The Board of Governors for Truman State University met on Saturday, August 4, 2018, on the University campus in Kirksville, Missouri. The meeting was held in the Conference Room of the Student Union Building. The open session of the meeting was called to order shortly after 1:00 p.m. by the Vice Chair of the Board of Governors, Laura A. Crandall.

Participating in the meeting were five of the seven voting members: Sarah Burkemper, Laura A. Crandall, Jennifer Kopp Dameron, K. Brooks Miller and Jim O'Donnell. Cheryl J. Cozette and Mike LaBeth were unable to participate due to previous commitments. Their absences were recorded as excused.

Also participating in the meeting were two of the three non-voting members: Mike McClaskey, one of two out-of-state members, and Tiffany Middlemas, student representative. David Lee Bonner, the other out-of-state member was unable to participate due to a previous commitment. His absence was recorded as excused.

On July 23, 2018, Governor Michael L. Parson appointed Tiffany Middlemas to replace Carter Brooks Templeton as the student representative of the Truman State University Board of Governors for a term ending January 1, 2020. The appointment of Ms. Middlemas was confirmed by the Missouri Senate on September 14, 2018.

Call to Order and Vice Chair Report
Laura A. Crandall, Vice Chair of the Board, called the meeting to order shortly after 1:00 p.m. and welcomed all in attendance.

Welcome to New Board Member – Tiffany Middlemas
Laura A. Crandall welcomed Tiffany Middlemas, the newly appointed Student Representative to the Truman State University Board of Governors.

Minutes for Open Sessions of Meetings on June 16, 2018 and July 9, 2018
Sarah Burkemper moved the adoption of the following resolution:

> BE IT RESOLVED that the minutes for the open sessions of the meetings on June 16, 2018, and July 9, 2018, be approved.

The motion was seconded by Jennifer Kopp Dameron and carried by a unanimous vote of 5 to 0. Laura A. Crandall then declared the motion to be duly adopted.

President's Report
Dr. Susan L. Thomas, University President, provided a report on several items of current interest. Dr. Thomas shared a selected engagements report detailing her activities since her last report. She provided a budget and legislative report and highlighted her participation in a Coordinating Board for Higher Education (CBHE) Talent for Tomorrow podcast on the topic of liberal arts. President Thomas noted that Dr. Ernie Hughes will assume the position of Vice President for University Advancement on August 13, and she provided an update on the search for a director of marketing. Dr. Thomas concluded her report by highlighting three community events which had a connection to Truman. First, the Missouri Mission of Mercy (MOMOM) free dental clinic took place in Pershing Arena on August 3-4. Each year, the Missouri Dental Association Foundation holds a free dental clinic in a different city throughout the state. The dental clinic provides free oral health care to

patients ages five and older who cannot otherwise obtain care. Second, the Kirksville Police Department recently recognized three Truman students (Gabriel Gowen, Jordan Lambay and Tyler Preston) as good Samaritans. On June 29, the three students intervened in a domestic dispute where a woman was being assaulted with an ax. And, finally, the Kirksville Police Department also recently recognized Rocky Merritt, a Truman Police Officer, for his actions that saved three students and a dog from a house fire.

Annual Athletics Report
Jerry Wollmering, Director of Athletics, provided the annual report on athletics.

Enrollment Management Update
Regina Morin, Vice President for Enrollment Management, provided an Enrollment Management update.

Advancement Report
Charles Hunsaker, Interim Director for University Advancement, provided an Advancement Report including a report on the successful conclusion of the Pursue the Future Campaign.

Finance and Auditing Committee Report
Sarah Burkemper, Chair of the Finance and Auditing Committee, provided a report on the committee meeting held on the morning of August 4.

Financial Report
Sarah Burkemper provided a review as of June 30, 2018, of education and general revenues and expenditures and auxiliary systems revenues and expenditures and a review as of June 30, 2018, of the Truman State University Foundation revenues and expenditures.

Academic and Student Affairs Committee Report
Laura A. Crandall, Chair of the Academic and Student Affairs Committee, provided a report on the committee meeting held on the morning of August 4.

Resolution amending Chapter 8, Section 8.110.5, of the Code of Policies of the Board of Governors pertaining to Alcohol and other Drug Amnesty
Jennifer Kopp Dameron moved the adoption of the following resolution:

> BE IT RESOLVED that Section 8.110.5 of the Code of Policies of the Board of Governors of Truman State University titled **Responsible Action Policy** be amended by the addition of a new Section ***8.110.5.1*** titled ***Alcohol and Other Drug Amnesty,*** the text of which is shown below in ***bold italics.*** In all other respects, Section 8.110.5 remains unchanged and in effect.
>
> 8.110.5. Responsible Action Policy. The welfare of our students is of the highest importance to Truman State University. There will be times when individual students, both on and off campus, may have knowledge of a situation that may present a significant threat to the health and welfare of themselves or others. Truman wants to eliminate any hesitation that students or student organizations might have in

obtaining help due to concern that their own behavior might be a violation of University policy.

The University will take into consideration the positive impact of reporting an incident on the welfare of students when determining the appropriate response for policy violations by the reporter of the incident. Any possible negative consequence for the reporter of the problem will be evaluated against the positive consequences of the intervention for the student in need. Responsible citizens recognize and accept the duty to make ethical and moral decisions about the health and safety of themselves or others even when to do so might result in personal inconvenience. At a minimum, Truman hopes that a student or student organization would make an anonymous report that would put the student in need in touch with professional helpers. If charged and found responsible for a violation of the Code, sanctions imposed, if any, will be less severe when students or student organizations appropriately report dangerous circumstances than if students or student organizations fail to report.

8.110.5.1 ***Alcohol and other Drug Amnesty***

If a person needs emergency medical attention, particularly resulting from the use of alcohol or other drugs, it is critical that students take responsible action by calling an ambulance or other appropriate emergency response personnel (ambulance, police, fire, etc.) to gain that assistance. Responsible action includes:

- ***a. CALL for help. In medical emergencies, immediate action should be taken by calling 9-1-1 either off campus or on campus.***
- ***b. STAY with the person until help arrives and you have been told your assistance is no longer needed.***
- ***c. COOPERATE with responding staff or emergency personnel, including all requests for information and assistance.***

Students/student organizations who take such responsible action by seeking emergency medical attention, or for whom such action is taken, will not be subject to the Student Conduct process for charges related to alcohol or drug use, nor will the incident become part of the student's conduct record. However, all students [including the student(s) needing assistance and reporter(s)] may be required to complete educational measures and pay nominal, if any, costs associated with those measures. Students and student organizations who do not take responsible action will be subject to the full extent of the Conduct Code.

Students requiring medical assistance, and student organizations hosting events where medical attention is sought will be limited to one application of medical amnesty. Individuals who engage in responsible action (call, stay, cooperate) will not be limited in the number of applications of medical amnesty where they serve as the person calling for help.

The application of medical amnesty does not preclude the university from pursuing charges against a student or student organization for allegations of code violations other than drug or alcohol policies. Possession with intent to deliver is not covered under medical amnesty.

Additional information and illustrative examples are available on the OCCS website.

8.110.5.2 ***Amnesty for Victims of Violent Crimes***
The University provides amnesty to students who have experienced violent crimes and who may be hesitant to file a complaint because they fear that they themselves may be accused of minor policy violations, such as underage drinking, at the time of the incident. Educational options may be explored, but no conduct proceedings against the complainant or conduct record will result.

The motion was seconded by Sarah Burkemper and carried by a unanimous vote of 5 to 0. Laura A. Crandall then declared the motion to be duly adopted.

Budget and Capital Projects Committee Report
Jim O'Donnell, a member of the Budget and Capital Projects Committee, provided a report on the committee meeting held on the morning of August 4.

Construction Projects Report
Jim O'Donnell provided an update on construction projects which have been approved by the Board at previous meetings.

Contracts for Construction Projects and Equipment Purchases Report
Jim O'Donnell noted that no construction projects or equipment purchases totaling $25,000 to $100,000 had been approved since the last meeting of the Board.

Construction Project – Student Union Building Food Service Project
Sarah Burkemper moved the adoption of the following resolution:

BE IT RESOLVED that the President of the University, or her designee, be authorized to enter into a contract with Sodexo Operations, LLC for a renovation

project in the Student Union Building to create an Einstein Bros Bagels at a cost not to exceed $337,000; and

BE IT FURTHER RESOLVED that a copy of the description of the project, as reviewed at the meeting, be attached to the minutes as an exhibit.

The motion was seconded by Jennifer Kopp Dameron and carried by a unanimous vote of 5 to 0. Laura A. Crandall then declared the motion to be duly adopted and the Secretary designated a copy of the document as Exhibit A.

Engineering Services – Chiller Replacement Project
Sarah Burkemper moved the adoption of the following resolution:

BE IT RESOLVED that the proposal from Ross & Baruzzini to provide engineering services for the Chiller Replacement Project, with the fees and work for such services to be within the guidelines of the proposal, be approved; and

BE IT FURTHER RESOLVED that the President of the University, or her designee, be authorized to execute a contract with the firm for the project; and

BE IT FURTHER RESOLVED that a copy of the proposal be attached to and made a part of the minutes for this meeting.

The motion was seconded by Laura A. Crandall and carried by a unanimous vote of 5 to 0. Laura A. Crandall then declared the motion to be duly adopted and the Secretary designated a copy of the document as Exhibit B.

Architectural Services – Roofing and Masonry Project
Laura A. Crandall moved the adoption of the following resolution:

BE IT RESOLVED that the proposal from Wm. B. Ittner to provide architectural services for the Roofing and Masonry Project, with the fees and work for such services to be within the guidelines of the proposal, be approved; and

BE IT FURTHER RESOLVED that the President of the University, or her designee, be authorized to execute a contract with the firm for the project; and

BE IT FURTHER RESOLVED that a copy of the proposal be attached to and made a part of the minutes for this meeting.

The motion was seconded by Jennifer Kopp Dameron and carried by a unanimous vote of 5 to 0. Laura A. Crandall then declared the motion to be duly adopted and the Secretary designated a copy of the document as Exhibit C.

Architectural Services – Sesquicentennial Plaza/Fountain Project
Sarah Burkemper moved the adoption of the following resolution:

BE IT RESOLVED that the proposal from Hitchcock and Associates to provide architectural services for the Sesquicentennial Plaza/Fountain Project, with the fees and work for such services to be within the guidelines of the proposal, be approved; and

BE IT FURTHER RESOLVED that the President of the University, or her designee, be authorized to execute a contract with the firm for the project; and

BE IT FURTHER RESOLVED that a copy of the proposal be attached to and made a part of the minutes for this meeting.

The motion was seconded by Laura A. Crandall and carried by a unanimous vote of 5 to 0. Laura A. Crandall then declared the motion to be duly adopted and the Secretary designated a copy of the document as Exhibit D.

Local Capital Budgets for Fiscal Year 2019

Sarah Burkemper moved the adoption of the following resolution:

BE IT RESOLVED that the "Local State Funds Capital Budget – FY 2019" of $1,360,000 and the proposed "Auxiliary Funds Capital Budget – FY 2019" of $5,035,255 be approved and that copies of the budgets be attached to the minutes as exhibits.

The motion was seconded by Jennifer Kopp Dameron and carried by a unanimous vote of 5 to 0. Laura A. Crandall then declared the motion to be duly adopted and the Secretary designated a copy of the document as Exhibit E.

State Appropriation Request for Fiscal Year 2020

Sarah Burkemper moved the adoption of the following resolution:

BE IT RESOLVED that the State Appropriation Request for Fiscal Year 2020 totaling $45,485,543 be approved and ratified; and

BE IT FURTHER RESOLVED that a copy of the State Appropriation Request for Fiscal Year 2020, be attached to the minutes as an exhibit and that the President of the University be authorized to modify this request based upon input from the staff of the Coordinating Board for Higher Education, Office of Administration, and the Legislature as appropriate.

The motion was seconded by Jennifer Kopp Dameron and carried by a unanimous vote of 5 to 0. Laura A. Crandall then declared the motion to be duly adopted and the Secretary designated a copy of the document as Exhibit F.

Agenda Items for Future Meetings

The Board reviewed a list of proposed agenda items for the regular meetings during the next year.

Dates for Future Meetings

Jennifer Kopp Dameron moved the adoption of the following resolution:

> BE IT RESOLVED that the next regular meeting of the Board of Governors be scheduled for Friday, October 12, 2018, on the University campus in Kirksville, Missouri, beginning at 1:00 p.m., with the understanding that the Chair may alter the starting time and/or place for the meeting by giving due notice of such change; and
>
> BE IT FURTHER RESOLVED that other regular meetings of the Board during the next year be tentatively scheduled for the following dates:
>
> Saturday, December 1, 2018;
> Saturday, February 9, 2019;
> Saturday, April 13, 2019;
> Saturday, June 15, 2019; and
> Saturday, August 3, 2019.

The motion was seconded by Sarah Burkemper and carried by a unanimous vote of 5 to 0. Laura A. Crandall then declared the motion to be duly adopted.

Agenda Items for Closed Session

Jennifer Kopp Dameron moved the adoption of the following resolution:

> BE IT RESOLVED that this meeting be continued in closed session, with closed records and closed votes as permitted by law, for consideration of the following items as authorized by Section 610.021, Revised Statutes of Missouri:
>
> 1. Approval of minutes for the closed session of the last meeting under Subsection 14 of the statute for "Records which are protected from disclosure by law";
> 2. Individual personnel actions under Subsection 3 of the statute for "Hiring, firing, disciplining or promoting of particular employees by a public governmental body when personal information about the employee is discussed or recorded"; and
> 3. Confidential communications with the General Counsel; and
>
> BE IT FURTHER RESOLVED that if any business not covered by the stated reasons for the closed session is raised during the closed session, then this meeting shall be reopened to the public and an announcement about a resumption of the open session shall be made in the hallway outside of the meeting room.

The motion was seconded by Sarah Burkemper and carried by a unanimous vote of 5 to 0. Laura A. Crandall then declared the motion to be duly adopted.

The closed session of the meeting began shortly after 3:00 p.m.

Jennifer Kopp Dameron
Secretary of the Board of Governors

I hereby certify that the foregoing minutes were approved by the Board of Governors on the 12th day of October, 2018.

Cheryl J. Cozette
Chair of the Board of Governors

EXHIBIT A

JKD

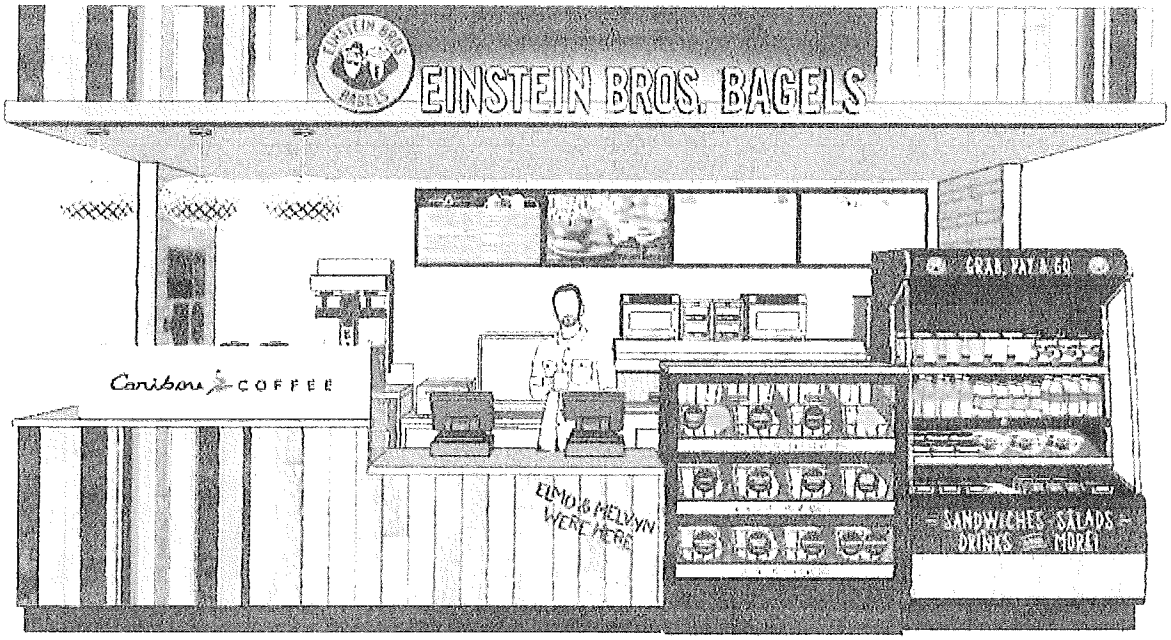
EINSTEIN BROS. BAGELS

TRUMAN STATE UNIVERSITY

SODEXO FOOD SERVICES

901 South Franklin Kirksville, MO 63501

Einstein Bros. Bagels License Unit Update



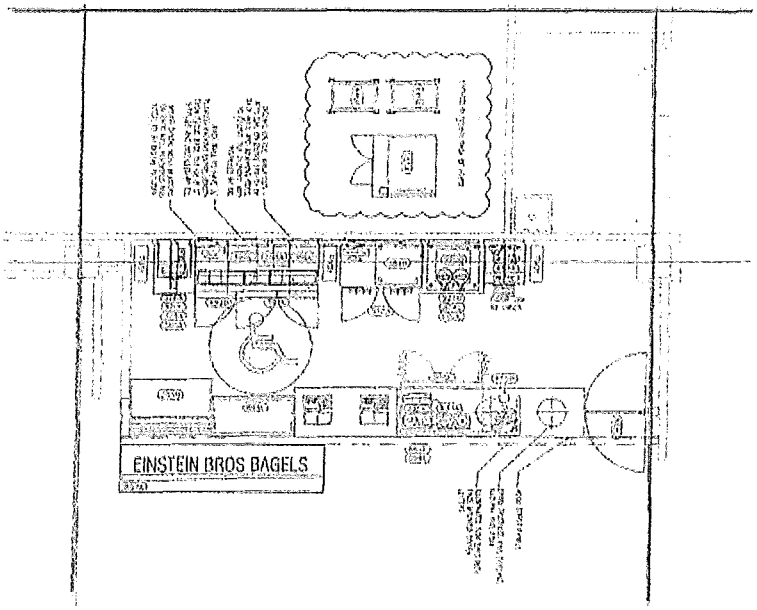
Einstein Bros Bagels Preliminary Schedule

TRUMAN STATE UNIV - EINSTEIN'S PRELIM SCHEDULE			
Phase 1 - Preliminary Development			
Finalize CFA Conceptual Design		8/10/18	
Construction Drawings	20 days	8/13/18	9/7/18
Sodexo Obtains Contractor bids	20 days	9/10/18	10/5/18
Sodexo present final project budget/contract		10/8/18	
Client reviews/approves final budget	4 days	10/9/18	10/12/18
Client Executes project contract	5 days	10/15/18	10/19/18
Phase 2 - Final Developpment			
Submit Documents as Required by Permitting Process AHJ	20 days	9/10/18	10/5/18
Order equipment/millwork	50 days	10/22/18	12/28/18
Phase 3 - Construction			
Pre-Construction Kick-Off Meeting		12/5/18	
Mobilize to Site		12/17/18	
Demolition	2 days	12/17/18	12/18/18
Construction	14 days	12/19/18	1/7/19
Finalize/Punchlist/Commission		1/8/19	
Final Inspections - AHJ		1/9/19	
Training/Cleaning/Stocking/Opening Prep	3 days	1/8/19	1/10/19
Open		1/11/19	

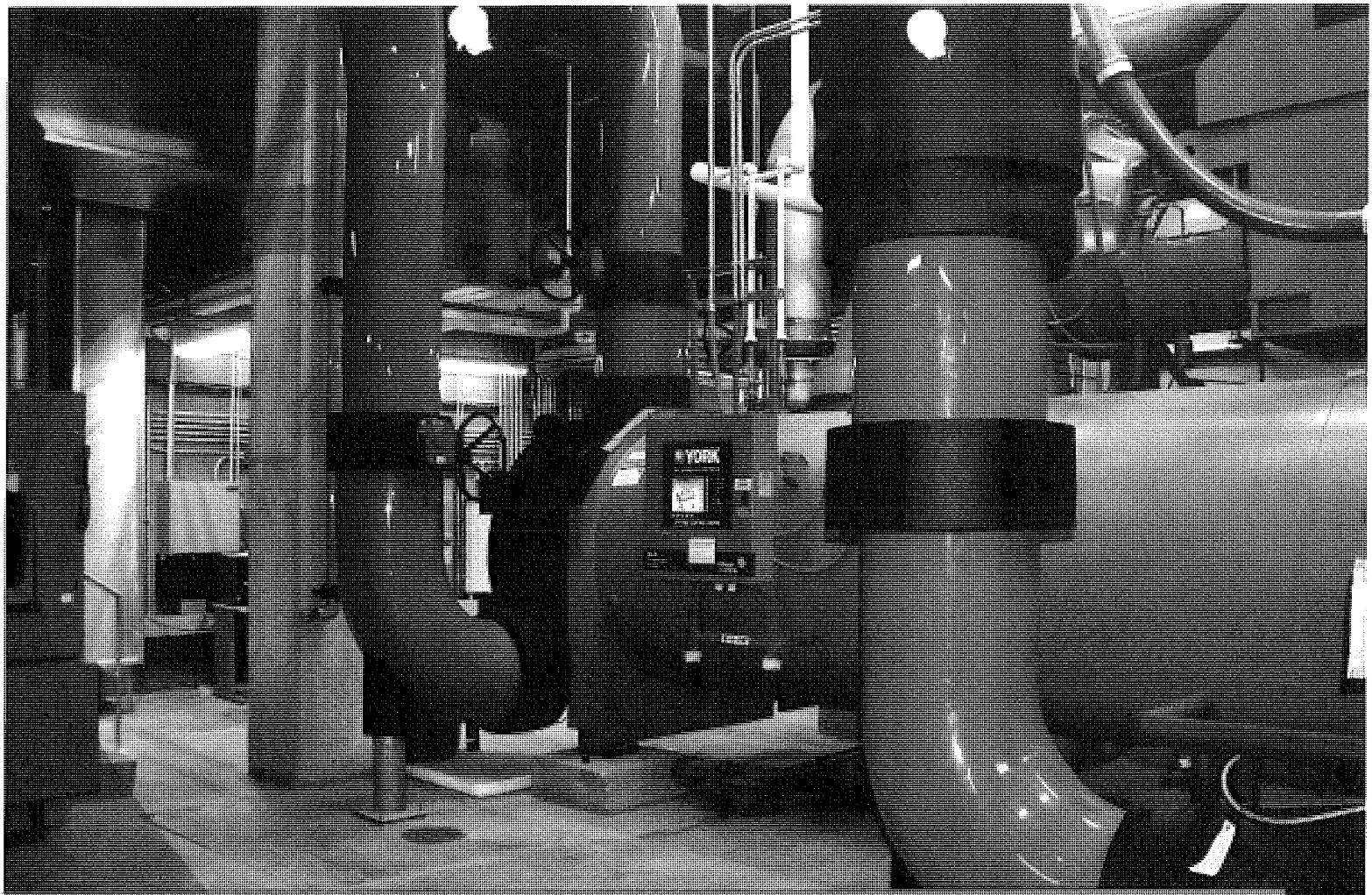
Cost Analysis

TRUMAN STATE UNIVERSITY - EINSTEIN'S			
CSI Div.	Description	Cost	
1	General Requirements	$	11,647
2	Existing Conditions/Demolition	$	5,824
6	Rough/Finish Carpentry (soffit)	$	11,647
8	Openings	$	1,165
9	Finishes (ceilings/paint/wall tile)	$	8,735
10	Specialties (menu bds/signage/smallwares)	$	24,459
11	Equipment (including freight/installation)	$	130,448
12	Furnishings (millwork)	$	23,294
21	Fire Suppression	$	5,824
22	Plumbing	$	11,647
26	Electrical/Lighting	$	25,624
27	Communications (POS wiring)	$	5,824
	Contingency (5%)	$	13,307
	Design (Architectural/Engineering)	$	28,652
	Supervision & Project Management	$	24,599
	Insurance & Administration	$	3,417
BUDGET CONTROL ESTIMATE		$	336,113

EINSTEIN BROS. BAGELS
Truman State University
901 S. Franklin
Kirksville, MO 63501



Einstein Bros. Bagels License Unit Update



Chiller Plant Replacements in Student Union and Violette Hall

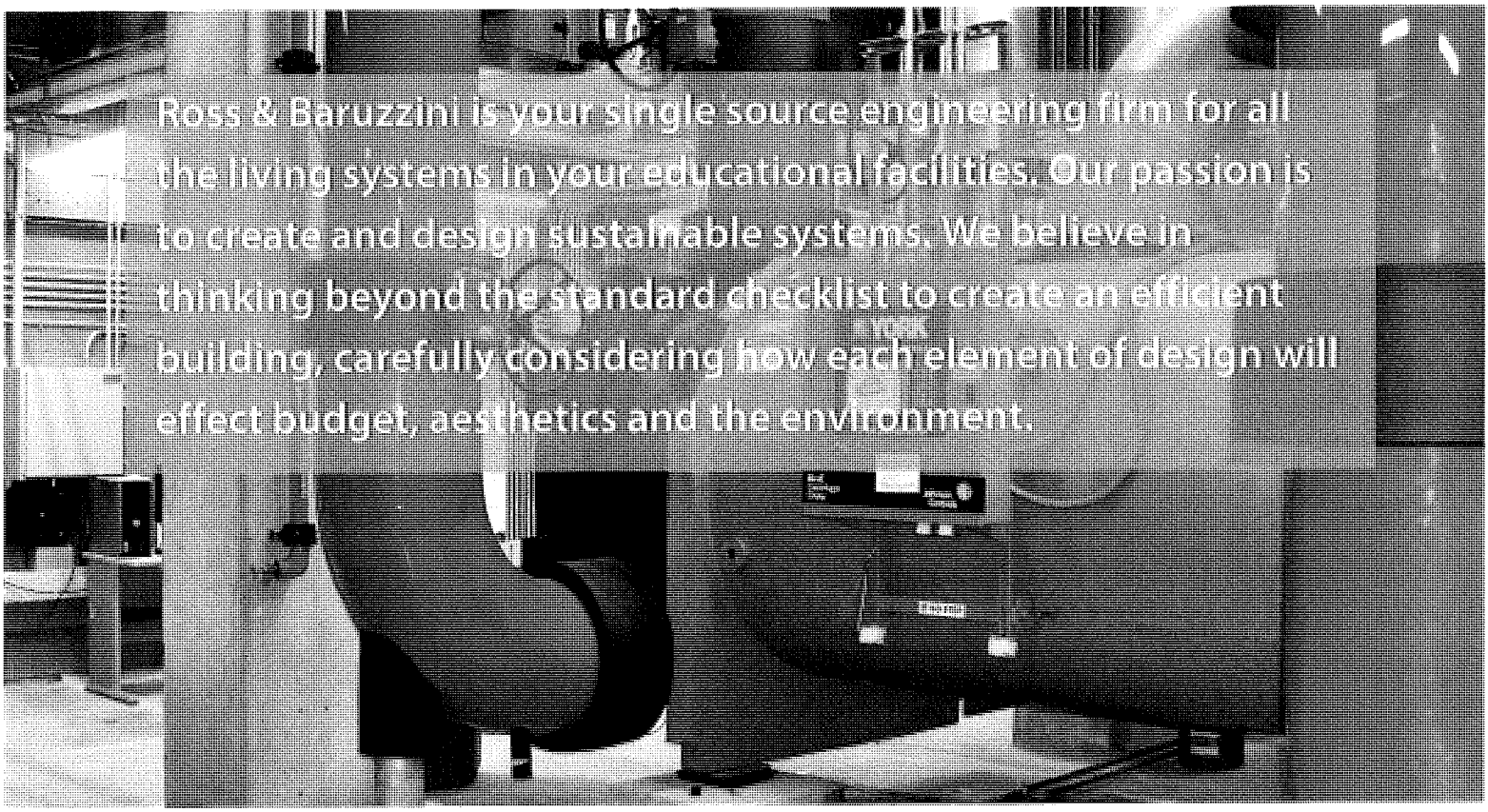
TRUMAN STATE UNIVERSITY

July 5, 2018

EXHIBIT B

Ross & Baruzzini

TABLE OF CONTENTS



SECTION 1. Cover Letter

SECTION 2. Firm Profile

SECTION 3. Team Organization Chart

SECTION 4. Key Personnel Resumes

SECTION 5. Relevant Project Experience

SECTION 6. Fee Proposal

SECTION 1 Cover Letter

July 5, 2018

Mr. Karl Schneider
Physical Plant Director
Truman State University
100 East Normal
Kirksville, MO 63501

Re: Chiller Replacements in Student Union and Violette Hall
Truman State University

Dear Karl:

We are most pleased to provide our Statement of Qualifications and Fee Proposal for the above referenced project.

Ross & Baruzzini, teamed with Simon Oswald Architects and ASDG, very much wish to provide engineering and architecture services for the Chiller Replacements in the Student Union and Violette Hall. We believe that the Ross & Baruzzini Team is the right team for this project based upon the following:

1. Significant chilled water plant experience in a campus environment.
2. Extensive knowledge of and work experience in the Student Union building, specifically in the main mechanical room where the chiller replacements will occur.
3. Work experience with Truman State University Facilities Operations staff.
4. The proposed Ross & Baruzzini Team members have current history of success working together on similar chiller replacement projects; this is a proven team.

Thank you for considering the Ross & Baruzzini team. We are ready to apply our chiller plant experience and expertise for the benefit of Truman State University, and very much hope to be selected for this important project.

Respectfully,

Jeffrey R. Crawford, P.E., LEED AP
Senior Vice President, Director – Higher Education & Research

SECTION 2 Firm Profile

Ross & Baruzzini

Year Founded	1953
Company Size	300+
Website	rossbar.com
Headquarters	6 South Old Orchard St. Louis, Missouri 63119 T: 314.918.8383
Office Locations	St. Louis, Missouri; Columbia, Illinois; Chicago, Illinois; Dallas, Texas; Hamden, Connecticut; Indianapolis, Indiana; Kansas City, Kansas; Los Angeles, California; Miami, Florida; New York, New York; Philadelphia, Pennsylvania

Ross & Baruzzini is a professional design and consulting firm that specializes in providing innovative solutions and exceptional service to the higher education industry. For 65 years, Ross & Baruzzini has provided strategic master planning, engineering, systems integration and commissioning services for universities around the world, with a focus on campus infrastructure. Whether designing a new chiller plant or performing an arc flash analysis of an electrical distribution system, Ross & Baruzzini responds with sound engineering advice based on the wealth of knowledge that exists within our organization.

Simon Oswald Architecture

Year Founded	1987
Website	soa-inc.com
Headquarters	2801 Woodard Dr. #103 Columbia, Missouri 65202 T: 573.443.1407

Founded in 1987 on the principle that architecture and interior design are intrinsically connected, SOA approaches design as an integrated process that aligns our client's functional requirements with their desired image. Our projects vary greatly not only in size and scope, but also type of construction (new construction, additions, renovations and adaptive reuse) and client type (educational, institutional, corporate, health care and civic). Together, we create places that enhance how mid-Missouri communities live, learn, work, heal and play.

ASDG, LLC

Year Founded	2003
Headquarters	1009 Lincoln Hwy Fairview Heights, Illinois 62208 T: 618.628.0887

ASDG, LLC was organized in 2003 under the statutes of the State of Illinois, specializing in the practice of structural engineering. The firm is dedicated to maintaining high standards in the field of structural engineering and endeavors to provide clients and the public with safe, economical structures.

Located in Fairview Heights, Illinois, ASDG, LLC and its members are qualified to render a complete range of structural engineering services including analysis and design, preparation of plans and specifications, construction administration and reports. The members of the firm have extensive experience in the design of structures of various types, including buildings for health care, education, retail and housing, office buildings and parking garages.

SECTION 3 Team Organization Chart & Resumes

The individuals we have selected for the Ross & Baruzzini Team have been hand-picked on the basis of their specialized experience with chiller replacements and other skills sets that are directly related to the unique requirements of this project. You will find that our staff has a clear understanding that we are in a service business and that our work is not done unless we have met and exceeded our client's expectations.

TRUMAN STATE UNIVERSITY

Ross&Baruzzini

Project Manager

JEFFREY CRAWFORD

PE, LEED AP, Sr. VICE PRESIDENT

Key Personnel

MECHANICAL SERVICES

LEAD MECHANICAL
Randy Diemer
PE, LEED AP BD+C
| Ross & Baruzzini

ELECTRICAL SERVICES

LEAD ELECTRICAL
James Partsch, LC LEED AP BD+C
| Ross & Baruzzini

ARCHITECTURAL SERVICES

PRINCIPAL-IN-CHARGE / QUALITY CONTROL
Bill Oswald, AIA
| Simon Oswald Architecture

PROJECT MANAGER
Brad Stegemann
AIA, LEED AP
| Simon Oswald Architecture

STRUCTURAL SERVICES

LEAD STRUCTURAL ENGINEER
Ron Behrens, SE, PE
| ASDG, LLC

Jeffrey R. Crawford, PE, LEED AP
Director of Higher Education + Research // Project Manager

Jeff has over 27 years of professional experience in all aspects of mechanical engineering and project management. He has applied his skills and knowledge in the design and analysis of mechanical systems for higher education facilities across the country, on projects of all types and sizes, including numerous campus chilled water system projects. In addition, Jeff has led Ross & Baruzzini's mission to provide national leadership in sustainability. As Project Manager, Jeff will be oversee the project through from start to finish and is committed to ensuring the University achieves their goals.

Firm Start Date
July 17, 1996

Education
MS, Mechanical Engineering, University of Missouri-Columbia

BS, Mechanical Engineering, University of Missouri-Columbia

Registration
Professional Engineer: Indiana, Missouri, Florida, Kentucky, Maryland, Oklahoma, Utah

Certification & Accreditation
LEED Accredited Professional

Certified Construction Specifier (CCS), The Construction Specifications Institute

Affiliations
American Society of Heating, Refrigerating and Air-Conditioning Engineers

American Society of Mechanical Engineers

US Green Building Council

Society for College and University Planning

Summary of Experience

Western Illinois University, Chiller Replacement at Various Buildings, Macomb, Illinois
Project Manager for the replacement of the existing chiller serving a hi-rise residence hall and dining facility at the edge of campus and the study of options, feasibility, and life cycle costs for replacing existing chillers, cooling towers, and pumps in five buildings with a new campus chilled water loop to serve those buildings with chillers in one or two locations.

University of Missouri – Columbia, Hearnes Chiller Replacement, Columbia, Missouri
Project Manager for the replacement of five (5) existing chillers totaling 2620 tons with two new 850-ton and one new 1020-ton water-cooled, magnetic bearing, electric centrifugal chillers. Project includes pump replacements and cooling tower retrofits.

University of Missouri-Columbia, Life Sciences Chiller #3 Replacement
Columbia, Missouri
Principal-in-Charge for the installation of a new 2,000 ton electric centrifugal chiller and associated cooling tower, pumps, and other auxiliary equipment and controls at the existing Life Science Chiller Plant.

University of Missouri-Columbia, Research Park Chiller Plant, Install Chiller & Cooling Tower, Columbia, Missouri
Project Manager for the installation of a new 600-ton electric centrifugal chiller and 1,000-ton cooling tower at the Research Park chiller plant. Project included installation of new chilled water and condenser water pumps and installation of variable frequency drives and flow meters on existing pumps to improve energy performance.

University of Kansas, Corbin Residence Hall Renovation
Lawrence, Kansas
Principal-in-Charge for the 99,000sf renovation of the historic Corbin Residence Hall. The project included the complete replacement of mechanical systems with new, energy efficient systems, including installation of a new 250-ton chiller plant.

Washington University, New Loop Student Living Initiative, St. Louis, Missouri
Project Manager for a new 275,000sf, 600-bed mixed-use apartment complex renamed The Lofts. Project included a 675-ton water-cooled, variable primary flow chiller plant. LEED Platinum certification was achieved for the project.

Randy J. Diemer, PE, LEED AP BD+C
Lead Mechanical Engineer

Randy has 19 years of professional experience in complete HVAC design from planning and schematics to final contract drawings. He has specialized in the design and analysis of mechanical systems for higher education facilities, including numerous chiller installations and replacements of all types and sizes.

Firm Start Date
December 2, 2002

Education
B.S., Mechanical Engineering, Southern Illinois University-Edwardsville

Registration
Professional Engineer: Illinois, Missouri

Certification & Accreditation
LEED Accredited Professional: Building Design + Construction

Affiliations
American Society of Heating, Refrigeration and Air-Conditioning Engineers (ASHRAE)

Summary of Experience

Western Illinois University, Chiller Replacement at Various Buildings, Macomb, Illinois
Lead Mechanical Engineer for the replacement of the existing chiller serving a hi-rise residence hall and dining facility at the edge of campus and the study of options, feasibility, and life cycle costs for replacing existing chillers, cooling towers, and pumps in five buildings with a new campus chilled water loop to serve those buildings with chillers in one or two locations.

University of Missouri–Columbia, Hearnes Chiller Replacement, Columbia, Missouri
Lead Mechanical Engineer for the replacement of five (5) existing chillers totaling 2620 tons with two new 850-ton and one new 1020-ton water-cooled, magnetic bearing, electric centrifugal chillers. Project includes pump replacements and cooling tower retrofits.

University of Missouri-Columbia, Life Sciences Chiller #3 Addition, Columbia, Missouri
Project Manager & Lead Mechanical Engineer for the construction of a new 2,000 ton chiller plant and associated cooling tower, pumps, and other auxiliary equipment and controls to serve the University's campus chilled water loop.

University of Missouri-Columbia, Research Park Chiller Plant, Install Chiller & Cooling Tower, Columbia, Missouri
Mechanical Engineer for the installation of a new 600-ton electric centrifugal chiller and 1,000-ton cooling tower at the Research Park chiller plant. Project included installation of new chilled water and condenser water pumps and installation of variable frequency drives and flow meters on existing pumps to improve energy performance.

University of Kansas, Corbin Residence Hall Renovation
Lawrence, Kansas
Principal-in-Charge for the 99,000sf renovation of the historic Corbin Residence Hall. The project included the complete replacement of mechanical systems with new, energy efficient systems, including installation of a new 250-ton chiller plant.

James M. Partsch, LC, LEED AP BD+C
Lead Electrical Designer

Jim has 21 years of experience in the field of electrical design for higher education and student living, healthcare, and government. He is experienced in lighting, power, telephone, data, and fire alarm systems. Jim is responsible for site observations, preparation of construction documents, technical specifications, cost opinions and construction administration services.

Firm Start Date
February 10, 1997

Education
University of Missouri-St. Louis / Washington University, Joint Electrical Engineering Program

Certification & Accreditation
NCQLP (National Council on Qualifications for the Lighting Professions) Lighting Certification

LEED Accredited Professional: Building Design + Construction

Summary of Experience

University of Missouri-Columbia, Hearnes Chiller Replacement, Columbia, Missouri
Lead Electrical Designer for the replacement of five (5) existing chillers totaling 2620 tons with two new 850-ton and one new 1020-ton water-cooled, magnetic bearing, electric centrifugal chillers. Project includes pump replacements and cooling tower retrofits.

Washington University, The Lofts Chiller & Cooling Tower Addition, St. Louis, Missouri
Lead Electrical Designer for the addition of a 250-ton chiller and cooling tower to the Lofts housing complex.

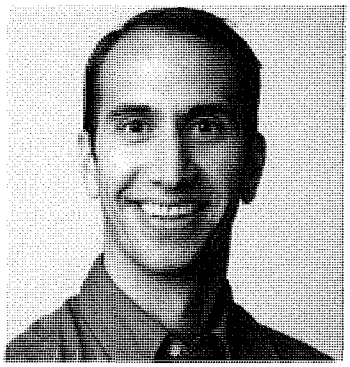
Washington University, New Loop Student Living Initiative, St. Louis, Missouri
Electrical Designer for a new 275,000sf, 600-bed mixed-use apartment complex renamed The Lofts. Project included a 675-ton water-cooled, variable primary flow chiller plant. LEED Platinum certification was achieved for the project

Missouri State University, FY12 Chilled Water System Expansion, Springfield, Missouri
Electrical Engineer for performing an energy study and cost-benefit analysis considering several options to expand the campus chilled water network to buildings not currently served by the system. For each option, predicted energy savings was modeled versus current consumption and compared to estimated construction cost. Deliverable is a written report with recommendations.

City of St. Louis, America's Center, Chiller Plant & Cooling Tower Upgrades
St. Louis, Missouri
Electrical Designer for the replacement of two (2) existing steam absorption chillers with three (3) new centrifugal chillers with capacities of 1,100 tons (2) and 400 tons at the America's Center. These new chillers were coupled with two (2) recently replaced 1,200 ton chillers to create a total plant capacity of 5,000 tons. Additional upgrades included the total replacement of the existing cooling towers and condenser water system, modifications to the primary chilled water distribution system, and electrical upgrades to support the new electric centrifugal chillers.

Truman State University, West Campus Suites, Kirksville, Missouri
Electrical Designer for a new 120,000sf residence hall that included a local water-cooled chiller plant with roof-mounted cooling towers.

Brad Stegemann AIA, LEED AP
Project Manager



Offering over 12 years of experience at SOA, Brad will be the main point of contact for SOA. As Project Manager he is responsible for leading SOA's internal staff as well as coordination and communication with the teams of engineers. Brad will continually monitor coordination of the building systems and architectural design.

Of Benefit to Truman State: Brad was the Project Manager for two separate Life Sciences Chiller Enclosure projects on the University's campus as well as a Hearnes Center HVAC Chiller Upgrades. He is very familiar with mechanical systems and experienced with what is required of chiller enclosures. Further, he is well versed in project processes and organizational structure.

Firm Start Date
November 1, 2005

Education
Bachelor of Architecture
Kansas State University

Registration
Registered Architect:
Missouri

Certification & Accreditation
LEED Accredited Professional:
Building Design + Construction

Affiliations
American Institute of Architects
AIA Mid-Missouri
Missouri Society for Healthcare Engineering (MOSHE)

Summary of Experience

University of Missouri–Columbia, Hearnes Multipurpose Building Chiller Replacement, Columbia, Missouri
Selective demolition and renovation on the first floor of Hearnes to accommodate replacement of 5 existing chillers with 3 new chillers.

University of Missouri–Columbia, Upgrade HVAC to Various Rooms
Columbia, Missouri
Selective demolition and renovation to accommodate a new HVAC system serving the second floor, south side of Hearnes.

University of Missouri–Columbia, Life Sciences Chiller #3 Addition Columbia, Missouri
A new chiller and cooling tower to serve MU campus, located in an existing pit at the north side of the Bond Life Sciences Buildings

University of Missouri–Columbia ,Medical Science Sprinkler System Upgrades
Columbia, Missouri
Selective demolition and renovation to accommodate a comprehensive fire suppression upgrade to a 1960's seven-story building

University of Missouri–Columbia, Jesse Hall 1st Floor Student Welcome Center
Columbia, Missouri
Extensive remodel of approximately 7,500 sf. of the first-floor west wing to create a new admissions enrollment center.

University of Missouri–Columbia, Jesse Hall 4th Floor Renovation for the Kinder Institute, Columbia, Missouri
Remodel of approximately 5,000 square feet of office and support space to house the Kinder Institute for Constitutional Democracy.

Bill Oswald AIA
Principal in Charge

Bill is responsible for Quality Control throughout the entire project. As Principal-In-Charge Bill's additional involvement includes code analysis, constructability and construction detailing, preliminary project budgeting and construction cost estimating, specification writing and the oversight during the entire construction process.

Of Benefit to Truman State: During cost estimating, Bill works closely with contractors and subcontractors to more fully understand the current construction climate in the Midwest region which in turn will help Truman State identify realistic budget numbers during the preliminary phase.

Firm Start Date
January 2, 1990

Education
BS in Architectural Studies
University of Nebraska

Registration
Registered Architect:
Missouri

Affiliations
American Institute of Architects
AIA Mid-Missouri, Past President
Central MO CSI, Past President
Missouri Society for Healthcare Engineering (MOSHE)

Summary of Experience

University of Missouri – Columbia, Hearnes Multipurpose Building Chiller Replacement, Columbia, Missouri
Selective demolition and renovation on the first floor of Hearnes to accommodate replacement of 5 existing chillers with 3 new chillers.

University of Missouri – Columbia Upgrade HVAC to Various Rooms
Columbia, Missouri
Selective demolition and renovation to accommodate a new HVAC system serving the second floor, south side of Hearnes.

University of Missouri –Columbia, Life Sciences Chiller #3 Addition
Columbia, Missouri
A new chiller and cooling tower to serve MU campus, located in an existing pit at the north side of the Bond Life Sciences Buildings

University of Missouri – Columbia, Medical Science Sprinkler System Upgrades, Columbia, Missouri
Selective demolition and renovation to accommodate a comprehensive fire suppression upgrade to a 1960's seven-story building

University of Missouri – Columbia, Power Plant - Ash Silo Refurbish West Ash Silo Exterior, Columbia, Missouri
Exterior repair of the ash silo and loading room, and replacement of damaged/rusted out stairs treads, grates and railings.

University of Missouri –Columbia, Tate Hall Renovation and Addition
Columbia, Missouri
A transformative remodel, renovation and addition that involved the total gut of 1927 and 1959 buildings as well as the creation of an addition with new elevator, egress stairs and building entrances. Significant structural, mechanical, electrical modifications were required.

Ron Behrens
Lead Structural Engineer

A Principal of ASDG, LLC since 2003, Ron serves as a project manager and structural engineer of record for various projects, with primary responsibility for structural design and production of structural drawings and specifications. Extensive experience with a variety of projects, including schools, auditoriums, university student housing, academic buildings, hospitals, warehouses, office buildings, shopping malls and parking garages, ranging in size from small to $110,000,000, involving new construction, renovation of existing construction and seismic retrofitting.

Firm Start Date
2003

Education
B.S., Civil Engineering,
Washington University
M.S., Civil Engineering,
University of Illinois

Registration
Professional Engineer:
Illinois, Missouri, Michigan,
Kansas, Indiana, North Carolina

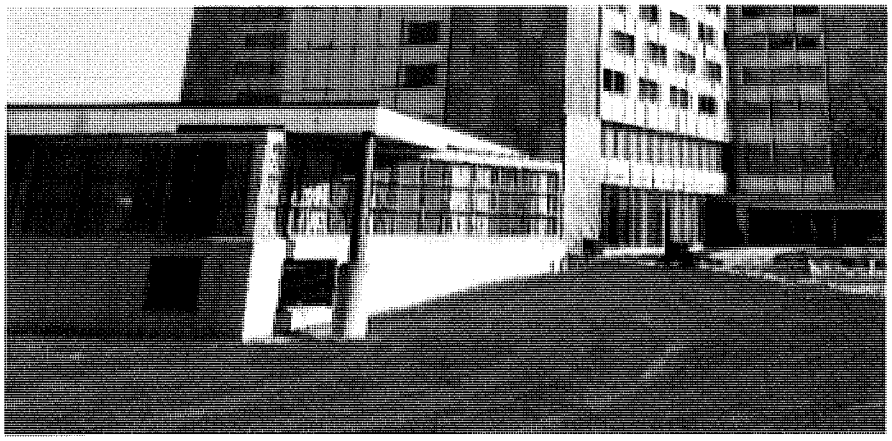
Summary of Experience

- University of Missouri, Hearnes Center Chiller Replacements
- University of Missouri, Med Science Cooling Tower Replacement, Columbia, Missouri
- University of Missouri, Ellis Library, Install Chiller (1,000 tons), Columbia, Missouri
- University of Missouri, Engineering Lab & Classroom Building Chiller Addition Columbia, Missouri
- University of Missouri, Life Sciences Chiller #3 Addition (2,000 tons) Columbia, Missouri
- University of Missouri, Medical Science Building, Science Building, Chilled Water Plant Expansion, Phase 3, Install Chillers (2 chillers-1,000 tons each) Columbia, Missouri
- University of Missouri, Missouri Rehabilitation Center, Chiller Addition, Additional Cooling Tower, Air Handler Upgrade and Sprinkler System Improvements (300 tons), Columbia, Missouri
- University of Missouri, Various Chilled Water Extensions, Columbia, Missouri
- Western Illinois University, Chiller Replacements at Various Buildings, Macomb, Illinois
- University of Notre Dame, Duncan Hall, Notre Dame, Indiana
- University of Notre Dame, Ryan Residence Hall, Notre Dame, Indiana
- Washington University, Small Group Housing (chilled water loop) St. Louis, Missouri
- Washington University, Snow Way Garage Chiller Plant (700 tons) St. Louis, Missouri
- Truman State University, Ryle Hall Renovation, Kirksville, Missouri
- Truman State University, Dobson Hall Renovation, Kirksville, Missouri
- Truman State University, Blanton-Nason-Brewer Residence Hall Renovation Kirksville, Missour
- Columbia College, Missouri Hall Renovation, Columbia, Missouri
- Missouri State University, Hammons Center, Springfield, Missouri
- Missouri State University, Morris Hall, Springfield, Missouri
- Missouri University S&T, New Residence Hall One, Rolla, Missouri
- Missouri University S&T, New Residence Hall Two-Three, Rolla Missouri

SECTION 4 Relevant Project Experience

Ross & Baruzzini has completed over 50 projects that are similar in scope and size, and a sampling of our relevant experience is provided on the following pages. Note that all of these projects represent the work of the proposed project team. None of the projects identified within this section of the qualifications are associated with work while at other firms.

Various Chiller Replacements
Western Illinois University



PROJECT DETAILS

Location
Macomb, Illinois

Expertise
Mechanical Engineering
Electrical Engineering

Construction Cost
$3.5 Million

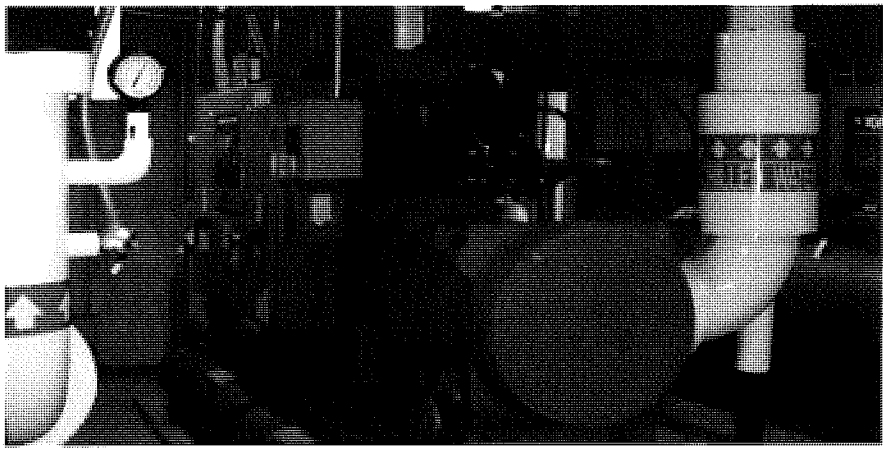
Completion Date
April 2019

Summary of Experience

Ross & Baruzzini is providing engineering services for chiller replacements at Western Illinois University in multiple buildings across campus including Thompson Hall, Memorial Hall, Browne Hall, Sallee Hall, Simpkins Hall and Tillman Hall. The project includes two parts: 1) a study phase to identify the best option for creating a new campus chilled water loop to serve Memorial, Browne, Sallee, Simpkins, and Tillman, with provisions for future expansion to other buildings on campus, and 2) full design and construction administration services to replace two existing chillers serving a hi-rise residence hall and dining facility on the outskirts of campus.

Both parts of this project required the study of several options for chiller replacements, as well as a life cycle cost analysis of the various chiller replacement options.

Hearnes Center Chiller Replacement
University of Missouri – Columbia



PROJECT DETAILS

Location
Columbia, Missouri

Expertise
Mechanical Engineering
Plumbing Engineering
Fire Protection Engineering

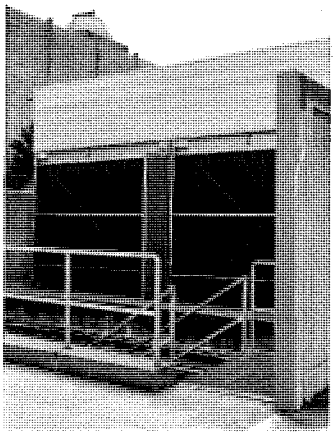
Construction Cost
$2.7 Million

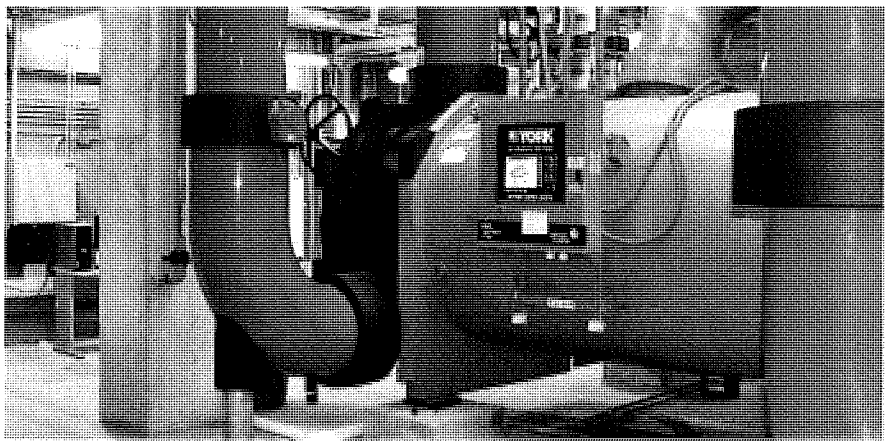
Completion Date
April 2019

Summary of Experience

Ross & Baruzzini is providing engineering services for the replacement of five existing chillers in the Hearnes Center, totaling 2620 tons with three new 850-ton, water-cooled, electric, magnetic bearing, centrifugal chillers at the existing Hearnes Chiller Plant. The project included a study phase to identify the best configuration for the new plant, followed by full design and construction administration services. The increase in electric centrifugal chiller capacity requires additional electrical service to the building. This will require replacement of the existing switch, installation of a new transformer, and installation of a new electrical duct bank and service into Hearnes from the main located on the east side of Hearnes near the cooling tower.

Life Sciences Chiller #3 Addition
University of Missouri-Columbia





PROJECT DETAILS

Location
Columbia, Missouri

Expertise
Mechanical Engineering
Electrical Engineering
Plumbing Engineering
Fire Protection Engineering
Structural Engineering
Energy Modeling

Construction Cost
$1.5 Million

Completion Date
June 2017

Summary of Experience

Ross & Baruzzini provided mechanical, electrical, plumbing, and fire protection engineering services. ASDG, LLC provided structural engineering services for the construction of a new 2,000-ton chiller plant to serve the MU campus chilled water loop.

The new chiller plant is located at the chilled water facility north of the Bond Life Sciences Center in an existing pit containing abandoned cooling towers that once served the Chemistry chilled water plant. The new plant houses a 2,000-ton electric centrifugal chiller, an associated cooling tower, primary chilled water pump, condenser water pump, piping, and controls. Project also included new electrical gear, a new transformer, and variable frequency drives for the chiller, pumps, and cooling tower. New loop piping was extended out of the new plant and connect to existing loop piping buried to the east of the facility.

The project included a study phase to evaluate chiller options and associated energy and electrical infrastructure implications.

Chillers were pre-purchased by the University using a Life-Cycle Cost Analysis bid form prepared by Ross & Baruzzini that calculate life cycle cost of the submitted chiller based on first cost, operating efficiency at eight (8) operating conditions with varying output capacity, condenser water temperature, and condenser water flow, and warranty costs.

Structural engineering services addressed the renovation and repair of the existing greenhouse structure which included chiller room enclosure, cooling tower platform, electrical room enclosures, modifications to existing concrete screen walls, chiller foundations, and hoist beam.

The average bid for this project was $2,707,681.25 and Ross & Baruzzini's estimate was $2,841,893.93 (4.96% off bid average).

Medical Science Building Chiller Plant & New Cooling Tower
University of Missouri-Columbia

PROJECT DETAILS

Location
Columbia, Missouri

Expertise
Mechanical Engineering
Electrical Engineering

Construction Cost
Chiller Plant $1.4 Million
Cooling Tower $1.5 Million

Completion Date
Chiller Plant 2007
Cooling Tower 2005

Summary of Experience

Chiller Plant

Ross & Baruzzini provided the design for the renovation and expansion of the Medical Science Building Chiller Plant. The project included removal of existing chillers and new pumping and piping systems. The new plant includes two new 1,000 ton electric centrifugal chillers with variable frequency drives, along with new loop pumps and new primary chiller pumps, and supporting electrical infrastructure. This installation represents the final phase of the overall expansion and renovation of this plant, which included the first phase which replaced a 500 ton absorption chiller, and a new field-erected cooling tower.

New Cooling Tower

Ross & Baruzzini provided engineering services for the replacement of two existing cooling towers that were combined into a single new cooling tower, designed to serve expansion of the chilled water plant it will be associated with. Project included providing new electrical service to the mechanical room to support the new cooling tower along with provisions for other future electrical improvements, and included new condenser water pumping systems, related piping modifications, and controls. The new cooling tower has been located within a new concrete pit to hold the top of tower elevation to match the nearest adjacent building. A new masonry wall enclosure was provided to screen the new tower from public view. Storm sewers in the area were modified to address the cooling tower pit.

Research Park Chiller Plant Chiller & Cooling Tower Installation
University of Missouri-Columbia

PROJECT DETAILS

Location
Columbia, Missouri

Expertise
Mechanical Engineering
Electrical Engineering
Plumbing Engineering
Fire Protection Engineering

Construction Cost
$1.1 Million

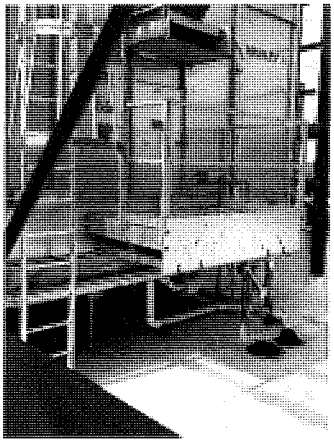
Completion Date
June 2012

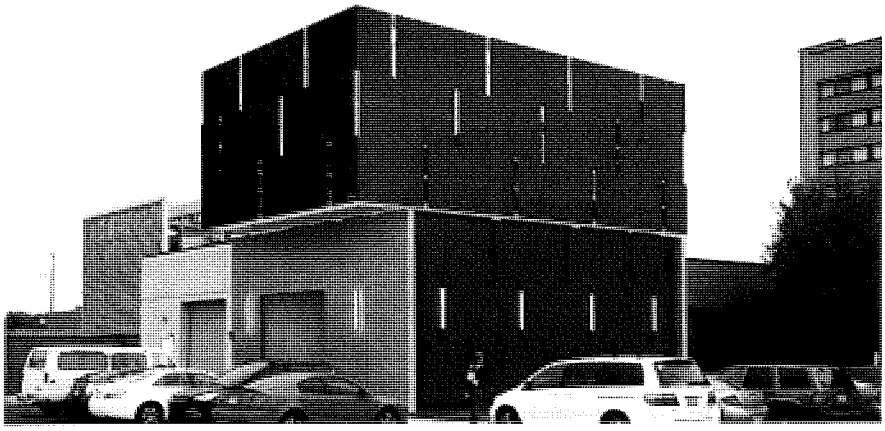
Summary of Experience

Ross & Baruzzini provided professional engineering services for the design of mechanical, electrical, and plumbing systems for the installation of a new 600-ton electric centrifugal chiller, a new 1000-ton cooling tower, and associated pumps and auxiliary equipment. Project included the evaluation of multiple cooling tower options and configurations to provide the most cost-effective long-term solution for the University. Project also included the installation of variable frequency drives on the existing chiller plant pumps and installation of a flow meter at the existing chiller to improve energy performance of the existing chiller operation. Sustainable features incorporated into this design included the following:

- High efficiency chiller with variable frequency drive
- Variable frequency drive on cooling tower fan
- Variable speed control of the primary chiller pumps and cooling tower pumps using flow meters vs. throttling of flow with balance valves

Cherry Street Chiller Expansion
Missouri State University





PROJECT DETAILS

Location
Springfield, Missouri

Expertise
Mechanical Engineering
Electrical Engineering
Plumbing Engineering
Fire Protection Engineering

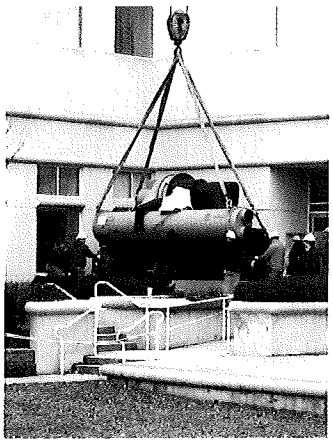
Construction Cost
$1.9 Million

Completion Date
August 2017

Summary of Experience

Ross & Baruzzini provided mechanical, electrical, plumbing and fire protection engineering services to dramatically improve the efficiency and capacity of the Missouri State University chilled water loop. The $1.9M, 1,200sf expansion of the Cherry Street Chiller Plant houses a 1,000-ton chiller and cooling tower with space to add another as the University grows. Adjacent to dorms and dining halls, the project included preserving parking and pedestrian pathways while veiling mechanical equipment. The perforated and slotted metal screen promotes airflow and diffuses integrated lighting at night.

Campus Chilled Water District Cooling
Missouri State University



PROJECT DETAILS

Location
Springfield, Missouri

Expertise
Mechanical Engineering
Electrical Engineering
Plumbing Engineering
Fire Protection Engineering
Energy Modeling

Construction Cost
$9.5 Million

Completion Date
April 2006

Awards
Awards:
2007 ASHRAE Award Winner, Missouri State University Campus Chilled Water Project, Category II, Institutional Buildings

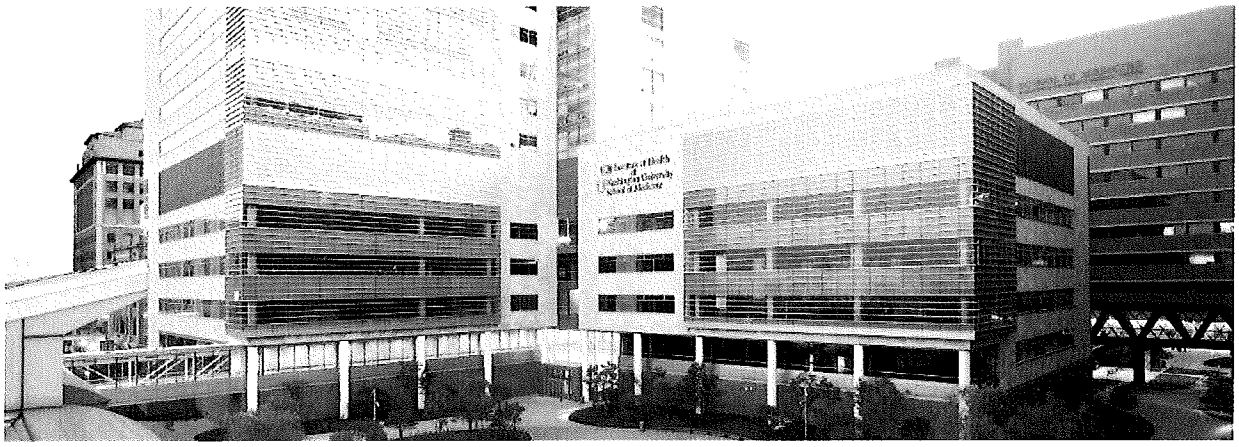
Summary of Experience

Ross & Baruzzini, in association with Johnson Controls, provided energy modeling services to construct a campus district chilled water system and connect 17 of its buildings thereto, making use of both new and existing equipment.

Ross & Baruzzini's services included modeling the energy cost, maintenance cost, and construction cost of the proposed campus chilled water project. The air conditioning energy performance was estimated for 22 separate buildings via an extensive compilation of Excel spreadsheets. This is the largest energy modeling and payback period analysis the Ross & Baruzzini Facilities group has performed.

The result of all of the energy modeling and other considerations is a new campus chilled water network, connecting 17 campus buildings and expandable for many others. Six of these campus buildings were designated as "Producer Buildings" that generate and feed chilled water into the campus network. The other eleven buildings are "Parasite Buildings" which take and use chilled water from the network. Each Producer plant features one or two water chilling units and a primary chilled water pump per chiller. One or more secondary chilled water pumps (with variable frequency drive) feeds the campus network and pressurizes the campus chilled water mains to set point. Additionally, a variable-speed tertiary building pump feeds chilled water to that particular building.

BJC Institute of Health Chiller Plant
Washington University School of Medicine



PROJECT DETAILS

Location
Springfield, Missouri

Expertise
Mechanical Engineering
Electrical Engineering
Plumbing Engineering
Fire Protection Engineering

Construction Cost
$250 Million

Completion Date
2010

Awards
2011 ASHRAE Technology 1st Place Award

2010 AGC Keystone Project of the Year

"Best Practices Award" by the St. Louis Council of Construction Consumers

LEED-Certification
Gold

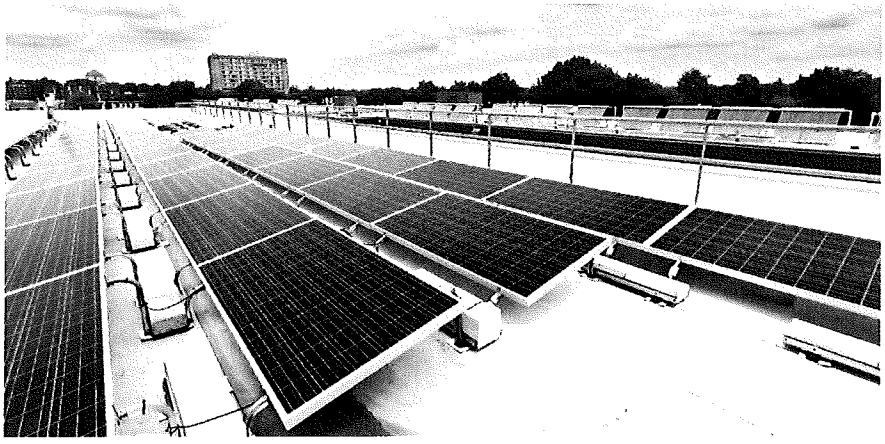
Summary of Experience

Ross & Baruzzini provided engineering services for a new 680,000sf, 11-story, state-of-the art biomedical research building located in the heart of the Washington University School of Medicine (WUSM) campus. The project included a large central chilled water plant to serve not only the needs of this research building, but also provide significant chilled water capacity to the campus chilled water loop. Extensive energy modeling and life cycle cost analysis was performed by Ross & Baruzzini to determine the optimum chiller plant configuration for this project.

The new chiller plant included the installation of three 1,700-ton, electric, water-cooled centrifugal chillers and two 600-ton, water-cooled centrifugal chillers, as well as infrastructure and space provisions to support the addition of a fourth 1,700-ton chiller. Four field-erected fiberglass cooling tower cells with stainless steel basins were installed on the roof of the building, with provisions for addition of a fifth cooling tower cell. One of the 600-ton chillers is a heat recovery chiller that produces heating hot water from its condenser to provide all of this building's reheat requirements, as well as providing heating hot water to adjacent buildings.

Additional energy conservation measures associated with the chiller plant included large temperature differences between supply and return water conditions for both chilled water (16 degrees) and condenser water (15 degrees) systems to minimize pumping energy, variable frequency drives on the cooling tower fans, and optimization of chiller sequencing. Chillers were bid on a life-cycle cost basis, using a load profile calculation prepared by Ross & Baruzzini as part of the bid form.

Loop Student Living
Washington University



PROJECT DETAILS

Location
St. Louis, Missouri

Expertise
Mechanical Engineering
Electrical Engineering
Plumbing Engineering
Fire Protection Engineering
Systems Engineering
Technology Engineering

Construction Cost
Phase 1 – $65 Million

Completion Date
Phase 1 – August 2014

LEED Certification
Platinum

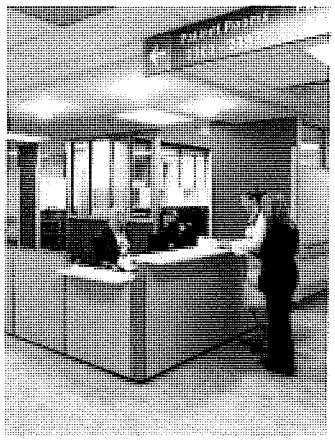
Summary of Experience

Ross & Baruzzini engineered the mechanical, electrical, plumbing and fire protection systems as well as the IT, Communications, and Security systems of four new buildings that are part of a mixed-use development in the Delmar "Loop" District of University City, north of the Washington University Danforth Campus. The four buildings total roughly 200,000sf and house approximately 450 students in a mixture of single, double, and triple apartment units. Two of the buildings located on Delmar Avenue house a mix of retail tenants at the street level. The project also included an underground parking structure under two of the buildings.

LEED Platinum certification was achieved for this project, and the complex is projected to have annual energy savings of 47% compared to ASHRAE 90.1-2007 requirements, or roughly $200,000 per year.

The project featured a 675-ton chiller plant to provide highly efficient cooling for the complex. Chiller plant included three 225-ton water-cooled electric twin screw chillers with variable frequency drives, configured in a variable primary flow arrangement. Cooling tower fans and condenser water pumps were equipped with variable frequency drives to allow for the implementation of a chiller optimization control strategy that varies condenser water flow and temperature to minimize the energy consumption of the plant. A plate & frame free-cooling heat exchanger was also incorporated into the plant to provide winter cooling for IT/telecom rooms and the grocery store housed in one of the buildings.

Missouri Baptist Medical Center West Pavilion Fit-Out Phase 2
BJC HealthCare



PROJECT DETAILS

Location
St. Louis, Missouri

Expertise
Mechanical Engineering
Electrical Engineering
Plumbing Engineering
Fire Protecting Engineering
Design

Construction Cost
$30 Million

Completion Date
November 2013

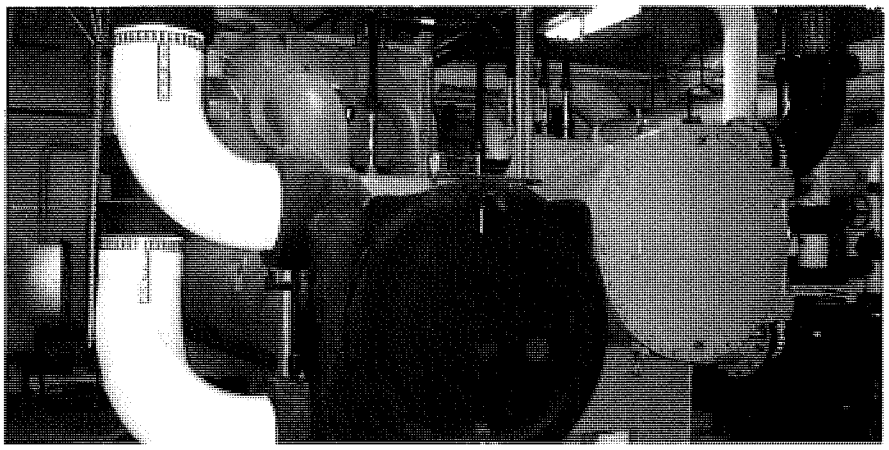
Summary of Experience

Ross & Baruzzini provided Mechanical, Electrical and Plumbing design services for 82,000sf tenant fit-out of Missouri Baptist West Pavilion 2nd, 3rd and 4th floors. The second floor was designed for 8 O.R.s, sub-sterile, instrument storage, clean core, soiled holding, administrative suite, electrical and mechanical rooms, 46 pre-post patient rooms/bays, patient care stations, medication rooms, nourishment, X-ray room, business center, and public areas. 3rd and 4th floors were designed for 48 private patient rooms, 16 private bariatric patient rooms, patient care stations, medication rooms, soiled holding, nourishment, and public areas.

In addition to the tenant fit out, Ross & scope of work included the shell and core design for the building's chiller plant, main air handling units, heating plant, and emergency generator. The chiller plant included two 500-ton water-cooled chillers, a 160-ton heat recovery chiller that produces 140-degree hot water for building reheat loads, a 70-ton air-cooled glycol chiller for emergency cooling loads, a 1000-ton 2-cell cooling tower, and associated pumps in a variable primary flow configuration.

As part of this project Ross & Baruzzini also created a detailed Revit Building Information Model (BIM) for the MEP systems. The quality of this model was such that the mechanical contractor was able to seamlessly import the model directly into their pipe and duct fabrication software, significantly reducing the time needed to get pipe and duct onsite for installation.

Chilled Water Plant Upgrades
America's Center



PROJECT DETAILS

Location
St. Louis, Missouri

Expertise
Architecture
Mechanical Engineering
Electrical Engineering

Construction Cost
$4.5 Million

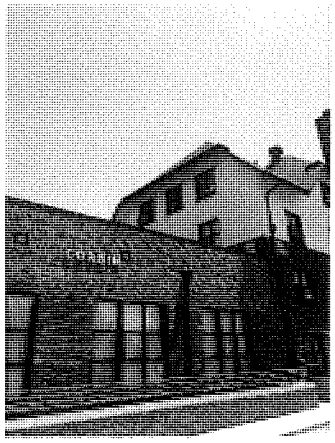
Completion Date
2010

Summary of Experience

Ross & Baruzzini provided architectural/engineering design services for the replacement of two steam absorption chillers with three new centrifugal chillers with capacities of 1,100 tons (2) and 400 tons. These new chillers were coupled to two recently replaced 1,200 ton chillers to create a total plant capacity of 5,000 tons to serve the America's Center (502,000sf) located in downtown St. Louis. Project also included the replacement of all cooling towers associated with the full plant capacity. Five new cooling towers were provided.

The design of the plant included energy conservation features such as variable speed pumping, large temperature differences between supply and return water conditions for both chilled water and condenser water systems, and chiller and cooling tower energy optimization. Additionally, the small chiller was designed for low load conditions and an existing plate-and-frame free cooling heat exchanger has been integrated into the new plant design. Phasing of the construction was necessary to maintain the on-going operation of the convention center.

Corbin Residence Hall Renovation
University of Kansas



PROJECT DETAILS

Location
Lawrence, Kansas

Expertise
Mechanical Engineering
Plumbing Engineering
Fire Protection Engineering
Construction Administration

Construction Cost
$14.5 Million

Completion Date
Est. August 2018

Summary of Experience

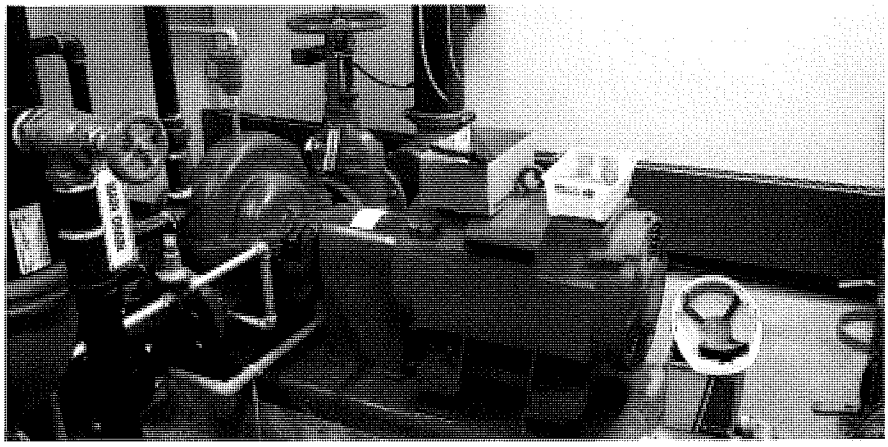
Ross & Baruzzini is providing mechanical and fire protection engineering design and construction administration services for a renovation of the historic Corbin Residence Hall at the University of Kansas. The renovation includes the complete removal and replacement of existing mechanical systems with new, more energy efficient systems in accordance with the University's standards. New mechanical systems include new 4-pipe fan coil units and associated distribution systems throughout, new DDC controls, **a new 250-ton chiller plant**, and a boiler plant to supply chilled and hot water to the complex. The existing fire suppression systems is being modified and expanded to support the planned renovation and bring the system up to current Code. The total square footage of the residence halls to be renovated was approximately 99,000. The project will be completed in two phases over 1-1/2 years.

Ross & Baruzzini performed a life cycle cost analysis of multiple HVAC system options as part of the scope of work, evaluating variable-refrigerant flow, water-cooled chiller plant, air-cooled chiller plant, and water-source heat pump options.

Sustainable design features include the following:

- Demand-based ventilation controls using occupancy sensors and carbon-dioxide sensors
- Occupancy sensor setback of lighting and HVAC set points
- High efficiency water-cooled chiller plant and condensing heating hot water boiler plant with variable primary flow configuration for both systems.

Medical Science Sprinkler System Upgrades
University of Missouri - Columbia



PROJECT DETAILS

Location
Columbia, Missouri

Expertise
Architecture

Construction Cost
$450,000

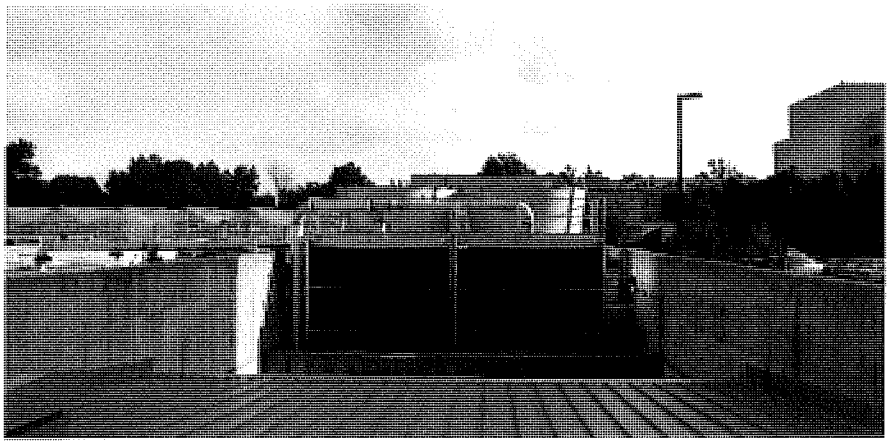
Completion Date
March 2018

Summary of Experience

University of Missouri-Columbia's seven story Medical Science Building finished construction in the mid 1960's, and since that time underwent various renovations to accommodate changing program and infrastructure. Some of these renovations included fire suppression systems, or piping, but a comprehensive fire suppression upgrade was deemed necessary in a 2004 master plan formulated by the University.

In 2015, SOA was selected to coordinate the design of a code-compliant fire sprinkler system providing full coverage of the entire Medical Science Building. With consulting MEP Engineers Ross & Baruzzini, SOA led the complex project which necessitated significant code research, field verification of 255,000 square foot building, preparation of Opinions of Probable Cost, drawings, specifications and a phasing plan enabling the building to remain occupied and fully functional during construction. With the delivery of Construction Documents, the University now has a master plan for adding sprinkler coverage to the entire building. The Phase 1 project to install a new fire pump and vertical risers was completed in the spring of 2018.

Life Sciences Chiller #3 Addition – Enclosure Design
University of Missouri - Columbia



PROJECT DETAILS

Location
Columbia, Missouri

Expertise
Architecture

Construction Cost
$2.6 Million

Completion Date
October 2017

Summary of Experience

Ross & Baruzzini Engineers selected SOA to serve as a consultant on a project for MU which involved the design of a new 1,500-ton electric centrifugal chiller and associated cooling tower to serve the Columbia, MO campus. The project necessitated the demolition of existing cooling towers, pumps, piping and conduits from the "east pit," just north of the Bond Life Sciences Building.

The new chiller was enclosed with a new north wall and roof structure while reusing the existing walls to the west, south and east sides of the pit. Other components included clerestory windows to provide daylight to the interior spaces, a roll up overhead door and double door to access the new equipment. Additionally, openings were cut into the concrete support walls to provide better access between the two pit areas. While SOA was not the prime contract holder, our scope of services were significant and included drawings and specifications, technical assistance during bidding and negotiation, submittal review during construction and preparation of record documents.

Ross&Baruzzini
6 South Old Orchard
St. Louis, Missouri 63119
314.918.8383

July 5, 2018

Mr. Karl Schneider
Physical Plant Director
Truman State University
100 East Normal
Kirksville, MO 63501

Re: Chiller Replacements in Student Union and Violette Hall
Truman State University

Dear Karl:

We are pleased to submit our Proposal for providing the professional engineering and architectural services for the above-referenced project.

PROJECT UNDERSTANDING

We understand the project to include the replacement of two (2) existing 200-ton chillers in the Student Center with one new 300-ton, water-cooled, electric, magnetic bearing, centrifugal chiller and replacement of one existing 200- ton chiller in Violette Hall with a new 200-ton, water-cooled, electric, magnetic bearing, centrifugal chiller. We further understand the following:

1. The cooling towers at both locations have been overhauled within the last 5 years, and no replacement, repairs or upgrades to them are required as scope of this work. R&B will evaluate the towers and advise the Owner if replacement, repairs or upgrades are required to support the new chillers. If replacement, repairs, or upgrades are required, R&B will submit an additional fee for that scope of work.
2. It is expected that the existing primary chiller and condenser water pumps will need to be replaced at both locations as work of this project, and that scope of work should be included in this project.
3. The existing chiller plant at the Student Union Building can be shut down for the duration of the chiller replacement in that space, and no temporary chiller will be required.
4. The existing chiller plant in Violette Hall can be shut down for the duration of the chiller replacement in that space, and no temporary chiller will be required.

SUMMARY OF SERVICES

Our professional engineering services shall include the following phases:

Schematic Design Phase – This phase includes:

1. Attendance at a kick-off meeting with the Owner.
2. Performing fieldwork to verify existing site conditions.

3. Performing engineering calculations.
4. Preparing a design narrative report describing the proposed scope of work.
5. Preparing demolition drawings.
6. Preparing preliminary new work drawings indicated proposed equipment layout.
7. Preparing preliminary one-line diagrams.
8. Preparing preliminary equipment schedules.
9. Preparing an estimate of probable construction cost.
10. Quality review by Senior Engineering staff.
11. Issuing Schematic Design Submittal to Owner.
12. Meeting with the Owner to review comments from the Schematic Design Submittal.

Construction Documents Phase – Based on Owner approval of the Schematic Design Documents and any adjustments in scope or fee, this phase includes:

1. Preparing final design and calculations.
2. Preparing final equipment selection.
3. Preparing final drawings.
4. Preparing final technical specifications.
5. Editing of front-end specifications provided by Owner to be job-specific.
6. Preparing final estimate of probable construction cost.
7. Quality review by Senior Engineering staff.
8. Issuing 100% Construction Documents to the Owner.
9. Meeting with Owner to review comments from the 100% Construction Document Submittal.
10. Incorporating review comments and issuing final bid documents to Owner.

Bidding and Negotiation Phase – This phase includes:

1. Attendance at a Pre-Bid Conference.
2. Technical assistance during bidding and issuing clarifications to the bid documents by addenda.
3. Analyzing bids.

Construction Phase – This phase includes:

1. Attendance at a Pre-Construction Conference.
2. Review of contractor submittals.
3. Review of contractor Pay Requests.
4. Performing field observations at the project site and preparing field observation reports for each field visit. We have included four (4) field observations, not including the final punch list inspection.
5. Attendance at construction meetings at the project site. The R&B team will be represented by the R&B Project Manager or R&B Construction Manager at each of these construction meetings, and the lead designers for each discipline will attend on an as-needed basis. We have assumed there will be a total of

five (5) construction meetings that R&B will attend in person, coinciding with the monthly field observations and final punch list inspection. R&B will attend additional construction meetings via phone and/or Webex, at the Owner's request.

6. Providing technical assistance to the contractor and responding to the contractor's Requests For Information.
7. Preparation of Change Proposal Requests or Supplemental Instructions that clarify the documents, but do not significantly change the scope of work.
8. Performing a final field observation at project completion and preparing a punch list of items found not in conformance with the contract documents.
9. Preparing record drawings from contractor supplied field data.

DELIVERABLES

The following documents will be provided by Ross & Baruzzini, Inc. at the end of each phase:

Schematic Design Phase - Electronic pdf copy of report, drawings, and cost opinion.
Construction Documents Phase – Electronic pdf copy of construction drawings, specifications, and cost opinion for 100% submittal; one set of signed and sealed reproducible drawings and specifications to be used for the reproduction of bid sets.
Closeout - One set of reproducible record drawings and electronic copies of same.

ASSUMPTIONS

1. The Owner will provide AutoCAD drawings of the existing chiller plants to R&B for our use.
2. AutoCAD is to be utilized for project drawings.
3. MasterSpec format will be used for project specifications.
4. Front-end specifications will be provided by the Owner for minor editing by R&B to be job-specific.
5. Contractor submittal review is limited to two reviews per submittal.
6. Adequate power exists in both locations to support the chiller replacements and no replacement of main electrical gear in either location will be required.
7. Refer to "Project Understanding" section of this proposal for additional assumptions.

ADDITIONAL SERVICES

The following services are not included in Ross & Baruzzini's scope of work for the project unless otherwise indicated:

1. Owner initiated changes to previously approved documents.
2. Excessive construction administration services due to lengthened construction period or poor contractor performance.

3. Regular site visits during construction beyond those identified. If additional site visits are requested, the associated additional fee per person per day is $1,250.
4. Preparation of construction contracts.
5. Preparation of construction schedules.
6. Preparation of Change Proposal Requests resulting from Owner initiated changes.
7. Review of Contractor submittals beyond those identified.
8. Arc flash analysis and labeling of equipment. R&B can provide this service for an additional fee, if desired by the Owner.
9. Soils information and testing.
10. Responsibility for uncovering and correcting existing asbestos or other hazardous materials.

The attached Hourly Rate Schedule is submitted for work exceeding the scope of this proposal.

SCHEDULE

This proposal is based on the following milestone schedule, based on an anticipated Notice-to-Proceed date of July 16, 2018:

Schematic Design Submittal:	August 13, 2018
Schematic Design Review Meeting:	August 22, 2018
100% Construction Document Submittal:	September 17, 2018
100% Construction Document Review Meeting:	September 26, 2018
Finalize Bid Sets:	October 8, 2018
Bid Date:	November 6, 2018
Construction NTP:	December 3, 2018
Construction Complete:	May 3, 2019

OWNER'S RESPONSIBILITIES

The Owner agrees that it is their responsibility to:

1. Review documents and make decisions that affect design in a timely manner to avoid schedule delays.
2. Provide full information regarding requirements for the project.
3. Designate a representative authorized to act in the Owner's behalf with respect to the project.
4. Furnish record drawings of existing conditions.

FEES

Ross & Baruzzini, Inc. proposes to provide the above noted services for a lump sum fee of Seventy-Five Thousand Dollars ($75,000). This fee request can be broken down as follows:

R&B Mechanical Engineering:	$42,000
R&B Electrical Engineering:	$12,500
R&B Project Management & Clerical:	$5,400
R&B Travel Expenses (10 site visits):	$2,600
Architecture (Simon Oswald Associates):	$7,500
Structural Engineering (ASDG) Labor & Expenses:	$5,000

REIMBURSABLE EXPENSES

Reimbursable expenses are included in the lump sum fee.

ATTACHMENTS

1. R&B Hourly Rate Schedule
2. SOA Hourly Rate Schedule
3. ASDG Hourly Rate Schedule

If this proposal is acceptable to you we understand that you will prepare the University's Standard Consulting Agreement to serve as a contract for our services.

We appreciate the opportunity to provide this proposal and look forward to working with you toward the successful completion of the project.

Respectfully,

Jeffrey R. Crawford, P.E., LEED AP
Senior Vice President, Director of Higher Education & Research

APPROVED BY:

William H. Overturf, III, P.E., LEED AP
President

Ross&Baruzzini

STANDARD HOURLY RATES

As of January 1, 2018
Good through December 31, 2018

Classification	*Rates*
Senior Project Principal	$275.00
Project Principal	$245.00
Senior Project Manager	$180.00
Project Manager	$160.00
Commissioning Authority	$160.00
Senior Engineer	$145.00
Construction Engineer	$135.00
Project Engineer	$130.00
Engineer	$125.00
Commissioning Agent	$120.00
Senior Designer	$100.00
Commissioning Field Engineer	$85.00
Designer	$85.00
Senior Project Coordinator	$85.00
Technician	$65.00
Project Coordinator	$65.00
Intern	$50.00

HOURLY RATES SCHEDULE – 2018

Principal	$175.00 per hour
Project Manager	$150.00 per hour
Project Architect	$130.00 per hour
Architect II	$115.00 per hour
Architect I	$105.00 per hour
Intern Architect IV	$105.00 per hour
Intern Architect III	$ 95.00 per hour
Intern Architect II	$ 90.00 per hour
Intern Architect I	$ 85.00 per hour
Project Interior Designer	$105.00 per hour
Interior Designer II	$ 85.00 per hour
Interior Designer I	$ 75.00 per hour
Digital Technician/Illustrator	$100.00 per hour
Project Administrator	$ 75.00 per hour
Administrative Support	$ 65.00 per hour
Undergraduate Students	$ 55.00 per hour

ADG, LLC
a Structural Design Group

RATE SCHEDULE / 2018

PROFESSIONAL SERVICES

Classification	Hourly Rates
Principal / Project Manager	$120 to 150
Engineer III	$105 to 120
Engineer II	$95 to 105
Engineer I	$85 to 95
Cadd III	$70 to 85
Cadd II	$65 to 70
Cadd I	$55 to 65
Clerical Staff	$35 to 50

REIMBURSABLE EXPENSES

Classification	Rates
Travel / Auto	$0.545 per mile
Travel / Other	1.0 x direct cost
Mailing / Postage and Handling	1.0 x direct cost
Courier Delivery	1.0 x direct cost
Long Distance Telephone / Fax	1.0 x direct cost
Outside Reproduction	1.0 x direct cost

In-House Printing / Plotting:

8.5" x 11"	$0.12 / Sheet
24" x 36"	$1.80 / Sheet
30" x 42"	$2.00 / Sheet
36" x 48"	$2.50 / Sheet

ST. LOUIS

6 South Old Orchard

St. Louis, Missouri USA

+1 314.918.8383

rossbar.com

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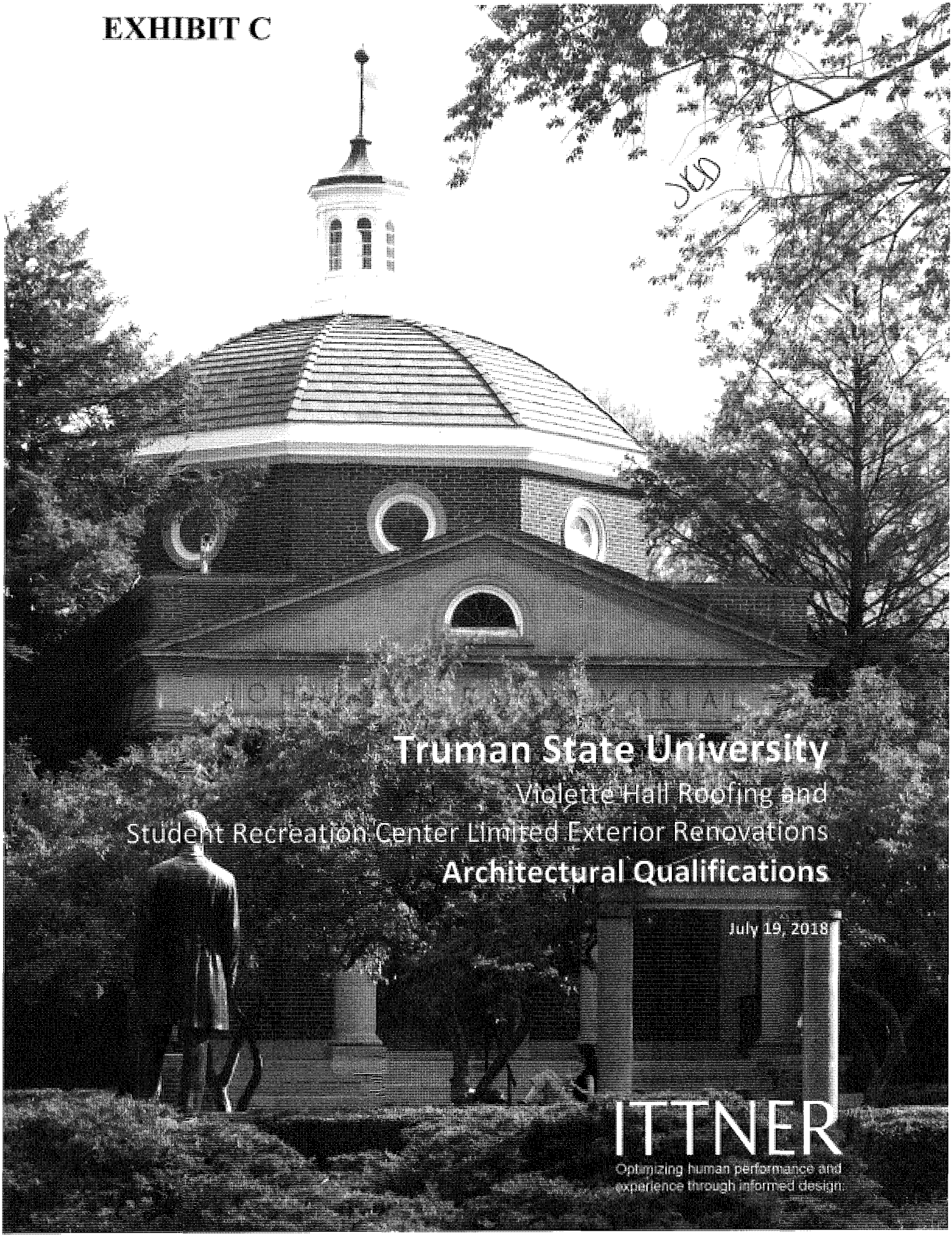
EXHIBIT C



Truman State University

Violette Hall Roofing and Student Recreation Center Limited Exterior Renovations

Architectural Qualifications

July 19, 2018

ITTNER

Optimizing human performance and experience through informed design.

ITTNER

July 19, 2018

Mr. Mark Schultz, AIA, CSI
Campus Planning Office, McClain Hall
Truman State University
100 East Normal
Kirksville, Missouri 63501

RE: **Architectural Qualifications**
Violette Hall Roofing and Student Recreation Center
Limited Exterior Renovations

Dear Mark:

Enclosed are Ittner's general qualifications proposal for Truman State University's upcoming renovation projects at Violette Hall for roofing and the Student Recreation Center limited exterior renovations.

We have extensive experience on your campus, having completed renovation work on more than ten buildings since 2010, and look forward to continuing our relationship with Truman State.

Sincerely,
Wm. B. Ittner, Inc.

Todd Powers, AIA
Vice President

tpowers@ittnerarchitects.com
314.421.3542 x 226
Cell: 314.952.8597

Optimizing human performance and experience through informed design.

Wm. B. Ittner, Inc.
611 N. Tenth Street, Suite 200
St. Louis, Missouri 63101
314.421.3542

333 Salem Place, Suite 110
Fairview Heights, Illinois 62208
618.624.2080

TABLE OF CONTENTS

Insights: Welcome to Ittner	Page 3
Innovative Designs for Truman State	Pages 4 – 8
Seasoned Partners, Experts in their Fields	Pages 9-11

CONTACT INFORMATION

Todd Powers, AIA, Vice President
Project Manager
Ittner Architects
611 N. Tenth Street, Suite 200
St. Louis, Missouri 63101

tpowers@ittnerarchitects.com
314.421.3542 x 226
Cell: 314.952.8597

TYPE OF FIRM

Type of Organization
Privately held Corporation

Percentage of Work Dedicated to Architecture: Over 98%

Offices & Licenses
Missouri & Illinois

Projects Completed
Over 4,800 since 1899

COMMITMENT TO TRUMAN STATE UNIVERSITY

At Ittner, education is our only focus. We believe that in order to deliver the best results you must focus your entire efforts at understanding education from the University's perspective. As a result of our commitment, Universities receive a wealth of experience and diversity of expertise ranging from campus maintenance programs, updating campus plans, performing arts, science, sports, housing and more. **Our commitment has created lasting relationships based upon continuous performance and value.**

We believe that a **long term working relationship provides** each of our University clients with the best service and results. Our 'hands-on approach' to taking a forensics approach to problem solving has resulted in a cost-effective approach in solving the real problems with a long-lasting solution.

LONG-TERM RELATIONSHIP

Through our extensive experience completing campus master plans, feasibility studies, renovations, and new buildings, Ittner has developed a reputation as leaders in designing higher education facilities. Communication is the key and we work closely with our clients, developing new and innovative ideas such as funding opportunities, LEED, sustainable design, interior design, college or university branding, and teachable buildings. We design spaces that promote learning, self-expression, sense of community, and overall enhancing the student's learning and living environments on campus.

Ittner has been working with Truman State University for the past 8 years in the ongoing repair of the exteriors of facilities having architectural significance campus wide.

PAST PERFORMANCE

Since October 15, 2010 Ittner has been awarded annual contracts to accomplish the following work:

- Student Union: Exterior masonry (stone and brick) repairs, renovated the HVAC system and associated interior repairs, and roof replacement
- Pickler Memorial Library: Roof, window and skylight replacement in phases over 3-year period and exterior masonry repairs
- Baldwin Hall: Exterior masonry repairs and roof replacement
- Pershing Hall: Roof replacement
- Violette Hall: Roof and gutter repairs
- Kirk Memorial Hall: Roof and cupola replacement, interior water damage repairs, new insulation and attic ventilation system.
- McClain Hall: Exterior masonry repairs, roof replacement and repairs to equipment awnings
- Magruder Hall: Roof replacement
- Missouri Hall: Exterior masonry repairs and window vent replacement
- Student Recreation Center: Roof replacement
- Ophelia Parrish Fine Arts Center: Roof screen wall/snow guard plus fixed acoustical problems in Instrumental and Choral Rooms
- Blanton-Nason-Brewer (BNB) Hall: Roof and Window Replacement

maintaining your investment, campus maintenance, every detail matters

MAXIMIZING DESIGN OPPORTUNITIES

Since 2010, Ittner has been tasked with the on-going challenge of maintaining the University's aging buildings. More than ten buildings have been restored; many involving correcting repairs that had caused additional damage. Returning the exterior appearance of these historic buildings was important to the University. For example, the dome roof of the University's iconic Kirk Memorial had severe moisture damage from a sealed plenum when it was constructed, trapping heat and moisture in the plaster ceiling and wood structure creating rot and mold issues. The repairs included insulating the plaster ceilings and ventilating the attic space by introducing brick vents at the perimeter and then rebuilding a new cupola to exhaust the top of the dome.

SENSITIVITY TO EXISTING ENVIRONMENTAL FEATURES

Many of the projects undertaken dealt with improving indoor air quality. Stopping water leaks in windows, skylights, doors, through walls and removing mold damaged finishes was typical for many of the buildings. Large fans were introduced in the skylight areas of Pickler Library, dramatically improving the comfort in that building. A long-term sound problem in Instrumental and Choral Rooms of the Ophelia Parrish Fine Arts Center was successfully corrected through the introduction of acoustical panels that were carefully integrated into the existing building.

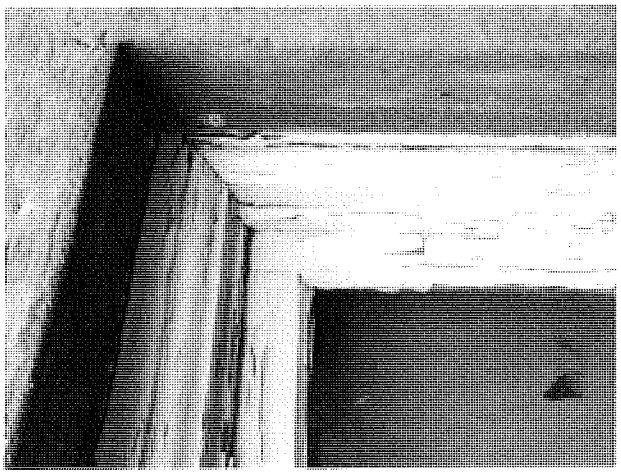
APPROACH TO MAXIMIZE ENERGY CONSERVATION OPPORTUNITIES

The goal of virtually every project was to improve the building envelope, often adding insulation to roofs, replacing doors and windows, and stopping air infiltration leaks, all with minimal change to the charm of the building.

COMPREHENSION OF CLIENT NEEDS AND OBJECTIVES

- ✓ Budget Sensitivity
- ✓ Energy conservation
- ✓ Sensitive Design Considerations
- ✓ Phased Repairs on an Occupied Campus

Before



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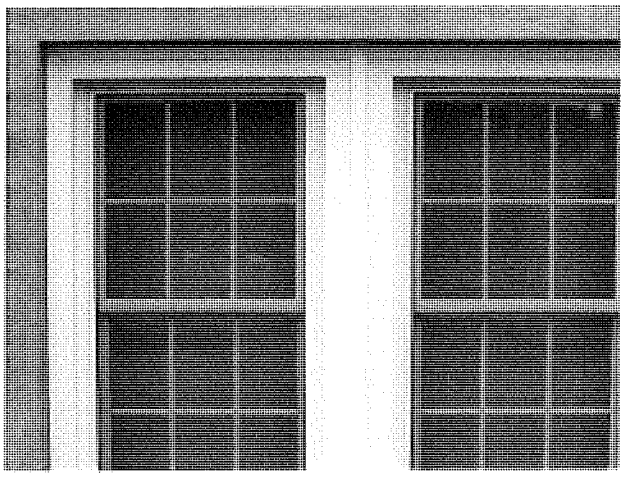

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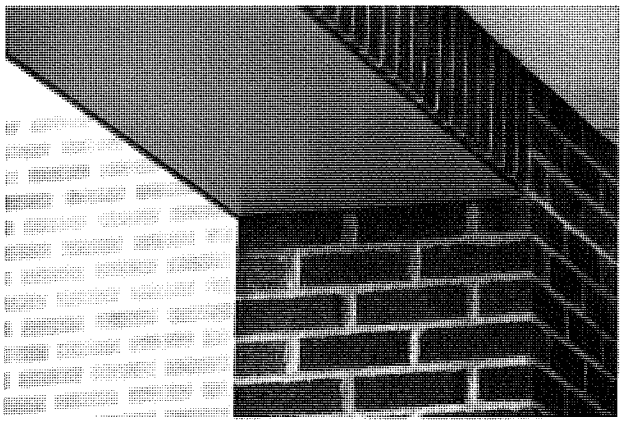

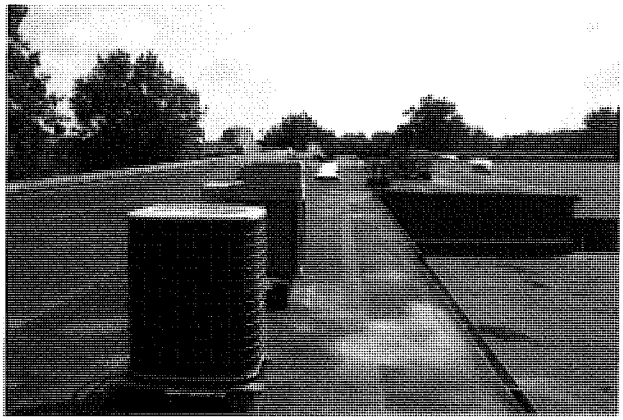

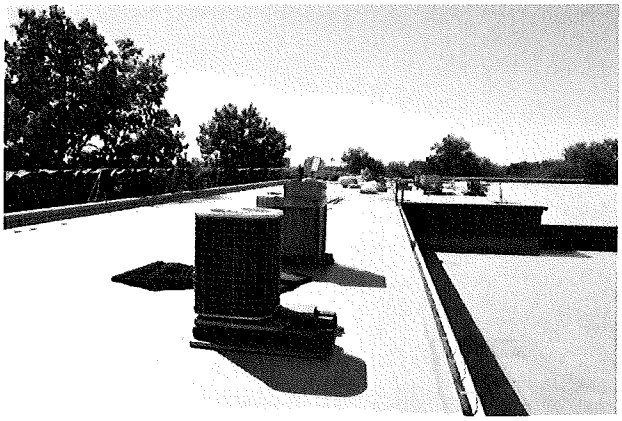

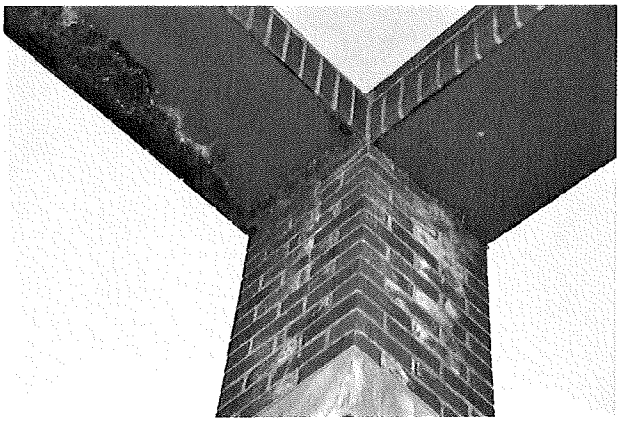

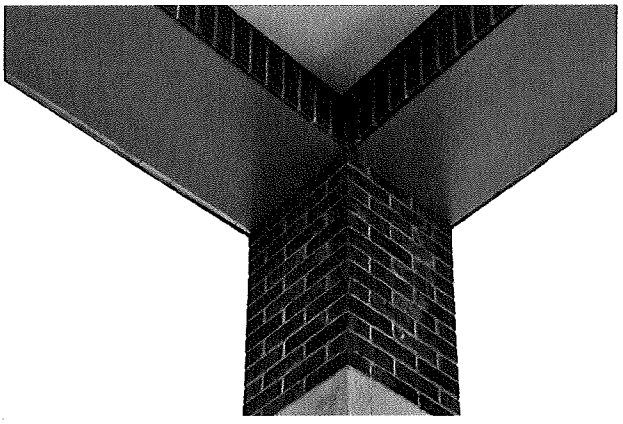

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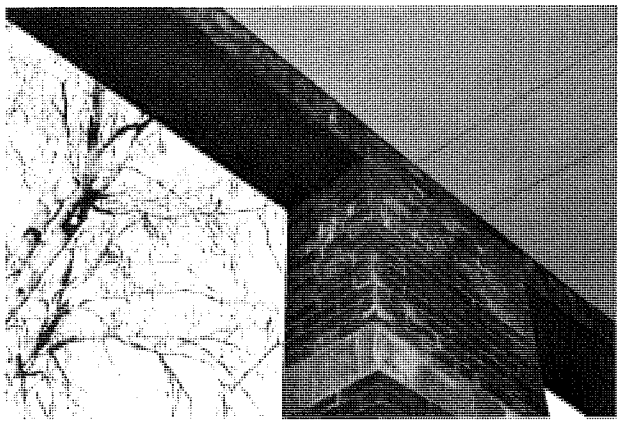

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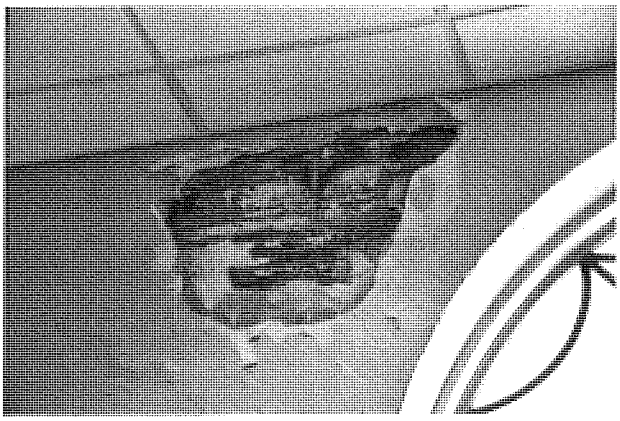
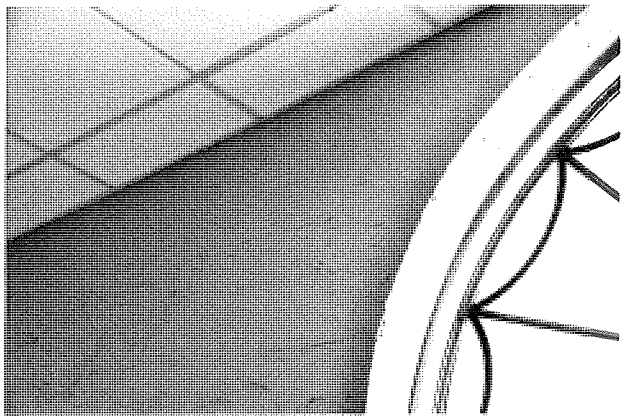
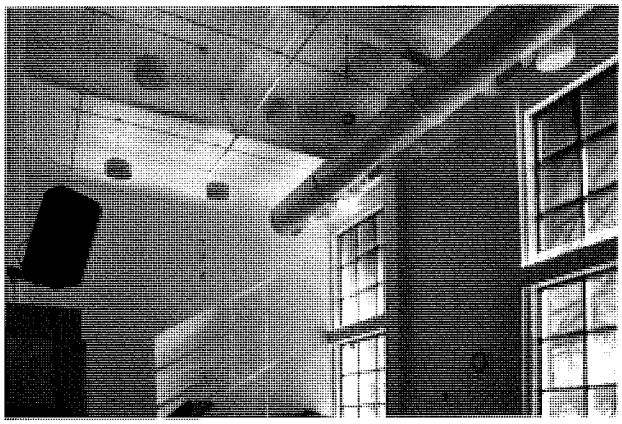
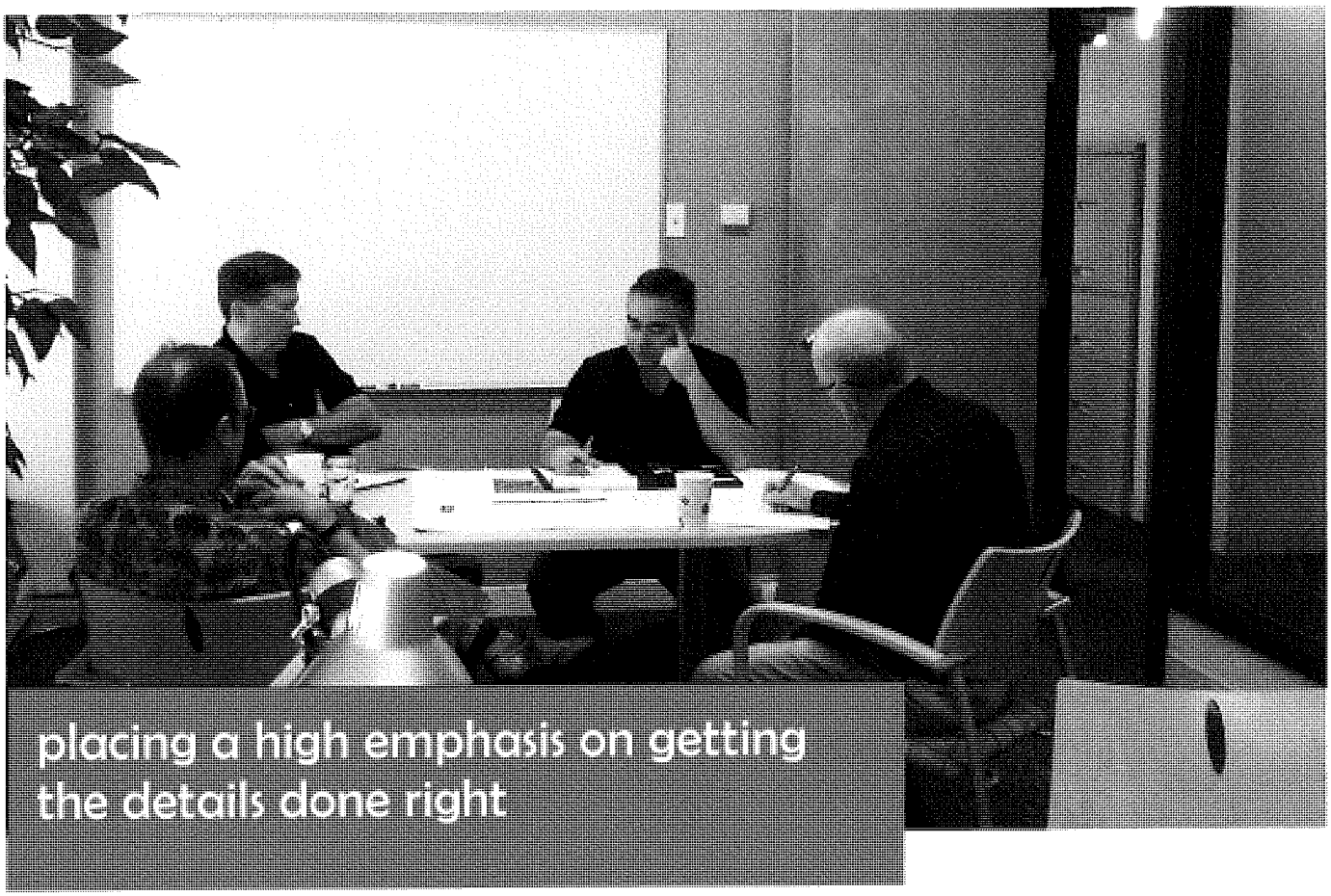








SEASONED PARTNERS, EXPERTS IN THEIR FIELDS

Ittner listens, to accurately interpret and anticipate client needs while leveraging the insights gained from recent projects and a century of experience.

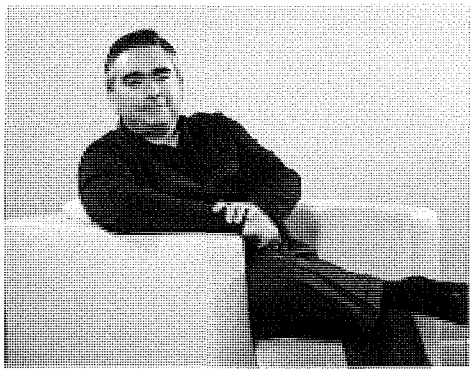
Ittner continues to earn respect from the communities and clients it serves because of its collaborative approach – an approach that follows an engaging process of interpreting needs, developing unique insights and, creating ideas that best answer the requirements of your project.

AN EXPERT RESOURCE

Our team of experts use a variety of tools to convey your vision into reality, developing options and exploring all possibilities.

INTRODUCING OUR TEAM

The solutions we bring and the trends that we set are direct result of the close partnership we have with our clients. It is your vision that begins our dialogue where together we achieve what neither can do alone. Our clients have all had experience with other architectural firms prior to working with Ittner. We are experts in education and deliver what we promise



From site preparation to building completion, Todd is hands-on and provides single-point responsibility as the Senior Project Manager as he has for other Universities and prominent clients. Todd is also a board member on the City of Sunset Hills Planning & Zoning Commission and works on issues important to the profession and public.

VICE PRESIDENT/PROJECT MANAGER
TODD POWERS, AIA

EDUCATION
Bachelor of Architecture - Cum Laude, Kansas State University
Graduate Seminar - Japan, Kyoto University

EXPERIENCE 28 years
WITH ITTNER 19 years

CONTACT
314.421.3542 x226
tpowers@ittnerarchitects.com

REGISTRATION
Registered Architect Missouri & Illinois
NCARB Certified

PROFESSIONAL AFFILIATIONS
American Institute of Architects
Construction Specification Institute
Society for College & University Planning

Todd has been an AIA CES Registered provider and has offered classes to the project management staff at several universities.

Todd's wide range of experience in all stages of design and construction will prove to be a valuable asset to your project from start to finish. His technical ability and personality enable him to work well not only with the owner, but also with the consulting staff and contractors.

Selected Project Experience

Truman State University, Kirksville, Missouri
Student Union: Exterior masonry (stone and brick) repairs, renovated the HVAC system and associated interior repairs, and roof replacement
Pickler Memorial Library: Roof, window and skylight replacement in phases over 3-year period and exterior masonry repairs
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Kirk Memorial Hall: Roof and cupola replacement, interior water damage repairs, new insulation and attic ventilation system.
McClain Hall: Exterior masonry repairs, roof replacement and repairs to equipment awnings
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Ophelia Parrish Fine Arts Center: Roof screen wall/snow guard plus fixed acoustical problems in Instrumental and Choral Rooms
Blanton-Nason-Brewer (BNB) Hall: Roof and Window Replacement

Southern Illinois University Carbondale, Carbondale, Illinois
Agricultural Building Reroofing, Green Roof

Missouri S&T, Rolla, Missouri
Castleman Hall Reroofing

University of Missouri, St. Louis, Missouri
Campus Maintenance, Task Orders

Southern Illinois University Edwardsville, Edwardsville, Illinois
Campus-wide Window Replacement and Renovations
Reroofing of 7 Facilities: Rendleman Hall Dunham Hall, Founders Hall, Alumni Hall Vadalabene Center, Support Services Building
200 University Park

Greenville University, Greenville, Illinois
New Entrepreneurship Grant Application and Center

St. Louis Community College, St. Louis, Missouri
Technical Specifications for the New College
Campus in Wildwood – Gold LEED Certification

Greg is very detail oriented and capable of executing the many responsibilities necessary for each given project. His technical abilities and communication skills are something our team and clients can rely upon. Greg is involved in projects from programming through design and the construction phase.

PROJECT ARCHITECT
GREG HIELSBERG, ARCHITECT (MO)

EDUCATION
University of Illinois at Urbana-Champaign
Master of Architectural Design

Southern Illinois University at Carbondale
Bachelor of Architectural Studies

EXPERIENCE
11 years

CONTACT
314.421.3542 x212
gregh@ittnerarchitects.com

REGISTRATION
Missouri Architect
NCARB Certified
Pursuing Illinois License

PROFESSIONAL AFFILIATIONS
Society for College & University Planning
USGBC, US Green Building Council

Greg understands the architectural requirements of educational projects. As an exceptional visionary, Greg's involvement on projects often result in designs that go beyond the expected – and designs that meet the needs of the clients and the students it serves.

Selected Project Experience

Truman State University
Southwestern Illinois College
Columbia College
Logan University
Holy Trinity Church
St. Louis Archdioceses

Lindbergh Schools
Steelville School District
Fort Zumwalt School District
Pattonville School District
Poplar Bluff Public Schools
Hancock School District
Marshall School District

Belleville 118
Southwestern CUSD 9
Mahomet -Seymour
*O'Fallon THSD 203

Additional Experience

*Hazelwood School District
*Fox School District
*Northwest School District

*denotes projects completed with other firms

ITTNER

Optimizing human performance and
experience through informed design.

Proposal

Violette Hall Roofing and Student Recreation Center Limited Exterior Renovations

Truman State University

July 19, 2018

Project Description:

The general architectural scope of the project is to address the following in two parts: Part One - evaluate the existing building envelopes; make recommendations for corrective actions including establishing budgets; prepare the design documents needed to obtain competitive bids; assist in the bid and negotiation process; and, Part Two - provide construction phase services for both general administration (in-office) and field observation activities.

The following specific scope of work will be designed for **Violette Hall**:

1. The existing shingle roofing will be replaced, along with damaged flashings, and deteriorated deck boards. Depending on how the attic is constructed, improving attic ventilation with a continuous ridge vent (high), and new dormer style vents (low) and increasing the depth of roof insulation in the existing attic may also be considered.
2. Existing EPDM membrane roof areas will also be replaced, including flashings, accessories, and deteriorated decking; and potentially increasing the slope and depth of roof insulation to comply with the current building and energy code requirements.

The following specific scope of work will be designed for the **Student Recreation Center**:

1. A number of building movement joints and elements in the existing façade (control joints, brick shelf, etc.) require repairs. Additionally, all stone to brick, and other stone joints need to repointed with sealant.
2. Any other façade miscellaneous repairs identified will also be performed, including damaged masonry repair and brick replacement, and exposed steel lintels to be be cleaned, primed and repainted.

Scope of Services:

Ittner will provide the overall project management and architectural services for these projects. No engineering services are anticipated. Environmental services shall be provided by the University's environmental consultant.

I. **Part One – Assessment, Design, and Bidding Services**

The following services are included in this phase:

A. Review of Existing Documents:
Ittner will scan and digitize available record drawings to create CAD backgrounds. Additional detailed information will be gathered in the field to understand the building envelope and to document the exterior elevations.

B. Field Investigation Process:
After reviewing the above information, a detailed work plan will be finalized to guide the field observation team to conduct a thorough, yet efficient investigation. The work plan will detail the requirements for a general visual investigation and documentation of the building.

C. Due to the straightforward scope of this project, we will develop the construction documents for the corrective measures in one Construction Document stage, omitting the traditional Schematic Design and Design Development phases. Our design process will include an estimate of the probable construction cost and a project schedule.

D. We will assist the University throughout the competitive bidding process and subsequent contractor negotiations. Our services shall include:
   - Prepare the bid advertisements. Arrange for the printing and handle the distribution to bidders. The cost of printing and mailing shall be a reimbursable expense.
   - Answer bidder questions, prepare and issue addenda to all plan holders as needed.
   - Review product substitution requests.
   - Conduct the pre-bid meeting and the bid opening meeting.
   - Review the bids and make recommendations for award to the University.

II. **Part Two – Construction Services**

The scope of services for this type of work requires that compensation for construction services be provided in the following two categories.

A. **Category #1 – General Administration.** The following services are included in Category #1 – General Administration services.
   - Answer questions of contractors and prepare/issue Clarifications, Change Proposal Requests, Construction Change Directives and/or Change Orders.
   - Review Shop Drawings.
   - When the Contractor notifies Ittner that the project is ready for the punchlist to be prepared, Ittner will inspect the project with the University in attendance. Ittner will provide a single punchlist and will be make two return trips to confirm that deficiencies noted in the punchlist have been corrected. Additional punchlists and return trips will be considered additional services.

B. **Category #2 - Field Observations.** While field observations services for new construction are relatively predictable, the nature of renovation work to correct concealed deficiencies makes it impossible to predict the field time that will be required. We anticipate visiting the site at least weekly during the construction to assess contractor's compliance with contract documents and to resolve issues that are discovered during the renovation. However, our experience tells us that unforeseen construction deviations are often discovered in this particular type of renovation that will require additional unplanned trips to develop timely and appropriate solutions. Therefore, the fee for field observation services is not included in the lump sum fee for Category #1 – General Administration. We recommend that at a minimum, weekly field visits be budgeted for the construction phase, plus reimbursable expenses.

Schedule:

We will commence upon notice to proceed following the August 2018 meeting of the Board of Governors, and complete work as follows:

I. **Part One – Assessment, Design, and Bidding Services Milestones:**

A. Assessment and Design Completion – not later than November 30, 2018
B. Bidding – December 17, 2018 – January 17, 2019
C. Contract Award – February 9, 2019 Board of Governors Meeting

II. **Part Two – Construction Services Milestones:**

A. Category #1 General Administration – Commence upon notice to proceed to the Contractor, shop drawing review and approval to facilitate material delivery on campus by the end of the spring term in early May 2019.
B. Category #2 Field Observations – On or about May 13, 2019 thru about August 2, 2019.

Compensation:

Compensation for the **Violette Hall Roofing and Student Recreation Center Limited Exterior Renovations** shall be in accordance with Attachment A – Compensation Analysis, plus reimbursable expenses.

Compensation Analysis

Attachment A

Violette Hall Roofing and Student Recreation Center Limited Exterior Renovations

Truman State University

ITTNER

Date: July 19, 2018

Task Description	Manhour Budget	Billing Rate (avg)	Detail Subtotal	Grand Totals
I. Assessment, Design & Bidding Phase Services				
A. Ittner in-house services:				
1. Project Management/administration	24			
2. Field verify As-Built conditions (2 staff, 1.5 days)	24			
3. Draft CAD backgrounds based on record drawings (SRC only)	4			
4. Drawings				
a. Violette Hall				
i. Roof Plan	24			
ii. Details	16			
b. Student Recreation Center				
i. Elevations	24			
ii. Details	16			
5. Project specifications	40			
6. Estimate of Probable Construction Costs	4			
7. Quality checking	4			
8. Coordination meetings w/ University (2 staff, 1 meeting)	24			
9. Bid Printing and Distribution	4			
10. Answer questions and issue Addenda	16			
11. Prebid Conf., prep agenda and minutes (1 staff, 1 meeting)	12			
12. Attend Bid Opening and prepare Tabulation (1 staff, 1 trip)	12			
13. Evaluate bids & recommend award	8			
Ittner labor cost for Assessment, Design & Bidding:	256	x $ 155 =	$ 39,680	
Total Labor Cost for Assessment, Design & Bidding Phase:			$ 39,680	$ 39,680
II. Construction Phase services (Category #1 - only):				
A. Ittner in-house services:				
1. Shop Drawings, RFIs & Change Orders	24			
2. Develop and distribute punchlist (1 staff, 1 trip)	16			
3. Project Admin/Pay Apps/Project closeout	12			
Ittner labor cost for Construction Phase:	52	x $ 135 =	$ 7,020	
Labor Cost for Construction Phase (Category #1 only):			$ 7,020	$ 7,020
Grand Total Lump Sum Fee, excluding reimbursable expenses:				**$ 46,700**

EXHIBIT D

HITCHCOCK DESIGN GROUP
creating public places

August 2, 2018

Mr. Mark Schultz, Campus Architect
Truman State University Campus Planning
McClain Hall 201
100 East Normal
Kirksville, Missouri 63501-4221

RE: Pedestrian Mall Reconstruction, Phase 2

Dear Mark,

Thank you for asking Hitchcock Design Group (HDG) to submit this proposal regarding Phase 2 of your Pedestrian Mall reconstruction project! We appreciate the opportunity to continue our relationship with you and your colleagues at Truman State University.

PROJECT UNDERSTANDING

We understand that Truman State University (TSU) is seeking to address several issues related to the existing pedestrian walkway extending between the south end of Phase 1 (approximately at the southwest corner of Pickler Memorial Library) and the southeast corner of the Student Union. These include replacing and relocating the existing fountain with a zero-depth interactive water feature and re-grading the fountain plaza to remove the steps into the Student Union. Site design elements and features used in Phase 1 will serve as the template for Phase 2 improvements. These include the pavement section and paver type; stormwater management across and through the paving; bicycle circulation and parking; pedestrian circulation and seating; site walls, steps and ramps; lighting; and new planting plans. The construction budget is $1,000,000. The design and documentation team will be led by **HDG** and will include **Anderson Engineering** (surveying, civil engineering, structural engineering), **McClure Engineering** (electrical, plumbing engineering), and **Fountain Technologies** (water feature design).

100 S. Wacker Drive, Suite 700
Chicago, Illinois 60606
312.634.2100

hitchcock**design**group.com

SCOPE OF SERVICES

In order to meet your objectives, we propose a three-phased process that is summarized below and described in greater detail in the attached Scope of Services.

First, during Preliminary Design, we will prepare a site survey and a concise Site Program that summarizes the existing resources and stakeholder interests. Then we will prepare Alternative Improvement Concepts and corresponding Construction Cost Opinions that identify the scale, character, complexity and potential construction cost of the proposed hardscape, pedestrian and landscape improvements. We will then review each with you.

Once the scope, character and budget have been established for the project, we will prepare Design Development Plans that illustrate the hardscape, pedestrian and landscape improvements, and Construction Documents, including drawings and specifications, which will be used to competitively bid and construct the approved improvements.

Finally, during Construction, our team will provide Construction Administration, Observation and Contract Close-out services that will help you administer your contract with the General Contractor.

This proposal understands that you and / or other members of the TSU staff will be involved with some of the construction observation duties and may request members of the HDG Team to visit the site, if needed, beyond what is described in the Scope, at the agreed-upon hourly rates.

As shown on Exhibit "A" Project Limits, this proposal incorporates Project 2A as the focus of the $1M project. Projects 2B and 2C will be studied during Schematic Design and, if it looks feasible relative to budget, will be documented in DD and CD, possibly as Add Alternates.

FEES

The HDG Team will provide the Professional services as described in the Scope as follows:

Pre-Design (including survey)	$9,950
Schematic Design	$19,750
Design Development	$42,000
Contract Documentation	$48,000
Bidding and Negotiation	$6,250
Construction Phase Services	$29,750
Total	**$155,700**

Additional reimbursable expenses allowance (Includes travel, lodging, printing, postage and delivery) Reimbursable expenses will be invoiced at cost plus 5%.	$5,000

PROJECT TEAM

As the team leader for Phase 2, I will be the project manager and lead designer. I will be responsible for routine project communications with you and rest of the project team. Other Hitchcock Design Group staff members will participate as needed to advance the work.

John Huss and **Tom Wooten** of Anderson Engineering will lead their team of surveyors, civil engineers, and structural engineers. As key members of the Phase 1 Mall team, they have years of experience working on the TSU campus.

Peter McDonnell and **Matt Meyers** of McClure Engineering will provide the electrical engineering services. Their experience – including Phase 1 of the Mall – with TSU's electrical systems, standards, and preferences will be a valuable asset to the success of this project.

Bob Watson and **Justin Hauad** of Fountain Technologies will provide the water feature design services. Their experience with designing fountains for institutions throughout the Midwest gives them the background needed to design a successful water feature. Their firm also offers fabrication and installation services for the fountain components which—if contracted for through the General Contractor—will give TSU a single point of contact for commissioning and trouble-shooting as well as consulting on on-going maintenance.

SCHEDULE

We understand that TSU would like to have project construction begin in May 2019. The HDG Team will begin the project immediately upon your Notice to Proceed and will target having bid documents ready for bid by April 2019.

Thank you, again, for the opportunity to participate on Phase 2 of this important project.

Sincerely,
Hitchcock Design Group

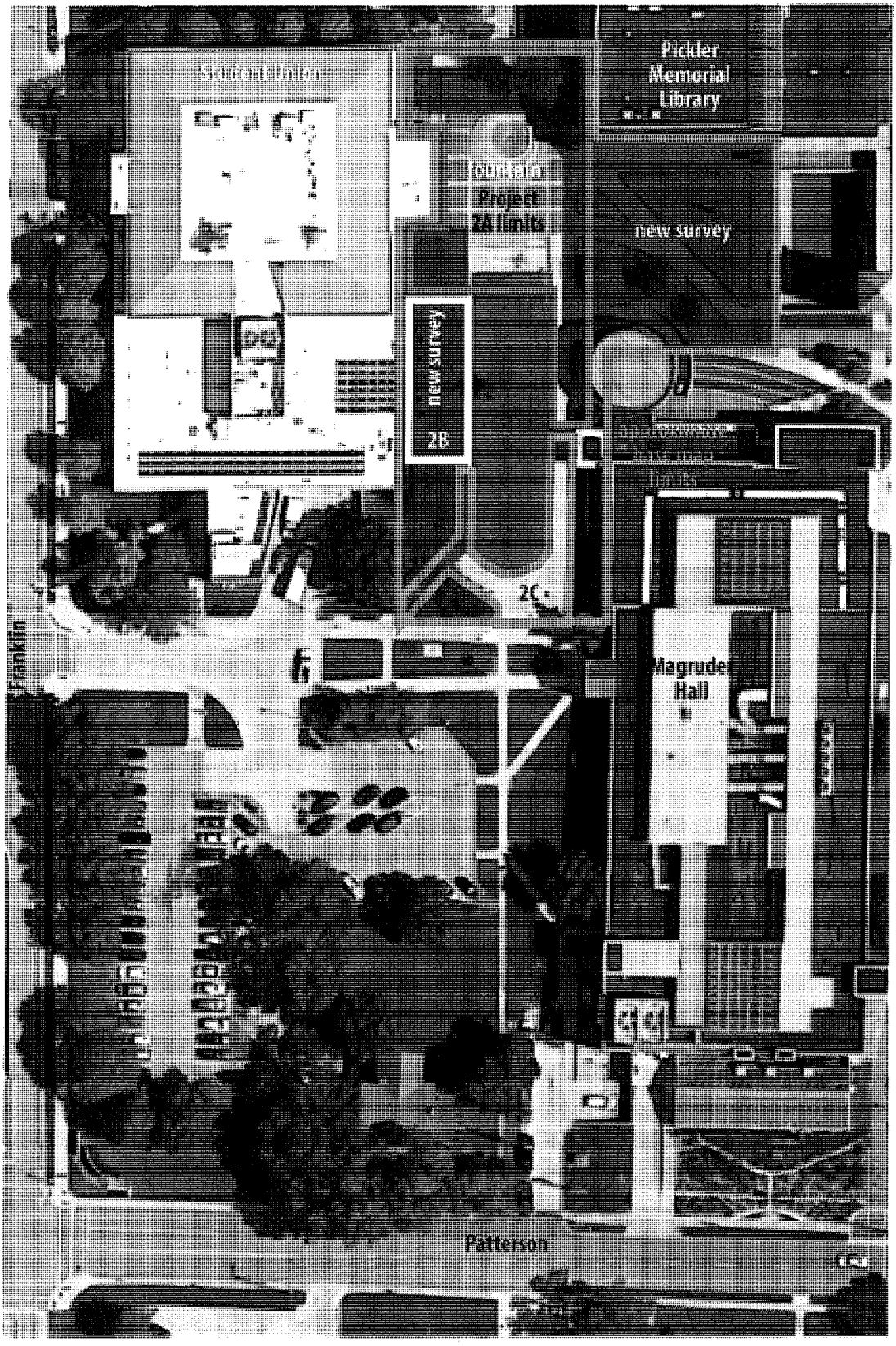
Craig Farnsworth, PLA, ASLA
Principal

Encl: Exhibit "A" Project Limits
Exhibit "B" Scope of Services
Exhibit "C" Schedule
Exhibit "D" Standard Billing Rates

Exhibit "A"

Truman State University Pedestrian Mall Reconstruction: Phase 2 Project Limits

Note:
Project 2A will be the primary focus area. Projects 2B and 2C will be studied in SD and included in DD/CD if construction budget allows.



Scope of Services (Exhibit "B")

PRELIMINARY DESIGN SERVICES

A. Research, Analysis and Programming

Objective: Confirm the characteristics of the existing resources, owner / users and stakeholders and produce new maps and a program summary that will be the basis for the design of site and landscape improvements on the campus of Truman State University (TSU) between the south end of Phase 1 improvements (approximately at the south end of Pickler Memorial Library) and the west entry to Magruder Hall (see attached Exhibit "A").

Process: Specifically, the HDG team will:

1. (On-site: Mtg. #1) Conduct a kick-off meeting with TSU representatives and the HDG team confirming:
   a. Project area
   b. Goals and objectives
   c. Project team structure and responsibilities
   d. Budgets
   e. Communications protocol
   f. Decision making process
   g. Tentative schedule
   h. Invoicing and payment
   i. Other administrative considerations

2. Identify operational practices, campus standards, development plans and construction procedures by interviewing representatives of appropriate stakeholder groups including:
   a. TSU Campus planning, campus security, Student Union staff, and campus maintenance

3. Collect from TSU readily available existing data for the project area and the immediate surroundings including:
   a. Topographic and utility surveys
   b. Environmental reports
   c. Geo-technical reports
   d. Archival photography
   e. Boundaries, property ownership and easements
   f. Pending improvement plans, as-builts, and original design documents
   g. Utility atlases

4. Observe and photograph the project area and immediate surroundings to identify readily apparent physical conditions and patterns of use.

5. Prepare a new **Topographic Survey** (see attached Exhibit "A" for limits), based on the English system and provided in AutoCAD format, establishing horizontal and vertical controls and locating natural features and manmade improvements including:
   a. Benchmarks visible from project area
   b. Contours at one foot intervals
   c. Spot grades at changes in elevation or material, at object corners, and where otherwise necessary
   d. Trees with approximate limits of branching canopy
   e. Underground water, storm and sanitary utilities including size, type, structures, grates and inverts
   f. Underground mechanical components and utilities related to the existing fountain

g. Above- and below-ground power and communication utilities
h. Buildings (including doors, windows, walls, columns) and other structures
i. Curbs, walks, stairs, roadways, drives, pavement banding/patterns, and lights
j. Field review of survey for accuracy double-check
k. Will be coordinated with "One Call" utility location services

6. Using the inventoried data and the new survey, prepare **Base Maps** at appropriate scales.

7. Prepare and submit a concise **Site and Landscape Improvements Program Memo** that summarizes the research and analyzes its impact on the proposed schematic design improvements including:
   a. Goal and objectives
   b. Stakeholder interests
   c. Budget (construction costs)
   d. Preliminary Schedule (design, bid, construct)

8. (Conference call: Mtg. #2) Review the Site and Landscape Improvements Program Summary.

Deliverables: **Topographic Survey** (ACAD format); **Base Maps** (ACAD and PDF formats); **Site and Landscape Improvements Program Memo** (PDF file)

B. Schematic Design
Objective: Reach consensus with TSU on the type, location, organization, scale, character and potential cost of site and landscape improvements on the Pedestrian Mall.

Process: Specifically, following your approval of the Site and Landscape Improvements Program Summary, the HDG team will:

1. Prepare **Alternative Concepts** including appropriate plan views, sections, elevations, images of comparable elements, and other graphic images to illustrate the location and organization of the proposed improvements including:
   a. Grading, drainage, stormwater management
   b. Water, gas, steam, sanitary sewer utilities
   c. Electric power supply, control, distribution
   d. Lighting
   e. Interactive water feature
   f. Walks, plazas and other pedestrian surfaces
   g. Walls, steps and ramps
   h. Trees, shrubs, perennials and turf
   i. Site furnishings (e.g. benches, tables, chairs, bike racks, trash / recycling containers)

2. (Conference call: Mtg. #3) Review the alternative concepts with TSU representatives and HDG Team members to select a **Preferred Alternative**.

3. Refine the preferred alternative giving increasing emphasis to scale and character.

4. Prepare a **Preliminary Construction Cost Opinion** using recognized systems costs.

5. Update the **Preliminary Schedule**.

6. (Conference call: Mtg. #4) Review the refined preferred alternative, preliminary construction cost opinion, and updated schedule with TSU representatives and HDG only.

7. Refine the schematic design recommendations, as required.

8. Prepare a concise **Schematic Design Exhibit** including appropriate graphics, text and data summarizing:
   a. Site and Landscape Improvement Program
   b. Preferred alternative showing recommended site and landscape improvements
   c. Preliminary construction cost opinion
   d. Preliminary implementation schedule

9. (Conference call: Mtg. #5) Review the Schematic Design Exhibit with TSU representatives and HDG only.

Deliverables: **Alternative Concepts** (PDF file); **Preferred Alternative** (PDF file); **Preliminary Construction Cost Opinion** (PDF file); **Preliminary Schedule** (PDF file); **Schematic Design Exhibit** (PDF file)

FINAL DESIGN SERVICES

A. Design Development

Objective: Reach consensus with TSU on the final design, probable cost and construction strategy for the proposed site and landscape improvements on the Pedestrian Mall.

Process: Specifically, based on the approved Schematic Design Report, the HDG team will:

1. Prepare **Design Development Documents** to finalize the size, horizontal and vertical geometry, structure, materials and finish, as appropriate, for these proposed improvements:
   a. Erosion and sediment control
   b. Grading, drainage, storm water management
   c. Water, gas, steam, sanitary sewer utilities
   d. Electric power supply, control, distribution
   e. Lighting
   f. Interactive water feature
   g. Walks, plazas and other pedestrian surfaces
   h. Walls, steps and ramps
   i. Trees, shrubs, perennials and turf
   j. Site furnishings (e.g. benches, tables, chairs, bike racks, trash / recycling containers)

2. Collect and review **Product Data** and **Material Samples** for possible improvements.

3. Update and submit the **Construction Cost Opinion** and **Schedule**.

4. (On-site: Mtg. #6) Review the drawings, specifications, product data and material samples with TSU representatives and HDG Team members.

5. Refine the drawings and supporting materials as may be required.

6. (Conference call: Mtg. #7) Review the revised documents with TSU representatives and HDG Team members.

Deliverables: **Design Development Documents** (ACAD files and PDF files); **Product Data** and **Material Samples** (PDF files); **Construction Cost Opinion** and **Schedule** (PDF files)

B. Construction Documents
Objective: Produce the final Construction Drawings and written Project Specifications that will be used by others to competitively bid and construct the specified improvements.

Process: Specifically, based on the approved Design Development documents, the HDG team will:

1. Produce **Construction Documents** (drawings and specifications) that will be used to bid and construct the improvements including:
   a. Project identification and general information
   b. Notes, index and standards
   c. Alignment, ties and bench marks
   d. Demolition
   e. Erosion and sedimentation control
   f. Grading, drainage, stormwater management
   g. Water, gas, steam, sanitary sewer utilities
   h. Erosion and sediment control
   i. Electric power supply, control, distribution
   j. Lighting
   k. Interactive water feature
   l. Walks, plazas and other pedestrian surfaces
   m. Walls, steps and ramps
   n. Trees, shrubs, perennials and turf
   o. Site furnishings (e.g. benches, tables, chairs, bike racks, trash / recycling containers)
   p. Other details as necessary
2. Update and submit the **Construction Cost Opinion** and **Schedule**.
3. (Conference call: Mtg. #8) Review the documents with TSU representatives and HDG Team members.
4. Make minor revisions as may be required.

Deliverables: **Construction Drawings** (ACAD files); **Project Specifications, Construction Cost Opinion** and **Schedule** (PDF files).

C. Bidding and Negotiation
Objective: Help select and engage a qualified Contractor to construct the improvements.

Process: Following approval of the Construction Documents, the HDG team will:

1. Help coordinate the printing of the Construction Documents for bidding.
2. (On-site: Mtg. #9) Conduct a pre-bid meeting for interested bidders and issue a written **Pre-bid Meeting Summary** to all participants.
3. Answer questions and issue written **Bid Addenda**, when appropriate, to all bidders regarding changes to or clarifications of the Construction Documents.
4. Prepare and help coordinate the printing of **"For Construction" Documents** based on the outcome of the bidding process.
5. Prepare and submit the **Owner / Contractor Agreement** to the Owner and selected bidder.

Deliverables: **Pre-bid Meeting Summary** (PDF file); **Bid Addenda** (PDF file); **"For Construction" Documents** (PDF file); **Owner / Contractor Agreement**

CONSTRUCTION SERVICES

A. Administration

Objective: Until final acceptance of completed Work, or until 60 days after the Certificate of Substantial Completion is issued, whichever occurs first, help the Owner interpret and administer the Contract Documents (both the Owner/Contractor Agreement and the Construction Documents) with the Contractor.

Process: Specifically, following the execution of the Owner/Contractor Agreement, the HDG team will:

1. (On-site: Mtg. #10) Participate in a pre-construction meeting with TSU and the Contractor to review:
   a. Contractor mobilization and logistics
   b. Temporary measures
   c. Contractor schedules
   d. Contractor submittals
   e. TSU, HDG team and Contractor responsibilities
   f. Communications protocol
   g. Testing, Submittal, Requests for Information, and Change Order processes
   h. Payment procedures
   i. Contract Close-out procedures

2. Review and issue **Submittal Review Memoranda** and maintain a **Submittal Review Log** for shop drawings, product data, material samples and tests which the Contractor is required to submit, but only for the limited purpose of determining their general conformance with the design concept expressed in the Contract Documents. The HDG team is entitled to rely on the adequacy of the information provided by other design professionals engaged by the Contractor or independently engaged by the Owner to prepare such submittals. The HDG team's review does not include:
   a. The accuracy or thoroughness of details such as quantities, dimensions, weights or gauges
   b. The appropriateness of fabrication or installation processes
   c. Coordination of the Work, with other trades
   d. Safety precautions

3. Maintain a **Request for Information Log** of Contractor requests for information about the Contract Documents, and with reasonable promptness, prepare **Supplemental Instructions** that interpret, clarify or modify the Contract Documents including supplemental:
   a. Information
   b. Drawings
   c. Specifications

4. Review Contractor Change Order requests with reasonable promptness, issue **Requests for Proposal**, and prepare, process, and maintain a **Change Order Log** for Owner-approved **Change Orders** for changes to the Work including minor changes to the Work that do not impact the Contract Time or Contract Sum or other changes that may impact the Contract Time or Contract Sum including:
   a. Owner initiated changes to the scope of work
   b. Additional work required as a result of the discovery of unknown or concealed site conditions at the time the Owner/Contractor Agreement was executed
   c. Supplemental Instructions

5. Based on periodic observations of the Work, review the Contractor's periodic Application for Payment and prepare a **Certificate for Payment** indicating that to the best of the HDG

team's knowledge and belief the Contractor has completed the Work represented in the application subject to:
a. Subsequent review of the Work in conformance with the Contract Documents
b. The results of subsequent tests and observations
c. The correction of minor deviations from the Contract Documents prior to completion

Deliverables: **Submittal Review Memoranda, Submittal Review Log, Request for Information Log, Supplemental Instructions, Requests for Proposal, Change Order Log, Change Orders, Certificates for Payment** (PDF files)

B. Observation
Objective: Help TSU assess the progress and quality of construction activity through on site observations and meetings with the Contractor.

Process: Specifically, in order to assess the progress of site construction, and respond to on-site conditions, the HDG team will:

1. (Mtgs. #11, 12 determined as follows) Observe the work at intervals appropriate to the stage of construction. This assumes two (2) visits / meetings by the Civil / Structural Engineer, two (2) visits / meetings by the Landscape Architect, one (1) visit / meeting by the Electrical Engineer, and one (1) visit / meeting by the Water Feature Designer.

2. Coincidental with periodic observations, participate in progress meetings at the site with TSU and the Contractor to review:
   a. Progress of the Work
   b. Contractor schedules
   c. Contractor submittals, requests and proposals
   d. Other observations and clarification

3. Prepare a **Field Report** with each site visit memorializing site conditions, construction activity, observations, and items / issues to be addressed.

Deliverables: **Field Reports** (PDF files)

C. Contract Close-out
Objective: Help TSU close out the Owner/Contractor Agreement with the Contractor.

Process: Specifically, after the Contractor notifies TSU that the Work is substantially complete, the HDG team will:

1. (Mtg. #13) Review and process the Contractor's request for acceptance of substantially completed Work including:
   a. Observation of the Work to determine the date of Substantial Completion
   b. If acceptable, issuance of a **Certificate of Substantial Completion**
   c. Review the Contractor's list of remaining Work
   d. If necessary, preparation of a **Punch List** of deficient or incomplete Work

2. Confirm and submit to TSU the balance of the Contract Sum, including amounts retained for final completion and/or correction of any deficient Work.

3. Review and submit to TSU the required submittals to be provided by the Contractor, such as, but not limited to:
   a. Operating and maintenance manuals
   b. As-built record drawings
   c. Labor and material lien waivers
   d. Release of surety, if any

e. Contractor's final Application for Payment

4. Review and process the Contractor's final Application for Payment and acceptance of completed work including:
   a. Issuance of the final **Certificate for Payment**

Deliverables: **Certificate of Substantial Completion, Punch List, Certificate for Payment** (PDF files)

GENERAL PROJECT ADMINISTRATION

In addition to the services outlined above, the HDG team will administer the performance of its own work throughout the term of the contract by providing the following services:

A. Communications
1. Schedule, create agendas and summarize the highlights of periodic meetings
2. Collect and disseminate communications from other parties
3. Periodically inform your representative about our progress

B. Schedules
1. Create, periodically update and distribute the project schedule
2. Coordinate the activities of our staff and our consultants

C. Staffing
1. Select and assign staff members and consultants to appropriate tasks and services
2. Prepare and administer consultant agreements

D. File Maintenance
1. Establish and maintain appropriate correspondence, financial, drawing and data files
2. Obtain appropriate insurance certificates from consultants
3. Maintain appropriate time and expense records

OPTIONAL, ADDITIONAL SERVICES

Services, deliverables, or meetings not specified in this Scope of Services will be considered Additional Services. These include, but are not limited to, the following:

- Architectural design related to the Student Union windows / doors / façade;
- Fountain permit drawing stamping/application process and any fees associated with filing;
- Construction Administration services by the fountain designer in the event that they are not contracted to fabricate and/or install the fountain;
- Preparation, application and submittal of MoDNR Land Disturbance Permit and any fees associated with filing;
- Design of natural gas / steam / telecommunications utilities;
- Irrigation design;
- Tagging plant materials at nurseries;
- Presentation illustrations / renderings.

If circumstances arise during the HDG team's performance of the outlined services that require additional services, HDG will promptly notify TSU about the nature, extent and probable additional cost of the Additional Services, and perform only such Additional Services following TSU's written authorization.

Preliminary Schedule (Exhibit "C")

Phase	Duration
Preliminary Design Services	
Survey	August 2018
Research Analysis & Programming	August – Sept. 2018
Schematic Design	Oct. – Nov. 2018
Final Design Services	
Design Development (=50% CDs)	Dec. – Jan. 2019
Construction Documentation	Feb. – March 2019
Bidding & Negotiation	April 2019
Construction Phase Services	
Construction Administration	May – August 2019
Construction Close-out	August 2019

Under normal circumstances, the Hitchcock Design Group team prefers to advance the proposed Scope of Services in a continuous and timely manner in general conformance with this preliminary schedule. However, because of many factors that we cannot control, such as illness, third party actions and political considerations, it is impossible for us to guarantee completion of these services by a specific date. We will update this schedule, from time to time, as the project advances in order to reflect the most recent information.

Standard Billing Rates and Expenses (Exhibit "D")

Effective April 28, 2018

Billing Rates

Senior Principal	$255
Principal	$185
Senior Associate	$145
Associate	$120
Junior Associate	$100

Expenses

In addition to our standard hourly rates, we invoice qualified sub-consultant fees, travel and reproduction expenses at 105% of our cost. We will invoice mileage in personal or company-owned cars at 100% of the current IRS reimbursement rate.

ANDERSON ENGINEERING
EMPLOYEE OWNED

FEE SCHEDULE - ENGINEERING

THIS SCHEDULE IS PREPARED AS A METHOD OF CHARGING FOR SERVICES ON A UNIT AND HOURLY BASIS. THE RATES ARE BASED UPON THE SKILL AND KNOWLEDGE OF OUR PERSONNEL. INVOICES WILL BE SUBMITTED MONTHLY AND/OR UPON COMPLETION OF SERVICES. PAYMENT IS DUE ON RECEIPT OF THE INVOICE. ACCOUNTS OVER FORTY FIVE DAYS ARE SUBJECT TO 1 1/2% PER MONTH SERVICE CHARGE. SERVICES WILL BE PERFORMED IN ACCORDANCE WITH ACCEPTED STANDARD METHODS UTILIZING PROPERLY TRAINED, REGISTERED, LICENSED, OR CERTIFIED PERSONNEL AS REQUIRED. HOWEVER, WE CANNOT ASSUME RESPONSIBILITY FOR CONSTRUCTION METHODS, MATERIALS, PROCEDURES, PRODUCTS, SAMPLING OR ACTIONS OF OTHERS.

ANDERSON ENGINEERING, INC., BY: _____ EFFECTIVE: 01/01/2018 TO 12/31/2018
NEIL S. BRADY, P.E., PRESIDENT

BASIC CHARGES

PERSONNEL (HOURLY RATES):

PRINCIPAL	$171.50
PROJECT MANAGER	$158.00
PROJECT ENGINEER	$141.00
ASSOCIATE ENGINEER	$118.50
DESIGN ENGINEER	$95.00
GEOLOGIST	$95.00
TECHNICIAN IV – CADD TECHNICIAN/FIELD TECHNICIAN	$94.50
TECHNICIAN III – CADD TECHNICIAN/FIELD TECHNICIAN	$77.00
TECHNICIAN II – CADD TECHNICIAN/FIELD TECHNICIAN	$64.50
TECHNICIAN I – CADD TECHNICIAN/FIELD TECHNICIAN	$47.00
ASSOCIATE DESIGNER	$109.00
PROJECT COORDINATOR	$90.00
DESIGNER III	$98.00
DESIGNER II	$89.00
DESIGNER	$80.50
GIS MANAGER	$109.00
GIS SPECIALIST	$82.50
MAPPER	$62.00
MAPPING TECHNICIAN	$51.00
CLERICAL	$47.50

EXPENSES & EQUIPMENT CHARGES:

VEHICLE (3/4 TON OR LESS)	$0.63/MILE
VEHICLE (SUBURBAN & 1 TON+)	$0.68/MILE
COPIES	$0.10/EACH
PRINTING PLANS	$0.50/SQ. FT + TECHNICIAN TIME

REIMBURSABLES: (COST PLUS 15 PERCENT) TRAVEL EXPENSES (INCLUDING MEALS AND LODGING), OUTSIDE PRINTING, CONSUMABLE MATERIALS AND SUBCONTRACTOR EXPENSES.

OVERTIME (OVER 8 HOURS PER DAY, 40 HOURS PER WEEK, SATURDAYS, SUNDAYS, AND HOLIDAYS): 1.5 TIMES THE HOURLY RATE.

HOURLY RATES: APPLY TO MEETING & TRAVEL TIME **DEPOSITION/COURT TIME:** 1.5 TIMES THE HOURLY RATE

ANDERSON ENGINEERING
EMPLOYEE OWNED

FEE SCHEDULE - SURVEYING

THIS SCHEDULE IS PREPARED AS A METHOD OF CHARGING FOR SERVICES ON A UNIT AND HOURLY BASIS. THE RATES ARE BASED UPON THE SKILL AND KNOWLEDGE OF OUR PERSONNEL. INVOICES WILL BE SUBMITTED MONTHLY AND/OR UPON COMPLETION OF SERVICES. PAYMENT IS DUE ON RECEIPT OF THE INVOICE. ACCOUNTS OVER FORTY FIVE DAYS ARE SUBJECT TO 1 1/2% PER MONTH SERVICE CHARGE. SERVICES WILL BE PERFORMED IN ACCORDANCE WITH ACCEPTED STANDARD METHODS UTILIZING PROPERLY TRAINED, REGISTERED, LICENSED, OR CERTIFIED PERSONNEL AS REQUIRED. HOWEVER, WE CANNOT ASSUME RESPONSIBILITY FOR CONSTRUCTION METHODS, MATERIALS, PROCEDURES, PRODUCTS, OR ACTIONS OF OTHERS.

ANDERSON ENGINEERING, INC., BY: _____ EFFECTIVE: 01/01/2018 thru 12/31/2018
NEIL S. BRADY, P.E., PRESIDENT

BASIC CHARGES

PERSONNEL (HOURLY RATES):

PRINCIPAL	$171.50
SURVEY MANAGER	$149.50
PROJECT SURVEYOR	$110.00
ASSOCIATE SURVEYOR	$98.50
TECHNICIAN III – CADD TECHNICIAN/PARTY CHIEF	$77.00
TECHNICIAN II - CADD TECHNICIAN/FIELD TECHNICIAN	$64.50
TECHNICIAN I - CADD TECHNICIAN/FIELD TECHNICIAN	$47.00
ONE MAN SURVEY CREW	$111.00
TWO MAN SURVEY CREW	$141.50
THREE MAN SURVEY CREW	$188.50
FOUR MAN SURVEY CREW	$235.50
GIS MANAGER	$109.00
GIS SPECIALIST	$82.50
DESIGNER III	$98.00
DESIGNER II	$89.00
DESIGNER	$80.50
CLERICAL	$47.50

EXPENSES & EQUIPMENT CHARGES:

VEHICLE (3/4 TON OR LESS)	$0.63/MILE
VEHICLE (SUBURBAN & 1 TON+)	$0.68/MILE
LASER SCANNING EQUIPMENT	$400.00/DAY
GPS EQUIPMENT	$270.00/DAY
ROBOTIC TOTAL STATION	$250.00/DAY
DRONE	$400.00/DAY
PRINTING PLANS	$0.50/SQ. FT

REIMBURSABLES: (COST PLUS 15 PERCENT) TRAVEL EXPENSES (INCLUDING MEALS AND LODGING), OUTSIDE PRINTING, CONSUMABLE MATERIALS AND SUBCONTRACTOR EXPENSES.

OVERTIME (OVER 8 HOURS PER DAY, 40 HOURS PER WEEK, SATURDAYS, SUNDAYS, AND HOLIDAYS): 1.5 TIMES THE HOURLY RATE.

HOURLY RATES: APPLY TO MEETING & TRAVEL TIME **DEPOSITION/COURT TIME:** 1.5 TIMES THE HOURLY RATE

McCLURE ENGINEERING

January 1, 2018

RATE SCHEDULE

Category	Hourly Rate
Principal	$238
Project Manager	$183
Senior Engineer	$170
Engineer	$148
Lighting Designer	$148
Senior Technician	$148
Technician	$124
Designer	$124
Project Administrator	$90
Drafter	$90
Clerical	$78

Reimbursable expenses are in addition to hourly fees and include expenses incurred by McClure Engineering in the interest of the project. Unless otherwise defined by contract, reimbursable expenses shall be invoiced and include the following:

- Travel at cost.
- Automobile mileage at the published IRS Standard Mileage Rate.
- Reproductions of drawings, specifications, and other documents at cost.
- Courier and delivery charges at cost.
- Fees paid for securing permits and approvals.
- Sub-consultant expenses at cost plus 5%.

1000 Clark Avenue St. Louis Missouri 63102 314-645-6232 www.mcclureeng.com

EXHIBIT E

LOCAL CAPITAL BUDGETS FOR FISCAL YEAR 2019

Local State Funds Capital Budget – FY 2019

The estimated FY 2018 carry-over funds from Education and General totaled $1,360,000. These funds will be used for University needs and priorities that cannot be funded by Maintenance and Repair Funds. Included among these are utility and infrastructure improvements such as masonry and roofing repairs, storm drainage improvements, utility and infrastructure improvement, as well as HVAC system replacements. Specific projects for FY 2019 include replacement of the roof at Violette Hall and HVAC upgrades. The campus land acquisition and development budget will also be funded at $200,000.

Auxiliary Funds Capital Budget – FY 2019

For FY 2019 the primary funding source for the Auxiliary Funds Capital Budget is the FY 2018 operating carry-over from the auxiliary enterprises. The operating carry-over, and auxiliary interest income, total was $5,035,255.

Funds from the Student Union Building ($94,728) and Student Recreation Center ($678,418) will be set aside for use in these facilities. Funds received through Sodexo for reinvestment ($1,864,362) will be set aside for the Missouri Hall Dining/Kitchen Project. Surplus funds from the Residence Hall System totaling $2,397,746 will be available for projects within the housing system.

All proposed project expenditures will come before the Board of Governors following the usual procedures and will be subject to individual Board approval.

EXHIBIT F

TABLE 1

Fiscal Year 2020 State Appropriation Request for Operating Funds	
Appropriation Base (Truly Agreed and Finally Passed) for FY 2019	$40,660,322
New Requests for FY 2020	
Restoration of FY 2018 core funds withheld	$ 1,082,204
Funding for Improved Outcomes (3%)	$ 1,290,810
Additional Maintenance and Repair Funds	$ 1,852,207
Mental Health Initiative	$ 325,000
Cooperative Community College Program Investments	$ 275,000
Total New Requests	$ 4,825,221
TOTAL FY 2020 FUNDING REQUEST (FY 2019 appropriation + new)	$45,485,543

TABLE 2

The state appropriations request for FY 2020 has two components: the Core Operating request based on FY 2019 actual appropriations and the new requests for FY 2020. Requests beyond the core are typically referred to as Decision Items or New Investments.

1. Funding for Core Operations: State Request $40,660,322
   The top priority for funding is to maintain the existing base level. These funds provide 43% of the Education and General budget for FY 2019 and are crucial to meeting the mission of the institution.

2. New Requests for FY 2020 $ 4,825,221

   A. Restoration of FY 2018 core funds withheld $ 1,082,204
   For FY 2018 the General Assembly appropriated $41,742,526 for Truman. The Governor withheld $1,082,204 from Truman to bring the appropriation back to the level initially recommended in the Executive Budget. The Governor released the withheld money at the very end of the fiscal year, but the Office of Administration determined it could not transfer the funds to the institutions; therefore, the funds were rolled over into the FY 2019 state budget. All public higher education institutions were impacted in this way, and the COPHE institutions have decided to make restoration of this core cut a top priority for FY 2020.

   B. Funding for Improved Outcomes $ 1,290,810
   The funding for Improved Outcomes (Performance Funding) was developed in 2012 by the CBHE Performance Funding Task Force and modified in 2017. It is designed to demonstrate success and reward outcomes with increased appropriations. For FY 2020 requests, COPHE institutions are recommending the three performance funding measures:

   Student Success and Progress
   1. Completions per full-time equivalent student (FTE)
   2. Percent of students meeting or exceeding the established performance threshold on the following assessment:
      a. Improvements in assessments in the major field

   Graduate Outcomes
   3. Institutions administer the First Destination Survey developed by the National Association of Colleges and Employers (NACE). Students are counted as successful if employed full time, participating in a volunteer or service program, serving in the military, or enrolled in continuing education in the six months following graduation.

   Success on each measure is defined as improvement over the previous year's performance (both measured with three-year rolling averages), year-over-year improvement or, where

applicable, sustained performance relative to an external benchmark. If all three measures are met, a three percent increase in base funding would result.

The increase requested in this category ($1,290,810) represents 3% of the FY 2019 core appropriation.

C. Maintenance and Repair: Protecting Investments $ 1,852,207
Truman currently has over one-million square feet of state-funded buildings, and additional funds are requested for the upkeep of campus facilities. Based on projected FY 2018 building replacement costs ($230,000,000) and the generally accepted standard of 2% of replacement costs, Truman needs $4.6 million annually for maintenance and repair. When combined with the current budget ($1,290,000) in this category, the requested additional state funding for maintenance and repair would allow Truman to make significant progress toward meeting campus upkeep needs.

D. Mental Health Initiative $ 325,000
Both Missouri and the Midwest region have a significant and continuing need for qualified mental health counselors. This request would provide funding for faculty and staff to support the new graduate program in mental health counseling.

E. Cooperative Community College Program Investments $ 275,000
Truman currently has a cooperative program with Moberly Area Community College (TruMACC) designed to make the transfer process more seamless for transfer students. This request would extend the program to additional community colleges and includes adding staff at these campuses to facilitate student success.