Franklin Field's new triple threat
Mark Alan Hughes, Philadelphia Daily News

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When John Heisman coached football at Franklin Field in the 1920s (yes, the namesake of the Heisman Trophy played and coached at Penn), it was a single-tier stadium.

By 1960, when the Eagles' Chuck Bednarik stopped the Packers' Jim Taylor in the waning moments of the NFL championship game and sat on him till the clock ran, preserving a 17-13 victory, it had been rebuilt as the nation's first double-tier stadium.

Next season, the arena will have another tier, but it'll be underground, a creative reuse of ancient assets that's a key challenge for our historic crumbling city.

Whether it's a 100-year-old rowhouse, 80-year-old school or 50-year-old warehouse, most Philadelphians face the "blessing in disguise" of fitting tomorrow's uses into yesterday's buildings.

With prominent siting along rail lines and the interstate, Franklin Field is an iconic gateway to Philadelphia. Along with the sacred ground of the Palestra, the two buildings form a kind of acropolis of sport rising above the river. The ambitious new Penn Park along the west bank of the Schuylkill will frame that view in powerful new ways.

That's all great, but old buildings can create challenges for institutions that must live in the next century and not just celebrate the last. For example, where does a modern weight-training facility go in a building constructed on the principles of a Roman aqueduct?

Take a walk along the south side of Franklin Field, and you can experience the power of the receding and interlocking arches that turn little bricks into an enormous structure. Working with columns and beams added with the second tier in 1922, those arches hold up the 50,000 seats that horseshoe around the track and field.

The arches also create fabulous spaces underneath them, which is where the word arcade comes from. For decades, that arcade has been treated as a leftover: a place to wait in line for tickets or, more often, to park your car or maintenance truck.

But as Penn moves east toward Center City, Franklin Field will become a campus center, not the ragged edge. As University City and Center City finally knit, thousands will walk along the Franklin Field arches.

As often happens, solutions came from respecting the power of the original building. Within those arches, Penn is building the $27 million George A. Weiss Pavilion, donated
by the alumnus known for his financing of the college educations of public-school kids from West Philadelphia.

The pavilion will house a new varsity athletes' training facility excavated from around the foundations of the arches, new retail at ground level for the sports venues and a fitness center for students and staff occupying a new mezzanine level with views of Center City.

As befits the Roman-inspired space, archaeology by the architects led to the discovery of usable space below grade. Crawford Architects of Kansas City, Mo. (best known for Baltimore's Camden Yards and the expansion of Boston's Fenway) used the archives, consultation with the water and streets departments and excavation to discover 28 feet of loose fill that could be removed, doubling the amount of space for the project.

It takes guts to get things built, and one of the gutsiest things I've seen on a site was executed by the Hunter Roberts construction company.

Concrete columns have stabilizing elements called pile caps, masses of concrete at the bottom of the columns. Four of these caps interfered with the design of the new lower-level weight room. The solution? Rebuild them lower and out of the way.

But that meant cutting out and removing the bottoms of the four columns to rebuild them. How to support 50,000 seats and billions of bricks while each column was cut and rebuilt? Take out one column and the stadium could collapse like a wave traveling through a rope.

So the team designed a temporary steel brace that would transfer the column's load to the two adjacent columns. For the time each column was being cut and rebuilt, that steel had to hold the load in place, with no more movement than the thickness of a piece of paper.

Reusing old buildings takes creativity, daring and sometimes brings unexpected bills. But you get what you pay for. Being able to pump iron in the only place where Vince Lombardi ever lost a playoff game is worth the trouble.

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