Focus of This Issue: Parking Structures

Longview Parking Garage in White Plains – Raising the Bar for Sustainability

The new 750 parking space garage built on Longview Avenue displays extra care in design and detail, such as the brick facing and simulated balconies, plus serious concern for a long life and material effectiveness has “raised the bar for structures of its kind” in White Plains, NY. The solid, well lit, stairway/elevator towers anchor two building corners, complete with large precast canopies above the entrances and exits. This 9-level, 261,000 sq ft total precast structure will be shared between the White Plains Medical Center located across Longview Avenue, using approximately 250 spaces, with the remaining spaces available for public and permit parking.

The attractive spandrels were made using the special thin brick method developed for anchorage in precast pieces. The structure required 790 precast components, which included 314 double tees and 44 columns. Project credits include: Architect, Ed Vogel of Warshauer Mellusi Warshauer, Hawthorne, NY; GC, MPCC Corp, New Rochelle, NY, both of whom gave credit to the Precaster, William E. Dailey Precast. LLC, Shaftsbury, VT, for doing a fine job of fabricating and erecting on schedule to enable project completion per the requirements of the contract documents. Microcorrosion inhibitors, fly ash, epoxy coated and stainless steel were all involved in the long life plan for the building.

Photos and Articles Submitted by Eric Schaffrick, Robin Outwater, Chris Bean, and Bob Wilcox, William E. Dailey Precast.

Tuf-Stop Parking Bumpers available in Safety Yellow or Handicap Blue

Sure, we build strong parking garages. And to compliment them, Tuf-Tite has introduced a new Car Stop, made of 120 pounds of concrete contained in 4 pounds of plastic mold. Call them at 800-382-7009.
RPI (Real Parking Improvement) – College Avenue Parking Garage

The new $8,300,000 parking structure for RPI (Rensselaer Polytechnic Institute) in Troy, NY, incorporates a few very unusual features. In this case, the field applied brick is unusual in that it wasn’t factory cast into the panels, as on the Longview job (page 1). But a unique waffle-style mold was built to cast the exterior load bearing panels, and half of a double tee was used on edge for non-load bearing spandrels; the concrete was buff/tan colored.

With four framed levels comprising 120,000 s.f. of elevated deck (500 parking spaces), William E. Dailey Precast’s contract for component design, fabrication, delivery and erection was $2,700,000.

Project credits are Architect: Desman Associates; General Contractor: McCarthy Construction; Pre-Cast Manufacturer: William E. Dailey Precast, Shaftsbury, VT. Thanks to Eric Schaffrick and Bob Wilcox for submitting the story and photos.

The Admix Advantage —Today’s Green Concrete is Made with Space Age Technology

It is widely known that air entraining admixtures disperse millions of tiny bubbles throughout the mortar fraction of concrete, typically 5 to 15 billion per cubic yard. With water present for years after manufacture, and in most cases for the entire service life of a concrete element, and the fact that water expands by about nine percent when it freezes, it is very positive to have those tiny air pockets and capillaries within the concrete. This water to ice expansion and its resulting pressure (approx. 30,000 psi) is lessened by the microscopic voids that accept the volume changes.

But how does it really prevent damage with all those tiny (avg. .003 to .006 inch) evenly spaced bubbles. It isn’t just the size of the bubble, but also the space between each one that helps determine the freeze/thaw resistance. At a spacing of 1/100th inch apart, most concrete is resistant to freeze-thaw damage. So the closer each bubble is, the easier and quicker it is for the freezing water to expand into without exerting local pressure. But if the bubble is too large, especially if spacing is uneven, concrete in those areas will be weaker. Also, as the air content increases, compressive strength is decreased one to three percent per one percent rise.

Consult your local admixture representative for specifics on recommended air entrainment products for your applications. They can assist in determining optimum air content for your geographic area and also help interpret prescriptive specifications. Submitted by Matt McCrae, Sika-Corp.
The Alexander at Patroon Creek

A luxury apartment complex has grown up on the west side of Albany, NY, across from the State Office complex. To serve its parking needs, a 4-level 570-space garage was constructed, providing direct access to the 300 new residential apartments, which were built essentially around the exterior of the garage. The private garage, over 190,000 sq. ft., was developed and built by The Spanos Corp, Stockton, CA; William E. Dailey Precast, Shaftsbury, VT, supplied the structure.

Glens Falls’ Old Mill Is New Again

Seeing opportunity where others saw vacancy, the 20 Elm Street Realty Company purchased an old mill building in downtown Glens Falls to convert into condominiums. A 229-car parking structure was built adjacent to “The Mill,” the new again 65-unit upscale mixed-use residential complex, across the street from the Glens Falls Hospital. George Yasenchak, P.E. of Engineering America Company in Saratoga Springs, NY, had to juggle the design problems of adding 3 additional stories to an old structure, built under previous building codes, and a new parking structure, built to current seismic requirements.

The new garage attaches to the old building with a covered walkway at the third level. The simple stair-tower will be covered with a hip roof, and an all-glass enclosure. William E. Dailey Precast, Shaftsbury, VT, furnished the precast concrete members to construct this 95,000 sq. ft. facility (210 precast pieces, 89 double tees, and 15 columns. Bovis Lend Lease LMB, Inc., Clifton Park, NY, was the general contractor.
Hardly Common, The Oakwood Commons Parking Garage ...

After tearing down an old used factory building in front of the IBM main plant in Poughkeepsie, Oakwood Partners LLC commenced a totally new $48 million mixed-use development detail, restaurant, and midrise office buildings for medical and insurance clients. But that also meant parking space would be needed, on what was already a tight site. Scott Cruikshank, Kirchhoff Construction Management, Pleasant Valley, NY, took on this design build challenge for the owner, and teamed with Carter Burgess Architects Engineers, Charlestown, MA. They studied several schemes and construction methods/materials, involving other subcontractors and trades, and decided that precast for the garage was most cost effective.

The garage was kept a simple plain grey, as it sits in back of this relatively high-tech site, almost unseen. Simple, complimentary stainless steel accent bands were added to the garage exterior corners to relate it to the 5-story office buildings, which are finished with blue glass in keeping with prevailing IBM motif.

Robin Atwater Project Manager for William E. Dailey Precast describes this structure as a basic garage design, with punch through stairs and railings, exposed to the elements (their cost-effective method to provide access), except for the canopy and four flat panels at the roof level. The exterior panels were made with a subtle face design and were sandblasted for contrast.

Photos were submitted by Scott Cruikshank.
MRB Group Wins Public Works Project of the Year

The Monroe County/Genesee Valley Branch of the American Public Works Association has awarded MRB Group the Project of the Year for Excellence in Administration and Management of the Farmington Wastewater Treatment Facility. Improvements to the Victor Facility were necessary to meet residential, commercial and industrial growth in the towns of Victor, Farmington, and the northern portion of Canandaigua. As a result, water quality, air quality, energy resources, and the economic health of the region have all been significantly improved.

STANTEC Designs Award Winning SUNY Brockport Dining Hall

STANTEC has earned a lighting excellence award for its work at Harrison Dining Hall on the SUNYBrockport Campus. The project was awarded the Harley Hill Excellence in Lighting Award from the Rochester Section of the Illuminating Engineering Society.

Congratulations to both firms!