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March 21, 2008

OFFICE OF THE PRESIDENT

Robert C. Dynes President

ACTION UNDER PRESIDENT'S AUTHORITY - AMENDMENT OF THE BUDGET FOR CAPITAL IMPROVEMENTS AND THE CAPITAL IMPROVEMENT PROGRAM FOR KING STUDENT UNION SEISMIC AND LIFE SAFETY CORRECTIONS, BERKELEY CAMPUS

It is recommended that:

Pursuant to Standing Order 100.4(q)

(1) The President amend the 2007-08 Budget for Capital Improvements and the Capital Improvement Program to include the following project:

Berkeley:

King Student Union Seismic and Life Safety Corrections -- preliminary plans, working drawings, and construction -- \$7,900,000 to be funded from the campus funds (Berkeley campus's Life Safety Fee).

A Key to abbreviations and the project description are attached.

(Attachments)

<u>KEY</u> <u>Capital Improvement Program Abbreviations</u>

S	Studies
P	Preliminary Plans
W	Working Drawings
C	Construction
E	Equipment
-	State Funds (no abbreviation)
F	Federal Funds
G	Gifts
HR	Hospital Reserve Funds
I	California Institutes for Science and Innovation
LB	Bank Loans or Bonds (External Financing includes Garamendi, Bonds, Stand-By, Interim and Bank Loans)
LR	Regents' Loans (Internal Loans)
N	Reserves other than University Registration Fee (Housing and Parking Reserves)
R	University Registration Fee Reserves
U	Regents' Appropriations (President's Funds, Educational Fund)
X	Campus Funds
CCCI	California Construction Cost Index
EPI	Equipment Price Index

Budget for Capital Improvements and Capital Improvements Program Scheduled for

Regents' Allocations, Loans, Income Reserves, University Registration Fee Reserves, Gift Funds, and Miscellaneous Funds

Campus and Project Title (Total Cost)		Proposed <u>2007-08</u>	
Berkeley	P	400,000	X
King Student Union Seismic and Life Safety Corrections	W C	500,000 7,000,000	$X \\ X$

(\$7,900,000)

DESCRIPTION

The Berkeley campus requests approval of the King Student Union Seismic and Life Safety Corrections (King Student Union) project at a total project cost of \$7,900,000. The King Student Union would be structurally upgraded to improve its seismic rating from "Poor" to "Good." Building code deficiencies in the areas involved in the structural corrections would also be addressed; these code upgrades consist of a fire alarm system, egress lighting, and new railing for the stairs in the main lobby (Room 226).

In July 2004, The Regents approved the continuation of the life-safety fee in order to fund priority projects addressing the safety needs of student services facilities. This included the Martin Luther King Student Union seismic remediation project at an estimated cost of \$3,500,000. Subsequently, in May 2005, The Regents approved another continuation and a new increase of the life-safety fee to further address the safety needs of student services facilities.

Background and Problem Analysis

The King Student Union is a six-story steel and concrete building totaling 69,578 asf (110,111 gsf). The building serves the Associated Students of the University of California (ASUC) Auxiliary and includes an art studio, a student-run open computer facility, Pauley Ballroom (a space heavily used for fairs, lectures, inaugurations, and alumni functions), and meeting rooms. It also includes ASUC commercial services, such as textbook and school supply sales, food facilities, a travel office, and a credit union.

In 2000, a seismic study conducted by Forrel/Elsesser Engineering, Inc., rated King Student Union as seismically "Poor." The building's lateral force-resisting system is inadequate to meet current standards for what is considered a seismically safe structure. In a major earthquake, the performance of the building is anticipated to result in significant structural and nonstructural damage, and falling hazards that would represent an appreciable life-safety risk to occupants and

visitors. The most serious expected failure would be the collapse of columns supporting the separate structure on the roof (Tilden Room, Room 501), which could cause failure of the floors below. This room is enclosed by a massive concrete shell roof supported by four circular concrete columns. The columns do not possess adequate strength or ductility to safely resist the expected lateral loads and displacement of a large earthquake and are likely to fail. Other expected failures include the failure of the high windows surrounding Pauley Ballroom (Rooms 301A and 301B) and the shedding of concrete encasement material from around the perimeter steel columns that support the ballroom.

The building has a number of fire, life-safety, and accessibility deficiencies. These deficiencies include an fire alarm system that does not meet current code requirements, lack of an adequate automatic sprinkler system, walls that do not meet the required fire code rating for occupancy separations, unprotected penetrations in rated separations, inadequate exit signs, and other exiting deficiencies (including inadequate emergency lighting in the stairwells, a missing rail at Pauley Ballroom main stair, and accessibility problems that must be addressed in areas affected by the seismic strengthening).

Project Description

This project would address several mandated life-safety upgrades, seismic hazards, and bring the current "Poor" seismic rating to "Good" in the King Student Union building. The improvements would be executed in two separate construction phases (Phase 1 and Phase 2) as follows:

Phase 1

- strengthening of the Tilden Room on the roof: the room has four freestanding concrete columns supporting a massive angled concrete roof; the concrete columns would be reinforced by wrapping them in steel and strengthening the floor beams beneath them to prevent collapse;
- upgrade of two restrooms on the fifth floor and installation of an accessible water fountain;
- installation of a fire alarm system in the food court area;
- installation of audible alarms and systems in coordination with areas between the King Student Union and the Chavez Student Center to the north; and
- upgrade of the egress lighting between the Tilden Room on the fifth floor and the Pauley Ballroom on the third floor.

Phase 2

- installation of a steel brace frame in the Pauley Ballroom from the foundation to the roof of the building to prevent the collapse of the wall and replacement of the existing plate glass with safer tempered glazing;
- upgrade of two noncompliant basement restrooms, widening of a basement ramp, and replacement of a noncompliant water fountain;

- reinforcement of the shearwall of the west stairwell by adding collector beams and increasing its thickness; this reinforcing work would require the closure of the food court in the building for the summer only; and
- installation of a new railing for the stairs leading from the main lobby of the building (Room 226) to the Pauley Ballroom.

Construction for Phase 1 would begin in April 2008 with completion anticipated in September 2009. Construction for Phase 2 would begin in January 2009 with completion expected in August 2009.

Green Building Policy and Clean Energy Standard

This project will comply with the UC Policy on Sustainable Practices. As required by this policy, the project will adopt the principles of energy efficiency and sustainability to the fullest extent possible, consistent with budgetary constraints and regulatory and programmatic requirements.

CEQA Classification

In accordance with the California Environmental Quality Act (CEQA) and the University of California Procedures for the Implementation of CEQA, this project has been classified as categorically exempt.

Financial Feasibility

The total project cost of \$7,900,000 would be funded from campus funds (Berkeley campus's Life-Safety Fee).

In July 2004, The Regents approved the continuation of the life-safety fee in order to fund priority projects addressing the safety needs of student services facilities. Subsequently, in May 2005, The Regents approved continuation and increase of the life-safety fee to further address the safety needs of student services facilities.

Additional project cost information may be found on Attachment 1.

Approved:

Robert C. Dynes

President of the University

3/25/08

Attachment

ATTACHMENT 1

PROJECT STATISTICS KING STUDENT UNION SEISMIC AND LIFE SAFETY CORRECTIONS CAPITAL IMPROVEMENT BUDGET BERKELEY CAMPUS CCCI 5157

Cost Category	Amount	% of Total
Site Clearance		
Building	\$6,250,000	79.1%
Exterior Utilities		
Site Development		
A/E Fees	600,000	7.6%
Campus Administration ^(a)	300,000	3.8%
Surveys, Tests	50,000	.6%
Special Items ^(b)	400,000	5.1%
Contingency	300,000	3.8%
Total	\$7,900,000	100.0%
Groups 2 & 3 Equipment		
Total Project	\$7,900,000	
Statistics		
Gross Square Feet (gsf) ^(c)	110,111	
Assignable Square Feet (asf) ^(c)	69,578	
Ratio ASF/gsf (%)	63%	
Building Cost/gsf ^(c)	\$57	
Building Cost/asf ^(c)	\$90	

⁽a) Campus administration includes project management and inspection.

⁽b) Special items include advance planning and studies, environmental mitigation and monitoring, code compliance fees, and VE/constructability review, totaling \$400,000.

⁽c) Gross square feet (gsf) is the total area, including usable area, stairways, and space occupied by the structure itself. Assignable square feet (asf) is the net usable area.