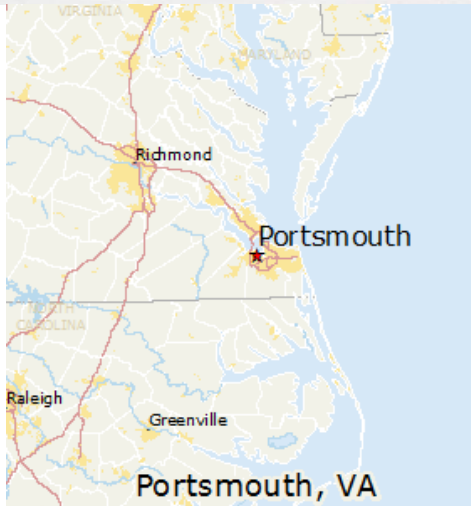




GREEN STREETS | GREEN JOBS | GREEN TOWNS INITIATIVE

The Green Streets, Green Jobs, Green Towns Partnership (G3) aims to stimulate the green jobs market and enable families to work where they live and play. Small to mid-sized communities can boost their local economies and protect water resources through the use of watershed planning, design and construction of stormwater best management practices.



3 workshops with 20 attendees



1 design plan created



CITY OF PORTSMOUTH

Engineered Design for Water Street Green Street and Park

Through this program, the City of Portsmouth created an engineered design plan for a portion of Water Street. This is the second green street planned for the city. Design is complete for Court Street Green Street, a pilot project for the City which is planned to go into construction by July 2020. This project focused on Water Street, which is located in downtown Portsmouth, and was identified as an opportunity for conversion to a green street to improve water quality, reduce runoff volume, and enhance public space. Water Street is located between Columbia Street and High Street and adjacent to the Elizabeth River. Drainage from the roadway enters the storm sewer system and outfalls into the Southern Branch of the Elizabeth River, which drains to the Chesapeake Bay.

A conceptual plan to retrofit Water Street into a Green Street was developed and completed in June, 2018. Details from this plan are shown the second page of this fact sheet. The concept plan looked at converting Water Street to a green street by

incorporating several Best Management Practices (BMPs), and adding removable bollards to allow the street to be closed to vehicular traffic and encourage pedestrian access to the waterfront. The engineered design plan will involve retrofitting approximately 500 linear feet of Water Street.

BMPs incorporated into the plan include permeable pavers, urban bioretention, and a reduction of impervious surface. Additionally, the adjacent parking lot will be retrofitted with an underground storage system and the impervious surface replaced with a combination of managed turf and recreational space.

This project will be incorporated into the Downtown Stormwater Park project, a retrofit of an existing City-owned parking lot to enhance public space. The green street and stormwater park are also part of a larger plan to relocate city offices away from the waterfront to minimize public use/tax exempt footprint downtown.

PROJECT ELEMENTS

- **Engineered design plan** – This engineered plan for 90% of the plan, added concrete details to the pre-existing concept plan. Some green elements included permeable paving, bioretention areas, and removing impervious pavement.
- **Permeable paving** – This alternative to traditional black top allows surface water to flow into the ground where the volume can be held, infiltrate into the lower soil or conveyed through a stormwater system. Porous paving is a good application for areas that require a hardscape surface and have no viable options for stormwater management.
- **Bio-retention areas** – These features filter, store, and reduce stormwater runoff, allowing it to infiltrate into the ground before it enters into the storm drain system
- **Engagement of local community** – This project engaged community members through workshops, which assisted in the completion of the project.



Figure 4: Existing Water Street corridor



Figure 5: Concept Rendering of Water Street Green Street

SUSTAINABILITY & GROWTH

This project is part of the City's Crawford Gateway Revitalization Strategy which seeks to capitalize on substantial public and private investment by placing an emphasis on the City Council Vision to provide access to the waterfront and reinvigorate downtown with substantial economic development. The city plans on meeting these goals by improving livability through bike-pedestrian enhancement, quality open space, and expanded retail, shopping and dining options. This project is also included in the Build One Portsmouth Comprehensive Plan, which was recently recognized by the Virginia Chapter of the American Planning Association as the 2019 Resilient Virginia Community of the Year.

The City plans to perform regular inspections and maintenance on the BMP facilities so they remain in prime operating condition. The city takes full responsibility for the ongoing maintenance that is required for the project. This is also covered under the city's MS4 permit through VDEQ which conduct regular audits on regulated locality programs.

Year Awarded: 2020
Award Amount: \$30,000
Match Amount: \$69,995

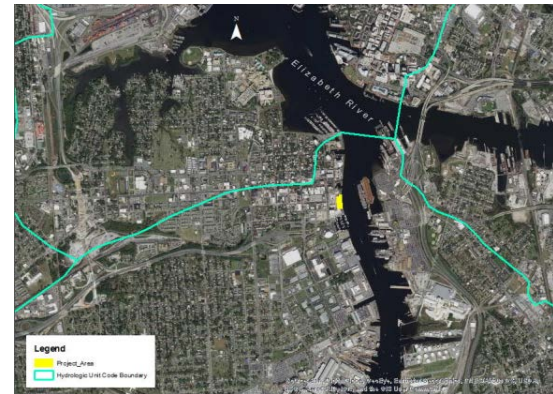


Figure 1: Location Map and HUC Boundary



Figure 6: Proposed Area of Redevelopment

Project Partners: Chesapeake Bay Trust,
City of Portsmouth, U.S. Environmental
Protection Agency, WSP