



ADOPT-A-HIGHWAY

Preparing Tree and Shrub Planting Plans and Work Schedule

Applicants must develop and submit a planting plan, a work plan, and a work schedule to the District Adopt-A-Highway (AAH) Coordinator. It is strongly recommended that applicants consult with a Caltrans Landscape Specialist or Architect before preparing these documents. AAH Permits will not be issued 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. If available, Caltrans may provide base plans of the proposed adoption area for reference purposes.

1. Planting Plan(s)

A planting plan (or map) illustrates the location of the adoption 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).
- **Planting Set-Back for Trees:**
 - **Freeways and Expressways:** Trees must be planted at least 30 feet from the edge of the traveled way.
 - **Conventional Highways - Small Trees:** A minimum height clearance of 15 feet from the pavement to the lower foliage of overhanging branches of mature trees is necessary to provide for the passage of trucks.
 - **Conventional Highways - Large Trees:** Trees must be planted at least 30 feet from the edge of the traveled way in areas where the posted speed limit is 35 miles per hour or less without curb or barrier, or, in areas where the posted speed limit is greater than 35 miles per hour.
 - Trees must be at least 20 feet from any manholes.
- **Planting Set-Back for Shrubs:** Shrubs may be planted closer to the edge of the traveled way than trees. The minimum set-back distance will be determined by the height and width of the shrub to be planted.
- 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.
- If Caltrans irrigation facilities are to be used, they must be included on the planting plan or on a separate drawing. Installation, modification, or maintenance of irrigation systems by adopters is not permitted.
- 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 or liner size plants are encouraged in most locations.

2. 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 vegetation debris and/or litter 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 Caltrans Maintenance Supervisor 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.
- **Weed Barrier:** Application of weed barrier prior to placement of mulch is 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 *Instructions for Using Mulch* handout from your District AAH 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, application of weed barrier, and/or applying herbicides.
- **Litter Removal:** Litter removal prior to weed control or other adoption activity is required.
- **Debris Removal:** 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* handout from your District AAH Coordinator before preparing your plans. Only Caltrans-approved herbicides may be used on the State right of way.
- **Use of Motorized Equipment:** It is recommended that only AAH 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 AAH service contractor to perform any portion of your adoption work, please obtain a copy of the *Working With Contractors* handout from your District AAH 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 your planting plan and work plan. The schedule must give dates for all of the activities mentioned in your plans. 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. Litter must be removed from the planted area each time you work at your site. 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
- Application of weed barrier
- Initial planting, mulching, and staking
- Year-round irrigation
- Year-round weed control
- Litter removal in conjunction with any adoption activity

Following Years

- Replacement of dead and diseased plants
- Reapplication of mulch
- Reapplication of fertilizer (if appropriate)
- Year-round irrigation
- Year-round weed control
- Litter removal prior to any adoption activity
- Litter removal in conjunction with any adoption activity

Note: Changes to a work schedule once a permit has been issued must be approved by the District AAH Coordinator in consultation with the Maintenance Supervisor of the area where the site is located and a Caltrans Landscape Specialist or Architect.

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 Supervisor and a District Landscape Specialist. If changes in adoption requirements are recommended (i.e. replacement of dead plants with a different species), the District AAH 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. AAH courtesy signs will be removed from sites that are not converted to vegetation control adoptions.