

CC-C: CAPITAL CONSTRUCTION REQUEST FOR FY 2011-12

Project Title		Ketchum Arts & Sciences Capital Renewal		State Controller Project No. P0803		Name and Email of Preparer: [Signature]			
Project Year(s)		FY 2011 - 12		Signature of Department or Institution Approval: Paul M. Leaf, AIA		Date: 3-Jun-10			
Agency or Institution		CDHE: University of Colorado - Boulder		Signature CCHE Approval: [Signature]		Date: 8/23/10			
Agency or Institution Priority Number: 3				Signature OSPB Approval: [Signature]		Date: 8/23/10			
Revision?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	Total Project Costs	Prior-Year Appropriation(s)	Current Request FY 2011-12	Year 2 Request	Year 3 Request	Year 4 Request	Year 5 Request
<b>A. Land Acquisition</b>									
(1)	Land/Building Acquisition		\$0	\$0	\$0	\$0	\$0	\$0	\$0
<b>B. Professional Services</b>									
(1)	Master Plan/PP		\$0	\$0	\$0	\$0	\$0	\$0	\$0
(2)	Site Surveys, Investigations, Reports		\$89,737	\$12,577	\$77,160	\$0	\$0	\$0	\$0
(3)	Architectural/Engineering/ Basic Services		\$880,274	\$603,000	\$277,274	\$0	\$0	\$0	\$0
(4)	Code Review/Inspection		\$24,340	\$11,840	\$12,500	\$0	\$0	\$0	\$0
(5)	Construction Management		\$0	\$0	\$0	\$0	\$0	\$0	\$0
(6)	Advertisements		\$809	\$809	\$0	\$0	\$0	\$0	\$0
(7a)	Inflation for Professional Services		\$0	\$0	\$0	\$0	\$0	\$0	\$0
(7b)	Inflation Percentage Applied			0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
(8)	Other		\$0	\$0	\$0	\$0	\$0	\$0	\$0
(9)	Total Professional Services		\$995,160	\$628,228	\$366,934	\$0	\$0	\$0	\$0
<b>C. Construction or Improvement</b>									
(1)	Infrastructure		\$0	\$0	\$0	\$0	\$0	\$0	\$0
	(a) Service/Utilities		\$181,365	\$0	\$181,365	\$0	\$0	\$0	\$0
	(b) Site Improvements		\$0	\$0	\$0	\$0	\$0	\$0	\$0
(2)	Structure/Systems/ Components		\$0	\$0	\$0	\$0	\$0	\$0	\$0
	(a) New (GSF):		\$0	\$0	\$0	\$0	\$0	\$0	\$0
	New \$ /GSF								
	(b) Renovate GSF:		\$9,172,693	\$29,500	\$143,193	\$0	\$0	\$0	\$0
	Renovate \$ /GSF								
(3)	Other (Haz. Mat.)		\$1,048,667	\$0	\$1,048,667	\$0	\$0	\$0	\$0
(4)	High Performance Certification Program		\$0	\$0	\$0	\$0	\$0	\$0	\$0
(5a)	Inflation for Construction		\$0	\$0	\$0	\$0	\$0	\$0	\$0
(5b)	Inflation Percentage Applied			0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
(6)	Total Construction Costs		\$10,402,625	\$29,500	\$10,373,126	\$0	\$0	\$0	\$0
<b>D. Equipment and Furnishings</b>									
(1)	Equipment		\$0	\$0	\$0	\$0	\$0	\$0	\$0
(2)	Furnishings		\$0	\$0	\$0	\$0	\$0	\$0	\$0
(3)	Communications		\$300,000	\$0	\$300,000	\$0	\$0	\$0	\$0
(4a)	Inflation on Equipment and Furnishings		\$0	\$0	\$0	\$0	\$0	\$0	\$0
(4b)	Inflation Percentage Applied			0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
(5)	Total Equipment and Furnishings Cost		\$300,000	\$0	\$300,000	\$0	\$0	\$0	\$0
<b>E. Miscellaneous</b>									
(1)	Art in Public Places=1% of State Total Construction Costs (see SB 10-94)		\$0	\$0	\$0	\$0	\$0	\$0	\$0
(2)	Annual Payment for Certificates of Participation		\$0	\$0	\$0	\$0	\$0	\$0	\$0
(3)	Relocation Costs		\$391,679	\$0	\$391,679	\$0	\$0	\$0	\$0
(4)	Other Costs [specify]		\$0	\$0	\$0	\$0	\$0	\$0	\$0
(5)	Other Costs [specify]		\$0	\$0	\$0	\$0	\$0	\$0	\$0
(6)	Other Costs [specify]		\$0	\$0	\$0	\$0	\$0	\$0	\$0
(7)	Other Costs [specify]		\$0	\$0	\$0	\$0	\$0	\$0	\$0
(8)	Total Misc. Costs		\$391,679	\$0	\$391,679	\$0	\$0	\$0	\$0
F.	Total Project Costs		\$12,089,484	\$657,728	\$11,431,756	\$0	\$0	\$0	\$0
<b>G. Project Contingency</b>									
(1)	5% for New		\$0	\$0	\$0	\$0	\$0	\$0	\$0
(2)	10% for Renovation		\$1,060,064	\$0	\$1,060,064	\$0	\$0	\$0	\$0
(3)	Total Contingency		\$1,060,064	\$0	\$1,060,064	\$0	\$0	\$0	\$0
H.	Total Budget Request		\$13,149,528	\$657,728	\$12,491,802	\$0	\$0	\$0	\$0
<b>I. Source of Funds</b>									
	CCF		\$13,149,528	\$657,728	\$12,491,802	\$0	\$0	\$0	\$0
	CF		\$0	\$0	\$0	\$0	\$0	\$0	\$0
	RF		\$0	\$0	\$0	\$0	\$0	\$0	\$0
	FF		\$0	\$0	\$0	\$0	\$0	\$0	\$0

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**A. AGENCY BASIC DATA:**

<input type="checkbox"/>	<b>Controlled Maintenance Request</b>	<input checked="" type="checkbox"/>	<b>Building/infrastructure Renewal Request</b>
		<input checked="" type="checkbox"/>	<b>HPCP required in Capital Renewal Request (Y/N)</b> (on CC-A specify HPCP compliance)

- 1) Agency University of Colorado Boulder
- 2) Department Higher Education
- 3) Physical Plant ID No. 03-03 Project M # \_\_\_\_\_
- 4) Agency Priority # 1
- 5) Project Title Capital Renewal of Ketchum Arts and Sciences Building

**B. FACILITY PROFILE**

1) Facility Type	<input type="checkbox"/>	Site (Utilities) _____
	<input type="checkbox"/>	or Site (Improvements) _____
	<input checked="" type="checkbox"/>	or Building Name (s) <u>Ketchum Arts and Sciences Building</u>
	<input type="checkbox"/>	Risk Mgmt. Bldg(s) ID# _____

- 2) Facility Location Central Campus-CU Boulder
- 3) Facility Area/Age GSF 59,454 ASF 48,306 Date Built 1938
- 4) Facility Functional Use/Occupancy Classrooms/Academic Offices/Labs/Instructional Space
- 5) Facility Construction (Type) II-FR-steel, concrete, stone
- 6) Facility Physical Condition and Facility Condition Index (FCI) Number  
 Actual FCI = .34 Targeted FCI = .85 Date of Last Audit 12/00  
 (Describe) Structurally sound, with basic bldg. systems deteriorated and in need of repair/upgrade for code compliance and maintenance upgrades. (Fire rated doors, electrical panels, exterior windows, roof gutters, interior door hardware, lighting systems, fire rated wall penetrations, ADA requirements, and stair enclosures are some of the deficiencies noted in audit.)

7) Facility - Intensity of Use, Time(s) of Operation: (Hours/Day, Days/Month, Months/Year)  
7:00 a.m. – 10:00 p.m., 6 days a week, 12 months a year, 10,538 student hours a week.

8) Facility - Current Replacement Value \$ 12,263,238; current risk management replacement value.

9) Master Plan Status - Check one or more of the following:

- a)  Facility 'useful' life is less than five (5) years.
- b)  Facility 'useful' life is more than five (5) years.
- c)  Master Plan is obsolete; Last Date Approved \_\_\_\_\_  
 (by OSPB/CCHE)
- d)  Major facility changes, renovations, or program revisions are ongoing or anticipated in the next five years, (If yes, please explain below if these facility renovations or program revisions may have an impact on this CM request.)  
N/A

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10) Facility Audit Survey:

a) Facility Audit Survey concluded and submitted to SBREP -	Date	<u>12/00-7/01</u>
b) Status of the Infrastructure Assessment.	% Completed	<u>25</u>
c) Facility Audit Survey Cycle	<u>1/3 year</u>	

11) List all the controlled maintenance, capital construction, and emergency projects completed within the last five years or ongoing CM, CC, or M projects that can be associated with either this CM building or infrastructure request.

Project No.	Project Title	Completion date or status
<u>M90032</u>	<u>Upgrade Fire Alarm Systems, Phase 5 of 5</u>	<u>Ph 5 request 07/08</u>
<u>M80053</u>	<u>Fire Sprinkler Upgrades, Phase 2 of 6</u>	<u>01/04</u>
<u>M90032</u>	<u>Upgrade Fire Alarm System, Phase 1 of 4 (network connection)</u>	<u>12/03</u>

**C. INTEGRATED PROGRAM PLAN DATA**

**NOTE:** For a Capital Renewal Building/Infrastructure Request, refer to the instructions for the additional information required to support the request.

1) Narrative Description of CM Problem (previous, current and future):

The facility audit for this facility shows major deficiencies in functionality, building integrity, code compliance, and hazardous materials (asbestos). Minor deficiencies are shown in appearance, energy, and exterior systems. The Capital Renewal Project will address these issues as well as issues pertaining to the mission of this facility.

By using a CM/GC approach for this project we will be able to confirm our cost estimates and better manage the design and construction process.

The project is being phased for budgetary reasons, with the design and construction work schedule to match the funding sequence. Phase 1: Design. Phase 2: Construction

See attached executive summary and budget sheet.

2) Total Project Cost Estimate (From Cost Breakdown) \$ 13,149,528

3) Consequences (cost effects, program impacts, facility impacts, etc.) of not funding and justifying this specific project request:

The current and future delivery of academic programs will be severely affected if this project is not funded.

4) **Mandatory** – Include Facility Audit documentation from most recent audit. Include site maps for any infrastructure project request.

Please see attached facility audit Deficiency List, Ketchum Cost per Sq. Foot Model, and photographs depicting current conditions in Ketchum building.

5) **Optional** – Include photographs and any other supporting documents

6) Explanation of how this project will improve the building(s) facility condition index or improve a specific infrastructure system.

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**D. DETAILED COST ESTIMATE (detail by phase, include all phases)**

1) Approved By Thomas Goodhew, AIA 2) Phase 1 of 2  
 3) Method of Estimate "means" square foot / historical campus project data

**4) Professional Services**

Site Surveys, Investigations, and Reports	
Material Testing	\$12,577
(Welding, concrete, pressure testing pipe)	
Code Review	\$11,840
Arch/Eng/Basic Services (Schematic Design/Design Development)	\$603,000
Basic Services @ 12% of construction (full Fee) with Reimbursable	
Pre-construction CM/GC Services	\$29,500
Other (Explain)	
Advertisements and Courier Services	\$809
Total of Professional Services – Funds expended as of 3/31/09	\$657,726

**5) Construction Improvement**

<u>WORK ITEM</u> (Labor/Material/Equipment)	<u>UNIT</u>	<u>UNIT COST</u>	<u>EXTENDED COST</u>
Infrastructure			
Total of Construction Improvements Costs -- Phase 1 is design only			\$0
---- See Attached Budget Summary and Detail ----			

**6) Miscellaneous (explain)**

Total of Miscellaneous Costs			\$0

**7) Project Contingency**

Contingency (10% CM) (Percentage of total of professional services, construction improvements, and miscellaneous costs.)	\$0
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8) Subtotal of professional services , construction improvements, miscellaneous costs, and project contingency percentage (by phase)	\$657,726
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9) TOTAL PROJECT COST (all phases)= REQUEST	\$13,149,528
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Note: Agency formatted cost estimates may accompany this page.

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**D. DETAILED COST ESTIMATE (detail by phase, include all phases)**

1) Approved By Thomas Goodhew, AIA 2) Phase 2 of 2  
 3) Method of Estimate "means" square foot/historical campus project data

**4) Professional Services**

<b>Site Surveys, Investigations, and Reports</b>	
Material Testing	\$35,000
(Welding, concrete, pressure testing pipe)	
Asbestos & Environmental Report	\$42,160
(Asbestos: floor tile, pipe insulation, window putty & wiring; ballasts and lead paint (windows))	
Arch/Eng/Basic Services (Schematic Design/Design Development)	\$277,274
Basic Services @ 12% of construction (full Fee) with Reimbursable	
Other (Explain)	
Plan Review Consultant	\$12,500
Pre-construction CM/GC. (2.5% of Construction)	\$59,000
<b>Total of Professional Services</b>	<b>\$425,934</b>
---- See Attached Budget Summary and Detail ----	

**5) Construction Improvement**

<u>WORK ITEM</u> (Labor/Material/Equipment)	<u>UNIT</u>	<u>UNIT COST</u>	<u>EXTENDED COST</u>
<b>Total of Construction Improvements Costs</b>			<b>\$9,252,072</b>
---- See Attached Budget Summary and Detail ----			

**6) Miscellaneous (explain)**

Asbestos abatement			\$1,048,567
Moving Expenses and staging			\$360,000
Temporary phone relocation			\$45,165
Art in Public Places			N/A
IT Infrastructure Upgrade			\$300,000
<b>Total of Miscellaneous Costs</b>			<b>\$1,753,732</b>

**7) Project Contingency**

Contingency (10% CM) (Percentage of total of professional services, construction improvements, and miscellaneous costs.)	\$1,060,064
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8) Subtotal of professional services , construction improvements, miscellaneous costs, and project contingency percentage (by	\$12,491,802
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<b>9) TOTAL PROJECT COST (all phases)= REQUEST</b>	<b>\$13,149,528</b>
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**Note: Agency formatted cost estimates may accompany this page.**

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**E. PROPOSED PHASING  
 PRIOR PHASING<sup>1</sup>**

Proj. M#	Phys. Plant ID #	Fiscal Year	Phase or Phases of Work	Dollar Amount (Actual Appropriation)
		FY 2007/2008		
		FY 2008/2009	Design, Phase 1	\$ 657,726
		FY 2009/2010		
		FY 2010/2011		

\$ 657,726 (subtotal)

**CURRENT PHASE<sup>2</sup> REQUESTED**

Proj. M#	Phys. Plant ID #	Fiscal Year	Phase of Work	Dollar Amount (Per Detailed Budget)
	03-03	FY 2011/2012	Design/Construction, Ph 2	\$ 12,491,802

\$ 12,491,802 (subtotal)

**FUTURE PHASING<sup>2</sup>**

Proj. M#	Phys. Plant ID #	Fiscal Year	Phase or Phases of Work	Dollar Amount (Per Detailed Budget)
		FY 2012/2013		
		FY 2013/2014		
		FY 2014/2015		
		FY 2015/2016		

\$ 0 (subtotal)

**Project Total Dollar Amount of All Projects Phases Requested** \$ 13,149,528  
 (Prior, Current and Future Phases)

<sup>1</sup> Please list all previous phases with actual appropriation by year. Note if different from that as requested.

<sup>2</sup> Please list all current and anticipated future phases with estimated costs as listed in the detailed cost estimate subtotal blank 8.

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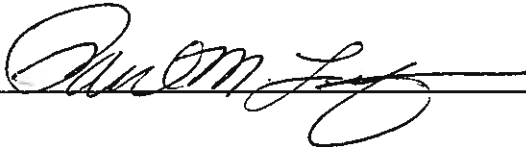
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**F. PROPOSED PROJECT IMPLEMENTATION SCHEDULE (PLAN):**

PHASE	FROM	TO
1. Pre-Design (Insert Dates)	_____	_____
2. Design (Insert Dates)	<u>July 2011</u>	<u>November 2011</u>
3. Construction (Insert Dates)	<u>December 2011</u>	<u>December 2012</u>
4. Project Close-out/Final Completion	<u>January 2013</u>	<u>June 2013</u>

**G. AGENCY APPROVAL**

Agency Authorized Signature



Date 6-8-10

## Review of Capital Renewal by the Office of the State Architect

<b>OSA Review 8/13/2010</b>	Capital Renewal FY 2011-12 request
<b>Title:</b>	Capital Renewal of Ketchum Arts and Sciences Building
<b>Department:</b>	Colorado Department of Higher Education
<b>Institution or Division:</b>	University of Colorado - Boulder
<b>Capital Construction Funds Requested:</b>	\$12,491,802
<b>Total Funds Requested:</b>	\$12,491,802
<b>Type:</b>	Continuation/Phase 2 of 2
<b>Operational Criteria:</b>	CM Level II - Impacting Energy/Environmental/Operations

### Summary of Request:

Ketchum is the premier facility for the delivery of the undergraduate program at CU boulder. It is a four story Arts and Sciences classroom building with a full basement totaling 59,454gsf. The building was built in 1938 and has classrooms at all levels. The facility Condition Index (FCI) rating is estimated at .34 with a capital renewal target of .85.

Overall proposed project costs of \$13.1M to include a scope of work over 58,544 gsf of building = \$221/gsf compared to an estimated building replacement cost of \$23.4M = \$400/gsf. Capital renewal costs are approximately 56% of estimated replacement costs. Scope of work consists predominantly of overall building system and component upgrades both interior and exterior including: replacing interior lighting and emergency lighting, upgrading electrical panels, IT upgrades, replacing suspended ceilings, providing new interior finishes, interior door replacement, providing ADA accessible restrooms with new fixtures, HVAC infrastructure replacement and upgrades, the inclusion of air conditioning, asbestos abatement of floor tile and lead paint, fire alarm and protection systems upgrades, fire rated wall construction as required and stair enclosure corrections. Exterior work includes: repair roof, window and door replacement, masonry repointing, damproofing, gutter and downspout replacements.

The Ketchum building renewal project was originally submitted as a two phase request for a total of \$9,426,961. In December of 2007 Phase I was general funded at \$991,015 for design work and in July of 2008 Phase II was general funded at \$8,435,946, bringing the total appropriation to \$9,426,961. However, with the passage of HB08-1375 a total of \$8,769,235 was deappropriated from both Phases leaving a balance of \$657,726. Prior to the deappropriation, the architect and contractor were selected. With the design and construction team in place an in depth review of the building conditions and full scope of work were reevaluated. Based on the contractor's current detailed cost estimate of the full scope of design development drawings the required project total increased to \$13,149,528. Therefore with \$657,726 remaining in the project budget for architectural design and contractor preconstruction services, a revised Phase II amount of \$12,491,802 is now being requested to complete the construction drawings and to commence and complete construction.

Code compliance work does not appear to be driving this request and is not a major portion of overall cost estimate. In addition the building has active fire alarm and protection systems that are being planned to be upgraded in this request.

This project request will significantly improve building operational deficiencies, will reduce environmental impact, save energy and is cost effective. The building is adequate for program functions but revitalization would greatly enhance occupant comfort and program delivery. Project falls within the definition of Capital Renewal with Controlled Maintenance criteria categorizing this request as a Level II priority - Impacting/Energy/Environment/Operations.

(Similar to FY10/11request with updates by CU to gross square footage, cost per square foot, replacement cost, and project schedule).



Impacts:

Phase II design is estimated to start July 2011 and continue through to November 2011 with the construction phase to immediately follow and to be completed by December 2011 with final closeout in June of 2013. Due to the CM/GC construction delivery method of having the contractor "on-board" during design, the construction schedule has been compressed to allow asbestos abatement work to commence with the funding of Phase II design. \$657,726 (Phase I design) + \$12,491,802 (Phase II design and construction) = \$13,149,528 (total project cost).

There are no out year costs.