

Chapter 29

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CHAPTER 29 – Landscape Architect

SECTION 1 General

Introduction

As the lead program responsible for the design of the highway roadside, the Landscape Architecture Program (LAP) provides expertise in the planning, design, construction, maintenance, and operation of transportation system improvements that:

- Balance mobility, safety, maintainability, and economic needs with adjacent land use and aesthetic, environmental, scenic, and community values;
- Improve motorized and non-motorized traveler safety through the design of context sensitive roadways and transit, bicycle, and pedestrian facilities;
- Improve traveler and worker safety by providing design solutions that reduce the frequency and duration of maintenance worker exposure to traffic; and
- Improve traveler safety through the design of safety roadside rest areas and management of rest area system needs.

Aesthetic, Environmental, Scenic, and Community Values

To make projects successful for the best overall public benefit, the project development process seeks to ensure that impacts to aesthetic, environmental, scenic, and community values are evaluated and addressed in balance with transportation goals.

The profession of landscape architecture utilizes site planning and design techniques that work in harmony with both the constructed and natural environments. Landscape architects offer the project development team (PDT) a broad range of skills to identify innovative design solutions that address often competing requirements.

Aesthetic Values

Landscape architects provide design expertise to protect and improve aesthetic values visible from and to transportation facilities. Community and departmental values may be incorporated into transportation projects by providing aesthetic reviews, visual impact assessments, comprehensive corridor plans, and aesthetic design guidance.

Environmental Values

Landscape architects provide design expertise to integrate transportation facilities with the physical, natural, and constructed environment, including: habitat conservation and restoration; conservation of agricultural lands; water conservation through the use of drought tolerant plants, inert materials, and the design of irrigation systems using non-potable water sources; and storm water pollution prevention through erosion control techniques.

Landscape architects also provide design expertise in the selection and placement of planting provided to replace existing native or non-native planting removed by roadway construction activities. This work includes restoration of native landscape areas, required mitigation planting, highway planting revegetation, and replacement highway planting projects. These projects help mitigate the environmental impact of roadway construction projects.

Scenic Values

As part of the environmental planning process, landscape architects assess potential adverse visual impacts of transportation projects adjacent to communities or natural scenic resources. Landscape architects work with permitting agencies, local communities, and the PDT to design creative mitigation measures. Landscape architects perform scenic resource evaluations and visual impact assessments, and provide design expertise to protect and preserve scenic resources.

Community Values

Landscape architects assist in integrating transportation needs with existing community goals and values by providing expertise in comprehensive corridor planning, urban design, historic preservation, and community involvement. Landscape architects assist in facilitating timely project delivery and building community consensus by implementing principles of community involvement and context sensitive design, including:

- Harmonizing the roadway with existing topography and land uses;
- Preserving and enhancing community character;
- Meeting the needs of non-motorized travelers;
- Preserving historic period resources such as historic landscapes; and
- Supporting the incorporation of transportation art and community identification.

Traveler and Worker Safety

Landscape architects contribute to the safety of the traveling public and Caltrans' maintenance workers by providing roadside improvement designs and recommendations with the goal of eliminating or minimizing worker exposure to traffic.

Improvements that enhance safety include placing or relocating facilities that require recurrent maintenance activities to protected areas, or to areas outside the clear recovery zone. Typical examples include relocating irrigation controllers, backflow preventers, remote control valves, and similar facilities to protected areas or adjacent to the right-of-way fence.

Improvements that reduce or eliminate recurrent maintenance activities include recurrent pruning, graffiti removal, irrigation work, herbicide application, and mowing. Typical examples include:

- Removal of plant material that encroaches upon sight distances;
- Planting vines or using textures on noise barriers;

- Automating manual irrigation systems;
- Providing vegetation control treatment beneath guardrails and signs;
- Paving slopes beneath bridge structures;
- Paving narrow areas and gore areas;
- Providing contrasting surface treatment beyond the gore pavement; and
- Placing rock or other inert mulch materials.

Improvements that provide maintenance workers with safe access to roadway and roadside facilities requiring regular maintenance include providing maintenance vehicle pullouts, maintenance access roads, and access gates for workers on foot or in vehicles.

Other improvements that provide safety to the traveling public include incorporating safety roadside rest areas into the transportation system where travelers can safely stop, rest, and manage their travel needs. Safety roadside rest areas provide an excellent opportunity for Caltrans to communicate with travelers.

Cross References

The [*Highway Design Manual*](#) contains design standards and guidelines concerning the planting and conservation of existing vegetation, the development of highway planting projects, and incorporation of scenic values in highway design. The manual also includes design standards and guidelines for safety roadside rest areas and vista points.

The [*Storm Water Project Planning and Design Guide*](#) provides design guidance for selecting and designing storm water quality best management practices (BMPs) during the planning and design phase of a project.

The [*Standard Environmental Reference \(SER\)*](#) provides guidelines in *Chapter 27* for conducting scenic resource evaluations and for performing visual impact assessments during the project development process.

The [*Standard Environmental Reference*](#) provides guidelines in *Chapter 28* for historic property determinations of eligibility and identifying historic landscapes during the project development process.

The [*Encroachment Permits Manual*](#) contains procedures and guidelines for permitting work by others, including planting design, transportation art, community identification, and gateway monuments through permits.

The [*Construction Manual*](#) describes allowable options for materials and work methods called for in the project specifications planting and irrigation.

The [*Maintenance Manual*](#) contains instructions about the maintenance of roadside vegetation and other roadside facilities.

The *Landscape Architecture Project Development Guide* provides guidelines for the preparation of highway planting and irrigation plans, specifications, and estimates (PS&E).

The [*Plans Preparation Manual*](#) and the [*CADD Users Manual*](#) provide guidelines for the preparation of highway planting and irrigation plans.

The [*Ready to List \(RTL\) and Construction Contract Award Guide*](#) provides the requirements necessary to make a project “Ready to List” for advertisement.

Division of Transportation Planning Best Practices for Public Participation Handbook contains the planning process to seek out and consider the needs of all stakeholders to maximize the potential and benefit of public involvement, and to adequately respond to and meet the requirements of federal and state legislation and mandates, and Caltrans’ policies and goals.

Division of Transportation Planning Public Participation Inventory is a spreadsheet with methods of public notification and participation techniques.

The [*Main Streets: Flexibility in Design and Operations*](#) booklet emphasizes Caltrans’ commitment and provides guidance on the safe, context appropriate design of State highways that function as community main streets.

The [*Office of Project Management Project Communication Handbook*](#) helps the project team identify internal and external stakeholders, and improves communication among all parties.

Director's Policy DP-22 provides guidance regarding *Context Sensitive Solutions* in the project development process.

Deputy Directive DD-31 provides guidance regarding *Protection of Scenic Corridors* in the project development process.

Deputy Directive DD-64 provides guidance regarding *Accommodating Non-Motorized Travel* in the project development process.

[*Design Information Bulletin 82 \(DIB-82\)*](#) provides *Pedestrian Accessibility Guidelines for Highway Projects*.

Federal Highway Administration (FHWA) Flexibility in Design provides guidance for creating transportation facilities that conserve and enhance environmental, scenic and community resources.

FHWA Executive Memorandum issued April 26, 1994: Memorandum on Environmentally and Economically Beneficial Practices provides guidance on using native plant material and integrated pest management techniques to conserve water and reduce pollution.

FHWA Executive Memorandum issued August 18, 1999: Guidance Implementing Executive Order on Executive Order 13112 Invasive Species provides guidance on implementing *Executive Order 13112* signed by President Clinton on February 3, 1999.

SECTION 2 Highway Planting

ARTICLE 1 Definitions, General Policy, and Programs

Definitions

Highway Planting

The term “highway planting” in this chapter includes new highway planting, replacement highway planting, highway planting restoration, highway planting revegetation, required mitigation planting, and irrigation system upgrade work. Highway planting addresses safety requirements, provides compliance with environmental commitments, and assists in the visual integration of the transportation facility within the existing environs.

Classified Landscaped Freeway

A classified landscaped freeway is a planted section of freeway that meets the criteria established by the *California Code of Regulations Outdoor Advertising Regulations, Title 4, Division 6*. This designation is used in the control and regulation of outdoor advertising displays.

Maintenance Access

Maintenance access improvements provide access for maintenance workers that reduce potential conflicts between highway workers and traffic. Maintenance access design concepts include maintenance vehicle pullouts, maintenance access roads, stairways, access gates, paving of narrow areas and gore areas, and relocation or clustering of facilities.

Irrigation System Upgrade

Irrigation system upgrade work includes the conversion of manually operated irrigation systems to automatic or remote irrigation control systems (RICS), replacement of obsolete irrigation components, conversion of potable water irrigation systems to non-potable water, and the conversion of non-compliant backflow preventers to code compliant reduced-pressure backflow preventers.

Nonpotable water suitable for irrigation purposes shall be used when it is practical and the estimated capital outlay for the water system does not exceed 125% of all costs associated with using a potable water source. Costs in excess of 125% are to be justified based on demonstrated cost savings over a 20-year life cycle, and when long-term water quality and consistent supply can be established. Non-potable water includes untreated sources (wells, streams, rivers, underground water sources) as well as reclaimed water.

General Policy

Conventional Highways

Highway planting, funded and maintained by Caltrans on conventional highways, is limited to planting that provides: safety improvements (headlight glare screening, delineation of the roadway, fire suppression, and wind breaks), erosion control and storm water pollution prevention, highway planting revegetation, and required mitigation planting.

Freeways, Controlled Access Highways, and Expressways

Highway planting is warranted on freeways, controlled access highways, and expressways under any of the following conditions:

- On new freeways, controlled access highways, and expressways - areas impacted by new highway construction where adjacent properties are developed at the time of highway construction contract acceptance;
- On existing freeways, controlled access highways, and expressways - areas impacted by major modifications to the existing highway where adjacent properties are developed at the time of highway construction contract acceptance;
- Where adjacent properties were developed on or before June 30, 1987;
- To satisfy memorandum of understanding (MOU) or memorandum of agreement (MOA) between Caltrans and another governmental agency;
- To mitigate for environmental impacts in compliance with environmental commitments, agreed to, for example, as a part of project development, resource agency permit requirement, or court order; and
- To provide planting necessary for revegetation, erosion control, storm water pollution prevention or traffic safety improvements (headlight glare screening, delineation of roadway, fire suppression, and wind breaks).

Adjacent properties are considered "developed" when the streets or buildings are in place, or when the adjacent properties have approved construction permits. Parks and open space are not considered developed property unless they are an integral component of a planned development.

Highway planting along freeways, controlled access highways, and expressways that exceed these provisions will only be permitted when funded and maintained by others.

Separate Contract Requirement for Highway Planting Work on Roadway Construction Projects

Highway planting having an estimated cost of \$200,000 or more, in conjunction with or resulting from a roadway construction project, must be accomplished by separate contract and must include three years of plant establishment. This policy applies to all highway planting projects within the State operational right-of-way regardless of the funding source. The estimated cost of highway planting is the total sum of the contract lump sum item for "Highway Planting" and the contract lump sum item for "Irrigation Systems."

Highway planting having an estimated cost of less than \$200,000, in conjunction with or resulting from a roadway construction project, may remain with the parent roadway construction project and must include one year of plant establishment. Exceptions to this policy must receive concurrence from both district maintenance and the district landscape architect (LA), and be approved by the Landscape Architecture Program (LAP).

The cost limit that triggers the separate contract requirement for highway planting work may be adjusted for inflation by the LAP.

Exceptions to the separate contract requirement policy may be granted by the Principal Landscape Architect, LAP, when there is a demonstrated benefit to the State to combine planting with road construction under a single contract, or the planting work is legally required to be installed with the roadway construction contract. Submit exception requests to the LAP using the form entitled "Fact Sheet Exception to Separate Contract Policy for Highway Planting" in [Appendix D](#) of this manual. Exception requests must be approved by the LAP prior to approval of the Project Report (PR).

Funding Limitations

The maximum cost per acre for highway planting work, and the maximum cost per acre for water assessment fees for highway planting projects have been established, and are adjusted annually by the LAP. These values establish Caltrans' funding limit for highway planting and water assessment fees. Required mitigation planting, traveler and worker safety, and roadside management items are not included in the maximum cost per acre limit for highway planting.

Exceptions to this policy must be approved by the Principal Landscape Architect, LAP, and may be considered where the highway planting work is funded and maintained by others, where a higher level of highway planting is required due to legal agreements, to replace planting originally provided by others, or for planting of narrow roadside areas such as vine planting on noise barriers.

Planting with Noise Barriers

Planting should be incorporated as an integral component of noise barrier work to discourage graffiti and address visual impact issues. Wherever graffiti removal or other visual issues represent an ongoing maintenance concern, consideration must be given to covering new or existing noise barriers with vines and/or placing plants to screen the noise barriers to reduce worker exposure and life-cycle maintenance costs related to graffiti removal.

Planting associated with noise barrier construction must be programmed and funded as part of the parent project. The cost of the work should be identified in the initiation document for the parent project. This planting must be programmed to be under construction within two years after highway construction contract acceptance. For specific information regarding project programming, please refer to [Chapter 9 "Project Initiation"](#) of this manual.

Plant Establishment

A plant establishment period is a duration of time that allows newly installed plant material to reach a state of maturity, requiring minimal ongoing maintenance for survival. A plant establishment period typically includes the removal of litter and trash, weeding, water application, irrigation repair, replacement of plant material that dies, and other activities required to ensure the long-term survival of plant material.

Federal Highway Administration (FHWA) regulations require a plant establishment period of sufficient length for the expected survival of new plant material in the highway environment on all projects that include highway planting.

Plant establishment periods for highway planting performed in conjunction with a roadway construction project must follow the policy described in Section 2, Article 1 – “General Policy, Highway Planting, Separate Contract Requirement for Highway Planting Projects”.

Plant establishment periods for highway planting performed under a separate contract from a roadway construction project must be three years in length. Plant establishment periods for required mitigation planting may exceed three years when required by the permit. Exceptions to this policy must receive concurrence from both district maintenance and the district LA and approved by the LAP.

Replacement Highway Planting

Replacement highway planting replaces vegetation installed by Caltrans or others that has been damaged or removed due to transportation project construction. Replacement highway planting may also include irrigation modifications and/or replacement. Caltrans will replace vegetation (including planting by others) damaged or removed by State transportation construction activity. Vegetation will be replaced at a rate and size determined by the district LA.

If a highway construction project, funded by others, is proposed for an area in which the operational right-of-way is currently planted, the project proponent must provide replacement planting equal to the current allowable maximum cost per acre. If they desire, the project proponent may provide replacement planting that exceeds the current allowable maximum cost per acre. See ["Maintenance Responsibilities - Planting by Others"](#) of this chapter regarding maintenance responsibilities for planting that exceeds the maximum cost per acre.

If there is limited space for replacement planting due to transportation construction, replacement planting may be installed outside the limits of the parent highway project. Replacement planting may be located outside the State operational right-of-way if it is in a public space within the adjacent community. The district LA and the appropriate public agency should negotiate and agree on the location of this planting and the terms of the maintenance agreement.

Replacement highway planting required due to the impacts of a roadway construction project must be programmed in conjunction with and funded from the parent project. The cost of highway planting work should be identified in the project initiation document (PID) for the parent project. The project approval and environmental document (PA&ED) phase of work for the parent project should include the planting project within its project scope. Replacement highway planting must be under construction within two years of acceptance of the highway contract that damaged or removed the existing planting. For specific information regarding project programming, please refer to [Chapter 9 "Project Initiation"](#) of this manual.

Required Mitigation Planting

Required mitigation planting provides planting and other work necessary to mitigate environmental impacts due to roadway construction. The word "required" indicates that the work is necessary to meet legally required environmental mitigation or permit requirements.

Examples of work involved in mitigation planting may include:

- Creation, restoration, or enhancement of habitat such as wetlands, oak woodlands, etc.; and
- Creation, restoration, or enhancement of specific habitat for sensitive species such as elderberry plantings for the valley elderberry longhorn beetle or nesting habitat for least Bell's vireo.

Required mitigation planting may be performed within the operational right-of-way, immediately adjacent to the highway or at an offsite location as determined by the permit.

A planting project for required mitigation due to the impacts of a roadway construction project must be programmed and funded as part of the parent project. The cost of required mitigation planting should be identified in the PID for the parent project. This planting must be under construction within two years of acceptance of the highway contract that damaged or removed the existing planting, unless otherwise specified. For specific information regarding project programming, please refer to [Chapter 9 "Project Initiation"](#) of this manual.

Highway Planting Revegetation

Highway planting revegetation provides planting as mitigation for native vegetation damaged or removed due to a roadway construction project. Highway planting revegetation may include irrigation systems as appropriate.

Highway planting revegetation, required due to the impacts of a roadway construction project, must be programmed and funded as part of the parent project. The cost of the work should be identified in the PID for the parent project. This planting must be programmed to be under construction within two years after acceptance of the highway contract. For specific information regarding project programming, please refer to [Chapter 9 "Project Initiation"](#) of this manual.

Scenic Resource Evaluation (SRE)

The environmental review process requires an analysis of a project's potential impact on scenic resources. Scenic resources such as large trees, rock outcroppings, scenic vistas, or structures with visual interest must be identified in a preliminary scenic resource review prepared during the PID phase of work. If this preliminary review identifies a significant impact on scenic resources, a Scenic Resource Evaluation (SRE) is prepared during the PA&ED phase of work. A proposed transportation improvement that damages or requires removal of a scenic resource cannot be classified Categorical Exempt (CE) under the California Environmental Quality Act (CEQA). Specific information regarding determination of scenic resources is described in Caltrans' SER.

Visual Impact Assessment

An assessment to analyze visual impacts must be carried out when an initial review concludes that a proposed project may have an effect on a scenic resource or the visual environment. The visual assessment can document potential impacts and their significance. The assessment also provides recommendations for appropriate impact avoidance or mitigation strategies. District Landscape Architects (LAs) are responsible for conducting the visual assessment, and should be contacted early in the project development process.

Wildflower Planting

California native wildflowers must be included with all projects with federal participation that include planting work per *Title 23 Code of Federal Regulations part 752.11*. Highway planting to provide traffic safety improvements (see "Conventional Highways" above), revegetation, erosion control, and irrigation-only projects are exempt from this requirement.

The minimum level of native wildflowers required is one-quarter of one percent of the total funds expended for planting and irrigation work.

PRs must include a discussion of the proposed use of wildflowers and compliance with federal wildflower requirements. See [Appendix D](#) of this manual, "Preparation Guidelines for Project Report (New Highway Planting and Highway Planting Restoration), Section 6. Considerations Requiring Discussion, E. Use of Wildflowers."

The use of native wildflowers may not be appropriate under conditions such as the following:

- Where native, non-endemic wildflowers are considered invasive to natural areas or competitive with endemic native species.
- Where native wildflowers would produce excessive dormant season fire fuel that increases the threat of wildfires and/or fire safety management will damage the wildflower resource itself.
- Where wildflowers would not be compatible with the adjacent urban landscape environs.
- Where the use of native wildflowers would result in poor planting design.

- In areas where human impacts, such as trampling, would preclude successful establishment of native wildflowers.
- Where irrigation necessary to sustain adjacent planting would lead to the decline of native wildflowers.
- Other unique project-related situations or conditions.

The PR must describe the specific reason why the use of native wildflowers is not appropriate with the project. In these situations, an estimate of the dollar value of the required wildflower element for the project must be included in the PR. These funds are to be tracked by the district for use in developing future native landscape restoration projects for compliance with the federal wildflower obligation.

Programs

Highway Planting Restoration

Highway planting restoration provides for replacement, restoration, and rehabilitation of existing vegetation damaged by weather, acts of nature, or deterioration to integrate the facility with the adjacent community and surrounding environs. Highway planting restoration also provides erosion control to comply with National Pollutant Discharge Elimination System (NPDES) permit requirements. These projects include strategies designed to protect the safety of travelers and maintenance workers by minimizing recurrent maintenance activities.

New Highway Planting

New highway planting provides planting to satisfy legal mandates, environmental mitigation requirements, memoranda of understanding or agreement between Caltrans and local agencies, and for aesthetics and erosion control. New highway planting also includes roadside management strategies that improve traveler and worker safety by reducing the frequency and duration of maintenance workers' exposure to traffic.

New highway planting required due to the impacts of a roadway construction project must be programmed and funded as part of the parent roadway project. The cost of the work should be identified in the PID for the parent project. This planting must be programmed to be under construction within two years after highway construction contract acceptance. For specific information regarding project programming, refer to [Chapter 9 "Project Initiation"](#) of this manual.

New highway planting funded from a district's minor program will only be allowed when approved by the District Director and adequate resources are committed for maintenance of the new planting and irrigation.

Beautification and Modernization

Beautification and modernization projects demonstrate new design concepts that improve highway corridor function and compatibility with the surrounding environs. These improvements serve to reduce repetitive maintenance tasks, increase worker safety, and improve highway facility life-cycle costs.

Modernization work typically includes updating or replacing aging, high-maintenance roadside facilities such as sign structures, light standards, and fencing; re-contouring slopes; and upgrading gore, median, and slope paving.

Beautification work typically includes providing aesthetic features for structures, barriers, and bridge rails; pedestrian scaled street-side amenities; rural wildflower and tree plantings; and minor planting for aesthetics, including the screening of distracting or objectionable views.

Roadside Enhancement

Roadside enhancement serves to enhance, preserve, or restore scenic and native landscape areas within or near roadsides. Examples of roadside enhancement work include structural modifications required for environmentally sensitive species, such as wildlife crossings, fisheries enhancements, or desert tortoise fencing, fish and wildlife preservation and protection, placement of historic markers, elimination of qualified junkyards, removal of nonconforming outdoor advertising signs, construction of vista points and roadside ecological viewing areas, scenic enhancements, relinquishment of environmental mitigation sites, and work required to comply with the *Surface Mining and Reclamation Act of 1975*.

Scenic Highways

The intent of the California Scenic Highway Program is to ensure the protection of highway corridors that reflect the State's natural scenic beauty. Caltrans has responsibility to cooperate with local governments in developing corridor strategies to accomplish this goal. If a transportation project occurs within the limits of an eligible or designated Scenic Highway, the district LA and/or scenic highway coordinator must be contacted for review and recommendation.

State laws governing the Scenic Highway Program are found in the *Streets and Highways Code, Section 260 et seq.* Caltrans makes an official designation of a scenic highway when a local jurisdiction has demonstrated that the eligible State or county highway meets the standards for scenic quality and corridor protection. See "[Guidelines for the Official Designation of Scenic Highways](#)" for specific information on the designation process.

ARTICLE 2 Responsibilities

Headquarters

Landscape Architecture Program (LAP)

The Principal Landscape Architect, LAP:

- Establishes statewide State Highway Operation and Protection Program (SHOPP) levels and performance goals.
- Designates "Landscaped Freeway" classifications.

- Directs the development, implementation, and evaluation of roadside management, traveler and worker safety, and context sensitive design strategies.
- Directs policy development, reviews, and evaluates district compliance.
- Directs research for new materials and methods.
- Reviews and approves design and policy exception requests.

Office of Landscape Architecture Coordination and Planning

The Chief, Office of Landscape Architecture Coordination and Planning:

- Provides advisory support to the Principal Landscape Architect, LAP for SHOPP coordination.
- Provides expert advice to the district for the preparation of program and project development guidelines.
- Recommends approval of policies, procedures, plans, and standards.

LAP District Coordinators:

- Assist districts with issues pertaining to policy and procedures involved in the preparation of project study reports (PSR), design concepts, PRs, design intent statements (DISs), fact sheets, and plans, specifications, and estimates (PS&Es) for compatibility improvement projects, including highway planting, rest areas, vista points, and other site development.
- Assist the Principal Landscape Architect, LAP, in development of SHOPP, State Transportation Improvement Program (STIP) and other programming documents relating to project development.
- Review and assist district compliance with objectives, policies, guidelines, and standards.
- Disseminate and interpret program and project development guidelines, policies, standards, and planting and irrigation system design concepts for compatibility improvements.
- Review and make recommendations for exception requests to Caltrans' standards for landscape architecture work.

The LAP Roadside Facilities Coordinator:

- Recommends and maintains policies, guidelines, procedures, and standards for safety roadside rest area and vista point design.
- Monitors compliance with [*Design Information Bulletin \(DIB\) 82*](#), available on the Division of Design website.
- Assists districts and other programs with rest area, joint economic development, and privatization efforts.
- Coordinates safety roadside rest area policies, standards, and 10-year SHOPP needs.
- Oversees the development and update of the statewide Safety Roadside Rest Area System Master Plan.

The Chief, Office of Roadside Management and Landscape Architectural Standards:

- Develops and maintains roadside management program objectives, policies, and guidelines.
- Coordinates improvement of roadside design standards among Headquarters functional units, communicates improvements to the districts.
- Monitors activities, objectives, and strategies for roadside management issues by Caltrans and other agencies, organizations, and manufacturers.
- Initiates and oversees research, consultant studies, and quality improvement teams.

District

District Director

The District Director:

- Ensures policy compliance with roadside programs and the compatibility of transportation facility improvements.
- Delivers programmed projects on time and within budget.

District Landscape Architect (District LA):

- Identifies highway planting needs by developing and maintaining a current list of potential projects that qualify as new highway planting or highway planting restoration.
- Identifies district roadside management needs for the roadside management program.
- Prepares PS&E for highway planting work.
- Prepares erosion control plans and special provisions for roadway improvement projects.
- Reviews and approves slopes steeper than 4:1 (V:H). The district LA's signature on the storm water data report at the conclusion of PID, PA&ED and PS&E affirms their review and approval.
- As a project development team (PDT) member, assists with the development of transportation improvements that are integrated with the surrounding environs and social context. The district LA coordinates stakeholder identification and collaboration, and provides recommendations for aesthetics, comprehensive corridor plans, context sensitive solutions, roadside management issues, storm water pollution prevention, and visual impact assessments.
- For highway planting projects provided by others, sends a copy of the planting plans and specifications to Headquarters LAP, Landscape Classifications, for "Landscaped Freeway" determination.

ARTICLE 3 Participation by Others

Highway Planting by Others

Highway planting within the State right-of-way, including installation, plant establishment, and maintenance, may be provided by others. Responsibility for

installation, plant establishment, and maintenance for these projects is shown in Figures 1 and 2.

Participation by others is normally accomplished through a cooperative agreement between Caltrans and the local agency.

The local agency should strive to implement a context sensitive project development process that considers early and continuous stakeholder input.

If requested by the local agency, Caltrans may perform, on a reimbursed basis, the services for which the local agency is responsible if Caltrans has sufficient reimbursed budget authority. If Caltrans performs project construction support, the project sponsor will reimburse Caltrans for its capital outlay support costs in the same proportion as the project sponsor's share of the total project capital cost unless other equitable arrangements are specified in the cooperative agreement.

An encroachment permit is required whenever the project sponsor, its consultants, or its contractors work within the State highway right-of-way. In the case of easements, additional permits may also be required from the entity that granted the highway easement. Refer to the [Encroachment Permit Manual](#) for specific information.

Plans and specifications for highway planting projects provided by others within the State right-of-way are sent to LAP Office of Landscape Coordination and Planning for "Landscaped Freeway" determination in accordance with the *California Outdoor Advertising Act* relative to the regulation of outdoor advertising displays.

Maintenance Responsibilities - Planting by Others

General

Maintenance of highway planting outside the highway operational right-of-way (except for required mitigation planting) is the responsibility of others at no additional cost to the State.

Freeways, Controlled Access Highways, and Expressways

Maintenance of warranted highway planting and required mitigation planting on freeways, controlled access highways, and expressways (within the maximum cost per acre) is the responsibility of Caltrans.

Maintenance of unwarranted planting on freeways, controlled access highways and expressways is the responsibility of others at no additional cost to the State.

Maintenance of warranted highway planting (except for required mitigation planting) on freeways, controlled access highways, and expressways that exceeds the maximum cost per acre is the responsibility of others at no additional cost to the State. Exceptions to this policy may be granted if the additional cost per acre is due to factors that do not increase the maintenance effort required, such as areas of rock blanket or larger plant material.

Exceptions must be concurred with by the Deputy District Director (DDD) of Maintenance and approved by the LAP.

Maintenance Agreements

Only one entity should be responsible for actual maintenance work at any one location. When both Caltrans and another entity have maintenance responsibilities within the same project limits, a maintenance agreement should be negotiated that results in an expenditure of Caltrans' funds and person-years no greater than Caltrans would expend for its portion of the responsibility. Maintenance agreements are implemented through the encroachment permit process.

When negotiating maintenance agreements between Caltrans and local entities, maintenance exchanges, as well as maintenance by others (including licensed landscape contractors and special programs groups), should be considered. To provide uniform application of policy, maintenance exchanges and maintenance by others must be approved beforehand by district maintenance.

When planting is funded by others, and the most efficient and economical maintenance option is to use Caltrans' resources, the additional maintenance cost must be paid for by the other entity. This funding arrangement must be specified in a formalized agreement.

Where local public agencies are prohibited by statute from participating in maintenance work, Caltrans and the local agency will negotiate a maintenance agreement.

Caltrans may require the permittee to secure utility sources. Performance bonds may be required to ensure that any installation, establishment, maintenance, and necessary restoration done by others will meet Caltrans' standards.

FIGURE 1 - DETERMINING LOCAL PARTICIPATION IN HIGHWAY PLANTING

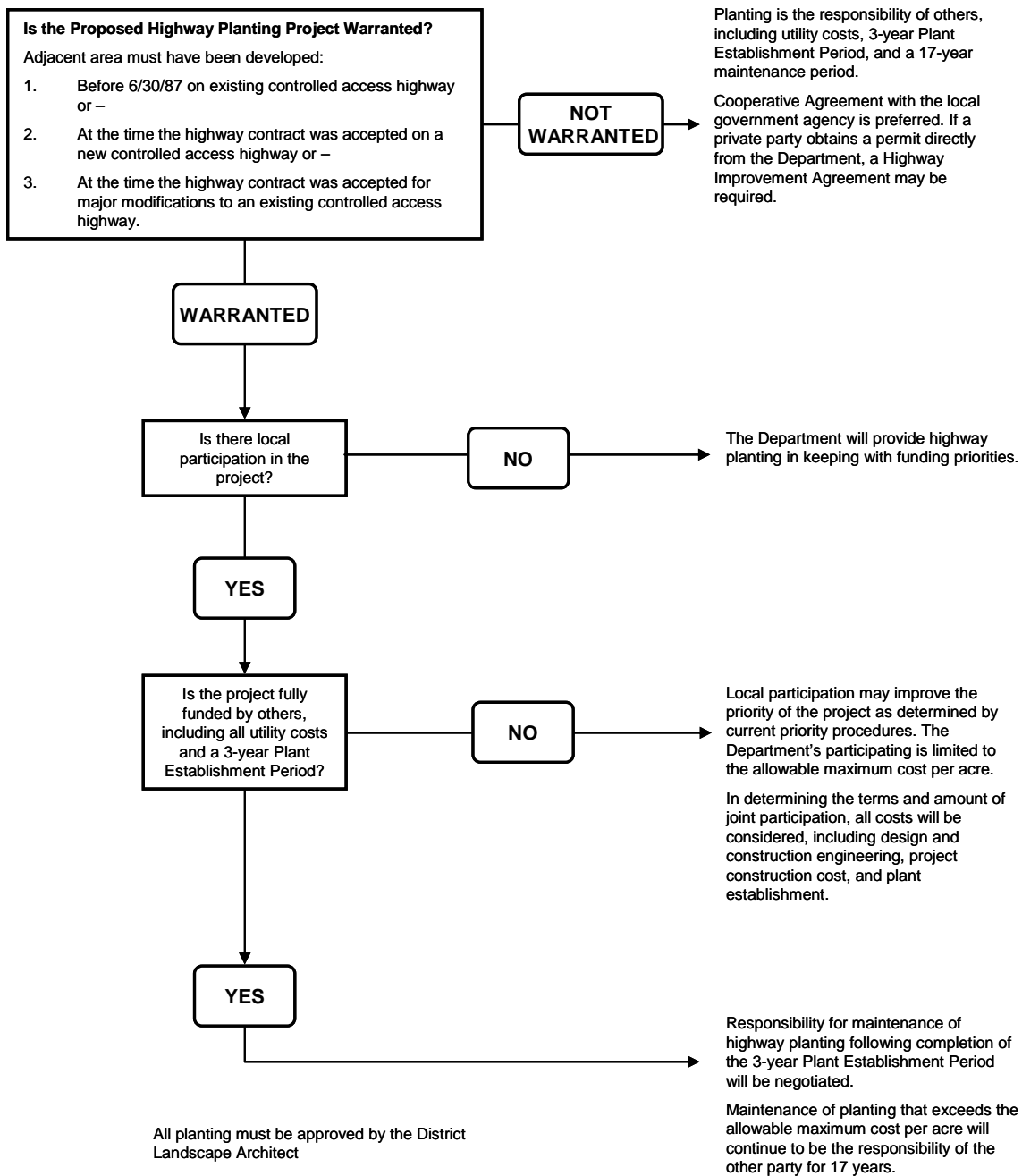


FIGURE 2 - RESPONSIBILITIES FOR HIGHWAY PLANTING FUNDED BY OTHERS

	INSTALLATION (Including 3-year plant establishment)	MAINTENANCE (17 years or perpetuity)
FUNDED JOINTLY		
New Highway Planting (warranted, not exceeding maximum cost per acre)	N	CT
Replacement Highway Planting	N	CT
Required Mitigation Planting	N	CT
Highway Planting that exceeds the maximum cost per acre	O	O
Unwarranted Planting	O	O N
FUNDED 100% BY OTHERS		
New Highway Planting (not exceeding maximum cost per acre)	O	N
Replacement Highway Planting	O	CT
Required Mitigation Planting	O	N
Highway Planting that exceeds the maximum cost per acre	O	O
Unwarranted Planting	O	O

CT – Caltrans O – Others N - Negotiated

ARTICLE 4 Project Development Process

General

This article describes the project development process for highway planting projects. Please refer to [Section 3](#) for information regarding the project development process for safety roadside rest areas.

The project development process is defined as those activities that commence with project initiation and end at the assembly of the Final Project Records following project construction. Project development for all roadside facility work should be consistent with this chapter, as well as Chapters 8-15, "The Project Development Process".

The design of all roadside facilities should incorporate context sensitive solutions techniques using a collaborative, interdisciplinary approach involving stakeholders early and continuously. The goal is to achieve transportation improvements that integrate and

balance aesthetic, environmental, scenic, and community values with transportation safety, maintenance, and performance goals. See [Chapter 22](#) for specific information regarding community involvement.

The project development process for the design of roadside facilities should incorporate value analysis techniques that improve the quality and reduce the cost of these transportation improvements. Refer to [Chapter 19](#) for specific information regarding the value analysis process.

Project Development Team (PDT)

A PDT is recommended for all highway planting projects. The PDT leader may be the project manager (PM), district LA or project LA. Appropriate Caltrans' functional units, especially maintenance (landscape specialists) and construction (personnel familiar with the project site), the local community, and other external stakeholders should be contacted and invited to participate in the PDT.

Preservation of aesthetic, environmental, scenic, and community values that contribute to the character of the project location or reflect shared community values is encouraged. Typical examples of these resources include existing trees or other desirable vegetation, historic plantings, rock outcroppings, and environmentally sensitive areas. In preparing the preliminary environmental analysis report (PEAR) and final environmental document, the district LA will review projects that affect existing resources and consult with the PDT regarding the need and techniques for preserving and protecting these resources where appropriate.

Refer to [Chapter 8](#), Section 4 of this manual, for specific information on the PDT.

Comprehensive Corridor Plan

Where highway planting and other roadside improvements are proposed for a highway through a city or other jurisdictional limit, the district LA will provide a copy of the comprehensive corridor plan, if available, to the local community, local agencies, and other affected stakeholders. The comprehensive corridor plan may be prepared by a consultant or other entity in cooperation with the community, local agencies, external stakeholders, and Caltrans' functional units, and is compiled and finalized by the district LA. The plan may consist of drawings, charts, maps, images, and narrative necessary to guide future roadside enhancement and roadway aesthetic features, including general concepts sufficient to determine types and levels of highway planting and maintenance responsibilities.

The comprehensive corridor plan should be reviewed and updated periodically to address current issues with internal Caltrans' functional units, the local community, local agencies, and other affected external stakeholders.

Priority Rating Sheets

Priority rating sheets are required to be submitted with the PSR data sheet for all highway planting projects. Refer to [Section 3](#) of [Appendix E](#) for guidance on the process for priority rating determination and completion of priority rating sheets.

Project Study Report (PSR)

General

A PID is required for the programming of all candidate Major projects into the STIP or the SHOPP. A PSR data sheet satisfies this requirement for both Highway Planting Restoration and New Highway Planting projects. Minor A and Minor B projects do not require a PID. For Minor A projects, the PR serves as the PID. For Minor B projects, please refer to the *Service Contracts Manual*, prepared by the Office of Service Contracts in the Administrative Service Center.

A PSR data sheet serves to identify the purpose and need for a project, including deficiencies in highway planting, traveler and worker safety, aesthetics, erosion control, storm water pollution prevention, traffic management requirements, and plant establishment needs. The purpose and need should be identified in the PSR data sheet in sufficient detail to provide for development of a detailed preliminary design plan and design concept during the PR phase of work.

Data collection performed during the PID phase should include field reviews; study of as-built plans; obtaining input from community, local agency, and other external stakeholders; and an assessment of district maintenance and other appropriate Caltrans' functional unit needs. Identification of critical project elements early in the project initiation process allows development of an accurate work plan. An accurate work plan provides a sound basis for evaluating and monitoring project cost, scope, schedule, and ensuring timely project delivery.

The LAP District Coordinator will review the draft PSR data sheet to ensure conformance with Caltrans' policies and program goals.

See [Appendix E](#) of this manual for PSR data sheet format.

Cost Considerations

The cost of highway planting is limited to the current maximum cost per acre as established by the LAP, unless allowed through the exception process. Traveler and worker safety features, roadside management items, traffic control, storm water pollution prevention plan (SWPPP) items and the rental cost of the engineer's field office should not be considered as included in the cost per acre of highway planting.

Where the one-time, up-front water assessment and/or hookup fees exceed the maximum cost per acre, a project of five acres or more will be considered only if the additional cost is paid by others. For projects less than five acres, the assessment fee should be

negotiated toward receiving the lowest rate possible. These charges should not be included in determining the cost per acre of the proposed highway planting.

Design Concept

PSRs developed for highway planting projects must include a written design concept as an attachment to the PSR data sheet, and may include a conceptual design plan. The design concept must be compatible with the Comprehensive Corridor Plan, if available. The purpose of the design concept is to identify project purpose and need, together with methods to address these needs, and to ensure that Caltrans' objectives are achieved, including enhancing aesthetics, maintaining environmental, scenic, and community values, and enhancing traveler and worker safety.

The following should be considered during development of a design concept for highway planting projects:

- Highway planting concepts such as effects and extent of roadside clearing, weed control, soil preparation, plant establishment, maintenance and operational strategies, and water management strategies.
- Coordination with external stakeholders, including community representatives and local agencies.
- Land use information, including railroad, adjacent land use, zoning, and the location of adjacent commercial businesses and advertising displays.
- Roadside development information, including:
 - Right-of-way limits;
 - As-built plans;
 - Locations of ditches, drainage basins, and other unplantable areas; and
 - Prior environmental commitments; and planned highway construction.
- Locations of subsurface and overhead utilities, including water, electrical service, high-risk utilities, and power lines.
- Soil conditions, including soil structure and fertility, presence of groundwater, and the presence of hazardous material such as aerially deposited lead.
- Climatic conditions.
- Aesthetic deficiencies, as well as existing defining aesthetic features of the corridor.
- Storm water pollution prevention, including storm water best management practices (BMPs) and storm water data report.
- Water assessment fees and cost of water to be used during the length of the contract.
- Water conservation techniques, including nonpotable water use, automation of manual irrigation systems through RICS, use of inert materials such as mulch, and the use of drought tolerant plant material.
- Beautification and modernization concepts, including the use of innovative materials, lighting, signage and clean up of noise barriers, bridge abutments, or other structures.
- Traffic management issues, including the potential required staged construction, traffic control, requirements for nighttime construction, and the need for lane and shoulder closures.
- Traveler and worker safety improvements, including:

- Relocating irrigation controllers, backflow preventers, mainline, remote control valves, laterals, and sprinklers to protected areas or adjacent to the right-of-way fence;
- Removal or replacement of deteriorating trees or other plant material, and removal of plant material that encroaches upon required sight distances;
- Planting of vines or the use of textures on noise barriers and retaining walls to deter graffiti;
- Automation of manual irrigation systems, including controllers, valves, and control and neutral conductors;
- Providing maintenance vehicle pullouts, maintenance access roads, and access gates for workers on foot or in vehicles; and
- Placing mulch or installing rock blanket areas.
- Design for Roadside Management improvements, including:
 - Providing vegetation control treatment beneath guardrails and signs;
 - Paving for gore and narrow areas;
 - Paving of slopes beneath bridge structures; and
 - Providing contrasting surface treatment beyond the gore pavement.
 - Updating or removal of aging highway facilities. This work may include:
 - Replacing guardrail with concrete barrier;
 - Removing signs that are redundant;
 - Replacing signs that are nonstandard; and
 - Removing or relocating pull boxes located in the shoulder or near the pavement edge.

Upon completion of a draft design concept, the PDT leader must request a review by the project LA and maintenance representative. The PDT leader will also arrange a meeting where members of the PDT discuss details of the design concept, including needs, deficiencies, priorities, and costs. The project LA should update the design concept to incorporate feedback from this meeting in preparation for review by the LAP district coordinator who will verify conformance with Caltrans' policies, guidelines, and standards.

Design Exceptions

Approval of exceptions to mandatory design standards is the responsibility of the Division of Design. Approval of exceptions is accomplished via the "Exceptions to Mandatory Design Standard Fact Sheet" process; see [Chapter 21](#) of this manual.

Approval of exceptions to mandatory design standards must be sought as early as possible in the project development process, especially where the project concept or project cost estimate depend on the proposed design exceptions. As soon as nonstandard design features are identified, the Division of Design geometric reviewer or Division of Design coordinator should be contacted to discuss the proposed nonstandard features. If an exception to a mandatory design standard is required, approval must be obtained from the Division of Design coordinator prior to PSR approval. The PSR should include a reference to the "Exceptions to Mandatory Design Standards Fact Sheet", with approval

date. The fact sheet should not be attached to the PSR. It is considered an independent document.

Approval of exceptions to advisory design standards should be handled in accordance with each district's procedure.

Design Intent Statement (DIS)

PSRs developed for highway planting projects should include a DIS. The DIS is developed from the design concept. It explains the purpose for the planting and irrigation work, as well as maintenance requirements for use by construction and maintenance personnel. By referring to this statement, future construction and maintenance staff can make decisions consistent with the original design concept.

A DIS should be prepared for all projects that include highway planting, including planting performed by permit.

See [Appendix EE](#) of this manual for the DIS format.

Project Report (PR)

The PR refines the project purpose and scope described in the PSR and design concept. Planting work included with transportation improvement projects must be addressed in the PR for the parent project. Separate planting projects, regardless of funding source or approval authority, are to conform to the responsibilities shown in Figures 1 and 2. Master PRs to cover several contiguous programmed projects on a single route may be acceptable when approved by the LAP. See [Chapter 8](#) and [Appendix K](#) for specific information on PRs for roadway projects.

Planting Areas

The limits of planting need not necessarily coincide with the limits of developed properties. Where there is a gap less than 200 feet between developments, it is permissible to plant within the break. Such planting may be done to achieve corridor continuity with adjacent planting, retain Landscaped Freeway classification or to accommodate conditions such as the view from the road, the terrain, road alignment, traffic control signs, drainage, etc.

Preliminary Design Plan

The PR should include a preliminary design plan that graphically communicates the design intent as an attachment. This plan is useful in generating more accurate project cost estimates at the PR phase. The PDT must be provided the opportunity to review the preliminary design plan, providing input early in the development of the project.

Design Concept

The design concept should be updated during the PA&ED phase.

Design Intent Statement (DIS)

The DIS should be updated during PA&ED phase.

Environmental Compliance

The PR should document key environmental issues, findings, assumptions, and commitments made to stakeholders during the PA&ED phase of work to ensure these key concepts are incorporated in the built project.

Highway planting and highway planting restoration projects do not typically require preparation of an environmental document, and are frequently classified as CE under CEQA and categorically excluded (CE) under National Environmental Protection Act (NEPA). The landscape architect should consult the district environmental unit to determine which environmental document, if any, is required for the project.

Highway planting projects not considered CE under NEPA or CEQA must include preparation of an environmental document to complete the PA&ED phase of project delivery. The environmental document must be attached to the Project Report – Highway Planning and Restoration (PR-HP&R).

The [Standard Environmental Reference Volume 1](#), Chapter 30 describes the criteria a proposed project must meet to be considered CE from NEPA, and the preparation and processing of the CE documentation.

The [Standard Environmental Reference](#) Volume 1, Chapters 34, 35, and 36 describe the preparation and processing of CEQA-only categorical exemptions, initial studies, negative declarations, and environmental impact reports.

Approval Process

The District Director (or designee) is authorized to approve the PR.

Approval of the PR and completion of PA&ED signifies:

- Authority to prepare the PS&E;
- Approval of the draft cooperative agreement; and
- Authority to finalize negotiations on the cooperative agreement, if a pre-approved cooperative agreement was used. If a pre-approved cooperative agreement format was not used, a draft of the cooperative agreement must be submitted to the Division of Design, Office of Cooperative Agreements, for a legal and procedural review.

Three copies of the approved PR should be transmitted to the LAP.

Following approval of the PR, changes to the scope of work should be avoided. Scope changes may affect other design decisions. Even minor scope changes may require additional field review or coordination with resource agency staff. Accordingly, significant scope changes that occur following PR approval should be presented to the PDT for concurrence, and preparation of a Supplemental PR may be required.

Plans, Specifications, and Estimate (PS&E)

Preliminary Design Preparation and Review

Following PR approval, the project LA should prepare the preliminary design, including detailed design plans, construction details, special provisions, project cost estimate, plant list, and water management plan. Planting and irrigation design should be sufficiently developed and the plans should be complete and accurate enough (including design for traveler and worker safety features) to allow a detailed analysis of how well the deficiencies and justifications described in the PR have been addressed.

Upon 60 percent completion of the preliminary design, the PM should request a review by the district LA. The district LA must ensure compliance with Caltrans' policies and standards discussed in Chapter 900 of the [*Highway Design Manual*](#).

The project LA should request PS&E and project cost estimate information for any specialty portions of work such as structures, electrical, or traffic control. As specialty work is incorporated into the PS&E package, it should be reviewed for consistency and conformity with the entire submittal.

Following the district LA review and incorporation of any response to comments, the PM must request a review by district maintenance, the LAP District Coordinator, and Headquarters maintenance. A minimum of ten working days should be provided for this review.

Plans, Specifications, and Estimate (PS&E) Preparation

Upon LAP acceptance of the preliminary design, the project LA should prepare the PS&E documents. The project LA should ensure that the final PS&E is reviewed by the LAP district coordinator, the PDT, and all appropriate functions and disciplines prior to submittal of the PS&E to the district office engineer. A minimum of ten days should be provided for this review. During this review, the project LA should coordinate and incorporate comments received from the various functions and disciplines into the PS&E.

Design Intent Statement (DIS)

During the development of the PS&E, the district LA should verify that the DIS is current and consistent with the PS&E, and should verify that copies of the DIS are forwarded to district construction and district maintenance, the LAP, Headquarters maintenance, and other pertinent stakeholders.

PS&E Submittal and Ready to List (RTL) Certification

PS&E submittal to the Division of Engineering Services Office Engineer (DES-OE), and completion of the Ready to List (RTL) Certification form should follow the procedures listed in the [*Ready to List Guide*](#), published by DES-OE. The RTL form certifies that the requirements necessary for a project's listing and advertisement have been met.

Ready to List (RTL) Certification - Water for Planting and Irrigation Work

If highway planting is proposed for an area of the State subject to water shortage, the project LA must obtain and provide the district Office Engineer with water availability documentation to accompany the RTL certification form.

Caltrans is to employ cost-effective and appropriate water conservation measures in the design, construction, operation, and maintenance of transportation facilities. To implement this directive, the following procedures have been established for the RTL Certification and advertisement of highway planting and roadway construction projects that require water for planting and irrigation.

Documentation of water availability for planting and irrigation is not required with the project submittal unless a serious or critical water shortage exists.

Actions for serious water shortage:

- A serious water shortage exists when a project's local or regional water storage has fallen to 50 percent of the historical average, or when the local water agency has mandated rationing. In these situations, written documentation must be obtained from the local water agency, verifying the availability of water for planting and irrigation.
- Indicate with a checkmark on the RTL certification form that the project is subject to a water shortage and provide water availability documentation. Documentation of water availability must be submitted to the LAP, and a copy included with the project submittal to DES-OE.
- If a serious water shortage is declared after the project is RTL certified, the project will not be advertised until the district provides water availability documentation or the serious water shortage status is removed.
- RTL-certified projects with a serious water shortage status will be reviewed by the LAP and the district LA to identify those likely to be reclassified as critical. Local communities should be alerted by the district of potential delays in the advertisement and award of these projects.

Actions for critical water shortage:

- A critical water shortage exists when a project's local or regional water storage is 70 percent below the historical average, or when the local agency has mandated a 25 percent or greater reduction in water use. In these situations, written documentation must be obtained from the local water agency verifying the availability of water for planting and irrigation. Indicate with a checkmark on the RTL certification form that the project is subject to a water shortage and provide water availability documentation. Documentation of water availability must be submitted to the LAP, and a copy included with the project submittal to DES-OE.
- Advertisement of projects proposed for areas under critical water storage status will be delayed until the critical water status is downgraded to serious, except for the following situations:
 - Projects that do not require water for planting and irrigation.
 - Required mitigation projects.

- Projects that conserve potable water through rehabilitation of existing irrigation systems or the conversion of irrigation systems from potable to non-potable.
- Projects funded and maintained by others such as encroachment permit and local measure work.
- Projects where the planting items have been removed or irrigation-only work is feasible.
- Projects with new irrigation systems using only recycled water.
- Exceptions to this policy regarding the advertisement of projects during water shortages may be granted by the LAP.

California Transportation Commission (CTC) "One Liners" and Fact Sheets

In preparation for CTC funding approval, "one-liners" and supporting fact sheets must be prepared for every project. Both must be submitted to the LAP district coordinator via electronic mail when the Request for Funds is submitted. This occurs simultaneously with PS&E submittal to DES-OE. The "one-liner" and Fact Sheet must conform to the format in [Appendix EE](#).

Construction

The project LA should include the DIS, quantity calculations and project documents in the resident engineer's (RE) Pending file for hand-off to construction.

The district LA, project LA, or functional units should be prepared to support and answer any technical questions from construction throughout the construction phase of work. Questions received directly from contractors, suppliers, or others outside of Caltrans should be directed to construction for response.

Prior to issuing contract change orders (CCOs) for any project that would affect highway planting or traveler and worker safety features, construction should consult with the district LA or project LA. The LA should review the proposed CCO with regard to its impact upon roadside facilities, storm water pollution prevention, erosion control, and other roadside management issues and provide construction with immediate support.

In an effort to continue to improve the quality and maintainability of highway planting projects, the PM should schedule a minimum of three field reviews during construction for each project. These reviews should include the RE, project LA, landscape specialist and maintenance manager or maintenance area superintendent. Reviews should occur during the layout of the irrigation system, upon completion of planting, and at the final "walk through" during plant establishment.

Field review meetings should focus on completion of contract document requirements and details that affect the safety, function, and maintainability of the completed project. Reviews should provide for timely and effective adjustments when necessary. The project LA should prepare a brief memo to the appropriate district and Headquarters functional units to provide suggestions for improving future projects.

Just prior to construction contract acceptance, it is recommended the RE request assistance from a landscape maintenance representative and the project LA to develop a punch list of items of work that do not meet contract requirements. Particular attention should be paid to incomplete contract work, permanent erosion control and other storm water pollution prevention work, which if not rectified, could result in additional maintenance to meet Regional Water Quality Control Board demands.

Maintenance

Upon Caltrans' acceptance of a New Highway Planting or Highway Planting Restoration project, the district LA and project LA should meet with maintenance for an operation review and to discuss lessons learned. In addition, the project LA must provide the district maintenance with a file that includes product and equipment data, names and phone numbers of contact persons, and the DIS.

SECTION 3 Safety Roadside Rest Areas

ARTICLE 1 General Policy

Purpose of the Safety Roadside Rest Area System

The safety roadside rest area system is a safety component of the highway system providing roadside areas where travelers can safely stop, rest, and manage their travel needs. Planned with consideration of alternative stopping opportunities such as truck stops, commercial services, and vista points, the rest area system provides public stopping opportunities where they are most needed, usually between large towns and at entrances to major metropolitan areas. In order to minimize the need for recurring maintenance activities, safety roadside rest areas are designed to support heavy use over many years.

Context Appropriateness

Rest areas are unique pedestrian environments where travelers (many of whom are unfamiliar with the local area) get out of their vehicles and experience the local environment up close and on foot. Users may interact with other travelers, rest area maintenance crews, and perhaps law enforcement. Rest areas provide travelers with a lasting impression of California, and that impression should be positive.

Rest areas provide an opportunity for local communities, businesses, and agencies (including those that manage tourism and recreational resources) to intercept travelers and provide information and communication links. In many areas of the State, rest areas can have a role in contributing to local economic development strategies.

The ideal site will balance preservation of scenic, environmental, and cultural features with mobility, safety, maintainability, and economic design requirements. Environmentally sensitive areas and their features may be suitable sites, but should be protected from degradation by construction, maintenance, and public use.

Each rest area should reflect and be integrated with the aesthetic, environmental, scenic, and cultural features (terrain, geology, vegetation, history, architecture, archaeology, and colors) of the region in which it is located. Architecture and landscape architectural development demands a high level of attention to maintaining contextual integrity through appropriate design details. The Project Development Team (PDT) must consider the existing natural and social context to develop an appropriate expression of its unique qualities for use in rest area design.

Caltrans strives to work with local communities, trade and commerce organizations, the public, and other agencies to ensure stakeholder collaboration in the development of rest area improvements.

Use of Rest Areas

The *California Code of Regulations, Title 21, Chapter 20*, regulates the use of rest areas. Length of stay is limited to eight hours during any 24-hour period. Camping is prohibited. Solicitation of money and the sale or merchandising of food, goods, or services is prohibited, except for regulated newspaper vending, public telephones, commercial advertising, and vending machines operated by the blind under the California Department of Rehabilitation, Business Enterprise Program. Other uses and activities may be considered when required by statute or requested in writing and approved by the Landscape Architecture Program (LAP).

Statutory Requirements

California Streets and Highways Code, Article 7, directs the California Transportation Commission (CTC) and Caltrans to plan, design, construct, and maintain a system of rest areas on the State Highway System (SHS), the costs payable from the State Highway Account. The Code also provides criteria for system planning:

- In combination with other stopping opportunities such as truck stops, rest areas should be located where most needed and approximately 30 minutes apart.
- Rest areas may be provided at entrances to large metropolitan areas.
- Paired directional units should be provided on high-volume highways of four or more lanes; on all other highways, a single unit serving both directions should be provided.
- On high-volume highways, more rest areas may be planned at strategic locations where needed.
- Caltrans shall design only those rest areas that are reasonably economical, and that will provide travelers a safe place to stop for a short time during daytime and nighttime.
- The size of the units may differ according to location and potential use.
- Rest areas may include, depending on size and use, vehicle parking, picnic tables, sanitary facilities, telephones, water, landscaping, tourist information panels, traveler service information facilities, and vending machines.
- Rest areas shall not contain camping or recreational facilities.
- Caltrans must post, to the extent feasible, missing children information provided by the Department of Justice.
- Caltrans must authorize the placement of vending machines in a manner consistent with federal requirements. Caltrans will determine which rest areas are suitable for vending machines, determine the vending machine location(s) within each rest area, and approve the design and construction of any structure(s) required.
- Caltrans may accept grants and financial or other assistance for rest areas.

Streets and Highways Code Section 226.5 provides for a Joint Economic Development Demonstration Project for up to six new rest areas.

- Caltrans may construct, operate, and maintain up to six new rest area units as a “Joint Economic Development Demonstration Project,” subject to the following:
 - There must be a public need for the rest area and the proposal must result in an economic savings to the State.

- Contracts for construction and maintenance of these facilities shall be awarded through competitive bidding.
- Caltrans may permit traveler-related commercial activities.
- No alcohol may be sold within the rest area facilities.
- Law enforcement responsibilities are the same as for the SHS.
- A public hearing must be held for each project to allow the local community and other interested parties to comment.
- Any money received for the Demonstration Project shall be deposited in the State Highway Account.

State and Federal Accessibility Requirements

Safety roadside rest areas contain public facilities used by pedestrians, including, but not limited to, buildings, parking areas, sidewalks, curb cuts, curb ramps, telephones, vending machines, and picnic tables and must conform to state and federal accessibility requirements. For detailed information regarding the review process for pedestrian facilities on transportation projects, please refer to [Design Information Bulletin \(DIB\) 82](#), available on the Division of Design website

State Energy and Environmental Design Requirements

To comply with *Executive Order S-20-04*, Caltrans shall:

- Take all cost-effective measures as described in the State of California Green Building Action Plan to build and operate the most energy- and resource-efficient buildings; and
- Design, construct, and operate all new and renovated buildings at a "Leadership in Energy and Environmental Design (LEED) Silver" or higher rating. The United States Green Building Council developed the LEED Rating System to advance energy and material efficiency and sustainability.

The *Executive Order* and *Green Building Action Plan* are available at the following link: <http://www.green.ca.gov/default.htm>.

Project LEED components are identified through a collaborative effort between Division of Engineering Services (DES) and the design unit.

The six LEED credit areas are:

- Sustainable site development;
- Water efficiency;
- Energy and atmosphere;
- Materials and resources;
- Indoor environmental quality; and
- Innovation in design

See [Article 3](#) – Project Development Process of this chapter and section for specific requirements in each phase of the project development process.

Safety Roadside Rest Area System Master Plan

The *Safety Roadside Rest Area System Master Plan* describes the ultimate rest area system to be implemented as funding allows. The master plan identifies existing rest areas, new rest area needs, other stopping opportunities, and proposed closures and relocations.

The *2000 Safety Roadside Rest Area System Master Plan* includes 88 existing units and 76 proposed rest area locations. It also identifies the need to relocate 4 units, provide an additional unit at four existing rest areas, and expand the parking capacity at 61 existing units to meet anticipated 20-year demand.

The LAP will consider recommendations for changes to the master plan upon request by the District Director. Districts should consider the requests of federal, state, and local agencies, tribal governments, or non-federally-recognized tribes. The LAP will coordinate departmental and CTC concurrence with all master plan revisions.

Rest Area Rehabilitation Program

The purpose of the Rest Area Rehabilitation Program is to improve public health, safety, security, accessibility by persons with disabilities, and the operational maintainability of existing rest areas.

Rehabilitation of existing rest areas will occur in two stages:

Stage I Priorities

- Compliance with accessibility requirements per [DIB 82](#) (including accessible parking, paths of travel, rest rooms and other facilities).
- Compliance with Cal-OSHA requirements (all-weather crew rooms, safe storage of equipment and supplies).
- Utility system improvements (water, wastewater, electricity).
- Security enhancements (pedestrian lighting, surveillance cameras, California Highway Patrol drop-in office and designated parking).
- Accommodation for the installation and operation of vending machines by the Department of Rehabilitation, Business Enterprise Program for the blind. This may include designated space for vending machines and storage, water, and electrical conduits.
- Repair or replacement of facilities when more cost effective than repair, beyond the scope of routine maintenance (structures, walkways, irrigation systems, signs, etc.) to reduce maintenance requirements.
- Restroom capacity.

Stage II Priorities

Stage II priority work will be initiated after system-wide completion of Stage I priorities. This work may include:

- Enlargement or modification of on-site parking;
- Rest area site relocation or comfort station replacement;
- Landscape improvements;
- Repair or replacement of facilities beyond the scope of routine maintenance (structures, walkways, irrigation systems, signs, etc.) that were deferred from Stage I projects; and
- Geometric improvements for ramps, merge and diverge areas to meet current Caltrans standards.

New Rest Area Program

The purpose of the New Rest Area Program is to provide new, conveniently spaced rest areas and auxiliary parking facilities as an integral part of the SHS. New rest area projects must be consistent with the general locations as indicated on the current approved Safety Roadside Rest Area System Master Plan.

The priority of the New Rest Area Program is to provide for additional rest areas on the Interstate System where there are gaps of more than 100 miles between existing rest areas, where the closest rest areas are significantly in need of additional parking capacity, and where unauthorized roadside parking is frequently observed. High-priority needs include additional rest areas on Interstate 5 between Sacramento and San Diego, Interstate 80 between Sacramento and Oakland, and Interstates 8, 10, 15, and 40 in the desert areas.

In partnership with the private sector, auxiliary parking facilities that may alleviate overcrowding at nearby existing rest areas may be developed outside the right-of-way of controlled-access highways. Auxiliary parking facilities provide an alternative to expanding parking at existing rest areas where space is limited or the site is environmentally sensitive.

Signing for Alternative Rest Area Stopping Opportunities

Caltrans may enter into an agreement with the operator(s) of commercial or governmental facilities located along the SHS to designate those facilities as alternative rest area stopping opportunities, and to provide highway directional signs with text or logos indicating, for example, restrooms, gas, and/or food. One or more entities may participate jointly in the agreement. Agreements should include reasonable expiration and renewal terms.

Each alternative rest area stopping opportunity should consist of facilities that are clustered in a single, easily identifiable location. Unless they serve a single direction of highway traffic, Caltrans-designated alternative stopping facilities should not be located closer than 20 miles apart.

To qualify for designation and highway signage as an alternative rest area stopping opportunity, the facility must meet the following criteria:

- The facility must be located in an area designated by Caltrans as deficient in rest area opportunities. The location should correspond to a new rest area need as indicated on the current Safety Roadside Rest Area System Master Plan, or supplement the capacity of an existing rest area that is deficient in parking capacity.
- The facility must provide adequate parking for automobiles and long vehicles (including commercial trucks), rest rooms, and drinking fountains, at no charge to the public.
- Operators may designate a time limit for free parking, but travelers must be allowed at least 2 hours of free parking.
- Public pay telephones must be available.
- The aforementioned rest area features must be open and available to the public 24 hours per day, 7 days per week, and must be accessible to persons with disabilities.
- The facility must be within one-half mile of the highway with safe and convenient highway ingress and egress and adequate off-right-of-way and on-premise signs.
- The facility operator must provide written assurance from local law enforcement authorities that the area signed will receive adequate police protection.
- The facility operator must provide sufficient maintenance services to assure that all facilities available to the public are clean and usable.

A Project Report (PR) should be prepared and should address the anticipated increase in traffic, parking, water, and wastewater-disposal demand and the impacts on the local community and environment. The public and affected agencies should be afforded an opportunity to comment on the proposed action.

Signs should be placed within the operational right-of-way only when privately-owned signs located outside the operational right-of-way cannot reasonably provide adequate directional information for travelers. Duplication of signs along non-access-controlled highways should be avoided. Off-highway directional signs must be in place prior to placement of signs within the operational State right-of-way.

Safety Roadside Rest Area System Improvement Team

The **safety roadside rest area system improvement team** consists of representatives from divisions and districts with rest area planning, design, construction, maintenance, and operation responsibilities, and includes representative stakeholders from agencies and organizations (e.g., CHP, trucking industry, automobile associations, other State agencies). The team meets periodically to coordinate rest area activities, improve the quality of rest area facilities and service to the public, and advance Caltrans' mission to improve mobility.

References

The [*Highway Design Manual*](#), Chapter 900, Topic 903, describes design standards for new rest areas. Design standards specific to rest area rehabilitation are under development by LAP.

Division of Engineering Services *TAEMW&W Memo to Designers 7-1, Project Delivery Guide*, explains the architectural, electrical, mechanical, water and wastewater project delivery process from plans, specifications and estimate (PS&E) start to final structures PS&E.

[*Caltrans Maintenance Manual*](#) provides policies and procedures for emergency and intermittent closures, and for closures due to routine or planned maintenance activities.

The American Association of State Highway and Transportation Officials (AASHTO) *Guide for Development of Rest Areas on Major Arterials and Freeways, Third Edition (2000)* provides useful guidance for rest area planning and design.

The United States Green Building Council *LEED for New Construction Version 2.2 Reference Guide* provides guidance, resources, and information on the process of achieving LEED for New Construction certification.

ARTICLE 2 Responsibilities

New and rehabilitated safety roadside rest areas follow a specialized project development process due to their uniqueness. Districts, DES, and the LAP must work closely for safety roadside rest area project development. Due to the small size of the program, the needed architectural and structural expertise has been centralized within DES, Office of Transportation Architecture (OTA). Due to the limited expertise in the design of safety roadside rest areas, including site design, the LAP provides design expertise to assist the districts with project delivery.

Headquarters Landscape Architecture Program (LAP)

Program Manager (Principal Landscape Architect)

The Principal Landscape Architect is the program manager for the roadside rest area program. The program manager develops, approves, and maintains rest area planning policy and guidance for the statewide Rest Area System Master Plan, and sets priorities for new rest areas and rest area rehabilitation work.

The program manager recommends to the State Highway Operation and Protection Program (SHOPP) Manager, the planned rest area funding levels, performance objectives, and projects for inclusion in the Ten-Year SHOPP Plan and the biennial SHOPP. The program manager also recommends to the Division of Transportation Programming funding of rest area projects by the CTC.

The program manager is responsible for the development and consistent application of policy, procedures, practices, and design standards. The program manager advises the districts on project identification and development, prioritization of candidate projects, and generally provides technical expertise. The program manager collaborates with the district to resolve programming, funding, and design issues.

The program manager provides training related to the project development and design of safety roadside rest areas in an effort to enhance and improve Caltrans' technical expertise.

Program Advisor

The program advisor implements the day-to-day rest area responsibilities of the program manager. The program advisor recommends approval of rest area policies, procedures, plans, and other standards, and the resolution of non-routine issues by the program manager.

LAP Roadside Facilities Coordinator

The LAP Roadside Facilities Coordinator recommends and maintains rest area design policies, guidelines, procedures, and standards, and assists the districts by providing guidance, training, and participation in project-specific design charrettes. The Coordinator chairs the Safety Roadside Rest Area System Improvement Team and maintains statewide liaison with internal and external stakeholders.

The LAP Roadside Facilities Coordinator is responsible to provide and distribute updated rest area policies to the district rest area coordinators.

The LAP Roadside Facilities Coordinator monitors compliance with the Americans with Disabilities Act (ADA) and [*Design Information Bulletin \(DIB\) 82*](#).

The LAP Roadside Facilities Coordinator assists the district LA, the architect, and other PDT members to ensure an appropriate, context sensitive approach to the planning of rest area sites, architecture, and site furnishings.

The LAP Roadside Facilities Coordinator reviews conceptual site plan, schematic site plan, architectural building concepts, and architectural schematic building plans.

The LAP Roadside Facilities Coordinator oversees the development and updating of the statewide Rest Area System Master Plan and guides the districts in identifying Ten-Year SHOPP Plan needs.

LAP District Coordinators

LAP district coordinators facilitate the project planning and development processes through review, liaison, and coordination. In cooperation with the LAP Roadside Facilities Coordinator, the LAP district coordinators assist the district LA and PDT members by providing guidance regarding policies, procedures, practices, and standards.

District

The District Director

The District Director ensures project delivery policy compliance when developing and implementing safety roadside rest area projects.

District Landscape Architect (LA)

The district LA is responsible for identifying district rest area needs, recommending projects, and developing site plans for new and rehabilitated rest areas, including architecture, pedestrian facilities, and landscaping.

As a PDT member, the district LA assists the architect with the architecture, layout, design, and aesthetics of individual roadside rest areas. The district LA is primarily responsible for the development of the conceptual site plan and schematic site plan, and assists in the development of the architectural building concepts and architectural schematic building plans.

The district LA is the first-line technical resource for questions regarding DIB 82 accessibility requirements for site pedestrian facilities (excluding building work) for roadside rest areas. The district LA is responsible for coordinating the review of site pedestrian facilities in conformance with [DIB-82](#).

Project Manager (PM)

The PM is responsible for managing a project's scope, cost, and delivery schedule. The PM should communicate frequently with the district LA, architect, LAP Roadside Facilities Coordinator, maintenance, district project engineer, and other functional units.

Responsible Charge Engineer

The district responsible charge engineer (PE) is responsible for developing the civil engineering portion of the district PS&E package. The PE works closely with the district LA, architect, and the PDT to coordinate the district PS&E packages.

District Rest Area Coordinator

The district rest area coordinator is a member of the safety roadside rest area system improvement team and serves as the district's focal point for coordinating rest area needs planning, project programming, traveler services (including vending and public information), maintenance, and partnerships with other agencies and the private sector.

The district rest area coordinator provides liaison between Headquarters and the district, coordinating rest area issues across various program functional units (planning, design, environmental, construction, operations, and maintenance).

The district rest area coordinator is designated by the District Director. At the District Director's discretion, separate coordinators may be designated for planning/design and maintenance/operations.

A current list of district rest area coordinators may be obtained from the [LAP website](#).

Division of Engineering Services (DES), Office of Transportation Architecture (OTA)

Architect

The architect is responsible for the development of architectural building design and building aesthetics.

As a PDT member, the architect assists the district LA with development of site plans for new rest areas, rehabilitated rest areas that include new architecture, and with the modification of existing pedestrian facilities. In collaboration with the district LA on aesthetic and site planning aspects, and based on the district's aesthetic recommendations, the architect is primarily responsible for the development of the architectural building concepts and architectural schematic building plans, and assists in the development of the conceptual site plan and schematic site plan.

The architect coordinates the work of building design disciplines within the OTA and Electrical, Mechanical, Water and Wastewater (EMWW) during the planning and design phases and coordinates support through construction. The specialists include structural, electrical, mechanical, water and wastewater engineers, architects, building estimators, and specification writers in the DES. The architect provides design standards and coordinates the DES review and oversight of work performed by consultants.

The architect is the first-line technical resource for *DIB 82* accessibility requirements for architectural building work. For the DES portions of the PS&E, the architect is responsible for review and approval of facility design in conformance with *DIB-82*, and for coordinating the State Fire Marshall review for fire code compliance.

The architect will be the project LEED coordinator and will:

- Ensure that appropriate LEED credits are identified and optimized;
- Coordinate with various functional units to develop the LEED credit checklist from project initiation through construction; and
- Submit completed LEED templates to USGBC, when applicable.

The evaluation and LEED components that are part of project scope of work must be documented in the project LEED credit checklist. The checklist shall be attached to the project initiation document (PID) and the PR.

DES LEED Project Reviewer

The DES LEED project reviewer, independent of the PDT, is responsible for reviewing project documentation for each LEED project. The DES LEED project reviewer will determine if the project achieved the credits pursued at each major milestone.

ARTICLE 3 Project Development Process

General

This article describes aspects of the project development process that are unique to the Safety Roadside Rest Area Program.

To be eligible for programming, new rest areas must be identified in the current Safety Roadside Rest Area System Master Plan. Auxiliary parking facilities may be programmed where parking deficiencies have been identified in the current master plan.

Rest Area Partnership Projects

The Joint Economic Development Demonstration Project is managed and guided by the LAP, with implementation by the districts. Proposals for joint economic development of new roadside rest areas by private partners or other agencies should be coordinated with the LAP.

Caltrans does not have statutory authority to commercialize existing rest areas.

A viable rest area joint economic development partnership may consist of a private or public partner that agrees to share in at least 50 percent of the total construction cost of the standard public rest area facility, including, but not limited to, ramps, access roads, parking, utilities, architecture, landscape, lighting, signs, and fences. In conjunction with traditional rest area facilities, the partner may fund, construct, maintain, and operate traveler-related commercial facilities, subject to federal and state laws, regulations, and requirements. The partner should maintain both the public and private facilities for an agreed-to term, generally 25 to 30 years.

It is preferred that Caltrans or another public agency own the right-of-way underlying any facilities or improvements funded with state or federal money. The partner may lease from Caltrans the land necessary for traveler-related commercial facilities or may construct those facilities on abutting land owned by others. State and federal requirements, such as prevailing wages, apply to work funded by Caltrans.

Federal Highway Administration (FHWA) regulations and the California Code of Regulations restrict or prohibit most commercial activities within controlled-access federal-aid highways. Pending a change in federal restrictions, commercialized rest areas are limited to locations along conventional highways or the area within one-half mile of a freeway ingress and egress.

Rest area partnerships are of interest, both positive and negative, to the local community and rest area stakeholders. Local and regional business competition, goods-movement needs, environmental concerns, and employment opportunities for the disabled and blind are among the issues of concern. Implementation of a successful partnership requires a willing partner, an economically feasible proposal, open communication, fairness to all

interests, respect of the inherent risks and effort of private entrepreneurs, and attention to the concerns of all stakeholders.

Site Requirements

Prior to programming any new rest area, major rest area rehabilitation, or auxiliary parking facility project, the district must document the type and adequacy (i.e., capacity, quality, reliability) of potable water, electrical power, and wastewater disposal. Commercial or municipal water and wastewater facilities should be utilized where available. When on-site wells and wastewater disposal are proposed, the district should analyze the feasibility and cost of developing and maintaining such systems.

A traffic analysis should be performed to determine the potential parking capacity demand for automobiles and long vehicles (commercial trucks, buses, recreational vehicles, and automobiles with trailers). Based upon traffic analysis, the comfort station capacity and utility demands can be determined by DES. The district should determine to what extent the proposed site can accommodate the traffic demand without diminishing the site's environmental and scenic qualities.

Prior to programming, the district must demonstrate the safety and adequacy of ingress and egress to the site, and pedestrian and vehicular circulation within the site.

Site and Architectural Analysis

Professional landscape architectural design processes should be applied to the site design of all new rest areas and rest area rehabilitation projects. This includes development of program/scope, base mapping, site inventory (topography, vegetation, hydrology, drainage, views, wind, etc.), site analysis, consideration of alternatives, and design synthesis.

Site designs should address possible future expansion, physical site constraints/capacity, and the appropriate degree of development with respect to site qualities.

The district LA should collaborate with the architect and provide the PDT with a recommendation regarding rehabilitation or replacement of comfort stations. Due to age, comfort stations may not be practical or cost effective to rehabilitate. When scoping each rest area rehabilitation project, the cost and advantages of demolishing and replacing the existing comfort stations versus rehabilitating the existing should be analyzed. The age, condition, materials, aesthetic qualities, before and after fixture capacity, and design requirements of the existing structure should be considered.

DES will provide Advance Planning Studies on building costs before project programming, upon request by the district PDT.

LEED Analysis

The PDT should use the LEED Credit Checklist to evaluate the six LEED credit areas: sustainable sites, water efficiency, energy and atmosphere, materials and resources, indoor environmental quality, and innovation in design.

The PDT shall use the *LEED Roles and Responsibilities for Caltrans Groups/Disciplines* to determine functional responsibility for each of the LEED credits.

Contact the Office of Transportation Architecture for a copy of the LEED Credit Checklist and the *LEED Roles and Responsibilities for Caltrans Groups/Disciplines*.

Stakeholder Involvement

The PDT should identify, contact, and engage external rest area stakeholders (local communities, chambers of commerce, historical societies, planning and land use professionals, tourism and recreational agencies, Native American Tribes, trucking and goods movement associations, etc.) to assist in assessing the natural, cultural, and aesthetic context of the project; participate in the selection of rest area style; and partner in the development and implementation of public information and interpretive displays. Stakeholders can also be valuable partners in seeking additional rest area enhancements through other funding sources, including Transportation Enhancement (TE).

Design Charrette Process

The design charrette process is recommended for the development of conceptual site plans, architectural building concepts, LEED goals and PID LEED Credit Checklist, schematic site plans, schematic building plans, and PR LEED Credit Checklist. Charrettes can accelerate the design process and ensure that important criteria are identified and incorporated initially into the design analysis and development.

Collaborative efforts to develop the conceptual and schematic site plans should include the district LA, project LA, architect, DES design engineers, project engineer, PM, representation from maintenance, environmental, right-of-way, LAP roadside facilities coordinator, LAP district coordinator, external stakeholders (e.g., California Highway Patrol, Bureau of Land Management, US Forest Service, blind vendors, etc.), and others as appropriate to the project.

The LAP, and OTA and EMWW within DES provide guidance on policy and standards issues, LEED considerations, and share ideas from a statewide perspective.

Project Study Report, Conceptual Site Plan, Architectural Building Concepts, LEED Goals and LEED Credit Checklist

At the scoping stage for a new rest area and rest area rehabilitation projects, a Project Study Report (PSR) is required as the PID for programming. A conceptual site plan must be developed depicting the right-of-way, general vehicular and pedestrian circulation, all

existing and proposed structures, including electrical, water and wastewater facilities shown in approximate scale and orientation. Generally, a bubble diagram to proper scale, along with circulation patterns, is sufficient at this stage.

Expansion required to satisfy 20-year design needs should be shown diagrammatically as well. If future expansion is limited by physical site constraints, show only that expansion that is practical and recommended.

The context analysis studies and conceptual site plan are prepared by the district LA, in consultation with the architect and other PDT members, and included in the PSR.

Architectural building concepts, including diagrammatic floor plans (bubble diagrams), circulation patterns, and elevation sketches are prepared by the architect for inclusion in the PSR. Architectural style, elevation, and detailing concepts should be derived from an analysis of the local and regional architecture, the historic and cultural context, and the natural environment. For new rest areas and rehabilitation projects that replace or significantly modify the existing architecture, the architect should develop a minimum of three appropriate variations of architectural building concepts for consideration.

The PDT shall establish goals for LEED elements of the project regarding indoor and site environmental concerns, energy use, equipment efficiency, and building occupancy and management. A completed LEED Credit Checklist shall be attached to the PSR. The Checklist shall be reviewed by the DES LEED Project Reviewer prior to PSR approval.

The conceptual site plan and recommended architectural building concepts shall be reviewed with the LAP Roadside Facilities Coordinator prior to PSR approval. PSRs for Safety Roadside Rest Area projects also must include an inventory of known environmental resources, identification of potential environmental issues and constraints, a description of potential hazardous materials or waste in the project area (including buildings at the project site), the type of environmental document anticipated for National Environmental Protection Act (NEPA) and/or California Environmental Quality Act (CEQA) compliance, and potential mitigation measures and their estimated costs. Refer for [Appendix L](#) of this manual for general information on PID requirements.

Refer to [Appendix X](#) for the format, requirements, and instructions for PSRs for major rest area and rest area rehabilitation projects.

Project Report (PR) Schematic Site Plan, Schematic Architectural Building Plans, and LEED Credit Checklist

A PR is required for all new rest areas, rest area rehabilitations, and auxiliary parking facility projects. The PR refines the project purpose and scope described in the PSR.

To facilitate DES building design, a “Building Site Data Submittal” (BSDS) must be completed by district PDT and then submitted to the architect with the draft PR.

A schematic site plan refines the conceptual site plan and must be prepared for all new rest area projects and rest area rehabilitation projects that involve the demolition and replacement of existing comfort stations or the placement of new buildings. The schematic site plan may be computer or manually drafted, and must be of a scale sufficient to show the location and arrangement of all buildings, parking areas, walkways, benches, tables, picnic structures, lighting fixtures, potable water faucets, trash receptacles, dumpster enclosures, kiosks, trees, lawn areas, and all other site elements that compose the design, (generally 1"=20').

The schematic site plan should be prepared by the district LA and included in the PR.

The architect shall prepare schematic architectural building plans that are a refinement of the preferred conceptual alternative selected by the PDT, and include floor plans and a view of each elevation.

A completed LEED Credit Checklist shall be attached to the PR. The checklist shall be reviewed by the DES LEED Project Reviewer prior to PR approval.

The schematic site plan and schematic architectural building plans shall be reviewed with the LAP Rest Area Coordinator and the program manager prior to PR approval.

Refer to [Appendix M](#) for the format, requirements, and instructions for PRs for rest area and rest area rehabilitation projects.

PS&E Preliminary Site Plan and Preliminary Building Design

A preliminary site plan refines the schematic site plan and must be finalized before the building design disciplines within OTA and EMWW within DES can begin their portion of the PS&E. This should occur at or before the 25 percent PS&E stage. At this point, all site elements and plan dimensions need to be accurately depicted and drafted on computer.

A preliminary building design plan refines the schematic architectural building plan. Upon completion of the preliminary building design, the architect will present the design to the district for approval by the PDT.

Functional units responsible for individual LEED Credits shall submit documentation to the architect as soon as sufficient information is available to complete the necessary calculations.

District PS&E Development

To facilitate coordination of the combined PS&E package, the district PS&E package should be completed concurrently with the DES PS&E. The district is responsible for coordinating and ensuring the consistency of the final, combined PS&E package.

At PS&E, the completed LEED Credit Checklist shall be incorporated into the contract documents as a plan sheet and will be used to develop the LEED credit templates to be submitted to the USGBC.

ARTICLE 4 Closure

Emergency or Intermittent Closure

An emergency closure is an unanticipated temporary closure of facilities and temporary suspension of services at a rest area unit to ensure public health, safety, or welfare.

An intermittent closure is a planned and regularly scheduled temporary closure of facilities and temporary suspension of services at a rest area unit to respond to seasonal issues (such as a snow), an expected or documented reduction in demand during a specified period of time (season, certain days, or months), or due to extraordinary budget issues.

Policies and procedures for emergency and intermittent closures are addressed in the [Maintenance Manual](#).

Permanent Rest Area Closure

A permanent closure is the termination of services and facilities at an existing rest area unit, and the removal of that unit from the Safety Roadside Rest Area System Master Plan.

A permanent closure, replacement, or relocation of an existing rest area constitutes a project.

A unit of the Safety Roadside Rest Area System may be permanently closed only after the following conditions have been met:

- A project has been initiated for closure of the facility following existing project development procedures.
- The public and stakeholders have been provided an opportunity for public hearing.
- Environmental analysis indicates impacts will be insignificant or may be mitigated.
- Traffic analysis has addressed mainline and ramp traffic volumes and vehicle types (auto, commercial trucks, buses) for the rest area and adjacent rest areas in the system.
- The CHP Division level office has been provided an opportunity to comment on the proposed closure.
- Route-segment accident and roadside parking history has been investigated and addressed.
- The resulting gap in rest area spacing has been addressed relative to spacing guidelines in the statutes and the Safety Roadside Rest Area System Master Plan.
- Availability of alternative safe and free parking and restroom opportunities has been addressed.

- Alternatives such as replacement, relocation, and operation by others have been considered.
- The FHWA has been provided an opportunity to comment on the proposed closure and potential reimbursement requirements.
- The District Director finds and recommends that rest area closure will not reduce traveler safety.
- The Rest Area Program Manager (Chief, LAP) concurs that the rest area closure will not significantly impact the rest area system, and amends the current Safety Roadside Rest Area System Master Plan.
- The CTC concurs with the action.

Major stakeholders, including the local county(ies), cities, communities, and Caltrans' Rest Area System Improvement Team Members (CHP, FHWA, California Trucking Association, California Automobile Association, Automobile Club of Southern California, American Association of Retired Persons, National Association of Truck Stop Operators-California Chapter, Parents Against Tired Truckers, California Commission on Aging, California Department of Rehabilitation Business Enterprise Program, California Department of Mental Health, and California Division of Tourism) should be notified and provided a 30-day opportunity to comment.

Districts should obtain the concurrence of the Rest Area Program Manager (Principal, LAP) prior to approval of the PSR or PR.

In signing the PSR or PR, the District Director should find that the rest area closure will not impact the function of adjacent rest areas. Consideration should be given to potential impacts to rest areas in adjacent districts or states. The approved PSR constitutes district recommendation for amending the Rest Area System Master Plan or permanently closing and disposing of the rest area unit(s).

If the Rest Area Program Manager concurs with the district recommendation, the proposal either will be recommended for programming and subsequently for funding as a capital project, or presented to the CTC for concurrence.

Temporary Closure for Construction

Construction closure is a planned and scheduled temporary closure of facilities and temporary suspension of services at an existing rest area unit due to rehabilitation or reconstruction contracts. It is the policy of Caltrans to close any unit of the Safety

Roadside Rest Area System during construction, in accordance with the following guidelines:

- The local community, CHP Division level office, contract maintenance forces, blind vendors, rest area stakeholders, and general public have been notified well in advance of the closures and are provided with timely updates of information before and during the closure.

- Temporary or alternative restroom, water, and telephone services for the public during the construction closure period have been considered, if need is indicated and costs are reasonable.
- Advance public notification of the closures should be provided through press releases, signs on the highway, and signs or posters at the adjacent rest areas.
- Efforts to shorten the duration of the construction period to reduce impacts to the traveler should be considered when feasible, economical, and reasonable.

SECTION 4 Vista Points

General

A vista point is a paved area beyond the shoulder that permits travelers to safely exit the highway to stop and view a scenic area. In addition to parking areas, amenities such as trash receptacles, interpretive displays, and in some cases rest rooms, drinking water, and telephones may be provided.

Vista points may be planned and designed as part of road construction projects or as separate projects. Vista point projects should follow the same project development procedures used for other Caltrans' projects.

Vista points identified with official roadside signs should be programmed at the earliest possible time for corrective work to comply with ADA and [Design Information Bulletin \(DIB-82\)](#) accessibility requirements.

Vista points may also be incorporated with existing or new safety roadside rest areas.

Refer to *Chapter 900, Topic 904, of the Highway Design Manual* for description of vista point standard facilities and design components.

SECTION 5 Aesthetics

General

Aesthetics must be considered in the highway project planning and design process. This is particularly important for highways that traverse communities and areas of natural beauty. A reasonable additional expenditure is justified to aesthetically enhance transportation projects.

Aesthetic Considerations

The following factors should be considered when planning and designing a highway:

- New highways should be located such that the new alignments and appurtenances will be integrated into their surroundings, preserving or enhancing the natural and constructed environment to maintain the contextual integrity of where the new highway is to be located, and will lead to and unfold scenic vistas where applicable. Aesthetic features such as natural slopes, rock outcroppings, existing vegetation; scenic views; historic locales and cultural features; and important environmental areas should be preserved to the greatest extent possible.
- Highway alignment and profile should fit the character of the area traversed and follow the existing terrain as closely as possible to minimize unsightly scars caused by excavation and embankment work.
- Round slopes to blend with the surrounding topography.
- Provide wide medians, independent roadways, or separated grade and profile elevations on multi-lane facilities, since these features may reduce the visual or environmental impact of the new highway, add scenic interest, and relieve the monotony of unilateral or parallel roadways wherever feasible.
- Consider bridges, tunnels, and retaining walls as substitutes for prominent excavation and embankment slopes when costs of such alternates are not excessive.
- When site requirements permit, infiltration or sediment basins should be sited and shaped to conform to the surrounding site conditions and terrain.
- Consider including aesthetic features to integrate transportation improvements with their surroundings, including special treatment for bridges, median barriers, walls, inert materials, and pavement.
- Selectively thin or remove existing vegetation such as trees or large shrubs to open up scenic vistas or provide a natural looking boundary between forest and cleared areas. Vegetation removal for aesthetic purposes requires concurrence of the district LA and input from the landowner of record and district environmental.
- Protect desirable vegetation (e.g., trees, specimen plants, diminishing native species, or historical plantings) wherever possible. Destruction of desirable vegetation should be avoided if possible, or minimized.
- Use project materials that reflect the character of the area.
- Consider provision of watering and establishment of replacement planting.

- Identify project or comprehensive corridor plan aesthetic features through community involvement and public participation. Aesthetic design features should address community goals, values, or other defining transportation improvement characteristics.
- Strive for consistency and compatibility of highway design features throughout the transportation corridor.

SECTION 6 Transportation Art

General

Caltrans recognizes the effects of transportation facilities on local communities, and encourages the integration of these facilities into their surroundings to enhance and reflect the aesthetic, environmental, scenic, and cultural values of the affected community. Caltrans collaborates with local stakeholders to enhance existing transportation facilities to meet the goals and expectations of both the local community and the public-at-large.

The design of the transportation system should reflect community values and characteristics that may be achieved through enhancements that include art. The Transportation Art Program provides a way for Caltrans to permit enhancement of existing transportation facilities by local communities and artists. Transportation art may include graphic or sculptural artwork, either freestanding or placed on required engineering features (such as noise barriers, retaining walls, bridges, bridge abutments, bridge rails, or slope paving) that expresses something special about a community's history, resources, or character.

Transportation art is provided and maintained by a local agency.

Transportation art differs from gateway monuments in that a gateway monument is defined as any freestanding structure or sign that may include text. See [Section 9-](#) "Gateway Monuments" for specific information on the Gateway Monument Demonstration Program.

Transportation art differs from community identification in that community identification may include text. Community identification must be placed on a required engineered highway feature while transportation art may be either freestanding or placed on a required engineering feature. See [Section 8-](#) "Community Identification" for specific information.

Policy

Caltrans supports the concept of enriching the cultural and visual environment of transportation system users and local communities by facilitating and coordinating the placement of artwork by others, within the State highway right-of-way, through the encroachment permit process.

The permit applicant for transportation art must be the responsible local public agency (e.g., city, county), tribal government, or non-federally-recognized tribe supporting the proposed art and representing the community where the art will be placed. The public agency will issue a resolution recommending approval of the proposed transportation art and requesting authority to install that work on State right-of-way. A "double permit" (as

described in Caltrans' [*Encroachment Permits Manual*](#)) is required of an artist, contractor, or other individual for the installation, maintenance, and removal of the artwork.

Guidance for placement of Transportation art on required engineering features is available from Division of Engineering Services (DES) Office of Transportation Architecture (OTA).

Administrative Responsibilities

Headquarters

The Principal Landscape Architect, Landscape Architecture Program (LAP), is responsible for:

- Appointing a Headquarters transportation art coordinator;
- Maintaining and clarifying policy and procedures for the Transportation Art Program; and
- Monitoring district performance and providing quality assurance of program guidelines.

The Chief, Office of Signs, Delineation, Encroachment Permits, and Outdoor Advertising is responsible for:

- Development of encroachment permit and special provisions forms for this program; and
- Maintaining and clarifying encroachment permit policy and encroachment permit procedural requirements.

The DES, OTA and Division of Maintenance Office of Structures Maintenance and Investigations are responsible for maintaining guidelines for structural and architectural design and structures maintenance to facilitate the placement of transportation art on highway bridge structures, and approval of any exceptions to those guidelines.

Districts

The district Director is responsible for:

- Appointing a district transportation art coordinator;
- Facilitating and coordinating the placement of authorized transportation art by others within the transportation right-of-way;
- Reviewing transportation art proposals for
 - Demonstrated community acceptance,
 - Compliance with federal and state laws and regulations and guidance governing Caltrans' operations,
 - Adequacy of planned and resourced maintenance for the art by the Permittee(s), and
 - Safety and liability issues for Caltrans, the artist, and the public.
- Approving transportation art proposals for placement within the right-of-way;
- Issuance of an encroachment permit for the construction and/or installation, maintenance, repair and removal of approved transportation art proposals; and

- Monitoring and enforcing permit requirements for the maintenance, restoration, or removal of transportation art by others.

Financial Responsibilities

Caltrans will assume the administrative costs associated with reviewing transportation art proposals and issuing and monitoring encroachment permits for approved artwork projects.

All other costs, including labor, materials, supplies, and traffic control (if required) for design, engineering, testing, construction, installation, maintenance, and removal of the transportation art will be borne by the Permittee(s).

Caltrans may require the permittee(s) to provide bonds or other means to ensure maintenance, rehabilitation, and removal of art.

Maintenance

Transportation art must be kept clean and in good repair. The permittee(s) must perform regularly scheduled maintenance, as described in the maintenance plan, of the transportation art for its projected lifespan, including graffiti removal and restoration work to maintain the integrity of the approved artwork. Graffiti removal must conform to the Caltrans' current policies and guidelines that require prompt removal of offensive messages and timely removal of all other graffiti. Maintenance practices must protect air and water quality as required by law.

Removal

Transportation art that becomes a safety or operational concern due to the lack of adequate maintenance (in the opinion of Caltrans), or deteriorates to a condition beyond the ability of the Permittee(s) to repair, must be removed by the Permittee(s). Caltrans will notify the Permittee(s) when it has determined that the art requires special attention. In the event the Permittee(s) fails to maintain, repair, rehabilitate, or remove the art in a timely manner, Caltrans may remove the art at any point (60) days following notification of the Permittee(s) and bill the Permittee(s) for all costs of removal and restoration of the site area.

Caltrans reserves the right to remove the transportation art prior to the end of its projected lifespan due to construction, rehabilitation, or other necessary activities affecting the transportation facilities without any obligation, compensation to, or approval of the Permittee(s) or artist(s). Caltrans should strive to notify the Permittee(s) of its intent to remove the transportation art to allow for timely removal and salvage by the Permittee(s) or artist(s).

Caltrans reserves the right to remove or alter any art that presents an immediate safety hazard to the public without delay or advanced notification to the Permittee(s) or artist(s).

Ownership and Copyrights

Transportation art located within Caltrans' right-of-way will be considered a benefit to the people of California and will become property of the State. However, any copyright claimed by the artist(s) may be retained by the artist(s), with the expressed expectation that Caltrans reserves the right to reproduce artwork for promotional purposes without paying compensation, regardless of copyright status.

The artist(s) and local agency must agree to relinquish all other rights, statutory or implied, to the transportation art.

Artist and Sponsor Recognition

When approved by Caltrans, the name, identifying logo, or symbol of the artist, local agency, and/or financial sponsor may be placed on or adjacent to the transportation art and is not considered to be "text." Caltrans retains sole discretion for determining the appropriate size, content, colors, and other elements of the artist and/or sponsor recognition. Logos and symbols for artist or sponsor recognition must be provided and maintained by the Permittee(s).

Design Guidelines for Transportation Art

Proposed transportation art must:

1. Be appropriate to its proposed setting;
2. Be in proper scale with its surroundings;
3. Not create a distraction to the motoring public (e.g., the proposed art should be large enough to interpret at highway speed, but not be so large that it demands attention from the motorist);
4. Be composed of materials that are durable for the projected life span of the project;
5. Be located where the Permittee(s) can safely perform required maintenance as specified in the encroachment permit and in conformance with Caltrans' procedures;
6. Be fully funded for design, installation, maintenance, and removal by others for its projected life span;
7. Conform to provisions of the Outdoor Advertising Act;
8. Not be placed in median areas of controlled-access highways (freeways and expressways);
9. Not imitate, obscure, or interfere with traffic control devices;
10. Not interfere with airspace above the roadway;
11. Not be placed within State highway right-of-way up on trees, rocks or other natural features;
12. Not adversely affect existing structures, drainage patterns or storm water runoff quality, landscaping, natural vegetation, or other planting;
13. Be located outside of the clear recovery zone (as defined in the Highway Design Manual). Transportation art must be placed as far from the traveled way or edge of roadway as is practical, with consideration for the visibility of the art;

14. Not make use of or simulate colors or combinations of colors usually reserved for official traffic control devices described in the American Association of State Highway and Transportation Officials (AASHTO) Manual of Uniform Traffic Control Devices (MUTCD);
15. Not include reflective or glaring surface finishes;
16. Not include illumination that impairs or distracts the vision of transportation system users. Other lighting may be permitted. Lighting may be allowed on structures only when approved by Division of Maintenance Office of Structures Maintenance and Investigations, in accordance with current requirements;
17. Not include blinking or intermittent lights;
18. Not include moving elements (kinetic art) or simulate movement;
19. Not restrict sight distance;
20. Not include any form of advertising that would be in conflict with the Outdoor Advertising Act;
21. Not display text, flags, religious, political, or commercial symbols;
22. Not include commercial symbols, except as allowed in “Artist and Sponsor Recognition”;
23. Be designed to minimize ongoing maintenance needs. Caltrans-approved protective graffiti coatings may be required by Caltrans;
24. Be consistent with Division of Maintenance Office of Structures Maintenance and Investigations inspection requirements, including:
 - Paint used on structures should not fill or obscure cracks. Latex or other flexible type paints may be used on concrete structures only with written permission from the Office of Structures Maintenance and Investigations;
 - Painting of steel structures will only be permitted with written permission from the Office of Structures Maintenance and Investigations;
 - Painted art on concrete structures should avoid load-carrying, stress-bearing structural members, including, but not limited to bridge girders, soffits, columns, and piers. Wing walls and abutments are preferred locations for painted art;
 - Artwork must not impair the necessary inspection of bridges, retaining walls and other structures;
 - To facilitate Caltrans’ inspection access to structures, mural art may be placed on removable panels; and
 - Chipping, blasting, or in any way modifying existing concrete surfaces is prohibited.

Submittal of Artwork Proposals

A transportation art proposal should be supported by the local agency that has jurisdiction in the area where the artwork will be placed.

The local agency will ensure that the proposal is developed in cooperation with the community immediately impacted by the artwork. The local agency will provide an opportunity for public comment on the proposed artwork.

The responsible local agency will secure and document acceptance from the community immediately impacted by the artwork. Such community acceptance may vary, but must

ensure that those most affected have an opportunity to express support or opposition to the proposal.

The method of community review will be determined by the responsible applicant local agency, with guidance provided by the district transportation art coordinator. The appropriate method for community review will depend on the nature of the artwork, and may range from developing a signed petition to conducting a noticed public meeting.

The local agency will provide Caltrans an adopted resolution that describes:

1. The local agency's jurisdiction in the vicinity of the project site;
2. The date of public consideration and comment of the proposed art;
3. The local agency's approval of the artwork content;
4. The project's projected life span;
5. The local agency's commitment to ensure maintenance of the artwork, including timely graffiti removal/repair, and removal (or restoration) of the artwork at the end of its life span; and
6. A schedule for commencing and completing project installation.

The artist(s) and local agency will adhere to and remain in compliance with Caltrans' rules, regulations, and any additional restrictions Caltrans may apply to the transportation art project, when working within the State highway right-of-way.

The name, address and telephone number of each person working within the right-of-way to construct, maintain, rehabilitate, or remove art will be provided to Caltrans as part of the permit application initially, and thereafter as changes occur.

Transportation art proposals should be submitted to the district transportation art coordinator. Transportation art proposals will be processed by Caltrans through the encroachment permit process.

Procedures for Processing Transportation Art Proposals

The proposed site for installation of transportation art must be reviewed and approved by Caltrans for safety and environmental considerations prior to approval of an encroachment permit. Safety determinations affecting highway operation, maintenance or tort liability may be documented in a permit engineering evaluation report (PEER) or by other means. Caltrans has sole responsibility for approval of transportation art sites. The local agency and Caltrans must review and approve the proposed transportation art prior to issuance of an encroachment permit.

Additional criteria and permit conditions may be applied to a project as determined appropriate by the district.

Transportation art proposals will be reviewed for compliance with this policy.

The approval of a transportation art proposal must be made with due consideration to safety (location, potential for motorist distraction, accessibility for maintenance, etc.), aesthetics, community support, and maintainability.

As a courtesy, Caltrans may suggest alternative locations when it is necessary to deny the issuance of an encroachment permit due to site conditions.

Transportation art proposals must include:

1. The local agency adopted resolution in support of the art;
2. A resumé of the artist's work and background;
3. A full description of the proposed artwork, including location, proposed life span, construction and installation techniques, details necessary to convey construction methods, and proposed materials, including, but not limited to, paint and protective coatings;
4. Specifications for proposed materials, including Material Data Sheets;
5. A scaled drawing and/or model. Caltrans may furnish necessary site data;
6. Construction schedule;
7. Project cost estimate;
8. Traffic control plan and provisions, when required; and
9. Maintenance plan and schedule.

Proposals that involve freestanding art, or involve the modification of existing Caltrans' structures, must include design plans stamped by an appropriately licensed engineer. These proposals will be submitted by the district transportation art coordinator to the Office of Structures Maintenance and Investigations for review.

Following review and approval by the district transportation art coordinator, the proposal and approval documents will be submitted by the district transportation art coordinator to the district permit engineer for processing. Permit applications for transportation art should be reviewed by district Landscape Architecture, maintenance (including field maintenance and Division of Maintenance Office of Structures Maintenance and Investigations) Structures Design, Safety, Environmental and other appropriate units.

The district transportation art coordinator should send an informational copy of the art proposal, approval documents, permit and as-built information to the Headquarters transportation art coordinator, LAP.

If, at any time during the process the district recommends any changes to or withholds concurrence on a project not yet approved, that proposal may be returned to the artist(s) for revisions. Once a permit is approved, no changes will be allowed to the art without prior written approval of the district transportation art coordinator and the district permit engineer.

SECTION 7 Blue Star Memorial Highway

General

After World War II, a nationwide movement was started to pay tribute to the nation's armed forces by designating various State and national routes as "Blue Star Memorial Highways." In 1945, the National Council of State Garden Clubs, Inc. approved the Blue Star Memorial Highway Marker program. California Garden Clubs, Inc. accepted the program in 1947 when the California Legislature designated Highway 40 (now Route 80) and Highway 99 as Blue Star Memorial Highways.

Policy

Caltrans will cooperate with the California Garden Clubs, Inc. in erecting and maintaining appropriate memorial markers on highways the California Legislature has designated as Blue Star Memorial Highways.

Responsibilities

Headquarters

- The Landscape Architecture Program (LAP) is responsible for coordinating the Blue Star Memorial Highway program. The Division of Transportation System Information, Office of Highway System Engineering, maintains a log of designated highway segments. This log is available in [*Named Freeways, Highways, Structures and Other Appurtenances in California, Section IV, Blue Star Memorial Highways.*](#)
- Legislative Affairs, if requested, will assist the California Garden Clubs, Inc. with preparation of draft legislative resolutions.

District

- The district is responsible for assuring that the location of a proposed marker is within a designated segment of highway, and for approving the actual site. If the marker is located within an easement, the district is responsible for coordinating with the owner of record.
- The district will assume the administrative costs associated with the project, including processing permits and, if required, staff assistance and traffic controls.
- An encroachment permit is required. However, because these markers designate memorial highways authorized by legislative resolutions, the district will not charge a permit fee.

Permittee

- Highways are designated as Blue Star Memorial Highways by the California Legislature. It is the responsibility of the California Garden Clubs, Inc. to initiate and sponsor legislative resolutions through their local legislators.
- The permittee(s) is responsible for the cost of all labor and materials involved in providing and installing the marker, as well as any modifications required to the facilities to accommodate the marker.

- If a marker is vandalized or accidentally damaged, the permittee(s) is responsible for its restoration, replacement, or removal.

Guidelines

Location of Markers

- Markers will only be erected on highway segments that the legislature has designated as Blue Star Memorial Highways.
- On designated highway segments with safety roadside rest areas, markers should be placed in rest areas.
- On designated highway segments without safety roadside rest areas, markers will be placed at vista points, historical sites, or other appropriate areas approved by the district.
- The district will work with the California Garden Clubs, Inc. in identifying an appropriate site, determining if planting is desirable, and to coordinate the project. Other than a marker, features such as paving, benches, or signs will not be permitted.
- Placement of markers must consider the effect of the proposed marker on routine roadside maintenance activities, traffic flow, and the maintainability of the marker without interference to traffic.

Maintenance

- The district will perform minor maintenance activities associated with the markers, such as litter pickup and other maintenance that is normally associated with the involved facility or right-of-way.
- Caltrans will not be responsible for maintaining the integrity of the marker. If a marker is vandalized or accidentally damaged, the district will consult with the Permittee(s) concerning its restoration, replacement, or removal.

Dedication Ceremony

- The California Garden Clubs, Inc. normally conducts a dedication ceremony at the site after a marker has been erected. A representative from the district should attend this ceremony to accept the marker.

SECTION 8 Community Identification

General

Caltrans recognizes the effects of transportation facilities on local communities and encourages transportation system improvements that reflect community needs and its values. Caltrans uses a collaborative approach to involve stakeholders early and continuously in the project development process to address livability, economic, aesthetic, environmental, scenic, and cultural expectations.

Community identification is defined as images or text that conveys information about a region, community, or area. There may be a local desire for new and existing transportation facilities to represent the communities in which they are located. Community identification facilitates enhancement of new and existing transportation facilities through collaboration with local communities.

Required engineered highway features, such as, but not limited to, sound walls, retaining walls, bridges, bridge abutments, bridge rails, and slope paving, may provide the opportunity for the placement of visual, graphic, or sculptural representations of a community's identity, including its history, resources, or other defining characteristics.

Community identification will typically be provided and maintained by the local agency.

Community identification differs from Transportation art in that community identification may include text and must be placed on a required engineered highway feature. Refer to [Section 6](#) "Transportation Art" for specific information on Transportation art.

Community identification differs from gateway monuments in that a gateway monument is defined as any freestanding structure or sign, not integral to required highway facilities. Refer to [Section 9](#) "Gateway Monuments" for specific information on the Gateway Monument Demonstration Program.

The following policy and guidelines define and describe Caltrans' process for incorporating the identification of local communities into the transportation system.

Policy

Caltrans supports the concept of enriching the cultural and visual environment for transportation system users and local communities by using a collaborative approach to facilitate and coordinate integration of community identification within the State highway right-of-way.

Caltrans will collaborate with the responsible local public agency (e.g., city, county), state or federal agency, tribal government, or non-federally-recognized tribe supporting the proposed community identification. The public agency will issue a resolution or other

official document recommending approval of the proposed design of community identification.

A community identifier communicates information about a region, community, or area that may be integrated, painted, or placed as an aesthetic treatment upon required engineered highway facilities. This includes community information placed upon highway facilities such as noise barriers, retaining walls, bridges, bridge abutments, bridge rails, and slope paving, etc. When approved by Caltrans, the name, identifying logo, seal, symbol, or slogan historically associated with the local community may be placed on or adjacent to the community identification. Caltrans retains sole discretion for approval of community identification, including determining the appropriate size, content, colors, and other design elements.

Additional guidance for the placement of community identification on required engineering features is available from DES OTA.

Administrative Responsibilities

Headquarters

The Principal Landscape Architect, LAP, is responsible for:

- Appointing a Headquarters Community Identification Coordinator;
- Maintaining and clarifying policy and procedures for community identification;
- Monitoring district performance and providing quality assurance of program guidelines; and
- Approving any exceptions to community identification policy.

Where community identification requires an encroachment permit, the Chief, Office of Signs, Delineation, Encroachment Permits, and Outdoor Advertising is responsible for the following:

- Development of encroachment permit forms.
- Maintaining and clarifying encroachment permit policy and encroachment permit procedural requirements.

The DES, OTA and Division of Maintenance, Office of Structures Maintenance and Investigations are responsible for maintaining guidelines for structural and architectural design, and structures maintenance to facilitate the placement of community identification on highway bridge structures, and approval of any exceptions to those guidelines.

Districts

The District Director is responsible for:

- Early identification of the community's desire to incorporate community identification during the development of new highway projects;

- Facilitating and coordinating the placement of authorized community identification within the transportation right-of-way;
- Reviewing community identification proposals for:
 1. Demonstrated local agency acceptance,
 2. Compliance with state and federal regulations governing Caltrans' operations,
 3. Adequately planned and resourced maintenance of the community identification (if necessary and agreed upon) by the local agency, and
 4. Safety and liability issues for Caltrans, the local agency, and the public.
- Approving or disapproving community identification designs and proposals;
- Issuance of an encroachment permit and/or development of cooperative agreement for the construction and/or installation, maintenance, repair, and removal of approved community identification proposals, if necessary; and
- Monitoring and enforcing encroachment permit or cooperative agreement requirements for the maintenance, restoration, or removal of community identification;

Financial Responsibilities

When the work is proposed by a local public agency, Caltrans will allocate project resources for the design and integration of community identifiers as would normally be allocated for the design of standard aesthetic treatments integrated with engineered highway features. Resources needed for design, implementation, construction (including traffic control, if required), and maintenance of community identification that are over and above what Caltrans would otherwise allocate will be negotiated with the local public agency and documented in the encroachment permit or cooperative agreement.

Caltrans will assume the administrative costs associated with reviewing community identification proposals, as well as developing, issuing and monitoring the encroachment permit or cooperative agreement for approved community identification projects.

Caltrans may require the local agency provide bonds or other means to ensure maintenance, rehabilitation, and removal of the community identification.

Maintenance

A maintenance agreement (as outlined in *Appendix B* of the [Encroachment Permit Manual](#)) should be established between the local agency and the Caltrans' maintenance access should be provided from outside the highway right-of-way, wherever possible.

Regularly scheduled maintenance of the community identification must be performed by the permittee or Caltrans, as described in the maintenance agreement, for its projected lifespan, including graffiti removal and restoration work to maintain the integrity of the approved community identification. Graffiti removal must conform to current Caltrans' policies and guidelines that require prompt removal of offensive messages and timely removal of all other graffiti. Maintenance practices must protect air and water quality as required by law.

Caltrans may perform maintenance activities in the area of the community identification, such as litter pickup and other maintenance that is normally associated with the transportation facility or right-of-way, but will not provide maintenance of the community identifier itself if, by encroachment permit or cooperative agreement, it is the requirement of the local public agency.

Removal

Community identification, with maintenance responsibility by the local public agency, which in the opinion of Caltrans becomes a safety or operational concern because it is not adequately maintained or deteriorates to an unacceptable condition, will be removed by the local agency. Caltrans will notify the local agency when it has determined that the community identification requires special attention. In the event the local agency fails to maintain, repair, rehabilitate, or remove the community identification in a timely manner, Caltrans may remove the community identification at any point sixty (60) days following notification of the local agency, and bill the Permittee(s)/local agency for all costs of removal and restoration of the area.

Caltrans reserves the right to remove the community identification due to construction, rehabilitation, or other necessary activities affecting the transportation facilities without any obligation, compensation to, or approval of the local agency. Caltrans should strive to notify the local agency of its intent to remove the community identification to allow for timely removal and salvage by the Permittee(s) (if possible).

Caltrans reserves the right to remove or alter any community identification that presents an immediate safety hazard to the public without delay or advanced notification to the local agency.

Guidelines for the Design and Placement of Community Identification

Proposed community identification must:

- Incorporate a community name, logo, graphic, seal, or slogan that has been associated historically with the community;
- Include, if required by Caltrans, approved protective graffiti coatings;
- Be developed to require low or no maintenance to minimize exposure of workers and others to potential risks;
- Be appropriate to its proposed setting;
- Be in proper scale with its surroundings;
- Be integral with the engineered transportation feature;
- Be composed of materials that are durable for the projected life span of the project;
- Be located where maintenance can be safely performed in conformance with Caltrans' procedures;
- Conform to provisions of the Outdoor Advertising Act;
- Be subject to the review and approval by Caltrans in consideration of design, size, and scale for appropriate integration on urban or rural highway features;

- Be consistent with Division of Maintenance Office of Structures Maintenance and Investigations inspection requirements, including:
 1. Paint used on structures should not fill or obscure cracks. Latex or other flexible type paints may be used on concrete structures only with permission of the Office of Structures Maintenance and Investigations;
 2. Painting of steel structures will only be permitted with written permission from the Office of Structures Maintenance and Investigations;
 3. Paint on concrete structures should avoid load-carrying, stress-bearing structural members such as bridge girders, soffits, columns, and piers;
 4. Community identification must not impair the necessary inspection of bridges, retaining walls, and other structures;
 5. To facilitate Caltrans' inspection access to structures, community identification may be placed on removable panels if not an integral part of a structure; and
 6. Chipping, blasting, or in any way modifying existing concrete surfaces is prohibited.

Proposed community identification must not:

- Contain religious, political, private, or commercial messages of any sort, including, but not limited to, symbols, logos, business names, trade names, jingles, or slogans;
- Display telephone numbers, street addresses, or Internet addresses;
- Interfere with airspace above the roadway;
- Create a distraction to the motoring public (e.g., the proposed community identification should be large enough to interpret at highway speed, but not be so large that it demands attention from the motorist);
- Adversely affect the structural integrity of existing structures;
- Include reflective or glaring surface finishes;
- Include illumination that impairs or distracts the vision of transportation system users. Other lighting may be permitted. Lighting may be allowed on structures only when approved by Caltrans Structures, in accordance with current requirements;
- Include moving elements (kinetic art) or simulate movement;
- Include images of flags;
- Be freestanding;
- Interfere with official traffic control devices or interfere with the operational right-of-way above the roadway;
- Be placed within the operational right-of-way up on trees, or painted or drawn upon rocks or other natural features;
- Make use of or simulate colors or combinations of colors usually reserved for official traffic control devices described in the American Association of State Highway and Transportation Officials (*AASHTO Manual of Uniform Traffic Control Devices*); and
- Restrict sight distance.

Submittal of Community Identification Proposals

A community identification proposal must be supported by the local agency that has jurisdiction in the area where the community identification will be incorporated with the transportation feature.

The local agency will provide Caltrans an adopted resolution or other official documentation that describes:

- The local agency's jurisdiction in the vicinity of the project site;
- The local agency's approval of the community identification content;
- Funding responsibility;
- The local agency's commitment to ensure maintenance of the community identification, including timely graffiti removal, repair, and removal (or restoration) of the community identification as needed; and
- A proposed schedule for commencing and completing project installation, if by separate permit.

The local agency will adhere to and maintain compliance with Caltrans' rules, regulations, and any additional requirements Caltrans may apply to the project.

Community identification proposals associated with existing transportation facilities should be submitted to the district Office of Encroachment Permits for circulation, review and approval. Community identification proposals associated with new transportation facilities should be submitted to the district Cooperative Agreements office for review and approval through Caltrans' project development process.

Procedures for Processing Community Identification Proposals by Local Agencies

The proposed site for integration of community identification will be reviewed and approved by Caltrans for safety and environmental considerations prior to approval of an encroachment permit or cooperative agreement. Safety determinations affecting highway operation, maintenance or tort liability may be documented in a permit engineering evaluation report (PEER) or by other means.

Additional criteria and conditions may be applied to a project, as determined appropriate by the district.

Community identification proposals must be reviewed for compliance with this policy.

The approval of a community identification proposal must be made with due consideration to safety (e.g., location, potential for motorist distraction, accessibility for maintenance), aesthetics, community support, and maintainability.

As a courtesy, Caltrans may suggest alternative locations when it is necessary to deny the issuance of an encroachment permit or cooperative agreement due to site conditions.

Community identification proposals must include:

1. The local agency's support of the community identification through an adopted resolution or other official documentation;
2. A full description of the proposed community identification, including location, construction and installation techniques, details necessary to convey construction methods, and proposed materials, including, but not limited to, paint and protective coatings;
3. Specifications for proposed materials, including Material Data Sheets;
4. A scaled drawing and/or model (Caltrans may furnish necessary site data);
5. Construction schedule;
6. Project cost estimate;
7. Traffic control plan and provisions if required; and
8. Maintenance plan and schedule, if required.

Community identification proposals that require review for structural stability or involve the modification of existing Caltrans' structures must include design plans stamped by an appropriately licensed engineer. These proposals will be submitted by the district to the Division of Maintenance Office of Structures Maintenance and Investigations for review.

Following review and approval by the district, the proposal and approval documents will be submitted to the district permit engineer for processing. Permit applications for community identification should be reviewed by district landscape architecture, maintenance (including field maintenance and Headquarters Structures Maintenance and Investigations), Structures Design Safety, environmental, and other appropriate units.

If, at any time during the process, the district recommends any changes or withholds concurrence on a project not yet approved, the proposal may be returned to the local public agency for revision. Once Caltrans approves a community identification proposal, no changes will be allowed to the community identification without prior written approval of the district.

Proposals for the placement of community identification must comply with this policy. Exceptions to this policy must be submitted to and approved by the Principal Landscape Architect, LAP.

SECTION 9 Gateway Monuments

Definition

A gateway monument is defined as any freestanding structure or sign, not integral or otherwise required for the highway facility that communicates the name of a region, community, or area.

Statutory Authority

Authority for Caltrans to control encroachments within the State highway right-of-way is contained in the *Streets and Highways Code, Chapter 3*.

Title 23 – Code of Federal Regulations, which states in part that all real property, including air space, within the right-of-way boundaries of a project shall be devoted exclusively to public highway purposes, governs Caltrans. Caltrans is responsible for preserving such right-of-way free of all public and private installations, facilities or encroachments, except for those with which Federal Highway Administration's (FHWA's) Administrator must approve. FHWA has delegated authority to Caltrans to allow utility encroachments on access controlled highway right-of-way. As gateway monuments are non-utility encroachments, Caltrans does not have the express authority to approve their placement within the State's right-of-way.

Policy

Refer to the [Design Memo titled Gateway Monument Demonstration Program](#) and the [Encroachment Permits Manual](#) for specific information on the Gateway Monument Demonstration Program.