

SECTION 02110

SITE CLEARING

PART 1 – GENERAL

1.01 DESCRIPTION

- A. Section includes specifications for clearing and grubbing. Perform site clearing in advance of grading and other construction operations.

1.02 REFERENCE STANDARDS

- A. State of California, Department of Transportation, Standard Specifications (Caltrans)
 - 1. Section 16 Clearing and Grubbing

1.03 SUBMITTALS

- A. Site Clearing Plan: Indicate location and limits of clearing and grubbing, methods, equipment, procedures, safety and protection measures, and disposal sites.

1.04 DELIVERABLES

- A. Submit copies of manifests showing delivery of disposed materials in accordance with permit conditions within 24 hours from time of delivery.

PART 2 - PRODUCTS

2.01 MATERIALS

- A. Provide temporary or permanent materials as required for the proper execution of the work of this Section.

PART 3 - EXECUTION

3.01 GENERAL

- A. Perform site clearing in accordance with Caltrans Standard Specifications Section 16.
- B. Maintain a clear site until covered by new work or until completion of the Work.
- C. Clear, grub, prune, remove, and dispose of materials, including bushes, brush, trees, stumps, fallen timber, logs, roots, signs, rubbish, refuse, trash and debris as shown on the Contract Drawings, specified herein, and as required to perform the work of the Contract.
- D. Refer to Section 01560, Temporary Controls, for requirements for storm water pollution prevention and dust control.
- E. Provide barricades, coverings, or other types of protection necessary to prevent damage to existing improvements indicated to remain in place. Protect improvements on adjacent properties as well as those on PCJPB property. Restore existing improvements damaged by the work to original condition to the satisfaction

of the Engineer.

- F. Refer to Section 02510, Utility Grade Adjustments, for specifications for raising and resetting existing frames, covers, and lids to meet new finish grade elevations.
- G. Upon completion of site clearing work, Caltrain property and adjacent areas shall be neat, clean and in condition to receive subsequent work.
- H. Carefully remove items to be salvaged, and store where required by the Engineer or where indicated in the Contract Documents.

3.02 LIMITS OF SITE CLEARING

- A. Perform site clearing sufficient to perform the construction work shown in these Contract Documents. In addition, perform site clearing as follows:
 - 1. Perform site clearing for track construction for a distance of 15 feet measured perpendicular from the centerline of track outward toward the right-of-way, or from the centerline to the right-of-way, whichever is less.
 - 2. Perform site clearing to three (3) feet beyond the toe of new embankments.
 - 3. Perform site clearing at grade crossings to a distance of not less than 100 feet in each direction of approach to grade crossings, within the entire width of the right-of-way, unless otherwise indicated on the Contract Drawings.

3.03 CLEARING

- A. Cut, remove and dispose of all timber, brush, fallen timber, stumps and rubbish except trees or other vegetation that is designated for preservation on the Contract Drawings. Retain and protect from damage any trees and shrubs that are outside the limits of the required clearing.
- B. Completely remove trees, stumps, shrubbery, and brush in areas where embankment will be placed.
- C. Remove stumps and roots completely in excavation areas and under embankments where the original ground level is within 3.5 feet of subgrade or slope of embankments. In embankment areas, where the original ground level is more than 3.5 feet below the sub grade or slope of embankment, cut off trees, stumps, and brush to within 6 inches of the ground.
- D. Do not start earthwork operations in areas where clearing and grubbing are not complete, except that stumps and large roots may be removed concurrently with excavation.

3.04 GRUBBING AND STRIPPING

- A. Grubbing: Excavate, remove and dispose of all roots, stumps, and other vegetation to a minimum depth of 30 inches. Measured depth shall be from existing ground surface or new finished grade, whichever is lower. Leave ground surface in a condition suitable for stripping of topsoil.
- B. Stripping: Excavate and remove topsoil (including any remaining vegetation) which is not classified as suitable fill material down to suitable fill material, except in plant bed areas. Salvage topsoil if required in the Contract Documents.

3.05 EXISTING TREES AND VEGETATION

- A. Protect existing trees indicated to remain in place against cutting, breaking or skinning of roots, skinning and bruising of bark, smothering of trees by stockpiling building materials or excavated materials within drip line, excess foot or vehicular traffic, or parking of vehicles within drip line. Provide temporary fences, barricades or guards at dripline to protect trees. Trees within limits of contract work shall be watered as required by the Engineer.
- B. When it is necessary to cut tree roots to provide room for new construction, cleanly saw tree roots over 1-1/2 inches diameter. Cover exposed roots with wet burlap to prevent roots from drying out.
- C. Where trees or shrubbery designated to remain or those in areas outside the area indicated to be cleared and grubbed are damaged in the course of the Work, repair damage to or replace damaged existing trees and shrubbery to the Engineer's satisfaction.

3.06 EXISTING STRUCTURES AND PROPERTY

- A. Obtain permission from the Engineer prior to removing signs, posts, catch basin frames and grates, and manhole frames and covers not indicated on the Contract Drawings for removal.
- B. Protect existing structures and facilities not to be removed.
- C. Store salvaged items in an orderly manner as directed by the Engineer.
- D. Protect existing survey monuments. Refer to Section 01050, Field Engineering, for procedures for replacement of disturbed or damaged bench marks or monuments.

3.07 DISPOSAL

- A. Disposal: Refer to General Provisions 7.16, Disposal of Material Outside of the Work Site.
 - 1. Do not store or stockpile on Caltrain property material designated for disposal, except as indicated in the Contract Documents.
 - 2. Debris and material that is not scheduled or shown on the Contract Drawings to be salvaged or re-used, shall become the property of the Contractor and shall be disposed of outside of the work site.
- B. Keep the project area clear of refuse and rubbish, and maintain the area in a neat condition.

END OF SECTION