



## The University of Texas at Austin - Darryl K. Royal Texas Memorial Stadium Expansion - TIE

TEXAS TOP PROJECTS

COST: \$150 MILLION



**Eight million dollars** were spent just on audiovisual improvements at the University of Texas' Darrell K. Royal Memorial Stadium, the centerpiece of which is a 7,370-sq-ft, high-definition Daktronics LED scoreboard nicknamed "Godzilla-

tron." It is regarded as one of the largest high-definition screens in the western hemisphere and the largest full-screen video screen in collegiate sports.

In all, the UT Board of Regents approved a nearly \$150 million expansion plan to include a new memorial plaza and new north end zone structure. The new outdoor plaza at the northwest corner is slated as a memorial to veterans, with a bronze tablet honoring Texas World War I deaths, a monument, landscaping, and new stadium entry gates between two 115-ft towers. The expansion also includes the replacement of the north end-zone structure with a multi-level complex that offers additional seats, club space,

### Key Facts

**Location:** Austin

**Start/Completion Dates:** November 2006 (stage 2)/October 2008

**Owner:** University of Texas at Austin, Austin

**General Contractor:** Hensel Phelps, Austin

**Architect:** Heery International, Houston

suites, athletic offices, academic-advising areas and a basement with gym space.

Overall seating capacity will rise to more than 90,000 from the current 80,082 – surpassing Texas A&M University's Kyle Field as the largest football stadium in Texas.



## Samsung Austin Semiconductor Fab A2 - TIE

TEXAS TOP PROJECTS

COST: \$150 MILLION



**The new Samsung** Austin Fab 2 (A2) project consists of approximately 1.2 million sq ft of cast-in-place structure with a steel truss roof. With a building footprint that covers an area the size of nine football fields, this massive new facility is more than four times the square footage

of the original fab that Hensel Phelps completed in 1997. The allotted schedule, however, is nearly identical.

Two days after receiving the notice-to-proceed, the first rebar hit the jobsite, and on the fifth day, the first vertical concrete was placed. Ultimately, there will be approximately 2,300 columns on each of the three, 450,000-sq-ft floors. The variety of forming systems goes from a flat slab to a pan deck to a through waffle deck with 36-in. and 16-in. dia. holes creating the waffle. Steel trusses each weighing approximately 100,000 lbs. utilize W14 x 580 at the largest point on the chords.

Construction equipment on this megaproject included six tower cranes, two 150-ton crawlers, two 80-ton hydraulics and a

### Key Facts

**Location:** Austin

**Start/Completion Dates:** May 2006/May 2007

**Owner:** Samsung Austin Semiconductor, Austin

**General Contractor:** Hensel Phelps, Austin

**Architect:** PageSoutherlandPage, Austin, Texas

Lampson LT1100 for steel truss erection. Construction is slated for completion in May, with commencement of chip production in the factory planned for September. When complete, the new A2 is expected to employ nearly 1,000 people, including Samsung employees and workers from supplier companies.



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## Sierra Providence Eastside Hospital

TEXAS TOP PROJECTS

COST: \$130 MILLION



**Despite losing close** to 40 production days due to strong winds and flooding last summer, the Sierra Providence Eastside Hospital construction team is still on schedule to complete work by March 2008.

The free-standing hospital on the 42-acre site features 104 beds in a four-story concrete structure. The exterior features stucco and stone in a Southwestern-style design.

Services offered at the new hospital will include radiology, respiratory care, non-invasive cardiology, intensive care, medical/surgical unit, labor and delivery, neonatal intensive care unit, nursery, post partum/GYN and telemetry unit.

### Key Facts

**Location:** El Paso

**Start/Completion Dates:** May 2006/March 2008

**Owner:** Tenet Healthcare, Dallas

**General Contractor:** Robins & Morton, Birmingham, Ala.

**Architect:** Sterling Barnett Little Inc., Arlington

The hospital's tight schedule has been the biggest challenge for the builders, calling for the completion of the 320,000-sq-ft structure in just 22 months. A streamlined process, aggressive schedule and extra work have kept the project on track.



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## Hillcrest Baptist Medical Center

TEXAS TOP PROJECTS

COST: \$126 MILLION



**The new six-story medical center** and two-story women's and children's hospital buildings are built on a 70-acre site and are connected by an enclosed walkway. The two replacement hospital structures total 470,000 sq ft.

The completed women's and children's center will offer OB/GYN, labor and delivery and neonatal intensive care services. The medical center will feature a new emergency room, several levels of intensive care, and medical and surgical rooms. Combined, the two buildings will offer 235 patient beds.

The steel frame building is built on a drilled pier foundation over highly expansive soils. The light brick and stone exterior skin mirrors the "hill country" style.

### Key Facts

**Location:** Waco

**Start/Completion Dates:** December 2006/June 2009

**Owner:** Hillcrest Health Systems, Waco

**General Contractor:** Robins & Morton, Birmingham, Ala.

**Architect:** HDR, Dallas

A proposed water feature begins in the outdoor dining area as a fountain and continues as a stream to a pond near the main entrance. The medical center lobby features terrazzo stone and brick with two fireplaces.



## The Domain

TEXAS TOP PROJECTS

COST: \$105 MILLION



**In an attempt to clear the way** for construction but still retain the feel of a well-established development, The Domain project team preserved and re-planted 18 live oak trees located on the site of the future master-planned urban village.

The process to move the trees – some with root balls as large as 33 ft by 29 ft – involved boring steel pipes under the trees in a grid pattern. The pipes were then chained and hoisted with cranes to lift the trees onto a flatbed trailer for transport to an on-site nursery. There they stayed for more than a year while construction continued. As the project progressed, the trees were replanted.

The largest oak, which weighed in at

### Key Facts

**Location:** Austin

**Start/Completion Dates:** February 2006/March 2007

**Owner:** Simon Property Group, Indianapolis, Ind.

**General Contractor/Construction Manager:** The Beck Group, Austin

**Architect:** JPRA, Detroit, Mich.

210,000 lbs., was estimated to be 100 years old.

The first phase of the lifestyle center includes 70,000 sq ft of retail and restaurant space; 40,000 sq ft of which was built by Beck. Beck's scope of work also includes two parking garages totaling 800,000 sq ft.



## H P's New Site Four Data Center

TEXAS TOP PROJECTS

COST: \$100 MILLION



HP's worldwide consolidation effort to combine all their storage facilities into larger structures. Other new data storage facilities are located in Austin and Atlanta.

The single-story facility features 25,000 sq ft of floor space for computers. A mechanical yard holds 16 generators providing 32 megawatts of emergency electrical power. The poured-in-place concrete structure features exterior precast cladding, and the entryway is a hurricane-resistant full glass curtainwall. The entire building is designed to be completely self-sufficient in the event of a catastrophe.

Despite experiencing 60 days of rain, the project has remained on schedule. The general contractor has negotiated contracts with its major subs, allowing for consider-

### Key Facts

**Location:** Houston

**Start/Completion Dates:** September 2006/July 2007

**Owner:** Hewlett Packard, Palo Alto, Calif..

**General Contractor:** Miner-Dederick Construction LLP, Houston

**Engineer:** Burns Delatte and McCoy Inc., Houston

able preplanning and coordination.

Many of the project's components – particularly precast, electrical and piping – were pre-fabricated off-site and delivered to the jobsite ready to install, saving considerable time.

**The new Hewlett-Packard Site Four** Data Center is a 250,000-sq-ft building on six acres designed solely for data storage. The single tier-three data facility is part of



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## Children's Medical Center, Tower IIIB

TEXAS TOP PROJECTS

COST: \$94 MILLION



**The Children's Medical Center** Tower IIIB project is being built by a joint venture between Balfour Beatty Construction and Pegasus Texas Construction. The 450,000-sq-ft tower expansion provides 75 additional pediatric ICU beds. Tower IIIB also adds new areas for surgical recovery, pharmacy, admitting, food services and a new family center. Tower IIIB is the new front door for Children's Dallas campus. A vehicular and pedestrian bridge connects the front entrance to an adjacent parking garage, creating a gateway into the medical center's campus and the healthcare district of Dallas.

Tower IIIB also includes renovation work to 2,600 sq ft of the existing central

### Key Facts

**Location:** Dallas

**Start/Completion Dates:** March 2006/  
August 2008

**Owner:** Children's Medical Center, Dallas

**General Contractor:** Balfour Beatty  
Construction, Dallas

**Architect:** FKP Architects Inc., Dallas

utility plant. The renovations include removing five chillers, four cooling towers, one air cooled chiller, and all associated piping. In their place, two new boilers will be installed with associated piping. In addition, Balfour Beatty Construction relocated the main oxygen feed for the hospital.

Formerly Centex, the general contractor was acquired by Balfour Beatty, an international engineering and construction services firm, in March 2007.



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## The Sapphire

TEXAS TOP PROJECTS

COST: \$91 MILLION



**Life's a beach** for The Sapphire project team.

Crews have had to battle little more than strong coastal winds during construction of this two-tower condominium project on South Padre Island. The towers feature 216 units, and 14 bungalows run perpendicular to the towers in a three-story structure.

Amenities include a 300-ft long swimming pool with outdoor bar, a full spa and fitness center, team activity room, media room, wine room and catering area.

Crews are using cast-in-place tunnel form concrete construction rather than a conventional forming system. The tunnel forms – which allow contractors to pour slabs and walls at the same time – have

### Key Facts

**Location:** South Padre Island

**Start/Completion Dates:** July 2006/July  
2008

**Owner:** Sapphire AU, LP, Houston

**General Contractor:** G.T. Leach Builders,  
Houston

**Architect:** Ziegler Cooper Architects,  
Houston

saved considerable time and money.

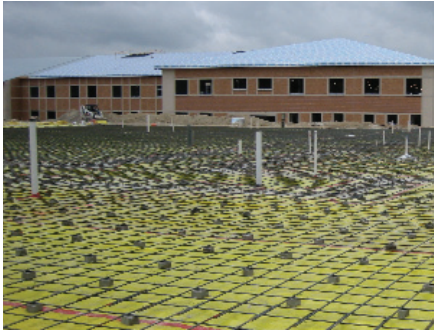
Originally designed as a concrete frame building, The Sapphire was re-engineered during the design phase to fit the tunnel form system, says Todd Fletcher, G.T. Leach project manager. Despite the cost of a redesign, the efficiency of the new building system still trimmed the overall project cost.



## Charlie Rouse High School - Leander ISD's #4 High School

TEXAS TOP PROJECTS

COST: \$76.8 MILLION



Work at the 120-acre site of the new Charlie Rouse High School includes construction of 406,600 sq ft of buildings and all sitework utilities, paving and landscaping.

The administration/classroom building is a 173,136-sq-ft, two-story structure featuring tilt wall construction and a

structural steel frame, and the science building is a one-story, 26,330-sq-ft building. The athletics facility is a one-story, 103,992-sq-ft building with multiple roof levels. It houses three gymnasiums (the competition gym seats 1,800), wrestling room, locker rooms, weight rooms, sports medicine facilities and coaches' offices. A fourth building includes the kitchen and cafeteria, band hall/drama/fine arts and vocational areas. Its auditorium seats 400. The structure is also a one-story building with multiple roof levels.

All four buildings utilize site-cast insulated sandwich tilt wall panels on the exterior. A thin-brick masonry veneer is cast into the outer layer of the panel and sand-

### Key Facts

**Location:** Leander

**Start/Completion Dates:** July 2006/Spring 2008

**Owner:** Leander ISD, Leander

**General Contractor:** American Constructors, Austin

**Architect:** Fields and Associates, Austin

blasted, giving the appearance of a masonry finish. Since the panels are insulated, there is no need for furred stud and sheetrock walls on the interior of the panels. The interior surface is painted.

Athletics areas include three practice fields, baseball and softball fields, and a football stadium with artificial turf and an eight-lane running track.



## Texas A&M University Interdisciplinary Life Science Building

TEXAS TOP PROJECTS

COST: \$75 MILLION



As the first sustainable building on the Texas A&M campus, the Interdisciplinary Life Science Building will redefine the energy and performance standards for campus research facilities and will serve as the sustainable benchmark for the university. Specific strategies include wind modeling for exhaust fan energy op-

timization, air stream energy recovery systems, use of sustainable construction materials and aggressive daylighting integration.

The three-story, 239,810-sq-ft facility includes 95,000 sq ft of modular laboratories and research offices to support chemical, biological and computational work. Laboratory and lab support facilities will utilize modular casework to permit reconfiguration based on evolving research directions.

The project is seeking a LEED 2.2 Silver designation from the U.S. Green Building Council. The building design required the reevaluation of University laboratory standards for fume hood performance and design, central plant de-

### Key Facts

**Location:** College Station

**Start/Completion Dates:** June 2006/August 2008

**Owner:** Texas A&M University, College Station

**General Contractor:** JE Dunn Construction, Houston

**Architect:** Perkins + Will, Houston

sign, process water reclamation, a crawl space to accommodate thousands of feet of mechanical piping, and the use of daylighting in a laboratory setting, among other things.

The project is being designed and constructed utilizing the fast-track, construction manager at-risk methodology.