
SECTION 500: PREPLANNING PROCEDURES

500.1

PREPLANNING PHASES

Each funded Project goes through a planning process delineated by the Bureau and stipulated in the Professional's contract as basic services.

The following guidelines have been developed to achieve the preplanning process.

Preplanning Phases

- * Program
- * Schematic Design
- * Legislative Submittal Data

500.2

CONSULTANTS

At the onset of the preplanning process, the Professional and/or Using Agency may request the services of special Consultants who have expertise in particular fields needed for the Project. Requests for Consultants must be made in writing by the Professional and will include the scope of work and the costs for the consulting service(s) if the service(s) is an additional cost to the Bureau beyond that of basic services.

If a Consultant is retained, the Professional will pay any portion of the Consultant's fee that is considered part of basic services and the Consultants will be listed in the Professional's contract with the Bureau and recorded across the Bureau's *Standard Approval Form - Record of Action*. Any change in Consultant status, will need written approval from the Bureau.

In some instances, the Consultant's fee, or a portion thereof, will be considered as an additional fee or service. The Professional will then be reimbursed separately for the Consultant's services.

In this instance, the Professional will provide the Bureau a copy of the Consultant's proposal clearly stating the scope, schedule of services, and cost of these special services.

Consulting Services

- * Costs which are a part of basic services
- * Costs which are in excess of basic services
- * Travel related expenses

The Bureau will not approve travel costs as an unknown, open-ended reimbursement, but will require an agreed amount supported by the estimated number of visits which includes time and reasonable costs associated with each visit. Special Consultants are, but not limited to *Program, Structural, Mechanical, Electrical, Asbestos, Furniture and Equipment, Theatrical, Acoustical, Cost Estimate, Kitchen and Landscape*.

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500.3**SCHEDULE/TIME**

The Professional shall perform the required services as expeditiously, skillfully and consistently as possible in order to have the Work progress in a timely manner. A *Schedule of Performance* may be established in one of the following manners:

1. Upon execution of the *Standard Form of Agreement Between the Owner and the Professional*, the Professional will submit to the Bureau Staff for approval a *Schedule of Performance* which include time allowances for review and approval of submissions by the Bureau and the Using Agency. When the *Schedule* has been approved, it will not - except for reasonable cause - be exceeded or changed by the Professional unless approved by the Bureau.
2. The Professional may be required to submit a *Schedule of Performance* during the interview process, or prior to the execution of the *Agreement Between the Owner and the Professional*. In this instance, the *Schedule* - upon approval - will become a part of the *Agreement* and may not be exceeded or changed unless approved by the Bureau.

An example of the Professional's *Schedule of Performance* as noted in Paragraph 2.2 of the *Agreement Between the Owner and the Professional* is as follows:

- .1 Professional services beginning date: (Date)
- .2 Program Phase: Number (XX) days
- .3 Schematic Phase: Number (XX) days
- .4 Design Development Phase: Number (XX) days
- .5 Construction Document Phase: Number (XX) days
- .6 Total planning: Number (XX) days

500.4**SURVEYS/BORINGS/TESTS**

Following the procedures for surveys/borings/tests outlined in **Section 400**, Professional will be responsible for obtaining all surveys, subsurface reports, miscellaneous tests, engineering data and any other information necessary to develop planning of the Work. The Professional will obtain this information from competent laboratories, licensed engineers and surveyors selected by and responsible to the Professional. The Bureau will approve the cost and selection prior to the work being ordered.

PROGRAM PHASE

500.5 (amended 500.5.7 07/15/08 SOS by adding 400.11)

THE PROGRAM

From time to time, it is necessary to prepare a written Program of the Using Agency's needs prior to the actual planning process. When a Program is required, it will be so stated in the *Standard Form of Agreement Between the Owner and the Professional*. The Program phase must have written approval by the Bureau before proceeding with the Schematic Design Phase.

Initially, the Professional will meet with the Bureau Staff to ascertain general requirements for the Project and will meet with the Using Agency and Bureau Staff to define the Scope, the functional and departmental objectives, relationship of Project to other structures and facilities, and the criteria for site selection.

The Professional will advise the Bureau as to the Project's projected cost and time requirements. The Professional will prepare and submit to the Bureau ten (10) copies of a comprehensive written Program which including the following minimum elements:

1. **Goal:** Design objectives, limitations, and criteria
2. **Site:** Site requirements and analysis including location, boundaries, topography, subsurface, vegetation, utilities, climate, flooding, traffic, noise, and adjacent buildings
3. **Space:** Space requirements and relations including
4. narrative description by area (square footage recommendations)
4. **People:** Number and functional responsibility of personnel
5. **Equipment:** Special equipment and systems
6. **Alterations:** Flexibility and ability to expand
7. **Energy:** Energy and sustainability considerations (400.11)
8. **Existing:** Analysis of existing facilities
9. **Concept:** Summary of Project concept, scope and goal
10. **Budget:** Total Project Budget

Minimum Elements

- * Goal
- * Site
- * Space
- * People
- * Equipment
- * Alterations
- * Energy
- * Existing Facilities
- * Concept
- * Budget

The Using Agency will be responsible for preparing a Program of furniture and equipment requirements and estimated costs. The Professional and Bureau Staff will assist the Using Agency, if needed.

After the Using Agency and Professional have received written notification that the Program has been approved, the Professional will proceed with the Schematic Design Phase.

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500.6**PROGRAM EXAMPLE**

The following is an excellent example of various phases included in a Program phase:

- 1.0 **DOCUMENT PLANNING SITUATION, PROJECT OBJECTIVES, LOCATION AND SCOPE**
 - 1.1 Describe conditions leading to need for this two-phase capital renovation project; document existing facilities and project sites, in terms of space available and condition.
 - 1.2 Outline project purpose, design objectives, and proposed occupants. Provide overview of affected administrative functions.
 - 1.3 Define project scope inclusive of size (e.g. renovation area, additional floor area, etc.) and anticipated design, construction and occupancy schedule.
 - 1.4 Defined required interim use of other facilities during the primary renovation.

- 2.0 **DEFINE PROJECT RATIONALE, ANALYZE FUNCTIONAL REQUIREMENTS AND DETERMINE SPACE ALLOCATIONS**
 - 2.1 State program and design goals for the proposed project.
 - 2.2 Analyze administrative and functional requirements; define facility and site issues.
 - 2.3 Present staff and other relevant statistical data in support of project need/rationale.
 - 2.4 Determine administrative space requirements for: administrative service areas, open space work areas, group offices, private offices, meetings rooms, and office support facilities, as well as for all other project functions such as ceremonial spaces in the primary building to be renovated.
 - 2.5 Develop listing of spaces to be provided in the renovated facilities.
 - 2.6 Utilize comparative office space standards for the Using Agency, State Government, and other entities.

- 3.0 **PREPARE DETAILED DESCRIPTIONS OF THE SPACES TO BE PROVIDED**
 - 3.1 Provide detailed descriptions of each space:
 - a. Name, function, and type of space
 - b. Approximate size (NASF)
 - c. HEGIS space code designation
 - d. Special design considerations
 - e. Functional relationships between spaces
 - 3.2 Provide graphic illustrations of desired relationships among all major spaces of the project.

- 4.0 **DEFINE DESIGN CRITERIA AND SPECIFIC PROJECT CONSIDERATIONS**
 - 4.1 Prepare listing of general architectural design considerations for the project, including standard items specified by the Using Agency.
 - 4.2 Prepare statement of special design considerations, including site issues that are unique to this project:
 - a. Project sequencing and schedule constraints
 - b. Required demolition
 - c. Project limits
 - d. Energy goals
 - e. Landscaping or site development requirements
 - f. Special utility requirements/interfaces

- 5.0 **PROVIDE LIMITED STAFF TIME FOR PROJECT REVIEWS AND REVISIONS**
 - 5.1 Submit program document to the Bureau of Building, Grounds and Real Property Management and the Using Agency for reviews and revisions prior to general distribution.
 - 5.2 Reserve two (2) work days for attendance/participation in review meetings and for accomplishing necessary document revisions at each of the two progress milestones.

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SCHEMATIC DESIGN PHASE

500.7

SCOPE DEFINITION

If the Professional has not been provided with a Program (as described in **Section 400**), or one has not been developed, the Professional will prepare and submit to the Bureau four (4) copies of a comprehensive written document detailing the Project's Scope which includes the following minimum elements:

1. **General:** General statement of work to be accomplished
2. **Goal:** Design objectives, limitations, and criteria
3. **Space:** Space requirements and relations including narrative description by area (square footage recommendations)
4. **People:** Number and functional responsibility of personnel
5. **Equipment:** Special equipment and systems
6. **Concept:** Summary of Project concept, scope and goal
7. **Budget:** Total Project Budget

500.8

THE SCHEMATIC DESIGN

The Schematic Design Documents generated by the Professional consist of a written report as well as preliminary drawings. The following paragraphs outline general requirements for the Schematic Design phase and the submissions of required data.

Although the Schematic Design phase is general and non-specific in nature by comparison to other planning phases, importance should be given to detail and direction from the very beginning in order to utilize time and expend funds wisely.

These phases will be discussed and enumerated individually over the next several pages.

Schematic Design Phase

- * Program or Scope Definition
- * Site Analysis
- * Design Concept
- * Conceptual Drawings
- * Visual Studies
- * Design Concept Approval

500.9

SITE ANALYSIS

The Professional will develop and provide for the Bureau's review, an analysis of the Project site describing the following basics.

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A rough sketch of the site showing the observations of site conditions and environment affecting the Project will be developed. A local land use map, a city or county planning map, or a United States Geological Survey map, together with the survey, will be utilized to prepare the site analysis sketch.

The general topographic survey information such as grades, walks, roads, water features, structures, tree masses, major utility lines, property lines, *set back* requirements or other restrictions will be shown on the site analysis sketch.

- * Significant features of physical environment
- * Characteristics of the site
- * Climate
- * Topography
- * Soils and their conditions
- * Ecology
- * Utilities
- * Circulation, views and noise
- * Existing structures
- * Statement of the above factors on the design

The site analysis sketch may be drawn directly on a print of the survey if it is inclusive enough to show the character of the site and the immediate surroundings which affect the Project. If site conditions outside the survey are required to adequately present the information, an additional sketch or overlay will be prepared.

500.10 DESIGN CONCEPT

The site analysis, rough sketches and a brief written description of the design concept will be developed (plans and elevations), as well as photographs (snapshots) of the area contiguous to the site. The sketches may be freehand, but must show enough information to illustrate the architectural character of the proposed Project with emphasis on the following characteristics: unity and harmony with the surrounding area and buildings, style of architecture, proportions, exterior facing materials, local zoning requirements, if any, and structural concept of the building.

In general terms, Schematic Design Documents are comprised of single-line drawings translating the space requirements and program requirements into plans, elevations and sections. During this planning phase, the Professional will be furnished topographic and site boundary information on which the proposed building is to be erected, or he will obtain the survey on a reimbursable basis. The Professional will also furnish a cost estimate to remove Hazardous Containing Materials (HCM). Extensive investigation and testing for HCM are not required during the Schematic Document phase. The Professional will comply with those codes set forth in this Manual. [See **Section 400.**]

After the site analysis/design concept has been approved, the Professional will proceed to complete the Schematic Design submission according to the approved schedule of time and instructions issued by the Bureau.

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500.11**CONCEPTUAL DRAWINGS**

The Professional will develop and provide for the Bureau's review Conceptual Drawings of alternative approaches for translating the Program requirements into conceptual design solutions.

Conceptual Drawings

- * Functional relationships within the Program
- * Consideration of relationships to master plans and environment
- * Consideration of land use
- * Traffic, parking, transportation
- * Utilities
- * Organization of major building functions

500.12**VISUAL STUDIES**

The Professional will prepare and provide for the Bureau visual studies related to the concepts listed in the paragraph above including, but not limited to:

- * Massing studies in model and/or diagrammatic form
- * Sketches of design concept showing elevations/exterior appearances
- * Other sketches or visual studies necessary for evaluation of alternative concepts

500.13**DESIGN CONCEPT APPROVAL**

Upon approval by the Bureau of the developed Design Concept, the Professional will prepare and submit to the Bureau Schematic Design drawings of the approved concept which include, but are not limited to:

1. The basic design approach drawn at an agreed upon scale
2. Site location in relationship to the existing environment
3. Relationship to master plans
4. Circulation
5. Organization of building functions
6. Functional/aesthetic aspects of the design concepts under study
7. Graphic description of critical details
8. Visual and functional relationship
9. Compatibility of the surrounding environment

Schematic drawings will clearly show the Project's basic design and need for elaboration beyond the requirements set forth in the text:

1. **Site Plan:** The following note will appear on the site plan: *Based on topographic survey dated (Date) or Based on site documents furnished by (Name).*

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2. **Floor Plan:** The following note will appear on the floor plans: *Based on program requirements dated _____ (Date)_____.* The square footage *requested* by the program and *provided* in the Schematic Design for each activity (net assignable area) by floors will be shown on a schedule on the Schematic Design floor plans adjacent to each floor plan. The first sheet of the floor plans will included a table of *Grand Totals of Areas* (in square feet) broken down by floors into net assignable areas, custodial, mechanical, electrical, miscellaneous spaces, horizontal and vertical circulation spaces. The gross area of the building will also be shown on the schedules. New areas of rooms, or other spaces, will be indicated only on the schedules and not on the Schematic Design floor plans. The floor which is approximately on the same level as the main entrance is designated as the *first floor*. When the lot slopes downward from the main facade so that one or more secondary entrances lead to a level below the first floor, this level will be designated as the *ground floor*. When the lot slopes upward from the main facade, there is no *ground floor*. A secondary public entrance at the rear of the building may be at the mezzanine or second-story level.
 3. **Roof Plan:** Show all levels of the roof, their elevations or slopes.
 4. **Elevations:** The elevations will be block outlines and breaks to indicate the various masses and how they coincide with the plans. Typical proposed window arrangement and exterior material indications will be shown only to the extent necessary to suggest possible design in accord with the concept sketches. Floor-to-floor dimensions will be shown. Definitely planned or probable future extensions will be indicated by dotted outlines on the plans and elevations. The words "Future Extension" should be noted to indicate the limits of the extensions.
 5. **Transverse and Longitudinal Sections:** In both the longitudinal and transverse sections, the important rooms (indicated by name or abbreviations) will be shown, as well as floor dimensions.

The drawings must show calculations for circulation areas, entrances, exits, stairways, exit stairways, passenger and freight elevators and escalators. The overall space divisions for each activity corresponding to the program requirements must be shown. Major spaces for mechanical and electrical equipment, public toilet rooms, major stacks and major chases must be indicated.

Partitions of each major room will be indicated on the drawings. At the Professional's option, the following may or may not be shown: door swings, closets, small storage areas, private toilets, recesses and alcoves within a given area.

Diagrammatic drawings will indicate space for mechanical and electrical equipment, toilet rooms and the number and location of elevators or escalators. Location and capacity of electricity, gas, water and sewer lines available for the Project and the approximate location of connections will also be indicated on the site plan.

In addition, diagrammatic drawings will be sufficiently developed with regard to column locations, grades and story heights to determine a sound structural scheme. The Professional will not submit diagrammatic drawings which have not been analyzed by the structural consultant and for which a feasible structural system has not been determined. The structural systems may be indicated by drawings or by written descriptions.

Since the building design and arrangement is dependent on the types of mechanical and electrical systems selected, it is necessary that the mechanical and electrical engineers be brought in at the concept stage of

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the design. The economic analysis description of systems and space requirements for mechanical and electrical systems will be included with the submission. The Professional, along with the structural, mechanical and electrical consultants, will stamp their Professional seal on respective drawings or submittal information.

500.14
SCALE OF DIMENSIONS

The site plan will be a scale of 1"=30' to 1"=50'. Other Schematic drawings will be drawn to 1/8", 1/16" or 1/32" scale and will be noted under the title of each sheet of drawing. The dimensions will be approximately correct but not necessarily final. The preferred sheet size is 24" x 36", including borders.

When reducing the original drawings to half-scale, all dimensions and notes will be a minimum of 3/16" or 1/8" in height, or larger in order to permit reduction.

500.15
DESCRIPTION OF BUILDING

The Professional will prepare and submit to the Bureau a description of building systems and give design criteria for major elements of the basic building systems:

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|--|
| <p>Criteria for Major Elements</p> <ul style="list-style-type: none">* Structure* Foundations* Floor grade and systems* Roof* Exterior/interior walls/partitions* Interior finishes* Sight lines* Stairs and Elevators* Specialty Items* Mechanical Systems* Built-in Equipment* Site Construction |
|--|

500.16
PROJECT BUDGET

The Professional will provide in writing a final Total Project Budget which includes all anticipated expenses. The Bureau may authorize the Professional to obtain independent estimated cost on a reimbursable basis, or the Bureau may pay the estimating firm directly. Estimates will be based on adjusted square foot or cubic foot cost of similar construction in the area of the Project or on a system cost study of the Project. Cost estimates will contain escalation factors in six (6) month increments for the subsequent two (2) years.

500.17
SCHEMATIC DESIGN SUBMISSION

The Professional will prepare and submit to the Bureau two (2) sets of Schematic Documents, an Estimated Total Project Budget reflecting the cost estimate based on proposed square footage and/or volume unit costs, furniture and equipment, fees and contingency.

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The Professional will also forward copies of the Schematic Documents to the Using Agency and its Governing Board for review. If the Using Agency or Governing Board has any comments regarding the documents, these comments should be forwarded to the Bureau through written correspondence.

The Using Agency, Governing Board and Review by Others (where applicable) will approve each design phase and notify the Bureau in writing of such approval. Upon approval of the Schematic Design phase by the Bureau, the Professional will be notified in writing to proceed with the Design Development phase.

500.18

SUBMISSION TO THE LEGISLATURE

If the planning of this Project was mandated by the Legislature, after final approval, the Professional will provide the Bureau with ten (10) sets of the complete preplanning documents for submission to the Legislature. The sets will include, but not be limited to, the following:

1. **Visual Presentation:** A colored print of the prospective is preferred; however, if one was not prepared, an elevation or building sketch conveying the facility's design and character will be necessary.
2. **Program:** A copy of an executive summary, or the entire Program document.
3. **Drawings:** Half scale set of all drawings.
4. **Cost Estimate:** Cost estimate prepared in a format required by the Bureau.