STANDARD AND SPECIFICATIONS FOR BRANCHPACKING



Definition

Branchpacking consists of alternate layers of live branch cuttings and tamped backfill to repair small, localized slumps and holes in slopes.

Purpose

The purpose of branchpacking is to provide repair to existing slopes that have small slips or slumps by filling in the failed area with plant materials and soil.

Conditions Where Practice Applies

This is an appropriate technique for repairing slip areas that do not exceed 4 feet deep or 6 feet wide. It should not be used as a slope stability measure if structural embankment support is needed.

Design Criteria

- The live branch cuttings shall be 1/2 2 inches in diameter and long enough to touch the undisturbed soil at the back of the area to be repaired. They should extend 4 - 6 inches beyond the finished backfill grade.
- Wooden posts should be used to secure the plant material in place. They should be 6 - 8 feet long and 3 -4 inches in diameter. If lumber is used, it shall be a minimum standard two by four.
- 3. Wooden posts shall be driven vertically 3 feet deep and placed in a grid pattern 1 2 feet apart.
- 4. Beginning at the bottom of the slip area, 4 6 inch layers of live branch cuttings are placed in angled layers, 1.5 to 3 feet apart. Compacted moist soil is placed between the layers (see Figure 4.8).

Maintenance

Due to the susceptibility of plant materials to the physical constraints of the site, climate conditions, and animal populations, it is necessary to inspect installations frequently. This is especially important during the first year or two of establishment. Plant materials missing or damaged should be replaced as soon as possible. Sloughs or breaks in drainage pattern should be reestablished for the site as quickly as possible to maintain stability.

Figure 4.8 Branchpacking

