

Tampa Flooding

A Stormwater Management Solution that Changed Lives



Installation of a multi-solution stormwater management system manufactured by Oldcastle Infrastructure for the Cypress Street area of Tampa, Fla.

When it rains, it pours. But for one area in downtown Tampa, Fla., heavy rains equaled more than a nice, cooling, summer shower: consistent downpours resulted in repeated significant flooding for area businesses and residents, creating a situation that needed a proper stormwater solution.

For years, the Cypress Street area of Tampa was plagued by excessive flooding following heavy thunderstorms. The area is close to the central business district and Tampa Bay, and is comprised of one residential street, two mixed-use streets and one commercial street, all located in a low-lying

portion of the city. The existing patchwork drainage system added to through the years resulted in a non-cohesive design with no capacity to manage the level of stormwater runoff present following typical Florida storms.

With an outdated storm drainage system that led to frequent flooding that overwhelmed the heart of downtown Tampa, the challenge for the City of Tampa and the Southwest Florida Water Management District (SWFWMD) was to research and select a stormwater management solution designed to ease flooding for local businesses and residents as well as prevent the ongoing

flood-related traffic delays and constant quality of life disruptions.

Contractor Woodruff & Sons, headquartered in Bradenton, Fla., was brought in, and they chose Oldcastle Infrastructure as the project's stormwater solutions provider. Given that the proposed solution would require integrating custom box culverts with the existing stormwater infrastructure, choosing Oldcastle Infrastructure, a company recognized as a full solutions provider of stormwater management products, simply made sense.

Additional products used in the Cypress Street project include dual vortex separators; Flogard® inlet filters; area drains; and Nutrient Separating Baffle Boxes® (NSBB®), an eco-friendly product offering sustainable benefits through multi-stage filtration, hydrodynamic separation and hydrocarbon absorption.

The design of the stormwater solution was simple: 7,300 linear feet of box culverts and reinforced concrete pipe with precast catch basins and curb/throat inlets would be installed with the goal of leading to reduced maintenance costs and a lessening of the duration and depth of any future flooding. Multi-solution systems offered by Oldcastle Infrastructure also offered an increased level of drainage and enhanced safety across the project footprint.

After the Oldcastle Infrastructure stormwater management solution was in place, the results were immediate: the Cypress Street area experienced enhanced pedestrian safety and mobility, and future rains resulted in far less flooding across the area, which led to reduced threats of road closures, flooded vehicles and traffic accidents. The overall water quality and green infrastructure of the area was improved thanks to filtration and proper drainage: the full stormwater management and drainage solution, including the NSBB and curb inlet filtration, significantly reduced polluted stormwater runoff to otherwise clean water sources.

One business in the area had erected a small dam to prevent flooding loss and damage to its property; following the installation of the Oldcastle Infrastructure stormwater solution, the dam was no longer needed—the business no longer flooded.

Through the elimination of business and residential flooding threats, traffic safety and overall quality of life in the area has improved. The Cypress Street project was the perfect opportunity to not only showcase the full range of stormwater solutions offered by Oldcastle Infrastructure, but to increase sustainability, safety and overall system longevity. Turnkey support and solutions served to modernize the area and surrounding community, transforming the lives of residents and businesses. **II**



Onsite inspection of box culverts prior to installation.



An aerial view of the completed Cypress Street stormwater management project.



The Hillsborough River sits just a few hundred feet east of the Cypress Street area, requiring the treatment of stormwater prior to it flowing into the river.