The Situation

In 2017 the Minnesota Vikings football franchise began the construction of new headquarters and practice facility—the Twin City Orthopedic (TCO) Performance Center—that will eventually include a stadium and five practice fields. For a team renowned to have one of the strongest defenses in the NFL, it became clear that the organization would need the support of an equally strong retaining wall system optimizing the mammoth site for the new facility.

“This project is on a massive site that features an extensive amount of grade change,” said Don Armstrong, PE, sales engineer for Belgard® Commercial, supplier of the project’s retaining wall system. “When you combine the building itself along with the stadium and the five practice fields, we knew it would require a number of significant retaining walls in order to provide stability for the proposed structures.”

The Solution

The project was initially planned with wetcast, precast modular wall units, but the design team discovered Belgard’s Mega-Tandem Mass Segmental Retaining Wall (MSRW) system could provide the stability they needed with an added benefit, a much more attractive look. With the appearance of chiseled stone, Mega-Tandem is an innovative, versatile system that can be used to create attractive, curved or straight retaining and freestanding walls. The system also offers long-term durability with compressive strengths in excess of 8,500 psi, making it an ideal system for the harsh freeze/thaw environment retaining walls are subjected to during Minnesota winters. “The landscape architect loved the look, and that’s really what helped sell the system,” said Armstrong. “The natural stone texture of the face, the color patterns—there’s nothing else like it on the market.”

The Results

Construction of the retaining wall systems for the TCO Performance Center site was completed in the spring of 2018. Ultimately, the 40-acre campus will include administrative offices, an outdoor stadium with seating capacity for 6,000, five outdoor practice fields, outdoor training areas, a team auditorium, a media center, a locker room, weight and equipment facilities,
cardiovascular speed rooms, a hydrotherapy room, and post-workout recovery rooms. The Performance Center facility is the first phase in an overall 200-acre planned development that is expected to include an on-site orthopedics center, offices, retail, residential, hospitality and a conference center for the Vikings headquarters as a development anchor. Construction has already begun on the next phase, Twin City Orthopedics, an 88,000-square-foot full-service on-site orthopedics center.

Introduced in 2013 and still a relatively new product in the Minnesota market, this was the first Mega-Tandem™ installation for the hardscape installation contractor. The Belgard® Commercial team provided technical support to both help with the design and facilitate a smooth installation.

"Not unlike many other products, there is a little bit of a learning curve with the Mega-Tandem,” stated project installer, Matt Barron, owner of Hardscape Construction. “The Belgard® Commercial team was there the first few days with some installation direction, but I have an experienced crew who got the hang of it quickly and each phase became easier and faster. It’s a great product that looks awesome and will perform well withstanding the extreme winters we have here in Minnesota."

Matt Barron —
Owner, Hardscape Construction

About Belgard® Commercial Hardscapes
Belgard Commercial is part of the Oldcastle® Architectural Group, the largest concrete products manufacturer in North America. With over 180 locations and a company culture characterized by a commitment to customer satisfaction, Oldcastle adheres to a level of service and consistency that no other supplier can match. Our combination of local market presence and national capabilities allows us to meet and exceed the demanding needs of an ever-changing industry.