

# APPENDIX D - Preparation Guidelines for Project Report (New Highway Planting and Highway Planting Restoration)

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## **APPENDIX D - Preparation Guidelines for Project Report (New Highway Planting and Highway Planting Restoration)**

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### **Use of Project Report (HP&R)**

These guidelines and the accompanying outline are to be used in accordance with the procedures described in Chapter 29 of this manual. They satisfy Project Report requirements for New Highway Planting projects in the STIP (20.20.075.600 or 20.20.025.700), and Highway Planting Restoration (PR-HP&R) projects in the SHOPP Roadside Rehabilitation Program (20.20.201.210).

### **Cover Sheet**

All PR-HP&Rs must have a standard cover sheet to provide project identification information and signatures. Refer to the sample Cover Sheet at the end of this Appendix. Include the following information:

- Title  
  
Use "Project Report (New Highway Planting)" or "Project Report (Highway Planting Restoration)" as appropriate.
- District-County-Route, Post Mile [Dist-Co-Rte, PM]  
  
The Post Mile provided should be accurate to the nearest 0.1 pm. If the project is 0.2 pm or more in length, state both the beginning and ending Post Miles.
- Responsible Unit (RU)  
  
The Unit Source Code of the licensed landscape architect in responsible charge of the technical features of the project.
- Expenditure Authorization (EA)  
  
The multiphase EA, using the "0" phase for the project.
- Program Identification  
  
The program code as provided in the programming document or project scheduling plan that indicates the type of work involved. Use program code 20.20.075.600 (regional) or 20.20.025.700 (interregional) for the preparation of Project Reports for New Highway Planting projects. Use 20.20.201.210 for the preparation of Project Reports for Highway Planting Restoration projects. Refer to [Chapter 4](#) for further information on program codes.
- On Route \_\_\_\_\_ From \_\_\_\_\_ To \_\_\_\_\_

- A brief written description of the project limits that correspond to the Post Mile given above and ties the limits to commonly known physical features on the ground that can be identified on available mapping.

- Vicinity Map

A small map that illustrates the project location and limits, description, Post Mile, including a north arrow. Sufficient detail should be provided in the map that a person unfamiliar with the project could locate it at a glance. The map should display site features used to identify the project limits such as roads, streams, junctions or railroads, the nearest town (unless too distant), together with a note that indicates the direction and name the nearest town in each direction.

- Right of Way Statement

A statement signed by the Deputy District Director Right of Way indicating review of the right of way information contained in the PR-HP&R together with the attached right of way data sheet finding that the data is complete, current, and accurate.

- Approval Recommended

The recommendation for approval signed by the Project Manager, the District Landscape Architect, District Maintenance Engineer, and the District Vegetation Management Committee Chairperson indicating concurrence with the scope and cost of the recommended alternative.

- Approved

The signature of the District Director or by a Deputy District Director to whom that authority has been officially delegated constitutes approval of the PR HP&R. The date of signing becomes the official date of approval.

### **Registered Landscape Architect's Stamp and Statement**

The second page of the PR-HP&R requires the stamp and signature of the licensed landscape architect in responsible charge. The sheet must include a statement indicating that the landscape architect attests to the technical information contained herein and the data upon that recommendations, conclusions, and decisions are based. Approval of the PR-HP&R is a management decision and is separate from this technical signature of the person in responsible charge. Refer to the sample Registered Landscape Architect's Stamp and Statement at the end of this Appendix.

## **Item-By-Item Guideline For The Outline**

### **1. INTRODUCTION**

Briefly describe the proposed project, including:

- Staging or portions, if applicable
- Gross length and area
- Types of work proposed, indicating the net length and area for each type
- Estimated cost on January 1 of the current year
- Proposed fiscal year
- Source of financing
- District Priority Number
- CTC Category and Project Development Category
- Federal Major Action or Categorical Exclusion

### **2. RECOMMENDATION**

Give a recommendation for approval. If cooperative features are described, recommend that the cooperative features be approved and a Cooperative Agreement be negotiated.

### **3. BACKGROUND**

#### **A. Dates of Highway Construction & Previous Planting Work**

#### **B. Project History**

Discuss how the project came about and the effort already expended, including previous relevant work, discussion of ongoing needs (deficiencies not corrected by previous projects), etc.

#### **C. Existing Facility**

Describe existing vegetation, irrigation facilities, and other landscaping features, including those in the adjacent sections of highway. Discuss median and roadside widths, road edge treatments, slopes, drainage facilities, and erosive conditions. Describe available utilities, particularly potable water, nonpotable water, and electrical power, and indicate if there are water line crossovers or conduits in structures or under the pavement and their age and condition.

#### **D. Project Study Report (PSR) Data Sheet Consistency**

Describe deviations from the PSR Data Sheet and refer to the attached PSR Data Sheet.

**E. Issues**

Describe issues such as community interaction, support or opposition.

**F. Commitments**

Address Departmental commitments (e.g., environmental mitigation requirements and political commitments).

**4. NEED AND PURPOSE**

**A. Deficiencies**

Identify deficiencies in the existing facility, including functional, traveler and worker safety, aesthetic, facility modernization, roadside management and maintenance needs, and environmental and water conservation issues.

**B. Water Consumption**

Project the current water consumption costs. Discuss any local or regional requirements for water conservation. Discuss any potential reduction in water consumption from the proposed project. Include water capacity fee.

**C. Maintenance**

Project the current and future maintenance costs, maintenance needs and potential savings, if any, to be derived from the proposed project.

Discuss how the proposed design concept will help achieve the chemical reduction goal in Caltrans' Vegetation Control Program as described in Deputy Directive DD 03/04-02. This program has the goal of reducing herbicide usage 80% by 2012.

**D. Paybacks**

To justify the purpose for rehabilitation projects, the payback must be 12 years or less. It must be calculated by subtracting the following applicable items from the total project cost: traveler and worker safety items, roadside management, water assessment fees, reclaimed water transmission/supply lines, remote irrigation control systems (RICS), Resident Engineer's Field Office, hazardous materials, traffic control, and storm water pollution prevention.

**5. PROPOSAL**

**A. Preliminary Design**

Provide a detailed description of proposed planting or planting restoration work, including how it solves deficiencies. Be site specific in your discussion of the proposal. Discuss design impacts and issues.

- Describe plant types and the functional purpose of the planting; discuss how planting is used to improve the maintainability, safety, and aesthetics of the area, identify the length of plant establishment period, etc.
- Describe watering requirements, proposed irrigation, etc.
- Refer to the Preliminary Design Plan (attached to the Project Report) that should delineate and describe the following:
  - Form and function of the plant material (i.e., broad deciduous trees, mulch, groundcover, shrub screen, grasses, etc.)
  - Irrigation mainline routing, bridge supply lines, irrigation crossovers, points of connection, water meter, water and power source, remote control valve cluster locations, irrigation controller locations, etc.
  - Gates, maintenance vehicle pullouts, and access road locations.
  - Additional gore and narrow area paving, slope paving, and use of inert materials (rock blanket, mulch, etc.).

#### **B. Design for Traveler and Worker Safety Considerations**

Describe proposed traveler and worker safety considerations including, but not limited to, the following:

- Relocating irrigation controllers, backflow preventers, mainline, remote control valves, laterals, and sprinklers to protected areas or adjacent to the right-of-way fence.
- Removal or replacement of deteriorating trees or other plant material, and removal of plant material that encroaches upon required sight distances.
- Planting of vines or the use of textures on noise barriers and retaining walls to deter graffiti.
- Automation of manual irrigation systems, including controllers, valves and CNC.
- Providing maintenance vehicle pullouts, maintenance access roads, and access gates for workers on foot or in vehicles.
- Placing inert materials, mulch, or installing rock blanket areas.

#### **C. Design for Roadside Management**

Roadside management includes features that reduce long-term maintenance activities associated with weed control and replacement of worn or obsolete roadside facilities. Strategies should be considered that reduce facilities life cycle costs.

Describe proposed design for roadside management considerations including, but not limited to, the following:

- Providing paving beneath guardrails and signs.
- Providing paving for narrow areas.
- Paving of slopes beneath bridge structures.
- Providing additional gore paving.
- Updating or removal of aging highway facilities. This work may include:
  - Removing signs that are redundant.
  - Replacing signs that are nonstandard.
  - Removing or relocating pull boxes located in the shoulder or near the pavement edge.

#### **D. Nonstandard Design Features**

Describe any features that are exceptions to planting policies described in [Chapter 29](#), Section 2, Article 1.

If nonstandard mandatory or advisory design features are involved, discuss any exceptions requested. Provide the date of approval for all exceptions to Mandatory and Advisory Design Standards in the Highway Design Manual.

#### **E. Project Cost Estimate**

- Provide a project cost estimate as of January 1st of the current fiscal year, with a 20% contingency factor. Refer to the sample Preliminary Project Cost Estimate at the end of this Appendix for items to consider in preparing a preliminary project cost estimate.

### **6. CONSIDERATIONS REQUIRING DISCUSSION**

The following items must be discussed:

#### **A. Hazardous Materials**

Discuss whether hazardous materials including Aerially Deposited Lead (ADL), and Naturally Occurring Asbestos (NOA) are present within the project site along with any recommended actions for avoidance or mitigation.

#### **B. Value Analysis**

### **C. Resource Conservation**

- Energy and other nonrenewable resources

Include reuse and salvage of existing highway facilities that otherwise would be removed or abandoned.

- Nonpotable Water Source

Provide a comprehensive analysis of the feasibility of using nonpotable water for irrigation including: water source, quality, cost justification (as an attachment), suitability for proposed planting, availability, reliability, quantity, unusual health or environmental considerations, future implications or operational problems, impact on adjacent or nearby planting projects, cooperation with other potential users, and any other appropriate considerations.

- Water management

When a Remote Irrigation Control System (RICS) or automated irrigation sprinkler system is proposed, discuss the recommended water management practices that will be used to operate the new system, utilizing existing maintenance resources. Include an analysis to show how the proposed irrigation system will fit into the District's overall automatic irrigation management plan. Discuss whether the District has the expertise to manage and operate the new system; if training is required, discuss how this will be accomplished.

### **D. Storm Water Pollution Prevention**

Discuss the National Pollutant Discharge Elimination System (NPDES) permit requirements. List the specific temporary and permanent storm water pollution prevention practices as identified in the project Storm Water Data Report.

### **E. Use of Wildflowers**

California native wildflowers must be included with all projects with Federal participation that include planting work. Highway planting to provide traffic safety improvements, revegetation, erosion control, and irrigation-only projects are exempt from this requirement.

The project report should discuss any proposed use of wildflowers and compliance with Federal wildflower requirements. If wildflowers are not incorporated, the project report must describe the specific reasons why use of native wildflowers is not appropriate. In these situations, an estimate of the dollar value of the required wildflower element should be included in the project report. These funds are to be tracked for use in developing future native landscape restoration projects. This figure must be used by the District to track compliance with its Federal wildflower obligation.

## **F. Right of Way**

Provide a general description of the right of way requirements. Reference the Right of Way Data Sheet, (See [Appendix JJ](#) for an example) that should be an attachment to the PR-HP&R. Describe any right of way issues that influence the design of the project.

## **G. Environmental Compliance**

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

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

- For projects Statutorily Exempt from CEQA, the following statement must be included in the PR-HP&R:

The project is Statutorily Exempt from CEQA.

- For projects Categorically Exempt from CEQA, the following statement must be included in the PR-HP&R:

The project is Categorically Exempt under Class (identify class) of the State guidelines.

- When appropriate, the following statement should be included in the PR-HP&R:

The project is Categorically Excluded under NEPA.

Before approving a PR-HP&R that includes a CE statement, the approving authority must have received the CE form (signed by the Environmental Branch Chief), and must verify:

- 1) No scope changes have been made that would affect the exemption determination;
- 2) The project description, included on the CE form, corresponds with the PR.

The Environmental Branch Chief should be consulted with questions regarding this verification.

Highway planting projects not considered CE under NEPA or CEQA must include preparation of an environmental document to complete the PA&ED phase of project delivery. The following statements must be included in Highway Planting and Highway Planting Restoration projects that require preparation of an environmental document:

- ND Projects  
(Negative Declaration – State Only Funded Projects)

For projects with a ND the following statement must be included:

The ND has been prepared in accordance with Caltrans environmental procedures. The attached ND is the appropriate document for the proposal.

The ND must be attached to the PR-HP&R.

- ND/FONSI Projects  
(Negative Declaration/Finding Of No Significant Impact)

For projects with an ND/FONSI the following statement must be included:

The ND/FONSI has been prepared in accordance with Caltrans environmental procedures, as well as State and Federal environmental regulations. The attached ND/FONSI is the appropriate document for the proposal.

The ND/FONSI with the IS/EA must be attached to the PR-HP&R

The *Standard Environmental Reference (SER)* Volume 1, Chapter 30 describes the criteria a proposed project must meet to be considered Categorical Excluded from NEPA, and the preparation and processing of the Categorical Exclusion (CE) documentation.

The *Standard Environmental Reference (SER)* Volume 1, Chapter 34, 35, and 36 describes the preparation and processing of CEQA-only Categorical Exemptions, Initial Studies, Negative Declaration and Environmental Impact Reports.

## **7. OTHER CONSIDERATIONS AS APPROPRIATE**

Discuss the following items as appropriate:

- A. Permits and Other Approvals**
- B. Consistency With Other Planning**
- C. Railroad Involvement**
- D. Cooperative Agreements**

Describe cooperative features, participants and responsibilities.

## **8. PROGRAMMING**

Discuss current programming and changes required, such as project cost estimate changes, fiscal year of programming, etc. Discuss scheduling or processing requests, such as advancements, postponements, combining projects, splitting projects, cost changes, projects funded by the parent project, etc.

## **9. REVIEWS**

Identify reviewers and discuss the results of their reviews, including: District Landscape Architect, Project Manager, Environmental Branch Chief representative, District NPDES Storm Water Coordinator, District and Headquarters' Maintenance representative, LAP District Coordinator, etc. Note any disagreements and how they were resolved; if they were not resolved, request a resolution in the "Recommendation".

In addition, report the outcome, location, and date of any community reviews, local government reviews, concept reviews, etc.

Indicate the type of Federal involvement, i.e., exempt, certification acceptance, or project by project.

## **10. PROJECT PERSONNEL**

List the name and phone numbers (CALNET and public) for the Project Development Team leader, Project Manager, Project Landscape Architect, District Landscape Architect, Project Development supervisor and senior, Environmental Branch Chief, right of way reviewer, District Maintenance representative, etc.

## **11. LIST OF ATTACHMENTS**

All attachments should be legible, clearly labeled, and folded with the binding on the left. The following attachments must be included with the PR-HP&R:

- A. Preliminary Design Plan**
- B. Design Concept**
- C. Environmental documentation or determination, as outlined above**
- D. Right-of-Way Data Sheet**
- E. Aerial Photographs**
- F. Draft Cooperative Agreement (if applicable)**
- G. Correspondence, minutes, and other supporting data**
- H. Cost justification for use of nonpotable water**

- I. PSR Data Sheet**
- J. Preliminary Project Cost Estimate**
- K. Storm Water Data Report**
- L. Fact Sheet Exception to Separate Contract Policy for Highway Planting (if applicable)**
- M. Design Intent Statement (DIS)**



Dist - Co - Rte,  
PM  
RU - EA  
Program Code

## PROJECT REPORT (New Highway Planting & Highway Planting Restoration)

### Vicinity Map

Show:

- Project limits
- North Arrow

On Route \_\_\_\_\_

From \_\_\_\_\_

To \_\_\_\_\_

*I have reviewed the right of way information contained in this Project Report (New Highway Planting & Highway Planting Restoration) and the Right of Way Data Sheet attached hereto, and find the data to be complete, current, and accurate:*

\_\_\_\_\_  
**DEPUTY DISTRICT DIRECTOR – RIGHT OF WAY**

APPROVAL RECOMMENDED:

\_\_\_\_\_  
**PROJECT MANAGER**

\_\_\_\_\_  
**DISTRICT LANDSCAPE ARCHITECT**

\_\_\_\_\_  
**DISTRICT MAINTENANCE ENGINEER**

\_\_\_\_\_  
**DISTRICT VEGETATION MANAGEMENT COMMITTEE CHAIRPERSON**

APPROVED:

\_\_\_\_\_  
**DISTRICT DIRECTOR**

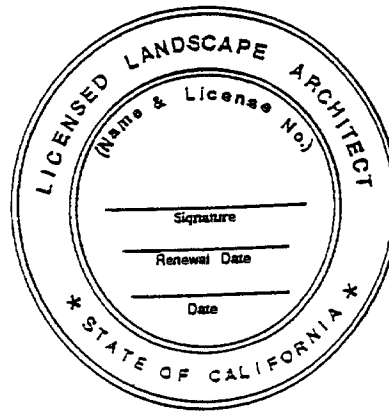
\_\_\_\_\_  
**DATE**

Dist - Co - Rte  
PM  
RU - EA  
Program Code

This Project Report (New Highway Planting and Highway Planting Restoration) has been prepared under the direction of the following licensed landscape architect. The licensed landscape architect attests to the technical information contained herein and the data upon which recommendations, conclusions, and decisions are based.

\_\_\_\_\_  
*LICENSED LANDSCAPE ARCHITECT*

\_\_\_\_\_  
*DATE*



**Outline For  
PROJECT REPORT  
(New Highway Planting &  
Highway Planting Restoration)  
(Preliminary Design Phase)**

**1. INTRODUCTION**

**2. RECOMMENDATION**

**3. BACKGROUND**

- |                                  |                               |
|----------------------------------|-------------------------------|
| A. Dates of Highway Construction | D. PSR Data Sheet Consistency |
| B. Project History               | E. Issues                     |
| C. Existing facility             | F. Commitments                |

**4. NEED and PURPOSE**

- |                      |                |
|----------------------|----------------|
| A. Deficiencies      | C. Maintenance |
| B. Water Consumption | D. Paybacks    |

**5. PROPOSAL**

- |                               |                                |
|-------------------------------|--------------------------------|
| A. Preliminary Design         | D. Nonstandard Design Features |
| B. Traveler and Worker Safety | E. Project Cost Estimate       |
| C. Roadside Management        |                                |

**6. CONSIDERATIONS REQUIRING DISCUSSION**

- |   |                             |
|---|-----------------------------|
| A. Hazardous Materials  | E. Use of Wildflowers       |
| B. Value Analysis   | F. Right of Way             |
| C. Resource Conservation  | G. Environmental Compliance |
| D. NPDES Permit Requirements and Storm Water Pollution Prevention |                             |

**7. OTHER CONSIDERATIONS AS APPROPRIATE**

- |                                    |                           |
|------------------------------------|---------------------------|
| A. Permits and Other Approvals     | D. Cooperative Agreements |
| B. Consistency With Other Planning |                           |
| C. Railroad Involvement            |                           |

**8. PROGRAMMING**

**9. REVIEWS**

**10. PROJECT PERSONNEL**

**11. LIST OF ATTACHMENTS**

- |                                |  |
|--------------------------------|--|
| A. Preliminary Design Plan     | H. Cost Justification  |
| B. Design Concept              | I. PSR Data Sheet  |
| C. Environmental Documentation | J. Preliminary Project Cost Estimate                                     |
| D. Right-of-Way Data Sheet     | K. Storm Water Data Report   |
| E. Aerial Photographs          | L. Fact Sheet Exception to Separate Contract Policy for Highway Planting |
| F. Draft Cooperative Agreement |  |
| G. Correspondence              | M. Design Intent Statement (DIS)   |



Dist - Co - Rte  
 PM  
 RU - EA  
 Program Code  
 FY

SAMPLE

## Project Report (New Highway Planting and Highway Planting Restoration) Preliminary Project Cost Estimate

Item Description	Unit	Quantity X	Unit = Price	Estimated Construction Cost
<b><u>Planting, Irrigation and Year(s) Plant Establishment Costs by Functional Planting Categories Identified in the Proposal</u></b>				
Linear Screen Planting	KM			
Tree and Shrub Planting	HA			
Groundcover Planting	HA			
Vines on Wall or Fence	KM			
Roadside Clearing	HA			
Irrigation System (Inc. supply line, sprinklers, CNC, and RCVs)	LS			
Water Meter	EA			
Backflow Preventer	EA			
Irrigation Controller Enclosure	EA			
Irrigation Crossover	M			
Electrical - Irrigation	LS	LUMP SUM		
Upgrade Existing Irrigation System	HA			
Water Supply	LS	LUMP SUM		
<b><u>Traveler and Worker Safety Elements</u></b>				
Relocate Irrigation Controllers	LS	LUMP SUM		
Relocate BPAs	LS	LUMP SUM		
Relocate Mainlines	LS	LUMP SUM		
Relocate Valves	LS	LUMP SUM		
Relocate Laterals & Sprinklers	LS	LUMP SUM		
Remove Hazardous Trees or Vegetation	LS	LUMP SUM		
Planting of Vines for Graffiti Control	LS	LUMP SUM		
Maintenance Vehicle Pullouts	EA			
Maintenance Access Roads	SY			
Maintenance Access Gates (Walk)	M2			
Maintenance Access Gates (Drive)	EA			
Mulch	M2			
Rock Blanket	M2			

Item Description	Unit	Quantity X	Unit = Price	Estimated Construction Cost
<b><u>Roadside Management Elements</u></b>				
Paving Beneath Guardrails or Signs	M2			
Pave Narrow Areas	M2			
Pave Slopes beneath Bridge Structures	M2			
Additional Gore Paving	M2			
Remove or Replace Signs	LS	LUMP SUM		
Remove or Relocate Pull Boxes	LS	LUMP SUM		
<b><u>Other Items</u></b>				
Plant Establishment	LS	LUMP SUM		
Water Assessment Costs/Meters	LS	LUMP SUM		
Reclaimed Water Conversion Costs (within right of way)	LS	LUMP SUM		
Extension of water main to right-of- way (from outside right of way)	LS	LUMP SUM		
Check Valve	LS	LUMP SUM		
Booster Pump	LS	LUMP SUM		
Supplemental Work	LS	LUMP SUM		
Hanging Ductile Iron Pipe on Bridge	M			
Jack or Directional Bore Crossovers	M			
Resident Engineer's Office	LS	LUMP SUM		
Stormwater Pollution Prevention (Consistent with SWDR)	LS	LUMP SUM		
Hazardous Materials	LS	LUMP SUM		
		SUBTOTAL		
		20% CONTINGENCY		_____
		GRAND TOTAL		
		CALL (Round to nearest \$1000)		_____



1. PROPOSED PROJECT

A. Project Description:

Briefly describe the project; what is the proposal, both roadway and roadside? Note the type of project and/or major elements of work to be done such as roadway widening, rehabilitation, reconstruction, full replacement planting, maintain existing plants, etc. What is the length of the proposed plant establishment period?

B. Existing Conditions:

How will this project impact existing conditions? Briefly describe the existing roadside conditions. What is the condition of the existing planting and irrigation system? How will the existing roadside be impacted by the proposed project?

C. Project Cost:

Include a summary project cost estimate segregated by major elements, including: roadway, structures, right of way, utility relocation, environmental mitigation, highway planting, irrigation system, plant establishment, maintain existing plants, maintain existing irrigation system, etc., as needed.

2. REASON FOR REQUESTING AN EXCEPTION

Briefly describe the reasons why this project cannot accommodate segregation. Describe any benefit to the State by combining the highway planting or mitigation work with the roadway contract (i.e., life cycle cost savings, functionality, etc.). Will the planting be adequately established within the period proposed? If additional time is necessary to establish the plants, how will this be accomplished?

3. PROJECT REVIEWS, CONCURRENCE

Note project reviews by District Maintenance personnel and the District Vegetation Manager. Provide a discussion of any issues identified by Maintenance, and state the concurrence with the proposed length of the plant establishment period.

4. ATTACHMENTS

Provide any additional documentation that supports the request for an exception.