CAPITAL FUNDING REQUEST

for the 2011 to 2013 BIENNIUM



UNIVERSITY OF ARKANSAS

March 19, 2010

INSTITUTIONAL PRIORITY RANKING of 2011-2013 HIGHER EDUCATION BOND CAPITAL REQUESTS

University of Arkansas, Fayetteville

Rank	Project Name	Category		Total Cost		Other Funds	101	l otal state runding Requested	0.0
	HILLSIDE AUDITORIUM	New/Demo	÷	5,906,199.00	θ	ı	ф	5,906,199.00	0
2	OZARK HALL with HONORS COLLEGE WING	Rest/Reno/Add	φ	27,361,222.00	Υ	8,700,000.00	φ	18,661,222.00	
ŝ	VOL WALKER HALL	Rest/Reno/Add	φ	32,678,728.00	Ь	13,000,000.00	φ	19,678,728.00	0
4	MULLINS LIBRARY	Reno/Add	÷	81,682,141.00	θ		φ	81,682,141.00	0
വ	NANOSCALE SCIENCE AND ENGINEERING - CLEANROOM	New	Υ	6,539,100.00	÷		φ	6,539,100.00	
9	COLLEGE OF EDUCATION AND HEALTH PROFESSIONS	New/Demo	Υ	24,953,650.00	θ		φ	24,953,650.00	0
7	ENGINEERING HALL	Rest/Reno/Add	Υ	18,022,357.00	θ		φ	18,022,357.00	0
∞	BUSINESS BUILDING	Reno	Υ	8,865,991.00	φ		φ	8,865,991.00	0
6	PLANT SCIENCES 2	New/Demo	Υ	37,598,589.00	θ		φ	37,598,589.00	0
10	NANOSCALE SCIENCE AND ENGINEERING - 3rd FLOOR	New	÷	6,444,216.00	θ		φ	6,444,216.00	0
11	BIOTECHNOLOGY RESEARCH CENTER	New	Υ	78,060,042.00	φ		φ	78,060,042.00	0
12	ENGINEERING RESEARCH CENTER 2	New	÷	24,800,018.00	θ		φ	24,800,018.00	0
13	NANOSCALE SCIENCE AND ENGINEERING - N & S WINGS	New/Add	φ	48, 187, 569.00	Υ		φ	48,187,569.00	0
	Total		ŝ	\$ 401.099.822.00	ŝ	21.700.000.00 \$ 379.399.822.00	ŝ	379.399.822.00	\sim

ii 2011-2013 Biennium

HILLSIDE AUDITORIUM

NEW CONSTRUCTION and demolition

Description of Project

The *Hillside Auditorium* will include a 300-350 seat auditorium, a 200-250 seat auditorium, and general teaching laboratories. The structure is anticipated to have a green roof. This project will eliminate the obsolete Science Engineering Auditorium, constructed in 1964, which has severe limitations in structure and function.

As part of this project, it may also prove necessary to demolish the Geology Building, constructed in 1947 as the Ordark Building for Army Ordinance -Arkansas. The building structure is showing moderate to severe cracking and deterioration due to settlement/movement. The Geology Building is a contributing building to the University of Arkansas Campus Historic District with a secondary status preservation value rating.

Located in the University of Arkansas Campus Historic District, listed on the National Register of Historic Places in 2009, the *Hillside Auditorium* will be prominently located adjacent to the Chi Omega Greek Theatre. The successful design will respect views to and from the theatre, and will be sensitive to its visual impact on the historic structure and landscape, both of which are listed on the National Register of Historic Places. The project will be fully commissioned and constructed to the equivalent of LEED Silver or Green Globes Two Globes.

Pertinent Data

Size: Proposed Use: % Auxiliary: Estimated at 10,440 sf Education and General None

Construction Schedule

The estimated design and construction timeline is 24 months. Estimated project costs factor construction beginning May 2011.

Plans Completed to Date

An architect was hired in 2007 to design this structure, but funds were reallocated before the project commenced.

History of Request

This is the first time this project has appeared in the biennium request.

FORM 2

HILLSIDE AUDITORIUM

Α.	Building Construction		\$ 2,831,400.00
Β.	Built-in equipment		\$ 616,900.00
C.	Architectural and Engineering Fees		\$ 744,572.00
D.	Contingencies		\$ 710,244.00
E.	Other Costs		
	Advertising	\$ 500.00	
	Land & Right-of-Way		
	Surveys & Borings	\$ 11,484.00	
	Site Improvements	\$ 172,260.00	
	Utilities	\$ 10,440.00	
	Parking Lots		
	Telephone/Remote Utility Fees	\$ 277,736.00	
	Total Other Costs		\$ 472,420.00
F.	Movable Furniture and Equipment		\$ 530,663.00

Estimated Project Costs

Total Estimated Project Costs

\$ 5,906,199.00

Project Funding Sources

	Source of Funds	Amount	Percent of Costs
A.	State Funds	\$ 5,906,199.00	100.00%
Β.	Federal Funds	\$ -	0.00%
C.	Private Gifts/Grants	\$ -	0.00%
D.	Bond Proceeds	\$ -	0.00%
E.	Auxiliary Funds	\$ -	0.00%
F.	Other Funds		0.00%
	Total Funding	\$ 5,906,199.00	100.00%

Describe commitments or funds already collected to finance this project:

There are no existing funds available for this project.

OZARK HALL with HONORS COLLEGE WING

RESTORATION, RENOVATION, and ADDITION

Description of Project

Ozark Hall was constructed in 1940 as a classroom building with funds from the Public Works Administration and the Federal Government. The second phase was added in 1947, which connected the classroom building with the commerce building (demolished in 1988). *Ozark Hall* was listed on the National Register of Historic Places in 1992. The Collegiate Gothic building historically housed Business Administration, Mathematics, and Buildings and Grounds, and is constructed of reinforced masonry and Batesville limestone ashlar with Bedford white limestone moldings. The building placement and style were directed by the 1925 masterplan, though the actual orientation of the north-south wing is reversed from what was initially proposed. *Ozark Hall* is a primary contributing building to the University of Arkansas Campus Historic District, listed on the National Register of Historic Places in 2009.

While structurally intact, *Ozark Hall* requires modernization of its mechanical, electrical, and plumbing systems. The original steel windows were replaced in 1992 with frames that, though energy-efficient, detract from the historic character of the building. In order to restore the historic appearance of this important campus building, new windows that meet the profile and fenestration patterns of the original will be evaluated for installation. The project will be fully commissioned and constructed to the equivalent of LEED Silver or Green Globes Two Globes.

Many departments currently located in *Ozark Hall* will be relocated with the completion of other projects. The Center for Advanced Spatial Technologies recently moved to a new building, and the Eleanor Mann School of Nursing will relocate in late 2011.

With these changes taking place, it is an excellent time to embark on a total building renovation that would include an *Honors College* addition to complete the south wing. Honors College staff are presently scattered among four buildings. This facility, with its own entrance off the quadrangle, will define an appealing and accessible space in which to strengthen community among honors students.

Pertinent Data

Constructed:	1940 and 1947
Style:	Collegiate Gothic
Size:	68,266 sf exist'g + 17,370 sf new (3 floors at 5,790 sf)
Current Use:	Classroom, instruction, laboratory, and office
Proposed Use:	Classroom, instruction, laboratory, and office
% Auxiliary:	None
Replacement Costs:	Estimated at \$32.5 million

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Construction Schedule

The estimated design and construction timeline is 30 months. Estimated project costs factor construction beginning May 2011.

Plans Completed to Date

None.

History of Request

This project was included in the 2005-2007 request, but without the proposed addition. This is the third time this project has appeared in the biennium request with the inclusion of the southern wing, which completes the intentions of the 1925 campus master plan.

OZARK HALL with HONORS COLLEGE WING

Α.	Building Construction		\$ 15,245,980.00
Β.	Built-in equipment		\$ 1,060,000.00
C.	Architectural and Engineering Fees		\$ 2,722,340.00
D.	Contingencies		\$ 3,513,626.00
Ε.	Other Costs		
	Advertising	\$ 500.00	
	Land & Right-of-Way		
	Surveys & Borings	\$ 158,000.00	
	Site Improvements	\$ 1,633,000.00	
	Utilities	\$ 515,051.00	
	Parking Lots		
	Telephone/Remote Utility Fees	\$ 1,327,725.00	
	Total Other Costs		\$ 3,634,276.00
F.	Movable Furniture and Equipment		\$ 1,185,000.00

Estimated Project Costs

Total Estimated Project Costs

27,361,222.00

\$

Project Funding Sources

Source of Funds		Amount	Percent of Costs
State Funds	\$	18,661,222.00	68.20%
Federal Funds	\$	-	0.00%
Private Gifts/Grants	\$	-	0.00%
Bond Proceeds	\$	-	0.00%
Auxiliary Funds	\$	-	0.00%
Other Funds	\$	8,700,000.00	31.80%
Total Funding	\$	27,361,222.00	100.00%
	State Funds Federal Funds Private Gifts/Grants Bond Proceeds Auxiliary Funds Other Funds	State Funds\$Federal Funds\$Private Gifts/Grants\$Bond Proceeds\$Auxiliary Funds\$Other Funds\$	State Funds\$18,661,222.00Federal Funds\$-Private Gifts/Grants\$-Bond Proceeds\$-Auxiliary Funds\$-Other Funds\$8,700,000.00

Describe commitments or funds already collected to finance this project:

Proceeds from the Honors College Endowment Fund will be used to offset the construction costs of the new wing.

VOL WALKER HALL

ADDITION for the Fay Jones School of Architecture

Description of Project

Vol Walker Hall was constructed in 1934-35 with funds from the Public Works Administration, and was listed on the National Register of Historic Places in 1992. The building is constructed of reinforced masonry and Batesville limestone ashlar with Bedford white limestone moldings. The building placement and style were directed by the 1925 masterplan. The Georgian/Classical Revival building was originally used as the University Library, and also housed the museum and the office of the President before being consigned to the School of Architecture upon completion of Mullins Library in 1968. Vol Walker is a primary contributing building to the University of Arkansas Campus Historic District, listed on the National Register of Historic Places in 2009.

While a quite expensive structure to renovate, *Vol Walker Hall* is a pivotal building in the history of the University because of its high quality of craftsmanship, materials, and style. In 2003, the process of cleaning and repointing the exterior stonework began, along with making the building compliant with current fire and life safety codes. That work, plus an office addition on top of the north and south sides, was completed in 2006. Even with this work, however, the building proposes many challenges—including a lack of acoustical privacy in faculty and administrative offices; forced separation of administrative offices; serious heating, ventilating and air conditioning problems; poor acoustics in most of the public review spaces; asbestos throughout the building; and wiring that is inadequate for current educational demands and computer networks. The former library stacks (encumbered by very low ceilings and structural columns six feet on center in both directions) provide little functional space. In addition, the elevator fails regularly, making it impossible for wheelchair-bound students, faculty, or staff to access the upper floors of the building.

A renovated and expanded *Vol Walker Hall* would allow the school to bring architecture, landscape architecture, and interior design programs together in a single facility for the first time in the school's history, fostering increased collaboration between the disciplines while allowing all programs to grow. In addition, with the improved conditions, the school will be able to expand its outreach mission, to introduce graduate programs to the curriculum, to promote interdisciplinary education and research opportunities, to facilitate collaborations with other professionals in the building industry, and to accommodate all of its students in one lecture hall. This lecture hall would be available to other campus units as well. The project will be fully commissioned and constructed to the equivalent of LEED Silver or Green Globes Two Globes.

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Pertinent Data	
Constructed:	1935
Style:	Georgian/Classical Revival
Size:	43,800 sf existing to be renovated; 10,000 sf replaced
	(stacks to be demolished and replaced with 4 floors within
	building shell); 30,700 sf addition to west side.
Current Use:	General Education
Proposed Use:	General Education, including classrooms, offices,
-	design studios, laboratories/workshops, exhibition spaces,
	media center
% Auxiliary:	None
Replacement Costs:	Estimated at \$41 million

Construction Schedule

The estimated design and construction timeline is 36 months. Estimated project costs factor construction beginning May 2011.

Plans Completed to Date

Recent work solved the fire egress problems in the east side of Vol Walker Hall, which was funded by the Arkansas Natural and Cultural Resources Council. A prior grant by ANCRC has funded the exterior restoration of the stone cladding and the roof.

History of Request

The School of Architecture has made a request for new or renovated facilities for over fourteen years. Vol Walker Hall has been included in six previous requests.

VOL WALKER HALL

	Estimated Project Costs					
Α.	Building Construction			\$	20,835,000.00	
В.	Built-in equipment			\$	1,701,400.00	
C.	Architectural and Engineering Fees			\$	3,300,364.00	
D.	Contingencies			\$	3,243,261.00	
Ε.	Other Costs					
	Advertising	\$	500.00			
	Land & Right-of-Way					
	Surveys & Borings	\$	182,780.00			
	Site Improvements	\$	534,785.00			
	Utilities	\$	98,800.00			
	Parking Lots					
	Telephone/Remote Utility Fees	\$	1,465,983.00			
	Total Other Costs			\$	2,282,848.00	
F.	Movable Furniture and Equipment			\$	1,315,855.00	

Total Estimated Project Costs

32,678,728.00

\$

Project Funding Sources

	Source of Funds	Amount	Percent of Costs
A.	State Funds	\$ 19,678,728.00	60.22%
Β.	Federal Funds	\$ -	0.00%
C.	Private Gifts/Grants	\$ 13,000,000.00	39.78%
D.	Bond Proceeds	\$ -	0.00%
Ε.	Auxiliary Funds	\$ -	0.00%
F.	Other Funds		0.00%
	Total Funding	\$ 32,678,728.00	100.00%

Describe commitments or funds already collected to finance this project: The university is pursuing private funding for \$10 million.

MULLINS LIBRARY RENOVATION and ADDITION

Description of Project

Mullins Library opened in 1968 in a building just west of Vol Walker Hall, the original home of the university library. Its construction was part of an expansion of the campus that occurred in the late sixties, which moved the focus of the University away from Old Main. The building was later named for David W. Mullins, president of the University from 1960 to 1974. Approximately 75,000 sf of the original building was remodeled in conjunction with the eastern addition in 1997. The remaining square footage is scheduled to be remodeled in this phase of construction.

Located in the University of Arkansas Campus Historic District, listed on the National Register of Historic Places in 2009, the Library is a central element of the University's vision for academic excellence. A building expansion in the academic core of the campus will embody this vision and achieve this mission: *"To build for the University a collaborative and interdisciplinary community that nurtures and inspires student-centered learning, creativity, and engagement."* This mission statement has guided decisions about program adjacencies and initial building concepts (see *Plans Completed to Date*, below.) As envisioned, the project will set a high standard for appealing and accessible space in which to strengthen the university community. The redesign will encourage students to take advantage of the Library's resources from their earliest days on campus. A purpose-built space for public events will enhance library programming and will help meet campus needs for such space in the central campus. The project will be fully commissioned and constructed to the equivalent of LEED Silver or Green Globes Two Globes.

Pertinent Data

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Constructed:	1968
Style:	Brutalist
Size:	13,200 sf ASRS and service passage + 21,040 sf perimeter captured by new building skin in front of the existing projecting bays = 34,240 sf of new space. Less 18,200 sf removed with reconfiguration of the atrium and double height space facing central quad for a total of 243,800 sf shown in the concept design.
Current Use:	Library
Proposed Use:	Library uses, including training rooms, computer access areas, staff offices, work and study areas, compact and standard shelving, ASRS, and public seating.
% Auxiliary: Replacement Costs:	None Estimated at \$88 million

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Construction Schedule

The estimated design and construction timeline is 36-42 months. Estimated project costs factor construction beginning May 2012.

Plans Completed to Date

The University hired a programming consultant to evaluate the existing building and to develop a full program for the Library that best serves the academic and strategic goals of the institution. The existing building analysis, detailed programming, preliminary design, and cost projections are complete.

Concept Design Narrative

The proposed design solution will significantly improve both the appearance and the experience of *Mullins Library*. The first three floors of the 1966 Mullins original building (the 1991 addition being left largely untouched) will be clad in a new skin of both Arkansas and Indiana stone, in keeping with the desired campus material palette. The fourth floor, home of the more public zones in the library, is envisioned as a glass penthouse, set back from the building's edge by approximately 10 feet, and surrounded by roof gardens. This move also helps reduce the perceived scale of the library as it relates to the Central Quad and the neighboring Music and Fine Arts buildings to the south. The west side of the library, immediately accessible from the Central Quad, features a grand colonnade framing an expansive glass facade, showcasing the 24/7 facilities located directly inside. The colonnade recalls the existing one on the east side of the library, establishing a strong sense of visual harmony. The vast majority (95%) of the collections will be housed in either the basement automated storage and retrieval system (ASRS) or closed compact shelving on the first floor. The remaining 5% of the collections are in open, fixed shelving located on the fourth floor.

The central feature of the interior, the atrium, has been sized to allow an ample amount of natural light into the core of the building. Even the most embedded spaces within the library will have a strong sense of connection to the exterior environment. The atrium space itself is envisioned as a large room, lined with wood paneling to add a warm, organic quality and human scale befitting a library. The atrium's roof is specially shaped to effectively harvest and diffuse daylight from the south and north, and will provide a signature image of the library when approached from the Central Quad.

History of Request

Library expansion in general has been needed for many years, and the 1997 expansion was only sufficient to accommodate approximately ten years of University growth. This project, therefore, has been included in the 2003-2005, 2005-2007, 2007-2009, and 2009-2011 requests.

MULLINS LIBRARY

	Estimated Project Costs					
Α.	Building Construction			\$	63,706,240.00	
В.	Built-in equipment			\$	835,403.00	
C.	Architectural and Engineering Fees			\$	7,643,214.00	
D.	Contingencies			\$	4,097,115.00	
E.	Other Costs					
	Advertising	\$	500.00			
	Land & Right-of-Way					
	Surveys & Borings	\$	484,704.00			
	Site Improvements	\$	599,200.00			
	Utilities	\$	262,002.00			
	Parking Lots					
	Telephone/Remote Utility Fees	\$	1,102,855.00			
	Total Other Costs			\$	2,449,261.00	
F.	Movable Furniture and Equipment			\$	2,950,908.00	

Total Estimated Project Costs

81,682,141.00

\$

Project Funding Sources

	Source of Funds	Amount	Percent of Costs
A.	State Funds	\$ 81,682,141.00	100.00%
Β.	Federal Funds	\$ -	0.00%
C.	Private Gifts/Grants	\$ -	0.00%
D.	Bond Proceeds	\$ -	0.00%
Ε.	Auxiliary Funds	\$ -	0.00%
F.	Other Funds		0.00%
	Total Funding	\$ 81,682,141.00	100.00%

NANOSCALE SCIENCE AND ENGINEERING BUILDING - CLEANROOM NEW CONSTRUCTION

Description of Project

The *Nanoscale Science and Engineering Building*, currently under construction, will provide standard and specialized wet/dry laboratories, offices, and support functions for the College of Engineering; the J. William Fulbright College of Arts & Sciences; and the Dale Bumpers College of Agricultural, Food, and Life Sciences. As designed, the facility is a highly flexible structure that can readily accommodate programmatic change. Due to budget constraints, the space allocated for the cleanroom, as well as the entire third floor of the building, will be unfinished, shelled space until such time as funds become available to complete the work. The project is fully commissioned and is pursuing a rating of LEED Silver.

There are a variety of unique research, design, and development activities programmed for the cleanroom, including Type III-IV substrates, compound semiconductors, MEMS, nanomaterials development, etc. A four-bay, single-loaded configuration is proposed with a bay/chase arrangement. The layout provides for non-gowned access to a double sided service chase, and for segregation between the Class 100 and Class 1000 areas of the room. The cleanroom will be an H-5 occupancy, which dictates that it be segregated from the remainder of the building by a one-hour separation at the walls, floor, and overhead structure. The concrete floor is designed to provide a low-vibration structure capable of supporting a future stepper in a VC-D environment. This request is to complete the cleanroom on the second floor and the requisite mechanical equipment space on the floor above.

Pertinent Data

Size:	3,285 sf on the second floor with an equivalent amount of
	mechanical space on the floor above
Proposed Use:	Research and Education
% Auxiliary:	None

Construction Schedule

The estimated design and construction timeline is 9 months. Estimated project costs factor construction beginning May 2011.

Plans Completed to Date

Construction documents are complete.

History of Request

This is the first time individual projects within the *Nanoscale Science and Engineering Building* have been included in the biennium request. The entire building, however, did appear in two previous requests as the #1 ranked project.

NANOSCALE SCIENCE AND ENGINEERING BUILDING - CLEANROOM

Estimated Project Costs

A.	Building Construction			\$ 5,000,000.00
В.	Built-in equipment	-		\$ _
С.	Architectural and Engineering Fees			\$ 614,700.00
D.	Contingencies			\$ 900,000.00
Ε.	Other Costs			
	Advertising	\$	500.00	
	Land & Right-of-Way			
	Surveys & Borings	\$	-	
	Site Improvements	\$	-	
	Utilities			
	Parking Lots			
	Telephone/Remote Utility Fees	\$	23,900.00	
	Total Other Costs			\$ 24,400.00
F.	Movable Furniture and Equipment			\$ -

Total Estimated Project Costs

6,539,100.00

\$

	Project Funding Sources						
	Source of Funds		Amount	Percent of Costs			
A.	State Funds	\$	6,539,100.00	100.00%			
Β.	Federal Funds	\$	-	0.00%			
C.	Private Gifts/Grants	\$	-	0.00%			
D.	Bond Proceeds	\$	-	0.00%			
E.	Auxiliary Funds	\$	-	0.00%			
F.	Other Funds			0.00%			
	Total Funding	\$	6,539,100.00	100.00%			

Describe commitments or funds already collected to finance this project:

\$37 million (\$16 million ADHE bonds, \$5.5 million GIF, \$15.5 million in general obligation bonds) has been allocated to the building to date, but there are no existing funds available to complete the third floor or the cleanroom.

COLLEGE OF EDUCATION AND HEALTH PROFESSIONS

NEW CONSTRUCTION and demolition

Description of Project

This building would house faculty offices, instructional and research programs, outreach, and service components for the College of Education and Health Professions. Programs would include the Eleanor Mann School of Nursing, Pre-Nursing program; the Communication Disorders Undergraduate Program; and additional space for the Department of Curriculum and Instruction. The *College of Education and Health Professions* is the fastest-growing college at the University, with a current enrollment exceeding 3,600 students. The college also has the largest graduate student enrollment, and yet it does not currently have access to classrooms that seat more than 50 students—even though pre-nursing classes, speech communication and curriculum, and instruction classes already exceed 60 students.

The site identified is close to Peabody Hall (current under restoration and renovation) and the Graduate Education Building, a proximity that is particularly important as the College of Education and Health Professions works to accomplish its mission. The site is located in the University of Arkansas Campus Historic District, listed on the National Register of Historic Places in 2009. The new facilities would replace those currently in use, some of which have been cited as inadequate and inaccessible by accrediting bodies, e.g., National Council for the Accreditation of Teacher Education and the Council on Academic Accreditation in Audiology and Speech-Language Pathology. The Pre-Nursing program is presently confined to inadequate space in Ozark Hall. There is no space available to adequately serve the more than 650 students enrolled in nursing degree programs (449 in pre-nursing and 204 nursing majors and masters degree students). Moreover, the College's Communication Disorders program is located in an old house that does not comply with ADA requirements. The College is exploring options for relocating its Speech and Hearing Clinic and Nursing program to a remodeled building across campus. However, space is still needed for Pre-Nursing, Speech Communication, and Curriculum and Instruction undergraduate degree students on the main campus. Without additional office and classroom space it will be difficult to accommodate the College's expanded enrollment and additional programs. The project will be fully commissioned and constructed to the equivalent of LEED Silver or Green Globes Two Globes.

Constructing a new facility in this location will require the removal of the Academic Support Building, formerly used by chemistry, law, psychology, and geology departments. While this building is one of the oldest remaining buildings on campus (completed in 1905), it is awkwardly situated, extremely small (12,475 sf), and has been badly modified over time. Indeed, the most significant feature—the figural gable parapet—has been removed and replaced with a simple gable and eave, sheathed with siding. Since the building has comparably little historical importance, and because the site could be much more efficiently used, it is

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recommended that the building be demolished and replaced, following complete recordation in accordance with US Department of the Interior standards.

Pertinent Data

Size: Proposed Use: % Auxiliary: 46,500 sf (3 floors including basement at 15,500 sf each) Education and Health Professions academic programs None

Construction Schedule

The estimated design and construction timeline is 30 months. Estimated project costs factor construction beginning May 2013.

Plans Completed to Date

No architectural plans have been completed. The College of Education and Health Professions has completed a space needs assessment for pre-nursing, communications disorders, and teacher education undergraduate programs and various research and service units.

History of Request

The College of Education and Health Professions has listed funding for a new classroom building as a priority for over fourteen years. This project was included in the 1999-2001, 2001-2003, 2005-2007, 2007-2009, and 2009-2011 requests.

COLLEGE OF EDUCATION AND HEALTH PROFESSIONS

	Esti	mated P	roject Costs	
A.	Building Construction			\$ 15,577,500.00
Β.	Built-in equipment			\$ 813,750.00
C.	Architectural and Engineering Fees			\$ 2,544,118.00
D.	Contingencies			\$ 3,254,368.00
E.	Other Costs			
	Advertising	\$	500.00	
	Land & Right-of-Way			
	Surveys & Borings	\$	51,150.00	
	Site Improvements	\$	744,000.00	
	Utilities	\$	286,500.00	
	Parking Lots			
	Telephone/Remote Utility Fees	\$	707,795.00	
	Total Other Costs			\$ 1,789,945.00

Total Estimated Project Costs

F. Movable Furniture and Equipment

24,953,650.00

973,969.00

\$

\$

Project	Funding Sources	
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	Source of Funds	Amount	Percent of Costs
A.	State Funds	\$ 24,953,650.00	100.00%
Β.	Federal Funds	\$ -	0.00%
С.	Private Gifts/Grants	\$ -	0.00%
D.	Bond Proceeds	\$ -	0.00%
Ε.	Auxiliary Funds	\$ -	0.00%
F.	Other Funds		0.00%
	Total Funding	\$ 24,953,650.00	100.00%

ENGINEERING HALL

RESTORATION, RENOVATION, and ADDITION for the College of Engineering

Description of Project

Engineering Hall is part of the Collegiate Gothic architecture built at the UA from 1925-1940, and was listed on the National Register of Historic Places in 1992. Designed by Jamieson & Spearl, architects of the 1925 masterplan, the building embodies their vision for a dignified campus, tied to the long traditions of Oxford and Cambridge. The building is constructed of reinforced masonry and Batesville limestone ashlar with Bedford white limestone moldings. With one of the most well-designed facades of any of the 1920's campus buildings, including a rusticated plinth, Doric pilasters, and cartouches with the University seal, its high historical and architectural value calls for restoration. In particular, the inappropriate windows installed in an attempt to upgrade the building should be evaluated for replacement with historically-correct steel casement windows that meet current energy requirements. *Engineering Hall* is a primary contributing building to the University of Arkansas Campus Historic District, listed on the National Register of Historic Places in 2009.

The planned construction of additional engineering facilities across Dickson Street will necessitate reconfigured pedestrian crossings to increase safety. The new building(s) and crossings will refocus attention on the south façade of *Engineering Hall*, which is currently used mainly for loading and deliveries. Also contributing to this façade will be an addition to complete the missing west wing of the building, which could include a 200-seat classroom and departmental offices. The project will be fully commissioned and constructed to the equivalent of LEED Silver or Green Globes Two Globes.

Pertinent Data

Constructed:	1927 with 1950 matching addition
Style:	Collegiate Gothic / Classical Revival
Size:	58,511 sf + 11,265 sf addition (3755 sf on 3 floors)
Current Use:	General Education for College of Engineering
Proposed Use:	General Education for College of Engineering
% Auxiliary:	None
Replacement Costs:	Estimated at \$26.6 million

Construction Schedule

The estimated design and construction timeline is 30 months. Estimated project costs factor construction beginning May 2013.

Plans Completed to Date

None.

History of Request

This is the third time this project has appeared in the biennium request.

ENGINEERING HALL

	Estimated Project Costs					
Α.	Building Construction			\$	10,359,525.00	
В.	Built-in equipment			\$	805,071.00	
C.	Architectural and Engineering Fees			\$	2,129,378.00	
D.	Contingencies			\$	2,302,365.00	
E.	Other Costs					
	Advertising	\$	500.00			
	Land & Right-of-Way					
	Surveys & Borings	\$	87,484.00			
	Site Improvements	\$	387,190.00			
	Utilities	\$	559,531.00			
	Parking Lots					
	Telephone/Remote Utility Fees	\$	576,182.00			
	Total Other Costs			\$	1,610,887.00	
F.	Movable Furniture and Equipment			\$	815,131.00	
	1					

Total Estimated Project Costs

18,022,357.00

\$

Project Funding Sources

	Source of Funds	Amount	Percent of Costs
A.	State Funds	\$ 18,022,357.00	100.00%
Β.	Federal Funds	\$ -	0.00%
С.	Private Gifts/Grants	\$ -	0.00%
D.	Bond Proceeds	\$ -	0.00%
Ε.	Auxiliary Funds	\$ -	0.00%
F.	Other Funds		0.00%
	Total Funding	\$ 18,022,357.00	100.00%

BUSINESS BUILDING

RENOVATION for the Sam M. Walton College of Business

Description of Project

Formerly called the Business Administration Building, the *Business Building* was designed by Wittenberg, Delony & Davidson and completed in 1977. Students moved to the new building from Ozark Hall in the historic core of campus. The *Business Building* was constructed, instead, near Kimpel Hall (formerly the Communications Building) on what is now known as McIlroy Hill. The Sam M. Walton College of Business occupies three buildings in the district.

After more than 30 years in service, the *Business Building* and Kimpel Hall still account for a good percentage of the campus' instructional space. While the structure itself is in decent condition, the building systems and interiors have received hard use and are in need of renewal. Restrooms should be brought to current code and ADA requirements, and finishes upgraded to today's standards. Perhaps most critical to the curriculum is the replacement of the routers and switches which control the flow of digital information in the College.

The Sam M. Walton College of Business continues to grow, and some reconfiguration of the existing space is necessary to accommodate that growth. In the past year, 10 staff and student workers have been added in Applied Sustainability Center alone. Undergraduate Programs staff have outgrown their areas, student organization space is limited, and additional solutions are needed. The College has added 35 doctoral students and adjunct faculty over the last ten years, and placing these individuals has become increasingly difficult.

Pertinent Data

Constructed:	1977
Style:	Late Modernist
Size:	115,700
Current Use:	Education and General
Proposed Use:	Education and General
% Auxiliary:	None
Replacement Costs:	Estimated at \$39 million

Construction Schedule

The estimated design and construction timeline is 18 months. Estimated project costs factor construction beginning May 2013.

Plans Completed to Date

None.

History of Request

This is the first time this project has appeared in the biennium request.

BUSINESS BUILDING

	Estimated Project Costs					
Α.	Building Construction			\$	6,362,392.00	
Β.	Built-in equipment			\$	-	
C.	Architectural and Engineering Fees			\$	906,116.00	
D.	Contingencies			\$	1,183,738.00	
E.	Other Costs					
	Advertising	\$	500.00			
	Land & Right-of-Way					
	Surveys & Borings	\$	69,373.00			
	Site Improvements	\$	86,716.00			
	Utilities	\$	28,905.00			
	Parking Lots					
	Telephone/Remote Utility Fees	\$	101,004.00			
	Total Other Costs			\$	286,498.00	
F.	Movable Furniture and Equipment			\$	127,247.00	

Total Estimated Project Costs

8,865,991.00

\$

Proi	iect	Funding	g Sources
	,	i unum	5 00ui 000

	Source of Funds	Amount	Percent of Costs
Α.	State Funds	\$ 8,865,991.00	100.00%
В.	Federal Funds	\$ -	0.00%
С.	Private Gifts/Grants	\$ -	0.00%
D.	Bond Proceeds	\$ -	0.00%
E.	Auxiliary Funds	\$ -	0.00%
F.	Other Funds		0.00%
	Total Funding	\$ 8,865,991.00	100.00%

PLANT SCIENCES 2

NEW CONSTRUCTION and demolition for the Dale Bumpers College of Agricultural, Food and Life Sciences and the Division of Agriculture

Description of Project

All of the plant-related departments in the Dale Bumpers College of Agricultural, Food and Life Sciences, and the Division of Agriculture are seriously constrained for laboratory, office and classroom space. All but one of these four units are housed in up to four different locations, which seriously reduces program cohesiveness. In addition, a number of faculty and staff in these units are housed at the Research and Extension Center nearly two miles from campus, while others are housed in the Agricultural Annex, which is one of the oldest buildings on campus and cannot meet modern program requirements.

When the Plant Science building was completed in 1977, it was supposed to be only the first phase of much larger facility that was envisioned to house all of the associated programs in the plant sciences. Though the completion of the Rosen Center in 1995 marginally improved this gap, an estimated 60,000 square feet of new space is essential to meet the immediate critical needs of these programs.

Constructing a new facility in this location will require the removal of the Agricultural Annex, formerly used by both agriculture and home economics and as the student infirmary. The building is now overflow space for the Dale Bumpers College, though it does not lend itself well to either classroom or laboratory use. The Agricultural Annex is a secondary contributing building to the University of Arkansas Campus Historic District, listed on the National Register of Historic Places in 2009. It is one of the oldest remaining buildings on campus (completed in 1905), but it is small (14,492 sf), inefficient, and in very poor condition. Taking into account that the site could be much more efficiently developed and the building has comparably little historical importance, it is recommended that the Agricultural Annex be demolished and replaced, following complete recordation in accordance with US Department of the Interior standards.

The project will be fully commissioned and constructed to the equivalent of LEED Silver or Green Globes Two Globes.

Pertinent Data

Size:	59,500 sf (3.5 stories at 17,000 sf per floor)
Proposed Use:	General Education
% Auxiliary:	None

Construction Schedule

The estimated design and construction timeline is 36 months. Estimated project costs factor construction beginning May 2013.

NARRATIVE



(CONTINUED)

Plans Completed to Date None.

History of Request

This is the third time this project has appeared in the biennium request.

FORM 2

PLANT SCIENCES 2

Α.	Building Construction		\$ 20,527,500.00
Β.	Built-in equipment		\$ 922,250.00
C.	Architectural and Engineering Fees		\$ 3,700,268.00
D.	Contingencies		\$ 4,924,838.00
Ε.	Other Costs		
	Advertising	\$ 500.00	
	Land & Right-of-Way		
	Surveys & Borings	\$ 65,400.00	
	Site Improvements	\$ 1,309,000.00	
	Utilities	\$ 3,259,500.00	
	Parking Lots		
	Telephone/Remote Utility Fees	\$ 1,034,327.00	
	Total Other Costs		\$ 5,668,727.00
F.	Movable Furniture and Equipment		\$ 1,855,006.00

Estimated Project Costs

Total Estimated Project Costs

37,598,589.00

\$

Project Funding Sources

	Source of Funds	Amount	Percent of Costs
A.	State Funds	\$ 37,598,589.00	100.00%
Β.	Federal Funds	\$ -	0.00%
С.	Private Gifts/Grants	\$ -	0.00%
D.	Bond Proceeds	\$ -	0.00%
E.	Auxiliary Funds	\$ -	0.00%
F.	Other Funds		0.00%
	Total Funding	\$ 37,598,589.00	100.00%

NARRATIVE

10.

NANOSCALE SCIENCE AND ENGINEERING BUILDING - 3rd FLOOR NEW CONSTRUCTION

Description of Project

The Nanoscale Science and Engineering Building, currently under construction, will provide standard and specialized wet/dry laboratories, offices, and support functions for the College of Engineering; the J. William Fulbright College of Arts & Sciences; and the Dale Bumpers College of Agricultural, Food, and Life Sciences. As designed, the facility is a highly flexible structure that can readily accommodate programmatic change. Due to budget constraints, the space allocated for the cleanroom, as well as the entire third floor of the building, will be unfinished, shelled space until such time as funds become available to complete the work. The project is fully commissioned and is pursuing a rating of LEED Silver.

The third floor is envisioned to emulate the second floor configuration of wet labs, support spaces, and offices. Wet laboratories are characterized by a greater need for casework and fewer large instruments than the materials development labs, hazardous materials usage, and a relatively high exhaust demand. The wet labs include several support modules, each housing a unique function such as radioisotope usage, cell culture, or protein purification. The wet labs are located on the second and third floors for access to natural light and views as well as to group the highest exhaust demands.

Pertinent Data

Size:17,000 sfProposed Use:Wet labs, support spaces, and offices% Auxiliary:None

Construction Schedule

The estimated design and construction timeline is 12 months. Estimated project costs factor construction beginning January 2013.

Plans Completed to Date

Schematic floor plans were developed in the basis of design for the building.

History of Request

This is the first time individual projects within the *Nanoscale Science and Engineering Building* have been included in the biennium request. The entire building, however, did appear in two previous requests as the #1 ranked project.

FORM 2

NANOSCALE SCIENCE AND ENGINEERING BUILDING - 3rd FLOOR

Estimated Project Costs

A.	Building Construction			\$ 4,700,000.00
<u>л.</u> В.	Built-in equipment			\$ 4,700,000.00
С.	Architectural and Engineering Fees	-		\$ 605,916.00
D.	Contingencies			\$ 878,900.00
Ε.	Other Costs			
	Advertising	\$	500.00	
	Land & Right-of-Way			
	Surveys & Borings	\$	-	
	Site Improvements	\$	-	
	Utilities			
	Parking Lots			
	Telephone/Remote Utility Fees	\$	23,900.00	
	Total Other Costs			\$ 24,400.00
F.	Movable Furniture and Equipment			\$ 235,000.00

Total Estimated Project Costs

6,444,216.00

\$

Project Funding Sources					
	Source of Funds		Amount	Percent of Costs	
A.	State Funds	\$	6,444,216.00	100.00%	
Β.	Federal Funds	\$	-	0.00%	
C.	Private Gifts/Grants	\$	-	0.00%	
D.	Bond Proceeds	\$	-	0.00%	
E.	Auxiliary Funds	\$	-	0.00%	
F.	Other Funds			0.00%	
	Total Funding	\$	6,444,216.00	100.00%	

Describe commitments or funds already collected to finance this project:

\$37 million (\$16 million ADHE bonds, \$5.5 million GIF, \$15.5 million in general obligation bonds) has been allocated to the building to date, but there are no existing funds available to complete the third floor or the cleanroom.

NARRATIVE

BIOTECHNOLOGY RESEARCH CENTER NEW CONSTRUCTION

Description of Project

The *Biotechnology Research Center* will include modern molecular biology and biochemisty laboratories, offices, and support functions for the Colleges of Engineering, Arts & Sciences, and Agriculture. The facility is envisioned as a highly flexible structure that can readily accommodate programmatic change.

As described to date, the *Biotechnology Research Center* will bring together the Arkansas Statewide Mass Spectrometry Facility, currently scattered in three building across campus. Another tenant will be the DNA Resource Facility. The building will be built of reinforced concrete to minimize vibrations that would adversely affect performance of sensitive instrumentation. As such, the bottom floor might be laboratory space designed to accommodate large and heavy Fourier transform and TOF mass spectrometers. The second floor could be labs housing isotope ratio mass spectrometry. The third floor could have the DNA Resource Facility and a lab for preparation of bacterial, nucleic acid, and protein samples, as well as additional laboratory space to accommodate future growth. The facility will have high-speed network access to the National LambdaRail optical research backbone and to terascale computing facilities on the University of Arkansas campus.

This center is planned to complement the Nanoscale Science and Engineering Building and increase the research capabilities of the University of Arkansas. The project will be fully commissioned and constructed to the equivalent of LEED Silver or Green Globes Two Globes.

Pertinent Data

Size: Proposed Use: % Auxiliary: 145,000 sf Research laboratories, offices, and support functions None

Construction Schedule

The estimated design and construction timeline is 36 months. Estimated project costs factor construction beginning January 2014.

Plans Completed to Date

None.

History of Request

This is the third time this project has appeared in the biennium request.

BIOTECHNOLOGY RESEARCH CENTER

٨	Duilding Construction		¢	
Α.	Building Construction		\$	46,785,500.00
Β.	Built-in Equipment		\$	1,745,700.00
С.	Architectural and Engineering Fees		\$	7,928,272.00
D.	Contingencies		\$	10,117,590.00
Ε.	Other Costs			
	Advertising	\$ 500.00		
	Land & Right-of-Way			
	Surveys & Borings	\$ 159,500.00		
	Site Improvements	\$ 2,972,500.00		
	Utilities	\$ 645,000.00		
	Parking Lots			
	Telephone/Remote Utility Fees	\$ 2,312,786.00		
	Total Other Costs		\$	6,090,286.00
F.	Movable Furniture and Equipment		\$	5,392,694.00

Estimated Project Costs

Total Estimated Project Costs

78,060,042.00

\$

Project Funding Sources

	Source of Funds	Amount	Percent of Costs
A.	State Funds	\$ 78,060,042.00	100.00%
Β.	Federal Funds	\$ -	0.00%
C.	Private Gifts/Grants	\$ -	0.00%
D.	Bond Proceeds	\$ -	0.00%
E.	Auxiliary Funds	\$ -	0.00%
F.	Other Funds		0.00%
	Total Funding	\$ 78,060,042.00	100.00%

ENGINEERING RESEARCH CENTER 2

NEW CONSTRUCTION for the College of Engineering

Description of Project

This request is precipitated by growing limitations in the existing Engineering Research Center. The sprawling, one-story building presents challenges to collaboration, and its physical limitations make needed lab spaces impossible to achieve. The building is useful for individualized lab space, which has reached full capacity. These circumstances led to the request for new facilities to greater benefit students and faculty while increasing the College of Engineering's national visibility and rankings.

While acknowledging that the current Engineering Research Center is valuable space, the College of Engineering cannot expand its faculty numbers or its research capabilities and activities within the square footage available. The College requires new individualized lab space, new multi-user research facilities, laboratories that provide new research capabilities, and educational lab facilities used specifically to train students.

Engineering Research Center 2 is envisioned as the first of three buildings to total approximately 250,000 gsf. These buildings would house both BSL-3 and GLP facilities for translational research purposes. In addition, the buildings would include a civil engineering structures laboratory, individualized lab space for new faculty, some educational training lab space for student activities, and shared user spaces that would benefit six of the seven departments in the College of Engineering. These research activities would also support the proposed Applied Research Center in its goal to have university researchers work directly with industry partners. The project will be fully commissioned and constructed to the equivalent of LEED Silver or Green Globes Two Globes.

Pertinent Data

square footage: use: % auxiliary: 75,000 Research and General Education None

Construction Schedule

The estimated design and construction timeline is 30 months. Estimated project costs factor construction beginning July 2014.

Plans Completed to Date

None.

History of Request

This is the first time this project has appeared in the biennium request.

ENGINEERING RESEARCH CENTER 2

Α.	Building Construction			\$	15,000,000.00
Β.	Built-in equipment			\$	1,312,500.00
C.	Architectural and Engineering Fees			\$	2,546,986.00
D.	Contingencies			\$	3,283,219.00
Ε.	Other Costs				
	Advertising	\$	500.00		
	Land & Right-of-Way				
	Surveys & Borings	\$	82,500.00		
	Site Improvements	\$	1,200,000.00		
	Utilities	\$	75,000.00		
	Parking Lots				
	Telephone/Remote Utility Fees	\$	254,000.00		
	Total Other Costs			\$	1,612,000.00
F.	Movable Furniture and Equipment			\$	1,045,313.00
				•	

Estimated Project Costs

Total Estimated Project Costs

24,800,018.00

\$

Project Funding Sources

	Source of Funds	Amount	Percent of Costs
A.	State Funds	\$ 24,800,018.00	100.00%
Β.	Federal Funds	\$ -	0.00%
С.	Private Gifts/Grants	\$ -	0.00%
D.	Bond Proceeds	\$ -	0.00%
E.	Auxiliary Funds	\$ -	0.00%
F.	Other Funds		0.00%
	Total Funding	\$ 24,800,018.00	100.00%

NARRATIVE

13.

NANOSCALE SCIENCE AND ENGINEERING BUILDING - N & S WINGS NEW CONSTRUCTION (ADDITION)

Description of Project

The Nanoscale Science and Engineering Building, currently under construction, will provide standard and specialized wet/dry laboratories, offices, and support functions for the College of Engineering; the J. William Fulbright College of Arts & Sciences; and the Dale Bumpers College of Agricultural, Food, and Life Sciences. The project is fully commissioned and is pursuing a rating of LEED Silver. The building was designed to accept two wings to form a quadrangle. This request is for construction of those building additions.

The new building wings will include similar uses, such as standard and specialized wet/dry laboratories, clean room(s), offices, and support spaces. The facility is envisioned as a highly flexible structure that can readily accommodate programmatic change. The foundation structure, at certain locations, will have the ability to isolate sensitive imaging equipment from outside vibration. The facility will have high-speed network access to the National LambdaRail optical research backbone.

The laboratory space will be designed to flexibly accommodate growth and change in general. Many of the labs will have large, open spaces in the middle with overhead service carriers to facilitate the easy placement of future instrumentation. Most of the built-in laboratory furniture will be flexible. The project will be fully commissioned and constructed to the equivalent of LEED Silver or Green Globes Two Globes.

Pertinent Data

Size:	32,000 sf north wing addition + 33,200 sf south wing
	addition = 65,200 sf total
Proposed Use:	Research laboratories and support spaces
% Auxiliary:	None

Construction Schedule

The estimated design and construction timeline is 36 months. Estimated project costs factor construction beginning in May 2014.

Plans Completed to Date

A grant to NIH was prepared in 2009, which included preliminary programming and conceptual design for this project.

History of Request

This is the first time an addition to the *Nanoscale Science and Engineering Building* has been included in the biennium request. The initial building, however, did appear in two previous requests as the #1 ranked project.

FORM 2

00.00	30,318,0	\$		Building Construction	Α.
600.00	5 1,010,6	\$		Built-in equipment	Β.
251.00	4,674,2	\$	5	Architectural and Engineering Fees	С.
923.00	6,187,9	\$		Contingencies	D.
				Other Costs	Ε.
		\$ 500.00	\$	Advertising	
				Land & Right-of-Way	
		\$ 71,250.00	\$	Surveys & Borings	
		\$ 1,586,600.00	\$	Site Improvements	
		\$ 315,200.00	\$	Utilities	
				Parking Lots	
		\$ 2,406,550.00	\$	Telephone/Remote Utility Fees	
100.00	4,380,	\$		Total Other Costs	
695.00	1,616,6	\$		Movable Furniture and Equipment	F.
		71,250.00 1,586,600.00 315,200.00	\$ \$ \$ \$	Land & Right-of-Way Surveys & Borings Site Improvements Utilities Parking Lots Telephone/Remote Utility Fees Total Other Costs	F.

NANOSCALE SCIENCE AND ENGINEERING BUILDING - N & S WINGS

Estimated Project Costs

Total Estimated Project Costs

48,187,569.00

\$

Project	Funding	Sources	
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	Source of Funds	Amount	Percent of Costs
A.	State Funds	\$ 48,187,569.00	100.00%
Β.	Federal Funds	\$ -	0.00%
С.	Private Gifts/Grants	\$ -	0.00%
D.	Bond Proceeds	\$ -	0.00%
E.	Auxiliary Funds	\$ -	0.00%
F.	Other Funds		0.00%
	Total Funding	\$ 48,187,569.00	100.00%