

Ballpark Village Block 400 Apartments

One Cardinal Way, St. Louis



STORIES BUILT



2021 Quality Concrete Award winner for outstanding concrete work.

Presented by Concrete Council of St. Louis and ACI Missouri Chapter.

With venues providing direct views into Busch Stadium, Ballpark Village brings the excitement of game days outside the stadium's walls. The mixed-use retail, entertainment, office and residential district, developed in partnership with the St. Louis Cardinals, spans seven city blocks directly adjacent to and fully integrated with the baseball stadium.

Phase 2 of the development included a 30-story residential tower with baseball-themed finishes. Floor-to-ceiling windows show the action on the field. The Level 8 amenity deck features bleacher seating and an infinity pool overlooking center field. Other amenities include ground-level retail space and six levels of parking.

Ceco provided the full concrete frame, which included two-way post-tensioned (PT) flat slabs for parking and residential floors, large transfer girders at Level 8 and a grade beam foundation supported by auger-cast piles. The PT system allowed for thin floor slabs while maintaining the designer's desired floor-to-ceiling heights (nine-plus feet). The tower was planned with constructability design input from Ceco, enabling the team to reuse concrete formwork.

Ceco formwork included aluminum trusses at typical slab levels, Speed Deck for the parking-level slabs, and aluminum shear wall forms and perimeter tables. Third-party formwork included FCI self-climbing core wall forms, Doka Framax, Gates column clamps and round fiberglass column formwork.

The project site was sloped, resulting in foundation construction at numerous elevations and transition retaining walls. Parking levels were placed in three slab pours per level. Apartment levels were typically completed in eight-day cycles. The use of a self-climbing core wall form and concrete placing boom accommodated high-rise construction needs.

COORDINATION WAS KEY

Ceco provided budgetary, constructability and schedule information prior to construction. Drawing from decades of high-rise concrete experience, the Ceco team delivered a safe, quality and timely project while adapting to several challenges. The greatest challenge was the fast-track construction, which resulted in frequent design and drawing changes with little lead time during the project's early stages. Once the design team was able to deliver timely critical information, Ceco's project leadership and construction engineering staff were able to efficiently manage the changes, deploy information effectively to the field and help mitigate their cost and schedule impacts.

Another challenge was the simultaneous construction of the adjacent Ballpark Village Block 100 Garage/Office and Lowes Hotel projects. The massive scale of these projects put a strain on the local construction workforce, local subcontractors and suppliers. The Ceco St. Louis office tapped into Ceco's national network and brought personnel from other offices to aid site management, field leadership and construction engineering efforts.

The building topped out December 2019. Known as One Cardinal Way, it is a dream come true for baseball fans in St. Louis. It is one of only a few high-rises recently built in downtown St. Louis. As part of the Ballpark Village development, the project has made the neighborhood more walkable and livable.

FAST STATS

Project Owner: Cordish Companies

Contractor: Paric Corp.

Designer/Architect: Hord Coplan Macht (HCM)

Structural Engineer: Optimal Engineering Solutions (OES)

Ceco Scope: Complete concrete frame

Ceco Project Manager: Matt Minor

Ceco Superintendent: Daryl Elsenraat

Date Completed: August 2020