

# MEMORANDUM

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**TO:** Joint Budget Committee

**FROM:** Patrick Brodhead, JBC Staff (303-866-4955)

**SUBJECT:** Capital Construction Supplemental Request

**DATE:** February 10, 2011

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This memorandum addresses one FY 2010-11 capital construction supplemental request that was approved by the Capital Development Committee at its meeting on February 3, 2011. This request is summarized below.

University of Colorado at Boulder, JILA Addition (202 Project): The University of Colorado at Boulder previously received an appropriation of \$5,500,000 cash funds and \$22,000,000 federal funds to construct a 55,442 GSF JILA addition to the Duane Physics Building. This FY 2010-11 supplemental request seeks an additional appropriation of \$9,625,000 cash funds in order to complete construction of the addition.

In order to complete construction of the JILA addition, the university requests additional cash funds spending authority to address recently discovered site conditions. These conditions include: (1) a greater than expected volume of hazardous materials in underground storage tanks to be mitigated; (2) the need to redesign and reroute utility pathways; and (3) a demand for additional mechanical, electrical, and plumbing work in order to accommodate sophisticated laboratory equipment. Project delays related to the guarantee of federal funds and changes in how the construction will be managed also contributed to the project cost increases. Finally, the university indicates that additional costs are driven by the need to meet vibration criteria for vibration-sensitive laboratories and to mitigate noise for the surrounding buildings. Specifically, the projected cost increases include:

1. \$1,489,237 for professional services, which includes \$990,487 for architectural and engineering services, \$178,043 for additional soil testing ahead of the tank removal, \$170,707 for construction management, and \$150,000 due to delays;
2. \$7,449,483 for construction costs, which includes \$3,000,000 for more intensive laboratory construction and design, \$1,900,000 to change the project delivery from a design-bid-build method to a contract manager/general contractor (CMGC) method due to the logistical challenges of the project, \$750,000 for higher than anticipated inflation rates, \$532,076 for oil tank removal due to contaminated pipes, \$500,000 for more difficult staging than anticipated, \$410,781 to reroute utilities pathways and meet utility needs of laboratory equipment, \$255,000 to increase the amount of energy and water

- conservation in the building, and \$101,626 to structurally support the existing roof due to snow loading in the shadow of the existing building;
3. \$42,598 for higher than anticipated relocation costs; and
  4. \$643,682 for contingency costs, which includes \$554,812 as a 5.0 percent contingency reserve for the new construction, and \$88,870 as a 10.0 percent contingency reserve for the renovation construction.

JILA is a joint institute operated by the university and the National Institute of Standards and Technology (NIST), an agency of the U.S. Department of Commerce. JILA was established in 1962 as the Joint Institute for Laboratory Astrophysics. However, the acronym is no longer accurate, and the institute is now known simply as JILA. The institute is staffed by top fellows made up of members of the faculty and NIST scientists. JILA fellows supervise graduate students, teach classes, and conduct their own research.

The JILA addition project adds 55,442 GSF to the Duane Physics Building located on the main campus. The addition is planned as a six-story structure with two below-grade floors for light and vibration sensitive laboratories and four above-grade floors to house faculty offices, student workstations, and collaboration space. The project also removes about 11,000 GSF of underground concrete oil tanks in preparation for construction.

The source of cash funds for the project is research-generated revenue. The university indicates that it may also receive a \$2.5 million federal grant to support the project. However, the university states that it will accumulate sufficient funds from research activity to pay the full cost of the supplemental request in the event no additional federal funds are received. As a Senate Bill 92-202 project, no state funds can ever be used for the design, construction, operation, or maintenance of the project's components.

**Staff Recommendation:** Staff recommends that the Committee approve the FY 2010-11 supplemental request for an appropriation of \$9,625,000 cash funds for this project. No state funds are required for the construction, maintenance, or operating expenses of the project. If the JBC approves the appropriation, it will be included in this year's Long Bill for informational purposes.