Exhibit 5.1: Archaeological Survey Report Format and Content Guide

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EXHIBIT 5.1: ARCHAEOLOGICAL SURVEY REPORT FORMAT AND CONTENT GUIDE

Archaeological Survey Report (ASR) Format

Caltrans uses the Archaeological Survey Report (ASR) to present results of identification efforts conducted for a project, demonstrating that Caltrans has made a reasonable level of effort to identify historic properties, commensurate with the scale and scope of the undertaking. It documents all archaeological identification efforts, including survey and consultation results for all pre-contact and post-contact archaeological, multi-component sites, as well as cultural sites and/or Traditional Cultural Places. The ASR does not document the evaluation cultural resources for National Register of Historic Places (National Register) or California Register of Historical Resources eligibility. While the level of detail will vary, ASRs should follow these basic format and content guidelines. A small project with no resources may result in a five-page document, while a long linear project through several ethnographic areas with varying archaeological sites may be a 50-page document (or longer).

The ASR is attached to a Historic Property Survey Report (HPSR) for federal undertakings or a Historic Resources Compliance Report (HRCR) for state-only projects.

The National Register status of properties is identified in the ASR if known, but the evaluation or re-evaluation of archaeological sites is addressed in an Archaeological Evaluation Report (AER) (see Exhibit 5.5). Post-contact archaeological sites, cultural sites, or Traditional Cultural Places may need to be evaluated in a Historic Resources Evaluation Report (HRER) (see Exhibit 6.5). See Exhibit 5.14 for post-contact archaeological methods. Built-environment resources are not reported in the ASR; rather, they are reported in a HRER.

Resources that qualified as exempt from evaluation pursuant to Appendix 4 of the Section 106 PA (106 PA[1]) or the PRC 5024 MOU (5024 MOU[2]) may be discussed in the ASR, but state that such properties, as a category, do not warrant evaluation for the National Register.

ASR Format

- Title Page
- Table of Contents
- Summary of Findings
- Project Location and Description
- Scope of Work
- Sources Consulted
- Background
- Field Methods
- Findings and Conclusions
- References Cited
- Preparer's Qualifications
- Maps
- Other Figures
- Site Records

Title Page

The title page contains the following information:

- Brief descriptive title with type of study (archaeological survey), name and general location of project (e.g., "Curve Correction on Route 989 between Forestview Drive and Limekiln Road").
- County, route, and postmile or local street or road name.
- EA/E-FIS[3] project number and phase (For Local Assistance projects, use the Federal-Aid project number).
- Project contract number (if prepared by consultants).

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[1] Programmatic Agreement Among the Federal Highway Administration, the Advisory Council on Historic Preservation, the California State Historic Preservation Officer, the United States Army Corps of Engineers' Sacramento District, San Francisco District, and Los Angeles District, and the California Department of Transportation Regarding Compliance with Section 106 of the National Historic Preservation Act as it Pertains to the Administration of the Federal-Aid Highway Program in California (2024).

[2] Memorandum of Understanding between the California Department of Transportation and the California State Historic Preservation Officer Regarding Compliance with Public Resources Code Section 5024 and Governor's Executive Order W-26-92 (2024).

[3] Enterprise Resource Planning Financial Infrastructure, a 10-digit number, followed by a phase number of one or more digits.

- Name, title, and signature of the Caltrans Professionally Qualified Staff (PQS) or consultant PQS-equivalent who prepares the report. Also state the preparer’s PQS or PQS-equivalent level and address or location. If the report has multiple authors, all should be listed by name, but only the senior author's name, title, location, and signature are needed.
- Name, title, and signature (if required) of the PQS who reviewed the report for approval, along with the reviewer’s location/address and PQS level (if different than preparer).
- Name, title, location, and signature of the Caltrans District Environmental Branch Chief (DEBC) for whom the document was prepared. The DEBC’s signature on the title page indicates approval and acceptance of the document.
- If a governmental permit for the survey was issued, provide the name of the permitting agency and the permit number.
- USGS topographic quadrangle(s) depicting the study area.
- Primary numbers, trinomials, and other permanent designations of all cultural resources identified in the report.
- Date (month/year) ASR was prepared (appears at bottom of page).

Table of Contents

If the report is large enough to make it helpful, provide a Table of Contents, listing the major report sections subheadings, appendices, tables, and figures, with page numbers.

Summary of Findings

Provide an abstract of the intent, methods, scope, and results of the survey. Describe briefly:

- Proposed undertaking
- Purpose and scope of the survey
- Any constraints to the survey effort
- Number and types of identified archaeological resources and their relation to the proposed project's limits (i.e., within or adjacent).
- Include the following statement:

  It is Caltrans' policy to avoid cultural resources whenever possible. Further investigations may be needed if the site[s] cannot be avoided by the project. If buried cultural materials are encountered during construction, it is Caltrans' policy that work stop in that area until a qualified archaeologist can evaluate the nature and significance of the find. Additional survey will be required if the project changes to include areas not previously surveyed.

Introduction

- Present the date(s) and location of the survey (e.g. on Route 49 in Mariposa County).
- Reference the Study Vicinity Map, Study Location Map, and Study Coverage Map appended to the report.
- Provide the names and general qualifications of the surveyors (PQS level, or relevant educational background, number of years and general geographical location of field experience).

Highway Project Location and Description

- State the district, county, route, post miles, and EA/E-FIS project number and phase (for Local Assistance projects, use the Federal-Aid number).
- Describe the project location as to its rural or urban setting and relation to communities or other major regional landmarks.
- Describe concisely the nature and scope of the proposed project and its potential to affect historic properties.
- Indicate whether new right of way is required.
- For the Area of Potential Effects (APE), describe horizontal and vertical extent of anticipated ground-disturbing activities (project footprint or Area of Direct Impact) within the APE. Reference the APE map, if it is available. If the APE has not been formally defined, describe and map the study area and justification (reference specific engineering plans, etc.)

Sources Consulted

Summarize the methods and results of the records search at the appropriate California Historical Resources Information System (CHRIS) Information Center and review of the Caltrans Cultural Resource Database (CCRD). Include the following:

- List the date of the records search.
- Identify who conducted the records search, and his/her affiliation.

- Describe the range of materials consulted during the records search (National Register of Historic Places, California Register of Historical Resources, California Inventory of Historic Resources, California Historical Landmarks, historical mapping, etc.)
- Define the area for which the records search was conducted (e.g., “a ½-mile radius”) and provide an explanation for why the size and scope of the records search area was chosen. This area may vary depending on the environmental setting of the project area (e.g., research up and down a river rather than a half-mile diameter circle).
- Identify how much of the APE and surrounding areas previously has been surveyed.
- List previously recorded sites present within the record search area and note which were found within or close to the APE, outside of the APE, or were included because they are directly relevant for assessing the sensitivity of the APE.
- Append to the ASR any documentation of the records search, including any maps that were created.

Identify any other institutions or agencies (e.g., U.S. Forest Service, Native American Heritage Commission), groups (e.g., historical societies), or individuals that were consulted for site records or other information, and describe the results.

Summary of Native American Consultation

Pursuant to Appendix 6 of the 5024 MOU and Appendix 7 of the 106 PA, Caltrans is required to ensure that California Native American Tribes have a reasonable opportunity to identify concerns about cultural resources of religious or cultural significance to them and advise on the identification of those resources.

The full details of consultation regarding the identification of Native American cultural resources should be captured in a consultation log that is appended to the HPSR. In this section, summarize the methods and results of Native American consultation with all California Indian tribes and/or individuals contacted, making sure to include the following:

- Concise chronological accounting of the consultation process;
- Methods of consultation (e.g., written letters, telephone calls, face-to-face meetings);

- Relevant information provided regarding this presence of cultural resources in the project area, known properties of concern, expressed tribal significance of known properties, or further identification needs;

Summary of the relevant outcomes of any discussions relating to resources within the project area (or lack thereof), while respecting the confidentiality of specific information. Include documentation of all consultation, including a copy of letters sent with recipients identified (note: multiple copies of form letters are not necessary), correspondence received, contact logs, records of conversation, and correspondence to and from Native American Heritage Commission with the consultation log in the HPSR. Include information given in confidence in a clearly labeled, separate appendix.

Present this information in a table that can be referenced in the HPSR (e.g. "see attachment ___ NA Consultation Table").

Background

The background section provides pertinent information to demonstrate a familiarity with the region under study and to provide context for the archaeological resources identified. The intent of the background section is to demonstrate that the author(s) have conducted research on the project area and understand the environment, ethnography, and pre-contact and post-contact context of the project area.

Research conducted for the background section should be commensurate with the scale and scope of the undertaking, and with the abundance and significance of resources identified. Conduct enough research prior to field studies to understand the type and nature of the potential cultural resources in the project area. This may mean more research is conducted for post-contact sites than pre-contact sites.

As a document that reports on identification efforts, the ASR is not the appropriate venue for exhaustive primary research. It is permissible to paraphrase and cite relevant discussions from previous works in the area. If the ASR is an addendum to a previous ASR, the background discussion in the original ASR may be referenced, and the addendum ASR need only discuss any additional relevant background information.

Environment

- Present a concise description of the local environment, in order to provide a sense of place.
- Emphasize factors that may have affected use of the area by pre-contact and post-contact occupants, such as elevation, food or material resources, and proximity to water.
- Include relevant paleoenvironmental conditions, to the extent that they are known.
- Discuss environmental factors that may have limited the survival or visibility of archaeological remains, such as alluviation, erosion, or modern disturbance.
- Based on the information above, discuss the likelihood of discovering archaeological deposits, including buried archaeological deposits.

Ethnography

- Identify the ethnographic inhabitants of the study area.
- If the ethnographic affiliations are unclear in the area within which the study was conducted, list the various groups that may have been associated with it.
- Briefly note major ethnographic elements that may have shaped the local archaeological record, such as subsistence foci, settlement systems, social organization, and material culture.
- Cite key ethnographic references.
- Include relevant information provided through Native American consultation.

Pre-contact Context

- Outline a standard pre-contact chronology for the region.
- Sketch the history of archaeological investigations in the region, with particular reference to studies close to the study area or concerning pre-contact sites similar to those identified in the study.
- The level of detail in this section should be commensurate with the scope of the project and with the abundance and types of resources found.

Post-contact Context

- Outline the post-contact chronology of the region, with particular reference to events close to the study area or themes related to post-contact archaeological site types identified in the study.

- Using historical maps and aerial photographs, identify what roads, communities, industries, natural resources, or other attributes are important to our understanding of potential archaeological sites.
- The level of detail in this section should be commensurate with the scope of the project and with the abundance and types of resources found.

Field Methods

- Describe transect types and spacing, size of crew, and techniques used to ensure survey coverage.
- Discuss factors affecting lateral and ground surface visibility.
- Identify specific areas where coverage may have varied.
- Discuss methods used to record sites, define site limits and assess constituents.
- Include a survey coverage map in the maps section (discussed below).

Study Findings and Conclusions

List and briefly describe each cultural resource in the study area, whether previously recorded or newly identified. Making sure to reference the relevant project mapping and attached site records, address the following items, as appropriate:

- Whether the resource was discovered as a result of the record search, archival or background research, or during the current field effort.
- Whether a previously recorded resource was relocated during survey.
- Location, with particular reference to the proposed project area and to an adjacent highway or Caltrans right of way.
- Areal extent, and the criteria used to determine the site limits.
- Estimated areal density of cultural material (specifying how the measure was taken; e.g. "a maximum density of about 0.5 flake per square meter in any 5-meter-square area").
- Types, distribution, and estimated quantities of cultural materials, in particular chronologically sensitive artifacts (e.g., projectile points, beads, cans, bottles).
- Estimated depth of the cultural deposit, and the basis for the estimate (e.g., rodent holes, previous excavations).
- Types and distributions of surface features (e.g., bedrock mortars, house pits).
- Types and extent of disturbance.

- Chronological and functional interpretations of the site
- Existing National Register status of the site (for sites with previous National Register determinations, their status should be documented by appending to the report copies of National Register listing and/or previous SHPO concurrence regarding National Register status).

Other Resources

- If resources that were previously reported or anticipated were not found, discuss the possible environmental and cultural factors that may have hidden or destroyed those resource(s).
- Identify any non-archaeological resources that were encountered and note whether they may require evaluation.
- Properties that meet the criteria in Appendix 4 “Properties Exempt from Evaluation,” of the Section 106 PA or the 5024 MOU for state-owned resources, may be discussed and mapped or listed as appropriate.

Unidentified cultural materials

Include the following statement: If previously unidentified cultural materials are unearthed during construction, it is Caltrans' policy that work be halted in that area until a qualified archaeologist can assess the significance of the find. Additional archaeological survey will be needed if project limits are extended beyond the present survey limits.

References Cited

- Include only those references cited within the body of the report.
- Bibliographic format follows the most recent style guide for *American Antiquity* or *Historical Archaeology*, as appropriate.

Preparers Qualifications

Briefly summarize the professional qualifications of each person who contributed to the report. For Caltrans PQS it is sufficient to list their names, PQS level and that their qualifications are on file in the Caltrans Division of Environmental Analysis Cultural Studies Office. For consultants, include name, classification or job title, qualifying degree(s) and major(s) and a one or two sentence description of qualifying experience. Exhibit 2.18 contains guidance for documenting preparer(s)' qualifications.

Maps

All maps are labeled with the district, county, route, post miles, and EA/E-FIS project number and phase (for Local Assistance projects, use the Federal-Aid number), and should feature a north arrow and a graphic scale. The following maps must be attached to the report:

- *Study Vicinity Map*: Depict the location of the study on a county or district map.
- *Study Location Map*: Depict survey limits on the portion of the appropriate USGS topographic map. Make sure to identify the topographic map by name, type (e.g., 7.5-minute), and date of latest revision. While the Survey Coverage Map will serve as the map of record for the project, the Study Location Map meets CHRIS Information Center guidelines and is important in guaranteeing that the survey coverage can be added to the CHRIS database.
- *Survey Coverage Map*: The base for this map may be a topographic or planimetric map or an aerial photograph. Most importantly, the map must be at a scale that is sufficient to document clearly the limits of the area surveyed and the spatial relationship between sites and the study area.

Depending on the scale and scope of the project and/or the number and complexity of the properties located within or near the project area, it may be appropriate to include additional maps (e.g., a records search map). Large or complex survey areas may require additional maps with specific area details. If so, an index map should be provided.

Other Figures

Photographs are typically used to document archaeological sites but also can be extremely effective in depicting the environmental setting of the study area and/or the spatial relationship between archaeological sites and existing transportation facilities. Original or digital prints are likely to be more useful than photocopies, and digital prints have the additional advantage of being easily labeled and enhanced.

Site Records

A primary record, a site record, and feature records, as appropriate, should be appended to the ASR for all sites identified within the survey area. Prepare site record updates for relocated sites if relevant changes to site constituents or significant new disturbances have occurred since the previous recording. It is not necessary to include site records for all sites identified during the records search (i.e., within the whole search radius). Include sites that have the potential to be affected by the project or that are crucial in understanding the archaeological sensitivity of the study area. Put the site records in numerical order, regardless if they were previously recorded or newly recorded.

Peer Review and Approval

All draft ASRs need to be peer reviewed by Caltrans PQS certified at the Co-Principal Investigator level or higher following the guidelines in Exhibit 2.16. Peer reviewers' names should be kept on record and comments retained in the project files.

Only Caltrans PQS may review ASRs for approval, which the DEBC approves. The Caltrans PQS or consultant who prepares the ASR signs, dates, and includes his/her discipline, PQS level (as applicable) and District/Headquarters or affiliation. The Caltrans PQS at the Co-Principal Investigator level or higher reviewing the ASR for approval likewise signs, dates, and includes his/her PQS discipline, level and District. Finally, the DEBC approves the ASR by signing and dating the document. See Chapter 2 Section 2.12 and Exhibit 2.17 Table C for additional guidance on peer reviews and reviews for approvals.