

Planning for Climate Resilience: Thinking Regionally, Acting Locally Southeast New England Program

Pomham Street Stormwater Improvements Spectacle Pond Watershed, Cranston, RI

PROJECT ABSTRACT

The City of Cranston has completed the design, permitting, and construction of a stormwater best management practice (BMP) to treat runoff from Pomham Street to Spectacle Pond. Pomham Street was identified as a feasible BMP location in the Phosphorus Reduction Plan for Spectacle Pond completed in 2021. This is one of several BMPs that the City of Cranston has implemented to reduce nutrient loading from nearby roadways, parking lots, and parks.

PROJECT

The Pomham Street Stormwater BMP is a subsurface infiltration system that collects stormwater from a portion of Pomham Street and the adjacent residential lots and conveys it underground to be treated through infiltration. Prior to the construction of this BMP, untreated runoff from this area shed directly overland to Spectacle Pond.

- Site Investigations: Site specific information was obtained in order to conduct the design. This included preparation of a site survey, delineation of wetlands in proximity to the site, and collecting in-situ data on soils and groundwater.
- Design: The project design included consideration of existing site constraints, regulatory requirements and water quality treatment objectives. Stormwater treatment, hydrologic analysis, and hydraulic calculations were conducted to size the stormwater management system. Plan sets were prepared for permitting and construction.
- Permitting: A Freshwater Wetlands Permit was required from RIDEM because the project modifies (reduces) stormwater flows to the adjacent Spectacle Pond. A Groundwater Discharge/ Underground Injection Control Permit was also obtained, as the project involves subsurface infiltration of stormwater.
- Construction: The project was constructed under the supervision of the design engineer and the City. Construction was completed in accordance with the approved design drawings.
- Public Engagement: The City and the Providence Stormwater Innovation Center prepared graphics and an informational video to communicate the project to the community.







