



DATE: May 14, 2021

SUBJECT: **Request for Proposals (RFP) - Architect/ Engineer (A/E) Team Selection  
Animal Diagnostic Laboratory (ADL) New Building Feasibility Study**  
University Park, PA

TO: CannonDesign  
EwingCole  
HGA  
HOK  
Perkins & Will  
SMP Architects  
Stantec Inc.  
ZGF Architects LLP

## **REQUEST FOR PROPOSALS - PART 1 PROJECT INFORMATION and OWNER REQUIREMENTS**

The Pennsylvania State University (PSU) wants to first thank the 15 submitting teams that expressed interest in this project. After careful review of the submitted Letters of Interest, we congratulate the 8 A/E teams who were selected to continue to the next step in the process: invitation to respond to this Request for Proposal (RFP). PSU uses a qualifications-based A/E Team Selection Process with three assessments: Long-list (based on Letter of Interest), Short-list (based on Proposal responses), and Virtual Interviews. This specific A/E Selection process is as follows.

Proposal responses are due by **Noon on June 4, 2021**. After review of Proposal responses, the Screening Committee will identify three firms for virtual interviews. The **Short-List/ Interview Notice will be posted to the OPP website on June 18, 2021**. Virtual interviews will occur on **July 13, 2021**. Non-Binding Fees will be requested of the three Short-Listed teams, which will be due just prior to the respective Interview.

The results of the AE Team selection process will be posted to the OPP website:  
<https://opp.psu.edu/planningdesignconstruction/project-bidsproposals>.

### **A. PROJECT OVERVIEW, PROJECT PROGRAM AND GOALS**

Penn State Animal Diagnostic Laboratory (ADL) is an integral part of the Pennsylvania Animal Diagnostic Laboratory System (PADLS), which plays a pivotal role as a cornerstone in protecting PA animal agriculture from infectious diseases. Penn State ADL is strategically located to serve the current and expanding needs of animal agriculture in Pennsylvania. ADL is the only full-service virology specialty within PADLS, and ADL brings to PADLS access to unparalleled expertise in genomics and bioinformatics and cutting-edge research facilities within the College of Agricultural Sciences (CoAS) and Penn State Huck Institute of Life Sciences. Leveraging this unique strength, ADL has been playing a significant role in

developing innovative diagnostic tools for emerging animal disease threats. The development of novel probe-based PCR for the rapid and accurate diagnosis of fowl Coryza (poultry disease) and Strep zoo (pig disease) are two recent examples that illustrate this unique strength. With the support and encouragement from the Pennsylvania Department of Agriculture, ADL has forged public-private partnerships to further Pennsylvania-based animal biotechnology companies to develop vaccines and diagnostic tools. In addition, ongoing animal infectious disease research projects at Penn State strengthen our efforts to provide innovative platforms for disease diagnoses and develop sustainable prevention and control practices of emerging and re-emerging diseases.

The Penn State ADL provides a variety of services for animal agriculture which include:

- The Pennsylvania Egg Quality Assurance Program for *Salmonella*
- Avian Influenza/Poultry Diseases Testing and Preparedness
- Avian and Mammalian Field Investigation
- Fish Viral Disease Monitoring
- Swine Viral Disease Testing and Preparedness
- Chronic Wasting Disease Testing
- Testing for Milk Quality, Mastitis and Herd Health
- Routine Pathology Services both Mammalian and Avian species, including rabies
- Expert Virology Services
- Services to the National Animal Health Laboratory Network
- Forensic Services to Law Enforcement
- Diagnostic services to beekeepers

We foresee that ADL's ability to continue to offer reliable, quality, and state of the art diagnostic services to our clientele will be compromised largely due to constraints presented by existing declining infrastructure. Our current facility is over 50 years old and is not amenable for further expansion. In the past decade, there have been several major technological changes in veterinary diagnostics. To stay current and better support Pennsylvania animal agriculture from the emerging disease challenges, it is critical to embrace and implement these state-of-the-art technologies within PADLS. In addition to the declining infrastructure, *ADL faces severe space constraints*, for instance, the regulatory avian influenza testing is performed in a trailer outside the main building, this raises challenges to maintaining biosecurity and biosafety on current premises.

Currently, there is a national trend of expansion of molecular diagnostic services, including the use of Next-Generation Sequencing for animal disease diagnosis. On behalf of PADLS, ADL has taken a lead role to represent Pennsylvania in the National Animal Health Laboratory Network (NAHLN). ADL faculty are participating in the NAHLN pilot projects relating to Antimicrobial Resistance and Whole Genome Sequencing. ADL has initiated the process to upgrade the status of the lab from level 2 to level 1 within the NAHLN system. At our last AAVLD site visit, it was highlighted that our Molecular Diagnostic Services need significant improvements to meet the national standards. In the existing facility, there is no space for expanding the molecular diagnostic services, which is currently located in another building on the Penn State campus.

The initial concept is to design and construct a new building (approximately 40,000 gsf) that will house state of the art laboratory facilities comprising of the following laboratories:

- 1) Molecular Diagnostics
- 2) Avian, mammalian and fish virology
- 3) Bacteriology
- 4) Serology laboratory
- 5) Regulatory Disease Testing Unit
- 6) Necropsy and pathology suites
- 7) a Biosafety level-3 (BSL-3) suite
- 8) Next-generation sequencing facility

In addition to the laboratory areas, the new building will also include a receiving area, meeting areas for clients and producers, staff and faculty offices, and a fully equipped training suite. The training suite will be used to conduct educational and training programs for producers, veterinarians, and other stakeholders in the Commonwealth of Pennsylvania.

The study may be used as the initial basis of design and for procurement of the design professional This study needs to define multiple potential options for advancement of the project. The study should not make a final design/program recommendation nor make final recommendation about advancing the project.

## **B. PROJECT SCHEDULE, DELIVERY METHOD, and OWNER REQUIREMENTS**

PSU anticipates executing the Architect-Engineer contract shortly after team selection. The planning/study/programming efforts will start upon execution of the agreement. We anticipate the study to be completed by **November 2021**.

**It is critically important that the Architectural/Engineering team have experience with:**

1. Complex research environments
2. Animal Diagnostic Facilities
3. Infrastructure for research, diagnostic and testing facilities including incinerators and waste stream management
4. Creation of flexible research facilities that are cost effective, well thought-through design solutions.

### **Task 1: Building & Site Assessment and Existing Conditions Analysis:**

The Building Assessment task is to focus primarily on the existing building and surrounding site.

- Assess and evaluate the existing site, potential new facility sites and how the area surrounding the existing facility might best be planned and utilized.
- Assess and evaluate existing utilities to the existing building and determine capabilities and capacities for new construction and major renovations.
- Develop a space assessment and program analysis.
- Determine which programs are best suited in the new building construction versus programs/function left or moved into heavy- or light-renovated facilities. Consultant to study

options based on programmatic drivers/needs, overall facility process and workflows, programmatic adjacencies, existing building conditions, and other factor to be defined.

- Determine of overall “building suitability”, respective to factors, such as: capital and life cycle cost, long term phasing scenarios, ability to address maintenance backlog in different planning scenarios, ability to achieve university accessibility, energy efficiency, and building shell and structure (vibration, floor to floor, ability to change, code/ seismic upgrades that could be triggered, etc.), MEP/FP systems, etc.
- Consider strategic facility improvements to existing facility to enhance ability to support current and future research functions.
- Provide an assessment of the existing and proposed site.
- Provide an assessment and evaluation of the existing incinerator facility.

#### Task 1 Meetings:

Anticipate monthly meetings through this phase. When possible, per University Guidelines, interview sessions should be conducted in-person and on campus and should be conducted with Academic Department representatives, on-site facilities department and University Park OPP representatives. Other meetings could be held virtually as warranted.

#### Task 1 Deliverables

Building & Site Analysis and Assessment Findings

### **Task 2: Space Needs Analysis & Program Development & Site Selection**

Evaluate and assess space usage, office requirements and related data in the existing building to determine if there is space to support the current activities and programs.

- The study will work closely with Planning, Design and Properties to evaluate and assess research space usage, space requirements and related data.
- Meet with users to develop a basic program document.
- Summarize the mission and vision of the project.
- Work with administration to finalize overall space projections and needs for new or renovated facilities including the identification of facility’s needs and programming gaps for present and future.
- Organize existing data analytics and utilize data as planning and design drivers.
- Provide the estimated space requirements for future activities and programs.
- Develop initial program space document for new space.
- Perform site selection analysis to determine the best placement and arrangement of the building on campus. Review of impact to University Planned District (UPD), zoning, etc.
- Site utility scope. Understand what site utilities and capacities the building needs.
- Provide a summary list of permits that will or may be required for this project to advance to the design stage.
- Provide assessment and evaluation of process flow including materials, systems, people, and waste.
- Provide an assessment and evaluation of maintenance and operational efficiencies and costs.

#### Task 2 Meetings:

Anticipate monthly meetings through this phase. When possible, per University Guidelines, interview sessions should be conducted in-person and on campus and should be conducted with

Academic Department representatives, on-site facilities department and University Park OPP representatives. Other meetings could be held virtually as warranted.

### Task 2 Deliverables

Space Needs Analysis and Program Summary

### **Task 3: Planning Scenarios and Concept Design:**

- Work with PSU OPP to develop planning drivers and priorities
- Apply the established space and facility projections and growth needs to create, develop, and analyze planning scenarios
- Develop a clear and feasible strategic, prioritized and phased framework for the planning and development of capital investments. Identify multiple scenarios for capital project investments, including:
  - Determine what programs could/be, and need to be located in the existing building.
  - Determine what programs could/be, and need to be located in the new building(s).
  - Determine what programs or buildings require: facility renovations; strategic interventions; adaptive re-use of a different building; can remain as is.
  - Consider project sequencing opportunities in considering these scenarios.
- Provide multiple planning scenarios that address the findings from Tasks 1 and 2. Provide an understanding of cost and logistical complications with each scenario along with other pros and cons. Utilize stacking diagrams to help illustrate the options. Additionally, address short and long term opportunities with each option.
  - a. Develop basic concept level floor plans and building massing to help convey design ideas presented in the planning scenarios which may include any additions and renovations that be required to meet future space needs,
  - b. Designing and sequence improvements whereby faculty, students, and staff may be relocated in whole or in part to other facilities required to accommodate this effort.
- Develop Conceptual Design for building and site. Include concept level building/engineering/site/civil/utility/landscape scope. Calculate the impervious surface and green space addition/loss.
- Develop criteria for the incinerator program and consideration of alternative systems.

### Task 3 Meetings:

Anticipate monthly meetings through this phase with the core working group consisting of the Administration, Academic Department representatives, on-site facilities department and University Park OPP representatives. Meetings may consist of both in-person and virtual platforms.

### Task 3 Deliverables

Planning Scenarios findings

Draft report outline

### **Task 4: Cost Estimate and Schedule**

Develop a conceptual cost estimate and schedule for any proposed planning scenario.

- Review the budget and provide a high-level breakdown of costs and fees.

- Determine a high-level schedule that includes design and construction durations.

Task 4 Meetings:

At least two meetings with the core working group that may be combined with other agenda tasks. If held separately, these meetings can be on a virtual platform.

Task 4 Deliverables

Cost Estimate and Schedule

**Task 5: Final Presentation**

Provide a final presentation to administration and physical plant representatives on scenarios and costs to implement the building program study. This study should not make any recommendations about advancing the project or make any recommendations about various programmatic options.

- Review progress of the scope, program, and other data with specific OPP stakeholders prior to submitting the first draft.
- Prepare and submit a draft report and final report for review and comment by the University.
- Assist the PSU project leader with preparation of graphics and metrics for PDRB Gate 1 Programming

Task 5 Meetings:

At least one virtual meeting with the core working group and several virtual work sessions with the PSU Project Manager.

Task 5 Deliverables

Final presentation and final report

**C. RFP ATTACHMENTS AND REFERENCED STANDARDS**

The following supplemental documents are relevant to this RFP:

- Proposed Site Location for the new building (attached to the LOI)
- Form of Agreement. Included is the link to our Form of Agreement 1-S:

<https://wikispaces.psu.edu/display/OPPDCS/00+50+00+CONTRACTING+FORMS+AND+SUPPLEMENTS>. Please review this agreement to ensure that your firm accepts all terms and conditions as written. In submitting a proposal for this project, you acknowledge that you concur, without exception, with all terms, conditions and provisions of Form of Agreement 1-S.

- Office of the Physical Plan (OPP) Standards. The web sites [www.opp.psu.edu](http://www.opp.psu.edu) and <https://wikispaces.psu.edu/display/OPPDCS/Design+and+Construction+Standards> provide information regarding specific design submission requirements and standards, of the University.
- OPP High Performance Standards. The University has a commitment to environmental stewardship and requires the maximum possible use of sustainable and energy-efficient designs and specifications, for architectural, site, utility, structural, mechanical, electrical,

and plumbing work. Refer to the following link for the University's high performance standards that exceed building code minimum requirements:

<https://wikispaces.psu.edu/display/OPPDCS/01+80+00+PERFORMANCE+REQUIREMENTS>

Apart of this is PSU's High-Performance Building Design Standards: Building projects shall comply with ASHRAE Standard 90.1 Energy Standard for Buildings Except Low-Rise Residential Buildings, 2010 version AND as superseded by more stringent requirements of ASHRAE Standard 189.1 Standard for the Design of High-Performance Green Buildings, 2011 version. The standard defines a minimum requirement of LEED Certified for this project.

## REQUEST FOR PROPOSALS - PART 2 PROPOSAL REQUIREMENTS

### A. PRE-PROPOSAL SUBMISSION CONTACT

Contact Greg Kufner [gak21@psu.edu](mailto:gak21@psu.edu) or Jeff Spackman [djs47@psu.edu](mailto:djs47@psu.edu) directly if you have any contract, programming or design related questions.

### B. PROPOSAL REQUIREMENTS

#### **Proposal**

Please answer all the questions in the ordered requested. Limit the entire document to twenty (20) 8-1/2 x 11, portrait formatted, single-sided pages. Submit the Technical Proposal in PDF form electronically to Greg Kufner ([gak21@psu.edu](mailto:gak21@psu.edu)) with a copy to Jeff Spackman ([djs47@psu.edu](mailto:djs47@psu.edu)). Late submissions will not be considered.

#### **Form of Agreement**

The successful team will be contracted through the University's Form of Agreement 1-S. Please review this agreement to ensure that your firm accepts all terms and conditions as written. In submitting a proposal for this project, you acknowledge that you concur, without exception, with all terms, conditions and provisions of the Form of Agreement 1-S.

#### **Proposal Document Format**

Collate technical proposals according to the following Sections. Proposals shall follow the below format, in the order stated to ensure that all pertinent information necessary for evaluation is included and easily comparable by Selection Committee. OPP encourages you to be as brief as possible without sacrificing accuracy and completeness. As applicable throughout proposal, provide professional credit to architectural partners (including design architect, architect of record) for all projects discussed within the proposal for all project images shown.

#### ***Introductory Letter***

An introductory letter shall be provided from the proposed leader(s) of the Candidate Team submitting. The cover letter should be one page maximum. The cover letter should include the following:

- A. This letter should establish the contact information (address, phone, and e-mail) for your team's main point of contact
- B. Primary office location of the submitting candidate team
- C. A concise summary as to why your team is best suited for this project
- D. Statement of certification that all information provided in your submittal is accurate

***Section 1.0 – TEAM STRUCTURE***

- A. Identify prime firm and key consultant firms, size of prime firm, each firm's role on this project, and each firm's qualification and experience on similar projects. Identify past collaboration between prime firm and key consultants.
- B. Provide team organizational chart. Include prime and key consultant firms and provide the name and role of key team members. Clearly identify which team members are designated for leadership positions on the team. Please highlight Diverse Business Enterprise Program (DBE) representation on your team.
- C. Provide resumes of key team members identified in the organizational chart. Include registrations/ certifications, educational background, years of experience, and relevant project experience. Relevant project experience should include size, budget, program type, project overview, and define what each team member's role was on each project listed on their resume. Emphasize each team member's most relevant experience and ideally highlight that the team member has had comparable roles on similar projects. Include at least two client references for each key team member. **If possible, please avoid using Penn State employees as references.**

**Include resumes for, at least, the following key team members:**

1. Principal in Charge (Project Team Lead)
2. Project Manager (PSU's day-to-day point of contact)
3. Lead Programmer. Laboratory Programmer/Planner
4. Campus Planner, Site Designer and/or Landscape Architect
5. Lead MEP Engineer(s)
6. Cost Estimator

Note: If any individual(s) is fulfilling multiple project roles, identify multiple roles on the organizational chart and within individual resumes.

***Section 2.0 – TEAM QUALIFICATIONS***

- A. Provide a summary of qualifications and expertise of the firms with specific emphasis on:
  1. Planning/ Design Excellence
  2. Distinguishing factors of team differentiation
  3. Experience delivering projects of a similar scope, scale, and complexity
  4. Leading edge integrated practices/processes for project delivery, stakeholder engagement and alignment. Experience applying LEAN principles to improve process.
  5. Expertise in the planning, design, and delivery Animal Diagnostic Facilities.

- B. Identify a maximum of five (5) example projects and/or studies within the last ten (10) years, which BEST exemplify qualifications and expertise listed above for the proposed team. Include brief description of each project, project gross square feet, project budget, final project cost, and completion date of project. If project is under construction, list the scheduled date of completion.
- C. **Project Relevancy Matrix.** Develop a matrix that illustrates the similarities between the example projects and this project. Please be as specific to our project, as possible.
- D. **People-Projects Matrix.** Develop a matrix to show the participation of key individuals from your proposed team on the example projects. List individual's role on example projects.
- E. Acknowledgment of your review and acceptance of the attached Form of Agreement 1-S, ensuring that your firm accepts all terms and conditions as written.

### ***Section 3.0 – PROJECT APPROACH AND SCHEDULE***

- A. Describe the approach your team will take for planning, managing, and executing the study process.
- B. Discuss your approach to helping client through the decision-making process(es), approach to meeting project goals and expectations, and the approach to programming/planning/design process.
- C. Provide statement validating the proposed project schedule and your entire team's availability to appropriately staff the anticipated workload.

### ***Section 4.0 – PROJECT-SPECIFIC KEY DRIVERS AND IDEAS***

- A. Project Understanding. Briefly demonstrate your understanding of the project. Provide any observations of the project program or other provided information.
- B. To indicate your understanding of the project, describe key project drivers and/or critical design elements that your team has identified as a priority for this specific project. For instance: What issues or driver, beyond purely functional issues, constitutes the essence of this project? If not done previously in your Proposal, discuss how you addressed similar issues on similar projects.
- C. Describe your unique knowledge about Animal Diagnostic Facilities and Labs. What makes them unique, what are the programmatic or design drivers? Very briefly summarize your understanding if or how the mechanical and electrical systems may influence the design of this facility.
- D. Describe how you would assess and evaluate the process flow (materials, people, waste) within the existing animal diagnostic lab then how you would use this information to inform the programming/design/arrangement of the new facility (in relationship with the full ADL complex).

- E. Describe how you would assess the maintenance and operational costs and develop criteria to use for providing a facility that will be easy to maintain and function on a low operating budget.
- F. Provide any final considerations regarding the project. Considerations may include your thoughts/opinions related to the project site, program elements, and/or any other design considerations.

### **ARCHITECT/ENGINEER (A/E) TEAM SELECTION PROCESS SCHEDULE**

**The University will perform a three-step A/E team selection process, with three assessments: Letter of Interest, Proposals, and Interviews (if needed).**

#### **A/E Team Selection Schedule**

- Proposal responses from the Long-listed teams are due at **Noon EST on June 4, 2021.**
- Three short-listed firms will be chosen from the RFP respondents. The short-list results and interview notice will be posted to the OPP website by the end-of-day on **June 18, 2021.**
- Virtual Interviews will be **July 13, 2021.** Instructions will be issued to the short-listed teams.

Due to security reasons, tours are not provided at this step in the selection process. Short listed teams will be given an in-person tour on **Wednesday June 23, 2021.** We will arrange specific time slots for each of the three teams. The first tour will begin at 8:30am, second tour at 10:30am and third tour at 1:30pm. Additional instructions, including number of people, will be issued to the short-listed teams.

Participation in this A/E Team Selection process is voluntary and at no cost or obligation to The Pennsylvania State University. PSU reserves the right to waive any informality, in any or all submissions, and to reject any submission or portion thereof. PSU reserves the right to modify dates as/if it deems necessary. News releases pertaining to this project will not be made without prior approval from PSU, and then only in coordination with PSU. All information, documents, and correspondence shared within the A/E selection process are to remain confidential, and as such, are not be made public in any manner. Additionally, the University may hold all proposals for up to 45 days.

Please contact myself or Facility Project Manager Jeff Spackman (814-863-2496, 814-826-8461 or [djs47@psu.edu](mailto:djs47@psu.edu)) with any questions regarding the projects or the A/E Selection process.

Kindest Regards,

Greg Kufner, AIA, NCARB



University Architect  
The Pennsylvania State University  
Direct: (814) 865-8177 | Mobile: (614) 512-2287  
Email: [gak21@psu.edu](mailto:gak21@psu.edu)

CC: Screening Committee