

Unit 12

01000
Right of Way
Development and Control



01000 – Right of Way Development and Control

- Stormwater Control Ponds Special Provision (01011)
- Water Quality Biofiltration Swale Special Provision (01012)
- Seeding (01030)
- Planting (01040)



Unit 12 Topics:

- Stormwater management systems
- Seeding materials and installation
- Permanent and temporary seeding
- Planting procedures
- Establishment periods



**01011 – Stormwater Control Ponds
Special Provisions**

- Perform excavation and fine grading when area is dry
- Scarify subsoil minimum of 12 inches
- No measurement of quantities



01012 – Water Quality Biofiltration Swale

- Plant plugs meeting 01040
- Compact each lift with a water filled landscape roller
- No measurement of quantities



Stormwater Management Systems

- Make sure Contractor understands purpose of system
- Verify location and elevation of inlets
- Grade to lines established
- Provide feedback to designer



01030 – Seeding



Establishment period after initial planting



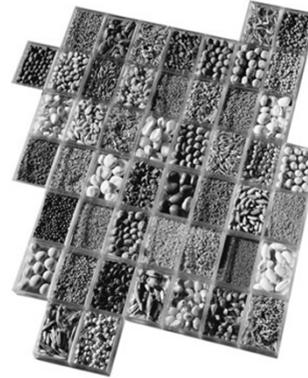
SEEDING		
Due	Section	What
precon	01030.30(a)	certification that weed control coordinator meets requirements of 01030.30(a)
precon	01030.42(a)	weed control work plan
within 60 days of execution of contract	01030.13(g)	List of seed sources for all specified seeds. Verify that all specified seed has been located and will be available.
before using	01030.17	Submit proposed pesticides and receive approval. Submit a copy of manufacturers federal registered label. If requested, submit MSDS sheet.
before using	01030.30(b)	certification that pesticide applicator possesses an Oregon Commercial Pesticide Applicators License (each individual applicator who will be performing work)



01030.13 Seed – Labels, Quality, Pure Live Seed, Inspection, Mixes

Look for:

- Testing date
- Compliance with Oregon and federal seed regulations
- Not sprouted, moldy, wet or damaged



As many as
2.5 million / lb!



01030.15 – Mulch

- Certified weed-free straw
- Cellulose fiber from QPL
- Verify application rate



01030.41 – (01040.48) Area Preparation

Prior Preparation Prevents Pitiful Poor Performance!

- 5 site prep methods for 8 seeding and 2 planting types
- Loosen subsoils
- Stockpile selected topsoils as briefly as possible.
- Haul and spread selected topsoils without compacting.



01030.43 – Seeding

a) Temporary and b) Permanent

- **West of the Cascades**
(March 1 - May 15 & September 1 - October 31) –
Extra time for irrigated areas.
- **East of the Cascades** (October 1 - February 1) –
Extra time for irrigated areas.
- **Wetland** (East and West)
(September 1 - October 31 & March 1 - April 30)



01030.43 – Seeding

Protect, water, fertilize, weed, mow and replace as needed

- Establishment minimum 90 percent cover
- Measurement area basis
- Partial payment
 - 70% at time of seeding
 - 30% after establishment



Planting 01040



Plants

- Do not plant when temperatures are expected to be below 32°F
- Notify Agency a minimum of 24 hours prior to inspection
- Do not plant until inspected and approved by Agency

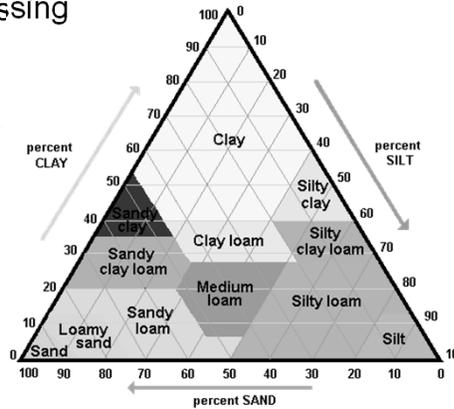


PLANTING		
Due	Section	What
within 90 calendar days of award of contract	01040.04(a)	Planting Work Plan
before arranging procurement of materials	01040.04(a)	List of project materials for approval
before planting	01040.13(a)	(1) Soil fertility analysis of existing soils performed by a certified lab. (2) Soil amendments report
before planting	01040.13(b)	(1) Soil Bio-amendments report
20 days before furnishing topsoil	01040.14	(1) Give agency notice of intent to use source (2) Provide access to the agency to the source (3) Provide a 20-pound representative soil sample for testing (4) Obtain approval of source
prior to construction	01040.15	Submit 15-pound sample of soil conditioner for approval.
prior to use	01040.16	Approval of soil amendments
90 days after execution of contract	01040.19(e)	List of nursery sources for specified plants



Topsoil

- Submit topsoil for testing
- Do not place topsoil until passing laboratory report



01040 – Planting

Planting Seasons

- **01040.41 – West of the Cascades**
September 1 through May 15
- **01040.42– East of the Cascades**
October 15 through November 30



Can be modified as appropriate through Special Provisions



01040 – Planting

01040.49 General Planting

- Inspect plants before planting. Look to see plants are healthy
- Inspect planting pit. No standing water (except for wetland plantings)
- Place mix of backfill, soil/bio amendments, fertilizers
- Moisten after planting
- Mulch
- Add water
- Keep work area in a neat.



01040 – Planting

Planting Establishment

- Typically 1 year
- Three periodic inspections
- Contractor will complete corrective work within 15 days
- Final Inspection



01040 – Planting

01040.80 Measurement

- Topsoil, Soil Conditioner and Mulch – measured by cubic yard (in hauling vehicle)
- Average area staked in 30 square yard plots



01040.90 Payment

- Partial payments
- 30% at original planting
- 10% after each inspection
- 40% after establishment

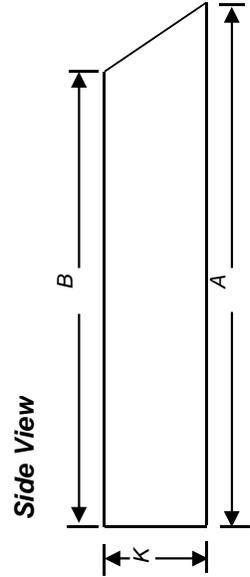
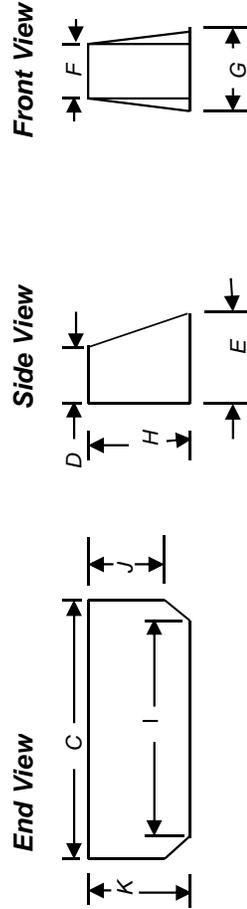
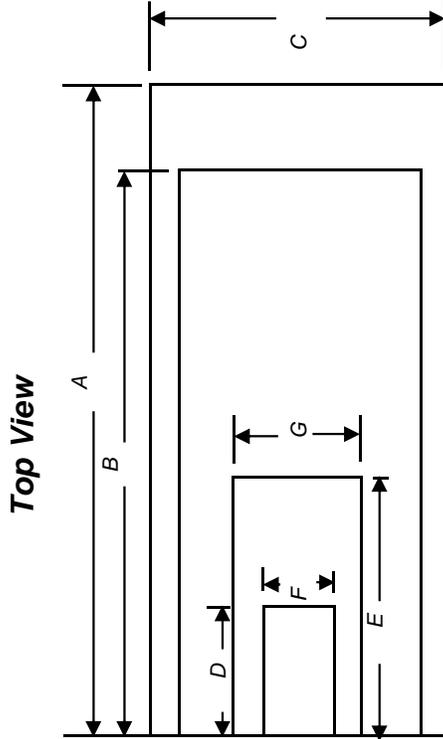


Truck Measure (End Dump) Worksheet

Project Name: _____
 Contract Number: _____
 Truck No: _____
 Driver: _____
 Date: _____
 Inspector: _____

English Measurements

A= _____	Hydraulic Blockout
B= _____	1. $\frac{(D+E)}{2}$ 0.00
C= _____	2. $\frac{(F+G)}{2}$ 0.00
D= _____	Negative Volume
E= _____	3. 1^*2^*H 0.00
F= _____	Fillet Volume
G= _____	4. $A(K-J)(C-)/2$ 0.00
H= _____	Total Subtractions
I= _____	5. $3+4$ 0.00
J= _____	Main Volume
K= _____	6. $[(A+B)/2]^*C^*K$ 0.00
	Total Volume @ 100%
	7. $(6-5)/27=CuYd$ 0.0 CuYd



Total Riprap Volume @ 70% CuYd

Topsoil Measurement by section 1040.81.
K= The depth of the material inside the truck bed that was leveled for measurement at delivery.

Key Inspection Points

- Verify and inspect seed mix and plants at time of delivery
- Make sure the Contractor properly prepares the ground
- Verify correct seeding or planting season
- Disturb as little existing vegetation as possible
- Contact Region Environmental Coordinator (R.E.C.) or Project Biologist with questions



Unit 12 Review:

- ✓ Stormwater management systems
- ✓ Seeding materials and installation
- ✓ Permanent and temporary seeding
- ✓ Planting practices
- ✓ Establishment periods



