



## Today's High Schools

The design and construction of today's high schools have evolved with the goal of providing our children with the necessary resources to continue their education beyond high school and pursue successful careers. Many school districts are building new facilities or making significant renovations to implement creative, fresh and innovative educational concepts that will enhance learning opportunities for the students. This issue highlights two new high schools that will be completed by the Fall 2010 semester. Both schools were designed using the most advanced learning concepts, exceeding Texas Educational Code requirements and incorporating strict quality standards and defined budgets.



### Cedar Ridge High School Round Rock, Texas

Round Rock Independent School District (RRISD) has already begun occupying Cedar Ridge, which is their fifth new high school. Cedar Ridge, located on Gattis School Road, is the culmination of over four years of community meetings, planning, programming, design and construction. The result is a state-of-the-art 375,000-square-foot learning center with supporting buildings, athletic facilities and fields, constructed on a 90-acre campus.

At the beginning of the process, several meetings were held, involving all stakeholders, to master plan, design and build a facility that supported the "Academy" learning model utilized by RRISD.



*Cedar Ridge High School Front Entrance*

With this concept, specific areas of learning (such as business, technology, economics, fine arts, etc.) are centered around specific areas or wings of the school. These academic centers include traditional classroom spaces, flexible classroom spaces with folding partitions, integrated media systems, library support, study areas and assembly space for group learning and interaction.

The facility was constructed with four primary wings, each of which supports one of the core academies. This arrangement provides a school at which dedicated teachers have the best resources available to instruct, mentor, coach and inspire young students.



*Cedar Ridge High School Classroom Wing*

### Some unique features of this high school include:

- **Four Academic Centers** – There are four separate wings: International Business and Economics; Science, Technology, Engineering and Mathematics; Professional Studies (Fine Arts, Human Services, \*Law Enforcement, \*Education and Culinary Arts); and Visual and Performing Arts.
- **Dual Purpose Performance/Educational Space** – The stage and back of house area adjacent to the stage/cafeteria is uniquely constructed to serve a dual role as both a performance stage and a "black box" classroom.
- **Athletics** – The school has two artificial turf fields for non-varsity and varsity football practice, which eliminated the need for two additional natural grass practice fields.
- **Integrated Media system** – All rooms have a system capable of displaying an array of media (internet, DVD, television and audio) from any number of sources. This system links each classroom together and provides the capability to simultaneously broadcast the same signal to multiple campuses. A performance or learning opportunity can also be broadcast internally to every classroom and externally to other campuses.
- **Energy Efficient Systems** – This facility utilizes insulated sitecast concrete walls for the exterior skin. This high mass wall system provides thermal performance that far exceeds that of other wall systems. It also provides a thermal mass cooling effect that helps to reduce heat gain and loss and decrease energy costs. This skin, coupled with the four-pipe water cooled chilled water system and the displacement ventilation used in many of the high ceiling areas, make this facility even more energy efficient.
- **Sustainability** – This school was designed and constructed with the goal of achieving a LEED certification; we anticipate being able to achieve a LEED silver rating.

\*Denotes programs only offered at Cedar Ridge and Round Rock High School.

## Cedar Creek High School - Bastrop, Texas

Cedar Creek High School, Bastrop ISD's second high school, is a 29,000-square-foot facility that is constructed on a 65-acre site. During the planning, programming and design sessions, this facility was carefully planned to provide a state of the art learning environment, while still provid-

ing compatibility with the existing high school curriculum.

To address these goals, Bastrop ISD developed a "Learning Communities" model. This is similar to the "Academy" model but includes some unique components that were critical to the needs of

the community and students. Each of the "Learning Communities" includes traditional classrooms, faculty work and observation areas, expandable classrooms using operable partitions and student study areas.



Cedar Creek High School Front Entrance



Cedar Creek High School Main Corridor

### Some unique features of this high school include:

- Learning Communities – There are two two-story wings; During the school's opening year, the first floor east wing will house the freshman class, and the first floor west wing will house the sophomore class. In future years, the second floor will house the juniors and seniors. In each wing there is a large common area with couches, tables, chairs and an overhead projection system where students can gather to work on projects or be taught in larger groups.
- "Eagles' Nest" – This study area is a circular space constructed over the coffee bar and adjacent to the library. The "Eagles' Nest" is surrounded by windows and overlooks the library and "Main Street" (the main corridor). This area is restricted to seniors only and is only accessed from the 2nd floor senior wing.
- Austin Community College Collaboration – Because the school's facilities are capable of supporting collegiate curriculum, it provides the opportunity to have other institutions utilize the facilities in the evenings and on weekends.
- Wireless Access – All areas of the facility have large bandwidth wireless access, and each student will be provided with either an iPad or laptop computer that will be used as the primary tool for providing information.
- Expansion – The facility has been designed and constructed so an additional classroom wing can easily be added. All utilities and systems have been sized and provided at the proposed expansion location to minimize the cost.
- Energy Efficient Systems – This facility utilizes insulated site cast concrete tiltwall panels for the exterior structure. This high mass wall system provides thermal performance that far exceeds that of other wall systems and also provides a thermal mass cooling effect that helps to reduce heat gain and loss and decrease energy costs. This exterior wall structure, coupled with the four-pipe HVAC system, make this facility even more energy efficient.
- Irrigation – Onsite water wells were drilled to provide water needed to irrigate the landscaped areas and the natural grass athletic fields. Additionally, the condensate water from the HVAC system is collected and utilized to minimize the amount of well water needed.

### 7th Annual Boys and Girls Clubs of Austin Charity Golf Tournament



American Constructors held our 7th Annual Boys and Girls Clubs of Austin Charity Golf Tournament at the Avery Ranch Golf Course on June 11, 2010. We had a full field of golfers, nice weather and held an appreciation dinner and awards ceremony afterward. The highlight of the day was having children from the Burnet Boys and Girls Club, some of whom had never been to a golf course, talk about their backgrounds and assist with the ceremonies.

We would like to thank all of our partners and sponsors for their participation with the event. Even in today's economic times, we were able to meet our fundraising goals.

## AMERICAN CONSTRUCTORS PROJECTions

is published for the friends and team members of American Constructors.

4330 Gaines Ranch Loop  
Suite 230  
Austin, TX 78735  
Phone: 512.328.2026  
Fax: 512.328.2520  
E-mail: [aci@acitexas.com](mailto:aci@acitexas.com)  
[www.acitexas.com](http://www.acitexas.com)