RESOLUTION OF THE BOARD OF TRUSTEES
OF THE TRUSTEES OF PURDUE UNIVERSITY (THE “CORPORATION”)

1. DECLARING THE NECESSITY FOR THREE ENGINEERING RESEARCH LAB PROJECTS IDENTIFIED AS THE:
   a. HIGH PRESSURE RESEARCH LAB TEST CELLS CONSTRUCTION AND CONTROL CENTER RENOVATION AND ADDITION;
   b. JISCHKE HALL ADDITION, AND
   c. FLEX LAB FACILITY;

2. GRANTING APPROVAL TO PLAN, FUND AND CONSTRUCT THE PROJECTS AND TO AWARD CONTRACTS FOR THEIR COMPLETION;

3. IN THE CASE OF THE FLEX LAB FACILITY PROJECT, APPROVING THE CONSTRUCTION AND FINANCING THEREOF PURSUANT TO THE PROVISIONS CONTAINED IN IC 21-35-3 AND OTHER APPLICABLE STATUTES;

4. AUTHORIZING CERTAIN OFFICERS OF THE CORPORATION TO REQUEST ALL NECESSARY STATE APPROVALS FOR THE PROJECTS;

5. AUTHORIZING CERTAIN OFFICERS OF THE CORPORATION TO NEGOTIATE FOR AND OBTAIN INTERIM AND/OR PERMANENT FINANCING FOR THE FLEX LAB FACILITY PROJECT, SUBJECT TO ALL STATUTORY PROVISIONS AND SUBJECT TO THEIR PRIOR APPROVAL BY THE TREASURER; AND

6. DECLARING OFFICIAL INTENT TO REIMBURSE CERTAIN PROJECT COSTS RELATED TO THE FLEX LAB FACILITY PROJECT WITH BOND PROCEEDS

WHEREAS, Article VII, Section 1 of the Bylaws of The Trustees of Purdue University (the "Corporation") sets forth the various authorizations required for contracts and instruments that, by virtue of the level of expenditure involved, require approval of the Board of Trustees (the “Board”), the Board’s Physical Facilities Committee (the "Committee"), and/or the Treasurer ("Treasurer") of the Corporation; and
WHEREAS, although not expressly required by Article VII, Section 1 of the Bylaws, the Board and the Committee have from time to time granted the respective approvals required of them at separate stages of a project or transaction, including the planning, finance and construction, and contract award stages, thus resulting in the need to consider the project or transaction multiple times over the course of several meetings; and

WHEREAS, the Board has considered the potential efficiencies, time savings, market timing opportunities and other benefits to be derived from a single, comprehensive authorization and approval granted at the early stage of a project or transaction, pursuant to which the appropriate officers of the Corporation would be delegated the full authority to take the project or transaction through the contract award stage, thus avoiding the need to revisit an already-approved project or transaction at later meetings—all while remaining cognizant of the Committee’s and the Board’s oversight responsibilities under the Bylaws; and

WHEREAS, the Board has been kept apprised of activities and preliminary plans for three new engineering research lab facility projects:

(a) construction of a High Pressure Research Lab Test Cells and Control Center facility that will contain five test cells, a laser lab and associated preparation space for research (the “Zucrow High Pressure Research Lab Test Cells Construction and Control Center Renovation and Addition Project”);

(b) construction of a Jischke Hall addition that will house research labs, expanded multidisciplinary student design lab, additional instructional spaces that support innovative active-learning pedagogy, office space, grad office areas, support spaces for instructional and research laboratories and add significantly to the University’s biomedical engineering research capabilities (the “Jischke Hall Addition Project”); and

(c) construction of a new ‘Flex Lab Facility’ that will serve as a centralized space for engineering design courses featuring mobile equipment that can be rapidly reconfigured for the varied aspects of prototype design and testing (the “Flex Lab Facility Project” and, with the other two aforementioned projects, collectively the “Projects”); and

WHEREAS, the Board has evaluated and is comfortable with the amount of due diligence and preliminary planning that has been conducted by the officers and representatives of the Corporation in order to bring the proposed Projects to the Board for consideration; and

WHEREAS, as a project involving one or more contracts with an estimated aggregate cost in excess of $5,000,000, each Project requires the authorization and approval of both the Committee and the Board; and

WHEREAS, under the provisions of Indiana Code 21-35-3, the Corporation is authorized and empowered, upon finding that a necessity exists, and subject to certain constraints on the sources and uses of related funds, to construct research facilities and to borrow funds to finance such projects upon obtaining certain specified state approvals; and

WHEREAS, the Corporation expects to issue debt for the purposes of paying or reimbursing a portion of the costs of designing, planning, acquiring, constructing, furnishing or equipping the Flex Lab Facility Project, as more particularly set forth below; and
WHEREAS, the Committee has recommended approval of each Project by adopting these resolutions and the actions described herein at a duly constituted meeting; and

WHEREAS, the Board now desires to declare the necessity for, and to approve, each of the Projects, and to authorize the designated officers of the Corporation to undertake necessary steps to complete each Project, all as more particularly set forth below:

NOW, THEREFORE, it is hereby RESOLVED by the Board of the Corporation as follows:

1. The Board hereby finds and declares that (a) a necessity exists for the planning, funding, construction, furnishing, equipping, operating, controlling, managing and financing of each of the Projects, as well as for the awarding of one or more contracts for the completion of each such Project, all in order to realize the benefits of the expanded engineering research capabilities these facilities are expected to afford Purdue University (the “University”), as shared with and discussed by the Board, and (b) with respect to the Flex Lab Facility Project, revenue from state, federal, local or private gifts, grants, contractual payments or reimbursements will be available in an amount that is reasonably expected to at least equal the annual debt service requirements of any bonds or other obligations and the costs to operate such Project for each fiscal year that such bonds or other obligations are outstanding.

Specific Approvals with respect to the Zucrow High Pressure Research Lab Test Cells Construction and Control Center Renovation and Addition Project:

2. The proposal to plan, finance, construct and award one or more contracts for the completion of the Zucrow High Pressure Research Lab Test Cells Construction and Control Center Renovation and Addition Project is hereby authorized and approved.

3. In order to provide funds with which to accomplish the Zucrow High Pressure Research Lab Test Cells Construction and Control Center Renovation and Addition Project, the Treasurer of the Corporation is hereby authorized, under the authority of these resolutions, and without the need for further authorization from this Board, to use up to $7,450,000 of gift funds and up to $750,000 of Repair and Rehabilitation funds, for a total Project cost of up to $8,200,000 (the “Authorized Cost Level”) for said Project.

4. The Treasurer of the Corporation be, and hereby is, authorized and empowered:

   (a) to solicit, evaluate, select, retain and contract with (i) one or more architectural/engineering firms to provide planning services for said Project, and (ii) one or more construction firms to construct said Project, in each case in such an amount (within the above-referenced Authorized Cost Level), in such phases or parts, and on such terms as he, in his sole discretion, shall deem to be in the best interests of the Corporation and Purdue University, and in any case in the manner prescribed by law; and

   (b) to authorize, approve and execute all change orders in connection with any of the above-referenced contracts so long as all such change orders, considered
collectively, do not cause the aggregate amount of expenditures incurred under such contracts to exceed the Authorized Cost Level.

5. For purposes of Article VII, Section 1(c) of the Bylaws, no change orders in connection with any of the above-referenced contracts shall require further Board or Committee authorization and approval unless and until such a change order, together with all other change orders previously authorized, approved and executed by the Treasurer, causes the aggregate amount of expenditures incurred under such contracts to exceed the Authorized Cost Level for the Zucrow High Pressure Research Lab Test Cells Construction and Control Center Renovation and Addition Project (it being understood that any change order or any other action that would cause such Authorized Cost Level to be exceeded must, before it is given effect, receive the express prior approval of the Committee and the Board).

Specific Approvals with respect to the Jischke Hall Addition Project:

6. The proposal to plan, finance, construct and award one or more contracts for the completion of the Jischke Hall Addition Project is hereby authorized and approved.

7. In order to provide funds with which to accomplish the Jischke Hall Addition Project, the Treasurer of the Corporation is hereby authorized, under the authority of these resolutions, and without the need for further authorization from this Board, to use up to $14,000,000 of gift funds for a total Project cost of up to $14,000,000 (the “Authorized Cost Level”) for said Project.

8. The Treasurer of the Corporation be, and hereby is, authorized and empowered:

   (a) to solicit, evaluate, select, retain and contract with (i) one or more architectural/engineering firms to provide planning services for said Project, and (ii) one or more construction firms to construct said Project, in each case in such an amount (within the above-referenced Authorized Cost Level), in such phases or parts, and on such terms as he, in his sole discretion, shall deem to be in the best interests of the Corporation and Purdue University, and in any case in the manner prescribed by law; and

   (b) to authorize, approve and execute all change orders in connection with any of the above-referenced contracts so long as all such change orders, considered collectively, do not cause the aggregate amount of expenditures incurred under such contracts to exceed the Authorized Cost Level.

9. For purposes of Article VII, Section 1(c) of the Bylaws, no change orders in connection with any of the above-referenced contracts shall require further Board or Committee authorization and approval unless and until such a change order, together with all other change orders previously authorized, approved and executed by the Treasurer, causes the aggregate amount of expenditures incurred under such contracts to exceed the Authorized Cost Level for the Jischke Hall Addition Project (it being understood that any change order or any other action that would cause such Authorized Cost Level to be exceeded must, before it is given effect, receive the express prior approval of the Committee and the Board).
Specific Approvals with respect to the Flex Lab Facility Project:

10. The proposal to plan, finance, construct and award one or more contracts for the completion of the Flex Lab Facility Project is hereby authorized and approved.

11. In order to provide funds with which to accomplish the Flex Lab Facility Project, the Treasurer of the Corporation is hereby authorized, under the authority of these resolutions, and without the need for further authorization from this Board, to use up to $38,000,000 of proceeds from bonds or other obligations, up to $13,500,000 of gift funds, and up to $2,500,000 of Central Reserve funds, for a total Project cost of up to $54,000,000 (the “Authorized Cost Level”) for said Project.

12. The Treasurer of the Corporation be, and hereby is, authorized and empowered:

   (a) to solicit, evaluate, select, retain and contract with (i) one or more architectural/engineering firms to provide planning services for said Project, and (ii) one or more construction firms to construct said Project, in each case in such an amount (within the above-referenced Authorized Cost Level), in such phases or parts, and on such terms as he, in his sole discretion, shall deem to be in the best interests of the Corporation and Purdue University, and in any case in the manner prescribed by law; and

   (b) to authorize, approve and execute all change orders in connection with any of the above-referenced contracts so long as all such change orders, considered collectively, do not cause the aggregate amount of expenditures incurred under such contracts to exceed the Authorized Cost Level.

13. For purposes of Article VII, Section 1(c) of the Bylaws, no change orders in connection with any of the above-referenced contracts shall require further Board or Committee authorization and approval unless and until such a change order, together with all other change orders previously authorized, approved and executed by the Treasurer, causes the aggregate amount of expenditures incurred under such contracts to exceed the Authorized Cost Level for the Flex Lab Facility Project (it being understood that any change order or any other action that would cause such Authorized Cost Level to be exceeded must, before it is given effect, receive the express prior approval of the Committee and the Board).

14. The Board further authorizes the financing of said Project, as further provided herein, subject to (i) the provisions for the financing thereof contained in IC 21-35-1, 21-35-3, 21-35-5 and 21-32-2 (collectively, the “Act”), (ii) the additional state approvals required by the Act, and (iii) the limitations as to costs which may be financed for said Project as set forth in the Act, so long as the principal amount of bonds or other obligations issued for the costs of said Project (excluding additional costs allowable for interest and financing charges, underwriter’s discount, debt service reserves, credit enhancement or bond or reserve insurance, or other incidental costs permitted by statute) does not exceed, in the aggregate, $38,000,000.

15. Accordingly, the Board hereby authorizes and directs the Chairman, Vice Chairman, Treasurer, Assistant Treasurer, Secretary, Assistant Secretary, Legal Counsel and Assistant Legal Counsel of the Corporation, and each of them, on behalf of and in the name of
the Corporation, to request and obtain all necessary approvals from the Indiana Commission for Higher Education, the Governor of the State of Indiana, the State Budget Committee and the State Budget Agency, as well as any other necessary government approvals, for the proposed design, acquisition, construction, equipping, furnishing and financing of the Project in the manner set forth herein.

16. The Board further authorizes and directs said officers of the Corporation, and each of them, as follows:

(a) If in their judgment it appears prudent, under then-current market conditions, said officers may obtain one or more series of interim, construction-period financings for the Flex Lab Facility Project prior to the issuance of long-term bonds, or, in lieu thereof or in conjunction therewith, they may negotiate with commercial banks, trust companies or departments, or other lending or financial institutions, for the borrowing of funds on an interim basis, for the construction and related costs of said Project (or for one or more individual phases of said Project), in aggregate principal sums not exceeding any statutory limitations, on such terms as may be legally permissible and as said officers may determine to be in the best interests of Purdue University and of the Corporation; subject, however, to the prior approval of such interim financings and all related bonds, notes or other documents by the Treasurer of the Corporation.

(b) Subsequent to the obtaining of interim financing, or promptly upon any determination that the use of interim financing is not prudent, said officers shall commence negotiations with commercial banks, investment banking or underwriting firms, or other lending or financial institutions, and to undertake preparation of documents for the proposed permanent financing of said Project through the issuance and sale of one or more new series of fixed or variable rate student facilities system revenue bonds (covering all or less than all of said Project or a combination of all or less than all of said Project together with other properly authorized projects). Such proposed bonds are to be issued as additional First Lien Bonds under the existing Indenture of Trust dated as of January 1, 2003 (as heretofore amended and supplemented) between the Corporation and The Bank of New York Mellon Trust Company, N.A., ultimate successor in interest to Bank One Trust Company, National Association, as Trustee, relating to student facilities system revenue bonds under one or more proposed new supplements to such Indenture, to be prepared in connection with the proposed series of new bonds, all subject, however, to prior approval of the proposed terms and conditions of the proposed bonds and all of the documents related to the issuance and sale thereof by the Treasurer of the Corporation. The bonds may be issued in any denomination not greater than $100,000 with maturities not later than 30 years from the date of issuance, may be sold at a negotiated sale as provided by IC 21-32-3, and may bear interest payable at any interval or intervals not exceeding one year. The Treasurer is authorized to grant the approvals described in this Section 16(b), to execute, sell and deliver, or to authorize the execution, sale and delivery of any such bonds and to delegate to said
officers of the Corporation such authority to determine and fix the final terms and conditions of the fixed or variable rate transaction as, in his sole discretion, the Treasurer deems appropriate.

17. The Board hereby declares its official intent, pursuant to applicable Treasury Regulations, to plan, design, acquire, construct, equip and furnish the Flex Lab Facility Project and to reimburse certain costs of design, acquisition, construction, equipping and furnishing of said Project with the proceeds of debt to be incurred by the Corporation with respect to said Project and to issue debt not in excess of the maximum amounts for said Project as set forth in this Resolution and as otherwise limited or permitted by applicable statues.

General Approvals with respect to All Three Projects:

18. Except for the authority delegated specifically to the Treasurer in Section 16 above with respect to the financing of the Flex Lab Facility Project, the Treasurer of the Corporation be, and hereby is, further authorized and empowered to delegate to one or more officers and representatives of the Corporation such tasks and responsibilities with respect to the completion of each Project as he, in his sole discretion, shall deem to be in the best interests of the Corporation and Purdue University and consistent with the exercise of the authority granted above.

19. The Chairman, Vice Chairman, Treasurer, Assistant Treasurer, Legal Counsel, Assistant Legal Counsel, Secretary and Assistant Secretary of the Corporation, and the Executive Vice President for Business and Finance, Treasurer and the Senior Vice President for Business Services and Assistant Treasurer of Purdue University, and each of said officers respectively, are hereby authorized and empowered for, on behalf of, and in the name of the Corporation, or of Purdue University, to: (a) request any necessary approvals (if not already obtained and to the extent not otherwise provided in this Resolution) of the Indiana Commission for Higher Education, the Governor of the State of Indiana, the State Budget Committee and the State Budget Agency for the actions hereinabove authorized, as well as such other governmental approvals as may be required by law; and (b) execute and deliver any and all documents and instruments and take any and all other actions as may be necessary or appropriate to carry out the purpose and intent of this Resolution, whether therein or herein specifically authorized or not, except for such actions as are specifically required by law to be taken by the Board as the governing body of the Corporation.
Zucrow High Pressure Research Lab Test Cells Construction and
Control Center Renovation and Addition

Request BOT Approval to Plan, Finance, Construct and Award

Campus: West Lafayette

Project Description: Construct new 9,600 GSF building containing five test cells, a
laser lab and associated preparation space for research. Renovate
and expand the existing ZL3 to approximately 5,000 GSF
including control center, research offices and new parking lot.

Architect/Engineer: TBD

Estimated A/E Fee: $700,000

Estimated Project Budget: $8,200,000

Gross Square Feet: 14,600

Assignable Square Feet: 8,500

Estimated Cost/GSF: $561.64

Source of Funds: Gift Funds $7,450,000

Repair and Rehabilitation – ARRA Funds – F&A 750,000

$8,200,000

BOT Plan, Finance, Construct and Award Approval: Request May, 16, 2014

Budget Agency Approval: Request May 16, 2014

A/E M/WBE Participation: TBD

General Contractor M/WBE Participation: TBD
Jischke Hall Addition

Request BOT Approval to Plan, Finance, Construct and Award

Campus: West Lafayette

Project Description: Construction will include a three story addition and basement to the existing Jischke Hall and will house research-type labs, an expanded multidisciplinary student design lab, additional instructional spaces that support innovative active-learning pedagogy, office space, grad office areas, and support spaces for instructional and research laboratories.

Architect/Engineer: TBD

Estimated A/E Fee: $1,000,000

Estimated Project Budget: $14,000,000

Gross Square Feet: 32,000

Assignable Square Feet: 21,500

Estimated Cost/GSF: $437.50

Source of Funds: Gift Funds

BOT Plan, Finance, Construct and Award Approval: Request May 16, 2014

Budget Agency Approval: TBD

A/E M/WBE Participation: TBD

General Contractor M/WBE Participation: TBD
Flex Lab Facility
Request BOT Approval to Plan, Finance, Construct and Award

Campus: West Lafayette

Project Description: The project will construct a new multidisciplinary research facility designed to support the growth of the College of Engineering and to meet the ever changing research needs of the University. The facility will provide a transformative environment which encourages collaboration, team based research, learning, and engagement among peers with diverse research interests. Both wet and dry lab needs will be accommodated in this facility designed to address the needs of today’s diverse research portfolio and to adapt to the changing needs of the future. Infrastructure will be built-out to accommodate future expansion of this facility on this site.

Architect/Engineer: TBD

Estimated A/E Fee: $3,840,000

Estimated Project Budget: $54,000,000

Gross Square Feet: 75,000

Assignable Square Feet: 60,000

Estimated Cost/GSF: $720

Source of Funds: Support and Research Facilities Revenue Bonds $38,000,000
Gift Funds 13,500,000
University Funds – Central Reserves 2,500,000

$54,000,000

BOT Plan, Finance, Construct and Award Approval: Request May 16, 2014

Budget Agency Approval: TBD

A/E M/WBE Participation: TBD

General Contractor M/WBE Participation: TBD

Additional Comments: $3,000,000 dedicated toward utility infrastructure