

## Atlanta's First Women's Shelter to See Improvements

After 30 years, the first women's crisis center built in Atlanta is getting a much-needed overhaul. My Sister's House, a shelter for battered women, will be the beneficiary of

\$8 million collected during the Atlanta Union Mission's Transformation Campaign.

The Mission is a non-profit organization that provides a number of shelters throughout the City. The Organization set out to achieve a goal of raising enough money to expand the existing facility so additional space could be provided for those in need.

Earlier this year, Long Engineering, Inc. was selected to provide all land surveying and site design services for the renovation to

the existing facility and construction of a recovery residential dormitory and program support center. The improvements will also include a new campus kitchen and dining area, a child development center with classrooms, a library and media room, a large playground and additional parking.



For this fast-track project, Long Engineering, Inc. provided a boundary and topographic survey of the 2.4-acre site, an assessment of the impacts of the development on the City of Atlanta's sanitary sewer system and its compliance with the Consent Decree and the design of all site improvements and the

development of construction documents. The project received a Building permit in October and will soon begin construction.



1775 The Exchange  
Suite 215  
Atlanta, GA 30339  
Ph: 770.951.2495  
www.longeng.com



## Glenwood Park: New Urbanism and the Environment

Looking out over the 27-acre tract at the southwest corner of I-20 and the Glenwood-Wylie Connector in the City of Atlanta (COA), one sees nothing but acres of concrete wasteland. Historically, the site has been the home for a sawmill, a concrete plant and most recently, a concrete recycling facility.

But as unappealing as this site appears, one can look west and see the beauty of Atlanta's skyline. If you are Charles Brewer, former founder and CEO of MindSpring Enterprises and current Chairman of the real estate development firm Green

Street Properties (GSP), you envision the site as Glenwood Park, a robust, urban community where apartments, single-family housing, retail and office space, a school, civic buildings, and parks are intertwined to create a pedestrian-friendly community where people live, learn, work, shop and play.

To meet the extraordinary development challenges of the site, GSP selected Long Engineering, Inc. to participate in the 3-day design charrette that was attended by professionals from around the Country, assist in the initial planning, and continue forward with design efforts that culminated in phased plans submitted for permit to the COA. As a part of transforming the brownfield site into a neighborhood community created on the principles of New Urbanism, the existing COA development ordinances needed to be modified to accommodate new Traditional Neighborhood Design (TND).

John Morey, Vice President and the Project Director for LEI, was critical in providing the technical assistance to GSP in the presentation of new design criteria to the COA that allows for traffic calming measures that encourage slower traffic, promote pedestrian access, and maximize on-street parking. GSP and the COA Fire Department staged a field verification where

three sizes of fire trucks negotiated various simulated intersection configurations to confirm the new TND standards could accommodate large emergency vehicles. Providing narrower streets, smaller curb radii at intersections, and

additional stop signs will help accomplish these important project goals. An important aspect of Green Street's development philosophy is dedicated to pursuing creative, environmentally-sensitive design as an integral part of the Glenwood Park



*Rendering of Glenwood Park*

Community development. Water quality is at the forefront. LEI developed a computer model of the watershed to simulate the hydrologic and hydraulic performance of storm drainage systems before and after the project is built.

Flood plain storage in the ditch traversing the site is replicated in a "Storm Water Park", a 1.5 acre park that is also designed for recreational use to provide water quality enhancement through incorporation of a micro pool, 38-hour drawdown of the first flush runoff and conventional storm water detention. Both the water quality enhancements and detention are not required by COA ordinances but voluntarily provided by GSP.

In addition to the water quality benefits of the Storm Water Park, innovative infiltration design measures, including residential and commercial building downspouts connected to infiltration trenches, infiltration beds, bio-retention, and the use of gravel and pervious concrete, are being considered to help further enhance the water quality. The end result is cleaner storm water runoff at a reduced rate that will improve the environment within Glenwood Park as well as those living downstream.



## A View from the Top

J. Ellen Long, P.E.

Long Engineering, Inc. has developed a reputation as an "urban design firm" and we are quite proud of this distinction. The majority of our projects are located in the urban core where property values are high and unencumbered space is scarce.

Our work requires a higher degree of accuracy, an increased level of detail and more complex analysis. These demands also require the attention of the more

experienced, technically-oriented staff currently employed at LEI.

Our capabilities in watershed evaluation have been critical in identifying the availability of sanitary sewer service for major developments such as City Center in the City of Atlanta and identifying flood potential and designing mitigation measures for the 5th Runway at HAlA.

We have been diligent in establishing an expertise in enhancing storm water

quality in urban areas and are putting this knowledge to work on the Big Creek Park Wetlands Enhancement Project for the City of Roswell as well as Glenwood Park where we are evaluating a wide variety of creative structural and vegetative measures.

I am also proud of our five year relationship with Chick-fil-A (CFA). My focus during this period has been the role of corporate civil engineering consultant responsible for developing and maintaining national design standards.

## Phase One of Fifth Runway Takes Off at World's Busiest Airport

Seeing planes take off and land is a common sight as you approach the Hartsfield Atlanta International Airport, one of the busiest airports in the world. But today, travelers are seeing another sight all together different as they navigate the roads. And no, it's not a bird or a plane, but a nearly 5-mile long conveyor belt stretching to Hartsfield.

In May, the race began to move 28 million cubic yards of dirt via conveyor belt, signaling the start of the Airport's fifth runway project. The conveyor brings nearly a cubic yard of soil to the runway site every second producing fast and dramatic topographic changes.

Long Engineering, Inc. was asked to assist in this important project by preparing the Comprehensive Monitoring Plan for the fifth runway guiding the storm water sampling required to measure compliance with Georgia's National Pollution Discharge Elimination System (NPDES) permit. LEI is also designing and continually updating the site's Erosion, Sediment and Pollution Control Plans (ES&PC) that are instrumental in controlling the erosion and minimizing the movement of sediment into the adjacent streams.



Some of the Best Management Practices being implemented include 10 sediment ponds with a combined capacity of almost 700,000 cubic feet, stone and synthetic filters, grassed swales, non-erosive conveyance systems and vegetative measures. Mike VanBriggle, P.E., Long Engineering, Inc.'s Project Manager, is inspecting the site weekly and providing plan modifications to keep the project in compliance.

The firm, well recognized in the field of NPDES permitting, was selected by the Corporate Environmental Risk Management (C.E.R.M.)/ATC team, who is providing geotechnical quality control and monitoring for environmental compliance during construction, to provide these important services. But at the helm of this endeavor is 5R Constructors, serving to placing the dirt.



## Northside Hospital to Serve Forsyth County

Northside Hospital a respected medical facility in Atlanta, renowned for its expertise in surgery as well as ranking first in the nation among community hospitals for the number of babies delivered. The Hospital continues to grow having purchased Baptist North Medical Center in Cumming, Georgia, earlier this year.

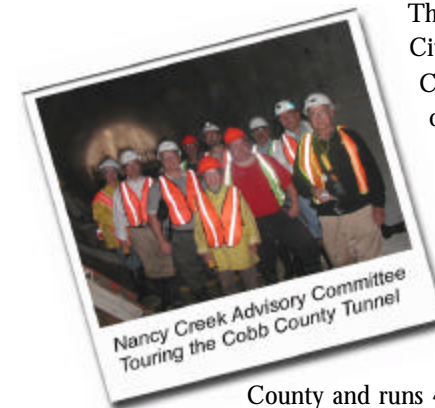
LEI is pleased to match their expertise in medical facility development, to the needs of Northside Hospital addressing their aggressive expansion of the newly-acquired facility in Cumming. The plans for a vertical expansion that added two hospital floors and one mechanical floor to the existing two story hospital building, requiring, the Central Energy Plant and utility services to be expanded to accommodate the new space.

LEI developed a Campus Plan of the existing site, coupled with a Regional Composite Plan to include proposed GA DOT improvements to the area resulting in construction documents for submission to the City of Cumming. "I've worked with Long Engineering before," said John Cummings, Director of Facility Services at Northside Hospital. "They always provide quality work and I wouldn't think of using anyone else for this project." The \$8 million project is on track to be completed in May 2003.

Long Engineering, Inc. has worked with Northside Hospital for years, providing land surveying and civil engineering services to their main campus at Peachtree Dunwoody Road and I-285 as well as several other properties that the Hospital owns.

## Long Engineering, Inc. Invited to Mayor's Task Forces

### Nancy Creek Tunnel Technical Advisory Committee



This past February, Mayor Franklin and the Atlanta City Council authorized the formation of the Nancy Creek Tunnel Technical Advisory Committee that is charged with ensuring that the project is accomplished in a cost-effective, timely and qualitative manner. Long Engineering, Inc. is on the nine-member committee representing Blackstone Real Estate Group, a New York based real estate investment firm.

The 18-foot diameter tunnel begins in DeKalb County and runs 44,000 feet west to the R.M. Clayton Water Reclamation Center at an average depth of 150 feet. Construction of this \$160 million project is estimated to be complete by October 2005. The tunnel will become an integral part of the City of Atlanta's sewer system and will prevent future overflows of sanitary sewage into Nancy Creek.

Leading the committee is Greg Giornelli with the Mayor's office, Atlanta City Councilpersons Mary Norwood, Clair Muller and Howard Shook. Public Works is represented by Jack Ravan, Commissioner of Watershed Management, David Peters, Deputy Commissioner and Heinz Brodheim, Project Manager. Long Engineering, inc. is represented on the committee by Shepherd Long, P.E., Vice President.

## Long Engineering Enhances Transportation Design & Surveying Services

We are pleased to announce the addition of David Jackson, P.E. as Vice President in charge of Transportation Design and Surveying Services and Bryant Kachel, RLS as Survey Manager.

David has B.S. and M.S. degrees in Transportation Engineering from the University of Tennessee and brings over 24 years experience relating to planning, design and construction of major transportation projects throughout the southeast.

In Metro Atlanta, this has ranged from developing a 20-year transportation plan for Forsyth County, redesign of the Thornton Road - I-20 interchange serving as the Program Management Director for a 5-year, \$40 million Local Option Sales Tax program in Spalding County, with hundreds of transportation design projects in between.

Bryant has a B.S. degree in Civil Engineering Technology from East Tennessee State University and brings over 20 years of progressive surveying experience.

Mr. Kachel's survey expertise is with ALTA/ACSM Land Title Surveys on extremely high profile real estate projects. He is also skilled in the application of GPS Real Time Kinematic surveys.