





Thinking

BIG



A precast concrete solution saves a city time, money and headaches with a big block gravity retaining wall.

By Kirk Stelsel

Right-of-way restrictions. Close proximity to residential property lines. An unexpected, large-diameter pipe not in the plans. Existing utilities. Limited budget. Tight schedule.

These are challenges so commonly faced by engineers and contractors that they could be for any roadway project in the world. In Carmel, Ind., they were the hurdles that had to be cleared to create an earth retention system for an elevated roundabout. The project was part of a massive overhaul of the highly trafficked Keystone Parkway, so time was of the essence.

The engineering firm and contractor on the project reviewed a number of options, but each one either could not overcome the site challenges or left them scratching their heads on how they could make the math work given the costs of production and installation. Enter the precast concrete big block gravity wall and Reading Rock Inc. of Cincinnati.

When Jill Fouts, a regional sales manager with Reading Rock, arrived on site, she and the general contractor realized that a big block retaining wall was the solution that eliminated all of the concerns, including cost.

"The GC said, 'If you look at the site, there's little room for excavation,'" Fouts recalled. "There was a temporary right of way, fences and property lines. It just so happened I had the face of a ReCon block in my car and told him, 'We have this, and you can use it as a gravity wall – you've got enough room for this wall!' They just had to make the cut and place the block in front."

The next week, the contractor called Fouts and told her it was perfect. Reading Rock went through the whole process of turning in budget numbers, getting an engineer involved, getting a contractor involved, and it ended up being about a quarter of the cost of other options.

The end product was approximately 15,000 sq ft of wall for all four



sides of the roundabout – the initial bid was for only one of the four walls – using block ranging from 24 in. deep to 60 in. deep. The product met all time, budget and location constraints, minimized excavation and required no soil reinforcement. “All parties were so relieved,” Fouts said. “It’s just such a great solution.”

According to Fouts, poured walls or H-piles and lagging would have been much more expensive and not feasible given site constraints. She estimates the contractor was able to lay approximately 1,600 sq ft a day, which shortened the timeline considerably.

“ReCon Retaining Wall Systems was a life saver for the Keystone Parkway & Main Street project,” said Craig Parks of American Structurepoint, the engineering firm for the project. “There was minimal excavation and no geogrid needed due to the size and weight of the units. It was the perfect solution for our project.”

Reading Rock often finds ways to get its products on projects by proactively seeking out active projects and explaining the benefits precast can offer. In addition to fielding calls, Fouts regularly searches municipal sites such as INDOT for lettings and electronic plan rooms to try to find jobs that are bidding with her product or a competing product such as poured walls. She also stays on top of active projects in the area.

“I knew this job was coming up for bid because of all of the work on Keystone,” said Fouts. “I’ll call engineers on a regular basis and ask them what’s bidding and if they’re working on anything, and that’s how we found this job. One of my searches on plan rooms is for poured walls, so if I see a poured wall I’ll call and ask if they’d entertain a budget number for our precast block.

“It’s the economical solution, but you just have to find the time and get out and call people, and then they know you have it. We’ve sold a lot of jobs because they’ve known, and they say, ‘How about that big block you have,’ because it solves a lot of problems.” **PS**

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