





The new **Collierville High School** consist of a 440,000 square feet main building and 64,000 square feet in Athletic Fieldhouses. The school was designed for 3,000 students. Enrollment was at approximately 2,500 students when design started and is currently at approximately 2,800. The site was an old pecan tree farm located on 150 acres. The new Collierville Hight School is considered one of the largest, if not largest, high schools in the Southeast.









## First Floor



**Second Floor** 



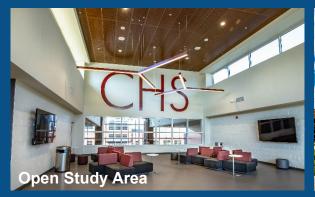


The Town of Collierville knew it had to invest in its school buildings to meet its enrollment demands and to create the premier community to live and work in the Memphis Metro Area. At that time, the current Collierville High School has exceeded its capacity to house its students, and its' campus offer the expansion space required to grow. Also, both Collierville Middle Schools have exceeded their capacity to house their students. After looking at numerous options and scenarios, it was decided that building a new high school and converting the existing high school to a middle school solves both problems.

Community, teacher, student and parent engagement were vital, and surveys and forums took place for all voices to be heard. After gathering feedback, the team continued to move forward with the design and elements fo<u>r the new high school.</u>

Collierville Schools wanted the new high school to be a model for the future of public education. Every design decision was purposeful, with student, teacher and faculty experiences driving the process. There are 107 regular classrooms, 18 vocational classrooms, eight science labs, four computer labs and four music classrooms. In addition to the traditional classrooms, students have access to a culinary arts training kitchen, STEM labs, a welding studio, auto mechanic shop, and other specialty learning spaces. The cafeteria and the auditorium both seats 1,000. There is also a complex for sports facilities that includes a turf football field, gymnasium, and field house.















**DESIGN:** The design team strived not only to create a school that gave the students diverse types of learning environments but to also give them spaces that were uniquely Collierville. Many elements were customized specifically for the school and for this space. Custom signage incorporating the dragon logo are on every door, custom wood floor staining in the varsity gymnasium representing dragon scales were used in the three-point lane, and custom light fixtures were used in the STEM area, Library and Cafeteria.

Natural light and bright colors are instrumental in learning and are incorporated throughout the campus. Every classroom has large exterior windows with shades that control the light and all corridors are bookended with glass that disperses natural light throughout. Color is also infused throughout all the spaces in the ceilings, floors, walls, furniture and graphics. Custom designed carpet, paint, luxury vinyl tile, lockers, chairs and many other elements were made with the Collierville High school colors.

The main academic building and associated athletic facilities are constructed of long-lasting and durable brick and stone masonry veneer. Other materials include metal panel and trims, storefront and curtainwall glazing, as well as EIFS at high roof areas. The main corridors have large expanses of glazing at their ends and along the halls to disperse natural light throughout.







**SAFETY:** Collierville took the safety of their students and staff very seriously and this was a major factor during the design and construction process. Security offices were placed strategically throughout the buildings with a main hub office in the center of the academic wings for visibility and access to all areas of the school. Security cameras were used throughout the campus and are monitored by these offices.

A bi-directional antenna system was installed throughout the building to ensure radio transmission for all Town of Collierville first responders (Police, Fire, Ambulance, etc.) would be at optimal levels whether inside the building or outside the building.

The school was designed with minimal points of entry with access controls on all exterior doors. After school has begun, access is limited to the main entrances only which are controlled by staff. The classrooms have special intruder locks which allows teachers to secure their classrooms during a crisis situation. After school has begun, access is limited to main entrances only.



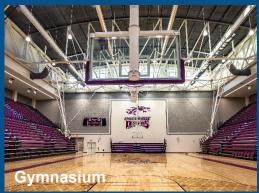












Community Impact: One Town One School – Everyone a Dragon. This was the motto used during the campaign for building the school. A connection to the community was extremely important to Collierville. This was to be a school that was built for the community. All of the large spaces throughout were designed with this in mind. A community room that seats 150 was created for community meetings, board meetings, lectures, and distance learning. Local groups can also host events in the 1,000-seat auditorium. The school also teamed up with community leaders and business to help shape their vocational programs. They worked together to create the programs, design the spaces, and procure the equipment that will help the students graduate with the training and knowledge to enter the local workforce.

Collierville also wanted the school itself to pay homage to the original Collierville High School. The original high school gym had an iconic barrel vault roof that the design team used for inspiration for the design of both the varsity gymnasium and the indoor training facility. The varsity gymnasium is constructed with curved barrel vault trusses 23' high. The indoor training facility is a pre-engineered metal building with a custom designed roof to mimic the barrel vault. These two are connected by the dragon walk which is a hardscape designed for tailgating and events. The walk features commemorative bricks that honor students, alumnae and community businesses and leaders.







**ENVIRONMENTAL LEADERSHIP**: Although LEED was not a requirement, energy and environmentally conscious design was important to the entire team. LED lights were used throughout as well as a dimmable lighting package with occupancy sensors.

Specific HVAC units were designed and installed to recover heat from the building exhaust systems, which was then used to pre-treat fresh air introduced into the building. Classroom air conditioning units were high efficiency air conditioning units (17 SEER) type with 2-stage compressors, which provide greater efficiency for maximum energy savings.

The roof system is composed of R-30 insulation, with a white roof for ultraviolet reflection. This system decreases the mechanical loads on the building to save energy. White roofs also help reduce heat island effect.



# **Descriptive Data**



## SIZE OF SITE & AREA OF BUILDING

- 156 acres
- Overall square footage: 513,534 sq. ft.



### STUDENT CAPACITY

- 3,000 students (Student expansion potential up to 3,500 students)



#### COST PER STUDENT & SPACE PER STUDENT

- \$171.2 sq. ft. per student
- 165 sq. ft. of space per student (145 sq. ft. per student, taking into account the 3,500 student number)



## TOTAL COST OF CONSTRUCTION & COST

- Total cost of construction: \$108,415,000
- Cost per square foot: \$211



## Identification slide

#### NAME & LOCATION

- The new Collierville High School
- 11605 E Shelby Dr., Collierville, TN 38017

#### **OWNER**

- Collierville Schools
- Dr. Gary Lilly, Superintendent
- Thomas Dougherty, Owner's Representative

#### **DESIGN FIRMS**

- Renaissance Group, Inc., Architect
- Fleming Architects, Architect
- Renaissance Group, Inc., Interior Design

#### LANDSCAPE ARCHITECT

- Integrated Land Solutions

#### **ENGINEERS**

- Civil Engineering: Renaissance Group, Inc.
- Structural Engineering: Chad Stewart & Associates
- Mechanical Engineering: Barham/Cain/Mynatt
- Electrical Engineering: DePouw Engineering
- Code: Code Solutions Group
- Technical: Memphis Audio
- Kitchen: Fisher and Associates

#### Builders

- Flintco
- Linkous Construction

#### **PHOTOGRAPHER**

- Hayes Laughlin



