

PCANY NEWSLETTER

PRECAST CONCRETE ASSOCIATION OF NEW YORK, INC.

April 2008

Volume 19, No. 4

Helping to Make Concrete Sustainable

Focus of This Issue: Parking Garages

Sky View Parc – A Residential and Commercial Development

Undergoing the final phase of fit out, this Flushing, New York parking structure was the largest garage, at the time, undertaken by Unistress, Pittsfield, MA. (They since have started an even larger one!) Built to park 2633 cars, it equated to 605,500 s.f. of double tees, typically 60' long, 12' wide, and 2'-11" deep. Code called for a 2 hour fire rating, requiring the pre-topped tee flanges to be 5" thick.



Sky View Parc garage construction nearing completion

Photo from Unistress Corp



Sky View Park, Flushing, taking shape

Photo by Unistress Corp

Complicating the layout of the structure, the access ramps are at different locations throughout the garage. The layout had typically 42' column bays and 12 stair towers. Of the 12 stair towers, 10 utilized plant fabricated stairboxes, each with the stair risers pre-installed prior to delivery. The structure is a part of a high rise residential - commercial complex, with some big box stores getting direct access to the parking areas on the east side.

Project Credits: Owner – Muss Brooklyn Development Corp, Forest Hills, NY; General Contractor – CE Flushing, LLC, Flushing; Engineer – DeSimone Consulting Engineers, New York City; Architect – Urbitran/Rosenbloom, New York City; Precast Supplier – Unistress Corp, Pittsfield, MA, whom we welcome as a Producer Member. □

Meetings of Interest –

April 25, 2008 – New York State Concrete Masonry Association Spring Conference, Saratoga Springs : Masonry design – effective compliance to new code provisions; Safe & sustainable – hollow core concrete plank & concrete masonry design; Design & Installation of moisture resistant concrete masonry structures. Registration info at www.nys-cma.org.

May 1, 2008 – Joint Meeting, NYSDOT Materials, Structures, & PCANY, 8:30 a.m. – 12:30 p.m., Meeting Room 125, Concourse Level, NY SOGS, Albany. Agenda (when available) at www.pcany.org. □

Newcrete Products Does Garages

North Street - Bethlehem, PA

The integration of the Parking Authority office and the Bus Terminal into the parking structure, along with the community-friendly architecture, provides a structure that enhances the overall area. The simple and logical pedestrian and vehicular way finding presents the user with an easy-to-navigate structure. Specifications of durability-enhancing features, chloride inhibitors, low water/cement ratio concrete, and high quality sealers will keep the projected maintenance cost low.

Description

- Three-bay single helix with two-bay traffic on the outer ramp and one-way traffic on the two adjacent flat bays.
- The glass-walled elevator tower is next to the pedestrian bridge that links the adjacent retail and office complex.
- Precast concrete framing systems with a maximum usage of plant-topped and washed tees form the

main structural system. The precast facade uses the same thin brick as the adjacent structure and provides an architectural residential neighborhood.

- The Parking Authority was relocated to the 6,300 square-foot office on the first floor level. Additionally, a 2,000 square-foot inter modal bus terminal was located at street level.

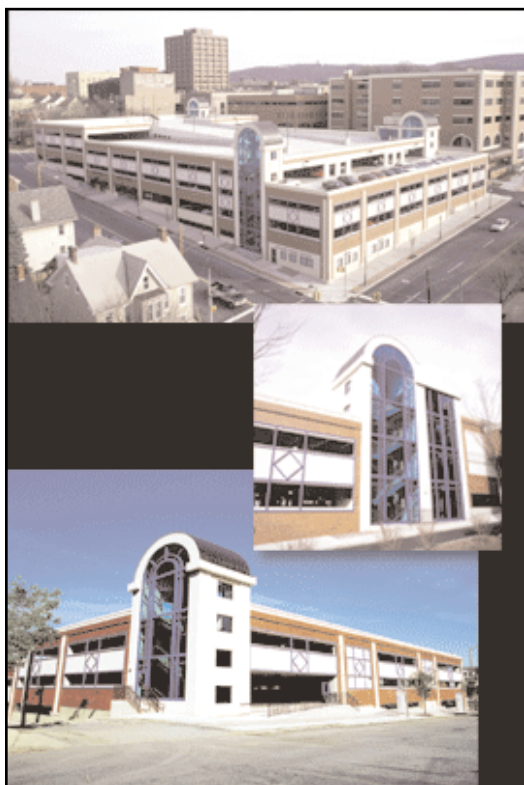
Data

Building Dimensions: 175' x 308'
 Number of Tiers: 5
 Supported, 1 on Grade
 Gross Parking Area (square feet): 263,000
 Number of Spaces: 800
 Construction Cost: \$10,200,000
 Cost/Space: \$12,750
 Total Number of Precast Members: 638
 Award Winning Structure 2002

Pennsylvania Parking Association Award of Excellence

Nittany Lion Inn - State College, PA

Located across from the Keller Conference Center and the Nittany Lion Inn, was a one-story parking deck. Phase I expanded the existing structure to six levels with 638 parking spaces. Phase II expanded the structure to accommodate an additional 850 cars. Both facilities recognized the need for a building with an architectural presence. Issues such as frontal views, creation of green space, entry, and movement were addressed to maximize the building's most basic functional elements.



Description

- Parking structure was expanded horizontally three bays at heights to match existing levels.
- Parking structure was initially a single-threaded helix with two-way ninety degree parking. After the expansion, it was converted to a double threaded helix with one-way angled parking.
- Construction and restriping of the new expansion resulted in a total of 1488 parking spaces.

Phase II Data

Building Dimensions: 272' x 168'
 Number of Tiers: 5 Supported, 1 on Grade
 Gross Parking Area (square feet): 221,000
 Number of Spaces: 850
 Construction Cost: \$1,900,000
 Cost/Space: \$10,700
 Total Number of Precast Members: 1095

(continued on next page)

University Avenue - Philadelphia, PA

In May 2000 a team was commissioned to design the University Avenue Parking Facility. The site, where the Philadelphia Civic Center was previously located, is considered a major gateway to the University of Pennsylvania and the Children's Hospital of Philadelphia. The exterior facade is dramatically presented with curved spandrels to maximize the boundaries of the property. The structure is designed with a four bay, grid column system.

Description

- Design is a double-threaded helix ramping system allowing for rapid one-way vertical travel.
- Curved precast components enhance the attractiveness of the large parking structure.

- Maximum usage plant-topped and washed tees form the main structural system.
- Largest parking structure located within the city limits of Philadelphia.
- Architectural Panels were produced with six distinct finishes to create a blended, unique exterior appearance.

Data

Building Dimensions: 291' x 310'

Number of Tiers: 9 Supported, 1 on Grade

Gross Parking Area (square feet): 660,000

Construction Cost: \$23,000,000

Cost/Space: \$11,598

Total Number of Precast Members: 638



The above articles were provided by Newcrete Products, Division of New Enterprise Stone & Lime Co., Randi Romani, Collegetown, PA. □

On-site Training Network Courses: May 7, 2008 Inspection of Existing Residential On-site Systems, May 28-29, 2008 Alternative On-site Wastewater Treatment Technology Training, both at the NYS Fairgrounds, Syracuse. Info & registration at www.wastewater.delhi.edu. □

No Gambling With Precast – It’s A Sure Bet For Parking Structures



L.C. Whitford Materials Co. expanded their product capabilities into parking garages not too long ago, as shown in their website photo of the Seneca Allegany Casino structure. And they have another similar facility in the works – watch for it in a future Newsletter.

Currently, there are two very helpful publications related to parking structures available from the Prestressed Concrete Institute: Maintenance Manual for Precast Parking Structures, MNL_136_04, intended for the owners, operators, architects, and engineers of precast parking structures in order to assist them in extending their structure’s service life; and Parking Structures: Recommended Practice for Design and Construction, P_MNL-129-98. These can be purchased very reasonably from the PCI Bookstore, or downloaded from the Knowledge Bank on their website, www.pci.org/publications/parking/index.cfm. If you need some help, please contact us at PCANY. □

Precast Concrete Association of New York, Inc.
2829 East Avenue
Rochester, NY 14610
Tel: 585-249-9564 • Fax: 585-381-0945
Email: pcany@aol.com • Web: www.pcany.org

PRSRRT STD
U.S. POSTAGE
PAID
Permit No. 76
Albany, N.Y.

RETURN SERVICE REQUESTED

PRECAST CONCRETE ASSOCIATION OF NEW YORK

April 2008 MONTHLY NEWSLETTER Page 4

Median USA Parking Structure Construction Costs 2008

Carl Walker Parking, Kalamazoo, MI recently published their annual (since 2004) Construction Cost Outlook, and to quote from Joey D. Rowland, PE: "Reality vs. Perception – the reality is that the cost of parking structures appears to have stabilized compared to previous years. However, the perception among some is that the cost of parking continues to increase at an alarming rate". So their latest letter examines the realities and perceptions, attempts to explain the difference, and offers representative costs around the country. Overall, he reports the 2008 median parking structure construction costs are \$14,631 per space, or \$44.39 per square foot. Contact him at jrowland@carlwalker.com. □

PRODUCER MEMBERS

A & R Concrete Products, New Windsor, NY, 845-562-0640
Bayshore Concrete Products, Cape Charles, VA, 757-331-2300
Binghamton Precast & Supply, Binghamton, NY, 607-722-0334
J.P. Carrara & Sons, Middlebury, VT, 802-388-6361
Coastal Pipeline Products Corp., Calverton, NY, 631-369-4000
Dailey Precast, Shaftsbury, VT, 802-442-4418
The Fort Miller Co., Inc., Schuylerville, NY, 518-695-5000
Hanson Pipe & Products, Inc., Pottstown, PA, 800-970-2216
Jefferson Concrete Corp., Watertown, NY, 315-788-4171
Kistner Concrete Products, East Pembroke, NY, 585-762-8216
Lakelands Concrete Products, Inc., Lima, NY, 585-624-1990
Newcrete Products, Division of New Enterprise Stone & Lime Co., Collegeville, PA, 484-902-0256
Oldcastle Precast, South Bethlehem, NY, 518-767-2116
Oldcastle Precast Inc., Middle Island, NY, 631-924-7400
Oldcastle Precast Inc., DBA Rotondo Precast, Avon, CT, 860-673-3291
Roman Stone Construction Co., Bay Shore, NY, 631-667-0566
Schuylkill Products, Inc., Cressona, PA, 507-385-2352
Sunnycrest Inc., Auburn, NY, 315-252-7214
Unistress Corp., Pittsfield, MA, 413-499-1441
LC Whitford Materials, Co., Inc., Wellsville, NY, 585-593-2741

SEPTIC TANK PRODUCER MEMBERS

Binghamton Precast & Supply, Binghamton, NY, 607-722-0334
Burnett Concrete Products, Inc., Wolcott, NY, 315-594-2242
Concrete Building Supply, Champlain, NY, 518-563-0700
R. Deso, Inc., Champlain, NY, 518-298-8411
Eastern Precast Co., Inc., Brookfield, CT, 203-775-0230
The Fort Miller Co., Inc., Schuylerville, NY, 518-695-5000
Grimm Building Materials Co., Troy, NY, 518-272-1100
Guardian Concrete Products, Schenectady, NY, 518-372-0080
Jefferson Concrete Corp., Watertown, NY, 315-788-4171
Keeler Vault Co., Inc., Hudson, NY, 518-851-6281
Kistner Concrete Products, East Pembroke, NY, 585-762-8216
Oneonta Block, Oneonta, NY, 607-432-6641
Sunnycrest Inc., Auburn, NY, 315-252-7214
Woodard's Concrete Products, Inc., Bullville, NY, 845-361-3471
Zeiser Wilbert Vault, Elmira, NY, 607-733-0568

ASSOCIATE MEMBERS

A-Lok Products, Inc., Tullytown, PA, 800-822-2565
Amcrete Products, Newburgh, NY, 845-562-0010
BASF Admixtures, Cleveland, OH, 518-232-1187
Buzzi Unicem USA, Stockertown, PA, 610-746-6224
Cemex, Inc., Wampum, PA, 724-535-4311
Chase Specialty Coatings, Pittsburgh, PA, 412-828-1500
Concrete Sealants, Inc., Royersford, PA, 610-948-7867

Dayton Superior Corp, Canton, CT, 860-693-1738
Eastern States Steel Corp., Upper Saddle River, NJ, 800-327-8335
Engineered Wire Products, Waynesville, OH, 937-433-9753
Essex Cement Company, Port Newark, NJ, 973-344-5903
Essroc Cement, Nazareth, PA, 610-746-3109
Federal White Cement Inc., Mancungie, PA, 610-366-9481
Forta Corporation, Grove City, PA, 800-245-0306
Grace Construction Products, Wynantskill, NY, 518-361-4335
H & H Hulls, Inc., Hudson, NY, 800-H2HULLS
Helsler Industries, Tualatin, OR, 503-692-6909
Jepco Sales, Royersford, PA, 610-948-7867
JVI, Inc., Pittsfield, MA, 413-442-4147
Keystone Cement Company, Exton, PA, 610-837-2100
Lafarge North America, Concord, Ontario, 905-882-3333
Lehigh Cement Company, Burlington, CT, 800-833-4157
Meadow Burke, Billerica, MA
Mixer Systems, Pewaukee, WI, 860-798-7248
Northeast Solite Corp., Saugerties, NY, 845-246-2646
NPC, Inc., Milford, NH, 800-626-2180
A L Patterson, Fallsington, PA, 800-332-7090
Plant-Tech Concrete Solutions, LLC, Bladensburg, MD
Polylok, Inc/Zabel, Wallingford, CT, 800-765-9565
St. Lawrence Cement Co., Saratoga Springs, NY, 800-462-8800
St. Mary's Cement Company, Cleveland, Ohio, 216-579-1911
Sika Corporation, Lyndhurst, NJ, 302-218-4987
Spillman Co., Columbus OH, 614-444-2184
Splice Sleeve North America, Irvine, CA, 239-948-1771
Stelcrete Indust Limited, Niagara Falls, Ontario, Canada, 905-354-5691
Stephenson Equipment, Inc., Syracuse, NY, 315-432-0779
Syracuse Casting Sales Co., Cicero, NY, 315-699-2601
Tuf-Tite, Inc., Lake Zurich, IL, 847-550-1011

SEPTIC TANK ASSOCIATE MEMBERS

Advanced Drainage Systems, Inc., Vestal, NY, 800-733-3555
The Euclid Chemical Co., Saratoga Springs, NY, 518-376-0871
Northeast Sales Associates Inc., Fairport, NY, 800-709-6372

PROFESSIONAL MEMBERS

Advance Testing, Campbell Hall, NY, 845-496-1600
Barton & Loguidice, PC, Syracuse, NY, 315-457-5200
A.S. Bell Engineering, PC, Slingerlands, NY, 518-357-0313
Bergmann Associates, Inc., Rochester, NY, 585-232-5135
A L Blades & Sons, Inc., Hornell, NY, 607-324-3636
C & S Engineers, Inc., Syracuse, NY, 518-455-2000
CDM, Syracuse, NY, 315-434-3200
Clough Harbour & Assoc. LLP, Albany, NY, 518-453-3961
Collins Engineering Inc., Albany, NY, 518-436-0392

Delta Engineers PC, Binghamton, NY, 607-231-6612
Dewberry, New York, NY, 212-685-0900
Earth Tech, Inc., Latham, NY, 518-951-2200
Edwards & Kelcey Engrs. Inc., Saratoga Springs, NY, 518-584-9733
Erdman Anthony, Rochester, NY, 585-240-2666
Finley Engineering Group, Inc., Tallahassee, FL, 850-894-1600
Fisher Associates PE, LS, PC, Rochester, NY, 585-334-1310
FRA/T Y Lin International, Henrietta, NY, 585-359-0280
Greenman-Pedersen, Inc., Buffalo, NY, 716-633-4844
HNTB Corporation, Hollywood, FL, 212-594-9717
Hunt Engr Arch Surveyors PC, Horseheads, NY, 607-358-1000
LaBella Associates, PC, Rochester, NY, 585-454-6110
Lamont Engineers, PC, Cobleskill, NY, 518-234-4028
LEAP Associates International, PE, Tampa, FL, 813-988-6870
Maser Consulting, West Nyack, NY, 845-727-1160
McFarland-Johnson, Inc., Binghamton, NY, 607-723-9421
O'Neill Consulting, Spring Lake, NJ, 732-974-0129
Popli Consulting Engineers, Penfield, NY, 585-388-2060
CQQA Laboratories, Inc., Schenectady, NY, 518-372-4067
Ryan-Biggs Assoc., P.C., Troy, NY, 518-272-6266
A H Sample, Inc., Ottsville, PA, 610-847-8945
R Samsel Engineers, Henrietta, NY, 585-334-5549
Chas. H. Sells, Inc., Briarcliff Manor, NY, 914-747-1120
Shumaker Consulting Engineering & Land Surveying, PC, Binghamton, NY, 607-798-8081
Simpson Gumpertz & Heger, Inc., Waltham, MA, 781-907-9000
SJB Services, Inc., Hamburg, NY, 716-649-8110
Stlocum, DeAngelus & Associates, PC, Latham, NY, 518-763-6000
Stantec, Albany, NY, 518-452-4358
Steuben County DPW, Bath, NY, 607-664-2479
TVGA Consultants, Elma, NY, 716-655-8842
Watts Architecture & Engineering, PC, Buffalo, NY, 716-836-1540
Wilbur Smith Associates, Latham, NY, 518-783-1887

OFFICERS, DIRECTORS AND STAFF
President: Tom Montalbino, Roman Stone
Vice-President: David Wan, Oldcastle Precast
Secretary: Joseph Amoia, A & R Concrete
Treasurer: Mike Weigand, J.P.Carrara & Sons
Assoc Dir: Jim Valent, A L Patterson
Prof Director: Tony Papile, Clough Harbour
Septic Gr Dir: Ed Pennypacker, Jepco Sales
NECSA Dir: Richard Sullivan, Lehigh Cement
Imm. Past Pres.: Scott Harrigan, The Fort Miller Co.
Executive Director: Carl S. Buchman, 585-249-9564