

NEW BIOSCIENCE EDUCATION CENTER

Montgomery College | Germantown, Maryland

CATEGORY

Institutional Architecture

PROJECT SYNOPSIS

Planning and design of the 145,000 SF New Bioscience Education Center (BEC) was undertaken to facilitate a world class biotechnology, biology and chemistry program to attract students, faculty, sponsors and corporate partners from around the world. Located north of the proposed Germantown Biotechnology Business Park, the BEC serves the needs of the thriving biotechnology industry in Montgomery County and further strengthens the State of Maryland's position as a global leader in bioscience and technology education.

KEY DESIGN ASPECTS

Many factors were considered when approaching the concept design for the BEC. At the forefront was the site, particularly its dramatic elevation changes along with its relationship to existing and proposed campus buildings, including the planned Biotechnology Park and a new Student Resource Center (SRC). The completion of the BEC, situated to the southeast of the existing Science and Applied Studies Building (SASB) has created a new student quad that fosters connectivity and a sense of community between the SASB, BEC and the future Student Resource Center. Additionally, the design had to be mindful of the master plan and the new building needed to serve as the anchor to the south end of the campus. The completed BEC facility, with its atrium and projecting roof, creates a welcoming gesture from the parking to the new quad.

TECHNICAL ASPECTS

Recently, the focus on Science, Technology, Engineering and Math (STEM) education has grown significantly, specifically its correlation to students entering the workforce in the critical fields that drive the nation's innovation and competitiveness. The BEC represents a significant investment in STEM education and workforce development in Montgomery County. The three-story building houses both general and specialty laboratory teaching and research space, including classrooms, recitation rooms, wet laboratories, science learning center, detached greenhouse complex, offices to support the biology, biotechnology and chemistry curricula, and Smart Instructor Work Stations. The labs provide students with access to commercial-grade lab equipment and sophisticated devices and follow laboratory protocols used in real world advanced research facilities.

SOCIETAL BENEFITS

The BEC was intended to be both a world class facility and a community resource to the biotech industry in Montgomery County. A distinct Conference Center was integrated into the design to bring students together with potential employers from the surrounding area. The Conference Center can house both small and large events, and allows for breakout areas and catering. The design works to attract students and corporate partners and fosters a growing relationship between the two.

SUSTAINABILITY

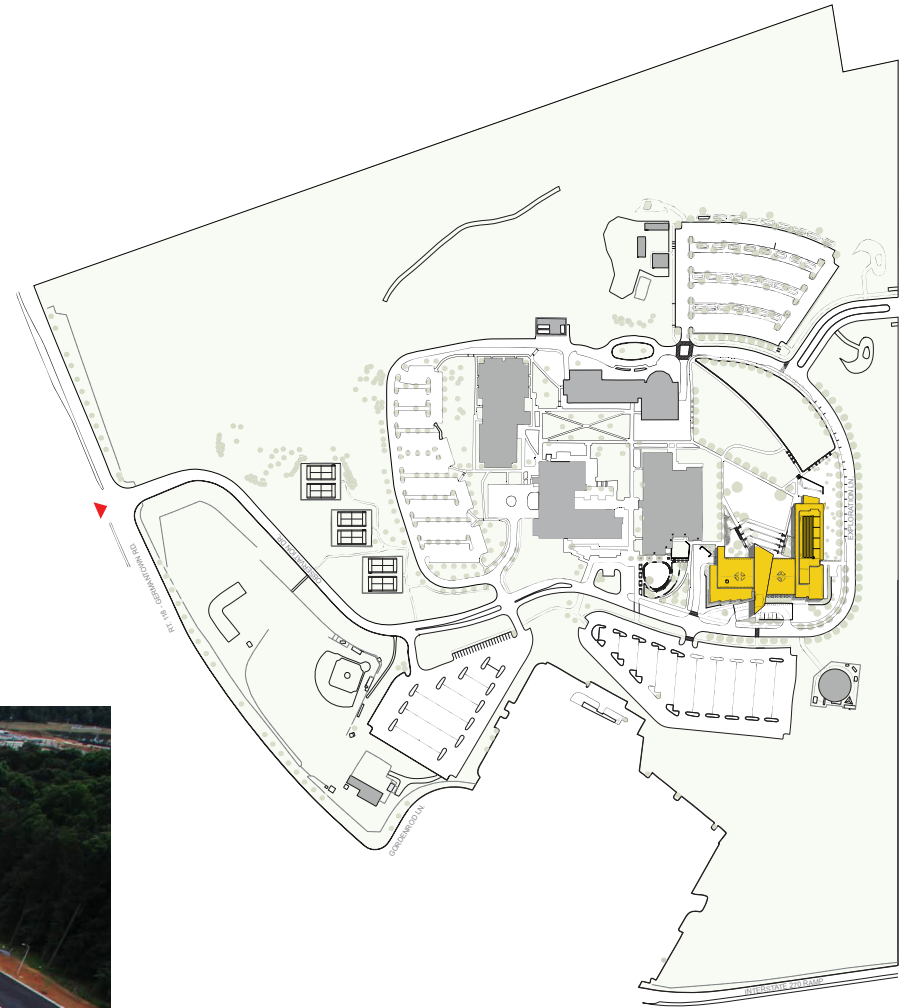
The Center has been designed to achieve LEED Gold certification and features numerous sustainable elements, intended to be used as teaching tools in and of themselves—including roof-mounted wind turbines, photovoltaic solar panel system, and green roof.



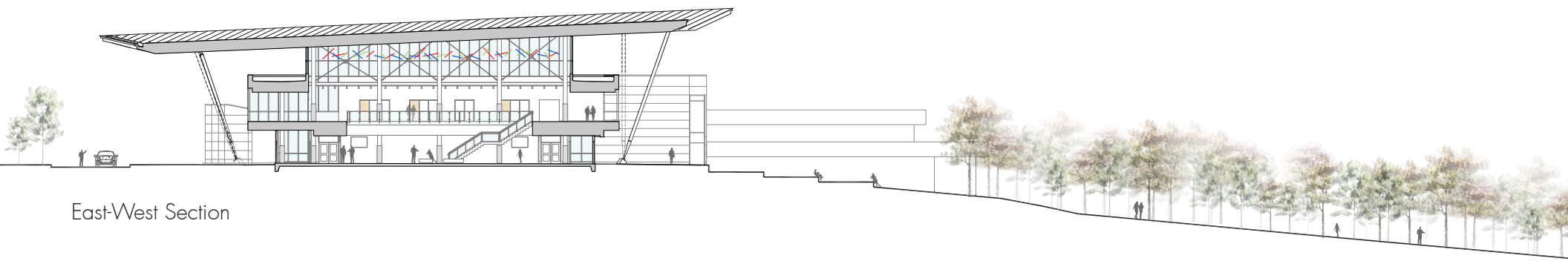
Entrance Canopy

“ This Bioscience Education Center will bolster our region’s reputation as a hub for biotechnology and innovation. By offering a world-class environment to educate and retrain the bioscience workforce, the Center will help keep our community, and our nation, at the cutting edge of research and discovery.”

Congressman Chris Van Hollen, Maryland - 8th District



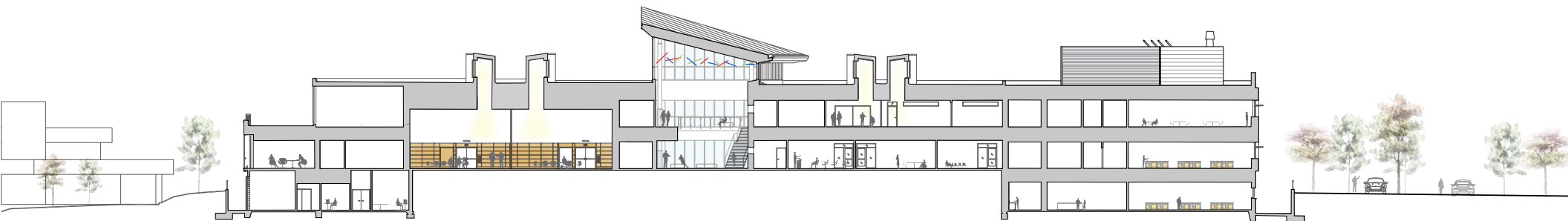
Campus Plan



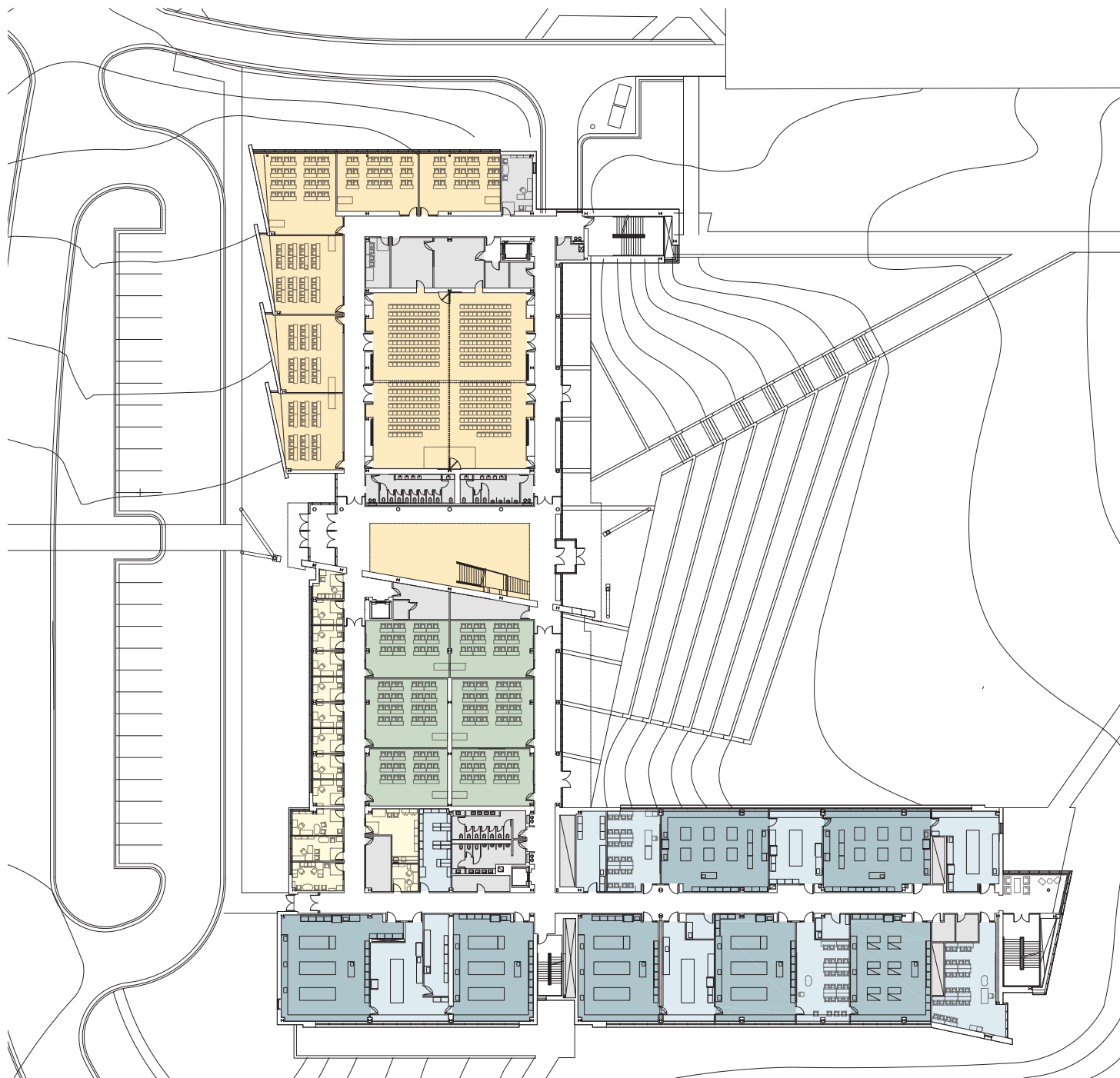
East-West Section



South Elevation

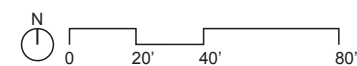


North-South Section



- LAB
- LAB SUPPORT
- CLASSROOMS
- OFFICE
- COMMON
- SERVICE
- CIRCULATION

Entry Level Floor Plan





“ Our Bioscience Education Center will fortify our workforce from lab bench workers to the next generation of scientists. It will fuel our economy, drive new discoveries and open new vistas.”

Dr. DeRionne P. Pollard, President, Montgomery College

Entrance Lobby



Chemistry Laboratory



Study Lounge



Multipurpose Room



Robotics Laboratory



East Elevation at Dusk

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