TECHNICAL SPECIFICATION

ITEM 04252 TEMPORARY EROSION CONTROL SEEDING

PART 1 - GENERAL

1.01 Description

Scope: Seeding of vegetated filter strip within a project construction site. Work area covered by this Item should be indicated on PLANS. Temporary seeding intended to germinate and establish within 10-14 days. The species used in this seeding are not permanent, so should be integrated with a permanent seeding or planting. When shown on PLANS, provide soil retention protection such as loose straw mulch or erosion control/soil retention fabric blanket.

1.02 Related Work

Permanent Grass Matrix and Forb/Wildflower Seeding (Item 4253); and Planting and Planting/Seeding Maintenance (Item 04254).

PART 2 - PRODUCTS

2.01 Materials

A. Seeds: Conform to requirements of U.S. Department of Agriculture Rules and Regulations as set forth in Federal Seed Act and Texas Seed Law. Use seed which has been treated with an approved fungicide. Container labels to show purity, germination, name and type of seed, and source of origin. Planting date, type, and rate of application as follows:

| Type | Rate of Application in | Planting Date |
|--------------------------------------|------------------------|------------------|
| | Pounds per Acre | |
| Unhulled Bermuda | 20 | Jan. 1 to Apr. 1 |
| Grass/oats/winter rye | | |
| 2. Hulled Bermuda | 12 | Apr. 1 to Oct. 1 |
| Grass/lovegrass | | |
| 3. Mix Bermuda and Annual | 12:200 | Oct. 1 to Jan. 1 |
| Rye in Following | | |
| Proportions | | |
| 4. Mix Bermuda and Annual | 12:200 | Oct. 1 to Jan. 1 |
| Rye in Following | | |
| Proportions | | |

B. Fertilizer: Use pellet or granular fertilizer with analysis of 16 percent nitrogen, 20 percent phosphoric acid, and zero percent potash (or 10-10-5), unless otherwise required as determined by soil analysis. Determine percent by methods of Association of Official Agricultural Chemists. Container labels to show analysis. Powdered or caked fertilizer not permitted.

- C. Straw Mulch: Use loose straw of oat or rice stems, native prairie grass hay, bermuda grass, or other approved straw. Do not use mulch containing Johnson grass or other noxious weeds and foreign materials.
- D. Erosion Control Soil Retention Fabric: Use a biodegradable straw and cotton twine based blanket or approved substitute.

PART 3 - EXECUTION

3.01 Construction Methods

A. General

Fertilizing and Seeding: After the vegetated strip areas are finely graded and completed to lines, grades, and sections shown on PLANS, apply fertilizer at uniform average rate of 500 pounds per acre or as required based on soil analysis. Thoroughly mix upper 4 inches of topsoil with fertilizer until a uniform mixture of fertilizer and topsoil is obtained. Sprinkle areas to be seeded with water, using fine spray to avoid washing or erosion of soil. Broadcast seed with sowing equipment or hand cast at rate specified above, using care to obtain uniform distribution. After broadcasting, lightly rake seeds into soil to a depth not to exceed 1/2 inch. Complete seeding by rolling with roller developing 15 to 25 pounds per inch of tread. Keep seeded areas moist for a period of 10 to 14 days immediately following placement. When watering seeded areas, use fine spray to prevent erosion of seeds or soil. Reseed any areas damaged by erosion. Do not apply seeds when weather is too windy, hot or drying, or other adverse conditions exist.

B. Straw Mulch or Soil Retention Blanket

- 1. Mulch Application: Immediately upon completion of planting of seed and fertilizing, spray or hand spread straw mulch uniformly over the area at the rate of 200 pounds of hay or straw mulch per acre. When watering seeded areas, use fine spray to prevent erosion of seeds or soil. Reseed any areas damaged by erosion for any reason. Mulching operation to follow seeding and fertilizing immediately in continuous operation. Care must be taken not to drive mulching equipment on seeded/planted areas.
- 2. Soil Retention Blanket: Roll blanket over newly prepared and seeded area. Attach as per manufacturers' instructions.

3.02 Maintenance

- A. The seeding must be adequately watered until established. Any areas damaged by erosion or areas that do not have an acceptable turfing to be reseeded. An acceptable turfing area is when at least 70 percent of the seeded area is established.
- B. Inspect seeded area after each rainfall, daily during periods of prolonged rainfall, and at a minimum once a week. Repair or replace damaged section immediately to restore

requirements of this Item. Remove sediment deposits when silt covers 75 percent of the seeding width.

3.03 Measurement and Payments

- A. Unless indicated in the Proposal Forms as a pay item, no separate payment for work performed under this Item. Include cost of work under this item in Contract prices bid for items of which this work is a component.
- B. Fertilizing and Seeding: When indicated in Proposal Forms as pay item, measure and pay for temporary erosion control seeding by the acre or lump sum. Payment for work under this Item will be made at Contract price for "Temporary Erosion Control Seeding", which price to be full compensation for all fertilizer, seed, equipment, materials, and labor necessary for fertilizing and seeding, inspection, maintenance, repair and replacement, and removal of silt deposits.
- C. Straw Mulch Application: When indicated on Proposal Forms as pay item, measure any pay for straw mulch application by the square yard. Payment for work under this Item to be made at the Contract price for "Straw Mulch Application", which price to be full compensation for straw mulch, equipment, materials and labor necessary for straw mulch application.
- D. Soil Retention Blanket: When indicated on Proposal Forms as pay item, measure and pay for soil retention blanket by the square yard or coverage area as indicated in the PROPOSAL. Payment for work under this item will be made at Contract price for "Soil Retention Blanket", which price to be full compensation for all materials, equipment, and labor necessary for blanket installation.