MINNESOTA STATE UNIVERSITY
MANKATO
CAMPUS SPACE ANALYSIS
REQUEST FOR PROPOSALS FOR RFP #196331
CONTENTS /

01. INTRODUCTION LETTER + UNDERSTANDING 03
02. SIMILAR EXPERIENCE 06
03. WORKPLAN + SCHEDULE 22
04. TEAM QUALIFICATIONS 32
05. CLIENT REFERENCES 40
06. FEE PROPOSAL 42
07. SAMPLE REPORTS 44

FORMS ATTACHED SEPARATELY
June 22, 2017

Donna Hensel
Facilities Purchasing Coordinator
358 Wiecking Center
415 Malin Street
Mankato, MN 56001

Re: Response to Request for Proposals for RFP #19633

Dear Donna and Selection Committee Members:

Perkins+Will is pleased to introduce our team and describe our understanding of the Campus Space Analysis project, the opportunities and challenges it affords, and how best to make informed decisions regarding the future of Armstrong Hall and the programs it currently houses. Together with our valued team members, Paulien & Associates and Loeffler Construction & Consulting, we are eager to share our insights into the highest and best use of your built academic facilities space, Armstrong Hall and its site. We offer nationally recognized benchmarking, planning and engagement skills. Our team can position you with data, dialogue and a cost model to undertake future-facing University classrooms, laboratories and workspace. We believe your project requires the combined deep understanding our team can bring to:

- Taking stock of past planning and current strategic initiatives
- Applying data and projections at the College, Department and Program level – including national, state, and peer benchmarks
- Identifying data-driven space needs based on new modes of learning, workplace and research space typologies
- Linking facility planning scenarios with existing and evolving academic centers of excellence
- Strengthening partnerships and adjacencies between programs for transdisciplinary learning and research
- Engaging a diverse academic stakeholder base – bringing understanding and acceptance of change
- Improving consensus and decision-making for the 2016 Armstrong Hall PreDesign strategies
- Developing a framework for facility renovation, repurposing, and/or new construction – for both Armstrong and its site
- Planning for shared space – indoors and out
- Improving universal design and pedestrian access - maintaining a human scale and welcoming experience
- Synthesizing project impacts on campus circulation – including strategies for linkages and servicing to adjacent buildings
- Develop actionable and flexible phasing scenarios, supported by interactive tools, based on accurate cost modelling and financing
A TEAM OF EXPERTS We have formed a team of experts with local knowledge along with national higher education expertise.

Perkins+Will has created innovative and award-winning designs for the world’s most forward-thinking clients. We are architects, interior designers, urban designers, landscape architects, consultants, and branded environment experts who approach design from all scales and perspectives.

Paulien & Associates is a firm recognized nationally for expertise in higher education space planning. They understand the issues campuses face within increasingly competitive markets, goals of increased efficiencies, deferred maintenance of existing buildings, optimization of services and evolving curriculum needs. Their services are customized for each client. They pride themselves on delivering results that are supported by the appropriate analytical tools, as well as vast experience.

Loeffler Construction & Consulting is an award winning firm which provides detailed cost estimates from the pre-design phase through the construction document phase. Each project estimate is carefully developed by using state of the art technology for quantity take-offs and an in-house database of current unit cost pricing. Through collaboration with the design team and the owner, their cost consulting efforts provide practical insight with respect to scope and feasibility, ensuring the team is maximizing the project’s goals and potential.

WHY OUR TEAM : We build a bridge between your current facilities and your future aspirations. We offer Minnesota State University Mankato:

Simple team structure with multi-disciplinary knowledge: The Minneapolis office of Perkins+Will and the Denver office of Paulien & Associates house all the expertise you require. We can address any aspect of planning for higher education facilities.

- **Bob Novak** – Managing Principal – providing continuity with past MSUM projects; the buck stops with him. He has worked with the Perkins+Will/Paulien team on other campuses and understands what this complex project requires.
- **Kate Herbolsheimer** – Managing Space Analyst, Planner and Architect with Paulien & Associates – bringing a broad range of national experience in higher education facilities planning with a focus on collaboration, teamwork, and balanced solutions.
- **Krisan Osterby** – Campus and Site Planner - coordinating the space needs analysis with MSUM’s 2013 master plan and other planning studies. Identifying pros/cons/synergies for three new building sites as well as the vacated site.
- **Doug Bergert** – Project Manager and Project Designer – bringing fresh experience with a wide range of academic facilities, fit to program assessment, working with cost estimators, and understanding retrofitting existing buildings and sites.
- **Lisa Pool** – Workplace Strategist - helping faculty, chairs and deans understand evolving office metrics and MSUM leadership manage change in a culture with a strong history of “owned space”.
- **Jonathan Murray** – Cost Modeler - bringing lessons learned from performing the same role for the 2016 Armstrong Hall PreDesign.
Planning excellence: Fast Company has honored us for Innovation. We incorporate evolving space typologies, Generation Z attitudes, Change Management, Branding and Wayfinding. When we apply our knowledge to your risks and opportunities, we can create resilient scenarios for your facilities.

Well-designed and proven process: Our 4-Step process for this project fosters student-to-student, student-to-faculty, and faculty-to-faculty interaction. We begin every project by creating a Master Meeting Agenda and an Information Database. Our clear schedule, tasks, deliverable dates, data tracking, and engagement strategy - developed jointly with MSUM from start to finish - ensure that we meet your goals, foster consensus, and position implementation.

Intentional communication, early and often: We facilitate collaboration and stakeholder feedback to create University-wide confidence in the planning process and products. Our work is accomplished on-campus in interviews, facility tours, and monthly multi-day work sessions. Our references from James Madison University, Ball State University, University of Wisconsin LaCrosse, Wright State University, Middle Tennessee State University and College of DuPage attest to our success.

Tools you can use over time: Our final deliverables – provided in early November - will be a composite of strategies and digital files. We provide living documents to optimize the momentum created by the project. Our recent master plans for University of Tennessee Chattanooga and St. Olaf College led directly to dynamic repurposing of existing core campus facilities. Similar to our submitted projects for University of Northern Colorado, University of Alaska-Fairbanks, and Wright State University, we provide:

- A project modeled in Revit
- Space Needs Dashboards, incorporating MSUM enrollment, staffing, externally funded research, co-curricular activities, and other institutional data and projections – integrated with Excel databases and pivot tables
- PDF reports created in Word and InDesign for high quality communication as well as easy future editing by MSUM

In summary, Perkins+Will is excited to submit our team’s proposal for the Campus Space Analysis. We believe our work with MSUM and MnSCU on numerous projects brings great benefits. We assure the quality of our work will meet your highest standards, fit your budget, and be complete before Thanksgiving 2017, to enable your preparation for the 2018 legislative session.

Please do not hesitate to contact me directly if you have any questions. We are looking forward to the opportunity to discuss our qualifications with you soon on campus!

Best regards,

Krisan Osterby
Campus Planning Practice Leader, Perkins+Will

t. 612.851.5128
e. Krisan.Osterby@perkinswill.com
WE CREATE NEXT-GENERATION ENVIRONMENTS TO INSPIRE LEARNING AND DISCOVERY
Perkins+Will provides master planning and programming services in each of our Centers of Excellence for Higher Education: Planning and Strategies, Branded Environments, Learning Environments, Science and Technology, Housing, Sports and Student Centers. In this era of globalization, interdisciplinary endeavors, and reduced funding, our accumulated experience offers benefits to our clients as we share knowledge and insight across our projects.

Our planners for this project are located in Minneapolis and have personally led comprehensive master planning for over 50 campuses in the last decade. They are also leaders and presenters to the organizations that serve higher education institutions, such as SCUP, ITGA, NACUBO, IFMA and APPA. Because of our involvement in these organizations, our planning is grounded in higher education and the particular mission, vision, context and community of each institution we serve. We believe this has resulted in truly sustainable master plans which convey both a sense of institutional purpose and a sense of place. Our plans have been successfully implemented, and have stood the test of time, growth and the need for flexibility. Each project example cited has its first phase completed or underway.

We are leaders in the field of sustainable design. We view campus sustainability through the lens of the triple bottom line: environment, equity and economy. We walk campuses through their interest and commitment to AASHE STARS, the ACUPCC, Sustainable Sites, LEED® ND, and RELi. We are leaders within B3 and USGBC.

Above all, we believe that every campus tells a story, and we can craft appropriate strategies to achieve integrated buildings, grounds, and infrastructure.
MASTER PLANNING / Our Knowledge of Higher Education Trends

MULTI-PURPOSE ENVIRONMENTS
Academic institutions are creating educational cultures that are increasingly multi-dimensional, global, distributed, social, experiential, and interactive. New learning spaces must support this fluid environment where pedagogy, technology, and new ideas are continually evolving and blurring traditional boundaries. These spaces enable groups of students or students and teachers to collaborate and range from a small meeting room to larger public spaces. These spaces must enable students to be productive through access to technology, writing surfaces and furniture groupings.

ADAPTABLE TECHNOLOGY
Technology should be used to augment, compliment and enhance (not automate, substitute or replace) teaching and learning approaches and processes. Personal and group digital technologies should be universal, seamless and essential in a 21st century learning environment. Learning can occur any time and in any place. Social media, ubiquitous computing, tablets and personal digital devices are integral to learning and communication inside and outside the classroom / lab, across the country, and around the world.

SPECIALIZED ENVIRONMENTS
As strategic partners, we support our clients’ institutional missions and goals while anticipating changes in technology, pedagogy, demography and the environment. The spaces and buildings we plan for our clients – for Performing Arts, Business, Law, Health Sciences, Libraries – encompass some of today’s most challenging and interesting educational issues. We bring a fully integrated approach to every project, using the best insights from our experts in multiple fields, across the country and abroad.

SOCIAL LEARNING
Students spend more time outside the classroom on coursework than scheduled class time. In new learning environments, buildings may provide 50% of the total seats in open collaborative user-adaptable settings for 24/7 teamwork and group learning. These spaces are like lightning rods, drawing energy and activity of knowledge application and building communities of accelerated student-mentored learning. Nurturing the social aspect of learning is an essential differentiator for bricks and mortar institutions. Relationships make learning stick.

EXPERIENTIAL LEARNING
Knowledge cannot simply be transmitted from teachers to learners, learners must be engaged in constructing their own knowledge. Studies have shown that any pedagogy using ‘interactive-engagement’ methods results in higher learning gains than the traditional lecture format. As a result, classrooms are transforming from large, tiered lecture halls to smaller, more flexible technology-rich classrooms with tables for group interaction. This setting allows for formal instruction to be augmented with team-based experiential learning.

VISIBILITY AND TRANSPARENCY
Maximizing transparency encourages collaboration among the building users and enhances the awareness of the work taking place within the classrooms and labs. Classrooms and labs that are fully glazed to the spaces beyond, allow daylight deep into the building and discovery of what is happening within these spaces to passersby. Whether in permanent cabinets hung from the walls or ceilings, or presented on interactive monitors, displays illustrate the work being done or research being carried out within, effectively turning the labs and classrooms inside out.
A major shift in workplace culture and facility design can be daunting to those affected. **Change Management** facilitates the process to realize a successful transition.

**THE DRIVERS**

- **Technology**
  Transformation of the instructor to student communication and the impact on current space.

- **Finance and Assessment Model**
  Shifting requires higher productivity and accountability. Focus on return on investment, student success and oversight.

- **Broadening the Circle of Performance**
  Collaboration and communication with partners requires new models and metrics.

**THE VALUE**

- **Build Trust**
  Open and up-front communication reassures stakeholders that the right decisions have been made for the right reasons.

- **Create Consensus**
  A Change Management program quashes rumors before they start, alleviates the fear that comes with change, and generates enthusiasm for planning.

- **Maximize Support and Productivity**
  The less time spent debating pending change, the more time available to focus on work and contributing to success.

**THE PROCESS**

1. **Identify the New Environment**
2. **Create Understanding**
3. **Create Experience**
4. **Prepare for Change**
5. **Sustain Interest**
MASTER PLANNING / Learning Environments
Space Needs Analysis

We fully understand that the Academic Mission acts as the institutional driver. We first explore all facets of the academic entities. Our planning efforts reinforce effective and efficient educational delivery methods.

We develop information about existing space use patterns as well as emerging typologies such as Maker Space, eLearning Support, and Authoring Centers. Our numerical analysis based on national, regional and peer standards as well as our own experience benchmarking institutions, is applied to academic and administrative departments.

OUR APPROACH

- We evaluate existing buildings for their capacity to meet and to facilitate institutional goals and objectives of academic disciplines
- We establish that relationships among the academic disciplines are located in optimal relationships and locations
- We consider building renewal
- We emphasize flexibility of academic and support spaces

OUR OBJECTIVES

- Improve operational relationships among programs
- Imbed flexibility in the design for multiple functions
- Allow for temporary fluctuations in size
- Allow for future growth
- Enhance space and optimize human qualities in the instructional programs

LEARNING ENVIRONMENTS

We analyze space utilization and identify space needs that catalyze and support collaboration and promote a synergism of ideas and relationships. By researching future technologies and delivery platforms, we efficiently and effectively respond to ever changing educational delivery methods and cultural pressures.

In an effort to analyze institutional space needs, information about existing space use patterns has to be developed. Our ‘numerical method’ is applied to each academic department and within each department to each instructional program. Moreover, our analysis is based upon optimizing the scheduling of each individual course and the utilization of each assigned instructional space.

Student station area allowances are developed by researching space allowances of the same or similar academic, administrative and student life functions developed by other states and institutions, by interviewing faculty, staff, and students and by observing the function in the midst of program activity. In seeking confirmation of area allocations, space demand tabulations are returned to executive leadership, administrators, deans and faculty and their input is sought. Space need calculations are then completed so the implications of benchmarking and optimal space proposals are clear to decision makers, facility managers and instructors.
RECENT PROJECTS
Bluegrass Community + Technical College
Carl Sandburg College
Case Western University
Clemson University
Coastal College of Georgia
CUNY York College
Eastern Kentucky University
Florida International University
George Mason University
Gustavus Adolphus College
Kennesaw University
North Hennepin Community College
Northwestern University - Saint Paul
South Dakota School of Mines + Technology
St. Olaf College
Texas A&M University
University of Alaska - Fairbanks
University of Colorado
University of Florida - Innovation Square
University of Minnesota
University of Tennessee - Chattanooga
University of Wisconsin - Platteville
University of Virginia
Whitworth University

HIGHLIGHTS
We have shaped the campus and open space framework for eminent institutions across the country and around the world. Spanning scales from individual building sites to entire campuses, we guide development, promote recruitment and retention, and create vibrant outdoor learning and living environments that reflect the institutional mission, sense of purpose and sense of place.

Perkins+Will’s success is rooted in the firm’s long-standing dedication to building its core Higher Education practice. Our team members, experienced in local, national, and international projects, have won design awards and LEED certification for projects that combine sustainability, innovation, quality, functionality, and cost effectiveness. These include campus entrances, signage, lighting, planting, landscape features, courtyards, quadrangles, malls, arboretum, complete streets, pathways and habitats.

Our success derives from our ability to envision, develop and organize ideas that are as bold and transformative as they are implementable and maintainable. We understand that a visionary idea must be simultaneously clear enough to gain leadership support, simple enough to gain traction with facility and maintenance staff, and compelling enough to achieve funding. Our concepts are imaginative, but they do not ignore the often complex physical conditions in which they reside. By engaging and leveraging this complexity rather than applying boilerplate solutions, our work is always tailored to the specific culture, ecology and heritage of each campus.

Campus design guidelines, built form studies, master plans and public realm plans for institutions are a significant focus of our work and research. Our team brings not only a deep knowledge of existing best practices but also experience in creating new guidelines and policies to help institutions and their surrounding communities achieve goals laid out in the planning process.
Perkins+Will was hired to update the MTSU Campus Master Plan. Key objectives were to position the University for continued excellence and growth while supporting the new strategic plan and reinforcing the success of recent facility, roadway, parking, and open space investment. Space needs, a space utilization study, a housing master plan, a utilities, and site infrastructure plan, and a landscape and tree plan were all synthesized into a coordinated set of strategies.

The comprehensive plan integrated over 15 academic facility projects, demolition of four major outdated facilities. Infrastructure, parking, and transportation improvements transformed connectivity across the campus. A major vacated facility near downtown Murfreesboro was acquired at the time and integrated into long-term campus planning.

Continuing services include delivery and training of space dashboards, a campus Revit model, and a program outline and site selections for math, computing, engineering, and technology facilities.

“Great presentation! Lots of positive head nods, Dr. McPhee was very pleased and complimentary... Thank you!”

Patti Miller
Assistant Vice President for Campus Planning.
UTC's strategic plan set a robust target to become one of the top five public master’s universities in the South.

The University of Chattanooga and Chattanooga City College merged with the University of Tennessee to form the UTC campus. UTC was given the mandate to develop excellence in student success and undergraduate education and to become a model of community outreach and partnerships. Perkins+Will created a long range development plan that integrated the Strategic Plan and Climate Action Plan with physical resources.

Planning services included a campus wide space needs analysis and utilization plan. Implementation and phasing strategies were targeted to help UTC meet its mission; enable partnerships with Chattanooga institutions and organizations, engage the nearby downtown, and support two adjacent historic neighborhoods. Space needs analysis and space utilization strategies were based on current needs, targeted enrollment and research projections. Continuing planning work has included space migration for underutilized natural science and vacated library facilities, highest and best use of transferred state office building property, and support for sports and recreation programming and fundraising.
Perkins+Will was hired by the University of Tennessee Chattanooga (UTC) to study and facilitate decision-making for repurposing Lupton Library and Holt Hall. After the construction of the new library building is completed, and all existing programs are relocated, Lupton Library will be vacated. This empty space positions UTC to rejuvenate Lupton, originally constructed in 1974 and create a forward-looking instructional facility. It also provides a key opportunity to align academic and support program adjacencies in the center of campus.

Holt Hall, originally constructed in 1977, is also a building that has become outdated. It contains a mix of Arts and Sciences programs – primarily Biology and English - that don’t necessarily complement each other. Given UTC’s strategic focus on STEM in this campus precinct in particular, and a desire to improve Life Science teaching and research in general, it is essential for UTC to test what programs might best fit the existing space, benefit adjacent Chemistry programs in Grote Hall, and position UTC students for degree completion.

Determining the highest and best use of these two facilities – on a campus that has significant instructional and administrative space shortages – is of utmost importance. UTC has approval and funding to move forward with programming and design. The results of this study provide a sound basis to begin that work. All recommendations must support:

- UTC Strategic Plan and Campus Master Plan goals
- Expanding enrollment – up to 18,000 students
- Successful delivery of curriculum to larger class sizes in core general education classes (120-130 seats)
- Team-based and active learning in smaller settings (40-50 seats).
- Departmental identity and co-location
- Logical interdisciplinary adjacencies

Utilizing and integrating these three components has allowed UTC to build consensus and position the study to quickly move forward towards implementation. All recommendations must support:
The Wright State University Master Plan will help the University achieve its vision “to be the best University for the world,” and define inspiring and environmentally responsible buildings and grounds.

Perkins+Will worked with Wright State University to update their Campus Master Plan. The scope of work included revising institutional goals and objectives to meet current strategic planning. It also included a new comprehensive data-driven approach to define space needs for academic, research, housing, and auxiliary programs. This data was supported by an assessment of existing facilities for their quality and capacity to support new living and learning styles as well as meet sustainability goals. Evolving enrollment, staffing and eLearning projections were incorporated within dashboards that support WSU’s desire to keep space needs analysis up-to-date.

The highest and best use of existing buildings, open space, and federally protected habitat drove decisions to locate programs and new development. Based on successful detailed phasing strategies to replace outdated facilities with a connected campus core, all master plan strategies are embedded in a campus Revit model. Partnerships and revenue-generation strategies were also included.
Since 2010, the College of DuPage has built nearly 300,000 GSF of new facilities and renovated just over 1 million GSF of facilities on its main campus in Glen Ellyn. Perkins+Will updated the college master plan by identifying projects completed since the 2010 Master Plan, and provided a foundation for future campus growth.

The master plan update identifies future facility needs, which range from specialized learning environments to parking structures, and provides a physical planning framework that enhances connectivity and generates a ‘sense of place’. Strengthening the physical connections between the east and west sides of campus, which is divided by a north-south arterial road, is one hallmark of the plan update. A second important elements is optimizing the land use and critical mass of activity on the west side of campus, where the College has greenfield sites ready for development.

Perkins+Will objectively evaluated the utilization rate of available space and all spaces on campus including classrooms, offices, labs, auxiliary spaces, study spaces, and support spaces. The goal of this effort was to identify existing spaces that could be optimized for better use and also to understand where the College needed to consolidate or reorganize spaces to better accommodate adjacencies across the nearly 1.8 million gsf of facilities on the main campus. The space utilization study required a high amount of data analysis including a detailed facility inventory, class schedules, enrollment figures, and library reference materials. The data was analyzed and compared to national best practices and regional benchmarks. The space analysis provided a list of recommendations to the College that indicated additional space needs, where existing spaces can be relocated, and where renovation best fit the College’s needs.
Perkins+Will updated the 1996 Frameworkplan to reflect past successes and new strategic plan initiatives.

The Campus Frameworkplan for St. Olaf College was the result of a comprehensive planning process. It included the analysis of all instructional space utilization, as well as a gap analysis to assess space needs. The plan positions new sports facilities; fine arts improvements; a new science building; renewed general classrooms, maker space and a coordinated open space and wayfinding program.

It’s most important goals are to:

- Clarify the campus vision for the next 25 years
- Create a plan that incorporates campus research on student learning modalities and the way students best learn
- Respect historic facility resources while positioning the highest and best use of land and buildings
- Strengthen connectivity and the campus' residential tradition
- Identify and improve crucial open space and provide a plan to manage the entire 1,000 acre campus

The plan included options for proposed development zones, building renovation, infill sites, open space networks, campus wayfinding and circulation, and parking systems.
The project breaths life and functionality back into one of the college’s most beloved buildings.

Holland Hall, built in 1924, lost its original character in a 1968 remodel when it went from being a science building to housing humanities. The plan was cramped, short on daylight, and lacked air conditioning. A renovation program was developed that reflected findings from a campus space needs analysis and student research on learning modalities.

The full renovation opens up the interior through smart space planning that provides views, daylight-filled atriums, and the sensitive use of interior windows. An inviting new grand stair improves life safety and connects the lower levels to a found seminar and student study space in the building’s attic.

Seminar rooms, classrooms, and faculty offices are planned for long-term adaptability and near-term flexibility in mind. Adjunct and departmental “home rooms” are provided. Furniture and AV equipment are designed to support state-of-the-art TEAL pedagogy. Student study, teaming, and touch-down space are located throughout the building to encourage interdisciplinary peer-to-peer collaboration.

New building entrances, interior gathering areas, outdoor terraces, social nodes, learning landscapes, and vehicular orientation are also being designed and constructed to meet requirements for connectivity and universal design.
Paulien completed an Academic Space Needs Study for the Fall 2015 semester and a ten-year planning horizon. Previously, we made recommendations for reallocation and migration of programs and units. The objectives of the master plan update were to:

- Reflect a true picture of existing physical assets,
- Portray optimum space needs by functional area at target enrollments, research goals, operational strategies, contemporary practices, and faculty/staff levels,
- Analyze the difference between the optimum space needs from a quantitative perspective, and
- Strategize the physical response to the planning objectives as suggested by the space needs outcomes.

New construction on the East Campus created opportunities for the University to analyze and reallocate the vacated and remaining space on the historic campus quad to meet future program needs. Our analysis included a determination of existing facility utilization and a quantitative evaluation of campus built space in comparison with the State Council of Higher Education for Virginia (SCHEV) space guidelines and national space guidelines. The outcomes of the academic space needs analysis provided James Madison University with a foundation for decision making, which can inform the types and amounts of physical assets the University requires. Specifically, the University will need additional space in most categories to support the projected student growth. While the campus has constructed new facilities as the result of previous master planning efforts, there are several factors that cause most space categories to be in deficit: projected student enrollment growth; increased enrollments in programs that require specialized instructional laboratories; increasing research activities within disciplines requiring specialized laboratories; and historic buildings that do not support contemporary office space guidelines.

The recommendations for the space reallocation create hubs of related disciplines to encourage adjacencies and synergy among the complimentary units.
BALL STATE UNIVERSITY

SERVICES PROVIDED

▪ Utilization Analysis
▪ Space Needs Analysis

Paulien & Associates conducted a space needs and academic space utilization analysis for the comprehensive master plan to guide future campus initiatives as Ball State University developed a detailed five-year strategic plan to define their vision, mission, and values. The University was projecting a growth in undergraduate and graduate student populations after an initial dip in enrollments due to entrance standards calibration. A shift in enrollments by program was expected to occur following the application of the campus academic strategic plan.

The primary space deficits were the result of historic utilitarian buildings. The campus had need of more space for collaborative learning and problem-based pedagogies including active learning environments. Additionally, the utilization highlighted the restrictive scheduling practices that is a factor of lower than expected classroom and teaching laboratory utilization.

UNIVERSITY OF WISCONSIN-LA CROSSE

SERVICES PROVIDED

▪ Campus Space Needs Analysis
▪ Pre-Design Program Academic Building + Science Building
▪ Pre-Design Verification College of Business Administration
▪ Classroom Mix Analysis (2)
▪ Academic Space Utilization

Paulien & Associates has performed several studies at the University of Wisconsin-La Crosse (UW-La Crosse). The most recent analyses are a campus space needs analysis, academic space utilization, Wittich Hall Pre-Design verification for the College of Business Administration and a campus wide classroom mix study. The individual analyses are in support of the continuing campus planning initiatives for new and renovated space on campus.

Previous work has included studies to develop the academic space requirements during the Cowley Hall building program pre-design phase. UW-La Crosse was working towards new and renovated facilities for the academic departments of Biology, Chemistry, Physics, Mathematics and general purpose classrooms. The detailed program space allocation included classrooms, science and research laboratories, academic offices, support areas, and collaborative learning spaces. Paulien also verified the program for a new Academic Building (now named Centennial Hall), which contained over 60,000 ASF for classrooms. Our campus wide classroom mix study provided UW-La Crosse with the quantity and size of classrooms at a target enrollment mix to inform the building program. Other occupants of the building as identified during the conceptual programming include such diverse programs as International Education, the College of Liberal Arts and Studies Dean’s Office, Student Support Services, Academic Advising, and other academic support services. The types of spaces designed into the new building include classroom space, office space, conference space, computer laboratory space, distance and education space, and a large gathering hall with serving kitchen.
WE STRIVE TO GUIDE DEVELOPMENT, PROMOTE ECONOMIC GROWTH AND CREATE VIBRANT, SUSTAINABLE, TRANSFORMATIVE ENVIRONMENTS FOR GENERATIONS TO COME.
We propose a process that we believe will determine clear outcomes for Minnesota State University, Mankato. The workplan includes overlapping components. The specifics of the workplan are identified as the following steps:

- Step 1: Discovery
- Step 2: Analysis
- Step 3: Outcomes
- Step 4: Documentation

**STEP 1: DISCOVERY**
**JULY 24 - AUGUST 18**
*Project Commencement*
Upon receipt of a signed contract or written authorization to proceed, The Perkins+Will team will develop a Master Meeting Agenda for Minnesota State University, Mankato (MSUM) engagement, and will schedule an initiation meeting with the senior leadership of MSUM. The intent of the meeting will be to discuss project expectations, University-wide strategic objectives, and desired outcomes of this process. Other objectives of this visit include discussing campus participation strategies, establishing specific project goals, identifying known space issues, reviewing the project schedule and milestones, setting specific dates for site visits, validating the products and duration of the tasks, and determining communication protocols. Perkins+Will will attend all project meetings in person. Paulien will participate via a conference call or webinar.

**Data Gathering**
The Perkins+Will team will provide a detailed request for the data that will be used. This “Request for Information on Data and Past Planning,” coordinates and tracks materials typically available such as the most recent fall term course file, access to any facilities inventory information, staffing/employee data, library metrics, floor plans/AutoCAD files, and current enrollments – as well as recent and on-going planning initiatives for institutional strategy, academic programs, and capital planning. A secure and project specific DropBox will be established for this project. A unique username and password will be provided to the University for materials to be transmitted via this secure Perkins+Will-hosted web-based file share site. This ensures that any materials provided by the University are secure.

**Space Inventory For Function + Appropriateness**
Accurately recording the current academic space on campus is an important component of space planning. The process of validating and revising a current space inventory ensures that recommendations are built on correct data and the process is not held back by “garbage in/garbage out”.

The process begins with assessment of any facilities information. After the current data is reviewed and available floor plans received, we will internally develop a specific action plan and review with the University to structure the campus visit for this component of work. During this call we will review expectations, clarify metrics used (e.g., room/space use codes), confirm spaces that might be excluded such as non-assignable and non-academic use areas, and discuss the schedule for the site visit.

Documentation will include current space allocations across academic and related administrative departments by space type. Specific fields that will be collected/reviewed include: building name, room number, primary space use code (per the National Center for Education Statistics’ Postsecondary Education Facilities Inventory and Classification Manual, 2006 Edition), instructional space station counts, the amount of space (assignable square feet), primary occupant/department, and general features. Using our tablet-based software application, the room data will be collected/reviewed and a photo taken of each space. The photos will be provided to the University.
The on-site work will include a team from Perkins+Will and Paulien experienced in providing space inventory validation as well as judging the quality of the space to fit programs and pedagogy. Our team will walk all the spaces included in the study. We believe that a professional team working with MSUM leadership will provide the most accurate information in a timely manner. We request that each team member be accompanied by a University staff person who has access to all the spaces (keys/key cards), can answer questions about the assignment of space (e.g., which department uses the space most often?), and can be available for the hours needed during the site visit. Our goal is to minimize the impact on the activities within the spaces. We have developed approaches to minimize interruptions. Up to three professional staff will be on campus for one week to complete the fieldwork for this effort.

Following the site visit, the team will meet with MSUM to review the field notes. Areas of change such as room numbers, space use codes, or primary department are documented and spaces that do not meet benchmarks for high-quality learning, research and workspace experience will be noted. After any remaining questions are clarified, the team will incorporate the changes into the University’s database.

Additionally, changes noted during the site visit such as one room split into two or a new door location will be documented and floor plans provided to the University. This audit of the CAD room configurations will be made using a mark-up method.

Stakeholder/User Group Meetings
Meetings with senior campus leadership, deans, available department chairs, and MSUM-identified focus groups will be scheduled. The empirical and experiential information gathered during these meetings will help the team understand the envisioned direction of the University. These meetings will also serve as a sounding board for issues and ideas that surface during the campus fieldwork. A series of campus meetings, for up to three professional staff, scheduled over three days is envisioned.

STEP 2: ANALYSIS
AUGUST 21 - SEPTEMBER 15
Utilization Study
The academic space utilization study will begin with an examination of current University data, including existing classroom utilization data. Using benchmarks and metrics appropriate to MSUM and MnSCU, we will develop meaningful comparisons and recommend strategies to maintain or increase efficiency levels for academic and administrative offices, classrooms, and laboratories. These recommendations will be directly applicable to strategies for dealing with Armstrong Hall deficiencies and phasing concerns.

Using our experience and knowledge gained from projects conducted on several hundred campuses across the nation, we will identify which under-utilized spaces would be suitable for re-purposing and/or sharing. We will provide best practices so the University can implement an appropriate evaluation system going forward.

Our utilization studies will reveal classroom and teaching laboratory use during the 2016 fall semester. For example, the outcomes include which rooms have very low average hours per week of use, low assignable square feet (ASF) per station, or lower than expected student station occupancy. The outcomes of the academic space utilization analysis will determine if:

- The existing learning spaces are suited for the desired pedagogy
- There too many chairs in a room to meet contemporary learning modalities and the course enrollment capacities
- There are classrooms that can be re-purposed to meet deficiencies of space such as informal learning spaces
- Certain teaching laboratories are only used for a few courses each term (thereby opening discussion as to whether these courses could be accommodated in a shared laboratory)
- Renovations, technology upgrades, or space reallocations are needed to better align College facilities with strategic academic goals

We will meld the course file and revised facilities inventory using Paulien's specialized database management software. Outcomes will include the validation of hours per week of scheduled use (as well as unscheduled use by students and organizations), percentage of seats filled when the room is in use, and the space per student. These results provide an outline of major opportunities or deficiencies.

Our reports will be customized to ensure the outcomes are appropriately representative of individual scheduling blocks (and differentiation of MWF versus TR), the spaces intended for instruction (versus those that are primarily conference rooms and occasionally used for instruction), and other considerations. We also can show utilization by types and sizes of classrooms, buildings, sectors of the campus or by individual schools and colleges.
The following examples show scheduled classroom use by day and time and percent of classrooms in use. Utilization reports may also be illustrated by: centrally scheduled versus departmental spaces, impact by building, outcomes by room amenities such as furniture type or technology level, and pedagogy (e.g., active learning spaces).

### Scheduled Classroom Use by Day and Time

*(Fall 2015)*

**(Darker colors indicate a large percentage of rooms are scheduled.)**

<table>
<thead>
<tr>
<th>Time of Day</th>
<th>Monday</th>
<th>Wednesday</th>
<th>Friday</th>
<th>Average</th>
</tr>
</thead>
<tbody>
<tr>
<td>% In Use</td>
<td>% In Use</td>
<td>% In Use</td>
<td>% In Use</td>
<td>% In Use</td>
</tr>
<tr>
<td>8:15 AM</td>
<td>58%</td>
<td>59%</td>
<td>55%</td>
<td>57%</td>
</tr>
<tr>
<td>9:35 AM</td>
<td>97%</td>
<td>98%</td>
<td>93%</td>
<td>96%</td>
</tr>
<tr>
<td>10:55 AM</td>
<td>94%</td>
<td>97%</td>
<td>93%</td>
<td>95%</td>
</tr>
<tr>
<td>12:15 PM</td>
<td>78%</td>
<td>77%</td>
<td>81%</td>
<td>79%</td>
</tr>
<tr>
<td>1:35 PM</td>
<td>90%</td>
<td>87%</td>
<td>51%</td>
<td>76%</td>
</tr>
<tr>
<td>3:25 PM</td>
<td>46%</td>
<td>43%</td>
<td>9%</td>
<td>33%</td>
</tr>
<tr>
<td>4:30 PM</td>
<td>46%</td>
<td>43%</td>
<td>8%</td>
<td>32%</td>
</tr>
<tr>
<td>5:30 PM</td>
<td>25%</td>
<td>15%</td>
<td>9%</td>
<td>16%</td>
</tr>
<tr>
<td>6:00 PM</td>
<td>32%</td>
<td>24%</td>
<td>9%</td>
<td>22%</td>
</tr>
</tbody>
</table>

**Total classrooms = 112**

This example shows the utilization of a particular room throughout the week with the detail of course offerings listed.

### Brady Educational Center • BEC 110

**Space Use Code:** Classroom

**Department:** Classrooms

**Weekly Room Hours:** 28

**Hours in Use:** 75%

**Station Occupancy:** 31

**Average Enrollment:** 19

**Capacity:** 27

**Assignable Square Footage:** 826

<table>
<thead>
<tr>
<th>Start Time</th>
<th>End Time</th>
<th>Days</th>
<th>Course</th>
</tr>
</thead>
<tbody>
<tr>
<td>8:15 AM</td>
<td>9:40 AM</td>
<td>MWF</td>
<td>MUSC 115 01</td>
</tr>
<tr>
<td>9:35 AM</td>
<td>10:20 AM</td>
<td>TR</td>
<td>MUSC 115 02</td>
</tr>
<tr>
<td>10:55 AM</td>
<td>11:40 AM</td>
<td>MWF</td>
<td>MUSC 233 01 A</td>
</tr>
<tr>
<td>1:35 PM</td>
<td>2:20 PM</td>
<td>TR</td>
<td>MUSC 130 01</td>
</tr>
<tr>
<td>2:10 PM</td>
<td>3:00 PM</td>
<td>MW</td>
<td>MUSC 162 01 A</td>
</tr>
<tr>
<td>3:25 PM</td>
<td>4:10 PM</td>
<td>MW</td>
<td>MUSC 411 01</td>
</tr>
<tr>
<td>4:30 PM</td>
<td>5:20 PM</td>
<td>TR</td>
<td>MUSC 218 01</td>
</tr>
<tr>
<td>5:15 PM</td>
<td>6:05 PM</td>
<td>M</td>
<td>EDUC 362 01</td>
</tr>
<tr>
<td>5:15 PM</td>
<td>6:05 PM</td>
<td>M</td>
<td>EDUC 362 02</td>
</tr>
<tr>
<td>6:15 PM</td>
<td>7:15 PM</td>
<td>M</td>
<td>EDUC 218 01</td>
</tr>
</tbody>
</table>

**COURSE**

<table>
<thead>
<tr>
<th>Enroll-ment</th>
<th>Enroll-ment</th>
<th>Student</th>
</tr>
</thead>
<tbody>
<tr>
<td>TYPE</td>
<td>WRH</td>
<td>WSC</td>
</tr>
<tr>
<td>3.3</td>
<td>26</td>
<td>86</td>
</tr>
<tr>
<td>4</td>
<td>27</td>
<td>108</td>
</tr>
<tr>
<td>3.3</td>
<td>14</td>
<td>46</td>
</tr>
<tr>
<td>4</td>
<td>27</td>
<td>108</td>
</tr>
<tr>
<td>3.2</td>
<td>27</td>
<td>86</td>
</tr>
<tr>
<td>3.2</td>
<td>10</td>
<td>32</td>
</tr>
<tr>
<td>3.2</td>
<td>27</td>
<td>86</td>
</tr>
<tr>
<td>2</td>
<td>9</td>
<td>18</td>
</tr>
<tr>
<td>2</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>2</td>
<td>4</td>
</tr>
</tbody>
</table>

**SECTION**

<table>
<thead>
<tr>
<th>Type</th>
<th>SECTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tec</td>
<td>2</td>
</tr>
</tbody>
</table>

**NOTE:** Concurrent sessions are counted as one section; WRH = Weekly Room Hours; WSC = Weekly Student Contact Hours
Space Needs Assessment

We will use customized software tools aligned with current trends and space planning guidelines to determine the types and amounts of space needed by the University to meet its strategic goals. The model blends the University's data metrics such as the current facilities inventory, staffing levels, student enrollments, and research goals with appropriate utilization expectations and guidelines. The analysis will be informed by the empirical information gathered during meetings on campus.

Working with the University, we will establish the guidelines to be used in determining space amounts needed at a base and future year enrollment mix. The space analysis will take into account the projected student enrollments, the overall enrollment goals, changes in faculty levels, research expectations (and growth areas), opportunities for productivity-based research space (where appropriate), impact of functionally-derived office space as compared to more traditional allocations by employee type (also where appropriate based on conversations with Deans and the Administration), areas for collaboration and interdisciplinary activities, functional relationships (adjacency priorities), and all other types of space needed to support the academic mission.

The current amount of space will be compared to that of similar institutions where we have worked. This provides context for understanding the amounts of space on campus, as well as that of similar campuses.
Base year space needs analysis will compare existing facilities to guideline space needs based on course offerings and staffing for the most recent fall term for which data is available. Appropriate instructional space utilization metrics will be applied, based on the outcomes of the utilization study and on conversations with the University’s leadership. The projected enrollment space needs analysis will compare existing facilities to space needed to accommodate projected enrollment and staffing. The analysis will exclude residence halls.

The analysis will be determined in three primary ways: (1) amount of space by space type, (2) amount of space by college/school/administrative unit by space type, and (3) amount of space by academic department/discipline by space type.
WORKPLAN + SCHEDULE

STEP 3: OUTCOMES
SEPTEMBER 18 - OCTOBER 20

We will present the outcomes of the space inventory, utilization study, and space needs assessment during a campus visit. Prior to the visit, the presentation will be shared with the University via webinar. The presentation will include the findings from each of the study’s components and recommendations. Recommendations will include opportunities for under-utilized instructional spaces, how much of what types of additional space are needed, departments that would function better if co-located, and departments with significant space needs and what kind of space is needed.

The outcomes will provide MSUM with analytics and recommendations to help make decisions about Armstrong Hall and the physical resources that support the academic mission. The analysis developed will be melded with the team’s assessment of MSUM academic facility current functionality and the 2016 Armstrong Hall Predesign so that we can develop and review appropriate options for the building and its replacement.

We will also recommend best practices for space utilization based on our experience with other campuses. We are currently working with several clients to identify methods for how they can use instructional space utilization outcomes to become more efficient. This includes recommendations for sharing space, reclassification of existing space, assessment of current instructional space utilization to identify why some classrooms and teaching laboratories have low or no utilization, reviewing scheduling practices to understand how the campus culture impacts utilization, and identifying where opportunities exist for different types of instructional space to support active learning or maker space.

As options for repurposing, relocating, or replacing Armstrong Hall program space, a cost model will be developed for up to three options. Utilizing a MSUM-provided debt service calculator, our team will hold a capital planning work session with University leadership to determine acceptable strategies for financing academic facility needs stemming from Armstrong Hall. Our recent team experiences repurposing or replacing mid-century modern academic buildings and major classroom buildings offer significant benefits to MSUM. We can share knowledge and insight into their specific project challenges. We will apply our data-driven outcomes to assess challenges with the Armstrong scope and budget and then work with MSUM to create the best solution.

We will work with University leadership in a workshop setting to develop three options for replacing Armstrong Hall. Our inclusive, collaborative process – focused on listening - will strive to understand fully the essential links between MSUM’s strategic plan and the facilities that support it. We will work with MSUM to position spaces that support collaboration - integrating social and intellectual endeavors. Our team will present sustainable solutions that support community and innovation, while addressing critical facilities priorities.

As part of the site selection options, we will also test methods for maintaining the pedestrian and materials management connections across the Armstrong Hall site – and at what cost. Rough order-of-magnitude budgets for a variety of solutions will illuminate how user-centered solutions can integrating academic, financial, and facilities priorities. We will work with University leadership to identify opportunities for enhancing campus connections and thoroughly supporting MSUM academic and student culture.

Our prosed implementation timeline will be coordinated with other facility and capital planning initiatives – whether underway or emerging from the space needs analysis. Phasing components will be limited to $20-25 million total project costs to meet with legislative funding approvals. Because of our extensive on-campus and wide-ranging higher education experience, we will anticipate, coordinate and collaborate with University leadership to integrate issues associated with other University initiatives. Our team is sensitive to the impact of building projects on campus life and will coordinate schedules and project scope to minimize disruption.

Finally, we will provide phasing ideas that take advantage of legislative funding cycles and non-traditional funding models. Logistical issues will be identified that simplify implementation, optimize initiatives, deliver funding, and maximize the utility of campus academic space. An integrated plan for academic scheduling and project phasing will be reviewed with University leadership. The preferred project schedule will work in tandem with the University calendar. The campus space analysis will identify under-utilized academic spaces and opportunities for space sharing. We will work with the University to construct a plan that combines scheduling and project phasing options to complete successfully the renewal or replacement of Armstrong Hall.
STEP 4: DOCUMENTATION
OCTOBER 23 - NOVEMBER 17

The process will culminate in digital documents and tools that include all the elements of this project. A concise executive summary will describe the process, terminology, metrics applied, optimization of existing campus-wide academic and supporting administrative space, additional space needs, and recommendations for Armstrong Hall.

Supporting sections will describe in detail:

- Academic Metrics
- Peer Benchmark Analysis
- Updated and Coordinated Academic and Administrative Space Inventory
- Campus Time and Fill Utilization Study
- Campus Space Needs Assessment
- Space-Sharing and Multipurpose Space Strategies
- Program (Re)distribution Plan
- Cost model, projected debt service, and financing plan
- Three alternate site studies for a replacement facility
- Vacated site redevelopment and connectivity opportunities and costs
- Phasing plan (coordinated timeline and site plan for Armstrong and other campus “positioning projects”)
- List of logistical and planning issues that must be addressed in a future design phase

The Draft for Review report will be submitted to the University. Comments from the University will be incorporated and a final Adobe PDF document will be provided – along with updated CAD and Revit files for Armstrong Hall and the campus academic facilities, working Excel tables, and three printed copies of the Final Report.
<table>
<thead>
<tr>
<th>WEEK</th>
<th>07/24 1</th>
<th>07/31 2</th>
<th>08/07 3</th>
<th>08/14 4</th>
<th>08/21 5</th>
<th>08/28 6</th>
<th>09/04 7</th>
<th>09/11 8</th>
<th>09/18 9</th>
<th>09/25 10</th>
<th>10/02 11</th>
<th>10/09 12</th>
<th>10/16 13</th>
<th>10/23 14</th>
<th>10/30 15</th>
<th>11/06 16</th>
<th>11/13 17</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>1</strong></td>
<td><img src="#" alt="Discovery" /></td>
<td><img src="#" alt="Discovery" /></td>
<td><img src="#" alt="Discovery" /></td>
<td><img src="#" alt="Discovery" /></td>
<td><img src="#" alt="Discovery" /></td>
<td><img src="#" alt="Discovery" /></td>
<td><img src="#" alt="Discovery" /></td>
<td><img src="#" alt="Discovery" /></td>
<td><img src="#" alt="Discovery" /></td>
<td><img src="#" alt="Discovery" /></td>
<td><img src="#" alt="Discovery" /></td>
<td><img src="#" alt="Discovery" /></td>
<td><img src="#" alt="Discovery" /></td>
<td><img src="#" alt="Discovery" /></td>
<td><img src="#" alt="Discovery" /></td>
<td><img src="#" alt="Discovery" /></td>
<td><img src="#" alt="Discovery" /></td>
</tr>
<tr>
<td>DISCOVERY:</td>
<td>SPACE INVENTORY + USER /STAKEHOLDER MEETINGS</td>
<td>DOCUMENTATION OF EXISTING CONDITIONS</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>2</strong></td>
<td><img src="#" alt="Analysis" /></td>
<td><img src="#" alt="Analysis" /></td>
<td><img src="#" alt="Analysis" /></td>
<td><img src="#" alt="Analysis" /></td>
<td><img src="#" alt="Analysis" /></td>
<td><img src="#" alt="Analysis" /></td>
<td><img src="#" alt="Analysis" /></td>
<td><img src="#" alt="Analysis" /></td>
<td><img src="#" alt="Analysis" /></td>
<td><img src="#" alt="Analysis" /></td>
<td><img src="#" alt="Analysis" /></td>
<td><img src="#" alt="Analysis" /></td>
<td><img src="#" alt="Analysis" /></td>
<td><img src="#" alt="Analysis" /></td>
<td><img src="#" alt="Analysis" /></td>
<td><img src="#" alt="Analysis" /></td>
<td><img src="#" alt="Analysis" /></td>
</tr>
<tr>
<td>ANALYSIS:</td>
<td>UTILIZATION STUDY + SPACE NEEDS ASSESSMENT</td>
<td>INSTITUTIONAL COMPARISONS, PROJECTIONS</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>3</strong></td>
<td><img src="#" alt="Outcomes" /></td>
<td><img src="#" alt="Outcomes" /></td>
<td><img src="#" alt="Outcomes" /></td>
<td><img src="#" alt="Outcomes" /></td>
<td><img src="#" alt="Outcomes" /></td>
<td><img src="#" alt="Outcomes" /></td>
<td><img src="#" alt="Outcomes" /></td>
<td><img src="#" alt="Outcomes" /></td>
<td><img src="#" alt="Outcomes" /></td>
<td><img src="#" alt="Outcomes" /></td>
<td><img src="#" alt="Outcomes" /></td>
<td><img src="#" alt="Outcomes" /></td>
<td><img src="#" alt="Outcomes" /></td>
<td><img src="#" alt="Outcomes" /></td>
<td><img src="#" alt="Outcomes" /></td>
<td><img src="#" alt="Outcomes" /></td>
<td><img src="#" alt="Outcomes" /></td>
</tr>
<tr>
<td>OUTCOMES:</td>
<td>CONCEPTS + RECOMMENDATIONS</td>
<td>PHASING, FUNDING IMPROVEMENTS</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>4</strong></td>
<td><img src="#" alt="Documentation" /></td>
<td><img src="#" alt="Documentation" /></td>
<td><img src="#" alt="Documentation" /></td>
<td><img src="#" alt="Documentation" /></td>
<td><img src="#" alt="Documentation" /></td>
<td><img src="#" alt="Documentation" /></td>
<td><img src="#" alt="Documentation" /></td>
<td><img src="#" alt="Documentation" /></td>
<td><img src="#" alt="Documentation" /></td>
<td><img src="#" alt="Documentation" /></td>
<td><img src="#" alt="Documentation" /></td>
<td><img src="#" alt="Documentation" /></td>
<td><img src="#" alt="Documentation" /></td>
<td><img src="#" alt="Documentation" /></td>
<td><img src="#" alt="Documentation" /></td>
<td><img src="#" alt="Documentation" /></td>
<td><img src="#" alt="Documentation" /></td>
</tr>
<tr>
<td>DOCUMENTATION:</td>
<td>DIGITAL DOCUMENTS AND TOOLS OF ALL PROJECT ELEMENTS</td>
<td>SUBMIT DRAFT FOR REVIEW TO UNIVERSITY</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**TASK CONFIRMATION / INITIATION MEETINGS**  **MID-POINT CHECK-IN**  **MILESTONE REVIEW MEETINGS**
“I am happy to attest to the professional planning and committed work ethic of Perkins+Will. Krisan provided great planning leadership highlighting her experience at other institutions and was able to build consensus and support from campus constituents as well as community partners. She is especially good at tailoring presentations to a particular audience from the most informal on up to the state legislative level. It has been a pleasure to work with Perkins+Will throughout the campus planning process. They come with very high recommendations from UTC.”

University of Tennessee at Chattanooga
Janet Spraker, PE, Director of Engineering Services
We believe that design has the power to positively transform people and the planet.

**Areas of Practice**
- Cities + Sites
- Corporate + Commercial
- Civic + Cultural
- Healthcare
- Higher Education
- Hospitality
- K-12 Education
- Medical Education
- Residential
- Science + Technology
- Sports + Recreation
- Transportation

**Disciplines**
- Architecture
- Branded Environments
- Economic + Market Analysis
- Interior Design
- Landscape Architecture
- Planning + Strategies
- Urban Design

**Founded 1935**

Curious, agile, and adaptable, we craft solutions that inspire our clients and their communities, create positive long-term environmental, economic, and social change, and set new paradigms for the future.

Since 1935, Perkins+Will has created innovative and award-winning designs for the world’s most forward-thinking clients. We are architects, interior designers, urban designers, landscape architects, consultants, and branded environment experts who approach design from all scales and perspectives. Engaged, accessible, and collaborative, our staff of over 2,200 professionals brings together high design, functional performance, and social responsibility to advance project goals. Inspired by the programs within, we design from the inside-out. We combine a deeply humanistic approach with results-driven pragmatism to create dynamic spaces for people. Research-focused and inventive, every day we reimagine how space can be used to foster stronger ties between communities, the built environment, and nature. With nearly 1,000 LEED® Accredited Professionals, sustainable design and the use of healthy building materials are fundamental to our process. Our transformative designs help students learn better, patients heal faster, business teams perform stronger, and city dwellers have more meaningful daily experiences.
Paulien is a firm recognized nationally for expertise in higher education space planning. We understand the issues campuses face within increasingly competitive markets, goals of increased efficiencies, deferred maintenance of existing buildings, optimization of services and evolving curriculum needs. Our services are customized for each client. We pride ourselves on delivering results that are supported by the appropriate analytical tools, as well as our vast experience. Our comprehensive services include:

**SPACE EFFICIENCY STUDIES**
- Utilization Studies for Classrooms and Teaching Labs
- Utilization Studies for Non-Credit Activity Space
- Utilization Studies for Office Space
- Space Needs Analysis
- Space Reallocation and Migration Studies
- Multi-Campus Program Migration Studies
- Classroom Mix Analysis
- Research Lab Analysis

**BENCHMARKING**
- Comparative Analysis
- Peer Surveys on Best Practices

**ACADEMIC PLANNING**
- Strategic Planning
- Environmental Scanning
- Occupational Demand/Workforce Analysis
- Career/Guided Pathway Modeling
- Program Gap Analysis
- New Program Feasibility Studies
- New Teaching/Learning Strategies
- Demographic and Participation Rate Studies
- Educational Master Planning

**FACILITY PROGRAMMING/PLANNING**
- Program Planning
- Educational Adequacy Studies
- Facilities Inventory Verification
- New Campus Feasibility Studies
- New Campus Planning

**POLICY DEVELOPMENT**
- Space Policy Recommendations

Paulien has focused on academic and facilities-related studies for higher education for over 37 years. The firm's planning projects have included more than 700 college and university campuses in 49 states, the District of Columbia, and nine foreign countries. For each of the campuses where we have worked, our services have been tailored to best meet the needs of the institution.
Quality-Driven, Best-Value
Construction Management

A bargain isn’t always a bargain in construction. To ensure the best possible outcome at the best possible cost, you must approach a project from a variety of different angles. That’s where Value Optimization comes into play. By leveraging our vast market knowledge, supplier relations, and network of value minded subcontractors, Loeffler Construction & Consulting is able to optimize outcomes to substantially lower overall cost, shorten construction time, and minimize client risk — all while increasing customer satisfaction and even reducing cost of ownership. Value Optimization is more than just immediate results. It’s about long-term returns.

The complexity of the modern building process demands qualified professionals with effective communication skills, impressive industry knowledge, and strong managerial abilities. Loeffler Construction & Consulting is that construction professional, representing people like you to bring projects in on time and within budget.

Our clients rely on us to provide the necessary control systems for cost, design scheduling, planning, and engineering to arrive at practical solutions for the most challenging of construction projects, no matter the delivery model.

One of the most important stages in construction takes place during the project’s conception. It’s at this time when you often arrive at key decisions with respect to scope, size, and feasibility. Our involvement early on provides an element of practical insight, ensuring you understand the constructibility and true costs associated with the project. We work with you to understand your project goals and vision and provide you the necessary components to allow you to make informed decisions.
To help you achieve your vision, we have assembled a multidisciplinary team with deep experience in space use analysis, campus planning, workplace strategies, and transition management. Our team includes key leadership in space analysis, campus planning, and landscape architecture, along with highly recommended project leadership and management.
ROBERT A. NOVAK, AIA, NCARB, LEED AP®
Managing Principal

Robert Novak has a demonstrated ability to successfully lead the programming, planning, and design of complex projects. He has over 30 years of experience in all project phases and has completed over 4 million square feet of research laboratories, teaching laboratories, and advanced technology facilities for a broad-spectrum of academic, corporate, governmental and healthcare clients, including Minnesota State University, Mankato.

Robert offers a national perspective to his clients and brings innovative and strategic thinking to his projects. Clients benefit from his focused attention during the design and planning process, his hands-on approach, his energy and enthusiasm, and his commitment to excellence.

EDUCATION
Bachelor of Architecture, University of Minnesota
Bachelor of Arts, University of Minnesota

REGISTRATIONS
Registered Architect, Minnesota
National Council of Architectural Registration Boards certified
LEED® Accredited Professional

PROFESSIONAL AFFILIATIONS
American Institute of Architect
Minnesota Society American Institute of Architects
National Council of Architectural Registration Boards
Society for College and University Planning Special Emphasis Panel
National Center for Advancing Translational Sciences
National Institute of Health
Scientific and Technical Review Board on Biomedical and Behavioral Research Facilities, National Institutes of Health (former board member)
Center for the Built Environment, University of California at Berkeley (former advisory board member)

RELEVANT EXPERIENCE
University of Wisconsin-Platteville
Campus Master Plan
Platteville, Wisconsin
Texas Christian University
Academic Commons Precinct Plan
Neeley School of Business Precinct Plan
East Campus Precinct Plan
2009 Campus Master Plan
2005 Campus Master Plan
Academic Facilities Master Plan
Fort Worth, Texas
University of North Dakota
Research Foundation
Research Precinct Plan
Grand Forks, North Dakota
Texas Christian University
Space planning and remodeling projects resulting from Academic Facilities Master Plan
Fort Worth, Texas
University of Minnesota
Bell Museum + Planetarium
St. Paul, Minnesota
University of Minnesota
Academic Health Center
Teaching & Technology Center Study
Minneapolis/St. Paul, Minnesota
University of North Dakota School of Medicine & Health Sciences
Grand Forks, North Dakota

North Hennepin Community College
Bioscience and Health Careers Center
Brooklyn Park, Minnesota
Minnesota State University Mankato
Clinical Sciences Building
Mankato, Minnesota
University of Northwestern - St. Paul
Nazareth Hall Sciences
School of Nursing
Saint Paul, Minnesota
Princess Noura Bint Abdulrahman University
College of Education Sciences
Science Laboratories
Riyadh, Saudi Arabia
Universidade Agostinho Neto
Chemistry Laboratories
Physics Laboratories
Luanda, Angola
Marquette University
College of Engineering Building
Milwaukee, Wisconsin
St. Catherine University
Mendel Hall Science Lab Remodeling
Anatomy Lab
Fontbonne Hall Repurposing
St. Paul, Minnesota
University of Tennessee
Health Science Center
Campus Master Plan
Memphis, Tennessee
Kate Herbolsheimer is a Vice President and Principal at Paulien. Her knowledge of architecture and academic planning, combined with superior communication skills, enable her to provide clients with creative and dynamic solutions. Kate's contributions to Paulien over the last 15 years include space needs analyses, utilization analyses, master plans, program plans, pre-design studies, migration/reallocation studies, and compliance overviews. Her creative strength lies in her ability to translate a client’s strategic planning, culture, and values into a physical response.

Kate's knowledge regarding current and emerging trends in higher education supports her dynamic solutions. She makes projects a success by implementing a process of inclusion and consensus building, thereby creating support for the project at every stage of development from conception through completion.

EDUCATION
Master of Architecture, University of Minnesota
Bachelor of Arts, Architecture, University of Minnesota

PROFESSIONAL AFFILIATIONS
Society for College and University Planning (SCUP)

PRESENTATIONS

RELEVANT EXPERIENCE
Kent State University
Utilization and Space Needs Analysis
Kent, Ohio
Henderson State University
Academic Space Utilization and Space Needs Analysis
Arkadelphia, Arkansas
James Madison University
Academic Space Utilization and Space Needs Analysis
Harrisonburg, Virginia
University of St. Thomas
Academic Space Utilization, Space Needs Analysis, and Benchmarking
St. Paul, Minnesota
University of Wisconsin LaCrosse
Academic Space Utilization and Space Needs Analysis
LaCrosse, Wisconsin
Ball State University
Space Needs and Utilization Analysis
Muncie, Indiana
Marquette University
Academic Space Utilization, Space Needs Analysis, and Benchmarking
Milwaukee, Wisconsin
University of Toledo
Space Needs, Utilization, and Education Adequacy
Toledo, Ohio

University of Wisconsin, Madison
Utilization, Space Needs Analysis, and Comparative Benchmarking for College of Letters & Sciences; Space Needs Analysis for College of Engineering
Madison, Wisconsin
Southwest Minnesota State University
Academic Space Utilization
Marshall, Minnesota
University of Alaska Fairbanks
Academic Space Utilization, Space Needs Analysis, Benchmarking, and Implementation Strategies
Fairbanks, Alaska
University of Memphis
Academic Space Utilization and Space Needs Analysis
Memphis, Tennessee
Kutztown University of Pennsylvania
Academic Space Utilization, Office Space Utilization, and Space Needs Analysis
Kutztown, Pennsylvania
Washington State University
Academic Space Utilization and Educational Adequacy
Pullman, Washington
Winona State University
Academic Space Utilization and Space Needs Analysis
Winona, Minnesota
Krisan has more than 30 years of national experience in the planning and development of memorable and sustainable campuses. She works closely with each institution to ensure that campus facilities, grounds and infrastructure tell the story of strategic, academic and capital planning. Her wide range of abilities include analyzing land and building use, open space, and circulation. She formulates campus design principles that integrate data, provide flexible phasing, encourage partnerships, and strengthen image and identity. She enjoys stakeholder engagement and promoting consensus and collaborative decision-making among diverse constituencies.

EDUCATION
Master of Landscape Architecture, Harvard Graduate School of Design
Fulbright /ITT Fellowship in Planning, The Netherlands
Bachelor of Arts in Geography, Gustavus Adolphus College
Durham University / IES Scholar
Durham, England

REGISTRATIONS
Registered Landscape Architect in Commonwealth of Massachusetts

PROFESSIONAL AFFILIATIONS
American Society for Landscape Architects
International Town Gown Association
National Trust for Historic Preservation
Society for College and University Planning: Facilities Planning Academy Member
Awards Committee Past Co-Chair
Professional Development Committee Past Member
Pre-Conference Workshops Past Chair
Nature Conservancy

RELEVANT EXPERIENCE
Texas Christian University
Campus Facilities Master Plan
Harris College of Nursing Expansion Plan
Fort Worth, Texas

University of Alaska-Fairbanks
Campus Master Plan Update
Campus Housing and Dining Master Plan
Fairbanks, Alaska

University of North Dakota
New School of Medicine and Health Sciences
Grand Forks, North Dakota

University of Tennessee Chattanooga
Academic Space Migration Plan
Campus Master Plan
Fine Arts Center Infill and Renovation Study
Holt Science Hall Renovation Study
Lupton Library Repurposing and Addition Study
Chattanooga, Tennessee

University of Tennessee Health Science Center
Campus Master Plan
Mixed Use Development RFEI Study
Memphis, Tennessee

University of Wisconsin Platteville
Campus Master Plan
Platteville, Wisconsin

Wright State University
Campus Master Plan Update
Dayton, Ohio
DOUG BERGERT, LEED AP® BD+C
Project Manager + Project Designer Associate

Doug works collaboratively with stakeholders and design teams to produce unique solutions that meet the client’s schedule and budget. He has over twenty years of design and planning experience in a variety of project types. A frequent design review critic at the University of Minnesota, Doug brings curiosity and rigor to each project, through all stages of planning, design, and construction.

RELEVANT EXPERIENCE
Eastern Kentucky University
Campus Master Plan
Richmond, Kentucky

Princess Nora Bint Abdulrahman
College of Business, Student Union,
Institute of Language and Translation,
Academic College Libraries
Riyadh, Saudi Arabia

University of Minnesota
Amundson Hall-Gore Annex Renovation & Expansion
Health Sciences Education Center
Minneapolis, Minnesota

University of Minnesota
Bell Museum + Planetarium
St. Paul, Minnesota

University of North Dakota
School of Medicine & Health Sciences
Grand Forks, North Dakota

University of Tennessee-Chattanooga
Academic Space Migration Plan
Lupton Library Repurposing Plan
Chattanooga, Tennessee

Youngstown State University
Williamson College of Business Administration
Youngstown, Ohio

LISA POOL, CID, LEED AP®
Workplace Strategist, Principal

As the Director of Workplace Strategies, Lisa Pool has been with Perkins+Will since 1994. Lisa specializes in large workplace environments, working with multiple Fortune 500 companies. By focusing on the client’s needs and project vision, she implements innovative solutions that reflect the culture, mission and financial objectives of the client. Lisa also leads Change Management services, helping her clients transition to new environments by providing clear messaging strategies resulting in awareness understanding and buy in. Lisa leads her clients and teams with a passion for collaboration and respect, resulting in positive outcomes for all involved. Lisa’s clients benefit from her years of knowledge and understanding of high performance work environments, where employees are both innovative and productive.

RELEVANT EXPERIENCE
University of North Dakota
School of Medicine + Health Sciences
Transition Management
Grand Forks, North Dakota

University of California, San Francisco
Workplace Strategy + Predesign
San Francisco, California

University of Minnesota
Social Science Tower
Minneapolis, Minnesota

Capella University
Minneapolis, Minnesota

EDUCATION
Bachelor of Fine Arts, Hope College
Philadelphia College of Art, Certified Program in Interior Design
University of California, Certified Program in Environmental Design

REGISTRATIONS
State of Minnesota Certified Interior Designer (CID)
LEED AP® Interior Design + Construction
Jonathan Murray is an experienced senior project manager and cost consultant at Loeffler Construction & Consulting who has completed hundreds of projects from the estimating phase through job completion. Jonathan has been a project manager for over ten years and has experience working in multiple market segments throughout the Midwest region including K-12, Higher Education, Corporate Interiors, Government, Medical, Restoration, Military, and Private Sector Special Projects.

Jonathan brings strong leadership, a collaborative mindset and a commitment to delivering projects that exceed the clients expectations.

EDUCATION
Bachelor of Science, Construction
University of Wisconsin, Stout

CERTIFICATIONS + ACCREDITATIONS
LEED AP®
American Institute of Construction, Associate Constructor
OSHA 30-Hour Construction Training
American Society for Healthcare Engineering, Health Care Construction (HCC) Certificate
OSHA Silica Awareness
First Aid + CPR Certified

RELEVANT EXPERIENCE
Minnesota State University Mankato
Armstrong Hall, Pre-Design Cost Consultant
Mankato, Minnesota

University of Minnesota Duluth
Limnology, Pre-Design Cost Consultant
Duluth, Minnesota

St. Cloud Technical Community College
Bookstore & Coffee Bar, Cost Consultant
St. Cloud, Minnesota

University of Minnesota
Sanford Dining Hall
Minneapolis, Minnesota

University of Minnesota
Frontier Hall HVAC
Minneapolis, Minnesota

University of Minnesota
West Bank Skyway
Minneapolis, Minnesota

Anoka Technical College
Anoka, Minnesota

Minnesota State University Mankato
RN Baccalaureate
Mankato, Minnesota

University of Minnesota Morris
Briggs Library
Morris, Minnesota

Century College
Exterior Façade
St. Paul, Minnesota
**What information do we need to make an informed decision about Armstrong Hall?**
- Assist the University in identifying academic metrics that could translate to college and department space needs.
- Provide qualitative analysis of academic metrics to assess potential future space needs.
- Provide some benchmark analysis to compare against peer institutions.
- Is there existing space available to reassign some of Armstrong Hall program to?
  - Verify campus space inventory.
  - Review current functional use of space.
  - Evaluate campus time and fill utilization.
- Is there opportunity for sharing space to increase efficiency?
  - Identify potential for multi-purpose space creation.
  - Can the GSF of Armstrong be reduced through reassignment/ increased efficiency?
    - Provide a program redistribution plan based on inventory and utilization reports.
- Can the campus support projected debt service to replace Armstrong vs. renewing it?
  - Provide a debt analysis using the campus provided cost of debt service calculator – incorporating info from cost model.
  - Incorporate table of University provided existing debt service in the analysis.
  - University will provide consultant existing debt service information.
- If Armstrong was to be replaced where should the new building be sited?
  - Include three potential siting plans with pro’s and con’s.
  - Siting based on meeting with University administration.
- If Armstrong was replaced what would we do with the vacated footprint/lost connection?
  - Provide a suggested method for maintaining building connections.
  - Rough order of magnitude cost for suggested solution.
- How does the Armstrong Hall plan fit in and impact other campus building initiatives?
  - Provide a coordinated timeline and building siting plan showing how the Armstrong Hall solution fits with other campus initiatives.
  - University to provide the consultant with the information about other initiatives (not part of this contract to expend design time on these other initiatives).
- How do we implement a major project in one of the most heavily used academic buildings which is located in the center core of campus?
  - Provide phasing plan based on input from the University/known funding cycles.
  - Include a listing of logistical issues that will need to be addressed during the project design process.

**TASK LEADERSHIP MATRIX /**

<table>
<thead>
<tr>
<th>TASK</th>
<th>PERKINS+WILL</th>
<th>PAULIEN</th>
<th>LOEFFLER</th>
</tr>
</thead>
<tbody>
<tr>
<td>What information do we need to make an informed decision about Armstrong Hall?</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Assist the University in identifying academic metrics that could translate to college and department space needs.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Provide qualitative analysis of academic metrics to assess potential future space needs.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Provide some benchmark analysis to compare against peer institutions.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Is there existing space available to reassign some of Armstrong Hall program to?</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Verify campus space inventory.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Review current functional use of space.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Evaluate campus time and fill utilization.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Is there opportunity for sharing space to increase efficiency?</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Identify potential for multi-purpose space creation.</td>
<td>Workplace</td>
<td></td>
<td>Acedemic</td>
</tr>
<tr>
<td>Can the GSF of Armstrong be reduced through reassignment/ increased efficiency?</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Provide a program redistribution plan based on inventory and utilization reports.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Can the campus support projected debt service to replace Armstrong vs. renewing it?</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Provide a debt analysis using the campus provided cost of debt service calculator – incorporating info from cost model.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Incorporate table of University provided existing debt service in the analysis.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>University will provide consultant existing debt service information.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>If Armstrong was to be replaced where should the new building be sited?</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Include three potential siting plans with pro’s and con’s.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Siting based on meeting with University administration.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>If Armstrong was replaced what would we do with the vacated footprint/lost connection?</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Provide a suggested method for maintaining building connections.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Rough order of magnitude cost for suggested solution.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>How does the Armstrong Hall plan fit in and impact other campus building initiatives?</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Provide a coordinated timeline and building siting plan showing how the Armstrong Hall solution fits with other campus initiatives.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>University to provide the consultant with the information about other initiatives (not part of this contract to expend design time on these other initiatives).</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>How do we implement a major project in one of the most heavily used academic buildings which is located in the center core of campus?</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Provide phasing plan based on input from the University/known funding cycles.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Include a listing of logistical issues that will need to be addressed during the project design process.</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
“The service that Wright State has received from Perkins+Will has been exceptional.”

Wright State University
Robert Thompson
Campus Architect
Middle Tennessee State University
Patti Miller, Assistant Vice President for Campus Planning
t. 615.898.2411
e. Patti.Miller@mtsu.edu

Wright State University
Robert Thompson, Campus Architect
t. 937.775.2035
e. rob.thompson@wright.edu

College of DuPage
Bruce Schmiedl, Director, Facilities, Planning, & Development
t. 630.942.6273
e. schmiedlb@cod.edu

Ball State University
Greg Graham, Director of Facilities Planning
t. 765.285.2828
e. graham@bsu.edu

James Madison University
Dr. A. Jerry Benson, Provost and Senior Vice President for Academic Affairs
t. 540.568.3429
e. bensonaj@jmu.edu

University of Wisconsin-La Crosse
Bob Hetzel, Vice Chancellor for Administration and Finance
t. 608.785.6491
e. bhetzel@uwlax.edu

Valley Natural Foods
Ralph Hale, Business Developer
t. 952.891.1212 x253
e. development@valleynaturalfoods.com
FEE PROPOSAL / Fees + Expenses + Rate Schedule

FEE SUMMARY

Minnesota State University, Mankato has expressed a clear project vision – crafting a campus space analysis project that weaves together academic space needs, facility utilization, and the faculty/student experience with past strategic planning and facility planning for Armstrong Hall. MSUM also desires the project to meet MnSCU and legislative requirements, steward fiscal resources, and add value when there is a clear benefit that can be realized.

Your goals and objectives are the foundation of our workplan and fee proposal. They include all tasks and deliverables listed in the RFP. We have also included a value-added task to include auxiliary facilities in our work so the campus inventory is complete and up-to date for all MSUM facilities (excluding housing). All expenses for travel and project work have been included in our Base Fee components – including the 3 required Final Reports. We have also included information about our printing service costs in the event MSUM requires more project materials and reports for distribution. At any point during our process, if desired by MSUM, we can add these services to the project scope and schedule to ensure a fully coordinated process and product.

We believe that our proposal will fulfill MSUM’s objectives. Our proposal is a sound starting point for more detailed discussions and fine tuning. We are able to organize and accomplish our work within whatever timeframe and budget is established by MSUM. As we learn more about the College’s detailed needs and resources, we can revise our proposal to best meet your desired experience and deliverables.

For your added benefit, we have included our team’s hourly rate schedule below.

RATES

PERKINS+WILL

<table>
<thead>
<tr>
<th>Role</th>
<th>Rate [$/hr]</th>
</tr>
</thead>
<tbody>
<tr>
<td>Principals</td>
<td>$175.00 - $290.00</td>
</tr>
<tr>
<td>Associate Principals</td>
<td>$175.00 - $250.00</td>
</tr>
<tr>
<td>Project Managers</td>
<td>$175.00 - $220.00</td>
</tr>
<tr>
<td>Planners</td>
<td>$150.00 - $210.00</td>
</tr>
<tr>
<td>Architects</td>
<td>$90.00 - $190.00</td>
</tr>
<tr>
<td>Technicians/CAD</td>
<td>$85.00 - $135.00</td>
</tr>
<tr>
<td>Administrative Staff</td>
<td>$55.00 - $80.00</td>
</tr>
</tbody>
</table>

PAULIEN & ASSOCIATES

<table>
<thead>
<tr>
<th>Role</th>
<th>Rate [$/hr]</th>
</tr>
</thead>
<tbody>
<tr>
<td>Vice Principal &amp; Principal</td>
<td>$280.00</td>
</tr>
<tr>
<td>Senior Associate/Senior Consultant</td>
<td>$200.00</td>
</tr>
<tr>
<td>Associate II/Senior Software Specialist</td>
<td>$185.00</td>
</tr>
<tr>
<td>Associate</td>
<td>$170.00</td>
</tr>
<tr>
<td>Planning Specialist</td>
<td>$140.00</td>
</tr>
<tr>
<td>Planning Analyst/Data Analyst</td>
<td>$140.00</td>
</tr>
<tr>
<td>Project Specialist</td>
<td>$100.00</td>
</tr>
<tr>
<td>Project Assistant</td>
<td>$80.00</td>
</tr>
<tr>
<td>CAD Drafter</td>
<td>$65.00</td>
</tr>
<tr>
<td>Administrative Staff</td>
<td>$45.00</td>
</tr>
</tbody>
</table>

LOEFFLER CONSTRUCTION & CONSULTING

<table>
<thead>
<tr>
<th>Role</th>
<th>Rate [$/hr]</th>
</tr>
</thead>
<tbody>
<tr>
<td>Estimator</td>
<td>$125.00</td>
</tr>
<tr>
<td>Administrative Staff</td>
<td>$70.00</td>
</tr>
</tbody>
</table>

BASE FEES

<table>
<thead>
<tr>
<th></th>
<th>Rate [$/hr]</th>
</tr>
</thead>
<tbody>
<tr>
<td>SPACE ANALYSIS + UTILIZATION STUDY</td>
<td>$73,500</td>
</tr>
<tr>
<td>CONCEPTS + OUTCOMES</td>
<td>$55,200</td>
</tr>
<tr>
<td>COST MODELING, DEBT SERVICE STUDY, PHASING AND LOGISTICS PLAN</td>
<td>$14,200</td>
</tr>
<tr>
<td>VALUE ADDED SERVICES FOR AUXILIARY SPACE ANALYSIS</td>
<td>$26,300</td>
</tr>
<tr>
<td>PRINTING SERVICES</td>
<td>Rate [$/side]</td>
</tr>
<tr>
<td>Color: 11 x 17</td>
<td>$2.10</td>
</tr>
<tr>
<td>8.5 x 11</td>
<td>$1.05</td>
</tr>
<tr>
<td>Black &amp; White: 11 x 17</td>
<td>$3.1</td>
</tr>
<tr>
<td>8.5 x 11</td>
<td>$0.16</td>
</tr>
</tbody>
</table>
SAMPLE REPORTS
Click Image to Open

Wright State University
Campus Master Plan Update

University of Northern Colorado
Space Utilization Study

University of Alaska, Fairbanks
Space Utilization Planning
Ideas + Buildings
That Honor the
Broader Goals of
Society
MINNEAPOLIS / CONTACT

KRISAN OSTERBY

t. 612.851.5128
e. Krisan.Osterby@perkinswill.com