September 5, 2014

Name
Firm
Address

Re: Facilities Master Plan for the College of Engineering

The Pennsylvania State University intends to produce a Facilities Master Plan for the College of Engineering on the University Park Campus. Our goal is to identify both the long-term and short-term comprehensive space needs necessary to accommodate the College’s new Strategic Plan. The College of Engineering Strategy includes increasing the size of the faculty by 15% over 3 years, in addition to starting new graduate programs that will increase the number of graduate students by at least 30% over 5 years. This Master Plan will develop a phased implementation strategy that identifies adequate existing space, as well as proposed renovated and new space to address the needs for 30-40 additional professors’ office and laboratory space, and 500-750 more graduate students.

With this letter, we invite you to submit a proposal for professional services to complete this Facilities Master Plan. If you are interested in this opportunity, please submit your proposal by noon on October 16, 2014 and limit it to 50 single-sided or 25 double-sided 8-1/2 x 11 pages. We have invited 12 consultants to respond to this request (see Appendix D below). Please include the following information in your proposal:

- A statement detailing your team’s unique qualifications, experience, and expertise for this project, including:
  - Examples of similar assignments
  - Qualifications and experience of proposed individual team members
- A detailed description of your approach to this project.
- A detailed scope of work.
- Explanation of key issues that are important to a facilities master plan of this scope and context.
- A project schedule.
- A cost proposal that corresponds to your proposed scope of work.
- List of 3 client references for projects of similar scope, completed during the past 10 years.

Please submit to my office twelve (12) hard copies of your response. Please include the name and email address of your team’s contact for this project. We would like to have a pdf version of the submission sent electronically to Christeen Kisslak at cjp2@psu.edu. The University will use a qualifications based selection process. The screening committee will select a short list of 3 teams on November 3, 2014 to be interviewed on campus on or before November 17, 2014.
Penn State is a public, Research-I university with 11 undergraduate colleges, a graduate school, schools of law, medicine, nursing, and global affairs. The University Park campus has approximately 46,000 students with an additional 24 locations distributed throughout the state bringing the total student count to approximately 98,000. The College of Engineering serves the majority of these locations but is concentrated on the University Park campus. While the College occupies space in 50 buildings (see attached Space Assignment Matrix) with a total of 749,000 net square feet, the majority of that space is occupied in 20 buildings.

A College of Engineering Space Assignment Matrix is attached to this RFP. It identifies where the College’s space is located and to which department it is assigned. Also attached is a campus map highlighting the buildings in which the College’s space is primarily located.

Visit the Penn State Fact Book at http://www.psu.edu/this-is-penn-state to learn more about Penn State and the University Park Campus. To learn more about The College of Engineering, please refer to Appendix A below, the College’s 2014-2019 Strategic Plan, which is attached to this correspondence, and to the College’s website at http://www.engr.psu.edu.

Materials listed in Appendix C are available upon request in a Penn State secured Box account. To request access, please contact Chrissy Kisslak @ CJP2@psu.edu.

We look forward to your response. Please call anytime with questions. We and the College of Engineering are available to meet to discuss this opportunity.

Very truly yours,

Gordon Turow
Director of Campus Planning and Design
The Pennsylvania State University
814.865.4402
get10@psu.edu

cc: Anthony Atchley
    Lisa Berkey
    Clark Colborn
    Amr Elnashai
    Christeen Kisslak
    Steve Maruszewski
    Dwayne Rush
    Ford Stryker
    Gordon Turow
    Steve Watson
    Dave Zehngut
Appendix A: The College of Engineering  
Dean Amr S. Elnashai

The College of Engineering at Penn State is a leading academy for learning, discovery and engagement that is recognized worldwide for excellence in academic programs, research enterprise and service to the global engineering community. Innovation is a hallmark of Penn State Engineering, with unique programs such as the Leaning Factory, Engineering Ambassadors, and formal Leadership and Entrepreneurial programs. The College of Engineering is ranked top among the University Park Campus colleges in terms of number of students, number of faculty, research expenditure and gift/endowment income. Its undergraduate and graduate programs are nationally ranked 19th and 25th respectively, according to the US News and World Report. Data obtained from Academic Analytics yields a ranking of 11th for number of citations and awards amongst all engineering programs in the USA. The College is ranked 8th on the basis of number of research grants, and 4th with regard to number of faculty with a published research article. Our undergraduate program is the second largest in the USA.

Whereas there has been a 24% increase in the number of undergraduates over the past 5 years, the infrastructure has not seen a commensurate expansion. Indeed, the College has not benefited from any significant investment in new buildings for many years. While being very proud of its past and current national and international standing, the College aspires towards much higher academic productivity and ranking. Plans have been agreed and resources have been allocated to expand the faculty by at least 15% over the next 3 years, thus adding about 30-40 new professorial faculty lines. The College also has final approval to launch a new Master of Science and Master of Engineering programs, with the target size of 500 students in 5 years. Over a 10-15 years horizon, the graduate student population is expected to grow by about 750 or more. The office of the Dean is also expanding, with the addition of a new associate dean for research and innovation, expansion of the communications and development groups, and strengthening of research administration, especially pre-award activities. To underpin the immediate expansion of the College and to also address the increase in the number of undergraduate and graduate students, while maintaining the world-class engineering support system, major investment is urgently needed in infrastructure. Laboratory space for the new faculty as well as space for the expansion of the Learning Factory and the Leadership programs is needed. Major upgrading of all instructional and many research laboratories has been a critical requirement for years, and space for the new MS and MEng programs will be required on 2-3 years. It is anticipated that the College will request considerable funds from the University to add new space and bring existing space to the high standard expected by our students, faculty, staff and partners.

The College of Engineering Master Plan is intended to provide clear and concise assessment of existing space and the quantitative requirement for new space over the next 10-15 years. Investment in the largest and most productive college on the University Park Campus of Penn State will pay immediate dividends both intellectually and financially.
Appendix B: College of Engineering Departments at University Park

- Acoustics Program (graduate program only)
- Department of Aerospace Engineering
- Department of Architectural Engineering
- Department of Biomedical Engineering
- Department of Chemical Engineering
- Department of Civil and Environmental Engineering
- Department of Computer Science and Engineering
- Department of Electrical Engineering
- Department of Engineering Science and Mechanics
- Department of Industrial and Manufacturing Engineering
- Department of Mechanical and Nuclear Engineering
- School of Engineering Design, Technology, and Professional Programs (SEDTAPP)

Appendix C: Studies Completed for College of Engineering Buildings

- A Facility Condition Analysis for each building prepared by ISES Corporation
- Hammond, Sackett, and Engineering Units Programming + Concept Design Study
  May 2013; Bohlin Cywinski Jackson
- Chemical Engineering / Biomedical Engineering Building Planning Study
  March 2013; Bohlin Cywinski Jackson
  - The university intends to demolish most of Fenske Building and build a major
    addition. This project will include a 144,000 gross feet addition and a 42,400 gsf
    renovation to house Chemical and Bio Engineering. This project is on the current
    Capital Plan with a total project cost of $140 million.

Background

- University Park Campus Master Plan Update, Land Use and Open Space Systems
  http://www.opp.psu.edu/planning-construction/master-plans/university-park-campus-
  master-plan/university-park-campus-master-plan
## Appendix D: Consultants Invited to Submit a Proposal for this Master Plan

<table>
<thead>
<tr>
<th>Mr. Jim Wheeler</th>
<th>Mr. Terry Steelman</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ayers Saint Gross</td>
<td>Ballinger</td>
</tr>
<tr>
<td>1100 First Street, NE, Suite 800</td>
<td>833 Chestnut Street, Suite 1400</td>
</tr>
<tr>
<td>Washington, DC  20002</td>
<td>Philadelphia, PA  19107</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Mr. William Loose</th>
<th>Mr. Neil Cahalane</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bohlin Cywinski Jackson</td>
<td>Ellenzweig</td>
</tr>
<tr>
<td>8 West Market Street, Suite 1200</td>
<td>1280 Massachusetts Ave, Suite 300</td>
</tr>
<tr>
<td>Wilkes-Barre, PA 18701</td>
<td>Cambridge, MA  02138</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Mr. Mark Corey</th>
<th>Mr. Kevin Sullivan</th>
</tr>
</thead>
<tbody>
<tr>
<td>Flad Architects</td>
<td>Payette</td>
</tr>
<tr>
<td>644 Science Drive</td>
<td>290 Congress Street, Fifth Floor</td>
</tr>
<tr>
<td>Madison, WI  53711</td>
<td>Boston, MA 02210</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Mr. Robert Goodwin</th>
<th>Mr. Joe Hibbard</th>
</tr>
</thead>
<tbody>
<tr>
<td>Perkins and Will</td>
<td>Sasaki</td>
</tr>
<tr>
<td>215 Park Avenue South, 4th Floor</td>
<td>64 Pleasant Street</td>
</tr>
<tr>
<td>New York, NY 10003</td>
<td>Watertown, MA 02472</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Ms. Lois Rosenblum</th>
<th>Ms. Katy Tassmer</th>
</tr>
</thead>
<tbody>
<tr>
<td>SLAM Collaborative</td>
<td>Tsoi/Kobus &amp; Associates</td>
</tr>
<tr>
<td>250 Summer Street, 4th floor</td>
<td>One Brattle Square</td>
</tr>
<tr>
<td>Boston, MA 02210</td>
<td>PO Box 9114</td>
</tr>
<tr>
<td></td>
<td>Cambridge, MA 02238</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Mr. William Wilson</th>
<th>Ms. Carol Duke</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wilson Architects</td>
<td>ZGF Architects</td>
</tr>
<tr>
<td>374 Congress Street, Suite 400</td>
<td>1800 K Street NW, Suite 200</td>
</tr>
<tr>
<td>Boston, MA 02210</td>
<td>Washington, DC 20006</td>
</tr>
</tbody>
</table>