

HOTEL/MOTEL BUILDING

KEY PROJECT ATTRIBUTES

The choice of precast concrete saved the owner \$700,000 and the project was completed four months early.

The precast concrete system can withstand storm surges, high winds, and salty sea air.

Use of precast concrete allowed thinner walls and floors systems, maximizing ocean frontage.

PROJECT AND PRECAST CONCRETE SCOPE

Build two three-story structures with 41 beachfront guest rooms and suites.

The project included 43,713 ft² of hollow-core and solid slabs and 72,434 ft² of spandrels and wall panels.

Total-precast concrete erection was completed in just nine weeks.

"Precast concrete gave us a material that would provide superior acoustical, thermal, moisture, and fire-protection benefits."

Michael Ramsey,
Architectural Design
& Planning Group

THE PEYTON HOUSE AND OCEAN HOUSE, PONTE VEDRA INN & CLUB PONTE VEDRA BEACH, FLORIDA

The Ponte Vedra Inn & Club has been a landmark destination on Ponte Vedra Beach for nearly 100 years. But the owners wanted to update the setting with a modern-day addition to the AAA Five Diamond-rated resort.

The plan was to add two new three-story structures with 41 beachfront guest rooms and suites, each of which would have a sweeping view of the ocean. The owners wanted a façade that matched the resort's historic brick, as community expectations and acceptance of the finished product were critical to the project's success.

The challenge: the designers had to complete both structures before the next tourist season, while keeping nearby facilities operational throughout construction.

Those demands caused the architect to replace their original plan to use a combination of cast-in-place, concrete masonry, brick, and precast concrete with an all-precast concrete solution. "Precast concrete was the only material that addressed all of the challenges of this project," says Michael Ramsey, president of Architectural Design & Planning Group.

Along with helping to meet the aggressive schedule, using precast concrete made it easier to erect the buildings on the constricted beachfront site, which had limited access for materials and labor. And it provided a resilient structure that exceeded all wind-load requirements and could withstand the salt, humidity, storm surges, and high winds that buffet these oceanside properties.

"Precast concrete gave us a material that would provide superior acoustical, thermal, moisture, and fire-protection benefits," Ramsey says. "And it allowed for precision construction in a very challenging and competitive construction labor market."

NINE WEEKS VERSUS ONE YEAR

Construction of the buildings began in January 2019, and erection went quickly. Precast concrete work on the north building was completed in five weeks and on the south building in six weeks. By overlapping the two projects, the entire precast

PROJECT TEAM:

OWNER: Ponte Vedra Inn & Club, Ponte Vedra, Fla.

PCI-CERTIFIED PRECAST CONCRETE PRODUCERS: Gate Precast Company, Jacksonville, Fla., and Gate Precast Company, Kissimmee, Fla.

ARCHITECT: Architectural Design & Planning Group, Raleigh, N.C.

ENGINEER OF RECORD: ONM&J Structural Engineers, Ponte Vedra, Fla.

PRECAST CONCRETE SPECIALTY ENGINEER: LEAP Associates International, Temple Terrace, Fla. **GENERAL CONTRACTOR:** Danis, Jacksonville, Fla.

PCI-CERTIFIED ERECTOR: Specialty Concrete Services, Inc., Umatilla, Fla. **PROJECT SIZE:** 49,247 ft²



Photos: Gate Precast Company.

concrete erection time took nine weeks total, compared with the estimated 12 months that would have been required for traditional masonry construction. "These compressed construction schedules allowed earlier access for follow-along trades, and ultimately earlier owner occupancy," says Tom Newton, vice president of operations for Gate Precast Company.

There were challenges along the way, but the precast concrete producer proved the material's resilience through an innovative, collaborate approach to the design. That included matching the new precast concrete buildings with the brick on the existing cast-in-place structures in the complex, while simultaneously reducing cost and erection times. Ramsey admits that originally he didn't think precast concrete was a viable solution due to the complex layout and the owners' desire for a brick exterior matching the rest of the resort. But he was wrong, he says. "Precast concrete proved to be the perfect material and satisfied all of the design criteria without significant compromise in our aesthetic intent."

"Total-precast concrete is a viable and potentially cost-saving option for any large residential project," Newton adds. "Total-precast concrete construction reduces the overall construction duration, resulting in earlier owner occupancy, and dramatically reduces the number of on-site trades and personnel."