# Top Projects


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## Mid-Atlantic Construction ranks the largest projects by value to break ground in each state during 2007.

**Major government initiatives** drove big projects to break ground in 2007. Mid-Atlantic Construction's annual survey of top ground breakings, as ranked by project value, revealed multiple projects near or above the billion-dollar benchmark.

With more than $10 billion in projects planned locally under the federal Base Realignment and Closure program, some of the largest government contracts ever let in the region will get under way in the coming months and years. Topping the BRAC list for 2007 was the $1.7 billion National Geospatial-Intelligence Agency's New Campus East at Fort Belvoir, Va.

Maryland kicked off considerable highway work in 2007, starting the first phase of the $2.4 billion Intercounty Connector project as well as the $1.2 billion I-95 express toll lanes project.

But private developers are doling out big work too, including the $800 million Sands Bethworks casino in Bethlehem, Pa.

Read on to see which top-dollar projects in Delaware, D.C., Maryland, eastern Pennsylvania and Virginia made this year's list. >>

D.C. TOP PROJECTS

# 1 Herbert C. Hoover Department of Commerce Modernization

## PROJECT VALUE: $500 MILLION

**Work has begun** on the first phase of a more than $500 million modernization of the Herbert C. Hoover Department of Commerce Building in Washington, D.C.

The project is scheduled for completion in multiple phases during the next 13 years, while 3,500 workers continue to occupy the historic building. The project will use swing space to move workers out of the construction zones.

The original 1.9-million-sq-ft, seven-story building was built in 1932 and is clad in gray Indiana limestone with a granite base. The modernization will upgrade all major building systems to meet current codes. Once complete, the building will sport high-efficiency systems, new fire and life-safety systems, enhanced perimeter security and seismic structural improvements. The team aims for LEED silver certification.

A joint venture between Gilbane Building Co. of Laurel, Md., and Grunley Construction Co. of Rockville, Md., began preconstruction services and work on phase one in 2007. During the $40 million initial phase, the team will clean the exterior and repoint the Pennsylvania Avenue façade. It also will replace and relocate the existing cooling towers to the middle of the roof away from the edge of the building.

The work adds a primary electric system and makes select safety and disability access upgrades. The team will install a new roof and skylight over courtyard 6, abate hazardous materials and build out about 100,000 sq ft in the courtyard to create temporary swing space for the workers. The existing courtyard space was designed for file stacks and has no windows. The skylight will bring natural light into the offices.

Phase one construction is scheduled for completion in April.

Phases two through eight include restoring existing windows and installing new interior security windows, a new perimeter security system and utility connections. Crews will replace electrical distribution, plumbing, HVAC, ceiling and lighting systems; remediate existing structural issues; replace failing interior perimeter walls; retrofit stairwells to mitigate seismic collapse; and build a new entrance and space for the National Aquarium.

Modernization of the Hoover Building is the last such project to upgrade aging buildings within the Federal Triangle area of the district.

PHOTO COURTESY: GENERAL SERVICES ADMINISTRATION

### Team Box:

**Owner:** U.S. General Services Administration National Capital Region, Washington, D.C.

**Construction Management/Program Management:** Jacobs Engineering Group, Pasadena, Calif.

**Construction Management, phase one:** A joint venture between Gilbane Building Co., Laurel, Md., and Grunley Construction Co., Rockville, Md.

D.C. TOP PROJECTS

## 2 Capitol Yards

**PROJECT VALUE: $470 MILLION**

IMAGES COURTESY OF JPI.

**JPI of McLean**, Va., broke ground in June 2007 on the third building at the $470 million Capitol Yards luxury, rental neighborhood in the Capitol Riverfront District in Southeast Washington, D.C..

JPI demolished a strip club and dilapidated row houses to clear the site where the 13-story 909 at Capital Yards is rising from the ground. The Preston Partnership of Atlanta designed the concrete-frame tower. The brick- and glass-clad building should finish in mid-2009.

Two other buildings are under way. The dual 12-story, concrete-frame towers of Jefferson at Capitol Yards will house 448 apartments in an industrial warehouse motif, with large windows and brick veneers. The 12-story Axiom at Capital Yards, also a concrete structure, features 246 units in a sleeker, more sophisticated setting. WDG Architecture of Washington, D.C., designed the two buildings, which are scheduled for completion this summer.

JPI plans to break ground in September on a fourth building. It will contain 421 units and up to 35,000 sq ft of retail space.

When finished, Capitol Yards will have 1,325 apartments. More than 9,000 residential units, 12 million sq ft of office space, 1,200 hotel rooms and 800,000 sq ft of retail space are planed in the Capitol Riverfront Business Improvement District, a 100-block area south of the U.S. Capitol.

The area is home to the new Nationals Ballpark, the Navy Yard campus, the new U.S. Department of Transportation headquarters building and the Coast Guard headquarters.

**Team Box:**

**Owner:** JPI, McLean, Va.

**Contractor:** JPI, McLean, Va.

**Architect for Jefferson and Axiom:** WDG Architecture, Washington, D.C.

**Architect for 909:** The Preston Partnership, Atlanta

D.C. TOP PROJECTS

## 3 American Pharmacists Association Headquarters

**PROJECT VALUE: $151 MILLION**

**The American Pharmacists Association** headquarters across from the Lincoln Memorial on the National Mall is getting a new look. The job, which began in January 2007, includes a $151 million renovation to the existing 14,000-sq-ft building constructed in 1932 as well as a six-story, 335,925-sq-ft addition.

Architect John Russell Pope designed the existing structure, as well as the National Archives and the Thomas Jefferson National Memorial. The American Pharmacists Association will preserve the historic integrity of its landmark building, while upgrading the mechanical, lighting and other systems.

Hartman Cox, Washington, D.C., designed the project and Tishman Construction Corp. of Washington is handling the renovation and construction. The new concrete structure will sit on a mat-on-rock foundation and includes office space, expanded meeting space, auditorium, conference center, history hall and exhibit gallery, outdoor botanical garden and a rooftop terrace for events. The building will have a marble, granite and precast concrete façade.

The American Pharmacists Association Foundation has launched a capital campaign to raise funds for the work.

Completion is scheduled for March.

**Team Box:**

**Owner:** American Pharmacists Association, Washington, D.C.

**Contractor:** Tishman Construction Corp., Washington, D.C.

**Architect:** Hartman Cox, Washington, D.C.

DELAWARE TOP PROJECTS

# 1 Cape Henlopen High School

## PROJECT VALUE: $73.8 MILLION

RENDERING COURTESY OF BSA+A, WILMINGTON, DEL.

**With its existing** high school lacking basic educational features, such as natural lighting and flexible learning spaces, the Cape Henlopen School District in Lewes, Del., decided to build a new $73.8 million high school to serve 1,600 students in grades nine through 12.

EDiS Co. of Wilmington, Del., began construction on the 210,000-sq-ft high school in March 2007. The project includes construction of a 10,000-sq-ft field house, with locker rooms and equipment storage, a synthetic track and an athletic stadium with artificial turf.

BSA+A of Wilmington designed the L-shaped, traditional collegiate-styled school to promote optimal flexibility. A spread-footing foundation supports the structural-steel frame building.

The two-story classroom wing surrounds an interior courtyard, which provides an outdoor, controlled learning environment. The other side of the L contains an athletic wing with a gymnasium, wrestling room, weight room and locker rooms. A 900-seat auditorium, with a full theatrical fly space, and a multiuse commons area, which will serve as a cafeteria and as breakout rooms for the gym and auditorium, sit in the middle. The mutiuse area will be accessible for public use after school hours. The design allows for future expansion of the wings.

Brick masonry on metal studs will clad most of the exterior. Cast stone will cover the center entrance rotunda. The design incorporates energy-saving features such as a closed-loop geothermal system-with 500 geothermal wells under the playing field and reaching 300 ft into the earth-which will heat and cool the school.

Exterior windows with high-efficiency glazing bring in natural daylight. An advanced energy management system will adjust light fixtures depending on the amount of ambient light entering the building. A white, ethylene-propylene-diene-terpolymer roof will reflect sunlight. Computer banks and wireless technology will provide students and teachers with connectivity.

Completion is scheduled in spring 2010. Once the new building is up, EDiS will demolish the existing structure, recycle much of the debris and covert that space into a parking lot.

### Team Box:

**Owner:** Cape Henlopen School District, Lewes, Del.

**Contractor:** EDiS Co., Wilmington, Del.

**Architect:** BSA+A, Wilmington, Del.

DELAWARE TOP PROJECTS

## 2 Dover Downs Hotel & Casino Expansion

**PROJECT VALUE: $56 MILLION**

RENDERINGS COURTESY OF DOVER DOWNS HOTEL & CASINO

**A $56 million** expansion of the Colonnade at Dover Downs Hotel & Casino will add gaming, dining, shopping and entertainment venues.

T.N. Ward Co. of Ardmore, Pa., broke ground on the 70,000-sq-ft addition to the Dover, Del., casino in June 2007. This is the gaming company's sixth expansion project.

Designed by the Friedmutter Group of Atlantic City, N.J., it includes a new main entrance with a porte cochere, leading to a two-story colonnade feature; 20,000 sq ft of restaurant space; retail shops; and space for 500 new slot machines.

The structural-steel frame building, with a radial footprint, sits on a conventional spread-footer foundation. The exterior sports a field-applied EFIS system on metal studs. The interior includes dropped drywall soffits, walkway paths, performance stage and the circular Fire & Ice Lounge. Completion is scheduled for summer.

Dover Downs Gaming & Entertainment operates a video lottery casino complex; the Dover Downs Hotel, with conference and concert hall facilities; and the Dover Downs Raceway, a harness racing track with parimutual wagering on live and simulcast horse races. The company increased its unsecured line of credit to $125 million to finance the casino expansion.

The same team of T.N. Ward and Friedmutter Group completed a 200,000-sq-ft, 10-story, 268-room addition to the hotel at Dover Downs Hotel & Casino last year.

### Team Box:

**Owner:** Dover Downs Gaming & Entertainment,

**Construction Manager:** T.N. Ward Co., Ardmore, Pa.

**Architect:** Friedmutter Group, Atlantic City, N.J.

DELAWARE TOP PROJECTS

## 3 Interstate 95 Widening

**PROJECT VALUE: $51.9 MILLION**

PHOTOS COURTESY DELDOT

**To ease congestion** along one of the East Coast's busiest corridors, the Delaware Department of Transportation is adding a fifth northbound lane on Interstate 95 from State Road 1 to Interstate 495 and a fifth southbound lane from the 131 interchange to the Churchman's Road Bridge over I-95.

R. E. Pierson Construction Co. of Pilesgrove, N.J., began work on the $51.9 million project in May 2007. Completion is expected in November.

Crews are working on four steel-girder, concrete-deck bridges-two over water and two over highways-and are widening the asphalt-paved road, primarily to the outside of the existing lanes. To minimize disturbing existing wetlands, R. E. Pierson drove 15,000 lin ft of sheet piling to keep the project within those confines.

A narrow work zone presents challenges. During peak hours, traffic is maintained in all four lanes in each direction, with closures allowed only at night.

### Team Box:

**Owner:** Delaware Department of Transportation

**Prime Contractor:** R. E. Pierson Construction Co., Pilesgrove, N.J.

**Design Team:** Rummel Klepper & Kahl, Baltimore

**Lead Inspection Team:** DMJM Harris/AECOM, New York

MARYLAND TOP PROJECTS

# 1 Intercounty Connector

## PROJECT VALUE: $2.4 BILLION

**The $2.4 billion**, 18.8-mi long, limited-access Maryland Intercounty Connector, linking central and eastern Montgomery County with northwestern Prince George's County, aims to relieve congestion, reduce travel time and improve safety on the local road network.

The Maryland State Highway Administration is overseeing construction for the Maryland Transportation Authority. From Interstate 270/Interstate 370 to Interstate 95, the ICC will feature three lanes in each direction, and from I-95 to U.S. Route 1, it will have two lanes. Eight interchanges will provide access to the road.

SHA awarded the first $478.7 million contract to Intercounty Constructors of Annapolis Junction, Md., which will build 7 mi of the ICC from I-370 to Georgia Avenue (MD 97).

Intercounty Constructors is a joint venture among Granite Construction Co. of Watsonville, Calif.; Corman Construction of Annapolis Junction, Md.; and G.A. & F.C. Wagman of York, Pa. A joint venture between Parsons of Rockville, Md., and Jacobs of Pasadena, Calif., provides design services.

The project includes asphalt paving, construction or widening of 18 steel- and concrete-girder bridges; installation of 5 mi of noise walls and an electronic tolls collection and intelligent transportation system; and building a 600-ft section that will carry traffic under a local neighborhood.

A 350-ft concrete arch will cross Rock Creek. Corman will excavate approximately 2.3 million cu yds of dirt.

The road traverses environmentally sensitive areas, parklands and wetlands.

Intercounty Constructors will relocate fish and provide deer and small mammal crossings under the highway. The team is using redundant erosion and sediment control, with two layers of protection, such as berms, straw dikes and silk fences.

Contract A is scheduled for completion in fall 2010.

In November, ICC Constructors of Bethesda, Md., received the $513.9 million ICC Contract C. ICC Constructors is a joint venture of Shirley Contracting Co. of Lorton, Va.; Clark Construction Group of Bethesda, Md.; Guy F. Atkinson Construction of Broomfield, Colo.; Facchina Construction of La Plata, Md.; and Trumbull Corp. of Pittsburgh.

Contract C includes design and construction of approximately four miles from west of U.S. Route 29 to east of I-95, approximately 2 mi of collector-distributor roadway along I-95 and two interchanges.

SHA expects to award Contract B this summer.

### Team Box:

**Owner:** Maryland State Highway Administration for the Maryland Transportation Authority

**Contract A Design-Builder:** Intercounty Constructors, a joint venture of Granite Construction Co., Watsonville, Calif.; Corman Construction, Annapolis Junction, Md.; and G.A. & F.C. Wagman York, Pa.

**Contract C Design-Builder:** ICC Constructors, a joint venture among Shirley Contracting Co., Lorton, Va.; Clark Construction Group, Bethesda, Md.; Guy F. Atkinson Construction, Broomfield, Colo.; Facchina Construction, La Plata, Md.; and Trumbull Corp., Pittsburg.

MARYLAND TOP PROJECTS

## 2 I-95 Express Toll Lanes

**PROJECT VALUE: $1.18 BILLION**

PHOTO OF ROSSVILLE BOULEVARD BRIDGE, COURTESY MARYLAND TRANSPORTATION AUTHORITY

**Work continues** on Maryland's $1.18 billion I-95 Express Toll Lanes project, adding two lanes in each direction along a 10-mi stretch of Interstate 95 from Baltimore to White Marsh.

The Maryland Transportation Authority project runs from south of the I- 95/ Interstate 895 split in northeast Baltimore to north of MD 43.

In 2007, the Rossville Boulevard, Cowenton Avenue and Joppa Road bridges opened.

Cherry Hill Construction of Jessup, Md., is working on a $53.7 million project, removing and replacing bridges at Moores Run, Moravia Road and Moravia Park Drive and constructing two new I-895 northbound general purpose lanes from south of Moravia Road to north of I-95. It's scheduled for completion in the fall.

The company also is the apparent low bidder on an $86.7 million contract to construct new pavement to the outside of I-95 from south of Chesaco to Kenwood avenues and extend the Hazelwood Bridge.

A joint venture among G.A. & F.C. Wagman of York, Pa.; Corman Construction of Annapolis Junction, Md; and McLean Contracting of Glen Burnie, Md., began working in January on a $208.6 million contract to build a four-level replacement I-95/Interstate 695 interchange and bridges at Lillian Holt Drive and Kenwood Avenue. The project should wrap up in 2010.

The transportation authority expects to open bids this year on five contracts totaling at least $500,000. Construction of the entire express toll lane project is scheduled for early 2012.

### Team Box:

**Owner:** Maryland Transportation Authority

**Contractors:** Joseph B. Fay, Baltimore; Cherry Hill Construction, Jessup, Md.; G.A. & F.C. Wagman, York; Pa.; Corman Construction, Annapolis Junction, Md; McLean Contracting, Glen Burnie, Md.; American Infrastructure, Worcester, Pa.

MARYLAND TOP PROJECTS

## 3 Army Team C4ISR

**PROJECT VALUE: $477.5 MILLION**

RENDERINGS CREATED BY SKIDMORE, OWINGS & MERRILL

**The Base Realignment** and Closure program is moving the Army Team Command, Control, Communications, Computers, Intelligence, Surveillance and Reconnaissance (C4ISR) from Fort Monmouth, N.J., to the Aberdeen Proving Ground in Maryland.

Tompkins-Turner Grunley/Kinsley, a joint venture among Tompkins Builders/Turner of Philadelphia; Grunley Construction of Rockville, Md.; and Kinsley Construction of Timonium, Md., received a $477.5 million, firm-fixed-price contract in September from the U.S. Army Corps of Engineers in Philadelphia to design and build the new C4ISR Center of Excellence research and technology campus, covering approximately 1.4 million sq ft.

Bridges will connect the project's nine buildings, which include administrative and headquarters facilities, laboratories, storage and training facilities. The structures house some unique components, such as an anechoic chamber, a room with no echoes, and sensitive compartmented information facility areas.

Concrete footings with a slab-on-grade foundation support the five-story, structural-steel frame buildings, which will be clad in a precast and glass exterior.

Skidmore, Owings & Merrill of Washington, D.C., serves as the design partner for the five-phase project. The team aims for LEED silver certification. The design calls for preserving maximal green space, daylighting, minimal site disturbance and a green roof on the auditorium.

The project is on schedule with completion expected in September 2010.

### Team Box:

**Owner:** U.S. Army Corps of Engineers, Philadelphia

**Design-Build Team:** Tompkins-Turner Grunley/Kinsley, a joint venture among Tompkins Builders/Turner, Philadelphia; Grunley Construction, Rockville, Md.; and Kinsley Construction, Timonium, Md.

**Design Partner:** Skidmore, Owings & Merrill, Washington, D.C.,

MARYLAND TOP PROJECTS

# 4 North Bethesda Market

**PROJECT VALUE: $250 MILLION**

**The $250 million**, 650,000-sq-ft North Bethesda Market mixed-use development broke ground in December in the White Flint Triangle area of North Bethesda, Md.

Located on Rockville Pike, near the White Flint Metro Station, North Bethesda Market replaces an aged motel and parking lot. The three-building project will include about 221,000 sq ft of retail and restaurants, plus 400 residential apartments, 15% set aside for affordable housing. Brick and a glass wall system will clad the exterior.

The 24-story, post-tensioned concrete tower, which will become the tallest building in Montgomery County and offer views of the Washington, D.C., skyline, will house nearly 200 units, two levels of retail and an entrance to a below-ground LA Fitness center.

A six-story, post-tensioned concrete building, with a rooftop courtyard and outdoor dining area, will contain a Whole Foods market and 210 units. A 36,000-sq-ft, stand-alone, two-story retail space for a single tenant employs a structural-steel frame.

## Team Box:

**Owner:** JBG Cos. of Chevy Chase, Md.

**General Contractor:** Clark Construction Group of Bethesda, Md.

**Planning and Design:** Torti Gallas and Partners, Silver Spring, Md.

**Construction Documents:** HKS, Dallas

**Structural Engineer:** Johnson Bernat Associates, Rockville, Md.

A four-level parking garage, with a mat and a spread-footer foundation, sits below the three buildings.

The project's general contractor is Clark Construction Group of Bethesda, Md. Torti Gallas and Partners of Silver Spring, Md., provided initial planning and design for developer JBG Cos. of Chevy Chase, Md. HKS of Dallas created the construction documents.

The project is scheduled for completion in the second quarter of 2010.

MARYLAND TOP PROJECTS

# 5 Franklin Square Hospital Center

**PROJECT VALUE: $175 MILLION**

**Franklin Square Hospital Center** in Baltimore has launched a $175 million expansion to meet the health-care needs in the eastern portion of Baltimore County.

The hospital has experienced a 25% increase in admissions during the past five years. Franklin Square reports having the busiest emergency department in Maryland, treating more than 100,000 patients annually. Volume has nearly doubled during the past eight years.

Wilmot/Sanz of Gaithersburg, Md., designed a 356,000-sq-ft, seven-story patient tower, and Bovis Lend Lease of Bethesda, Md., broke ground in October. Lillibridge of Chicago provides program management on the project, which is scheduled for a 2010 finish.

More than 130 caissons, reaching to a depth of about 40 ft, support the structure. The atrium and mechanical penthouse employ a structural-steel frame.

The concrete-frame tower will contain an expanded adult emergency department, pediatric emergency department, 42-bed intensive care unit, 192 medical beds, 48 intermediate care beds and nine pediatric beds, all in private rooms.

## Team Box:

**Owner:** MedStar Health, owner of Franklin Square Hospital Center, Baltimore

**Program Management:** Lillibridge, Chicago

**Contractor:** Bovis Lend Lease, Bethesda, Md.

**Parking contractor:** Potts and Callahan, Baltimore

**Architect:** Wilmot/Sanz, Gaithersburg, Md.

Hospitalwide, the number of patient rooms will increase from 241 to 366, with 96% of them being private. Architectural precast panels with thin-brick cladding and punch windows will grace the exterior.

A new, approximately 25,000-sq-ft, two-story, structural-steel-frame central energy plant will hold equipment to serve new and replacement infrastructure on the medical campus.

1

# Sands Bethworks

## PROJECT VALUE: $800 MILLION

RENDERINGS COURTESY OF ALVIN H. BUTZ

**Las Vegas Sands Corp.** will redevelop the former Bethlehem Steel plant site in Bethlehem, Pa., into Sands Bethworks–an $800 million casino, hotel, shopping and entertainment complex.

Construction manager Alvin H. Butz of Allentown, Pa., broke ground on the first phase in July. It features a 300-room, 265,000-sq-ft hotel; 200,000 sq ft of retail space; 3,000 slot machines; multipurpose arena; and dining and entertainment venues. The complex also will house the National Museum of Industrial History; SteelStax, an arts and cultural center; and the broadcast home of WLVT, the local PBS affiliate.

At 126 acres, it is one of the largest brownfield regenerations in the country. The steel plant closed in 1998. Sands officials expect the project will spur economic growth in the area.

Sands Bethworks will retain some of the historic structures and supplement with new buildings that complement the existing mill property. The design incorporates a massive ore crane, under which guests will drive as they approach the brick and steel porte cochere. Other elements, such as exposed steel trusses and back-lit perforated metal screens, will remain in a number of the existing buildings.

Steel erection began in February. The project will consume 14,500 tons of steel, all of which will come from domestic mills. The three-level, 457,000-sq-ft casino is constructed of steel and concrete with a brick veneer and metal-panel façade. The 1.32-million--sq-ft, seven-level, steel and post-tensioned concrete parking deck will provide space for 3,231 cars.

The project is scheduled for completion in September 2009.

### Team Box:

**Owner:** Las Vegas Sands Corp., Las Vegas

**Construction manager:** Alvin H. Butz, Allentown, Pa.

**Architect:** RTKL, Chicago

E. PENNSYLVANIA TOP PROJECTS

## 2 Pennsylvania Convention Center Expansion

**PROJECT VALUE: $700 MILLION**

PENNSYLVANIA CONVENTION CENTER

**After years of planning**, dirt is moving in Philadelphia's Center City for a $700 million expansion of the Pennsylvania Convention Center.

Hill International of Philadelphia is managing demolition being performed by Geppert Bros. of Colmar, Pa., for the Redevelopment Authority of the City of Philadelphia. Twenty-seven existing buildings will come down during demolition.

The three-story expansion will add 376,000 sq ft to the center, bringing total exhibit and meeting space to 1 million sq ft. Vitetta of Philadelphia provided architectural and engineering services. Thompson Ventulett Stainback & Associates of Atlanta served as design associate.

The Pennsylvania Convention Center Authority began soliciting bids in April for packages 1 and 1a. The scope of work for the first contract includes relocation of street utilities, underground utilities below slab, foundation work, superstructure concrete and structural steel. The second contract is for vertical transportation.

The authority has invited six prequalified general contractors to bid. They include: AP Construction of Blackwood, N.J.; Bedwell Co. of West Chester, Pa.; Conti Enterprises of South Plainfield, N.J.; a joint venture between Daniel J. Keating Co. and Keating Building, both of Philadelphia; Hunter Roberts Construction Group of Philadelphia; and a joint venture between Walsh Construction of Chicago and Buckley & Co. of Philadelphia. The convention center expects to receive bids in early May.

### Team Box:

**Owner:** Pennsylvania Convention Center Authority, Philadelphia

**Demolition Manager:** Hill International, Philadelphia

**Demolition Conractor:** Geppert Bros., Colmar, Pa.

**Architect and Engineers:** Vitetta, Philadelphia

**Design Associate:** Thompson Ventulett Stainback & Associates, Atlanta

E. PENNSYLVANIA TOP PROJECTS

## 3 Cira Centre South

**PROJECT VALUE: $370 MILLION**

**The Post Office Redevelopment** Cira Centre South project blends renovation of a historic structure with construction of a contemporary high rise in Philadelphia's University City area near the University of Pennsylvania.

Brandywine Realty Trust of Radnor, Pa., developer of the $370 million post office renovation and parking garage, also plans to build at the site two structural-steel frame towers in Cira Centre South that could accommodate office, hotel, residential and retail uses, but the cost and timing of their construction depends on market conditions.

The new Cira Center South complex will sit on land owned by the University of Pennsylvania and leased to Brandywine for 90 years. The University of Pennsylvania Almanac reports a total cost of approximately $800 million and total size of 2.8 million sq ft.

In November, Keating Building Corp. of Philadelphia began a $260 million historic restoration of the five-story, 862,000-sq-ft, 1935-era post office building, preserving its lobby and façade. Completion of the renovation and garage is planned for the third quarter of 2010.

### Team Box:

**Owner:** Brandywine Realty Trust, Radnor, Pa.

**Construction Manager:** Keating Building Corp., Philadelphia

**Master Plan Annex Development:** Pelli Clarke Pelli Architects, New Haven, Conn.

**Executive Architect for post office:** Bohlin Cywinski & Jackson, Wilkes-Barre, Pa.

**Executive Architect for Annex Development, Walnut Street Tower:** Cope Linder, Philadelphia

**Structural Engineer:** Thornton-Tomasetti Group, Philadelphia

**Civil Engineer:** Pennoni Associates, Philadelphia

**Interior Mechanical Engineer for the Renovation:** PHY Consulting Engineers, Philadelphia

E. PENNSYLVANIA TOP PROJECTS

## 4 SAP America Headquarters Expansion

**PROJECT VALUE: $106 MILLION**

**Business software developer** SAP America is expanding its presence in Newtown Square, Pa., with a $106 million, 425,000-sq-ft addition to its corporate headquarters.

Construction manager Gilbane of Philadelphia began the project by relocating an existing 35 kv duct bank and a telephone and data backbone system during a scheduled weekend building closure. Work on the new structural-steel addition broke ground in June 2007. Ninety-five 2.5-ft to 6-ft caissons with grade beams support the new building. The foundation includes a half basement.

FXFowle of New York designed the structure, which curves organically along the grade, complementing the existing structure and the wooded site. The open-plan building features meeting, conference and amenity space for more than 1,500 employees. Gilbane also is expanding the existing parking garage to accommodate 325 more cars.

The team strives for LEED platinum certification. Sustainable elements include a green roof; a geothermal system with 10 400-ft-deep wells heat and cool the main atrium; a chilled ice storage system; rolling daylighting with automatically adjusting sun shades and interior light fixtures; use of low-volatile, organic-compound-emitting materials; an under-floor air-distribution system with air towers; and a stormwater recovery system for landscape irrigation. Chestnut trees onsite have been harvested and milled for use in the building's railings.

Completion is scheduled for 2009.

### Team Box:

**Owner:** SAP, Newtown Square, Pa.

**Construction manager:** Gilbane, Philadelphia

**Architect:** FXFowle, New York

E. PENNSYLVANIA TOP PROJECTS

## 5 Route 309 Expressway Reconstruction (Phase 4)

**PROJECT VALUE: $102 MILLION**


**The Pennsylvania Department of Transportation** began the fourth and final phase of a $350 million, 10-mi project to rebuild the Pennsylvania Route 309 Expressway in July 2007. Federal money funded 80% of the project, with the balance coming from state dollars.

A joint venture between Nyleve Bridge Corp. of Emmaus, Pa., and James D. Morrissey of Philadelphia received the $102.4 million contract to reconstruct the 4-mi northern portion of the highway, between Highland Avenue and Route 63 (Welsh Road) in Montgomery County.

The project includes eight bridges or overpasses; rebuilding, lengthening or widening existing on- and off-ramps; adding two ramps at Norristown Road; and installing a sound wall along southbound Route 309, between Norristown Road and Butler Pike.

This final phase is scheduled for a 2010 finish.

The first $57.9 million phase, between Route 73 (Church Road) and Highland Avenue, began in 2004 and was completed in spring 2007 by Alan A. Myers of Worcester, Pa. Morrissey and Nyleve began work in 2005 on a $82.6 million contract to build new ramps and improve access between Route 309 and the Pennsylvania Turnpike.

Also in 2005, Buckley/Glasgow Joint Venture, a partnership between Buckely and Co. of Philadelphia and Glasgow of Glenside, Pa., started on an $88.3 million project to rebuild the southern portion between Cheltenham Avenue and Route 73 (Church Road) and its interchanges at Easton Road and Paper Mill Road. These two sections of Route 309 should open by the end of 2008.

### Team Box-Phase Four:

**Owner:** Pennsylvania Department of Transportation

**Contractor:** Nyleve Bridge Corp., Emmaus, Pa., and James D. Morrissey, Philadelphia

**Construction Management:** Urban Engineers, Philadelphia

**Design Consultant:** DMJM + Harris, Philadelphia

VIRGINIA TOP PROJECTS

# 1 NGA New Campus East

## PROJECT VALUE: $1.7 BILLION

RENDERING COURTESY U.S. ARMY CORPS OF ENGINEERS, BALTIMORE DISTRICT

**Work on** the Mid-Atlantic's largest vertical construction project, the $1.7 billion, 2.4 million sq-ft National Geospatial-Intelligence Agency New Campus East, began in August 2007.

NGA, a Department of Defense combat support agency, provides timely, relevant and accurate geospatial intelligence-analysis of imagery to describe and assess physical features and activities on earth. The work supports the country's national security efforts.

New Campus East will consolidate 8,500 NGA employees from seven sites throughout the National Capital Region to a 130-acre site at Fort Belvoir's Engineer Proving Ground. The project is part of the 2005 Base Closure and Realignment Act.

The U.S. Army Corps of Engineers, Baltimore District is managing the fast-track project and used an integrated design-bid-build contracting process, bringing the construction team in early to provide preconstruction services.

Clark/Balfour Beatty-NGA will build the campus, which includes a 2.1-million sq-ft office building, visitor control center, central utilities plant, technology center and a 5,100-car parking garage. Clark/Balfour Beatty is a joint venture of Clark Construction Group of Bethesda, Md., and Balfour Beatty Construction of Washington D.C.

RTKL/Kling of Baltimore, a joint venture between RTKL of Baltimore and Kling Stubbins of Philadelphia, is designing the campus.

The design is on track for a January delivery.

A concrete, drilled caisson and spread-footer foundation will support the main, eight-story, structural-steel frame building. The 6- to 8-ft-diameter caissons average 20 ft to 25 ft in depth. The exterior features precast concrete with punch windows and a glass curtain wall at the ends of the building.

Work is scheduled to start on the parking deck in the fall.

Jacobs of Pasadena, Calif., is designing roads; water, gas and power lines; and other infrastructure outside the Engineer Proving Grounds.

CBB has completed the central utility plant and the technology center. The entire project is scheduled to wrap up in April 2011.

New Campus East is one of many BRAC-related projects in the region. The Corps of Engineers has increased its workforce to ensure quality oversight. The North Atlantic Division divided projects among different districts and hired many new engineering college graduates as civilian interns to assist with management of the projects.

### Team Box:

**Owner:** U.S. Army Corps of Engineers, Baltimore District

**Contractor:** Clark/Balfour Beatty-NGA, a joint venture between Clark Construction Group, Bethesda, Md., and Balfour Beatty Construction, Washington D.C.

**Architect:** RTKL, Baltimore and KlingStubbins, Philadelphia

**Infrastructure Design Outside the Campus:** Jacobs, Pasadena, Calif.

VIRGINIA TOP PROJECTS

## 2 DeWitt Community Hospital

**PROJECT VALUE: $747 MILLION**

HDR ARCHITECTURE

**As part of the** Base Realignment and Closure process, Turner-Gilbane began construction in November on the $747 million, 1.3 million-sq-ft replacement of the DeWitt Community Hospital complex at Fort Belvoir, Va.

Turner-Gilbane is a joint venture between Gilbane Building Co. of Laurel, Md., and Turner Construction Co. of Arlington, Va. HDR Architecture of Alexandria, Va., in a joint venture with Dewberry of Fairfax, Va., designed the new facility.

The military used an integrated design-bid-build procurement process for the new Fort Belvoir community hospital, which will pick up some patients with the closing of Walter Reed Army Medical Center in Washington, D.C. The procurement process promoted coordination between the design and construction teams about constructability and scheduling and enabled the U.S. Army Corps of Engineers, Norfolk District to accelerate construction.

The 120-bed, seven-story, hospital will contain 10 operating rooms with remote surgery capabilities, 10-bed intensive care unit, 10-bed behavioral health inpatient unit, emergency department and pharmacy.

The steel-frame building will sit on a spread-footer foundation and be topped with a green roof. An aluminum composite metal panel system will clad the exterior.

Crews poured the first footing in March, with completion of the hospital set for September 2010. At that time, the Corps of Engineers will turn it over to the U.S. Army Medical Command to staff and equip the facility.

### Team Box:

**Owner:** U.S. Army Corps of Engineers, Norfolk District

**Contractor:** Gilbane Building Co., Laurel, Md., and Turner Construction Co., Arlington, Va.

**Architect:** HDR Architecture, Omaha, Neb., and Dewberry of Fairfax, Va.

VIRGINIA TOP PROJECTS

## 3 8th and 9th Street Office Buildings

**PROJECT VALUE: $160 MILLION**

IMAGE COURTESY OF THE VIRGINIA DEPARTMENT OF GENERAL SERVICES

**The Virginia Department of General Services** will replace the Eighth Street Office Building and renovate the Ninth Street Office Building. The two Richmond structures were built in the early 1900s and have outdated heating and cooling systems and obsolete mechanical and electrical systems.

W.M. Jordan Co. of Richmond provided preconstruction services for the $160 million project and began demolition of the 126,933-sq-ft Eighth Street structure in May 2007. The former hotel had stood vacant since 2005. That same year, beams and posts were placed in basement to provide structural reinforcement to prevent the sidewalk from collapsing.

The construction team will salvage bricks and other materials, including historic maple doors and transoms, wood column wraps, panels and flooring and the cast-iron staircase for use in renovating the Ninth Street building and the connection between the two office structures.

Preliminary plans call for a 300,000-sq-ft, 11-story Eighth Street building with four levels of belowground parking for 270 cars, open office areas and meeting rooms of variable sizes. The team strives for LEED silver certification. The buildings will sport green roofs, daylighting, solar sunshades and high-tech glazing.

Renovations will take place throughout the 183,167-sq-ft, 10-story Ninth Street building to bring it up to code. The team will preserve significant character-defining features, such as the two-story marble lobby and skylight, and the two-story ballroom on the top floor.

The start of construction on the two buildings depends on state funding.

### Team Box:

**Owner:** Virginia Department of General Services, Richmond

**Construction Manager:** W.M. Jordan Co., Richmond

**Architect:** Commonwealth Architects, Richmond, and Perkins + Will, Washington, D.C.

VIRGINIA TOP PROJECTS

# 4 Atlantic Treatment Plant (Phase 3)

**PROJECT VALUE: $141 MILLION**

BACKUS AERIAL PHOTOGRAPHY

**Population growth** in southeastern Virginia has prompted the Hampton Roads Sanitation District to undertake a project to increase capacity at its 25-year-old Atlantic Treatment Plant in Virginia Beach.

HDR Engineering of Norfolk, Va., designed the expansion, which will allow the plant to treat 54 million gal per day of wastewater, up from 36 mgd currently. The district divided the $160 million project into three contracts.

Pizzagalli Construction Co. of South Burlington Vt., began work on the largest, $141.2 million, phase in May 2007, adding aeration basins, primary and secondary clarifiers, pump stations, solid handling facilities, odor control and scrubber stations, dewatering building, acid phase digester and control building, plant drain pump station, biosolids storage pad and new electrical and standby-generation systems.

The contract calls for upgrading the existing solid handling building, digester complex and effluent pump station and is set to finish in September 2010.

Mid Eastern Builders of Chesapeake, Va., completed the $7.4 million site preparation contract in December 2006. It required clearing and excavating surcharge areas, moving 750,000 cu yds of fill from other areas of the 400-acre site to the expansion area to compact the soil and installing temporary drainage and a permanent stormwater management facility. The district estimates consolidating the underground soil saved more than $10 million in foundation work.

### Team Box:

**Owner:** Hampton Roads Sanitation District, Virginia Beach, Va.

**Design Engineer:** HDR Engineering, Norfolk, Va.

**Contractor, A:** T.A. Sheets Mechanical, Norfolk, Va.

**Contractor, B:** Mid Eastern Builders, Chesapeake, Va.

**Contractor C:** Pizzagalli Construction Co., South Burlington, Vt.

VIRGINIA TOP PROJECTS

# 5 Army Logistics University

**PROJECT VALUE: $136 MILLION**


RENDERING COURTESY: U.S. ARMY CORP OF ENGINEERS, NORFOLK DISTRICT

**The $136 million** Army Logistics University at Fort Lee, Va., will train Army personnel and people from 63 different foreign countries. The university will resemble a traditional college campus and house the School of Systems and Acquisition Management and the School of Logistics Science.

The 404,000-sq-ft campus, on 46 acres, includes more than 100 classrooms, a 67,000-sq-ft simulation center and the ability to train 2,000 students daily.

Construction began in June 2007 on a four-story, 348,000-sq-ft education building to house a student center, auditorium, library, classrooms, conference rooms, offices and student break areas. Also being built is a separate, three-story, 48,000-sq-ft research facility.

Both buildings will feature raised-access flooring, blast resistant materials and will be eligible for LEED silver certification. The design unifies the existing buildings and landscape with the new facilities.Buildings are framed with recycled steel and skinned brick and precast concrete to convey a sense of performance and structure.

The project is scheduled for completion in April.

### Team Box:

**Owner:** U.S. Army Corps of Engineers, Norfolk, Va., District

**Design-Build Contractor:** Balfour Beatty Construction, Fairfax, Va.

**Architectural Design Consultants:** Hellmuth, Obata & Kassabaum, Washington, D.C.

**Engineering Design Consultants:** Hankins and Anderson, Glen Allen, Va.

**Electrical Subcontractor:** Truland Systems Corp., Reston, Va.

**Mechanical Subcontractor:** Colonial Webb Contractors, Richmond, Va.

**Geotechnical Engineers:** Froehling and Robertson, Richmond, Va.

**Food Service Design Consultants:** Hopkins Food Service, Cabin John, Md.