This master should be used by designers working on Port of Portland construction projects and by designers working for PDX tenants (“Tenants”). Usage notes highlight a few specific editing choices, however the entire section should be evaluated and edited to fit specific project needs.

Use this section for acreage cleanup and management.

SECTION 329200 - CLEARING AND SEEDING

1. GENERAL
	* + 1. DESCRIPTION
				1. This section includes mowing, clearing, grading, and seeding of areas outlined on the drawings.
			2. REFERENCES
				1. Association of Official Seed Analysts of North America
				2. ORS: Oregon Revised Statutes

ORS 633.320

ORS 633.330

ORS 633.340

ORS 633.361-633.495

ORS 633.511: Definitions

ORS 633.520: Labeling Agricultural Seed or Bulk Flower Seed

ORS 633.651: Prohibited Acts

* + - 1. SUBMITTALS
				1. Prior to delivery of seed, submit one copy of grass seed analysis tag. Tag shall state seed name(s), mixture, blend, or variety, lot number, origin of seed, each variety with its associated purity, germination and test date, percentages of crop, inert and weed, “use before” date, AMS number, and net weight. Tag shall comply with standards established by the Official Seed Analysts of North America.
			2. WORK PERIOD
				1. Complete seeding and fertilizing between September 15 and November 1 or between February 15 and May 1. However, if weather conditions are not advantageous to seed growth during these periods, the Port may specify alternate periods.
1. PRODUCTS
	* + 1. GRASS SEED
				1. The seed mix is to be untreated tested seed of good quality with a germination rate of at least 90 percent and free of noxious weeds.
				2. Seed shall be dry and not moldy and shall show no sign of having been wet or otherwise damaged.
				3. Label each bag with the variety of seed and mix percentages and the supplier’s name and address and other information as required by the Oregon State weed laws (ORS 633.511, 633.520, 633.651).
				4. The seed mix shall be constituted of the following types and percentages by weight:

|  |  |
| --- | --- |
| Perennial Rye | 60% |
| Hard Fescue | 15% |
| White Dutch Clover | 7% |
| Strawberry Clover | 6% |
| White Alyssum | 5% |
| Birdsfoot Trefoil | 5% |
| White Yarrow | 2% |

* + - 1. FERTILIZER
				1. The fertilizer shall be standard commercial grade and formulated to provide the following elements for plant growth in the following percentages by weight:

Choose one of the two tables. The first is for non-PDX locations, the second is for PDX locations. Delete the unused option.

|  |  |
| --- | --- |
| Nitrogen | 15% |
| Phosphorous | 10% |
| Potash | 10% |

|  |  |
| --- | --- |
| Nitrogen | 25% |
| Potash | 5% |
| Iron | 3% |

* + - * 1. Fertilizer elements shall be uniformly mixed to ensure even distribution of plant nutrients.
				2. The fertilizer shall not contain elements or materials which are detrimental to the soil or to plant growth when applied in the recommended manner.
				3. Furnish fertilizer in a dry condition free from lumps and in granular or pelletized form suitable for dispensing with standard agricultural machinery.
				4. The fertilizer shall be constituted and tested as required in the Oregon State fertilizer laws (ORS 633.361 through 633.495).
				5. Furnish fertilizer in bags marked in accordance with the Oregon State fertilizer labeling laws, including net weight and guaranteed formulation (ORS 633.320, 633.330 and 633.340).
				6. Provide storage space and weather covers, as needed, to keep the products dry until application.
1. EXECUTION
	* + 1. WORK AREA BOUNDARIES
				1. The boundaries adjacent to a street shall be the curbline or edge of pavement.
				2. The boundaries adjacent to a drainage ditch shall be the edge of the ditch bank as defined below. Boundaries not defined by the above shall be as shown on the drawings.
				3. Edge of ditch bank shall be defined as that point at which the general slope of the terrain approaching the ditch changes from less than a 3:1 slope to greater than or equal to a 3:1 slope.
				4. Branches from trees growing within the work‑exempted portion of the bank shall be trimmed or removed as necessary to provide the clearance specified herein.
			2. MOWING
				1. Mow existing grass.
				2. Mow with rotary and hammer-type flail or sickle type mower.
				3. Height of cut shall be 2 to 4 inches above ground.
				4. If mowed by sickle‑bar mower, rake area.
				5. Dispose of raked grass off Port property.
			3. CLEARING
				1. Clear areas of berry brambles to bare earth so that evidence of their presence is removed.

Earth within the cleared area shall be scarified and broken up by means of a disc, or other approved equipment, to a minimum depth of 6 inches.

Thoroughly sever and disturb the root mat of the berry brambles.

* + - * 1. Cut down and remove brush and trees less than 6 inches in diameter, unless otherwise directed by the Port.
				2. Grub out stump and root growth to a minimum depth of 6 inches below ground surface.
				3. Trim or cut back lower limbs of deciduous trees and trees designated by the Port to provide a minimum 8 1/2-foot above‑ground clearance. If this requirement would result in the removal of a majority of the major limbs that extend from the lower crotch of the tree, then remove the entire tree per specifications herein for tree removal.
				4. Remove fence as shown on the drawings. Remove fence posts, fencing wire, and fence railings completely and dispose of off Port property.
				5. Remove culverts as shown on the drawings and dispose of off Port property.
				6. The following material, which is evident prior to or after mowing, shall be removed and disposed of off Port property:

Concrete, rock, brick, and concrete block.

Fallen and cut wood, brush, stumps, and other cleared vegetation.

Wire or other debris causing damage or hindrance to the mower.

* + - 1. GRADING AND FILLING

If A and B below are used, note in the Invitation to Bid.

* + - * 1. A designated parcel of land has been established as a standard of comparison for purposes of establishing grading requirements. This parcel of land is referred to herein as the standard. Obtain from the Port the location of this parcel prior to bidding.
				2. Any portion of the work area rougher than the standard shall be smooth graded by the Contractor so that it is at least as smooth as the standard. In case of dispute, comparison between the disputed area and the standard shall be made in terms of deviation from a 10‑foot straightedge laid on the ground surface. A reasonable mean deviation determined by the standard shall be the controlling criteria applied to the disputed area.
				3. Ruts and furrows 2 inches or more in depth shall be obliterated.
				4. Regrade banks, except ditch banks, with existing slopes greater than 3:1 and an elevation differential of 2 feet or less between top and bottom of such slope. Finish slope of bank shall be less than 3:1.
				5. Clean existing ditches of debris along streets adjacent to work boundaries. Leave no obstructing material in any ditch.
				6. Grade, cut, and fill areas to preserve existing drainage patterns and to prevent water ponding.
				7. Bury allowable organic material by alternating layers of organic material with layers of earth. The maximum thickness of the layer of organic material shall be 2 feet. The minimum thickness of the layer of earth shall be 2 feet.
				8. Grading and filling shall comply with the approved erosion control plan.
			1. FERTILIZING
				1. Fertilize areas to be seeded.
				2. Spread fertilizer with an approved spreader prior to seeding.
				3. Thoroughly work and till into top 3 inches of soil.
				4. Apply fertilizer at the rate of 400 pounds per acre.
				5. Avoid direct contact between seed and fertilizer.
			2. SEED BED PREPARATION
				1. Repair graded areas as required, including damage by erosion, filling of gullies, smoothing irregularities and incidental damage.
				2. Rake or clear areas to be seeded of stones 2 inches in any diameter, sticks, stumps, and other debris.
				3. Thoroughly loosen and work the upper 5 inches minimum of the seed bed.
				4. Top 3 inches of soil shall be loose, friable, and reasonably free of undesirable matter, rocks, and clods.
			3. SEEDING
				1. Seed bare and scarified areas, or as shown on the drawings.

Specify the preferred method of seeding for this area.

* + - * 1. Seeding Method: [ ].
				2. Sow seed at rate of 200 pounds of seed per acre.
				3. Seed in one direction over an entire area.
				4. Be responsible for producing a uniform dense stand of grass in seeded areas.
				5. Protect and maintain seeded areas prior to final acceptance.
			1. SECURING WORK AREAS
				1. Secure, in a manner acceptable to the Port, points of access to work areas in order to prevent and/or discourage illegal dumping.
				2. Material dumped on work areas due to failure of the Contractor to provide acceptable security shall be removed at no additional cost to the Port.
				3. Responsibility for securing work area shall terminate upon final acceptance of the work area by the Port.

END OF SECTION 329200