

CHAPTER 7
BUILT-ENVIRONMENT CULTURAL RESOURCES:
EVALUATION AND TREATMENT

TABLE OF CONTENTS

7-1 INTRODUCTION1

7-2 THE DISCIPLINES OF ARCHITECTURAL HISTORY AND HISTORY1

7-3 PROFESSIONAL QUALIFICATIONS2

7-4 BUILT-ENVIRONMENT RESOURCES3

 7-4.1 Buildings4

 7-4.2 Structures4

 7-4.3 Districts4

 7-4.4 Sites4

 7-4.5 Objects5

7-5 SCOPE OF SURVEY5

 7-5.1 Section 106 Programmatic Agreement6

 7-5.2 Seismic Retrofit Programmatic Agreement6

7-6 PRELIMINARY RESEARCH7

 7-6.1 Primary and Secondary Sources7

 7-6.2 Historical Themes and Context7

7-7 FIELD SURVEYS8

 7-7.1 Reconnaissance Surveys8

 7-7.2 Properties Exempt From Evaluation8

 7-7.3 Dates of Construction9

 7-7.4 Limits on Survey Coverage10

 7-7.5 Safety Considerations on Field Surveys10

7-8 EVALUATION OF BUILT-ENVIRONMENT RESOURCES11

 7-8.1 Property-Specific Research11

 7-8.2 National Register Criteria12

 7-8.3 Integrity13

 7-8.4 Criteria Considerations15

 7-8.5 Complex Property Types15

 Linear Resources15

 Bridges21

 Historic Districts22

 Historic Landscapes23

 Traditional Cultural Properties24

7-9	ELIGIBILITY DETERMINATIONS.....	25
7-9.1	Ineligible Properties	25
7-9.2	Eligible Properties.....	25
7-9.3	Boundaries	26
7-9.4	Essential Physical Features	28
7-9.5	Setting	29
7-10	INVENTORY FORMS.....	30
7-10.1	Physical Descriptions.....	30
7-10.2	Historic Districts	31
7-10.3	Primary Numbers	31
7-10.4	Map Reference Numbers	31
7-10.5	Photographs.....	32
7-11	THE HISTORICAL RESOURCES EVALUATION REPORT (HRER)	32
7-11.1	Determinations of Eligibility in HRERs	33
7-11.2	Specialists Responsible for Preparing HRERs	34
7-11.3	Statement of Significance	34
7-11.4	Reviews and Approval.....	35
	Peer Reviews.....	35
	Approvals.....	36
7-11.5	Supplemental and Updated Studies	36
7-12	EFFECTS	37
7-12.1	Assessment of Effects	37
7-12.2	No Historic Properties Affected.....	38
7-12.3	No Adverse Effect with Standard Conditions.....	39
7-12.4	No Adverse Effect without Standard Conditions.....	39
7-12.5	Adverse Effect	40
7-12.6	Mitigation Measures	41
7-12.7	Mitigation Options	42
	Relocation	43
	Rehabilitation.....	43
	Recordation.....	44
	Protective Covenants, Conservation Easements and Preservation Agreements	44
	Landscaping and Screening	47
	Signage.....	47
	Public Interpretation.....	47
	Mitigation Measures Specific to Bridges.....	48
7-12.8	Review of Mitigation Measures over \$500,000.....	49
7-12.9	Construction Monitoring.....	50
	Effective Monitoring.....	50
	Safety Concerns While Monitoring	51
	Reporting Damage to Built Environment Historic Properties	51

7-13 STATE LAWS AND REGULATIONS52

7-13.1 CEQA.....52

7-13.2 Public Resources Code (PRC) §502452

7-13.3 Identification and Evaluation of cultural resources53

7-13.4 Assessment of Effects and Mitigation Plans.....53

7-13.5 Mitigation Measures54

7-13.6 Measures to Mitigate to Below the Level of Significant Impact54

**7-14 ADDITIONAL STATE RESPONSIBILITIES FOR
HISTORIC PROPERTIES55**

7-14.1 PRC §502455

7-14.2 PRC §502755

7-14.3 Secretary of the Interior’s Standards for the Treatment of Historic Properties56

7-14.4 California Historical Building Code56

Consultation with State Historical Building Safety Board57

CHBC and the California Building Energy Efficiency Standards.....57

CHAPTER 7

BUILT-ENVIRONMENT CULTURAL RESOURCES

7-1 INTRODUCTION

This chapter outlines Caltrans policies and procedures under federal and state laws and regulations for identifying and evaluating the built environment, which includes buildings, structures, objects, certain sites, and districts, that may be affected by Caltrans projects. It also discusses findings of effect for built-environment properties, options for mitigation measures, and Caltrans' stewardship responsibilities for historic properties and historical resources under its ownership or control. Built-environment issues that have been challenging on Caltrans projects also receive specific attention in this chapter.

The primary applicable laws and regulations discussed in this chapter are Section 106 of the National Historic Preservation Act (Section 106), the California Environmental Quality Act (CEQA), the California Public Resources Code §5024 (PRC §5024), and the California Historical Building Code (CHBC). The State Historic Preservation Officer (SHPO) and the Federal Highway Administration (FHWA) have primary review responsibilities for cultural resources studies conducted under federal laws and regulations; the SHPO is the primary review agency for such studies under state laws and regulations.

As used in this chapter and in Caltrans cultural resources guidance and studies, the terms “cultural resource,” “historic property,” “historical resource,” and “significant cultural resource” have precise meanings. See [Chapter 4](#) and [Exhibit 1.2](#) for definitions.

7-2 THE DISCIPLINES OF ARCHITECTURAL HISTORY AND HISTORY

Architectural history addresses the social and aesthetic aspects of culture through the study of style, form, and design and their historical development, as well as changes in technology through analysis of the evolution of engineering practice and the use of materials in construction. The discipline of architectural history attempts to understand the past through the perspective of the existing architectural and vernacular heritage. By analyzing buildings, structures, and objects, either singly or in groupings, both architect-designed and vernacular, one seeks to explain how culture, economics, demography, technology, politics, and artistic expression in the past are reflected in the built environment. In addition, architectural history helps to demonstrate that the design and spatial arrangement of the structures in which previous generations lived, worked, played, studied, and

worshipped reflect how such generations felt about those activities and how their artistic, cultural, and ethnic heritage were expressed in physical form.

History addresses the broad themes that help explain why events in a particular locality took the turn they did and how a particular cultural resource fits into the larger picture. The knowledge of dominant themes in American history is an essential component of the historian's education, but only a part. Combined with this specialized understanding of the history of the United States and California is an ability to think critically about the veracity of the data collected and to apply broader historical theory to commonplace research problems. Basic to the discipline is the historian's special way of looking at people and places over time. Almost automatically, the historian poses certain questions, such as: How did this evolve over time? What are its origins? Why did it develop when it did? Who were the people involved, and what were the reasons for their decisions? Summations regarding cause and effect and conclusions made in evaluating a particular historic resource are actually comprehensive generalizations of a very high order. And the ability to make these generalizations is the ability to think historically.

Over one-third of California's National Register listed and determined eligible historic properties qualified under Criteria A, or their association with events or developments significant in our past, and more rarely, B, for their association with important individuals.

Thus, architectural historians and historians also are prepared to address a wide variety of built environment features, such as irrigation systems, vernacular landscapes, industrial complexes, ranches, free-standing commercial signs, transportation systems, and sites where major historic events took place. Besides considering the culturally based esthetic dimensions underlying the design and materials of a structure, architectural historians are attuned to the way in which a structure fits into national and regional historical developments.

7-3 PROFESSIONAL QUALIFICATIONS

In this handbook, the term "architectural historian" refers to all cultural resources specialists who meet the Caltrans Professional Qualifications Standards as Architectural Historian (AH) or Principal Architectural Historian (PAH), regardless of civil service classification or job title; the term includes Caltrans staff and other professionals, except as noted. For Caltrans purposes, the title of architectural historian is applied to both architectural historians and historians, conforming to the existing Environmental Planner (Architectural History) series classification, but it encompasses the work of both disciplines.

See [Chapter 1](#) Section 1-3.4 and the Section 106 Programmatic Agreement (Section 106 PA) [Attachment 1](#) for a discussion of professional qualifications, minimum standards, and certification levels under the Section 106 PA. Caltrans

staff who meet these Professional Qualifications Standards, have completed specific training, and have received approval of their qualifications will be certified by Headquarters Cultural and Community Studies Office (CCSO) as Professionally Qualified Staff (PQS), as Architectural Historian (AH) or Principal Architectural Historian (PAH). Professional historians and architectural historians outside of Caltrans who meet the Caltrans Professional Qualifications Standards for Architectural Historian or Principal Architectural Historian may prepare technical studies for submittal under the Section 106 PA, but they are not designated as PQS under the Section 106 PA.

Under the Section 106 PA, Caltrans PQS have responsibilities beyond preparing technical studies. They also have been delegated authority to act on FHWA's behalf in reviewing and approving Section 106 documents. Although consultants are not certified as PQS, are not delegated the review role under the Section 106 PA as PQS, and may not approve documents, those professionals who meet the same standards are qualified to prepare the same level of technical studies on the built environment.

Caltrans uses these same professional qualifications standards in fulfilling its cultural resources compliance for the built environment under other federal and state laws and regulations.

Projects that include maintenance, repairs, rehabilitation, relocation, ownership transfer or demolition of state-owned historic buildings and structures (such as historic roadways, bridges, retaining walls, pumping stations, etc.) need to be reviewed and, if appropriate monitored, by PQS who meet the Caltrans Professional Qualifications Standards as Principal Architectural Historian and who have the requisite training and experience in order to ensure that the *Secretary of the Interiors Standards for the Treatment of Historic Properties (Standards)* are met. Appropriately qualified Caltrans Principal Architectural Historians need to review these projects prior to consulting with SHPO. See [Chapter 2](#) Section 2-7 for guidance on the appropriate procedures to follow. [Section 7-14.3](#) explains Caltrans policy on using the *Standards*.

7-4 BUILT-ENVIRONMENT RESOURCES

Architectural historians identify and evaluate buildings, structures, districts, sites, and objects, ranging from single-family residences, stores, schools, and factories, to downtown commercial districts, ranches, military bases, roads, railroads, bridges, tunnels, gardens, and statues. Guidelines on documenting and evaluating these resources include the series of *National Register Bulletins*, among them, [National Register Bulletin 15](#) and [National Register Bulletin 16A](#), which provide basic guidance and define categories of historic properties. The definitions and discussions of these categories, below, are excerpted from *National Register Bulletin 15*.

7-4.1 BUILDINGS

A building, such as a house, barn, church, hotel, or similar construction, is created principally to shelter any form of human activity. "Building" may also be used to refer to a historically and functionally related unit, such as a courthouse and jail or a house and barn. Buildings eligible for inclusion in the National Register must include all of their basic structural elements. Parts of buildings, such as interiors, facades, or wings, are not eligible independent of the rest of the existing building. The whole building must be considered, and its significant character-defining features must be identified. If a building has lost any of its basic structural elements, it is usually considered a ruin and categorized as a site.

7-4.2 STRUCTURES

The term structure is used to distinguish from buildings those functional constructions made usually for purposes other than creating human shelter. Structures include roads, railroads, trails, bridges, dams, canals, ditches, and retaining walls. If a structure has lost its historic configuration or pattern of organization through deterioration or demolition, it is usually considered a ruin and categorized as a site.

7-4.3 DISTRICTS

A district possesses a significant concentration, linkage, or continuity of sites, buildings, structures, or objects united historically or aesthetically by plan or physical development. A district derives its importance from being a unified entity, even though it is often composed of a wide variety of resources. The identity of a district results from the interrelationship of its resources, which can convey a visual sense of the overall historic environment or be an arrangement of historically or functionally related properties. For example, a district can reflect one principal activity, such as a mill or a ranch, or it can encompass several interrelated activities, such as an area that includes industrial, residential, or commercial buildings, sites, structures, or objects. A district can also be a grouping of archaeological sites related primarily by their common components; these types of districts often will not visually represent a specific historic environment. Large-scale cultural landscapes are usually classified as districts.

7-4.4 SITES

A site is the location of a significant event, a prehistoric or historic occupation or activity, a small-scale cultural landscape, or a building or structure, whether standing, ruined, or vanished, where the location itself possesses historic, cultural, or archaeological value regardless of the value of any existing structure. A site

can possess associative significance or information potential or both, and can be significant under any or all of the four criteria. While it is unusual, physical remains need not mark a site if it is the location of a prehistoric or historic event or pattern of events and if no buildings, structures, or objects marked it at the time of the events (see National Register Bulletin 15, [Section IV](#)). However, when the location of a prehistoric or historic event cannot conclusively be determined because no other cultural materials were present or survive, documentation must be carefully evaluated to determine whether the traditionally recognized or identified site is accurate.

A site may be a natural landmark strongly associated with significant prehistoric or historic events or patterns of events, if the significance of the natural feature is well documented through scholarly research. Generally, though, the National Register excludes from the definition of "site" natural waterways or bodies of water that served as determinants in the location of communities or were significant in the locality's subsequent economic development. While they may have been "avenues of exploration," the features most appropriate to document this significance are the properties built in association with the waterways.

In rare cases, if evaluation is warranted, the architectural historian may be requested to evaluate built-environment resources under Criterion D, for their potential to yield significant information about the historical past.

7-4.5 OBJECTS

The term "object" is used to distinguish from buildings and structures those constructions that are primarily artistic in nature or are relatively small in scale and simply constructed. Although it may be movable by nature or design, an object is associated with a specific setting or environment. Small objects not designed for a specific location, or that have been moved from the original location for which they were designed, rarely require study. Such works include transportable sculpture, furniture, and other decorative arts, that unlike a fixed outdoor sculpture, do not possess association with a specific place. Examples of objects include boundary markers, monuments, fountains, sculptures, statuary, boats and locomotives.

7-5 SCOPE OF SURVEY

[Chapter 4](#) contains a detailed discussion regarding how to scope built environment surveys and the use of the Section 106 PA. Section 4-2 discusses screened undertakings and those requiring studies; Section 4-3 contains guidance on defining areas of potential effects and study areas; Sections 4-4 and 4-5, respectively, discuss initial identification efforts and background research, while Sections 4-6 and 4-7 provide guidance on initial surveys and cultural resources evaluations.

7-5.1 SECTION 106 PROGRAMMATIC AGREEMENT

The Section 106 PA among the FHWA, the Advisory Council on Historic Preservation (ACHP), the SHPO, and Caltrans governs all undertakings under the Federal-aid Highway Program in California. This means that all Caltrans projects with FHWA involvement now need to comply with the Section 106 PA instead of 36 CFR §800, except where the Section 106 PA itself directs otherwise. The attachments to the Section 106 PA also provide general guidance that Caltrans follows on non-federal projects. [Chapter 2](#), particularly Section 2-3, discusses the Section 106 PA, provides a detailed discussion of this document and the procedures to follow.

7-5.2 SEISMIC RETROFIT PROGRAMMATIC AGREEMENT

While, the Section 106 PA streamlines the process for the majority of federal projects, the Seismic Retrofit Programmatic Agreement (Seismic Retrofit PA) may be used to streamline specific bridge projects.

The [Seismic Retrofit PA](#) applies *only* to seismic retrofit work on a bridge that is federally funded and that involves either structural modification of an existing bridge or the replacement of a bridge by a newly constructed structure, including any associated activities within the Area of Potential Effects (APE) of the project. Note that if a project involves any upgrades, enhancements or other activities that are not specified in the Seismic Retrofit PA, that document may not be used to streamline Section 106 compliance.

Under the Seismic Retrofit PA, seismic retrofit projects are exempt from review under Section 106 when the project's activities are

- Restricted to the bridge itself
- Limited to one of the nine types of activities listed in [Seismic Retrofit PA Appendix B](#).

Seismic retrofit work on bridges is exempt from CEQA because it is a statutory exemption. However, if the bridge is owned by Caltrans, PRC §5024 still applies and consultation with the SHPO is required if the bridge is National Register or California Historic Landmark listed or eligible.

There may be situations when, theoretically, both programmatic agreements may apply on a bridge retrofit project. Either—but only one of them—can be used, depending on which is more likely to be to Caltrans' benefit. On a project involving only the seismic retrofit of a bridge, however, it is likely that the Seismic Retrofit PA would be most beneficial.

7-6 PRELIMINARY RESEARCH

Preliminary research and surveys, which are similar in methodology among many types of resources, are discussed in detail in [Chapter 4](#), Sections 4-4 and 4-5. Refer to Chapter 4 for greater detail on general processes.

7-6.1 PRIMARY AND SECONDARY SOURCES

Documents used in historical research generally are classified as either primary or secondary sources. Secondary sources are those works that present or interpret historical information, that is, works that discuss the historic period but are not, themselves, of the period. They may include textbooks, journal articles, local histories, scholarly studies, reference works, and survey documents. Secondary sources usually are investigated first, and they are the main resource for preliminary research.

Primary sources are those works that are first-hand accounts of historic events or that are contemporaneous with the historic period. They may include letters, diaries, maps, public records, and newspapers of the time. Primary sources usually are investigated only *after* an examination of secondary sources and a field survey have narrowed the focus to specific properties and themes that warrant more intensive research.

Repositories for both primary and secondary sources include libraries, archives, government agencies, universities, historical societies, and private holdings. [Exhibit 4.1](#) describes both primary and secondary documents and provides information on standard sources.

7-6.2 HISTORICAL THEMES AND CONTEXT

The National Register states, “The significance of a historic property can be judged and explained only when it is evaluated within its historic context.” It defines historic contexts as “those patterns or trends in history by which a specific occurrence, property, or site is understood and its meaning (and ultimately its significance) within history or prehistory is made clear.”

Developing a historical context generally begins with compiling information from secondary sources on relevant historical themes. [National Register Bulletin 15](#) defines a theme as “a means of organizing properties into coherent patterns based on elements such as environment, social/ethnic groups, transportation networks, technology, or political developments that have influenced the development of an area during one or more periods of prehistory or history. A theme is considered significant if it can be demonstrated, through scholarly research, to be important in American history.”

Adequate historical research should be conducted to identify and develop the appropriate themes to determine whether those themes are significant and to establish the context within which to assess significance of the built environment. It is acceptable to use previously written historical contexts from other reports, so long as the excerpts are appropriately credited and cited. Understanding the connection between historical context and themes (or areas of significance) and the properties being evaluated is crucial in determining National Register eligibility. Also, it is essential to include the geographic and temporal extent of the relevant context (e.g., citrus growing in Riverside County 1880 to 1900; commercial development in Marysville's central business district 1860-1890) to provide the context's limits.

7-7 FIELD SURVEYS

Because pre-field surveys and background research are similar in methodology to many types of resources, please see [Chapter 4](#) Section 4-6 for details on conducting field surveys. For field safety guidelines see [Exhibit 2.6](#), which is derived from the [Caltrans Survey Manual](#).

7-7.1 RECONNAISSANCE SURVEYS

When a project covers a large area and there are numerous properties that might require evaluation, if time constraints and the travel budget allow, a quick reconnaissance (windshield) survey is advisable prior to a formal field survey. The windshield survey can reveal the quantity, quality, and distribution of resources that might require evaluation, allowing the architectural historian to be better prepared for the full field survey. When an early field visit is not feasible, preliminary information might be gathered through use of the Caltrans Photolog, satellite photography, existing aerial photographs and maps, previous studies, or contact with knowledgeable locals.

7-7.2 PROPERTIES EXEMPT FROM EVALUATION

The Section 106 PA identifies certain categories of properties that inherently lack potential for historic significance, and following review by appropriately qualified PQS or by consultants meeting the same standards, typically do not warrant any further consideration. [Section 106 PA Attachment 4](#) defines these categories of properties, specifies the level of professional qualifications needed to exempt them, and describes exceptions to the exemptions. Historical Property Types 4, 5, and 6 may only be exempt from evaluation *after review* by a Caltrans Architectural Historian or Principal Architectural Historian, or a consultant who meets the PQS standards for architectural history.

No written documentation or mapping of exempted resources is necessary. It is sufficient to state in the Historical Resources Evaluation Report (HRER) that, “*Consistent with Section 106 Programmatic Agreement Attachment 4, no [other] properties in the APE required evaluation.*” See [Chapter 4](#) and [Exhibit 2.8](#) for information on addressing exempted resources in the Historic Property Survey Report (HPSR) or the Historical Resources Compliance Report (HRCR) for state-only projects.

Consultants are not required to document their exempted properties for Caltrans PQS who are reviewing consultant-prepared documents. Caltrans PQS are responsible for ensuring only that the consultants are professionally qualified to exempt properties under [Section 106 PA Attachment 4](#); they are not responsible for the consultants’ conclusions.

Exempting Properties When the Section 106 PA Does Not Apply

For undertakings wholly or partly on, or that could affect, tribal lands, and for other federal undertakings for which the Section 106 PA does not apply, Caltrans uses the Cultural Resources Letter Report (Letter Report) format to consider cultural resources that normally would be exempted under [Section 106 PA Attachment 4](#). See [Exhibit 6.2](#) for guidance when and how to use the Letter Report. District environmental staff may contact the Section 106/PA Coordination Branch (Section 106 Branch) Chief in CCSO regarding appropriate use of the Letter Report.

7-7.3 DATES OF CONSTRUCTION

National Register and California Register criteria state that usually, a property must be at least 50 years old to be considered for historical significance, in order to ensure that sufficient time has passed to gain an adequate historical perspective for its evaluation. On the field survey, visual inspection generally will be adequate to sort out properties that may require evaluation based on their age. In order to conduct cultural resources surveys efficiently and not have to re-survey the same APE, it is Caltrans policy to treat as 50 years old all cultural resources that will become 50 years old by the time a project is scheduled to be completed.

Because Caltrans projects often have long lead times from environmental studies to project delivery, typically three to five years, it is necessary to take into consideration whether properties might become 50 years old during the life of a project.

If visual inspection alone does not clearly indicate a property’s age, the following resources may be useful in verifying the construction date:

- Caltrans Right-of-Way database

- Sanborn Fire Insurance Company maps
- United States Geological Survey (USGS) topographical maps
- Historical maps and photographs
- Reclamation district maps
- Aerial photographs
- Land ownership atlases
- Subdivision plat maps
- Tax assessment and appraiser's records
- Building permit files
- Utility records (date of first water or sewer service)
- City or county directories
- Census records

7-7.4 LIMITS ON SURVEY COVERAGE

Each property evaluated must be considered as a whole; however, that does not necessarily require physical access to, or recordation of, private spaces, restricted areas, or distant elements. Most built-environment properties can be adequately surveyed from public sidewalks or other public right of way. When physical access is restricted, unsafe, or infeasible, properties can be evaluated based solely on information that is reasonably obtainable. In those circumstances the survey document should explain why the coverage was limited.

Built-environment surveys do *not* require consideration of residential interiors, suburban backyards, or similar spaces lacking public access. In rare cases, buildings may have accessible interior spaces with *demonstrable* potential for historical or architectural significance, e.g., an intact classic movie theatre interior, the ornate public lobby of a train station, or an early manufacturing plant with intact original equipment.

While large properties, such as ranches, military bases, irrigation systems, or industrial complexes, must be considered as a whole, the survey should focus on those elements that are subject to project effects, not on recording distant components that will not be affected. When buildings or other features in the APE may contribute to a larger potentially historic district, however, the district limits and its significance may require evaluation.

7-7.5 SAFETY CONSIDERATIONS ON FIELD SURVEYS

When documenting properties within the right of way, it is necessary to pay special attention to safety. When recording properties, such as roads, railroads or bridges, in or near the traveled way, it is necessary to follow safe field practices. The [Caltrans Safety Manual](#) requires that protective clothing always be worn, and that one needs to have a “buddy” standing lookout for hazardous conditions. To

avoid becoming distracted by potential traffic dangers, it is important to be particularly alert while taking photographs. If photographs of a property cannot safely be obtained, do not pursue the effort or attempt any unsafe behavior. Instead, explain the situation as described in [Section 7-7.4](#) above. Trespassing is not permitted. Permission must be obtained from owners or tenants to safely and legally enter private property, as explained in [Chapter 4](#) Section 4-6.3.

7-8 EVALUATION OF BUILT-ENVIRONMENT RESOURCES

Resources that require evaluation are examined to determine their potential eligibility for inclusion in the National Register in accordance with Section 106, and to determine whether they are historical resources for the purposes of CEQA. For state-only projects, properties are evaluated under CEQA only. However, state-owned buildings and structures also may need to be evaluated for PRC §5024 compliance using the National Register criteria. See [Section 7-13](#) below for further guidance on the state process.

Historical research is an ongoing process throughout the identification and evaluation phases. It generally evolves from a general overview history of a large geographical area to a concentrated analysis of each property requiring evaluation. The level of research effort undertaken must be commensurate with the property's potential for significance and the ease or difficulty of reaching a conclusion and of providing supporting evidence for that finding.

Section 106 requires a “reasonable and good faith effort” to identify historic properties ([36 CFR §800.4\[b\]\[1\]](#)). It is Caltrans policy to conduct research sufficient to establish whether or not a property is eligible and to support that finding, but not to carry the research further. Workloads, standards of efficiency, and good public service prohibit doing otherwise.

7-8.1 PROPERTY-SPECIFIC RESEARCH

When resources require evaluation, research must focus on whether those properties are eligible for inclusion in the National Register or are historical resources for purposes of CEQA. Research should be as efficient as possible, identifying only those areas of significance that apply to the resources in the APE. Unrelated areas or extraneous information should not be in the HRER, however interesting they may be.

Most properties encountered during survey work will lack significance. They will be ordinary or modest in character and will not be associated with important events, individuals, styles, or property types. It is always possible that such a

property, unremarkable on the surface, could contain hidden values, but it is more likely that any potential significance will be known locally or will quickly be discovered through preliminary research. For the vast majority of properties, what appears to be ordinary, in fact is so, and it is not good public policy to expend major effort exploring unlikely avenues and pursuing diminishing returns. At the same time, experience has shown that researchers may need to do extensive research for properties on the borderline of eligibility, and as much effort may go into properties that ultimately prove to be not eligible as those that are found eligible.

It is not expected that every survey will uncover eligible properties, and the “best” property in a survey area does not equate to eligibility. The context for evaluation is the established historic context, not the project area.

7-8.2 NATIONAL REGISTER CRITERIA

[National Register Bulletin 15: How to Apply the National Register Criteria for Evaluation](#) specifies that in order to qualify for the National Register, “a property must be significant; that is, it must represent a significant part of the history, architecture, archaeology, engineering, or culture of an area, and it must have the characteristics that make it a good representative of properties associated with that aspect of the past.” The property must also possess the physical features necessary to convey that history.

In National Register evaluations, significance must be viewed within the local historical and architectural context, which is the interpretive and comparative framework composed of similar resources in an area. This framework provides the basis for assessing the historical or architectural significance of a property. For example, a property determined eligible for its architectural style in one community might not be eligible in another community that had a richer stock of similar historic properties.

The criteria for evaluation are as follows:

- Criterion A. *Properties that are associated with events that have made a significant contribution to the broad patterns of our history.* Criterion A recognizes single historic events or patterns of events, when both the event itself and the property’s association with

A Queen Anne cottage with some, but not all, of the essential physical features of the Queen Anne style and a fair degree of integrity may be eligible for its architecture in a town with very few buildings of that type or period, while the same building might *not* be eligible in a large city where there may be dozens of Queen Anne style houses that retain most of their essential Queen Anne features *and* a high degree of integrity. Likewise, the same Queen Anne cottage might be eligible, regardless of its architecture, if it has significant historical associations with an event or a person important in the history of that particular community.

it can be proven to be significant.

- Criterion B. *Properties that are associated with the lives of persons significant in our past.* Criterion B applies to the single property best associated with an important individual, such as the individual's home, office, or studio, and usually during the time of that individual's greatest achievements. More than one property can be associated with an individual, however, when each property represents a different important aspect of that individual's significance. Criterion B is often misapplied to a person's works, which are more appropriately evaluated under Criterion C.
- Criterion C. *Properties that embody the distinctive characteristics of a type, period, or method of construction, or that represent the work of a master, or that possess high artistic values, or that represent a significant and distinguishable entity whose components may lack individual distinction.* Criterion C addresses architectural, engineering, and artistic values, and it applies to historic districts, which may or may not contain individually eligible components.
- Criterion D. *Properties that have yielded or may be likely to yield information important in prehistory or history.* Criterion D generally applies to archaeological resources rather than to the built environment, but in extremely rare circumstances, built-environment properties can have Criterion D values, such as when an unusual rammed-earth building could possess important construction information that was otherwise unknown.

Of these four criteria, Criteria A and C are the ones that typically apply most frequently to built-environment properties.

For [CEQA](#) purposes, evaluate resources using the California Register of Historical Resources criteria codified in [PRC §5024.1\(c\)](#). See [Exhibit 2.16](#) for a comparison of the National and California Registers and [Exhibit 4.2](#) for National Register definitions and criteria.

Consult [National Register Bulletin 15](#) for additional guidance in applying the criteria. This bulletin also identifies several types of properties that are normally excluded from National Register eligibility (under Criteria Considerations; see [Section 7-8.4](#) below).

7-8.3 INTEGRITY

In addition to significance under one or more of the criteria, a resource must retain historical integrity. [National Register Bulletin 16A](#) defines integrity as “*authenticity of a property's historic identity, evidenced by the survival of physical characteristics that existed during the property's historic or prehistoric period.*” It is through its integrity of physical character that a property conveys its

history, and its sense of time and place. It is the physical manifestation of the historic themes and context.

The principal test in assessing whether a property retains integrity is:

Does the resource still retain the historical *identity* for which it is significant (e.g., the essential physical features that convey its historical character)?

Would it be recognizable to a person from the property's period of significance?

National Register Bulletin 15 (Section VIII) characterizes historic integrity as “. . . the ability of a property to convey its significance. . . The evaluation of integrity is sometimes a subjective judgment, but it must always be grounded in an understanding of a property's physical features and how they relate to its significance. . . Historic properties either retain their integrity or they do not.”

There are seven aspects of integrity (see box). All seven aspects of integrity and every essential physical feature from its period of significance do not need to be present, but the property must retain enough essential physical features to convey its past identity and, thus, its significance.

Essential physical features define:

1. *Why* a property is significant (the applicable National Register Criteria and Areas of Significance).
2. *When* it was significant (Period of Significance).

The eligibility Criteria and areas/ periods of significance determine which aspects of integrity are most critical. For example, if a property is important because it exemplifies a particular engineering type (Criterion C), the integrity of the property's design, materials, and workmanship are vital. Integrity of feeling and association may be more meaningful to properties eligible for their association with persons or an event, such as citrus growing the late 19th century (Criterion A).

The 7 aspects of integrity:

- Location
- Design
- Setting
- Materials
- Workmanship
- Feeling
- Association

The steps necessary in assessing integrity are outlined in *National Register Bulletin 15 Section VIII* as

1. Define the *essential physical features* (also called character-defining features) that must be present to represent the property's significance.
2. Determine if the *essential physical features are visible enough* to convey their significance.
3. Determine if the property needs to be compared to similar properties.

4. Determine *which aspects of integrity* are particularly important to the property and *if they are present*.

Historic setting is a factor in determining the boundaries of a historic property. It is mentioned here to emphasize its importance in determining historic integrity. Setting “refers to the *character* of the place in which the property played its historic role” (*National Register Bulletin 15*). Thus, if a property retains its integrity of setting along with other essential physical features, it would convey sense of time and place from its period of significance.

7-8:4 CRITERIA CONSIDERATIONS

The National Register Criteria and the California Register both identify several types of properties that normally are excluded from eligibility or listing (see table below). However, there are National Register Criteria Considerations and California Register Special Considerations that specify the conditions under which these property types may be eligible for the National Register or considered historical resources under CEQA.

See [Exhibit 2.16](#), for an explanation of the following considerations.

NATIONAL REGISTER CRITERIA CONSIDERATIONS FOR EXCLUDED PROPERTIES	CALIFORNIA REGISTER SPECIAL CONSIDERATIONS FOR EXCLUDED RESOURCES
a) Religious properties b) Moved properties c) Birthplaces and graves d) Cemeteries e) Reconstructed properties f) Commemorative properties g) Properties that have achieved significance within the past 50 years	1) Moved buildings, structures or objects. 2) Resources that have achieved significance within the past 50 years 3) Reconstructed buildings

- a. These normally excluded properties do not need to go through formal evaluation, but they should be acknowledged in the HRER and their status explained. No further effort is needed for properties that meet the criteria considerations, unless they qualify as exceptions.

7-8.5 COMPLEX PROPERTY TYPES

LINEAR RESOURCES

Linear resources such as trails, roads, railroads, transmission lines, flumes, and canals that cross or border a project area and may extend far beyond it can be

challenging on a survey. The first step is to determine whether they are subject to potential effect by the project, and should be included within the APE. The second step is to consider whether they require evaluation, or if they are exempt under [Section 106 PA Attachment 4](#).

Some types of projects have no potential to affect a linear resource, either directly or indirectly, and thus the resource does not need to be included in the APE. In such projects, the linear resource is typically either adjacent to the project area without direct contact, or it encounters the project area in a brief crossing at an already altered point. For example, if a project to replace a bridge over a canal does not involve any physical impacts to the canal, and the bridge has no historical associations with the canal (e.g. postdates the period of significance for the canal), the canal can be excluded from the APE. The HRER would specify that the canal was not included in the APE *because the project has **no** potential to affect it*.

Even linear resources within an APE may be found exempt from evaluation under [Section 106 PA Attachment 4](#). Such exempt properties include contemporary canals, pipelines, ditches, and levees; converted railroad grades; segments of bypassed or abandoned roads; city streets and sidewalks; transmission lines; and fences and walls. Other linear structures, including roads, railroads, canals, and similar resources, also can be determined exempt in accordance with Section 106 PA Attachment 4, when it is appropriate to do so. For example, because such properties generally are subject to routine maintenance and improvement projects, they are often substantially altered and can thus be found exempt by appropriately qualified PQS or consultants.

If a project does have potential to affect a linear resource that is not exempt from evaluation, the resource as a whole must be considered. Formal recordation and evaluation of an entire long, linear property is rarely necessary, however. The level of effort will depend on the nature and scope of the project and its potential to affect the property as a whole. If a project has the potential to affect only a short segment of a large property, the property as a whole may be briefly examined, its potential eligibility described (e.g., National Register criteria, approximate boundaries, period of significance), and it can be considered eligible for the purposes of the project. The segment subject to effect then may be evaluated in the context of the larger property as to whether it would be a contributor to the larger property as a whole, and that segment would be considered eligible or ineligible for the purposes of the project only. The HRER would state that the segment(s) is/is not a contributor to the larger property should that property ever be determined eligible for inclusion in the National or California Register.

Trails

California contains traces of numerous nineteenth-century emigrant trails, such as the Stevens Trail and the California Overland Emigrant Trail, that have clear

potential for historical significance in California history. If any traces of these early emigrant trails are located within the APE, the trail will require evaluation.

It cannot be expected that early trails will be clearly visible on the ground today. Indeed, many have vanished under subsequent roads or other development, or from the actions of natural processes. This loss of most early trails increases the likelihood that physical evidence supported by accurate documentation of an important early trail will lead to a finding that the trail is eligible, assuming there is some reasonable degree of integrity of setting.

Many historic trails in California have been designated under other federal laws that have their own criteria. Regardless of any such other designation a trail may possess, Caltrans evaluates trails in accordance with the National Register and California Register eligibility and integrity criteria.

Streets and Roads

For the most part, streets and roads and their associated features are part of our modern, ubiquitous infrastructure, and as such do not require study. City streets, isolated segments of bypassed or abandoned roads, sidewalks, retaining walls, and fragments of bypassed or demolished bridges are typically exempt from evaluation under [Section 106 PA Attachment 4](#).

A short, isolated segment of abandoned or bypassed road normally would be exempt from recordation or evaluation, even when it is part of an old road that possesses historical associations. However, such a property is not exempt if it is long enough to convey a sense of the road's potential significance, or if there are multiple segments that collectively could convey potential significance.

In most cases, if roads and related features are not associated with significant themes, or if their significance cannot be conveyed because of loss of integrity, neither recordation nor evaluation is warranted.

Highways and Freeways

A number of California highways either have been listed in or determined eligible for inclusion in the National Register. The Old Ridge Route in Castaic, Los Angeles County, and the original route of the Old Redwood Highway (U.S. 101) in Del Norte County are listed on the National Register. Other sections of highway have been determined eligible for inclusion in the National Register as a result of Caltrans projects, including the Arroyo Seco Parkway (Pasadena Freeway) and segments of the Cahuenga Freeway in Los Angeles County, the Cabrillo Freeway in San Diego, Route 66 in San Bernardino County, Highway 50 over Echo Summit in El Dorado County, the Feather River Highway in Plumas and Butte counties, and a segment of Highway 101, the Redwood Highway, in Del Norte County.

The FHWA and ACHP have agreed that the Interstate Highway system, with few exceptions, is exempt from Section 106 regulations and from Section 4(f). Additionally, under federal law (SAFETEA-LU [Section 6007](#)), the bulk of Interstate Highway system is exempt from consideration as a historic property under Section 4(f). FHWA has developed a list of [Nationally and Exceptionally Significant Features](#) of the Interstate Highway System to which the Interstate Highway system exemption does *not* apply. Very few features on the Interstate system in California are on that list, and, therefore, would be subject to Section 106 and Section 4(f) compliance. Refer to [Chapter 2](#) Section 2-2.7 for guidance on this exemption. It is important to remember that the Interstate Highway exemption does not apply to freeways and highways that are *not* officially part of the Interstate system.

While segments of the Interstate could be subject to review under state laws and regulations, the majority of the Interstate in California would meet the conditions outlined in [Section 106 PA Attachment 4](#). This is the guidance Caltrans also uses to exempt resources from evaluation under CEQA and PRC §5024. See [Chapter 2](#) Section 2-7 (State-only Projects) and Section 2-7.9 (State-owned Cultural Resources) for further guidance.

In recent years, the state and federal governments officially have recognized the historical significance of several twentieth-century highways. At the federal level, Congress has passed an Act to Preserve the [Route 66](#) Corridor and the [Lincoln Highway](#) Study Act. At the state level, the California Legislature has recognized the historical significance of U.S. [Highway 99](#), Historic U.S. Highway [Route 101](#), U.S. Highway [Route 40](#), [alternate U.S. Highway Route 40](#), and U.S. Highway [Route 395](#). Note, however, that legislative recognition is commemorative and does not equate to eligibility for the National Register. There are historic highway associations for a number of recognized routes and much popular interest in their recognition and preservation. While it does not translate directly into National Register or California Register eligibility, it is important to be sensitive to the public and legislative interest in these routes.

Railroads

Because railroads are almost invariably over 50 years old and have the potential to possess significance for their role in California's history and economy, they generally require evaluation when a transportation project has the potential to affect them. Railroads are private property, are extremely dangerous, and should not be entered by field crews without first obtaining permits to enter, as explained in [Chapter 4](#) Section 4-6.3, and [Chapter 5](#) Section 5-11.2

However, projects on a highway that merely parallels a railroad or that intersects it at an existing grade crossing, or construction of a new over- or undercrossing that does not physically touch the railroad, have limited potential to affect it. In

such cases, the railroad need not be included in the APE. Physical proximity of one transportation facility to another does not necessarily introduce an effect.

Because modern railroad grade crossing already constitute alterations that postdate any potential historical significance, a project that modifies such grade crossings is unlikely to affect any National Register significance a railroad might possess. Rather, this would amount to changing a noncontributing segment of the railroad, should the property as a whole be significant.

It is sufficient in such cases to state in the HRER that the railroad was not included in the APE because the project *has no potential to affect it*. No further discussion of the railroad is necessary; do not mention it in the HPSR.

When an evaluation is warranted, it is conducted in a focused manner that concentrates on the segment within the APE. If the railroad as a whole appears to possess significance, then that segment in the APE is assessed within the context of the property *as a whole* to determine whether the segment retains sufficient integrity to convey a sense of the railroad's significance.

Loss of original rails, ties, and ballast does not necessarily indicate loss of integrity for a railroad, because those elements are subject to frequent replacement on working lines. Railroads in use for many years are no more likely to retain those original materials than are houses of the same age, for example, to possess an original roof. If materials are less than fifty years of age, the evaluation should clearly state that fact, and that they post date the period of significance. However, railroads that have lost important associated buildings and structures, such as depots, maintenance sheds, roundhouses, watchman's towers and signal bridges, may not be eligible for inclusion in the National Register because of the loss of integrity of materials and association.

When a railroad is abandoned, rails and ties are typically removed for reuse, thus an abandoned railroad cannot be expected to possess those elements of materials and workmanship. However, the property then would need to possess a high degree of the other aspects of integrity (location, setting, design, feeling, and association) in order to retain sufficient integrity for eligibility.

Railroad grades that have been converted to uses such as roads, levees, or bike paths, however, will have lost historic integrity, and therefore, would not meet National or California Register criteria; they will be exempt from evaluation, provided they are not part of a larger historic property requiring evaluation (see [Section 106 PA Attachment 4](#)).

Water Conveyance Systems (Ditches and Canals)

Not all water conveyance properties encountered in the course of a project require study. No studies are needed when the project has no potential for effect on the

property and it can be excluded from the APE, or when the property is exempt from evaluation.

Any work on a noncontributing bridge that merely crosses over a canal has little potential to affect any National Register significance that the canal might possess. Work on or in the approximate footprint of a bridge that postdates the canal, including full replacement of the bridge, will be considered an alteration to a noncontributing segment of the canal, should the property, as a whole, be significant.

It is sufficient in such cases to state in the HRER that the canal was not included in the APE because the project *has no potential to affect it*. No further discussion of the canal is necessary; do not mention it in the HPSR.

Even when the APE includes canals and related features, they will be exempt from evaluation. Section 106 PA Attachment 4 contains a list of water conveyance and control features that typically are exempt; additional water conveyance properties that are substantially altered also may be determined exempt by Caltrans PQS or consultants who are appropriately qualified to make this exemption.

However, a bridge that was constructed as part of a canal system could be a contributing element to that larger property. If the bridge may be a contributor to a larger system, or if a project does otherwise have the potential to affect a canal or other water conveyance feature, the property would be included in the APE. Unless exempt from evaluation, the canal, and possibly the system of which it is a part, will require evaluation.

Depending on the project's potential for effect, and on the characteristics of the resource itself, the evaluation may concentrate on just the affected segment of the canal, but in any case, it will examine the segment within the context of the property as a whole.

Follow the guidance in Caltrans' "[Water Conveyance Systems in California](#), Historic Context Development and Evaluation Procedures" whenever there are water conveyance resources requiring evaluation. This document provides historical context for water conveyance systems in California, as well as guidance for recognizing, classifying, and describing these systems and their individual components, determining appropriate level of documentation, and determining significance and integrity. The guidelines also contain an extensive bibliography and suggestions on organizing the information in a report format.

BRIDGES

California Historic Bridge Inventory

Unlike other types of resources, most bridges on both state highways and local roads already have been evaluated for National Register eligibility in the California Historic Bridge Inventory (first completed in 1986 and updated in 2006). Therefore, few highway or road bridges will require formal evaluation for Caltrans projects. The findings of the California Historic Bridge Inventory, or subsequent amendments to those findings, typically is the only documentation required, and is referenced the HRER and HPSR/HRCR, as appropriate. [Exhibit 7.5](#) contains an explanation and listing of the five “Historical significance” categories assigned to bridges in the inventory.

Bridge Evaluations

While formal bridge re-evaluations rarely are necessary, new information, subsequent alterations, passage of time, changing perceptions of significance or loss of similar properties may be cause for reconsideration. Caltrans projects also may involve railroad bridges, privately owned bridges, or other bridges that were not included in the Historic Bridge Inventory and that consequently must be evaluated. Caltrans has in place a Bridge Evaluation Memorandum of Understanding (MOU) and MOU short form for use in those instances where a bridge was not included in the Historic Bridge Inventory. See [Exhibit 7.3](#) and [Exhibit 7.4](#). Please contact the Historical Architectural and Community Studies (HACS) branch in CCSO for assistance and further guidance if it appears that a bridge evaluation is warranted.

Note that culverts not assigned Caltrans bridge numbers are identified in [Section 106 PA Attachment 4](#) as a property type typically exempt from evaluation.

For bridge projects that qualify under the Seismic Retrofit PA, there is a streamlined procedure for identification, evaluation, and treatment. This agreement also includes a [Checklist](#) designed to assist staff in following appropriate procedures under the Seismic Retrofit PA.

For state-owned bridges, copies of any evaluations, whether or not the bridge is National Register eligible, and the SHPO’s subsequent concurrence letters need to be sent to the Chief of the Built Environment Preservation Services (BEPS) Branch in CCSO for inclusion in Caltrans’ master inventory of bridges and for annual reporting to SHPO.

HISTORIC DISTRICTS

As defined by *National Register Bulletin 15*, a district “possesses a significant concentration, linkage, or continuity of sites, buildings, structures, or objects united historically or aesthetically by plan or physical development.”

Typically, significant historic districts are found eligible under Criterion C because they “represent a significant and distinguishable entity whose components may lack individual distinction.” Districts may also be found eligible under Criterion A should they also possess important historical associations with significant events. Criterion D also might be applicable if there is a historical archaeological component. Otherwise, Criteria B and D rarely apply to districts.

The buildings, sites, structures, or objects that compose a district form a significant and distinguishable entity, but they may lack sufficient integrity or significance to be eligible as individual properties. The interrelationship of resources creates the character of a district and can project a visual sense of the historic environment, as well as represent “an arrangement of historically or functionally related properties.”

While a district may contain buildings, structures, objects and features that are not individually eligible for inclusion in the National Register, the resources that do make up the historic character of the district must have sufficient historic integrity to convey a sense of time and place from the period of significance. Contributing elements of the district must reflect its historic theme or area of significance, evoke a sense of that time and place, and retain a sufficient degree of integrity from the period of significance.

A historic district must have substantially more contributing elements than noncontributing elements. Numbers do not tell the whole story, however, as some features will have a more substantial presence than others or have a greater effect on the overall appearance of the district. Keep in mind that an eligible district should appear much the same as it did during its period of significance. This can be done only if the preponderance of resources, or their effect, within the district boundaries clearly reflects the physical appearance of

The Highland Historic District in Riverside County embraces the entire original town-site of Highland, which was an important citrus growing area in the early twentieth century. Its period of significance spanned from the late 1890s to the 1930s, when citrus production declined. It was determined eligible under Criteria A and C.

The Bay Terrace District in Vallejo, represents an important event that occurred over a relatively short period of time. It contains a cohesive group of dwellings built during World War I by the federal government to house Mare Island Naval Shipyard workers. It was part of a national plan that used progressive designs for worker housing and innovative concepts of site planning. As a well-preserved example this nation-wide wartime construction program, it was determined eligible under Criteria A and C at a national level of significance.

the area during the period of significance.

A generally accepted rule of thumb: contributing elements should constitute roughly two-thirds or more of the total number of features of substance within the historic district boundaries

A formal evaluation of an entire large district on the periphery of a project area is not always necessary, depending on the nature and scope of the project and its potential to affect the property as a whole. If a project has the potential to affect only a small component of a large district, the district may be briefly examined, its potential eligibility described (e.g., National Register criteria, approximate boundaries, period of significance), and it can be considered eligible for the purposes of the project only. The individual properties subject to effect then may be evaluated as to whether they are contributors to that district.

HISTORIC LANDSCAPES

Historic landscapes generally are categorized either as sites or districts, and specifically defined as either vernacular or designed landscapes.

Vernacular landscapes (sometimes called cultural landscapes) are the result of past human activities, land uses, and choices. They may display a particular arrangement of resources reflecting a significant land use, rather than a conscious design. These landscapes often are rural. An example could be an important dairy-farming region in which the farms display a consistent pattern and style from an earlier time.

Designed landscapes are conscious works in a recognized style or tradition. They may be associated with significant developments, persons, or events in landscape architecture. Aesthetic values often play an important role. An example could be a park or the grounds of a college campus designed by an important landscape architect.

Generally, historic landscapes that are categorized as sites are recorded and evaluated in the same manner as other sites, while historic landscape districts are treated in accordance with the same basic principles as other historic districts.

As with other historic districts, formal evaluation of a large landscape district on the edge of a project area may not be necessary. If there is little potential to affect the landscape as a whole, it may be briefly discussed, outlining the qualities of its potential eligibility, and the landscape can be considered eligible for the purposes

For additional guidance on landscapes see:
[*National Register Bulletin #18
Designed historic landscapes*](#)
[*National Register Bulletin 30
Rural Historic Landscapes*](#)
[*National Register Bulletin #41
Cemeteries and Burial Places*](#)
[*National Register Bulletin #42
Historic Mining Properties.*](#)

of the project only. Individual components subject to effect then would be evaluated to determine whether they are contributors to that historic landscape.

Caltrans has developed the “[General Guidelines for Identifying and Evaluating Historic Landscapes](#),” which should be followed when potential landscapes are encountered. The guidelines include recognition, classification, and description of landscapes; determination of the appropriate levels of documentation; and determinations of significance and integrity. The guidelines also contain an extensive bibliography and suggestions for organizing the information in a report format.

TRADITIONAL CULTURAL PROPERTIES

Although Traditional Cultural Properties (TCPs) usually are associated with Native American values, on rare occasions built-environment resources also may qualify as TCPs. Consult [National Register Bulletin 38: Guidelines for Evaluating and Documenting Traditional Cultural Properties](#), for guidance in evaluating any potential TCPs.

National Register Bulletin 38 states that a traditional cultural property can be “defined generally as one that is eligible for inclusion in the National Register because of its association with cultural practices or beliefs of a living community that (a) are rooted in that community's history, and (b) are important in maintaining the continuing cultural identity of the community.” Such associations must be traditional, important, and continuing, playing the same role in the community today as in the past. Just as with any other property, *a TCP must meet National Register criteria for significance and integrity*.

Developing a compelling argument for eligibility as TCPs of built-environment properties such as ethnic neighborhoods can be difficult and time-consuming. It should be pursued *only* after careful consideration. Sometimes properties that might appear to have potential TCP values could be better recognized and more easily and appropriately documented as National Register property types (buildings, structures, objects, historic districts, etc.) under the “area of significance” categories outlined in *National Register Bulletins 15 Part V* and *16A Part III.8*. However, when built-environment properties do have values that best can be addressed as a TCP, they should be evaluated as such, following the guidance in [National Register Bulletin 38](#).

It must be emphasized that eligibility of historic-era TCPs should be based on scholarly historical research and that the resource or traditional activities must be based in the past and, in continuing use for at least 50 years, and the TCP must have integrity. When supporting documentary evidence can be expected to exist, historical research must be conducted, and the findings examined with intellectual rigor. The associated community also must be clearly identified, and the full range of its members’ opinions noted, including opposing viewpoints.

Because of the potential for objections to such a finding, the argument for eligibility of a historic-era TCP should be especially careful to present an objective view and to address any controversies regarding the finding.

7-9 ELIGIBILITY DETERMINATIONS

All built-environment properties within the APE, other than those determined to be exempt from evaluation, must be evaluated for eligibility for the National Register and clearly presented as either eligible or ineligible. For borderline properties where the conclusion is not clear, it may be helpful to: 1) consult peers for guidance, and 2) draft arguments both for and against, to see which is the stronger. It is not allowable, however, to defer evaluation to a future time or to offer an “indeterminate” finding.

7-9.1 INELIGIBLE PROPERTIES

Properties are determined to be not eligible for inclusion in the National Register when they either lack significance under any of the National Register criteria, or they lack the integrity necessary to convey any significance they might possess.

A reasonable level of effort must be made to identify possible significance, “reasonable” depending on the particular circumstances for each property. If research fails to reveal any potential for important associations under criteria A or B, and the property displays no apparent values under Criterion C, or if it lacks integrity because of substantial alterations, and there is no potential for archaeological deposits (see [Chapter 6](#)), the property can be determined to be not eligible for inclusion in the National Register.

An adequate argument has to be constructed for ineligibility, as well as for eligibility, and the determination must convey the rationale and present the evidence in support of the conclusion. Generally, the more obvious the conclusion, the less effort needs to go into the argument.

7-9.2 ELIGIBLE PROPERTIES

Properties are determined to be eligible for inclusion in the National Register when they possess significance under any of the National Register criteria, *and* they possess the integrity necessary to convey that significance.

A determination of eligibility must convey specific findings, the rationale for those findings, and supporting evidence. It is a professional obligation also to

reveal any evidence or argument for a contrary conclusion, which should be discussed objectively, and the reason for the final judgment explained.

In order for the State Historic Preservation Officer to concur in a determination of eligibility, it is necessary to identify and provide justification for the following specifics the:

- *Applicable National Register criteria.* Only one criterion is needed for eligibility, but any others that may apply should also be mentioned.
- *National Register property boundaries.* (See [Section 7-9.3](#), below.)
- *Period of significance.* More than one period can apply when a property has different phases of significance. A property significant for its architecture will generally have the date of construction as its period of significance, although the period can be extended to include the date of later alterations that have also acquired significance.
- *Level of significance.* National, state, or local.
- *Contributing and noncontributing elements.* Any substantial components that add to or detract from the property's significance, such as buildings, fences, or vegetation.

7-9.3 BOUNDARIES

Boundaries of a historic property must be delineated clearly and carefully, as they are a critical factor in the subsequent assessment of project effects on the property. The *National Register Bulletin*, [Defining Boundaries for National Register Properties](#), provides substantial guidance on establishing boundaries, including the following summary:

Selection of boundaries is a judgment based on the nature of the property's significance, integrity, and physical setting. . . . Select boundaries that define the limits of the eligible resources. Such resources usually include the immediate surroundings and encompass the appropriate setting. However, exclude additional, peripheral areas that do not directly contribute to the property's significance as buffer or as open space to separate the property from surrounding areas. Areas that have lost integrity because of changes in cultural features or setting should be excluded when they are at the periphery of the eligible resources.

The guidance is also useful for determining boundaries for historical resources under CEQA and compliance with PRC §5024.

Current property lines (assessor's parcels) often are the appropriate boundaries for built-environment properties in urban or suburban areas, and sometimes for rural properties as well. When a historic property does not correspond with the current legal parcel, other kinds of boundaries may be used. Historic ownership maps

may be used to show the original property lines from the period of significance; landscape features such as tree rows, stone walls, or roads may provide logical limits; or adjacent modern intrusions can represent appropriate boundaries for the limit of the eligible resource. Whatever boundaries are chosen, it is important that they be described in relation to other features in a manner that will clearly distinguish the eligible property from its surroundings.

The boundaries of a historic property *must be depicted* clearly on a map that accompanies the Building Structure and Object (BSO) Record or District Record (as appropriate), and on the APE Map. Include a narrative boundary description on the BSO or District Record.

Boundary lines need to be delineated on a map of appropriate scale and detail. For large properties, the boundaries may be drawn on a USGS quad sheet. If the boundaries are straight lines that form a polygon, Universal Transverse Mercator (UTM) coordinates can be used to designate the vertices of the property. If used, mark and label the UTM references on the map. See [National Register Bulletin #28: Using the UTM Grid System to Record Historic Sites](#).

In unusual cases where the property is a historic district composed of discontinuous elements, boundaries for each of the separate parcels of land comprising the district should be selected according to the guidelines presented in [National Register Bulletin 16A](#). This situation is limited to situations in which

- Visual continuity is not a factor of historic significance
- Resources are geographically separate
- Intervening space lacks significance.

A good example is a canal system, in which human-made elements are interconnected by natural components that are excluded from the National Register. Another example is where a portion of a historic district was separated from the rest of the district by intervening development or highway construction and the separated portion has sufficient significance and integrity on its own to meet the National Register criteria.

It is important to make careful, thoughtful judgments regarding boundaries, especially when including land outside the legal parcel within the historic property's boundaries. Boundaries must be defensible in terms of the intrinsic historical or architectural values they contain. The boundary description needs to provide a clear rationale, particularly when the boundary does not correspond to the current legal parcel, based upon historical significance and historic integrity.

7-9.4 ESSENTIAL PHYSICAL FEATURES

Essential physical features are those distinctive tangible elements and physical features that convey a property's historic appearance and that are indispensable to conveying its historic significance. Essential physical features (also referred to as contributing elements or character-defining features) are directly related to the criteria under which a property qualifies for the National Register of Historic Places. Identifying a property's essential physical features is critical in assessing its integrity for the evaluation, and in determining a project's effects on that property. If the various materials, features and spaces that give a property its visual character are not recognized and preserved, then essential aspects of its character may be damaged through project effects, mitigation, rehabilitation, and other activities.

Essential physical features may include such elements as materials, craftsmanship, construction details, overall shape and size, spatial relationships, and contributing setting. In general, only exterior, publicly accessible features of built-environment properties require consideration on a survey. For most Caltrans projects, the exterior essential physical features of buildings, structures, objects, sites and districts are the most critical because they are the features that are most likely to be affected.

There are situations, however, when Caltrans projects have the potential to affect interior features, such as maintenance activities and repairs to Caltrans-owned historic buildings, or when appropriate mitigation measures include interior work on affected historic buildings or structures. *Careful consideration needs to be given as to whether identifying interior character-defining features is necessary.* Understanding what essential physical features a historic property possesses becomes critical in during the effects phase of the Section 106, CEQA and PRC §5024 processes, and guide the development of mitigation measures.

Character refers to the *visual* aspects and physical features that comprise the appearance of every historic built-environment resource. Essential physical features include overall shape and size of a resource, its materials, craftsmanship, decorative details, spatial relationships, various aspects of its site and environment, and, in limited circumstances, interior spaces and features.

When determining whether a property meets National Register criteria or is a historical resource under CEQA, discussion of these features in the evaluation tends to be generalized, a summary of the overall features the property possess that conveys its significance under the applicable eligibility criteria. If a historic property will be adversely affected, or the *Secretary of the Interior's Standards for the [Treatment of Historic Properties](#) (Standards)* are used to achieve a finding of No Adverse Effect with Special Conditions, to develop mitigation measures, or to obtain a Categorical Exemption under CEQA, a more detailed and ranked list of specific character-defining features may be necessary. See [Exhibit 7.2](#) for further guidance on describing and listing these features.

The discussion of essential physical features for individually eligible buildings, structures, objects and districts is fairly straightforward, as described previously. Contributing buildings and structures within historic districts, however, require more thought when considering effects and mitigation measures. If these contributing properties are not individually, eligible their features must be linked to the features of the historic district in which they are located and must convey the significance of the district.

With few exceptions, *interior features rarely convey the essential physical features of the district*. For each affected contributor, how it relates to the historic district's essential physical features, the integrity of the contributor itself, and its own essential physical features also would need to be summarized and noted.

7-9.5 SETTING

A property's historic setting often is a factor in determining a project's indirect effects. "Setting," as defined by *National Register Bulletin 15* "is the physical environment of a historic property." See [National Register Bulletin 15](#) for more information.

For National Register evaluation purposes, buildings and structures are counted as contributing and noncontributing elements. Setting is not considered a "countable entity" in the same way one would tally the number of contributing buildings, structures or objects.

As noted in [Section 7-8.3](#), each of the seven aspects of integrity could be less or more important (a sliding scale) depending on why a property is eligible for the National Register. Setting is one component of integrity. For instance, integrity of location, setting, and association might be more important for a property that is significant because of an event (e.g. scientific discovery or signing of a treaty) that occurred at the property than integrity of design, workmanship and materials.

Open cropland and hills surrounding a farmstead set in a valley may be a visual part of the farmstead's setting "whose expression extends beyond the boundaries of the property." ([National Register Bulletin 38](#)) A concise description of the setting and its limits is critical information for those who must consider the impacts of a transportation project that may affect a historic property whose setting is important.

A discussion of setting, whether it is an aspect of integrity and/or an essential character-defining feature, is necessary for completing a later step in the Section 106 process: assessing effects.

A greatly detailed discussion of setting generally is not required in National Register determinations of eligibility since integrity as a whole is what is important in the evaluation. However, there are cases in which setting is an

important character-defining feature of a property, rather than just one aspect of integrity. Setting that conveys the significance of a historic property does not necessarily have to be confined within the historic property boundaries of the property; it can extend beyond them. In this instance, the setting is a contributing element and the researcher must define, as explicitly as possible, how those visual, auditory and atmospheric elements of setting are essential physical features for the historic property, and how the setting conveys significance.

7-10 INVENTORY FORMS

To record and evaluate built-environment resources, Caltrans uses the Department of Parks and Recreation (DPR) 523 forms, as adapted by Caltrans to add County, Route, and Postmile information. For the built environment, inventory forms shall always include the DPR 523 Primary Record form *and* the DPR 523 BSO form. Other forms may be used as appropriate, including the Continuation Record, Historic District Record, Linear Record (optional, but in addition to, not in place of, the BSO), Location Map, and Sketch Map. Electronic templates for use on Caltrans projects are available on the Caltrans Division of Environmental Analysis [CCSO website](#).

[Exhibit 7.1](#) contains guidelines for completing DPR 523 Primary Records and BSO forms in a manner that will best facilitate SHPO review.

7-10.1 PHYSICAL DESCRIPTIONS

In preparing a property's physical description, focus on recording the essential physical elements (also called character-defining features) that would be important to the resource's significance, should the property be eligible: that is, the elements that define the resource's important historical, architectural, design, or engineering values (see [Section 7-9.4](#) and [Exhibit 7.2](#)) and would contribute to the property's integrity. To assist in the assessment of character-defining features (CDF), Caltrans has developed a historic district CDF form, district contributor CDF form and an individually eligible property CDF form for use on Caltrans projects. They are available on the [CCSO webpage](#) under Templates.

For large numbers of homogeneous (by style or period) property types, such as residential housing tracts, a *single* form may be prepared with representative examples, describing those buildings' shared

Example: It is not necessary to complete individual DPR 523 Primary Records and BSO forms for every single property within a large postwar housing tract. Complete one DPR 523 Primary Record, Location Map and District Record for the tract as a whole. Representative Primary Records would be completed for buildings with shared characteristics (such as for each model home plan).

characteristics and any design modifications. Include photographs of typical examples and streetscapes. Each homogenous grouping receives a single Map Reference Number in the document and on the APE map (see [Section 7-10.4](#)).

7-10.2 HISTORIC DISTRICTS

A potential historic district is recorded and evaluated on the appropriate DPR 523 forms, including the District Record. On the Primary Record, the physical description should provide an overall perspective on the character of the district and its components. The District Record should include a listing of all contributing and noncontributing elements, if the property is found eligible, and describe the specific qualities that give the district its significance, based on the historic context established in the HRER.

For a statement of significance, clearly state whether the property is significant under the National Register criteria, explain the reasons for the finding, assess the property's integrity, and conclude whether the property is eligible or ineligible for inclusion in the National Register. Do not use boilerplate statements or simply repeat the property's history, but instead, present a cogent and compelling argument in support of the evaluation. Also address any likely objections, or any evidence contrary to the findings, in a direct, straightforward manner.

7-10.3 PRIMARY NUMBERS

Primary numbers from the Regional Information Centers of the California Historical Resources Information System (CHRIS) are *not required* for submission of built-environment resources forms to SHPO for review. After completing review and accepting the survey findings, SHPO staff will send the data to the appropriate CHRIS Information Center. When the Information Center receives the HPSR and supporting documentation, it assigns primary numbers to the DPR 523 forms.

7-10.4 MAP REFERENCE NUMBERS

Assign a Map Reference Number to each evaluated resource. This number is used to cross-reference the Primary, BSO and other DPR records with the APE Map.

If possible, assign numbers in a sequence that is logical for the particular nature of the project. For example, because most Caltrans projects are linear in character it is often most useful to assign the map reference numbers in sequence from one end of the project to the other. Most often project plans designate a beginning point and ending point of the construction area, so it would be practical to start the map reference numbers at the beginning point and continue in sequence from there. This practice is particularly useful when large numbers of resources are

involved. Another option is to assign map reference numbers to properties alpha-numerically by street and number for historic districts or large surveys.

If the resources are contained on a large number of map sheets, provide a map page key or indicate the map page depicting the resource on the Primary and BSO records.

The boundaries of each historic property must be depicted clearly on the BSO Record's Sketch Map or on an equivalent map attached to the District Record, as appropriate, *and* on the APE Map.

7-10.5 PHOTOGRAPHS

Photographs either may be in color or black and white, and either as 35 mm prints or in high-resolution digital images. Regardless of format, it is essential that the images are clear and sharp and that they provide sufficient detail to enable a reviewer to confirm that they match the written description. Prints should be no smaller than 3½ by 5 inches. Scanned images on DPR 523 forms should approximate the 3½-by-5 inch size.

Photographic documentation must include the principal elevation (main façade) of each evaluated building, structure, or object. Photographs of secondary elevations (sides and back of a property) may be taken as needed to record alterations or distinctive features. When recording districts or complex properties, also photograph the largest area possible, such as streetscapes or rows of structures, to document spatial relationships.

Having aerial photographs taken for a project area that previously has not been photographed is usually too expensive for most survey projects. However, under special circumstances this method might be justified for recording the spatial patterns of a large district or a complicated historic property. Satellite photographs or photographs taken from elevated vista points can also provide aerial views. There are a number of sources on the Internet that might be useful, such as [Terraserver](#), [Maps.Google](#), [Maps.Live.com](#), and others.

See [National Register Bulletin #23: How to Improve the Quality of Photographs for National Register Nominations](#) for more guidance.

7-11 THE HISTORICAL RESOURCES EVALUATION REPORT (HRER)

The HRER documents the identification and evaluation of buildings, structures, objects, districts, cultural landscapes, all other built-environment resources, sites of historic events, and historical archaeological sites within the APE (see [Chapter](#)

6). Ideally, these resources all will be documented in a single HRER, but if studies are conducted at different times or by different entities, separate HRERs can be prepared as needed (see [Chapter 6](#) Section 6-10.3).

Three previous Caltrans built-environment report formats—the Historic Architectural Survey Report, Historic Study Report, and Historical Resources Evaluation Report—are now combined in the HRER. [Exhibit 6.2](#) describes the required format and content of the HRER.

7-11.1 DETERMINATIONS OF ELIGIBILITY IN HRERS

For both federal undertakings and state-only projects, Caltrans uses the HRER and accompanying DPR 523 forms to document a property’s National Register eligibility and to determine whether it is a historical resource under CEQA. For FHWA-assisted projects, the determinations are consensus determinations: FHWA makes the determination and SHPO concurs. Under the Section 106 PA, Caltrans, on behalf of FHWA, makes these determinations, includes the determination in the HRER attached to the HPSR, and forwards the documentation to SHPO, as explained in [Chapter 2](#). For state-only projects where Caltrans makes the determination whether cultural resources are historical resources under CEQA, the documentation is not forwarded to SHPO unless there are state-owned properties included in the HRER for which consultation under PRC §5024 is required (see [Chapter 2](#) Section 2-7).

It must be noted that under the Section 106 PA, when SHPO does not provide comments on eligibility findings, Caltrans is permitted to proceed to the next step of the process. However, this does not mean that Caltrans can “assume concurrence” with its determinations of eligibility. In the absence of formal SHPO comments, there is no “consensus determination” on the eligibility of the evaluated properties, and therefore Caltrans’ findings are valid *for the purposes of that project only*. Caltrans must resubmit eligibility determinations to SHPO on any future project involving those properties.

In rare situations, such as when a disagreement on eligibility cannot be resolved in accordance with Section 106 PA [Stipulation VIII.C.5b](#), FHWA will forward the HRER to the Keeper of the National Register to determine whether a property is eligible. When the Keeper makes a determination, it is called a formal determination of eligibility, as opposed to a consensus determination. Every attempt should be made to resolve eligibility through consensus negotiations without involving the Keeper, as the process is time-consuming and Keeper’s determination will be final. It also is important to remember that if the Keeper made the original determination of eligibility, any re-determination also must be submitted to the Keeper for reconsideration.

7-11.2 SPECIALISTS RESPONSIBLE FOR PREPARING HRERs

Either architectural historians or historical archaeologists, or both working together, can prepare HRERs, depending on the nature of the resources involved. For projects that require an interdisciplinary approach, a team of qualified cultural resources specialists jointly prepares the HRER. When there is a preponderance of resources that are non-archaeological in nature the team architectural historian is ultimately responsible for preparing the HRER, with input from the other team members.

For combined work, the citation and reference style shall be determined by the principal author and the preponderance of resources; e.g., if resources are primarily built environment resources and, therefore, the architectural historian is the principal author, the historical archaeologist's portion of a combined document should conform to the *Chicago Manual of Style*, as revised. However, if historical archaeologists and historians or architectural historians separately prepare two HRERs that then are merged, the HRERs do not need to conform to the same citation and reference style. [Chapter 4](#) Section 4-8.2 contains information about combined documentation, as well as [Chapter 6](#), Section 6-10.3.

7-11.3 STATEMENT OF SIGNIFICANCE

The statement of significance in the Conclusions section of the HRER and in Section B10 of the BSO form should encapsulate the eligibility findings for the evaluated properties. It is sufficient to summarize this information in the HRER and to refer to the BSO forms for greater detail. For state-owned resources, all evaluations must go to SHPO for review under PRC §5024, even if the resource is found to be ineligible for the National Register or as a California Historical Landmark.

The significance statement must provide a clear and concise conclusion that states whether each evaluated property is eligible for inclusion in the National Register and also whether it is a historical resource under CEQA, based on criteria outlined in PRC §5024.1. For both eligible and ineligible resources, the significance statement must explain how and why the significance criteria were or were not met, including an assessment of historic integrity.

For eligible properties, the statement of significance must explain which National Register criteria apply, and why, and within what historic context; give the period and level (local, state, or national) of significance; identify the historic property boundaries; list all substantial contributing and non-contributing elements; and address the property's integrity. A good statement of significance is critical to understanding the property's essential physical features and thus appropriately assessing project effects.

The Conclusions section must also identify any resources that are locally designated, identified as significant in a local survey, listed as a California Historical Landmark, or listed as a California Point of Historical Interest. Properties that have been determined eligible for inclusion in the National Register or listed as a California Historical Landmark from number #770 on are automatically listed in the California Register.

In addition, under CEQA, any resource that has been designated as a landmark under a local government ordinance, was found significant in a local historical resources survey, or is a California Historical Landmark numbered from #1 through #770 will require consideration as to whether or not it is a historical resource for purposes of CEQA. If there is a preponderance of evidence that the resource does not meet the criteria outlined in PRC §5024.1, it will be determined that it is not a historical resource under CEQA.

Under state law, only the State Historical Resources Commission can make determinations of eligibility for the California Register. Caltrans is not permitted to make such determinations. Instead, Caltrans documents must state that a resource “*is (or is not) a historical resource for the purposes of CEQA because it does (or does not) meet the criteria outlined in PRC §5024.1.*”

7-11.4 REVIEWS AND APPROVAL

Prior to the distribution of the built environment studies, reports and documents, there need to be *three* reviews:

1. District or CCSO PQS, who is someone other than the author(s) of the documents and is certified at the appropriate Principal Investigator or Principal Architectural Historian PQS level(s), must peer review the Caltrans staff- and consultant-prepared draft documents.
2. District PQS must review and *approve* the final document, under the terms of the [Section 106 PA Stipulation XVI](#), and as Caltrans policy for state compliance.
3. DEBC must review and approve the final document.

See [Exhibit 2.11](#) Table C for addition information.

PEER REVIEWS

Peer reviews are part of the report preparation process. Peer reviewers may be identified in the acknowledgement section of the HRER or in a table of personnel working on the environmental studies. That is separate from PQS approval of completed documents prior to submittal, which is required under the Section 106 PA.

Draft HRERs must be peer reviewed either by a Principal Architectural Historian or a Historical Archaeologist certified at the Principal Investigator level, depending on the nature of the resources under evaluation. Appropriately qualified PQS at the Principal level in any district or in CCSO may conduct peer reviews. Upon DEBC request to the appropriate CCSO Branch Chief, CCSO has appropriately qualified staff who are available to conduct peer reviews for districts. (See [Chapter 1](#) Section 1-3.2 for a description of CCSO Branch Chiefs' responsibilities.) CCSO will complete such reviews within 15 working days or less of receipt of request. Preferably, the review would be completed in 10 working days or less.

Peer reviews are conducted to ensure that the:

- Document follows the format and content guidelines provided in [Exhibit 6.2](#).
- Project APE is depicted appropriately.
- Identification efforts are adequate.
- Eligibility determinations are logical and well supported.

APPROVALS

Following peer review (whether by district or CCSO PQS), and any necessary revisions based on comments received, the Caltrans PQS report preparer signs the title page of the final HRER. Consultants' names must appear on the final HRCRs they prepare and they have the option to sign the final report. The Caltrans-prepared or the consultant-prepared HRER must be reviewed and *approved* either by a Caltrans PQS certified as a Principal Architectural Historian or a Historical Archaeologist at the Principal Investigator level, depending on the nature of the resources under evaluation. If a Caltrans PQS at the appropriate Principal level has not prepared the document, then the responsible Caltrans PQS at the appropriate Principal level indicates review and *approval* by signing the title page. The DEBC finally reviews and formally approves the document by signing the title page.

[Chapter 2](#), Section 2-5.5, further discusses Caltrans internal review guidelines; the process for resolving any disagreements or differences of opinion is outlined in Chapter 2, Section 2-11.

7-11.5 SUPPLEMENTAL AND UPDATED STUDIES

Supplemental HRERs are studies completed subsequent to SHPO review of an earlier HRER for the same project. A supplemental study is required when a project APE shifts or enlarges to include resources not previously studied. In accordance with the Section 106 PA, Caltrans PQS and the Project Manager jointly determine when project changes require modifying an APE, and the

Caltrans PQS then makes the determination as to whether a supplemental study is necessary.

Supplemental reports either may be stand-alone documents, incorporating relevant data from the original study, or they can present the new material backed by the original study as an attachment. If the latter, the supplemental report should still briefly summarize information from the original document and reference the attachment for more details. It is highly unlikely that the SHPO is familiar with the earlier study or retains a copy of it at hand, so the submittal should include all necessary material, including dates of any previous findings and copies of relevant correspondence.

Additional background research may be necessary if a new APE contains resources with a different historical use or development. New information should be of the same nature and thoroughness as the original document and should follow the same format, if appropriate.

An updated study is a new version of the original study, a redo rather than an addition. An update might be necessary because of the passage of time. When five or more years have elapsed since the preparation of the original document, it should be examined to determine whether the findings still hold. The study is likely to require updating when resources in the APE have since reached 50 years of age, or when resource characteristics have changed (e.g., loss of integrity or restoration of original fabric). Changing perceptions of significance, reduction in the stock of comparable properties, new information, changes in cultural resources laws and regulations, or incomplete or erroneous prior evaluations may also indicate that an updated study is warranted.

7-12 EFFECTS

7-12.1 ASSESSMENT OF EFFECTS

If historic properties are identified in the APE, the project's effects to these properties will need to be assessed. [Chapter 2](#) provides guidance on assessing effects and preparing the appropriate documentation.

The Finding of Effect document must address this question: Does the project adversely affect a contributing element within the boundaries of the historic property (building structure, site, object, or district)?

There are three possible outcomes:

1. *No Historic Properties Affected* (either there are no historic properties present, or there are no effects to historic properties that are, or may be, present).

2. *No Adverse Effect* (either with or without standard conditions).
3. *Adverse Effect*.

7-12.2 NO HISTORIC PROPERTIES AFFECTED

When there are historic properties within the project's APE but there are no effects to them, the finding is called "No Historic Properties Affected." It is necessary to keep in mind the reason why a historic property is significant, its period of significance, its essential physical features and its National Register boundaries when determining whether there is an effect. Refer to [Chapter 2](#) Section 2-3.7 for guidance on what constitutes an effect.

When it is determined that there *is* an effect to one or more historic properties within a project APE, Finding of Effect (FOE) documentation is required to assess the project's effects on such properties. FOEs are discussed in [Chapter 2](#). [Exhibit 2.9](#) contains the FOE format and required content. Because of their training and experience, architectural historians take the lead in assessing effects to built-environment historic properties; they also prepare the sections of the FOE that specifically discuss built-environment historic properties.

In order to determine whether there are adverse effects, it is necessary to review:

- The criteria under which the historic property was listed or determined eligible.
- The property's level and period of significance.
- Its essential physical features.
- Its National Register boundaries.
- The aspects of integrity that would be affected.

The National Register nomination or determination of eligibility documentation should contain this vital information. If the determination of eligibility was prepared for a Caltrans project, this information should be in the summary paragraph for the affected historic properties in the HRER and the HPSR (See [Exhibit 2.17](#)). In addition, Caltrans has developed Character-defining features forms and guidance to assist in determining effects and planning for appropriate rehabilitation, maintenance and mitigation measures. See [Exhibit 7.2](#) for additional guidance. These components of the historic property's significance guide not only the finding of effect, but also the conditions for No Adverse Effect Findings and mitigation measures for Adverse Effect Findings. The architectural historian may need to conduct additional, but typically *minimal*, work, if the existing documentation does not contain this information, or the information is vague.

7-12.3 NO ADVERSE EFFECT WITH STANDARD CONDITIONS

In accordance with the [Section 106 PA Stipulation X.B.](#), a finding of No Adverse Effect with Standard Conditions may be appropriate when the federal undertaking itself or the undertaking's effects are *limited to the rehabilitation* of historic properties in accordance with the *Standards* (36 CFR Part 68), Rehabilitation Treatment Option.¹

When Section 106 PA Stipulation X.B. is applicable, Caltrans prepares a "Finding of No Adverse Effect With Standard Conditions," report as discussed in [Chapter 2](#), Section 2-3.8 and 2-5.3. The finding must include the applicable Standard(s) under the Rehabilitation Treatment option and an explanation as to how the proposed work meets the cited *Standards*.

Plans and specifications for any proposed rehabilitation project must be reviewed by PQS who meet the Caltrans Professional Qualifications Standards as Principal Architectural Historian and who have the training and experience to ensure that the standards are met. Districts lacking a Principal Architectural Historian PQS may submit a request for review or assistance either to the BEPS Chief or HACS Chief at CCSO.

If the undertaking itself is *not* a rehabilitation project; if there will be effects to the historic property that are not rehabilitation; or if other conditions must be imposed in addition to the Standard Condition, a "No Adverse Effect with Standard Conditions" finding is *not* applicable.

7-12.4 NO ADVERSE EFFECT WITHOUT STANDARD CONDITIONS

This finding applies only to federal undertakings when either no conditions are imposed (there is an effect, but it does not rise to the level of being adverse), or when conditions other than, or in addition to, one of the two Standard Conditions are imposed.²

Other conditions may be imposed to avoid adverse effects to historic buildings and other built-environment resources; however, they would not be "Standard Conditions." These other-than-standard conditions could be used to support a finding of "No Adverse Effect," as discussed in [Chapter 2](#), Section 2-3.8 and 2-5.3. The justification for this finding should include a description of the affected historic property's essential physical features and aspects of integrity; specify how they would be affected, and explain why the proposed conditions would not

¹ This Stipulation does not apply to state-only projects or for compliance with PRC §5024. See Section [Chapter 2](#) Sections 2-7 and 2-9, and Sections [7-13](#) and [7-14](#) below for guidance under state laws and regulations.

² This Stipulation does not apply to state-only projects or for compliance with PRC §5024. See Section [Chapter 2](#) Sections 2-7 and 2-9, and Sections [7-13](#) and [7-14](#) below for guidance under state laws and regulations.

ensure those qualities that make the property eligible for inclusion in the National Register would not be diminished.

7-12.5 ADVERSE EFFECT

A federal undertaking is considered to have an adverse effect when any aspect of an undertaking meets one or more of the Criteria of Adverse Effect, when a consulting party disagrees with a No Adverse Effect finding, or when SHPO objects to a finding of No Adverse Effect without Standard Conditions.

As stated in the Section 106 regulations [[36 CFR §800.5\(a\)\(2\)](#)], examples of adverse effects³ include [*italics indicate explanatory information*]:

- (i) Physical destruction of or damage to all or part of the property [*such as demolishing a historic apartment complex that is center-line on a new alignment, or removal of stone entry pillars and elms that line the drive leading to a historic farm on a curve correction project*];
- (ii) Alteration of a property, including restoration, rehabilitation, repair, maintenance, stabilization, hazardous material remediation, and provision of handicapped access, that is not consistent with the Secretary's Standards for the Treatment of Historic Properties (36 CFR part 68) and applicable guidelines [*such as removing and replacing or raising original railings on a historic bridge, or removing a wooden sidewalk and balcony support posts to install a wheelchair accessible ramp and concrete sidewalk at the entry of an architecturally significant commercial building*];
- (iii) Removal of the property from its historic location [*such as relocating the home and studio of a historically important artisan to a new location because it is center-line on a new highway*];
- (iv) Change of the character of the property's use or of physical features within the property's setting that contribute to its historic significance [*such as installing an elevated freeway immediately adjacent to a retreat significant as a meditation site, or converting an architecturally significant theater into multi-level offices*];
- (v) Introduction of visual, atmospheric or audible elements that diminish the integrity of the property's significant historic features [*such as installing sound walls that block views of the ocean from an architecturally significant hotel, when the hotel was consciously designed and sited to take advantage of the ocean views; or widening a highway to within 20 feet of the entrance to a*

³ Caltrans uses these same criteria for assessing whether a project has the potential for substantial adverse change under CEQA and adverse effect under PRC §5024. See Section [Chapter 2](#) Sections 2-7 and 2-9, and Sections [7-13](#) and [7-14](#) below for guidance under state laws and regulations.

historically significant rural church, and thus increasing noise in a meditative or spiritual setting];

- (vi) Neglect of a property which causes its deterioration, except where such neglect and deterioration are recognized qualities of a property of religious and cultural significance to an Indian tribe or Native Hawaiian organization [*such as “deferred” or no maintenance of an architecturally significant building*]; and
- (vii) Transfer, lease, or sale of property out of Federal ownership or control without adequate and legally enforceable restrictions or conditions to ensure long-term preservation of the property's historic significance. [*This effect normally does not apply to Caltrans projects, however there is a similar state law that applies to state-owned historic properties. See [Chapter 2, Section 2-6](#). The transfer of historic properties with covenants on Caltrans federal undertakings usually is part of other mitigation measures; for instance, when Caltrans has to acquire a historic house for a highway project, relocate it and transfer ownership to a private owner or local government. This type of transfer would be part of the mitigation measures for one or more of the above cited examples. Contact FHWA if there is a question whether Section 106 applies to properties acquired with federal funds and provision for their transfer were not included in mitigation measures.*]

The discussion of adverse effects should explain how and why an affected historic property is significant, identify its essential physical features, explain how the project potentially affects the property, cite the appropriate Section 106 adverse effect criteria, and propose appropriate measures to mitigate the adverse effects. Adverse effects on the built environment either can be direct (e.g., demolition, alteration, take of land) or indirect (e.g., visual, audible, atmospheric). For more guidance see [Exhibit 2.9](#) and [2.17](#).

Under the Section 106 PA, Caltrans proposes the finding of Adverse Effect to FHWA, and FHWA consults with SHPO. After FHWA, the SHPO, Caltrans, and any other consulting parties reach an agreement on the finding, they move on to resolving adverse effects. The purpose of this step is to reach agreement on measures that will avoid or reduce harm to historic properties, while enabling the undertaking to proceed.

7-12.6 MITIGATION MEASURES

When adverse effects cannot be avoided, measures to mitigate those effects are stipulated in a Memorandum of Agreement (MOA). See [Chapter 2](#) for a description of the consultation process to resolve adverse effects. There are standard mitigation measures that are often applied, but mitigation must *always* be commensurate to the scope of the undertaking, actual project effects, and the type and significance of the historic properties being affected. Development and

review of such measures for buildings and other built-environment historic properties should be done by, or under the supervision, of architectural historians who meet the PQS standards for Principal Architectural Historian.

7-12.7 MITIGATION OPTIONS

Commonly applied mitigation options include relocation, rehabilitation, recordation, disposal with covenants, landscaping, screening, signage, and public interpretation. Development of other, creative mitigation measures is encouraged, but in all cases, measures must be reasonable, cost effective, and designed to address the actual effects of the project on historic properties. For example, relocation might be appropriate mitigation for a building that otherwise would be demolished, but not appropriate for the same building if the only project effects on it were indirect.

For buildings and structures other than bridges, such mitigation measures typically include:

- Adding visual screens or other features to lessen visual, audible or atmospheric impacts and that are compatible with the historic property(ies),
- Repositioning the building or structure and/or portions of its contributing elements within the parcel (such as moving entry pillars, fences, gates back on a large parcel when there is new right-of-way along the edge of a parcel),
- Relocating the building or structure and its contributing elements to a new site with protective covenants and conveyance of title to another party preceded by recordation to Historic American Buildings Survey ([HABS](#)), Historic American Engineering Record ([HAER](#)) or Historic American Landscapes Survey ([HALS](#)) standards, collectively known as Heritage Documentation Programs ([HDP](#)) standards; or
- As a last resort, demolition, with recordation to HDP standards.

Mitigation measures need to be consistent with the [Standards](#), whenever feasible. Depending on the type of mitigation measure, the appropriate standard can range from preservation to reconstruction. For instance, if the mitigation measure involves relocating a historic house, reconstruction may be the appropriate treatment option for installing landscaping, walkways, drives and fencing, while rehabilitation may be the appropriate treatment option for repairing the house at its new location. If mitigation measures for working adjacent to a fragile Gold Rush-era stone warehouse include stabilizing the warehouse, the preservation treatment option may be the most appropriate. The discussion of mitigation measures should reference the applicable standards and describe how the proposed work meets those standards.

RELOCATION

Relocation can be an appropriate mitigation measure when

- A property would be demolished or otherwise suffer substantial adverse effects if left in place,
- When it possesses significance that is not dependent on its location, and
- When it can be moved to a compatible new site.

Individual buildings, structures, or contributing elements can be repositioned, reoriented, or moved back within the existing parcel to accommodate new right-of-way acquisition, or the historic property can be relocated in whole or in part to an entirely new site.

When relocation is determined to be an appropriate mitigation measure, the MOA/HRCR should include some or all of the following stipulations: acquisition of relocation site (the site specified if known, or site requirements identified); conditions of the sale or transfer of title; protective covenants; stipulations for the moving process; recordation prior to the move; standards for documentation of the property (whether to HDP or other standards); re-evaluation of the property in its new location; and distribution of reports.

For historic buildings, relocation shall be done in accordance with the Secretary of the Interior's publication, *Moving Historic Buildings*⁴ and the applicable treatment options in the *Standards*, unless otherwise stipulated. For additional information or assistance, contact the BEPS Chief in CCSO.

REHABILITATION

The Secretary of the Interior defines rehabilitation as “the act or process of making possible a compatible use for a property through repair, alterations, and additions while preserving those portions or features which convey its historical, cultural, or architectural values.” Rehabilitation, which makes a property available for contemporary use (either original use or adaptive reuse) through carefully considered alterations or additions, is a desirable alternative to demolition, and it is appropriate to consider this option for the purpose of mitigation.

⁴ Curtis, John Obed. *Moving Historic Buildings*. Washington, DC: National Park Service, Heritage Conservation and Recreation Service, Technical Preservation Services Division, 1979. Reprinted in 1988 by the AASLH Press and in 1981 by W. Patram for the International Association of Structural Movers. This publication is out of print but is available through a number of libraries in California, including the California Historical Society, California State Library, Northern and Southern Regional Library Facilities, and the University of California campuses of Berkeley, Davis, Riverside, San Diego, Santa Barbara, and Santa Cruz.

When rehabilitation is used as mitigation, the MOA/HRCR should stipulate that it would be done in accordance with the [Secretary of the Interior's Standards for Rehabilitation](#).

RECORDATION

For mitigation purposes, recordation is intended to document the existing condition of a historic property, to establish for posterity a record of the historic property prior to its alteration, relocation, or demolition. The level of mitigation documentation, which can range from minimal photo documentation to a formal and extremely detailed process, will be determined as part of the consultation process, and it will be specified in a stipulation in the MOA/HRCR.

In specific circumstances, the National Park Service (NPS) Pacific Great Basin Support Office in the NPS Western Regional Office will determine the level of documentation for mitigation, as noted below; in other cases, the SHPO determines the level (should the SHPO withdraw from consultation during the resolution of adverse effects, ACHP will then make that determination).

For National Historic Landmarks, properties listed or determined eligible at the national level of significance, and some specifically identified individual properties, NPS will stipulate the level of documentation. The highest level of recordation will be in accordance with HDP ([HABS](#), [HAER](#) or [HALS](#)) standards, as appropriate. Generally, documentation of a property to HDP standards will require black-and-white large-format photographs. *NPS has not yet approved Digital media as an appropriate archival standard for mitigation documentation.* See [Exhibit 7.6](#) for guidance on HDP documentation and procedures for reviewing, approving, and transmitting documentation to the appropriate agencies and repositories.

PROTECTIVE COVENANTS, CONSERVATION EASEMENTS AND PRESERVATION AGREEMENTS

Disposal of a publicly owned historic property and conveyance of title to another party generally is considered to have the potential for an adverse effect when the property goes *outside* the protections of state and federal laws governing the actions of public agencies. Disposal of the property to a private party with a protective covenant or conservation easement or to a public entity with a conservation easement or preservation agreement can be an appropriate mitigation measure for this effect. Conservation easements are defined in California under the [Civil Code §815.1](#).

The protective covenant, conservation easement, or historic preservation agreement, ensures that a new owner will preserve the property in accordance with the *Secretary of the Interior's Standards for the Treatment of Historic Properties*; the full and proper title for the *Standards* needs to be cited in the

covenant or agreement. This transfer document also includes a list or description of the historic property's character-defining features that are to be protected by the new owner.

Property Transfer to Private Party

For transfer to a private party, the covenant grantee (new owner) must assume liability as well as title, which makes conveyance of some properties, notably bridges, difficult at times. Typically, covenants and conservation easements for Caltrans-owned properties include a third party, such as a nonprofit local historical society or historic preservation group, as the entity that accepts the covenant or conservation easement and monitors its conditions. In other words, Caltrans officially and permanently assigns to this third party its responsibilities for ensuring that the covenant or easement is enforced. The protective covenant or conservation easement then is recorded in the appropriate county recorder's office. Transfer of a historical resource to a private party *with* a protective covenant or conservation easement typically is considered no adverse effect/no substantial adverse change. The process is complete when Caltrans informs SHPO that the transfer has been executed.

Property Transfer to Another Governmental Entity

When a Caltrans-owned historical resource is transferred to a public entity, such as city or county governments, another state agency or to a federal agency, the preservation language in the transfer documents can vary, depending on which form of government would receive the property. For local governments, it may take the form of a conservation easement or a city council (or board of supervisors) adopted resolution that stipulates the conditions for preserving, maintaining, and protecting the historic property. In addition, if the local government has a historic preservation or landmark ordinance, the agreement may stipulate that the receiving government officially would designate the historical resource under its ordinance and provide protections for its preservation and maintenance. If the receiving government does not have an established ordinance, then the preservation agreement would need to stipulate that the municipality will pass a resolution recognizing the property as a historical resource, will preserve and maintain it in accordance with the *Standards* and the CHBC, will consider it a historical resource under CEQA, and, if it was determined National Register eligible or listed, a historic property for Section 106 purposes.

For transfers to a federal agency or another state agency, such protective agreements are not necessary because the historical resource would remain protected by PRC §5024 (state) or Sections 106 and 110 (federal). Typically, the transfer agreement and the HPSR/HRCR would identify character-defining features to be protected and would cite the applicable equivalent protective laws and regulations (e.g., [Sections 106](#) and [110](#) of the NHPA for federal agencies, and [CEQA](#), [PRC §5024](#), [Governor's Executive Order W-26-92](#), and the [California Historical Building Code](#) (CHBC) for state agencies). Transfer of a historical

resource to a federal agency or another California state agency is considered “no effect/no impact” because it is *automatically* protected under federal and state historic preservation law. The process is complete when Caltrans informs SHPO that the transfer has been executed.

If the transfer of a Caltrans-owned National Register listed built-environment property to another public entity would result in an adverse effect, compliance with PRC §5027 is required; see [Section 7-14.2](#) below.

SHPO Review

Transfers of state-owned historical resources are included in the list of actions that have the potential for substantial adverse change (adverse effect under PRC §5024). See [Chapter 2](#) Section 2-7.9). This *state* obligation must be met even when the project is a *federal* undertaking. FHWA has determined that when federal funds initially were used to acquire state-owned parcels, The National Environmental Policy Act (NEPA) applies to those excess parcels under 23 CFR 771.117(d)(6). As of January 2007, Caltrans is working with FHWA and SHPO to determine the Section 106 implications. If in doubt as to whether Section 106 applies, ask FHWA, California Division Environmental staff.

Allow enough time for early consultation with and review by SHPO.

Transfers of Caltrans-owned historical resources out of Caltrans ownership, whether to a private party or to a public entity, must be reviewed by SHPO under PRC §5024 *and* Section 106 if the transfer is identified as a mitigation measure in an MOA. For a transfer to a private party or local entity, typically, Caltrans submits a draft version of the covenant, easement, resolution or transfer agreement to SHPO for review and consultation. When SHPO concurs with the content of the protective document(s) or language in the HRCR, Caltrans will submit a signed and recorded copy of the covenant, easement or officially accepted resolution or local designation to SHPO and request that SHPO change the ownership status accordingly. This is a record-keeping measure for SHPO in which the property is removed from the Master List of [state-owned] Historical Resources, if transferred out of state ownership, but retains its underlying National Register, California Register and or State Historical Landmark listing/eligibility status.

When the transfer of a historical resource is to a federal agency or another California state agency, under PRC §5024(f) and/or PRC §5024.5 Caltrans provides notice and summary to SHPO by submitting the HPSR/HRCR with an explanation that the property will remain protected under Sections 106 and 110 of NHPA (federal) or CEQA, PRC §5024 and Governor’s Executive Order W-26-92 (state), as applicable. The process is complete when Caltrans informs SHPO that the transfer has been executed.

For additional information on, or assistance with, protective covenants and preservation agreements, contact the BEPS Chief in CCSO.

LANDSCAPING AND SCREENING

When a project may have indirect effects on historic properties, compatible visual screens or other features can be proposed as mitigation to lessen visual, audible, or atmospheric impacts. For example, landscaping can help screen a visual intrusion or compensate for removal of existing vegetation, while sound barriers may provide noise abatement. While the addition of sound barriers or other screening features can be a mitigation measure, their installation also may create potential adverse effects, such as a visual intrusion on the historic property being screened; they also would require consideration as additional potential project effects.

SIGNAGE

When a project's effects include reducing access to, or visibility of, a historic property that is dependent on attracting travelers, such as a roadside business, the effect may be wholly or partially mitigated by installing new signs identifying the facility or redirecting the traveling public to it. The introduction of signage would need to be coordinated with the Division of Traffic Operations [Office of Signs, Markings and Permits](#).

PUBLIC INTERPRETATION

Public interpretation can be appropriate mitigation when it will be of benefit to the public, it is reasonable and cost effective, and it relates to the actual effects of the project on historic properties.

Not all properties will be equally amenable to interpretation as mitigation. For interpretation to be appropriate,

- The subject of the interpretation must be closely tied to the resource's values and the project's effect,
- The information to be conveyed would not be otherwise easily discernible or apparent to the public, and
- There is likely public interest in receiving that information.

Options for interpretation include brochures, booklets, museum exhibits, traveling exhibits, interpretive panels, roadside signs, audio-visual presentations, audiotapes, radio or television programs, live performances, and school programs. Other methods also should be explored as appropriate; creativity is especially valuable in identifying and producing products related to public interpretation.

MITIGATION MEASURES SPECIFIC TO BRIDGES

The Transportation Research Board ([TRB](#)) and [FHWA](#) have developed additional programmatic mitigation measures and procedures that apply specifically to historic bridges.

Historic bridges are rated for functional adequacy by the same standards as new bridges, which often results in historic bridges being found deficient and therefore subject to replacement. As a result, specific programmatic mitigation options were developed for bridges. In accordance with the TRB's 1983 publication *NCHRP Synthesis 101: Historic Bridges – Criteria for Decision Making*, and its complimentary publication, TRB's 1999 *NCHRP Synthesis 275: Historic Highway Bridge Preservation Practices*,⁵ mitigation options for bridges include:

1. Rehabilitation to bring a bridge up to current standards.
2. Continued use for vehicular traffic on its existing site (perhaps as half of a couplet of bridges).
3. Continued use for non-vehicular traffic (pedestrian, bicycle, or equestrian use) on its existing site.
4. Continued use for vehicular or non-vehicular use on another site, preceded by recordation to HAER standards.
5. Retention in place exclusively for environmental mitigation purposes.
6. As a last resort, demolition, preceded by recordation to HAER standards.

The first two options listed above could permit the bridge to remain on the State Highway System when brought up to current bridge standard. The others would require that a new bridge be built to current standards. The historic bridge then would be demolished, retained off-system by Caltrans, or transferred to an appropriate party willing to assume title and liability and to abide by a preservation contract or protective covenant. A preservation contract is reimbursable with the Federal-aid funds, up to but not to exceed the applicable Federal-aid pro-rata share of demolition costs. However, if the FHWA Federal-aid pro-rata share of demolition costs is used to preserve the historic bridge, other FHWA funds cannot be used to match this money. Likewise, the federal reimbursement cannot be used to set up a trust account for future maintenance of the historic bridge.

According to the Caltrans Legal Division, mitigation option 5 is a feasible alternative and constitutes a recognized highway purpose: "[Article XIX](#) of the State Constitution authorizes the Department to expend funds for the mitigation of the environmental effects of its activities. Consequently, the retention of property for mitigation effectively would remove it from qualified disposal requirements."

⁵ Available to Caltrans staff through the Caltrans Library and History Center

A historic bridge may be bypassed by a new bridge and retained in place without having the historic bridge serve another use, or the historic bridge may be relocated to another compatible site. Removal of certain types of historic bridges could involve match-marking the structural members and dismantling the structure for storage and future use. If Federal Bridge Replacement funds are used to construct a new bridge, the old bridge will be removed from the State Highway System (its bridge number is changed to reflect this fact). According to the Highway Bridge Replacement and Rehabilitation Act regulations ([23 CFR §650.411\[c\]\[2\]](#)), “Whenever a deficient bridge is replaced or its deficiency alleviated by a new bridge under the bridge program, the deficient bridge shall be dismantled or demolished or its use limited to the type and volume of traffic the structure can safely service over its remaining life.” In addition, the old bridge would not be eligible for Federal Bridge Replacement funds thereafter.

Section 123(f) of the Surface Transportation Act of 1987 requires that MOAs for historic bridges contain a marketing plan for transferring title for bridges that otherwise would be demolished. Retention by Caltrans is a “last resort” option, which avoids Section 4(f).

The Programmatic Section 4(f) Evaluation and Approval for FHWA Projects that Necessitate the Use of [Historic Bridges](#) allows demolition of a historic bridge *only* if

- The bridge is not a National Historic Landmark;
- There is no prudent and feasible way to save the bridge; *and*
- FHWA, the SHPO, and ACHP have reached agreement on the project under Section 106.

As a result of heightened security measures, as-built plans for many bridges, tunnels and highway structures are confidential documents and need to be treated as such.

Before including copies of as-builts, whether historic or current, in any reports or HDP or other recordation documents, please consult with the Division of Engineering Services to determine whether the as-builts for a particular highway structure has been classified as confidential.

Mitigation measures need to be consistent with the Standard whenever feasible. See discussion under [Section 7-12.2](#) “Mitigation Options,” above.

7-12.8 REVIEW OF MITIGATION MEASURES OVER \$500,000

As a result of concerns expressed by Caltrans Headquarters, Regional and District management, the California Transportation Commission, FHWA and regulatory agencies over the appropriateness of certain mitigation expenditures, Caltrans

established a policy for internal independent peer review of all environmental mitigation commitments expected to exceed \$500,000 per project. This review is intended to confirm that the mitigation is cost effective and that it is commensurate to the scope of the undertaking and to the type and significance of the historic properties.

All proposed measures that identify potential mitigation costs of \$500,000 (and above) for the undertaking *as a whole* must be reviewed by the CCSO Chief, under delegation by the Chief, Division of Environmental Analysis, per [memo of January 28, 2005](#).

Documentation should include:

- Basic project information
- Affected resources
- Project effects,
- Proposed mitigation
- Alternatives considered
- Likely costs
- Issues impacting mitigation decisions

The CCSO Chief will complete the review within 15 working days from receipt of the mitigation documentation. The DEBC will take the CCSO Chief's comments into consideration prior to approving mitigation expected to cost \$500,000 or more.

7-12.9 CONSTRUCTION MONITORING

EFFECTIVE MONITORING

Despite Caltrans' efforts to ensure plans and specifications include instructions for contractors to follow that are consistent with the *Standards*, sometimes actions occur that result in damage to or destruction of significant character-defining features and materials. A PQS who meets the criteria outlined in the [Section 106 PA Attachment 1](#) at the Principal Architectural Historian level may be assigned to monitor construction work for the purpose of ensuring plans and specifications are followed in a manner consistent with the *Standards* to avoid or minimize damage to character-defining features. *Monitoring is not a substitute for adequate pre-construction instructions and specifications.*

Effective monitoring requires that the Principal Architectural Historian monitor work closely with Caltrans' and the contractor's field personnel. All participants need to understand clearly:

- The nature of the historic built-environment concerns at the location.
- Various participants' responsibilities.
- Construction schedules and procedures.
- The chain of command for dealing with any damaged or destroyed character-defining features.

A monitoring plan should discuss chain of command and decision thresholds for what constitutes damage to built-environment historic properties.

SAFETY CONCERNS WHILE MONITORING

Safety concerns are particularly important in construction situations. The Principal Architectural Historian monitor must be adequately aware of the operating methods of heavy equipment, adjacent traffic conditions, safety policy with respect to general construction practices and hazardous materials potentially present at the site. See [Chapter 5](#) Section 5-3.6 for guidance on field safety.

If the monitor sees that the work is not being performed in a manner consistent with the *Standards*, or that damage has occurred to character-defining features, it may be necessary temporarily to divert construction work away from the location, to allow the damage to be properly assessed. The monitor contacts the Resident Engineer (RE) and the RE will redirect any work.

Because delays may cause serious impacts to the construction schedule, the monitor should have a clear understanding of the thresholds for such damage.

REPORTING DAMAGE TO BUILT ENVIRONMENT HISTORIC PROPERTIES

Damage to historic properties may result in additional assessment and repair work that necessitates construction delays.

When damage occurs, the DEBC prepares a Report of Construction Impacts to Cultural Resources. The DEBC certifies this report and includes it in the project files. The DEBC sends copies of this report to Headquarters Division of Construction and to the CCSO Chief. [Exhibit 5.13](#) contains guidance for completing the Report of Construction Impacts. Damage to historic properties must be reported to SHPO when they occur; they are also reported in the Section 106 PA Annual Report. Annual reports are discussed in [Chapter 2](#) Section 2-5.6.

7-13 STATE LAWS AND REGULATIONS

CEQA and PRC §5024 are the primary state laws and regulations that apply to Caltrans projects. [Chapter 1](#) and [Exhibit 1.4](#) explain the applicable state laws and regulations in further detail.

Compliance with CEQA and PRC §5024 follows the same procedures for level of effort, identification, evaluation, assessment of effects and developing mitigation measures as for federal undertakings.

If the project is a federal undertaking, the federal documents (HPSR, HRER, Finding of Effect, etc.) need to include a section on CEQA compliance and, if applicable PRC §5024. If the project is state-only, follow the procedures outlined in this chapter and report the findings, including identification, evaluation, assessment of effects, and mitigation measures in the HRCR. See [Exhibit 2.15](#) for reporting guidance.

7-13.1 CEQA

The California Environmental Quality Act (CEQA) ([PRC §21000 et seq.](#) and its implementing regulations CEQA Guidelines California Code of Regulations ([CCR](#)) [§15064.5 et seq](#)) is intended to develop and maintain a high-quality environment now and in the future. CEQA requires California's public agencies to identify the significant environmental effects of their actions and to avoid or mitigate them, where feasible. CEQA applies to projects that will be undertaken by, or that require the approval of, state or local government agencies and that have the potential to have a physical impact on the environment.

7-13.2 PUBLIC RESOURCES CODE (PRC) §5024

Public Resources Code [§5024](#) requires state agencies to preserve and maintain state-owned historical resources. PRC [§5024.5](#) authorizes the SHPO to review state agencies' compliance with this law. State agencies must demonstrate to SHPO that they are protecting and maintaining their prehistoric, historic, ethnographic, and traditional cultural resources, and that they are ensuring that their development or maintenance projects will not adversely impact those resources.

Caltrans projects that include maintenance, repair, rehabilitation, relocation, ownership transfer (including route relinquishments and excess parcel sales), or demolition of state-owned historic buildings or structures (such as historic roads, bridges, retaining walls, pumping stations, etc.) must be reviewed, and if appropriate monitored, by Caltrans PQS Principal Architectural Historians. Because these activities potentially could cause adverse effects to state-owned

historic buildings and structures, such projects require review by Caltrans PQS and consultation with SHPO.

See [Chapter 2](#) Section 2-7 for guidance on the appropriate procedures to follow regarding state-owned historic buildings and structures within a project APE or Project Study limits.

7-13.3 IDENTIFICATION AND EVALUATION OF CULTURAL RESOURCES

Normally, the identification and evaluation efforts for historical resources under CEQA and PRC §5024 are the same as for historic properties under Section 106, but the HRER is attached to the HRCR, for state-only projects. However, SHPO does not need to be consulted on these efforts for CEQA purposes. Caltrans, as the lead agency, makes the determinations whether resources meet California Register criteria. When state-owned resources are evaluated, however, Caltrans must consult with SHPO by submitting the HRCR, with attached HRER, whether or not a resource meets National Register or California Historic Landmark criteria. See [Chapter 2](#), Sections 2-7 and 2-13 for more guidance.

7-13.4 ASSESSMENT OF EFFECTS AND MITIGATION PLANS

Normally, the impacts and the mitigation measures for historical resources under CEQA are the same as for historic properties under Section 106, though under CEQA adverse effects are called substantial adverse changes⁶, and include locally designated landmarks and resources identified as significant in a local survey that meets SHPO standards, whether or not those resources meet National Register criteria. When a project is federally funded, assessment of impacts under CEQA is incorporated into the assessment of effects and mitigation measures contained in the Section 106 documentation. As under Section 106, impacts to historical resources must be assessed under CEQA, and if applicable, mitigated. Unlike the Section 106 process, a single document, the HRCR, can be used to document both the impacts and the mitigation measures for state-only projects. For state-owned built-environment historical resources, Caltrans must consult with SHPO under PRC §5024.5. For state-owned historical resources that do not have constructed features, such as landscapes and tree rows, Caltrans must consult with SHPO under PRC §5024(f). See [Chapter 2](#) Section 2-6 for more information on the state process. [Exhibit 2.15](#) contains the format and required content.

The stipulations outlined in [Section 106 PA Stipulation X.B.](#), “No Adverse Effect with Standard Conditions,” do not apply to state-only projects to findings under PRC §5024. See Section [7-13.6](#) below.

⁶ Caltrans uses the federal criteria of adverse effect [[36 CFR §800.5\(a\)\(1\)and \(2\)](#)] as guidance for assessing whether a project has the potential for substantial adverse change under CEQA and adverse effect under PRC §5024.

7-13.5 MITIGATION MEASURES

Mitigation measures for buildings and structures (including bridges) follow the same principles under state law as under federal law. Document the proposed measures in the Mitigation Plan section of the HRCR and include plans, specifications, and other relevant material as attachments. Consultation with SHPO on mitigation is required *only* when a state-owned historical resource is involved, as outlined in PRC §5024.5, or when there are other agreements or stipulations that require this consultation. See [Chapter 2](#) and [Exhibit 2.15](#) for more guidance.

As with federal undertakings, all proposed mitigation measures with costs of \$500,000 and above must be submitted to the CCSO Chief for review and comment. See [Section 7-12.2](#), above.

7-13.6 MEASURES TO MITIGATE TO BELOW THE LEVEL OF SIGNIFICANT IMPACT

The equivalent in CEQA to the Section 106 “No Adverse Effect with Standard Conditions” for rehabilitation of a historic property is a Class 31 Categorical Exemption ([CEQA Guidelines §15331](#)), which requires that the rehabilitation, maintenance, repair, restoration, or reconstruction of historical resources, including buildings, bridges, structures, and other built-environment resources, be done in a manner consistent with the [Standards](#).

Likewise, under [CEQA Guidelines §15064.5\(b\)\(3\)](#), conformance to these *Standards* is considered to mitigate substantial adverse changes to historical resources to below the level of significant impact. The proposed work also must comply with the [CHBC](#) (see [Section 7-14.4](#) below). Use of this code is a legal requirement for work on state-owned historical resources.

A Caltrans PQS Principal Historian must review plans and specifications for proposed rehabilitations, maintenance, repairs or mitigation measures that would mitigate to below a level of significant impact. The plans, specifications or other mitigation documentation must be attached to the HRCR. A district without appropriately qualified PQS can send review requests to the BEPS Chief in CCSO.

7-14 ADDITIONAL STATE RESPONSIBILITIES FOR HISTORIC PROPERTIES

7-14.1 PRC §5024

Caltrans owns a large number of historical resources. Some are part of Caltrans' facilities, such as maintenance stations, bridges, or historic roadways, while others were purchased as right of way for proposed highway projects. It is Caltrans responsibility to identify and maintain these historical resources in accordance with the requirements of PRC §5024 and §5024.5.

Statutory and regulatory provisions that govern or set guidelines for managing historic buildings and structures under Caltrans ownership or control are mentioned above and also described in [Chapter 1](#) Section 1-2 and [Exhibit 1.4](#). These laws and regulations outline Caltrans' stewardship responsibility in preserving historic properties. Caltrans activities that may impact state-owned historical buildings and structures, ranging from repairs to relinquishment, are all subject to PRC [§5024](#). This code also applies to the *maintenance* of historic buildings, bridges, and other structures under Caltrans control, along with other preservation measures, such as stabilization, rehabilitation, and rehabilitation.

In addition, Caltrans has the responsibility to ensure that no historic building or structure (including roads and associated ancillary features) is sold or its ownership transferred until the property is evaluated for its potential eligibility for the National Register, as California Historical Landmark or as a historical resource under CEQA. If a cultural resource is determined to be eligible for the National Register or as a California Historical Landmark, or is a historical resource under CEQA, its sale or transfer shall include preservation agreements.

7-14.2 PRC §5027

PRC [§5027](#) prohibits the demolition, destruction or significant alteration (except for restoration to preserve or enhance its historical values) of any state-owned National Register-*listed* building or structure that is transferred to another public agency, without prior approval of the Legislature. In essence, the Legislature needs to change the law in order to allow this type of substantial adverse change to occur. Because the Legislature has to amend PRC §5027 to allow a substantial adverse change to this type of property *and* Caltrans must consult with SHPO early in the process, before the legislation is passed, allowing enough time for SHPO review is critical and needs to be synchronized with CEQA and PRC §5024 compliance. The key points to remember are

- National Register *listed* building or structure

- There is a *substantial adverse change*/adverse effect through demolition, destruction or significant alteration
- Transfer is to another *public agency*
- SHPO must be consulted prior to the passage of the proposed legislation and PRC §5024 compliance must be complete
- This kind of transfer is either a *Negative Declaration or EIS*

The law does not apply to archaeological sites, landscapes or other non-structural property types. Very few Caltrans-owned historic buildings or structures are actually listed in the National Register; most are determined eligible.

7-14.3 SECRETARY OF THE INTERIOR’S STANDARDS FOR THE TREATMENT OF HISTORIC PROPERTIES

It is Caltrans policy to use the Secretary of the Interior’s *Standards for the Treatment of Historic Properties with Guidelines for Preserving, Rehabilitating, Restoring & Reconstructing Historic Buildings (Standards)* for the repair, maintenance, stabilization, rehabilitation, or restoration of Caltrans-owned historic buildings and structures. This includes both federal and state-only projects and activities.

Under the [Section 106 PA Stipulation X.B.2.a\(i\)](#), rehabilitation that conforms to the *Standards* may be used to document a finding of No Adverse Effect with Standard Conditions or to mitigate adverse effects on historic properties. Rehabilitation conforming to the *Standards* can also mitigate substantial adverse changes to historical resources under CEQA. Use of the *Standards* in repair, maintenance, or rehabilitation of historical resources also constitutes a Categorical Exemption under CEQA as a [Class 31 project](#).

7-14.4 CALIFORNIA HISTORICAL BUILDING CODE

The California Historical Building Code ([CHBC](#)) is the mandated alternative to other prevailing local and state codes “to preserve, encourage conservation and provide a cost effective approach to preservation of the resource and safety of users and occupants” for historical resources. The CHBC outlines state regulations that “control and allow alternatives to any prevailing codes when dealing with qualified historical buildings or sites.” It is designed to protect the character-defining features of buildings and structures, while also meeting the federal Americans with Disabilities Act (ADA) and its accompanying guidelines, as well as state ADA laws and regulations.

Under the CHBC state agencies are required to “apply the alternative building regulations pursuant to Section 18959.5 [of the Health and Safety Code] in permitting repairs, alterations, and additions necessary for the preservation,

restoration, rehabilitation, moving or continued use of an historical building or structure.”

The code’s use is mandatory, not optional, on state-owned historic buildings and structures, including roads and bridges. *Caltrans must therefore comply with the CHBC* in its maintenance programs; in repair, stabilization, and rehabilitation activities; and in projects that involve Caltrans-owned historic buildings and structures that meet the definition of a qualified historical building or property outlined in Chapter 8-2 of the CHBC and Section 18955 of the Health and Safety Code. That includes properties listed in or eligible for inclusion in the National Register or the California Register, designated as a State Historical Landmark or Point of Historical Interest, listed in city or county registers, and listed in inventories of historical or architecturally significant sites, places, historic districts, or landmarks.

CONSULTATION WITH STATE HISTORICAL BUILDING SAFETY BOARD

Consultation with the Executive Director of the [State Historical Building Safety Board](#) is required when use of prevailing codes and standards could result in an adverse effect to a state-owned historical resource. Consultation should occur early in the planning process to determine whether components of the project can take advantage of this alternative code.

CHBC AND THE CALIFORNIA BUILDING ENERGY EFFICIENCY STANDARDS

Qualified historical buildings, as defined in the CHBC, are exempt from the [California Building Energy Efficiency Standards](#), as revised. This exemption includes historic lighting components or replicas of historic lighting components. However, all other light systems in historical buildings must comply with the energy efficiency standards for lighting power allowances. Under the CHBC, all non-historical additions must comply with regular code. New or replacement mechanical, plumbing and electrical equipment and appliances *should* comply with the Building Energy Efficiency Standards.

The BEPS Chief in CCSO is the Caltrans contact person regarding the CHBC.