

PART 1: GENERAL**1.1 SUMMARY**

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

1.3 SUBMITTALS

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

1.5 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**2.1 ACCEPTABLE PRODUCTS & MANUFACTURER**

- A. HYDROSTRAW, LLC
22110 S. State Route 27
Rockford, WA 99030
Toll Free: 800-545-1755
Fax: 815-468-7450
www.hydrostraw.com
info@hydrostraw.com

2.2 MATERIALS

A. Mixed sustainable slope seed: The Vegetator Warm and Cool Season Mixes by HydroStraw LLC should be applied at a minimum rate of 50 lbs / acre (56 kg / hectare) with the following characteristics.

1. Material: Permanent and temporary seed varieties (species-variey).
 - Crested Wheat Grass – Hycrest II
 - Tall Fescue – Fawn
 - Tetraploid Ryegrass – Prana
 - Alkaligrass – Fults II
 - Paspalum – Pure Dynasty
 - Bermudagrass – Chilly Verde
 - Timothy – Climax
 - White Clover – Dutch
 - Crimson Clover – Common
 - Yellow Blossom SC – Common
 - Radish – Daikon
 - Canola – Common
 - Hairy Vetch – Common
 - Buckwheat – Common
 - Triticale – TriCal 718
 - Millet - German
2. Inert Material: Less than 1%.
3. Other Crop Seed: Less than .5%.
4. Weed Seed: Less than 1%.
5. Packaging: 50 lb (27.7 kg) Polywoven bags.

B. HydroStraw® All In 1 Technology Bonded Fiber Matrix: Apply according to manufacturer recommendations. This product should be applied at a minimum rate of 4,000 lbs / acre (4,500 kg / hectare).

C. Fertilizer:

Mulch lbs / Acre	Nutrients Delivered lbs / Acre
4,000 lbs / ac	N(40 lbs) P(40 lbs) K(40 lbs)
5,000 lbs / ac	N(50 lbs) P(50 lbs) K(50 lbs)
6,000 lbs / ac	N(60 lbs) P(60 lbs) K(60 lbs)

Mulch kg / Hectare	Nutrients Delivered kg / Hectare
4,500 kg / ha	N(45 kg) P(45 kg) K(45 kg)
5,600 kg / ha	N(56 kg) P(56 kg) K(56 kg)
6,725 kg / ha	N(67 kg) P(67 kg) K(67 kg)

- D. Soil Amendments: Should be applied per Soil Test Recommendations.
- E. 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 70 lbs (32 kg) or organic mulching amendment plus fertilizer and solids for each 100 gallons (379 liters) of water.

PART 3: EXECUTION

3.1 EXAMINATION

- 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. If needed, 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 2,000 lbs / acre (2,240 kg / hectare) 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.

3.2 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 HydroStraw® All In 1 Technology Bonded Fiber Matrix for visual metering and apply along the areas to be vegetated being sure to apply seed and amendments at the specified rates. The Vegetator Warm Season Mix should be applied to in Warm Season Climates while The

Vegetator Cool Season Mix should be used in Cool Season Climates. Both mixtures can be applied from Early Spring, Summer, and even in Fall at a minimum of 50lbs per acre (56 kg / hectare).

- C. Mix and apply the HydroStraw® All In 1 Technology Bonded Fiber Matrix at a rate of 75 lbs (34 kg) per 100 gallons (379 liters) of water for hose work or 100 lbs (45 kg) per 100 gallons (379 liters) of water for tower work 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.

3.3 **INSPECTION AND 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 (if applicable) 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.
- E. Increased mulch rates will facilitate increased moisture retention.

END OF SECTION