Section 02936

PERMANENT SLOPE HYDROSEEDING

PART 1 GENERAL

1.01 SUMMARY

A. This section specifies a seed mix applied to sloped area requiring sustained vegetation.

1.02 SUBMITTALS

A. Product Data: Submit manufacturer's product data and installation instructions. Include required substrate preparation, list of materials, and application rate.

1.03 DELIVERY, STORAGE, AND HANDLING

A. Deliver materials and products in factory labeled packages. Store and handle in strict compliance with manufacturer's instructions and recommendations. Protect from weather damage, excessive temperatures, and construction operations.

PART 2 PRODUCTS

2.01 ACCEPTABLE MANUFACTURER

A. PENNINGTON SEED INC. SEED PRODUCTION – 1280 ATLANTA HWY – MADISON, GA 30650, 800-286-6100 (Fax706-342-8071)

2.02 MATERIALS

- A. Mixed sustainable slope seed: Slopemaster by Pennington Seed, Inc applied at a minimum rate of 50lbs (1.15lbs/1000 square feet) of the warm season mixture and 100lbs (2.25lbs/1000 square feet) of the cool season mixture with the following characteristics.
 - 1. Material: Permanent and temporary seed varieties.
 - 2. Minimum: 5% Durana White Clover.
 - 3. Inert Material: Less than 1%.
 - 4. Other Crop Seed: Less than .5%.
 - 5. Weed Seed: Less than 1%.
 - 6. Coating: Inoculated with Germax Seed Treatment (Rhizokote XL and Apron XL) and MYCO Advantage coated.
 - 7. Packaging: 25lb Seatac bags.

- B. Flexterra Flexible Growth Medium Fiber Mulch: Apply according to manufacturer recommendations. This product should be applied at a minimum rate of 3000lbs/acre (70lbs/1000 square feet).
- C. Fertilizer: A balanced commercial grade fertilizer of 19-19-19 should be applied at a rate of 250lbs per acre (5.5lbs/1000 square feet).
- E. Soil Amendments: The soil amendment Neutra Lime Dry should be applied at a rate of 80lbs per acre (1.85lbs/1000 square feet).
- F. Equipment shall have a built in mechanical agitation system and operating capacity sufficient to agitate, suspend, and homogeneously mix a slurry containing not less than 44lbs or organic mulching amendment plus fertilizer, chemical additives, and solids for each 150 gallons of water.

PART 3 EXECUTION

3.01 SUBSTRATE PREPARATION

- A. Examine substrates and conditions where material will be applied. Do not proceed with installation until unsatisfactory conditions are corrected, only apply product to geotechnically stable slopes that have been designed and built to divert the water shed away from the face of the slope, therefore eliminating surface flow energy from above from damaging the face slope.
- B. All slope gradients should be prepared to agricultural standard recommended by the Department of Agricultural within the state where the work is being performed. Agricultural Lime or pelletized lime should be added during the slope preparation stage at the rate recommended according to soil analysis. Apply agricultural lime or pellet lime at a rate of 2000lbs per acre if no soil analysis has been performed.
- C. Examine related work including irrigation and grading of surface before proceeding with any work and notify the Engineer in writing on conditions which may prevent the proper execution of this work. All grading or tracking on slopes should be performed so that all cleats are running perpendicular to the flow of water down the hill.

3.02 INSTALLATION

- A. Strictly comply with manufacturer's installation instructions and recommendations.
- B. Mix the seed, soil amendments, and commercial fertilizer with a small amount of the Flexible Growth Medium for visual metering and apply along the areas to be vegetated being sure to apply seed and amendments at the specified rates. Slopemaster warm season seed mixture should be

- applied during the late spring and summer months at a minimum of 50lbs per acre (1.15lbs/1000 square feet). The cool season Slopemaster seed mixture should be applied during the fall and early spring at a minimum of 100lbs per acre (2.25lbs/1000 square feet).
- C. Mix and apply the Flexible Growth Medium at a rate of 50lbs per 150 gallons of water over freshly seeded areas. Hydromulch should be applied in multiple directions so that shadowing does not occur and to insure uniformity of the application. Confirm the loading rates with equipment manufacturers. Do not leave seeded surfaces unprotected, especially if precipitation is imminent.
- D. Exercise special care to prevent any of the slurry from being sprayed onto any hardscape areas including concrete walks, fences, walls, buildings, etc. Remove all slurry sprayed onto these surfaces immediately.

3.03 MAINTENANCE

- A. Frequent light irrigation will need to be applied to seeded areas if no natural rain events have occurred within one week of hydroseeding.
 Water should be applied long enough to moisten the soil thoroughly to the depth of the slurry mulch taking care not to super saturate or wash away the slurry and seed.
- B. After seed germination has occurred and plants are visible the frequency of irrigation should be cut back with heavier application rates still making sure not to super saturate or wash away the slurry and seed.
- C. Repair all seed washings and erosion.
- D. Future fertilization should occur whenever applicable at the recommended rate based on soil analysis with a low Nitrogen fertilizer.

3.04 CLEANING AND PROTECTION

- A. Wash hands after seeding to remove all seed treatment or chemical residue that could be remaining.
- B. Advise owner or engineer of methods for protection of seeded areas.

END OF SECTION

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