

ZONING

164 Attachment 5

Town of Warwick

SCHEDULE A

Examples of Stormwater Management Practices Acceptable for Water Quality

Group	Practice	Description
Pond	Micropool extended detention pond (P-1)	Pond that treats the majority of the water quality volume through extended detention, and incorporates a micropool at the outlet of the pond to prevent sediment resuspension.
	Wet pond (P-2)	Pond that provides storage for the entire water quality volume in the permanent pool.
	Wet extended detention pond (P-3)	Pond that treats a portion of the water quality volume by detaining storm flows above a permanent pool for a specified minimum detention time.
	Multiple pond system (P-4)	A group of ponds that collectively treat the water quality volume.
	Pocket pond (P-5)	A stormwater wetland design adapted for the treatment of runoff from small drainage areas that has little or no baseflow available to maintain water elevations and relies on groundwater to maintain a permanent pool.
Wetland	Shallow Wetland (W-1)	A wetland that provides water quality treatment entirely in a shallow marsh.
	Extended detention wetland (W-2)	A wetland system that provides some fraction of the water quality volume by detaining storm flows above the marsh surface.
	Pond/wetland system (W-3)	A wetland system that provides a portion of the water quality volume in the permanent pool of a wet pond that precedes the marsh for a specified minimum detention time.
	Pocket wetland (W-4)	A shallow wetland design adapted for the treatment of runoff from small drainage areas that has variable water levels and relies on groundwater for its permanent pool.
Infiltration	Infiltration trench (I-1)	An infiltration practice that stores the water quality volume in the void spaces of a gravel trench before it is infiltrated into the ground.
	Infiltration basin (I-2)	An infiltration practice that stores the water quality volume in a shallow depression before it is infiltrated into the ground.
	Infiltration drainfield (I-3)	An infiltration practice that functions in a manner similar to a drainfield for a septic system.

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	Dry well (I-4)	An infiltration practice similar in design to the infiltration trench, and best suited for treatment of rooftop runoff.
Filtering practices	Surface sand filter (F-1)	A filtering practice that treats stormwater by settling out larger particles in a sediment chamber, and then filtering stormwater through a sand matrix.
	Underground sand filter (F-2)	A filtering practice that treats stormwater as it flows through underground settling and filtering chambers.
	Perimeter sand filter (F-3)	A filter that incorporates a sediment chamber and filter bed as parallel vaults adjacent to a parking lot.
	Organic filter (F-4)	A filtering practice that uses an organic medium such as compost in the filter in place of sand.
	Bioretention (F-5)	A shallow depression that treats stormwater as it flows through a soil matrix, and is returned to the storm drain system.
	Level spreader (F-6)	A filtering practice used in conjunction with bioretention areas, level spreaders can increase detention storage and time of concentration and, thus, assist with pollutant and sediment removal.
	Filter strip (F-7)	A low-grade vegetated area that permits sediment deposition during sheetflow and thus, acts as a pre-treatment device.
Open channels	Dry swale (O-1)	An open drainage channel or depression explicitly designed to detain and promote the filtration of stormwater runoff into the soil media.
	Wet swale (O-2)	An open drainage channel or depression designed to retain water or intercept groundwater for water quality treatment.
Other systems	Rain barrels	A low-cost retention device placed below roof downspouts to collect water during storms, thereby helping reduce the cumulative effects of stormwater on downstream systems.
	Cisterns	A preformed storage device, usually sited underground, in proximity to rooftop downspouts functioning similarly to rain barrels but offering larger storage capacities.
	Vegetated roofs	Vegetated roofs, also known as green roofs, are structural components that help to mitigate the effects of development on water quality by filtering, absorbing or detaining rainfall. Vegetated roofs can help control nitrogen pollution in stormwater runoff.
	Tree box filters	Tree box filters are in-ground containers

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		typically containing street trees. These filters can be effective at controlling runoff water quality, especially when numerous units are distributed throughout a site. Runoff is directed to the tree box, where it is filtered by vegetation and soil before entering a catch basin.
	Permeable pavers	Permeable pavers allow water to seep through regularly interspersed void areas in order to reduce runoff and pollutants. Runoff may be detained in the gravel bed, infiltrated into the underlying soil, or both. By reducing the volume of runoff, permeable pavers help to decrease downstream flooding and the thermal pollution of sensitive waters.
	Permeable pavement	Permeable pavement can be either asphalt or concrete. As with permeable pavers, water is allowed to pass through voids and infiltrate into the underlying soil. Permeable pavement lacks most of the fine material found in conventional pavements, allowing water to flow through voids in the aggregate.