GUIDELINES FOR PREPARING SECTION C: COSTS OF THE PROJECT CAPITAL IMPROVEMENT BUDGET (CIB)

(Updated January 2008)

The following guidelines are to be used in the preparation of Section C: Costs of the project Capital Improvement Budget (CIB) form. See "<u>Guidelines for Preparation of the Project Capital Improvement Budget (CIB)</u>" for information about the other components of the CIB.

While it is recognized that each project has unique program and design requirements, the guidelines are designed to help the user array individual cost items within the Section C format of the CIB in a uniform and consistent manner. The guidelines provide general definitions of the project-related costs to be included in each of the line items of that form (Cost lines 0-9). They also includes special notes about certain cost items that may be defined in more than one way and assigned to more than one line item, or to identify pertinent qualifiers.

GENERAL NOTES

All costs indicated on the CIB form, part C: COSTS, should be rounded to the nearest \$1,000 except at project completion, and entered in column (4), "Total All Sources." Costs should be broken down into separate columns where helpful in clarifying separate elements of a project (e.g., alterations separate from new construction, major seismic component, etc.). All costs should include contractor general conditions, overhead and profit, where applicable. Early cost estimates should include escalation through the construction period, i.e., estimate to mid-point of construction or cost-weighted mid-point of construction. It is recognized that initial costs estimates will be based on incomplete information and are subject to adjustment.

0. SITE CLEARANCE

Include the costs of preparing a site for construction of a project as described in the Project Planning Guide (PPG). These costs include, for example, demolition, relocation, removal, and temporary modifications of the site to allow construction to proceed unobstructed by initial, existing conditions. All work should fall within the designated "project limits" defined by the overall site planning process.

The following cost items should be considered in line item 0:

- Relocation of Existing Utilities as Appropriate
- Relocation or Replacement of Existing Facilities as Appropriate and Approved (e.g., trailers, parking, tennis courts)
- Demolition and Disposal of Existing Buildings
- Demolition and Disposal of Surface Slabs, Paving, Roadways, Utilities, Miscellaneous Improvements
- Removal and Disposal of Underground Tanks
- Removal and Appropriate Disposal of Hazardous Materials (e.g. Asbestos, PCBs) Decontamination or Removal and Disposal of Contaminated Soils Temporary Utilities (for site clearance)
- Temporary Grading, Drainage, and Erosion Control Improvements for Site as may be required
- Stripping, Minimal Grading, Vegetation Removal, etc.
- Excavation and Shoring (where required for site clearance)
- Fencing of Areas for Environmental Protection (e.g., tree groups, archaeological sites, etc.)
- EIR Mitigation Measures (Construction) Related to Site Clearance
- Other Site Clearance (list)

1. BUILDING CONSTRUCTION

Include the costs of normal building construction work contained in the sixteen CSI Specification Sections, as well as additional costs due to unique project requirements or unusual local conditions (e.g., environmental mitigation costs) and site costs within five feet of the building. Include expenses for bonds, general conditions, and contractor profit and overhead.

Include the costs of construction management services during the construction period that are focused specifically on the execution of the construction of the facility when the construction manager is acting in lieu of a general contractor or when such services are in lieu of all or a portion of the management services which would normally be provided by a general contractor.

The following general categories of cost items should be considered in line item 1:

- Foundations (including excavation and shoring, soil removal, soil recompaction, basement and slab drainage systems, etc.)
- Vertical Structure
- Horizontal Structure and Roofs
- Exterior Cladding
- Roofing and Waterproofing
- Interior Partitions
- Floor, Wall, and Ceiling Finishes
- Building Function Equipment (i.e., Group I equipment as specified, including signage, security systems, etc.)
- Vertical Transportation (i.e., stairs, elevators, etc.)
- Plumbing (including laboratory piped services)
- HVAC
- Electrical (including telecommunications, data communications, energy management system, and cable TV)
- Fire Protection

Miscellaneous Considerations:

- Asbestos Abatement "Construction" Costs (excluding internal and external fees for design, testing, monitoring, consulting, etc.)
- Construction Management Services (see notes above)
- Work Done by Campus Personnel or Specialty Contractors Separate from Primary Contract (e.g., installation of telecommunications equipment, data cables, lock keying)
- General Conditions-related Issues (e.g., site access, construction phasing, construction yard, site material storage and retrieval, temporary utilities, labor parking, insurance.
- Builders Risk Insurance
- Demolition Within Existing Structure
- Abnormal Subsoil Conditions (e.g., rock, seismic conditions, sink holes, ground water, etc.)
- Extension of Utility Lines to 5 Feet from Building
- Other Miscellaneous (list)

2. EXTERIOR UTILITIES

Include the costs of site utility work starting 5 feet from the outside perimeter of the building, including hookups to building stub-outs if not included in building construction estimates. Typically, this includes all work from the point at which the project is connected to an existing, adequate utility source.

The following cost items should be considered in line item 2:

- Sanitary Sewer
- Storm Drainage
- Domestic Water
- Utility Water (non-potable)
- Fire Water
- Electrical Power
- Gas
- Steam
- Chilled Water
- Data Communications
- Telecommunications
- Cogeneration Power Connections
- Cable TV
- Fire Alarm
- Security
- Cathodic Protection for Utility Lines
- Work Done by Campus Personnel or Specialty Contractors Separate from Primary Contract
- Other Exterior Utilities (list)

4. SITE DEVELOPMENT

Include the costs of work necessary to restore the designated project site following demolition, construction excavation, and footing and foundation backfill, including temporary roads, mitigation measures, and required work that may be outside the formal project limits.

The following cost items should be considered in line item 4:

- Rough and Finish Site Grading (including import and export of fill)
- Retaining Walls (not related to building)
- Site Drainage (excluding storm drainage system)
- Parking, Drives, and Loading Areas
- Pedestrian Paths, Bikeways, Bicycle Parking, Underpasses, Bridges, and Stairs
- Landscaping and Irrigation
- Streetscape, Plazas, Courtyards, Major Unroofed Atria, Exterior Seating, etc.
- Trash and Recycling Enclosure
- Site Lighting
- Signage
- Environmental Mitigation Measures Related to Site Development
- Offsite Improvements (excluding those in line item 2 "Exterior Utilities")
- Other Site Development (list)

5. FEES (External Consultants)

Include only the costs and reimbursable expenses of "basic" services associated with the design and management of a project (e.g., the executive architect and his team of civil, electrical, and mechanical engineers) and certain of the most commonly used consultants (generally, the roofing, graphics, and lighting consultants). These costs with lines items 6 and 7 are subject to the limit of 13% of construction cost (lines 0, 1, 2, and 4). Costs associated with "special" services (e.g., acoustical and traffic consultants; special design consultants for laboratories, theaters, and libraries; plan check fees, including OSA, OHA, OSHPD, and SFM) should be assigned to line item 8, "Special Items." Those costs are excluded from the 13% limit. Use the following list of items to help you distinguish "basic" services from "special" services.

Include project management services that augment or replace in-house project management services, e.g., when a project is particularly unusual or complex, or if campus A&E offices have limited staff. It is assumed that these additional costs will be offset, at least in part, by a reduction in the in-house costs that would be incurred for similar services.

Include the cost of preparing record drawings that are required of the executive architect/engineer as part of his basic contract with The Regents to document the work done in the project. Record drawings are defined here as reproducible drawings that reflect all changes between the original construction documents prepared for bid and the final documents that show what was actually constructed.

Include the costs of construction management services except as provided during the construction period that are focussed specifically on the execution of the construction of the facility when the construction manager is acting in lieu of all or a portion of the management services which would normally be provided by a general contractor.

The following) cost items should be considered in line item 5:

- Executive Architect
- Soils/Foundations Design (soils/geological site investigation included in line item 7)
- Civil/Structural Engineer
- Electrical Engineer
- Mechanical Engineer
- Landscape Architect
- Outside Project Management (see notes above)
- Construction Management Consultation (see notes above)
- Basic Costs of Above Groups for Independent Seismic Deficiencies
- Basic Costs of Above Groups for Regents Design Presentations, Value Engineering, and Independent Review (Non-Seismic) Requirements. (For Non-State projects only.)
- Services of Other Consultants for Independent Review Requirements (design, cost, etc.) and Expenses for Regents Design Review. (For Non-State projects only.)
- Record Drawings (see notes above)
- Other Fees (list)

6. A&E/PP&C (Internal Fees)

Include the costs of in-house University services such as project management services, bidding services, contract administration services, and construction inspection services based on estimates of time and recharge rates. Do not include costs associated with area master plans, predesign studies and programming, preliminary site master plans, environmental analysis, etc. which may appear in line item 8, "Special Items".

Include the cost of preparing campus as-built records only when they document actual campus conditions related to construction, civil engineering (e.g., topographical surveys). These records document unanticipated conditions discovered in the course of other actions, e.g., a run of telephone conduit is discovered when it is severed during the installation of a utility line. The newly discovered condition is then documented in the campus as-built records for future reference and use.

The following cost items should be considered in line item 6:

- Project Management, including Staff Support
- Bidding Services
- Contract Administration
- Construction Inspection
- Warranty Review
- Special Project Support of Other Campus Offices (excluding routine services such as Accounting, EH&S consulting)
- Campus As-Built Records (see notes above)
- Other A&E/PP&C (list)

7. SURVEYS, TESTS, PLANS, SPECIFICATIONS

Include all direct fees and reimbursable expense costs. Estimates are frequently developed from past cost information and from anticipated requirements of the project.

The following cost items should be considered in line item 7:

- Site and Topographic Surveys
- Soils, Geology, Foundation, Hydrology Investigations
- Material and Workmanship Testing
- Plans and Specifications Reproduction Costs
- Publishing and Advertising Costs
- Other Surveys, Tests, Plans, and Specifications (list)

8. SPECIAL ITEMS

Include costs that do not fit into one of the above CIB line items, including costs that are associated with "special" services provided by both external consultants and internal staff outside the normal design process, and plan check fees, as identified below. Such costs should be limited to those necessary to address major issues not normally encountered in general projects. Costs of in-house staff work on Special Items tasks may be included if the costs are necessary, reasonable, and justifiable. State-funded project CIBs normally do not include predesign planning and programming costs, and it may be necessary to exclude other items on a case-by-case basis when appropriate to meet requirements for State funding requests. All costs within this Special Items category are excluded from the 13% limit on the allowance for internal and external fees and administrative costs, but must be clearly itemized on the CIB form, in section H for Notes, to facilitate review.

The costs and reimbursable expenses for "basic" services related to the design and management of a project (e.g., the executive architect and team of civil, electrical, and mechanical engineers) and the most commonly used consultants (generally, the roofing, graphics, and lighting consultants) should be assigned to line item 5, "Fees (External Consultants)." These costs are subject to the 13% limit on internal and external fees and administrative costs. Use the list below to help distinguish "special" services from "basic" services.

The cost of community design review when a project is subject to review by authorities within the community where it will be sited may be included in Non-State projects, but not in State projects. Community design review costs are defined as the fees charged by local authorities, much like local building departments, to support their staffs and offices. The University is not obligated to pay these fees by law, but may do so to promote good relationships with the communities surrounding its campuses.

Include the cost of legal fees only when they are incurred by outside legal counsel for special services that are NOT related to disputes, claims, or litigation. The Regents General Counsel and campus legal counsel should not be reimbursed for services of any kind.

Include the cost of contract services to prepare as-built survey/documentation of existing conditions to develop information that does not exist for older buildings and facilities. This item is defined as only the fees paid to outside consultants to do a first-time survey and as-built record of buildings constructed in the past.

Include reasonable and justifiable in-house staff costs when they are associated with any of the special services itemized below. This includes the cost of administering contracts, overseeing and coordinating the work of external consultants, providing support, and participating in or conducting special services.

The following cost items should be considered in line item 8:

- Detailed Project Program (DPP) and Other Pre-design Study Consultants (when inclusion is appropriate, typically only for Non-State projects)
- Environmental/EIR Services Consultants and Related Costs (including air quality, traffic, archeology, etc.)
- Coastal Commission Review
- Community Design Review Expenses (for Non-State projects; see notes above)
- Special Air Quality Emissions Testing and Permitting Costs
- Wind Tunnel Tests
- Value Engineering/Constructability Reviews (excluding basic design team contract services)
- Land and Easement Acquisition
- Loan Financing and Construction Loan Interest Costs
- Surge Space Costs (including rental, alterations, design, moving, telecommunications, construction of temporary facilities)
- Plan Check Fees (including OSA, OHA, OSHPD, SFM, FAA, etc.) and Energy Use Certification Analysis
- Special Environmental Mitigation Expenses Not Included in Construction (including off-site mitigation when authorized)
- Environmental Mitigation Monitoring (during Construction period)
- As-Built Survey/Documentation of Existing conditions (see notes above)
- Major Local Jurisdiction Fees (e.g., utility, water districts, etc., when inclusion is appropriate)
- Special Design Consultants (e.g., acoustics, laboratory, library, theater)
- Interior Design Consultant
- Special Architect's Cost Consultant
- Special Roofing Consultant
- Special Graphics Consultant
- Special Lighting Consultant
- Special Telecommunications Consultant
- Fire Protection/Life Safety Engineer Consultant
- Traffic Consultant
- Independent Structural/Seismic Review
- Hazardous Materials Surveys and Testing (including soils tests, PCB analysis, airborne asbestos sampling/testing, etc.)
- Hazardous Materials Abatement/Remediation Design Services, Monitoring Services during Construction, and Testing and Verification after Completion (including consultants and in-house EH&S/Industrial Hygienist staff services)
- Art Work
- Reasonable and Justifiable In-house Staff Costs in support of above special service (see notes above)
- Other Special Items (list)
- Legal Fees (see notes above)

9. CONSTRUCTION CONTINGENCY

This item is for change orders during construction, and is based on the total of construction costs in lines O, 1, 2, and 4 and the complexity of the project. In instances where major unknown factors exist, such as uncertain groundwater conditions or potential existence of asbestos, additional investigation and analysis should be considered prior to inclusion of a major additional contingency in the final cost estimate. The State limits budgeting for construction contingency to 5% for new construction and 7% for renovation.

The following cost items should be considered in line item 9:

- Potential Inconsistencies in Soils/Foundation Conditions Unknown Conditions in Existing Buildings
- Potential for Delay During Construction
- Other Contingency Considerations (list)

3. GROUP 2&3 EQUIPMENT

Estimates for moveable equipment cost should be developed for the project from the most reliable historical data, anticipated knowns, and Office of the President equipment cost factors per assignable square feet (asf) for particular categories of programs. Equipment costs for State-funded projects are developed and documented in accordance with instructions issued by the Office of the President.

The following cost items should be considered in line item 3:

- Moveable Equipment and Furnishings (including open office systems), Material Management Services
- Moving Expenses (when inclusion is appropriate)
- Heavy Custodial Equipment
- Refuse Collection Equipment (e.g., dumpsters, when a capital cost), Other Group 2&3 Equipment (list)