Municipal Stormwater Operations and Maintenance
South Burlington, Vermont

February 27, 2020

Presentation by:
Tom DiPietro, Deputy Director
South Burlington Department of Public Works
Presentation Overview

• Equipment Used in Stormwater O & M
• Maintenance of:
  – Stormwater Conveyance Infrastructure
  – Stormwater Treatment Infrastructure
  – Roads
• Q&A
Equipment Used in Stormwater O&M

- Vacuum Truck
- Street Sweeper
- Backhoe / Excavator
- Dump Trucks
- Trench Box
- Portable Pumps
- Hydroseeder
- Mowers & Weed Whackers
- Pipe Camera
- Inspection Forms
- Assorted Hand Tools
There are different types of street sweepers:
- Mechanical
- Vacuum Assisted
- Regenerative Air Sweepers
Equipment Review
Maintaining Conveyance Infrastructure

• Stormwater Pipes
• Storm Drains
• Culverts
• Swales
• Stone lined ditches
• Pump Stations
Pipes, Storm Drains & Culverts

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Grass Swales & Stone Lined Ditches
Stormwater Pump Stations

- Stormwater isn’t typically pumped.
- Pump stations require regular inspection, maintenance, and cleaning.

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Maintaining Treatment Infrastructure

- Bioretention (a.k.a. Rain Gardens)
- Treatment Wetlands
- Wet Ponds
- Underground Tanks/Vaults for Storage and/or Infiltration
- Permeable Pavement
- Hydrodynamic Swirl Separators
Bioretention / Rain Gardens & Treatment Wetlands

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South Burlington Stormwater Utility
Plants and Maintenance
Stormwater Treatment and Landscaping
Wet Ponds

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Underground Tanks for Storage and/or Infiltration

- Vacuum Truck
- Street Sweeper
- Backhoe / Excavator
- Dump Truck
- Trench Box
- Portable Pumps
- Hydroseeder
- Mower / Weed Whacker
- Pipe Camera
- Inspection Form
- Hand Tools
- Maintenance Staff
Permeable Pavement
Hydrodynamic Swirl Separators
Stormwater Related Road Maintenance

- Street Sweeping
- Plowed Snow
- De-Icing
Street Sweeping

- Vacuum Truck
- Street Sweeper
- Backhoe / Excavator
- Dump Truck
- Trench Box
- Portable Pumps
- Hydroseeder
- Mower / Weed Whacker
- Pipe Camera
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Plowed Snow
De-Icing

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Questions