CONSTRUCTION ENTRANCE - TYPE 1

25' Min. radius commercial
15' Min. radius residential

Provide water to wash tires

Sandbags or straw bales
lined with plastic
(See RD10.70)

CONSTRUCTION ENTRANCE - TYPE 2

25' Min. radius commercial
15' Min. radius residential

Division ridge required where
construction entrance grade exceeds 2%

Sandbags or straw bales
lined with plastic
(See RD10.70)

CONSTRUCTION ENTRANCE - TYPE 3

(TYPE 1 OR 2 WITH EXISTING CURB)

4"-1" Open graded aggregate mix
8" thick over subgrade geotextile

Sandbags or straw bales
lined with plastic

Notes:
1. Type 1 entrance is a simple entrance without a diversion
   ridge or settling basin.
2. The wooden ramp may be used on either type 1 or type 2
   entrances in situations where there is curb and the curb is
   not removed for the construction entrance.

SECTION A-A

Slope construction entrance to
drain to sediment setting basin

4'-1" Open graded aggregate min. 8" thick

Subgrade geotextile

SECTION B-B

SUBGRADE GEOTEXTILE

CONSTRUCTION ENTRANCE TABLE

<table>
<thead>
<tr>
<th>Length (FT)</th>
<th>Area Of Exposed Soil (Acre)</th>
</tr>
</thead>
<tbody>
<tr>
<td>20</td>
<td>0.25</td>
</tr>
<tr>
<td>50</td>
<td>0.25 &lt; A &lt; 1.0</td>
</tr>
<tr>
<td>100</td>
<td>A &gt; 1.0</td>
</tr>
</tbody>
</table>

CALC. BOOK NO. 6408

OREGON STANDARD DRAWINGS

CONSTRUCTION ENTRANCES

The selection and use of this
Standard Drawing, while de-
signed in accordance with
generally accepted engineer-
ing principles and practices,
is the sole responsibility of
the user and should not be
used without consulting a
Registered Professional En-
gineer.

NOTE: All material and workmanship shall be in accordance with the current Oregon Standard Specifications

Paved roadway

Wooden curb ramp

SECTION C-C

Wooden curb ramp

Drain to sediment setting basin

CONSTRUCTION ENTRANCE

WOODEN CURB RAMP SECTION D-D

Effective Date: December 1, 2018 - May 31, 2019
The selection and use of this Standard Drawing, while designed in accordance with generally accepted engineering principles and practices, is the sole responsibility of the user and should not be used without consulting a Registered Professional Engineer.

NOTE: All material and workmanship shall be in accordance with the current Oregon Standard Specifications.

NOTE: L = Spacing along swale or ditch so that Elevation "U" equals Elevation "D".

NOTE: Pt "A" must be a minimum of 6" higher than Pt "B".

NOTE: Pt "A" must be a minimum of 6" higher than Pt "B".

To prevent erosion, place 10 mil. polyethylene plastic sheeting extending 3' downslope for energy dissipation.

**Sandbag Check Dam - Type 4**

<table>
<thead>
<tr>
<th>MAXIMUM CHECK DAM SPACING &quot;L&quot;</th>
</tr>
</thead>
<tbody>
<tr>
<td>Height (ft)</td>
</tr>
<tr>
<td>0%</td>
</tr>
<tr>
<td>5%</td>
</tr>
<tr>
<td>10%</td>
</tr>
<tr>
<td>15%</td>
</tr>
<tr>
<td>20%</td>
</tr>
</tbody>
</table>

**Notes:**
1. Type 3 - stake biofilter bags with two 2" x 2" x 18" (min.) wood stakes per bag. Drive stakes a minimum of 6" into the ground and flush with the top of the bags. Omit stakes if placed over paved surfaces. Overlap bags 6" min at each joint.
2. Type 4 - Tightly abut or overlap ends of sandbags at each joint.
3. Spacing between check dams for all check dam types shall comply with the typical profile section shown above.

**Effective Date:** December 1, 2018 - May 31, 2019
GEOTEXTILE/WIRE MESH/AGGREGATE - TYPE 2

Prefabricated Filter Insert - Type 3

Sod Protection - Type 6

Notes:

Type 2 - Geotextile/wire mesh/aggregate
Place the wire mesh over the grate. Place sediment fence geotextile over the wire mesh and perimeter area around structure. Install aggregate over the geotextile fabric.

Type 3 - Prefabricated filter inserts
Install prefabricated filter inserts according to the plans, special provisions, and manufacturer recommendations. Prefabricated inserts with provisions for overflow are allowed only when accompanied by additional BMPs to prevent the potential of sediments entering project storm systems. Field fabricated inserts are not allowed.

Type 7 - Compost filter sock
Drive 2" X 2" wood stakes a minimum of 6" into ground and flush with the top of the sock. Overlap ends of sock per manufacturers recommendations

Type 7 cont. - (1" min, 3" max).
Use 8" to 12" dia sock on curbside in traffic areas. Use 12" to 18" dia sock in non-traffic areas. Use 8" dia sock in non-traffic areas where the larger socks can be used safely.

Type 10 - Curb inlet sediment dam
Fit curb inlet sediment dam snugly into inlet mouth. Curb inlet sediment dam is required for use with inlet filter insert where at-grade inlet grate and curb inlet are combined at a catch basin.

Type 11 - Wattle barrier with filter insert
Install prefabricated filter insert per type 3 detail. Install wattles over opening and 3' to each side of opening tight against curb. Adjust wattles to force storm water to flow through filter insert or wattle prior to leaving the site. Adjust, replace or modify the inlet protection as needed to prevent sediment laden water from entering the catch basin.

** Straw wattle drawn NTS to show curb inlet opening

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OREGON STANDARD DRAWINGS

INLET PROTECTION

TYPE 2, 3, 6, 7, 10 and 11

Effective Date: December 1, 2018 - May 31, 2019
BIOFILTER BAGS – TYPE 4

Note:

1. Stake biofilter bags with 2½" wood stakes, and use a minimum 2 stakes per bag.
   Drive stakes a minimum of 6" into the ground and flush with the top of the bags.

2. Omit stakes when bags are placed on pavement surface.

3. Overlap all bag joints 6".
**BIOFILTER BAG / SAND BAG BARRIER - TYPE 2 AND 4**

**Notes:**

1. For type 2 barrier, drive stakes flush with top of bag and into undisturbed ground a min. of 12". Omit stakes if bags are placed on paved surface.

2. For type 2 and 4 barrier, space bags (L) so that the elevation of point "A" is less than or equal to the elevation of point "B".

**Type 2 - Biofilter bags**

**Type 3 - Wattles**

**Type 4 - Sand bags**

**INSTALL PARALLEL ALONG CONTOURS AS FOLLOWS**

<table>
<thead>
<tr>
<th>% SLOPE</th>
<th>% SLOPE</th>
<th>MAXIMUM SPACING ON SLOPE</th>
</tr>
</thead>
<tbody>
<tr>
<td>10% Flatter</td>
<td>1:10 or Flatter</td>
<td>300'</td>
</tr>
<tr>
<td>10 &gt; % ≥ 15</td>
<td>10 &gt; % ≥ 7.5</td>
<td>150'</td>
</tr>
<tr>
<td>15 &gt; % ≥ 20</td>
<td>7.5 &gt; % ≥ 5</td>
<td>100'</td>
</tr>
<tr>
<td>20 &gt; % ≥ 30</td>
<td>5 &gt; % ≥ 3</td>
<td>50'</td>
</tr>
<tr>
<td>Steeper than 30%</td>
<td>Steeper than 1:3</td>
<td>25'</td>
</tr>
</tbody>
</table>

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Effective Date: December 1, 2018 - May 31, 2019

OREGON STANDARD DRAWINGS

SEDIMENT BARRIER TYPE 2, 3 AND 4

2018

CALC. BOOK NO. 6403, 6408, 6407

BASELINE REPORT DATE: January 2016

NOTE: All material and workmanship shall be in accordance with the current Oregon Standard Specifications
Drape matting over brush and secure in trench (Min. 4"x4") with compacted native backfill.

Min. 5' wide brush barrier with Max. 6" diameter woody debris.

Matting may be jute or Geo-Grid.

Anchor downhill edge of matting with stakes, sandbags, or equivalent.

BRUSH BARRIER – TYPE 5

AGGREGATE BARRIER – TYPE 6

NOTES:

1. Direct diverted flows from the outlet side of the rock filter berm/dam onto a stabilized area, such as vegetation and or rock, or into a sediment trapping facility.
2. Embed barrier a min. of 4" into the existing ground/embankments.
3. Use 1:3 or flatter side slope. Within the safety clear zone, use 1:6 or flatter side slopes.
4. Use 4"-1" clean aggregate.

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NOTE: All material and workmanship shall be in accordance with the current Oregon Standard Specifications.
Compost filter sock filled with coarse compost 03020

2' X 2' X 3'; wooden stake, spaced every 5' O.C. (typ.)

Excess sock material drawn and tied off at stake (typ.)

Turn lip upward at ends

* 2' at 30° angle each end to prevent flow around (typ.)

Contour line (typ.)

Length sipes

Limit of work or perimeter sock

SLOPE APPLICATION – PERSPECTIVE VIEW

ALTERNATIVE 1 (Staking)

ALTERNATIVE 2 (Staking)

Compost Filter sock see table for size and spacing

2" X 2" X 3'-0" wooden stake

Compost Filter Sock or wattle

Compost Filter socks spaced equally along slope. See plans and table.

Excess sock material drawn and tied off at stake (typ.)

Limit of work or perimeter sock

O.C.

O.C.

O.C.

O.C.

Top of slope

O.C.

O.C.

O.C.

O.C.

Sediment Barrier Type 8

Effective Date: December 1, 2018 - May 31, 2019

5-8 RD1032
Coarse Compost. Slope determined by blower skid. If hand placed maintain 2:1 slope. 

COMPOST FILTER BERM - TYPE 9

COMPOST FILTER BERM SERIES

Coarse Compost. Slope determined by blower skid. If hand placed maintain 2:1 slope.

COMPOST FILTER BERM - TYPE 9

COMPOST FILTER BERM DIMENSIONS AND SPACING BASED ON SLOPE

<table>
<thead>
<tr>
<th>Slope</th>
<th>Berm Spacing</th>
<th>Berm Dimensions</th>
</tr>
</thead>
<tbody>
<tr>
<td>&lt; 50:1</td>
<td>250 ft</td>
<td>Height: 1 ft, Bottom width: 2 ft (min.), Top width: 1 ft</td>
</tr>
<tr>
<td>50:1 - 10:1</td>
<td>125 ft</td>
<td>Height: 1 ft, Bottom width: 2 ft (min.), Top width: 1 ft</td>
</tr>
<tr>
<td>10:1 - 5:1</td>
<td>100 ft</td>
<td>Height: 1 ft, Bottom width: 2 ft (min.), Top width: 1 ft</td>
</tr>
<tr>
<td>3:1 - 2:1</td>
<td>50 ft</td>
<td>Height: 1 ft, Bottom width: 2.6 ft (min.), Top width: 1 ft</td>
</tr>
<tr>
<td>&gt; 2:1</td>
<td>3' or to right-of-way whichever is less</td>
<td></td>
</tr>
</tbody>
</table>

5' Min. from slope toe

10' preferred

COMPOST FILTER BERM General Notes

1. Compost filter berms are sediment control devices for areas where runoff occurs as sheet flow. See Section 00280, Oregon Standard Specifications.

2. The maximum drainage area for a continuous berm shall be 1/4 acre per 100 linear feet of filter berm.

3. Where possible, berms should be placed away from the toe of slopes a minimum of 5 feet (10 feet preferred) to allow for energy dissipation and sediment storage.

4. Direct the outlet side of filter berm, located at base of slope, onto a stabilized area, such as vegetation and/or aggregate.

5. Place filter berms along or on the ground contour with the ends of the filter berm turned up slope per details. Adequate area shall be provided behind berm for ponding.

6. Compost filter berms may be vegetated with temporary or permanent seeding after placement.

7. If placed in area with existing ground vegetation, cut vegetation to 2-4 inches above grade at berm footprint. Do not remove existing vegetation or cut back outside berm footprint unless directed by Agency.

8. If soils are exposed apply compost blanket per details and specifications.

Blend compost material into existing vegetation, (typ.)

Existing vegetation

Sheet flow

CALC. BOOK NO._ 6403, 6404, 6405_
Front View Section A-A

Sediment Fence and Geotextile Bury Detail – Type 1

- Angle ends of sediment fence to assure sediment is trapped
- Connect fence ends with either the turned ends or the post spacing overlap end connection
- Install wings to break up length of slope
- Join two runs of fence by wrapping end posts a minimum of two full wraps.

Plan View Termination at Corner or Property Line

- Install sediment fence with sewn in posts sleeves with sleeves upslope.
- Join two runs of fence by wrapping end posts a minimum of two full wraps.

Table 1: Fence Spacing for General Application

<table>
<thead>
<tr>
<th>Grade</th>
<th>Maximum Spacing on Grade</th>
</tr>
</thead>
<tbody>
<tr>
<td>Grade &lt; 10%</td>
<td>300’</td>
</tr>
<tr>
<td>10% ≤ Grade &lt; 15%</td>
<td>150’</td>
</tr>
<tr>
<td>15% ≤ Grade &lt; 20%</td>
<td>100’</td>
</tr>
<tr>
<td>20% ≤ Grade &lt; 30%</td>
<td>50’</td>
</tr>
<tr>
<td>30% ≤ Grade</td>
<td>25’</td>
</tr>
</tbody>
</table>

Table 2: Post Spacing

<table>
<thead>
<tr>
<th>Post Spacing</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>6’</td>
<td>Sediment Fence with Geotextile elongation less than 50%</td>
</tr>
<tr>
<td>4’</td>
<td>Sediment Fence with Geotextile elongation 50% or more</td>
</tr>
</tbody>
</table>

NOTES:
1. Use must be approved by the engineer.
2. Not approved for use with sediment fencing with sewn-in post sleeves.

Alternate Sediment Fence w/o Trenching – Type 2

Notes:
1. Use 2” x 2” wood fence posts.
2. Posts to be installed on downhill side of sediment fence geotextile. Position posts to prevent separation from geotextile.
4. Locate fence no closer than three feet to the toe of a slope.
5. Wing spacing shall comply with table 1.

Centerline Report Date November 2017

The selection and use of this Standard Drawing, while designed in accordance with generally accepted engineering principles and practices, is the sole responsibility of the user and should not be used without consulting a Registered Professional Engineer.
Install sediment fence or check dam prior to discharging sediment laden water.

Existing grade

Notes:
1. Temporary slope drains shall be used at the top of fill slopes as the embankment is constructed to prevent erosion.
2. Temporary drainage curbs shall be used in conjunction with temporary slope drains to prevent erosion on completed slopes and to direct flow into end section.
3. All dimensions not indicated will be as directed.

TABLE FOR PIPE SIZE

<table>
<thead>
<tr>
<th>PIPE</th>
<th>CONTRIBUTING AREA TO SLOPE DRAIN (sq ft)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Slope (min.)</td>
<td>D in. (min.)</td>
</tr>
<tr>
<td>3.8%</td>
<td>6</td>
</tr>
<tr>
<td>2.5%</td>
<td>8</td>
</tr>
<tr>
<td>1.9%</td>
<td>10</td>
</tr>
<tr>
<td>1.5%</td>
<td>12</td>
</tr>
</tbody>
</table>

The selection and use of this Standard Drawing, while designed in accordance with generally accepted engineering principles and practices, is the sole responsibility of the user and should not be used without consulting a Registered Professional Engineer.

OREGON STANDARD DRAWINGS
TEMPORARY SLOPE DRAIN WITH ENERGY DISSIPATOR

Effective Date: December 1, 2018 - May 31, 2019
NOTE:
All dimensions not indicated will be as directed.

The selection and use of this Standard Drawing, while designed in accordance with generally accepted engineering principles and practices, is the sole responsibility of the user and should not be used without consulting a Registered Professional Engineer.

OREGON STANDARD DRAWINGS
TEMPORARY SCOUR BASIN/ENERGY DISSIPATOR

Effective Date: December 1, 2018 - May 31, 2019
**SLOPE AND CHANNEL MATTING**

**CALC. BOOK NO.** 6403, 6404, 6405

**Effective Date:** December 1, 2018 - May 31, 2019

**OREGON STANDARD DRAWINGS**

**DATE**

<table>
<thead>
<tr>
<th>REVISION DESCRIPTION</th>
<th>5-13</th>
<th>RD1055</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Install channel liner matting, in the direction of water flow. Anchor upstream end of mat with check slot for culvert outfalls, place mat under pipe 12&quot; minimum upstream from pipe outlet.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Construct check slots across channel bottom at 25' spacing and at the end of each mat (Fig. A3 or A4).</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Overlap side channel liner matting edges 6&quot; over the center channel liner matting and fasten edges 12&quot; O.C. Continue overlap and stapling pattern for each additional side channel liner mat.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Lap upstream matting end 12&quot; over beginning edge of downstream matting. Fasten 12&quot; O.C.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. Anchor top edge of side channel matting in trench and fasten 12&quot; O.C. (Fig. A2).</td>
<td></td>
<td></td>
</tr>
<tr>
<td>6. Fasten matting interior at 24&quot; O.C. with staggered spacing.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>7. Construct initial anchor trench at downstream end of matting and terminal slope anchor at upstream end.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
**PLAN**

- **50' Min.**
- **16'**
- **15'**

**SECTION A-A**

- **4"-1" Open graded aggregate**
- **Subgrade geotextile**
- **HS-20 cattle guard**

**SECTION B-B**

**TIRE WASH - TYPE 1**

*(Manual Hose Wash)*

- **3" Ø Extra strong grade 50 pipe**
- **1/4" End plate full width**
- **HS-20 CATTLE GUARD**

**TIRE WASH - TYPE 2**

*(Manual Hose Wash)*

- **3" Ø Extra strong grade 50 pipe**
- **1/4" End plate full width**
- **HS-20 CATTLE GUARD**

**NOTE:** All material and workmanship shall be in accordance with the current Oregon Standard Specifications.

**OREGON STANDARD DRAWINGS**

**TIRE WASH FACILITY TYPE 1 AND 2**

2018

**CALC. BOOK NO.: 6403, 6404, 6405**

**BASELINE REPORT DATE:** July 2014

**REVISION DESCRIPTION:**

- **Effective Date:** December 1, 2018 - May 31, 2019

**NOTE:** The selection and use of this Standard Drawing, while designed in accordance with generally accepted engineering principles and practices, is the sole responsibility of the user and should not be used without consulting a Registered Professional Engineer.
**Note:** Trap may be formed by berm or by partial or complete excavation.

* $L = $ Length from design
* $W = $ Width from design

### PLAN

- Inlet flow $Q$
- Outlet flow
- Depth ($D_W$)
- Length ($L$)

**SECTION A-A**

- Class 100 Riprap
- Flat bottom
- 1:3 or flatter
- 3" - 6" Size rock
- 3/4" - 1 1/2" Aggregate

**SECTION B-B**

- Weir length $X$
- Weir invert
- 3" - 6" Size rock
- 3/4" - 1 1/2" Aggregate

**SECTION C-C**

- 3" - 6" Size rock

### SEDIMENT TRAP

**Calc. Book No.:** 6403, 6404, 6405

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**Effective Date:** December 1, 2018 - May 31, 2019

**OREGON STANDARD DRAWINGS**

**SEDIMENT TRAP**

**CALC. BOOK NO.:** 6403, 6404, 6405

**BASELINE REPORT DATE:** July 2014

**NOTE:** All material and workmanship shall be in accordance with the current Oregon Standard Specifications.
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NOTE: All material and workmanship shall be in accordance with the current Oregon Standard Specifications.