**Facility Planning & Control**

**1. GENERAL INSTRUCTIONS TO DESIGNERS**

**RESPONSIBILITY FOR DESIGN**

**1. The designer is responsible for the design of the project. Quality Control of the design and design documentation is the responsibility of the Designer. The Designer is not to rely on or expect Facility Planning & Control to review his/her documentation with the intent of detecting design or technical errors or to verify coordination among the disciplines. Review of the documentation by FP&C, if any, will strictly be for compliance with programmatic requirements, design standards, State Building Code requirements and to verify that the Designer is fulfilling the terms of his/her Contract. If any failure on the part of the Designer to provide quality control for his/her documents results in additional costs to the Owner, the Designer will be held responsible.**

**2. The Designer shall provide an interdisciplinary coordination review of all documents. The Designer shall provide documentation that this review has been performed. Marked-up documents from this review or certification from a firm specializing in this work will satisfy this requirement.**

**GENERAL REQUIREMENTS**

**3.** The Designer shall be responsible for taking minutes of all meetings, during design and construction and distributing within 7 days.

**4** If at any time the Designer is called upon by the User or the Umbrella Agency to include work, the quality or quantity of which will raise the cost above the AFC, the Designer shall notify Facility Planning and Control ***(the Owner)*** in writing.

**5.** This department will not advertise a project for bids until the Construction Document Phase has been satisfactorily completed, in accordance with the Procedure Manual and these instructions. Letters of Approval from designated regulatory agencies are required before advertising for bids.

**6.** All submissions shall be made to the Owner. Each completed phase shall be made using the **Design Phases Transmittal and Certification of Phase Completion Form**, a copy of which is attached hereto.

**7.** Designers shall not specify that the Contractors prepare "as built drawings". The Designer shall prepare the record drawings on the basis of information furnished by the Contractor. (Refer to Article 7.1.7(1) of the Louisiana Capital Improvement Projects Procedure Manual for Design and Construction, (Procedure Manual) Edition as included in the Designer’s contract.) The Designer shall instruct the Contractor to record as‑built information that varies from the contract documents, on (1) one set of prints, to be furnished to the Designer at completion of the job.

**8.** The Designer shall determine by percentage of dollar value of the proposed work, which classification of Contractor shall be allowed to bid according to the requirements of RS 37:2150-2164. If in question, consult with Facility Planning and Control.

**9.** The Designer is responsible to verify that all products specified do not contain asbestos. A statement shall be included in the specifications in Division 1 stating that in all descriptive or performance specifications, the contractor shall certify that no product used contains asbestos.

 **10.** Facility Planning & Control periodically makes revisions to the Instructions to Designers. It will be the responsibility of the Designer to incorporate any such changes that occur during the design of the project into the Construction Documents. A copy of the current version is available from the Facility Planning & Control Project Manager.

 **11.** All office space shall be designed according to Facility Planning and Control’s Space Entitlements and General Procedures. A copy of this document is found in Facility Planning and Control’s Instructions to Designers Word Files.

 **12.** The Designer shall be familiar with the Code of Governmental Ethics requirement that prohibits public servants and/or their immediate family members from bidding on or entering into contracts; he/she is aware that the Designer and its principal owners are considered Public Servants under the Code of Governmental Ethics for the limited purposes and scope of the Design Contract with the State on this Project (see Ethics Board Advisory Opinion, No. 2009-378 and 2010-128.) Neither the Designer nor any principal within the Designer’s firm with a controlling interest therein shall have an immediate family relationship with the Bidder or any principal within the Bidder’s firm. (see La. R.S. 42:1113).  Any bid submitted in violation of this clause shall be disqualified and any contract entered into in violation of this clause shall be null and void.

 **13.** If called for in the advertisement for Selection Board applications an artist will be selected to provide artwork for the project. The Designer shall coordinate the location and installation of the artwork and ensure that it is installed properly and in a location that is not detrimental to the building. The cost of the artwork and its installation is not part of the project.

 **14.** The following is a check list of the services required and the documents to be submitted at each Design Phase. For further explanation, refer to Article 7.1.1 through 7.1.5 of the Procedure Manual. **All documents submitted at each Design Phase shall be both hard copy and electronic versions including pdfs of all drawings.**

**Program Completion**.

 The following is an outline of scope of services required in the Program Completion Phase. Refer to Article 7.1.1 of the Procedure Manual.

Designer shall refine the program and submit the following documents.

A. Completed program submittal, identi-fying any special systems which are not required by code, for Owner and User approval

B. Designer's review of the AFC and determine if it is realistic

C. Time schedule

***and when applicable to the project:***

D. Geo-technical survey proposal for Owner approval

E. Topographical survey proposal for Owner approval

**Schematic Design**

 The following is an outline of the scope of services required in the Schematic Design Phase. Refer to Article 7.1.2 of the Procedure Manual.

Architectural Design/Documentation services during the Schematic Design Phase shall include the investigation of two alternative design concepts that respond to the program requirements, unless otherwise agreed to by Facility Planning and Control, and shall include the preparation of:

A. Conceptual site and building plans

B. Preliminary sections and elevations

C. Preliminary selection of building systems and materials

D. Development of approximate dimensions, areas and volumes

E. Perspective sketch(es)

The design concepts shall address factors affecting the design such as site utilization, single story versus multistory, building shape and orientation, size, scale, energy efficiency and location of areas required by functional groups, level of quality, level of maintenance, etc.

As early as possible in the schematic design process the Designer shall make an interim presentation to the Owner and the User that will graphically describe the exterior appearance of any new building, addition or major renovation that will alter the exterior appearance of an existing building. This presentation shall occur early enough in the process that the Designer can make any required modifications to the design up to and including complete redesign without causing undue hardship on the Designer or affecting the schedule.

Structural Design/Documentation services during the Schematic Design Phase consisting of recommendations regarding basic structural materials and systems, analyses, and development of conceptual design solutions for:

A. A structural system with proposed grid layout or

B. Possible alternate structural systems.

Civil Design/Documentation services during the Schematic Design Phase consisting of consideration of alternate materials and systems and development of conceptual design solutions for:

A. On‑site utility systems

B. Off‑site utilities work

C. Drainage systems

D. Paving

Mechanical Design/Documentation services during the Schematic Design Phase consisting of consideration of alternate materials, systems and equipment, and development of conceptual design solutions for:

1. Energy Source(s)

2. Energy Conservation

3. Heating and Ventilation and Air-Conditioning - Provide necessary infor-mation on HVAC system or systems so that both the owner and the user agency understand the operation of the proposed system or systems.

4. Plumbing

5. Fire Protection. Flow tests on projects containing sprinkler installations shall be performed during the schematic design phase of projects to ensure that adequate water pressure and flow quantities are available for all buildings included in the project.

6. Special Mechanical Systems

7. Process Systems

8. General Space Requirements.

Electrical Design/Documentation services for the Schematic Design Phase consist of a narrative defining consideration of alternate systems, recommendations regarding basic electrical materials, systems and equipment, analyses, and development of conceptual design solutions for:

1. Power Service and Distribution

2. Lighting (types of fixtures, illumination levels, color temperature, CRF, CRI, etc.)

3. Any required Special Systems such as CATV/CCTV Distribution, Fire Alarm, Intercom/Paging, Lightning Protection, Nurse Call, PA, Security, Telecom-munications Distribution, TVSS, etc.

4. Electrical and Telecom Equipment Room Space, Quantity, Location, and Environment Allocations for all of the above.

5. Outline Plans and Specifications that include the items in this list

6. List Energy Conservation Measures that will be considered.

**Schematic Design Phase Documents to be submitted.**

A. Sketches and Drawings.

B. Outline Specifications identifying all component parts included in project.

C. Statement of Probable Cost.

D. Analysis of requirements of Louisiana Code for State owned buildings as they affect the project.

The purpose of the Schematic Design Phase is to establish the design concepts upon which the project will be based. Once the Schematic Design Phase is approved and the Designer is authorized to proceed with the Design Development Phase, no changes to the design concepts will be considered.

**Design Development**

 The following is an outline of scope of services required in the Design Development Phase. Refer to Article 7.1.3 of the Procedure Manual.

Architectural services during the Design Development Phase consists of development and expansion of selected Architectural Schematic Design to establish the final scope, relationships, forms, size and appearance of the project through:

A. Plans, sections and elevations

B. Typical construction details

C. Three dimensional sketch(es) (new building, additions or major exterior renovation only)

D. Final materials selections

E. Equipment layouts

Structural Design/Documentation services during the Design Development Phase consisting of continued development of the specific structural system(s) and Schematic Design in sufficient detail to establish:

A. Basic structural system and dimensions

B. Final structural design criteria

C. Foundation design criteria

D. Preliminary sizing of major structural components

E. Critical coordination clearances

F. Outline Specifications or materials lists

Civil Design/Documentation services during the Design Development Phase consisting of continued development and expansion of civil Schematic Design and development of outline Specifications or materials lists to establish the final scope and preliminary details for on‑site and off‑site civil engineering work.

Mechanical Design/Documentation services during the Design Development Phase consisting of continued development and expansion of Mechanical Schematic Design Documents and development of outline specifications and materials lists to establish:

1. Preliminary Equipment Sizes and Capacities

2. Preliminary Equipment Layouts including required minimum allowances for maintenance areas. Coordinate the size of the equipment rooms with the Architect.

3. Required Space for Equipment

4. Required Chases and Clearances

5. Size the first five (5) feet of supply ductwork leaving each equipment room and confirm that there is sufficient space to run the ductwork along its proposed route.

6. Show single line routing for the ductwork, and show all VAV boxes and air diffusers that are required

7. Visual Impact

8. Energy Conservation Analysis

9. Submit cut-sheets from two manu-facturers for all HVAC, plumbing and fire protection equipment that is included in this project. Equipment should include air-handling units, chillers, cooling towers, pumps and boilers. The designer is responsible for any other manufactured equipment size and configuration.

10. Submit all information from at least two (2) manufacturers of chillers denoting the efficiency of the chillers as stated in item 3 in the Guidelines for Mechanical Designers section of these instructions.

11. Plumbing and mechanical plans in sufficient detail to define the intent of the systems. Coordinate plumbing fixture quantities and locations with Archi-tectural drawings.

12. Coordinate locations of all existing and new utilities.

13. Show sprinkler system risers and main piping runs on all floors.

Electrical Design/Documentation services for the Design Development Phase shall consist of continued development and expansion of electrical Schematic Design to design completion for:

1. Outdoor & Indoor CATV/CCTV, Power, EMS, Fire Alarm, Lighting, Security, and Telecommunications Distribution Systems

2. Equipment Sizes and Capacities

3. Equipment Layouts with Required Space and Clearances

4. Preliminary load calculations to support sizing of equipment space.

5. Equipment Schedules indicating Symbols Used, Lighting Fixtures (cut sheets and illuminance calculations, in computerized format, also required) and Panelboards, including Phase and Total Loads

6. Electrical Riser, Special System’s Risers, and Grounding Systems Diagrams

7. Lighting and Power Energy Conservation Measures as per Energy Conservation Analysis Requirements included in these documents.

**Design Development Phase Documents to be submitted.**

A. Drawings

B. Expanded outline specifications based on the C.S.I. format, including submittal for FP&C written approval of possible closed specifications and required support per R.S. 38:2290 – 2296

C. Updated Statement of Probable Cost (with backup data)

D. Detailed Code Analysis

E. Preliminary Energy Conservation Analysis

**At the completion of the review of the Design Development Submittal, the Designer, the User Agency and the Owner shall meet to confirm that the design meets the program needs as stated by the User. Once approval is granted and the Construction Documents Phase is started no changes to the design will be considered.**

For renovation projects the meeting shall be held on site to also ascertain that any existing documents and the Scope of Work properly relate to existing conditions.

**Construction Documents**

 The following is an outline of the services required according to Article 7.1.4 of the Procedure Manual. Based on the approved Design Development Documents the Designer shall prepare and submit the following documents:

A. Completed Working drawings stamped by appropriate disciplines

B. Specifications

C. Bidding and Contract Forms

D. Updated Statement of Probable Cost (with backup data, prepared not more than 30 days before advertising)

E. Energy Conservation Analysis

F. One bound file copy of all design calculations, including electrical

G. If more than 24 months has elapsed since the flow test in Schematic Design, a new flow test shall be performed to confirm adequate water pressure is available for the sprinkler system (if applicable).

For this phase to be considered complete, **ALL DOCUMENTS SHALL BE COMPLETE, COORDINATED, AND READY TO BID**. Refer to **RESPONSIBILITY FOR DESIGN** at the beginning of these instructions.

**Bidding & Contract**

Refer to Article 7.1.5 of the Procedure Manual for the services required during this phase.

**No project will be advertised** for bids unless the following documents have been received:

A. Approval of the Office of the State Fire Marshal.

B. Approval of the Louisiana Department of Health when applicable.

C. Approval of the Office of Technology Services when applicable.

D. A current Statement of Probable Cost on the form provided in the Designer’s Package. "Current" means dated within 30 days of the first date of advertisement for bid.

E. An up-to-date certificate of insurance for the designer’s professional liability insurance.

 After receipt of bids, the Designer shall consult with the Owner and User Agency and make written recommendation to the Owner to award the contract or reject all bids.

**Construction**

 The Designer’s services and responsibilities during the construction of the project are covered in Article 7.1.6 & 7.1.7 of the Procedure Manual and will be covered after the bids are awarded. See attached recommended agenda for the pre-construction conference.

Partial outline of required services are:

1. Conduct pre-construction meeting and collect required Contractor submittals.

2. Conduct required site visits to evaluate progress and quality of Work. Recommend rejection of below standard Work as soon as detected.

3. Conduct regular construction progress meetings, prepare and distribute minutes within 7 days. Submit the Monthly Status Report with each pay request.

4. Verify Contractor’s Application for Payments reflects status of work and stored material. Verification of this application represents the Designer’s assertion that the work and stored materials, to the best of the Designer’s knowledge, are complete, **acceptable and in accordance with the contract documents**.

5. Recommend and Prepare Change Orders in accordance with Section 7.2 of the Supplementary Conditions with explanations and acceptable backup documentation.

6. At the monthly meeting with the Owner and Contractor, when project is 75% to 80% complete, review requirements for Acceptance to ensure timely close-out (ask Project Manager for recommended agenda).

**CONSTRUCTION CLOSE OUT** shall include but not be limited to:

1. Arrange for regulatory agency inspections and ensure that the Owner receives copies of inspection certificates particularly from the Office of State Fire Marshal.
2. Determine the value of the documents required by Section 3.11 of the Supplementary Conditions and not approve payment of this amount until all of the listed documents are delivered to the Architect in good order, completely marked with field changes and otherwise complete in all aspects.
3. Provide as-built drawings and specifications. As-built drawings shall be provided as two digitally produced copies on plain bond paper having a minimum 20-pound base weight and two compact disks or flash drives containing the AutoCAD files (one for FP&C, one for User Agency). The compact disks shall also include a copy of the drawings in PDF format. The as-built specifications shall be provided in similar format.
4. Prepare punch list including a value for each item in accordance with R.S. 38:2248(B).
5. Prepare Recommendation of Acceptance.
6. Prepare Certificate of Compliance with American with Disabilities Act
7. Obtain Operating Manuals, training and warranties, particularly roofing.
8. Obtain Consent of Surety.
9. Authorize release of retainage when the Clear Lien certificate is received.

**ONE YEAR WARRANTY:**

1. The Designer will be advised by Facility Planning and Control near the end of the one year warranty period and shall inspect the project with the User and Facility Planning and Control Project and identify any warranty items that need to be corrected.
2. The Designer shall notify the Contractor of the items in need of correction.
3. The Designer shall follow up to ensure that all warranty items are completed by the Contractor.

**DEFINITION OF DOCUMENTS:**

1. Construction Documents - Plans and specifications that provide the requirements of a construction project and are complete pending review and approval.
2. Bid Documents – Plans and specifications which have passed all reviews and may be issued or have been issued for bidding purposes. Bid documents may includeadvertisement or invitation to bidders, instructions to bidders, bid form, form of contract forms of bonds, conditions of contract, specifications, drawings, addenda, and any other information needed to completely describe the work.
3. Contract Documents – Plans and specification including all addenda and any other modifications and may be attached or have been attached to a construction contract. These may include the agreement between the owner and contractor, all conditions of the contract including general and supplementary conditions, the specifications and drawings, any changes to the specifications and drawings, any changes to the original contract, and any other items specifically itemized as being part of the contract documents.