Project Spotlight

2424 Tulane - New Orleans, Louisiana

Owner: Kevin Frischertz **Engineer: Pace Group, LLC**
Installer: CellFill **General Contractor: Gibbs Construction**

Background Information

Earlier this year, construction began at 2424 Tulane Avenue, a $40 million residential and commercial complex in the heart of New Orleans, Louisiana. The new, seven-story complex is being built on the site of the old Capri Motel, which was recently demolished after years of housing various illegal activities. The construction of this new complex is expected to discourage illegal activity in the area while also improving the local economy and supporting the nearby Veterans Affairs and University Medical Center hospital complex.

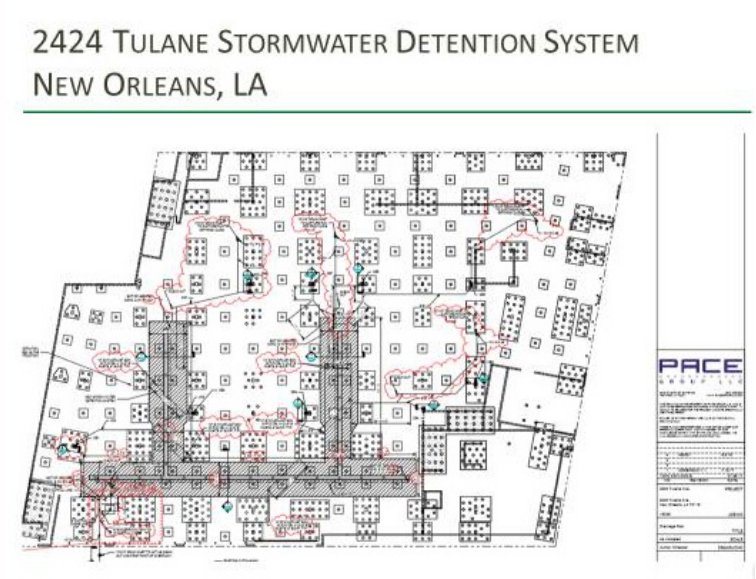
This modern facility will contain 202 one- and two-bedroom apartment buildings, a community room, a rooftop pool, and a fitness center for its residential inhabitants. In addition, the ground floor of the building will include 1,353 square feet of retail space along with myriad vehicle and bicycle parking spaces.

Construction in the city of New Orleans, like many older historic cities, requires special attention to stormwater management and detention. The stormwater management systems of many older cities do not have the capacity to manage the amount of water that flows through them. This often results in the backup of drainage systems and flooding of buildings and streets. With this consideration, the engineering and construction firms at 2424 Tulane Avenue knew the first order of business would be to create an effective stormwater management solution for this state-of-the-art facility.

Project Details

In order to control the stormwater runoff and create an effective slow water release detention system, the team from Pace Group LLC engineering firm decided to place a holding reservoir underneath the main foundation slab of the new building.

This reservoir would effectively hold the stormwater and control the outflow of that water into the New Orleans storm drainage system, preventing the drainage system from overflowing.



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Project Details (continued)

The construction of this new complex was overseen by New Orleans-based general contractor Gibbs Construction. The holding reservoir, or containment well, was dug out from the soft compressible subgrade of the building's foundation and lined with a 40-mil geomembrane material. The drainage pipes within the area were wrapped with a high-flow silt fabric to ensure their longevity and permeability. At this point in the construction, a permeable low-density cellular concrete (PLDCC) was installed.

The four-person installation crew from Oklahoma-based contractor CellFill placed a total of 420 cubic yards of 30-pcf Aerix's AQUAERiX™ PLDCC in less than one day. Once the PLDCC was placed, an additional geomembrane material was installed before the main slab of the building's foundation was laid.

Aerix Added Value

In this application, Aerix's AQUAERiX PLDCC served as a permeable low-density detention system, enabling effective water flow from the building into the holding reservoir. Because it is highly compressive, lightweight, and features unique water filtration characteristics, Aerix's AQUAERiX PLDCC provided the long-term performance needed for this stormwater management system. Without the use of a permeable material like AQUAERiX, there would be significant potential for this newly constructed building to create stormwater runoff, which would place additional pressures on the subgrade soils as well as the New Orleans' drainage system, causing inefficiency and inconvenience to the surrounding community.

With Aerix's AQUAERiX PLDCC, 2424 Tulane Avenue will not only improve the region's economy and support local businesses but will also create the potential for significant improvement in the city's stormwater management system and mitigate the effects of hurricanes and other heavy rain events.