



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

DATE: August 20, 2018

SUBJECT: **Request for Qualifications (RFQ)**
Design & Construction Administration/Inspection Services
Taxiway A Rehabilitation
Penn State University Park Airport
Penn State Project No. 00-05410.01

TO: Prospective Professional Engineering Consultants

A. PROJECT OVERVIEW AND GOALS

The Pennsylvania State University Park Airport recently completed a feasibility study for the rehabilitation of Taxiway A and is seeking a qualified aviation consultant to provide professional services for the design and construction administration/inspection for this project. The feasibility study report is enclosed for your reference. All work will be required to meet Federal Aviation Administration (FAA) and Pennsylvania Department of Transportation (PennDOT) Bureau of Aviation (BOA) Standards.

The total estimated project budget, including soft costs and contingency, is \$35,200,000. This budget is dependent on federal, state, and Passenger Facility Charge Program funding which may require the project to be constructed in multiple phases and years. The goal is to design the entire project at one time with the understanding that the plans and specifications may need to be broken out into separate packages to accommodate available funding.

The goal is to start construction as early as 2020.

B. SCOPE OF WORK

To help inform your proposal, including the finalization of your proposed team, we are providing a preliminary scope of work for this project. In addition to the scope of services specified in the "Form of Agreement 1-P" that will apply to this project, the scope of work will include, but is not limited to, the following:

- **Survey.** Under the supervision of a professional surveyor licensed in Pennsylvania, survey the general area within the limits of the project, including any off Airport improvements, as necessary to complete the project in its entirety. Some of the survey tasks include but are not limited to:
 - Conduct a PA One-Call and obtain a design serial number.
 - Tie-in to PA State Plane Coordinate System and establish control points.
 - Locate and identify utilities based on the PA One-Call, field evidence, existing mapping and coordination with Penn State.
 - Detailed information on existing stormwater facilities including pipe types, size, inverts, and condition based on field evidence.



- Prepare an AutoCAD topographic base map suitable for design purposes.
- **Geotechnical Investigation.** Under the supervision of a professional engineer licensed in Pennsylvania, conduct a geotechnical investigation within the limits of the project that is required for design and construction of the proposed scope of work.
- **Environmental Assessment.** Complete a short form Environmental Assessment document in accordance with FAA requirements. The document will include both on and off Airport improvements and format will follow the procedures specified in FAA Order 5050B and 1050.1F. Copies of the final document will be distributed to the FAA for review and finding.
- **Airport Layout Plan (ALP) Pen and Ink Change.** Revise and update the ALP to provide a “pen & ink” change for the proposed geometry of the Taxiway A improvements and an off Airport storm water facility. This will include incorporation of the edge of pavement line work for the proposed edge of pavements of Taxiway A, proposed line work for storm water facility, revision to the ALP sheet to depict changes, and electronic hard copy deliverables of the changes for review by the Airport Sponsor and FAA.
- **Design.** Under the supervision of the appropriate professional engineer(s) licensed in Pennsylvania, develop schematic design plans, design development, and construction documents including specifications in accordance with FAA and PennDOT BOA standards and any other applicable local, state, and/or federal regulations and requirements. Submit design documents at the end of each phase for review by Penn State; allow at least three (3) weeks for each design review. Prepare necessary engineering reports and recommendations. Print and provide necessary copies of engineering drawings, contract documents and specifications including front end documents per Penn State requirement for a 1C construction contract. The design shall include detailed site logistics and traffic control plans to ensure safety is maximized and operational impacts on the Airport are minimized to the maximum practical extent during construction.
- **Stormwater Design** – The University Park Airport stormwater drainage is primarily controlled by two (2) high hazard Dams regulated by the Pennsylvania Department of Environmental Protection (PaDEP). They are referred to as Dam 1A (D-14-121) and Dam 4A (D14-123) and both are located within Benner Township. The majority of the developed portion of the Airport drains to Dam 4A. The original Dam 4A impervious design assumptions have been exceeded by development and an error was made by the original designer that neglected approximately 15% of the drainage area. Dam 4A serves both as a stormwater facility controlling the 1 to 100 year runoff events in accordance with Township ordinances and was originally designed to safely pass the ½ PMF runoff event for PaDEP Dam Safety. In 2012, Dam 4A was downgraded from a size/hazard classification of C-2 to C-3, which meant its maximum PaDEP design storm could potentially be reduced from between the 100-yr event to the ½ PMF event. At this time, PaDEP Dam Safety has not made a final determination. However, the water surface elevation in Dam 4A has exceeded the original 100-year design water surface elevation twice in the last two (2) years. Dam 1A also serves both as a stormwater facility controlling the 1 to 100 year runoff events in accordance with Township ordinances and was originally designed to safely pass the ½ PMF runoff event for PaDEP Dam Safety. The Dam 1A size/hazard classification is C-2.



The successful firm will conduct a comprehensive analysis of both Dams for both Benner Township and to meet PaDEP Dam Safety requirements using acceptable models/methods as required. All current, proposed, and future imperviousness will be accounted for in the analysis. Penn State's Office of Physical Plant will provide the successful firm with actual stage data for the dams for use in model calibration. Stormwater will also include designs to meet regulatory requirements of the NPDES permit; however, both Dams have had a history of sinkholes and Dam 4A is structurally lined. Therefore, engineered infiltration will be prohibited in most areas of the Airport. This task also includes updating the Airport's current Exhibit A to modify proposed drainage easements required for the preferred alternative for review by the Airport Sponsor and FAA. The successful firm is required to have expertise in stormwater management, dam design, and a strong background in karst geology.

- **Cost Estimating.** Develop and maintain a construction cost estimate and total project cost estimate during each phase of design.
- **Scheduling.** Create and maintain a detailed project schedule. The schedule shall clearly depict all tasks, including durations and dependencies, and the tasks that are on the critical path.
- **Project Coordination.** Coordinate with the appropriate internal and external stakeholders to ensure the design and construction complies with FAA and PennDOT BOA standards and any other applicable local, state, and federal regulations and requirements. In addition to the Penn State Project Manager, some of the key stakeholders include, but are not limited to, representatives from Penn State University Park Airport, Engineering Services, Utility Services, Environmental Health & Safety, FAA, PennDOT, PaDEP, Benner Township, Centre County Conservation District, Centre County Airport Authority, and Public/Private Utility Providers.
- **Permitting Approvals.** Assess and determine the need for land development and permitting approvals. Prepare and submit applicable documents to the appropriate agencies for review and approval. Coordinate and attend meetings as required to support this effort and obtain the necessary approvals, including presentations to municipalities when necessary.
- **Construction Administration/Inspection:** Assist Penn State in advertising, securing bids, negotiating services, analyzing bid results, and furnishing recommendations on the award of contracts. Attend and lead pre-bid meeting(s), job conferences, and final inspection(s), including the preparation and distribution of meeting minutes. On-site construction inspection and/or administration involving the services of a part time or full-time resident engineer(s), inspector(s), or manager(s) during construction. Provide consultation and advice to Penn State during all phases of construction. Inspect work in-progress periodically and providing appropriate reports to Penn State, FAA, and PennDOT BOA. Review and approve contractor submittals for compliance with design documents. Review and respond to contractor RFIs, potential change orders, and supplemental agreements, including assisting Penn State with negotiations when necessary. Reviewing, analyzing and approving laboratory and mill test reports of materials and equipment. Preparation of record drawings in the format outlined in the University Park Airport's CAD Structure Requirements, dated January 2008 or current edition. Determine amounts owed to contractors and assist Penn State in the preparation of payment requests for amounts reimbursable for grants. Upon completion of final inspection, submit a report of the completed project to Penn State, FAA, and PennDOT BOA. It is anticipated that a majority, if not all, of the



processes and documentation related to construction administration and inspection services will occur in eBuilder which Penn State is migrating to as a Project Management Information System in 2019.

Penn State will issue a “Form of Agreement 1-P” for this project. In submitting a proposal for this project, the Professional is acknowledging that they concur with, without exceptions, the terms, conditions and provisions as contained in the University’s latest version of “Form of Agreement 1-P” that can be found at the following webpage under “00 5200 Professional Agreements”:

<https://wikispaces.psu.edu/display/OPPDCS/Division+00+-+Procurement+and+Contracting+Requirements>

The following sections of the Form of Agreement 1-P shall be stricken and not apply to this project:

- 1.1.10 Building Information Modeling (BIM)
- 1.1.11 Design Visualization
- 1.1.11 Contractor Design-Assist
- 1.1.12 LEED Responsibility for Project
- 6.9 Preconstruction Services

C. RFQ ATTACHMENTS AND REFERENCED STANDARDS

- Taxiway A Rehabilitation Feasibility Study, attached
- Form of Agreement 1-P
- Design Phase Deliverables. Reference this document under the heading *00 51 00 MISCELLANEOUS FORMS* at the following link:
<https://wikispaces.psu.edu/display/OPPDCS/Division+00+-+Procurement+and+Contracting+Requirements>
- FAA regulations, rules, policies, and Grant Assurances, specifically but not exclusively, 49 CFR 18 as outlined in FAA Advisory Circular (AC) 150/5100-14E or current edition.
- PennDOT BOA Standards
- University Park Airport CAD Structure Requirements, dated January 2008 or current edition.
- Penn State Office of the Physical Plan (OPP) Standards. The web sites 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 Penn State.

Please review to ensure that your team is able to deliver a compliant project.

The Consultant, with the submission of a RFQ proposal, accepts the responsibility for knowledge of, and compliance with the guidelines and procedures within this noted documentation.

D. ANTICIPATED SELECTION MILESTONES

- RFQ Posted: August 20, 2018



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| • Site Visits: | Schedule with Bryan Rodgers or Ed Foster |
| • RFQ Proposal Due: | September 7, 2018 (at Noon) |
| • Consultant Selection Meeting: | September 19, 2018 |
| • Scope of Work & Fee Proposal Due from Selected Consultant: | September 28, 2018 |
| • Board of Trustees Approval and Post Results: | November 9, 2018 |

E. PRE-PROPOSAL SUBMISSION CONTACT

We encourage you to visit the site and discuss the project with representatives of the user group in order to understand our goals and the major issues driving this project. To schedule your visit, please contact Bryan Rodgers, C.M., Director of University Park Airport, at 814-865-4042 or bqr3@psu.edu, or Ed Foster, AAE, Associate Director of University Park Airport, at 814-865-4042 or wef11@psu.edu.

F. STATEMENT OF QUALIFICATION SUBMITTAL REQUIREMENTS

Deliver seven (7) hard copies of your proposal and one (1) PDF version on a thumb drive in a sealed package to:

Kurt Coduti, Project Manager (see address below)

Hard copies of the Proposals are due in a sealed package plainly marked "Statement of Qualifications – University Park Airport Taxiway A Rehabilitation" **by no later than September 7, 2018 at Noon, Eastern Standard Time**. Proposals received after this date and time will be automatically rejected. Proposals shall be provided in an 8.5"x 11" format. Limit submission to twenty (26) single-sided pages maximum (13 double-sided). Double-sided printing is strongly encouraged.

A cover letter shall be provided from the proposed leader(s) of the consultant team submitting. The cover letter should be one (1) page maximum. The cover letter should include the following:

- A. Contact information (address, phone, and e-mail) for the team's main point of contact
- B. Primary office location of the submitting consultant 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
- E. Acknowledgment of your review and acceptance of the "Form of Agreement 1-P", ensuring that your firm accepts all terms and conditions as written without exception.

Proposals shall follow the format below in the order stated to ensure that all pertinent information necessary for evaluation is included and easily comparable. The cover letter, table of contents, and divider pages will not count towards the RFQ page limitation. You're encouraged to be as brief as possible without sacrificing accuracy and completeness.

Penn State reserves the right to accept or reject any or all proposals and waive any irregularities and informalities therein. Any incomplete, false, or misleading information provided by or through the

Consultant will be grounds for non-consideration. Do not include any type of pricing data or work hours. Inclusion of pricing data will eliminate your firm/team from consideration.

As applicable throughout proposal, provide professional credit to professional partners (including lead design firm and engineer of record) for all projects discussed within the proposal and for all project images shown.

Collate and bind proposals according to the following four (4) Sections:

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, including number/ value of projects.
- 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 and be advised that Penn State University is an equal opportunity employer.
- C. Provide role descriptions and resumes of key team members identified in the organizational chart. Include registrations/certifications, educational background, years of experience, relevant project experience and define each key team member's role on each project. Be specific about the roles and on-site participation for each team member. Include at least two (2) client references for each key team member.

Section 2.0 – TEAM QUALIFICATIONS

- A. Provide a summary of qualifications and expertise of the firms with specific emphasis on:
 1. Design Excellence, including national recognitions.
 2. Distinguishing factors of team differentiation.
- B. Please highlight five (5) relevant projects within the last ten (10) years that convey your team's expertise with this type of project. Please include the following information:
 1. Description of work
 2. Project Manager and Engineer of Record
 3. Project budget and final project cost
 4. Design and construction delivery method (Design-Bid-Build, CM at Risk, Design-Build)
 5. Date of completion
- C. In matrix form, show the participation of individuals from the proposed team on the identified projects. List team member's respective role on each of the example projects.
- D. Briefly describe your proposed methodology to help maximize DBE firm participation within your proposed team.

- E. List errors and omissions insurance coverage limits of the lead/ prime entity of the candidate team. Provide information on errors and omissions claims in the last (7) seven years.
- F. Provide historic breakdown of project performance. Include project delivery method, history of project budgets compared to completed construction cost, history of change orders, average response time to RFIs, and any other key project profiles relevant to this project.

Section 3.0 – PROJECT APPROACH AND SCHEDULE

- A. Briefly outline your project specific design process and approach, including planning, managing, and executing the project. Summarize your team structure and governance as it relates to decision making. Be specific with the principals applied to DBE participation and outreach. Identify areas for enhanced collaboration between the design team, Penn State, FAA, and PennDOT BOA.
- B. Describe your team’s proposed project approach to:
 - 1. Helping to define project goals and expectations and describe methodology for achieving goals/ expectations from concept design through construction.
 - 2. Creating a collaborative design and construction process between your team, the contractor(s), FAA, PennDOT, and Penn State stakeholders.
 - 3. Briefly describe your approach to design reviews and any necessary permitting/jurisdictional reviews for the proposed improvements.
- C. Outline the cost estimating and cost control methodology you plan to implement on this project.
- D. Provide a proposed design and construction milestone schedule for this project in graphic form for the project, allowing three (3) weeks for design reviews. This can be printed on an 11x17 fold-out and only count as a single page.
- E. Provide a summary of your scheduling processes and techniques. Please describe your understanding of the key schedule drivers for this project. Provide a statement validating your entire team’s availability to appropriately staff the anticipated workload.
- F. For stormwater design, provide a list of models to be used and the qualifications of the individuals conducting this design.

Section 4.0 – PROJECT-SPECIFIC KEY DRIVERS AND IDEAS

- A. Briefly demonstrate your understanding of the project. Provide any observations of the project program and any project-specific design ideas, thoughts or considerations.
- B. Describe any initial considerations related to site logistics and construction phasing.
- C. Identify and discuss design and construction issues that are the key drivers of this type of project and illustrate these with examples from your previous work. Please identify and discuss specific lessons-learned that you plan to apply to this project from your previous experience (phasing/staging, permitting, schedule reduction opportunities, or any other subjects that are pertinent).



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G. SELECTION PROCESS

Penn State will follow FAA AC/150/5100-14E or current edition for the procedures of consultant selection. Firms will be screened and evaluated by the Qualifications Evaluation Committee (QEC) based on the criteria listed in the section titled STATEMENT of QUALIFICATIONS SUBMITTAL REQUIREMENTS, which are listed in relative order of importance. The QEC may create a short list of consultants based on their review of the submitted documents. The QEC may choose to conduct discussions with the short listed consultants regarding the submitted proposal and the anticipated Scope of Services or may choose to enter directly into contract negotiations with the highest qualified consultant as determined by the QEC. Penn State reserves the right to select the highest qualified consultant as determined by the QEC. If Penn State is unable to negotiate a fair and reasonable fee as determined, we will terminate negotiations with the first ranked consultant and begin negotiations with the next most qualified consultant from the short list or may choose to re-initiate the selection process. In addition, the successful consultant will require approval of the Penn State Board of Trustees which is expected to be at their meeting in November 2018.

This contract is subject to the provisions of Executive Order 11246 (Affirmative Action to Ensure Equal Employment Opportunity) and to the provisions of the Department of Transportation Regulations 49 CFR Part 21 (Nondiscrimination in Federally-Assisted Programs) and 26 (Disadvantaged Business Enterprise Participation) and to foreign trade restrictions. DBE firms are encouraged to submit.

Questions regarding this RFQ must be submitted in writing to Kurt Coduti at the email address below no later than **September 4, 2018 by 5:00 p.m. Eastern Standard Time.**

Penn State reserves the right to make changes to this RFQ. Changes will be made by written addendum, which will be posted to www.UniversityParkAirport.com. Respondents are responsible for checking the airport website for addenda to the RFQ.

Sincerely,

A handwritten signature in blue ink that reads "Kurt Coduti".

Kurt H. Coduti, P.E.
Project Manager
The Pennsylvania State University
108 Physical Plant Building
University Park, PA 16802
Phone: (814) 863-4960
Email: khc3@psu.edu

Cc: Qualifications Evaluation Committee