

# FCR 9

Office of the President  
February 21, 2020

Members, Board of Trustees:

IMPROVE CENTER FOR APPLIED ENERGY RESEARCH FACILITIES  
CAPITAL PROJECT (MINERAL PROCESS BUILDING EXPANSION)

Recommendation: that the Board of Trustees approve the request to initiate the Improve Center for Applied Energy Research Facilities Capital Project (Mineral Process Building Expansion).

Background: Pursuant to Administrative Regulation 8:2, any capital project with an estimated cost of \$1,000,000 or more must be approved by the Board prior to initiation.

The University's Center for Applied Energy Research (CAER) is working in partnership with the U.S. Department of Defense to expand the University's Mineral Process Building. This 2,000 square foot expansion is essential for increasing bulk storage of raw materials which are needed to develop high performing concrete for military applications. The elimination of heavy precast rebar-laden structural elements can greatly simplify logistics, speed of construction, and on-going repair. The purpose of the research is to create cements and concretes that can be used to construct or repair bridges, runways, roadways and other hardened structures. These materials must be simple to deploy and use; quickly achieve a very high strength; and achieve high bond strength with little or no surface preparation.

The expansion will allow CAER to develop more concrete variations and increase the scale and scope of specimens for advanced field testing and implementation. As the raw materials are sensitive to environmental conditions such as heat and moisture, monitored and conditioned storage space is required to ensure uniformity in the materials and products.

This \$1,500,000 project, authorized by the 2018 Kentucky General Assembly, is well within the total legislative authorization of \$20,000,000 and will be funded with federal funds from the U.S. Department of Defense.

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Action taken:  Approved     Disapproved     Other \_\_\_\_\_

