

2.5 Project Phases

FORWARD

- 2.5.0.1 Generally, a project is produced in three phases followed by delivery of the original tracings and the specification masters (Reproducible Bid Documents) to the Department of Public Works. If the project is limited in size and scope, the Department may authorize its preparation in one or two phases.
- 2.5.0.2 At the Schematic Design phase, the Architect/Engineer shall translate the program data into a detailed schematic illustrating the project to the degree necessary to understand its scope. The two following phases shall embody refinements of the first culminating in documents suited in every way for bidding and construction.
- 2.5.0.3 The phases are entitled:
- Schematic Design
 - Design Development
 - Contract Documents
 - Bid Documents [Reproducible Bid Documents]
- 2.5.0.4 Proceed to the next phase only after receiving written authorization to do so. Reproducible Bid Documents may be authorized by phone.
- 2.5.0.5 Submit the number of copies of documents for each phase as stated in the contract between the State and the Architect/Engineer.
- 2.5.0.6 Prepare the specifications using the State version of the CSI format including the 5 digit Section identifiers. The outline specification required in the Schematic phase is detailed in "Schematic Design Phase Checklist" Section 2.5.2 of this manual.
- 2.5.0.7 The A/E will reply to all review comments if a phase is reviewed by DPW. The A/E shall have a signature and date of reply the designer responsible. Additional next stage reviews will not be initiated until the A/E responds to prior review comments. "Will comply" is not an acceptable review response. A short simple declarative sentence is required. Occasional an attached sketch is most effective. Included with each submission will be a one page synopsis of the status/program/scope of the project. This submission will represent the design professionals' best understanding of the project. Included will be typical issues being addressed such as: new construction, renovation, additions, environmental problems, traffic, historical, code items, and construction access constraints. This submission will be updated with each submission to DPW and be modified to represent the most up-to-date status.
- 2.5.0.8 Buildings and structures must conform to seismic requirements in the CT State Building Code. Additions and alterations to buildings or structures must be physically separated from the existing building or else one of the 3 options used; 1). Physically separate new from existing with an expansion joint, 2). Attach structural analysis to indicate existing is not made unsafe, or 3). Obtain a modification of the code from SBI. Refer to the code.
- 2.5.0.9 Designs containing tension stresses in masonry are not permitted.
- 2.5.0.10 Drawing orientation to be consistent on all plans drawings. i.e.; North is always the same direction from plan to plan.
- 2.5.0.11 Asbestos abatement is the responsibility of the State of Connecticut on all projects, **EXCEPT** when asbestos is included in the roofing system. Refer to "Hazardous Materials" Section 2.4.10 this Manual. During the programming phase of the project, the State undertakes an investigation of the various products incorporated in the existing

building. In general we expect that this material will be totally removed, but invariably, some material will be found during the design or construction phases. We require that the Design Consultant inform us immediately if any materials are found that may appear to contain asbestos, in order for the State to arrange for its abatement.

2.5.0.12 The prime design professional is responsible for the coordination, integration and completeness of the Review Submissions. All submission (Schematics, Design Development, Contract Documents and Tracing and Masters) shall be coordinated, and reviewed by the prime design professional, and corrections completed – prior to submission to DPW. Inappropriate submission may be returned without review. If the Design Development or Contract Documents submission has received numerous comments, or the proposed “systems” require major modification, coordination or completion; a complete reprinting and resubmission of the submission shall be required.

2.5.0.13 Basic design services include the verification of the existing conditions as presented in the construction documents. The client Agency and DPW will furnish the available record drawings for the site and/or building. The A/E shall understand that record drawings may not reflect current conditions, be accurate, or be in sufficient detail for design and bidding of the proposed project. In many instances, Agencies have done building modifications, which may invalidate portions of the record drawings. Many state campuses have agency owned utility systems such as steam, sanitary sewer systems, water systems, primary electrical distribution systems, and voice communication systems. The design of new buildings or building renovations may necessitate tying into these existing systems. Survey and testing may be necessary to verify the location and capacity of the existing systems. When included, the design of the connection to the existing agency system is an important part of construction cost, and the designing effort is within the scope of the design professional's services. Project involving renovations or additions require specific, detailed knowledge of the existing systems: location, size, materials, material present condition, operating voltage, operating pressures, et. The existing condition shall be verified prior to the design development submission. The verification shall be undertaken by staff knowledgeable in such systems. Substantial investigation is required for building renovations and additions. When extensive detailed inspection, testing services, or as-built documentation of inaccessible areas is required, these items may be additional services.

2.5.0.14 The Contract Documents and Reproducible Bid Documents submission should be **COMPLETE** when submitted (with the exception of inclusion of Division 0- to be inserted by DPW) The final coordination and corrections shall be complete. The Reproducible Bid Documents shall be ready for advertising. On a selected basis as program and schedule requirements demand, the department will on occasion submit the CD or Reproducible Bid Documents submission directly to the Bid 'Room for bidding. In these instances a cursory review may be provided by DPW and if necessary the Design Consultant will address any required changes or corrections through an addendum process.

2.5.1 Pre-design Phase

A pre-design if necessary shall be detailed as to scope and outline in a contract with DPW. The contract form may be a study contract or a standard Architect or Engineer contract detailed for the specific work required. The program and budget shall be developed at such a level to allow the Agency and DPW to request a B-100 form or a capitol project request.

See also Consultant Services Section 0.3.2.1 “Pre-design Studies” in this Consultant's Procedure Manual.