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National Aeronautic and Space Administration
U.S. Department of Energy
Finding of No Significant Impact
Life Sciences Building
Brown University, Providence, Rhode Island

NOTICE: NASA/03-GSFC-02 and DOE/EA-1473

AGENCIES: National Aeronautic and Space Administration
U.S. Department of Energy

ACTION: Finding of No Significant Impact

SUMMARY:

The National Aeronautic and Space Administration (NASA) and the U.S. Department of Energy (DOE) propose to partially fund a Life Sciences Building to be located on the Brown University campus in Providence, Rhode Island. Conference reports accompanying their congressional appropriations indicated that NASA and DOE were provided $5.25 million and $1.0 million, respectively, for this purpose. NASA and DOE determined that award of the partial funding would require compliance with the National Environmental Policy Act (NEPA), 42 U.S.C. 4321 et seq. Primarily, because of potential impacts to historic resources, the agencies determined that preparation of an environmental assessment (EA) was appropriate.

DESCRIPTION OF THE PROPOSED ACTION:

The proposed action consists of providing partial funding for a new Life Sciences Building on a site adjacent to the existing Grimshaw-Gudewicz Biomedical Building on the Brown University campus. The occupants of the proposed facility would be scientists from the Department of Molecular and Cell Biology and Biochemistry, the Department of Neuroscience, and a new Brain Science Program. The proposed facility would contain 51 laboratory modules, 69 faculty offices, two administrative suites, three large seminar or conference rooms, and 15 small conference rooms. There would be research suites for Magnetic Resonance Imaging units and electron microscopy. The building would consist of approximately 15,800 square meters (170,000 gross square feet), with five levels above grade and one level below grade. The building would be framed of structural steel with concrete floors on steel decking. The exterior envelope would consist of masonry and glass construction.

ALTERNATIVES:

In addition to the proposed action, alternative sites were considered for the proposed building. Seven potential sites were identified and then compared with screening criteria developed by Brown University to identify reasonable sites for analysis. Of the seven sites, only the proposed site met all the screening criteria. The other sites were eliminated from consideration because they were either too small to accommodate the proposed facility, were not within reasonable

proximity to existing life sciences facilities that would be shared by the new Life Sciences Building, were not currently owned by Brown University, or were not in the Institutional Zone approved by the City of Providence. Renovation of existing buildings was also considered, but was eliminated from consideration because no acceptable buildings were found and the cost would be prohibitive.

Under the no action alternative, neither NASA nor DOE would provide partial funding for the proposed Life Sciences Building. However, this funding represents less than 7 percent of the total funding for the project, and it is likely that Brown University could find other sources for these funds. Brown University is committed to implementing the project without the NASA or DOE funding if necessary; thus, the environmental impacts of the no action alternative would be consistent with those of the proposed action. Denial of funding is not a reasonable option because it does not meet the intent of Congress.

ENVIRONMENTAL IMPACTS:

Areas of potential environmental impact evaluated in the EA included those associated with both the construction and operation of the proposed facility. Construction impacts evaluated included the effects of demolishing existing buildings in an historic district, air emissions, noise, and construction traffic and parking. Impacts of operation included air emissions, noise, traffic and parking, and the effects of the use of hazardous, radiological, and biological materials and waste generation.

Impacts of Construction

The primary environmental impact of the proposed Life Sciences Building would be to historic resources. The proposed site for the building is located in the College Hill Historic District of Providence, Rhode Island. In addition, the proposed action would require that three contributing resources be removed and replaced with the proposed building. These impacts have been mitigated to the fullest extent possible (including photo-documentation and redesign of the proposed building to reduce overall scale and massing). NASA, DOE, the Rhode Island State Historic Preservation Officer, and Brown University have agreed to a Memorandum of Agreement that documents these commitments.

During construction, there would be a small volume of air pollutant emissions, temporary increases in noise, and temporary disruptions in traffic and parking. Brown University has committed to implementing several mitigation measures to minimize construction impacts, including establishing a special parking lot for construction workers and a designated construction truck route. The Construction Manager would ensure that all applicable equipment met current federal and state emission regulations (*e.g.*, valid inspection certificates, *etc.*). All site trade contractors would comply with the City of Providence Noise Control Ordinance and the limitations placed upon them in Project Specifications regarding various pieces of equipment.

Impacts of Operation

The operation of the facility is a reasonably foreseeable outcome of the proposed action and, therefore, NEPA requires consideration of the operational impacts. The operation of the facility would result in an increase in the use of hazardous materials and in the generation of hazardous, radioactive, and biological waste as a result of research conducted in the building. Brown University would comply with all applicable federal and state regulations regarding the handling, storage, and disposal of these materials and wastes. The operation of the proposed building would also result in air emissions, some of which would be added to the university's existing Title V Air Operating Permit issued by the Rhode Island Department of Environmental Management. The identified air emissions generated from the operation of the proposed building would be from boilers, an emergency generator, cooling towers, and exhaust from research fume hoods.

DETERMINATION: Based on the analysis in the EA, NASA and DOE have determined that the construction and operation of the proposed Life Sciences Building at Brown University in Providence, Rhode Island, would not individually or cumulatively have a significant affect on the quality of the human environment. Therefore, the proposed action does not constitute a major federal action within the meaning of NEPA, and an environmental impact statement is not required.

PUBLIC AVAILABILITY: Copies of the EA are available by contacting:

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A copy may be viewed online at: http://www.brown.edu/webmaster/special_rept.html

Copies of the EA are also available for review at the following locations:

Providence Public Library
Government Documents
225 Washington Street
Providence, RI 02903

For further information regarding the NASA NEPA process, contact:

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THE NATIONAL AERONAUTICS AND SPACE ADMINISTRATION

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UNITED STATES DEPARTMENT OF ENERGY

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