

Project: **River Street Parking Garage**, Harrisburg, PA

Concrete Facts

- 285,000 SF total precast structure

Products Used

- 52 architectural panels
- 18 rectangular beams
- 4 columns with no haunches
- 30 spandrels
- 113 solid slabs
- 30 stair units with landings
- 152 wall panels
- 181 exterior architectural wall elements
- 291 15-foot by 57-foot Double-Tees
- 29 inverted tee girders

Owner

Harrisburg Parking Authority

General Contractor

The Whiting-Turner Contracting Co.
Baltimore, MD

Architect

Bohlin Cywinski Jackson
Wilkes-Barre, PA

Structural Engineer

John B. Stopen Engineering Partnership
Syracuse, NY

Precaster

High Concrete Structures, Inc.
Denver, PA

PCI Certified Erector

Precast Services, Inc.
Twinsburg, OH



CONCRETE EVIDENCE:

Precast—The Parking Authority

You can't have a party without people, and you can't have people without parking. That was the dilemma for Pennsylvania's capital city of Harrisburg in 1999 when a new revitalization began to take hold in the city's business district. City officials saw the beginnings of a renaissance of the city's image as a social and event destination. In order to strengthen and encourage that trend, more people and the vehicles that would bring them into the city needed to be accommodated.

The Harrisburg Parking Authority, under the direction of Joseph V. Link, P.E. assessed the need at 850 new spaces—in tight urban quarters. Difficult? Yes. Impossible? No.

The architectural firm of Bohlin Cywinski Jackson of Wilkes-Barre, PA won the RFP for design and wanted to design the structure more to reflect and complement the urban affluence and office building feel of the surrounding cityscape. High Concrete Structures, Denver, PA was brought in early in the process as a consultant by general contractor, The Whiting-Turner Contracting Co. of Baltimore, MD. High Concrete worked closely with the architect utilizing a 15-foot precast Double-Tee to create a structure that maximized architectural aesthetics and functional design.

According to Joe Link, Executive Director of The Harrisburg Parking Authority, there were several factors in making the final decision to select a precast structure. The City of Harrisburg is a major hub of activity in the area. The city is host to thousands during the local Memorial Day festival and draws equal numbers around the July 4th weekend celebrations. The garage would need to be complete so these events would not be hindered by construction. That made the speed of building with precast all important for the city, its merchants, restaurants and hotels that benefit from the influx of holiday business. Another factor deemed key with precast was the logistics of construction. The precast elements were delivered south-bound on a north-bound, one way street during off hours to minimize downtown traffic congestion. This was done at night to avoid over-sized loads being delivered during early morning, rush hour traffic. The third factor according to Link was quality. Because precast is manufactured in a controlled environment, the city knew what it was getting. With cast-in-place concrete, quality might vary from day to day and shift to shift.

With its glass elevator gleaming as the sun moves around the vertical parabolic shaped elements, the structure displays a new dynamic of light and shadow with each passing hour. The columns at 7 1/2 feet on center hide the stem of the tees providing uninterrupted sight lines and allowing more natural light to enter the garage. Even with additional natural light entering the facility, the city supplemented it with lighting approximately every 7 1/2 feet, making it one of the most well lit and safest parking facilities in the city.

Harrisburg is busier than ever with more state business, more private business and more nightlife. Now it has more parking to accommodate the ebb and flow of the people who live, work and play in this growing metropolis—thanks to the foresight of the city, ingenuity of the design and the versatility of precast.

