

SECTION 02485 - SEEDING

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 1 Specification sections, apply to the Work specified in this Section.

1.2 DESCRIPTION OF WORK

- A. Furnish all materials, labor, equipment and services necessary to perform all Work.
- B. Work included in this Section includes clearing of weeds, seed bed preparation, installation of erosion control fabric, and seeding operations required for seeding of the areas shown on Drawings.

1.3 SPECIFICATIONS AND STANDARDS

- A. U.S. Department of Agriculture: SRA 156 U.S. Department of Agriculture, Rules and Regulations under the Federal Seed Act.
- B. American Joint Committee on Horticultural Nomenclature Standard: 1942 Edition Standardized Plant Names.

PART 2 - PRODUCTS

2.1 SEED

- A. All seed shall be furnished in sealed, standard containers, unless otherwise approved. Seed which has become wet, moldy, or otherwise damaged will not be acceptable.
- B. Each container of seed shall be fully labeled in accordance with the Federal Seed Act and seed certifications shall be signed and made part of seed invoices.
- C. Seed shall be a Bermuda blend of "Guyman," "Cheyenne," and "Sun Devil," 97 percent pure live seed.

2.2 FERTILIZER

- A. Fertilizer shall be uniform in composition, free-flowing, suitable for application with approved equipment and delivered to the site unopened in original containers each bearing the manufacturer's guaranteed analysis and in conformity with state fertilizer laws. Fertilizer shall contain the following minimum percentage of plant food by weight:
 - 1. 12 percent available nitrogen
 - 2. 12 percent available phosphoric acid
 - 3. 12 percent available potash
- B. Fertilizer application rates shall be 600 pounds per acre.
- C. Invoices for fertilizer shall show grade furnished. Upon completion of the project, a final check of total quantities of fertilizer used will be made against total area seeded and if minimum rates of application have not been met, the Architect will require distribution of additional quantities of these materials to make up minimum application specified.

2.3 EROSION CONTROL FABRIC

- A. Fabric shall be "Soil Saver" as is distributed by Jim Walls Company in Dallas, Texas (214) 239-8577; or "Curlex Blankets" as is distributed by American Excelsior Company in North Kansas City, Missouri (816) 842-3034; or approved equal.

2.4 STAPLES

- A. Staples shall be a No. 11 gauge steel wire formed into a "U" shape, 6 inches long.

PART 3 - EXECUTION

3.1 GROUND PREPARATION

- A. General: The ground areas are to be seeded and fertilized as indicated on the Drawings, and/or as specified herein. Equipment necessary for the proper preparation of the ground surface and for handling and placing all required materials shall be on hand, in good condition and shall be approved before the Work is started.
- B. Clearing: Prior to tillage, seeding or other specified operations, all vegetation which might interfere with the indicated treatment of the areas shall be mowed, grubbed, raked and the debris removed from the site. Prior to or during grading and tillage operations, the ground surface shall be cleared of materials which might hinder final operations. Areas which have been disturbed shall be finish graded and/or developed as indicated on the Drawings or as specified.

- C. Tillage: After the areas required to be seeded have been brought to the finish grades as specified, they shall be thoroughly tilled to a depth of at least 6 inches by plowing, disking, harrowing or other approved methods until the condition of the soil is acceptable to the Architect. Work shall be performed only during periods when beneficial results are likely to be obtained. When conditions are such by reason of drought, excessive moisture, or other factors that satisfactory results are not likely to be obtained, Work shall be stopped. Work shall be resumed only when desired results are likely to be obtained.
- D. Leveling: Any undulations or irregularities in the surface resulting from tillage, fertilizing or other operations shall be leveled with a float drag before seeding operations are begun.
- E. Fertilizing: Fertilizer shall be distributed uniformly at the rate previously specified per 1,000 square feet over the areas to be seeded and shall be incorporated into the soil to a depth of at least 3 to 4 inches by disking, harrowing or other approved methods. The incorporation of fertilizer may be a part of the tillage operation hereinbefore specified. Distribution by means of an approved seed drill equipped to sow seed and distribute fertilizer at the same time will not be accepted. Fertilizer shall be incorporated into the soil a minimum of 10 days before seed is planted.
- F. Planting Time: All seeding Work shall be done between the dates of April 1 to May 15 for spring planting and from August 15 to October 15 for fall planting except as otherwise directed in writing by the Architect.

3.2 SEEDING

- A. General: Prior to seeding, any previously prepared seedbed areas compacted or damaged by interim rains, traffic, or other cause shall be reworked to restore the ground condition previously specified. Seed may be planted by either broadcast seeding or drill seeding. Do not broadcast seed when the wind velocity is such as to prevent uniform seed distribution.
- B. Broadcast Seeding: Seed shall be uniformly broadcast at the rate of 6 to 8 pounds per 1,000 square feet using broadcast seeders. Half of seed shall be broadcast in one direction, and the remainder at right angles to the first direction. Seed shall be covered to an average depth of ¼-inch by disk harrow, steel mat drag, cultipacker, or other approved device.
- C. Drill Seeding: Seed shall be uniformly drilled to an average depth of ½-inch and at the rate of 6 to 8 pounds per 1,000 square feet using equipment having drills not more than 6½ inches apart. Row markers shall be used with the drill seeder.
- D. Rolling: Immediately after seeding, except for slopes 3 horizontal to 1 vertical and greater, the entire area shall be firmed with a roller not exceeding 90 pounds for each foot of roller width. Do not roll areas seeded with seed drills equipped with rollers.

3.3 INSTALLATION OF EROSION CONTROL FABRIC

- A. Fabric shall be rolled out in place. Fabric shall be applied without stretching and shall lie smoothly but loosely on the soil surface. The Contractor shall refer to the Drawings for details of fabric fastening.
- B. It is intended that no seeded area indicated on the Drawings to be protected from erosion be left unprotected. Therefore, application of the erosion control fabric shall occur the same day that the seeding of an area has taken place.
- C. Fabric shall completely cover all areas which are shown on the Drawings to be protected from erosion. After fabric installation, the entire area shall be rolled with a smooth roller weighing between 200 to 250 pounds. After rolling, the fabric shall be in intimate contact with the soil surface at all points. Any clods, etc., which hold the fabric off the ground should be removed. The fabric shall be forced down into any depressions and held there with a staple.

3.4 MAINTENANCE

- A. General: The project areas shall be kept clean at all times and care shall be taken that use of the premises shall not be unduly hampered by Work herein specified. The intent of this Section is to ensure a healthy, well-established turf.
- B. The maintenance period shall extend as required until final acceptance by the Architect.
- C. Watering: Contractor shall be responsible for watering and proper care of the seeded areas during the maintenance period.
- D. Watering shall be performed daily or as often as necessary during the first week of the maintenance period and in sufficient quantities to maintain moist soil to a depth of at least 4 inches.
- E. After the first week, the Contractor shall water the seeded areas as required to provide 1 inch of water per week.
- F. Mowing: The Contractor shall mow the grass to a 2-inch height when it reaches the height of 3 inches and shall continue to maintain it at 2 inches for the duration of the maintenance period.

3.5 GENERAL ACCEPTANCE

- A. The Architect shall make an inspection of the seeded areas. Seeded areas shall be considered acceptable when scattered bare spots not greater than 1 square foot do not exceed 3 percent of seeded areas. Those areas found to be unacceptable will be reseeded.
- B. Reseeding shall be with the seed specified hereinbefore for seeding and shall be sown in a manner that will cause a minimum of disturbance to the existing stand of grass.

Grove Park Improvements
Wichita, Kansas

- C. When any portion of the soil surface becomes gullied or otherwise damaged during the maintenance period, the affected portion shall be repaired and reseeded as previously specified.

3.6 GUARANTEE

- A. The guarantee for all Work accomplished under this Section shall run concurrently with Section 02490 - Trees, Shrubs and Ground Cover.

END OF SECTION 02485