

# BIOFILTRATION SYSTEMS

High Performance, Low Impact Development Solutions for Urban Areas



## STORMVAULT BIOFILTRATION

The StormVault Biofiltration System is a simple and highly versatile stormwater treatment solution. Through physical and chemical filtration, adsorption, and biological processes, StormVault Biofiltration efficiently removes Total Suspended Solids (TSS), metals, nutrients, oil, and grease from stormwater runoff to meet water quality standards as a low impact development best management practice. With specially engineered filter media, the system can treat higher flows than conventional bioretention units, allowing for a smaller footprint size and lower overall costs.



### DESIGN

- Receive site specific configurations and drawings to meet required treatment flow rates and removal efficiencies.
- Utilize high surface loading rates to shrink treatment footprint and save valuable development land.
- Deploy with open bottom to promote infiltration and groundwater recharge.



### BID

- Complete your bid with efficiency leveraging our experience with state and municipal regulations.
- Receive proposal for complete package direct from the manufacturer.
- Select from standard models of vaults and trenches for a wide variety of widths and lengths. Customized configurations also available.



### BUILD

- Install with ease using a system deployed in modular precast concrete vaults and trenches configured to meet site specific requirements
- Enhance site aesthetics with options for open-top vegetated treatment vaults.
- Plant a wider selection of species using a biofiltration unit with a separate tree well to promote longer and healthier plant life.
- Configured using site specific conditions to match existing pipe elevations and streetscapes.



## StormVault Biofiltration Fights Pollution with Green Infrastructure

### BIOFILTRATION TREATMENT VAULT

#### 1 INLET

- Inlet configurations include grated, piped, direct curb inlet, and curb inlet chamber

#### 2 INTERNAL BYPASS PIPE

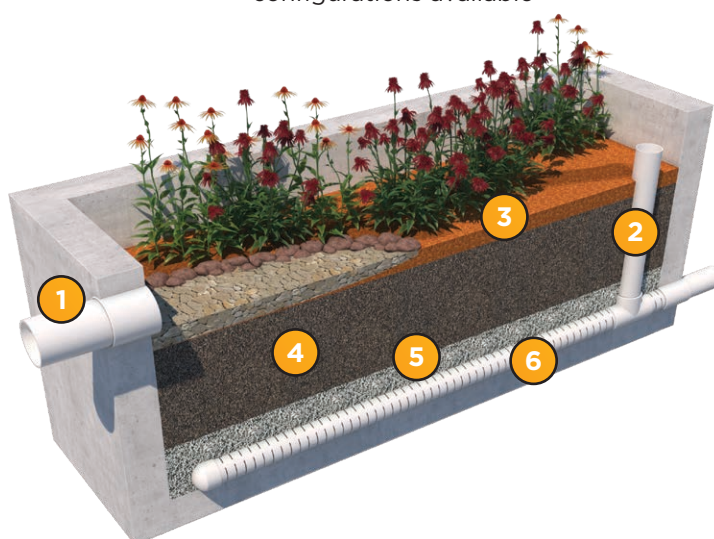
- Conveys excess flow past the treatment chamber
- External bypass configurations available

#### 3 MULCH STABILIZATION LAYER

- Captures large trash and debris
- Protects media from scour
- Water retention for vegetation

#### 4 ENGINEERED MEDIA

- Inorganic components remove TSS and metals
- Organic components remove nutrients and facilitate biological uptake, which supports plant life



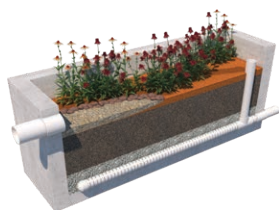
#### 5 BRIDGING STONE

- Allows for even drainage
- Protects effluent pipe from clogging

#### 6 PERFORATED UNDERDRAIN PIPE

- Conveys treated flow to storm drain system

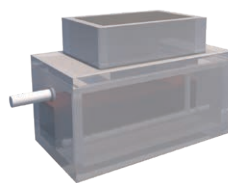
### STANDARD CONFIGURATIONS



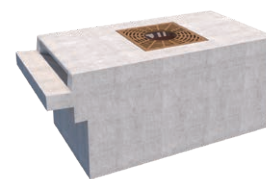
Open Top Planter Box



Grated Tree Box



Underground Vault with Access Hatch



Box with Curb Inlet

All standard models can also be deployed with an open bottom to promote infiltration and groundwater recharge.