



Office of Physical Plant
Physical Plant Building
University Park, PA 16802-1118

DATE: May 16, 2023

SUBJECT: Request for Letters of Interest - Architecture/Engineering Team Selection
UP-CHIMES Cleanroom Renovation, PSU Project No. 00-08958.00
University Park, PA

TO: Design Firms

The Pennsylvania State University (PSU) is excited to begin the Design Team selection process for the forthcoming CHIMES Cleanroom Renovation project to support the strategic goals of the College of Engineering and the Electrical Engineering Department. PSU is utilizing its standard qualification-based Design Team selection process for this project.

PROJECT OVERVIEW

The Electrical Engineering Department recently hired a new department head who is a leader in the semiconductor research industry. The Semiconductor Research Corporation (SRC)'s Joint University Microelectronics Program 2.0 (JUMP 2.0) has announced the creation of a new Penn State-led Center for Heterogeneous Integration of Micro Electronic Systems (CHIMES). The focus of this research is to collaborate to advance effective integration and packaging of semiconduction devices, chips, and other components.¹ Two new advanced research facilities are required to support the EE Department's new research goals.

PROJECT-SPECIFIC INFORMATION AND PROGRAM

The purpose of this project is to complete the design of the new micro electronic systems packaging research laboratory and determine the anticipated cost of construction. This research is to be completed by the Penn State Department of Electrical Engineering within the SRC JUMP Center, along with partnering external researchers, to develop an advanced semiconductor devices and packaging process.

The research has been divided into two distinct processes and will be located in two buildings at University Park. The wet material processing functions will be located in the Millennium Science Complex (MSC). This location was selected because the MSC is thought to have the existing specialty utility systems required for support the wet material processes of the CHIMES research. The existing cleanrooms also have lab equipment that can be shared by multiple research groups allowing for optimizing of University assets. The scope of work within this facility consists of the fit out of new cleanroom space as well as modifications to existing space.

The remaining research functions consist of dry packaging processes which will be located within the Electrical Engineering West Building (EEW). This is an older building in the historic core of Penn State's campus that was built in 1940. The existing Room 113 cleanroom suite was established in 1991. Significant renovation of portions of this suite will be required to meet current design and research standards.

The purpose of this Letter of Interest is to identify a complete design team to work with representatives from the College of Engineering and the Office of the Physical Plant to complete this project.

The anticipated substantial completion date for the design phase is early spring 2024.

The total estimated construction cost for this project shall be determined as a part of this study.

PROJECT SCHEDULE

PSU will execute the Architect-Engineer contract shortly after the completion of the interview process. The program validation and design will begin immediately after. The Design Phase will be complete by April 2024 and construction will be done by May 2025. Interim phases may happen along the way, such as moving the occupants and working around existing research spaces. Also, because the lab will be located in two different buildings, the entire project team will need to evaluate the appropriate phasing of work.

Abatement, demolition, and building systems upgrades projects must also happen.

PROJECT DELIVERY

- **Form of Agreement.** Included is the link to our Form of Agreement 1-P: [The Owner's "Form of Agreement 1-P"](#)
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-P.
- **Design Phase Deliverables.** Reference this document under the heading *00 51 00 MISCELLANEOUS FORMS* at the following link: <https://oppwiki.atlassian.net/wiki/spaces/OPPDCS/pages/5409499/Division+00+-+Procurement+and+Contracting+Requirements?preview=/5409499/5407947/OPP%20Design%20Phase%20Deliverables.pdf>
- **Office of the Physical Plant (OPP) Standards.** This website provides information regarding specific design submission requirements and standards of the University. The University is willing to consider recommended exceptions to OPP standards due to the project type. Any such exceptions would need to be formally approved, in writing, by PSU OPP.
<https://oppwiki.atlassian.net/wiki/spaces/OPPDCS/overview>
- **OPP High Performance Standards.** The University has a commitment to environmental stewardship with a focus on university and campus-wide carbon reduction and total-cost-of-ownership. Our projects require maximum consideration of potential sustainable and energy-efficient designs and specifications for architectural, site, utility, structural, mechanical, electrical, and plumbing disciplines. Refer to the following link for the University's high-performance standards that exceed building code minimum requirements:
<https://oppwiki.atlassian.net/wiki/spaces/OPPDCS/pages/5409436/01+80+00+PERFORMANCE+REQUIREMENTS>

A part of this is PSU's High-Performance Building Design Standards: Building projects shall comply with ASHRAE Standard 90.1 Energy Standard for 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. This standard defines a minimum requirement of LEED Certified for this project. The project will consider additional sustainability or high-performance measures and innovations.

DESIGN TEAM SELECTION PROCESS AND SCHEDULE

The University will perform a three-step Design Team selection process for this project with three assessments: Letters of Interest (LOI), Request for Proposals (RFP), and In-Person Interviews. Each assessment will be separate and distinct. The result selects the full design team, including the architectural team, engineering team, and specialty consultants. Firms may decide the makeup of the full or partial team at this initial LOI phase. However, the next step will require the long-list of teams to identify the entire design team.

Design Team Selection Schedule

- Letters of Interest are due from lead firms by Noon, Eastern Standard Time (EST), **June 2, 2023**.
- The Screening Committee will review the received Letters of Interest and determine a long-list of firms.
- The Screening Committee will send the long-listed firms a Request for Proposal. The long list of firms and the RFP will be posted on the OPP website by the end-of-day, **June 9, 2023**.
- Proposals from the long-listed teams are due at Noon, Eastern Standard Time (EST), **June 30, 2023**.
- The Screening Committee will choose three firms from the RFP respondents. The short-list results and interview notice will be posted on the OPP website by the end-of-day, **July 7, 2023**.
- On **July 25, 2023**, in-person interviews will occur at The Penn Stater Hotel and Conference Center in State College, PA. This date will not change, so please plan accordingly.
- The Design Team selection process results will be posted on the OPP website in **following the interviews**. We plan to start immediately after contract negotiation to align with the project schedule.
- Dates are subject to change and all firms will be notified.

LETTER OF INTEREST SUBMISSION REQUIREMENTS

If your firm/team is interested in pursuing this project, please submit a Letter of Interest that, at the least, includes the following:

1. A brief statement detailing the firm/team's profile (size, characteristics, unique qualifications, etc.). There is no requirement to identify the entire Design Team at this stage, but firms that wish to include an architectural partner should describe their anticipated role on the project.
2. Outline the firm/team's experience in the planning/design/execution of facilities of similar higher education programs, scope, size, and complexity. Convey how building renovations, and sensitively done additions within historic parts of campuses, can transform a building/campus.
3. Narrate the firm/team's vision of what, beyond purely functional issues, constitutes the essence of this type of facility. Then, discuss some of the uniqueness and critically important issues in designing a project of this type.
4. Include images (captions encouraged) of the firm/team's most relevant design experience related to this particular project.

*** As applicable throughout the Letter of Interest, provide professional credit to architectural partners (including design architect, architect of record, and academic planning partners) for all projects discussed within the proposal and for all project images shown.**

Submit a PDF version of the Letter of Interest by Noon, Eastern Standard Time (EST), **June 2, 2023**. Limit the submission to five (5) total letter-size pages, single-sided. A cover letter, if included, must be within the five (5) total pages. Send a PDF of the submission electronically to jat280@psu.edu and gak21@psu.edu by the submission deadline. Include the team's primary contact name and email address for the design team selection process.

PSU encourages design teams to visit the site during this selection process. However, guided campus/ site tours are not provided at this step in the selection process but will be scheduled later with the long-listed or short-listed teams.

Participation in this Design Team selection process is voluntary and at no cost or obligation to PSU. PSU reserves the right to waive any informality in any submissions and reject any submission or portion thereof. PSU reserves the right to modify dates as it deems necessary.

CONFIDENTIALITY AND NON-DISCLOSURE

Design Teams may not make news releases about this project without prior approval from PSU and then only in coordination with PSU. In addition, all information, documents, and correspondence shared within the design team selection process are to remain confidential and, as such, are not be made public in any manner. Please contact me (information below) or the Facility Project Manager Julie Patrick (jat280@psu.edu or 814-777-8602) with any questions.

Kindest Regards,



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cc: Selection Committee

1. Penn State leads semiconductor packaging, heterogeneous integration center.
<https://www.psu.edu/news/engineering/story/penn-state-leads-semiconductor-packaging-heterogeneous-integration-center/>