

## **Category 12: Best Building Project – General Contractor (\$40-\$70 Million)**

**Contractor: Dohn Construction**

**Project Name: Union on Elizabeth**

The Union on Elizabeth is a mixed-use project located in the Campus West neighborhood of Fort Collins, Colorado. Completed in April of 2020, the Union on Elizabeth consists of 107 student housing apartment units totaling 402 bedrooms and amassing over 400,000 total square feet built around a central six-level precast parking garage. The units themselves are a mix of one, two, three, four and five-bedroom apartments, some being comprised of multiple stories. To complement the living experience, luxury amenities including a rooftop pool, rooftop lounge, outdoor grilling area, fitness center, business center, leasing office, and two storefront retail spaces are also located on site.

Throughout construction of the project, the Union on Elizabeth team successfully conquered a variety of obstacles and special conditions. Set in a heavily-trafficked area near the campus of Colorado State University, the site had virtually no storage, staging, or parking areas, requiring advanced organization and intensive subcontractor scheduling and coordination. Dohn Construction collaborated with the City of Fort Collins to plan and create a dedicated construction delivery zone by closing the north lane of Elizabeth Street while still maintaining consistent traffic flow of cars, bikes and pedestrians, as well as maintaining access to local businesses for the duration of the project. Project Superintendent, Ron Shimpa, attended many local area business meetings to share project updates and to communicate traffic control plans to ensure all details were presented and thoroughly discussed with community and local business members. As a result of Ron's established line of communication between the construction team and the local community, proposed project schedules were rearranged on multiple occasions to accommodate city and university-planned events, minimizing disruption to businesses and residents.

Along with the logistical challenges of delivery, staging, and storage as well as maintaining continuous traffic flow, the Union on Elizabeth also included complex design requirements. With limited access for fire trucks around the perimeter of the building, the fire department required several safety measures typically only seen in high-rise construction including the use of pressurized stairwells, call stations on every level of every stairwell and an

added emergency stairwell escape from the rooftop pool. The fire department also required an on-site fire command center, only the second in Fort Collins to ever be built. Design and construction of the command center required multiple meetings and intense coordination of remote elevator control, building access control, fire alarm systems control and low voltage engineering. The Union on Elizabeth team also worked closely with the local fire department to re-sequence the unit numbers throughout the entire building to better help emergency services efficiently navigate all floors and units. These efforts will decrease response times for medical services in a future emergency response situation.

To account for water run-off and to reduce the burden on the City's stormwater system, a stormwater detention vault was installed in the parking garage. In addition, the Paseo sidewalk that runs through the middle of the site features a permeable paver system with a StormTech water storage system under the pavers. These systems work to retain water in heavy rain events and slowly release the water back to the stormwater system to reduce flash flooding effects. Additionally, in order to maintain the drainage of the Elizabeth Street corridor during construction, the team had to remove and replace a large median in the middle of the roadway. Careful attention was given to the replacement median, which was required to be installed with identical dimensions and elevations as the original.

The most interesting design feature of this project was also the most difficult to coordinate and build: a stainless-steel swimming pool and two hot tubs located on the rooftop deck of the parking garage. Coordination with the pool manufacturer and precast subcontractor began six months in advance, including block outs for piping, sloping and waterproofing for adequate drainage along with protection of the cars below, and maintenance of proper ADA heights and clearances. The stainless-steel pools and spas were constructed off site, disassembled into five pieces, flown by crane to the rooftop, and reassembled in the concrete "bathtub" on the roof. Since the parking garage is surrounded on all sides by apartment units, the pool had to be installed while one side of the garage was still exposed and could be reached by the mobile crane. Months of meetings, models and shop drawings culminated in a triumphant two-hour installation. To the team's great joy (and relief), each section fit perfectly in place.

The relationship between the client and the contractor is critical to any project's success, and that was no different for the Union on Elizabeth. After previously completing the Union on Plum with the same development group, a great owner-contractor relationship was already in

place at the beginning of the Union on Elizabeth project. However, over the course of construction, the original group was purchased by a larger development corporation, and the owner's representatives changed multiple times. The Dohn team made each transition as seamless as possible for the client by scheduling onsite meetings with multiple stakeholders, reviewing previous communications and decisions with incoming managers, all while demonstrating competence and professionalism in every interaction. The Dohn team was proud to continue the excellent working relationship with the new owner's representatives and worked quickly to earn their trust.

The Union on Elizabeth project was efficiently executed through exceptional teamwork and organization. With student move-in not scheduled until August 2020 and project completion scheduled for May 2020, time was not a significant factor in project delivery. However, the Union on Elizabeth team delivered the project on the date promised as well as within the proposed budget. Construction of the building began with the precast parking garage, followed by sequencing the building construction into three phases. At the peak of construction, the team was managing every phase of the project simultaneously. During this time, everything from framing to closeout and pre-punch was being accomplished at once, with three active cranes, nonstop deliveries and over 200 craft professionals on site each day.

The Union on Elizabeth featured state-of-the-art construction innovation and incorporation of new techniques to enhance the building process, the most significant of which was prefabrication of all the framing. The framing subcontractor panelized all of the walls at a shop in Erie, CO and then delivered the wall panels to the site in Fort Collins. This prefabrication resulted in decreased framing durations as compared to traditional stick-framed construction, as well as reduced the risk of accidents or injury in the field.

Dohn Construction leadership believes it is their duty to provide team members, subcontractors, and anyone on Dohn jobsites with a safe work environment. Safety was viewed as an integral part of the Union on Elizabeth project, with weekly toolbox talks and monthly third-party safety inspections. During the last two months of construction, COVID-19 significantly impacted the team's safety protocols with new precautions in place including mandatory face coverings at all times, social distancing on site, and limiting work areas to one crew at a time. The pandemic posed plenty of new challenges for the team to overcome, making

Dohn's established safety plan even more critical so that focus could be placed on implementing the proper changes on site and in the office.

As a large-scale living spaces project, the Union on Elizabeth presented many challenges and opportunities for the project team. All involved were proud to contribute to the local community by revitalizing an underutilized property near the growing Colorado State University campus. This project will not only provide a great place for students to live and learn, but it will also give local businesses more patrons as students move in.

Through successful completion and turnover, the Union on Elizabeth building and construction team received many accolades from the project clients. Dino DiTullio of Westward Development said, "so glad I'm working with you guys on this project. With all that has gone on, it is so nice to be able to just trust that things are getting done right in the field. Your team has done an A+ job on this. Thank you!" City of Fort Collins planner, Jason Holland, commented, "I drive by [the jobsite] a few times a week. Impeccable construction and design work. Dohn and their subs are on it. Really impressed with how this is coming together." Jason also said, "thank you for all the great work your team is doing on this project. The construction quality, management, design and everything out there is looking really, really good. You all are setting the bar and delivering. Thanks for helping make us a better city as we grow up."









