

Stormwater Simplified Approach Review Request

PO Box 458 * Veneta, OR 97487 * 541-935-2191 * Fax 541-935-1838 * www.venetaoregon.gov

Date Received: _____

Approved by: _____

Building Permit #: _____

Address: _____

Assessor's Map / Tax Lot Number: _____

NRCS Soil Type or Measured Infiltration Rate: _____

Facility Sizing

Total Proposed New or Replaced Impervious Surface Area: _____ → BOX 1

1. Impervious Area Reduction

Ecoroof	_____ sf
Pervious asphalt or concrete	_____ sf
Permeable pavers	_____ sf
Tree Credit	_____ sf

Total Impervious Area Reduction: _____ → BOX 2

Total impervious area requiring stormwater management: _____ → BOX 3

2. Facility Sizing for Water Quality and Flow Control

Surface Facilities	Impervious Area Managed	Sizing Factor	Facility Surface Area
Rain Garden	_____ sf	x 0.11	= _____ sf
Stormwater Planter	_____ sf	x 0.07	= _____ sf
Sand Filter	_____ sf	x 0.07	= _____ sf

Sum of Total

Impervious Area Managed

BOX 4

(Box 4 must be equal to
or greater than Box 3)

Point of Discharge

- Overflow to gutter (weephole)
- Overflow to public storm drain pipe
- Overflow to Open Drainage
- Subsurface Infiltration

New Evergreen Trees

To receive Impervious Area Reduction Credit, new evergreen trees must be planted within 25 feet of the new or replaced impervious surfaces. New trees cannot be credited against rooftop areas. Minimum tree height **at the time of planting** to receive credit is 6 feet.

Enter number of new evergreen trees that meet the qualification requirements in BOX A.

 BOX A

Multiply BOX A by 200 and enter result in BOX B.

 BOX B

New Deciduous Trees

To receive Impervious Area Reduction Credit, new large deciduous trees must be planted within 25 feet of the new or replaced impervious surfaces and new small deciduous trees must be planted within 10 feet of new or replaced impervious surfaces. New trees cannot be credited against rooftop areas. Minimum tree caliper **at the time of planting** to receive credit is 2 inches.

Enter number of new deciduous trees that meet the qualification requirements in BOX C.

 BOX C

Multiply BOX C by 100 and enter result in BOX D.

 BOX D

Existing Tree Canopy

To receive Impervious Area Reduction Credit, existing large tree canopies must be within 25 feet and existing small tree canopies must be within 10 feet of ground-level impervious surfaces (cannot be credit against roof top surfaces). Existing tree canopy credited towards Impervious Area Reduction must be preserved during and after construction throughout the life of the development. Minimum tree caliper to receive credit is 4 inches. No credit will be given to existing tree canopy located within environmental conservation areas.

Enter square footage of existing tree canopy that meets qualification requirements in BOX E.

 BOX E

Multiply BOX E by 0.5 and enter result in BOX F.

 BOX F

Total Tree Credit

Add Boxes B, D, and F and enter the result in BOX G.

 BOX G

Multiply BOX 1 on Page 1 of this form by 0.1 and enter the result in BOX H.

 BOX H

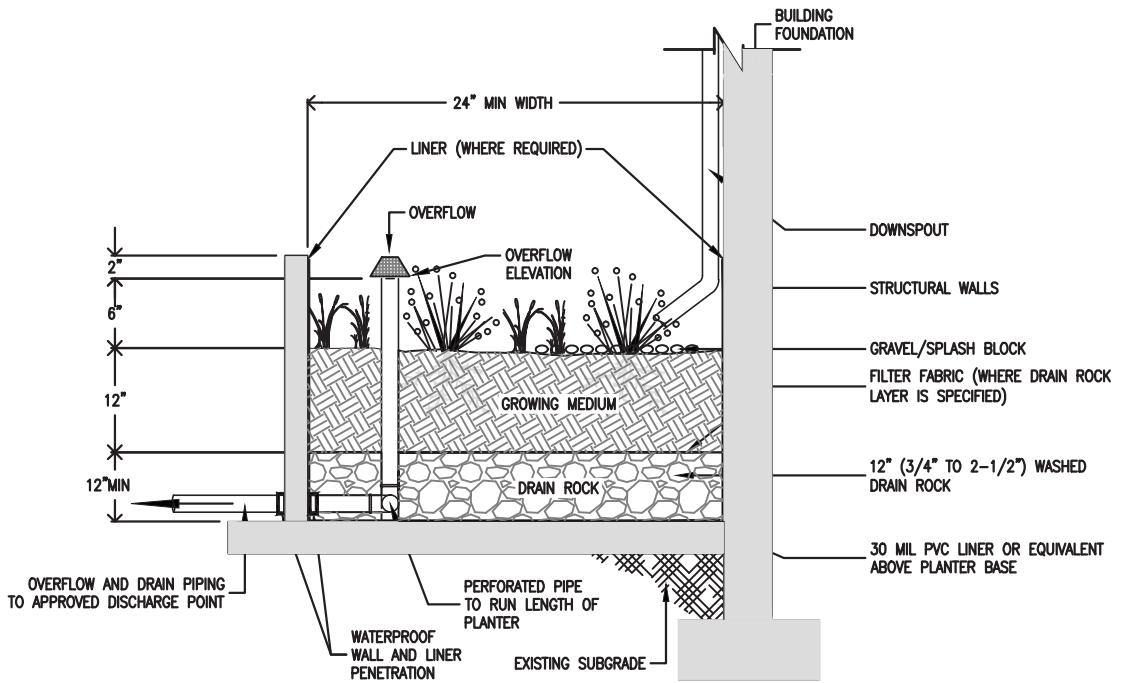
Enter the lesser of BOX G and BOX H in BOX I.

 BOX I

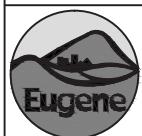
(This is the amount to be entered as "Tree Credit" on Page 1 of this form).

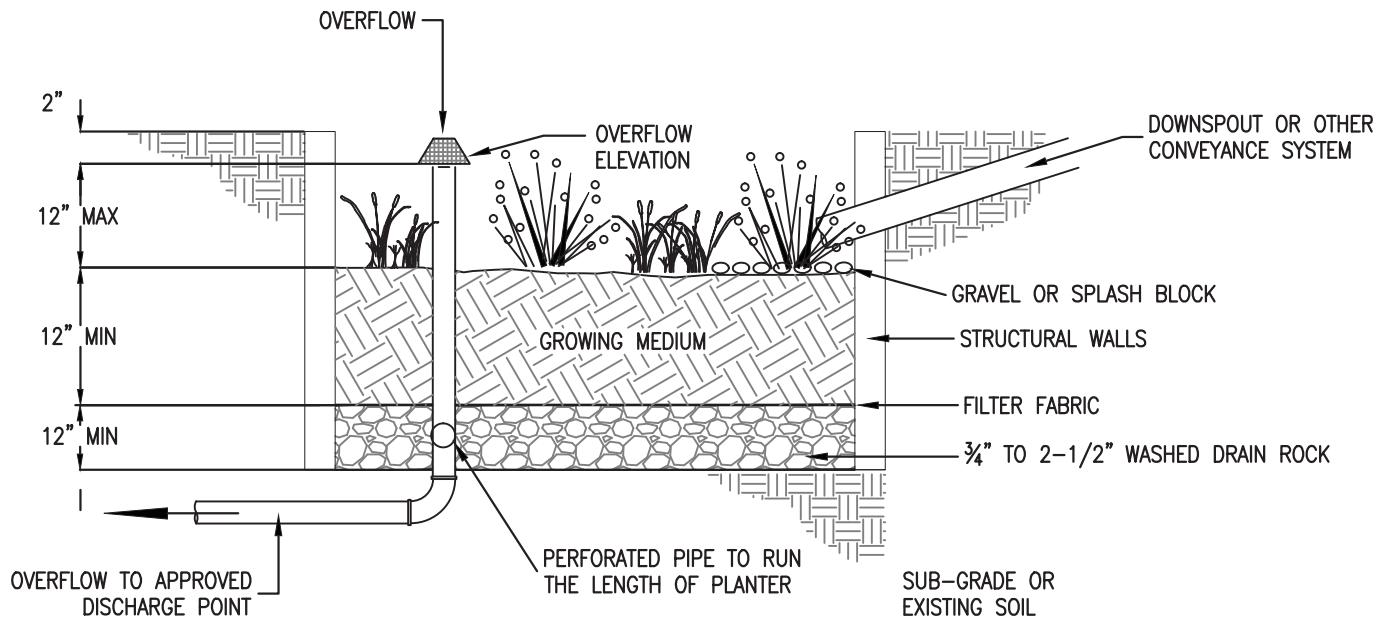
Instructions for Filling out this Form

1. Enter square footage (sf) of total impervious area being developed into BOX 1.
2. Enter square footage (sf) for impervious area reduction techniques.
3. Enter sum of the impervious area reduction techniques into BOX 2.
4. Subtract BOX 2 from BOX 1 to find BOX 3, the amount of impervious area that requires stormwater management.
5. Select appropriate stormwater management facilities.
6. Enter the square footage of impervious area managed that will flow into each facility type.
7. Multiple each impervious area managed by the corresponding sizing factor. Enter this area as the facility surface area. This is the size of facility required to manage runoff.
8. If selecting a facility that will overflow, select the point of discharge location.
9. Enter the sum of the total of all the impervious area managed into BOX 4. BOX 4 must be greater than or equal to BOX 3.



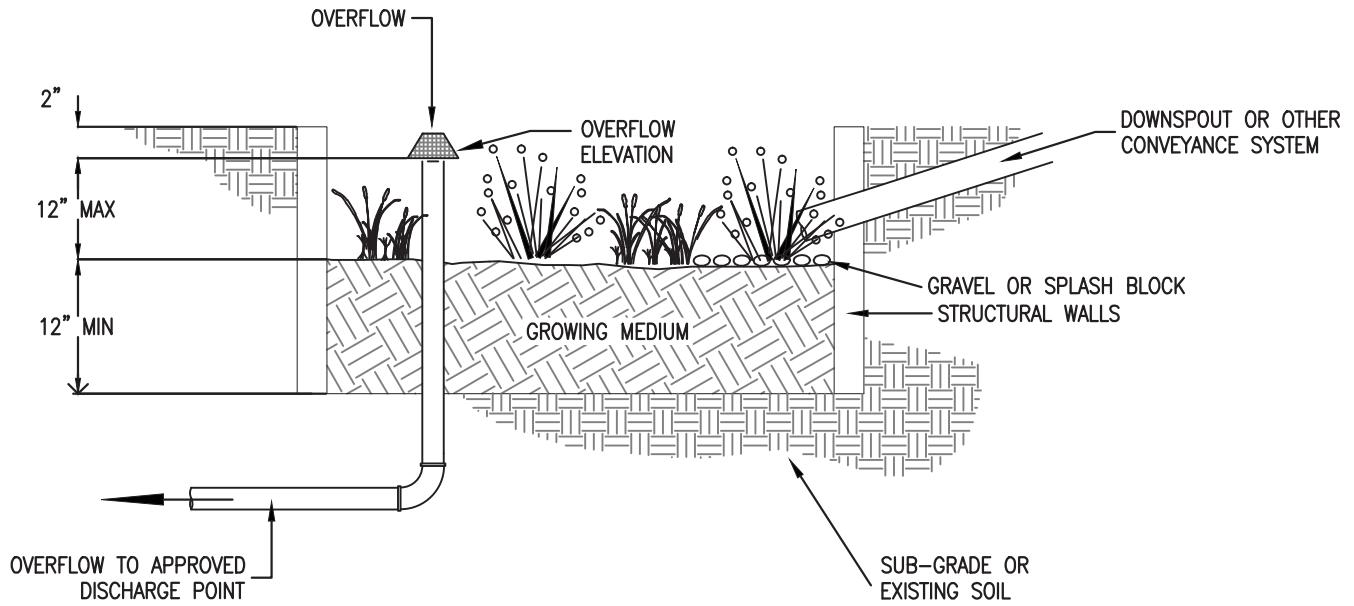
1. Provide protection from all vehicle traffic, equipment staging, and foot traffic in proposed infiltration areas prior to, during, and after construction.
2. Dimensions:
 - a. Width of planter: 24" minimum.
 - b. Depth of planter: 6" minimum from top of growing medium to overflow elevation.
 - c. Slope of planter: 0.5% or less.
3. Setbacks:
 - a. Infiltration planters must be 10' from foundations and 5' from property lines.
 - b. Filtration planters do not require a setback with an approved waterproof liner.
4. Overflow:
 - a. Overflows are required to an approved discharge point when using the Simplified Method
 - b. Overflows are not required when sized to fully infiltrate the flood control event using the Presumptive Method.
 - c. Minimum 2" freeboard from overflow elevation to the top of the planter walls.
5. Piping: Minimum 3" pipe required for up to 1,500 sq ft of impervious area, otherwise 4" min. Piping material, slopes and installation shall follow the Uniform Plumbing Code.
6. Drain rock:
 - a. Size: 3/4" to 2-1/2" diameter open graded
 - b. Depth: 12" Minimum
 - c. Length and Width: Full length and width of facility
7. Drain rock layer shall be separated from the growing medium by a geotextile
8. Growing medium:
 - a. 12" minimum
 - b. Import topsoil or amended native topsoil
9. Vegetation: Follow landscape plans otherwise refer to plant list in SWMM Appendix F. Number of plantings per 100sf of facility area:
 - a. 100 Ground Covers, OR
 - b. 80 Ground Covers and 4 Small Shrubs, OR
 - c. 60 Ground Covers and 12 Small Shrubs
10. Planter walls:
 - a. Material shall be stone, brick, concrete, wood, or other durable material (no chemically treated wood).
 - b. Walls shall be included on building plans here incorporated into foundations or other permitted structures..
11. Waterproof liner (where required): Shall be 30 mil PVC or equivalent.
12. Install washed pea gravel or river rock to transition from inlet or splash pad to growing medium.





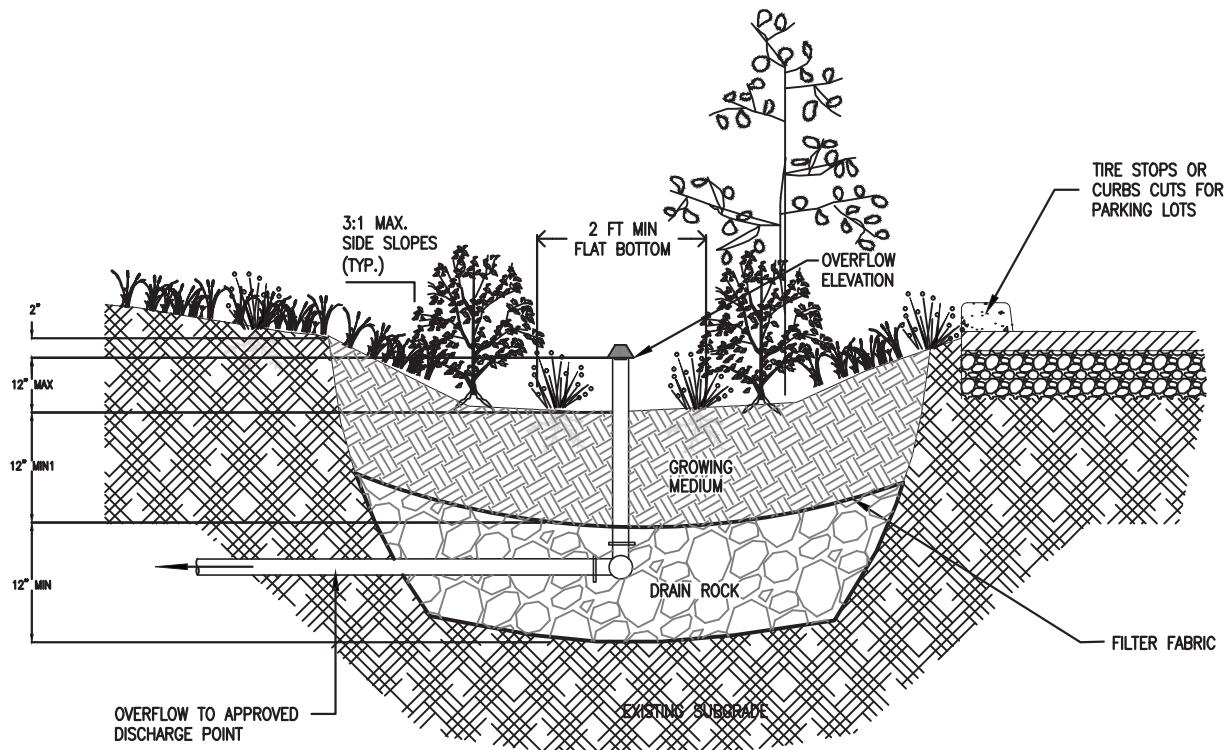
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 - b. Filtration planters do not require a setback with an approved waterproof liner.
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 - b. Overflows are not required when sized to fully infiltrate the flood control event using the Presumptive Method.
 - c. Minimum 2" freeboard from overflow elevation to the top of the planter walls.
5. Piping: Minimum 3" pipe required for up to 1,500 sq ft of impervious area, otherwise 4" min. Piping material, slopes and installation shall follow the Uniform Plumbing Code.
6. Drain rock:
 - a. Size: 3/4" to 2-1/2" diameter open graded
 - b. Depth: 12" Minimum
 - c. Length and Width: Full length and width of facility
7. Drain rock layer shall be separated from the growing medium by a geotextile filter fabric
8. Growing medium:
 - a. 12" minimum
 - b. Import topsoil or amended native topsoil
9. Vegetation: Follow landscape plans otherwise refer to plant list in SWMM Appendix F. Minimum container size is 1 gallon. # of plantings per 100sf of facility area:
 - a. 100 Ground Covers, OR
 - b. 80 Ground Covers and 4 Small Shrubs, OR
 - c. 60 Ground Covers and 12 Small Shrubs
10. Planter walls:
 - a. Material shall be stone, brick, concrete, wood, or other durable material (no chemically treated wood).
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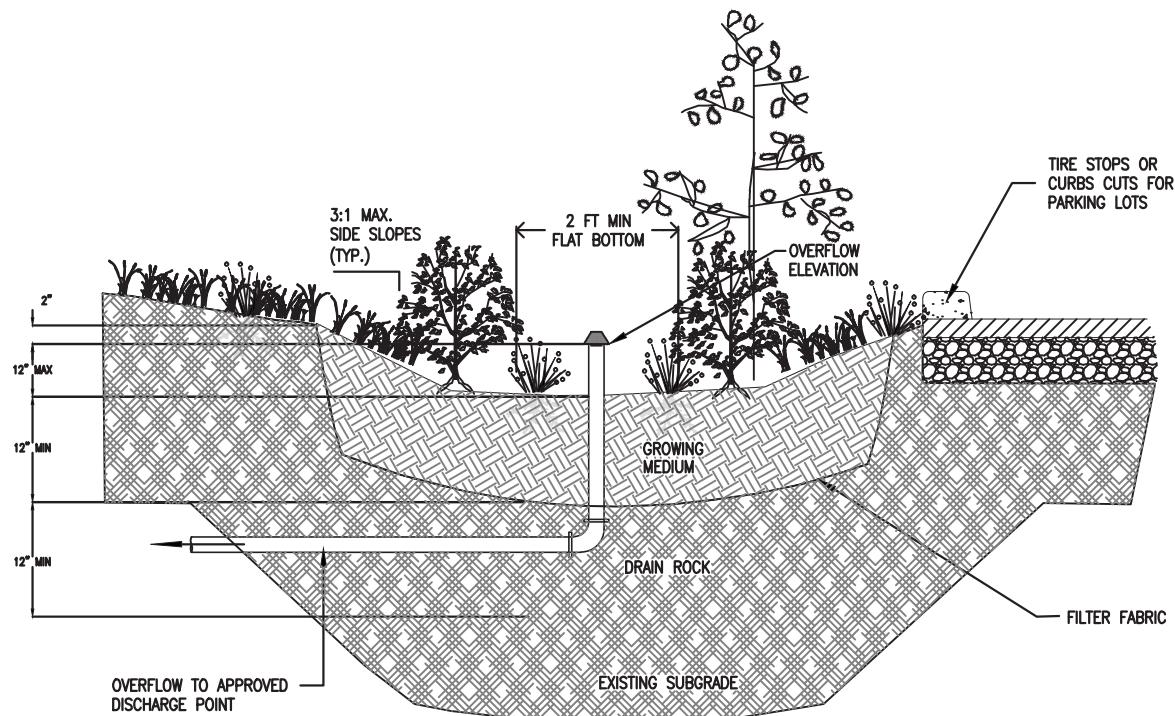
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2. Dimensions:
 - a. Width of planter: 24" minimum.
 - b. Depth of planter: 6" minimum from top of growing medium to overflow elevation.
 - c. Slope of planter: 0.5% or less.
3. Setbacks:
 - a. Infiltration planters must be 10' from foundations and 5' from property lines.
 - b. Filtration planters do not require a setback with an approved waterproof liner.
4. Overflow:
 - a. Overflows are required to an approved discharge point when using the Simplified Method
 - b. Overflows are not required when sized to fully infiltrate the flood control event using the Presumptive Method.
 - c. Minimum 2" freeboard from overflow elevation to the top of the planter walls.
5. Piping: Minimum 3" pipe required for up to 1,500 sq ft of impervious area, otherwise 4" min. Piping material, slopes and installation shall follow the Uniform Plumbing Code.
6. Growing medium:
 - a. 12" minimum
 - b. Import topsoil or amended native topsoil
7. Vegetation: Follow landscape plans otherwise refer to plant list in SWMM Appendix F. Minimum container size is 1 gallon. # of plantings per 100sf of facility area:
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 - a. Material shall be stone, brick, concrete, wood, or other durable material (no chemically treated wood).
 - b. Walls shall be included on building plans here incorporated into foundations or other permitted structures..
9. Install washed pea gravel or river rock to transition from inlet or splash pad to growing medium.





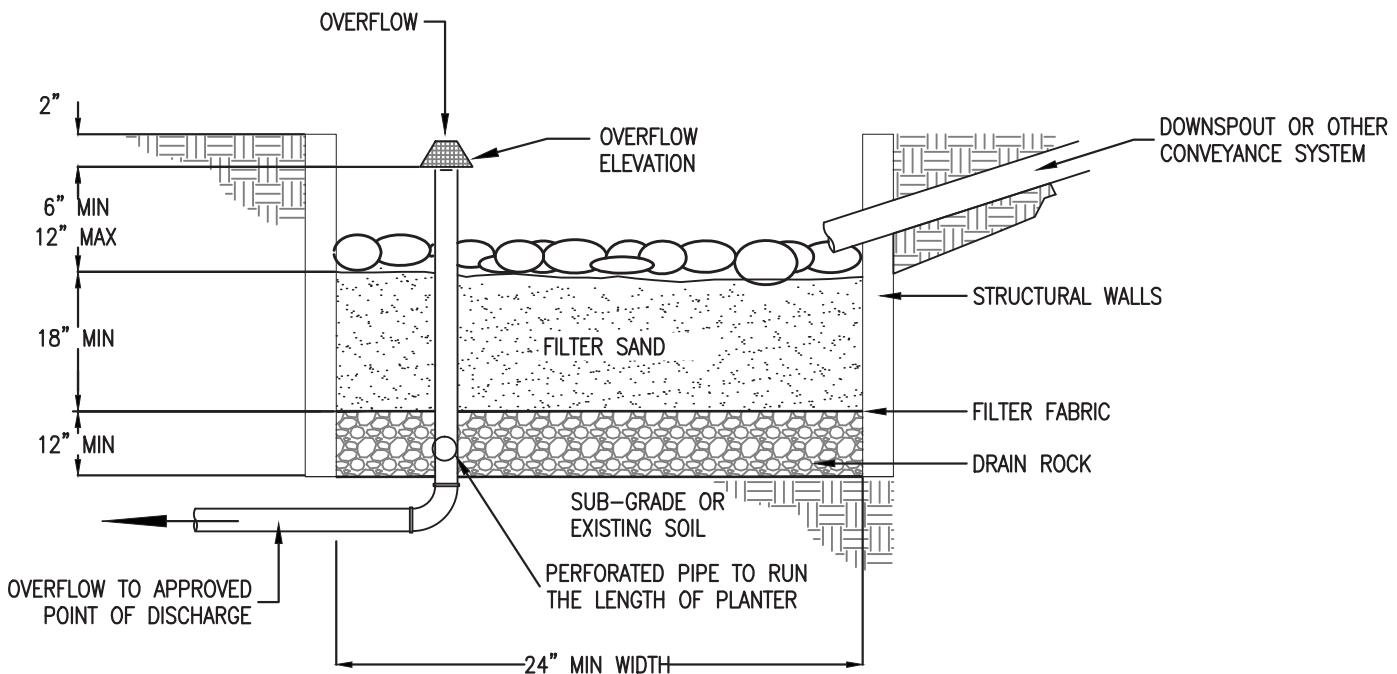
1. Provide protection from all vehicle traffic, equipment staging, and foot traffic in proposed infiltration areas prior to, during, and after construction.
2. Dimensions:
 - a. Depth of rain garden: 6" minimum and 12" maximum
 - b. Flat bottom width: 2' min.
 - c. Side slopes of Rain Garden: 3:1 maximum.
3. Setbacks:
 - a. Infiltration rain gardens must be 10' from foundations and 5' from property lines.
 - Filtration Rain Garden do not require a setback with an approved waterproof liner.
4. Overflow:
 - a. Overflows are required unless sized to fully infiltrate the flood control design storm.
 - b. Inlet elevation must allow for 2" of freeboard, minimum.
5. Piping: Minimum 3" pipe required for up to 1,500 sq ft of impervious area, otherwise 4" min. Piping material, slopes and installation shall follow the Uniform Plumbing Code.
6. Drain rock:
 - a. Size: 3/4"-2-1/2" washed
 - b. Depth: 12" Minimum
7. Drain rock later shall be separated from the growing medium and the surround soils by a geotextile filter fabric.
8. Growing medium:
 - a. 12" minimum
 - b. Imported topsoil or amended native topsoil.
- Vegetation: Follow landscape plans otherwise refer to plant list in SWMM Appendix F. Number of plantings per 100sf of facility area:
 - a. 100 Ground Covers, OR
 - b. 80 Ground Covers, 2 Large Shrubs 4 Small Shrubs and 1 tress (deciduous or evergreen)
10. Install washed pea gravel or river rock to transition from inlets and splash pad to growing medium.





1. Provide protection from all vehicle traffic, equipment staging, and foot traffic in proposed infiltration areas prior to, during, and after construction.
2. Dimensions:
 - a. Depth of rain garden: 6" minimum and 12" maximum
 - b. Flat bottom width: 2' min.
 - c. Side slopes of Rain Garden: 3:1 maximum.
3. Setbacks:
 - a. Infiltration rain gardens must be 10' from foundations and 5' from property lines.
 - Filtration Rain Garden do not require a setback with an approved waterproof liner.
4. Overflow:
 - a. Overflows are required unless sized to fully infiltrate the flood control design storm.
 - b. Inlet elevation must allow for 2" of freeboard, minimum.
5. Piping: Minimum 3" pipe required for up to 1,500 sq ft of impervious area, otherwise 4" min. Piping material, slopes and installation shall follow the Uniform Plumbing Code.
6. Growing medium:
 - a. 12" minimum
 - b. Imported topsoil or amended native topsoil.
7. Vegetation: Follow landscape plans otherwise refer to plant list in SWMM Appendix F. Number of plantings per 100sf of facility area:
 - a. 100 Ground Covers, OR
 - b. 80 Ground Covers, 2 Large Shrubs 4 Small Shrubs and 1 tress (deciduous or evergreen)
8. Installation:
 - a. Install washed pea gravel or river rock to transition from inlets and splash pad to growing medium.

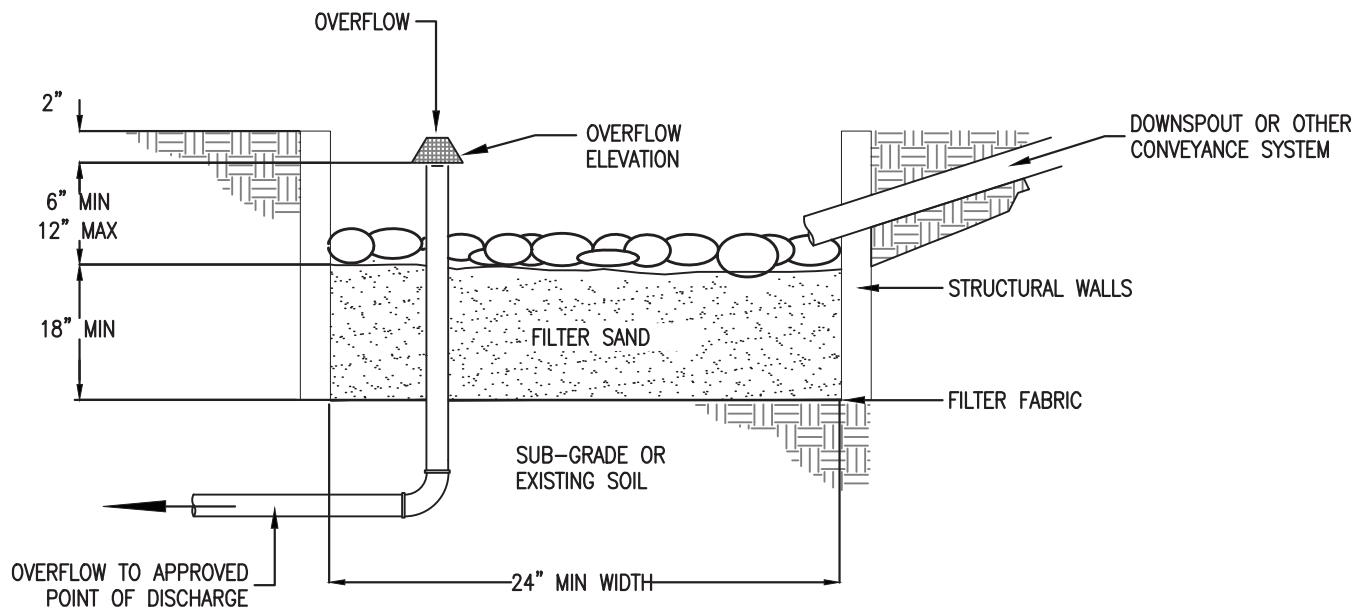




1. Provide protection from all vehicle traffic, equipment staging, and foot traffic in proposed infiltration areas prior to, during, and after construction.
2. Dimensions:
 - a. Width: 24" minimum.
 - b. Depth: 6" minimum
 - c. Slope: 0.5% or less
3. Setbacks (from centerline of f):
 - a. Infiltration sand filters must be 10' from foundations and 5' from property lines. Filtration sand filters do not have setbacks with an approved waterproof liner.
4. Overflow:
 - a. Overflows are required to an approved point of discharge.
 - b. Inlet elevation must allow for 2" of freeboard, minimum.
5. Piping: Minimum 3" pipe required for up to 1,500 sq ft of impervious area, otherwise 4" min. Piping material, slopes and installation shall follow the Uniform Plumbing Code.
6. Drain rock (minimum): 12" minimum of 3/4" - 2-1/2" washed.
7. Separation between drain rock: Drain rock shall be separated from sand layer and surrounding soil by a geotextile filter fabric
8. Filter sand:
 - a. 18" minimum.
 - b. See sand specification in SWMM.
9. Sand filter walls:
 - a. Material shall be stone, brick, concrete, wood, or other durable material (no chemically treated wood).
 - b. Filter walls built into foundation walls shall be shown on building plans.
10. Waterproof liner (where required): Shall be 30 mil PVC or equivalent.
11. Install washed pea gravel or river rock to transition from inlet or splash pad to growing medium.



DATE	1/2/2014
SCALE	NTS
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1. Provide protection from all vehicle traffic, equipment staging, and foot traffic in proposed infiltration areas prior to, during, and after construction.
2. Dimensions:
 - a. Width: 24" minimum
 - b. Depth: 6" minimum
 - c. Slope: 0.5% or less.
3. Setbacks:
 - a. Infiltration sand filters must be 10' from foundations and 5' from property lines.
 - b. Flow-through sand filters must be less than 30" in height above surrounding area if within 5 feet of property line.
4. Overflow (where required):
 - a. Overflow required for Simplified Approach.
 - b. Inlet elevation must allow for 2" of freeboard, minimum.
 - c. Protect from debris, sand, and sediment with strainer or grate.
5. Piping: Minimum 3" pipe required for up to 1,500 sq ft of impervious area, otherwise 4" min. Piping material, slopes and installation shall follow the Uniform Plumbing Code.
6. Filter sand:
 - a. 18" minimum.
 - b. See sand spec in SWMM Exhibit 2-4.
7. Sand filter walls:
 - a. Material shall be stone, brick, concrete, wood, or other durable material (no chemically treated wood).
 - b. Concrete, brick, or stone walls shall be included on foundation plans.
8. Install washed pea gravel or river rock to transition from inlet or splash pad to growing medium.



PLANTING OPTIONS
CITY OF EUGENE

Scientific Name	Common Name	Facility Planting Options	Plant Categories	Planting Zones	
		Grassy Swales Vegetated Swales / Filter Strips Stormwater Planters Rain Gardens / Dry Detention Ponds Wet / Extended Wet Ponds	Ground Cover Plants Small Shrubs Large Shrubs Deciduous Tree Evergreen Tree	Planting Zone A (wet to moist) Planting Zone B (moist to dry)	Approved Street Tree Options
<i>Abies grandis</i>	Grand Fir			◆	
<i>Abies koreana</i>	Silver Korean fir			◆	◆
<i>Abies lasiocarpa</i>	Rocky Mountain fir			◆	◆
<i>Acer circinatum</i>	Vine Maple		◆	◆	◆
<i>Acer ginnala</i>	Amur Maple		◆	◆	◆
<i>Acer glabrum</i> var. <i>douglasii</i>	Rocky Mountain Maple		◆	◆	◆
<i>Acer griseum</i>	Paperbark Maple		◆	◆	◆
<i>Acer macrophyllum</i>	Big leaf Maple		◆	◆	◆
<i>Agrostis exarata</i>	Spike Bentgrass	◆		◆	
<i>Alisma plantago-aquatica</i>	Water Plantain		◆	◆	
<i>Allium acuminatum</i>	Hooker's Onion	◆		◆	
<i>Allium amplectens</i>	Slim Leaf Onion	◆	◆	◆	
<i>Alnus rhombifolia</i>	White Alder		◆	◆	◆
<i>Alnus rubra</i>	Red Alder		◆	◆	◆
<i>Alopecurus geniculatus</i>	Water Foxtail	◆		◆	
<i>Amelanchier alnifolia</i>	Western Saskatoon Serviceberry	◆	◆	◆	◆
<i>Amelanchier grandiflora</i>	Autumn Brilliance & Forest Prince		◆	◆	◆
<i>Arbutus menziesii</i>	Pacific Madrone		◆	◆	◆
<i>Arbutus unedo</i>	Strawberry Madrone		◆	◆	◆
<i>Arctostaphylos uva-ursi</i> *	Kinnikinnick		◆	◆	
<i>Aster hallii</i>	Hall's Aster	◆	◆	◆	
<i>Aster subspicatus</i>	Douglas' Aster		◆	◆	
<i>Athyrium felix-femina</i>	Lady Fern		◆	◆	
<i>Beckmannia syzigachne</i>	American Slough Grass	◆	◆	◆	
<i>Betula nigra</i> 'Heritage'	Heritage River Birch			◆	◆
<i>Bidens cernua</i>	Nodding Beggarticks		◆	◆	
<i>Blechnum spicant</i>	Deer Fern		◆	◆	

Scientific Name	Common Name	Facility Planting Options					Plant Categories				Planting Zones	
		Grassy Swales	Vegetated Swales / Filter Strips	Stormwater Planters	Rain Gardens / Dry Detention Ponds	Wet / Extended Wet Ponds	Ground Cover Plants	Small Shrubs	Large Shrubs	Deciduous Tree	Evergreen Tree	Planting Zone A (wet to moist)
*approved for public rights of way												
<i>Brodiaea congesta</i>	Harvest Brodiaea						◆				◆	
<i>Bromus carinatus</i>	California Brome Grass		◆	◆	◆	◆	◆				◆	
<i>Bromus sitchensis</i>	Alaska Brome	◆					◆				◆	
<i>Bromus vulgaris</i>	Columbia Brome Grass		◆				◆				◆	
<i>Calocedrus decurrens</i>	Incense Cedar	◆							◆		◆	◆
<i>Camassia quamash</i>	Common Camas	◆					◆			◆	◆	
<i>Carex densa</i> *	Dense Sedge		◆				◆				◆	
<i>Carex deweyanna</i>	Dewey Sedge		◆				◆				◆	
<i>Carex hendersonii</i>	Henderson Hedge						◆				◆	
<i>Carex obnupta</i> *	Slough Sedge			◆	◆	◆	◆				◆	
<i>Carex stipata</i> *	Sawbeak Sedge		◆				◆				◆	
<i>Carex tumulicola</i> *	Foothill Sedge			◆			◆				◆	
<i>Carpinus betulus</i>	European Hornbeam		◆						◆		◆	◆
<i>Ceanothus cuneatus</i>	Buckbrush			◆			◆				◆	
<i>Ceanothus integerrimus</i>	Deerbrush		◆				◆				◆	
<i>Ceanothus sanguineous</i>	Oregon Redstem Ceanothus	◆	◆		◆	◆	◆				◆	
<i>Ceanothus velutinus</i>	Snowbrush	◆	◆		◆	◆	◆				◆	
<i>Celtis occidentalis</i>	Common Hackberry	◆	◆		◆	◆	◆		◆	◆	◆	◆
<i>Celtis reticulata</i>	Netleaf Hackberry	◆	◆		◆	◆	◆		◆	◆	◆	◆
<i>Chilopsis linearis</i>	Desert Willow	◆	◆		◆	◆	◆		◆		◆	◆
<i>Chitalpa taskhentensis</i>	Pink Dawn Chitalpa	◆	◆		◆	◆	◆		◆		◆	◆
<i>Clarkia amoena</i>	Summer's Darling					◆					◆	
<i>Clarkia purpurea</i>	Four Spot Godetia					◆					◆	
<i>Collomia grandiflora</i>	Large Leaf Collomia	◆	◆		◆	◆	◆				◆	
<i>Cornus kelseyi</i> *	Kelseyi Dogwood						◆				◆	
<i>Cornus nuttallii</i>	Western Flowering Dogwood	◆	◆					◆			◆	
<i>Cornus stolonifera</i>	Red-osier Dogwood	◆	◆				◆				◆	
<i>Corylus cornuta</i>	Western Beaked Hazlenut	◆	◆				◆				◆	
<i>Crataegus douglasii</i>	Black Hawthorn						◆				◆	
<i>Cupressus arizonica</i>	"Blue Ice" Arizona cypress	◆	◆		◆						◆	◆
<i>Cupressus bakeri</i>	Modoc cypress							◆				◆
<i>Daffodil</i> *	Daffodil					◆					◆	
<i>Danthonia californica</i>	California Oatgrass					◆					◆	

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*approved for public rights of way													
<i>Deschampsia caespitosa</i>	Tufted Hairgrass						◆					◆	◆
<i>Deschampsia elongata</i>	Slender Hairgrass						◆					◆	◆
<i>Dichelostemma congestum</i>	Ookow	■	■	■	■	■	◆					◆	◆
<i>Downingia elegans</i>	Calico Flower						◆					◆	◆
<i>Eleocharis acicularis</i>	Needle Spike-rush						◆					◆	◆
<i>Eleocharis ovata</i>	Ovate Spike-rush	■	■	■	■	■	◆					◆	◆
<i>Eleocharis palustris</i>	Creeping Spike-rush						◆					◆	◆
<i>Elymus glaucus</i>	Blue Wildrye						◆					◆	◆
<i>Elymus trachycaulus</i>	Slender Wheatgrass		■	■			◆					◆	◆
<i>Epilobium densiflora</i>	Dense Spike Primrose	■	■	■	■	■	◆					◆	◆
<i>Eriophyllum lanatum</i>	Oregon Sunshine		■	■	■	■	◆					◆	◆
<i>Euonymus altus*</i> (Need water)	Dwarf Euonymus		■	■	■	■		◆					◆
<i>Festuca occidentalis</i>	Western Fescue Grass		■	■	■	■	◆					◆	◆
<i>Festuca roemeri</i> var. <i>roemeri</i>	Roemer's Fescue	■	■		■		◆					◆	◆
<i>Festuca rubra</i> var. <i>commutata</i>	Western Red Fescue		■	■			◆					◆	◆
<i>Fragaria chiloensis*</i>	Beach or Chilean strawberry	■	■		■		◆					◆	◆
<i>Fragaria vesca</i> (<i>virginiana</i>)	Wild Strawberry	■	■				◆					◆	◆
<i>Fraxinus latifolia</i>	Oregon Ash	■	■						◆			◆	◆
<i>Gaultheria shallon</i>	Salal							◆				◆	◆
<i>Ginkgo biloba</i>	Ginkgo	■	■		■				◆			◆	◆
<i>Glyceria occidentalis</i>	Western Manna Grass	■	■		■		◆					◆	◆
<i>Grindelia intergrifolia</i>	Gumweed						◆						
<i>Helictotrichon sempervirens*</i>	Blue Oat Grass		■	■	■	■	◆					◆	◆
<i>Holodiscus discolor</i>	Oceanspray	■	■					◆				◆	◆
<i>Hordeum brachyantherum</i>	Meadow Barley			■	■		◆						
<i>Idesia polycarpa</i>	Chinese Wonder Tree								◆			◆	◆
<i>Iris douglasiana*</i>	Douglas Iris		■	■			◆					◆	◆
<i>Iris tenax*</i>	Oregon Iris		■	■			◆					◆	◆
<i>Juncus acuminatus*</i>	Tapertip Rush		■	■	■	■	◆					◆	◆
<i>Juncus effusus</i> var. <i>gracilis*</i>	Common / Soft Rush		■	■	■	■	◆					◆	◆
<i>Juncus effusus</i> var. <i>pacificus*</i>	Common Rush		■	■	■	■	◆					◆	◆
<i>Juncus ensifolius*</i>	Dagger-leaf Rush		■	■	■	■	◆					◆	◆
<i>Juncus oxymeris</i>	Pointed Rush	■	■	■	■	■	◆					◆	◆

Scientific Name	Common Name	Facility Planting Options					Plant Categories				Planting Zones		
		Grassy Swales	Vegetated Swales / Filter Strips	Stormwater Planters	Rain Gardens / Dry Detention Ponds	Wet / Extended Wet Ponds	Ground Cover Plants	Small Shrubs	Large Shrubs	Deciduous Tree	Evergreen Tree	Planting Zone A (wet to moist)	Planting Zone B (moist to dry)
*approved for public rights of way													
<i>Juncus patens</i> *	Grooved Rush; Spreading Rush	◆					◆					◆	
<i>Juncus tenuis</i>	Slender Rush	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	
<i>Juncus unilateralis</i>	One-sided Rush	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	
<i>Koeleria macrantha</i>	Junegrass	◆					◆						
<i>Koelreuteria paniculata</i>	Goldenrain Tree	◆						◆	◆	◆	◆	◆	◆
<i>Lagerstroemia indica</i>	Crape Myrtle	◆					◆	◆	◆	◆	◆	◆	◆
<i>Lemna minor</i>	Common Lesser Duckweed												
<i>Lonicera involucrata</i>	Black Twinberry	◆	◆					◆				◆	
<i>Lupinus micranthus</i>	Small Flowered Lupine	◆	◆	◆	◆	◆	◆	◆				◆	
<i>Lupinus polyphyllus</i>	Large Leaf Lupine	◆	◆	◆	◆	◆	◆	◆				◆	
<i>Lupinus rivularis</i>	Riverbank Lupine		◆					◆					
<i>Madia elegans</i>	Showy Tarweed		◆				◆						
<i>Mahonia aquifolium</i>	Tall Oregon Grape	◆					◆					◆	
<i>Mahonia nervosa</i> *	Dull Oregon Grape		◆				◆					◆	
<i>Mahonia repens</i> *	Creeping Oregon Grape		◆				◆					◆	
<i>Malus fusca</i>	Pacific Crab Apple	◆						◆			◆		
<i>Myosotis laxa</i>	Small-flowered Forget-me-not												
<i>Nandina domestica</i> *	Dwarf Nandina (Heavenly Bamboo)	◆					◆					◆	
<i>Nyssa sylvatica</i>	Canyon Live Oak							◆			◆	◆	◆
<i>Oemleria cerasiformis</i>	Indian Plum	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	
<i>Olea europaea</i>	Wilsonii fruitless olive	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
<i>Parrotia persica</i>	Persian Ironwood	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
<i>Philadelphus lewisi</i>	Mock Orange	◆					◆					◆	
<i>Physocarpus capitatus</i>	Pacific Ninebark	◆					◆					◆	
<i>Picea smithiana</i>	Morinda spruce	◆						◆			◆	◆	◆
<i>Pinus bungeana</i>	Lacebark Pine	◆					◆				◆	◆	◆
<i>Pinus monticola</i>	Western White Pine							◆			◆		
<i>Pinus ponderosa</i>	Ponderosa Pine							◆			◆		
<i>Pinus wallichiana</i>	Himalayan Pine												
<i>Pistacia persica</i>	Chinese Pistache												◆
<i>Plagiobothrys figuratus</i>	Popcorn Flower						◆						
<i>Polystichum munitum</i> *	Sword Fern	◆					◆				◆	◆	
<i>Populus balsamifera</i>	Black Cottonwood	◆						◆			◆	◆	

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<i>Populus tremuloides</i>	Quaking Aspen	◆							◆			◆	◆
<i>Potamogeton natans</i>	Floating-leaved Pondweed		◆	◆									
<i>Potentilla gracilis</i> var. <i>gracilis</i>	Graceful Cinquefoil	◆			◆	◆						◆	
<i>Prunella vulgaris</i> var. <i>vulgaris</i>	Heal All			◆		◆							
<i>Prunus emarginata</i>	Choke Cherry	◆					◆						
<i>Pseudotsuga menziesii</i>	Douglas Fir							◆				◆	
<i>Pteridium aquilinum</i>	Bracken Fern			◆								◆	◆
<i>Quercus bicolor</i>	Swamp White Oak	◆						◆				◆	◆
<i>Quercus chrysolepis</i>	Canyon Live Oak							◆				◆	◆
<i>Quercus douglasii</i>	Blue Oak	◆						◆				◆	◆
<i>Quercus engelmannii</i>	Engelmann Oak	◆						◆				◆	◆
<i>Quercus frainetto</i> 'Schmidt'	Forest Green Hungarian Oak	◆						◆				◆	◆
<i>Quercus garryana</i>	Oregon White Oak	◆						◆				◆	◆
<i>Quercus imbricaria</i>	Shingle Oak	◆						◆				◆	◆
<i>Quercus kelloggii</i>	California Black Oak							◆				◆	◆
<i>Quercus lobata</i>	Valley Oak							◆				◆	◆
<i>Quercus shumardii</i>	"Southern Plains" Shumard Oak	◆						◆				◆	◆
<i>Quercus suber</i>	Cork Oak							◆				◆	◆
<i>Quercus virginiana</i>	"Cathedral" Southern Live Oak	◆						◆				◆	◆
<i>Ranunculus occidentalis</i>	Western Buttercup					◆							
<i>Rhamnus purshiana</i>	Cascara Buckthorn	◆						◆				◆	◆
<i>Ribes sanquineum</i>	Red-Flowering Current			◆				◆					◆
<i>Rosa gymnocarpa</i>	Baldhip Rose							◆					◆
<i>Rosa nutkana</i>	Nootka Rose							◆					◆
<i>Rosa pisocarpa</i>	Swamp Rose							◆				◆	◆
<i>Rubus calycinoides</i> *	Creeping Bramble	◆											◆
<i>Rubus parviflorus</i>	Thimbleberry	◆						◆				◆	
<i>Rubus pensylvanicus</i> *	Creeping Rubus	◆											◆
<i>Rubus spectabilis</i>	Salmonberry							◆				◆	
<i>Sagittaria latifolia</i>	Broadleaf Arrowhead												
<i>Salix fluvialis</i>	Columbia Willow	◆						◆				◆	◆
<i>Salix hookeriana</i>	Hookers Willow	◆						◆				◆	◆

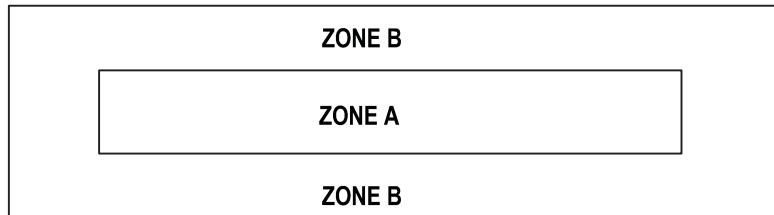
Scientific Name	Common Name	Facility Planting Options					Plant Categories				Planting Zones	
		Grassy Swales	Vegetated Swales / Filter Strips	Stormwater Planters	Rain Gardens / Dry Detention Ponds	Wet / Extended Wet Ponds	Ground Cover Plants	Small Shrubs	Large Shrubs	Deciduous Tree	Evergreen Tree	Planting Zone A (wet to moist)
*approved for public rights of way												
<i>Salix lucida</i>	Pacific Willow	◆							◆		◆	
<i>Salix scouleriana</i>	Scouler's Willow	◆	◆					◆		◆	◆	◆
<i>Salix sessilifolia</i>	Soft leafed Willow	◆	◆							◆		
<i>Salix sitchensis</i>	Sitka Willow	◆	◆					◆	◆		◆	
<i>Sambucus nigra cerulea</i>	Blue Elderberry	◆	◆					◆				◆
<i>Sambucus racemosa</i>	Red Elderberry	◆	◆					◆				◆
<i>Sciadopitys verticillata</i>	Japanese Umbrella pine	◆	◆						◆		◆	◆
<i>Scirpus americanus</i>	American Bulrush	◆								◆		
<i>Scirpus microcarpus</i>	Small Fruited Rush	◆								◆		
<i>Sedum oreganum</i>	Oregon Sedum	◆	◆									◆
<i>Sisyrinchium douglasii</i>	Purple-eyed Grass	◆	◆									
<i>Sisyrinchium idahoense</i>	Blue-eyed Grass	◆										
<i>Sophora japonica</i>	Chinese Scholar Tree							◆			◆	◆
<i>Sparganium emersum</i>	Narrowleaf Burreed	◆	◆									
<i>Spirea betulifolia</i>	Shiny-leaf Spirea	◆	◆	◆	◆	◆	◆		◆		◆	◆
<i>Spirea douglasii</i>	Douglas Spirea	◆	◆	◆	◆	◆		◆	◆		◆	◆
<i>Spirea sp*</i>	Dwarf Spirea	◆	◆	◆	◆	◆						◆
<i>Symporicarpus albus</i>	Common Snowberry	◆	◆	◆	◆	◆		◆				◆
<i>Taxodium distichum</i>	Bald cypress	◆	◆	◆	◆	◆			◆		◆	◆
<i>Thuja plicata</i>	Western Red Cedar	◆	◆	◆	◆	◆		◆	◆		◆	◆
<i>Tsuga canadensis</i>	Canadian hemlock	◆	◆	◆	◆	◆		◆	◆		◆	◆
<i>Tsuga mertensiana</i>	Mountain hemlock	◆	◆	◆	◆	◆		◆	◆		◆	◆
<i>Tsuga sieboldii</i>	Southern Japanese hemlock	◆	◆	◆	◆	◆		◆	◆		◆	◆
<i>Veronica americana</i>	American Speedwell	◆	◆	◆	◆	◆		◆				
<i>Viburnum edule</i>	Highbush Cranberry	◆	◆	◆	◆	◆		◆	◆		◆	◆

FACILITY PLANTING ZONES

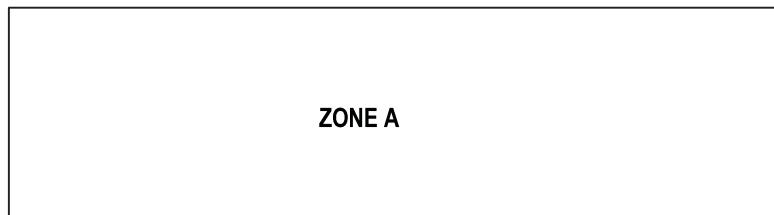
Zone A: Area of the facility defined as the bottom of the facility to the designated high water mark. This area has wet to moist soils and plants located here shall be tolerant of mild inundation.

Zone B: Area of the facility defined as the side slopes from the designated high water line up to the edge of the facility. This area typically has drier to moist soils with the moist soils being located farther down the side slopes. Plants here should be drought tolerant and help stabilize the slopes.

SWALE PLANTING ZONES



PLANTER PLANTING ZONES



RAIN GARDEN PLANTING ZONES

