

APPENDIX L

SUBMITTAL REQUIREMENTS FOR DESIGN DOCUMENTS

TABLE OF CONTENTS

A. PENDING ISSUES REPORT	2
B. CONSTRUCTION COST ESTIMATE.....	2
C. SCHEMATIC DESIGN DOCUMENTS	2
1. Civil.....	3
2. Architectural	3
3. Structural.....	4
4. Mechanical.....	4
5. Electrical	5
6. Landscape Architectural	5
D. DESIGN DEVELOPMENT DOCUMENTS	6
1. Civil.....	6
2. Architectural	6
3. Structural.....	8
4. Mechanical.....	8
5. Electrical	11
6. Landscape Architectural	12
E. CONSTRUCTION DOCUMENTS.....	13
ATTACHMENT A - Pending Issues Report Example.....	16
ATTACHMENT B – Basic Data.....	17
ATTACHMENT C – Cost Quantity Survey Example.....	19

SUBMITTAL REQUIREMENT FOR DESIGN DOCUMENTS

A. **PENDING ISSUES REPORT**

The Project Architect/Engineer shall prepare and maintain a Pending Issues Report throughout the Schematic Design, Design Development and Construction Document Phases to record outstanding decisions for the Design Team. An example may be seen as **Attachment A, Pending Issues Report**. The example indicates the kinds of data that should be maintained and documented for pending issues.

B. **CONSTRUCTION COST ESTIMATE**

The Project Architect/Engineer shall provide a Construction Cost Estimate by an independent estimating company, acceptable to the Owner, throughout the entire design process at the end of each design phase (or as necessary to meet the Owner's identified Construction Cost Limitation) until 100% completion of the Construction Documents. An example may be seen as **Attachment C**.

C. **SCHEMATIC DESIGN DOCUMENTS**

The preliminary phase of design services to produce a diagrammatic representation of the project, including sketches of building exterior and selected interior spaces, outline-level specification of materials and finishes to be incorporated, general floor plans, and a narrative assessment (for the non-professional Owner) of proposed building systems. The design shall be generated from the approved Facility Program, and resulting conceptual studies and alternative schemes developed in conference with the Owner.

Schematic documents shall be considered "complete" when all areas of design (i.e. Civil, Architectural, Structural, and MEP) are 100% schematic in nature as defined below and agreed upon by the Owner.

- The submittal requirements noted in this appendix do not exclude elements which may be unique to a particular project required for the facility design, that are not specifically identified/mentioned herein or in any of the referenced appendices in the Design Guidelines. It is the Architect/Engineer's responsibility to incorporate any necessary plans, sections or details in the design documents of each submittal package for review.
- Complete schematic design documents are a result of a completed product and are not a function of time/duration of work.
- Documents that are "on average" 100% schematic will not be considered "complete" schematic documents.

APPENDIX L

1. Civil

See Appendix B for Civil submittal requirements.

2. Architectural

- a. A copy of the approved Facility Program.
- b. Building Code Analysis: Including, but not limited to, IBC, NFPA-101; Texas Department of Licensing and Regulation, and A.D.A. Refer to Appendix C.
- c. Site description and conditions.
- d. Renovation projects shall include plans of the existing building, building structural system, and areas requiring demolition.
- e. Drawings (small scale and schematic in nature):
 - (1) Site Plan: schematic project location, building footprint, adjacent structures, access and proposed site improvements.
 - (2) For renovation projects, provide schematic demolition plan.
 - (3) Floor Plans (final agreed scheme) showing room layout, room titles, gross areas.
 - (4) Selected critical areas (identified by the Owner) to larger scale.
 - (5) At least two exterior elevations (final agreed scheme), building profile section showing floor to floor dimensions, ground floor elevation to mean sea level (MSL), and primary elevation and other significant façades (street-facing, loading dock area, adjacent to recognized neighbor).
 - (6) At least two perspective renderings in color or a model if authorized.
- f. Descriptive Specifications: Brief narrative description of the proposed component systems, materials and equipment in the Construction Specification Institute (CSI) Master Format, current edition.
- g. Construction Cost Estimate based upon (at a minimum) square footage costs for building systems (i.e. foundation, structure, exterior closure, roof, interior construction, specialties, conveying, MEP systems, etc.) typical for the building type and location.

APPENDIX L

3. Structural

See Appendix K for Structural submittal requirements.

4. Mechanical

- a. Describe briefly the proposed HVAC system, gross design loads, supply and return air system, principal piping materials, and fire protection system.
- b. Drawings: (small scale, $\frac{1}{8}'' = 1' - 0''$ minimum, and schematic in nature).
 - (1) Site Plan, showing location of existing utility sources and characteristics, and proposed routing of new utilities to building.
 - (2) For renovation projects, provide schematic HVAC system ductwork and air devices and Plumbing domestic water and sanitary waste piping demolition plans.
 - (3) HVAC Floor Plans showing equipment layout in mechanical rooms; building floor plans indicating ductwork in single line format for Supply Air (SA), Return Air (RA) and Exhaust Systems; indicate estimated SA, RA and Exhaust airflow rates; piping mains.
 - (4) Plumbing fixtures and equipment may be shown on Architectural Floor Plans.
- c. Submit completed preliminary copy of **Attachment B, Basic Data**.
- d. HVAC Controls
 - (1) Describe the proposed controls sequence of operation for each system.
 - (2) For systems with multiple fans or pumps, indicate size of each relative to full load capacity, and how many operate at a time.
 - (3) For AHU controls, indicate if economizer cycle and CO₂ demand ventilation sequences will be included.
 - (4) Describe any required network integration of packaged controls systems for equipment such as chillers, boilers, computer room AHUs, etc.

APPENDIX L

5. Electrical

- a. Briefly, describe the proposed normal and emergency electrical power distribution systems, preliminary design loads, interior and exterior lighting, fire detection/alarm, telecommunication, audio visual, central clock and CCTV and security systems. Include any other items relevant to the project, such as lightning protection, special grounding requirements, UPS, power quality, hazardous locations, etc.
- b. Drawings:
 - (1) Site Plan, showing location of existing or new utility source, characteristics and proposed routing of new electrical service to building. Indicate the provider of the power, utility company, campus generated, etc.
 - (2) Typical lighting and power layouts and main distribution gear locations.

6. Landscape Architectural

- a. Describe briefly the scope and character of landscape development, both hardscape and softscape, including proposed special features such as fountains, sculpture, etc.
- b. Cost estimate of site work.
- c. Drawings: Reflect Campus Master Plan and/or Facility Program requirements.
 - (1) Show areas (in plan) proposed to be planted and irrigated at a scale consistent with the Architectural Site Plan.
 - (2) These may be included on the Architectural Site Plan itself unless degree of complexity requires separate plan sheet.
 - (3) Show location of water source for irrigation.
 - (4) Include major space defining elements such as trees, walls, fences, etc. to convey overall site design concept.
 - (5) Include major vehicular and pedestrian circulation patterns.

D. DESIGN DEVELOPMENT DOCUMENTS

The continued development of the project design and detailing, refinement and confirmation of program requirements and schematic design efforts, and the expansion of outline specifications that fully describe the nature and intent of the project. The design is a continuation the Schematic Design documents, and resulting studies, and alternative schemes developed in conference with the Owner.

Design Documents shall be considered “complete” when all areas of design (i.e. Civil, Architectural, Structural, and MEP) are 100% design development documents as defined below and agreed upon by the Owner.

- The submittal requirements noted in this appendix do not exclude elements which may be unique to a particular project required for the facility design, that are not specifically identified/mentioned herein or in any of the referenced appendices in the Design Guidelines. It is the Architect/Engineer’s responsibility to incorporate any necessary plans, sections or details in the design documents of each submittal package for review.
- Complete design development documents are a result of a completed product and are not a function of time/duration of work.
- Documents that are “on average” 100% design development documents will not be considered “complete” design development documents.

1. Civil

See Appendix B for Civil submittal requirements.

2. Architectural

- a. A complete code review of the entire scope of the project. Code review drawings would include Building Code Analysis and Fire Life Safety drawings. The Fire Life Safety drawings would include as a minimum, construction type, fire exposure analysis, occupancy type and loads, required egress capacity and means of egress, transportation systems (elevators, moving walks, escalators, etc.), required fire and smoke barriers, fire suppression, emergency notification, smoke control, stair pressurization, vertical openings , emergency lighting, etc. Provide technical documentation support with any proposed equivalencies.

APPENDIX L

- (1) Code review shall include, as a minimum, the following codes: NFPA 101, IBC, IMC, IPC, NEC, TDLR-TAS, and other codes as warranted. Refer to Appendix C for latest edition.
 - (2) The Energy Conservation Design Standard for State Buildings except Low-Rise Residential Buildings is based on ASHRAE Standard 90.1 for Nonresidential Buildings. Refer to Appendix C for latest edition. Provide worksheets addressing the Building Envelope compliance. The completed SECO compliance documentation, based upon the final design, will be submitted by OFPC to SECO to certify the building design is in conformance with the Standard. OFPC is to review SECO compliance documentation prior to submittal to SECO.
 - (3) The State Energy Conservation Office (SECO) adopted the International Energy Conservation Code for Low-Rise Residential Buildings. See Appendix C for current edition. Provide document results from *REScheck* software analysis indicating compliance. The completed SECO compliance documentation, based upon the final design, will be submitted by OFPC to SECO to certify the building design is in conformance with the Standard. OFPC is to review SECO compliance documentation prior to submittal to SECO.
- b. Site conditions and constraints, survey, sub-surface conditions, existing structures and improvements, demolition.
 - c. For renovation projects: existing building plans, elevations, structural and architectural systems and elements.
 - d. All special design criteria, such as acoustics, environmental, transportation, security.
 - e. Complete drawings, to scale:
 - (1) All site plans including project location, adjacent structures, access, site improvements, topographical contour lines, landscaping scheme.
 - (2) Renovation projects: All demolition plans.
 - (3) All proposed floor plans showing overall dimensions, room titles and sizes, door swings, furniture layout, equipment layout, fire rated walls, gross area and net assignable area calculations.

APPENDIX L

- (4) All major exterior elevations with exterior materials indicated, building sections, typical wall sections (exterior and interior).
- (5) A preliminary room finish and door schedule.
- (6) Cabinet/casework elevations and typical sections, dimensioned.
- (7) All special equipment descriptions/schedule.
- (8) Bid alternates.
- (9) Assignable and gross floor areas calculated following Appendix A.
- f. Descriptive Specifications: A narrative description of the component systems, materials and equipment in the Construction Specification Institute (CSI) Master Format, current edition, in “non-specification” language.
- g. Descriptive Literature: Catalogue cut-sheets of proposed systems, materials and equipment.
- h. Construction Cost Estimate based upon detailed quantities and unit costs for all materials, labor, equipment, building systems, General Conditions, fees and contingencies in the CSI Master Format, current edition, and/or the Uniform at Assemblies format.
 - All estimates shall include all costs associated with completion of the documents through the Construction Document phase.

See **Attachment C**, Construction Cost Estimate, for an example of a Construction Cost Estimate in a form acceptable to the Owner.

3. Structural

See Appendix K for Structural submittal requirements.

4. Mechanical

- a. Describe design criteria:
 - (1) Code Review, UT Guidelines Review, Occupancy classification, Construction Envelope, International Mechanical Code, International Plumbing Code, International Fuel Gas Code, Texas Department of Licensing and Regulation. See Appendix C for current editions.

APPENDIX L

- (2) Design loads for HVAC, Plumbing; and Plumbing Fixture requirements per code.
 - (3) The Energy Conservation Design Standard for State Buildings except Low-Rise Residential Buildings is based on ASHRAE Standard 90.1 for Nonresidential Buildings. See Appendix C for current edition. Provide worksheets addressing the Heating, Ventilating and Air Conditioning (HVAC), and Domestic Water Heating compliance. The completed SECO compliance documentation, based upon the final design, will be submitted by OFPC to SECO to certify the building design is in conformance with the Standard. OFPC is to review SECO compliance documentation prior to submittal to SECO.
 - (4) The State Energy Conservation Office (SECO) adopted the International Energy Conservation Code for Low-Rise Residential Buildings. See Appendix C for latest edition. Provide documentation from *REScheck* software analysis indicating air conditioning equipment efficiencies in compliance. . The completed SECO compliance documentation, based upon the final design, will be submitted by OFPC to SECO to certify the building design is in conformance with the Standard. OFPC is to review SECO compliance documentation prior to submittal to SECO.
 - (5) Provide a written evaluation of alternative energy applications in compliance with Texas Government Code. Also provide a letter statement regarding the results of the evaluation. Federal Renewable Energy Screening Assistant software (FRESA) may be used to assist in the evaluation. Include a copy of the analysis results with the evaluation report.
 - (6) Special environmental requirements (such as equipment, space pressurization, processes, animals, odors, sterility, etc.)
 - (7) Update and resubmit “Basic Data” form.
- b. Complete drawings, to scale $\frac{1}{8}'' = 1' - 0''$:
- (1) All site plans showing existing and proposed utilities, underground and overhead, with sizes shown, valves, boxes, cleanouts, access ways, manholes, fire protection Siamese and hydrant locations.
 - (2) Material and equipment legends, symbols, abbreviations.
 - (3) All HVAC floor plans shall include:

APPENDIX L

- (a) Mechanical room plan (1/4" scale) laid out with HVAC and associated equipment (air handlers, pumps, compressors, etc.) shown to scale.
 - (b) Mechanical room plans to indicate service clearances for all equipment, including coil pull space for Air Handling Units (AHU).
 - (c) Plans shall indicate egress route for large equipment including height requirements. Remodel projects shall also indicate egress routes for major components.
 - (d) Medium pressure ductwork shown in double line format, placement of single/dual duct terminal units, thermostats. Show major taps and splits, duct sizes.
 - (e) Low pressure ductwork shown in single line format, not sized, diffusers, grilles and returns shown but not sized. Indicate SA, RA and Exhaust Device cfm from current Load Calculations.
 - (f) Routing of HVAC piping and pipe sizes shown.
 - (g) Show in special detail, cross-section or other appropriate manner above ceiling spaces dedicated to specific services, such as special laboratory services, conduit, piping, ductwork, fire protection piping, etc.
 - (h) Equipment schedules, but not necessarily complete.
- (4) HVAC Controls
- (a) Provide preliminary points list for all systems that is complete enough to allow accurate scope of work for pricing of controls work.
 - (b) Provide detailed sequence of operation for all systems.
- (5) Plumbing plans shall include:
- (a) All plumbing fixtures, floor and roof drains, special devices.
 - (b) All sanitary waste and vent piping; Roof/Overflow Storm Drain piping; and main water supply taps and piping, sized.

APPENDIX L

- (c) Any special plumbing system requirements such as vacuum, compressed air, de-ionized water, medical or laboratory gases or laboratory waste.
 - (d) Typical Cold/Hot Water, Sanitary Waste and Vent riser diagrams.
 - (e) Equipment and fixture schedule showing major characteristics of each.
- (6) Fire protection plans shall include:
 - (a) Location of incoming supply, valves, fire pump, etc.
 - (b) All piping routes, sprinkler head locations in architecturally sensitive areas only, fire department connections.
 - (c) Show sizes of risers and trunks.
- c. Descriptive Specifications - describe all systems, controls, equipment and materials in narrative form.
- d. Descriptive Literature - catalogue cut-sheets on all equipment, fixtures.

5. Electrical

- a. Complete drawings, to scale:
 - (1) All site plans showing normal and emergency electrical service system equipment locations, routing and characteristics, including electric utility switches, power poles, sub-stations, vaults, ductbanks, manholes, exterior lighting, etc., as applicable.
 - (2) Updated estimate of total normal and emergency electrical loads with line item breakout of power, lighting, mechanical, receptacles, misc., etc.
 - (3) All floor plans showing typical light fixture layout and types, both interior and exterior, typical power layouts, all distribution equipment locations, electrical rooms/vaults, telecommunications rooms, etc. Unless permitted otherwise, provide separate sets of sheets as needed for power, lighting, fire alarm, telecommunications, audio-visual and security.

APPENDIX L

- (4) Schedule of typical spaces, including exterior, with design foot-candle levels and calculated lighting levels for the corresponding spaces. The Energy Conservation Design Standard for State Buildings except Low-Rise Residential Buildings is based on ASHRAE Standard 90.1 for Nonresidential Buildings. See Appendix C for current edition. Provide worksheets addressing the Interior and Exterior Lighting Budget compliance. The completed SECO compliance documentation, based upon the final design, will be submitted by OFPC to SECO to certify the building design is in conformance with the Standard. OFPC is to review SECO compliance documentation prior to submittal to SECO.
 - (5) One-line or riser diagram indicating electrical service supply (primary and secondary as applicable), switchgear, switchboards, MCC's, large individual mechanical equipment, distribution panel boards, branch circuit panel boards, generators, fire pumps, etc.
 - b. Descriptive Specifications - for all systems and equipment, including electrical power and lighting, fire detection and alarm, telecommunications, security, audio visual, central clock control, CCTV, etc.
 - c. Description Literature - catalogue cut-sheets on all light fixtures and major distribution equipment.
- 6. Landscape Architectural
 - a. Complete drawings, to scale: further refine site plan incorporating schematic comments from OFPC and User.
 - (1) Site plan should evolve into a separate plan sheet at this phase with complete hierarchy of plant materials shown and identified.
 - (2) Include landscape accessories such as seating, litter receptacles, tables, tree grates, drinking fountains, etc.
 - (3) Include landscape lighting if applicable.
 - (4) Show proposed grading.
 - (5) Identify hardscape materials.
 - (6) Begin to show irrigation diagrammatically in terms of number of zones and type of components (sprays on risers, pop-up sprays, rotary heads, drip, etc.).

APPENDIX L

- b. Further refine cost estimate for site work based on further refinement of drawings.
- c. Submit outline specifications for planting, irrigation and accessories.

E. CONSTRUCTION DOCUMENTS

The completion of Design Documents that incorporate and illustrate all aspects of the project in sufficient detail for purposes of accurately bidding/proposing by the construction community throughout the construction process.

- The submittal requirements noted in this appendix do not exclude elements which may be unique to a particular project required for the facility design, that are not specifically identified/mentioned herein or in any of the referenced appendices in the Design Guidelines. It is the Architect/Engineer's responsibility to incorporate any necessary plans, sections or details in the design documents of each submittal package for review.
 - Complete Construction Documents are a result of a completed product and are not a function of time/duration of work.
 - Construction Documents shall be considered "complete" when all areas of detail design (i.e. Civil, Architectural, Structural, and MEP) are satisfactory to the Owner as defined below.
1. Additional requirements are identified in Appendices for each discipline.
 - a. Civil Engineering Criteria – Appendix B
 - b. Electrical Criteria – Appendix E
 - c. Landscape Architecture – Appendix F
 - d. Mechanical Criteria – Appendix G
 - e. Structural Criteria – Appendix K
 2. Color Selections: Include color selections for specified materials included in the construction documents. The Project Architect/Engineer's recommendations for color selections shall be reviewed with and approved by the Owner's representatives.
 3. Construction Cost Estimate: It shall be based upon itemized quantities of unit costs and components, overhead and profit, escalation, and administrative expenses. See Attachment C, Cost Quantity Survey, for an example of a Cost Quantity Survey in a form acceptable to the Owner.
 - Construction Cost Estimate shall be based upon detailed quantities and unit costs for all materials, labor, equipment, building systems, General Conditions, fees and contingencies in the CSI Master Format, current edition, and/or the Uniformat Assemblies format, and shall address and include cost values that reflect anticipated market conditions at time of defined procurement and construction durations.

APPENDIX L

4. Equipment Scheduling: Provide equipment scheduling for all equipment requiring a space allocation and/or architectural/mechanical/electrical service and/or a rough-in, including any future equipment if required in the construction documents. Equipment schedules shall be placed on the construction drawings which cross-references the specification section (or description of the equipment, as required) with the specific location(s) of the equipment on the drawings. The equipment shall be grouped into at least three categories:
 - Contractor Furnished - Contractor Installed (CFCI)
 - Owner Furnished - Contractor Installed (OFCI)
 - Owner Furnished - Owner Installed (OFOI)
5. Project Data Sheet: Include a project data sheet in each set of construction documents. The project data sheet shall include, at a minimum, the following information specific to the project design and the construction documents:
 - Abbreviations used
 - Alternate bid descriptions
 - Codes and standards analysis summary
 - Component Institution's name and address
 - Date of construction documents
 - Drawing symbols
 - Future provisions for expansion (all design disciplines)
 - List of Drawings, Tables and Schedules
 - Materials legend
 - Project Architect/Engineer's name and address
 - Project Architect/Engineer's consultants' names and addresses
 - Project name and UT System project number
 - Square footage per project level and the project total (gross and assignable square footage). See Appendix A, Definition of Building Areas.
 - Vicinity map
6. Project Manuals: Prepare Project Manuals in accordance with Appendix J, Guidelines for Architects/Engineers - Preparation of Project Manuals.
7. Prevailing Wage Rates: OFPC will provide the UT System prevailing wage rates to be used for the project. The Project Architect/Engineer shall include the prevailing wage rates in the Project Manual where instructed in the material identified under "Project Manuals".
8. Title Block: Include certain minimum information on the title block for the drawings. Submit a mock-up of the title block to the Project Manager for review before reproduction on drawing sheets or use. The information to be included on the title block for the drawings shall include, at a minimum:
 - Owner's approved project name and number
 - Project Architect/Engineer's name and street address

APPENDIX L

- Project Architect/Engineer's consultants' names and professional discipline(s)
- Location for the date of issue of the plans with space for several revision dates
- Location for professional seals
- Location for the sheet title
- Location for the sheet number and “___ of ___ Sheets”

APPENDIX L

ATTACHMENT A

PENDING ISSUES REPORT EXAMPLE

PROJECT NAME
INSTITUTION NAME
OFPC PROJECT NUMBER

Action Number	Date Action Initiated	Requested By	Requested Action	Responsible Party	Due Date for Resolution	Action Item/Comment	Status (Open/Closed)
01	09/01/00	A/E	Chemical storage list/quantities	Institution	10/01/00	Per 50% CD review meeting	Open
02	09/01/00	Institution	Upgrade Roof warranty	CM	10/01/00	Per 50% CD review meeting	Accepted – 9/15/00

APPENDIX L

ATTACHMENT B

BASIC DATA

Project: _____ Date: _____
Location: _____ OFPC Project No.: _____

Areas:
Gross: _____
Assignable: _____

‘U’ & ‘SC’ VALUES:

WALLS		Type 1	Type 2	Type 3	Type 4	Type 5
	‘U’					
	Location					

GLASS		Type 1	Type 2	Type 3	Type 4	Type 5
	‘U’					
	‘SC’					
	Location					

ROOF		Type 1	Type 2	Type 3	Type 4	Type 5
	‘U’					
	Location					

FLOOR		Type 1	Type 2	Type 3	Type 4	Type 5
	‘U’					
	Location					

SLAB EDGE		Type 1	Type 2	Type 3	Type 4	Type 5
	‘U’					
	Location					

APPENDIX L

ATTACHMENT B
(Continued)

BASIC DATA

COOLING SYSTEM

Tons: _____ GPM: _____
Type: _____

Prime Energy Source: _____

If served by central plant, has plant capacity for this project been verified? Yes: ____ No: ____

Confirmed by: _____

HEATING SYSTEM

1000 BTU: _____ Lb/Hr Steam: _____ or GPM HW: _____

Type: _____

Prime Energy Source: _____

If served by central plant, has plant capacity for this project been verified? Yes: ____ No: ____

Confirmed by: _____

AIR SYSTEM

Type: _____

No. of prime units: _____ Total CFM: _____

VENTILATION RATES

CFM/person: _____

or CFM/sq. ft.: _____

or Air Chg./Hr.: _____

Min. O. A. _____ Max. O. A. _____

Vent Cycle? _____

PLUMBING

San. load: _____ FU _____ GPM

Cold Water: _____ FU _____ GPM

Hot Water: _____ FU _____ GPM

Storm Water: _____ FU _____ GPM

ELECTRICAL LOADS

Lighting: _____ watts/sq. ft. _____ kw total

General Power: _____ watts/sq. ft. _____ kw total

Special Power: _____ watts/sq. ft. _____ kw total

APPENDIX L

ATTACHMENT C

COST QUANTITY SURVEY EXAMPLE

PROJECT NAME

INSTITUTION NAME

OFPC PROJECT NUMBER

TITLE (Design Development or Construction Document Estimate)

SUMMARY - BASE BID
(Repeat For Each Alternate Bid)

DATE OF ESTIMATE

	\$	\$/GSF (XX,XXX GSF)
DIVISION 01 - GENERAL REQUIREMENTS	XXX,XXX	X.XX
DIVISION 02 - EXISTING CONDITIONS	XXX,XXX	X.XX
DIVISION 03 - CONCRETE	XXX,XXX	X.XX
DIVISION 04 - MASONRY	XXX,XXX	X.XX
DIVISION 05 - METALS	XXX,XXX	X.XX
DIVISION 06 - WOOD, PLASTIC, AND COMPOSITES	XXX,XXX	X.XX
DIVISION 07 - THERMAL AND MOISTURE PROTECTION	XXX,XXX	X.XX
DIVISION 08 - OPENINGS	XXX,XXX	X.XX
DIVISION 09 - FINISHES	XXX,XXX	X.XX
DIVISION 10 - SPECIALTIES	XXX,XXX	X.XX
DIVISION 11 - EQUIPMENT	XXX,XXX	X.XX
DIVISION 12 - FURNISHINGS	XXX,XXX	X.XX
DIVISION 13 - SPECIAL CONSTRUCTION	XXX,XXX	X.XX
DIVISION 14 - CONVEYING SYSTEMS	XXX,XXX	X.XX
DIVISION 21 - FIRE SUPPRESSION	XXX,XXX	X.XX
DIVISION 22 - PLUMBING	XXX,XXX	X.XX
DIVISION 23 - HVAC	XXX,XXX	X.XX
DIVISION 25 - INTEGRATED AUTOMATION	XXX,XXX	X.XX
DIVISION 26 - ELECTRICAL	XXX,XXX	X.XX
DIVISION 27 - COMMUNICATIONS	XXX,XXX	X.XX
DIVISION 28 - ELECTRONIC SAFETY AND SECURITY	XXX,XXX	X.XX
DIVISION 31 - EARTHWORK	XXX,XXX	X.XX
DIVISION 32 - EXTERIOR IMPROVEMENTS	XXX,XXX	X.XX
DIVISION 33 - UTILITIES	<u>XXX,XXX</u>	X.XX
SUBTOTAL:	<u>XXX,XXX</u>	
ADD FOR GENERAL CONDITIONS - ____% :	XXX,XXX	
ADD FOR GENERAL CONTRACTOR'S FEE - ____% :	<u>XXX,XXX</u>	
SUBTOTAL:	XXX,XXX	
ADD FOR GENERAL CONTINGENCIES - ____% :	<u>XXX,XXX</u>	
SUBTOTAL:	XXX,XXX	X.XX
(Describe, if any) SPECIAL CASH ALLOWANCE(S):	<u>XXX,XXX</u>	
CONSTRUCTION CONTINGENCY ALLOWANCE:	<u>XXX,XXX</u>	
TOTAL OF ESTIMATE:	<u>XXX,XXX</u>	

APPENDIX L

ATTACHMENT C
(Continued)

**COST QUANTITY SURVEY
EXAMPLE**

PROJECT NAME
INSTITUTION NAME
OFPC PROJECT NUMBER

TITLE (Design Development Or Construction Document Estimate)

BASE BID
(Repeat For Each Alternate Bid)

DATE OF ESTIMATE

<u>REF.</u>	<u>DESCRIPTION</u>	<u>QUANTITY</u>	<u>UNIT</u>	<u>RATE</u>	<u>TOTAL</u>
<u>DIVISION 03 - CONCRETE</u>					
<u>03 30 00 - CAST-IN-PLACE CONCRETE</u>					
200	Retaining wall 1'6" deep	X,XXX	SF	XX.XX	XX,XXX
300	Concrete topping slab	X,XXX	SF	XX.XX	XX,XXX
500	10' x 10' Housekeeping pad	X,XXX	EA	XX.XX	XX,XXX
510	6" Housekeeping pad	X,XXX	EA	XX.XX	XX,XXX
REFERENCE 03 30 00 - SUBTOTAL:				XX,XXX	
<u>03 53 00 - CONCRETE TOPPING</u>					
010	Broom finish concrete topping on waterproof membrane	X,XXX	SF	XX.XX	XX,XXX
150	Concrete topping on waterproof membrane to east and west terraces	X,XXX	SF	XX.XX	XX,XXX
REFERENCE 03 53 00 - SUBTOTAL:				XX,XXX	
<u>03 35 00 - CONCRETE FINISHING</u>					
100	Broom finish to concrete topping and sidewalk	X,XXX	SF	XX.XX	XX,XXX
REFERENCE 03 35 00 - SUBTOTAL:				XX,XXX	
<u>03 35 13 - HIGH-TOLERANCE CONCRETE FINISHES</u>					
010	Trowel top of elevated slabs	X,XXX	SF	XX.XX	XX,XXX
011	Deburr and patch bottom of slabs	X,XXX	SF	XX.XX	XX,XXX
015	Trowel top of pier caps	X,XXX	SF	XX.XX	XX,XXX
020	Rub finish round columns	X,XXX	SF	XX.XX	XX,XXX
REFERENCE 03 35 13 - SUBTOTAL:				XX,XXX	

APPENDIX L

Revision Log Appendix L

Rev. Date	Remarks
10/1/10	Added design of controls systems deliverables, added fire life safety drawing deliverables, clarification of electrical deliverables