

Carla Madison Recreation Center

Adolfson & Peterson Construction

Keri Burson: kburson@a-p.com; 303-363-7101

10 - Best Building Project – General Contractor \$40 - \$70 Million

Why this project should win an ACE Award and why this project is unique

The Carla Madison Recreation Center is Colorado's first urban recreation facility and the crown jewel of the City of Denver's community recreation program. The challenging and unique four-story design included placing a gymnasium over the pool, and offers an eight-lane pool, a leisure pool for families, a large cardio-weight room, full-size basketball court and diverse programming that promote healthy and active lifestyles. The facility also contains ample community gathering space to support a variety of neighborhood interests.

Located at Colfax Avenue and Josephine Street, the center fulfills the City's long-standing need for a centrally located facility. In addition, the new center serves as yet another catalyst along the Colfax business corridor to help drive economic growth and transform the area into a thriving cultural and residential area.

Other special features include a 30-foot climbing wall affixed to the exterior of the four-story building (the first in Denver and one of the only outdoor climbing walls in the state), an outdoor bouldering area, and a wall-covering piece called the "Circuit," which greets visitors outside the entrance with LED lights that are connected to workout equipment and change colors as the linked machines are used. The building also includes an indoor/outdoor rooftop event space (a late add to the project scope).

The center is named after Carla Madison, a longtime advocate for City Park West and nearby neighborhoods. She served as a council representative for District 8 from 2007 until her death in 2011. A portrait of Madison, designed to showcase her vibrant and bold personality, is in the entryway of the building.

Solutions of Special Projects

While the project faced many challenges, the team focused on uncovering the best solution for each. For example, to allow for future retail space and to keep part of an existing dog

park, the City changed the design to a unique multi-story, stacked configuration – a first for Colorado. The team worked tirelessly with subs, engineers and consultants to perform constructability reviews on the gymnasium floor and weight room that spans over the top of a natatorium. Unable to rely on historical data for pricing and constructability, the team brought creative thinking, research and strong attention to detail during preconstruction and construction.

Once construction was underway, the below-grade pool design resulted in extensive dewatering, complicated by a site contaminated by a former gas station. The soil was highly polluted with Methyl tertiary-butyl ether [MTBE], Uranium and Selenium, all posing health risks if released into water. The project had a full pumping and wastewater treatment system onsite to handle dewatering efforts and provided weekly influent and effluent testing and reporting to the State CDPHE.

The project involved new utility connections for storm, sanitary, gas, water and fiber. Most work was performed at night due to needed road closures in the busy intersection of Colfax and Josephine. The team shored and road-plated these excavations daily and used flash-fill to temporarily cover holes, so the road could be reopened for the morning commute.

Over a year into construction the City secured more financing and added an indoor/outdoor rooftop event space, as well as an outdoor climbing feature. This halted steel construction to allow the structural engineer to re-do calculations and adjust framing members, shear bracing, joist design, etc.

The outdoor climbing feature was further complicated by an engineering error that caused the need to cut open brick on the façade and install heavier anchorage steel. AP overcame these challenges and completed the additions on time.

Excellence in Project Execution and Management/Team Approach

Early design estimates were based on a similar “example” project which presented a cost problem as the design developed into something significantly different. AP worked alongside BRS and the owner to bring the program into budget, and helped with large scope assessments, such as pricing a one-story mezzanine or going vertical, which is what the final design included.

To ensure construction quality, AP built mock-ups of pool deck finishes, exterior envelope finishes, polished concrete floors, sun-shades and anti-graffiti coatings to establish quality expectations early with subs. The team held pre-construction meetings for all major

trades with the designers and various City representatives in attendance to have their voices heard.

The late design additions (rooftop space and climbing wall) caused significant re-design requirements and the need to re-sequence parts of the structure and envelope. This was carefully managed to minimize the schedule impact. AP's team engaged the steel and joist vendors and had them work alongside the structural engineer in weekly work sessions to resolve shop drawing detailing issues and resolving RFIs on the fly. The team visited directly with the out-of-state steel fabricator at their shop and helped facilitate sequencing of our changes to work around their other commitments with minimal impact to this project. Because of this close coordination, they were able to produce and ship steel to AP in a five-week window after submittal approvals that would normally take eight to nine weeks.

The facility was delivered per the contract schedule and within the GMP. This project opened to great fan-fare with over 500 attendees at a lavish ribbon cutting with Denver Mayor Michael Hancock as the keynote speaker. The local news organizations have written numerous articles and TV broadcasts that showcased the inherent beauty this facility provides in what was once a blighted area of historic Colfax Avenue.

Construction Innovations/State-of-the-Art Advancement

The site is a City of Denver case study for site amenities designed around water conservation. Features include a large underground stormwater detention system beneath the adjacent dog park, numerous rain gardens with Xeriscape plantings to minimize water use, and a series of cascading stormwater gardens with plants designed to prevent erosion. Each level has a weir designed to settle out contaminants in a containment area, so by the fourth level the water is nearly clear before being discharged.

As mentioned previously, visitors to the facility are greeted outside the entrance with a noticeable piece of public art, a wall-covering piece called "Circuit." LED lights are connected to equipment in the weight room and will change colors as the linked machine is used. The person operating the equipment can see the results of their efforts while looking at the art display through the window overlooking the art piece, the gold State Capital dome, the Denver City Skyline and the Rocky Mountains to the west. This outstanding user experience is a result of a

high-quality design, devoted construction team and attention to every detail by everyone involved with the project.

Environmental/Safety

Located on a high-traffic intersection along Colfax, as well as near Denver's East High School, the project called for an extra focus on safety and controlling pedestrian access. Clear site signage, carefully placed fencing and daily coordination with subcontractors resulted in no injuries to the public. Additionally, despite nearly 300,000 total hours worked there were no lost time hours on the project.

The facility is targeting LEED Gold certification, with a focus on energy efficient lighting, heating, daylighting, water conservation, natural lighting, use of regional and recycled materials and innovation points for exemplary performance in several of these categories.

Excellence in Client Service and/or Contribution to Community

'With a goal of transforming the area into a thriving cultural district, the project scope expanded to include the complete restoration of a historic, 1930s Terra Cotta entry wall to City Park and DPS East High School, which included fountains, statues, urns, bowls, benches and antique street lighting. The wall was in disrepair, crumbling and heavily covered by graffiti. Our team carefully replaced the two fountain pumping and filtration systems, restored much of the Terra Cotta in place and bought new pieces where needed. Funded through a State Historic Grant and through Denver's Arts and Venues foundation, the projects were run under a single City contract, but accounted for separately.









