# PROFESSIONAL SERVICES GUIDE
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1.00 INTRODUCTION

1.01 PURPOSE:

This manual is furnished as a guide to the Design Professional providing services to the State of Florida, Department of Management Services, Division of Facilities Management and Building Construction (referred herein as “Building Construction”). The Professional Services Guide is intended to assist the Design Professional in fulfilling both the contractual and the professional responsibilities to the State. The Professional Services Guide is organized in the normal sequence of services to be provided, from the selection of the professional through the warranty period of a project. Current forms, checklists and other information can be obtained from the Project Director. This edition of the Professional Services Guide supersedes all previous editions.

If questions arise regarding any of Building Construction's policies or procedures, contact your DMS Project Director for assistance and clarification.

1.02 ROLE OF BUILDING CONSTRUCTION:

Building Construction Provides:

Project management services by coordinating and supervising the construction of state office buildings and regional service centers that includes planning, selection, design, construction and occupancy;

Project management services on design and construction for state facilities pursuant to Section 255.31 FS "Client Agreements;"

Building Construction is organized into two units - PROJECT MANAGEMENT AND OVERSIGHT, and CONTRACTS ADMINISTRATION.

PROJECT MANAGEMENT AND OVERSIGHT is responsible for the management of projects from appropriation through construction warranty. There are three regional offices located throughout the State to provide quick response to our Client Agencies. These offices are located in Tallahassee, Jacksonville, and Tampa. Project Directors located at the regional offices are the principle contact with the Client Agency, the Design Professional and the Contractor. The Project Director reviews Agency programs, chairs selection committees, administers the Design Professional's contract, assists the Design Professional and provides liaison with the Client Agency, coordinates plan reviews and approvals, chairs bid openings and initial construction conferences, attends construction meetings, reviews Contractor's pay requests, and assists with project close out and warranty questions.

CONTRACTS ADMINISTRATION is responsible for negotiating Design Professional contracts, preparing contracts, awarding Construction Contracts, coordinating contract execution, and tracking/monitoring project budget information.

1.03 ROLE OF THE DESIGN PROFESSIONAL:

Building Construction utilizes private-consulting firms almost exclusively to design, bid and administer its construction projects. You, the Design Professional, have been selected over your colleagues for your qualifications relative to a specific project. We, therefore, look to you to take a key role in the project, to be responsible for keeping the design on schedule, and to keep us and the Client Agency, through the Project Director, informed of the progress of the project at all times.

The Design Professional is expected to schedule services, design phases and to request additional services (such as soil borings, surveys, testing, permits, etc.) when necessary. The Design Professional is expected to be competent in design practices and technical specifications.
and methods, leading to a design solution and product that will be durable, economical, maintainable, and of high quality. Documentation is expected to be thorough and coordinated; incorporate all of the code and permitting requirements of the various code/permitting agencies applicable to the project; and that all permits are applied for and received in a timely fashion. The Design Professional is expected to make the inspections and observations necessary to administer the Construction Contract and to assure that the Contractor and actual construction are meeting the requirements of the Contract Documents.

**Just as the Contractor is expected to meet the construction schedule or face penalties, the Design Professional is expected to do the same.** All too often it is not recognized that delays in the design phase are just as costly, if not more so, as in the construction phase. After you have developed the project schedule and it has been approved, you are expected to see that it is maintained.

Outlined below are documents that are important in fulfilling your basic responsibilities. The Design Professional's firm members and consultants must become familiar with these documents, especially as they affect procedural and legal issues in the performance of your contract and that of the Construction Contract. They are:

A. Form of Agreement between Owner and Architect-Engineer.  
   1. Construction Management projects.  
   2. Design/Bid projects.  
C. Building Construction's Non-technical Specifications Section of Division One (latest edition provided by the Project Director)(Design/Bid projects).  
D. Agreement between Owner and Contractor (found in the Non-technical Specifications)(Design/Bid projects).

Building Construction's Project Director will be your prime client contact. While you will at times be dealing directly with the Client Agency's Representatives and other members of Building Construction's team, the Project Director must be kept informed of all meetings and communications. All changes or modifications will be submitted to the Project Director. The Project Director will assist you through the State's procedures and may participate in many design reviews and construction inspections. The Project Director will participate with you and assist you as necessary, but you are expected to assume a strong role in the process.

The Design Professional must have electronic mail capabilities through the World Wide Web. It is the intention of the Department of Management Services (DMS) to use electronic communication, whenever possible, for all projects. The Design Professional shall provide the firm's electronic mail address with points of contact within the firm for electronic communications.

### 2.00 SELECTION OF THE DESIGN PROFESSIONAL

The selection of the Design Professional (also referred to as A/E or Architect-Engineer) is accomplished in accordance with Section 287.055, Florida Statutes, commonly called the Consultant's Competitive Negotiation Act. This procedure is used to select architects, engineers, landscape architects and registered land surveyors based on quality of service rather than price being the primary determinate.

The procedure is further defined in **THE SELECTION OF THE DESIGN PROFESSIONAL**. This guide is available upon request by calling any Regional Office. The guide is intended to inform the professional community of the methods for announcement, application requirements, and the procedure for the selection by the selection committee.

The quality of services rendered by the Design Professional to the Department of Management Services and other State Agencies will be evaluated. The resulting project performance rating will be used as one of the criteria in the selection of your firm for future work. The Design
Professional should understand they are responsible not only for the performance of their own firm, but also for their consultants and that their consultants’ performance contributes to the overall performance evaluation of the Design Professional's services.

### 3.00 CONTRACT NEGOTIATION AND INVOICING

#### 3.01 PREPARATION:

After being selected as the Design Professional for a project, a professional service agreement will need to be negotiated. In order to prepare for your negotiation, you should receive a copy of the following from the Project Director:

- **A.** Building Construction’s Professional Services Guide
- **B.** The Authority letter authorizing negotiations with your firm
- **C.** A program statement that outlines the scope of work to be performed, the proposed budget and a suggested schedule. The prepared program may need to be further clarified or amplified. The Design Professional should do so by calling and discussing the scope of work with the Project Director and the various Client Agency Representatives listed in the program. A site visit is recommended prior to negotiation.
- **D.** The Client Agency Representative(s) name(s) and phone number(s).

The Design Professional shall prepare a detailed proposal for basic services. This proposal should give the step-by-step tasks required to accomplish the program objectives, the hours and discipline of each individual for each task, a summation of the hours for each individual for each phase (schematic design phase, design development phase, etc.), each individual’s hourly rate times the number of hours spent by the individual on each phase, a summation of all personnel cost per phase, the personnel cost per phase times the overhead multiplier justified for the firm, and that total times the profit multiplier for the firm. A spreadsheet format is recommended. A detailed breakdown of the reimbursable expenses for each phase (travel, per diem, reproduction, etc.), a summation of, basic cost per phase, and a summation of all costs for basic services are to be provided.

The Design Professional shall provide with his proposal a justification of the firm's overhead rate, a listing of personnel salaries, the project design phases proposed, a proposed project schedule, any proposed additional services, and the frequency or proposed number of construction site visits during construction. The names of your prime personnel and those of your consultants shall be listed for each phase, including those providing construction visits.

It is recommended to discuss the project scope and proposed services with the Project Director and Client Agency Representative(s) prior to the negotiation to assure a common understanding. On large projects or complicated projects, a "scope meeting" will be held with the Design Professional and Consultants at the site or at our office to discuss/agree upon the scope of services and the approach to be used. This meeting can also be used for a preliminary discussion of fees, use of special consultants, etc. Basic services are to be segregated from additional services on your proposal. A partial list of additional services appears in Section 4.07. Additional services may be authorized either as a Lump-Sum Fee or with Not-To-Exceed limits based on pre-approved hourly rates.

When you have prepared your fee proposal, email it (including sub-consultant proposals) to the Project Director. The Project Director will then schedule a negotiation with the Contracts Administrator. A sample "Fee Proposal Submission" and a sample "Form of Agreement Between Owner and Architect-Engineer" may be obtained by contacting the Project Director.

#### 3.02 THE NEGOTIATION:

The negotiation may be scheduled as a face-to-face meeting in one of our offices, or as a telephone negotiation. The negotiation is chaired by the Contracts Administrator and may be attended by the Project Director, the Client Agency Representative and the Design Professional.
along with any key consultants, such as the Mechanical, Electrical, Plumbing (MEP) Engineer(s). On large projects, the MEP Engineer will play a key role in formulating the systems design parameters and in commissioning the building prior to occupancy.

The Design Professional's fee proposal will be reviewed, discussed and modified as necessary during the negotiation. The budget, phases of submittal, the schedule and assigned personnel will be reviewed and agreed upon. The Contracts Administrator will prepare minutes of the meeting and issue those to all attendees. Once an agreement has been reached, Building Construction will prepare a contract and mail multiple copies to the Design Professional to sign, seal and return. Building Construction will execute the contracts and will transmit a signed copy to the Design Professional.

3.03 INVOICING:

A. GENERAL:

It is the intention of Building Construction to expeditiously approve all invoices properly rendered for professional services and reimbursable expenses. In order to assure processing of invoices in a minimum amount of time, they should be properly prepared and contain the appropriate information and back-up data.

INVOICES ARE TO BE ADDRESSED TO THE PROJECT DIRECTOR. DO NOT ADDRESS YOUR INVOICES TO THE CONTRACTS ADMINISTRATOR. Improper addressing of invoices may cause unnecessary delays. Invoices may be submitted at the completion of a phase of service or monthly, as authorized by the agreement.

INVOICES NOT PROPERLY PREPARED AS TO FORM, CONTENT, OR BACK-UP DATA WILL BE RETURNED TO THE DESIGN PROFESSIONAL FOR CORRECTION AND RESUBMISSION. INVOICES NOT CERTIFIED AS TRUE AND CORRECT WILL BE RETURNED TO THE DESIGN PROFESSIONAL FOR SIGNATURE.

1. The Project Director will approve the invoice promptly if everything is in order and the services have been approved. Generally, the approval of an invoice by the Project Director should not take longer than two-three days if Building Construction and the Client Agency have approved the work product.

2. The invoice is then transmitted to the Client Agency for vouchering, and then to Division of Financial Services for payment. The time period for processing and payment is usually 15-20 calendar days, including mailing time.

THE DESIGN PROFESSIONAL SHALL SUBMIT INVOICES ONLY FOR THOSE BASIC SERVICES, ADDITIONAL SERVICES AND REIMBURSABLE EXPENSES THAT ARE SPECIFICALLY AUTHORIZED BY AGREEMENT OR BY A WRITTEN AUTHORIZATION FROM THE CONTRACTS ADMINISTRATOR OR PROJECT DIRECTOR. DO NOT START WORK UNTIL YOU HAVE AN APPROVED AGREEMENT OR AUTHORIZATION FOR THE WORK AND DO NOT START THE WORK BEFORE THE DATE OF APPROVAL. FAILURE TO COMPLY WILL RESULT IN NON-PAYMENT FOR THE WORK ACCOMPLISHED PRIOR TO THE DATE OF APPROVAL. THIS IS ESPECIALLY IMPORTANT WITH NOT-TO-EXCEED AUTHORIZATIONS.

In order to assure processing of invoices in a minimum time, they should be properly prepared and contain the appropriate information and back-up data. Invoices shall include:

1. State Project Number
2. State Project Name
3. Minority Vendor Number (if applicable)
4. Design Professional's Federal Tax Identification Number as it appears on the agreement.
B. FORMAT, NUMBER OF COPIES:

INVOICE FORMAT: A sample invoice may be obtained from the Project Director.

NUMBER OF COPIES: Invoice Routing Sets (multi-part forms) are available from the Project Director and shall be completed and attached to each invoice submitted. The Design Professional shall submit an original and three (3) copies of the invoice. The original and each copy are to have copies of all of the required back-up data. The backup should be HIGHLIGHTED where applicable and include CHECK NUMBERS/DATES PAID. All invoices MUST include ACTIVATIONS OR AUTHORIZATIONS, as required. Please organize the backup in order of your invoice format.

CONTENT: All invoices must show the following: Services, Total Fee, Percentage of Completion, Due to Date, Previously Billed and Amount Due.

NUMBERING: Invoices shall be numbered consecutively beginning with number one (1) and continuing in numerical order throughout the life of the contract.

To expedite payment, keep the number of invoices submitted to a minimum by combining as many items as possible on each invoice.

C. JUSTIFICATION, BACK-UP DATA REQUIRED:

In order to comply with the Comptroller’s Rules promulgated to meet the requirements of Florida Statute 287.057, the back-up data outlined below is required for payment of the item invoiced. Remember that all services must have prior written authorization to be eligible for payment. Basic Services are authorized by the Professional Services Agreement, while Additional Services and Reimbursable Expenses may only be authorized in writing by the Contracts Administrator or the Project Director (with exception for those reimbursable expenses associated with advertising and printing during the bidding phase).

D. SPECIFIC REQUIREMENTS FOR BACK-UP DATA:

1. Basic Planning or Design Phase Invoices. For payment at the submittal of a Phase, the Work Product specified in the Agreement (Master Plan, Report, Schematic Documents, Design Development Documents, etc.) must be submitted prior to or with the invoice.

2. Basic Bidding Phase Invoices. A copy of the Bid Tabulation and your recommendations concerning contract award must have been submitted to the Project Director prior to or concurrently with the invoice (copies do not have to be attached to the invoice). Note: This is not applicable to Construction Management projects.

3. Basic Construction Administration Phase Invoices. A copy of the Contractor's Certificate of Partial Payment must be attached to the invoice and copies. Your invoice must be in proportion to the percentage of completion shown (total completed to date divided by contract sum) on the Contractor's Certificate of Partial Payment. Failure to do so will delay processing of invoices. Your final invoice must have a copy of the completed Certificate of Contract Completion attached to the invoice and each copy submitted.

4. All Lump-Sum Authorizations. A copy of the work product prescribed in the authorization must be submitted prior to or with the invoice and a copy of the authorization must be attached to the invoice and each copy submitted.

5. Personnel Time Expenditure Charges Authorized On A Not-To-Exceed Basis. Attach to the invoice and each copy of the invoice:
   a. A copy of the Authorization,
   b. Time sheets, or a recapitulation sheet indicating the individual’s name, specific days, hours and tasks performed (Timesheets may be obtained from the Project Manager). Use a colored marker to highlight the
personnel time and to differentiate it from other assignments on the time sheets,
c. Calculations to show how the personnel time expenditure charge was determined (Hourly Rate) x (Overhead Multiplier) x (Number of Hours) = Personnel Time Expenditure Charge.

6. Charges for Premium Portions of Overtime Authorized on a Not-To-Exceed Basis. These types of charges require the same back-up data as specified for Personnel Time Expenditures Charges in Paragraph 5 above.

7. Travel and Per Diem Charges Authorized on a Not-To-Exceed Basis. All travel and/or per diem charges shall not exceed the limits set forth in section 112.061, Florida Statutes. Attach to the invoice and each copy of the invoice the following:
   b. A completed form DBF-AA-15 which indicates the name of the individual traveling, the purpose of the trip, the place, time and date of departure, destination and return.
   c. Calculations must be shown for personal or company automobile mileage charges. You are allowed to charge for the city-to-city mileage shown on a standard Department of Transportation Road Map or their website, plus vicinity mileage. Vicinity mileage should be shown separately along with the justification for its necessity.
   d. Receipts for lodging, airplane, bus, rental automobiles, etc. Receipts for taxi fare in excess of $15.00 on a per fare basis and receipts for parking or tolls in excess of $3.00.
   e. Note: each individual incurring expenses must complete separate travel vouchers. ALL TRAVEL MUST BE BY THE MOST ECONOMICAL CLASS OF TRANSPORTATION AVAILABLE. All communication expenses must include a statement that expenses being claimed were for State business.

8. Telephone Charges Authorized on a Not-To-Exceed Basis. Generally, telephone calls are not considered as a reimbursable expense having been included within the Basic Services fee or as a part of the overhead and profit multiplier. Only in special cases will an authorization be made for telephone calls, and the authorization will specify what telephone charges are allowable with a not-to-exceed limit. Attach to the invoice:
   a. A copy of the authorization.
   b. A phone log showing name of individuals placing and receiving the call.
   c. A phone log showing purpose of call.
   d. Paid invoices/receipts of bills showing the calls must be attached to invoices. In case of watts line, the charge per unit of time must be given.

9. Charges For Reproduction of Drawings and Specifications Authorized on A Not-To-Exceed Basis. Attach to each invoice:
   a. A copy of the authorization (or the Bidding Documents - Advertising and Bidding Approval letter).
   c. A completed Documents Distribution Record.
   d. Copies of paid invoices/receipts for all printing, copying and mailing costs (Note: All in house printing costs shall be at current market rate per vicinity).

Note, all documents should be accounted for on the Documents Distribution Record since any documents printed, but not distributed or returned, must be credited to the Owner. After all documents have been returned from bidders, contact our Project Director for instructions on their disposition. Once the need for documents by Building Construction and the Client Agency has been satisfied, normally, any available documents will be given to the low bidder at no cost. Documents retained by the Design Professional or his consultants are not reimbursable. Any deposits not refunded and any documents sold shall be credited to the Owner.
10. **Fees Paid For Securing Approval of Authorities Authorized on A Not-To-Exceed Basis.** Attach to the Invoice:
   a. A copy of the Authorization or the Bidding Document - Advertising and Bidding Approval Letter.
   b. A copy of the Consultant's invoice (with a copy of the Authorities' approval document attached), indicates your approval on its face.
   c. The back-up data described in Sections 5 through 9 above, as applicable.
   d. If the authorization specifies a Cost-Plus-Not-To-Exceed Amount in accordance with a Consultant's Fee Schedule, a copy of the approved Fee Schedule shall be attached.

11. **Advertising Costs Authorized On A Not-To-Exceed Basis.** Attach to the Invoice:
   a. A copy of the authorization or the Bidding Document-Advertising and Bidding Approval Letter.
   b. A copy of the newspaper or advertising agency paid invoice/receipt.
   c. An original notarized proof of advertisement.

**E. PAST DUE INVOICES:**

When submitting a new invoice and there are outstanding or past due billings, please indicate these past due invoices in the lower right hand corner of the invoice form. In no case should an item previously invoiced be shown on a later invoice in the "amount due" column. It should only appear under "previously billed." Call or write the Project Director if you wish to inquire about the status of an invoice.

**4.00 DESIGN SERVICES**

**4.01 GENERAL INFORMATION:**

Building Construction recognizes the basic design phases of schematics, design development and Construction Documents. During your negotiations, the design phase submittals will be discussed and agreed upon. Some projects are small and may not require all the standard phases of submittals. Some projects may be large enough to require additional submittals, such as conceptual schematics, advanced schematics and 50% Construction Documents. Your contract with the Owner will reflect the agreed upon phases and their scheduled submittal times. The minutes of negotiation will reflect the number and distribution of copies at each phase.

Note: Since Building Construction delivers a large variety of building types we do not have a published design guide but we encourage the design consultant to utilize the National Institute of Building Sciences “Whole Building Design Approach” listed on their website [www.wbdg.org](http://www.wbdg.org) to achieve “high performance” buildings within available funding. Furthermore, the design consultant shall focus special attention to integral building envelopes and advanced HVAC systems that provide quality indoor air environments. The building design should work in every way to enhance the agency’s mission that it is housing while being secure, energy efficient, easy to maintain and constructed of long life cycle building components. It is anticipated that the design consultant will have to shift emphasis from building design geometry issues, to building systems issues, to deliver an affordable and approvable design.

The three basic design phase submittals and their requirements are detailed hereinafter. Also, the Owner's expectations of other basic responsibilities of the A/E are explained in Section 4.06. A partial list of additional services is given in Section 4.07.
required, the Design Professional should promptly request authorization (via a proposal) to purchase such services.

During the negotiation, it should be agreed upon whether design submittals will be presented and discussed at a review meeting, or whether the submittals will be mailed or electronically submitted and reviewed independently. The location and associated travel costs of any review meetings should also be agreed upon at negotiation.

The Project Director for the Design Professional, attended by the Project Director, the Design Review Team and the Client Agency, will arrange a review meeting, as necessary. A copy of all required materials should be sent to all participants by, the Design Professional, a week prior to the meeting. At the meeting, the Design Professional will explain the design and the influences that led to the proposed solution. The Design Professional will show that the design meets all of the requirements of the program with particular emphasis on space allocation, function, site adaptation, codes, and local zoning requirements. THE DESIGN PROFESSIONAL SHALL MAKE MINUTES OF THE MEETING AND ADDRESS THEM TO THE PROJECT DIRECTOR WITH COPIES TO ALL OTHER ATTENDEES.

A. SUBMISSION REQUIREMENTS:

The Design Professional shall present enough documentation to ensure a full understanding of the proposed design. Exterior and interior perspective sketches and mass models may be necessary to fully present the concept. Such sketches and models are considered basic design tools and are inherently a part of basic services. Detailed models and perspective renderings are not expected at the schematic stage.

Schematic design documents should include fundamental design decisions such as: functional organization; building and site circulation; massing; scale; conceptual appearance; neighborhood context; basic exterior and interior finish material and product concepts; conceptual structural, mechanical, and electrical systems; and circulation/conveying systems.

On large projects, the schematic phase may be divided into a conceptual and an advanced submittal. On smaller projects only one schematic submittal may be required. Regardless, the Design Professional is responsible for seeing all the following requirements are included in his schematic submittal(s).

B. CONCEPTUAL SCHEMATIC REQUIREMENTS:

Should include, but not be limited to, any of the following that are applicable:

1. A study of the existing master plan (if one exists, or a statement that the project does not have a master plan). If there is a need for a master plan and there is none, the Design Professional should point this out.

2. The soil and ground water conditions, contours, accessibility, utilities, flora, zoning and governing codes, etc., should be described as they relate to the project.

3. Topographic studies of terrain shall emphasize features that contribute to the solution or require significant alteration in the solution. Include a flood hazard evaluation. The design consultant should determine whether or not the building site is in a 100-year flood plain. This information, including the 100-year flood elevation, must be shown on the building site plan and lowest (ground level) finished floor elevation set one (1) foot above the 100-year flood elevation. The probability of water over running site shall be investigated. The 100-year flood elevation and contour shall be indicated.

4. A site plan indicating orientation, site use, demolition, placement of structures, Building Construction, circulation and parking. Indicate utility systems showing existing utilities with different tonal qualities or line types from new. Indicate different landscape and hardscape concepts and forms.
5. Block diagrams (floor plans) for each proposed level. Repetitive levels may be grouped.
6. At least two sections, perpendicular to each other at same scale as plan/block diagrams and establish vertical control.
7. Exterior elevations, blocking out to illustrate massing and context while avoiding detail.
8. Larger scale (l/4”=1'-0") drawing of repetitive modules such as individual offices, medical exam rooms, or dormitories are part of the project should be included, if applicable. Provide larger scale drawing of complicated rooms such as kitchens.
9. In the case of additions or renovations to existing buildings, plans showing existing and proposed facilities in their relative arrangement and relationship. Provide a brief description of the existing construction and systems and indicate the present and former uses of the facility.
10. Proposed accommodations for the handicapped, as regards both program needs and code requirements.
11. A general description of architectural, engineering, and construction concepts, and the architectural, structural, plumbing, fire protection, mechanical (HVAC), communications, electronics and electrical systems to be used.
12. A listing of codes to which the project’s design complies.
13. A fact sheet indicating names, addresses and phone numbers of the Owner, Client Agency Representative, Architect and consultants.
14. A statement that the Department of State has been contacted and that any conflicts between the project and conservation or historical interests of the Department have been or are being resolved. This contact should be made with the Compliance Review Staff, Historic Preservation Section, Division of Historic Resources, Department of State, R.A. Gray Building, 500 South Bronough Street, Tallahassee, Florida 32399-0250.
15. Cost and area analyses correlated to the program requirements and established budgets.

C. ADVANCED SCHEMATIC PHASE REQUIREMENTS:

Should include, but not be limited to, any of the following that are applicable.

1. For complex projects over $10,000,000, provide a Basis of Design Booklet (or binder) explaining the basis of design and describing how the design solution satisfies the program. The basis of design should summarize the opportunities and constraints influencing the design and rationale behind design. The booklet will also serve as a vehicle to acquaint interested upper management and lay persons with the particulars of the project. Provide a narrative description of the design and construction concepts and how they are responsive to the program.
2. Provide a Basis of Design Booklet summarizing the opportunities and constraints influencing the design and rationale behind the design.
   a. Introduction - Provide a brief description of the project scope, purposes, data sources and contents. Provide a fact sheet indicating names, addresses and phone numbers of Owner, Client, Agency Representative, Architects and consultants.
   b. Goals - Provide a statement of the architect's understanding of the owner's project objectives stated in terms of function, form, quantity, quality, economy, and time.
   c. Facts - Identify pertinent data, amenities, configuration and operations including general site planning, functional organization, design, site use and development. Identify existing facility's structural, mechanical, and electrical systems. A description of existing zoning and its restrictions, any other site factors controlling development, and recommendations for resolving them. An identification and presentation of code requirements and local authorities and other state agencies who will have jurisdiction. Provide a review of codes having bearing on the project and report...
specific problems encountered in conforming to these specific codes or any problems which may arise in satisfying these permitting agencies, as well as solutions, waivers or variances, if any, being pursued.

d. Needs - Provide space and functional program requirements, schedule requirements, and compatibility with established budget requirements.

e. Problem Statement - Provide summary statements identifying unique and essential project design and construction criteria. Provide recommendations regarding additional required services; surveys, soil borings, detailed cost estimates, models, etc.

f. Provide a preliminary project description. Describe major site, architectural, structural, mechanical, plumbing, fire protection, cathodic protection, communications, electronics and electrical systems with proposed construction products and materials; include off-site improvements if applicable. Provide a description of the features and provisions provided in the facility for use by disabled persons.

g. Provide cost analysis with summary and project schedule.

h. Appendix - Provide relevant information such as owner's directives, relevant correspondence, graphical data referenced in document, functional diagrams, space planning tables, and reduced drawings.

3. A plan showing how the project fits into the master plan for total facility development, if applicable.

4. Site plans showing existing and proposed roads, walks, circulation elements, on-site and off-site utility systems, accessible route(s), plantings and special site features. Include flood plain considerations.

5. Studies and reports relative to site and its topographical, ecological, botanical and other features contributing to the solution or requiring significant alteration of the existing site.

6. Floor plans indicating accessible route(s) provide a plan for each proposed level. Repetitive levels do not need to be shown separately but may be grouped. Horizontal control dimensions should be indicated.

7. If the project is an addition, or is otherwise related to existing buildings on the site, the plans shall show such facilities and their general arrangement and relationships.

8. A life safety plan indicating class of construction, occupancy, exiting patterns, exit width calculations, smoke compartments (if applicable), and fire ratings for walls, doors and other openings. If smoke control systems are planned, so indicate. Provide plan at same scale as floor plan.

9. Floor plans and interior elevation studies of typical repetitive modules such as individual offices, medical exam rooms or dormitories, if applicable. Complex areas such as kitchens should also be enlarged at 1/4"=1'-0" scale or larger, if applicable. The footprint, volume and organization of repetitive components should be established along with plumbing, HVAC, and electrical services.

10. Building sections at least two perpendiculars to each other and at the same scale as the floor plans. Provide dimensions to establish vertical control.

11. Exterior elevations the same scale as the floor plans.

12. Structural framing plans at the same scale as floor plans and indicate primary vertical and horizontal structure.

13. HVAC plans at the same scale as the floor plans showing proposed distribution for primary vertical and horizontal HVAC systems, including shafts and schematic arrangement of primary equipment.

14. Plumbing plans at same scale as floor plans and indicate primary plumbing risers, chases, fire service risers, roof drains and overflows with storm-water leaders and proposed primary horizontal distribution, including location and schematic arrangement of primary equipment.

15. Electrical plans at the same scale as floor plans. Indicate vertical and horizontal electrical primary and stand-by power and communication distribution, including locations and schematic arrangement of primary equipment, switchboards and panel boards.
16. Details of non-typical construction, materials and building components.
17. Provide project product material binder and specification notebook based on design decisions reflected by the schematics arranged in C.S.I. format.
18. When required by your contract, provide presentation materials including study sketches, perspectives, and other drawings as appropriate to convey design intent; provide study model(s) when appropriate.

D. COMMENT AND APPROVAL:

After the presentation meeting, or upon receipt of the submittal, the Project Director will coordinate the review and, if appropriate, approve the schematics. Approval of schematics by the Project Director is required before proceeding to Design Development.

A schematic phase approval is given with the explicit understanding that all expectations of the program, codes, rules, regulations, and laws will be capable of satisfactory evolution in later phases and the economic constraints of the budget will not be exceeded.

E. RESPONSE TO DMS REVIEW COMMENTS:

The Design Professional shall respond in writing to DMS review comments using the format provided or specified by the Project Director. The response shall be submitted to the Project Director. Any other changes in the design contemplated by the Design Professional as a result of the review comments shall be noted in the response.

4.03 LIFE-CYCLE COST ANALYSIS SUBMITTAL OF ENERGY CONSUMING OR HVAC EQUIPMENT:

Note: This only applies to buildings with over 5,000 gross square feet. After schematic approval, but prior to submittal of Design Development, the Design Professional shall submit at least three HVAC or equipment schemes and life-cycle analysis results for review and approval. (ref. FS 255.251 - 255.254) The analysis shall comply with the Florida Energy Modeling Program (FEMP) procedures and can be obtained from the Project Director. The submittal shall be bound and include the project number, project name and relevant data, results, FEMP summary sheets, the engineer's recommendation concerning the scheme with the lowest life-cycle cost, and the engineer's signature and seal.

Note: This submittal is considered additional services when complex/multiple systems are evaluated. However, to minimize the cost impact, the engineer should utilize the same FEMP-approved software for calculating the building heating and cooling loads for the lifecycle cost analysis.

4.04 DESIGN DEVELOPMENT:

A. SUBMISSION REQUIREMENTS:

1. General: All design decisions should be documented in design development, as these documents when approved will provide the basis for Construction Documents. At the completion of Design Development, it is expected that all design, technical, administrative and cost challenges will have been resolved and that there will be no carry over of design or basic research to the next phase. The Design Professional shall present enough documentation to fully explain the quality level decisions and solutions that have been reached. This documentation shall consist of drawings, outline specifications, perspectives, models, cost estimates, material samples and a booklet of design criteria such as sketches, calculation, notes and economic or engineering analysis. Specification cut sheets for lighting, plumbing, hardware, HVAC equipment, architectural specialties, special equipment, and other key elements are to be included.
2. **Development Procedures:** Any conferences needed with the Client Agency or other agencies having jurisdiction, either in the office or on site, shall be coordinated with the Project Director. The Design Professional will provide minutes of each meeting to the Project Director, with copies to all attendees.

The Project Director for the Design Professional may arrange a formal review meeting. The meeting may be attended by the Project Director, the Client Agency, and other assigned review staffs. The Design Professional a week prior to the meeting shall send the contracted number of copies of review materials to the invitees. At the meeting, the Design Professional will explain the design and the decisions that have led to it. The Design Professional will explain how the design meets the requirements of the program, with particular emphasis on space allocation, function, budget, codes, engineering concepts, and local building requirements. The Design Professional shall complete and provide minutes of the meeting to the Project Director with copies to other attendees.

**B. SITE:**

The information pertaining to the site and its development should be presented as an entity passing across professional disciplines. It should include, but not be limited to:

1. **Informational data -** Location plots, property and topographical surveys, subsurface boring logs and plans, ecological and botanical surveys, easements, zoning and other appropriate information.
2. **Master Plan -** A copy of the master plan, indicating the location of the project and total scheme, if applicable.
3. **Flood Hazards -** In accordance with Section 255.25(6) show that the proposed construction is in compliance with the flood plain management criteria for mitigation of flood hazards, as prescribed in the rules and regulations of the Federal Emergency Management Agency or what is to be designed and constructed to bring the proposed construction into compliance therewith.
4. **Environmental consideration -** Necessary design data, specifications, and cost estimates for preservation, dust, erosion, sedimentation and run-off control, where applicable, as an integral part of the design and construction project. Such controls will be limited to the area involved in the construction operation and those required by applicable ordinances, rules laws, etc. Environmental control is not to be confused with landscaping. The information provided will include statements regarding the type of treatments selected, the affected areas, and the reasons for the selection of the type of controls chosen.
5. **Grading and Site Development -** The data provided, in addition to the proposed development, should include a statement of the general soil conditions with a brief outline of the soil exploration and testing performed.
6. **Site Construction -** All permanent features to be constructed on the site. Indicate on plans footprint of buildings and different design disciplines.
7. **Roads, Walks, Parking, and Handicapped Accessibility -** Indicate the type and volume of traffic, speed limit on roadways, controlling wheel loads, classes of surfacing under consideration, with justification for same, any deviation from criteria for those classes. Parking requirements per code, program, occupant load, etc. Provide for handicapped accessibility in the site elements and to the building in accordance with applicable codes and the Florida Accessibility Code for Building Construction (FACBC). Any exceptions shall be documented in writing, discussed and agreed upon.
8. **Utility Services -** All existing and proposed utility services including runs, locations, capacities, sources, characteristics, materials and installation methods should be fully described. The energy sources (gas vs. electrical vs. solar, etc.) should be evaluated for the equipment to be installed. Indicate on site utilities plan above and belowground utilities, points of connection to off-site services, buildings and facilities. Distinguish between existing and new work with different
a. Electrical: A statement relative to the adequacy of the primary supply at the point of takeoff. If the source is inadequate, state measures proposed to correct the deficiency. Design Professional should determine electrical demands and the consumption profile of the proposed electric utility (and possibly with competing companies) for the most advantageous rates, including off-peak loading, reducing demand charges etc. Address grounding and lightning protection requirements and solutions. Electrical site plan should show lighting and site power locations, service locations and sizes.

b. Fuel distribution and storage information shall include the following:

   (1) Fuel Gas:
       (a) Statement of type, location and size of takeoff from supply, and available pressure.
       (b) Statement of type and material for pipes and valves.
       (c) List applicable codes for installation, permitting, licensing, maintenance and future replacement and a statement indicating compliance and impact. Including DEP/Fire Marshal/Etc. certifications and compliance requirements.

   (2) Liquid Petroleum Products:
       (a) Statement of type, location and size of takeoff from supply, and available pressure.
       (b) Description of the type of system and proposed features.
       (c) Statement of the basis for storage capacity, rate of pumping, and number of dispensing outlets.
       (d) Description of power supplies and power requirements.
       (e) Selection of type of materials for pipe, tanks and valves.
       (f) List applicable codes for installation, permitting, licensing, maintenance and future replacement, and a statement indicating compliance and impact.
       (g) List applicable codes for installation, permitting, licensing, maintenance and future replacement and a statement indicating compliance and impact including DEP tank certifications and compliance requirements.

   Note: Tanks over 550-gallon capacity shall comply with Florida Administrative Code Chapter 62-761 for above-ground tanks and 762 for below-ground tanks. Tanks shall be double-wall construction and not less than 550 gallons to reduce frequency of refilling. Contact the DMS Environmental Section for questions regarding tanks.

c. Domestic water and fire protection:

   (1) Source, minimum and maximum pressure at each building and in the system, and an explanation of the existing system covering particularly the type, capacity, present flow, condition, present water use, and unsatisfactory elements of the component parts.
   (2) A statement of the type of construction proposed, materials for water mains, or wells, etc.
   (3) The distribution system, a statement of design, domestic and fire flow usage of well pressure, elevation differential, and the designer's preliminary estimate of tentative pipe sizes.
   (4) A statement of tentative sizes, elevations, capacities, etc. as can be readily determined without long computations or design consideration for reservoirs, treatment units, plumbing plants, well pumps and such units.
   (5) Fire mains shall conform to NFPA 24.
(6) Separate fire mains from potable water supply by a listed backflow preventer.

(7) Determine source, availability and adequacy of fire protection water supply by obtaining test data from local authorities on flow and pressure of existing or proposed water supply systems.

d. Sewers and sewage disposal systems: Information provided shall include:
(1) An explanation of existing systems, particularly the type, capacity, condition, present flow, and unsatisfactory elements or components.
(2) The interpretation of the degree of treatment necessary by field requirement and units necessary for treatment.
(3) A statement of the design factors with present design population per various units for the sewage treatment plant.
(4) Statements of materials to be used for the sewage system, sewage collection system, and the sewage treatment plants.
(5) Means of effluent disposal.

e. Storm water retention, detention and conveyance system:
(1) An explanation of the existing system covering particularly the type, capacity, condition, and unsatisfactory elements or components.
(2) A statement of the type of construction proposed, material, etc.
(3) A statement of the design requirements, calculations and tentative pipe sizes.

f. Chilled water supply and return with indication of connection points shall be indicated on plan.

9. Electronics and instrumentation - As related to the site, the following information shall be provided:
   a. System engineering concepts.
   b. Site and location considerations.
   c. Antenna requirements such as types, separation, heights, aircraft clearance, and area requirements.
   d. Site communications and control linkages.
   e. Electronic security considerations.

10. Cathodic protection - In addition to the proposed design, provide:
   a. Results of soil resistivity measurements.
   b. Variations in soil make-up.
   c. Soil moisture content and normal seasonal variations.
   d. Results of temporary cathodic protection tests, if any.
   e. Results of structure to soil potential measurements where protection is to be provided.

11. Site irrigation systems - Provide tentative layouts, materials, sizes, etc. Utilize the parameters outlined in Florida Statute 373.185, Local Xeriscape ordinances, and/or in FAC Chapter 60D-14 “XERISCAPE”.

12. Fencing - type, height and justification for fencing

13. Landscaping - provide preliminary data on plant species, size and massing layout. Utilize the parameters outlined in Florida Statute 373.185, Local Xeriscape ordinances, and/or in FAC Chapter 60D-14 “XERISCAPE”. Landscape plan shall include planting lighting, landscape, hardscape, site furniture and recreational elements.

14. Lateral and transverse sections through the site shall indicate development of the site, when it is necessary, due to substantial elevation changes or circulation at more than one level.

15. Any special consideration pertinent to the site and its development.

C. BUILDING:

Each building should be fully described. Drawings should be organized for subsequent use as
contract document drawings. Include title sheets with zoning, building, fire, life safety, plumbing, mechanical and electrical code summaries and calculations; area and location maps; and a drawing index. The information should include, but not be limited to the following:

1. Architectural drawings shall include:
   a. Abbreviations, symbols, legends, room numbers, room material code index (if used), keynotes and general notes.
   b. Key Floor Plans
   c. A plan of each floor with dimensions, room names, room numbers, room material codes (if used), wall and partition type indications, ceiling heights, openings (i.e. window, door, and louver locations with symbols), plumbing fixture locations, casework, collateral equipment, building specialties, shafts, chases, suspended slab openings, and depressed slab locations.
   d. Large scale (1/4" to 1/2" per foot) floor plans, reflected ceiling plans, and elevations of typical repetitive elements (i.e. exam room, offices, dormitories etc.)
   e. Life safety plans indicating the class of construction, occupancy, exiting patterns, exit widths and calculations, smoke compartments (if applicable), and fire ratings for walls, doors and other such openings, exit signs, and fire detection and protection devices. If smoke control systems are planned, so indicate.
   f. Reflected ceiling plans with light fixture locations and ceiling materials; coffers, vaults, domes, and other special constructions; and operable partitions.
   g. Roof Plans showing all equipment locations, penetrations, slopes and drainage.
   h. Interior elevations.
   i. Transverse and lateral sections through the building, indicating heights, vertical circulation, and relationship. The finished floor elevation of each level should be given.
   j. Exterior elevations, giving floor elevations at each level and showing finish materials.
   k. Exterior wall sections and details necessary to indicate the methods of construction and to determine the overall "U" values achieved as required.
   l. Preliminary opening schedules (e.g. door, window, and louver) and all sizes, types, constructions, finishes, hardware, frame types, and fire ratings.
   m. Wall and partition schedules.
   n. Preliminary architectural finish and color schedules - applied finish colors may be omitted at this phase (if a third party interior designer is involved, ensure that the architectural room finish schedule differentiates between architecturally selected finishes and interior designer selected finishes; indicate where interior designer finishes are documented.
   o. Conventional and accessible toilet accessory schedules with fixture related mounting locations and heights.
   p. Toilet partition types and supports.
   q. Casework and countertop locations, profiles, configuration, and materials.
   r. Architectural woodwork location, profiles, and materials.
   s. Building specialties with their locations.
   t. Exterior horizontal and vertical closure and roofing systems.
   u. Horizontal and vertical circulation including chutes, shafts and their fire ratings and their ancillary and equipment spaces.
   v. Fire-resistive assemblies and their locations.
   w. Sound-rated assemblies, including operable partitions and their locations.
x. Provide for handicapped accessibility to all areas of the building in accordance with applicable codes. Any exceptions shall be documented in writing, discussed and agreed upon.

y. Area recap and square footage should be indicated for the project in comparison to that required by the program.

z. Provide list of all safety equipment, including cost that has been included in the project.

aa. Other information considered necessary for the development of the program or explanation of the design, including a threshold building statement as defined in Section 553.71 Florida Statutes.

bb. The formal architectural rendering, if required by your Contract, should be submitted after approval of the Design Development documents.

c. After approval of Design Development, but prior to completing Construction Documents, provide color schemes and schedules for all areas, interior and exterior. Material and sample palettes shall be provided, including exterior materials.

d. Sketches as necessary to portray the design concept.

e. A description of the materials used for all major items of construction.

2. Structural:
   a. A description of foundation conditions, types of foundations to be used, the method by which the allowable bearing value is to be determined, and the maximum allowable bearing capacity for the foundation.
   b. Statement as to the type of construction adopted and reasons therefore with capacities, dimensions, or other size criteria.
   c. Floor plans showing structural foundation systems and sub-slab construction, horizontal and vertical framing systems showing slab (or equivalent) edges, suspended slab openings, depressed slab locations, lateral load cross bracing, and typical construction details. Indicate proposed length and spacing of principal members, etc. Note floor elevations.
   d. The description of the structural roof system proposed with principal members' dimensions, etc.
   e. Provide structural building sections, transverse and longitudinal, indicating vertical relationships and headroom.
   f. Note limited load carrying capacities and statement of live loading to be used, including floor loads, wind, earthquake, etc., with justifying data.
   g. Provide calculations and design criteria when requested.
   h. A statement of any special considerations that affect the design.
   i. Provide general notes, but do not duplicate info in specs.

3. Heating Ventilation, Air Conditioning (HVAC):
   a. Provide floor plans showing major plant equipment sizes and locations, heating and refrigerant supplies and returns, air-handling equipment locations and air-handling distribution, air-handling supply systems and discharge locations and sizes, air handling exhaust systems and intake locations and sizes, shafts and chases. Provide exhaust and ventilation riser diagrams for multi-story buildings or those with complex systems.
   b. Provide sections showing equipment and locations of ductwork.
   c. Energy Conservation - Provide assumption, calculations, and criteria in the form and detail required to fully convey the design intent and show compliance to the Florida Building Code. For projects over 5,000 square feet, the HVAC Design shall reflect the lowest life-cycle cost alternative resulting from the lifecycle cost analysis.
   d. Provide full description of the energy management control systems (EMCS) proposed for use including current and future capabilities. The Engineer is alerted that Building Construction has a contract for automated management controls (limited to DMS managed buildings)
through a single manufacturer for standardizing and Interfacing building controls to the Department's Operation Control (OPCON) Center in Tallahassee. For further information, contact your DMS Project Director.

e. Heating systems:
   (1) Statement of indoor and outdoor design temperatures and "U" factor for walls, ceilings, floors, etc., to be used in design.
   (2) Heating medium, such as steam, hot water, baseboard, forced warm air, unit heaters, etc.
   (3) Type of heating system such as converter, baseboard, forced warm air, unit heaters, etc.
   (4) Types of building temperature control, and energy management control systems.
   (5) Location and type of heating plant.
   (6) Brief explanation of the basis for selection of type of fuel, including an economic comparison with other fuels.
   (7) Provide heat in all buildings with full-time occupants within the state. Deviations shall be requested in writing.

f. Ventilation:
   (1) Statement of type of system and the design intent.
   (2) Show in the Design Development documents the selected design approved for maintaining indoor air quality (such as outdoor air quantity, recirculation through air purification devices, etc.). Provide a building ventilation schedule and a floor-by-floor air balance schedule to demonstrate positive building pressure.
   (3) Indicate the ventilation air quantity during cooling and heating seasons, assumptions, occupant load, calculate the critical space and adjust outside air quantity accordingly, and specify the code-compliance methodology.
   (4) Demonstrate compliance to ASHRAE 62. Delineate assumptions; show each space ventilation flow-rate based upon occupancy, ratio of ventilation to supply air, critical space, and calculation to determine the final outside air flow-rate per equation 6.1.e.

g. Air conditioning:
   (1) Provide a brief description of the air conditioning system proposed, such as factory assembled or built-up system, variable air volume (VAV), variable-volume variable—temperature (VVT), constant air volume (CAV) (acceptable only in small spaces and/or where outside air pretreatment system is used), number of zones (if applicable) or unit type, chilled water system, or direct expansion, type of refrigerant, etc.
   (2) List and describe areas to be air-conditioned.
   (3) List applicable code standards and editions approved by the Authority Having Jurisdiction, e.g. FBC 2004, and/or other governing requirements such as ASHRAE. Delineate inside design temperatures and relative humidity, outside wet- and dry-bulb design temperatures, "U" factors for the roof, walls, windows, and/or type of construction proposed and a statement of the economics of applying insulation and/or sunshades.
   (4) Description of equipment to be used such as reciprocating or centrifugal compressor, condenser, air-handling equipment, duct system piping, etc.
   (5) Type of building temperature control system, such as electric, electronic or pneumatic and sequence of operation.

h. Refrigeration (cold storage):
   (1) Statement of areas to be refrigerated, indicating their usage, and temperatures to be maintained.
   (2) Outside design dry and wet bulb temperatures.
(3) Type of refrigeration equipment.
(4) Type and thickness of refrigeration insulation.

4. Electrical:
a. Indicate electrical service entrance power characteristics such as phase, voltage, configuration, transformer requirements, etc.
b. Indicate electrical characteristics, such as phase, voltage, number of wires, etc., of each circuit. Provide a breakdown of the estimated connected load to show:
   (1) Lighting and convenience outlet load.
   (2) Power load for building equipment such as heating, air conditioning, etc.
   (3) Loads for special operating equipment such as compressors, x-ray equipment, pumps, etc., and for power receptacles being provided to energize special equipment. Apply an appropriate demand factor to each, to compute a total demand load.
c. Indicate the location of the main switchboard or power panels, light panels, transformers and all equipment panels.
d. Indicate type of wiring system, such as rigid conduit, electrical metallic tubing, etc., and where proposed for use.
e. The type of conductors and insulation, etc., and their proposed location.
f. Specify breaker types and acceptable/reasonable ampere-interrupt capacities for the required service.
g. Show the location of all lights, power outlets, switches, GFCI, etc.
h. Describe the proposed pertinent standards of design such as voltage drop, lighting intensities, and types of lighting fixtures, in accordance with lifecycle cost analysis.
i. Describe the short-circuit duty required for all protective devices and switchgear.
j. Indicate the requirements for the emergency electrical system.
k. Ensure that the electrical information for the facility is fully coordinated with the site electrical requirements and with the low voltage communications systems requirements.
l. Describe the lightning protection system. Indicate resistance and continuity tests to be performed.
m. Indicate the requirements for surge arrestors.

5. Communication, electronic and instrumentation provisions
a. Provide sufficient information, including engineering concepts for review purposes of the systems proposed, i.e. - intercom system, telephone system, public address system, radio and antenna systems, television antenna systems, protection alarm systems, respond tie-ins and any other data or systems deemed necessary.
b. Indicate equipment selection.
c. Site or location considerations for equipment.
d. Required radio paths and propagation.
e. Antenna requirements such as types, separation, tower heights, aircraft clearance, and area requirements.
f. Antenna transmission lines, terminations and switching.
g. Bonding and grounding requirements.
h. Communication, control cables and radio links.
i. Test equipment, repair shop and spare parts storage requirements.
j. Equipment and instrumentation arrangement and space requirements indicating requirement for racks, consoles, and for individual mounting.
k. Wiring and cable requirements plus terminations.
l. Power and lighting requirements, including emergency or standby requirements.

m. Air-conditioning requirement, including humidity and dust control requirements.

n. Interference and clearance requirements.

6. Plumbing:
   a. Provide preliminary layout of utility lines and building construction service lines with elevations and sizes fundamental to design.
   b. Provide fixture schedule and floor plans showing domestic hot and cold water supplies and returns, major horizontal and vertical services, the location and sizes of fixtures, equipment and the number of person served.
   c. Preliminary building sections showing riser and branch lines, fixtures and equipment.
   d. Provide the estimated number of fixture units, demand and GPM for all plumbing fixtures.
   e. Provide the estimated minimum and maximum water pressure at each building.
   f. Indicate the type of heater and capacity for hot water supply, when hot water is authorized.
   g. Indicate requirements for acid dilution tanks (laboratory waste), grease separators (foodservice wastes), etc.
   h. Additional details as necessary to describe or clarify any other conditions.

7. Fire Protection:
   a. Indicate service hydrants, post indicator valves, stand pipes and test valves.
   b. Indicate risers and hose cabinets. Provide a riser diagram.
   c. For sprinkler systems, indicate the hazard rate of occupancy, the type of sprinkler system (wet or dry), and the water volume, pumps and pressure required. Delineate any special system such as carbon dioxide, foam, etc. that will be required.
   d. Layout sprinkler head coverage based on NFPA 13.
   e. Indicate type of protection for sprinkler pipes and heads located in unconditioned spaces.

8. Special Equipment: If equipment is to be purchased by others, indicate N.I.C (not in contract), and specify who is to assemble, set-up and provide the utility rough-ins and final connections of this equipment Indicate all equipment, such as:
   a. Kitchen equipment
   b. Auditorium seating
   c. Stage curtain and equipment
   d. Gym layout and equipment
   e. Window coverings
   f. Hospital equipment
   g. Lawn irrigation equipment
   h. Vacuum cleaning systems
   i. Material handling equipment
   j. Telephone/data communication systems

D. BASE BID AND ALTERNATES:

The Design Professional should recommend the scope of the base bid and the additive alternates proposed in order of priority to receive a base bid within budget. Alternates must be listed in order of priority and will be awarded in that sequence as funds allow. The base bid must be structured so that the project will function as intended if the alternates cannot be awarded.
E. BASIS OF DESIGN BOOKLET:

Update Basis of Design Booklet from schematic phase but no need to update preliminary project description. Booklet should include an estimate of probable construction cost with the Design Development submittal. This shall be compared with the Owner's approved budget.

Booklet should also include an area analysis of the project. This shall be compared to the approved program. The area analysis should include the net and gross square footage and efficiency factor by floor and overall.

F. OUTLINE SPECIFICATIONS:

Provide outline specification and arrange according to C.S.I. format.

G. PROJECT PRODUCT BINDER MATERIAL:

Update product binder from schematic phase and update with the addition of new materials and products as they are selected.

H. COMMENT AND APPROVAL

After the review meeting, or upon receipt of the review materials, the Project Director will coordinate the review and approval of the Design Development submittal. Approval of Design Development must be given prior to proceeding into Construction Documents. Approval of Design Development does not transfer to the State any of the liabilities and responsibilities of the Design Professional.

I. RESPONSE TO DMS REVIEW COMMENTS:

The Design Professional shall respond in writing to DMS review comments using the format provided or specified by the project director. The response shall be submitted to the Project Director. Any other changes in the design contemplated by the Design Professional as a result of the review comments shall be noted in the response.

4.05 CONSTRUCTION DOCUMENTS:

A. GENERAL:

At completion of 100% Construction Documents it is expected that all design, technical, administrative and cost challenges will have been resolved and that there is no carry over of work from this phase to the bidding phase.

B. NON-TECHNICAL SPECIFICATIONS (Design/Bid Projects Only):

THE LATEST EDITION OF THE DMS NON-TECHNICAL SPECIFICATIONS WILL BE PROVIDED BY THE PROJECT DIRECTOR AT THE START OF THE CONSTRUCTION DOCUMENT PHASE. DO NOT USE PREVIOUS EDITIONS OF THE NON-TECHNICAL SPECIFICATION WITHOUT CHECKING WITH THE PROJECT DIRECTOR TO MAKE SURE IT INCLUDES THE LATEST REVISIONS. THE DESIGN PROFESSIONAL SHALL USE THE NON-TECHNICAL SPECIFICATION AS IS, WITHOUT RETYPING, EXCEPT FOR THE FOLLOWING:

1. Cover Sheet - Retype the cover sheet, providing the missing information and the current date. When the final bid set of the Contract Documents is prepared, the current date will be the date that the Contract Documents are made available to prospective bidders; all drawings and specifications are to bear this date and the drawings are to be without revisions. Any required revisions to the Contract Documents after this date shall be made by addendum during the bidding period.

2. Table of Contents - Add the table of contents for the technical specifications by
continuing the Non-technical Specifications Table of Contents utilizing the same page numbering system and using as many pages as necessary.

3. Advertisement for Bids - Utilize and insert the advertisement that will be provided by the Project Director, as an attachment to the "Bidding Documents - Advertising and Bidding Approval Letter." The type of licensed Contractor(s) capable of performing the project and to be shown in the "Advertisement for Bids" should be discussed and decided upon by you and the Project Director before the Project Director prepares the "Advertisement for Bids." Refer to the Department of Business and Professional Regulation's website at http://www.myflorida.com/dbpr/pro/cilb/cilb_code.shtml for a list of Contractors requiring licensing.

4. Invitation to Bid - Retype entire letter on the Design Professional's letterhead with filled-in blanks from data provided in the Advertisement for Bids. Discuss the amount of deposit for the Contract Documents with the Project Director. This amount should cover only the costs of printing and handling rounded up to the nearest dollar.

5. Owner's name, project number and other blanks that are listed in the instructions for completing the Non-technical Specifications.

6. The Design Professional is to complete the section listing permits and impact fees required of the Contractor. If known, the amount of impact fees should be given. If not available, either indicate an allowance or "to be paid by Owner." Indicate if this is a threshold-building project.

7. Time of Completion and Liquidation Damages: Fill in the blanks. Discuss the contract times and liquidated damages with the Project Director. As a minimum, liquidated damages should cover the Design Professional's fees for extended construction administration based on a daily rate.

8. Alternates: Make certain to list all alternate bid items. Give the alternate number followed by a brief work description, the word "add" and then a blank for the lump sum amount. The alternate shall be fully described elsewhere in the documents. The DMS Project Director must approve the use of any alternates in advance, and in writing.

The qualified bidder submitting the lowest bid will be that bidder who has submitted the lowest price for the base bid, or the base bid plus additive alternates or less deductive alternates, taken in the numerical order listed in the bid documents—not to exceed the budget determined by the Owner. ALTERNATES MUST BE AWARDED IN SEQUENCE UNLESS THE ORDER OF ALTERNATES DOES NOT AFFECT THE DESIGNATED QUALIFIED LOWEST BIDDER.

9. Unit Prices: If unit prices are desired from the Contractor, prepare a form for the prices desired, using the example as shown in the Non-technical Specifications. If unit prices are not desired, delete this paragraph from the form. It is recommended that unit prices be the price for adding or deleting work from the project. This will require the design professional to include a reasonable amount of units in the base bid which is expected to be used or encountered by the Contractor. Indicate that unit prices are exclusive of overhead and profit.

10. List of Subcontractors: Retype this sheet, insert only major licensed subcontractors applicable to this project, and remove all unused blanks.

11. Special Conditions: The Design Professional should tailor this section to the needs of the project, adding, deleting or modifying paragraphs as necessary to fit the particular project. On smaller projects eliminate the Architect-Engineer trailer. On small projects, and where the work is not visible to the public, eliminate the project sign. Make any necessary adjustments to previous non-tech sections in this section.

12. Agreement between Owner and Contractor, Performance Bond, Labor and Material Payment Bond: Do not fill in any of the blanks in these documents. Building Construction's Contracts Section will prepare these documents, when a contract award has been made.
C. CODES:

The Design Professional shall provide a certification with signature that lists all of the codes and local ordinances to which the project complies.

D. COST ESTIMATES:

At the end of each phase of design, an opinion of probable cost is required of the Design Professional. The information should be presented by discipline or CSI format and given in recognizable units for estimating purposes (such as sq. ft, cu. yds, tons, etc). Compare this to the budget given in the program and in the Agreement between the Owner and the Architect/Engineer.

E. AREA ANALYSIS:

The Design Professional shall submit an area analysis of the project.

F. DRAWING REQUIREMENTS:

1. General - The Design Professional should ensure that the drawings are final and complete with all elements thoroughly checked and coordinated to ensure that there are no conflicts between architectural, structural, mechanical, electrical, civil and other portions of the work. Particular emphasis shall be placed on coordination when elements of the design are performed under subcontract to another firm.

   The drawings should be prepared so that Change Orders to Construction Contracts will not be necessary due to errors, omissions, inadequacies, lack of coordination among the various design disciplines or conflict between various component parts or with the specifications. When applicable, the design data should be shown on the drawings, i.e.:
   a. Occupancy classification of all areas both for Building Code and NFPA 101.
   b. Floor areas and occupancy classification areas in square feet.
   c. Loads - Roof and floor live loads, wind loads for roof, walls, fenestration, etc. and total loads.
   d. Basic working stresses for - concrete, structural steel, wood, concrete block, masonry.
   e. Foundations - Allowable soil pressure for spread footings and bearing value for piles.
   f. Means of egress - Identify clearly on drawings.
   g. Construction type and occupant loads.
   h. Smoke partitions
   i. Fire and smoke barriers with fire resistance ratings as appropriate.
   j. Details of fire stopping for all penetrations
   k. Sprinkler system design criteria; head locations and riser diagrams

2. Medium: Unless otherwise instructed, the drawings should be prepared by AutoCAD (Computer Aided Design & Drafting) version 2000 or later. Many Client Agencies are interested in obtaining copies of plans and specifications on CD media. DMS requires this for both the contract and record-set documents. Each AutoCAD (.dwg) drawing file shall be bound with no extraneous X-refs such that it can be opened in its entirety by the end user via the CD media. All .dwg files shall be saved to one properly labeled CD.

3. Lettering: Lettering size should be a minimum of 1/8" high.

4. All engineering drawings, including sprinkler systems, shall be signed and sealed by the responsible engineer, in accordance with the rules of the Florida Board of Professional Engineers.
G. SPECIFICATION REQUIREMENTS:

1. General: The specifications shall be comprehensive and address all facets of requisite construction, tailored to the specific project, complete and final with all elements thoroughly checked and coordinated. Particular emphasis should be placed on the coordination of various elements of the specifications or portions of the specifications prepared under subcontract to another Design Professional.

2. Standard specifications: Maximum use shall be made of standard materials and methods of construction and standard specifications. Specifications for classifications of work and material issued by an approved association, such as ASTM, and ASME, etc., may be included. Each referenced specification must be examined, before its use, to ensure that it is suitable for its intended purpose and that proper choice is made of the options given in it. Federal and military specifications may be used. When a small quantity of material is needed and a standard commercial product would be suitable, reference to a standard specification should not be made. WHEN SPECIFYING BY PRODUCT, MODEL NUMBER, ETC., THREE ACCEPTABLE MANUFACTURER’S PRODUCTS SHOULD BE SPECIFIED (YOU MUST ASSURE THAT EACH MANUFACTURER LISTED DOES IN FACT MANUFACTURE AN EQUIVALENT PRODUCT). HOWEVER, WHEN THIS IS NOT POSSIBLE, THE WORDS, "OR ARCHITECT/ENGINEER APPROVED EQUIVALENT," MUST BE INCLUDED WITH THE ONE OR TWO SPECIFIED PRODUCTS. SOLE SOURCE SPECIFICATIONS ARE NOT ALLOWED WITHOUT PRIOR APPROVAL FROM THE REGIONAL MANAGER. In referencing standard specifications, the following rules should be followed:
   a. Avoid reference to specific paragraphs in the standard specifications, since it limits the requirements to the paragraph referenced.
   b. Avoid repeated references to a standard specification within the same section
   c. Specify types, classes, weights, and similar applicable characteristics required to ensure an accurate description.
   d. The Design Professional shall submit a copy of each referenced standard specification when requested by the Project Director.

3. Code Compliance: Include in the Construction Documents a complete listing of applicable codes and regulations with current edition dates. Refer to paragraph 4.06N for the source of these codes.

H. SIGNATURES AND SEALS:

The Design Professional shall submit bid documents and final drafts of reports under the signature, seal, and date of the principal in charge, representing each firm performing services on the project. This shall be done in accordance with the rules of the respective Board for that registered profession.

I. COMMENT AND APPROVAL:

Plans and specifications submitted for review shall be sent directly to the Project Director, the Client Agency Representative, the State Fire Marshal, and others, as directed. The Design Professional shall give a reply to each comment, and if a change to the design is to be made as a result of the comment, then this should be mentioned and described in the reply. It may be more appropriate to send a drawing/sketch/ASI/etc. showing the changed design along with the response.

4.06 OTHER BASIC REQUIREMENTS:

AS THE DESIGN PROFESSIONAL, YOU PLAY A KEY ROLE IN A SUCCESSFULLY MANAGED PROJECT. YOU ARE EXPECTED TO KEEP BOTH BUILDING CONSTRUCTION
AND THE CLIENT AGENCY INFORMED OF THE SCHEDULE AND STATUS OF THE
PROJECT. YOU ARE EXPECTED TO BE AWARE OF ALL THE LAWS, CODES, RULES, ORDINANCES AND PERMITTING AUTHORITIES HAVING JURISDICTION OVER YOUR PROJECT. You are expected to anticipate the projects' need for additional information or services (such as soil borings, surveys, asbestos testing, etc.). You are expected to alert the Project Director and initiate any proposals for additional services that are not a part of your basic architectural/engineering contract. The following is a partial list of expectations Building Construction has of its Design Professionals.

A. DOCUMENT SUBMITTAL:

The quantity and distribution of documents should be discussed at contract negotiations. In addition to Building Construction, other permitting agencies may require multiple submissions or multiple copies for review. Send document submittals directly to the Review Agency(s) and provide a copy of the transmittal to the Project Director.

B. PROJECT SCHEDULE:

The Design Professional shall submit a general schedule with projected calendar dates indicating the key steps leading to completion of design and construction. This should be submitted after receipt of the signed contract and be updated as required. Copies should be submitted to the Project Director for approval and distribution. On large or complex projects, the schedule must be sufficiently detailed to show all interrelated activities, such as DRI activities, concurrency application and approval, programming, space planning, permitting, etc. It should show the sequence of events with projected calendar dates for start and finish of planning, design, bid, construction and occupancy. It should show all tasks necessary to complete each phase of the project, show intervals for review between phases and indicate all permits, licenses and approvals by agencies having jurisdiction, whether application is made by the Owner, Design Professional or Contractor.

C. STATUS REPORTS:

The contract for professional services requires the Design Professional to prepare MONTHLY Planning and Design Reports to be submitted by the first of each month during design, and MONTHLY Construction Reports to be submitted by the first of each month during construction. These reports must cover all work through the end of the previous month, with special emphasis on items that are of critical importance to the extent that they may cause future delays or problems. Information provided shall be in sufficient detail to give a concise overview of the project. The Design Professional shall submit these to the Project Director with copies to the Client Agency and to the Regional Manager. Do not make entries that require reference to earlier reports. Formats/examples can be obtained from the Project Director.

D. AREA CALCULATION:

At the end of each phase of design, calculate the area of the project using the standard BOMA or A.I.A. method as applicable. Compare this to the area referenced in the program.

E. PUBLIC INFORMATION RELEASE:

Any proposed press releases must receive approval by Building Construction prior to release. The nature of the services of the Design Professional requires that discretion be used in the release of any information throughout the project.

F. MINUTES OF MEETINGS, CONFERENCES AND CALLS:

The Design Professional shall take notes of the proceedings of all conferences, meetings and conference telephone calls which deal with matters of scope, design, basic input or project development. From these notes, the Design Professional shall develop minutes of the
proceedings and send copies to the Project Director, the Client Agency and all participants. We recommend keeping a log and notes on all incoming and outgoing calls related to the project. These can be invaluable later in resolving any dispute that may arise.

G. FORMAL DESIGN PRESENTATIONS:

During the course of the negotiation, the required phase submittals and the manner of submittals will be discussed. Some submittals will be by mail. Others may require design review meetings that may be "working sessions." Larger projects may require formal presentations to Agency heads or other dignitaries. For these, the Design Professional should prepare adequate copies of 8 1/2 x 11 material for all attendees. Large boards, slides and models may be necessary for review and approval in a large conference setting. Reduced scale copies of these should be included in any handouts. The Design Professional may be asked to give a "sneak preview" of his presentation material to Building Construction management prior to the formal design presentation to the Client. The location and cost of these formal design presentations should be discussed and agreed upon at negotiation.

H. SITE INFORMATION:

The Project Director will furnish the Design Professional with any available information relative to existing conditions at the site. The Design Professional should exercise due caution with these materials, including original Construction Documents, as-built drawings and shop drawings, and be satisfied by actual site investigation as to their validity before utilizing the data.

If authorized as an additional service, the Design Professional shall prepare measured drawings, and conduct an investigation of hidden conditions. When removal is necessary, contact the Project Director about making arrangements for the removal. When the project requires more site information than is provided (such as, surveys and subsurface investigations), the Design Professional shall make arrangements and submit a proposal to obtain the additional information as an additional service. See Section 4.07.

I. MATERIAL AND EQUIPMENT SELECTION:

Building Construction encourages the use of quality building materials. In general, materials should be selected to provide optimum service and lowest maintenance for the dollars spent. Products and materials manufactured in the U.S.A. and Florida should be specified when possible.

Drawings and specifications should be prepared so that the bidder will be permitted a choice of materials or methods which are equally satisfactory for the purpose intended and are comparable in cost and quality when subjected to open market competition.

Drawings and specifications must clearly establish a standard of quality for all materials and equipment. Restrictive requirements should not be used if possible. The drawings and specifications should permit competition consistent with the work involved. WHEN IT IS NECESSARY TO DESIGNATE EQUIPMENT AND MATERIALS BY PRODUCT NAME, THREE EQUIVALENT PRODUCTS SHOULD BE NAMED AND THE OPPORTUNITY PROVIDED FOR OTHER PRODUCTS TO QUALIFY BEFORE AND AFTER THE BID DATE. SUBSTITUTIONS AFTER THE BID ARE GENERALLY NOT ACCEPTED UNLESS QUALITY CAN BE PROVEN EQUAL AND IF A PROPER CREDIT IS GIVEN. PROPRIETARY, OR SOLE SOURCE SPECIFICATIONS ARE NOT ALLOWED UNLESS PRIOR APPROVAL IS OBTAINED FROM THE REGIONAL MANAGER.

The use of asbestos or asbestos-based materials (including vinyl asbestos tile) is prohibited in buildings being renovated, remodeled or constructed for ownership or lease by the State. Both the Design Professional and the Contractor will be required to complete affidavits stating that no asbestos containing materials have been specified or installed in the project.

Rev. 11/2005
J. PROTECTIVE CONSTRUCTION, SHELTER IN PUBLIC BUILDINGS:

The State of Florida, in accordance with F.S. 255.042, has instituted a policy of consideration of protective construction and/or fallout shelters in public buildings. The degree of protection to be provided will depend on factors that vary with the type, size, location, and cost of the individual structure or facility. When the program so instructs, the design of a project will consider such protection and shall provide an evaluation of its costs.

The planning and design of a project will provide for protective construction by slanting. Slanting is defined as the incorporation, without appreciable extra cost or reduction in efficiency, of certain architectural and engineering features into a new permanent type structure and portions thereof to improve their resistance to damage or to protect materials, function and/or personnel.

These features may provide immediate improvement or may facilitate later conversion for such purposes. Where slanting can be provided at no appreciable cost, it should be applied to all permanent new construction.

K. DOCUMENT REVIEW AND COORDINATION:

The Design Professional shall thoroughly review, check and coordinate all elements of each and every submittal including those of consultants to avoid omissions and conflict. These checks should be made by persons other than those preparing the material. The name of the checker shall be indicated on all drawings, computations, and other submittal. Upon review of submitted materials, if the Project Director determines that it has not been reviewed, checked and fully coordinated, the submittal may be rejected and returned to the Design Professional for satisfactory completion.

L. JURISDICTION OF OTHER AGENCIES:

Many State and local agencies have specialized knowledge or jurisdiction over certain aspects of building projects. They should be contacted early in the design process for consultation and coordination to ensure timely inputs and approvals. The Design Professional shall review his project with the Project Director to determine which agencies may be involved.

The State, and hence the Design Professional, must follow all local or other zoning, building and permitting requirements. This includes storm-water management, tree-removal, landscaping, regional planning councils, concurrency, etc.

M. UTILITY SERVICES AND CONNECTION:

It is the responsibility of the Design Professional to investigate any utilities that are available, or are being made available, their characteristics and capacities, and the application and permitting requirements for connections. The Design Professional shall ensure that the Construction Documents are fully coordinated with the utilities to be connected, that service and capacity is available, and that permits can be obtained for each.

N. CODES, RULES, REGULATIONS AND PERMITS:

The Design Professional shall provide with each design submittal a listing of all codes and regulations that are followed in the design of the project. The Design Professional shall further certify by signature that the design documents fully comply with those codes and regulations and/or as stipulated by the governing boards of their discipline. The design, construction, erection, alteration, modification, repair, and demolition of all public and private buildings are governed by the Florida Building Code and the Florida Fire Prevention Code, which are enforced by local jurisdictions or local enforcement districts unless specifically exempted by F.S. 553.80. Exceptions to local jurisdiction are as follows: facilities constructed under the authority of chapters 944, 945, 985; the Governor’s mansion and grounds thereof, and the Capitol Building and environs, etc.; see F.S. 255.31. Codes applicable to state office buildings and structures...
O. LIFE SAFETY AND FIRE PROTECTION:

It shall be the responsibility of the Design Professional to ensure that the design provides optimum measures for life safety and fire protection. The Design Professional shall abide by the governing codes and regulations. The Division of The State Fire Marshal is responsible for review of all plans for compliance with fire safety provisions for all State owned facilities. Where a question of Life Safety Code interpretation exists, the Design Professional shall contact the State Fire Marshal’s Office for resolution. In the continuation of decision-making, the following order of precedence shall be observed:

1. Prevention of loss of life and personal injury
2. Protection of materials and equipment of high monetary value and of records that would be difficult to replace.
3. Protection of buildings and their components.

4.07 ADDITIONAL SERVICES

In addition to basic services, the Design Professional may be requested to provide additional compensable services for the Owner. SUCH SERVICES MUST BE AGREED UPON IN ADVANCE AND AUTHORIZED IN WRITING. Services will either be agreed upon for lump sum amounts, or for hourly rates with a maximum fee amount. The more common additional services are.

A. PROGRAMMING:

A program is a statement, prepared by or for the Owner, setting forth the conditions and objectives for a building project which includes its general purpose and detailed requirements, such as a complete listing of required rooms and their sizes, special facilities and interior environmental and energy requirements, etc. Normally the program is provided to the Design Professional prior to negotiations, but for certain projects the Design Professional may be requested to prepare the program or refine an existing program. This work shall be negotiated and authorized prior to commencement of the work.

B. SURVEYS:

If available, a survey of the project site will be provided to the Design Professional by the Project Director. If a survey is not available, the Design Professional shall, upon authorization by the Project Director, arrange to have a survey made, the cost of which is paid as an additional service. The purpose of a site survey is to obtain all information necessary for drainage design, development of the site and for making utility connections to the building. Any existing structures or improvements on the site will be so designated on the survey drawings. The survey description and legal description by the surveyor shall be copied onto the drawing. If the survey is of a partial plot, it shall be so indicated. Securing a survey:

1. Determination of need: The Design Professional shall determine the surveying needs in detail. These needs shall be defined and sent to the registered surveyor(s) of choice for pricing and availability to schedule the work. The surveyor is considered a special consultant to the Design Professional.
2. Authorization: The Design Professional shall review the surveyor's service proposal and send it with a recommendation to the Project Director, who, after review, will authorize the services.
3. Upon receipt of the survey the Design Professional shall verify its completeness, and to the extent possible, its accuracy.
4. Upon receipt of the survey, the Design Professional shall send one copy to the Project Director and one copy to the Client Agency.
5. Survey content, minimum requirements:
a. Survey shall meet the standards required under F.A.C. 61G17-6. The surveyor may want to contact the Department of Environmental Protection, Division of State Lands, Bureau of Survey & Mapping for any updated requirements.

b. Boundary survey - the typical boundary survey of property should indicate the following:
   (1) All headings and distances of property lines of all parcels that comprise the site.
   (2) The dimensions and locations of buildings, structures, easements, rights-of-way, setbacks, and encroachments on the site, and the presence of any undeveloped mineral rights to which the site is subject.
   (3) Details of all party walls, walls and foundations adjacent to, or within five feet of, the property lines.
   (4) Certification on the survey drawings by the city engineer or other qualified official that the officially established street lines, grades of curbs, sidewalks, and sewers are correctly given.
   (5) All surveys shall designate the full legal description of the parcel shown; said legal description shall also indicate if the parcel is part of a parent tract.
   (6) The survey shall be certified, sealed, signed and dated by a land surveyor registered in the State of Florida.

c. Topographic Survey - The typical topographic survey drawings should indicate:
   (1) Items one through six (1-6) above.
   (2) The position, dimension, elevation, and contours of all cellars, excavations, wells, backfill areas, and the elevation of any water bodies.
   (3) Generally, only trees six inches or larger in trunk diameter need be shown. The survey should note their identity, trunk sizes and approximate foliage area.
   (4) Existing major shrubs, undergrowth and ground cover areas.
   (5) Detailed information required to established curb and building lines, street, alley, sidewalk and curb grades and lines at, or adjacent to, the site and materials of which they are constructed.
   (6) Floor elevations of all existing buildings to be renovated or to which additions will be made.
   (7) All known utility services, including pipe sizes, pressures and electrical characteristics. The location and invert elevations of all piping, mains, sewers, poles, wires, hydrants, and manholes upon, over, or under the site, or adjacent to the site, if within the limits of the survey.
   (8) The probability of water overrunning the site shall be investigated. The one hundred (100) year flood elevation and contour shall be indicated.
   (9) The official data upon which elevations are based and the benchmark established on, or adjacent to, the site shall be clearly indicated. Only one such data point or benchmark shall be used on any site for establishing the grades for a project.
   (10) Contours and elevations or a grid system of not more than fifty-foot intervals shall indicate changes of slope over that portion of the site to be developed. The intervals for contours shall be tailored to the site where construction is anticipated.
   (11) The contemplated data and description of any known or proposed improvements to the approaches or utilities on or adjacent to the site shall be given.
C. **SUBSURFACE INVESTIGATIONS:**

When the Design Professional determines that information on subsurface conditions is needed, the arrangements for the necessary investigations should be made upon written authorization.

The cost of these investigations will be paid by Building Construction when they have been properly authorized. Any investigation undertaken should be extensive enough to provide all the information needed to complete the design and should be closely monitored by the Design Professional. Upon receipt of a geo-technical report, the Design Professional shall send copies to the Project Director and to the Client Agency. Securing a subsurface investigation:

1. **Determination of need** - the Design Professional shall determine the testing needs in detail. This should be sent to the testing laboratories serving the project vicinity.

2. **Authorization** - the Design Professional shall evaluate the replies from the testing laboratories and determine which can provide the services required. The Design Professional shall forward the selected proposal with recommendations to the Project Director. The Project Director will authorize the Design Professional to proceed. The Design Professional is cautioned against proceeding with subsurface investigations until the authorization is approved.

Typical Requirements for Subsurface Investigation:

1. The Design Professional shall arrange for a full and comprehensive report prepared by a qualified professional with graphical indication of the soil strata in each test location and a written narrative analysis of the tests and their meaning with regard to design of the proposed construction.

2. Borings and test pits shall extend to stable soil below the bottom of all proposed foundations. A field log of each boring shall be made, recording the thickness, consistency and character of each soil layer encountered. Samples of each layer shall be taken and retained for later reference.

3. The amount and elevation of ground water encountered in each pit or boring, its possible variation during the seasons and its effect on the subsoil shall be determined. High and low levels of nearby bodies of water that affect the ground water level should also be determined and noted.

4. Appropriate laboratory tests shall be performed to determine the safe bearing value, compressibility, and characteristics of the various soil strata encountered.

5. Tests shall be made to determine if the soil has chemical characteristics, which would adversely affect foundations or metallic conduits or pipe.

6. Percolation tests.

D. **ROOF INVESTIGATIONS:**

When moisture or precipitation has occurred during roof installation, an infrared thermographic analysis, nuclear roof moisture profile inspection, or some other form of non-destructive analysis should be made after completion of the roof. The Design Professional should get quotes from at least two firms and send the proposals to the Project Director with a letter of recommendation. The Design Professional is cautioned against proceeding with the investigation until the authorization is approved. For re-roofing projects that may not require a complete replacement down to the deck, a roof investigation is recommended prior to designing this work. Also, roof cuts or cores are recommended to determine the roof composition and to determine if asbestos material is present. Again, a written approved authorization is required for this work.

E. **APPLICATION FOR DEVELOPMENT AGREEMENT FOR DEVELOPMENTS OF REGIONAL IMPACT (DRI):**

May be negotiated with lump sum parts or totally on an hourly fee with a maximum limit.

F. **REZONING:** Normally authorized on an hourly fee with a maximum limit.
G. MEASURED DRAWINGS: Normally authorized on an hourly fee with a maximum limit.

H. ASBESTOS/LEAD SURVEYS, TESTING AND ABATEMENT:

1. General:
   a. Prohibition: In accordance with 255.40 FS "The use of asbestos or asbestos-based fiber materials is prohibited in any building, construction of which is commenced after September 30, 1983, which is financed with public funds or is constructed for the express purpose of being leased to any government entity." Construction documents must include this prohibition.

   b. AWARENESS: ASSUME THAT ALL EXISTING BUILDINGS MAY HAVE ASBESTOS CONTAINING MATERIAL AND/OR LEAD PAINT. AFTER BEING AUTHORIZED, HAVE THE NECESSARY/CURRENT (less than five-years old) ASBESTOS/LEAD SURVEY AND/OR CLEARANCE TESTS FROM PRIOR ABATEMENT PROJECTS PRIOR TO INITIATING DESIGN.

   Note: For DMS facilities, the Project Director shall contact the DMS Facilities/Environmental staff and provide direction to the design professional regarding their involvement.

   c. Design professionals overseeing asbestos or other hazardous material abatement projects shall comply with all state, federal, and local laws/rules/etc. It is recommended to abate hazardous materials prior to commencing construction. This eliminates the coordination issue between the abatement contractor and the general/sub contractors and minimizes risks overall. In the event hazardous materials remain in the facility, provide in an appropriate section of the specifications the requisite coordination information. Also include procedures to be followed if potential or suspect asbestos containing material (ACM) is encountered.

   d. The following list suggests several actions that the professional consultant and the Project Director should accomplish as part of the consultant's services:

      (1) Develop a work plan and a schedule for having survey teams in the building as well as for construction monitoring.

      (2) Coordinate and review these plans with the Client Agency representative or DMS building manager.

      (3) Review these plans with the building occupants' highest level of administration.

      (4) Hold right-to-know meetings with the building occupants, involving the building manager and (when applicable) other maintenance, HVAC and electrical personnel.

      (5) Assure that DEP and any other regulatory agencies have received notification prior to commencing abatement projects.

I. ENVIRONMENTAL ASSESSMENT:

Levels I and II: May be lump sum or hourly fee with a maximum limit.

J. ART SELECTIONS:

Certain State projects have up to 0.5% of the appropriation designated for the commissioning or purchase of artwork for public spaces in the project. A committee is formed that includes representatives of the Client Agency, local artists or educators, the Design Professional, and the Department of State, Florida Arts Council.
As the Design Professional you may be asked to provide copies of floor plans and elevations. A brief description or statement about the building may be requested. The Design Professional is requested to plan for art display in the building during the design of the project. This may affect lighting, space for sculpture or wall hangings, structural support or rigidity for hangings, lobby layouts, etc. An hourly proposal with a maximum limit is the normal authorization.

K. ADDED PROJECT SCOPE:

During the course of the project, the Design Professional may be asked to design additional elements by the Client Agency, the City or the County, a Permitting Agency, or some other Agency having jurisdiction. The Design Professional should consult with the Project Director and refer back to the program, the original fee proposal and the negotiation minutes. If this is not a basic service, or if this has not been discussed and agreed upon at negotiation, then this service may be authorized as an additional service. Some common examples of added scope may include:

1. Designing alternate bids outside the scope of the original program, or designing alternates over the budget once the Design Professional has advised Building Construction and the Client Agency of this during the design phase.

2. Securing and paying for permits such as driveway permits, storm-water permits, DEP permits, etc.

3. Designing off-site utility or roadway improvements not in the original program or discussed and agreed upon during the original negotiation.

L. FULL TIME PROJECT REPRESENTATIVE: Sometimes referred to as "Clerk of the Works." This is usually authorized as a lump sum amount.

M. EXTENDED CONSTRUCTION ADMINISTRATION: Refer to the Agreement between Owner and Architect/Engineer for definition.

N. MECHANICAL TEST AND BALANCE AND OTHER TESTING:

The technical specifications should clearly state that the Contractor is NOT to be responsible for test and balance of heating, ventilating, cooling and hydronic systems, but will be required to assist an independent test and balance company with this work. This work will be done as a separate service by an independent specialist, authorized through either the owner (when requested) or the general/construction contractor. The mechanical design professional will be asked to recommend a qualified firm who has experience with projects of similar scope.

The mechanical design professional of record shall accompany the test and balance company during a portion of its work to assure accuracy and validity, and review/comment on preliminary and final reports.

Similarly, the Design Professional may be required to perform other testing services, or retain testing sub-consultants, to safeguard the Owner's interest.

Some commonly authorized tests include witnessing factory chiller tests; lightning protection resistance and continuity tests; paving and materials tests; concrete cylinder tests; and fire flow and water pressure tests.

O. BUILDING COMMISSIONING:

Building Commissioning is a term that describes bringing the building systems from their static state to complete operation to meet both the design intent and the user's needs. It is a period for fine-tuning building equipment and controls by running through the various cycles and load conditions. When commissioning is required, the engineers should
coordinate with the commissioning consultant, if used, to delineate the operational design features to be accomplished and provide operational instructions and sequencing to assure that the systems operate as intended. This service will be further defined by the DMS Project Director and may be authorized hourly or lump sum either to the design professionals or commissioning consultants.

P. WARRANTY AND GUARANTEE INSPECTION:

Prior to the expiration of the one-year warranty and guarantee, the Design professional may be authorized to schedule an inspection of the facility. A time would be selected when the Contractor, Project Director, Client Agency and other interested parties can attend. This inspection shall completely cover the constructed facility, and the Design professional shall generate a list of all items requiring corrective action for the Contractor. While the Client Agency is expected to contact the Contractor or his Subcontractor about deficiencies occurring during the warranty period, the Design professional, if contacted, is expected to assist the Client Agency or Building Construction in obtaining satisfactory correction.

Q. POST OCCUPANCY EVALUATION:

It may be desired to evaluate selected buildings after they have been occupied to provide feedback for designing and constructing future buildings. The Design Professional's team may be authorized to evaluate the building usage, its systems and materials. The building occupants, maintenance staff, and the building committee members may be interviewed for their input.

5.00 PLAN REVIEWS AND APPROVALS

At each design phase, as called for in your Agreement with the Owner, the Design Professional shall submit documents to the Project Director, the Client Agency, and other reviewing Agencies for approval. In order to keep the process moving as quickly as possible, the Design Professional should transmit copies to all entities directly. The best method is to address the transmittal letter to the Project Director, and at the bottom of the transmittal show copies with attachments to the other applicable Agencies. Likewise, each Agency may respond directly back to you and should copy the appropriate Project Director and Client Agency with their comments. (If you do not see the Project Director copied on another entity's response, call your Project Director to see if comments were received). This simultaneous distribution and commenting may cause some duplication or conflicts, but the time saved is advantageous. Face-to-face plan review meetings (see Section 4) can be beneficial in getting comments and approvals quicker and in getting problems resolved. The Design Professional should discuss this with the Project Director prior to the phase submittal.

5.01 DMS PROJECT DIRECTOR:

The DMS Project Director will review documents with an emphasis on function, program, budget, aesthetics, design quality, schedules and construction materials. The DMS Project Director will coordinate the comments of others and help resolve any conflicting comments. The approval of a design phase submittal is issued only after the Project Director is satisfied that the documents meet the requirements for that phase and that all others' comments have been resolved or answered. DO NOT PROCEED INTO THE NEXT PHASE WITHOUT WRITTEN APPROVAL OF THE DMS PROJECT DIRECTOR.

5.02 OTHER AGENCIES:

The following is a list of some of the regulatory agencies that should be coordinated with by the Design Professional and to whom plans submittal shall be made if applicable:

- Client Agency
6.00 BIDDING AND CONTRACT AWARD (Design/Bid Projects Only, except as noted)

6.01 APPROVAL TO BID:

Once the 100% Construction Documents have been reviewed and approved by all, the Project Director will issue Building Construction’s approval of the submittal. Some entities, such as the Fire Marshal, or other Agencies with jurisdiction may issue their approvals directly.

At this point, the bid time and location is to be established by the Project Director in cooperation with the Design Professional. A complete public advertisement will be sent to the Design Professional, along with the "Bidding Documents - Advertising and Bidding Approval Letter." Upon receipt of this information, the Design Professional shall fill in the appropriate blanks in the master specification. Three to four weeks should be allowed for preparation and receipt of bids; a longer time may be permitted on large projects. The Design Professional is not to proceed with bidding until the Project Director has given his approval. The Design Professional should become familiar with Chapter 60D-5, Florida Administrative Rules. These procedures serve as the guide for bidding and awarding State projects.

6.02 ADVERTISEMENT:

Projects projected to cost more than $200,000 will be advertised by the Project Director in the Florida Administrative Weekly and on Building Construction’s opportunities website http://fcn.state.fl.us/dms/dbc/opportun/index.html so that the advertisement appears at least 21 days prior to the established bid opening.

Projects projected to cost more than $500,000 will be advertised by the Project Director in the Florida Administrative Weekly and on Building Construction’s opportunities website http://fcn.state.fl.us/dms/dbc/opportun/index.html so that the advertisement appears at least 30 days prior to the established bid opening; and, the Design Professional is to place the advertisement for bids in at least one newspaper’s legal section that has general circulation in the county where the project is located so that the advertisement appears at least 30 days prior to the established bid opening.

For projects under $200,000 refer to Chapter 60D-5 for advertising requirements. Under no circumstances will the Design Professional advertise or release the documents for bid until an approved bid date is received from the Project Director.

The newspaper(s) should send the invoices and notarized proof of advertisement to the Design Professional for payment. The Design Professional is asked to pay for the advertisement and invoice Building Construction for this amount. The Design Professional shall send invoices and notarized proof of advertisement to the Project Director together with his accounting for plans and specifications.

The Design Professional shall also solicit bids from Contractors through personal contacts, through mailing out the INVITATION TO BID letter (found in the Non-technical Specifications) and
through plan rooms, in order to obtain adequate bids from qualified Contractors.

6.03 PRINTING AND DISTRIBUTING DOCUMENTS:

The Design Professional should distribute drawings, specifications, and addenda to bidders, the Project Director, the Client Agency, Builders Exchanges, Plan Rooms and other interested parties. Collect and account for plan deposit and purchase monies and pay for printing, handling, and mailing costs. The Design Professional shall inform all prime Contractors of the mandatory requirements for prequalification of bidders, and any other special experience requirements for this particular project. Refer to Section 3.03 for invoice requirements. An invoice format and a sample Cost Recapitulation Sheet can be obtained from the Project Director.

The Design Professional shall solicit price quotes from several printing firms and have the work done by the firm that will do satisfactory work at the lowest cost. If the Design Professional prints the plans and specifications in-house, it must be done at rates comparable to commercial printing firms.

The Design Professional shall sign and seal three sets of plans and specifications. These sets shall be exactly the same as those given to the Contractors for bid preparation. Promptly send one set to the Contracts Administrator. As addenda are issued, promptly send them to the Project Director and the Contracts Administrator after signing, sealing and dating. The other two sets of plans, specifications and addenda, are retained by the Design Professional, and later to be used by the successful Contractor to apply for the building permit.

6.04 ADDENDA (All Projects):

During the bidding period, the Design Professional shall issue addenda as necessary to clarify or modify the Construction Documents. HE SHALL NOT GIVE ORAL EXPLANATION OF THE PLANS AND SPECIFICATIONS, AND NO ORAL INSTRUCTIONS SHALL BE GIVEN BEFORE AWARD OF A CONTRACT. All instructions or clarifications shall be in the form of written addenda. Addenda shall be given to all bidders and document holders. Bidders must be directed to acknowledge receipt of addenda on the bid form.

Addenda should be kept to a minimum. The receipt of facsimile copies should be verified by phone by the Design Professional. Do not use addenda as a means to respond to Agency comments from the 100% Construction Document review. All addenda sent to Building Construction shall be signed, sealed and dated. Avoid issuing Addenda too close to the bid date to avoid confusion. If a late addendum is absolutely necessary, then the bid date should be postponed to give an adequate number of days to review and include it in the bid. A sample Addendum format can be obtained from the Project Director.

6.05 PRE-QUALIFICATION OF BIDDERS:

All prime Contractors shall comply with the requirements in the specifications entitled "Bidder's Qualification Requirements and Procedures," which includes the Contractor having a current certificate issued by the Florida Construction Industry Licensing Board and a current corporate license or charter renewal from the Florida Department of State, Division of Corporations (if the bidder is a corporation). The procedure is self-explanatory; the DMS phone number is included in the Non-technical Specifications for the Contractor's convenience. If a specialty Contractor is required, a separate prequalification period can be established to limit bidders to those with specialized experience. Consult your Project Director for more information.

The bid proposal form requires the prime bidder to identify the major Subcontractors that the Design Professional and the Project Director consider important to the project. However, we do not pre-qualify Subcontractors. The prime bidder is responsible for listing only qualified Subcontractors who are licensed to perform the work. The listing of unlicensed Subcontractors may disqualify the bid of a prime bidder.
6.06 MINORITY SET-ASIDES OR PARTICIPATION REQUIREMENTS:

At times, Building Construction may set-aside projects for bidding only by CERTIFIED MINORITY BUSINESS ENTERPRISES (CMBE). On all other projects each bidder should make every effort to include sufficient CMBE participation. A listing of State of Florida CMBE suppliers and subcontractors may be obtained through the Department of Management Services, Office of Supplier Diversity.

6.07 RECEIPT AND OPENING OF BIDS:

Transmission of bids may be by hand, mail or other courier. FACSIMILE BIDS OR MODIFICATIONS ARE NOT ALLOWED. No bid is to be accepted after the published time of bid opening has passed. Only bids from qualified bidders will be considered for the award of the contract. The Project Director will receive and open the bids at the appointed time and place in accordance with the procedures established in Chapter 60D-5. This duty may be delegated to the Design Professional. The Design Professional shall attend and assist in the bid opening and supply bid tabulation forms (obtained from the Project Director) for the bidders use during the bidding. The Design Professional shall be responsible for completing the bid tabulation and recording the minutes for the bid opening. The Design Professional shall indicate in ink the submission of all required documents by a check in the proper column and the price quotations of each bid as read aloud. The Project Director, the Client Agency representative (or another witness present) and the Design Professional shall sign the bid tabulation sheet. The completed tabulation is to be given to the Project Director. After the bid opening, the Project Director, Design Professional and Client Agency will confer to determine what contract award they will recommend. If a recommended award can be made, the Project Director will post the Bid Tabulation and Notice of Award Recommendation at the place of the bid opening. The Project Director will give the Design Professional a copy of each bid and the tabulation. The Project Director will then submit the bids through the Regional Office to the Contracts Administrator.

6.08 AWARD RECOMMENDATION:

For level 4 and 5 projects (projects over $200,000), the Design Professional must review and evaluate the Low Bidder's "Experience Questionnaire and Contractors Financial Statement" qualification data following the bid opening. This form is found in the Non-technical Specifications. All data submitted by the low bidder shall be forwarded simultaneously to the Project Director and evaluated concurrently by Building Construction. The Design Professional shall review the low bidders proposed management staff, references and capability to perform the project and shall make a recommendation to the DMS Project Director. The low bidder will be judged as either qualified or unqualified. Should the bidder be judged unqualified that bid will be rejected and the bidder submitting the next lowest responsive bid will be given two calendar days to submit the required qualification data. The Design Professional shall write to the Project Director making his recommendation.

6.09 CONTRACT PREPARATION:

After the award recommendation has been determined, the Contracts Administration Section will prepare the contract documents and send them to the Contractor for bonds, insurance, signing and sealing. After the Contractor completes the contract documents, the Contractor returns all copies to the Contracts Administrator for execution and distribution.

The award of a contract does not give authorization to proceed to construction. THE CONTRACTOR SHALL BE CAUTIONED BY THE DESIGN PROFESSIONAL THAT WORK SHALL NOT BEGIN UNTIL THE BUILDING PERMIT, ALL OTHER NECESSARY PERMITS AND THE NOTICE TO MOBILIZE ON SITE AND PROCEED WITH CONSTRUCTION IS RECEIVED.
7.00 PERMITTING (All Projects)

7.01 BUILDING PERMITS:

Projects shall be designed and permitted in accordance with the Florida Building Code and Florida Fire Prevention Code.

The building Contractor must obtain a building permit, except in certain locations as referenced herein, from the local authority having jurisdiction and the State Fire Marshal prior to starting work. In order for the Contractor to initiate this permit process he must first obtain multiple complete sets of signed and sealed final Construction Documents with all addenda from the Design Professional. The building Contractor then signs the cover of each document and submits them with a permit application to the local authority having jurisdiction as well as (2) sets to the State Fire Marshal (if task hasn’t been accomplished by the design consultant).

7.02 OTHER PERMITS AND APPROVALS:

It is the responsibility of the Design Professional to determine which other authorities have jurisdiction, assure that the development of the project is fully coordinated with these agencies and see that their requirements are accommodated in the documents so that all approvals can be readily obtained. This coordination begins with the schematic design and must be completed prior to taking of bids so that delays in start of construction do not occur. Some agencies require fees for permits and approvals. Discuss this with your Project Director. Building Construction may be able to pay these agencies directly through electronic transfer of funds for these fees. This should be coordinated with the submittal of the permit application by the Design Professional.

A. DEPARTMENT OF ENVIRONMENTAL PROTECTION:

The Department of Environmental Protection is responsible for the implementation of Chapter 403, F.S., concerning pollution control of the environmental water supply and discharge. To meet the intent of the law, Department of Environmental Regulation has issued several rules of the DEP-62 series and some require permits. There are similar rules regarding storm-water and wastewater requiring permits. The Design Professional should ensure that the design meets the requirements of all Department of Environmental Protection rules applicable to the project.

B. ZONING AND COMPREHENSIVE PLANNING:

All local government, as required by Part II of Chapter 163, F.S. entitled, “County and Municipal Planning and Land Development Regulation,” have or will adopt comprehensive plans and zoning. The State, as any Owner, is obligated to develop their property in accordance with the adopted comprehensive plans and zoning ordinances and obtain reviews and approvals, including any variances as required. The Design Professional should begin this coordination early in the design process and carry it through to the end to ensure that the project meets all local requirements and to resolve conflicts as they arise. This may include zoning, landscape ordinances, tree removal permits, drainage, etc.

C. USE AND DEVELOPMENT PERMITS:

Certain use and development permits are required by local, state and/or federal agencies prior to commencement of construction. These permits, covering such items as sewage, water, air quality, etc., must be obtained prior to release of documents for bidding. It is the responsibility of the Design Professional to identify each such permit and to apply for these on behalf of the Owner.

D. CONNECTION FEES:

The State (through the Contractor) will pay for connection and impact fees for utilities such as
water, sewer, storm drainage and electricity connected to an external system. A notice to obtain permits is issued to give the Contractor time to arrange for these connection fees. THESE FEES, IF ANY, ARE TO BE IDENTIFIED IN THE NON-TECHNICAL SPECIFICATIONS BY THE DESIGN PROFESSIONAL.

E. STATE FIRE MARSHAL AND THE LOCAL FIRE DEPARTMENT:

The Design Professional is expected to work closely with the Fire Department serving the project area and to accommodate their fire fighting methods, equipment, hose threads, etc. The State Fire Marshal must approve the Construction Documents prior to bidding. Building Construction will pay the plan review fees, directly to the State Fire Marshal. The State Fire Marshal will also inspect projects at substantial completion, prior to occupancy.

F. THE BUREAU OF ELEVATOR INSPECTION:

The Design Professional shall submit elevator drawings and specifications, to:

Department of Business and Professional Regulations
Bureau of Elevator Safety
1940 N. Monroe
Tallahassee, Florida 32399-1013

Or to Metro Dade County (not including City of Miami or City of Miami Beach), if appropriate. A copy of the transmittal letter shall be sent to the Project Director.

G. CONSTRUCTION IN NAVIGABLE WATERS:

Construction in navigable waters or wetlands requires permitting by the Department of the Army, Corps of Engineers, and the Florida Department of Environmental Protection, in addition to local permits.

H. FLOOD PRONE AREAS:

Every site plan shall be evaluated for flood hazard and meet the minimum building requirements mandated by the National Flood Insurance program as a mandatory requirement for obtaining a building permit. Building Construction is responsible for assuring that all state-funded facilities meet or exceed the FEMA requirements pursuant to 255.25(6) F.S. The Design Professional or the Contractor must provide documentation that indicates conformance prior to the issuance of the Certificate of Occupancy. Flood criteria information may be obtained from the State Assistance Office for the National Flood Insurance Program at the Department of Community Affairs, Division of Emergency Management, 2555 Shumard Oak Blvd., Tallahassee, FL 32399

I. LIFE-CYCLE COST ANALYSIS:

Every building 5,000 square feet or greater and leased space of 20,000 square feet or greater is subject to the provisions of Section 255.251, Florida Statutes, and Chapter 60D-4, Florida Administrative Code. This program is administered by the Project Management and Oversight Group within Building Construction.

J. WATER MANAGEMENT DISTRICTS:

Plans must be submitted to the local water management district for review and approval. Water Management District plan review fees can be paid directly by Building Construction. The cost of any fees for permits, which the Contractor is required to obtain, shall be identified in the Non-technical Specifications.
8.00 CONSTRUCTION ADMINISTRATION (All Projects)

8.01 NOTICE TO PROCEED:

Award of a contract does not give the Contractor authorization to start construction. The Project Director gives this authorization separately. The Contractor shall be cautioned by the Design Professional not to commence construction until both a BUILDING PERMIT and a "NOTICE TO MOBILIZE ON SITE AND PROCEED WITH CONSTRUCTION" is received.

The contract will be issued to the Contractor after the Contract’s Administrator has prepared it. The Project Director will then send the Contractor a "Notice to Secure Permits" from all other agencies having jurisdiction on the project. The Contractor is allowed up to sixty days from the time of this notice to secure the required permits and pay permitting and connection fees. If additional time is required, the Contractor may request approval of a time extension for the purpose of obtaining any permit required prior to commencing construction on site. The Contractor must receive the building permit before work begins.

When the Project Director has been notified BY THE DESIGN PROFESSIONAL that the Contractor has secured all required permits, the "NOTICE TO MOBILIZE ON SITE AND PROCEED WITH CONSTRUCTION" will be issued. The date specified in the "NOTICE" marks the start of construction.

8.02 INITIAL CONSTRUCTION CONFERENCE:

Immediately prior to starting construction, or as soon as possible after the construction has started, the Project Director and the Design Professional will arrange a meeting with the Contractor, the major subcontractors, the Client Agency, federal representatives, if any, and any other interested parties. The purpose of this meeting is to discuss the requirements and responsibilities of the various parties. The Project Director will chair this conference. To be a productive meeting the Contractor should bring questions regarding schedules, schedules of values, substitutions, submittals, etc. to the meeting to be discussed. The Design Professional should be prepared to review the technical aspects of the project. This meeting may require the Design Professional to issue clarification drawings or supplemental instructions. The Design Professional shall keep detailed minutes, and after the conference, have the minutes typed and distributed to the Project Director and all attendees. Items to be discussed include the following:

A. ROLES:

The Project Director will handle liaison between the Client Agency, federal agencies, if any and any other interested parties. During construction the Client Agency has no contract responsibility or authority. All instructions to the Design Professional from the Client Agency must come through the Project Director. All instructions to the Contractor must come from the Design Professional. Only the Design Professional can interpret the Construction Documents. However, the Design Professional cannot obligate the Owner to changes in the contract for either time or money.

B. SCHEDULE OF CONTRACT VALUES:

The Design Professional shall review the Schedule of Contract Values to ensure that it is sufficiently detailed and accurate to give a true indication of the distribution of costs in the project, and reflect the total contract amount. The breakdown shall clearly identify cost of site work and outside utilities. The Design Professional's approval of the Schedule of Contract Values signifies that it is of sufficient detail for evaluation of the Contractor's request for payment; that it fairly represents the apportioning of costs; and that it is not "front end loaded." If the Design Professional does not agree with the Schedule of Values, it should be discussed with the Project Director. The Schedule of Values shall be broken out in CSI format. The schedule should also show costs for rough-in, setting of fixtures/equipment, satisfactory operation, as-builts, warranties,
demobilization, etc. The Schedule of Contract Values when approved by the Design Professional becomes the basis for payment request submittals. Transmit approved copies to the Project Director and the Client Agency.

C. PROJECT SCHEDULE (Design/Bid Projects):

A project schedule is required to be submitted within 30 days of the issuance of the Notice to Proceed. Refer to the Agreement between Owner and Contractor and the Non-technical Specifications for schedule requirements. Projects greater than $2,000,000 require a CPM (Critical Path Method) for scheduling. The Design Professional shall review the schedule for reasonableness and adherence to contract times. It shall be of sufficient detail to indicate precedent and antecedent work items. Provide copies of the accepted schedule to the Project Director and the Client Agency. If the Design Professional does not agree that the Contractor's proposed schedule is reasonable, discuss this with the Project Director. The Contractor's schedule and monthly updates serve as a focal point for most claims for time or delay costs.

The Design Professional shall determine whether the Contractor has met the schedule requirements with the initial schedule and with THE REQUIRED UPDATES WHICH ARE A CONDITION FOR PAYMENT APPROVAL EACH MONTH.

D. SHOP DRAWINGS:

The Design Professional's specifications should require that the Contractor submit all shop drawings to the Design Professional for approval. It is the responsibility of the Contractor to properly schedule the submission of shop drawings, the manufacture and the shipment of items to the job site in sufficient time to prevent delays in the progress schedule. The Design Professional is expected to complete shop drawing review within ten (10) working days after receipt or sooner if items are on the critical path. The Design Professional shall send to the Project Director copies of all transmittals (only) of shop drawing correspondence, approvals and disapprovals and shall keep a running log of all shop drawings. The Design Professional will receive one copy of shop drawings for the Project Director and should discuss with the Project Director at the initial construction meeting if these are to be retained by the Design Professional until project closeout, or whether the Project Director wishes to receive some or all submittals during the course of the project.

The Design Professional shall retain one copy of all approved shop drawings to be turned over to the Client Agency together with all guarantees, warranties, and as-built drawings at completion of the project. A copy of the transmittal of shop drawings to the Client Agency must be furnished to the Project Director prior to approval of the final payment for Contractor and Design Professional.

E. RECORD-SET/ASBUILT DRAWINGS:

Either the non-technical or Design Professional's specifications shall require record-set drawings that accurately reflect the as-built conditions at completion of the project. These shall be maintained and updated daily by the Contractor and subcontractors and checked monthly by the Design Professional when the Contractor submits pay requests.

The specifications shall require the General Contractor and his subcontractors to record, on a daily basis, exact locations, as installed, on their field sets of drawings; all walls and doors, and all conduit, pipe and duct lines, etc. whether concealed or exposed. Where manholes, boxes, underground conduits, plumbing, hot or chilled water lines, inverts etc., are involved as part of the work, the Contractor shall furnish true elevations and locations, all properly referenced by using the original bench mark used for the institution for this project. Where the work was installed exactly as shown on the contract drawings, the drawings shall not be disturbed other than being marked "as-built." In showing the changes, the same legend shall be used to identify piping, etc., as was used on the contract drawings. Each sheet shall bear the date and name of the subcontractor submitting drawings.
If separately authorized and prior to completion of the project, the Design Professional shall review and input via AutoCAD 2000 or later edition (.dwg file type) all as-built drawing information on the electronic drawing set and rename these as Record-Set Drawings. Show all as-built changes as a revision with cloud, provide the revision note and date, and print three (3) preliminary sets for the contractor to review/comment/markup.

Note: Each drawing shall be bound (no x-refs) such that it can be viewed/printed without access to any external (x-ref) files.

The Contractor shall review the completed/preliminary as-built drawings to ascertain that all data furnished on the drawings and input by the Design Professional is accurate and truly represents the work as actually installed. The contractor shall return one marked up preliminary set to the Design Professional. The Design Professional shall incorporate the contractor’s comments/markups and issue three electronic (on Compact Disks, CDs) and paper final sets of record-set drawings to the contractor.

8.03 DISTRIBUTION OF CONTRACT DOCUMENTS:

The Contractor shall bring the permitted plans and specifications (the set approved by the Building Department or Authority Having Jurisdiction and the set approved by the State Fire Marshal) to the Initial Construction Conference. These plans and specifications must be the sets with the approval stamps and signatures thereon. The Contractor's set of these documents are to be used for construction and shall be available at the site at all times for code inspectors, State Fire Marshal's inspectors, and others as requested. If the Contractor requires additional sets of documents, other than those listed in the Agreement, these may be purchased through the Design Professional office at cost. If sets have been returned to the Design Professional after bidding, then once the Client Agency's document needs and ours are met, any additional sets may be given free to the Contractor for use on the project.

8.04 PROJECT SIGN:

If a project sign is called for in the contract, the location and colors should be agreed to during the Initial Conference. The size and layout are shown in the Non-technical Specifications. The Design Professional is responsible for verifying the content of the project sign with the Project Director and the Client Agency and for transmitting this information to the Contractor in a timely manner.

8.05 CONSTRUCTION INSPECTIONS:

Under the Agreement between Owner and Architect/Engineer, the Design Professional shall provide adequate inspection during construction to assure that the project is being built in accordance with the plans, specifications, and other Contract Documents. Refer to your contract negotiation minutes for minimum trips, disciplines making inspections, expected frequency, etc. Each time the Design Professional or Consultant makes a visit to the site, a written report shall be issued describing the construction status, reporting any problems that require resolution. Do not make entries that require reference to earlier reports. Provide copies of field reports to the Project Director. (These do not have to be typed).

8.06 CODE INSPECTIONS:

The Design Professional should understand that visits to the site by Code Inspectors or by the Project Director in no way substitutes for inspections by the Design Professional or the Design Professional's consultants. These code inspections also serve the secondary purpose of evaluating the adequacy of the inspection being provided by the Design Professional and the consultants. During construction, the Project Director will evaluate the services being provided by the Design Professional.
8.07 CLARIFICATIONS:

When necessary, the Architect/Engineer should issue additional drawings and/or specifications to the construction manager to clarify the Contract Documents. Copies of these documents shall be sent to the Project Director. Facsimile transmittals are encouraged to save time. All transmittal letters to the Contractor for clarification documents shall bear the following disclaimer: "If these additional plans or specifications result in a modification of the scope of the basic contract in either time or money, the Design Professional shall be notified immediately." When clarification documents are issued to the Contractor, copy the Project Director, and the Client Agency. If the Contractor makes a claim for time or money as a result of a clarification, the Design Professional must evaluate the claim and recommend to the Project Director if a Change Order should be issued. IMMEDIATELY NOTIFY THE PROJECT DIRECTOR WHEN ANY CLAIM IS RECEIVED.

8.08 MONTHLY PAY REQUEST MEETINGS:

A construction conference will be called monthly, or as required by the project conditions and agreed to by the Design Professional and the Project Director. The Design Professional will invite the following persons: Project Director, Contractor and the appropriate subcontractors, the appropriate Design Consultants, and Client Agency Representative. Certain essential areas of information should be sought and reported in EVERY CONFERENCE, such as:

A. Project progress as it relates to schedule  
B. Schedule updates  
C. Payment requests and their status  
D. Change Orders and their status  
E. Special problems and remedial action required  
F. Results of previous agenda items and their status, action taken, results, etc.  
G. Code violations as reported by inspections  
H. Shop drawing submittal and approvals  
I. RFI/ASI logs and status of outstanding issues

The Design Professional shall chair the conference, keep detailed minutes, and after the conference have the minutes typed and distributed to the Project Director and all attendees.

8.09 CONTRACTOR'S PAY REQUESTS:

The Design Professional, the Contractor and Project Director shall agree in advance of the date selected for their periodic construction meeting. There are two preferred methods for reviewing monthly pay requests. One method is for the Contractor to supply the Design Professional with copies of the construction payment request several days prior to the meeting date for review. This pay request is to be reviewed, and if found correct, approved at this meeting. Minor corrections can be made and initialed as necessary to reflect the Design Professional's approval. A second approach is to review a draft of the pay request at the monthly pay request meeting. Once agreed upon, the Contractor types, signs and transmits the final version to the Design Professional for signature. After certifying, the Design Professional shall transmit the Contractor's pay request directly to the Project Director for processing. A TOTAL OF FOUR NOTARIZED COPIES, WITH BACK-UP DOCUMENTS, ARE REQUIRED.

A copy of the routing slip (multi-part form which is furnished by Building Construction) must be on the front of the payment request forwarded by the Contractor. Instructions for its use are printed directly thereon. If a payment request is returned for any reason, the returning party keeps the routing slip and a new one is prepared for the resubmission. A copy of the Rush Payment Routing Slip and a copy of the Certificate of Partial Payment can be obtained from the Project Director.

It should be emphasized that materials must be stored at the site and cannot be removed from the site after the payment has been made. An itemized listing of materials stored on-site should
be prepared on the Contractor’s letterhead, listing those items stored at the end of the period and those items listed in the previous month’s request that are now incorporated in the project. The date on this list must match the date on the Certificate for Partial Payment. The detailed description of stored materials should show quantities and size of materials. The usual terms of reference such as tons of steel and types of windows will be acceptable. Shipping tickets or invoices may be required of the Contractor as back up to substantiate quantities. A copy of the stored material list shall accompany each copy of the Pay Request.

If the Contractor deems it necessary, and both the Design Professional and the Project Director recommend it, the Contractor may store material off the construction site if there is a prior written agreement between the Owner and Contractor. The Contractor must provide the following:

A. Proof of applicable insurance.
B. A written guarantee of delivery on the job site.
C. A written title to all materials covered by application for payment, which will pass to the Owner.
D. An on-site inspection of facilities, by the Design Professional to verify the authenticity of quantities of stored materials. The Contractor will be responsible for reimbursing the Design Professional for all incurred expenses resulting from each inspection. A copy of materials requested to be stored off-site should be submitted with each Partial Payment Request.

8.10 MONTHLY STATUS REPORTS:

The Design Professional will supply the Project Director and the Client Agency with a report of construction progress EACH MONTH and an updated summary schedule for the construction furnished by the Contractor. The report shall be a standard format. Samples can be obtained from the Project Director.

These reports shall begin upon issuance of the Contractor’s contract and will not terminate until transmittal of the Contractor's final payment request. Numbered in consecutive order, reports shall be prepared at the end of each month and be mailed in time to be received by the fifth (5th) day of each month.

8.11 TESTING:

The Design Professional shall clearly set forth in his technical specifications the tests to be carried out during construction. Responsibility for payment for tests is generalized in the Non-technical Specifications BUT MUST BE DEFINED IN THE TECHNICAL SPECIFICATION FOR FREQUENCY, QUANTITY AND QUALITY. THE DESIGN PROFESSIONAL SHALL ARRANGE FOR ALL TESTS THAT ARE TO BE PAID BY BUILDING CONSTRUCTION. The Design Professional is cautioned not to proceed with any testing until a written additional services authorization from the Project Director is approved. You should also ensure that the Contractor does not obligate Building Construction for payment of tests that are not authorized in writing by the Owner. The arrangement for an authorization for testing is considered a basic service of the Design Professional.

8.12 CHANGE ORDERS:

A. GENERAL:

Changes in the work (Construction Contract) shall be held to a minimum and be consistent with the original scope and budget. The Design Professional shall not permit "swapping" of extras and credits except through a written Change Order. All changes in the work, regardless of the amount, must be thoroughly documented by Change Order. Where a change is made at no cost, or where added and deleted work balance in cost, a Change Order shall be initiated to record the fact that such changes were made and a full description and explanation shall be given. A sample form can be obtained from the Project Director.
B. INITIATION OF CHANGE ORDERS:

The Design Professional should actively involve the Project Director with full details and price quotations on proposed Change Orders in order to provide guidance on how to proceed. The Design Professional should discourage changes in the work that may be requested during the later stages of the construction period.

The Design Professional must promptly prepare both the "Contract Change Order" and the backup data. The Change Order shall fully specify the scope of the work explaining completely what each item entails and the cost or credit, and time extension involved. THE DESIGN PROFESSIONAL SHALL ATTACH A LETTER GIVING ADEQUATE JUSTIFICATION AS TO THE CONDITIONS ON A PARTICULAR PROJECT NECESSITATING THE CHANGE AND HIS CONCURRENCE IN THE PRICING. Also, attach the written proposal from the Contractor with a detailed breakdown of cost, showing quantities and sizes of materials, unit costs, labor profit and overhead. Should an emergency change item occur requiring immediate action, immediately contact the Project Director for advice and procedures to follow. The cost of any changes not receiving prior authorization shall be the liability of the person authorizing such changes.

Process Change Orders as they develop on a timely basis. Do not wait until the contract is scheduled for completion or accumulate items before processing a Change Order. It is our policy not to process any Change Orders near the end of construction that will delay the final completion unless the change is of a critical nature.

C. REVIEW:

The Design Professional should discuss any Change Order proposals with the Project Director prior to its preparation. After the Contractor's pricing and the draft Change Order have been discussed with the Project Director, the Design Professional shall transmit TWO COPIES of the Change Order form (but not his letter), to the Contractor for signature, and return to the Design Professional. Simultaneously, the Design Professional shall transmit a review copy of the Change Order, justification, Contractor's cost proposal and any other related material to the Project Director. When the two signed copies of the Change Order are received from the Contractor, the Design Professional shall sign both copies, add the Contractor's proposal and breakdown of costs, add any applicable supplemental instructions or request for proposals, add the justification letter, and then transmit TWO FULL SETS OF THE CHANGE ORDER PACKAGE TO THE PROJECT DIRECTOR.

The Design Professional shall have reviewed quantities and costs carefully and determination made that they are reasonable and proper before submitting the Change Order to the Project Director.

Building Construction shall pay a fair value, and only one time, for the end result to be achieved under the contract. Where items of material, equipment or work have been inadvertently omitted from the contract documents and are necessarily included in the contract Change Order, the Owner shall pay the first cost of the omitted items since such cost was not included in the bid.

EXTRA COST TO THE OWNER BECAUSE OF CORRECTIONS OR MODIFICATIONS RESULTING FROM OMISSIONS OR FOR REMOVAL OF INSTALLED WORK WHICH HAS TO BE TORN OUT AND REPLACED BECAUSE OF ERROR, OMISSION, OR FAULT ATTRIBUTABLE TO THE DESIGN PROFESSIONAL SHALL BE ASSESSED TO THE DESIGN PROFESSIONAL. THIS SHALL INCLUDE THE CONTRACTOR'S OVERHEAD, PROFIT, AND OTHER CHARGES RESULTING FROM THE ERROR OR OMISSION.

EXTRA COSTS TO THE OWNER BECAUSE OF CONSTRUCTION NOT INSTALLED IN ACCORDANCE WITH CODE OR SPECIFICATION STANDARDS, INCLUDING WORK COVERED UP PRIOR TO CODE INSPECTION, WILL BE ASSESSED TO THE CONTRACTOR.
The Project Director and the Regional Manager will carefully review each Change Order. If necessary information is found to be lacking, the Design Professional will be called to add the information required to complete the package. The Project Director will keep an accurate and up to date log so that he will know at all times where each Change Order is and when it has been approved.

D. TIME EXTENSIONS:

The Design Professional shall review the contract documents for the basis upon which a time extension request can be granted. THE CONTRACTOR SHALL INDICATE WHAT THE AFFECT IS UPON HIS SCHEDULE AND WHY WORK CANNOT BE DONE CONCURRENTLY. SUBSTANTIATING DATA MUST BE SUBMITTED WITH REQUESTS FOR TIME EXTENSIONS. Such time extensions, if justified, will be granted by contract Change Order only. It is important that written notices of delay be submitted to the Design Professional and the Project Director within twenty days of the beginning of the delay. TIME EXTENSIONS WILL NOT BE GRANTED FOR NORMAL AMOUNTS OF INCLEMENT WEATHER, BUT MAY BE GRANTED FOR PERIODS EXCEEDING THE NORM. NORMAL WEATHER CONDITIONS WILL BE BASED UPON THE RECORDS OF THE NATIONAL WEATHER SERVICE FOR THE GEOGRAPHICAL AREA OF THE PROJECT. Time extensions for changes in work must be included on the contract Change Order form authorizing such changes. DO NOT WAIT UNTIL THE END OF CONSTRUCTION TO PROCESS TIME EXTENSION CHANGE ORDERS.

8.13 CLAIMS:

The Contractor as required should submit claims directly to Building Construction by the conditions of the contract. HOWEVER, WHEN THE DESIGN PROFESSIONAL IS PRESENTED WITH ANY WRITTEN REQUEST FOR DAMAGES BY THE CONTRACTOR, FOR MONEY OR TIME, THE DESIGN PROFESSIONAL MUST IMMEDIATELY COPY THE PROJECT DIRECTOR WITH THAT NOTIFICATION. The Design Professional acting as the owner's agent, shall make a thorough and objective analysis of the claim, in a timely manner, consistent with terms of the Construction Contract and shall advise Building Construction of the Design Professional's opinion. Building Construction will respond to all claims as required by the conditions of the contract.

8.14 SUBSTANTIAL COMPLETION:

The Design Professional shall arrange an inspection for verification of substantial completion after notification by the Contractor that the work is ready for inspection. The Design Professional shall select a time when the Contractor, Project Director, Client Agency and other interested parties can attend. At this time, all previously uncorrected code violations shall have been corrected and passed inspection by the code inspector. The Contractor shall notify the code inspector prior to the date of the inspection set to establish substantial completion.

The Design Professional's substantial completion inspection shall be detailed and complete. The Contractor is to inspect the project and prepare a punch list prior to the Design Professional's inspection and provide it to the Design Professional. The Design Professional shall then prepare a master punch list to include the comments of all attendees and any corrections needed with provision for indicating the room or location and provision for indicating correction at a later date. This punch list shall be assembled and transmitted to the Contractor expeditiously. Should it become apparent that there will be numerous items to be added to the Contractor's punch list, the Design Professional should cancel the inspection and tell the Contractor to reschedule when the project is in fact ready. When the project is deemed substantial, the Design Professional shall prepare the Certificate of Substantial Completion form obtained from the Project Director and forward it to the Contractor for signature. He shall transmit three signed copies of the certificate and punch list to the Project Director for execution. The Project Director will transmit copies back to the Contractor and the Design Professional (with copies to the Client Agency).

The term "substantial completion" shall mean that the project under this contract is sufficiently
8.15 INSPECTION BY OTHER AGENCIES:

Where other agencies are involved with inspecting the work, it is generally the Contractor's responsibility to notify these agencies of the need for inspection and certification. The Design Professional should prompt the Contractor of this need at least 60 days before scheduled contract substantial completion. Such items requiring coordination of inspection may include, but are not limited to:

A. Fire Alarm Certification by State Fire marshal
B. Sprinkler Certification by State Fire Marshal
C. Elevator Certification by State Elevator Inspector
D. Emergency Generators Certification by the Manufacturer, the State Fire Marshal and DEP or their delegated jurisdiction
E. Water Systems Certificate to Construct and Certificate to Operate by DEP
F. Sewage Systems Certificate to Construct and Certificate to Operate by DEP
G. Storm-water Systems Certification by the Water Management District
H. Medical Facilities inspection and approval by the Agency for Health Care Administration
I. Kitchen/Food facilities inspection by the local Health Department
J. School Classrooms inspection by DOE
K. Certificate of Occupancy by Building Construction
L. Manufacturer Inspection, start-up and testing of boilers (inspection of boilers by the State Fire Marshal)

8.16 OCCUPANCY PRIOR TO COMPLETION:

Building Construction discourages the occupancy of any project prior to final completion of all punch list items by the Contractor. If the Client Agency must occupy the project, or a part thereof, prior to final completion and acceptance of construction, the following items shall be accomplished prior to occupancy:

A. A Certificate of Occupancy from the authority having jurisdiction for that portion to be occupied.
B. Written agreement from the Contractor that none of the provisions of this contract are being violated.
C. Written approval from the resident agent of the Contractor's insurer resident agent that the builder's risk coverage provisions will not be violated.
D. All arrangements shall have been made in writing between the Client Agency, Building Construction and the Contractor pertaining to the payments for utility costs, maintenance and repairs during the period of joint occupancy.
E. A written statement from the Design Professional indicating any punch list items outstanding in the area proposed for joint occupancy by the Client and the Contractor.
F. The Client Agency shall have notified the State Division of Risk Management so that the building will be covered by fire insurance. Copy the Design Professional, the Contractor, and Building Construction with that notice.
G. Any other items Building Construction deems necessary. The Project Director will furnish a copy of these items.

8.17 FINAL INSPECTION:

Final inspection shall be arranged by the Design Professional after notification in writing by the Contractor that the punch list work has been completed and after advice from the Design Professional's inspection team, that the work is ready for final inspection. The Design
Professional shall select a time when the Contractor, Project Director, Client Agency and other interested parties can attend.

This inspection is to verify that all corrections from previous inspections have been made. Following the inspections, the Design Professional shall prepare a new list of items, if any, requiring correction and shall make another inspection, if necessary, to ensure that all the work has been completed. All punch list items that were found at the time of substantial completion shall have been completed by the time stated in the Construction Contract.

A. CERTIFICATE OF CONTRACT COMPLETION:

FOUR COPIES of the Architect/Engineer's Certificate of Contract Completion (obtained from the Project Director) shall be prepared by the Design Professional after the final completion. The Contractor shall complete, sign and notarize FOUR (4) COPIES of the Contractor's Affidavit of Contract Completion (obtained from the Project Director) and submit them to the Design Professional.

The total amount of the contract shown on the certificate shall include the sum of all approved Change Orders. The substantial completion date on the A/E Certificate of Contract Completion must be the same as that shown on the substantial completion form.

The actual final completion date should be the same or earlier than the contract completion date. If not, the Design Professional must recommend charging liquidated damages as provided in the contract or a Change Order, completely justifying any extension of time. Approval of any late Change Order can delay processing of final payment to the Contractor. Therefore, this requirement should be addressed early. The Design Professional should retain both the Contractor's Affidavit of Contract Completion, and the Architect/Engineer Certificate of Contract Completion; he should then hold them until the Contractor's request for final payment is furnished. Attach the certificates to the Request for Final Payment.

B. GUARANTEES AND OPERATING INSTRUCTIONS:

The Design Professional is responsible for obtaining all guarantee documents from the Contractor. The Contractor shall be responsible for collecting, identifying, indexing and collating the materials from the subcontractors, and will deliver three copies of the finished document to the Design Professional for checking. When the Design Professional has approved these, send two copies of all documents to the Client Agency and copy the Project Director and Contractor with the transmittal. The Design Professional shall send one set to the Project Director. The Design Professional may wish to obtain an additional copy of all documents for their office files.

As applicable, complete equipment diagrams, operating instructions, maintenance manuals, parts lists, wiring diagrams, pneumatic and/or electrical control diagrams, test and balance reports, inspection reports, guarantees and warranties for each and every piece of equipment furnished under this contract are to be supplied in a ring binder, hard-cover book, properly indexed for ready reference. Also, specific information regarding manufacturers' names and addresses, nearest distributors and service representative's names, addresses, office and home phone numbers, make and model numbers, operating design and characteristics, etc., will be required. All information submitted shall be updated to reflect existing conditions.

The specifications must provide that the Contractor and/or subcontractor shall provide competent and experienced personnel, thoroughly familiar with the work, for a reasonable period of time to instruct the Client Agency personnel in operation and maintenance of equipment and control systems, subsequent to the time of substantial completion and receipt of as-built drawings, operations and maintenance books, but prior to the date of final acceptance. This instruction will include normal start-up, run, stop, and emergency operations, location and operation of all controls, alarms and alarm systems, etc. The instruction will include tracing the system in the field and on the diagrams in the instruction booklets so that operating personnel will be thoroughly familiar with both the system and the data supplied. Evidence that this instruction has occurred
must be included in the Contractor's final submittal.

C. KEYS:

The specification must also provide that the Contractor will deliver keys and key blanks to the designated building operator and provide a signed receipt to the Project Director and the Design Professional.

D. AS-BUILT/RECORD SET DRAWINGS:

The Construction Manager or Contractor shall include completed as-built drawings in accordance with previous sections mentioned herein in the close out document submittal. The Design Consultant shall verify accuracy and number and type of paper/electronic copies submitted as part of the closeout package review and before approving final payment. The contractor is responsible for distributing the paper and CD media copies of the Record Set Drawings to the Project Director and Client Agency at the time of final completion. Copy the Project Director with the CD media version of the Record Set Drawings only.

E. NON-BONDED PROJECTS:

Projects $100,000 or less (and projects of $200,000 or less for which bonds were waived by the Department prior to bidding) do not require bid bonds, performance bonds, or labor and material payment bonds. THE DESIGN PROFESSIONAL IS DIRECTED TO CAREFULLY READ AND DIRECT THE CONTRACTOR TO FOLLOW THE PROCEDURES OUTLINED IN THE NON-TECHNICAL SPECIFICATIONS.

F. FINAL PAY REQUEST CHECKLISTS:

Building Construction has checklists (one for bonded projects and one for non-bonded projects) to assist both the Contractor and Design Professional in gathering the required materials for the final pay request. The Contractor's Final Pay Request will not be processed until all items on the checklist have been achieved. These checklists for bonded projects and for non-bonded projects can be obtained from the Project Director.