

ALYS BEACH

Belgian Cobble® Provides Old Colonial Aesthetic for First Permeable Paver Road in Panhandle

LOCATION:

Walton County, Florida

PRODUCTS:

Belgian Cobble®, 70mm

COLORS:

Custom Color

INSTALLED AREA:

900,000 sq. ft. total to date

ARCHITECT:

Khoury-Vogt Architects

CIVIL ENGINEER:

Innerlight Engineering Corporation

INSTALLER:

Stone Scapes, Inc.

LANDSCAPE ARCHITECT:

Patrick Hodges Land Studio





Background

Alys Beach, an unincorporated planned community in Walton County, Florida, is a family dream that came to fruition in 2004. In the late 1970s, Jim Stephens, his wife, Julie and his father, Elton purchased 158 acres of land on the very secluded Highway 30A in the Florida Panhandle. They named the land Alys Beach for Elton's wife. While at the time it was just pure scrub oak, sand and blue water, the family had a vision to develop

it into a community that was dedicated to architectural excellence and a deep respect for the natural environment. It is now a New Urban community that combines Bermudan architecture with courtyard living.

The Challenge

The roadway was a key focus of design and planning because of its potential impact on the environment. "This was a legacy project for the family members, who were adamant from the beginning that sustainability be one of the key components of the development," said Jim Martelli, civil engineer and managing director, Innerlight Engineering Corporation. "They wanted the neighborhood to stand the test of time and be the best it could be for the environment. A significant part of that is stormwater management."

MarieAnne Khoury-Vogt and Eric Vogt (KVA) designed Alys Beach in a New Urbanist style,



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which is particularly suited to the waterfront location but posed some challenges. In particular, a New Urbanist plan calls for the utilities to be under the street but, as the town is still growing, utilities would be accessed regularly. If an asphalt road was put in, pieces would be cut out and replaced every time utilities needed to be accessed, creating an unsightly patchwork. Asphalt also did not meet the aesthetic or sustainability goals for the town.

The Solution

For water conservation and to maximize land usage, Martelli and installer Robert Reeder, owner of Stone Scapes, Inc., created the first true permeable road installation in the panhandle, allowing the road to be part of the stormwater system. Belgian Cobble® in a dark gray blend with a granitelike appearance, was chosen as the surface of the permeable system to complement the high-end, old colonial aesthetic of the community. The product perfectly fit with the aesthetic, need to access utilities without leaving evidence of disturbance, and the very important issue of stormwater management. They have used approximately 900,000 square feet of the Belgian 70mm cobble pavers to date.

Typically, in a cobblestone roadway, the road

base would be crushed concrete, but there is no permeable benefit to that. Instead, they chose washed #57 stone, similar to river rock but with many angular pieces that lock together. Additionally, nearly half of the base is comprised of gaps, which provide storage space for the water. Martelli calculated that 12" of the #57 stone was suitable to support heavy vehicle loads. The Belgard cobble stone is 2 3/4 thick to achieve the particular vehicle loading requirement. They chose to use 1 to 1 ½ inches of very small #89 stone for the bed under the cobble and to fill the joints. "Rainfall is absorbed almost immediately into the ground, getting filtered in the process," Martelli said.

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Jim Martelli Civil Engineer and Managing Director, Innerlight Engineering Corporation

The Result

"Alys Beach is now the model for new urbanist resort planning," explained project landscape architect Patrick Hodges, noting the appeal of both the aesthetic and functional benefits. "The Belgard permeable pavers are ideal for managing stormwater and have been used successfully to enhance treatment and reduce runoff in several recent projects here in the northwest Florida."

For nearly 20 years, Belgian Cobble® has helped Alys Beach convey the aesthetic KVA designed for the community while achieving the family's sustainability goals. As the community continues to grow, so, too, will the permeable road system.

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.



