

INSTRUCTIONS FOR USE OF CONSTRUCTION SPECIFICATION 2

CLEARING AND GRUBBING

1. APPLICABILITY

Construction Specification 2 is applicable to the clearing and grubbing of woody vegetation and the removal of trash and rubbish at construction sites.

2. MATERIAL SPECIFICATIONS

There are no material specifications complementary to Construction Specification 2.

3. ITEMS TO BE INCLUDED IN CONTRACT SPECIFICATIONS AND DRAWINGS

- a. When the area(s) to be cleared and grubbed, including area(s) of rubbish removal, is definable on the project layout map or other construction plan view, the limits must be shown and clearly defined.
- b. When the area(s) to be cleared and grubbed is not definable on the drawings (which may occur for many channel improvement projects) the extent of clearing and grubbing required must be described by notes and designation of right-of-way boundaries and station limits.
- c. When replacement plants are required because of damage caused by the Contractor, the specific size, number, and species needs to be specified in Section 7. Example; "Any tree removed that was designated to remain or is irreparably damaged shall be replaced with two 15 gallon size Valley Oak (*Quercus lobata*) as directed by the Contracting Officer."
- d. When measurement and payment is identified to be in accordance with Method 2, Section 6, the survey line(s) along which the cleared and grubbed area(s) length is to be measured must be designated. The lateral extent and station reaches of the area(s) to be cleared and grubbed must be clearly defined.
- e. Areas in which disposal of refuse/waste material will not be allowed or areas where disposal will be restricted must be clearly defined and/or shown on the drawings.
- f. Special requirements for grubbing depth, if required.
- g. Required depth of earth cover over buried materials, if applicable.
- h. Required surface grading over buried materials, if applicable. Existing natural flow patterns onto or from the construction site onto other properties must be a consideration in the final grading.
- i. Restrictions on the use of explosives, if any.
- j. Restrictions on the burning of combustible materials as a disposal procedure, if any.

- k. Special requirements for control of erosion, water pollution, and air pollution, if applicable. Requirements of this specification must be compatible with any and all requirements outlined in Construction Specification 5, Pollution Control, when included as part of the contract.
- l. Method(s) of measurement and payment, if the standard specification includes more than one method.

4. DISCUSSION OF METHODS

a. Section 6, Measurement and Payment

- (1) Method 1 is intended for use when the area (s) to be cleared and grubbed is extensive and can be defined in units of area on the ground and on the drawings. Section 6 should specify horizontal or surface measurements to be used to determine area cleared and grubbed. A reservoir area is a typical example of this type of site.
- (2) Method 2 is intended for use when the area (s) to be cleared and grubbed is long and narrow. Section 6 should specify horizontal or surface measurements to be used to determine length of clearing and grubbing. A channel right-of-way is a typical example of this type of site.
- (3) Method 3 is intended for use when the area(s) to be cleared and grubbed is extensive, but the vegetation consists mainly of scattered trees, stumps, snags, etc., that can be measured individually.
- (4) Method 4 is intended for use when the area(s) to be cleared and grubbed cannot be measured practically and when it is reasonable to expect that variations in the estimated quantity of work to be performed will not occur after the contract is awarded. For Method 4, the procedures that will be used to determine the amount of work satisfactorily completed for progress payment needs to be identified in Section 7.

Options may include:

- an on site agreed-to estimate of the percent of work satisfactorily completed at time of cutoff; or
- require the contractor to provide measurements of all areas and identify those that have been satisfactorily cleared and grubbed, and use a percentage of the total bid item; or
- other suitable and fair methods, one of which could be related to construction schedule.

When specifications are prepared using electronic procedures and all but one method are deleted for use in the contract specification, delete "All Methods The following provisions apply to all methods of measurement and payment." and left justify the remaining text.