## **Green Infrastructure Tool Box**



University of New Hampshire Stormwater Center October 2015

Green Infrastructure Tool Box							
INLETS	Water Quality Volume Treatment/ft <sup>3</sup>	Pros	Cons	Notes			
Catch basin	NA	Maintainable, easy to install, better pretreatment	Little WQ benefit routine vactor maintenance	Can be combined with slotted pipes to act as hydraulic inlet to underground system			
Leaching Catch basin	NA	Maintainable, easy to install, good pretreatment	Little WQ benefit routine vactor maintenance	Can also be a hydraulic inlet to underground system (PP or Stone Detention)			
Sedimentation Basin or other structure	NA	Maintainable, easy to install, good pretreatment	Little WQ benefit routine vactor maintenance	Can be combined with slotted pipes to act as hydraulic inlet to underground system			
Rip Rap Channel	NA	Easy to install	Harder to maintain	Can act as at grade hydraulic inlet to system			
Slotted Pipe	NA	Efficient stable inlet	Cost	Can be combined with concrete basins to act as hydraulic inlet to underground system			
Conveyance	Water Quality Volume Treatment/ft <sup>3</sup>	Pros	Cons	Notes			
Vegetated Swale	NA	Easy to install and maintain	little WQ benefits	Can provide good pretreatment and act as hydraulic inlet to filter systems			
Pipe	NA	Effective stable conveyance	Cost	Can be combined with concrete basins to act as hydraulic inlet to underground system, neet appropriate grading			
Stone Channel	NA	Easy to install	Harder to maintain	Can provide good pretreatment and act as hydraulic inlet to filter systems			

Treatment	Water Quality Volume Treatment/ft <sup>3</sup>	Pros	Cons	Notes
Stone Detention Above Ground	1	Easy to install	need space, hard to maintain, minimal WQ benefits	Basic WQ
Stone Detention Below Ground	0.4	optimizes space, provides some detention and minimal WQ benefits	harder to install, vactor truck maintenance, minimal WQ benefits	Basic WQ
Soil Filter	0.15	Good WQ treatment	Need above ground ponding space (4"-12"). Maintain annually	Advanced WQ, usually combined with above ground basin storage and underground stone detention reservoir to increase effectiveness
Soil Filter with native plants	0.15	Good WQ treatment	Need above ground ponding space (4"-12"). Maintain annually	Advanced WQ, usually combined with above ground basin storage and underground stone detention reservoir to increase effectiveness
Soil Filter with grass	0.15	Good WQ treatment, grass maintains infiltration rate capacity, can blend in with landscape	Need above ground ponding space (4"-12"). Mow as desired	Advanced WQ, usually combined with above ground basin storage and underground stone detention reservoir to increase effectiveness
Tree Filter	0.2	Good WQ treatment, structure provides aesthetic benefits	Annual maintenance can be difficult (handwork)	Advanced WQ, usually combined with above ground basin storage and underground stone detention reservoir to increase effectiveness
Porous Pavement	0.2	Good WQ Treatment, multiple benefits	Need Vacuum sweeper, product will clog if not maintained	Advanced WQ, combined with extended subbase materials to increase effectiveness