

Walter P Moore experts Shruti Sharma and Erin Kueht lift the veil on Birmingham, Alabama's newest sports complex.

irmingham-Jefferson Civic Center (BJCC) set out to revitalise their sports, convention, and entertainment complex with the goal to host high-profile events, boost the local economy, and bring the community together.

This ambitious goal included the construction of a brand new, \$175 million, 45,000-seat, multi-purpose venue - known as Protective Stadium and a \$125 million massive renovation of the 19,000-seat Legacy Arena, originally built in the 1970s.

Structural engineering for both the projects was carried out by Walter P Moore in collaboration with sports architecture firm, Populous.

DISTINCTIVE **ARCHITECTURE**

Future home to the **University of** Alabama at Birmingham Blazers football team, the stadium's architectural design celebrates Birmingham's roots in the iron and steel industry.

Walter P Moore collaborated with Populous to feature visually exposed braces, steel columns, trusses, connection plates, and bolts prominently throughout the facility. Sports fans will enjoy the stadium's distinctive architecture highlighted in the 120ft tall x 170ft wide freestanding scoreboard, six light towers that rise 92ft above the concourse, numerous entry canopies, Suite Tower on the home side, pedestrian ramp,



and entire upper grandstand.

Across the complex, the renovation of Legacy Arena. Álabama's largest arena. enhances the overall fan experience; improves circulation; adds concession variety and restrooms; upgrades seating options and technology; and creates a distinctive presence for the facility through activation of the building entries and exterior façade.

The brand-new grand entrance with two new premium seating levels carved out of the existing precast bowl overlooks an impressive column-free lobby space that lets natural light into the previously fully enclosed building.

BUILDING THROUGH CHALLENGES

The Protective Stadium site topography varies 65ft in elevation across the site, so Walter P Moore and Populous teamed up to utilise the site topology to its maximum potential—supporting it on soil where the natural grade was high and stacking floors under an elevated concourse where the natural grade was low.

When new favourable soil testing came in during construction, Walter P Moore quickly redesigned the east concourse structural supports to be soil-supported, saving the project three months in construction schedule and more than half a million dollars.

"Partners such as Walter P Moore and Populous helped the BJCC Authority deliver a project in Protective Stadium that visually identifies with Birmingham's history while maximising the opportunity the site topography presented.

Walter P Moore also delivered in creatively maximising the opportunities presented in modernising a mid-70s arena with features and amenities today's consumers of sports and entertainment expect," says Tad Snider, Executive Director and CEO of the BJCC Authority.

GLOBAL MAP

Legacy Arena is scheduled to complete its revitalisation in December 2021 and has already attracted high level performances and allowed the Birmingham Squadron

- the city's new NBA G-League team
- to play in the arena an entire year earlier than previously planned.

Scheduled to open in October 2021 with overwhelming support from the public and private entities, Protective Stadium is well on its way to host 3.600 elite athletes from over 100 countries in the World Games 2022 and fulfilling BJCC's aspiration to place Birmingham on the global map.



EXPERTISE OF EPIC PROPORTIONS

EXPECT THE IMPOSSIBLE



Comprehensive Sports Venue Life Cycle Services including Structural Engineering, Diagnostics, Enclosure Engineering, Parking and Traffic Consulting **Bart Miller**, PE Sports Market Leader

Chris Pinto, PE

Sports Venue Diagnostics Leader