

NICOLOSI DRIVE GABION WALL
STATEN ISLAND, NEW YORK, U.S.A.**Slope Protection****Problem**

In response to a Nor' Easter that hit the coast of Staten Island in March of 2010, a gabion retaining wall was installed along the oceanfront property to protect upland infrastructure from storm damage and wave action. The original wall design consisted of PVC coated galvanized steel gabions, spanning 100' parallel to the shore direction with a 9' vertical height and two 30' return walls at either end. During Super Storm Sandy in October 2012, the storm surge had pushed a large volume of sand and debris upland against the existing wall. While minimal damage was observed in confined places, the wall structure remained intact and fully functional. Following the storm, the property owner utilized the same contractor to perform clean up and maintenance on the gabion wall system.

While the original gabion structure performed as designed, providing protection to the upland infrastructure and foundation, the property owner elected to add to the existing gabion wall in addition to simple maintenance repairs. During the construction phase, the adjacent homeowner also elected to install a separate gabion wall fronting their property after seeing how well his neighbor's wall held up during the storm.

Solution

The solution was to add to the front of the existing gabion wall, widening its footprint so the wall's overall height could be increased from 9' to 12'. It was during this time that the wall was also extended in length to shield and protect the adjacent property.

Client: PRIVATE HOMEOWNER**Designer / Consultant:** MACCAFERRI**Contractor:** MILLENNIUM STONE WORK - COLTS NECK, NJ**Products used (Qty.)**

- Gabion 12'

Date of construction: 11/2012 - 12/2012

Gabion wall under construction



Completed gabion wall after expansion