APPENDIX M
COST ESTIMATES REQUIREMENTS AND FORMATS

SECTION M.1 GENERAL

M1.1 Building Cost Summary Form

All estimates shall be prepared in the systems format and shall be summarized on a Building Cost Summary form. The Building Cost Summary form utilizes ASTM Uniformat II cost breakdown structure in ASTM Uniformat II Classification Standard which has been extracted, with permission, from ASTM E1557-09 Standard Classification for Building Elements and Related Sitework-UNIFORMAT II, copyright ASTM International, 100 Barr Harbor Drive, West Conshohocken, PA 19428. A copy of the complete standards may be obtained from ASTM International, www.astm.org. The Building Cost Summary form (Form Number DGS-30-224) is available as an Excel spreadsheet template which may be downloaded from the DGS Forms Center. A printed copy of the Building Cost Summary form and the associated supporting estimate backup shall be provided with each submission. Unless waived by the Director, FPDC, the design and cost consultants are required to submit an electronic copy of each completed Building Cost Summary form. When DEB cost review is required, the electronic copy of the form (i.e., spreadsheet) may be submitted to DEB either on removable electronic media or as an e-mail attachment.

M1.2 Estimate Backup Material

The estimate backup material for each submittal shall be consistent with the level of design required for that submittal. Accurate quantity take-off, inclusion of all appropriate standard systems, and accurate unit prices for the project's location are fundamental to the development of a good cost estimate. Properly prepared cost estimates provide a check of the plans and specifications for constructability, coordination, conflicts, discrepancies, and omissions. They are used to establish/ verify budgets, to develop historical data for future estimates, and for verification of the Contractor's initial Schedule of Values (HECO-12).

M1.3 Estimating Expectations

The estimate at each submittal is expected to reflect the A/E's or Agency's Independent Estimator's best information and experience. Pricing must reflect all requirements of the contract plans and specifications. Estimate backup may be prepared manually or by utilizing computerized estimating programs, however, the estimate must be summarized using the Building Cost Summary spreadsheet. A detailed breakdown of the components of each system or assembly shall be calculated, quantified and cost-estimated. The total system cost, a system quantity, a unit cost for the system, and a unit cost per square foot of gross building area shall be calculated for each system and summarized on the Building Cost Summary spreadsheet.

M1.4 Minimum Requirements for the Use of Cost Estimating Services

Separate estimates will be prepared for each new non-identical building, structure, or addition costing over $250,000 contract cost when the Contractor will be competitively selected or costing over $50,000 contract cost where there is only one Contractor available or capable of performing the work. Costs of alteration work to existing buildings will not be included with the building addition costs. When one construction contract contains more than one type of work (i.e., new construction, repair, equipment installation, etc.), the estimate shall be structured such that each type of work is identified separately. In addition to an overall or master

summary sheet, each type of work requires a separate summary sheet. Costs from these separate summary sheets must be directly transferable to the master summary sheet. Refer to the notes on page 1 of the Building Cost Summary form.

M1.5 Estimates that Exceed Approved Project Costs

When the estimates exceed the approved or proposed construction budgets, the agency, in consultation with their design and cost consultants, shall describe how they will address this issue.

M1.6 Coordination Between Estimators

When an independent cost estimator is engaged by the University, coordination and consistency between the A/E, Contractor, and third-party estimator is critical. Any and all markups, contingencies, fees, insurances, and other items are to be coordinated prior to submission of any estimate.

SECTION M.2 COST ESTIMATING REQUIREMENTS BY PHASE

M.2.1 Schematic Design (SD)/Project Criteria Phase Estimate

The SD Construction Cost Estimate shall be developed in the "systems" format. Each system shall include a description or listing of the components or items included in that unit cost. To the extent possible, major systems or commodities should be quantified. Where quantification is not practical, the key assumptions made while developing the estimate must be described.

M2.2 Preliminary Design (PD) Phase Estimate

The Preliminary Estimate shall be based on a materials take-off from the PD documents. The estimate for this submittal shall reflect cost based on reasonably accurate take-off of material/systems consistent with the level of design. For those elements of the project where the status of design does not permit a reasonably accurate take-off of quantities or firm pricing of individual items of work, system unit prices may be used. Lump sum costs are not acceptable. Use of empirical costs shall be minimized. The Preliminary Building Cost Summary backup shall use the systems format. If the difference between the A/E cost estimate and the Independent cost estimate is 10% or greater, the University shall provide a reconciliation of the two consultants' estimates.

M2.3 Final/Working Drawings (WD) Phase Estimate

The A/E shall provide a final estimate based on the WD drawings and specifications and shall be prepared using the systems format. A full and accurate description of each system shall be provided in the estimate. Quotations shall be obtained for all items of substantial quantity or cost. Documentation must be provided for all major items of equipment included in the project. "Estimated prices" are considered to be quotations that are reasonable expectations of the price a Contractor will be expected to pay. Estimates that do not conform to these formats and information requirements will be returned for revision. Separate estimates must be prepared for each additive bid item included in the documents and shall be in the proper format.

M2.4 Summary of Estimate Submission Requirements

Design Phase	A/E Estimate	Owner's Independent Estimate
SD Phase	Required*	Optional (at owner's discretion)
PD Phase	Required*	Required*
WD Phase	Required*	Optional (at owner's discretion)

* The following are required:
  - Submit a hard copy of the Building Cost Summary sheet(s) and supporting estimate backup to DEB
  - Submit an electronic version of the completed Building Cost Summary worksheet(s) to DEB (the Excel worksheet template, "Form DGS-30-224" is available for download from the DGS Forms Center)

SECTION M.3 COST ESTIMATING STANDARDS

M3.1 Design Contingency

Estimates are expected to include design contingency not exceeding the percentages shown:

ESTIMATE CATEGORY	%___
Pre-planning	15%
Schematic Design (SD)	10%
Preliminary Design (PD)	5%
Working Drawings (WD)	0%

M3.2 Construction Contingency

The amount of contingency will depend upon the project size, procurement method, and whether the project is renovation work or new construction.

M3.3 Building Cost Summary Sheet

Standard DGS forms and formats are available for download from the DGS Forms Center. To view/download the latest version of the Building Cost Summary Sheet (Form “DGS-30-224”), visit the website listed above and enter “DGS-30-224” in the search box on the Forms Center. Additional instructions for viewing and downloading forms are available in the Help Guide on the DGS Forms Center.