

**UNIVERSITY OF ALABAMA SYSTEM  
BOARD RULE 415  
BOARD SUBMITTAL CHECKLIST CRITERIA**

**BOARD SUBMITTAL CHECKLIST NO. 4  
CAPITAL PROJECT - STAGE IV SUBMITTAL <sup>/1</sup>  
(Construction Contract Award)**

**CAMPUS:** University of Alabama, Tuscaloosa, AL

**PROJECT NAME:** Renovations for Materials Characterization Service and Support of Academic Programs

**MEETING DATE:** June 8-9, 2023

- |                                     |   |
|-------------------------------------|---|
| <input checked="" type="checkbox"/> | 1. Board Submittal Checklist No. 4  |
| <input checked="" type="checkbox"/> | 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 |
| <input checked="" type="checkbox"/> | 3. Proposed Board Resolution requesting approval of Construction Contract Award, Construction Budget and Project Budget by the Board of Trustees  |
| <input checked="" type="checkbox"/> | 4. Executive Summary of Proposed Capital Project with final Contract Construction Budget and Project Budget (include all proposed project funding for movable equipment and furnishings) <sup>/2</sup>          |
| <input checked="" type="checkbox"/> | 5. Tabulation of competitive bids – certified by Project Architect/Construction Manager   |
| <input checked="" type="checkbox"/> | 6. Recommendations for Contract Award by Architect/Construction Manager   |
| <input checked="" type="checkbox"/> | 7. Campus Map(s) showing project site   |
| <input type="checkbox"/>            | 8. Final Business Plan (if applicable) <sup>/3</sup>  |

Prepared by: Shawn Templeton

Approved by:

*Tim Leopard*  
*MA*

<sup>/1</sup> Reference Tab 3I - Board Rule 415 Instructional Guide

<sup>/2</sup> Reference Tab 3E - Board Rule 415 Instructional Guide

<sup>/3</sup> Reference Tab 3V - Board Rule 415 Instructional Guide

THE UNIVERSITY OF  
**ALABAMA**<sup>®</sup> | Office of the  
President

May 9, 2023

Chancellor Finis E. St. John IV  
The University of Alabama System  
500 University Boulevard East  
Tuscaloosa, Alabama 35401

Dear Chancellor St. John:

I am pleased to send to you for approval under Board Rule 415 the attached documents for a Stage IV submittal for the Renovations for Materials Characterization Service and Support of Academic Programs project.

The resolution requests authorization to award the construction contract for the Construction Package B – AIME Renovation and approval of the revised project scope, budget and funding.

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 at their regular meeting on June 8-9, 2023.

Sincerely,



Stuart R. Bell  
President

Enclosure



THE UNIVERSITY OF ALABAMA

**RESOLUTION**

**APPROVAL OF THE REVISED PROJECT SCOPE AND BUDGET;  
AUTHORIZATION TO EXECUTE THE CONSTRUCTION CONTRACT FOR THE  
RENOVATIONS FOR MATERIALS CHARACTERIZATION SERVICE AND  
SUPPORT OF ACADEMIC PROGRAMS**

WHEREAS, on September 16, 2022, in accordance with Board Rule 415, The University of Alabama (“University”) received approval from the Board of Trustees of the University of Alabama (“Board”) for a Stage I submittal for the Renovations for Materials Characterization Service and Support of Academic Programs project (“Project”) to be located in the current Alabama Innovation and Mentoring of Entrepreneurs Center (“AIME”) at 720 2<sup>nd</sup> Street and Tom Beville Building at 201 7<sup>th</sup> Avenue; and

WHEREAS, the Project will provide for the instruction and education of undergraduate and graduate students in materials characterization and analysis related fields using modern analytical instruments, will recapitalize the University’s inventory of materials characterization and analytical equipment, and will renovate existing spaces where the equipment will be installed and utilized to provide the appropriate support environment for the equipment; and

WHEREAS, the Project will foster interactions that provide opportunities to recruit future students by allowing K-12 teachers to come to these facilities to learn how to incorporate materials into their physical science, chemistry, and physics courses, and have microscopes that can stream ‘live’ images into their classes; and

WHEREAS, the new instruments in this Project will allow the University to train more students in materials and materials characterization and to therefore be in high demand for future employment and post-graduate placement to secure more funding from industry partners in research and development projects that will involve students, and to obtain more external grants and contracts that in turn will fully pay for the use and upkeep of the instruments; and

WHEREAS, Williams Blackstock Architects of Birmingham, Alabama (“WBA”) has gained a substantial knowledge base of the unique requirements of the Project over the course of development and are committed to deliver the Project expeditiously; and

WHEREAS, on September 16, 2022, due to WBA’s familiarity and knowledge of the existing facilities and the University’s standards, design principles, and procedures which will facilitate an efficient design process and ensure coordination with the existing infrastructure, systems, finishes and materials, the Board approved a waiver of the Consultant Selection Process and authorized the University to utilize WBA for this project, accepting a final design fee based on 7.2% of the cost of construction plus a 15% renovation factor and

\$80,542 for additional services and less credits totaling \$15,000 for Laboratory/Instrument Room planning and design and overall design, which represents a positive financial benefit to the University; and

WHEREAS, following schematic design and evaluation of the facility and equipment and environmental requirements of the electron microscope being located in the AIME space, it was determined that enhanced vibration elimination measures would need to be incorporated into the immediately adjacent large equipment mechanical room; and

WHEREAS, on April 25, 2023, pursuant to Title 39, State Bid Law of Alabama Code, competitive bids were received for Construction B – AIME Construction and N. C. Morgan Construction Co., Inc. of Tuscaloosa, Alabama was declared the lowest responsible bidder with a base bid in the amount of \$2,350,000, as referenced on the certified bid tab; and

WHEREAS, the University is requesting approval to award the construction contract for Construction B – AIME Construction to N. C. Morgan Construction Co., Inc. of Tuscaloosa, Alabama for a total contract amount of \$2,108,835, which includes the base bid of \$2,350,000, less a voluntary deduct of \$241,165; and

WHEREAS, on April 25, 2023, pursuant to Title 39, State Bid Law of Alabama Code, competitive bids were received for Construction Package C – Bevill Renovation and N. C. Morgan Construction Co., Inc. of Tuscaloosa Alabama was declared the lowest responsible bidder with a base bid in the amount of \$95,400, as referenced on the certified bid tab; and

WHEREAS, the base bid for Construction Package C – Bevill Renovation was below the threshold amount required for Board approval; 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 the Project is in direct support of the University's Strategic Goals; and

WHEREAS, the University is requesting approval of a Budget Revision and Reallocation to reflect the aforementioned enhanced scope at the AIME building, the Construction Package bid results and the associated revisions to soft costs; and

WHEREAS, the Project will be funded from the Office for Research and Economic Development Reserves in the amount of \$4,644,844; and University Central Reserves in the amount of \$6,687,099 and will address campus deferred maintenance (capital renewal) liabilities in the amount of approximately \$8,500,000; and

WHEREAS, the Office for Research and Economic Development will execute an internal loan to reimburse central reserves \$668,710 per year for 10

years using indirect funds produced by the externally sponsored projects generated by this initiative; and

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

BUDGET:	REVISED
<i>Construction A – AIME Demolition</i>	\$ 38,500
<b>Construction B – AIME Construction</b>	<b>\$ 2,108,835</b>
Construction C – Bevill Construction	\$ 95,400
Furniture, Fixtures and Equipment	\$ 8,458,283
Security/Access Control	\$ 25,000
Telecommunication/ Data	\$ 12,500
Contingency* (6.5%)	\$ 145,778
UA Project Management Fee** (3%)	\$ 71,655
Architect/Engineer Fee*** (7%)	\$ 245,992
Other****	\$ 130,000
<b>TOTAL PROJECT COST</b>	<b>\$ 11,331,943</b>

\*Contingency is based on 6.5% of the costs of Construction Packages A - C.

\*\*UA Project Management Fee is based on 3% of Construction Packages A-C, plus Contingency.

\*\*\*Architect/Engineer Fee is based on 7% of the costs of Construction Packages A - C with 1.15 Renovation Factor, plus \$80,452 for additional services, and Design Credit of \$15,000.

\*\*\*\* Other includes Geotechnical, Materials Testing, UA Work Orders, Campus Bird, Advertising, Printing, and Construction Transportation and other associated project costs, as applicable.

*Contract Complete. Actual Cost.*

#### **Current Package for Contract Award Approval.**

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

1. The revised scope, funding and budget revision and reallocation for the Project are hereby approved as stipulated above.
2. Stuart R. Bell, President; Matthew M. Fajack, Vice President for Finance and Operations and Treasurer; or those officers named in the most recent Board Resolution granting signature authority for the University be, and each hereby is, authorized to act for and on behalf of The Board of Trustees of The University of Alabama in executing the aforementioned contracts with N. C. Morgan Construction Co., Inc. of Tuscaloosa, Alabama, for Construction Package B – AIME Construction of the Renovations for Materials Characterization Service and Support of Academic Programs project in accordance with Board Rule 415.

**EXECUTIVE SUMMARY**  
**PROPOSED CAPITAL PROJECT**  
**BOARD OF TRUSTEES SUBMITTAL**

**MEETING DATE:** June 8-9, 2023

**CAMPUS:** The University of Alabama, Tuscaloosa, Alabama  
Renovations for Materials Characterization Service and Support of Academic Programs

**PROJECT NAME:** 252-23-3028 AIME Renovation for Materials Characterization  
249-23-3033 Bevill Renovation for Materials Characterization

**PROJECT LOCATION:** AIME – 720 2nd Street; Bevill – 201 7th Avenue

**ARCHITECT:** Williams Blackstock Architects of Birmingham, Alabama

**THIS SUBMITTAL:**

- ☐ Stage I
- ☐ Stage II
- ☐ Campus Master Plan Amendment
- ☐ Stage III
- ☒ Stage IV (Construction B-AIME Renovation)

**PREVIOUS APPROVALS:**

September 16, 2022

September 16, 2022

PROJECT TYPE	SPACE CATEGORIES	PERCENTAGE	GSF
<input type="checkbox"/> Building Construction	Laboratory & Academic Support	~100%	1,032
<input type="checkbox"/> Building Addition			
<input checked="" type="checkbox"/> Building Renovation			
<input checked="" type="checkbox"/> Equipment			
<b>TOTAL</b>		<b>100%</b>	<b>1,032</b>

<b>BUDGET</b>	<b>Current</b>	<b>Revised</b>
<i>Construction A – AIME Demolition</i>	\$ 75,000	38,500
<b>Construction B – AIME Construction</b>	<b>\$ 950,000</b>	<b>2,108,835</b>
Construction C – Bevill Construction	\$ 100,000	95,400
Furniture, Fixtures and Equipment	\$ 8,458,283	8,458,283
Security/Access Control	\$ 12,500	25,000
Telecommunication/Data	\$ 12,500	12,500
Contingency* (6.5%)	\$ 73,125	145,778
UA Project Management Fee** (3%)	\$ 35,944	71,655
Architect/Engineer Fee*** (7%)	\$ 158,692	245,992
Other ****	\$ 81,701	130,000
<b>TOTAL PROJECT COST</b>	<b>\$ 9,957,745</b>	<b>11,331,943</b>
<b>Total Construction Cost per square foot \$2,314</b>		

\*Contingency is based on 6.5% of the costs of Construction Packages A-C.

\*\*UA Project Management Fee is based on 3% of the costs of Construction Packages A-C plus Contingency.

\*\*\*Architect/Engineer Fee is based on 7% of the costs of Construction with 1.15 Renovation Factor, plus \$80,542 for additional services, and Design Credit of \$15,000.

\*\*\*\*Other Includes: Geotechnical, Materials Testing, UA Work Orders, Campus Map Update, Advertising, Printing, and Construction Transportation and other associated project costs, as applicable.

*Contract Complete. Actual Cost.*

**Current Package for Contract Award Approval.**

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

(Utilities, Housekeeping, Maintenance, Insurance, Other)

N/A\*

Total Estimated Annual O&M Costs:

\*AIME and the Tom Bevill Buildings are existing Educational and General facilities and, as such, O&M costs are already funded. There will be no incremental change in O&M resulting from this project.

**FUNDING SOURCE:**

Office for Research and Economic Development Research Reserves \$ 4,644,844

University Central Reserves \$ 6,687,099\*

**O&M Costs:** University Annual Operating Funds \$ N/A

\*ORED will reimburse Central Reserves \$668,710 per year for 10 years using indirect funds produced by the externally sponsored awards generated by this initiative.

**NEW EQUIPMENT REQUIRED**

Helios 5 Hydra P-FIB

Talos 200I TEM

Spectra 300 TEM

Helios 5 UX FIB

**Equipment Bundle Subtotal:** \$6,400,000

LEAP Atom Probe

6000XR \$2,058,283

**Total Equipment Costs:** \$8,458,283



**PROJECT SCOPE:**

The Renovations for Materials Characterization Service and Support of Academic Programs project will replace certain equipment as enumerated above and renovate the spaces in AIME and the Tom Bevill Building as necessary to support the new equipment and analytical instruments.

Providing the appropriate facility environment including vibration elimination, electromagnetic interference (EMI) and radio frequency (RF) shielding, and acoustics are paramount for the proper operation of the equipment and is included as necessary. Specialty consultants are included in the scope of the Architect's services to ensure the requirements are identified and met within the design.

Following schematic design and evaluation of the facility and equipment environmental requirements of the electron microscope being located in the AIME space, it was determined that enhanced vibration elimination measures would need to be incorporated in the immediately adjacent large equipment mechanical room.

The project will recapitalize UA's inventory of materials characterization equipment and provide equipment that meets the needs and functionality of the service group.

**PROJECT STATUS**

SCHEMATIC DESIGN:	Date Initiated	March 2022
	% Complete	100%
	Date Completed	October 2022
PRELIMINARY DESIGN:	Date Initiated	November 2022
	% Complete	100%
	Date Completed	December 2022
CONSTRUCTION DOCUMENTS:	Date Initiated	December 2022
	% Complete	100%
	Date Completed	February 2023
BID DATE: Construction B- AIME		April 25, 2023

*\*N/A on Stage I Projects*

## RELATIONSHIP AND ENHANCEMENT OF CAMPUS PROGRAMS

The Renovations for Materials Characterization Service and Support of Academic Programs has as its core mission the instruction and education of undergraduate and graduate students in materials research-related fields using modern analytical instruments. The University of Alabama (UA) can affirm itself as a leading education location worldwide through a recapitalization in the proposed materials characterization equipment, where the current instruments are becoming perilously susceptible to obsolescence and experience significant downtime. Many of the instruments are approaching nearly two decades of life. Such a recapitalization will attract the best students and faculty in multiple disciplines. In doing so, UA's core facilities will usher in the next generation of materials education and research for energy, defense, transportation, human health, and environmental sciences, all of which align with the state of Alabama's Science and Technology Roadmap (<https://alepscor.org/roadmap/>).

The recapitalized instruments are used in supporting undergraduate and graduate-level courses in multiple departments and across colleges. However, the current condition of many of these instrument's results in frequent downtime hindering reliable incorporation for teaching and supporting research programs. Furthermore, they are no longer cutting-edge, inhibiting UA from meeting its educational objectives for providing its students the highest quality of opportunities for training and education. In addition, the obsolescence of the instrument's places UA at a disadvantage to its peer institutions in proposing and winning new research grants and contracts that support student education as they can no longer match what many others can propose.

The renewal itself would expand educational and research horizons on and off-campus. Through modern remote access availability offered by these modern instruments, coupled with renovations to make them effective in their environment, UA will be able to support UA system campuses in their educational and research pursuits creating true core facility. The remote access will also enable ongoing outreach engagements to spark the interest of the rising generation of Alabamian students in K-12 classrooms. Here, teachers that now come to the UA campus to learn how to incorporate materials into their physical science, chemistry, and physics courses will have microscopes that can stream 'live' images into their classes. These interactions give UA an edge in recruiting future students.

Collectively, the renewal initiative offers the infrastructure to ensure UA's preeminent leadership in education and research to support the state's growing workforce needs, evident in the burgeoning aerospace and defense employers in Huntsville, for example. Renewal of this scale will have a generational impact on the scope of education, research, and facility capabilities unmatched in the southeast region and nation.

TABULATION OF BIDS

THE UNIVERSITY OF  
**ALABAMA**

Project Name

AIME - Renovation for Materials  
Characterization Service & Support  
of Academic Programs

UA Project No.  
252-23-3028

Bid Due

April 25, 2023 1:00 p.m. local time

Bid Location

405 Cahaba Circle  
Tuscaloosa, Alabama 35404

Architect/Engineer

Williams Blackstock Architects  
2204 1st Avenue South, Suite 200  
Birmingham, AL 35233  
phone: (205) 252-9811

## FUNDS AVAILABLE:

Eight hundred thousand dollars and 00/100 (\$800,000.00)

## BIDS SHALL BE VALID FOR:


Sixty (60) Days

## CONSTRUCTION DURATION:

Project Completion: September 22, 2023

CONTRACTOR	N C Morgan Construction Co., Inc.	N/A
	1008 James I. Harrison Jr. Pkwy. Tuscaloosa, AL 35405 (205) 553-7720 GC Lic. #15820	
Addenda ONE - THREE	<u>X</u> Yes ___ No	
LICENSE # ON ENVELOPE	<u>X</u> Yes ___ No	
BONDING COMPANY OR BID DEPOSIT	Travelers Casualty & Surety Co. of America	
BASE BID ON PROPOSAL	\$ 2,350,000.00	
ENVELOPE ADJUSTMENT	-	
TOTAL BID	\$ 2,350,000.00	

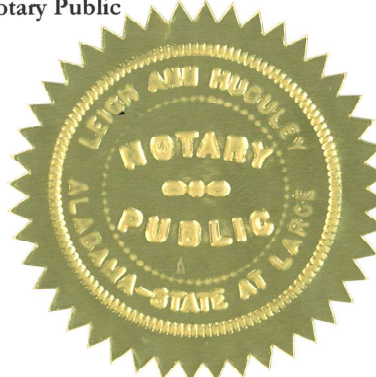
I CERTIFY THAT THE ABOVE BIDS WERE RECEIVED SEALED AND WERE PUBLICLY OPENED AND READ ALOUD AT THE TIME AND PLACE INDICATED AND THAT THIS IS A TRUE AND CORRECT TABULATION OF ALL BIDS RECEIVED FOR THIS PROJECT. I RECOMMEND AWARD OF THE CONTRACT FOR CONSTRUCTION TO THE LOWEST RESPONSIBLE AND RESPONSIVE BIDDER AS SHOWN ABOVE, AS DETERMINED BY THE AVAILABLE FUNDS AND SUBJECT TO THE INSTRUCTIONS TO BIDDERS AND ANY APPLICABLE LAW.

  
Joey Tudisco, AIA  
Williams Blackstock Architects

Sworn to and subscribed before me this 25<sup>th</sup> day of April, 2023.

  
Notary Public

April 4, 2027  
My Commission Expires



**TABULATION OF BIDS**

THE UNIVERSITY OF  
**ALABAMA**

**Project Name**

Bevill - Renovation for Materials  
Characterization Service & Support  
of Academic Programs

**UA Project No.**

249-23-3033

**Bid Due**

April 25, 2023 3:00 p.m. local time

**Bid Location**

405 Cahaba Circle  
Tuscaloosa, Alabama 35404

**Architect/Engineer**

Williams Blackstock Architects  
2204 1st Avenue South, Suite 200  
Birmingham, AL 35233  
phone: (205) 252-9811

FUNDS AVAILABLE:

One hundred thousand dollars and 00/100 (\$100,000.00)

BIDS SHALL BE VALID FOR:

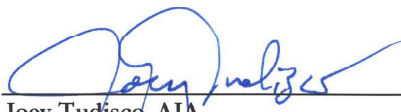
Sixty (60) Days

CONSTRUCTION DURATION:

Base Bid Completion - July 28, 2023; Alternate 1 Completion - August 18, 2023

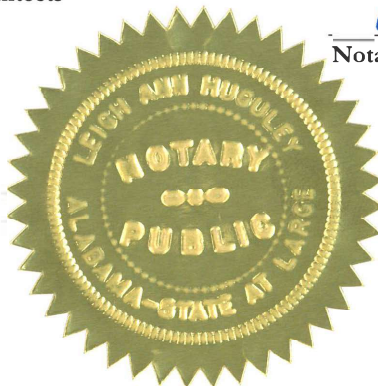
CONTRACTOR	N C Morgan Construction Co., Inc.	N/A
	1008 James I. Harrison Jr. Pkwy. Tuscaloosa, AL 35405 (205) 553-7720 GC Lic. #15820	
Addenda ONE - TWO	<u>X</u> Yes <u>  </u> No	
LICENSE # ON ENVELOPE	<u>X</u> Yes <u>  </u> No	
BONDING COMPANY OR BID DEPOSIT	Travelers Casualty & Surety Co. of America	
BASE BID ON PROPOSAL	\$ 95,400.00	
ENVELOPE ADJUSTMENT	-	
ADJUSTED BASE BID	95,400.00	
ALTERNATE #1 <i>Description on back of page</i>	42,440.00	
ENVELOPE ADJUSTMENT	-	
TOTAL BID W/ALTERNATE	\$ 137,840.00	

I CERTIFY THAT THE ABOVE BIDS WERE RECEIVED SEALED AND WERE PUBLICLY OPENED AND READ ALOUD AT THE TIME AND PLACE INDICATED AND THAT THIS IS A TRUE AND CORRECT TABULATION OF ALL BIDS RECEIVED FOR THIS PROJECT. I RECOMMEND AWARD OF THE CONTRACT FOR CONSTRUCTION TO THE LOWEST RESPONSIBLE AND RESPONSIVE BIDDER AS SHOWN ABOVE, AS DETERMINED BY THE AVAILABLE FUNDS AND SUBJECT TO THE INSTRUCTIONS TO BIDDERS AND ANY APPLICABLE LAW.

  
Joey Tudisco, AIA  
Williams Blackstock Architects

Sworn to and subscribed before me this 25<sup>th</sup> day of April, 2023.

  
Notary Public  
April 4, 2027  
My Commission Expires



Alternate Description:

Alternate #1: Replacement of Ceiling Tiles



# RENOVATIONS FOR MATERIALS CHARACTERIZATION SERVICE AND SUPPORT OF ACADEMIC PROGRAMS

## LOCATION MAP

