



MIXED-USE DEVELOPMENT PAVERS ENCORE - TAMPA, FL

Pavers Set the Stage For Urban Revitalization Project

PROJECT:

Urban Revitalization - Mixed Use Development - Tampa, FL

OWNER:

Tampa Housing Authority

PRODUCTS:

Urbana® Stone, Mega-Bergerac®, Mega-Arbel® & Holland Stone

INSTALLATION SIZE:

90,000+ Sq Ft

MANUFACTURED BY:

Coastal an Oldcastle® APG Company

INSTALLATION METHOD:

Hand installed

ENGINEER:

Cardno

LANDSCAPE ARCHITECT:

Andrew Hill



Nearly 80 years ago Ella Fitzgerald wrote her hit song "A Tisket, A Tasket" while in a distinctive entertainment district just outside Tampa, Florida. But as suburbs began to prosper, populations grew, and urban neighborhoods became more difficult to maintain, the area that once hosted shining stars and cultural influencers including Ray Charles and Martin Luther King, Jr., fell into a sad state of disrepair. But things they are a-changin'. Today, this once-distressed area, now called Encore!, is a revitalized master-planned, urban mixed-use community thanks to the vision of the Tampa Housing Authority, financial support from corporate partners and grants, and a group of dedicated experts that included Oldcastle and its Belgard® Hardscapes team.

"Encore has been transformed. This blighted area is now called the 'Crown Jewel of

Tampa' and it's a well-deserved title," said Belgard's Bill Megrath, who was working with Encore's engineers at Cardno, an international, professional infrastructure and environmental services company, on a different redevelopment project for the city of Pinellas Park in Pinellas County when this project got underway. Cardno asked Belgard to help with the plan to create roadways that tied into the architectural design, created a pedestrian-friendly pathway, and could withstand the impending vehicular growth of Encore. "The goal was to give the streetscape the same superior aesthetic that's seen throughout the project," said Jim Bernard, senior project manager with Cardno. "The landscaping and street lighting are all decorative and high quality, and the architectural palette of the street needed to reflect that look. It's very nice – it's not your typical roadway."

Before we selected interlocking concrete pavers, we looked at reports from similar locations until we were convinced this was the right solution. It really worked well.

*Catherine Brown
Watershed Group Project Manager*

Each roadway intersection, crosswalk and pedestrian promenade within the 40-acre mixed-use community was designed with Belgard Commercial Urbana®, Mega Arbel® and Mega-Bergerac® pavers. Mega-Bergerac's classic, hand-cobbled appearance, Mega Arbel's flagstone look of irregular shapes and textured surfaces,

PAVERS SET THE STAGE FOR URBAN REVITALIZATION PROJECT

and Urbana's vintage cut stone look were well-suited to the project's architectural and design demands. The broad crosswalks create a scenic and safe area for pedestrians as vehicular traffic slows to look for walkers.

"The crosswalks and surrounding roadways turned out exactly as we envisioned," said Bryan Zarlenga, an engineer at Cardno who worked on the project. "It is a traffic calming area, which helps traffics and pedestrians co-exist safely even as Encore continues to grow."

In total, the community features 92,000 square feet of pavers specially manufactured under the highest possible standards, meeting or exceeding ASTM-C936-01 – a critical consideration based on expectation of the community's growth.

The first completed portion of the development was a multi-family community, which opened to residents in 2012 while additional residences, retail and offices continue to be constructed around them to create a city within a city. At completion, the project will include more than 2,000 residential units, 50,000 square feet of commercial retail space, and nearly 60,000 square feet of office space including a hotel, supermarket and town center.

Based on the diversity of residences and businesses, road planning had to consider the range of vehicles that would traverse its surface -- passenger vehicles, garbage trucks, single unit or van type delivery vehicles, as well WB-50 type vehicle, or 18-wheel tractor trailers.

"The concrete pavers we chose have interlocking ridges that help add to durability," Bernard said. "The paver is only as good as the subgrade, and at Encore we had an ample supply of concrete that we repurposed from previous structures on the site, and we had good compaction."

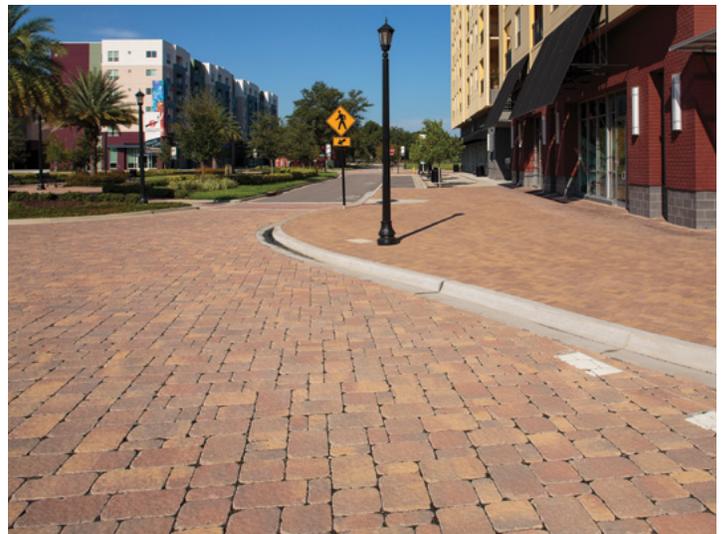
Interlocking concrete pavers are laid with a compacted soil subgrade, compacted aggregate base, and a sand bedding course. Once the joints are filled with sand and the pavers compacted, they are interlocked and can transfer loads to the surrounding pavers to reduce stress to the base and subgrade.

As a result, the pavers resist cracking. In an instance where a paver is damaged, the roadway or sidewalk can be repaired by replacing the individual damaged pavers rather than a complete removal and re-install like would be required with asphalt or concrete. This flexible pavement solution is ideal for a development expected to handle significant traffic.

"The technical experts from Belgard spent a lot of time understanding Encore's traffic load needs and talking with us about the durability and thickness of the concrete pavers," Bernard said. "Before we selected interlocking concrete pavers, we looked at reports from similar locations until we were convinced this was the right solution. It really worked well."

The Encore development was the first of its kind to receive top LEED certification in the state of Florida thanks to green building solutions such as a stormwater management system. The stormwater system was designed as part of a 10,000 square-foot "Town Green" area and was created by Oldcastle Architectural's sister company, Oldcastle Precast. The system features Belgard Eco Holland® permeable interlocking concrete pavers (PICP) in Harvest Blend on the surface, with its joints and subsystem of aggregate filtering the water before it reaches the storage area underneath. The stormwater system's 18,000 square-foot vault system retains 33,000 cubic feet of stormwater runoff.

Owned by the Tampa Housing Authority, Encore was recognized by the Hillsborough County City-County Planning Commission with an award for Outstanding Contribution to the Community in the Master Planning & Urban Design category at the 29th Annual Community Design Awards in April 2014.



About Belgard®

Belgard, part of Oldcastle APG, offers a complete collection of paver and wall products for outdoor living spaces, walkways, driveways, parking areas and retaining walls. Available in a range of styles, premium Belgard products have been found in America's finest homes and award-winning commercial and retail properties since 1995. For more information, visit Belgard.com or call 1-877-Belgard (235-4273). Oldcastle APG is part of CRH's Building Products division. CRH is a leading global diversified building materials group, employing c.85,000 people at c.3,600 operating locations in 32 countries worldwide. CRH is the largest building materials company in North America and the second largest worldwide.