

EDWARD J. MINSKOFF PAVILION AT THE BROAD COLLEGE OF BUSINESS

COAA PROJECT LEADERSHIP AWARD NOMINATION

AUGUST 31, 2020

SECTION I GENERAL PROJECT INFORMATION

NAME OF PROJECT

Edward J. Minskoff Pavilion at the Broad College of Business

LOCATION OF PROJECT

Michigan State University, East Lansing, Michigan

NAME AND ADDRESS OF OWNER

Michigan State University 426 Auditorium Road East Lansing, Michigan 48824

NAME AND ADDRESS OF DESIGN PROFESSIONAL(S)

Fishbeck (Architect and Engineer of Record) 1515 Arboretum Drive SE Grand Rapids, Michigan 49546

LMN Architects (Design Architect)

801 2nd Avenue, Suite 501 Seattle, Washington 98104

NAME AND ADDRESS OF CONSTRUCTION PROFESSIONAL(S)

Clark Construction Company 3535 Moores River Drive Lansing, Michigan 48911

OTHER CONSULTANTS OR PROFESSIONALS DESIGN SUBCONSULTANTS

Olin Studio, Philadelphia, Pennsylvania (Landscape Architecture) **Sextant Group**, Ann Arbor, Michigan (A/V and Technology)

IPD RISK POOL TRADES PARTNERS

John E. Green Co., Lansing, Michigan (Mechanical) Dee Cramer Inc., Holly, Michigan (Mechanical) BCI, Okemos, Michigan (Building Controls) Superior Electric, Lansing, Michigan (Electrical) Glazing Solutions Inc., Morrice, Michigan (Glass and Glazing) Douglas Steel Inc., Lansing, Michigan (Structural Steel)

TYPE OF PROJECT

Higher Education, Business College

DELIVERY METHOD

Integrated Project Delivery (IPD)

GENERAL PROJECT DESCRIPTION

Michigan State University (MSU) expanded the Broad College of Business in 2019 with a 100,000-sf pavilion of classrooms, teaching labs, program offices, career management offices, and interaction spaces. The pavilion creates a new identity for the College of Business and supports their mission to improve recognition, recruitment, and rankings.

Classrooms offer tiered, case-study rooms and flat, flexible, technology-enabled rooms, allowing ultimate flexibility. Interaction spaces, including a café, lounges, event and meeting rooms, informal seating groups, and exterior landscaped areas were another significant project component. These areas provided team building

and collaboration opportunities outside of the classroom and serve as amenities for attracting students and faculty.

The design weaves together classrooms, laboratories, and social spaces at a variety of scales to emphasize collaborative environments supporting graduate-level research and development. A skylight plus clerestory windows run the building's length to fill the space with natural light.

The transparent community space is framed by two program "bars" that focus views to the Red Cedar River. Corridors overlooking the atrium lead to flat/flexible and tiered/case study classrooms for face-to-face discussions and technology-enabled active learning and networking. The pavilion's masonry, glass, and metal exterior expresses the contemporary functionality of its forward-looking programs while complementing the materials and sensibility of the surrounding campus architecture.

MSU wanted to maximize the value for the project and decided to use the Integrated Project Delivery (IPD) to foster collaboration, leverage partner expertise, and lean principles and processes. This unique model creates a shared risk/reward scenario between the owner, architect, and construction manager as equal partners within the contract. The partner group for the Pavilion involved MSU, Clark Construction, Fishbeck as Architect and Engineer of Record, and LMN Architects as the national business school expert for programming and design, along with key subcontractors.

The project fore group managed the design process and collaborative nature of the contract type through virtual platforms such as Bluebeam Studio, Autodesk A360, and PlanGrid. Consistent partner meetings, and involvement of 20 Design Assist Trade Partners positively influenced the design and budget. Having the trade partners, key subcontractors, MSU facilities and maintenance team members, Business College stakeholders, and more all at the table created consensus decisions and met MSU goals to catalyze organizational change, reduce silos, and facilitate learning and collaboration by leveraging resources.

PROJECT DURATION

Preconstruction: 700 calendar days Construction: 730 calendar days

PROJECT START DATE

June 5, 2017

PROJECT COMPLETION DATE

Planned: June 19, 2019 Actual: June 5, 2019

CHANGES IN SCHEDULE

Project completed two weeks ahead of target schedule.

INITIAL CONSTRUCTION COST

Target construction: \$46,370,201 Target program: \$62,000,000

FINAL CONSTRUCTION COST

Actual construction: \$49,018,660 Actual program: \$61,000,000

PERCENT OF CHANGE ORDERS

5.7% (added owner's scope)

SECTION II OVERALL PROJECT MANAGEMENT

CONSTRUCTION MANAGER'S PERSPECTIVE PROJECT MANAGEMENT

Example 1: MSU's project representative, Tony Rhodes, recognized early that the Clark preconstruction manager/senior project manager was working on campus for the first time and began coaching him early in the preconstruction phase as to the culture and systems at MSU, and never stopped coaching. You could tell he enjoyed it rather than it being a burden and his coaching extended to the construction team as well. Tony was always available to the team, supported the team and was a key contributor to the overall project success.

Example 2: MSU's involvement on this project was very intensive, being an academic leader in collaborative learning and lean concepts. The amount of up-front owner involvement was unlike any other project at this level. This in turn helped all parties understand the wants and needs of the University and how it should be delivered. Meetings would take place every week for multiple hours in the design phase of the project to ensure the owner's needs aligned with design intent and budgets. As a member of the construction team, it was reassuring that the owner had the same goals in mind and wanted the design and construction team to succeed.

SCHEDULING

Example 1: MSU was adamant we pull-plan the project design phase and have all necessary persons in attendance. This included all subcontractors, design consultants, and MSU personnel. Construction is accustomed to scheduling work in this manner. This method of scheduling is unfamiliar to designers, but through a lot of meetings, we collectively collaborated the design schedule to 30/60/90 percentages of each design phase. MSU participated in the construction pull-planning sessions and had all required design and owner personnel in attendance. MSU also participated in weekly scheduling meetings with the subcontractors giving input and challenging the team at every turn.

Example 2: MSU was present at every weekly pull-planning scheduling discussion and was part of the team to find ways to improve and become more productive in the field. MSU pushed for prefabrication alternatives; site; and building logistics; on-time deliveries; and site storage to help ensure we, as a construction team, were being efficient with our processes. We averaged over 75 percent complete on weekly activities and managed to complete the project two weeks ahead of owner occupancy with the use of the project team's lean practices and MSU leadership.

COST MANAGEMENT

Because this was an IPD contract, we were able to take advantage of collective savings in timing the markets. We were able to make collective decisions on when to purchase our mass materials. For example, the United States was just increasing tariffs and we were able to purchase copper piping, aluminum storefront materials, and door hardware before the price increases. MSU was a leader in this cost management investment that paid dividends.

MSU reviewed and tracked all costs through their Primavera software and performed monthly financial audits to see where costs were tracking.

QUALITY MANAGEMENT

This project was very collaborative in the design phase. We held bi-weekly meetings with the MSU design and inspection divisions where the designers would update MSU on the design progress and then we would split into disciplines to dive deeper into the details to make sure what we were designing met MSU standards, the look and feel the University wanted, the constructability, and the budget. The best quality management is the efforts put forth in the design phase.

Our punch list walk throughs also included our owner rep, our client from the Business College, their building manager, and the design and construction teams. The owner was very hands on throughout the project regarding quality design and quality construction.

DESIGN MEMBERS' PERSPECTIVE PROJECT MANAGEMENT

The first example of how MSU demonstrated excellence in project management was in the establishment and structuring of the MSU stakeholder groups. There were over 70 MSU individuals engaged at various levels on this project. The groups were established to give each stakeholder a voice in the project, and the input and organization was exceptional. The primary groups were the Steering Committee, comprised of five individuals from the Business College; Infrastructure Planning and Facilities; and University Facilities Planning and Space Management. One member from each group was also a member of the project's Core Group. From here, more groups broadened to include many others. These included special user groups involved during programming and a large group assembled, referred to by MSU as the Project Planning Partners. These stakeholders were MSU specialists from mechanical and electrical systems, security, door hardware, accessibility, inclusion, and sustainability. Not only did MSU identify these stakeholders, but they also helped define the ways and frequencies of engagement, keeping all parties involved and informed. To be lean, each meeting or engagement had to be preplanned to be focused and involve only the participants needed to meet agenda objectives. This required a lot of communication on the part of the MSU project managers. The real value of this level of inclusion and collaboration was exemplified through comments from stakeholders being brought into the design process, resulting in the designers creating solutions to meet the multitude of specialized needs.

The second example was evident in MSU's project leaders being open to new ideas and recommendations. The IPD mindset of this project provided a great opportunity to explore different ideas, even those that broke with MSU traditions and adopted standards. MSU leadership promoted this to all team members. We were constantly looking at opportunities to deviate from MSU's standards. In the pre-design phase alone, the team generated over 250 exceptions to MSU design standards that were adopted into the project. This would not have occurred on such a scale without the encouragement of MSU project leaders and those that they report to.

SCHEDULING

This project was a new approach for MSU and the way the project was scheduled could be seen as an experiment for MSU. Pull-planning the pre-construction (i.e., design phases) of the project was one area where MSU showed flexibility. This exception was focused more on the design process than scheduling, in that MSU allowed the team to thoroughly deviate from their design phase standards to find the best efficiencies in the design process. The team's focus shifted from milestone document review to design and construction team task-based decision making and documentation.

Another example, and one of the more deviant process changes, was at the end of the design development phase when the design team turned documentation over to the construction partners to immediately develop shop drawings, which also served as construction documents. This change in process allowed the team to by pass the duplicated effort of developing both construction documents and shop drawings.

A second example of MSU demonstrating scheduling excellence was the quick response to team inquiries. The majority of responses were received the same or next day, and while it may seem this is normal engagement, the timeliness of response was critical to this project's success. Design and construction team members work in real time, and it was an expectation of the team members to have quick answers from the project managers. This was a mindset for the team, and without MSU's willingness to participate with the same level of urgency, the mentality would have been lost. It was another instance of MSU being involved and part of the team.

COST MANAGEMENT

The first example of cost management excellence from MSU came during the pre-design phase. A feasibility study had been conducted prior to the pre-design phase establishing a project target cost of \$57 million. Our team developed the programming and concept and it was well-received by the Business College, but it exceeded the target budget. Some versions of the concept and program were estimated at \$70 million. This was a moment where the project scope and budget had to be reconciled. MSU pushed the team to meet the \$57 million target. In doing so, the Business College recognized the reduced program and design qualities. After many iterations and estimate updates, the target budget was changed to \$62 million. Raising a project

budget in this phase is not too unusual, but what was unusual was that MSU challenged the team to find the balancing point for the scope and budget early in the process, resulting in never having to revisit budget issues again.

It was a very crucial moment, where contingencies were lowered, below typical levels, and the team was challenged to innovate to find future savings. MSU not only set the expectation, but also participated in the innovation and savings, resulting in the final project cost being roughly \$1 million under the target cost with nearly 6 percent of owner-added scope.

The second example of cost management excellence for MSU came from their broad understanding of being part of the project team. This was a major mindset shift for MSU, resulting in major brainstorming contributions, efficiencies, and savings. One example occurred when an MSU electrical engineer posed the question about adding the emergency generator demands to an existing generator in the business complex instead of proving a new one. Loads had to be assessed and special load-testing had to be performed, but the idea saved the project approximately \$1 million and had a neutral impact on long-term maintenance.

QUALITY MANAGEMENT

MSU has historically become known as a university that views project quality conservatively, with an eye toward resiliency, low maintenance, and high performance. On the value scale, MSU's buildings are designed and constructed to last at least 50 years with many active buildings on campus over 100 years old. What was different for this project was how quality was viewed and value assigned. It started with the Steering Committee's set criteria called the "project conditions of satisfaction." This high-level list of five conditions set the idea of where value was to be placed. For example, "iconic design" was a key quality for the design to meet. While it was a broad and abstract requirement, it gave the team a way to gauge where to place value and other areas of the project where value would need to be reserved to help meet this requirement. The criteria from MSU was clear and had consensus from the stakeholders. It was challenged on many occasions during design, but the conditions of satisfaction were used as a way to vet ideas and MSU did not waiver. From the Business College's perspective, each condition of satisfaction was met.

The second example of quality management excellence came during construction. It involved the planning stakeholders at MSU visiting the project during construction to verify the design they helped shape was being constructed accordingly. MSU has experts in roofing and envelopes and systems and in energy use reduction and accessible design. Many of the experts not only participated in the design process, but they also took ownership of the design and wanted to ensure the construction reflected their inputs. There was a large, diverse group of construction inspectors on this project compared to others.

SECTION III OVERALL PROJECT SUCCESS

The most important contributor to the Minskoff Pavilion project's success was the use of the IPD approach to project management. IPD enabled representatives from the Broad College and MSU to participate directly in committee discussions that managed the Pavilion project. In particular, representatives were able to specify conditions of satisfaction at the project's initiation and then participate in decision making that led to satisfaction of those conditions as design and construction took place. As a consequence, decisions were timely, the project came in at the budgeted cost, and the resulting building is truly an iconic structure. The College believes the combination of cost and quality goals would not have been achieved without IPD management.

LMN and Fishbeck were chosen by the College and University based on design work that LMN had done for other business colleges, particularly the University of Washington's Foster School of Business, and due to satisfaction with Fishbeck's work on other projects on the MSU campus. Clark Construction Company was chosen by the College and University due to satisfaction with prior work done on MSU's campus and the company's willingness to incorporate IPD in their construction process. Subcontractors were chosen through IPD committee interviews with prospective contractors.

SECTION IV PROJECT COMPLEXITY

- The IPD agreement we used was Consensus Docs 300. The contract took three months to execute, which was not a long period to compared to other IPD projects. What was very challenging was interpreting the responsibilities in the agreement and developing tracking and management tools to align with these understandings. The project managers developed the necessary tracking tools to align with the agreement language.
- We sometimes mused about using IPD to accomplish an "iconic design." Because of how lean processes had been developed and taught the idea of Integrated (Lean) Project Delivery and iconic design did not seem like a good match. We learned that some lean approaches, such as trying to save every dollar, was not applicable to this project, especially where aesthetics were being considered. However, we also learned we could be lean in other ways.
- The process of collaboration was challenging because key partners were located on the west coast and Pennsylvania. The management team devised a "virtual big room" using Revit A360, Bluebeam Studio, and Zoom meetings at least once a week as a way to collocate the team.
- Site logistics for the project construction were very constrained. A detailed and well-vetted site logistics plan was developed and closely followed to provide efficiency and safety within and around the construction site.
- There were no template files available and considerable time was spent creating and vetting the tools. We received some sage advice from one of our peers in the Business College, who said, "Don't let the tools get in the way."
- We learned we only needed to do what worked and worked efficiently and effectively. It gave us a renewed appreciation for "low tech" approaches, such as sketching, using photographs of schedules, and digital mark-ups of the photographs to make updates.
- The project was 100-percent donor-funded, which came piecemeal. This caused several pauses in the design phase, extending this phase.
- Our goal was not to build a building for the greatest possible savings, but rather to get as much building and features for the target budget. This task complicated matters from early design through final completion spending every dollar to make it better.
- Two, 3-story structures with a 3-story atrium between created construction logistics challenges as well as a barrier to route piping and ductwork across. Extreme coordination measures were taken.
- One structure was on an odd angle to maximize building footage in the allowable space and the other structure was set at another angle and curved to maximize both the size of the atrium and the view of the Red Cedar River and landscaping. The challenging geometry was not dimensioned on plans. BIM and Trimble were used to locate all elements of the building. The curved structure had curved cantilevered sections protruding on its exterior wall. The execution of the technical design and construction had to ensure weather-tightness. A 100-foot curved skylight also attached to a curved penthouse wall.
- There was a lot of acoustic wood panels that had to house electrical, mechanical, and AV/IT components that required very specific details for almost each location. Trades partners worked very closely to sequence and construct details.
- We used a displacement air system for our HVAC low flow in-wall or in-floor and our team had to get creative with wall finishes to allow for proper flow. Coordination of systems placement routing was exacting and extreme. The construction partners worked from a coordinated BIM to avoid conflicts and improve efficiencies.
- The room signage was custom designed and contained donor naming, which required collaboration between the fundraising team at the Business College and the project team to make sure every word was correct and the donors were properly acknowledged.

SECTION V SUSTAINABILITY ELEMENTS/EFFORTS

- A project condition of satisfaction was to achieve LEED Silver certification. The project stretch goal however was to achieve LEED Gold certification. The LEED certification process is nearly finalized, and LEED Gold certification is expected.
- For the project, sustainability aspects were to be understandable and appreciable to the occupants. The MSU campus is often referred to as an arboretum and site sustainability was therefore of primary importance. Bioswales filter stormwater and a baffle system was designed adjacent to the main entrance to demonstrate this water-cleansing feature from the roof drainage.
- The mechanical displacement ventilation system and associated controls provided the best combination of air quality, environmental comfort, and efficiency in larger volume areas, such as the atrium. The controls range allows MSU to program extremely low energy use when the campus is closed, or the building is closed for the evening. The ranges are exceedingly low, yet can be programmed to ramp up in time for morning occupancy.
- All building and site lighting is energy-conserving LED. Lighting controls allow for a variety of scenes to reduce energy consumption when the building is unoccupied.
- University-wide recycling and housekeeping processes and procedures were designed for the facility.
- The building envelope is defined by high-performance systems and a purposeful design that takes into account sun paths and predominant wind directions. A variety of glazing types are used, based on facade orientation.
- There are many flat screen monitors in the facility that provide information about the building's sustainability features when the screens are not being used for other purposes.
- The Business College established an endowment to maintain the facility and keep it performing at an optimal level for years to come.

SECTION VI CONFLICT RESOLUTION

- Within the Core Group, among the owners, designers, and contractors, relationships grew
 throughout the course of the project. The contract was referenced often to understand the
 responsibilities of the team and develop tools such as cost-tracking and shared savings. However,
 the contract was only referred to one time, at around 75 percent construction complete, in reference
 to a team member failing to appropriately report their financial circumstances for the project to the
 Core Group. The relationships were strong enough that it was noted on numerous occasions that
 although contract execution was hard work, it could have been archived, because of the levels of
 trust established between team members.
- As an IPD project, decisions were made by the Core Group. The Core Group evolved to consist of three owner's representatives, two members from the design team, and the construction team one member from the CM and one from each risk pool contractor.
- Had we not been able to come to an agreement or the decision met certain criteria, then the decision was extended up to the Senior Executive Team (SET). Should they not be able to agree on a decision, then it was solely up to MSU.
- There were two conditions that would trigger automatic involvement of the SET a program or scope change exceeding \$100,000. Throughout the design and construction, the SET became involved one time to make a program change. The Core Group was able to resolve differing views.
- As stated above, the owner had three voting representatives in the Core Group for all decisions – one construction rep, one University rep, and a Business College rep. In addition, we regularly had representatives from the various departments at MSU to inform the decision-making process, including but not limited to other Business College personnel, landscaping, AV/IT, FFE, mechanical and electrical design, commissioning, etc. This distribution of power and engagement of others allowed those at MSU who had a stake in the project have a voice in decision-making, and in a way, established an MSU Core Group that nested inside the project Core Group.
- MSU set up the decision-making process to be successful in that the experts were in the room, everyone had a voice, many parties had a vote, and we always came to a collective decision that was best for the project.



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616.575.3824 | fishbeck.com

August 28, 2020

Construction Owners Association of America Project Leadership Award

To Whom it May Concern:

As the architects and engineers for this project, Fishbeck and LMN Architects were honored to have been selected, recognizing the significance of this project. MSU had one previous IPD project involving another design consultant. Our project came several years after and was larger and more complex. It was also mentioned that the previous project ran into some significant challenges, making this project a really important second attempt for IPD at MSU. Moreover, this project and its delivery were clearly understood as an experiment but an experiment those at MSU were counting on to be successful. MSU's leaders recognized the importance of the project beyond the project itself and the potential to have an exceptional IPD experience.

IPD aligns with MSU's academics in business education and construction management education. MSU's leadership fit the ideal project type to the ideal delivery model for that specific project. The project was an academic opportunity as well, dovetailing with what research universities do, which is to imagine and test ideas, ultimately expanding knowledge. The project was a living research project with design and construction partners participating in course lectures and describing their experiences.

MSU was fully committed to this project, which was essential to the project's success. MSU leadership committed the resources and expertise. At times, this was very challenging for them, but they understood the importance and value of those inputs during design, and when it mattered most. MSU was of the mindset to keep pace with the design and construction partners, recognize critical path issues, identify key MSU participants to help resolve those issues, and involve them in conversations quickly.

MSU was overt about wanting the design and construction partners to succeed and make a profit on the project. These were fresh words for an architect and project manager who had numerous projects where you could sense the owner's success was measured by how little they could perform, how much they could get, and how little they could pay – the traditional "that's business" attitude. It was so refreshing to see the results of this process, where we moved away from adversarial relationship and the value to the owner increased so significantly, like removing the friction from a machine that slows it down, makes it work harder, and uses more energy to accomplish the same amount of work.

MSU Infrastructure, Planning, and Facilities leaders were true partners in this project, who initiated reducing their own control and executive authority for the betterment of the project. This was true within the circle of MSU partners. The Business College, as the end user, was given a significant voice in matters of value and where to spend resources. There was a very strong sense of partnership between the MSU division stakeholders. As a design partner, we felt listened to and respected at all times. I suspect the construction partners felt similarly. In the end, many of us felt like we created an amazing place together, but what happened along the way in terms of making friends and changing traditional adversarial ways of doing projects may have been even more meaningful.

Sincerely,

Daniel Launstein, AIA, LEED AP Senior Design Architect



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August 25, 2020

RE: Michigan State University Edward J. Minskoff Business Pavilion – COAA Award Submission

To Whom it May Concern:

The purpose of this letter is to address the following Award Questionnaire Question:

2. "A letter from the Construction Professional describing how they found the Owner contributed to the project success"

As I am sure you are aware, this project was delivered as an Integrated Project Delivery (IPD). This form of project delivery is collaboration in the design and construction world at the highest level. The following items outline how the Construction Management team believes MSU fostered an incredibly collaborative culture that manifested into the wildly successful Edward J. Minskoff Business Pavilion.

- MSU's long-term commitment to collaboration with their industry partners – MSU has long been recognized as an industry-forward owner. They pride themselves on creating an environment of trust with their industry partners. This starts at the very top of the MSU leadership team. The culture created by this environment has developed a devoted legion of partners that takes pride in serving MSU with their best interests in mind while delivering the highest standards of safety, cost, schedule, and quality.
- MSU built a trade network that was ready for IPD Having already adopted a strong preference for the "design assist" delivery method, MSU had a stable of qualified trade contractors ready to take on the learning curve of IPD. This should not be overlooked as it served this project very well.





Michigan's First Platinum Contractor

2017, 2015, & 2013 AGC National Safety Excellence Award

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- MSU's internal client representation John Wagner and Dave Frayer were highly committed to the daily attention needed for an IPD project. These two individuals were undoubtedly the MVPs of the owner's team as they truly embraced the IPD methodology from day one. The visionary for the project, Dean Gupta, was very supportive to devote his finest resources to the project to ensure its success as well. Finally, the Infrastructure, Planning, and Facilities (IPF) group committed two very well trained and versed individuals, Amr Abdel-Azim and Tony Rhodes, who had decades of experience to guide the entire project team.
- IPD contract negotiation For the entire project team to be in the "collaborative safe zone," the contract needed to represent and spell out exactly what was required of all partners. This was an exhaustive process that yielded a successful collaborative contract in which all parties received a proper risk/reward proposition that encouraged all team members to challenge one another and enjoy the fruits of "comfortable tension." We believe our team was the first team in the country to sign the 2017 updated Consensus Docs 300. Our team was proud to be part of a tireless effort to update the most collaborative contract to represent the movement in our industry toward a higher level of collaboration and satisfaction.
- MSU had a clear vision for the project, nothing less than excellence would be accepted – In short, MSU took full advantage of the IPD process by having the design and construction team study 28 different concepts before finally choosing on "the only acceptable solution." We finalized a truly magnificent design that 1. provided iconic design, 2. connected two parallel buildings alongside an historic river to create a "business campus feel," 3. incorporated and challenged proven "campus standards" developed for superior campus quality, and 4. Executed the design within an incredibly tight budget that was nearly half of other benchmarked buildings.
- MSU adopted lean practices learned on this project across other new IPF initiatives – While the project was still in preconstruction and throughout its construction, MSU used tools such as A3 reports and design assist methodologies on numerous other projects to hone their game as an owner. This mentality by MSU sets them above many other owners. Their investment in a culture based on trust and collaboration has reaped rewards on this project and many more for generations to come!

While the project team of LMN Architects, Fishbeck, and Clark Construction certainly performed at an insanely high level on this project, we undoubtedly

benefitted from the special culture MSU has fostered over the past decade with their design and construction community.

Please feel free to contact me directly to further discuss any details of the project that could benefit this submission.

Yours truly,

Robert LaLonde Senior Vice President Clark Construction Company 517.881.6436m





Michigan's First Platinum Contractor 2017, 2015, & 2013 AGC National Safety Excellence Award

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MICHIGAN STATE

August 10, 2020

Construction Owners Association of America Project Leadership Award Icastro@coaa.org

Dear Sirs:

I am the Eli Broad College of Business' Director of Buildings and Facilities and was the college's primary IPD representative during the process of designing and building the Minskoff Pavilion. This letter describes the conditions of satisfaction that guided the Pavilion project.

Attracting prospective students, and in particular prospective MBA students, is extremely competitive and requires college faculty, staff, and facilities be perceived by students to be unquestionably first rate. Creating an advantage for the Broad College within this environment was the ultimate goal of the Minskoff Pavilion project. Conditions of satisfaction derived from this goal were to (1) create a truly iconic design that would (2) stimulate and enhance student collaboration while (3) maximizing occupant comfort and satisfaction. The Pavilion needed to have the iconic "wow factor" required to tip student recruitment in the college's favor, creating the competitive advantage necessary to sustain Broad's undergraduate and MBA programs. It also needed to have the floor plan, furnishings, and information technology required to support student collaboration in teams, since such collaboration is the way business is conducted in the 21st century. Finally, it needed to have lighting, HVAC, and infrastructure systems that would contribute to occupant comfort and satisfaction, making it a pleasure to work and learn in the Pavilion.

After a year's occupancy, it is clear that all three conditions of satisfaction have been met or exceeded. The Minskoff Pavilion is a "must see" building on the Michigan State University campus. Representatives from universities throughout the country visit the Pavilion to get ideas for their own projects. Students from throughout MSU comment regularly that the Pavilion is like nowhere else on campus. MBA students indicate the Pavilion strongly influenced their decision to attend MSU and the Broad College. Team facilities were heavily used until the COVID retrenchment and will certainly be popular once campus and college operations normalize. Lighting and HVAC systems are still works in progress but far exceed the systems that support the college's other two buildings. Notably, all of this was accomplished while meeting budgetary and timeline targets.

In sum, the Broad College of Business is unconditionally satisfied with the Minskoff Pavilion as designed and constructed by our team of architects, engineers, and contractors. In fact, we have reengaged with many of the original team's members to renovate another of our buildings, the Eppley Center. I cannot think of a clearer indication of end user satisfaction.

Sincerely,

John A Wagner III Director, Building and Facilities Professor, Department of Management



Broad College of Business

Department of Supply Chain Management

Business College Complex Michigan State University 632 Bogue St. Room N370 East Lansing, MI 48824

> 517-353-6381 Fax: 517-432-1112 broad.msu.edu

AFFIRMATION AND RELEASE

Nomination is submitted by: Dan Launstein, AIA, LEED AP Fishbeck 1515 Arboretum Drive SE Grand Rapids, MI 49546 616.575.3824 dlaunstein@fishbeck.com

In submitting this application, I affirm to the best of my knowledge, that the information contained herein is accurate and correct. I also agree to grant permission for COAA® to use the nomination materials in their entirety (including photographs) for promotional purposes which may include, but not be limited to, the COAA® website and the *Owners Perspective* magazine.

Signature:

Date: August 31, 2020

Title: Senior Design Architect

PHOTOS AND GRAPHICS



Design: Fishbeck and LMN Architects Photos courtesy of LMN Architects



























