Project Profile

CCHS WILMINGTON VISITORS PARKING GARAGE

Scan here for more information

2023 PCI DESIGN AWARDS
BEST ALL-PRECAST CONCRETE PARKING STRUCTURE

Owner
ChristianaCare Health Services
Wilmington, DE

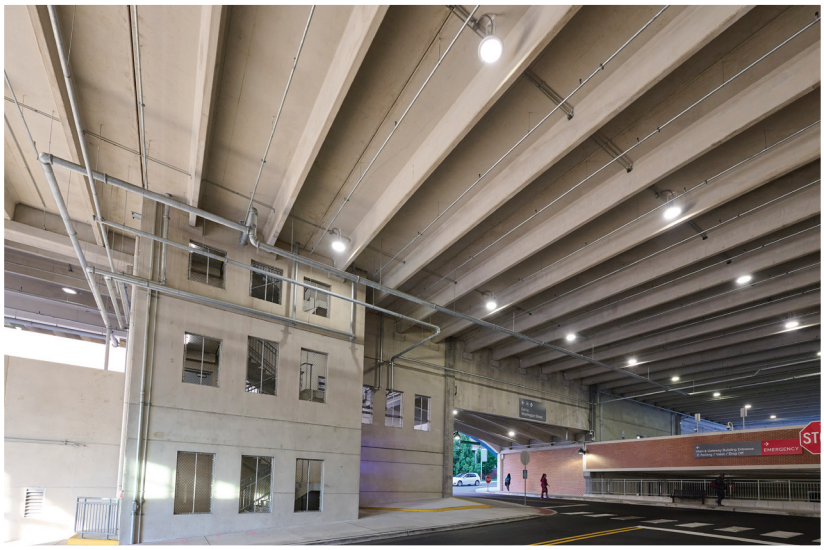
PCI-Certified Precast Concrete Producer
High Concrete Group
Denver, PA

Architect
Walker Consultants
Wayne, PA

Engineer of Record
Tredo Engineer
Buffalo, NY

General Contractor
The Whiting Turner Contracting Company
Newark, DE

Project Size
302,507 ft²



Above: CCHS Wilmington Visitors Parking Garage finished garage.

Left: Interior of CCHS Wilmington Visitors Parking Garage.

HIGH CONCRETE GROUP LLC

Key Project Attributes

- Construct a six-level parking structure for patients and visitors in a busy downtown location directly across from the main entrance of ChristianaCare.
- Incorporate architectural features such as embedded thin brick and light-sandblasted finishes that blend with other precast concrete buildings on the medical campus.
- Use a flat-plate floor plan to improve mobility, access, and convenience for patients.

Project Overview

As the use of a structure changes over time, the facilities themselves must adapt. Sometimes, this means fully demolishing an existing structure to accommodate the evolving needs of its tenants. This was the case at a regional medical center, where plans were made to replace a parking garage to increase capacity and functionality. The project would feature six levels and a total of 851 parking spaces along with the construction of medical offices within the new structure. The medical center also wanted to design their new garage with flat levels so patients with mobility issues could easily access the main buildings without having to navigate ramps or stairs. It was crucial to avoid disruption of hospital access for employees and patients during construction. The bulk of this project also happened to take place during the peak of a pandemic, meaning that the hospital had higher traffic and that it was even more important to minimize disruption of the medical center's activity.

Access

One of the hospital's long-term goals is to ensure that the community have convenient access to high-quality care. The new 860-space parking structure was built adjacent to the hospital, which remained open and fully functioning during construction. Contracts for the demolition of the existing parking garage and site preparation were awarded early to avoid any delays. The hospital wanted to minimize disruption and open the garage as quickly as possible. With the elimination of the old garage, parking was at a premium.

Cost Competitive

ChristianaCare selected a total precast concrete system because it offered a cost-competitive superstructure, speed of erection, and the ability to coordinate the construction of the parking structure with that of the steel-framed medical office building within the garage's footprint. With precast concrete's front-loaded design, many of the key project decisions were made early. That enabled the project team to develop how to encapsulate the medical office facility as a building within a building. Visitors and patients with impaired mobility benefited from the garage's "flat-plate" design.

"FROM THE BEGINNING, CHRISTIANACARE WAS DEDICATED TO USING A PRECAST CONCRETE STRUCTURAL SYSTEM WITH THIN BRICK TO MATCH THE RECENTLY COMPLETED ADJACENT HOSPITAL TOWER EXPANSION PROJECT."

– Damian Larkin, PE, LEED AP, Walker Consultants

High Concrete Group LLC | 125 Denver Rd, Denver, PA 17517
800.773.2278 | concrete.answers@high.net | www.highconcrete.com

03/23