REQUEST FOR ARCHITECTURAL

& ENGINEERING SERVICES

Veterinary Medicine Addition
2019-21

DFDM Project # 18H2H

January 2019

CONSULTANT REQUIREMENTS

Architectural/Engineering/Planning (Rev. 2018-05)

This request is to seek design consultant(s) to provide architectural/engineering/planning (AEP) services to complete the project phases indicated below for **State Project No. 18H3H – Veterinary Medicine Addition & Renovation at the University of Wisconsin-Madison** (*see attached for further detail*).

Pre-Design Phase	Preliminary Design Phase	Final Design Phase	Bidding Phase	Construction Phase
☐	☒	☒	☒	☒

Consultants should submit their qualifications demonstrating specific expertise in the design, coordination, and remodeling of new and existing buildings to house office, administrative, classroom, research and teaching functions. The project design team should consist of architectural, landscape, civil, structural, mechanical, electrical, plumbing, fire protection, audio visual, interior design, and ADA consultant services. 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 interactive planning process by meeting with appropriate DFDM, UW System and campus staff, including Facilities Planning & Management and UW School of Veterinary Medicine, to verify that the documentation created in 13I1S Expansion Feasibility Study for the School of Veterinary Medicine dated September 23, 2015 is still accurate. Working in collaboration with DFDM, UW System and the campus project team, the consultant will be responsible for verification, program development and documentation; creating and documenting design alternatives with corresponding budget estimates and construction cost and project schedules for each design alternative; and determining and documenting any project work dependencies for selected design alternatives.

The design consultant(s) will provide limited pre-design and complete preliminary-design services through construction administration/project closeout services as indicated in the Division of Facilities Development and Management *Policy and Procedure Manual for Architects/Engineers and Consultants*, and the DFDM *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.

Preliminary-Design Services: In addition to the requirements for preliminary-design through construction in the *Policy and Procedure Manual for Architects/Engineers and Consultant,* the following addition and clarifications should be noted:

- Prepare a comprehensive building code assessment and recommendations on the entire facility complex.
- Verify existing project planning. Evaluate and prepare for DFDM, UW System 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 an updated Program Statement per the *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 documents necessary for Board of Regents and State Building Commission.

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, and 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 cost estimates, full schematic building level floor plans for each level impacted by the project, two-dimensional elevations, building sections, 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, distinguished characteristics, or legibility.

All final documentation must be provided electronically via download link, USB flash drive, or optical disc (CD or DVD) in its original electronic format and 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.

In addition to deliverables listed above, A/E shall provide:

- Seven (7) bound color copies of the Concept Report, letter size. (Diagrams may be 11" x 17", folded to fit in the bound report). One (1) bound color copy for DFDM and six (6) for UW System/ campus.
- Electronic copies, in PDF format, downloadable or via web link. All diagrams shall be capable of full graphic clarity in either color or black and white.
- Provide one mounted color image of the building exterior, approximately 30" x 36", mounted on a foam core board. The image need not be an image created specifically for this purpose but may be an image that is produced as part of the Design Report content. Also provide an electronic PDF of the image.

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

- The design consultant(s) will work with DFDM and the appropriate campus staff (UW-Madison FP&M, School of Veterinary Medicine, Environmental Health and Safety, and UW Police Department) 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 DFDM 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 DFDM Project Manager.
- The A/E team will attend a review meeting at each of the Preliminary Review and Final Review stages. The A/E will provide the campus with eight (8) complete review sets in addition to the review sets required for DFDM for the Preliminary Review and Final Reviews.
- A/E will provide 3D detailed design renderings illustrating massing, volume of main spaces, finishes, and colors for review by DFDM, UW System, FP&M, and the UW School of Veterinary Medicine as the project progresses. These drawings should show information appropriate to the phase of the work (early drawings will show the architecture of the spaces; later drawings will show all colors and materials). These drawings will show exterior elevations and all major interior spaces. These drawings will also be used in the public and city zoning review process for the project.
- A/E will provide interior design services including design and specifications of systems furniture in office areas in addition to design and specification of all other movable furniture. This item should be a line item in the fee proposal.
- A/E will design building signage to include all life safety, room number, informational and way finding. Exterior building identification signage will be coordinated by FP&M staff and paid for by the project.
- The project will include design and construction documents for all landscape and site work around the new facility including new entry sidewalks, retaining walls, and landscape plantings and parking modifications, if necessary.
- At the end of construction, the A/E will provide DFDM with electronic copies and FP&M with two (2) electronic and two (2) hard-copies each of O&M manuals and record drawings/specifications in AutoCAD/MS Word/PDF format, including the work of all sub-consultants, furnishings, signage, etc. Any renderings or models generated by the AE will also be turned over to the campus.

Note that per the DFDM *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 DFDM based on the demolition plans. Abatement documents will be incorporated into the bid set.
- Third party Level-II commissioning will be contracted separately by DFDM.

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.

13I1S Expansion Feasibility Study for the School of Veterinary Medicine
dated September 23, 2015

Note: This template is based upon DFDM's *Policy and Procedure Manual for Architects/Engineers and Consultants*, December 2013 edition, Section Three - Pre-Design Phase (*3.c.2.b Table of Contents, 3.C.2.e Physical Planning Issues, 3.C.2.h Room Data Sheets, 3.C.2.i Special Planning Issues, 3.C.2.j Budget*).

ID	Y/N?	Description	Comments and Clarification Notes
1.00	☒	Project and Program Considerations	*For Feasibility Studies, Project and Program Considerations items that are selected to recognize that the documentation and professional guidance required to develop the required support documentation is above and beyond the traditional 10% concept report, but not necessarily completing the full 35% preliminary design efforts.*
1.01	☒	Program Verification	
1.02	☒	Design Concept	
1.03	☒	Site/Survey	
1.04	☒	Site/Existing Conditions	
1.05	☒	Facilities Site Plan	
1.06	☒	Existing Land Use	*1.05 Please see <https://www.wisconsin.edu/capital-planning/reference/deliverables/> for more detailed AutoCAD and geospatial data definition requirements.*
1.07	☒	*Topography/Drainage*	
1.08	☒	*Vegetation/Landscaping*	
1.09	☒	*Subsurface Conditions*	*1.06 Includes erosion control requirements.*
1.10	☒	*Construction Staging/Occupancy of Site During Construction*	
1.11	☐	*WEPA – Environmental Impact Determination and Identification*	
1.12	☒	Utilities/Infrastructure	*1.13 Includes the central utility plant.*
1.13	☒	Existing: capacity and condition of existing lines and equipment	*1.14 Includes chilled water, domestic water, electrical power, natural gas, sanitary sewer, storm water sewer, steam and condensate return, and telecommunications.*
1.14	☒	Proposed central and site utility systems	
1.15	☒	Maintaining utility services and infrastructure during construction	*1.20 Includes during construction period.*
1.16	☒	Transportation/Circulation	
1.17	☒	Vehicular/Bicycle/Pedestrian	
1.18	☒	Parking	
1.19	☒	Service/Loading/Unloading	
1.20	☒	Access to Site	
1.21	☒	Existing Building Conditions	
1.22	☒	Conditions of Existing Building Spaces as necessary for design	
1.23	☒	Condition of Existing Infrastructure and Equipment	
1.24	☒	Demolition Planning/Phasing	
1.25	☒	Building Systems	
1.26	☒	Structural Systems	
1.27	☒	Mechanical Systems/HVAC	
1.28	☒	*Environmental Control*	
1.29	☒	Electrical/Lighting	
1.30	☒	*Lighting Design*	
1.31	☒	*Fire Alarm*	
1.32	☒	*Telecommunications Systems*	
1.33	☒	*Access Control*	
1.34	☒	Plumbing	
1.35	☒	Fire Protection Systems	
1.36	☒	Signage (Building and Room/Space Identification)	
1.37	☒	Other Systems	
2.00	☒	Design Considerations	*2.04 Includes the Sustainable Facilities Standards Checklist items applicable to the project.*
2.01	☒	Cost Estimating	
2.02	☒	Constructability	*5.01 Please see <https://www.wisconsin.edu/capital-planning/reference/deliverables/> for more detailed AutoCAD and geospatial data definition requirements.*
2.03	☒	Accessibility	
2.04	☐	Sustainable Facilities and Energy Conservation	
2.05	☒	Equipment Layout	*5.02 Includes performance test data, list of normal and alarm set points, and contact information for responsible parties.*
2.06	☒	Campus Technical Review	
3.00	☒	Bid Documents (see contract for details)	*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.*
4.00	☒	Construction Administration (see contract for details)	
4.01	☒	Commissioning (Level 1)	
5.00	☒	Post-Construction Deliverables (see contract for details)	*5.04 Includes contact information for responsible parties and date of warranty expiration.*
5.01	☒	As-Built Record Drawings	
5.02	☒	Commissioning Details	
5.03	☒	Operations and Maintenance Manuals	
5.04	☒	Warranty/Guarantee Details	

ID	Y/N?	Description	Comments and Clarification Notes
A.00	☒	Planning Considerations	*A.04 Includes developing recommendations based on room scheduling and utilization data, program delivery, enrollment projections, and appropriate benchmarks.*
A.01	☐	Master Planning	
A.02	☒	Blocking and Stacking Diagramming	
A.03	☐	Scope Definition	
A.04	☐	Space Needs Analysis	
A.05	☒	Site Evaluation	
A.06	☐	Market Study	
A.07	☐	Space Utilization Analysis	
B.00	☐	Project and Program Considerations	*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.12 Includes adaptive reuse, functionality assessment, and/or physical condition assessment.*
B.01	☒	Occupants/User Activities	
B.02	☒	Space Tabulation	
B.03	☒	Room Data Sheets	
B.04	☒	Site/Survey	
B.05	☒	Easements	
B.06	☒	Zoning Approval Efforts	
B.07	☐	Floodplain Restrictions	
B.08	☐	Landholdings/Ownership/Boundaries	
B.09	☒	Utilities/Infrastructure	
B.10	☒	Energy Modeling	
B.11	☒	Existing Facilities Survey	
B.12	☐	Facility Condition Assessment	
B.13	☐	Document Existing Conditions	
B.14	☐	Concealed Conditions	
B.15	☒	Building Code Analysis	
B.16	☒	Phasing Options and Analysis	
B.17	☒	Adjacency Analysis and Matrix	
B.18	☒	Facility Specialties	*B.23 Includes architectural and performance lighting (artistic, athletics, theatrical)* *B.25 Includes selection, recommendation, specification, and/or systems furniture layout.*
B.19	☒	Acoustics	
B.20	☒	Elevator Constructor/Vertical Transportation	
B.21	☐	Food Service Operations/Kiosks	
B.22	☒	Security/Video Surveillance	
B.23	☐	Specialty Lighting	
B.24	☐	Other (Please Specify)	
B.25	☒	Furniture and Equipment	
B.26	☐	Design Standards to Follow	
B.27	☒	Furniture Design Services	
B.28	☒	Fixed Equipment	
B.29	☒	Movable Equipment	
B.30	☐	Art Selection Assistance	
B.31	☐	Universal Design	*C.01 Includes additional on-site construction administration beyond basic services*
B.32	☐	Historic Preservation	
B.33	☐	Historic Structure Report (HSR)	
B.34	☐	Historic Preservation Plan (HPP)	
B.35	☐	Wisconsin Historical Society Approval for Building Concept	
B.36	☒	Presentations	
B.37	☒	Formal Presentation(s)	
B.38	☒	Presentation Materials	
B.39	☒	Facilitate on Campus Design Document Review	
C.00	☒	Construction Administration	
C.01	☐	Additional Construction Administration Services	
D.00	☒	Miscellaneous	*D.02 includes LEED certification, certification submittal, and/or measurement & verification report.*
D.01	☒	Wayfinding	

D.02	☐	LEED™	
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)	*E.00 Includes Benchmark Facility Tours, Selective and Investigative Demolition, Post-bidding Analysis, and Specialty Bidding Conditions*

SUPPLEMENTAL SERVICES — Board of Regents Evaluation Criteria Responses

ID	Y/N?	Description	Comments and Clarification Notes
F.00	☐	General Considerations	*F.01 Determine and document what type(s) of space is(are) required and where surge space is available to facilitate any portion of the proposed project solution/phase/alternate.* *F.02 Determine and document if any site utility work is required to facilitate the proposed project scope that is not included in the proposed project solution/phase/alternate scope and budget estimate.*
F.01	☐	Surge Space(s) Identification	
F.02	☐	Utility Infrastructure Impact(s) Identification	
G.00	☐	Priority Considerations	*G.01 Determine and document what capital project work is required to facilitate any portion of the proposed project solution/phase/alternate. The scope of work identified in this section should not be included in the proposed project solution/phase/alternate scope or budget estimate.*
G.01	☐	Project Sequence Dependency Identification	
H.00	☐	Physical Development Considerations	*H.01 Determine and document what building code compliance resolutions are required and included in the proposed project solution/phase/alternate scope and budget estimate.* *H.02 Determine and document what health & safety condition compliance resolutions are required and included in the proposed project solution/phase/alternate scope and budget estimate.* *H.03 Determine and document what environmental protection condition compliance resolutions are required and included in the proposed project solution/phase/alternate scope and budget estimate.* *H.04 Determine and document what facility and/or program standards resolutions are required and included in the proposed project solution scope/phase/alternate and budget estimate.* *H.05 Complete the table shown at left as per each proposed project solution/phase/alternate and provide the additional assessments for each type of project space as outlined below the table.*
H.01	☐	Code Compliance Resolution	
H.02	☐	Health & Safety Condition Resolution	
H.03	☐	Environmental Protection Condition Resolution	
H.04	☐	Facility and/or Program Standards Condition Resolution	
H.05	☐	Space Profile (Demolition/Renovation/New Construction)	

Demolition	40,000	ASF	75,680	GSF	$	960,000
Renovation	22,000	ASF	38,000	GSF	$	12,064,000
New Construction	75,000	ASF	139,000	GSF	$	71,892,000
Project Total	137,000	ASF	252,680	GSF	$	84,916,000

Determine and document the following for each solution/phase/alternative…

1. *Estimated capital renovation costs and current replacement value for the proposed space to be demolished.*
2. *Estimated capital renovation costs and current replacement value for the proposed space to be renovated.*
3. *If any portion of the proposed new construction space is required to resolve building codes and standards, and/or health and safety conditions, and/or environmental protection conditions, and/or facility or program standards which cannot be economically be resolved in existing space.*
4. *If any portion of the proposed new construction space is required to resolve demonstrated capacity issues or space shortages related to enrollment growth and 5-year enrollment trends (specific program and/or overall campus).*
5. *If any portion of the proposed new construction is required to resolve poor adaptive reuse potential for existing space that could have been included in the proposed project solution scope and budget estimate.*

I.00	☐	Program Considerations	*I.01 Determine and document functionality improvements that the proposed project solution/phase/alternate provides in comparison to existing conditions and space.* *I.02 Determine and document a total energy cost estimate comparison for the proposed project per solution/phase/alternate vs. existing space energy costs.*
I.01	☐	Functionality Improvement(s) Identification	
I.02	☐	Energy Cost Impact Profile	
I.03	☐	Space Shortage(s) Condition Resolution	
I.04	☐	Space Utilization Profile	

Please breakdown the energy cost estimate by electrical, heating, and cooling.
I.03 Determine and document if any portion of the proposed project solution/phase/alternate resolves a demonstrated space shortage for program space, especially instructional classrooms and laboratories.
I.04 Determine and document if any portion of the proposed project solution resolves known and demonstrated poor space utilization, especially instructional classrooms and laboratories.

Major Project Request
2019 - 21 Biennium

Agency	Institution	Facility ID	Facility Name
University of Wisconsin	Madison	285-0A-0093	School of Veterinary Medicine

Project Title

Veterinary Medicine Addition & Renovation

Project Request

The UW System requested, and the Board of Regents approved, this project of $128,103,000 ($88,656,000 General Fund Supported Borrowing; $1,447,000 Building Trust Funds; and $38,000,000 Gifts) to construct a new veterinary medicine facility and renovate portions of the animal hospital at UW-Madison. It has been included in the proposed 2019-21 Capital Budget request submitted to the Department of Administration and the State Building Commission.

Project Description and Scope

This project constructs a new three-story building on the Lot 62 site, just north of the School of Veterinary Medicine (SVM) between Observatory and Linden Drives. The new facility will provide space for the small animal clinic and connect it to the existing clinic; construct new research, animal biosafety level 3, and biosafety level 2 and 3 laboratories; and include new offices, conference rooms, and shared collaboration/interaction spaces to support the teaching hospital. The clinical space will be expanded to increase access to the small and large animal isolation suites that are required to meet accreditation standards, increase the quantity of specialized surgery environments and equipment, provide imaging space for horses and cattle, and separate patient access to medical oncology services. The clinic currently has inadequate space for patient waiting and separation of species, and little privacy for admissions and discharge. Additional space will be dedicated to student work center diagnostics, treatment planning, medical records updates, client communications, and classrooms. This project will also renovate portions of the animal hospital and raze three buildings (Veterinary Diagnostic Laboratory, Farm House, Storage Building I) at the SVM Charmany site. The following summary is the construction cost portion for the proposed scope of work.

Demolition:	40,000	ASF	75,680	GSF	$	960,000
Renovation:	22,000	ASF	38,000	GSF	$	12,064,000
New Construction:	75,000	ASF	139,000	GSF	$	71,892,000
Project Total:	**137,000**	**ASF**	**252,680**	**GSF**	**$**	**84,916,000**

Due to the significant deficiencies with the current biosafety spaces, they will be converted to conventional animal holding areas and new high-containment zone, biosafety and animal biosafety research laboratories will be constructed. The containment suite will be designed to meet the Association for the Assessment and Accreditation of Laboratory Animal Care (AALAC) guidelines and meet or exceed the fifth edition of the Biosafety in Microbial and Biomedical Laboratories (BMBL) standards. It will be equipped with both laboratory and vivaria functions and meet federal operational guidelines and standards for a variety of research programs including biosafety level 3 enhanced (BSL-3E), zoonotic diseases (BSL-3), and dual use research of concern (DURC) pathogens; select agent; and tier one. The new biosafety and animal biosafety level space will be comprised of eight laboratories and four holding rooms in a configuration that can be divided into four separate suites to allow independent operations for multiple pathogen work. The flexibility incorporated into the proposed design layout can accommodate research projects under multiple scenarios depending on the program needs.

Security at entry and exit points, as well as in between lab and holding room doors, will also be incorporated. These security systems allow for select agent work requiring mandated federal registration to occur without affecting protocols for others working in the biosafety laboratory zone. Each animal holding room will have a small procedure room attached to it for invasive procedures or necropsy work. This allows for a segregated space, away from other research animals and is compliant with the National Research Council (NRC) Guide for the Care and Use of Laboratory Animals. An air lock is provided in the animal room exit into the dirty corridor and may be used to decontaminate racks or other large equipment entering or exiting the holding-lab suite. This air lock also functions as a safety measure in combination with the differential air pressures to mitigate cross contamination. At the biosafety laboratory perimeter and dirty corridor exit, there is an additional air lock for outgoing/incoming equipment with decontamination capabilities, as well as an autoclave for sterilization of waste prior to exiting the high-containment zone. An alternate means for shower out capability from

the dirty corridor will also be provided, allowing for flexibility in protocol development while also functioning as a secondary means of safety exiting the containment boundary.

Background

The School of Veterinary Medicine facility (144,330 ASF/248,850 GSF) was constructed in 1983 and an 8,100 GSF addition was added in 2009 to house a tomography unit and associated clinical space. The School also occupies the SVM-Hanson Biosciences Building (27,300 ASF/43,500 GSF constructed in 1962) and has a large animal instructional facility located on Mineral Point Road. More SVM faculty research programs are scattered around campus in a variety of buildings, including the Biotron Laboratory and the Waisman Center. These facilities collectively house a veterinary medical teaching hospital, UW Veterinary Care, and instructional and research space.

The curriculum provides a broad education in veterinary medicine with learning experiences in food animal medicine and other specialty areas including human vaccinations for rare viruses such as Ebola, Zika, and other newly emerging diseases. Faculty in the school's four academic departments train 87 students each year in a four-year program leading to a Doctor of Veterinary Medicine (DVM) degree. In addition, the school provides exceptional graduate research training in core areas of animal and human health through its Comparative Biomedical Sciences Graduate Degree Program. Students may also choose from a variety of dual degree options. The program has earned a reputation as one of the country's leading schools for veterinary medicine.

A feasibility study to determine the appropriate and adequate SVM facilities expansion for the next 30 years was completed in 2013. The study also assessed the existing facilities to determine the highest and best use for clinical and research space in the context of the proposed expansion. The results and recommendations from the feasibility study form the basis for this capital project request.

Analysis of Need and Project Justification

The small animal hospital was originally designed for ~12,000 cases annually, but now handles ~25,000 cases per year. To meet the current and projected demands of the clinical research program, instructional program, and public demand for specialty services, the case load is projected to increase even further and exceed the capacity of the current facilities. Veterinary medicine practice has evolved considerably since the original facility was designed, requiring more dedicated and specialized spaces. New facilities are required to implement the new diagnostic, treatment, and instructional methods available. The current facilities support an expanding array of extramurally funded research activity, which has grown from $2.6 million in 1991 to $28.6 million today. Consequently, research programs have outgrown existing space, and faculty are constrained by space, rather than by the ability to secure additional funding. New research space is essential for faculty retention and recruitment, to decompress and co-locate research programs, to allow existing programs to grow, and to foster new initiatives.

Critical to the success of the school is its ability to continue to deliver high caliber client and student service, research, and education. The services that have developed and been realized over the last 25 years were not imagined when the original facility was constructed. Two recent examples that the school has been able to deliver through internal renovations are the Tomography suite and the Clinical Skills/Simulation Core, yet nearly a dozen others are currently delivered somewhat ad hoc in overcrowded, under-equipped, and understaffed conditions. There are significant challenges with the current facilities that limit the quality, quantity, and performance of the instructional and research programs. Those challenges include the inability to adequately support large animal clients in an urban setting, a lack of dedicated instructional space, the lack of core services and staff support spaces, an inability to support interdepartmental research teams among the decentralized facilities, a compromised ability to recruit and retain quality faculty, and the risk of losing accreditation and certifications due to the poor building infrastructure condition and performance.

The majority of research activity is housed in the two oldest SVM facilities, constructed in 1962 and 1983. The current biosafety laboratories have significant deficiencies in life safety systems, building infrastructure capabilities, animal holding areas, and storage; and lack of dedicated building systems and imaging capabilities. The lack of quantity and quality research space has led to the dispersion of faculty among multiple locations, resulting in inefficient and expensive administrative and equipment support practices that could be shared and limited if co-located. The dispersion also prevents co-location of potential research teams, limits opportunities for faculty mentoring, and hinders the development of interdepartmental translational research programs.

Major Project Request

2019 - 21 Biennium

Alternatives

No viable alternatives are available to accomplish the proposed intent. Continuing to utilize the overcrowded, obsolete, and unreliable equipment adversely impacts the School of Veterinary Medicine's ability to succeed in the future. It must have facilities that will allow the delivery of high caliber client and student services, extend its research components and most importantly keep up with current education trends. This renovation and addition seeks to satisfy those needs now and into the foreseeable future.

Project Budget per Request for A/E Services

Construction:	$	
Hazardous Materials:	$	
Total Construction:	**$**	
Design Fees (Basic):	$	
Design Fees (Other):	$	
Total Design Fees:	**$**	
Contingency:	$	
DFDM Management Fees:	$	
Equipment/Other:	$	
Total Budget Estimate:	**$**	**107,500,000**

Project Schedule per Request for A/E Services

A/E Selection:	Apr 2019
Design Report:	Sep 2019
Approval:	Oct 2019
Bid Date:	Jan 2021
Start Project:	Apr 2021
Substantial Completion:	Feb 2023
Project Close Out:	May 2023

Previous Action

None.

Segregated Fee Impact(s)

None.

Impact on Operating Budget

	FTE		Cost
Custodial Staff:	2.00	$	231,186
Maintenance Staff:	0.00	$	1,260,000
Supplies & Expenses:		$	19,880
Utility Bills:		$	420,000
TOTAL:	**2.00**	**$**	**1,931,066**

Description

It is estimated that an additional $1,931,066 will be required annually to support the completion of this project for staffing, supplies and expenses, and energy bills. Adequate and appropriate operational budget sources have been identified and internally allocated/committed to support this proposed project.