The Larking Minneapolis, Minnesota





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The Larking redevelopment is transforming the site of a single-story drive-thru bank into a vibrant, high-density destination in the Elliot Park neighborhood of Minneapolis. The mixed-use project will provide street-level retail—including a newly redeveloped, 3,500-square-foot Wells Fargo Bank—with 341 market-rate apartment units occupying the remaining 15 floors and three levels of underground parking.

Ceco Concrete, which provided formwork services for The Larking's adjacent sister site, HQ Apartments, provided the horizontal formwork for the building's post-tensioned (PT) concrete decks. The scope of work included decks, bulkheads and beams.

The building's PT concrete structural design enables maximum spans between columns and thinner slabs, resulting in greater design flexibility in room build-outs. Typical floor plates are 19,000 square feet. Formwork used for this project included the CEFCO truss system, a fast, safe and efficient option that allows the Ceco team to cycle through decks quickly so other trades can begin work sooner. For each level, Ceco placed concrete deck formwork in a two-pour sequence; a new level was placed and finished every eight days. Ceco varied the crew sizes daily to provide on-time results without unproductive downtime. Sharing seasoned crews with other Ceco projects maximized the effectiveness of the CEFCO truss system.

WORKING THROUGH CHALLENGES

The below-grade parking levels are surrounded by a permanent sheet pile retention system, which made stressing the PT slabs below grade challenging. Although this work was not part of Ceco's scope, the Ceco team helped the reinforcing installer coordinate and install the stressing pockets and pour strips. Also, the parking garage design includes helix ramps to enhance the speed of user parking. The monolithic ramp slabs do not naturally have floor openings large enough to hoist formwork equipment from the lower levels to the leading edge of construction—a scenario that is typically needed to efficiently cycle deck formwork. In addition, site logistics restricted the ability to move formwork material externally, outside the footprint of the garage. As a result, the Ceco team created an internal formwork transportation road that allowed workers to cycle equipment through Ceco's shoring, which often was under a fresh concrete pour load, to be reused for the next lift of deck formwork installation. This system design approach minimized crane picks and overcame access challenges, allowing the Ceco team to power through and achieve project goals.

The project was completed on schedule, despite a 10-day delay in construction due to extremely cold winter temperatures. The final pour took place March 2021.

	Project Owner: Kraus-Anderson Development
	General Contractor: Kelleher Construction
0	Construction Manager: Kraus-Anderson Construction Co.
	Designer/Architect: ESG Architects
2	Structural Engineer: Meyer Borgman Johnson
_	Ceco Scope: Deck formwork services
	Ceco Project Manager: Jake Evans
	Ceco Superintendent: Jordan Robelia
	Ceco Engineer: Sebastian Kolpak
	Date Completed: March 2021