UNIVERSITY OF ALABAMA SYSTEM BOARD RULE 415 BOARD SUBMITTAL CHECKLIST CRITERIA

BOARD SUBMITTAL CHECKLIST NO. 2 CAPITAL PROJECT - STAGE II SUBMITTAL ^{/1} (Architect Ranking, Project Scope and Project Budget) ^{/8}

CAMPUS: The University of Alabama, Tuscaloosa, Alabama

PROJECT NAME: AIME Renovations for AMP Battery Research Center

MEETING DATE: February 6-7, 2025

- 1. Board Submittal Checklist No. 2
- 2. Transmittal Letter to Chancellor from Campus President requesting project be placed on the agendas for the forthcoming Physical Properties Committee and Board of Trustees (or Executive Committee) Meetings
- 3. Proposed Board Resolution requesting approval of Stage II Submittal (Architect Ranking, Project Scope and Project Budget; authority to proceed with Owner/Architect contract negotiations) by the Board of Trustees
- 4. Executive Summary Proposed Capital Project ^{/2}
 - 5. Executive Summary Architect, Engineer, Selection Process (include Interview Outline). ^{/3, /4, /5}
- 6. Campus letter requesting approval of the ranking of firms and authority to Submit to the Physical Properties Committee for approval signed by Chair of the Physical Properties Committee and UA System Senior Vice Chancellor for Finance and Administration ¹⁶
 - 7. Preliminary Business Plan (if applicable)⁷⁷
 - 8. Campus map(s) showing project site

Prepared by: Approved by:

- ¹¹ Reference Tab 3H Board Rule 415 Instructional Guide
 ²² Reference Tab 2E Board Rule 415 Instructional Guide
- ¹² Reference Tab 3E Board Rule 415 Instructional Guide
- ⁷³ Reference Tab 3K Board Rule 415 Instructional Guide Performance Tab 3L – Board Rule 415 Instructional Guide
- ⁴ Reference Tab 3L Board Rule 415 Instructional Guide
- ⁷⁵ Reference Tab 3M Board Rule 415 Instructional Guide ⁷⁶ Reference Tab 3M – Board Rule 415 Instructional Guide
- ¹⁶ Reference Tab 3N Board Rule 415 Instructional Guide Reference Tab 3V – Board Rule 415 Instructional Guide
- Reference Tab 3V Board Rule 415 Instructional Guide
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- After Completion of negotiations on Owner/Architect Agreement, provide notification to Chair of Physical Properties Committee and Senior Vice Chancellor for Finance & Administration, Reference Tab 3-O-Board Rule 415, Instructional Guide



Office of the **President**

December 19, 2024

Interim Chancellor Sid J. Trant The University of Alabama System 500 University Boulevard East Tuscaloosa, Alabama 35401

Dear Interim Chancellor Trant:

I am pleased to send you, for approval under Board Rule 415, the attached documents for a Stage II submittal for the AIME Renovations for the AMP Battery Research Center Project.

The resolution requests approval of the revised project scope, budget, and funding, and authorization to enter into an Owner Designer Agreement with Williams Blackstock, Inc. of Birmingham, Alabama, as the principal design firm for this project.

The item has been thoroughly reviewed and has my endorsement. With your concurrence, I ask that it be added to the agenda for The Board of Trustees of The University of Alabama at their regular meeting on February 6-7, 2025.

Sincerely,

Stuart R Bell/cr

Stuart R. Bell President

Enclosure



203 Rose Administration Building | Box 870100 | Tuscaloosa, AL 35487-0100 | 205-348-5100 | Fax 205-348-7238 president@ua.edu | http://www.ua.edu

THE UNIVERSITY OF ALABAMA

Approving the revised project scope and budget; granting authorization to execute an Owner/Architect Agreement for the AIME Renovations for AMP Battery Research Center project

RESOLUTION

WHEREAS, on September 5, 2024, in accordance with Board Rule 415, The Board of Trustees of The University of Alabama ("Board") approved a Stage I submittal for the AIME Renovations for AMP Battery Research Center ("AMP BRC") project ("Project") to be located at 720 2nd Street; and

WHEREAS, the proposed Project initially entailed the renovation of approximately 6,000 square feet within the 1st floor of the Alabama Innovation & Mentoring of Entrepreneurs Building ("AIME"), and will create a state-of-the-art battery research laboratory facility featuring a new pilot line laboratory for pouch, prismatic, and cylindrical cell production; and

WHEREAS, through this Project, the University will acquire advanced, multi-scale, multi-disciplinary equipment designed for next-generation battery research and education and will provide a facility that will significantly enhance the University's capabilities in battery technology, foster innovation, and provide unparalleled educational opportunities for students and researchers; and

WHEREAS, the renovated facility will include dedicated areas for materials and chemical receiving, as well as office and storage spaces to support research activities; and

WHEREAS, upon further investigation and project discovery meetings, the University recognizes a need for the Project to encompass additional square feet of renovated space for a Project total of 8,710 gross square feet ("GSF") including approximately 1500 square feet of mezzanine mechanical space and to address interface areas and tie in areas and corridors relative to the renovation work; and

WHEREAS, the Project includes the purchase of AMP BRC equipment and will provide an appropriate environment for operation thereof; and

WHEREAS, to maintain an efficient and cost-effective delivery, the Project has been divided into three packages, including Construction Package A – Main Renovation, Construction Package B - Demolition, and Construction Package C -Structural; and

WHEREAS, Williams Blackstock Architects, Inc., Birmingham, AL ("WBA") has previously served as a consultant for the concept design for this Project and has familiarity and innate knowledge of the facility; and

WHEREAS, WBA's knowledge of the AMP Battery Research Center facility needs through concept design, and their familiarity with University Standards, design principles and procedures, will greatly facilitate the design and administrative process and support the Project schedule, the University is requesting approval to waive the Consultant Selection Process and to utilize WBA for architectural services for the Project; and

WHEREAS, the University has negotiated a design fee of 5.9% of the cost of construction plus a 1.1 renovation factor for the existing facility renovation, and \$49,175 for additional services and reimbursables less a discount credit of \$35,784, representing a 16% reduction in the standard fee for this type of project; and

WHEREAS, the University is requesting approval of a revised and reallocated budget from \$15,000,000 to \$15,700,000 to reflect the additional space required for the BRC equipment and fit-out, the construction packaging revisions, and the negotiated design fees plus related soft costs; and

WHEREAS, the Project location and program have been reviewed and are consistent with the University Campus Master Plan, University Design Standards, and the principles contained therein; and

WHEREAS, the Project will be funded from the ETF Supplemental Appropriations allocated in Act #2024-428 (HB 144), as allocated by the Board of Trustees of the University of Alabama in the amount of \$15,000,000 and \$700,000 from University Central Reserves, for a Total Project Budget of \$15,700,000, and will eliminate deferred maintenance liabilities in the amount of \$1,900,000; and

BUDGET	REVISED			
Construction Package A – Main Renovation	\$	5,140,150		
Construction Package B – Demolition	\$	90,000		
Construction Package C – Structural	\$	500,000		
Owner Furnished Contractor Installed (OFCI) Equipment	\$	6,400,000		
Furniture, Fixtures, and Equipment	\$	250,000		
Security/Access Control	\$	70,000		
Telecommunication/Data	\$	75,000		
Contingency ¹ (10%)	\$	1,213,015		
UA Project Management Fee^2 (4.5%)	\$	600,442		
Architect/Engineer Fee ³ (\sim 7.2%)	\$	800,638		
Other ⁴	\$	177,828		
Escalation ⁵	\$	382,927		
TOTAL PROJECT COST	\$	15,700,000		

WHEREAS, the revised budget for the Project is as stipulated below:

 $^1\!Contingency$ is based on 10% of the cost of Construction Packages A - C and OFCI Equipment.

 2 UA Project Management Fee is based on 4.5% of Construction Packages A - C, OFCI Equipment, and Contingency.

 3 Architect/Engineer Fee is based on a negotiated design fee of 5.9% of the cost of Construction Packages A - C and OFCI Equipment plus 10% renovation factor for the existing facility renovation, and \$49,175 for additional services and reimbursables less a discount credit of \$35,784.

⁴Other expenses include Geotech, Construction Materials Testing, Inspections, Advertising, Printing, and other associated project costs, as applicable. ⁵Escalation is calculated at 2.5%.

NOW, THEREFORE, BE IT RESOLVED by The Board of Trustees of The University of Alabama that:

- 1. The Stage II submittal package for the Project is hereby approved.
- 2. The revised Project scope, budget, and funding, as stipulated above, are hereby approved.

BE IT FURTHER RESOLVED, that Stuart R. Bell, President; Daniel T. Layzell, Vice President for Finance and Operations and Treasurer; or those officers named in the most recent Board resolutions granting signature authority for the University be, and hereby are authorized to act for and on behalf of The Board of Trustees of The University of Alabama to execute an owner designer agreement with Williams Blackstock Architects, Inc., Birmingham, Alabama, for architectural design services in accordance with Board Rule 415 for this project.

EXECUTIVE SUMMARY PROPOSED CAPITAL PROJECT BOARD OF TRUSTEES SUBMITTAL

MEETING DATE: February 6-7, 2025

The University of Alabama, Tuscaloosa, Alabama

PROJECT NAME: AIME Renovations for AMP Battery Research Center (AMP BRC)

PROJECT NUMBER: 252-23-3362

PROJECT LOCATION: 720 2nd St

ARCHITECT:

CAMPUS:

Williams Blackstock, Inc. - Pending Approval

THIS SUBMITTAL:

PREVIOUS APPROVALS:

□ Stage I

Stage II Waiver

Campus Master Plan Amendment

□ Stage III

□ Stage IV

September 5, 2024

PROJECT TYPE	SPACE CATEGORIES	PERCENTAGE	GSF
□ Building Construction	Classroom Facilities	$\sim 0\%$	0
□Building Addition	Laboratory Facilities	~ 51%	4,463
Building Renovation	Office Facilities	~0%	0
⊠Equipment	Study Facilities	$\sim 0\%$	0
	Special Use Facilities	$\sim 0\%$	0
	General Use Facilities	~0%	0
	Central Service/ Support	$\sim 0\%$	0
	Circulation Area*	~32%	2,747
	Building Service Area	$\sim~0\%$	0
	Mechanical Area**	~17%	1,500
	TOTAL	100%	8,710

*Corridor and interface tie-in areas that will be renovated

**new square footage for mechanical mezzanine infill

BUDGET	Current	Revised		
Construction Package A – Main Renovation	\$ 4,660,500	\$	5,140,150	
Construction Package B - Demolition	\$ 0		90,000	
Construction Package C - Structural	\$ 0		500,000	
Owner Furnished Contractor Installed (OFCI) Equip.	\$ 7,000,000	\$	6,400,000	
Furniture, Fixtures, and Equipment	\$ 150,000	\$	250,000	
Security/Access Control	\$ 45,000	\$	70,000	
Telecommunication/Data	\$ 50,000	\$	75,000	
Contingency ¹	\$ 1,166,050	\$	1,213,015	
UA Project Management Fee ²	\$ 577,195	\$	600,442	
Architect/Engineer Fee ³	\$ 839,556	\$	800,638	
Other ⁴	\$ 145,845	\$	177,828	
Escalation ⁵	\$ 365,854	\$	382,927	
TOTAL PROJECT COST	\$ 15,000,000	\$	15,700,000	
Total Construction Cost per square foot \$1,532				

¹Contingency is based on 10% of the cost of Construction Packages A - C and OFCI Equipment. ²UA Project Management Fee is based on 4.5% of Construction Packages A - C, OFCI Equipment, and Contingency. 3 Architect/Engineer Fee is based on a negotiated design fee of 5.9% of the cost of Construction Packages A - C, including owner-furnished equipment, plus a 10% renovation factor for the existing facility renovation, and \$49,175 for additional services and reimbursable less a discount credit of \$35,784

⁴Other expenses include Geotech, Construction Materials Testing, Inspections, Advertising, Printing, and other associated project costs, as applicable.

 5 Escalation is calculated at 2.5%.

ESTIMATED ANNUAL OPERATING AND MAINTENANCE (O&M) COSTS:

(Utilities, Housekeeping, Maintenance, Insurance, Other) 8.710 sf x~\$9.95/sf

\$ 86,665 S 86,665

Total Estimated Annual O&M Costs:

FUNDING SOURCE:

Education Trust Fund Supplemental Appropriations Act #2024-428 (HB 144) \$15,000,000

University Central Reserves \$700.000

O&M Costs: University Annual Operating Funds \$

86,665

PROJECT SCOPE

The AIME Renovations for AMP Battery Research Center (AMP BRC) project at The University of Alabama involves the renovations of approximately 8,710 gross square feet within the Alabama Innovation & Mentoring of Entrepreneurs Building ("AIME"), located at 720 2nd Street. This project will create a state-of-the-art facility featuring a pilot line laboratory for pouch, prismatic, and cylindrical cell production. Also, the renovated space will include dedicated areas for materials and chemical receiving and storage spaces to support research activities. The project also encompasses the acquisition of advanced, multi-scale, multi-disciplinary equipment designed for next-generation battery research and education. This facility will significantly enhance the University's capabilities in battery technology, fostering innovation and providing unparalleled educational opportunities for students and researchers.

Project will include an additional 1,500 GSF of mechanical mezzanine through the infill of high bay space, which will not impact the exterior visual appearance.

NEW EQUIPMENT REQUIRED

Specialized Battery Research Equipment: Electrode Line Equipment, Pouch Cell Assembly Equipment, Pouch Cell Formation Equipment, Electrode Preparation Equipment, Cycling Room Equipment, Formation and Aging Equipment, Battery Characterization Equipment.

Total Equipment Costs:

\$6,400,000

PROJECT STATUS		
SCHEMATIC DESIGN:	Date Initiated % Complete Date Completed	November 2024 100% December 2024
PRELIMINARY DESIGN:	Date Initiated % Complete Date Completed	January 2025 60% March 2025
CONSTRUCTION DOCUMENTS:	Date Initiated % Complete Date Completed	March 2025 0% April 2025
SCHEDULED BID DATE: *N/A on Stage I Projects		April 2025

RELATIONSHIP AND ENHANCEMENT OF CAMPUS PROGRAMS

As a one-stop shop for deploying battery and energy storage technologies at scale, the AMP BRC will significantly enhance The University of Alabama's campus programs. What's unique about the facility is its integrated, interdisciplinary, multi-scale approach. By incorporating state-of-the-art instrumentation across all facets of the battery supply chain, the AMP BRC will enable research and development activities that holistically address the battery ecosystem from raw materials production (upstream), materials processing, and cell manufacturing (midstream) to module and pack manufacturing and end-of-life recycling and reuse (downstream). In the US, this facility will be the first of its kind. Above and beyond its direct scientific contribution, the AMP BRC will enhance campus programs in the following ways:

- Enrichment of Academic Curriculum: The new laboratory will provide advanced facilities
 and cutting-edge equipment, benefiting academic programs in engineering, materials science,
 environmental science, and related fields. Students will have access to state-of-the-art resources
 for hands-on learning and experimentation, integrating theoretical knowledge with practical
 applications. This experiential learning approach will deepen their understanding and skills,
 preparing them for future battery technology and energy storage careers.
- 2. Expansion of Research Opportunities: The AMP BRC will create a dedicated space for faculty and students to engage in innovative research projects. It will support interdisciplinary collaboration, allowing for joint projects between chemistry, physics, and engineering departments. The lab's advanced instrumentation will enable groundbreaking research into battery materials, manufacturing processes, and sustainability, positioning UA as a leader in this critical field.
- 3. Workforce Development: The laboratory will serve as a training ground for the next generation of scientists, engineers, and technicians. Offering specialized training and research opportunities will help students develop the technical expertise and practical skills needed to excel in the battery industry. This aligns with the university's goal of fostering workforce development and ensuring that graduates are well-prepared to meet the demands of a rapidly evolving job market.
- 4. **Industry Collaboration and Partnerships**: The lab will facilitate stronger ties between the university and industry partners. Through collaborative research projects, internships, and coop programs, students will gain valuable industry experience and exposure to real-world challenges. These partnerships will also enhance the university's ability to attract research funding, grants, and investments, further supporting campus programs and initiatives.
- 5. Support for Sustainability Initiatives: The focus on battery research and energy storage technologies aligns with the university's commitment to sustainability. The lab will contribute to developing sustainable energy solutions and promoting research addressing environmental challenges such as renewable energy integration, energy efficiency, and carbon reduction. This will not only enhance campus programs related to sustainability but also position the university as a leader in addressing global environmental issues.
- 6. Enhanced Learning Environment: Finally, adding the AMP BRC will improve the overall learning environment on campus. It will provide students and faculty access to the latest technology and resources, fostering a culture of innovation and excellence. This will attract top-tier students and researchers, enhancing the university's reputation and academic standing.

The planned AIME Renovations for AMP Battery Research Center project will enrich the academic curriculum, expand research opportunities, promote workforce development, strengthen industry collaborations, support sustainability initiatives, and improve the learning environment.

ALABAMA

Division of Finance and Operations Vice President

December 16, 2024

Dr. Dana S. Keith Senior Vice Chancellor for Finance and Administration Sid McDonald Hall 500 University Boulevard, East Tuscaloosa, AL 35401

Trustee Evelyn VanSant Mauldin Chair, Physical Properties Committee Sid McDonald Hall 500 University Boulevard, East Tuscaloosa, AL 35401

RE: Request for Waiver of Consultant Selection Process AIME Renovation for AMP Battery Research Center UA Project No.: 252-23-3362

Dear Dr. Keith and Trustee Mauldin:

The University of Alabama ("University") is requesting a Waiver of the Consultant Selection Process for the AIME Renovations for the AMP Battery Research Center project ("Project") located at 720 2nd St, Tuscaloosa, AL 35401.

The University proposes to utilize William Blackstock Architects, Inc., Birmingham, AL ("WBA") as the principal design firm for this Project. The services of WBA are proposed due to the firm having served as consultants for the programming and concept design for this Project and their familiarity and innate knowledge of the Project. WBA was also the architect of record for the Renovations for Materials Characterization Service and Support which involved work in the AIME building providing them valuable knowledge of the building and its' operations. This insight and AIME facility expertise will facilitate an efficient and effective design process. Accordingly, the University is requesting approval to utilize WBA for this Project.

The University has negotiated a design fee of 5.9% of the cost of construction, including owner-furnished equipment, plus a 10% renovation factor for the existing facility renovation, and \$49,175 for additional services and reimbursable less a discount credit of \$35,784 for WBA's familiarity with the facility and recent concept design with the end users. The negotiated fee reflects a 16% reduction of the standard fee for this type of project (Group III), which represents a financial benefit to the University.

Cost of the Work		Percentage Fee for Building Group III		Major Renovation Factor		Credits		Fee
\$12,130,150	x	5.90%	+	25%	-	\$0	=	\$894,599
\$12,130,150	x	5.90%	+	10%	-	\$35,784	=	\$751,463

Fee savings are \$143,136 or approximately 16% of the value of the standard fee for the Project.

Approval is hereby requested for:

- 1. Waiver of the Consultant Selection process.
- 2. William Blackstock, Inc. Birmingham, AL, as the design service provider for the Project at a negotiated design fee based on 5.9% of the cost of construction, including owner-furnished equipment, plus a 10% renovation factor for the existing facility renovation, and \$49,175 for additional services and reimbursable less total credits in the amount of \$35,784.
- 3. Submittal to the Physical Properties Committee for review and approval.

If you have any questions or concerns, please feel free to contact me.

Sincerely, appl iniel T. Lavzell

Vice President for Finance and Operations and Treasurer

DTL/mw

Attachment

Pc w/atchmts:

Michael Rodgers Jessica Morris Tim Leopard Matt Skinner Tommy Alfano Jason Bigelow

Dana skeith 9C2EFD005B6C48D...

Dr. Dana S. Keith, Senior Vice Chancellor for Finance and Administration

Recommended for Approval

□Not Recommended for Approval. Submit to Physical Properties

Committee Evelyn Van Sant Mauldin

Trustee Evelyn VanSant Mauldin, Chair for Physical Properties Committee

AIME RENOVATIONS FOR AMP BATTERY RESEARCH CENTER

LOCATION MAP

