National Standard Construction Specifications Part 642 National Engineering Handbook

Instructions for use Construction Specification 4—Channel Clearing and Shaping

1. Applicability

Construction Specification 4 is applicable to the clearing, removal, and disposal of woody and other vegetation; removal and disposal of trash and rubbish; and the earth shaping of the bottom and sides of the channel. This specification is applicable for natural floodways, constructed channels, and other drainage systems.

2. Material specifications

No material specifications complement Construction Specification 4.

3. Included items

Items to be included in contract specifications and drawings

- a. The special markings indicating trees to be left standing, undisturbed, and uninjured must be described.
- b. For Section 2, Protection of Existing Vegetation, when the specific size of replacement plant is known or is desired, specify the number, size, and species of the replacement in section 8. Example: "Any tree designated to remain or is irreparably damaged shall be replaced with two 15gallon valley oak (Quercus lobata) as directed by the contracting officer."
- c. Areas in which disposal of refuse material or other waste materials resulting from channel clearing and shaping activities is not allowed or areas where disposal is limited or restricted, if known.
- d. Restrictions on the burning of combustible materials as a disposal procedure, if any.
- e. The reaches of the stream or channel where shaping is to be performed.
- f. An illustration or description that provides the shaping requirements.

g. Method(s) of measurement and payment if the standard specification includes more than one method.

4. Methods Section 7, Measurement and Payment

Method 1—Intended for irregularly shaped reaches that need to be physically measured in the field. Section 8 should specify horizontal or surface measurements to be used to determine area cleared and shaped.

Methods 2 and 3—Intended for long channel reaches that have a uniform width and minor variations in width, respectively. Section 8 should specify horizontal or surface measurements to be used to determine area cleared and shaped.

Method 4—Intended for use where the amount of work required is relatively consistent throughout the described work area. For this method, procedures that will be used to determine the amount of work satisfactorily completed for progress payment need to be identified in section 8. Options may include:

- An onsite agreed-to estimate of the percent of work satisfactorily completed at time of cutoff.
- Require the contractor to provide supporting calculations to determine extent of work satisfactorily completed.
- Other suitable and fair methods, one of which could be related to the construction schedule.

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Method of measurement and payment

When all but one method are deleted for use in a contract specification, delete from the last paragraph *All Methods The following provisions apply to all methods of measurement and payment.* Left justify the remaining text.

5. Items of work and construction details

Starting at the top of page 4–3, prepare and outline job specific "Items of Work and Construction Details" (IWCD) in accordance with these instructions. For ease of utilization, the use of recyclable color paper for the IWCD should be considered.