

BMP 57.00. Temporary Seeding

DESIGN CONSIDERATIONS

Objectives

Temporary Seeding is intended to temporarily stabilize the soil of a disturbed area to prevent the erosion and the discharge of soil and/or sediments.

Temporary Seeding is used in areas where permanent cover is not necessary or appropriate. By protecting bare soil from raindrop impact and binding the soil with roots, a well-established vegetative cover is one of the most effective methods of reducing erosion.

Other Names

Temporary Stabilization.

Applicability

Temporary Seeding is applicable to exposed areas subject to erosion that are not actively being worked. Temporary Seeding can be used where permanent covering is not necessary or where future ground disturbing activities will occur.

By itself, Temporary Seeding is not soil stabilization because the seeds are not effective until they sprout and create a stabilizing root mat. Temporary Seeding should be accompanied by surface preparation, surface roughening, fertilizer, mulch, and maintenance to encourage seed establishment. Temporary Seeding can remain and be left to winter over only if ground-disturbing activities are scheduled to resume the following spring. Prior to application of permanent stabilization measures, Temporary Seeding should be removed from, or plowed/tilled into, the existing soil

Selection Considerations

- Consider application rate, regional climate, environment, and duration of required vegetation coverage prior to application. Temporary Seeding is intended to be used for a maximum of one growing season.
- Temporary Seeding should be applied soon after ground-disturbing activities cease in the area and in compliance with highway Section 641 (airport Section P-157). The use of fertilizers is advised to promote rapid and healthy seed growth. Fertilizer should be applied at the application

rate specified by the manufacturer or per the recommendations from a soil analysis

Design

Seed Selection: Annual Ryegrass (*Lolium multiflorum*) should be used for short periods lasting no more than one growing season.

Seed Application Rate: Typical rate of 20 lbs/acre (per Plant Material Center recommendation), although the rate may be varied based on site-specific conditions.

Fertilizer Application Rate: Typical rate of 200 lbs/acre of 20-20-10 (percent nitrogen-phosphorus-potassium) fertilizer (per Plant Material Center recommendation).

Other Soil Amendments: In certain cases, in addition to fertilizer, specifying compost or topsoil may enhance vegetative growth. However, note that in some cases a layer of topsoil on gravel surfaces can increase erosion potential.

Soil Stabilization Methods: Hydraulic erosion control products (HECPs), including bonded fiber matrix, mulch, and tackifiers; and rolled erosion control products (RECPs) for slopes should be considered on a site-specific basis in conjunction with Temporary Seeding to decrease soil erosion potential

Relationship to Other Erosion and Sediment Control Measures

Seeding should be performed in conjunction with surface roughening, soil stabilization methods, and grading practices. Concentrated flows or runoff should be directed away from the seeded areas using diversions.

Common Failures or Misuses

Common failures are generally due to faulty installation and maintenance. These failures include:

- Ground or growth medium is insufficient to support seed.
- Seed is not applied at an adequate application rate.

- Mulch or HECP used is inadequate to hold seed on slopes.
- Seed is not applied uniformly and/or adequate ground coverage is not achieved.
- Seed is not properly or adequately irrigated.
- Seeded areas are disturbed by foot traffic and/or equipment after installation.
- Seeding is applied too close to freeze-up

SPECIFICATIONS

Standard Specifications

- 658 – Temporary Seeding
- 620 – Topsoil
- 657 – Tackifier
- 650 – Compost Blanket
- 653 – Permanent Seeding
- 652 – Soil Amendments
- 753 – Soil Amendments
- 725 – Fertilizer
- 651– Hydraulic Erosion Control Products
- 751—Hydraulic Erosion Control Products
- 654– Rolled Erosion Control Products for Slopes
- 754-- Rolled Erosion Control Products