



## ADOPT-A-HIGHWAY

### Guidelines for Preparing Tree and Shrub Planting Plans and Work Schedule

---

Applicants must develop and submit the following plans and a work schedule to the District Adopt-A-Highway Coordinator along with their Adopt-A-Highway Program Application. Applications will not be processed until these documents are received and approved. All costs incurred for adoption activities, including materials, equipment rental, and labor charges are the sole responsibility of the adopter. *It is strongly recommended that adopters consult with a Caltrans Landscape Architect or Landscape Specialist before preparing the following documents.* If available, Caltrans may provide base plans of the proposed adoption area for reference purposes.

#### 1. Planting Plan(s)

Prospective adopters must provide a plan (or map) that illustrates the location of the site within the highway right of way. If the proposed location requires further clarification, a written description should be included. The plan must show where the trees or shrubs are to be planted. The plan must list the quantity and species of the trees or shrubs. The plan must comply with the following guidelines:

##### Proposed Location

- Tree and shrub planting adoptions must cover approximately three acres (net).
- Trees and shrubs must be planted at least 15 feet from traffic lanes on conventional highways and at least 30 feet from traffic lanes on freeways.
- Plants should be located so that pruning will not be required; they should be planted at least 10 feet from the nearest fence, wall, ditch, or drainage way.
- The height and width of the proposed species at maturity must be taken into consideration when choosing the planting location within the adoption site.
  - Plants must not interfere with the function of safety features such as shoulders, barriers, guardrail, and signs.
  - Plants must not interfere with the ability of the driver to see a continuous length of highway.
  - Plants must avoid conflict with overhead wires, underground facilities, irrigation systems, drainage facilities, lighting, adjacent highway plantings, and existing billboards on adjacent property.

##### Proposed Plant Quantity and Species

- A minimum of twenty trees and/or shrubs per acre must be planted.
- All plants must be drought-tolerant. Plants must also be tolerant of local environmental conditions such as temperature, soil, water quality, air quality, and wind. California native plants

should be incorporated into the design. Caltrans can recommend species that have been successfully grown on highway roadsides in your area.

- If planted in a non-irrigated area, plants should be capable of surviving without irrigation two years after planting.
- Describe the size of the plants to be installed. One-gallon size plants, liner size plants, or acorns are encouraged in most locations.

## 2. Irrigation Plan (Optional)

If Caltrans irrigation facilities are to be used, they must be included on the planting plan or on a separate drawing. Installation (or modification) of irrigation systems by adopters is not permitted.

## 3. Work Plan

Your work plan must describe how the following planting and maintenance operations will be accomplished. Any assistance to be provided by Caltrans (i.e., mowing or disposal of debris) must be included in the work plan.

### Site Preparation

- **Weed and Litter Removal:** Prior to planting, you must remove weeds and litter from the area to be planted.
  - Describe of the type of weeds present.
  - Describe weed removal method(s). Take into account the type and density of weeds, soil conditions, and slopes. Typically, weed removal includes one or more of the following tasks: hand-pulling, hoeing, mowing, weed-whipping, or applying herbicides.
  - Describe how any resulting debris will be removed from the site.
- **Digging:** Describe how you plan to dig the planting holes and how large the holes will be. Holes may be excavated by hand, power auger, tractor, or backhoe. Describe safety measures to be taken around unattended holes.

A list of any Caltrans-owned underground facilities, such as irrigation and electrical installations, will be supplied by Caltrans. It is the adopter's responsibility to contact the Underground Service Alert (USA) at 1-800-227-2600 for identification of underground lines that are not owned by Caltrans. USA must be called at least two full working days prior to breaking ground. If underground lines are found, you must call the Adopt-A-Highway representative listed on your Encroachment Permit before proceeding.

- **Preparation of Planting Holes:**
  - **Soil Amendment:** List what kind, and the quantity of, any soil amendments you plan to use (i.e. compost, gypsum, etc.)
  - **Fertilizer:** If recommended for the species being planted, list what kind, and the quantity of, fertilizer you plan to use.
  - **Protectors:** Describe any wire-cage foliage protectors or root protectors to be used in the holes.

## Planting

- **Watering Basins and Staking:** Describe watering basins and, if applicable, include details for plant staking. Placement of highly visible stakes is strongly recommended.
- **Mulch:** It is required that you surround the plants with a layer of mulch that is four- to six-inches deep. The area within a three-foot radius (six-foot diameter) of each plant must be covered, except for within a one-foot radius of the trunks of trees and shrubs.

Identify the kind of mulch you will use, how it will be brought to the site, and how it will be spread. Please obtain a copy of the *Guidelines for Using Mulch* handout from your District Adopt-A-Highway Coordinator for acceptable mulch composition.

## Ongoing Maintenance

- **Watering:** Supplemental watering of plants is required. If there are no on-site irrigation facilities, then you must describe how you plan to water the plants. Truck-watering can be used, or, adjacent property owners may be willing to allow you to run hoses to your site.
- **Mulch:** Describe your plan for reapplying mulch to maintain a four- to six-inch depth.
- **Replacing Plants:** Describe your plan for replacing dead and diseased plants.
- **Fertilizer:** Describe your plan for reapplying fertilizer (if recommended for the species).
- **Weed Control:** Describe the method(s) you will use to control weed growth at your site. Weeds must be controlled within a three-foot radius (six-foot diameter) of the plants or out to the plant's dripline, whichever is further. In addition to the required application of mulch, weed control typically includes one or more of the following tasks: hand-pulling, hoeing, mowing, weed-whipping, and/or applying herbicides.
- **Litter Removal:** Indicate whether or not litter removal prior to weed control is required.
- If applicable, describe how any resulting vegetation debris and/or litter will be removed from the site.

**Use of Herbicides:** If your work plan includes the use of herbicides, please request a copy of the *Working With Contractors* or the *Caltrans Licensing Requirements for Adopt-A-Highway Volunteers Using Herbicides* from your District Adopt-A-Highway Coordinator before proceeding. Only Caltrans-approved herbicides may be used on the State right of way.

**Use of Motorized Equipment:** It is recommended that only Adopt-A-Highway service contractors be permitted to use motorized equipment to perform adoption tasks. However, at the discretion of Districts, volunteers who routinely perform landscape maintenance tasks in a professional capacity, may be permitted to use motorized equipment.

**Use of Contractors:** If your group intends to hire an Adopt-A-Highway service contractor to perform any portion of your adoption work, please obtain a copy of the *Working With Contractors* handout from your District Adopt-A-Highway Coordinator before proceeding.

## 4. Work Schedule for Tree and Shrub Planting and Maintenance Activities

A proposed, five-year work schedule must be submitted along with the plans. The schedule must give dates for all of the activities mentioned in your work plan. Usually, the best time to plant is after the first rain, in the Fall or Winter, so that the plants can become established during the rainy season. Local weather conditions will determine the best planting dates and watering frequencies.

Statewide guidelines require that you provide weed control a minimum of two times a year. However, you may be required to work more often if necessary to keep the area in a neat and clean condition. Plan to control weeds before they reach six inches in height or before they produce seeds. In order to avoid accidentally starting a fire, do not plan to use power equipment for weed control during periods when weeds and brush are dry.

**Sample items to include in your work schedule:**

**Year 1**

- Weed control and litter removal prior to planting
- Digging and preparation of planting holes
- Initial planting, mulching, and staking
- Year-round irrigation
- Year-round weed control

**Following Years**

- Replacement of dead and diseased plants
- Reapplication of mulch
- Reapplication of fertilizer (if appropriate)
- Year-round irrigation
- Year-round weed control

Note: Changes to work schedules once an encroachment permit has been issued must be approved by the District Adopt-A-Highway Coordinator.

**5. Requirements for Renewing Tree and Shrub Planting Adoptions**

Near the end of your encroachment permit period, your adoption site will be reviewed by a District Maintenance field representative and either a District Landscape Architect or a District Landscape Specialist. If changes in adoption requirements are recommended (i.e. replacement of dead plants with a different species), the District Adopt-A-Highway Coordinator will communicate these to you.

Groups who wish to apply for another five-year encroachment permit must provide a new or amended planting plan and/or work plan to reflect any changes. If there are no changes, copies of existing plans may be submitted along with the application.

Whether or not there have been any changes in the adoption requirements, all groups who reapply must provide a revised work schedule for the new encroachment permit period.

Once all plants can survive without supplemental watering provided by the adopter, the adoption will be considered complete. Groups with completed tree and shrub planting adoptions may be offered the opportunity to convert to a vegetation control adoption when the current encroachment permit period expires. Vegetation control adopters must remove weeds from the entire, three-acre site, not just around the plants. Adopt-A-Highway courtesy signs will be removed from sites that are not converted to vegetation control adoptions.