

**SECTION 329200 – LAWN SEEDING****PART 1 - GENERAL****1.1 WORK INCLUDED**

- A. Hydro-seeding new lawn areas.

**1.2 SUBMITTALS**

- A. Product Data: For each type of product indicated.
  - 1. Pesticides and Herbicides: Include product label and manufacturer's application instructions specific to this Project.
  - 2. Maintenance Fertilizer
  - 3. Hydro (Wood Fiber) Mulch
  - 4. Tackifier
- B. Submit seed vendor's certified statement of analysis for grass seed mix.
  - 1. Comply with standards established by the Association of Official Seed Analysts.
  - 2. Seed shall have a guaranteed minimum germination rate of 80%.
  - 3. Seed must contain at most 1.0% total weed seed by weight.
- C. Maintenance Instructions: Recommended procedures to be established by Owner for maintenance of turf during a calendar year. Submit before expiration of required establishment period.

**1.3 REGULATORY REQUIREMENTS**

- A. Meet State of Oregon licensing requirements for the application of herbicides.

**1.4 DELIVERY, STORAGE AND HANDLING**

- A. Seed and Other Packaged Materials: Deliver packaged materials in original, unopened containers showing weight, certified analysis, name and address of manufacturer, and indication of conformance with state and federal laws, as applicable.

**1.5 SITE CONDITIONS**

- A. Environmental Requirements:
  - 1. Apply seed when wind velocity is less than 5 miles per hour at the site.
  - 2. Do not plant lawns when the air temperature is below 40°F or above 90°F.
- B. Scheduling:
  - 1. Perform seeding work after soil preparation, planting, irrigation, and other work affecting ground surface has been completed.
  - 2. Seed lawns between April 15 and October 15, unless otherwise approved by the Owner.
  - 3. Apply seed within 4 hours after final preparation of seeding areas.
  - 4. If approved by Owner to seed after October 15, increase grass seed mixture by one pound per 1000 square feet per week up to a total of 12 pounds per 1000 square feet.

**1.6 MAINTENANCE**

- A. Lawn Establishment Period: Begin maintenance immediately after each area is seeded and continue until acceptable lawn is established, but for not less than the following periods:

1. 60 days from date of seeding
  2. When establishment period has not elapsed or lawn is not fully established before end of planting season, continue maintenance during next planting season.
- B. Lawn Maintenance:
1. Irrigate new seeded lawn areas at a maximum rate of 0.5" of water per hour to keep soil materials moist.
  2. Do not walk on lawn areas for the first 30 days to irrigate, weed, or replace grass seed without using plywood protection boards to walk over prepared lawn areas.
  3. Apply Maintenance Fertilizer within the maintenance period at 5 pounds per 1,000 square feet if required to supplement lawn establishment after germination or as directed by the Landscape Architect.
  4. Water fertilizer thoroughly into soil.
  5. Keep grass mowed to a height of 1-1/2" to 2", removing no more than 1/3 of the grass leaf with each mowing.
  6. Mow grass only when ground is sufficiently firm to prevent ruts and depressions exceeding 1/8" caused by mowing equipment wheel loads.
  7. Reduce or temporarily terminate watering as necessary to allow mowing machinery to be used without causing ruts and depressions exceeding 1/8".
  8. Remove excess accumulations of grass clippings within 2 hours after mowing and legally dispose of off Project site.
- C. Repair of Lawn Areas:
1. Apply grass seed to bare areas that occur in lawn areas during the establishment period.
  2. Reseed lawn areas where soil erosion or poor germination causes bare areas.
  3. Immediately remove and replace seeded areas showing excessive growth of perennial and annual weeds, deficient grass growth, or damage.
  4. Completely remove weeds including weed roots.
  5. Remove and replace unaccepted lawn areas in accordance with requirements in this Section.
- D. Maintenance Conclusion: Notify Owner in writing 5 days minimum prior to Owner assuming maintenance responsibility for lawn areas.
- E. Lawn Acceptance:
1. Acceptance of seeded lawn areas is contingent upon meeting the requirements of this Section and the establishment of a healthy, weed-free stand of grass, uniform in thickness, texture, color, and height.
  2. Coverage Requirements: 90% coverage over any 10 sq. ft. area, with bare spots not exceeding 5 by 5 inches.
  3. Weed-free Tolerance: One broadleaf or narrow-leaf weed for each 50 square feet of lawn area.
  4. Re-establish unaccepted lawn and provide maintenance beyond the required establishment period as necessary to achieve specified results.

## 1.7 QUALIFICATIONS

- A. Installer Qualifications: The landscape construction professional as defined in ORS 671.520 and performing work under this section of the contract shall hold a valid landscape contractor's license in accordance with ORS 671.510 to 671.760.

## PART 2 - PRODUCTS

### 2.1 SEEDING MATERIALS

- A. Fertilizer and Accessories:
1. Maintenance Fertilizer: Best Turf Gold 22-5-6, or approved equal.
  2. Vapor Retarder: 6 mil thick, black polyethylene sheet.

- B. Grass Seed:
  1. Low-Water Lawn Mix: "Team Jr." three-way turf type tall fescue blend by Sunmark Seeds International, Inc., or approved equal.
  2. All lawn seed shall be State of Oregon Department of Agriculture Certified Blue Tag Seed.
  3. Inoculate all lawn seed blends with mycorrhizae according to the manufacturer's recommended application rate.
- C. Hydro Mulch:
  1. Material: Virgin wood cellulose fiber containing no growth or germination inhibiting factors.
  2. Application Metering Material: Green dye to facilitate visual metering.
  3. Performance Characteristics: Forms homogenous slurry upon agitation for rapid and even dispersal.
  4. Acceptable Wood Fiber Mulches: Eco-Fiber by Profile Products or approved equal.
- D. Binder or Tackifier: Agritek-PAM or approved equal.

## 2.2 PESTICIDES AND HERBICIDES

- A. General: Pesticide, registered and approved by EPA, acceptable to authorities having jurisdiction, and of type recommended by manufacturer for each specific problem and as required for Project conditions and application. Do not use restricted pesticides unless authorized in writing by authorities having jurisdiction.
- B. Post-Emergent Herbicide (Selective and Non-Selective): Effective for controlling weed growth that has already germinated.

## 2.3 EQUIPMENT

- A. Hydraulic Hydro-seeding Equipment: Continuous mixing and agitating action to mix water, seed, fertilizer, and mulch and distribute the mixture on lawn areas.
- B. Temporary Fence:
  1. Posts: Pre-painted 6' long steel tee posts, or accepted substitute.
  2. Fence: 4' high orange plastic safety fence.

## PART 3 - EXECUTION

### 3.1 PERFORMANCE

- A. Verification of Conditions:
  1. Inspect topsoil in new lawn areas.
  2. Verify compliance with required soil preparation, compaction, grades, slope to drains, and completion of underground utility lines in lawn areas.
  3. Start of lawn planting Work indicates acceptance of subgrade and topsoil conditions.
- B. Protection of Adjacent Surfaces Prior to Seeding: Protect existing utility systems, paving, walks, curbs, and other site improvements from damage during seeding.
- C. Protection of Adjacent Surfaces Prior to Hydro-seeding: Install 10 feet minimum width vapor retarder sheet cover at perimeter of hydro-seeding area to prevent hydro-seeding drift on adjacent surfaces.
- D. Surface Preparation for Seeding:
  1. Comply with requirements in Section 32 91 13, Soil Preparation.
  2. Remove hard or soft topsoil areas and adjust grade of topsoil where required.
  3. Lightly irrigate dry planting soil.
  4. Allow time for free surface water to drain prior to seeding.
- E. Hydro-seeding:

1. Seed all new lawn areas shown on Drawings and areas disturbed as a result of construction operations.
2. Apply seed, mulch, fertilizer, amendments, and water uniformly in one application with hydraulic equipment to prepared lawn areas.
3. Standard lawn mix: Apply 8 pounds seed for each 1,000 square feet. Low-water mix: Apply 8 pounds seed for each 1,000 square feet.
4. Apply 70 pounds (dry weight) wood fiber mulch for each 1,000 square feet and 2 pounds binder or tackifier for each 1,000 square feet.
5. Apply mixture through a pressure spray distribution system providing a continuous, non-fluctuating discharge of mixture in the above quantities uniformly on lawn areas.
6. Apply seed and mulch mixture using a sweeping, horizontal motion of spray distribution system.
7. Do not seed within 2 feet of base of trees.

### **3.2 PESTICIDE AND HERBICIDE APPLICATION**

- A. Apply pesticides and other chemical products and biological control agents in accordance with requirements of authorities having jurisdiction and manufacturer's written recommendations. Coordinate applications with Owner's operations and others in proximity to the Work. Notify Owner before each application is performed.
- B. Post-Emergent Herbicides (Selective and Non-Selective): Apply in accordance with manufacturer's written recommendations and only as necessary to treat already-germinated weeds.

### **3.3 COMPLETION**

- A. Adjusting and Cleaning:
  1. Contractor may adjust method of seeding application only when written request is acceptable to the Owner.
  2. Repair or replace irrigation system components damaged during lawn seeding.
  3. At completion of Work in each area, remove debris, equipment, and surplus materials.
  4. Wash walks, walls, and paving areas adjacent to lawn areas to completely remove seed, mulch, and soil materials, and stains from exposed surfaces.
- B. Installation of Temporary Fence:
  1. Install temporary fence at perimeter of lawn areas where necessary to prohibit public access.
  2. Install posts at 10 feet on center maximum, to a minimum depth of 18".
  3. Keep fence erect and taut at all times.
  4. Remove fence when lawn areas are established and accepted.

END OF SECTION