Category 5: Best Building Project-Specialty Contractor ($2-$6 million)

Contractor: Lancaster Stoneworks dba A.P. Eberlein Company

Project Name: University of Colorado Boulder Music Imig Addition

The College of Music at the University of Colorado Boulder is one of the country's top public music programs, but facilities were dated, crowded and disconnected. The students and faculty deserved a space that reflected the quality, talent and artistry they put into their work and performances.

A 64,000- sf addition to the Imig Music Building expanded and updated the facility to keep music programs thriving. More than an expansion of space, the new recital hall, ensemble rehearsal, dance studio, practice rooms, wellness and entrepreneurship spaces help students and faculty flourish—intellectually, physically, emotionally and musically.

Features of the addition include a state-of-the-art recording studio, dedicated suites for the Entrepreneurship Center for Music and Musicians' Wellness Program, new classroom space, additional office and studio space for faculty and staff, and supplemental practice rooms to address overcrowding the college previously faced.

A new venue for the community, the new building is a landmark for music in Boulder. It provides a beautiful new gathering place for students, faculty and music lovers in the community. Innovative rehearsal halls that convert to performance spaces help strengthen the college's deep ties to the community through College of Music events.

The addition consolidates the College of Music programming into one facility, creating increased opportunities for collaboration across departments. The addition also includes space for the Department of Theatre & Dance, providing a dance studio, changing rooms and a theater classroom.

The addition's grand opening was scheduled to align with the College of Music's 100th anniversary, enhancing the college's standing as a national leader in excellence in music teaching and research.

Solutions of Special Projects:

One of the first and most visible challenges of this project was to match the stone to the existing building. This was particularly challenging since the original building was over 20 years old and the desire was to keep a uniform aesthetic between the new and old portions of the building. Samples were taken from multiple local quarries to match the four existing stone colors.

It was also necessary to match the size of the existing stone, since the existing building featured a stone pattern that was not uniform in size. Three mockups were built over a period of time to get an exact match to the original size and pattern.

The building's unique shape provided challenges for masonry work, especially on levels two and three. Special roof scaffolding was installed in order to provide a safe working environment. On the north elevation, the stonework attached to the existing building and it was necessary to work off the existing roof requiring more specialized scaffolding. The north side elevation featured a blind drop for the crane operator and required significant coordination between crane operator and riggers. A team of riggers was used for guiding each load to the north elevation.

The limestone panels used on this project required significant care and coordination. These very large panels were placed on the west elevation of the building, and a great deal of coordination was required between the lift operator and masons in order to place these massive stone pieces. On the interior of the building these same stone panels were placed in a small, tight hallway requiring specialized scaffolding placement. The materials also included limestone pieces on each window, some of which were very large and required careful and detailed coordination between masons and lift operators.

The entrance to the building featured hanging stone, which is a unique application for sandstone. A custom-built work table was installed on-site to accommodate alignment of all the stone pieces so holes could be drilled in each stone for a metal support rod. After support holes were drilled a support structure was erected to stabilize the stone while the mortar and grout were setting. This application also required a special mix of grout, thin enough to fill but strong enough to maintain the needed structural support.

Exterior masonry work began in December, bringing winter weather which is always a challenge. A mix of hydro-mobile scaffolding and traditional scaffolding was used, as well as plastic tenting in the scaffold to provide a barrier to the weather. Diesel heaters were used to supply indirect heat (which did not require a fire watch) across the job site. COVID restrictions also impacted this job—we reduced team size and worked multiple locations to keep the project moving.

Excellence in Project Execution and Management/Team Approach:

A unique approach as taken in the staffing of this project, as the stonework pattern was particularly difficult to manage. It was found easier to train apprentices to install the distinctive pattern to match the existing building, and so a 1:1 ration of masons to apprentices was used. This strategy worked extremely well in meeting CU's very strict standards and there were no sections of this job that required a tear down or rebuild, allowing good management of the schedule and an on-time delivery of scope.

A pro-active management approach was taken, with monthly meetings between the AP Eberlein owner and director of operations, and the general contactor's leadership team. With each management team working proactively it was possible to address coordination issues with other trades and quality issues with other scopes which had the potential to impact the job timeline. This was also an important piece of managing the COVID protocols and their effect on the schedule.

As always, safety was at the forefront of all decisions. Working with heavy pieces of sandstone and limestone present a daily challenge, and the management team met periodically with the job site workers to remind them of the ever-present job hazards. Communication was also an important aspect of the safety plan, with three people on the radio working with the crane operator to ensure the blind drops on the north elevation were executed without issue. Again, COVID was an ongoing concern, which required a reduction in team size and creation of multiple teams in order to separate workers as much as possible. These protocols were taken very seriously by our management team.

Construction/Innovations/State-of-the-Art Advancement:

While at first glance this job seemed to be straightforward masonry work with strip stone and stone panels, the shape of the building and the attachment to the existing building required innovative solutions to safely erect scaffold and land materials. Many of these innovations have been described above. Of particular note was the challenge of placing hanging stone, which required a great deal of planning and custom work benches as well as supports, in order to lay the stone and align it correctly.

Environmental/Safety:

On this project as on all AP Eberlein projects, the team had daily morning meetings to start the day. Stretches are performed as a team to get them working together and thinking about the job at the start of the day. This is also an opportunity for the foreman to discuss any safety concerns specific to the scope of work for the day.

As with all A.P. Eberlein jobs, Toolbox Talks were conducted to address safety issues. Industry-focused safety concerns for that month are addressed along with job-specific issues. If there is an injury or close call a Toolbox Talk is conducted on that specific issue as an opportunity to train our team.

If warranted, specific trainings are conducted to address an issue or to be proactive when a challenging elevation is anticipated.

The owner conducted meetings on-site to dialogue with the team periodically in order to discuss safety and to allow the team to provide suggestions on how to improve job safety.

Working with masonry products help the green rating for a building since they are made of natural materials. The sandstone used in this project was all from local quarries and adds to the thermal properties of the building.

Excellence in Client Service and/or Contribution to Community:

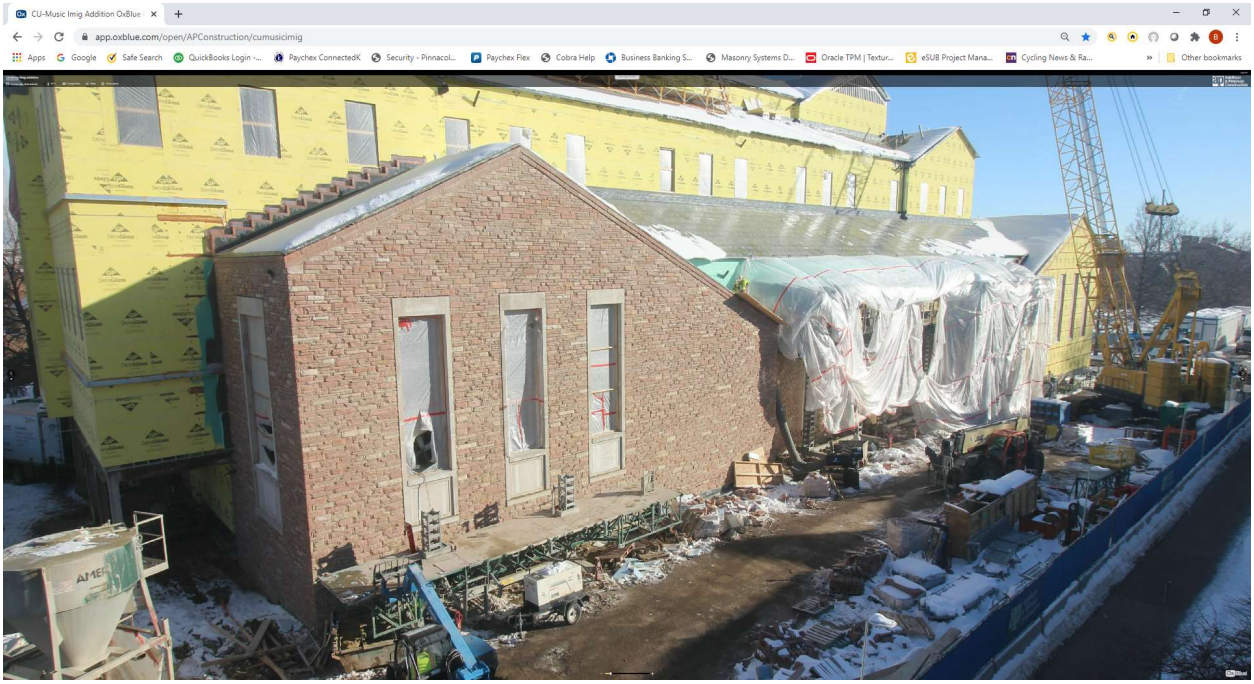
The Imig Music Building is a centerpiece on the campus of CU Boulder. A new venue for the community, the building is a landmark for music in Boulder it provides a beautiful new gathering place for students, faculty, and music lovers in the community.

From general contractor Adolfson & Peterson:

“Each stone was hand-laid and cut to fit perfectly in place, requiring eight months of masonry. The CU Planning Department reviewed the masonry weekly for color, size and distribution of the stones. Great care was taken to ensure the aesthetic quality met with the campus standards and expectations as the team had to incorporate all elements to marry to the addition with the old structure.”

CU’s campus architecture team was very complimentary to the craftmanship of our team, and we are proud to have had the chance to contribute such a visible component of this beautiful campus building which will be enjoyed by students and community members for decades to come.


WAGNER Imig MUSIC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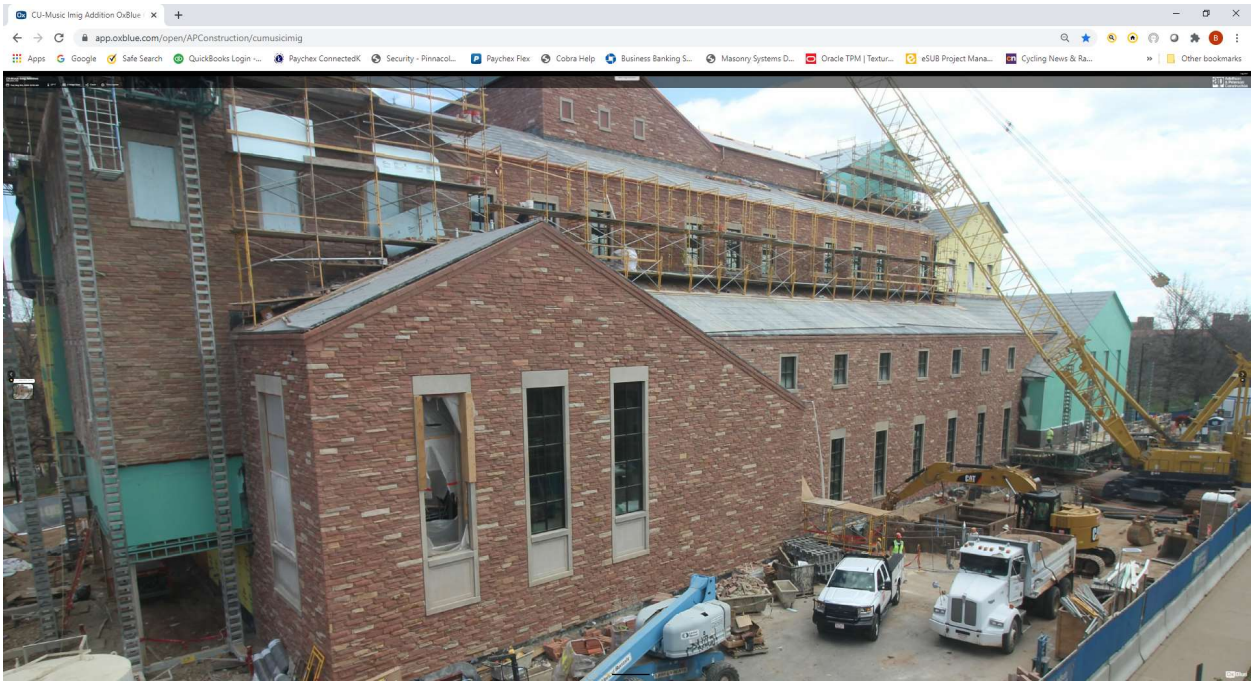
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