Ramsey Place Green Infrastructure Project

Community Meeting - February 6, 2019

City of Albany Department of Water & Water Supply

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Presentation Overview

- The Big Picture: Combined Sewer Overflow & Flood Mitigation in Albany
- Ramsey Place Project Timeline
- Ramsey Place Project Overview
- Questions and Discussion
City of Albany
Combined Sewer System

- Part of sewer system combined sanitary and stormwater into one pipe network during rain events
- When system overflows during storms, it discharges into Hudson River or onto the street
- Combined stormwater and sewage can back-up into basements.
Summer 2018 Flooding/Backup Calls

➔ July 5th
◆ 119 Calls

➔ August 3rd
◆ 116 Calls

➔ August 6th
◆ 37 Calls
Ramsey Place Project Timeline

Fall 2018
- Initial Outreach
- Nov. 7th Community Meeting

Winter 2018/2019
- Additional Research and Project Development

Winter/Spring 2019
- Design and Bid/Contract Process

Spring/Summer 2019
- Construction, completion deadline October 31st.

February 6th Community Meeting
Green Infrastructure: Street Trees

Managing stormwater where it falls.

Establishes a natural system to slow down and soak up rain.

Helps to alleviate sewer capacity issues downstream.
 Ramsey Place Green Infrastructure Project – Street Tree Planting

**Tree Benefits Values**

**New Plantings**
- **Stormwater Interception**
  - 2" caliper tree: 87 gallons
  - Fifty 2" caliper trees: 4,350 gallons

- **Atmospheric Carbon Reduction**
  - 2" caliper tree: 35 pounds
  - Fifty 2" caliper trees: 1,750 pounds

**Mature Plantings**
- **Stormwater Interception**
  - 12" caliper tree: 1,390 gallons
  - Fifty 12" caliper trees: 87,500 gallons

- **Atmospheric Carbon Reduction**
  - 12" caliper tree: 330 pounds
  - Fifty 12" caliper trees: 16,500 pounds

**Project Benefits**
- The addition of green space and porous pavement will result in a total decrease in impervious surface of over 15,000 sq. ft. providing a 30% reduction.
- Per a rain event up to 150,000 gallons of stormwater will be detained in the stone reservoir and slowly released to the combined sewer system downstream.
- This project serves as just one example of the Albany Water Department's commitment to implement green infrastructure throughout the city with the goal of creating a more resilient stormwater management system. Small changes at the neighborhood level over time can make big impacts in alleviating flood prone areas and the combined sewer system.
Project Component 1 - Street and Curb

What?

Curbs move in 3’ on each side of the road. The 40’ street becomes 34’.

Why?

⇒ Slight change from 3.5’ on each side.
⇒ Allows space for install of new stormwater pipe.
⇒ Reduces impervious asphalt and allows for more stormwater storage space.
⇒ Street calming.
Emergency Access Vehicles

➔ Scenario: Car and truck parked on street
◆ Provides a minimum 16’+ travel lane for emergency vehicles
◆ Negligible impact
Project Component 1 - Street and Curb

What?

Addition of 2’ of porous pavement along each curb.

Why?

➔ This is how water enters the underground detention space.

www.dec.ny.gov/lands/74995
Project Component 2 - Street Trees

➔ Stormwater Interception
  ◆ New tree - 87 gallons per year
  ◆ Mature tree - 1,350 gallons per year

➔ Energy & Air Quality Benefits

➔ Street Value
Project Component 2 - Street Trees

City of Albany Forester and Landscape Architects at EDR collaborate in tree removal and planting plans.

- Already in decline
- Not expected to survive construction
- Invasive species

- Appropriately spaced
- Healthy diversity and species paired with remaining trees
Project Component 3 - Underground

- Engineered soil for lawn and trees
- Stone Reservoir
- Water infiltrates or makes it way to the perforated pipe
  - Separated Storm Sewer - no longer combines with sewage, reduces potential for back-ups
  - Designed to outlet slowly to Hackett and New Scotland sewers
  - 150,000 gallons of storage
Project Component 4 - Lead Service Replacement

➔ Funding supplemented by NYS Department of Health grant to City of Albany

➔ Replaced all the way to the meter in the home

➔ Optional replacement, consent form must be signed by owner granting or withholding permission.
Questions?