HISTORY
Since 1987, the St. Cloud Police Department shared a building with the Stearns County Sheriff’s Department, and as both departments expanded, closets and storage rooms were turned into work stations and office space. At one point, six officers were working in a space designed for just one.

The residents of St. Cloud approved funding for a brand-new $27 million police headquarters in 2006. Located two blocks from its previous home, the new police station would incorporate a contemporary work environment and modern operations to meet staff and community expectations. The three-story, 100,000 square-foot building was designed to combine administration, investigations, patrol, training and community meeting space, evidence and forensic labs, and one level of below-grade parking with capacity for 250 vehicles.

PROBLEM
The building footprint is located on the edge of the town’s commercial center and established residential district, with three of the planned walls tight to the surrounding community and a road way. A challenging design stacked the program vertically and placed 115,000 square feet of parking underground. Planning for below-grade construction with traditional methods drove costs higher than anticipated.

SOLUTION
In 2008, Nucor Skyline presented the project partners with a cost-effective, top-down construction system that allowed for the excavation of a below-grade parking level to complete while the building of the superstructure commenced. The steel sheet pile design maximized the available footprint and parking space, and accelerated completion of the project.

Skyline provided AZ 19-700 steel sheet piles, at 32-foot lengths, that were driven to 20 feet below slab and measured at an ultimate capacity of 44 KLF (kips per linear foot) to create the excavation site.

The project was completed in the winter of 2010 with minimal interruption to the commercial center and an established residential district. The subterranean parking allowed the confluence of the commercial and residential pedestrian patterns in an urban plaza that marks the threshold of the two districts.

PROJECT PARTNERS
Contractors
R.A. Morton & Associates
St. Cloud, Minnesota
Carl Bolander & Sons
Minneapolis, Minnesota

Architects
BKV Group
Minneapolis, Minnesota
GLT Architects
St. Cloud, Minnesota

Engineer
Engineering Partners Intl.
Eagan, Minnesota

PRODUCT
250 tons of AZ 19-700