

ACB Ohio Creek Watershed Project

The City of Norfolk, VA



PROJECT OVERVIEW

CUSTOMER:

The City of Norfolk, VA

PRODUCTS:

Shoreblock SD-475-CC Block
N080N Non-Woven Geotextile

LOCATION:

Norfolk, VA

CHALLENGE:

Reduce shoreline erosion that exacerbates river flooding and prevents recreational activity.

SOLUTION:

Install a matrix of individual Shoreblock concrete blocks to form an erosion-resistant overlay with specific hydraulic performance characteristics.

PRODUCT ADVANTAGES:

- Shoreblock SD mats provide superior erosion resistance at competitive costs to rip rap.
- Shoreblock SD mats are fabricated with a 5:1 cable strength to mat weight ratio for optimized strength.
- Shoreblock SD mats feature cable loops at the end of each row for easier handling and anchoring.

Background

The Ohio Creek Watershed comprises the Historic Chesterfields Heights and Grandy Village neighborhoods, two predominantly African American communities including more than 700 individual housing units. The watershed is only accessible via two roads. During regular nuisance flood events, one access road becomes completely impassable, restricting access and evacuation routes for Ohio Creek Watershed residents.

Project Scope

Shoreline erosion in the area contributes to flooding events that leave Ohio Creek Watershed inaccessible. Gloucester-based contractors Coastal Design & Construction was tasked with providing permanent erosion solutions that would reduce flooding and maintain access to the Chesterfield Heights and Grandy Village communities.

Method

Coastal Design & Construction selected Shoreblock SD-475-CC Blocks because of the product's proven capabilities in the Virginia Natural Gas Pipeline crossing. Using our N080N non-woven geotextile as underlayment filter fabric, the contractors laid a matrix of individual concrete blocks placed together to form an erosion-resistant overlay with specific hydraulic performance characteristics. The mat matrix is connected by a series of cables that pass longitudinally through performed ducts in each block.

The Solution: Ferguson Waterworks

Coastal Design & Construction partnered with ACF Environmental—now Ferguson Waterworks—because of an existing relationship and their faith in ACF/Ferguson to provide support from the bid stage to the installation of the product. We were able to streamline the design and sourcing process for the contractor by providing project-specific mat sizes and tools for assembly and project-specific mat drawings with sequence numbers.

For more information, contact Ferguson Waterworks associate [Del Fuller](mailto:Del.Fuller@fergusonwaterworks.com) at (757) 641-4820