

Levitt Pavilion Denver

Category 8: Best Building Project- General Contractor (Under \$10 Million) - Fransen Pittman General Contractors

Nestled a few miles south of downtown Denver with breathtaking views of the city skyline, historic Ruby Hill Park resides. Though in a popular location between urban and outdoor experiences, Ruby Hill Park was used only a few times a year as a legendary sledding hill due to its man-made bowl nature. When completing a Master Plan in 2006, The City of Denver saw the park's potential and began searching for attractions to bring life back to this underutilized and abused park. Playgrounds, mountain bike trails and parks were built as the City awaited the planning for an outdoor venue within the expansive inclines of Ruby Hill Park. Drawn by the desire to create a concert space with a larger purpose, the City of Denver sought out Levitt Foundation. The nonprofit organization Levitt Foundation builds community through music by providing seed funding for outdoor venues to showcase free concerts. Driven by the desire to bring arts and culture to otherwise neglected areas, the 88-acre open air park in Ruby Hill Denver proved to be just the spot for Levitt Foundation and the City of Denver to build their partnership. While attracting Levitt to Denver, the history of the park would also bring challenges that only strong collaboration and dedicated team work could overcome.

When selected as the right CM/GC to deliver this important community service, Fransen Pittman was eager to get started. Difficulties with the permit review delayed the construction start and quickly condensed this eight-month project into six. Originally scheduled to begin the construction of Levitt Pavilion in September of 2016, issues with the fire line delayed the schedule from the start. Excited and eager to begin, Fransen Pittman did everything within our power in the permitting process between Denver Fire and Denver Water to upsize the fire line portion. While waiting for the permitting to be approved, FP ensured that everything else necessary for the construction start was in place so we could hit the ground running as soon as allowed. Extensive constructability reviews, material procurement, environmental policy plans, and updates to subcontractor scheduling continued to occur as we anxiously awaited our approval to start working. Once approved in the last week of December, Fransen Pittman was more than prepared to break ground. However, breaking ground would present more obstacles to the project.

Previously a landfill in the 1950's, Ruby Hill Park is a historically contaminated site. Earning its moniker from the historic ruby red glow of the burning trash, today, asbestos laces the soil among other environmental considerations. Previous projects conducted on this site resulted in environmental difficulties and project tribulations. Aware of this knowledge while in our planning stages, Fransen Pittman and Public Works worked extensively with all project stakeholders including, Denver Parks and Rec, Levitt Foundation, Denver Environmental Health, Colorado Department of Public Health and Environment and Better Denver Bond, to draft a policy plan that would outline how to approach the construction of the site. With each stakeholder's knowledge and experience contributing to the policy plan, FP was armed and ready to break ground. Then, asbestos was immediately found within 10 feet of turf removal. With

safety and environmental considerations at the forefront, our team unanimously determined we needed to halt work, reassess, and draft an intensive plan to efficiently manage the change. Working hand in hand with all project parties once again, a change management plan was drafted to address the extremity of the asbestos and abatement needed, while also honoring the project specific Regulated Asbestos Containing Soils (RACS) plan (PSR&P).

This PSR&P was very stringent due to the history of the site and was critical to maintain. Because of this new policy plan, the scope of the project was expanded to account for the asbestos abatement required. The project would have remained in standstill if not for the collaboration and coordination between all project counterparts.

With a new plan in place to address the greater amounts of RACS, the project kicked off once again. The project was placed on an accelerated schedule from day one from the permitting delays (totaling 23 weeks) with our team actively searching for any opportunities for schedule advancement with the new revelations of asbestos quantities. The concurrent abatement of asbestos with active construction was identified and considered a pioneering action to ensure that the amphitheater opened on time for its first concert.

Abating at the same time of all other construction activities added to the complexity of an already challenging job. When abating the asbestos within the soil, crews had to take out all of the old dirt with care and precision, properly dispose of it at an acceptable site an hour away, and replace it with brand new soil. According to our PSR&P, every piece of the debris on the construction site had to be treated as friable asbestos. While adding to the difficulty, this ensured that we maintained the safety of the public, the workers, and the environment. To stay on schedule, FP continued to search for effective methods to accelerate construction without crippling quality. Several construction options were identified, presented to the Owner and architect, and once approved, were implemented. Of those options, a helical pier design for the foundation was optimized, reducing the overall number of piers required by 20%, to save on time and cut down on foundation costs. A mix of cast in place concrete and concrete masonry units (CMU) were optimized to tilt up to aid the schedule. While actively searching for time saving construction methods, FP ensured that quality and safety were never sacrificed. Safety audits and quality checks were occurring multiple times per day to ensure that while the construction was moving quickly, quality and safety were not forgotten.

Innovative construction techniques revolving around the site's environmental considerations were essential to the maintenance of the original schedule and safety guidelines. For example, instead of open trenching the utilities due to environmental concerns, bore digging techniques were utilized; this created its own unique abatement challenges that had to be reviewed by all stakeholders but with schedule concerns in mind, this was the optimal method. This allowed our crews to horizontally drill a hole underground between two points without disturbing the surface and minimized the disturbance to the surrounding asbestos. Trenchless digging was challenging with the amount of unpredictable rock formations, but ultimately saved ~2000 feet of trench and proved to be an efficient and effective way to install utilities in the face of asbestos laced soil.

Collaboration between Fransen Pittman, subcontractors, the City of Denver, and the architect was paramount. Because of the accelerated schedule, tasks that could typically extend for a few days' time, needed to be completed as soon as possible. All project teammates were on call most hours of the day to ensure that the project had what it needed immediately with no lost time.

In the face of lengthy administrative chains to approve the necessary change orders due to the extensive abatement, FP funded the project throughout as environmental change orders proved to delay efficient payments. This funding of subcontractors through Fransen Pittman's General Conditions, kept the subcontractors paid and available, and kept the project moving forward. With the evident strain on the subcontractor market, floating the project was a clear decision to ensure Levitt Pavilion continued forward and more importantly, the subcontractors could continue working. Within the subcontractor market, FP and the City agreed upon an original 21% use of Women and Minority Owned Businesses to construct the project. Because of the accelerated schedule and challenging project, the City of Denver lowered that amount to 18%. Wanting to uphold the City's original goal while maintaining the schedule, FP continued to subcontract as many available Women and Minority Owned Businesses as possible and Levitt Pavilion ultimately used 32% MBE and WBE. Maintaining cashflow is of utmost importance for Disadvantaged Small Businesses (DSB) which enforced the priority of Fransen Pittman funding subcontractors as municipality processes completed.

The teamwork between the subcontractors and Fransen Pittman ultimately allowed Levitt Pavilion to hit all original milestone dates. As the project neared its total closeout and the public's excitement grew, FP and dedicated subs put forth admirable effort to ensure Levitt opened on time for its first scheduled concert in mid July. The final stages of the project just barely outnumbered the days until Levitt was scheduled to open. Dedicated to upholding the opening milestone, our teams began pulling all-nighters. Because of this effort, Levitt opened the day of the first concert, just as news cameras and anchors arrived on site to promote the new amphitheater and the band began to unload. The successful delivery of Levitt was possible because of the collaboration and perseverance of every team member.

With the completion of Levitt Pavilion, up to 7,500 Denver community members now have a state-of-the-art amphitheater to experience more than 50 concerts in an open and accessible way. As each summer passes by, Levitt Pavilion Denver is continually recognized as a modern, groundbreaking venue with an admirable purpose.











