

Kiewit Infrastructure West Co.
Klamath River Renewal Project
Technical Specifications

31 10 00 – CLEARING, GRUBBING AND STRIPPING

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REVISION INDEX

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PART 1 - GENERAL

1.1 SUMMARY

- A. This specification describes the construction and quality management requirements for Clearing, Grubbing and Stripping activities.
- B. This specification applies to the Clearing, Grubbing and Stripping as specified in this Section and set out in the Drawings.

1.2 RELATED SECTIONS

- A. Section 31 05 00 – Materials for Earthwork.
- B. Section 31 23 00 – Excavation and Fill Placement.
- C. Section 31 25 00 – Erosion and Sedimentation Controls.
- D. Section 31 30 00 – Earthwork Methods.
- E. Section 31 60 00 – Foundation Preparation.
- F. Section 31 80 00 – Care of Water.

1.3 REFERENCE STANDARDS

- A. Conform to Siskiyou County code within the State of California for disposal of debris.
- B. Conform to Klamath County code within the State of Oregon for disposal of debris.
- C. California Stormwater Quality Association:
 - 1. California Stormwater BMP Handbook – Construction.
- D. State of Oregon Department of Environmental Quality:
 - 1. Construction Stormwater Best Management Practices Manual, 1200-C NPDES General Permit.

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1.4 DEFINITIONS

- A. **Clearing** – The felling and removal of trees, shrubs, and vegetation to within 18 inches of the ground within areas of the Site so designated on the Drawings.
- B. **Grubbing** – The removal of roots and stumps within areas of the Site so designated on the Drawings.
- C. **Stripping** – The complete removal of all vegetation and organic matter to a maximum depth of 3 feet within areas of the Site so designated on the Drawings.
- D. **Organics and Woody Debris** – All organic matter including trees, shrubs, roots, stumps, and other vegetation existing in the Site areas.
- E. **Merchantable Timber** – Tree or portion of a tree suitable for harvesting and transport to a processing plant.

1.5 SUBMITTALS

- A. Project Record Documents: Record actual locations of abandoned utilities and services, foundations, and other appurtenances.

1.6 QUALITY ASSURANCE

- A. Work shall be in conformance with the Drawings, submittals, and other project documents.

PART 2 - PRODUCTS

2.1 EQUIPMENT

- A. Equipment shall be the responsibility of the Contractor.

2.2 CLASSIFICATION OF MATERIALS

- A. Materials removed during Clearing, Grubbing and Stripping are to be classified as either organics and woody debris or merchantable timber and stored as described on the Drawings and as specified in this Section.

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PART 3 - EXECUTION

3.1 GENERAL

- A. Site clearing operations must not commence until temporary erosion and sedimentation controls measures are in place.
- B. The Contractor shall clear, grub and strip all ground surfaces prior to fill placement in any area to the limits as shown on the Drawings.
- C. The Contractor shall clear, grub and strip all ground surfaces prior to excavation if the excavated materials are to be used for construction purposes and have specified material requirements.
- D. In order to reduce erosion and contamination of the surface runoff to a minimum at all times, Clearing, Grubbing and Stripping shall be scheduled to be performed only as and when required to enable each portion of the Work to be carried out.

3.2 PREPARATION, PROTECTION AND EXAMINATION

- A. Call Local Utility Line Information service at (800) 332-2344 (Oregon) or (811) (California) not less than three working days before performing Work.
 - 1. Request underground utilities to be located and marked within and surrounding construction areas.
 - 2. Obtain local as constructed record documents for local and private utilities.
- B. Obtain protocols on protection of utilities and cultural resources. Locate, identify, and protect utilities indicated to remain, from damage. Protect benchmarks and other survey control points from damage or displacement.
- C. The Contractor shall stake out the areas where Clearing, Grubbing and Stripping are to be carried out. Markings of the area limits should be clearly visible and remain in place following the completion of the Clearing, Grubbing and Stripping activities.
- D. The Contractor must minimize the tracking of mud and soil from the project area on to the existing paved or public roads. Soil or mud tracked from the Work area and on to the roads shall be removed daily.

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3.3 CLEARING

- A. Clear the areas of the site as designated on the Drawings or in the Technical Specifications including the felling of all trees, shrubs, and vegetation to within 18 inches of the ground.
- B. Collect all organics and woody debris for eventual disposal or stockpiling.
- C. Any clearing, which the Contractor elects to perform for his own purposes, shall be subject to approval by the Owner. This clearing must be performed in accordance with the requirements of this Specification. Prior to the clearing of any area, which is not required for the construction of the permanent Works, the Contractor shall submit to the Owner for approval, full details of the clearing it proposes to perform.

3.4 GRUBBING

- A. Grubbing shall include the complete removal of all roots and stumps in areas designated on the Drawings. Removal of root structures shall be to the bottom of the root or 18” below grade level.
- B. Grubbed debris can be temporarily stockpiled or windrowed within the work area, but ultimately is to be removed to designated stockpile or disposal locations.
- C. Where Grubbing will result in erosion, measures shall be taken to mitigate such as per Section 31 25 00 - Erosion and Sedimentation Controls.
- D. Grubbing shall be completed as soon as Clearing operations allow.

3.5 STRIPPING

- A. Stripping includes the complete removal of all vegetation and organic matter to a maximum depth of 3 feet.
- B. Stripping shall be performed in a manner that maximizes the salvage of the organics for eventual site restoration.
- C. Stripped debris can be temporarily stockpiled or windrowed within the work area, but ultimately is to be removed to designated stockpile or disposal locations.
- D. Where Stripping will result in erosion, measures shall be taken to mitigate such as per Section 31 25 00 - Erosion and Sedimentation Controls.

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- E. Stripping shall be completed in conjunction with grubbing operations or as soon as grubbing operations allow.

3.6 REMOVAL AND STOCKPILING

- A. After an area has been cleared, stripped, grubbed and the debris removed, remove surface organics and woody debris and windrow, or stockpile this material.
- B. Stockpile locations shall not interfere with any other part of the Work and shall be located at a minimum 50 feet away from proposed or existing structures.
- C. Stockpile the organics and woody debris in a neat workmanlike manner ensuring that it is stable and protected from erosion. Care shall be exercised during stockpiling to prevent compaction and possible mixing of the organics with subsoil.

3.7 QUALITY

- A. The Contractor shall provide the Owner and Engineer access to the site at all times.
- B. The Contractor is responsible for performing work in accordance with the Drawings and performing quality control.
- C. The Engineer shall inspect the area to determine whether removal of material has been completed satisfactorily.

END OF SECTION 31 10 00