

LATE DISCOVERY PLAN
R STREET IMPROVEMENT PROJECT
10TH TO 13TH STREETS

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INTRODUCTION

The Archaeological Survey Report prepared for the R Street Improvement Project between 10th and 13th streets was prepared by Tremaine & Associates in 2007. At that time Tremaine & Associates reviewed historic maps and noted that a long finger of dry, high ground between branches of swampland occurred in the project area between 10th and 12th streets. In other areas within the City these locations of high ground are associated with prehistoric deposits and appear to have been a favorable location for prehistoric inhabitants. In light of the potential for encountering prehistoric deposits below R Street Caltrans has determined that a Late Discovery Plan is required prior to beginning construction.

The following Late Discovery Plan specifies measures to be taken during construction to identify buried archaeological or traditional cultural resources, if they are present and also specify treatment measures if such resources are found during construction. Implementation of this plan will resolve any adverse effects of the undertaking on a buried archaeological resource potentially eligible for listing in the National Register of Historic Places (NRHP).

RESEARCH ORIENTATION

In 2002 Tremaine & Associates prepared a National Register of Historic Places nomination for the Sand Cove Site in Sacramento County. That nomination provided a research design for the Sand Cove Site (CA-SAC-164) and other sites in the region (Tremaine 2007). Generally, prehistoric sites in the Sacramento Region lend themselves to addressing theoretical issues regarding hunter-gatherer settlement and subsistence models. Using that orientation as a foundation, Tremaine suggested that issues including resource storage, demography, intracommunity structure and organization, intercommunity interactions and mortuary behaviors can be studied. Methodological issues include site formation processes and settlement variability. In addition, researchers working in this area of the Sacramento Valley have been studying impacts to native populations resulting from changes in paleolandscapes and paleoclimates (focusing from Holocene sea level rise and drought cycles), paleodemography, trade and exchange, tool technologies, settlement patterns and social systems (Tremaine 2002:Section 8, page 1).

Tremaine's research raised specific issues that prehistoric deposits in the region may address or contribute important information under Criterion D of the National Register. These issues are listed below. Tremaine's NRHP nomination contains detailed discussion of each topic and will serve as a comparative basis, should prehistoric deposits be uncovered during the R Street Improvement project. Issues include:

- Effects of Climate Change on prehistoric populations;
- Trade and Exchange (based on geochemical tracing of obsidians and plotting temporal and spatial distributions)
- Settlement;
- Subsistence;
- Social Systems and Health; and
- Technology.

Sites rich in cultural material that exhibits great diversity and variability in content contain the greatest potential data needed to address research issues. For example, artifactual and ecofactual

remains contained within a site, numerous features, a cemetery, chronologically sensitive artifacts, obsidian artifacts and debitage, baked clay, fire-affected rock, invertebrate and vertebrate remains and macrobotanical remains are key elements required to address many of the research issues (Tremaine 2002:Section 8, pp. 2-7).

PREFIELD COORDINATION

The City's archaeological consultant will attend at least one pre-construction meeting with the City and contractor to discuss the Late Discovery Plan and its implementation. Discussion should include the possibility that an archaeological deposit may be encountered during construction at the particular location, monitoring procedures, personnel involved, and that archaeological work may be necessary. The City's consultant will have the authority to halt construction upon the discovery of potentially eligible historic or Native American artifacts, with all parties cognizant that such monitoring may slow earthwork somewhat in the area of interest. The monitor may deem it necessary to use heavy equipment (e.g. backhoe) and an operator for archaeological work. In addition, a member of a local Native American community may be present during monitoring and/or archaeological work.

MONITORING

The majority of the construction work would occur from zero to three feet below the grade. Utility lines placed in R street between 10th and 12th streets in 2006 did not expose any archaeological deposits at these depths; therefore, archaeological monitoring will be conducted at excavation locations that are deeper than three feet below grade. The City's consultant will coordinate with the City's Project Manager to determine when such earthwork begins and archaeological monitoring will commence. Archaeological monitoring will be done by the City's consultant on a daily basis until excavations of the areas are completed. In the event that no deposit is encountered, the consultant will prepare a report describing the work done, soils and soil column/geological deposits observed. The report will be presented to the City's Preservation Director and to Caltrans District 03 PQS-PI Prehistoric Archaeology for review.

ARCHAEOLOGICAL EXCAVATION/DATA RECOVERY

The monitoring archaeologist will halt work if archaeological materials are discovered during construction, investigate the find and decide if the material encountered warrants implementation of the Plan. An examination of the deposit will be conducted to determine if the discovered artifacts and/or features are *in situ*. Identification of an *in situ* deposit will minimally be based on the presence/absence of modern material, soil color, composition, and matrix characteristics, as well as relative artifact position. To ascertain the context of the deposit, it may be necessary to have additional excavation conducted by hand or with mechanized equipment, depending on the circumstances. Work shall remain stopped if additional archaeological personnel are necessary and

until they arrive on site. If it is determined that the archaeological artifacts/ecofacts or features have been previously disturbed by previous construction and site integrity is compromised, simple artifact recovery will proceed. In the case of a disturbed deposit, only formal tools will be collected. Collection of artifacts may be accomplished with the aid of mechanized equipment and/or by use of hand tools depending on the nature of the materials and their abundance.

Implementation of the Plan will occur if a deposit is discovered and minimally comprised of a collection of ground or flaked stone tools, shell and/or bone, midden soil, artifacts of the historic era, and/or archaeological feature(s) occurring in *undisturbed contexts*. Numbers of artifacts and density of ecofacts should be sufficient to indicate other than an isolated find.

If human remains are observed, the Sacramento County Coroner will be contacted under provisions of Section 27491 of the Government Code. If the coroner determines the remains to be Native American, the Coroner shall contact the NAHC within 24 hours. The NAHC will appoint a Most Likely Descendent (MLD) for disposition of the remains (Health and Safety Code Sect. 7050.5, Public Resources Code Sect. 5097.24). City staff will coordinate with the MLD regarding disposition of any human remains found.

If it is determined the deposit lies in undisturbed contexts and construction work cannot avoid the deposit, archaeological data recovery will commence within the confines of the construction excavation (i.e. trenches). Locational data will be maintained using construction control points. Artifact-bearing soil will be passed through 6mm screens and recovered materials will be bagged and labeled. Data recovery will proceed using standard archaeological procedures. All controlled, manual excavation units shall be hand excavated in arbitrary 10cm levels unless cultural stratigraphy is noted, in which case excavation within levels may proceed by reference to observed strata. Excavation for the purpose of exposing a feature or burial need not proceed in 10cm levels.

If deemed appropriate for the conditions, a mixed strategy of 3mm and 6mm mesh hardware cloth may be used to recover artifacts and constituents from excavated soil. Appropriate soil samples may be taken, not necessarily from each unit of excavation. Level records and maps shall be completed for every level of each unit. Soil profiles and photographic records shall be kept for each unit. All identified subsurface features shall be individually documented, photographed, and mapped, both in plan and profile; appropriate flotation and carbon samples shall be taken from each feature if appropriate.

LABORATORY/ANALYSIS

All material will be entered into a catalog system for appropriate identification. Laboratory work and analysis will be conducted such as: artifact cleaning; measurement; photography; examination of morphological characteristics including microscopy, as needed; identification of faunal bone; time-of-manufacture and functional analysis of historic-era artifacts; and obsidian hydration, if appropriate. Additional analysis, if feasible and prudent, may include radiocarbon dating, residue analysis, x-ray fluorescence spectroscopy, and macrobotanical analysis. Formal analyses will include:

Obsidian Hydration Analysis—A sample of formal obsidian tools and debitage shall also analyzed. A total sample size of about 100 specimens is anticipated.

Description and Interpretation of Features—Feature provenience, size, depth and general

configuration shall be described. Feature artifacts and associations will be described.

Other Analyses—If feasible and prudent, additional analyses may include radiocarbon dating, soils and geomorphological studies, blood residue analysis, or bead analysis. Objectives, methods, and sampling criteria will be ascertained and identified by the Contractor and approved by the City's Project Coordinator and the Caltrans District 03 PQS-PI Prehistoric Archaeology.

DATA REPORT

If a site is found to occur in an undisturbed context, a report on the findings will be prepared describing the methods of data recovery, the inventory of collected archaeological materials, morphology and measurement of formal tools, and the results of selected special studies (e.g., obsidian hydration). The report shall present analyses of the data and interpret the collection in terms of the research design described above.

If the deposit is compromised by disturbance (i.e. physical damage) to a point where data contained within the deposit has little or no research potential, the report will describe the disturbance and its extent to the deposit as well as methods of recovery and artifacts found. Any report produced as a part of this project will be presented to the City's Preservation Director and to the Caltrans District 03 PQS-PI Prehistoric Archaeology for review.

REFERENCES CITED

Tremaine and Associates

2007 *Archaeological Survey Report, R Street Improvement Project, 10th to 13th Streets*. On file, City of Sacramento.

Tremaine, Kim

2002 Sand Cove Site (CA-SAC-164) National Register of Historic Places Nomination. On file, United States Department of Interior, National Park Services, Washington D.C.