake	Rock	1	Surface
4079-13	3908-06	L-01	2/13/24	Lithic flake	Rock	1	Surface
4079-14	3908-06	L-02	2/13/24	Lithic flake	Rock	1	Surface
4079-15	3908-06	L-04	2/13/24	Lithic flake	Rock	2	Surface
4079-16	3908-06	L-05	2/13/24	Lithic flake	Rock	1	Surface
4079-17	3908-06	C-02	2/13/24	Pottery sherd	Clay	1	Surface
4079-18	3908-06	C-03	2/13/24	Pottery sherd	Clay	1	Surface
4079-19	3908-02	FAC	2/14/24	Fire-affected clay	Clay	1	Surface
4079-20	3908-04	L-03	2/14/24	Lithic flake	Rock	1	Surface
4079-21	3908-01	SS1	2/15/24	Lithic flake	Rock	2	0-10
4079-22	3908-01	U1	2/15/24	Bottle shard	Glass	1	60-70
4079-23	3908-01	U1/GL-01	2/15/24	Bottle shard	Glass	3	20-30
4079-24	3908-01	STP-03	2/15/24	Bottle shard	Glass	1	10-20
4079-25	3908-01	U1	2/15/24	Faunal	Bone	2	90-100
4079-26	3908-01	U1	2/15/24	Faunal	Bone	5	70-80
4079-27	3908-01	U2	2/15/24	Faunal	Bone	12	60-70
4079-28	3908-01	L-04	2/14/24	Lithic flake	Rock	1	Surface
4079-29	3908-01	FAC-12	2/14/24	Fire-affected clay	Clay	1	Surface
4079-30	3908-01	FAC-07	2/14/24	Fire-affected clay	Clay	2	Surface
4079-31	3908-01	C-02	2/15/24	Pottery sherd	Clay	1	Surface
4079-32	3908-01	FAC-09	2/14/24	Fire-affected clay	Clay	2	Surface
4079-33	3908-01	FAC-10	2/14/24	Fire-affected clay	Clay	1	Surface
4079-34	3908-01	L-03	2/14/24	Lithic flake	Rock	1	Surface
4079-35	3908-01	FAC-04	2/14/24	Fire-affected clay	Clay	1	Surface
4079-36	3908-01	FAC-05	2/14/24	Fire-affected clay	Clay	1	Surface
4079-37	3908-01	FAC-08	2/14/24	Fire-affected clay	Clay	1	Surface
4079-38	3908-01	FAC-02	2/14/24	Fire-affected clay	Clay	1	Surface
4079-39	3908-01	FAC-03	2/14/24	Fire-affected clay	Clay	1	Surface
4079-40	3908-01	FAC-06	2/14/24	Fire-affected clay	Clay	1	Surface
4079-41	3908-01	L-06	2/15/24	Lithic flake	Rock	1	Surface
4079-42	3908-01	L-07	2/15/24	Lithic flake	Rock	1	Surface
4079-43	3908-01	LP-01	2/14/24	Projectile point	Rock	1	Surface
4079-44	3908-01	STP-01	2/14/24	Pottery sherd	Clay	2	Surface
4079-45	3908-01	L-05	2/15/24	Lithic flake	Rock	1	Surface
4079-46	3908-01	C-03	2/14/24	Pottery sherd	Clay	1	Surface
4079-47	3908-01	FAC-11	2/14/24	Fire-affected clay	Clay	1	Surface
4079-48	3908-07	GS-01	2/13/24	Mano	Rock	1	Surface
4079-49	3908-07	GS-02	2/13/24	Mano	Rock	1	Surface
4079-50	3908-07	C-22	2/13/24	Pottery sherd	Clay	1	Surface
4079-51	3908-07	C-05	2/13/24	Pottery sherd	Clay	1	Surface
4079-52	3908-07	C-23	2/14/24	Pottery sherd	Clay	1	Surface

**Archaeological Catalogue
CRM TECH Project No. 4079**

Cat. #	Location 1	Location 2	Date	Artifact Type	Material	Qty.	Depth (cm)
4079-53	3908-07	L-02	2/13/24	Lithic flake	Rock	1	Surface
4079-54	3908-07	C-13	2/13/24	Pottery sherd	Clay	1	Surface
4079-55	3908-07	C-18	2/13/24	Pottery sherd	Clay	3	Surface
4079-56	3908-07	C-21	2/13/24	Pottery sherd	Clay	3	Surface
4079-57	3908-07	C-06	2/14/24	Pottery sherd	Clay	4	Surface
4079-58	3908-07	C-20	2/13/24	Pottery sherd	Clay	4	Surface
4079-59	3908-07	C-15	2/13/24	Pottery sherd	Clay	1	Surface
4079-60	3908-07	C-17	2/13/24	Pottery sherd	Clay	1	Surface
4079-61	3908-07	C-16	2/13/24	Pottery sherd	Clay	1	Surface
4079-62	3908-07	C-08	2/13/24	Pottery sherd	Clay	1	Surface
4079-63	3908-07	C-09	2/13/24	Pottery sherd	Clay	3	Surface
4079-64	3908-07	C-07	2/13/24	Pottery sherd	Clay	1	Surface
4079-65	3908-07	L-01	2/13/24	Lithic flake	Rock	1	Surface
4079-66	3908-07	F-01	2/13/24	Faunal	Bone	1	Surface
4079-67	3908-07	C-10	2/13/24	Pottery sherd	Clay	8	Surface
4079-68	3908-07	C-11	2/13/24	Pottery sherd	Clay	1	Surface
4079-69	3908-07	C-12	2/13/24	Pottery sherd	Clay	4	Surface
4079-70	3908-07	C-14	2/13/24	Pottery sherd	Clay	2	Surface
4079-71	3908-07	C-06	2/13/24	Pottery sherd	Clay	7	Surface
4079-72	3908-07	C-19	2/13/24	Pottery sherd	Clay	2	Surface
4079-73	3908-07	U1	2/14/24	Pottery sherd	Clay	3	30-40
4079-74	3908-07	STP-03	2/14/24	Fire-affected rock	Rock	4	10-20

ATTACHMENT 3

**CALIFORNIA HISTORICAL RESOURCES INVENTORY
RECORD UPDATES**

Confidential and Private