



UNIVERSITY *of* WISCONSIN
GREEN BAY

Request for Architectural/Engineering/Planning Services

Cofrin Technology & Education Center

State Project No. 21E2W
September 2021

CONSULTANT REQUIREMENTS

Architectural/Engineering/Planning (Rev. 2019-08)

This request provides architectural/engineering/planning (AEP) resources to complete the project phases indicated below for **Project No. 21E2W – Cofrin Technology & Education Center at the University of Wisconsin-Green Bay** (see attached for further detail).

Pre-Design Phase	Preliminary Design Phase	Final Design Phase	Bidding Phase	Construction Phase
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

Consultants should submit their qualifications and demonstrate specific expertise and experience in the design and coordination of institutional construction and comprehensive infrastructure (architectural, mechanical, electrical, plumbing) renovations; library design; office suite renovations and relocations; interior building pedestrian circulation, wayfinding, and elevator systems design; food service operations and kiosks as part of a design team. Work includes project area surveys, acquiring field data, and verifying as-built conditions to assure accurate development of design and bidding documents.

The consultant(s) will participate in a highly collaborative and interactive campus planning process by meeting with appropriate campus staff, including Campus Administration, Academic Affairs, Facilities Management, Dining, Information Technology & Library Services, and Student Affairs to develop a Program Statement, Preliminary Design, and Final Design documentation. Working in collaboration with the campus project team, the consultant will be responsible for program development, verification, and documentation; developing and documenting design alternatives with corresponding project cost estimates and project schedules for each design alternative; and determining and documenting any project work dependencies for selected design alternatives.

David A. Cofrin Library (originally named Library Learning Center) is listed by the Wisconsin Historical Society (WHS) as a building of potential historical significance ([WHS Reference #242722](#)). The design consultant will be expected to consult and coordinate with the WHS on the design alternatives, final design solution, mitigation plans, and demolition work.

All project solutions and alternatives developed must be in compliance with [DFD's Sustainability Guidelines for Capital Projects](#) (September 2020, Version 2.0).

The design consultant(s) will provide pre-design services through construction administration services as indicated in the current Division of Facilities Development (DFD) *Policy and Procedure Manual for Architects/Engineers and Consultants*, and the *DFD Contract for Professional Services*. These services may be contracted through multiple contracts or contracts with multiple parts and project-specific review/approval/authorization milestones as determined by the needs of the project. Authorization for subsequent services will be issued in writing upon satisfactory performance and completion of contracted services and deliverables.

PRE-DESIGN SERVICES

In addition to the requirements for pre-design through construction in the *DFD Policy and Procedure Manual for Architects/Engineers and Consultants*, the following addition and clarifications should be noted:

- Prepare a comprehensive building code assessment and recommendations for the entire facility complex.
- Perform Project Planning. Evaluate and prepare for DFD and campus consideration options and scenarios for determining project priorities and project delivery, this includes scheduling, phasing, estimated cost, inflation, and loss of revenue implications.
- Prepare a Project Plan with a Program Statement per the *DFD Policy and Procedure Manual for Architects/Engineers and Consultants* incorporating the Facilities Condition Assessment (completed during the feasibility study), code assessment, and project delivery scenarios, phases, and alternatives.
- The design consultant(s) will also prepare materials (documents, images, etc.) necessary for Board of Regents and State Building Commission construction authority.

COST ESTIMATING

Provide conceptual construction cost estimates for all design alternatives and provide full budget estimates for selected design alternative. All estimates for a selected design alternative must provide construction cost detail with a dated reference for ease of future cost escalation. All project cost estimates not directly associated with the construction costs (basic and additional design services, project management fees, design contingency, project contingency, movable and special equipment, escalation factors) must be indicated separately from the construction cost estimates.

Life cycle cost estimates must include annual energy consumption; operational maintenance and repair cost estimates; life expectancy; and capital maintenance, repair, and replacement cost estimates of all facilities and utilities included in the master plan. Energy consumption estimates will be provided in the unit of measure most appropriate to the associated utility service to allow cost impact calculations at a future date based on current rates and agreements.

DELIVERABLES

Produce a Program Statement] document with narrative descriptions of each project component and implementation phase, executive summary, detailed construction cost estimates, detailed life cycle costing estimates, full schematic building level floor plans for each level impacted by the project, two-dimensional elevations and color renderings of selected components, and three-dimensional color renderings of selected project areas. The narrative descriptions must include functions, occupant capacity/limits, building/structure and site infrastructure requirements, proposed materials, and applicable building code impacts. The executive summary will include all planning findings, project goals and principles, key recommendations, and an implementation plan.

Produce a life cycle cost estimate document detailing energy consumption; operational maintenance and repair cost impacts; capital maintenance, repair, and replacement cost impacts; and life expectancy for all selected design alternatives.

All graphics must be grayscale compatible without losing meaning, distinguishing characteristics, or legibility.

All final documentation must be provided electronically via download link, USB flash drive, or optical disc (CD or DVD) in Adobe Acrobat PDF format. All narrative text and cost estimate documentation shall also be provided in an unlocked, editable file format for future use and presentation outside of the final Program Statement] document. Text shall be provided in rich text format (*.RTF) or Microsoft Word XML document format (*.DOCX) and cost estimates provided in Microsoft Excel XML workbook format (*.XLSX). The content of the editable file formats must match the content of the final Program Statement document, but the organization, layout, and formatting needs only to be representative of the final content. All graphics, images, maps, plans, and renderings must be provided in electronic format separate from the master plan document in high-resolution 300 pixels per inch (ppi) raster format (*.PNG), suitable for poster size (minimum 24-inches by 36-inches) publication. All graphics, images, maps, plans, renderings, models, and documentation will become the property of the university.

PRELIMINARY AND FINAL DESIGN SERVICES

In addition to the requirements for preliminary design through construction in the DFD *Policy and Procedure Manual for Architects/Engineers and Consultants*, the following additions and clarifications should be noted:

- The design consultant(s) will work with DFD and the appropriate campus staff to review the Program Statement, Preliminary Design, and Final Design documents. The design consultant(s) will attend a design review meeting at each of the Preliminary Design and Final Design review stages. The reviewers will provide written comments to the DFD Project Manager based on the documents, and discuss the comments with the design consultant(s). The design consultant(s) are required to provide written responses to the DFD Project Manager.

Note that per the DFD *Policy and Procedure Manual for Architects/Engineers and Consultants*, the following services will not be included in the scope of services:

- Hazardous material abatement design will be provided by a consultant under separate contract with DFD based on the demolition plans. Abatement documents will be incorporated into the bid set.
- Preparation of a Wisconsin Environmental Protection Act (WEPA) Type I Environmental Impact Statement will be contracted separately by the campus.

The following documents will be made available to the successful design consultant team for reference, verification, and update as it relates to the project intent, description, and scope of work.

Cofrin Research Center Renovation & Use Study
Feasibility Study and Facilities Condition Assessment
18D2W from March 25, 2020

ID	Y/N?	Description	Comments and Clarification Notes
1.00	<input checked="" type="checkbox"/>	Project and Program Considerations	<p><i>Review, verify, and fully develop program and project design concepts as initiated and documented under 18D2W Cofrin Research Center Renovation & Use Study dated 03/25/2020. Include design, phasing, and sequencing alternatives with associated cost estimates for consideration by DFD and the UW-Green Bay Project Core Team. Phasing and sequencing documentation is critical to assist the institution with managing swing space logistics and facilitate project progress.</i></p> <p>1.05 Please see <https://www.wisconsin.edu/capital-planning/reference/deliverables/> for more detailed AutoCAD and geospatial data definition requirements.</p> <p>1.06 Includes erosion control requirements.</p>
1.01	<input checked="" type="checkbox"/>	<u>Programming & Program Verification</u>	
1.02	<input checked="" type="checkbox"/>	<u>Design Concept</u>	
1.03	<input checked="" type="checkbox"/>	<u>Site/Survey</u>	
1.04	<input checked="" type="checkbox"/>	Site/Existing Conditions	
1.05	<input checked="" type="checkbox"/>	Facilities Site Plan	
1.06	<input checked="" type="checkbox"/>	Existing Land Use	
1.07	<input checked="" type="checkbox"/>	<u>Topography/Drainage</u>	
1.08	<input checked="" type="checkbox"/>	<u>Vegetation/Landscaping</u>	
1.09	<input checked="" type="checkbox"/>	<u>Subsurface Conditions</u>	
1.10	<input checked="" type="checkbox"/>	<u>Construction Staging/Occupancy of Site During Construction</u>	
1.11	<input checked="" type="checkbox"/>	<u>WEPA – Environmental Impact Determination and Identification</u>	
1.12	<input checked="" type="checkbox"/>	<u>Utilities/Infrastructure</u>	<p>1.12 includes selective underground utility tunnel and utility distribution reconfiguration, relocation, temporary services, and modification to accommodate the location of the new facility vs. the existing facility.</p> <p>1.13 Includes the central utility plant.</p> <p>1.14 Includes chilled water, domestic water, electrical power, natural gas, sanitary sewer, storm water sewer, steam and condensate return, and telecommunications.</p> <p>1.17, 1.18 includes developing schematic site plans for a small visitor’s parking lot (~20 stalls) and the associated roadway and pedestrian walkway modifications required to facilitate that new lot under an independent and future project.</p> <p>1.20 Includes during construction period.</p> <p>1.24 Includes staging, sequencing, and phasing of the demolition of the David A. Cofrin Library; and selective reconfiguration, relocation, temporary services, and modifications to the underground utility tunnel and utility distribution systems to connect to the new building location.</p>
1.13	<input checked="" type="checkbox"/>	Existing: capacity and condition of existing lines and equipment	
1.14	<input checked="" type="checkbox"/>	Proposed central and site utility systems	
1.15	<input checked="" type="checkbox"/>	Maintaining utility services and infrastructure during construction	
1.16	<input checked="" type="checkbox"/>	<u>Transportation/Circulation</u>	
1.17	<input checked="" type="checkbox"/>	Vehicular/Bicycle/Pedestrian	
1.18	<input checked="" type="checkbox"/>	Parking	
1.19	<input checked="" type="checkbox"/>	Service/Loading/Unloading	
1.20	<input checked="" type="checkbox"/>	Access to Site	
1.21	<input checked="" type="checkbox"/>	<u>Existing Building Conditions</u>	
1.22	<input checked="" type="checkbox"/>	Conditions of Existing Building Spaces as necessary for design	
1.23	<input checked="" type="checkbox"/>	Condition of Existing Infrastructure and Equipment	
1.24	<input checked="" type="checkbox"/>	Demolition Planning/Phasing	
1.25	<input checked="" type="checkbox"/>	<u>Building Systems</u>	
1.26	<input checked="" type="checkbox"/>	Structural Systems	<p>2.01 All design solution alternatives must include project cost estimate impacts for phasing and sequencing to assist in the decision-making processes.</p> <p>2.02 Includes staging, sequencing, and phasing of the demolition of the David A. Cofrin Library; and selective reconfiguration, relocation, temporary services, and modifications to the underground utility tunnel and utility distribution systems to connect to the new building location.</p> <p>2.04 includes DFD’s Sustainability Guidelines for Capital Projects (September 202, Version 2.0).</p> <p>5.02 Includes performance test data, list of normal and alarm set points, and contact information for responsible parties.</p> <p>5.03 Includes all newly installed components, include list of all input/output control points and custom software with programming requirements needed to maintain and/or field-modify newly installed systems.</p> <p>5.04 Includes contact information for responsible parties and date of warranty expiration.</p>
1.27	<input checked="" type="checkbox"/>	Mechanical Systems/HVAC	
1.28	<input checked="" type="checkbox"/>	<u>Environmental Control</u>	
1.29	<input checked="" type="checkbox"/>	Electrical/Lighting	
1.30	<input checked="" type="checkbox"/>	<u>Lighting Design</u>	
1.31	<input checked="" type="checkbox"/>	<u>Fire Alarm</u>	
1.32	<input checked="" type="checkbox"/>	<u>Telecommunications Systems</u>	
1.33	<input checked="" type="checkbox"/>	<u>Access Control</u>	
1.34	<input checked="" type="checkbox"/>	Plumbing	
1.35	<input checked="" type="checkbox"/>	Fire Protection Systems	
1.36	<input checked="" type="checkbox"/>	Signage (Code Required; Building and Room/Space Identification)	
1.37	<input checked="" type="checkbox"/>	Other Systems	
2.00	<input checked="" type="checkbox"/>	Design Considerations	
2.01	<input checked="" type="checkbox"/>	<u>Cost Estimating</u>	
2.02	<input checked="" type="checkbox"/>	<u>Constructability</u>	
2.03	<input checked="" type="checkbox"/>	<u>Accessibility</u>	
2.04	<input checked="" type="checkbox"/>	<u>Sustainable Facilities and Energy Conservation</u>	
2.05	<input checked="" type="checkbox"/>	<u>Equipment Layout</u>	
2.06	<input checked="" type="checkbox"/>	<u>Campus Technical Review</u>	
3.00	<input checked="" type="checkbox"/>	Bid Documents (see contract for details)	
4.00	<input checked="" type="checkbox"/>	Construction Administration (see contract for details)	
4.01	<input checked="" type="checkbox"/>	<u>Commissioning (Level 1)</u>	
5.00	<input checked="" type="checkbox"/>	Post-Construction Deliverables (see contract for details)	
5.01	<input checked="" type="checkbox"/>	<u>As-Built Record Drawings</u>	
5.02	<input checked="" type="checkbox"/>	<u>Commissioning Details</u>	
5.03	<input checked="" type="checkbox"/>	<u>Operations and Maintenance Manuals</u>	
5.04	<input checked="" type="checkbox"/>	<u>Warranty/Guarantee Details</u>	

ID	Y/N?	Description	Comments and Clarification Notes
A.00	<input checked="" type="checkbox"/>	Planning Considerations	<i>A.03 and A.04 Includes verification of, and if required, updating of the recommendations from the feasibility study which were developed based upon then current and anticipated/estimated room scheduling and utilization data, program delivery, enrollment projections, and appropriate benchmarks. A.05 Includes considerations related to the relocation of the original campus focal point and circulation hub.</i>
A.01	<input type="checkbox"/>	<u>Master Planning</u>	
A.02	<input type="checkbox"/>	<u>Blocking and Stacking Diagramming</u>	
A.03	<input checked="" type="checkbox"/>	<u>Scope Definition</u>	
A.04	<input checked="" type="checkbox"/>	<u>Space Needs Analysis</u>	
A.05	<input checked="" type="checkbox"/>	<u>Site Evaluation</u>	
A.06	<input type="checkbox"/>	<u>Market Study</u>	
A.07	<input type="checkbox"/>	<u>Space Utilization Analysis</u>	
B.00	<input checked="" type="checkbox"/>	Project and Program Considerations	<i>B.02 Space tabulation for each department and operation was developed during the feasibility study. UW-Green Bay will verify this information, and if necessary, provide updated versions of this information to the design team for verification and incorporation into the final design solution, phasing, and sequencing alternatives. B.03 Room Data Sheets will need to be developed in consultation and coordination with the UW-Green Bay Project Core Team. B.04 Includes Geotechnical Survey and Report. Please see <https://www.wisconsin.edu/capital-planning/reference/deliverables/> for more detailed AutoCAD and geospatial data definition requirements. All buildings, site improvements, and site utilities within the designated project area, including those not impacted by project construction. Reference known elevation datum and include attributes for input or transfer to campus GIS mapping. B.13 and B.14 include the underground utility tunnel and utility distribution systems. B.15 in particular as it relates to connections to and through the underground concourse system and central campus utility system extensions or connections. B.16 Includes selective underground utility tunnel and utility distribution reconfiguration, relocation, temporary services, and modification to accommodate the location of the new facility vs. the existing facility.</i>
B.01	<input checked="" type="checkbox"/>	<u>Occupants/User Activities</u>	
B.02	<input checked="" type="checkbox"/>	Space Tabulation	
B.03	<input checked="" type="checkbox"/>	Room Data Sheets	
B.04	<input checked="" type="checkbox"/>	<u>Site/Survey</u>	
B.05	<input type="checkbox"/>	Easements	
B.06	<input type="checkbox"/>	Zoning Approval Efforts	
B.07	<input type="checkbox"/>	Floodplain Restrictions	
B.08	<input type="checkbox"/>	Landholdings/Ownership/Boundaries	
B.09	<input checked="" type="checkbox"/>	<u>Utilities/Infrastructure</u>	
B.10	<input checked="" type="checkbox"/>	Energy Modeling	
B.11	<input checked="" type="checkbox"/>	<u>Existing Facilities Survey</u>	
B.12	<input type="checkbox"/>	Facility Condition Assessment	
B.13	<input checked="" type="checkbox"/>	Document Existing Conditions	
B.14	<input checked="" type="checkbox"/>	Concealed Conditions	
B.15	<input checked="" type="checkbox"/>	Building Code Analysis	
B.16	<input checked="" type="checkbox"/>	Phasing Options and Analysis	
B.17	<input checked="" type="checkbox"/>	Adjacency Analysis and Matrix	
B.18	<input checked="" type="checkbox"/>	<u>Facility Specialties</u>	<i>B.25 Includes selection, recommendation, specification, and/or systems furniture layout.</i>
B.19	<input checked="" type="checkbox"/>	Acoustics	
B.20	<input checked="" type="checkbox"/>	Elevator Constructor/Vertical Transportation	
B.21	<input checked="" type="checkbox"/>	Food Service Operations/Kiosks	
B.22	<input checked="" type="checkbox"/>	Security/Video Surveillance	
B.23	<input type="checkbox"/>	Specialty Lighting	
B.24	<input type="checkbox"/>	Other (Please Specify)	
B.25	<input checked="" type="checkbox"/>	<u>Furnishings, Fixtures, & Equipment</u>	
B.26	<input type="checkbox"/>	Select Only (campus to procure and install)	
B.27	<input type="checkbox"/>	Select & Specify (campus to procure and install)	
B.28	<input checked="" type="checkbox"/>	Select, Specify, & Supervise Installation	
B.29	<input checked="" type="checkbox"/>	Fixed Equipment	
B.30	<input checked="" type="checkbox"/>	Movable Equipment	
B.31	<input type="checkbox"/>	Art Selection Assistance	
B.32	<input checked="" type="checkbox"/>	<u>Universal Design</u>	<i>B.36 includes coordinating project and mitigation plans with the Wisconsin Historical Society related to the proposed demolition of the David A. Cofrin Library (formerly named the Library Learning Center). C.01 Includes additional on-site construction administration beyond basic services</i>
B.33	<input type="checkbox"/>	<u>Historic Preservation</u>	
B.34	<input type="checkbox"/>	Historic Structure Report (HSR)	
B.35	<input type="checkbox"/>	Historic Preservation Plan (HPP)	
B.36	<input checked="" type="checkbox"/>	Wisconsin Historical Society Approval for Building Concept	
B.37	<input checked="" type="checkbox"/>	<u>Presentations</u>	
B.38	<input checked="" type="checkbox"/>	Formal Presentation(s)	
B.39	<input checked="" type="checkbox"/>	Presentation Materials	

SUPPLEMENTAL SERVICES

Architectural/Engineering/Planning (Rev. 2019-08)

- B.40 Facilitate on Campus Design Document Review
- C.00 **Construction Administration**
- C.01 Additional Construction Administration Services

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- D.00 **Miscellaneous**
 - D.01 Wayfinding
 - D.02 Building Performance and Certification Standards Compliance
 - D.03 Renderings, Models, and Mock-Ups
 - D.04 Building Information Modeling
 - D.05 Measured Drawings Beyond Project Area
 - D.06 Commissioning (i.e. Level 2, Exterior Envelope)
 - D.07 Post Occupancy Evaluation
 - E.00 **Other (Please Specify)**

D.01 includes connection and relationship to the underground concourse system; exterior terrain and element connections, visual access, and paths of travel through the heart of campus.

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<u>Agency</u>	<u>Institution</u>	<u>Facility ID</u>	<u>Facility Name</u>
University of Wisconsin	Green Bay	285-0D-2025	Cofrin Technology & Education Center

<u>Project Title</u>	<u>Project No.</u>
Cofrin Technology & Education Center	21E2W

Project Intent

This project demolishes and replaces the original campus library learning center and focal point of campus with a new technology and education center on an adjacent site; reconfigures, relocates, extends, and connects the underground site utility tunnel, concourse pedestrian circulation, and utility distribution systems to the new building site; and redevelops and integrates the original site into the updated campus fabric and layout.

Project Description and Scope

This project will transform the entire campus layout and main entry point, implemented from the original 1968 master plan, by replacing and demolishing the original high-rise, library learning center and navigational focal point with a new low-rise, multi-use academic, technology center, and administrative facility that will be relocated just slightly off its previous axis and center of campus. The replacement facility will have large, flexible floor plates and be more efficient spatially, reducing the amount of square footage required to be reconstructed. The new facility will continue to serve as the gateway and heart of campus, but will be re-situated, migrating slightly north and with an expanded footprint. It is envisioned that the previous monolithic, impenetrable high-rise facility that confounded wayfinding will be replaced by a more transparent, permeable structure to promote navigation in all directions, both interior and exterior to the building. The programs and functions located in the new facility will be organized physically and operationally to promote collaboration among students and faculty in an interdisciplinary manner, which has been a hallmark of this institution since its inception. Interior spaces will have flexible and functional finishes, furnishings, and technology in the correct locations, and with appropriate adjacencies that will allow the university to operate more efficiently and effectively. The underground campus concourse circulation system that connects all main academic facilities and converges at the Cofrin Library, the academic and circulation hub of campus, will be re-routed and re-connected along with the replacement hub facility. The new 4- to 5-story building will have a 40,000 SF footprint and will not exceed the 75-foot height limit for low-rise construction. The following summary is the construction cost portion for the proposed scope of work.

Demolition:	122,761 ASF	187,703 GSF	\$	4,806,000
Renovation:	0 ASF	0 GSF	\$	0
New Construction:	111,352 ASF	179,600 GSF	\$	67,921,000
Project Total:	234,113 ASF	367,303 GSF	\$	72,727,000

All programs and functions currently housed in the Cofrin Library will be relocated to the new facility; re-sized and re-configured to meet the current and anticipated future campus demands; and reflect a more efficient building footprint, open office scheme, and shared common spaces. Library and archive spaces will be modernized and consolidated, while still providing open but secured access to an array of documents in various formats. Site improvements surrounding the building will promote seamless transitions from interior to exterior. A new technology hub will be created, enabling students to keep ahead of emerging technologies by providing creative digital scholarship laboratories and state-of-the-art digital studios. New gallery spaces will also be created to showcase academic achievements, provide opportunities to develop fresh pedagogical methods, workspace for grant funded programming, and areas to display works-in-progress to visitors and the campus community. Shared spaces that are envisioned for instruction and exploration, with an emphasis on public and partner areas, will also be developed and showcased in the new facility.

The replacement building structure, envelope, infrastructure, systems, and equipment will meet all applicable current codes and standards and provide an emphasis on energy efficiency with low-cost operations and maintenance requirements. New security and automated, programmable environmental control systems will be installed to meet the current standards of the Society of American Archivists and fulfill the requirement to house regional archival materials for the Wisconsin Historical Society. New fire protection and suppression systems will be installed along with other required life safety features, including a properly sized emergency generator. LED lighting will be installed throughout the facility and the state's sustainability standards will be consulted to determine the most appropriate and rational

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strategies to implement in the design solution. The project will be built in a single phase and campus central utilities will be extended to the new site and connected to the replacement building. Occupants of the existing building will be temporarily relocated elsewhere on campus to facilitate the demolition and construction of the replacement building.

Background

The Library Learning Center (122,761 ASF/187,703 GSF) was constructed in 1972, renamed as the David A. Cofrin Library in 1990, and the building systems and equipment are original to the facility. This is the only high-rise facility on campus and is situated at the center of the academic core development. Envisioned as a research hub of cross disciplinary collaboration, it serves as a gateway, landmark, and focal point for navigation throughout the main campus. It houses campus administration, campus and regional archives, campus library collections, and offices of the Business and Finance, Center for the Advancement of Teaching and Learning, Continuing Education and Community Engagement, Controller and Purchasing, Graduate Studies, Grants and Research, Human Resources, Institutional Strategy and Effectiveness, International Education, Library Learning Commons, Marketing and Communication, Student Affairs and Campus Climate, Student Success Center, and Writing Center.

Resolving the functional and physical issues in the Cofrin Library has been the top capital budget priority at UW-Green Bay for the past decade. A feasibility study was completed in March 2020 which concluded that renovation of the existing facility would not be cost effective and still result in a highly compromised facility. A key component of this conclusion was the discovery of the poor, deteriorated, and unstable condition of the exterior envelope. A Small Project is currently in design to stabilize and secure the exterior envelope for the short-term until the building can be demolished. After the exterior envelope conditions were exposed, the planning and design efforts explored and analyzed multiple replacement construction and renovation options and alternatives. These efforts were eventually consolidated into three approaches: (1) maintenance and repair only, (2) complete renovation with a small addition to house the new programs that could not be accommodated in the existing facility, and (3) construction of a replacement building with demolition of the existing facility. Option 1 provided no functional or programmatic benefit to campus for the same or similar disruption and was quickly shown to have little campus impact. Option 2 similarly, only provided meaningful functional and programmatic benefit in the proposed small addition and the existing building remained in a highly compromised and dysfunctional state. Option 3 will provide resolution of all the functional and physical condition problems, deliver the most flexible facility for campus evolution, and achieve a significant campus impact by establishing the new vision and direction for the campus that meets the regional demands and needs.

Analysis of Need and Project Justification

The vast majority of the exterior envelope has failed, requiring the removal and replacement of more than 75% of the face brick to resolve its condition. Investigations discovered significant corrosion in the masonry ties and shelf angles based on the unusual construction of the masonry. With insulation sprayed directly onto the inside face of the bricks, moisture became trapped, causing deterioration of the bricks and their support systems. Destructive testing of the face brick anchoring system determined that severe corrosion and rust has weakened the system to the point of imminent failure, which would require removal and replacement of the failing masonry envelope. Since the original construction in 1972, there have been at least eight capital projects to address masonry repair issues, indicating a history of poor design and associated moisture problems. Access to this high-rise facility for the required exterior masonry repairs is challenging, considering the campus terrain, changes in elevation, and the necessity to protect the network of underground utility and circulation tunnels that spiral from the building. The exterior windows are single-glazed, uninsulated, not thermally broken, and energy inefficient. The window gaskets and sealants have failed, allowing water to penetrate the building envelope in several locations.

The building's mechanical, electrical, and plumbing systems all require complete replacement, have all exceeded their useful lives, and were assessed to have maintained only 14% of their original value. The mechanical systems available for the Archives are completely inadequate for the long-term preservation of both irreplaceable university collections and those held as the Area Research Center of the Wisconsin Historical Society for Northeastern Wisconsin. Portable humidifiers are deployed in an attempt to maintain the correct relative humidity for archival preservation. This is not an acceptable practice, nor a safe mode of operation in areas where irreplaceable documents are stored. The only building system to receive a satisfactory assessment grade was the building structural system, which has retained more than 90% of its original value and remains in good condition. There is no fire suppression system and the installation of new standpipes, sprinkler distribution piping, and fire pumps throughout would be a costly retrofit for this high-rise facility.

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For more than 20 years, the majority of student academic support services have been located in the basement level of the Cofrin Library. These underground spaces are not well lit, have low ceilings, poor environmental controls, and do not present a welcoming image to the public or student body. These areas are not conducive for student learning but see significant pedestrian traffic during cold and inclement weather. The low visibility combined with the deteriorating physical infrastructure present a significant barrier for student access to multiple critical support services, including writing support, library research services, and computing laboratories. Entrances to the building are located on the basement and first floor, necessitated by the campus terrain, but visual wayfinding is not possible from the basement to first floor. Through campus surveys conducted during the feasibility study, there is a demonstrated need to improve visibility and public visitor accessibility to all resources found at upper levels of the building. The signature campus facility is dysfunctional; in disrepair; spatially inefficient; difficult to navigate in, through, and around; and unable to be fully utilized as intended to support learning, collaboration, and technological advancement.

Alternatives

The option to comprehensively renovate the Cofrin Library was investigated and determined to be cost ineffective, as the budget estimate would have resulted in a significantly compromised facility that was more than 75% of the cost to construct a new facility with no compromises. The planning and pre-design efforts already completed have concluded the Cofrin Library cannot effectively be renovated for its intended purpose due to its small and inefficient floor plates; extensive exterior envelope deterioration, failure with difficult and costly access to the high-rise facility for repairs; and the increased, distributed, and relocated mechanical room placements to meet current code requirements.

Project Budget

Construction:		\$	72,333,000
Hazardous Materials:		\$	394,000
Total Construction:		\$	72,727,000
Design Fees (Basic):	8.13%	\$	5,916,000
Design Fees (Other):	0.94%	\$	681,000
Total Design Fees:		\$	6,597,000
Contingency:	15.00%	\$	10,909,000
Management Fees:	4.00%	\$	3,345,000
Furnishings/Fixtures/Eqpt:	3.74%	\$	2,719,000
Total Budget Estimate:		\$	96,297,000

Funding Sources

GFSB:	\$	0
PRSB:	\$	0
Cash:	\$	5,937,000
Gifts:	\$	0
Grants:	\$	0
BTF:	\$	0
Other (Please Describe):	\$	0
Other (Please Describe):	\$	0
Other (Please Describe):	\$	0
Total Funding Sources:	\$	5,937,000

Project Schedule

A/E Selection:	Sep 2021
Design Report:	Nov 2023
Approval:	Jan 2024
Bid Date:	Jul 2025
Start Project:	Sep 2025
Substantial Completion:	Jul 2027
Project Close Out:	Jan 2028

Previous Action

None.

Segregated Fee Impact(s)

Not Applicable.

Impact on Operating Budget

It is estimated that no additional funding will be required annually to support the completion of this project for staffing, supplies and expenses, and energy bills.