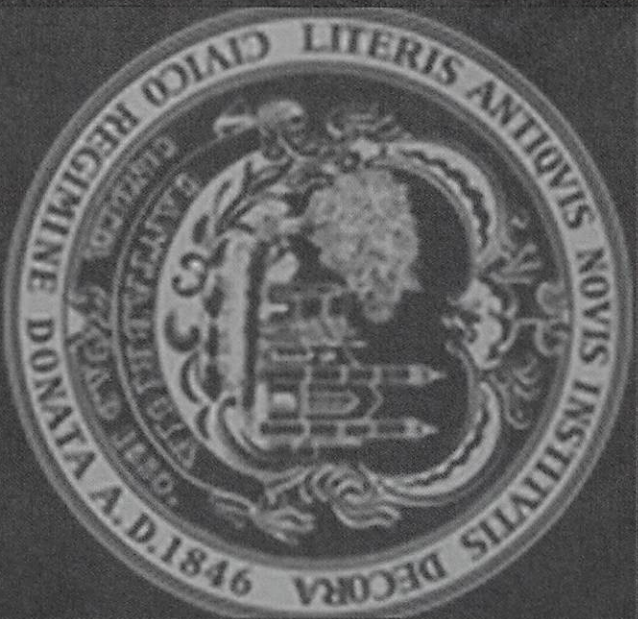



Fresh Pond Advisory Board – May 17, 2018



Stormwater Management and Enhancing Open Space in Cambridge, MA

James Wilcox, Director of Engineering Services

Jennifer Letourneau, Conservation Commission Director/Senior Engineer



Stormwater Management

Department of Public Work's Role

- Compliance with NPDES permit
- Public and Private Property
- Before, During and After Construction

Stormwater Management

Goal= Control Quantity and
Quality of Stormwater

Three (3) Components:

- Site Planning and Design
- Source Controls
- Structural (Grey and Green) and
Non-Structural Best Management
Practices (BMPs)- Grey and Green



Open Space Examples

- Northeast Sector Project
- Alewife Reservation Stormwater Wetland



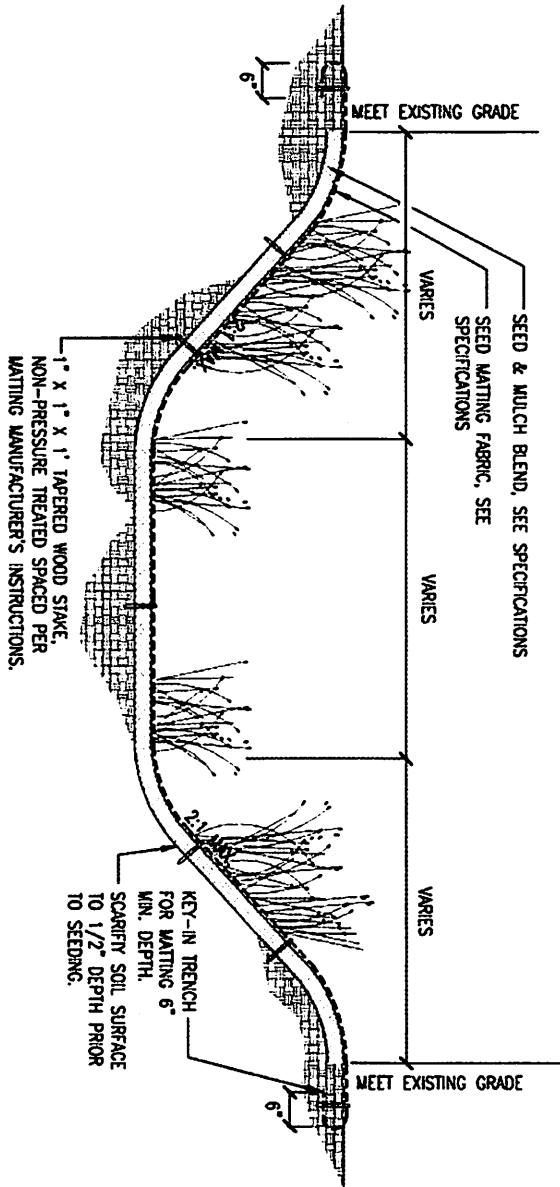
Northeast Sector Project

Completed 2006

- Improve the health of Fresh Pond Reservoir by reducing erosion and enhancing natural filtration processes
- Reduce invasive plant species and increase native species diversity within the Reservation
- Create beautiful, universally accessible space within the Reservation
- Produce new, inviting active use areas further from the Reservoir







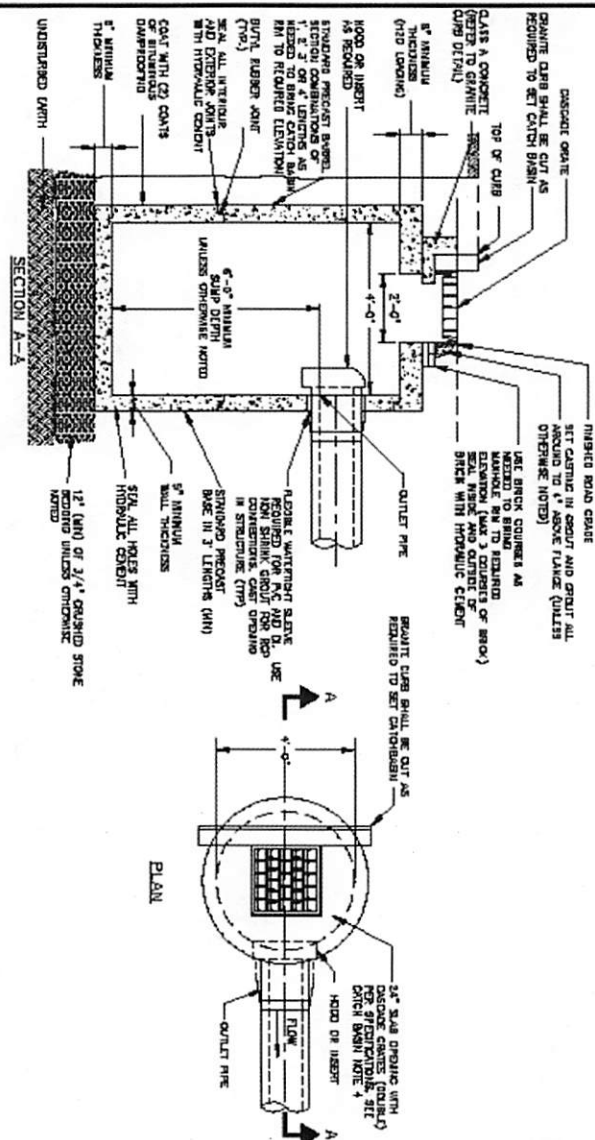
12

SLOPE/SWALE STABILIZATION

NTS

1





TYPE 1 - SINGLE GRATE CATCH BASIN

SCALE: N.T.S.

SPEC SECTION REF: 026004

2804.2

Alewife Reservation Stormwater Wetland

Completed 2013

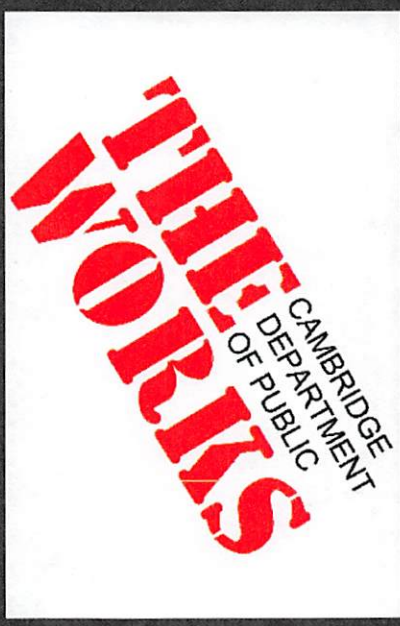
- 3.4-acre project serving 300+ acres
- The largest engineered wetland in the Eastern United States
- Designed allow sewer separation in West Cambridge, reducing Combined Sewer Overflows (CSOs) to the Little River
- Retains and treats separated stormwater in a constructed wetland before being discharged to the Little River and ultimately Alewife Brook, Mystic River, and Boston Harbor.





- Storm Runoff
- Sanitary Sewer
- Combined
- Abandoned
- MMWA
- Force Mains
- Over / Under
- Trench Drain
- SS Service
- SD Service
- Abandoned
- Catchbasin
- Drywell
- Area Drain
- Drop Inlet
- Oil / Water Separator
- Abandoned
- Outfall
- C.S.O.
- Underground Structures
- Pump Station
- Lift Station
- Storm Runoff Catchment Area
- City Line





THANK YOU!

ANY QUESTIONS?