

029-2 Capital Project Approval Process

Effective Date: July, 2007

Policy Statement

This policy outlines the University's procedures for reviewing and approving capital improvement projects. Such projects include new construction, renovations, infrastructure and information technology improvements that serve to enhance the physical assets of the University.

Reasons for the Policy

The purpose of this policy is to

- Provide for consistent documentation of capital project proposals, which defines the purpose, scope, budget, funding source, operating budget impact, schedule and other project details
- Establish appropriate levels of approval for capital projects

Primary Guidance to Which This Policy Responds

There is not a primary policy to which this policy responds. It is consistent with best practices.

Responsible University Office and Officer

The Office of Management and Budget (OMB) is responsible for the maintenance of this policy, and for responding to questions regarding this policy. The Associate Budget Director for Capital is the Responsible Officer.

Revision History

This policy was first established in July 2007.

Who is Governed By This Policy

All University staff and officers who play a role in the approval and execution of capital projects, defined in the University's accounting system as ledger-7 spending.

Who Should Know This Policy

Senior Executive Officers, Deans, Vice Presidents, Senior Administrative Officers, Departmental Administrators

Exclusions & Special Situations

The University Trustees, President, Senior Executive Vice President, as a situation warrants and at their discretion, may override this policy.

Policy Text

Background

Capital spending at Columbia is guided by the University's rolling five-year Capital Plan, which is reviewed periodically by the University Trustees. The Capital Plan includes three categories of spending:

- Active projects - projects that have been authorized to proceed through the Capital Project Approval process
- Planned projects - projects that have already been accepted into the Plan presented to the Trustees, but have not yet been through the Capital Project Approval process
- SOGR programs – annual programs that have already been accepted into the Plan presented to the Trustees and are part of the Columbia University Facilities (CU Facilities) state-of-good-repair programs (SOGR).

For active and planned projects, spending can not occur until the individual project has been through the approval process outlined in this document. For SOGR programs, approval is granted each year by the Trustees for the following fiscal year's spending when the annual Operating Plan and Capital Budget is approved. The process outlined below is used to (1) move projects from "planned" to "active" and (2) add new projects to the Plan. It does not apply to SOGR program spending.

Project Initiation

Columbia University Facilities (CUF) and Columbia University Medical Center Facilities (CUMC Facilities) initiate and manage all capital projects on the Morningside and Medical Center Campus.

Capital projects include new construction, renovations and infrastructure improvements that serve to enhance the physical assets of the University as well as major information systems improvements. The need for a capital project can be initiated by a school, department, institute, center or by the Central University – hereafter referred to as Client – via a written project request form once it has been internally approved. The request should briefly identify the purpose and need of the project, as well as define any associated goals or objectives. It should also briefly discuss the general scope, space identified for the project, funding strategy, schedule, and special requirements or considerations. The client submits project requests via email or electronically via the Columbia University Facilities webpage and through points of contact if already established from prior projects.

Project Definition & Preliminary Design

Once transmitted to CUF or CUMC Facilities, all project requests undergo an initial categorization process in which CUF representatives evaluate the feasibility of the project. If they are deemed viable, projects move first to the Project Definition phase, and then to the Preliminary Design phase. These two preliminary phases consist of the following actions:

<p>1. Project Definition</p> <ul style="list-style-type: none"> • Definition of Program • Consideration of Relocations • Identification of Building Impacts • Development of Test-Fit Floor Plan • Preparation of Conceptual estimates • Identification of project Funding 	<p>2. Preliminary Design</p> <ul style="list-style-type: none"> • Authorization of Preliminary Design • Consideration of Design Options • Preparation of Design Contract Documents • Development of Construction Budget • Development of Project Schedule • Assignment of Project Manager
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After the preliminary design is developed, a clearer picture emerges of what the project entails, and how to accomplish the established goals and objectives. Following the Preliminary Design Phase, the Client is provided with a Project Authorization Form along with copies of the Preliminary Design, the Project Budget and a milestone schedule. If the client wishes to proceed, the form is executed. Once the total anticipated cost of the project is identified, a Project Document is prepared to obtain the appropriate level of approval to proceed.

Documentation

The documentation and level of approval required is governed by the total project cost of the project. An exception may be made in cases where the project consists only of a study, which will inform the development of a capital project at a later date. In this case, it is the total cost of the study that determines the necessary documentation and level of approval. Documentation is prepared by the executor of the project – CU Facilities for Morningside “bricks and mortar” projects, CUMC Facilities for “bricks and mortar” projects on the CUMC campus and CUIT for Information Technology projects.

- Projects with a total project cost up to and including \$50,000: Projects in this category should be expensed, as per the guidelines of the Controller’s Office. Since they are not considered to be “capital” projects, they are not addressed by this policy. Please refer to the “Definitions” section at the end of this document for information on determining whether or not an expense can be capitalized.
- Projects with a total project cost above \$50,000 but less than \$250,000 and funded with departmental operating reserves: Projects in this category require a Capital Project Approval Letter (see appendix for sample). This one-page document briefly describes the scope of work and any impact to the operating budget that will result from the project. As back-up to the Capital Project Approval Letter, an Estimating Sheet (see appendix for sample) must also be included.
- Projects with a total project cost of \$250,000 and above and any project requiring debt funding: Projects in this category require a Capital Project Document (see appendix for sample). The project document is composed of twelve categories:

1. Statement of Purpose & Need	7. Sustainability
2. Project Scope	8. Safety & Security
3. Project budget	9. Consideration for the Disabled
4. Project Financing	10. Mode of Accomplishment
5. Maintenance & Operating Costs	11. Certificate of Occupancy
6. Energy Considerations	12. Project Schedule

The project document also includes a signature page which requires the signature of the respective client(s) and four mandatory signatures for CUF (Executive Vice President, Columbia University Facilities, Executive Vice President, Finance, Senior Executive Vice President and Provost. For CUMC Facilities, the signature page requires the signature of the respective client(s) and five mandatory signatures for CUMC (Chief Operating Officer, CUMC, Executive Vice President, Health and Biomedical Sciences, Dean of the Faculties of Health Sciences and Medicine, Executive Vice President, Finance, Senior Executive Vice President and Provost).

Approval Thresholds

As indicated in the chart that follows this section, capital projects are subject to three successive levels of approval, dependent on the total project cost. Note that gift-funded projects must have 100% of the gifts in-hand or pledged in the form of a signed, irrevocable pledge agreement.

- Capital projects under \$500,000 and requiring no debt: These projects are approved by the OMB. Once the availability of the funding sources has been verified, the project is approved.
- Projects costing \$500,000 and above and any project requiring debt: These projects must be submitted to the Capital Budget Issues meeting (Blss) for approval. Members of Blss include the Senior Executive Vice President and the Provost, plus supporting staff. The Executive Vice President for CU Facilities will present the project documents to Capital Blss. The schedule of Capital Blss must be constructed such that sufficient time is allowed for review and edit of project documents in preparation for the scheduled meeting of the Trustees. Materials must be submitted to the Blss 48 hours before the scheduled meeting for them to be considered. Projects in this category that are approved by Blss but do not require explicit Trustee approval (see Trustee threshold below) are to be summarized for information only at the next scheduled Trustee meeting.

In addition to explaining and justifying the project, the presenter(s) of the Capital Project Documents must be prepared to explain and verify the following:

- Funding (debt) – Any debt called for must already be included in the Capital Plan. If the project increases the total amount of debt in the Plan, this must be explicitly bought to the attention of the Committee. Provisions for servicing the debt must be made in the appropriate unit's operating budget.
- Funding (departmental operating reserves) – Transfers of previous or currently accumulated operating reserves to fund capital projects must be included in the appropriate unit's operating budget.
- Funding (gifts) – Proposed gift funding must be 100% in-hand or pledged.
- Operating budget impact – The sponsoring unit must have the ability in their operating budget to absorb the estimated new or incremental operating costs (energy, O&M) that result from the project as well as the associated debt service.

If Capital Blss approves the project and no further approvals are needed (as outlined in the chart that follows this section), an account will be created and expenses can be incurred.

- Projects over \$1M with debt and any project over \$2M – In addition to Capital Blss, these projects must also be approved by the Committee on Physical Assets of the University Trustees. Capital Project documents must be submitted to the Secretary's Office before the established deadline to be considered by the Committee.

Required Level of Approval			
Project Cost	OMB only	BIss	Physical Assets
Under \$500k No debt required	X		
\$500k and Over	X	X	
Above \$1M with debt	X	X	X
Above \$2M	X	X	X

Account Assignment Process

Projects with a total project cost above \$50,000 but less than \$250,000 and funded with departmental operating reserves:

- For CUMC projects, expenses will accumulate in a subsidiary (s/l) account in department 644 that maps to a general ledger (g/l) account in department 644 titled “Miscellaneous CUMC Capital Projects”.
- For CU Facilities projects, expenses will accumulate in a s/l account that resides in department 011 and that maps to the sponsor department’s “Miscellaneous [School or Department name] Capital Projects” g/l account. When new projects are initiated, the sponsor department will create the new s/l account. OMB will approve the account once the proper documentation has been received and move the account to department 011 so that CU Facilities can spend off the account. As part of the quarterly close process, the sponsor department must clear all accumulated overdrafts in their “Miscellaneous Capital Projects” account.

Projects with a total project cost of \$250,000 and above and any project requiring debt funding:

- For CUMC projects, expenses will accumulate in one or more s/l accounts in department 644 that maps to a g/l account in the same department created specifically for that project. As part of the quarterly close process, CUMC, working with OMB, must clear all accumulated overdrafts in these capital accounts. The only permissible reason for an outstanding overdraft beyond the close would be if pledged gift or grant funds have not yet been received. Only overdrafts resulting from timing differences between project spending and the receipt of documented pledge payments will be permitted to remain at the close of each quarter. No additional, new capital project proposals will be approved if existing projects have not been fully funded as described above.
- For CU Facilities projects, expenses will accumulate in one or more s/l accounts that reside in department 011 and that map to a g/l account created specifically for this project. The g/l account will reside in the sponsor’s department if the sponsor is any unit other than Central. For Centrally-sponsored projects, and for projects with multiple sponsors, the g/l will reside in department 011. Once the proper approvals have been received per the section above, the sponsor department will create the new g/l and s/l accounts and OMB will move the s/l to department 011 so that CU Facilities can spend off the account. As part of the quarterly close process, the sponsor department, working with OMB, must clear all accumulated overdrafts in these capital accounts. The only permissible reason for an outstanding overdraft beyond the close would be if pledged gift or grant funds have not yet been received. Only overdrafts resulting from timing differences between project spending and the receipt of documented pledge payments will be permitted to remain at the close of each quarter. No additional, new capital project proposals will be approved if existing projects have not been fully funded as described above.

Responsibilities

Capital BIss – responsible for review and approval of capital projects as outlined above.

Associate Budget Director Capital Budget – responsible for responding to inquiries regarding Capital Project Approval process.

Definitions

Capital project - The University capitalizes construction costs that have a value or cost in excess of \$50,000 at the date of acquisition. Renovations in excess of \$50,000 are capitalized if they significantly extend the useful life of the existing asset or otherwise enhance its capacity to render service. Capitalized construction and renovation projects occur only on University owned or leased space. Capital projects are depreciated over their estimated useful lives ranging from ten to forty years.

Contacts

Responsible Officer – Frank Lombardo, Associate Budget Director Capital Budget, (212) 854-6785, fjl11@Columbia.edu

Cross References to Related Policies

Web Address for Policy

Appendix

COLUMBIA UNIVERSITY
IN THE CITY OF NEW YORK
DESIGN AND CONSTRUCTION

CAPITAL IMPROVEMENT PROGRAM - PROJECT COST ESTIMATE

DATE:
TO:
FROM:
PROPOSED PROJECT:

Your office has requested the [Select one from the list] work of

The estimated project budget is \$. The cost of each item is listed on the attached Project Estimate sheet. Please note, that this budget is based on work performed during regular construction hours: **Monday through Friday, 8:00 a.m. to 4:00 p.m.** Should you require the work to be phased or performed on off hours or if the work is interrupted for a period of time, additional costs may result. We will require your approval for any related budget increase.

Maintenance and Operations Costs

As a result of this [Select one from the list] work, yearly maintenance and operations costs [Select one from the list] by \$ due to . These costs will be the responsibility of _____.

Energy Considerations

As a result of the [Select one from the list] work, yearly energy costs [Select one from the list] by \$ due to . These costs will be the responsibility of _____.

Safety and Security

As a result of the [Select one from the list] work, yearly safety and security costs associated with this project will be \$ due to . These costs will be the responsibility of _____.

If you find this estimate to be satisfactory and you wish to proceed, please sign and return a copy of this memorandum (a copy has been attached for your convenience). Kindly include an account number so that a Capital Project Account can be opened for the charges to be incurred. Once we have received your department's approval, a project schedule will be prepared. At the completion of the project and upon reconciliation of all outstanding invoices and payments, you will be provided with an accounting of project costs.

For Client's Use

Departmental Approval Signature: _____ Date: _____

Account Number: _____

For Facilities Finance Use

Bill Back: _____ Capital Reserve: _____ Project Document: _____

Attachments: Project Budget Summary
Project Estimate Worksheet
Scope Drawing

CAPITAL IMPROVEMENT PROGRAM

Project Estimate For:						#	Date:	
Item	%	Subcode	Scope	Schematic	Des. Dev.	75% CD	Const.	
1	Construction							
2	Trade Costs	7301						
3	General Conditions	7301						
4	Design Contingency	7301						
5	Estimating Contingency	7301						
6	Sustainable Design	7301						
7	C.M. Fee	7301						
8	C.M. Insurance	7301						
9	G.C. Overhead & Profit	7301						
10	Overtime Allowance	7301						
11	Bonding	7301						
12	Escalation To:	7301						
13	Subtotal, Basic Construction	7301						
14	Permits (Government Agencies)	7301						
15	Security System	7330						
16	Guard Service	3660						
17	Surveys	7424						
18	Subsurface Investigation	7422						
19	Probes + Tests	7422						
20	Signage + Plaques	7331						
21	Special Insurance	4990						
22	Physical Plant Charges	7325						
23	Controlled Inspections	7425						
24	Other							
25	Subtotal, Other Construction							
26	TOTAL CONSTRUCTION							
27	Hazardous Materials							
28	Environmental Testing & Monitoring	7324						
29	Abatement	7324						
30	Other							
31	TOTAL HAZARDOUS MATERIALS	7324						
32	Furniture, Fixtures & Equipment							
33	Furniture	6211/6121						
34	Moving & Relocations	7304						
35	Tele/Data Wiring	2720						
36	Tele/Data Equipment	2720						
37	Audio Visual Equipment	6111						
38	Equipment (movable)	6110						
39	Other							
40	TOTAL FF&E							
41	Consultant Fees							
42	Project Scope Expense	7401						
43	A/E Fees	7401						
44	Reimbursable Expenses	7408						
45	Interior Design Fee	7401						
46	Pre-Construction Services	7401						
47	Specialty Consultants' Fees	7401						
48	Zoning	7401						
49	Estimating	7401						
50	Expediting	7401						
51	Other							
52	TOTAL CONSULTANTS' FEES							
54	Project Contingency	7030						
53	Project Management	6.5%	7489	0				
55	Escalation To:							
56	Collateral Moves							
57	Acquisition Costs	4652						
58	Legal Costs	2450						
59	Development Expenses							
60	TOTAL PROJECT COST							

Project Area: _____ Gross Sq. Ft. _____ Net Sq. Ft. Cost/Square Foot: \$ _____ Gross Sq. Ft. \$ _____ Net Sq. Ft.

Project Document

LAMONT-DOHERTY EARTH OBSERVATORY CAMPUS GEOCHEMISTRY LABORATORY BUILDING Construction Documents and Construction Phase

Statement of Purpose and Need

The Lamont-Doherty Earth Observatory (LDEO) endeavors to create research facilities to support the superior quality of work performed by researchers and scientists housed within its campus. This major step towards this objective was reached with the construction of the Monell Building, completed in 1999, to house the International Research Institute. The next step in this development is the construction of a new laboratory building that will bring together the Geochemistry faculty, which is currently scattered among several buildings and trailers on the campus and replace the remaining antiquated Geochemistry facility. When the existing facility is vacated, the LDEO will conduct, under a separate project, an assessment to determine the future of the building.

The new building will provide state-of-the-art laboratories, classrooms, and meeting space to address the research and teaching needs of the department.

Project Scope

The previous phase of the project authorized funding for programming, architectural, engineering and pre-construction-services through design development. This phase of the project will provide funding to complete construction documents and for the full construction of a four story, 67,000 gross square foot building.

Project Budget

	Previous <u>Request</u>	Current <u>Request</u>	Total Anticipated <u>Project Cost</u>
Construction	\$400,000	\$32,345,000	\$32,745,000
Furniture, Fixtures and Equipment	0	1,307,000	1,307,000
A/E Fees and Expenses	2,000,000	2,240,000	4,240,000
Legal Fees	100,000	0	100,000
Contingency	240,000	3,622,000	3,862,000
Project Management	500,000	2,246,000	2,746,000
Total	<u>\$3,240,000</u>	<u>\$41,760,000</u>	<u>\$45,000,000</u>

Project Financing

The total cost of the project is anticipated to be \$45,000,000. This total cost is based on completed 50% construction documents and derived from an estimate of the plans, sections, elevations and sections that describe the building.

The total cost of the project is \$45,000,000 and will be funded as follows: \$18,000,000 in gifts from the Comer Science and Education Foundation; \$2,000,000 in gifts from Gerry Lenfest; \$10,000,000 from debt to be serviced by Lamont-Doherty Earth Observatory; \$10,000,000 from debt to be serviced by the Central University; \$4,952,142 from additional gifts to be secured by Lamont-Doherty Earth Observatory and the Earth Institute and \$47,858 from Lamont-Doherty Earth Observatory operating reserves. The final allocation of sources of funding will be made prior to the issuance of University debt.

This is a declaration of official intent for purposes of United States Treasury Regulations Section 1.150-2. The maximum principal amount of bonds expected to be issued to permanently fund the project, based upon current cost estimates is \$20,000,000, plus costs of issuance and any reserves established in connection with the bonds. To the extent that costs increase, it is expected that the principal amount of bonds will be increased to fund the project. Any costs temporarily financed on an interim basis with University funds are expected to be reimbursed with bond proceeds to the extent that such costs are not funded with external sources and to the extent the University does not elect to permanently finance such costs with University funds.

Maintenance and Operations

It is anticipated that maintenance and operations costs for the building will be approximately \$250,000 per year. These costs will be the responsibility of the Lamont-Doherty Earth Observatory.

Energy Considerations

It is anticipated that energy costs for the building will be approximately \$380,000 per year. These costs will be the responsibility of the Lamont-Doherty Earth Observatory.

Safety and Security

This project will be constructed in accordance with all applicable University, New York State, Federal and County safety and security regulations.

Consideration for the Disabled

This project will be constructed to be in compliance with ADA requirements.

Mode of Accomplishment

The firm of Payette Associates, an architectural firm selected in accordance with University procurement procedures, is providing design services. Construction management will be provided by Torcon, Inc., a construction firm selected in accordance with University guidelines. The Department of Capital Project Management will provide project management.

Certificate of Occupancy

This new facility will be built to meet all New York State and applicable agencies requirements and have a certificate of occupancy upon completion.

Project Schedule

Work on the project began in September 2005. Construction is scheduled to begin in the Fall of 2006. The project is scheduled to be completed in the Winter of 2007/2008.

sample

Approved by:

Joseph A. Ienuso, Executive Vice President, Columbia University Facilities Date

G. Michael Purdy, Director, Lamont-Doherty Earth Observatory Date

Jeffrey D. Sachs, Director of the Earth Institute Date

Albert G. Horvath, Executive Vice President, Finance Date

Robert Kasdin, Senior Executive Vice President Date

Alan Brinkley, Provost Date