



MARINE CORPS BASE - QUANTICO

Anchorplex® System Provides Retaining Wall Stability Solution for Tight Space, Requiring Less Excavation

LOCATION:

Quantico, Virginia

PRODUCTS:

Anchorplex® Retaining Wall System, Incorporating Vertica® Wall Units

COLORS:

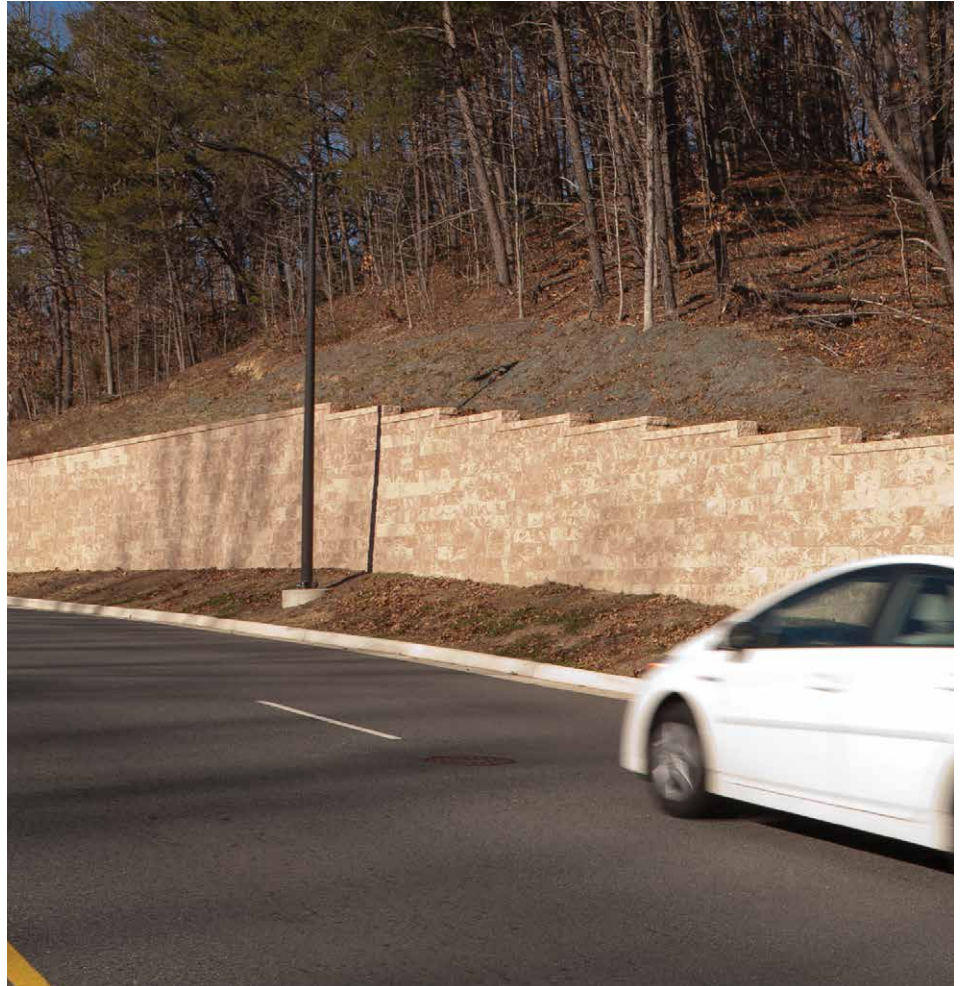
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INSTALLED AREA:

3,800 sq. ft., 585 ft. wall length

INSTALLED BY:

BRACK Retaining Walls, Inc.
Richmond, Virginia



The Challenge

A road designed in the 1960s near the entrance of Marine Corps Base Quantico needed to be widened to accommodate the increasing traffic of the base's growing population. A retaining wall is an essential part of the design plan, but there was little space to stage the construction or excavate for a wall due to slope conditions. The limited space available for excavation, equipment and geosynthetic reinforcement was the primary consideration in the system-selection process,

along with other considerations, including cost and the speed of installation so the road could remain operable as much as possible during construction.

The Solution

A number of systems, including segmental retaining walls, big-block systems and poured-concrete walls, are familiar to the engineering company A. Morton Thomas & Associates of Richmond, Virginia, which was

awarded the design-build contract.

The design firm presented the Anchorplex® retaining wall system built with Vertica® retaining wall blocks as a solution for the tight space. The engineers, as well as the Naval Facilities Engineering Command (NAVFAC), accepted this solution, as it addressed all of the challenges of the site.

Designed for sites just like this one, the Anchorplex system is a retaining wall built with Anchor™ products and structural backfill placed immediately behind the

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block. This system eliminates the need for the construction of a mechanically stabilized earth zone behind the wall face and requires less excavation and compaction than is usually necessary in a geogrid-reinforced retaining wall.

Installation of the Anchorplex system, a first for Richmond-based BRACK Retaining Walls, Inc., went smoothly. Part of the bid was to have professionals from Anchor Wall Systems on-site to provide construction support. Installing the system, composed of segmental retaining blocks laid by hand, is faster than placing big-block systems and doesn't require large machinery. NAVFAC also approved the Vertica blocks in a variegated color, which complements the colors of the environment because the blocks were locally produced.

The Result

Russell Road has been widened without the need for extensive excavation, the retaining wall serves its purpose, and it looks good. The Anchorplex system not only provided the needed solutions for a sloped space, but the efficient installation kept the road operable during construction.

About Belgard Commercial®

Belgard Commercial, part of Oldcastle® APG, offers a complete collection of paver and wall products for plazas, terraces, parking areas, roadways, rooftops and retaining walls. Available in a range of styles, premium Belgard Commercial products have been found in the nation's finest developments and award-winning commercial and retail properties since 1995.

Oldcastle APG is part of CRH's Building Products division. As the largest building materials company in North America, CRH provides a single-source solution for commercial construction projects with a full portfolio that also includes structural masonry, masonry veneers, dry mix products, hardscape jointing sands and sealants, stormwater management systems, concrete infrastructure, architectural glass, lawn & garden products, and composite decking.

