CHAPTER 29 – Landscape Architecture

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CHAPTER 29 – Landscape Architecture

SECTION 1 General

Introduction

As the primary program responsible for the design of the highway roadside, the Headquarters 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 nonmotorized 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.
- improve traveler safety through the design of safety roadside rest areas and management of safety roadside rest area system needs.

Aesthetic, Environmental, Scenic, and Community Values

To make projects successful and to provide the best overall public benefit, the project development process includes evaluating and addressing impacts to aesthetic, environmental, scenic, and community values in balance with transportation goals.

The profession of landscape architecture utilizes site planning and design techniques that work in harmony with both 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 expertise to protect and improve scenic views both towards and away from transportation improvements. Community and Caltrans aesthetic 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 and inert materials; the design of irrigation systems using non-potable water sources; and stormwater 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. These projects help mitigate the environmental impact of roadway construction projects.

Visual Quality

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 consider avoidance mitigation measures. Landscape architects perform scenic resource evaluations and visual impact assessments, and they provide design expertise to protect and preserve scenic resources. For more information on preliminary assessments, scenic resource evaluations, and visual impact assessments, see Chapter 8 – Overview of Project Development.

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. They also 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 nonmotorized travelers.
- preserving historic resources such as historic landscapes.

- supporting the incorporation of transportation art, gateway monuments, and community identification.

Traveler and Worker Safety

Landscape architects contribute to the safety of the traveling public and highway workers through roadside design techniques that minimize or eliminate worker exposure to traffic. These design techniques can be grouped into three categories: safe facility location, recurrent activity elimination, and safe maintenance access.

Safe Facility Location

These improvements enhance safety by placing or relocating facilities that require recurrent maintenance activities to protected areas or to areas outside the clear recovery zone. Typical examples include locating, relocating, or clustering facilities such as irrigation controllers, backflow preventers, remote control valves, ramp meters, changeable message sign controls, and cabinets to areas adjacent to the right-of-way fence or to protected areas. See the *Highway Design Manual (HDM)*, Topic 706, for more information.

Recurrent Activity Elimination

These improvements enhance safety by reducing or eliminating recurrent maintenance activities such as frequent pruning, graffiti removal, irrigation system repair, herbicide application, and weed control. Typical examples include the following:

- Removing plant material that encroaches upon sight distances
- Planting shrubs or vines or using textures on noise barriers
- Automating irrigation systems
- Providing vegetation control treatment beneath guardrails and signs
- Paving slopes beneath bridge structures
- Paving narrow areas
- Providing contrasting surface treatment (paving) beyond the gore area pavement
- Placing rock or other inert mulch materials
- Removing signs that are no longer required

Safe Maintenance Access

These improvements enhance safety by providing maintenance workers with safe access to roadway and roadside facilities requiring regular maintenance and include providing stairs on steep slopes, maintenance access roads, maintenance access gates, and maintenance vehicle pullouts.

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 the 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 Quality Handbooks: Project Planning and Design Guide* provides design guidance for selecting and designing stormwater quality best management practices (BMPs) during the planning and design phase of a project.

Chapter 27 of the *Standard Environmental Reference (SER)* provides guidelines for conducting scenic resource evaluations and for performing visual impact assessments during the project development process.

Chapter 28 of the *Standard Environmental Reference* provides guidelines for determinations of historic property eligibility and identification of 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.

The *Construction Manual* describes administration and oversight of projects.

The *Maintenance Manual* contains instructions about the maintenance of roadside vegetation and other roadside facilities.

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

The *Plans Preparation Manual* and the *CADD Users Manual* provide guidelines for the preparation of highway planting and irrigation plans.

Caltrans Best Practices Public Participation Reference provides the planning process to seek out and consider the needs of all stakeholders in order to maximize the potential and benefit of public involvement and to adequately respond to and meet the requirements of State and federal legislation and mandates and Caltrans' policies and goals.

The *Main Street, California* booklet emphasizes Caltrans' commitment to and provides guidance on the safe, context-appropriate design of State highways that function as community main streets.

The Headquarters Division of Project Management *Project Communication Handbook* helps the project team identify internal and external stakeholders and improves communication among all parties.

Design Information Bulletin 82 – Pedestrian Accessibility Guidelines for Highway Projects, provides design guidance for pedestrian accessibility for highway projects.

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

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

The FHWA Executive Memorandum issued August 18, 1999, *Guidance Implementing Executive Order 13112 Invasive Species*, provides guidance on implementing *Executive Order 13112* signed by President Clinton on February 3, 1999, which strives to control the introduction and spread of invasive species and minimize their impact on economic, ecological, and human health.

SECTION 2 Highway Planting

ARTICLE 1 Definitions, General Policy, and Programs

Definitions

Establish existing planting – the period of time that allows newly installed plant material to reach a state of maturity that requires minimal additional maintenance. Establish existing planting work is accomplished via a separate contract that begins just after the completion of a planting and irrigation contract. The majority of the work performed during an establish existing planting project is identical to plant establishment; however, an establish existing planting project includes additional activities at the start of the project, including checking plants for deficiencies, checking and testing irrigation facilities, and repairing identified deficiencies.

Highway planting – the term includes new highway planting, replacement highway planting, roadside rehabilitation, 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.

Irrigation system upgrade – the conversion of a manually-operated irrigation system to an automatic or remote irrigation control system (RICS), replacement of obsolete irrigation components, conversion of a potable water irrigation system to non-potable water, and worker safety improvements.

Landscaped freeway – the planted section of freeway that meets the criteria established by the *California Outdoor Advertising Act*. This designation is used in the control and regulation of outdoor advertising displays.

Plant establishment – the period of time that allows newly installed plant material to reach a state of maturity necessary to require minimal future maintenance. FHWA regulations require a plant establishment period of sufficient length to ensure the survival of new plant material for all projects that include highway planting. The plant establishment period typically includes replacement of dead or damaged plant material; weed, rodent, and pest control; irrigation operation and repair; and other activities required to ensure the long-term survival of plant material.

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 stormwater 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 conditions from a memorandum of understanding (MOU) or memorandum of agreement (MOA) between Caltrans and another governmental agency
- To mitigate environmental impacts in compliance with environmental commitments, agreed to, for example, as a part of project development, resource agency permit requirement, or court order
- To provide planting necessary for revegetation, erosion control, stormwater 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 spaces 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 with an estimated cost of $300,000 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 bid items for planting and irrigation work and does not include the cost of traveler and worker safety features, or storm water pollution prevention plan (SWPPP) items.

Highway planting with an estimated cost of less than $300,000, 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 Headquarters Landscape Architecture Program.

The cost limit that triggers the separate contract requirement for highway planting work may be adjusted by the Headquarters Landscape Architecture Program.

Exceptions to the separate contract requirement policy may be granted by the Headquarters Division of Design-Landscape Architecture Program Deputy Division Chief when there is a demonstrated benefit to the State to combine planting with road construction under a single contract or when the planting work is legally required to be installed with the roadway construction contract. Exception requests must be approved by the Headquarters Landscape Architecture Program prior to approval of the project report (PR).

Maximum Costs for Planting and Water Assessment

Maximum costs have been established by the Headquarters Landscape Architecture Program for the cost per acre of new planting and for water assessment fees. These maximum costs apply whenever new planting or new water service are included on a project, regardless of funding source. The maximum costs for planting and water assessment fees may be adjusted by the Headquarters Landscape Architecture Program. The current maximum values established for planting and water assessment fees are located at the Headquarters *Landscape Architecture Program-Design Guidance* website.

Exceptions to this policy must be approved by Headquarters Division of Design-Landscape Architecture Program Deputy Division Chief 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 or to replace planting originally provided by others.

Maximum Cost per Acre for Planting

The maximum cost per acre for planting excludes the costs for traveler and worker safety, stormwater pollution prevention, mitigation planting, erosion control, and the water assessment fee.

Maximum Water Assessment Fee Limit

The water assessment fee should not exceed the limit calculated by multiplying the maximum cost per acre by the number of irrigated acres. If the one-time, up front water assessment and/or water meter hookup fee exceeds the limit, a project of five or more acres will only be considered if the additional cost is paid by others. For projects affecting less than five acres, the assessment fee should be negotiated toward receiving the lowest fee possible.

Non-potable Water Irrigation Goal

One of Caltrans' goals is to minimize the use of potable water and maximize the use of non-potable water when needed for irrigated landscapes. Non-potable water includes untreated sources (wells, streams, rivers, underground water) as well as recycled water. Non-potable water suitable for irrigation should be used when available and cost effective. Use of non-potable water is cost effective when there is a demonstrated cost savings over a 20-year life cycle. Cost sharing or other methods should be evaluated to bring recycled water to the highway right-of-way in a cost effective manner.

Planting with Noise Barriers

Planting should be incorporated as an integral component of noise barrier work to discourage graffiti, address visual impact issues, and reduce future maintenance worker exposure. Where graffiti removal requires, or is expected to require recurrent maintenance activities, consideration must be given to covering new or existing noise barriers with vines and/or placing plants to screen the noise barriers to reduce graffiti.

To avoid excessive maintenance a variety of plant species whose growth habits minimize the potential for growth onto private property should be selected.

Noise barrier design and placement should provide safe maintenance access to plant materials.

Plant Establishment

Plant establishment periods for highway planting performed in conjunction with a roadway construction project must follow the policy described in this section under the heading "Separate Contract Requirement for Highway Planting Work on Roadway Construction 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 a regulatory agency.

Exceptions to this policy must receive concurrence from both district maintenance and the district landscape architect and approval from the Headquarters Landscape Architecture Program.

Establish Existing Planting

An establish existing planting project must be scoped and programmed as soon as it is determined that the standard three year duration of plant establishment work is insufficient to establish the plants in the initial highway planting contract. To minimize lapses in performance of plant establishment work that would occur between contracts, an "establish existing planting project" needs to be delivered and advertised so that the contract starts immediately after completion of the plant establishment period from the initial contract. Funding for establish existing planting contracts should be split from the parent project or funded by others.

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 landscape architect.

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 or greater than the current allowable maximum cost per acre. See the "Maintenance Responsibilities – Planting by Others" Sub-article 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 and is maintained by others. The district landscape architect 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, refer to Chapter 9 – Project Initiation.

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 legal and regulatory requirements.

Work involved in mitigation planting may include the following:

- Creation, restoration, or enhancement of a habitat such as wetlands or oak woodlands

- Creation, restoration, or enhancement of a specific habitat for sensitive species (such as elderberry plantings for the valley elderberry longhorn beetle or nesting habitat for the 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, refer to Chapter 9 – Project Initiation.

Mitigation Monitoring

Monitoring of mitigation planting may be required as described in the regulatory and/or public agency's permit or the environmental document.

A separate mitigation monitoring contract 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. The PA&ED phase of work for the parent project should include the mitigation monitoring within its project scope. The mitigation monitoring project needs to be delivered and advertised so that the contract starts immediately after completion of the mitigation planting contract. For specific information regarding project programming, refer to Chapter 9 – Project Initiation.

Highway Planting Revegetation

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

When highway planting revegetation is required due to the impacts of a roadway construction project, it 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. A follow-up establish existing planting contract may be required to ensure the success of the highway planting revegetation project.

For specific information regarding project programming, refer to Chapter 9 – Project Initiation.

Wildflower Planting

California native wildflowers must enhance roadside assets and provide food and shelter for pollinators. Wildflower planting must be included with all projects that have federal participation and include planting work, per *Title 23 Code of Federal Regulations*, Section 752.11. Highway planting to provide traffic safety improvements (see the "Conventional Highways" heading in this section), revegetation, erosion control, and irrigation-only projects are exempt from this requirement.

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

Project reports must include a discussion of the proposed use of wildflowers and compliance with federal wildflower requirements. See Appendix D – Preparation Guidelines for Project Report (New Highway Planting or Roadside Rehabilitation) for more information.

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
- In areas where human impact, 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

The PR must describe the specific reasons 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 that include wildflowers for compliance with the federal

wildflower obligation. Funding for these native landscape restoration projects shall come from the district's State Highway Operation and Protection Program (SHOPP) minor allocation.

State Highway Operation and Protection Program

Roadside Rehabilitation

Roadside rehabilitation provides for water conservation improvements by utilizing recycled water and efficient irrigation technology, replacement and rehabilitation of existing vegetation damaged by weather, acts of nature, or deterioration in order to integrate the facility with the adjacent community and surrounding environs. Roadside rehabilitation also provides erosion control to comply with National Pollutant Discharge Elimination System (NPDES) permit requirements. These projects include strategies that improve traveler and worker safety by reducing the frequency and duration of maintenance worker exposure to traffic.

New Highway Planting

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

When new highway planting is required due to the impacts of a roadway construction project, it 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.

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

Roadside Safety Improvements

Roadside safety improvements provide solutions to worker safety issues and reduce the frequency and duration of worker exposure to traffic through eliminating the need

for workers on foot adjacent to the travel way, increasing access from locations off of the travel way, accommodating mechanized maintenance activities, and relocating equipment away from traffic. The risk of injury or fatality increases with the length of time an employee is exposed to traffic without protection. The majority of employee fatalities involve workers on foot. Common factors in these fatalities include urban location, high average daily traffic (ADT), roadside work near the shoulder, vehicles parked on the shoulder, and employees on foot.

Roadside Protection and Restoration and Advanced Mitigation

Roadside protection and restoration serves to enhance, preserve, or restore scenic and native landscape areas within or near roadsides, reduce life-cycle costs, and improve worker safety. Examples of roadside protection and restoration, and advanced mitigation work include the following:

- 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
- Experimental or new features
- Work required to comply with the *Surface Mining and Reclamation Act of 1975*
- Buying credits in bulk from existing banks or in-lieu fee programs
- Securing environmental resources for advance mitigation that are in high demand but short supply
- Partnering with other agencies or non-profit organizations to fund restoration projects, in part or in whole
- Creation of new privately owned and operated, but Caltrans-dedicated, mitigation banks or conservation banks
- Acquiring conservation easements and land in fee simple
- Creation of new Caltrans-owned and operated mitigation banks or conservation banks
- Improving fish and wildlife protection on the State highway system, including fish passage remediation or improving habitat connectivity

ARTICLE 2 Responsibilities

Headquarters

Landscape Architecture Program

The Headquarters Division of Design-Landscape Architecture Program Deputy Division Chief:

- establishes statewide roadside SHOPP levels and performance goals.
- designates "landscaped freeway" segments.
- directs the development, implementation, and evaluation of sustainable roadsides, traveler and worker safety, and context-sensitive design strategies.
- directs policy development, performance reviews, and evaluates district compliance with policy and guidance.
- directs research for new materials and methods.
- reviews and approves landscape architecture policy exception requests.
- directs policy for compliance with National Pollutant Discharge Elimination System for erosion control and final soil stabilization.

Office of Landscape Architecture Support and Planning

The Chief of the Office of Landscape Architecture Support and Planning:

- provides advisory support to the Headquarters Division of Design-Landscape Architecture Program Deputy Division Chief for SHOPP coordination.
- provides expert advice to the districts for program and project delivery activities.
- recommends approval of policies, procedures, plans, and standards.

District coordinators for the Office of Landscape Architecture Support and Planning:

- assist districts with issues pertaining to policy and procedures involved in the preparation of PIDs, design concepts, PRs, design intent statements (DISs), design standard decision documents, and PS&Es for projects that improve compatibility, including highway planting, safety roadside rest areas, vista points, and other site development.
- assist the Headquarters Division of Design-Landscape Architecture Program Deputy Division Chief 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 requests to deviate from Caltrans' standards for landscape architecture work.
- recommend and maintain policies, guidelines, procedures, and standards for safety roadside rest area and vista point design.
- assist districts and other programs with safety roadside rest area, joint economic development, and privatization efforts.
- coordinate safety roadside rest area policies, standards, and ten-year SHOPP needs.
- oversee the development and update of the statewide *Safety Roadside Rest Area Master Plan*.

Office of Landscape Architecture Standards and Procedures

The Chief of the Office of Landscape Architecture Standards and Procedures:

- develops and maintains landscape architectural guidance and procedures.
- coordinates improvement of roadside design standards among Headquarters functional units, communicates improvements to the districts.
- monitors activities, objectives, and strategies for worker safety issues by Caltrans and other agencies, organizations, and manufacturers.
- initiates and oversees research and consultant studies.
- develops and maintains standards for highway planting and erosion control.

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

The district landscape architect:

- identifies highway planting needs by developing and maintaining a current list of potential projects that qualify as new highway planting, or roadside rehabilitation.

- reviews the preliminary environmental analysis report (PEAR) and final environmental document to ensure conservation of resources that contribute to the character of a project location, including existing trees, historic plantings, rock outcroppings, and environmentally sensitive areas.
- identifies district needs for accommodating worker safety on the State Highway System (SHS).
- prepares PID, PA&ED, and 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 (H:V). The district landscape architect'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 PDT member, assists with transportation improvements developed by Caltrans or others that are integrated with the surrounding environs and social context. The district landscape architect coordinates stakeholder identification and collaboration and provides recommendations for aesthetics, comprehensive corridor plans, context-sensitive-solutions, roadside management issues, stormwater pollution prevention, and visual impact assessments.
- for projects with highway planting developed by others, sends a copy of the planting plans and specifications to Headquarters Landscape Architecture Program, Office of Landscape Support and Planning, 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 Figure 29-1 and Figure 29-2.

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

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

If requested by the public agency, Caltrans may perform (on a reimbursed basis) the services for which the public 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 Permits Manual* for specific information.

Plans and specifications for highway planting projects provided by others within the State right-of-way are sent to the Headquarters Landscape Architecture Program-Office of Landscape Support 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 Headquarters Landscape Architecture Program.

Maintenance Agreements

Only one entity should be responsible for performing maintenance at a particular location. When Caltrans and another entity share maintenance responsibilities in the same area, a maintenance agreement should be negotiated that requires no greater expenditure of Caltrans' funds and personnel years (PYs) than Caltrans would typically expend for that area. Maintenance agreements are implemented through the encroachment permit process.

When negotiating maintenance agreements between Caltrans and public agencies, maintenance performed by others (including licensed landscape contractors and special programs groups) should be considered. To provide uniform application of policy, agreements for maintenance performed by others must be approved by district maintenance and the public agency.

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

Caltrans may require the permittee to obtain water, electrical, or other utility sources.

Performance bonds may be required to ensure that any installation, establishment, maintenance, and necessary rehabilitation done by others will be constructed to Caltrans' standards.

Figure 29-1 Determining Local Participation in Highway Planting

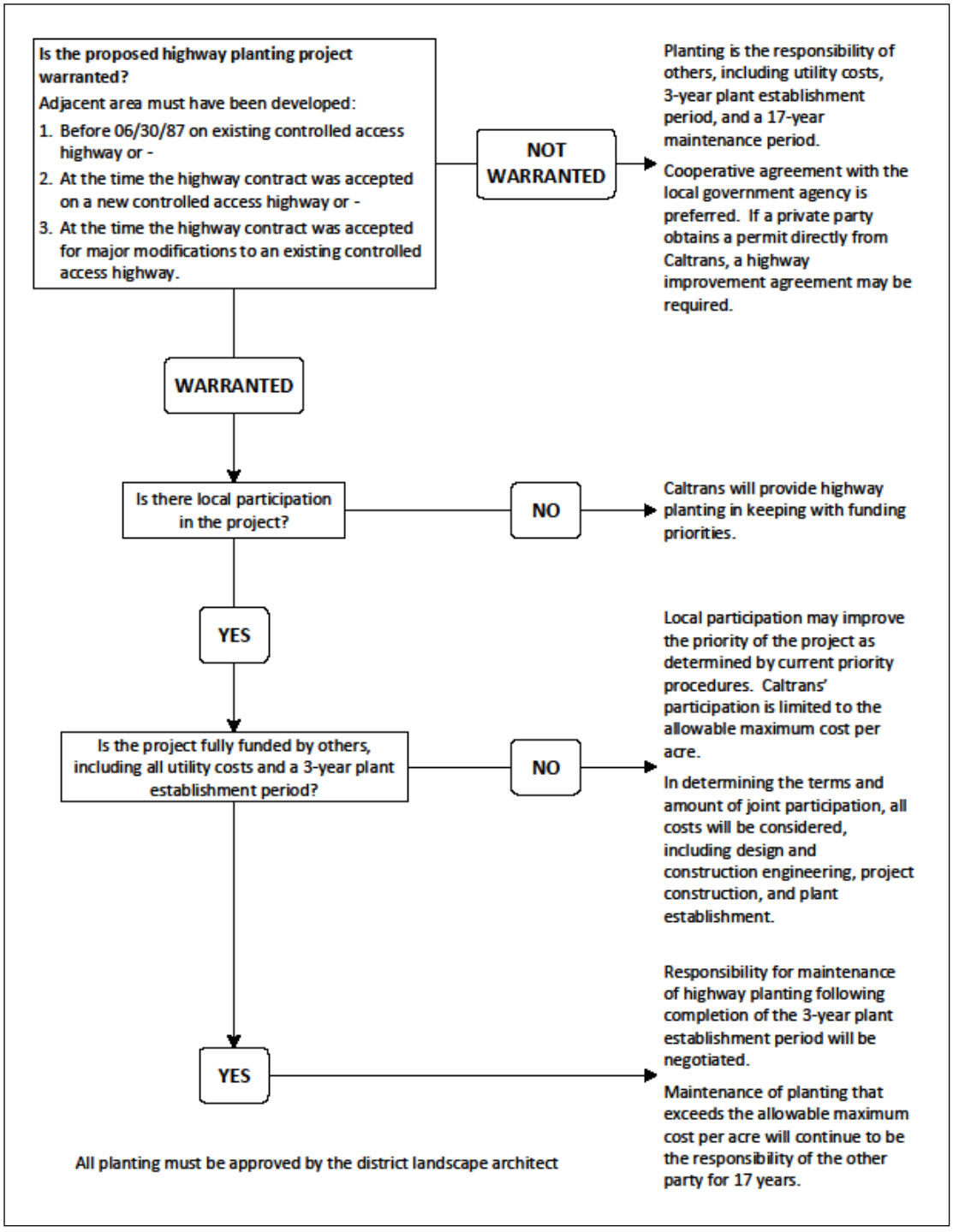

Figure 29-2 Responsibilities for Highway Planting Funded by Others

	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
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. Refer to Section 3 "Safety Roadside Rest Areas" for information regarding the project development process for safety roadside rest areas.

The project development process is defined as those activities that commence with the project initiation phase 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 Part 2 – The Project Development Process (Chapters 8 through 15).

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 – Community Involvement 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 – Value Analysis for specific information regarding the value analysis process.

Project Development Team

Appropriate Caltrans' functional units, especially maintenance (landscape specialists) personnel familiar with the project site, construction, the local community, and other external stakeholders should be contacted and invited to participate in the PDT.

Refer to Chapter 8 – Overview of Project Development, 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 landscape architect will provide a copy of the comprehensive corridor plan, if available, to the local community, public agencies, and other affected stakeholders. The comprehensive corridor plan may be prepared by a consultant or other entity in cooperation with the community, public agencies, external stakeholders, and Caltrans' functional units, and is compiled and finalized by the district landscape architect. 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, public agencies, and other affected external stakeholders.

Project Initiation Phase

General

A PID is required for the programming of all candidate Major projects into the STIP or the SHOPP. For specific information regarding project programming, refer to Chapter 9 – Project Initiation.

The PID serves to identify the purpose-and-need for a project, including deficiencies in highway planting, traveler and worker safety, aesthetics, erosion control, stormwater pollution prevention, traffic management requirements, and plant establishment needs. The purpose-and-need should be identified in the PID 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; input from community, public 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 Headquarters Landscape Architecture Program district coordinator will review the unsigned PID to ensure conformance with Caltrans' policies and program goals.

Cost Considerations

For Caltrans funding limits for planting work and water assessment fees, see the heading "Maximum Planting and Water Assessment Costs" in this section.

Design Concept

PIDs developed for highway planting and roadside rehabilitation 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 and roadside rehabilitation projects:

- Highway planting concepts such as effects and extent of roadside clearing, weed control, soil preparation, plant establishment, maintenance and operational strategies, and water conservation strategies
- Coordination with external stakeholders, including community representatives and public 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 paved ditches and drainage basins, and other areas that are not vegetated
  - Prior environmental commitments
  - Planned highway construction
  - Environmentally sensitive areas
- Locations of subsurface and overhead utilities
- 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
- Stormwater pollution prevention, including stormwater best management practices and water quality treatment techniques
- Water assessment fees and cost of water to be used during the length of the contract
- Irrigation techniques for water conservation including, but not limited to, temporary irrigation systems, recycled water transmission lines, recycled or non-potable water use, updating of irrigation systems with smart controllers, remote irrigation control systems, temporary irrigation systems, and reducing or ending irrigation at the completion of plant establishment
- Planting for water conservation including the use of native and non-native drought tolerant plant material, and inert (gravel) mulch

- 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 components such as controllers, backflow preventers, mainline pipe, remote control valves, lateral pipe, and sprinklers, or other roadside facilities such as ramp meters, control boxes and pull boxes 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 or blocks visibility to signage
  - Planting of vines and shrubs, or the use of textures on noise barriers and retaining walls to deter graffiti
  - Automation and modernization of irrigation systems
  - Providing maintenance access roads, access gates, and maintenance vehicle pullouts for workers on foot or in vehicles
  - Placing organic (woody) or inert (gravel) mulch, or installing rock blanket areas
  - Providing vegetation control treatment beneath guardrails and signs
  - Paving narrow areas
  - Paving slopes beneath bridge structures
  - Providing contrasting surface treatment beyond the gore pavement
  - Updating or removal of aging highway facilities. This work may include the following:
    - Replacing guardrail with a concrete barrier
    - Removing signs that are redundant
    - Replacing signs that are not standard
    - Removing or relocating pull boxes located in the shoulder or near the pavement edge

Upon completion of a draft design concept for highway planting and roadside rehabilitation projects, the PDT leader must request a review by the team, including the maintenance representative. The PDT leader may also need to arrange a meeting where other members of the PDT can discuss details of the design concept, including needs, deficiencies, priorities, and costs. The project landscape architect should update the design concept to incorporate feedback from this meeting in preparation for review by the Headquarters Landscape Architecture Program district coordinator who will verify conformance with Caltrans' policies, guidelines, and standards.

Design Exceptions

If deviations from design standards are needed, approval must be obtained according to the procedures in Chapter 21 – Design Standard Decisions.

Approval of deviations from 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 nonstandard design features. As soon as nonstandard design features are identified, the Headquarters Project Delivery Coordinator should be contacted to discuss the proposed nonstandard features.

District coordinators for the Headquarters Office of Landscape Architecture Support and Planning should be notified of project impacts.

Design Intent Statement

PIDs developed for highway planting projects should include a design intent statement. The design intent statement 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 design intent statement should be prepared for all projects that include highway planting, including planting performed by permit. See Appendix EE – Highway Planting "One Liner" and Design Intent Statement (DIS) for the design intent statement format.

Project Approval and Environmental Documentation Phase

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. Projects with planting, regardless of funding source or approval authority, are to conform to the responsibilities shown in Figures 29-1 and 29-2. Master PRs to cover several contiguous programmed projects on a single route may be acceptable when approved by the Headquarters Landscape Architecture Program. See Chapter 8 – Overview of Project Development and Appendix K – Preparation Guidelines for Project Report for specific information on PRs for roadway projects.

Planting Areas

The limits of planting do not necessarily need to coincide with the limits of adjacent developed properties. Such planting may be done to achieve corridor continuity with adjacent planting, to retain "landscaped freeway" classification, or to accommodate conditions such as the view from the road, the terrain, road alignment, traffic control signs, drainage or as part of a greenhouse gas reduction strategy.

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 PA&ED phase and for evaluation of future maintenance need by the maintenance unit. 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

The design intent statement should be updated during the 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.

New highway planting, roadside rehabilitation, and safety improvement projects do not typically require preparation of an environmental document, and are frequently classified as a categorical exemption (CE) under the California Environmental Quality Act (CEQA) and a categorical exclusion (CE) under the National Environmental Policy Act (NEPA). The landscape architect should consult the district environmental unit to determine which environmental document, if any, is required for the project.

Projects not classified as a categorical exemption/categorical exclusion must include preparation of an environmental document to complete the PA&ED phase of project delivery. The environmental document must be attached to the PR.

The *Standard Environmental Reference* Volume 1, Chapter 30 describes the criteria that a proposed project must meet to be considered categorically excluded under NEPA as well as the preparation and processing of the categorical exclusion 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 is authorized to approve the PR.

Approval of the PR and completion of PA&ED signifies authority to prepare the PS&E and authority to finalize negotiations on the cooperative agreement. A copy of the approved PR should be transmitted to the Headquarters Landscape Architecture Program.

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 Phase

Preliminary Design Preparation and Review

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

Upon 60 percent completion of the preliminary design a review by the district landscape architect should be requested. The district landscape architect must ensure

the project complies with Caltrans' policies and standards discussed in the *Highway Design Manual*, Chapter 900 – Landscape Architecture.

The project landscape architect should request information required to complete the PS&E from the various function units. As functional portions of the project are incorporated into the PS&E package, it should be reviewed for consistency and conformity with the entire submittal.

Design Intent Statement

During development of the PS&E, the district landscape architect should verify that the design intent statement is current and consistent with the PS&E and should verify that copies of the design intent statement are forwarded to district construction, district maintenance, and other pertinent stakeholders.

Plans, Specifications, and Estimate Submittal and Construction Contract Submittal for Advertisement

PS&E submittal to the Headquarters Division of Engineering Services-Office Engineer should follow the procedures listed in the *Ready to List and Construction Contract Award Guide (RTL Guide)*.

Construction Contract Submittal for Advertisement – Water Conservation Requirements for Planting Work

Based on the recurring drought in California, and in anticipation of future water shortages, Caltrans has established the following standard water conservation practices that apply to all projects at all times:

1. Comply with the water conservation practices required by *Deputy Directive DD-13 – Water Conservation* and the Model Water Efficiency Landscape Ordinance, even when there are no restrictions on water use.
2. Limit planting to native and non-native plant material appropriate for the project microclimate so that no additional water beyond natural rainfall is required for healthy plant survival after the plant establishment period.
3. Limit supplemental water provided by irrigation to non-potable, unless not practical.

In times of drought, additional water conservation actions will be required. Caltrans has established the following water conservation levels to categorize the actions triggered by the severity of the water shortage.

Figure 29-3 Water Conservation Categories and Required Actions

Conservation Category	Condition That Triggers Category	Actions Required by District Office Engineer or Designer
Voluntary Conservation	At least one of the following actions occur: 1. Local water agency requires water conservation 2. State requires voluntary conservation statewide.	Consider delaying the planting work in projects until the voluntary conservation requirements are lifted. Consider using nonpotable water truck watering sources. Submit written documentation of water availability with the submittal of the contract for advertisement.
Mandatory Conservation	At least one of the following actions occur: 1. Local water agency requires mandatory conservation 2. State requires mandatory conservation statewide.	Do not advertise or award projects that include non-essential planting work irrigated with potable water.
Severe Drinking Water Emergency	State Water Resources Control Board-Division of Drinking Water declares a local drinking water emergency due to an acute drinking water shortage.	Do not advertise or award projects that include any planting work irrigated with potable water.

Construction Phase

The project landscape architect should include the design intent statement, quantity calculations and project documents in the resident engineer (RE) file for distribution to construction.

The district landscape architect, project landscape architect, or functional units should be prepared to support and answer any technical questions from the district construction unit 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, the construction resident engineer should consult with the district landscape architect or project landscape architect. The landscape architect should review the proposed contract change order with regard to its impact upon roadside facilities, stormwater pollution prevention, erosion control, and other issues and provide the construction resident engineer with immediate support.

In an effort to continue to improve the quality and maintainability of highway planting projects, the project manager should schedule three field reviews as appropriate during construction. Reviews should include the resident engineer,

project landscape architect, landscape specialist and either the maintenance manager or the 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.

Just prior to construction contract acceptance, the resident engineer requests assistance from a landscape maintenance representative and the project landscape architect to develop a "punch list" of items that do not meet Caltrans' requirements. Particular attention should be paid to compliance with water conservation requirements, including proper irrigation controller programming and operation and compliance with stormwater permit requirements, which, if not rectified, could result in additional maintenance to meet regional water quality control board requirements.

Transfer to Maintenance

Upon Caltrans' acceptance of a new highway planting or roadside rehabilitation project, the district landscape architect and project landscape architect meet with district field maintenance for a project review. The project landscape architect must provide the district field maintenance with a file that includes product and equipment data, names and phone numbers of contact persons, and the design intent statement.

SECTION 3 Safety Roadside Rest Areas

ARTICLE 1 Definitions, General Policy, and Programs

Definitions

Safety roadside rest area – a facility that improves safety for the traveling public by allowing travelers to safely stop, rest, and manage their travel needs. Safety roadside rest areas provide an excellent opportunity for Caltrans to communicate with travelers.

Wayside stop – a facility designated by Caltrans, outside of the highway right-of-way, that provides products and services to the public, 24-hour access to public restrooms, and parking for automobiles and heavy trucks allowing for travelers to safely stop and rest.

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 wayside stops, truck stops, commercial services, and vista points, the safety roadside rest area system provides public stopping opportunities where they are most needed, usually between large towns and at entrances to major metropolitan areas. To minimize the need for recurring maintenance activities, safety roadside rest areas are designed to support heavy use over many years.

Context Appropriateness

Safety roadside rest areas are unique pedestrian environments on the State Highway System where travelers (many of whom are unfamiliar with the local area) may 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. Safety roadside rest areas provide travelers with a lasting impression of California, and that impression should be positive.

Safety roadside rest areas provide an opportunity for local communities, businesses, and public agencies (including those that manage tourism and recreational resources)

to intercept travelers and provide information and communication links. In many areas of the State, safety roadside rest areas can have a role in contributing to local economic development strategies.

The ideal safety roadside rest area site balances preservation of scenic, environmental, and cultural features with mobility, safety, and maintainability design requirements. Environmentally sensitive areas and their features may, in some instances, be suitable sites, but they should be protected from degradation by construction, maintenance, and public use.

Each safety roadside 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 demand a high level of attention to maintaining contextual integrity through appropriate design details. The PDT must consider the existing natural and social context to develop an appropriate expression of its unique qualities for use in safety roadside rest area design.

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

Use of Safety Roadside Rest Areas

Title 21 California Code of Regulations, Division 2, Chapter 20, regulates the use of safety roadside 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 non-commercial uses and activities may be considered when required by statute or requested in writing and approved by the Headquarters Landscape Architecture Program.

Statutory Requirements

The *California Streets and Highways Code*, Section 218 through Section 226.5, directs the California Transportation Commission (CTC) and Caltrans to plan, design, construct, and maintain a system of safety roadside rest areas on the State Highway

System, with associated costs paid from the State Highway Account. The *California Streets and Highways Code* also describes system planning criteria:

- In combination with other stopping opportunities, safety roadside rest areas should be located where they are most needed and approximately 30 minutes apart.
- Safety roadside 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 safety roadside rest areas may be planned at strategic locations where needed.
- Caltrans shall design only those safety roadside 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.
- Safety roadside 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.
- Safety roadside rest areas shall not contain camping or recreational facilities.
- Caltrans must post, to the extent feasible, missing children information provided by the California Department of Justice and human trafficking posters.
- Caltrans shall authorize the placement of vending machines in a manner consistent with federal requirements. Caltrans will determine which safety roadside rest areas are suitable for vending machines, determine the vending machine locations within each safety roadside rest area, and approve the design and construction of any required vending structures.
- Caltrans may accept grants and financial or other assistance for safety roadside rest areas.

The *California Streets and Highways Code*, Section 226.5, provides for a joint economic development demonstration project for up to six new safety roadside rest areas.

- Caltrans may construct, operate, and maintain up to six new safety roadside rest area units as a joint economic development demonstration project, subject to the following:
  - There must be a public need for the safety roadside 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 safety roadside rest area facilities.
- Law enforcement responsibilities are the same as for the State Highway System.
- A public hearing must be held for each project to allow the local community and other interested parties to comment.
- Any funds 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, refer to *Design Information Bulletin 82* – Pedestrian Accessibility Guidelines for Highway Projects.

State Energy and Environmental Design Requirements

To comply with *Executive Order B-18-12*, Caltrans shall perform all of the following:

- take all cost-effective measures as described in the State of California Green Building Action Plan to build and operate the most energy-efficient and resource-efficient buildings.
- incorporate building commissioning to facilitate and improve building system operation.
- comply with applicable California Green Building Standard's (CALGreen) Tier 1 measures for new or major renovated State buildings under 10,000 square feet.
- obtain "Leadership in Energy and Environmental Design (LEED) Silver" or higher rating for new or major renovated State buildings larger than 10,000 square feet. The United States Green Building Council developed the LEED rating system to advance energy and material efficiency and sustainability.
- design and construct new or major renovated State buildings to exceed the applicable version of *Title 24 California Code of Regulations*, Part 6 by 15 percent.
- reduce water use 20 percent as measured against a 2010 baseline and strive for greater efficiencies.

- utilize alternate sources of water whenever cost effective for buildings and landscape.

The *Executive Order* and *Green Building Action Plan* are located at the *California Green Buildings* website.

Caltrans is committed to the preservation and enhancement of California's resources and assets by minimizing the environmental impacts of projects. To help achieve this goal, all new and renovated safety roadside rest area buildings will be designed, constructed, and operated at a "LEED Silver" or higher rating, using the applicable version of LEED.

Project LEED and CALGreen components are identified through a collaborative effort between the Headquarters Division of Engineering Services and the design unit working with the project development team.

See Article 3 "Project Development Process" in this section for specific requirements in each phase of the project development process.

Safety Roadside Rest Area Master Plan

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

The *Safety Roadside Rest Area Master Plan* includes existing units and highway segments identified as needing new rest area services. It also identifies parking capacity expansion needs at existing units to meet current and anticipated 20-year demands.

The Headquarters Landscape Architecture Program will consider recommendations for changes to the master plan upon request by the District Director. Districts should consider the requests of public agencies (including federal, State, and local agencies; tribal governments; or non-federally-recognized tribes). The Headquarters Landscape Architecture Program coordinates Caltrans and CTC concurrence for all master plan revisions.

Safety Roadside Rest Area Rehabilitation Program

The purpose of the SHOPP Safety Roadside Rest Area Rehabilitation Program is to improve public health, safety, security, accessibility, and operational maintainability of existing safety roadside rest areas. Examples of improvements include operational improvements; capacity expansion (parking and comfort stations); rehabilitation or replacement of exiting structural elements; compliance with the California Department of Industrial Relations-Division of Occupational Safety and Health, the *Americans with Disabilities Act of1990* (ADA), or sewage and drinking water quality mandates; electrical system upgrades; and upgrades to current ramp standards.

New Safety Roadside Rest Areas Program

The purpose of the SHOPP New Safety Roadside Rest Areas Program is to provide for new, appropriately spaced stopping opportunities as an integral part of the State Highway System where travelers may stop, rest, relax, obtain travel information, and return to the highway more alert and driving safely. All land, structures, landscaping, utilities and other facilities such as: restrooms, California Highway Patrol (CHP) office and storage space, tables, drinking fountains, telephones, motorist information, and trash receptacles are included. Partnerships and joint development on or off the State Highway System for safety roadside rest areas or other stopping opportunities with the private sector or public agencies are included.

The priority of the New Safety Roadside Rest Areas Program is to provide for additional safety roadside rest areas and other stopping opportunities on the Interstate System where there are gaps of more than 100 miles between existing safety roadside rest areas, where the closest safety roadside rest areas need additional parking capacity, and where unauthorized roadside parking is frequently observed. High-priority needs include additional safety roadside 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.

Wayside Stop Demonstration Program

A wayside stop is defined as a facility near a highway but not within the highway right-of-way, designated by Caltrans as meeting the eligibility criteria of this program, that provides products and services to the public, 24-hour access to public restrooms, and parking for automobiles and heavy trucks. The Wayside Stop Demonstration Program conforms to the Interstate Oasis Program FHWA criteria.

In partnership with the private sector or public sector, wayside stop facilities that may alleviate overcrowding at nearby existing safety roadside rest areas may be developed outside the State highway right-of-way. Wayside stop facilities provide an alternative to expanding parking at existing safety roadside rest areas.

The Wayside Stop Demonstration Program has been established to enhance safety and convenience for highway users by designating and providing signage to certain facilities off the freeway at six locations that will provide increased opportunities to stop for rest, use restroom facilities, and obtain basic services.

Caltrans may enter into an agreement with the operators of commercial or governmental facilities located along the State Highway System to designate those facilities as wayside stops, and to provide highway signage. One or more entities may participate jointly in the agreement.

Each wayside stop should consist of facilities that are clustered in a single, easily identifiable location. Unless they serve a single direction of highway traffic, wayside stops should not be located closer than 20 miles apart. In cases where no single business meets all of the eligibility criteria, a combination of two or more businesses may qualify as a wayside stop if they are located immediately adjacent to each other, are easily accessible on foot from each other's parking lots by pedestrian walkways that are compliant with the *Americans with Disabilities Act of 1990*, and do not require crossing a public highway.

The wayside stop shall comply with laws concerning the provision of public accommodation without regard to race, religion, color, sex, national origin, or disability.

To qualify for wayside stop designation and highway signage, the facility must meet the following criteria:

- The facility must be located in an area designated by Caltrans as deficient in safety roadside rest area services. The location should correspond to a new rest area or stopping opportunity need as indicated on the current *Safety Roadside Rest Area Master Plan* or should supplement the capacity of an existing safety roadside rest area that is deficient in parking capacity.
- The facility must provide parking for automobiles and long vehicles (including commercial trucks) sufficient to meet anticipated demand, modern and sanitary rest rooms, and drinking fountains, at no charge to the public. Parking areas and paths of travel shall be well lit.

- Operators may designate a time limit for free parking, but travelers must be allowed at least 10 hours of free parking.
- The facility must be open and available to the public 24 hours per day, seven days per week, and must comply with the *Americans with Disabilities Act of 1990*.
- The facility shall provide products and services to the public. These products and services should include a public pay telephone; food (vending, snacks, fast food, and/or full service); and fuel, oil, and water for automobiles, trucks, and other motor vehicles. The facility may elect to provide additional products, services or amenities.
- The facility must be within three miles of the highway and shall be reached from a route that an engineering study determines can safely and conveniently accommodate vehicles of the type, size, and weight that would be traveling to the facility, entering and leaving the facility, returning to the highway, and continuing in the original direction of travel.
- The facility must include parking areas and ingress/egress points, that an engineering study determines can safely and efficiently accommodate movements into and out of the site, on-site circulation, and parking by all vehicles, including heavy trucks of the type, size and weight anticipated to use the facility.
- The facility operator must provide written assurance from local law enforcement authorities that the facility will receive adequate police protection.
- The facility operator must provide sufficient maintenance so that all facilities available to the public are clean and usable.
- The facility should be staffed by at least one person 24 hours per day, 365 days per year.

A PR should be prepared that addresses 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.

Signage shall conform to the *California Manual on Uniform Traffic Control Devices (California MUTCD)*. Off-highway directional signs must be in place prior to placement of signs within the operational State right-of-way.

ARTICLE 2 Responsibilities

New and rehabilitated safety roadside rest area projects follow a specialized project development process due to their uniqueness. Districts, Headquarters Division of Engineering Services, and the Headquarters Landscape Architecture Program must work together closely for safety roadside rest area project development. Due to the limited expertise in the design of safety roadside rest areas, including architectural, structural, and site design the Headquarters Division of Engineering Services-Structure Design, Office of Transportation Architecture and the Headquarters Landscape Architecture Program provide design expertise to assist the districts with project delivery.

Headquarters Landscape Architecture Program

Program Manager

The Headquarters Division of Design-Landscape Architecture Program Deputy Division Chief is the program manager for safety roadside rest area projects. The program manager:

- develops, approves, and maintains safety roadside rest area planning policy and guidance for the statewide *Safety Roadside Rest Area Master Plan* and sets priorities for new safety roadside rest areas, safety roadside rest area rehabilitation work, and wayside stops.
- recommends to the SHOPP Manager safety roadside rest area needs and deficiencies, performance objectives, and projects for inclusion in the current *Ten-Year State Highway Operation and Protection Program Plan (SHOPP Plan)* located at the Headquarters *Division of Transportation Programming-State Highway Operation and Protection Program (SHOPP) and Minor Program* website and the biennial SHOPP.
- recommends to the Headquarters Division of Transportation Programming the funding of safety roadside rest area projects by the CTC.
- is responsible for the development and consistent application of policy, procedures, practices, and design standards.
- advises the districts on project identification and development, prioritization of candidate projects, and provides technical expertise.
- collaborates with the district to resolve programming, funding, and design issues.
- provides training related to the project development and design of safety roadside rest areas.

Program Advisor

The program advisor:

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

Headquarters Landscape Architecture Program Roadside Facilities Coordinator

The roadside facilities coordinator:

- recommends and maintains safety roadside rest area design policies, guidelines, procedures, and standards.
- maintains statewide liaison with internal and external stakeholders.
- provides and distributes updated safety roadside rest area policies to the district safety roadside rest area coordinators.
- monitors compliance with the *Americans with Disabilities Act of 1990* and *Design Information Bulletin 82* – Pedestrian Accessibility Guidelines for Highway Projects.
- oversees the development and updating of the statewide *Safety Roadside Rest Area Master Plan* and guides the districts in identifying current *Ten-Year State Highway Operation and Protection Program Plan (SHOPP Plan)* needs.

Headquarters Landscape Architecture Program District Coordinators

The district coordinators:

- assist the district by providing guidance and training.
- assist the PDT to ensure an appropriate, context-sensitive approach to the planning and design of safety roadside rest area sites, architecture, and site furnishings.
- review conceptual site plan, schematic site plan, architectural building concepts, and architectural schematic building plans.
- facilitate the project planning and development processes through review, liaison, and coordination.
- assist the district landscape architect and PDT members by providing guidance regarding policies, procedures, practices, and standards in cooperation with the Headquarters Landscape Architecture Program Roadside Facilities Coordinator.

Headquarters Division of Engineering Services-Structure Design, Office of Transportation Architecture

Architect

The architect:

- in collaboration with the district landscape architect, is responsible for the development of architectural building design and building aesthetics.
- as a PDT member, assists the district landscape architect with the development of site plans for new safety roadside rest areas and rehabilitated safety roadside rest areas that include new architecture, and with the modification of existing pedestrian facilities.
- 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 in collaboration with the district landscape architect on aesthetic and site planning aspects, and based on the district's aesthetic recommendations.
- coordinates the work of building design disciplines within the Office of Transportation Architecture and Office of Electrical, Mechanical, Water and Wastewater Engineering in the Headquarters Division of Engineering Services-Structure Design 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.
- provides design standards (including CALGreen requirements) and coordinates the Headquarters Division of Engineering Services review and oversight of work performed by consultants.
- acts as the technical resource for *Design Information Bulletin 82* – Pedestrian Accessibility Guidelines for Highway Projects, for architectural building work.
- for the Headquarters Division of Engineering Services portions of the PS&E, is responsible for review and approval of facility design in conformance with *Design Information Bulletin 82* – Pedestrian Accessibility Guidelines for Highway Projects, and for coordinating the State Fire Marshal review for fire code compliance.

The architect will also 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.
- submit completed LEED templates to the United States Green Building Council, when applicable.

- ensure that CALGreen requirements are met.

The evaluation and LEED components that are part of project scope of work must be documented in the project credit checklist, the Owner's Project Requirements, and the Basis of Design. The appropriate LEED documents shall be attached to the PID and the PR.

Headquarters Division of Engineering Services Leadership in Energy and Environmental Design Project Reviewer

The Headquarters Division of Engineering Services LEED project reviewer, independent of the PDT:

- reviews project documentation for each LEED project.
- determines if the project achieved the credits pursued at each major milestone.

District

District Director

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

District Landscape Architect

The district landscape architect:

- identifies district safety roadside rest area needs, recommends projects, and develops site plans for new and rehabilitated safety roadside rest areas, including architecture, pedestrian facilities, and landscaping.
- as a PDT member, assists the architect with the architecture, layout, design, and aesthetics of individual safety roadside rest areas.
- develops the conceptual site plan and schematic site plan.
- assists in the development of the architectural building concepts and architectural schematic building plans.
- acts as the technical resource for questions regarding *Design Information Bulletin 82* – Pedestrian Accessibility Guidelines for Highway Projects, for site pedestrian facilities (excluding building work) for safety roadside rest areas.
- coordinates the review of site pedestrian facilities in conformance with *Design Information Bulletin 82* – Pedestrian Accessibility Guidelines for Highway Projects.

Project Manager

The project manager is responsible for managing a project's scope, cost, and delivery schedule. The project manager communicates frequently with the district landscape architect, architect, Headquarters Landscape Architecture Program Roadside Facilities Coordinator, district maintenance, district project engineer (PE), and other functional units.

Project Engineer

The district project engineer is responsible for developing the civil engineering portion of the district PS&E package. The project engineer works closely with the district landscape architect, architect, and the PDT to coordinate the various project aspects.

District Safety Roadside Rest Area Coordinator

The district safety roadside rest area coordinator:

- serves as the district's focal point for coordinating safety roadside rest area needs planning, project programming, traveler services (including vending and public information), maintenance, and partnerships with other public agencies and the private sector.
- provides liaison between Headquarters and the district, coordinating safety roadside rest area issues across various program functional units (planning, design, environmental, construction, operations, and maintenance).

The district safety roadside 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 safety roadside rest area system coordinators is located at the Headquarters *Landscape Architecture Program-Safety Roadside Rest Area System* website.

ARTICLE 3 Project Development Process

General

This article describes aspects of the project development process that are unique to safety roadside rest area projects.

To be eligible for programming, new safety roadside rest areas must be identified in the current *Safety Roadside Rest Area Master Plan*.

Safety Roadside Rest Area Partnership Projects

Joint economic development demonstration projects are managed and guided by the Headquarters Landscape Architecture Program, with implementation by the districts. Proposals for joint economic development of new safety roadside rest areas by private partners or other public agencies should be coordinated with the Headquarters Landscape Architecture Program. Funding for joint economic development demonstration projects requires approval from the SHOPP Executive Committee.

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

A viable safety roadside 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 a standard public safety roadside rest area facility, including, but not limited to, ramps, access roads, parking, utilities, architecture, landscape, lighting, signs, and fences. In conjunction with traditional safety roadside rest area facilities, the partner may fund, construct, maintain, and operate traveler-related commercial facilities, subject to State and federal 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 funds. The partner may lease the land necessary for traveler-related commercial facilities from Caltrans or may construct those facilities on abutting land owned by others.

FHWA regulations and the *California Code of Regulations* restrict or prohibit most commercial activities within controlled-access Federal-aid highways. Commercialized safety roadside 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 safety roadside rest area or major safety roadside rest area rehabilitation, the district must document the type and adequacy (capacity, quality, and reliability) of potable water, electrical power, and wastewater disposal. Commercial or municipal water and wastewater facilities should be utilized where available. The district should analyze and document the feasibility and cost of developing, maintaining, and operating on-site wells and wastewater disposal 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 the Headquarters Division of Engineering Services. The district should determine to what extent the proposed site could 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 as well as 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 safety roadside rest areas and safety roadside rest area rehabilitation projects. These include development of program/scope, base mapping, site inventory (topography, vegetation, hydrology, drainage, views, and wind), site analysis, consideration of alternatives, sustainability, and design synthesis.

Site designs should address the potential for future expansion, physical site constraints/capacity, and the appropriate protection or incorporation of site qualities.

The district landscape architect collaborates with the architect and district maintenance to provide the PDT with a recommendation regarding rehabilitation or replacement of comfort stations. Due to age and condition of comfort stations may

not be practical or cost effective to rehabilitate. When scoping each safety roadside rest area rehabilitation project, the cost and advantages of demolishing and replacing the existing comfort stations versus rehabilitation should be analyzed. The age, condition, materials, aesthetic qualities, before and after fixture capacity, and design requirements of the existing structure should be considered.

The Headquarters Division of Engineering Services will provide advance planning studies on building costs prior to project programming upon request by the district PDT.

Leadership in Energy and Environmental Design and California Green Building Standards Code Analysis

The PDT uses the LEED Credit Checklist and CALGreen requirements to evaluate LEED credit areas, using the applicable version of LEED.

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

Contact the Headquarters Division of Engineering Services-Structure Design, Office of Transportation Architecture for a copy of the LEED Credit Checklist, CALGreen requirements, and the *LEED Roles and Responsibilities for Caltrans Groups/Disciplines.*

Stakeholder Involvement

The PDT identifies, contacts, and engages external safety roadside rest area stakeholders (local communities, chambers of commerce, historical societies, planning and land use professionals, tourism and recreational agencies, Native American tribes, and trucking and goods movement associations) to assist in assessing the natural, cultural, and aesthetic context of the project; participate in the selection of safety roadside 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 safety roadside rest area enhancements through other funding sources.

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, the LEED Owner's Project Requirements, the LEED Basis of Design, and PR LEED Credit Checklist. Charrettes can accelerate the design and delivery 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 include the district landscape architect; project landscape architect; architect; Headquarters Division of Engineering Services design engineers; project engineer; project manager; representation from maintenance, environmental, and right-of-way; Headquarters Landscape Architecture Program Roadside Facilities Coordinator; Headquarters Landscape Architecture Program district coordinator; external stakeholders such as: CHP, Bureau of Land Management, United States Forest Service, blind vendors, and others as appropriate to the project.

The Headquarters Landscape Architecture Program, and the Office of Transportation Architecture and Office of Electrical, Mechanical, Water, and Wastewater Engineering within the Headquarters Division of Engineering Services-Structure Design provide guidance on policy and standards issues and LEED considerations, and share ideas from a statewide perspective.

Project Initiation Phase

At the scoping stage for a new safety roadside rest area and safety roadside rest area rehabilitation projects, a PID is required for programming. A conceptual site plan must be developed, typically a bubble diagram that illustrates the following elements at their approximate location and scale: right-of-way, vehicular and pedestrian circulation patterns, existing and proposed structures, and existing underground and overhead utilities.

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 describe unmet needs.

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

Architectural building concepts, including diagrammatic floor plans (bubble diagrams), circulation patterns, and elevation sketches are prepared by the architect for inclusion in the PID. Architectural style, elevation, and construction detail concepts should be derived by analyzing local and regional architecture, historic and cultural context, and the natural environment. For safety roadside rest area rehabilitation projects that replace or significantly modify the existing architecture, the architect should develop a minimum of three contextually appropriate architectural building concepts for consideration.

The PDT shall incorporate CALGreen requirements and establish goals for LEED elements of the project regarding indoor and site environmental concerns, energy use, equipment efficiency, and building occupancy and management. A draft Owner's Project Requirements and Basis of Design and a completed LEED Credit Checklist shall be attached to the PID. The Owner's Project Requirements, Basis of Design, and Checklist shall be reviewed by the Headquarters Division of Engineering Services LEED Project Reviewer prior to PID approval.

The conceptual site plan and recommended architectural building concepts shall be reviewed with the Headquarters Landscape Architecture Program Roadside Facilities Coordinator prior to PID approval. PIDs for safety roadside rest area projects 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 NEPA and/or CEQA compliance, and potential mitigation measures and their estimated costs. Refer to Appendix L – Preparation Guidelines for Project Study Report for general information on PID requirements.

Project Approval and Environmental Documentation Phase

A PR is required for all new safety roadside rest areas, safety roadside rest area rehabilitations, and wayside stop demonstration projects. The PR refines the project purpose and scope described in the PID.

To facilitate Headquarters Division of Engineering Services building design, a building site data submittal must be completed by the district PDT and then submitted to the architect.

A schematic site plan refines the conceptual site plan (bubble diagram) and must be prepared for all new safety roadside rest area projects and safety roadside 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 manually drafted and must be of a scale sufficient to show the location and arrangement of site elements, including buildings, parking areas, walkways, benches, tables, picnic structures, lighting fixtures, potable water faucets, trash receptacles, dumpster enclosures, kiosks, trees, and lawn areas (generally 1″=20′).

The schematic site plan should be prepared by the district landscape architect 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 shall include floor plans and a view of each elevation.

A completed LEED Owner's Project Requirements, Basis of Design, LEED Credit Checklist, and a list of CALGreen features shall be attached to the PR. The documents shall be reviewed by the Headquarters Division of Engineering Services LEED Project Reviewer prior to PR approval.

The schematic site plan and schematic architectural building plans shall be reviewed with the Headquarters Landscape Architecture Program Safety Roadside Rest Area Coordinator and the program manager prior to PR approval.

Refer to Appendix M – Preparation Guidelines for Project Report (Safety Roadside Rest Area) for the PR format, requirements, and instructions for safety roadside rest area and safety roadside rest area rehabilitation projects.

Plans, Specifications, and Estimate Phase

Preliminary Site Plan and Preliminary Building Design

A preliminary site plan refines the schematic site plan and must be finalized before the Office of Transportation Architecture and Office of Electrical, Mechanical, Water, and Wastewater Engineering within the Headquarters Division of Engineering Services-Structure Design can begin their portion of the PS&E. This should occur at or before the 30 percent PS&E stage. At this stage, all site elements and plan dimensions need to be accurately depicted and drafted electronically.

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 submit documentation to the architect as soon as sufficient information is available to complete the necessary calculations.

District Plans, Specifications, and Estimate Development

To facilitate coordination of the combined PS&E package, the district PS&E package is completed concurrently with the Headquarters Division of Engineering Services PS&E. The district is responsible for coordinating and ensuring the consistency of the final, combined PS&E package.

At PS&E, the Owner's Project Requirements and LEED Basis of Design are updated, and the completed LEED Credit Checklist incorporated into the contract documents as a plan sheet. These documents are used to develop the LEED credit templates to be submitted to the United States Green Building Council.

ARTICLE 4 Closure

Emergency or Intermittent Closure

An emergency closure is an unanticipated temporary closure of facilities and temporary suspension of services at a safety roadside 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 safety roadside 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 (a 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 Closure

Permanent closure is the termination of services and facilities at an existing safety roadside rest area unit and the removal of that unit from the *Safety Roadside Rest Area Master Plan*.

Permanent closure, replacement, or relocation of an existing safety roadside 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, and buses) for the safety roadside rest area and adjacent safety roadside 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 safety roadside rest area spacing has been addressed relative to spacing guidelines in the statutes and the *Safety Roadside Rest Area Master Plan*.
- Availability of alternative safe and free parking and restroom opportunities have been addressed.
- Alternatives such as replacement, relocation, and operation by others have been evaluated.
- The FHWA has been provided an opportunity to comment on the proposed closure and identified reimbursement requirements.
- The District Director finds and recommends that safety roadside rest area closure will not reduce traveler safety.
- The Safety Roadside Rest Area Program Manager (Headquarters Division of Design-Landscape Architecture Program Deputy Division Chief) concurs that the safety roadside rest area closure will not significantly impact the safety roadside rest area system and amends the current *Safety Roadside Rest Area Master Plan*.
- The CTC concurs with the action.

Major stakeholders, including the local counties, cities, communities, and other parties should be notified and provided a 30-day opportunity to comment.

Districts should obtain the concurrence of the Safety Roadside Rest Area Program Manager (Headquarters Division of Design-Landscape Architecture Program Deputy Division Chief) prior to approval of the PID or PR.

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

If the Safety Roadside 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 safety roadside 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, California Department of Rehabilitation Business Enterprise Program 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 safety roadside 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.

ARTICLE 5 References

The *Highway Design Manual*, Topic 903 – Safety Roadside Rest Area Standards and Guidelines, describes design standards for new safety roadside rest areas.

The *Maintenance Manual* provides policies and procedures for safety roadside rest area emergency and intermittent closures and for closures due to routine or planned maintenance activities.

The Headquarters 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 PS&E start to final structure PS&E.

The United States Green Building Council *LEED for New Construction Current Version* Reference Guide provides guidance, resources, and information on the process of achieving LEED certification for new or major reconstruction of safety roadside rest areas.

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 safety roadside rest area planning and design.

SECTION 4 Vista Points

ARTICLE 1 General Policy

Purpose of Vista Points

Caltrans recognizes that California's highways traverse areas of scenic beauty and pass by points of visual interest where the traveling public desire to safely pull off the highway to experience the scenic view and take a short break from driving. To satisfy traveler expectations, Caltrans provides vista points at appropriate scenic locations.

A vista point is a roadside facility that permits travelers to safely exit the highway to park, get out of the vehicle, and view a scenic panorama or point of visual interest. Vista points typically include parking areas, sidewalks, and viewing areas, and pedestrian amenities such as benches, interpretive displays, and bicycle parking. In some cases, vista points may also include picnic tables, rest rooms, trash receptacles, and drinking fountains.

General Considerations

Vista points provide travelers with a lasting impression of California's environmental diversity and scenic beauty. Each vista point should reflect and reinforce the aesthetic, scenic, environmental, and cultural features of its surrounding region and should carefully balance preservation of these features with safety, mobility, and maintainability requirements.

Development of new vista points should be considered in the planning and design of all transportation improvement projects. New vista points should be implemented as part of a roadway construction project.

Rehabilitation of an existing vista point may be planned and designed as part of a roadway construction project or as separate stand-alone vista point project.

Vista points may also be integrated into new or existing safety roadside rest areas.

Preservation of Views

As part of providing travelers a place to stop and safely take in a scenic view, the preservation and enhancement of scenic views is a paramount design concern in

designing a vista point. Site infrastructure that detracts from scenic views should be screened or located outside the scenic viewshed. Attractive views may be enhanced and revealed by selectively pruning or removing existing vegetation. Proposed vista point sites where future off-site development or vegetation growth may block scenic views should be avoided.

Scenic views at existing vista points may become obscured or degraded by unforeseen development or vegetation growth outside the right-of-way. Efforts should be made to work with adjacent property owners to reclaim lost views through vegetation pruning or removal of vegetation. When views cannot be restored, the vista point's designation and signage must be removed and the facility designated and signed as a map stop. A map stop provides amenities similar to a vista point but does not feature scenic views.

Americans with Disabilities Act of 1990 Compliance

To be designated a vista point, the site must be paved and provide access conforming to State and federal accessibility requirements (*Americans with Disabilities Act of 1990* and *Design Information Bulletin 82* – Pedestrian Accessibility Guidelines for Highway Projects). Unpaved pullouts located beyond the shoulder are not designated vista points.

Signage Requirements

New vista points must include signage conforming to the *California Manual on Uniform Traffic Control Devices*. Existing facilities designated by signs as scenic overlooks, scenic areas, scenic views, or viewing areas must also conform to the *California Manual on Uniform Traffic Control Devices*. Signage not meeting *California Manual on Uniform Traffic Control Devices* requirements must be replaced as part of adjacent roadway construction projects or as part of normal maintenance.

Vista Point Inventory

Vista points are listed in Caltrans' vista point inventory. Contact the Roadside Facilities Coordinator in the Headquarters Landscape Architecture Program to add a new vista point to the inventory.

ARTICLE 2 Project Development Process

The district landscape architect provides the PDT with recommendations regarding the vista point site location, scenic view orientation, and conceptual site design. Design concepts for vista points should be derived from an analysis of the local and regional setting, the historic and cultural context, and the natural environment.

To ensure stakeholder collaboration in the development of new vista points, the PDT identifies, contacts, and engages external stakeholders (local communities, historical societies, tourism and recreational agencies, and Native American tribes) in assessing the natural, cultural, and aesthetic context of the project area and in the development of amenities such as interpretive displays.

While Caltrans typically holds fee simple ownership of a vista point site, it may be necessary or desirable to construct a vista point on land owned by other State, federal or tribal agencies. Work to obtain right-of-way agreements or easements with other public agencies begins early in the project development process.

During PA&ED, a preliminary site plan is prepared by the district landscape architect depicting the right-of-way, topography, pedestrian circulation, and all existing and proposed site features and amenities for all new and rehabilitation vista point projects. The preliminary site plan must be of a scale sufficient to show the location and arrangement of parking areas, walkways, benches, picnic tables, trash receptacles, interpretive signs, and all other site elements that compose the design. The preliminary site plan must be included in the project report.

The safety and adequacy of ingress and egress to the site, and pedestrian and vehicular circulation within the site, must be demonstrated prior to programming. The proposed site must accommodate the traffic demand without diminishing the site's environmental and scenic qualities. The Headquarters Division of Design is responsible for the design and approval of roadway geometrics.

The district landscape architect is responsible for approving site selection, design concept, and site design for all vista points.

ARTICLE 3 References

Refer to the *Highway Design Manual*, Topic 904 – Vista Point Standards and Guidelines, for a description of vista point standard facilities and design components.

SECTION 5 Park-and-Ride Facilities

ARTICLE 1 General Policy

Purpose of the Park-and-Ride System

Park-and-ride lots are valuable resources that lead to improved performance of the entire transportation system. They provide a location to park vehicles to utilize carpools and access bus and rail services or bikeways, thereby taking vehicles off of local streets and the State Highway System. Planning, constructing, and maintaining a network of well-placed park-and-ride lots is an important element of an effective multi-modal transportation system. The goals of a network of park-and-ride lots include, but are not limited to, increasing the mobility options of travelers, increasing person throughput on the system, decreasing the number of vehicle trips, decreasing greenhouse gas and air pollution associated with transportation, and decreasing congestion on the system.

Use of Park-and-Ride Lots

The *California Vehicle Code*, Section 22518, regulates the use of fringe and transportation corridor parking facilities constructed, maintained, or operated by Caltrans. Fringe parking is an area for parking located on a commuter corridor, outside the central business district, and most often used by suburban residents who work or shop downtown.

Park-and-ride facilities shall be used only by persons using a bicycle or public transit, or engaged in ridesharing, including, but not limited to, carpools or vanpools. No person shall park any vehicle 30 feet or more in length or engage in loitering, camping, vending, or any other commercial activity, on any fringe or transportation corridor parking facility.

Statutory Requirements

Park-and-ride facilities must be considered for inclusion on all major transportation construction projects that include, but are not limited to, new freeways, interchange modifications, lane additions, transit facilities, and high-occupancy vehicle (HOV) lanes. It is important to consider park-and-ride facility needs before setting right-of-way lines. The district park-and-ride coordinator must be consulted as to the appropriateness of including park-and-ride facilities and for assistance in

documenting compliance with the legal requirements in the project initiation and project approval documents. Justification is required for proposals that are contrary to the park-and-ride coordinator's recommendations. The *California Streets and Highways Code*, Section 146.5, regulates park-and-ride development as follows:

a. The department may construct, maintain, and operate fringe and transportation corridor parking facilities along the state highway system when those facilities would reduce motor vehicle traffic congestion or improve highway safety. Those facilities may include child care projects that are part of an overall traffic reduction plan. For purposes of this code, those facilities are part of the state highway, and the department shall acquire the right-of-way necessary for those facilities in accordance with all of the laws and procedures applicable to other state highway projects.
b. The department may enter into agreements with other public agencies for the joint financing of fringe and transportation corridor parking facilities. The rights and obligations of the department and other public agencies with respect to those facilities shall be determined by agreement.
c. Fringe and transportation corridor parking facilities estimated to cost two hundred fifty thousand dollars ($250,000) or more and located in an urbanized area shall be limited to those facilities included by transportation planning agencies in a regional transportation improvement program prepared pursuant to Section 14527 of the Government Code. Not more than two million dollars ($2,000,000) of the state funds appropriated by the Legislature each year for state highway construction may be used for the purpose of constructing those facilities. In addition, for projects estimated to cost thirty thousand dollars ($30,000) or more, the state funds may be used only to match federal or local funds, or both.
d. It is the intent of the Legislature to allow the department to make available space in underutilized park and ride lots for child care purposes when linked to an overall traffic reduction plan. It is not the intent of the Legislature for the department to enter into the operation of those child care projects.

State and Federal Accessibility Requirements

Park-and-ride lots are public facilities used by pedestrians, including, but not limited to, parking areas, sidewalks, curb cuts, curb ramps, and telephones, and must conform to State and federal accessibility requirements. For detailed information regarding the review process for pedestrian facilities on transportation projects, refer to *Design Information Bulletin 82* – Pedestrian Accessibility Guidelines for Highway Projects.

Park-and-Ride Lease Program

In partnership with the private sector, park-and-ride facilities may be developed outside the right-of-way of controlled-access highways. Caltrans may enter into agreements and leases with private land owners for use of existing parking facilities such as shopping centers and church parking lots, or to develop parking facilities for the park-and-ride lease program.

Refer to the *Right of Way Manual*, Chapter 11 "Property Management," Section 11.15.06.00 "Park and ride Facility Leases," for the procedure for Caltrans to enter into park-and-ride agreements and leases.

ARTICLE 2 References

The *Highway Design Manual*, Topic 904 – Park and Ride Standards and Guidelines, describes design standards for park-and-ride facilities.

The *Maintenance Manual* provides policies and procedures for maintenance of park-and-ride lots.

The American Association of State Highway and Transportation Officials *Guide for Park-and-Ride Facilities* provides useful guidance for park-and-ride facility planning and design.

SECTION 6 Aesthetics

General

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

Aesthetic Considerations

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

- New highways are located such that the alignments and appurtenances will be integrated into their surroundings, preserving or enhancing the natural and constructed environment to maintain contextual integrity. If applicable, the new highway incorporates scenic vistas. Aesthetic features such as natural slopes, rock outcroppings, and 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 are designed to 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.
- Slopes are rounded to blend with the surrounding topography.
- Provide wide medians, independent roadways, or separated grade and profile elevations on multi-lane facilities, to 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, stormwater treatment best management practices such as bioswales, infiltration, or sediment basins are sited and shaped to conform to the surrounding site conditions and terrain.
- Include aesthetic features to integrate transportation improvements with their surroundings, including special treatment for bridges, median barriers, walls, ground cover materials, and pavement.
- Selectively thin or remove existing vegetation such as trees or large shrubs to open up scenic vistas and provide a natural looking boundary between vegetated and cleared areas. Vegetation removal for aesthetic purposes requires concurrence of the district landscape architect and input from the landowner and the district environmental unit.

- Protect desirable vegetation such as: trees, specimen plants, diminishing native species, or historical plantings wherever possible. Destruction of desirable vegetation is avoided if possible, or minimized.
- Use project materials that reflect the character of the area.
- 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, including bridges, overhead sign structures, noise barriers, retaining walls, traffic barriers, and paving.
- Develop corridor design themes with consistent form, line, color, material, and texture.
- Develop aesthetic treatments for wall structures in accordance with *Design Information Bulletin 88* – Wall Structure Aesthetic Guidelines.

SECTION 7 Blue Star Memorial Highways

ARTICLE 1 Purpose and General Policy

Purpose of Blue Star Memorial Highways

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 Program. California Garden Clubs, Inc. accepted the program in 1947 when the California State Legislature designated Highway 40 (now Route 80) and Highway 99 as Blue Star Memorial Highways.

General Policy

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

ARTICLE 2 Responsibilities

Headquarters

The Headquarters Landscape Architecture Program coordinates the Blue Star Memorial Highway program. The Headquarters Division of Research, Innovation and System Information Office of Highway System Information and Performance, maintains a log of designated highway segments. This log is located at the Headquarters *Landscape Architecture Program-Blue Star Memorial Highways* website.

The Division of Legislative Affairs assists the California Garden Clubs, Inc. with preparation of draft legislative resolutions.

District

The district:

- approves the location proposed for a marker and assures it is within a designated segment of highway. If the marker is located within an easement, the district is responsible for coordinating with the owner of record.

- assumes the administrative costs associated with the project, including permit processing and, if required, staff assistance and traffic control.

Because these markers designate memorial highways authorized by legislative resolutions, the district does not charge a fee for the required encroachment permits.

Permittee

The California Garden Clubs, Inc. is responsible for initiating and sponsoring legislative resolutions for Blue Star Memorial Highways through their local legislators.

The permittee:

- assumes 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.
- restores, replaces, or removes markers that are vandalized or accidentally damaged.

ARTICLE 3 Guidelines

Location of Markers

The following guidelines govern the placement of Blue Star Memorial Highway markers:

- Markers may only be erected on highway segments that the California State Legislature has designated as Blue Star Memorial Highways.
- On designated highway segments with safety roadside rest areas, markers should be placed in safety roadside rest areas.
- On designated highway segments without safety roadside rest areas, markers may be placed at vista points, historical sites, or other appropriate areas approved by the district.
- The district works with the California Garden Clubs, Inc. to identify an appropriate site, determine if planting is desirable, and coordinate the project. Features such as paving, benches, or signs will not be permitted as part of a marker site.
- 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 performs litter pickup and other minor maintenance activities required in the right-of-way adjacent to the markers.

The permittee is responsible for maintaining the integrity of the marker. If a marker is vandalized or accidentally damaged, the district will consult with the permittee concerning its restoration, replacement, or removal.

Dedication Ceremony

The California Garden Clubs, Inc. may conduct a dedication ceremony at the marker installation site. A district representative attends this ceremony.

SECTION 8 Scenic Highways and Byways

ARTICLE 1 General Policy and Program

General

Many State highways are located in areas of outstanding natural beauty. California's Scenic Highway Program was created by the California State Legislature in 1963. Its purpose is to protect and enhance the natural scenic beauty of California highways and adjacent corridors through special conservation treatment. The State laws governing the Scenic Highway Program are found in the *California Streets and Highways Code*, Section 260 through Section 263.

A highway may be officially designated as scenic depending upon how much natural landscape is seen by travelers, the scenic quality of the landscape, and the extent to which development intrudes upon the traveler's enjoyment of the view.

To be eligible for designation, a highway segment must be included in the *California Streets and Highways Code*, Section 263. An official list of highways "eligible" for designation as scenic highways and those already "officially designated" as scenic highways is located at the Headquarters *Landscape Architecture Program-Scenic Highways* website.

The status of a proposed State scenic highway changes from "eligible" to "officially designated" when the local governing body applies to Caltrans for scenic highway approval, adopts a Corridor Protection Program, and receives notification that the highway has been officially designated a scenic highway.

Corridor Protection Program

To nominate an eligible scenic highway for official designation, a city or county must identify and define the highway's scenic corridor. Scenic corridors consist of land visible from the highway, and is comprised primarily of scenic and natural features. Topography, vegetation, viewing distance, and/or jurisdictional lines determine the corridor boundaries. The city or county must adopt ordinances, zoning, and/or planning policies that preserve the scenic quality of the corridor or document that such regulations exist in local codes. The ordinances or policies should contain sufficient detail to avoid broad interpretation and effectively maintain the scenic

character of the corridor. These ordinances and/or policies make up the Corridor Protection Program.

The Corridor Protection Program must include five legislatively required elements:

1. Regulation of land use and density of development
2. Detailed land and site planning
3. Control of outdoor advertising
4. Careful attention to and control of earthmoving and landscaping
5. The design and appearance of structures and equipment

Public participation in developing these elements helps to assure popular support.

ARTICLE 2 Designation and Design Considerations

The Official Designation Process

To nominate an eligible scenic highway for official designation, contact the Caltrans district scenic highway coordinator. A coordinator list is located at the Headquarters *Landscape Architecture Program-Scenic Highways* website.

The government entities with jurisdiction over lands adjacent to the highway must take the following steps:

1. Conduct a visual assessment of the route to determine if it meets current scenic highway criteria and to what extent, if any, development has intruded on the scenic views.
2. Submit a scenic highway proposal to the district scenic highway coordinator. The proposal package should include a letter of intent by the local governing body, maps showing the scenic corridor and existing zoning, a map overlay of development in the corridor, a narrative description of the scenic elements, and clear delineation and labeling of all city, county, and public land borders. The district and State scenic highway coordinators review the proposal and, if it is determined that the corridor meets the scenic criteria, the applicant proceeds to the next step. If the route fails this review, it is not advisable to continue seeking official designation.

3. Prepare and adopt a Corridor Protection Program. The district and State scenic highway coordinators review the corridor protection program. If it is determined that the program meets the legislative standards, a recommendation to designate the highway as scenic is forwarded to Caltrans Director.

Adding State Highways to the Scenic Highway System

A city or county may propose adding routes with outstanding scenic elements to the list of eligible State highways. However, additions can only be made through legislative action. Before consideration of a new route, consult the district scenic highway coordinator to ensure that the proposed route qualifies.

County Roads as Part of the Scenic Highway System

Although there is no official list of county highways eligible for scenic designation, county highways that have outstanding scenic qualities are considered eligible and do not require legislation. To receive official designation, the county must follow the same process required for official designation of State scenic highways.

Scenic Highway Identification

The California poppy serves as the logo for the Scenic Highway Program. Caltrans places signs with this logo along officially designated routes.

Scenic Highway Program Funding

There are no special State funding sources for preparation of scenic highway nominations. However, interested cities and counties can apply to Caltrans for Community Based Planning Grants for this purpose. More information is available at the Headquarters *Division of Transportation Planning* website.

Widening a Scenic Highway

While widening of scenic highways is allowed, Caltrans works with appropriate agencies to ensure protection of scenic corridors to the maximum extent feasible. Caltrans identifies impacts to scenic corridors (including degradation and obstruction of scenic views) as an integral part of its project planning, project development, and maintenance operations.

Official Designation Does not Preclude Development

An effective Corridor Protection Program ensures that activities within the scenic corridor are compatible with scenic resource protection and consistent with community values while still allowing appropriate development.

Revoking a Scenic Highway Designation

The most critical element of the Scenic Highway Program is implementation and local enforcement of the Corridor Protection Program. Caltrans performs a compliance review of scenic highways every five years, or more often if appropriate. Revocation of a scenic highway designation can occur if Caltrans determines that the Corridor Protection Program or the scenic quality of the corridor is no longer in compliance. A city or county may request revocation if it no longer wishes to be part of the program.

Scenic Highway Designation Benefits

Official designation requires a local governing body to enact a Corridor Protection Program that protects and enhances scenic resources along the highway. A Corridor Protection Program, properly enforced by the locals can:

- protect the scenic corridor from encroachment of incompatible land uses such as junkyards, dumps, concrete plants, and gravel pits.
- mitigate activities within the corridor that detract from its scenic quality by proper siting, landscaping or screening.
- prohibit billboards and regulate on-site signs so that they do not detract from scenic views.
- make development more compatible with the environment and in harmony with the surroundings.
- regulate grading to prevent erosion and cause minimal alteration of existing contours and to preserve important vegetative features along the highway.
- preserve views of hillsides by minimizing development on steep slopes and along ridgelines.
- prevent the need for noise barriers (soundwalls) by requiring a minimum setback for residential development adjacent to a scenic highway.

Additional Benefits

- Enhancing community identity and pride, encouraging citizen commitment to preserve community values
- Enhancing land values by maintaining the scenic character of the corridor
- Providing a vehicle for the community to promote local tourism that is consistent with the community's scenic values

SECTION 9 Transportation Art

ARTICLE 1 General Procedure

Caltrans recognizes the effects of transportation facilities on local communities and encourages integrating these facilities with their surroundings to enhance and reflect the aesthetic, environmental, scenic, and cultural values of the affected community.

Caltrans supports enriching the cultural and visual environment by facilitating placement of transportation art within the State highway right-of-way.

Transportation art includes graphic or sculptural artwork, either freestanding or placed upon a required engineered transportation feature (such as a noise barrier, retaining wall, bridge, bridge abutment, bridge rail, or slope paving) that expresses unique attributes of a community's history, resources, or character.

Transportation art is proposed, provided, installed, maintained, and removed or restored by the public agency representing the area in which the art will be installed. The public agency may be a city, county, incorporated town, tribal government or non-federally recognized tribe.

Transportation art, community identification, and gateway monuments compare and contrast as follows:

Figure 29-4 Transportation Art, Community Identification, and Gateway Monuments

	May Include Text	**May Include Graphic Images**	**Freestanding Structure or Sign**	**Integrated With or Placed Upon a Required Engineered Transportation Feature**
Transportation Art	No	Yes	Freestanding or Integrated	Freestanding or Integrated
Community Identification	Yes	Yes	No	Yes
Gateway Monuments	Yes	Yes	Yes	No

Statutory Authority

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

Intellectual Property Rights - Copyright Ownership of Transportation Art

Transportation art located within Caltrans' right-of-way is a benefit to the people of California and will become property of the State. Prior to the installation or placement of the approved transportation art, the artist(s) and public agency must provide Caltrans with an executed and notarized copyright assignment and transfer agreement containing terms and conditions approved by Caltrans. The copyright assignment and transfer agreement assigns, transfers, and conveys the artist's entire rights, title and interest in and to the approved transportation art to Caltrans, including but not limited to, the artist's common law and federal law copyright ownership rights to the approved transportation art.

Artist Disclaimer Statement

The artist must place a disclaimer statement in a conspicuous manner on or in close proximity to the artwork and will not be considered to be "text." The disclaimer statement must state that the contents of the artwork solely reflect the views of the artist and do not reflect the official views or policies of Caltrans or the Federal Highway Administration.

Sponsor Recognition

Transportation art may include sponsor recognition such as the name, identifying logo, or symbol of the artist, public agency, and/or financial sponsor(s). The sponsor recognition should be unobtrusive, discreet, and not appear to be an integral part of the artwork. The sponsor recognition may be placed on or adjacent to the transportation art and will not be considered to be "text." Caltrans retains sole discretion for determining the appropriate size, content, colors, and other elements of this recognition. Sponsor recognition must be provided and maintained by the public agency.

Sponsor Recognition Disclaimer Statement

The sponsor recognition must include a disclaimer statement that Caltrans does not endorse the sponsor's products and/or services and that the sponsor's name only appear as a reference as the source of sponsorship. This disclaimer must be placed in a conspicuous manner adjacent to the sponsor's name and will not be considered to be "text."

Placement

Transportation art may be either freestanding, or placed upon/integrated with a required engineered transportation feature such as a noise barrier, retaining wall, bridge, bridge abutment, bridge railing, or paved slope.

Freestanding transportation art within the State right-of-way must be placed as far as practical from the traveled way or edge of roadway, while still remaining visible. The proposed location for all transportation art must be reviewed by Caltrans for safety and environmental considerations prior to approval.

Transportation art that is freestanding is considered to be a discretionary fixed object. See *Highway Design Manual* Topic 309 – Clearances, for the minimum required horizontal clearances for transportation art.

Transportation Art Requirements

Proposed transportation art must:

- include graphics or sculptural artwork that expresses unique attributes of an area's history, resources, or character.
- be a freestanding structure or sign, or integrated with or placed upon a required engineered transportation feature.
- not make use of or simulate colors or combinations of colors usually reserved for official traffic control devices described in the *California Manual on Uniform Traffic Control Devices*.
- not create a distraction to transportation system users. For example, it should be large enough to interpret at highway speed, but not be so large that it demands attention from the motorist.
- not include illumination (such as blinking or intermittent lights) that impairs the vision of or distracts transportation system users. Other lighting may be permitted. Lighting may be allowed on existing structures only when approved by Headquarters Division of Maintenance-Structure Maintenance and Investigations.

- be located where required maintenance can be safely performed as specified in the encroachment permit, the maintenance agreement, and in conformance with Caltrans' procedures.
- be appropriate to its proposed setting.
- be in proper scale with its surroundings.
- be composed of materials that are durable for the projected lifespan.
- be fully funded for design, installation, maintenance, restoration, and removal by others for its projected lifespan.
- conform to provisions of the *California Outdoor Advertising Act*.
- not imitate, obscure, or interfere with traffic control devices.
- not interfere with airspace above the roadway.
- not be placed within State highway right-of-way upon trees, rocks or other natural features.
- not adversely affect existing structures, drainage patterns or stormwater runoff quality, landscaping, natural vegetation.
- not include reflective or glaring surface finishes.
- not include moving elements (kinetic art) or simulate movement.
- not restrict sight distance.
- not display symbols or icons such as flags, logos, or commercial symbols, except as allowed in Sub-article "Sponsor Recognition."
- not display text.
- be designed to minimize ongoing maintenance needs. Caltrans-approved protective graffiti coatings may be required if appropriate.
- be consistent with Headquarters Division of Maintenance-Structure Maintenance and Investigations inspection requirements, including the following:
  - 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 Headquarters Division of Maintenance-Structure Maintenance and Investigations.
  - Painting of steel structures will only be permitted with written permission from the Headquarters Division of Maintenance-Structure 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.

- Chipping, blasting, or in any way modifying existing concrete surfaces is prohibited, unless required for inspection by Headquarters Division of Maintenance-Structure Maintenance and Investigations.

Additional guidance for placing transportation art on highway bridge structures is available from Headquarters Division of Engineering Services-Structure Design, Office of Transportation Architecture.

ARTICLE 2 Responsibilities

Administrative Responsibilities

Headquarters

The Headquarters Division of Design-Landscape Architecture Program Deputy Division Chief:

- appoints a Headquarters Transportation Art Coordinator.
- maintains and disseminates policy and procedures for the Transportation Art Program.
- monitors district performance and provides quality assurance of program guidelines.
- reviews proposals for conformance with policy and for statewide consistency.

The Division of Traffic Operations, Office of Encroachment Permits & Engineering Support Chief:

- develops forms and special provisions for the Transportation Art Program.
- maintains and clarifies encroachment permit policies and procedures.

The Division of Engineering Services-Structure Design, Office of Transportation Architecture and Division of Maintenance-Structure Maintenance and Investigations:

- maintain guidelines for structural and architectural design and structure maintenance to facilitate the placement of transportation art on highway bridge structures.
- approve any exceptions to the guidelines for structural and architectural design and structure maintenance.

District

The District Director:

- administers the transportation art program in accordance with these guidelines.
- designates a district transportation art coordinator.
- approves qualified final transportation art proposals.

The district transportation art coordinator:

- acts as the single focal point to qualify, process, and evaluate transportation art submittals by public agencies.
- facilitates and coordinates the placement of authorized transportation art within the transportation right-of-way.
- notifies the Headquarters Transportation Art Coordinator of permit approval and construction completion.
- prepares annual summary reports and submits them to the Headquarters Division of Design-Landscape Architecture Program Deputy Division Chief.
- reviews transportation art proposals for:
  - documented public acceptance.
  - compliance with State and federal regulations and Caltrans' guidance.
  - adequately planned and resourced maintenance of the transportation art by the public agency.
  - safety and liability issues for Caltrans, the public agency, and the public.
- submits final transportation art proposals to the Headquarters Division of Design-Landscape Architecture Program Deputy Division Chief.

The district permit engineer:

- forwards the qualified final submittal to the Headquarters Division of Design, Office of Project Support, to obtain written approval from FHWA if the proposal is on an Interstate highway.
- ensures a maintenance agreement has been executed prior to issuance of the encroachment permit.
- ensures a copyright assignment and transfer agreement is executed prior to issuance of the encroachment permit.
- issues the encroachment permit to the public agency.
- monitors and enforces permit and maintenance agreement requirements for the maintenance, restoration, or removal of transportation art.
- inspects the transportation art construction.
- notifies the district transportation art coordinator of permit approval and construction completion.

Financial Responsibilities

Transportation art is solely funded by the public agency. All costs for proposed transportation art design, construction, access for maintenance, maintenance, and removal, if required, shall be the responsibility of the public agency and stipulated in detail in the preliminary and final transportation art submittals.

Caltrans assumes the administrative costs associated with reviewing transportation art proposals, and developing, issuing, and monitoring the encroachment permit and maintenance agreement for approved transportation art projects. All other costs, including labor, materials, supplies, and traffic control (if required) for design, engineering, testing, construction, installation, maintenance, restoration, and removal of the transportation art shall be the responsibility of the public agency.

Caltrans may require the public agency to provide bonds or other means to ensure maintenance, restoration, and removal of the transportation art.

Maintenance Responsibilities

Transportation art must be kept clean, free of graffiti, and in good repair. The public agency must provide regularly scheduled maintenance as described in the maintenance agreement for its projected lifespan, including graffiti removal and restoration work necessary to maintain the integrity of the transportation art. Graffiti removal shall conform to Caltrans' policies and guidelines, which require prompt removal of offensive messages and timely removal of all other graffiti. Caltrans graffiti removal policy is described in *Deputy Directive DD-39-R1 – Graffiti Prevention and Removal* and Volume 1, Chapter D1 of the *Maintenance Manual*.

A maintenance agreement for the care and upkeep of the transportation art by the public agency must be executed between the public agency and Caltrans. Maintenance shall be performed by the public agency as stipulated in the agreement. Worker access to perform maintenance required by transportation art should be from outside the highway right-of-way whenever possible.

Caltrans will not provide maintenance of transportation art, but may perform maintenance activities in the area, such as litter pickup and other activities associated with normal transportation facility maintenance. Any maintenance activities required adjacent to the transportation art that are over and above what Caltrans would normally provide must be described in the encroachment permit, maintenance

agreement, or cooperative agreement and identified as a responsibility of the public agency.

If the public agency fails to maintain the transportation art as provided in the maintenance agreement, Caltrans may perform the maintenance at the public agency's expense, or direct the public agency to remove the transportation art at the public agency's expense.

When notified by Caltrans, the public agency shall remove any transportation art that creates a maintenance or operational concern. If the public agency does not remove the transportation art in a timely manner, Caltrans may remove the transportation art and bill the public agency for the costs involved.

Caltrans reserves the right to immediately remove or alter transportation art due to emergency, construction, restoration, or other necessary activities affecting the transportation facility.

ARTICLE 3 Project Development Process

Processing Transportation Art Proposals

A transportation art proposal is developed by the public agency, as described in Article 1 "General Procedure," that has jurisdiction over the area where the transportation art will be placed. Public agencies should contact the Caltrans district transportation art coordinator to develop a qualified final proposal for submittal to the District Director for approval, and then processed as an encroachment permit.

Transportation art included as part of a capital improvement project, will be reviewed and approved through Caltrans project development process, and as directed within these guidelines.

Preliminary Proposal Review

Public agencies seeking approval of transportation art must first submit a preliminary proposal to the Caltrans district transportation art coordinator. The coordinator reviews the preliminary proposal for safety, aesthetics, maintenance accessibility, message, and proper fit within the context of the transportation corridor. The preliminary proposal will be returned to the public agency for revision if Caltrans recommends changes at any time before final approval.

Preliminary proposals must consist of plans, specifications, artist renderings, and other necessary documents prepared by a licensed landscape architect, architect, professional engineer, or artist, as appropriate and include:

- A written evaluation of alternate locations outside the highway right-of-way for proposed freestanding transportation art
- A resumé of the artist's work and background
- A full description of the proposed transportation art, including a model or scaled plans, elevations, sections and details necessary to convey location, view from all sides, materials, and construction or installation methods. Caltrans may furnish site data as required
- Plans and details stamped by a licensed engineer if the proposal includes freestanding art, new structures, or modification of existing Caltrans' structures
- Proposed location, showing existing topography, and dimensions and offsets to right-of-way lines, edge of pavement, centerline, and the clear recovery zone
- Proposed color scheme, paint or stain materials, or protective coatings
- Required environmental documentation
- Material safety data sheet for proposed materials
- Proposed lighting
- Specifications
- Proposed traffic control plans and specifications
- Proposed cost estimate
- Proposed construction schedule
- Projected lifespan
- Proposed maintenance access plan
- Preliminary maintenance agreement, including maintenance schedule

After receiving the preliminary proposal, the district transportation art coordinator reviews the submittal for compliance with safety requirements (clear recovery zone setback, visibility, maintenance access, and highway operations), and compatibility with transportation corridor character and aesthetics. The district transportation art coordinator may advise the public agency of constraints or other concerns, solicit additional documentation or exhibits, or may request changes to the scope of work. The public agency must address all comments, make appropriate revisions, and resubmit the proposal to the district transportation art coordinator for review as a qualified preliminary proposal.

Upon acceptance of a qualified preliminary proposal, the district transportation art coordinator circulates the proposal for evaluation of potential conflicts with gateway monuments and community identification. District design, traffic operations, environmental, maintenance, right-of-way, and other appropriate functional units also evaluate the preliminary proposal and identify concerns or provide suggestions for compliance with Caltrans' policies. Proposals that involve freestanding art, new structures, or modification of existing Caltrans' structures must also be circulated to Headquarters Division of Maintenance-Structure Maintenance and Investigations, and/or Headquarters Division of Engineering Services-Structure Design, Office of Transportation Architecture.

The district transportation art coordinator also determines whether preparation of a permit engineering evaluation report (PEER) will be required, taking into consideration highway operation, maintenance, and tort liability.

Upon completion of district circulation, the district transportation art coordinator provides review comments to the public agency and asks them to make the required revisions. After completion of revisions, the package is resubmitted by the public agency to the district transportation art coordinator as a qualified final proposal. The qualified final proposal should then be processed by the public agency for public review.

Public Review and Public Agency Resolution

Prior to final proposal review by Caltrans, the public agency must document local support for the proposal. Working with the district transportation art coordinator, the public agency will determine an appropriate method of public review, ranging from a signed petition to conducting noticed public meetings. The public agency will secure and document public acceptance, ensuring that those most affected have been provided the opportunity to express either support or opposition to the final proposal. After securing public acceptance, the public agency shall issue an adopted resolution or other official document recommending approval of the proposed design of the transportation art and requesting installation within the highway right-of-way. This resolution or document must describe the public agency's:

- jurisdiction over the area of the project site.
- approval of the transportation art.
- funding responsibility.

- commitment to regular scheduled maintenance of the transportation art throughout its projected lifespan, including timely graffiti removal, restoration, and removal of the transportation art as required.
- proposed schedule for commencing and completing project installation.

Final Proposal Review

The district transportation art coordinator will review the qualified final proposal, including the maintenance agreement, and documentation of local support to verify that all previous comments have been addressed and will forward the proposal to the District Director for approval.

District Director Review

The District Director will review the qualified final proposal for public acceptance, compliance with State and federal regulations, and Caltrans' guidance, adequacy of maintenance resources, and safety and liability issues for Caltrans, the public agency, and the public.

District Director approval of a transportation art proposal is made with due consideration to safety (location, potential for motorist distraction, and accessibility for maintenance), aesthetics, public support, and maintainability. Once approved, no changes shall be made without prior written approval of the District Director.

After District Director approval, the district transportation art coordinator advises the public agency to submit the proposal to the district permit engineer for processing as an encroachment permit.

Encroachment Permit Process

Approved transportation art proposals are processed as an encroachment permit as per the *Encroachment Permits Manual*, Section 500.2 and Appendix B.

After Construction

After construction is complete, the district transportation art coordinator sends a copy of the transportation art proposal, approval documents, permit, and as-built information to the Headquarters Transportation Art Coordinator.

SECTION 10 Community Identification

ARTICLE 1 General Procedure

Caltrans recognizes the effects of transportation facilities on local communities and encourages transportation system improvements that reflect community needs and its values.

Caltrans supports enriching the cultural and visual environment by facilitating the placement of community identification within the State highway right-of-way.

Community identification includes visual images, graphics, sculptural artwork, or text that is placed on a required engineering feature (such as a noise barrier, retaining wall, bridge, bridge abutment, bridge rail, or slope paving) that expresses unique attributes of a community's identity, history, resources, character, or other defining characteristics.

Community identification is proposed, provided, installed, maintained, and removed (or restored) by the public agency representing the area in which the community identification will be installed. Public agency is described in Section 9, Article 1 "General Procedure."

Community identification, transportation art, and gateway monuments compare and contrast as follows:

Figure 29-5 Transportation Art, Community Identification, and Gateway Monuments

	May Include Text	**May Include Graphic Images**	**Freestanding Structure or Sign**	**Integrated With or Placed Upon a Required Engineered Transportation Feature**
Transportation Art	No	Yes	Freestanding or Integrated	Freestanding or Integrated
Community Identification	Yes	Yes	No	Yes
Gateway Monuments	Yes	Yes	Yes	No

Community Identification Requirements

To avoid distraction and minimize visual clutter, only a single community identification or gateway monument will be permitted per each State highway approach in each direction within the public agency boundary. Existing community identification or gateway monuments located within 660 feet of the State highway on either private or public property will be considered the single allowed feature, and no additional community identification or gateway monument will be approved.

Proposed community identification must:

- incorporate any of the following: a name, logo, graphic, seal or slogan that has been associated with the community.
- be integrated with, or placed upon a required engineered transportation feature.
- not be a freestanding structure or sign.
- not make use of or simulate colors or combinations of colors usually reserved for official traffic control devices described in the *California Manual on Uniform Traffic Control Devices*.
- not create a distraction to transportation system users. For example, it should be large enough to interpret at highway speed, but not be so large that it demands attention from the motorist.
- not include illumination (such as blinking or intermittent lights) that impairs the vision of, or distracts transportation system users. Other lighting may be permitted. Lighting may be allowed on existing structures only when approved by Headquarters Division of Maintenance-Structure Maintenance and Investigations.
- be located where the required maintenance can be safely performed as specified in the encroachment permit, the maintenance agreement, and in conformance with Caltrans' procedures.
- be appropriate to its proposed setting.
- be in proper scale with its surroundings.
- be composed of materials that are durable for the projected lifespan.
- be fully funded for design, installation, maintenance, restoration, and removal by others for its projected lifespan.
- conform to provisions of the *California Outdoor Advertising Act*.
- not imitate, obscure, or interfere with traffic control devices.
- not interfere with airspace above the roadway.
- not be placed within State highway right-of-way upon trees, rocks or other natural features.

- not adversely affect existing structures, drainage patterns or stormwater runoff quality, landscaping, or natural vegetation.
- not include reflective or glaring surface finishes.
- not include moving elements (kinetic art) or simulate movement.
- not restrict sight distance.
- not display symbols or icons such as flags, logos, or commercial symbols.
- not display text that makes special interest, private, religious, or political statements, or includes business names, trade names, jingles, or slogans.
- be designed to minimize ongoing maintenance needs. Caltrans-approved protective graffiti coatings may be required if appropriate.
- be consistent with Headquarters Division of Maintenance-Structure Maintenance and Investigations inspection requirements, including the following:
  - 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 Headquarters Division of Maintenance-Structure Maintenance and Investigations.
  - Painting of steel structures will only be permitted with written permission from the Headquarters Division of Maintenance-Structure Maintenance and Investigations.
  - Community identification on concrete structures should avoid load-carrying, stress-bearing structural members, including, but not limited to bridge girders, soffits, columns, and piers.
  - Community identification must not impair the necessary inspection of bridges, retaining walls, and other structures.
  - To facilitate Caltrans' inspection access to structures, community identification may be placed on removable panels if not an integral part of a structure.
  - Chipping, blasting, or in any way modifying existing concrete surfaces is prohibited, unless required for inspection by Headquarters Division of Maintenance-Structure Maintenance and Investigations.
- Additional guidance for placing community identification on highway bridge structures is available from Headquarters Division of Engineering Services-Structure Design, Office of Transportation Architecture

ARTICLE 2 Responsibilities

Administrative Responsibilities

Headquarters

The Headquarters Division of Design-Landscape Architecture Program Deputy Division Chief:

- appoints a Headquarters Community Identification Coordinator.
- maintains and disseminates policy and procedures for community identification.
- monitors district performance and provides quality assurance of program guidelines.
- reviews proposals for conformance with policy and for statewide consistency.
- processes FHWA review of proposals located on an Interstate highway.

The Division of Traffic Operations, Office of Encroachment Permits & Engineering Support Chief:

- develops forms and special provisions for the Community Identification Program.
- maintains and clarifies encroachment permit policies and procedures.

The Division of Engineering Services-Structure Design, Office of Transportation Architecture and Division of Maintenance-Structure Maintenance and Investigations:

- maintain guidelines for structural and architectural design and structures maintenance to facilitate the placement of community identification on highway bridge structures.
- approve any exceptions to the guidelines for structural and architectural design and structure maintenance.

District

The District Director:

- administers the community identification program in accordance with these guidelines.
- designates a district community identification coordinator.
- approves qualified final community identification proposals.

The district community identification coordinator:

- acts as the single focal point to qualify, process, and evaluate community identification submittals by public agencies.
- facilitates and coordinates the placement of authorized community identification within the transportation right-of-way.
- notifies the Headquarters Community Identification Coordinator of community identifications permit approval and construction completion.
- prepares annual summary reports and submits to the Headquarters Division of Design-Landscape Architecture Program Deputy Division Chief.
- reviews community identification proposals for:
  - documented public acceptance.
  - compliance with State and federal regulations and Caltrans' guidance.
  - adequately planned and resourced maintenance of the community identification by the public agency.
  - safety and liability issues for Caltrans, the public agency, and the public.
- submits final community identification proposals to the Headquarters Division of Design-Landscape Architecture Program Deputy Division Chief.

The district permit engineer:

- forwards the qualified final submittal to the Headquarters Division of Design, Office of Project Support, to obtain written approval from FHWA, if the proposal is on an Interstate highway.
- ensures a maintenance agreement has been executed prior to issuance of the encroachment permit.
- issues the encroachment permit to the public agency.
- monitors and enforces permit and maintenance agreement requirements for the maintenance, restoration, or removal of community identification.
- inspects the community identification construction.
- notifies the district community identification coordinator of permit approval and construction completion.

Financial Responsibilities

Community identification is solely funded by the public agency. All costs for community identification design, construction, access for maintenance, maintenance, and removal, if required, shall be the responsibility of the public agency and stipulated in detail in the preliminary and final community identification submittals.

When the work is proposed by a public agency, Caltrans will allocate project resources for the design and integration of community identification 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 public agency and documented in the encroachment permit or cooperative agreement.

When community identification proposed by a public agency is to be part of a Caltrans roadway project, Caltrans will allocate resources for the administrative costs associated with review and determination of appropriateness of proposed community identification as part of the transportation corridor's existing and proposed engineered highway features.

Caltrans assumes the administrative costs associated with reviewing community identification proposals, and developing, issuing, and monitoring the encroachment permit and maintenance agreement for approved community identification projects. All other costs, including labor, materials, supplies, and traffic control (if required) for design, engineering, testing, construction, installation, maintenance, restoration, and removal of the community identification shall be the responsibility of the public agency.

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

Maintenance Responsibilities

Community identification must be kept clean, free of graffiti, and in good repair. The public agency must provide regularly scheduled maintenance as described in the maintenance agreement for its projected lifespan, including graffiti removal and restoration work necessary to maintain the integrity of the community identification. Graffiti removal shall conform to Caltrans' policies and guidelines, which require prompt removal of offensive messages and timely removal of all other graffiti. Caltrans graffiti removal policy is described in *Deputy Directive DD-39-R1 – Graffiti Prevention and Removal* and Volume 1, Chapter D1 of the *Maintenance Manual*.

A maintenance agreement for the care and upkeep of the community identification by the public agency must be executed between the public agency and Caltrans. Maintenance shall be performed by the public agency as stipulated in the agreement.

Worker access to perform maintenance required by community identification should be from outside the highway right-of-way whenever possible.

Caltrans will not provide maintenance of the community identification, but may perform maintenance activities in the area such as litter pickup and other activities associated with normal transportation facility maintenance. Any maintenance activities required adjacent to the community identification that are over and above what Caltrans would normally provide must be described in the encroachment permit, maintenance agreement, or cooperative agreement and identified as a responsibility of the public agency.

If the public agency fails to maintain the community identification as provided in the maintenance agreement, Caltrans may perform the maintenance at the public agency's expense, or direct the public agency to remove the community identification at the public agency's expense.

When notified by Caltrans, the public agency shall remove any community identification that creates a maintenance or operational concern. If the public agency does not remove the community identification in a timely manner, Caltrans may remove the community identification and bill the public agency for the costs involved.

Caltrans reserves the right to immediately remove or alter community identification due to emergency, construction, restoration, or other necessary activities affecting the transportation facility.

ARTICLE 3 Project Development Process

Processing Community Identification Proposals

A community identification proposal is developed by the public agency, as described in Section 9, Article 1 "General Procedure," that has jurisdiction over the area where the community identification will be placed. Public agencies should contact the Caltrans district community identification coordinator to develop a qualified final proposal for submittal to the District Director for approval, and then processed as an encroachment permit.

Community identification included as part of a capital improvement project, will be reviewed and approved through Caltrans project development process, and as directed within these guidelines.

Preliminary Proposal Review

Public agencies seeking approval of community identification must first submit a preliminary proposal to the Caltrans district community identification coordinator. The coordinator reviews the preliminary proposal for safety, aesthetics, maintenance accessibility, message, and proper fit within the context of the transportation corridor. The preliminary proposal will be returned to the public agency for revision if Caltrans recommends changes at any time before final approval.

Preliminary proposals must consist of plans, specifications and other necessary documents prepared by a licensed landscape architect, architect, or professional engineer and include:

- A full description of the proposed community identification, including a model or scaled plans, elevations, sections and details necessary to convey location, view from all sides, materials, and construction or installation methods. Caltrans may furnish site data as required
- Plans and details stamped by a licensed engineer if the proposal includes new structures or modification of existing Caltrans' structures
- Proposed location, showing existing topography, and dimensions and offsets to right-of-way lines, edge of pavement, centerline, and the clear recovery zone
- Proposed color scheme, paint or stain materials, or protective coatings
- Required environmental documentation
- Material safety data sheet for proposed materials
- Proposed message to be communicated
- Proposed lighting
- Specifications
- Proposed traffic control plans and specifications
- Proposed cost estimate
- Proposed construction schedule
- Projected lifespan
- Proposed maintenance access plan
- Preliminary maintenance agreement, including maintenance schedule

After receiving the preliminary proposal, the district community identification coordinator reviews the submittal for compliance with safety requirements, visibility, maintenance access, and highway operations), and compatibility with transportation corridor character and aesthetics. The district community identification coordinator may advise the public agency of constraints or other concerns, solicit additional

documentation or exhibits, or may request changes to the scope of work. The public agency must address all comments, make appropriate revisions, and resubmit the proposal to the district community identification coordinator for review as a qualified preliminary proposal.

Upon acceptance of a qualified preliminary proposal, the district community identification coordinator circulates the proposal for evaluation of potential conflicts with gateway monuments and transportation art. District design, traffic operations, environmental, maintenance, right-of-way, and other appropriate functional units also evaluate the preliminary proposal and identify concerns or provide suggestions for compliance with Caltrans' policies. Proposals that involve new structures or modification of existing Caltrans' structures must also be circulated to Headquarters Division of Maintenance-Structure Maintenance and Investigations, and/or Headquarters Division of Engineering Services-Structure Design, Office of Transportation Architecture.

The district community identification coordinator also determines whether preparation of a PEER will be required, taking into consideration highway operation, maintenance, and tort liability.

Upon completion of district circulation, the district community identification coordinator provides review comments to the public agency and asks them to make the required revisions. After completion of revisions, the package is resubmitted by the public agency to the district community identification coordinator as a qualified final proposal. The qualified final proposal should then be processed by the public agency for public review.

Public Review and Public Agency Resolution

Prior to final proposal review by Caltrans, the public agency must document local support for the proposal. Working with the district community identification coordinator, the public agency will determine an appropriate method of public review, ranging from a signed petition to conducting noticed public meetings. The public agency will secure and document public acceptance, ensuring that those most affected have been provided the opportunity to express either support or opposition to the final proposal. After securing public acceptance, the public agency shall issue an adopted resolution or other official document recommending approval of the proposed design of the community identification and requesting installation within

the highway right-of-way. This resolution or document must describe the public agency's:

- jurisdiction over the area of the project site.
- approval of the community identification.
- funding responsibility.
- commitment to regular scheduled maintenance of the community identification throughout its projected lifespan, including timely graffiti removal, restoration, and removal of the community identification as required.
- proposed schedule for commencing and completing project installation.

Final Proposal Review

The district community identification coordinator will review the qualified final proposal, including the maintenance agreement, and documentation of local support to verify that all previous comments have been addressed and will forward the proposal to the District Director for approval.

District Director Review

The District Director will review the qualified final proposal for public acceptance, compliance with State and federal regulations, and Caltrans' guidance, adequacy of maintenance resources, and safety and liability issues for Caltrans, the public agency, and the public.

District Director approval of a community identification proposal is made with due consideration to safety (location, potential for motorist distraction, and accessibility for maintenance), aesthetics, public support, and maintainability. Once approved, no changes shall be made without prior written approval of the District Director.

After District Director approval, the district community identification coordinator advises the public agency to submit the proposal to the district permit engineer for processing as an encroachment permit.

Encroachment Permit Process

Approved community identification proposals are processed as an encroachment permit as per the *Encroachment Permits Manual*, Section 500.8 and Appendix B.

After Construction

After construction is complete, the district community identification coordinator sends a copy of the community identification proposal, approval documents, permit, and as-built information to the Headquarters Community Identification Coordinator.

SECTION 11 Gateway Monuments

ARTICLE 1 General Procedure

Cities, counties, or incorporated towns often desire transportation facilities to provide identification and a favorable image of the area in which they are located. Caltrans encourages and promotes enrichment of the cultural and visual environment by facilitating and coordinating the integration of gateway monuments within the State highway right-of-way.

Gateway monuments are any freestanding structure or sign, non-integral or non-required highway feature that communicate the name of a local city, county or incorporated town.

Gateway monuments are proposed, provided, installed, maintained and removed (or restored) by the public agency representing the area in which the gateway monument will be installed. Public agency is described in Section 9, Article 1 "General Procedure."

Gateway monuments, transportation art, and community identification enhancements compare and contrast as follows:

Figure 29-6 Transportation Art, Community Identification, and Gateway Monuments

	May Include Text	**May Include Graphic Images**	**Freestanding Structure or Sign**	**Integrated With or Placed Upon a Required Engineered Transportation Feature**
Transportation Art	No	Yes	Freestanding or Integrated	Freestanding or Integrated
Community Identification	Yes	Yes	No	Yes
Gateway Monuments	Yes	Yes	Yes	No

Statutory Authority

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

Placement

Gateway monuments within the State right-of-way must be placed as far as practical from the traveled way or edge of roadway, while still remaining visible. The proposed location for all gateway monuments must be reviewed by Caltrans for safety and environmental considerations prior to approval.

Gateway monuments are considered to be a discretionary fixed object. See *Highway Design Manual*, Topic 309 – Clearances, for the minimum required horizontal clearances for gateway monuments.

Gateway Monument Requirements

To avoid distraction and minimize visual clutter, only a single community identification or gateway monument will be permitted per each State highway approach in each direction within the public agency boundary. Existing community identification or gateway monuments located within 660 feet of the State highway on either private or public property will be considered to be the single allowed feature, and no additional community identification or gateway monument will be approved.

Before submitting a proposal to locate a gateway monument within the State highway right-of-way, the public agency must consider and document other feasible alternatives including, but not limited to:

- locating the gateway monument outside of the operational highway right-of-way.
- providing community identification on existing or proposed engineering highway features in lieu of a gateway monument.
- providing aesthetic treatment on an existing or proposed transportation facility in lieu of a gateway monument.
- use of existing or natural topographic features in the placement of the gateway monument.

Other improvements may be considered in conjunction with the gateway monument proposal. Any improvements over and above what Caltrans would otherwise fund,

install, construct, or maintain, will be the responsibility of the public agency. Caltrans will collaborate with the public agency for appropriateness of the gateway monument proposal in context with existing, proposed, and future improvements.

Caltrans retains sole discretion for determining all design elements of a gateway monument, including location, appropriate size, colors, and content.

Proposed gateway monuments must:

- incorporate the name, logo, graphic, or officially adopted seal or slogan of the city, county, or incorporated town.
- be a freestanding structure or sign.
- not be integrated with, or placed upon a required engineered transportation feature.
- not make use of or simulate colors or combinations of colors usually reserved for official traffic control devices described in the *California Manual on Uniform Traffic Control Devices*.
- not create a distraction to transportation system users. For example, it should be large enough to interpret at highway speed, but not be so large that it demands attention from the motorist.
- not include illumination (such as blinking or intermittent lights) that impairs the vision of, or distracts transportation system users. Other lighting may be permitted. Lighting may be allowed on existing structures only when approved by Headquarters Division of Maintenance-Structure Maintenance and Investigations.
- be located where required maintenance can be safely performed as specified in the encroachment permit, the maintenance agreement, and in conformance with Caltrans' procedures.
- be appropriate to its proposed setting.
- be a proper size and in scale with its surroundings. The maximum size shall fit within 353 cubic feet. The width shall not exceed 20 feet and the height shall not exceed 18 feet above existing grade
- be composed of materials that are durable for the projected lifespan.
- be fully funded for design, installation, maintenance, restoration, and removal by the public agency for its projected lifespan.
- conform to provisions of the *California Outdoor Advertising Act* .
- not imitate, obscure, or interfere with traffic control devices.
- not interfere with airspace above the roadway.
- not be placed within State highway right-of-way upon trees, rocks or other natural features.

- not adversely affect existing structures, drainage patterns or stormwater runoff quality, landscaping or natural vegetation.
- not include reflective or glaring surface finishes.
- not include moving elements (kinetic art) or simulate movement.
- not restrict sight distance.
- not display symbols or icons such as flags, logos, or commercial symbols.
- not display text that makes special interest, private, religious, or political statements, or includes business names, trade names, jingles, or slogans.
- be designed to minimize ongoing maintenance needs. Caltrans-approved protective graffiti coatings may be required if appropriate.
- not display telephone numbers, street addresses, or internet addresses.
- not require the removal of trees or other vegetation for visibility, or harm trees during construction. Pruning of tree branches or roots, and removal of shrubs should be avoided, and will be allowed only with written approval of the district landscape architect.
- not negatively impact existing highway features, including existing signs, irrigation systems, necessary drainage patterns, and facilities.
- not protrude or span over travel lanes or roadbed.

ARTICLE 2 Responsibilities

Administrative Responsibilities

Headquarters

The Headquarters Division of Design-Landscape Architecture Program Deputy Division Chief:

- appoints a Headquarters Gateway Monument Coordinator.
- maintains and disseminates policies and procedures for gateway monuments.
- formulates and manages a statewide inventory of gateway monument proposals.
- monitors district performance and provides quality assurance of program guidelines.
- reviews proposals for conformance with policy and for statewide consistency.
- processes FHWA review of proposals located on an Interstate highway.

The Division of Traffic Operations, Office of Encroachment Permits & Engineering Support Chief:

- develops forms and special provisions for the Gateway Monument Program.

- maintains and clarifies encroachment permit policies and procedures.

District

The District Director:

- administers the Gateway Monument Program in accordance with these guidelines.
- designates a district gateway monument coordinator.
- approves qualified final gateway monument proposals.

The district gateway monument coordinator:

- manages the Gateway Monument Program
- acts as the single focal point to qualify, process, and evaluate gateway monument submittals by public agencies.
- facilitates and coordinates the placement of authorized gateway monuments within the transportation right-of-way.
- notifies the Headquarters Gateway Monument Coordinator of gateway monument permit approval and construction completion.
- prepares annual summary reports and submits to the Headquarters Division of Design-Landscape Architecture Program Deputy Division Chief.
- reviews gateway monument proposals for:
  - documented public acceptance.
  - compliance with State and federal regulations and Caltrans' guidance.
  - adequately planned and resourced maintenance of the gateway monuments by the public agency.
  - safety and liability issues for Caltrans, the public agency, and the public.
- submits final gateway monument proposals to the Headquarters Division of Design-Landscape Architecture Program Deputy Division Chief.

The district permit engineer:

- forwards the qualified final submittal to the Headquarters Division of Design, Office of Project Support, to obtain written approval from FHWA, if the proposal is on an Interstate highway.
- ensures a maintenance agreement has been executed prior to issuance of the encroachment permit.
- issues the encroachment permit to the public agency.
- monitors and enforces permit and maintenance agreement requirements for the maintenance, restoration, or removal of gateway monument.
- inspects the gateway monument construction.

- notifies the district gateway monument coordinator of permit approval and construction completion.

Financial Responsibilities

Gateway monuments are solely funded by a public agency. All costs for proposed gateway monument design, construction, access for maintenance, maintenance, and removal, if required, shall be the responsibility of the public agency and stipulated in detail in the preliminary and final gateway monument submittals.

Necessary resources for design, implementation, construction or maintenance of gateway monuments will be the responsibility of the public agency. A cooperative agreement between Caltrans and the public agency will document any such negotiated agreements.

Caltrans assumes the administrative costs associated with reviewing gateway monument proposals, and developing, issuing, and monitoring the encroachment permit and maintenance agreement for approved gateway monument projects. All other costs, including labor, materials, supplies, and traffic control (if required) for design, engineering, testing, construction, installation, maintenance, restoration, and removal of the gateway monument shall be the responsibility of the public agency.

Caltrans may require the public agency provide bonds or other means to ensure maintenance, restoration, and removal of the gateway monument.

Maintenance Responsibilities

Gateway monuments must be kept clean, free of graffiti, and in good repair. The public agency must provide regularly scheduled maintenance, as described in the maintenance agreement, for its projected lifespan, including graffiti removal and restoration work necessary to maintain the integrity of the approved gateway monument. Graffiti removal shall conform to Caltrans' policies and guidelines, which require prompt removal of offensive messages and timely removal of all other graffiti. Caltrans graffiti removal policy is described in *Deputy Directive DD-39-R1 – Graffiti Prevention and Removal* and Volume 1, Chapter D1 of the *Maintenance Manual*.

A maintenance agreement for the care and upkeep of the gateway monument by the public agency must be executed between the public agency and Caltrans. Maintenance shall be performed by the public agency as stipulated in the agreement.

Worker access to perform maintenance required by gateway monuments should be from outside the highway right-of-way whenever possible.

Caltrans will not provide maintenance of the gateway monument, but may perform maintenance activities in the area such as litter pickup and other activities associated with normal transportation facility maintenance. Any maintenance activities required adjacent to the gateway monument that are over and above what Caltrans would normally provide must be described in the encroachment permit, maintenance agreement, or cooperative agreement and identified as a responsibility of the public agency.

If the public agency fails to maintain the gateway monument as provided in the maintenance agreement, Caltrans may perform the maintenance at the public agency's expense, or direct the public agency to remove the gateway monument at the public agency's expense.

When notified by Caltrans, the public agency shall remove any gateway monument that creates a maintenance or operational concern. If the public agency does not remove the gateway monument in a timely manner, Caltrans may remove the gateway monument and bill the public agency for the costs involved.

Caltrans reserves the right to immediately remove or alter gateway monuments due to emergency, construction, restoration, or other necessary activities affecting the transportation facility.

ARTICLE 3 Project Development Process

Processing Gateway Monument Proposals

A gateway monument proposal is developed by the public agency, as described in Section 9, Article 1 "General Procedure," that has jurisdiction over the area where the gateway monument will be placed. Public agencies should contact the Caltrans district gateway monument coordinator to develop a qualified final proposal for submittal to the District Director for approval, and then processed as an encroachment permit.

Gateway monuments included as part of a capital improvement project, will be reviewed and approved through Caltrans project development process, and as directed within these guidelines.

Preliminary Proposal Review

Public agencies seeking approval of gateway monuments first submit a preliminary proposal to the Caltrans district gateway monument coordinator. The district gateway monument coordinator reviews the preliminary proposal for safety, aesthetics, maintenance accessibility, message, and proper fit within the context of the transportation corridor. The preliminary proposal will be returned to the public agency for revision if Caltrans recommends changes at any time before final approval.

Preliminary proposals must consist of plans, specifications and other necessary documents prepared by a licensed landscape architect, architect, or professional engineer and include:

- A written evaluation of alternate locations outside the highway right-of-way for proposed freestanding gateway monuments
- A full description of the proposed gateway monument, including a model or scaled plans, elevations, sections and details necessary to convey location, view from all sides, materials, and construction or installation methods. Caltrans may furnish site data as required.
- Plans and details stamped by a licensed engineer
- Proposed location, showing existing topography, and dimensions and offsets to right-of-way lines, edge of pavement, centerline, and the clear recovery zone
- Proposed color scheme, paint or stain materials, or protective coatings
- Required environmental documentation
- Material safety data sheet for proposed materials
- Proposed message to be communicated
- Proposed lighting
- Specifications
- Proposed traffic control plans and specifications
- Proposed cost estimate
- Proposed construction schedule
- Projected lifespan
- Proposed maintenance access plan
- Preliminary maintenance agreement, including maintenance schedule

After receiving the preliminary proposal, the district gateway monument coordinator reviews the submittal for compliance with safety requirements (clear recovery zone setback, visibility, maintenance access, and highway operations), and compatibility with transportation corridor character and aesthetics. The district coordinator may

advise the public agency of constraints or other concerns, solicit additional documentation or exhibits, or may request changes to the scope of work. The public agency must address all comments, make appropriate revisions, and resubmit the proposal to the district gateway monument coordinator for review as a qualified preliminary proposal.

Upon acceptance of a qualified preliminary proposal, the district gateway monument coordinator circulates the proposal for evaluation of potential conflicts with transportation art and community identification. District design, traffic operations, environmental, maintenance, right-of-way, and other appropriate functional units also evaluate the preliminary proposal and identify concerns or provide suggestions for compliance with Caltrans' policies.

The district gateway monument coordinator also determines whether preparation of a PEER will be required, taking into consideration highway operation, maintenance, and tort liability.

Upon completion of district circulation, the district gateway monument coordinator provides review comments to the public agency and asks them to make the required revisions. After completion of revisions, the package is resubmitted by the public agency to the district gateway monument coordinator as a qualified final proposal. The qualified final proposal should then be processed by the public agency for public review.

Public Review and Public Agency Resolution

Prior to final proposal review by Caltrans, the public agency must document local support for the proposal. Working with the district gateway monument coordinator, the public agency will determine an appropriate method of public review, ranging from a signed petition to conducting noticed public meetings. The public agency will secure and document public acceptance, ensuring that those most affected have been provided the opportunity to express either support or opposition to the final proposal. After securing public acceptance, the public agency shall issue an adopted resolution or other official document recommending approval of the proposed design of the gateway monument and requesting installation within the highway right-of-way. This resolution or document must describe the public agency's:

- jurisdiction over the area of the project site.
- approval of the gateway monument.

- funding responsibility.
- commitment to regular scheduled maintenance of the gateway monument throughout its projected lifespan, including timely graffiti removal, restoration, and removal of the gateway monument as required.
- proposed schedule for commencing and completing project installation.

Final Proposal Review

The district gateway monument coordinator will review the qualified final proposal, including the maintenance agreement, and documentation of local support to verify that all previous comments have been addressed and will forward the proposal to the District Director for approval.

District Director Review

The District Director will review the qualified final proposal for public acceptance, compliance with State and federal regulations, and Caltrans' guidance, adequacy of maintenance resources, and safety and liability issues for Caltrans, the public agency, and the public.

District Director approval of a gateway monument proposal is made with due consideration to safety (location, potential for motorist distraction, and accessibility for maintenance), aesthetics, public support, and maintainability. Once approved, no changes shall be made without prior written approval of the District Director.

After District Director approval, the gateway monument coordinator advises the public agency to submit the proposal to the district permit engineer for processing as an encroachment permit.

Encroachment Permit Process

Approved gateway monument proposals are processed as an encroachment permit as per the *Encroachment Permits Manual*, Section 500.7 and Appendix B.

After Construction

After construction is complete, the district gateway monument coordinator sends a copy of the gateway monument proposal, approval documents, permit, and as-built information to the Headquarters Landscape Architecture Program Gateway Monument Coordinator.