East Hamilton Middle School
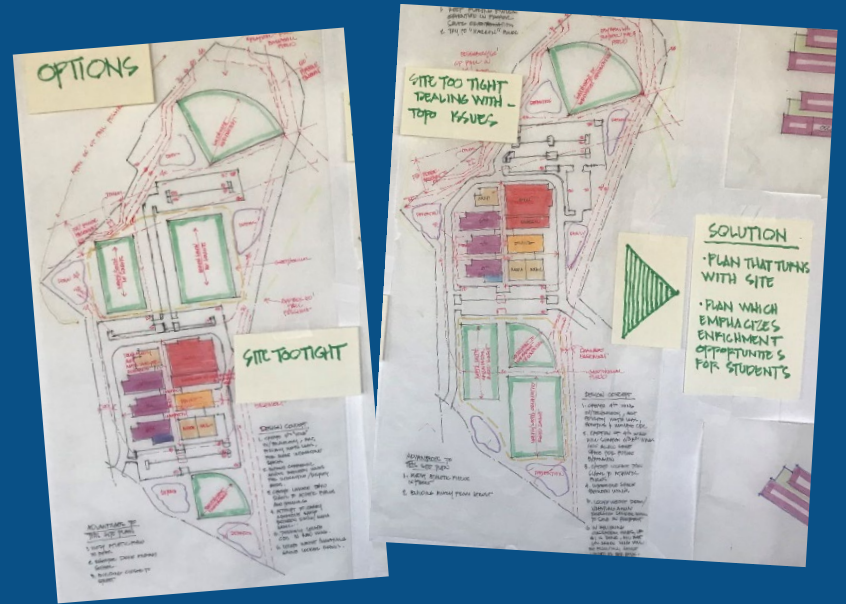
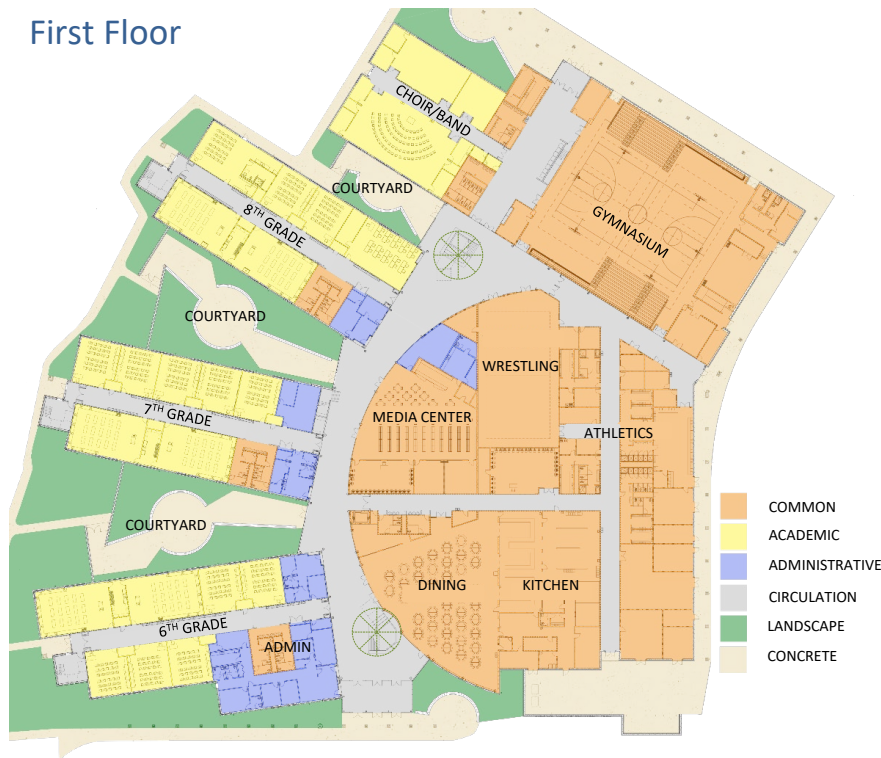Site Plan

Community Environment:

Situated in a residential area in Apison, Tennessee, East Hamilton Middle School was initially designed to help alleviate overcrowding at a nearby middle / high school. The site provided both challenges and opportunities for the design team to complement the natural surroundings as well as the adjacent neighborhoods.

Bound by two creeks on the east and west, divided by a utility easement and steeply contoured, this narrow property allowed a natural and safe access from bus and vehicular loading zones. These access routes and walkways (both onsite as well as from the local community) also created a safe passage between the athletics fields and the educational building, allowing the school to achieve a secure setting for the academics.

The configuration of the building was inspired by the natural contour of the site. The building is organized around a two-level curvilinear circulation spine with the two-story classroom wings organized by grade level. Splayed courtyards between the classroom wings provide secure outdoor areas for collaboration of core academics, arts and sciences exploration. These courtyards also bring daylight into the central core of the building. promoting a healthy learning environment.

Second Floor

First Floor

The open, central core allows students to connect with the programs, staff and students (both physically and visually) to the shared, high bay media center and cafeteria. Anchored at the South (main entry) is the administration offices where students may quickly and securely check in. A gymnasium at the North end of the connection is designed to function independently of the academic wings. And locker rooms and mechanical make up the remaining east side of the building with staff and loading access only.

Learning Environment:

The main objective for the 6th-8th grades was to develop safe, positive and nurturing environments to encourage the pursuit of academic excellence.
To achieve this, we incorporated secure, yet collaborative, transparent and engaging spaces.
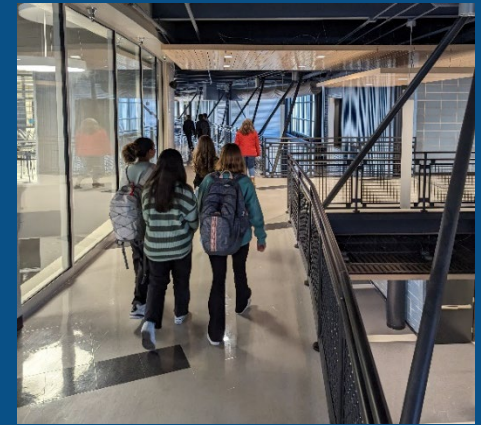

The school has two main lobbies and entrances with a circular clerestory above a monumental staircase. The clerestory is supported by a steel tube structure designed to appear tree like while representing life, knowledge, and growth.

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Classrooms are designed for flexibility allowing teachers and students to adapt to the ever-changing learning environment. The student is provided options and settings that best suits their learning style.

The STEM lab and Art studio are visible to and from the media and cafeteria areas, so all students can visually relate to activity and learning opportunities.

Surfaces and finishes are designed to be cheerful and inviting with various types of integrated technology available to all students and teachers.

Bright, yet adjustable lighting and controls are designed for flexibility and to save energy.

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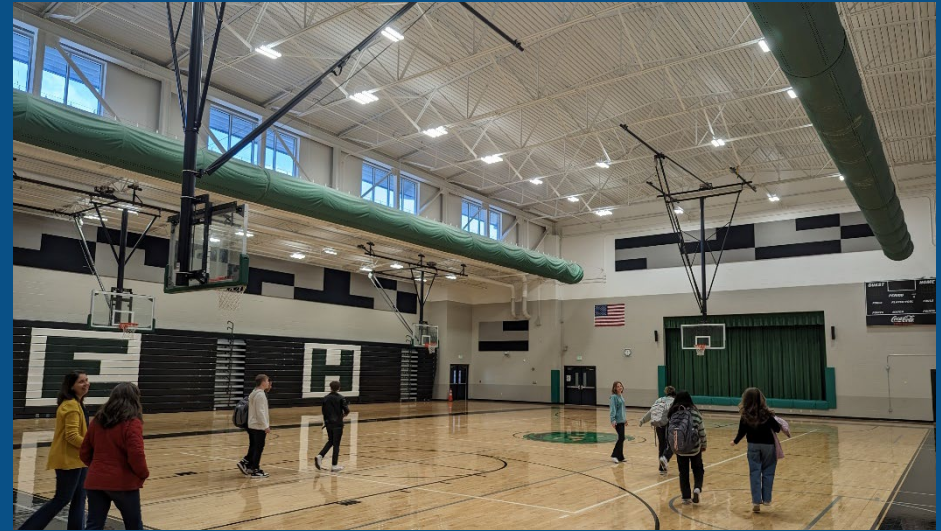**Tennessee Chapter**

Physical Environment:

The radiating floor plan is an innovative space that encourages students to explore and engage with their surroundings. The 2-story atrium with second-floor bridges and balconies creates a social and interactive environment that exposes students to different types of art, media, and other social spaces. By seeing the exposed structures, mechanical and electrical systems, students can develop a better understanding of the built environment. The many high bay window walls not only provide a sense of freedom to explore and observe but also introduce daylight far into the interior spaces allowing an interconnectivity between students and activities.

The curvilinear spine is a key architectural element connecting the north entrance to the south gymnasium providing openness and transparency to media, cafeteria, and classrooms on one side while connecting to 6th, 7th, and 8th grade education wings and exterior court yards to the other side.

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The building was designed with the student's and staff's safety and security in mind, while creating engaging spaces to enhance the learning experience.

Programming also considered the building dynamics, energy efficiency, cost, and material durability.

The building design incorporates sustainable practices and elements in order to reduce energy demands and improve the well-being of occupants. Daylighting an passive shading is utilized to reduce energy and provide a pleasant environment. Geothermal systems are used to harness the natural heating and cooling of the site. The building massing captures the sun's natural energy. Light colored roofing materials are used to reduce the heating loads.

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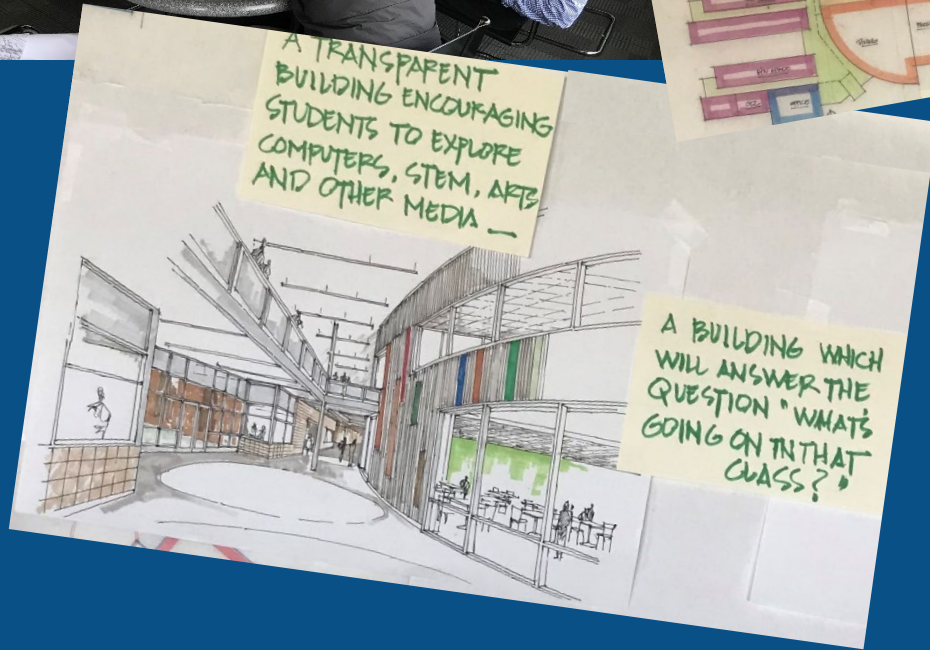Enhancing the Educational Experience
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Planning Process:

The design team began the project by working with all stakeholders to develop the program and spatial allocations. Community and neighborhood meetings were held regularly to provide progress updates and receive input.

BUILDING –
• RELATIONSHIP OF SPACES
• INTERACTION OPPORTUNITIES
• CENTRAL BUILDING FOCUS
• RELATIONSHIP TO SITE

These plans and aspirations are tested to assure seamless integration of the design with the site, community, and natural surroundings.

A TRANSPARENT BUILDING ENCOURAGING STUDENTS TO EXPLORE COMPUTERS, STEM, ARTS, AND OTHER MEDIA —

A BUILDING WHICH WILL ANSWER THE QUESTION "WHAT'S GOING ON IN THAT CLASS?"

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Descriptive Data:

Size of Site: 33-acres
Student Capacity: 1,200
Area of Building: 175,364 SF
Total Project Cost: $42,395,000
Cost per Square Feet: $24.75
Cost per Student: $35,329
Space per student: 146 SF

Identification slide

Project Name:
East Hamilton Middle School

Project Location:
3550 Bentwood Cove Drive, Apison, TN

Owner/Client:
Hamilton County Schools
Dr. Justin Robertson – Superintendent

Owner's Representative:
Justin Witt – Facilities Director

Design Firm of Record: MBI Companies Inc.

- Ronny Rahn, AIA – Principal in Charge
- Phil Whitfield, AIA – Project Designer
- Bob Roza – Construction Administrator
- Nick Deal – Structural Engineer
- MBI – Plumbing & Fire Protection
- Campbell & Associates– Mechanical & Electrical
- March Adams & Associates – Civil
- Craig Design Group – Landscape Architecture
- Dennis Ford – Foodservice Consultant
- Roof Design & Consulting Services – Roof & Building Envelope Consultant

General Contractor: Tricon, Inc.
Photographer(s): MBI Companies, Inc.

MBI
ARCHITECTS & ENGINEERS

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