Stormwater
Simplified Approach Review Request

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

Related Permit No.:_____

Date Received:_____

Site Address: _____Assessor's Map Number: _____Tax Lot Number: _____

Total impervious area being developed or redeveloped: → [ ] **BOX 1**

1. Impervious Area Reduction

Ecoroof	_____sf
Pervious asphalt or concrete	_____sf
Permeable pavers	_____sf

Total Impervious Area Reduction: → [ ] **BOX 2**

Total impervious area requiring stormwater management: → [ ] **BOX 3**

2. Surface Facilities

	Impervious Area Managed		Sizing Factor		Facility Surface Area
Swale	_____sf	x	0.09	=	_____sf

Overflow will be directed to (check all that apply):

- ☐ Subsurface facility
- ☐ Surface water
- ☐ Stormwater sewer
- ☐ Combined Sewer

3. Subsurface Facilities

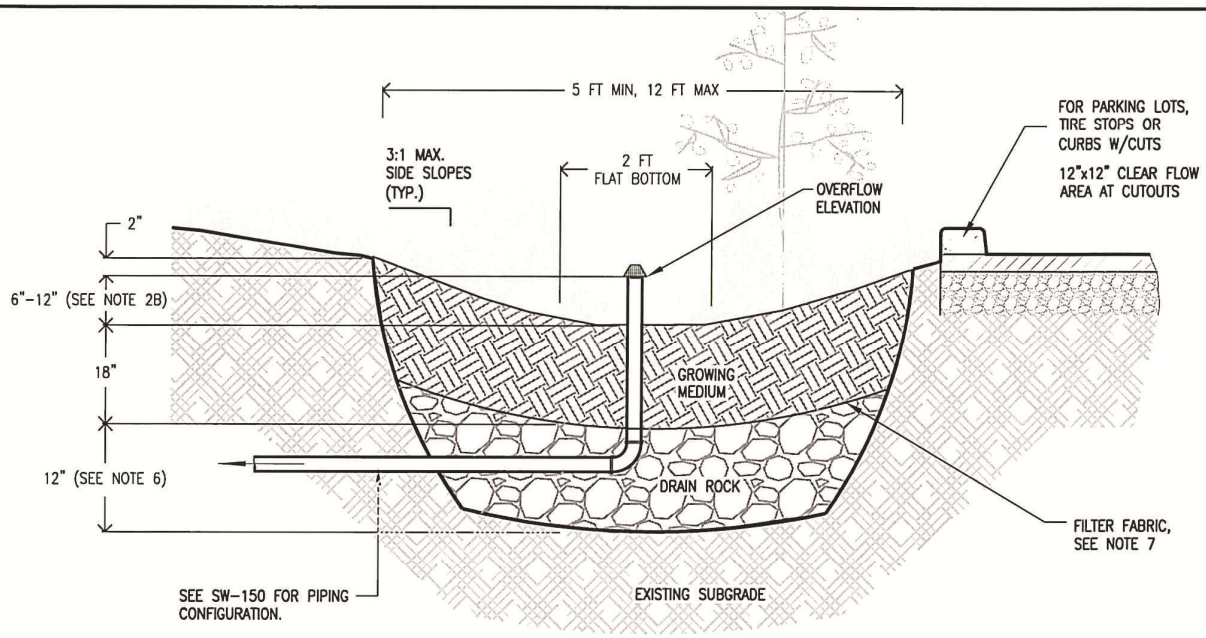
The following subsurface facilities can receive overflow from the facilities listed above or can be used independently to manage stormwater from residential roofs. If stormwater is generated from anything other than residential roofs, the facilities are subject to the UIC (Underground Injection Control) requirements.

		(See Section 2.3.3. for sizing information)	Facility Size
Drywell	_____sf	_____Diameter	_____Depth
Soakage Trench	_____sf	_____Length	_____Width

Sum of Total Impervious Area Managed → [ ] **BOX 4**

4. Escape Route

In the event the stormwater facilities temporarily fails or rainfall exceeds the facility design capacity, describe where flows will drain to in order to maintain public safety and avoid property damage. Depending on site conditions, this may include storage in an overflow structure, parking lot, or landscape area._____



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 swale: 5' - 12'.
   b. Depth of swale ((from top of growing medium to overflow elevation); Simplified: 9", Presumptive: 6"-12".
   c. Longitudinal slope of swale: 6.0% or less.
   d. Flat bottom width: 2'.
   e. Side slopes of swale: 3:1 maximum.

3. Setbacks (from centerline of facility):
   a. Infiltration swales must be 10' from foundations and 5' from property lines.
   b. Flow-through swales must be lined with connection to approved discharge point according to SWMM Section 1.3.

4. Overflow:
   a. Overflow required for Simplified Approach
   b. Inlet elevation must allow for 2" of freeboard, minimum.
   c. Protect from debris and sediment with strainer or grate.

5. Piping: shall be ABS Sch.40, cast iron, or PVS Sch.40. 3" pipe required for up to 1,500 sq ft of impervious area, otherwise 4" min. Piping must have 1% grade and follow the Uniform Plumbing Code.

6. Drain rock:
   a. Size for infiltration swale: 1½" - ¾" washed
   b. Size for flow-through swale: ¾" washed
   c. Depth for Simplified: 12"
   d. Depth for Presumptive: 0-48", see calcs.

7. Separation between drain rock and growing medium: Use filter fabric (see SWMM Exhibit 2-4 Geotextile table) or a gravel lens (¾ - ¼ inch washed, crushed rock 2 to 3 inches deep).

8. Growing medium:
   a. 18" minimum
   b. See Appendix F.3 for specification or use sand/loam/compost 3-way mix.

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. ~~Zone~~ A (wet): ~~115 herbaceous plants OR 100 herbaceous plants and 4 small shrubs~~. SEED
   b. Zone B (moderate to dry): 1 tree AND 3 large shrubs / small trees ~~AND 4 small shrubs AND 140 groundcover plants.~~

   The delineation between Zone A and B shall be either at the outlet elevation or the check dam elevation, whichever is lowest.

10. Waterproof liner: Shall be 30 mil PVC or equivalent for flow-through facilities.

11. Install washed pea gravel or river rock to transition from inlets and splash pad to growing medium.

12. Check dams: Shall be placed according to facility design. Refer to SW-340 for profile and spacing.

13. Inspections: Call BDS IVR Inspection Line, (503) 823-7000, for appropriate inspections.

- DRAWING NOT TO SCALE -

STORMWATER MANAGEMENT MANUAL TYPICAL DETAILS

- Simplified / Presumptive Design Approach -

Swale

Bureau of Environmental Services

NUMBER

SW-120

APPENDIX F.4 PLANT LISTS

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

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

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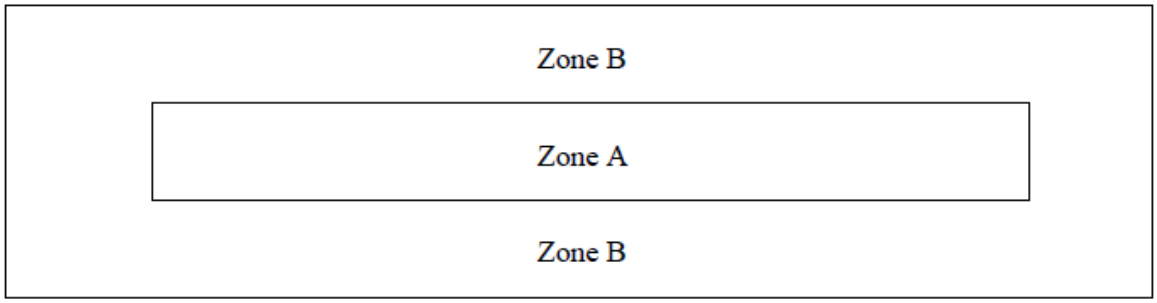
Swale Planting Zones



Facility Plant List

Plant Name		Proposed Facility Type						Characteristics			
		Private					Public				
Botanic name, Common Name	Zone	Swale	Planter	Basin	Dry Pond	Wet Pond	Basin	NW Native	Evergreen	Potential Hgt.	O.C. Spacing
Herbaceous Plants											
Aster suspicatus, Douglas' Aster	B	X		X				Y	N	36"	12"
Athyrium felix-femina, Lady Fern	B	X		X			X	Y	N	36"	24"
Blechnum spicant, Deer Fern	B	X		X			X	Y	N	24"	24"
Bromus carinatus, Califonia Brome Grass	A			X			X	Y	Y	18"	12"
Bromus sitchensis, Alaska Brome	A			X			X	Y	Y	18"	12"
Bromus vulgaris, Columbia Brome	A			X			X	Y	Y	18"	12"
Camassia leichtlinii, Camas Lily	A	X	X	X				Y	N	24"	12"
Camassia quamash, Common Camas	A/B	X	X	X			X	Y	N	24"	12"
Carex deweyanna, Dewey Sedge	A	X	X	X			X	Y	Y	36"	12"
Carex densa, Dense Sedge	A	X	X	X			X	Y	Y	24"	12"
Carex obnupta, Slough Sedge	A	X	X	X			X	Y	Y	4'	12"
Carex rupestris, Curly Sedge	A	X	X	X				N	Y	14"	12"
Carex stipata, Sawbeak Sedge	A	X	X	X				N	N	20"	12"
Carex testacea, New Zealand Orange Sedge	A	X	X	X			X	N	Y	24"	12"
Carex vesicaria, Inflated Sedge	A	X	X	X			X	Y	N	36"	12"
Deschampsia cespitosa, Tufted Hair Grass	A/B	X	X	X			X	Y	N	36"	12"
Eleocharis acicularis, Needle Spike Rush	A	X	X	X			X	Y	Y	30"	12"
Eleocharis ovata, Ovate Spike Rush	A	X	X	X			X	Y	Y	30"	12"
Eleocharis palustris, Creeping Spike Rush	A			X			X	Y	Y	30"	12"
Elymus glaucus, Blue Wild Rye	B	X		X			X	Y	Y	24"	12"

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Festuca occidentalis, Western Fescue Grass	A	X		X			X	Y	N	24"	12"
Festuca rubra, Red Fescue	B	X		X			X	Y	Y	24"	12"
Glycera occidentalis, Western Manna Grass	A			X			X	Y	Y	18"	12"
Hebe 'Autumn Glory', Hebe	B	X		X				N	Y	14"	12"
Iris douglasiana, Douglas Iris	B	X		X			X	Y	N	18"	12"
Iris sibirica, Siberian Iris	A	X	X	X				N	N	36"	12"
Iris tenax, Oregon Iris	B	X		X			X	Y	N	18"	12"
Juncus balticus, Baltic Rush	A	X	X	X				N	N	20"	12"
Juncus effusus var. pacificus, Soft rush	A	X	X	X			X	Y	Y	36"	12"
Juncus ensifolius, Dagger-leaf Rush	A	X	X	X			X	N	N	10"	12"
Juncus patens, Spreading Rush	A	X	X	X			X	N	Y	36"	12"
Juncus tenuis, Slender Rush	A	X	X	X			X	Y	Y	36"	12"
Lupinus micranthus, Small Flowered Lupine	B	X		X			X	Y	N	18"	12"
Lupinus polyphyllus, Large-leaved Lupine	A/B	X		X				Y	N	36"	12"
Polypodium glycrrhiza, Licorice Fern	A	X	X	X				Y	Y	12"	12"
Polystichum munitum, Sword Fern	A/B	X		X			X	Y	Y	24"	24"
Pteridium aquilinum, Bracken Fern	B	X		X				Y	Y	5'	12"
Scriptus acutus, Hardstem Bulrush	A	X	X	X				N	N	10"	12"
Scriptus americanus, American Bulrush	A	X	X	X			X	Y	Y	30"	12"
Scriptus mlcrocarpus, Small Fruited Bulrush	A			X			X	Y	Y	24"	12"
Scriptus validus, Softstem Bulrush	A	X	X	X				N	N	5'	12"
Sedum oreganum, Oregon Stonecrop	B	X						Y	Y	4"	12"
Sisyrinchium californicum, Yellow-eyed Grass	A/B	X	X	X				N	Y	6"	12"

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Veronica liwanensis, Speedwell	A	X		X				N	N	2"	12"
Large Shrubs and Small Trees											
Acer circinatum, Vine Maple	A/B	X	X	X			X	Y	N	15'	10'
Amelanchier alnifolia, Western Serviceberry	B	X		X			X	Y	N	20'	10'
Ceanothus sanguineus, Oregon Redstem Ceanothus	B	X		X			X	Y	Y	7'	4'
Holodiscus discolor, Oceanspray	B	X		X			X	Y	N	6'	4'
Lonicera involucrata, Black Twinberry	B	X		X			X	Y	N	5'	4'
Oemleria cerasiformis, Indian Plum	B	X		X			X	Y	N	6'	4'
Philadelphu lewisii, Wild Mock Orange	B	X		X			X	Y	N	6'	4'
Ribes sanguineum, Red-Flowering Current	B	X		X			X	Y	N	8'	4'
Rubus parviflorus, Thimbleberry	B	X		X			X	Y	N	8'	4'
Rubus spectabilis, Salmonberry	A	X	X	X			X	Y	N	10'	4'
Salix fluviatalis, Columbia Willow	A/B	X	X	X			X	N	N	13'	6'
Salix lucida var. 'Lasiandra', Pacific Willow	A	X	X	X			X	Y	N	13'	6'
Salix purpurea nana, Blue Arctic Willow	B	X		X				N	N	8'	6'
Salix stichensis, Sitka Willow	A	X	X	X			X	Y	N	20'	6'
Sambucus cerulea, Blue Elderberry	B	X		X			X	Y	N	10'	10'
Sambucus racemosa, Red Elderberry	B	X		X			X	Y	N	10'	10'
Spriaea douglasii, Douglas Spiraea	A/B	X	X	X			X	Y	N	7'	4'
Viburnum edule, Highbush Cranberry	A/B	X	X	X			X	Y	N	6'	4'

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Shrubs											
Ceanothus velutinus, Snowbrush	B	X		X			X	Y	Y	4'	3'
Cornus sericea, Red-twig Dogwood	A	X	X	X			X	Y	N	6'	4'
Cornus sericea 'Kelseyii', Kelsey Dogwood	B	X		X			X	N	N	24"	24"
Gaultheria shallon, Salal	B	X		X			X	Y	Y	24"	24"
Mahonia aquifolium, Oregon Grape	B	X		X			X	Y	Y	5'	3'
Mahonia nervosa, Dull Oregon Grape	B	X		X			X	Y	Y	24"	24"
Physocarpus capitatus, Pacific Ninebark	A/B	X	X	X				Y	N	10'	3'
Rosa gymnocarpa, Baldhip Rose	B	X		X			X	Y	N	3'	3'
Rosa nutkana, Nootka Rose	B	X		X			X	Y	N	8'	3'
Rosa pisocarpa, Swamp Rose	A/B	X	X	X			X	Y	N	8'	3'
Symphoricarpos alba, Common Snowberry	B	X		X			X	Y	N	6'	3'
Groundcovers											
Arctostaphylos uva-ursi, Kinnickinnick	B	X		X				Y	Y	6"	12"
Fragaria chiloensis, Coastal Strawberry	B	X		X				Y	Y	6"	12"
Fragaria vesca, Woodland Strawberry	B	X		X				N	Y	10"	12"
Fragaria virginiana, Wild Strawberry	B	X		X				N	Y	10"	12"
Helictotrichon sempervirens, Blue Oat Grass	B	X		X				N	Y	24"	12"
Mahonia repens Creeping Oregon Grape	B	X		X				Y	Y	12"	12"
Trees											
Abies grandis, Grand Fir	B			X			X	Y	Y	150'	

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Acer griseum, Paperbark Maple	B	X		X				N	N	30'	
Acer macrophyllum, Big Leaf Maple	B	X		X			X	Y	Y	60'	
Alnus rubra, Red Alder	A	X		X			X	Y	N	80'	
Arbutus menziesii, Madrone	B			X			X	Y	N	35'	
Crataegus douglasii, Black Hawthorn	A	X		X			X	Y	N	40'	10'
Fraxinus latifolia, Oregon Ash	A/B	X		X			X	Y	N	30'	
Malus fusca, Pacific Crabapple	A	X	X	X			X	Y	N	30'	10'
Metasequoia glyptostroboides, Dawn Redwood	B			X			X	N	N	80'	
Populus tremuloides, Quaking Aspen	A			X			X	Y	N	40'	
Prunus emarginata var. mollis, Bitter Cherry	A/B	X	X	X			X	Y	N	50'	
Pseudotsuga menziesii, Douglas Fir	B	X		X			X	Y	Y	200'	
Quercus garryana, Oregon White Oak	B	X		X			X	Y	N	100'	
Rhamnus purshiana, Cascara	A/B	X	X	X			X	Y	N	30'	
Salix hookeriana, Hooker's Willow	A/B	X	X	X			X	Y	N	15'	
Salix scouleriana, Scouler's Willow	A/B	X	X	X			X	Y	N	15'	
Thuja plicata, Western Red Cedar	A			X			X	Y	Y	150'	
Tsuga hetrophylla, Western Hemlock	A	X		X			X	Y	Y	125'	
Tsuga mertensiana, Mountain Hemlock	B	X		X			X	Y	Y	125'	