The New York City Department of Design and Construction (NYCDDC) needed to update an old sanitary storm sewer system in Staten Island. Working with NYCDDC and JR Cruz, Maccaferri supplied its proprietary, customizable, easy to install Reno Mattresses to help create a semi-circular catchment basin to meet the client’s needs.

Problem
The NYCDDC released a project for the replacement of an outdated sanitary storm sewer system. With the installation of this new sanitary storm sewer system, the detention ponds where the stormwater flowed also needed updating. This included the installation of an overflow dam and a sediment catchment basin on the low side of the dam, designed to catch and redirect sediment in the water and deposit it into a separate location, making it easier to maintain overtime.

Solution
The designers needed a solution to meet the unique shape of the basin. Maccaferri proposed utilizing 12x6x9” PVC Reno Mattresses. Since the basin was semi-circular to the overflow dam wall, the Reno Mattresses were the perfect choice. This allowed for field modification; installers could cut and bend the mattresses to achieve the turn needed.

Client:
NYC DEPT. OF DESIGN AND CONSTRUCTION

Main Contractor:
JR CRUZ

Designer:
NYC DEPT. OF DESIGN AND CONSTRUCTION

Products used:
12X6X9” PVC RENO MATTRESSES (6X8 MESH)

Date of Construction:
JANUARY 2017 - FEBRUARY 2017
the sweeping round shape to form the basin. In some areas the thickness of the mattresses needed to be 18 inches which was easily achieved by stacking the 9” Reno Mattresses on top of one another.

Maccaferri products were chosen due to the ease of installation and ability to make field modifications to accommodate different shapes and sizes to conform to site conditions. Maccaferri provided exceptional on-site technical support to the installer during installation. Our area manager was on-site during the project to help with any questions and ensure proper installation techniques.

Maccaferri products were best suited for this project because the installation was done in “wet” conditions. Our testing of the PVC coated material showed that our products would provide the design life necessary to satisfy the client.

“We appreciated the ease of assembling the mattresses. All the components were shipped factory installed and we didn’t have to spend time piecing together the mattresses with diaphragms.”

- JR Cruz (Contractor)