



### **CEG Housing Texas Teams**

*Reliant Stadium*

Texas have never been shy about spending money for new homes and Texas sport teams are no exception. CEG-Texas has a long history designing and detailing the precast components for the new homes of Texas' sports teams including the San Antonio Spurs, Houston Texans, Houston Rockets, Houston Astros, Texas A&M Aggies and even the Round Rock, Texas High School football team.

One of the new homes, Reliant Stadium, home to the new NFL Texans, saw its first action August 24th when NFL

football returned to Houston after a six year absence. Located next to the Astrodome, the world's first domed stadium, Reliant Stadium is setting new standards for technology and comfort. With the first retractable roof stadium of any NFL franchise, a seating capacity of 69,500, 147 private luxury suites, spacious lounges and locker rooms and a price tag of \$449 million, the Texans are already starting out as champions.

Precast concrete played a major role in the construction of Reliant Stadium. Heldenfels

Enterprises, Inc. of San Marcos and Corpus Christi, Texas fabricated 1944 riser sections, 148 raker beams, 80 slabs, 122 stair units, and 369 wall panels which were all erected within a 10-month period.

CEG utilized 3-dimensional drafting techniques to detail many of the complex pieces adjacent to the "super columns". The columns were skewed, sloping, cast-in-place concrete in 3 planes which required the generation of a 3-dimensional model to properly visualize, detail and erect the precast pieces.

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3-dimensional graphics were again used to detail many of the complex geometrical pieces in the SBC Center, the new home of the San Antonio Spurs. The Spurs will be opening the 2002-2003 season in their new state of the art arena which seats 18,500 fans for basketball games. The collaboration of CEG and Heldenfels

SBC Center

Enterprises was again critical in successfully meeting extremely tight fabrication and erection schedules on the project.

3-dimensional modeling and in house stadium design software continue to allow CEG to meet the Texas sized challenges of modern precast stadium construction.



## CEG Texas Celebrates Birthday

The Consulting Engineers Group's Texas office celebrated its' 20th anniversary in July 2002. The Texas office made its humble start on July 1, 1982 with two employees and has grown to its current size of 29 employees. The office has

required several moves to keep up with its growth of employees and its relentless pursuit of technology.

While the office continues to nurture a family atmosphere, the office's immediate family has celebrated several new

births, a few weddings, numerous school graduations and the welcoming of several new grandchildren and American citizens.

The employees celebrated their anniversary with a dinner party at the Sonterra Country Club on August 8, 2002. The staff, their spouses and numerous clients enjoyed sharing old adventures during the evening.



The celebration provided an opportunity to look back and be thankful for all of the wonderful friends that CEG has worked with over the years. It was also a reminder to look forward and embrace the new challenges with the same enthusiasm that inspired the Texas staff for the first 20 years.

## **Borgess Medical Center Parking Garage**

A new parking structure for the Borgess Medical Center is just what the doctor ordered. Part one of the Medical Center's three part \$76.9 million renovation plan provides a new 943 space structure on the former Stryker Center location. The unique structure will provide direct access from the garage to an atrium that houses reception, patient registration, in-patient elevators and a new pharmacy. Each floor will have access to a completely enclosed bridge which serves as the passageway between the parking structure and the Medical Center.

The Borgess Medical Center is part of Borgess Health Alliance which consists of nine owned or affiliated community hospitals, ambulatory care facilities, physicians practices, home health care, nursing home and several other associated facilities. Borgess Health Alliance is a member of Ascension Health, the country's largest Catholic health system, which includes 75 health care facilities.

The garage's 13'-6" floor to floor height and numerous barrier free (handicap) parking spaces reflect the garage's primary goal of providing convenient and accessible parking to its' patrons. The 8'-2" minimum clearance allows full size handicap vans easy access to all parts of the structure, especially the connecting bridge.

The interior framing system consists of a single interior row utilizing vertical lite walls, inverted tee beams and narrow L beams to support the pretopped D.T. floor system. A crossover exists at each floor as the result of careful interior framing of the scissor ramps. The lite walls with openings and the beam framing system provide the "wide open" atmosphere that so many health care facility owners desire in their parking structures.

The exterior framing system uses pocketed loadbearing architectural spandrels which have a brilliant Borgess blue tile surrounded by thin tile bricks framed with an acid etched precast concrete border. The two main entrances to the garage are highlighted by architectural panels, these panels also serve as the structural shear walls. Arched precast panels also accentuate the two main entrances, as well as four other entry/exit locations. The arches provide a nice contrast to the long, linear look

that this large structure delivers.

The project is currently under construction and will open this fall. Nucon-Schokbeton of Kalamazoo, MI is the precaster supplying the high quality architectural products. Several other plants are supplying the structural components. The owner is the Borgess Medical Center also of Kalamazoo, MI.



## **Consider A Contingency Agreement**

Change is certainly a constant in the parking industry. One day it's the crack in the garage floor. Does the crack indicate a potential hazard? The next day the Mayor requests a parking study for a new development. How many spaces are needed? The following day you come to the realization that the decade-old revenue control equipment must be replaced. What system is best for your operation? Many of these common events require the assistance of industry experts. Yet in order to hire a professional, many agencies must utilize an RFP or RFI process to comply with mandated regulations. This process can take months to complete. Meanwhile, the problem or issue remains unsolved.

Consider the advantages of a contingency contract for parking consulting services. Under a typical contingency agreement, the consulting organization agrees to provide services to the client upon request based upon a pre-arranged fee structure for a specified period of time, say five years. There is no requirement for the agency to use the consulting firm but when assistance is needed, help is only a phone call away. The months spent implementing the usual RFP process is eliminated. The assistance you need is rendered more quickly. Imagine informing the Mayor that the parking study she requested will commence within a week!

Of course, the selection of a consulting firm for a contingency contract must initially comply with legal regulations regarding such contracts. This process, however, once completed, need not be repeated for several years. By conducting the selection process ahead of actual need, the usual haste of selection and contract administration is eliminated. The process allows for more time to carefully examine the qualifications of those firms submitting a proposal. To provide the best level of service, a consulting firm experienced in multiple aspects of the parking industry is highly recommended. Consider the current and potential needs of your operation. Does the firm provide engi-

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# News Bites



The Consulting Engineers Group Inc.

- **Patsy Salazar** (CEG-TX) and **Keith Allen** (CEG-IL) have been elected as “At Large” members of the Board of Directors. *Congratulations!*
- The Illinois office would like to thank **Lauren Ganzer** for her fabulous assistance in the front office during the past summer. Lauren has since returned to Purdue University for her junior year.
- The Illinois office was the proud host to two high school interns during the past summer. As part of High School District 214’s career planning and internship program, **Rachel Frey** and **David Cohen** became part of CEG’s family for the better portion of the summer. Each student worked approximately 20 hours a week at a wide variety of assignments, including some grueling, hot field work for our transportation and parking study in Oak Park, Illinois. Thanks to both for their help and enthusiasm.
- CEG is proud to welcome **Chris Mosley** and **Abel Cota** to our Texas office.
- The Texas office would like everyone to know that **Tom D’Arcy’s** new knee seems to be working better than the one it replaced. His August surgery was a success and a return to the golf course is planned in time for the PCI convention.

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neering services to properly evaluate that floor crack? Has the firm conducted parking studies under similar conditions in the past? Is the firm familiar with revenue control equipment and procedures? By selecting a firm with experience in those areas where you may need assistance, you will receive the most benefit from a contingency agreement.

There are two other important advantages of contingency contracts. Budgeting for consulting costs is more accurate since fees are known in advance. After the first one or two assignments, the consulting firm is familiar with your parking operations. Future assignments can often be completed without the need for orientation to your facilities and personnel.

By using a contingency agreement with a qualified consulting firm, you and your organization will be better prepared to face the changes that surely lie ahead.

CEG provides the full range of parking consulting services applicable to assignments of this type. In the past, contingency agreements have been prepared for communities, parking authorities, universities, and parking operators. Such services are now being provided to the cities of Cincinnati and Little Rock and to a private development organization.

**Website: [www.cegengineers.com](http://www.cegengineers.com)**