Sodding

Description

Sodding is transplanting vegetative sections of plant materials to promptly stabilize areas that are subject to erosion. Sod may be field sod, or commercial sod which is a cultured product utilizing specific grass species.

Other Terms Used to Describe

Vegetative Establishment

Pollutants Controlled and Impacts

A sodded area provides one of the best filtering methods for preventing soil particles and associated attached chemicals from leaving the site. Sod provides immediate protection against soil erosion caused by water and wind, helps minimize runoff, and allows groundwater recharge.

Application

Land Use
Applicable to all land uses.

Soil/Topography/Climate
On all slopes greater than 3:1 (h:v), or where high water velocities are expected, sod should be held in place with wooden stakes.

When to Apply
Sod should be placed as soon as possible after the ground surface has been graded, to take advantage of the ground moisture. Sod may be laid any time from May 1 until October 20 if it can be irrigated as needed. Sod should not be laid between June 10 and September 10 without irrigation.

Where to Apply
Apply at all construction sites or earth change activities which require vegetative stabilization sooner than can be established by seeding. Sodding is particularly beneficial along steep slopes where seeding may be difficult to establish and maintain.

Relationship With Other BMPs

Sodding is sometimes used to develop Grassed Waterways and Buffer/Filter Strips, and is often used as a part of Critical Area Stabilization. Sod can also be used as Filters around storm drain inlets.

Specifications

Planning Considerations:

Sod selection:

Species. The proper sod species should be selected following basic integrated pest management principles (see the Pesticide Management BMP). To reduce the amount of fertilizers, pesticides and

other inputs needed, choose adapted varieties based on environmental conditions, management level desired, and the intended use. For example, consider using bluegrass sod on areas where an attractive appearance is desired and maintenance will include regular mowing and intensive care. Natural fieldgrass of bluegrass and associated perennial grasses may be used in areas where maintenance will be less intensive.

Size. Sod should be live grass in uniform width strips, taken from thick-growing stands free of weeds. Cultured sod should be cut approximately 0.5 inches thick. Other grass sods should be cut at least 2 inches thick.

Length. Cultured strips should not be less than 30 inches in length. Other grass sods shall be in strips at least 10 inches by 18 inches.

Sod strips should be cut with smooth clean edges and square ends to facilitate laying and fitting.

When to Sod. Although sod can be laid any time from May 1 until October 20 if it can be irrigated as needed, survival is greatly increased if sod is placed during months other than July and August. Sod should never be laid between June 10 and September 10 without irrigation.

Sod should never be frozen, nor should sod ever be applied on frozen ground.

Sod should not be permitted to dry out. Lay sod within 24 hours after cutting. Sod should also be protected from wind and rain until it is laid.

Site Preparation:

1. Consider protecting sodded areas from pedestrian access using the Construction Barriers BMP.

2. Where possible, divert concentrated flows away from the sodded areas at least until the sod is attached to the soil through rooting. Follow specifications in the Diversions BMP.

3. Soil tests should be done to determine the nutrient and pH content of the soil. Depending on the results of soil tests, Soil Management may be necessary to obtain a pH of between 6.5 and 7.0 (for most conditions). All lime, fertilizer and other soil amendments should be addressed following the Soil Management specifications.

4. Prepare a 3-5-inch deep sodbed, with the top 3-4 inches consisting of topsoil. Note that the earth bed upon which the topsoil is to be placed should be at the required grade.

5. The sodbed should be firm but not compact. The top three inches of the soil should be loose, moist and free of large clods and stones. All stones larger than 2 inches in diameter, roots, litter and any foreign matter should be raked and removed. The topsoil surface should be in reasonably close conformity to the lines, grades and cross sections shown on the grading plans.
6. Subsurface Drains may be needed where water movement may cause seeps or soil slippage. Wet waterways should be tiled to ensure the vegetation is established.

7. Immediately before placing the sod, the soil surface should be loosened to a depth of 1 inch

and thoroughly dampened if not already moist.

Applying the Sod:

1. Apply the sod by hand in rows at right angles to the direction of the slope, starting at the base of the area to be sodded and working upward. Do not use pitch forks to handle sod and don't dump the sod from vehicles, as this will ruin the integrity of the sod. Place the strips together tightly so that no open joints are left between strips or between the ends of strips. Stagger the joints between the ends of strips.

2. Always lay sod perpendicular to the flow of water on slopes and in ditches and waterways.

3. The edges of the sod at the top of the slopes should be tucked slightly under. A layer of soil should be compacted over the edge to conduct surface water over and onto the top of the sod.

4. Fill any spaces between the joints and all sod edges with at least 2 inches of topsoil.

5. Sod should be firmly tamped or rolled immediately after it is placed.

6. On slopes steeper than 3:1, or areas of concentrated flows, sod should be secured with wooden pegs, or other approved techniques. Wooden pegs should be a minimum of 10 inches long, spaced 2 feet apart in any direction, and driven flush with the surface of the sod.

   In areas of concentrated flows, you may also want to consider installing Check Dams to decrease the velocity in the channel.

7. Water sod immediately after it is installed. Water to a depth of 1 inch into the sod. Additional watering should be done based on soil moisture, and following specifications in the Lawn Maintenance BMP.

8. See the Filters BMP for the use of sod as filters.

9. Excess top soil should be disposed of following specifications in the Spoil Piles BMP.

Maintenance

Newly sodded areas need to be inspected frequently for the first few months to ensure the sod is maturing. Failures may be due to improper conditioning of the subsoil, lack of irrigation, improper staking, or improper placement of the sod pieces. New pieces of sod, and fertilizer, lime or other constituents may need to be applied. Spot Seeding can be done to small damaged areas. Follow specifications in the Fertilizer Management and Soil Management BMPs to identify appropriate options.

Once the sod is well established:

1. Construction Barriers may be removed.

2. Water the sod following specifications in the Lawn Maintenance BMP.

3. Protruding stakes should either be pounded flush to the ground or removed before mowing.

Follow mowing specifications in the Lawn Maintenance BMP.

4. Occasional soil tests should be collected and analyzed to determine if the soil is appropriately fertilized.

5. Control pests following specifications in the Pesticide Management BMP.

6. Refer to the Lawn Maintenance BMP for information on determining the steps which can be taken to improve unhealthy turf.