

# ARCHITECTURE & ENGINEERING DIVISION

## PERFORMANCE AND DOCUMENT REQUIREMENTS

### PROGRAMMING

1.1.1 The Programming effort shall provide the following:

1.1.1.1 develop and define the needs for the Project based upon the Owner's Initial Information and other information obtained through the data gathering process, interviews, charrettes, surveys and operational parameters;

1.1.1.2 review, develop, and document detailed requirements for the project, covering items such as project goals and objectives, design objectives, limitations, and criteria; gross area and space requirements; spatial relationships; needs and options for flexibility or expandability; identifying the need for special equipment and systems; site requirements; further development/alteration of the project schedule and budget requirements;

1.1.1.3 space concepts and flow diagrams, functional relationships, access, circulation, and flow patterns within the building and on the site;

1.1.1.4 existing facilities will require additional research to review existing conditions, assembling and reviewing information to identify and document areas to be involved in alterations, additions, repairs or demolition; and,

1.1.1.5 define and develop programmatic and conceptual level documents consistent with the following:

1.1.1.5.1 Architectural - services responding to the programming and project requirements and consisting of preparation of conceptual site and building diagrams for each level or floor, investigation of alternative approaches, key diagrammatic sections, typical diagrammatic elevations, preliminary selection/recommendation of building systems and materials, development of approximate dimensions, areas and volumes, and review of any existing project documentation;

1.1.1.5.2 Structural - recommendations regarding structural materials and systems;

1.1.1.5.3 Mechanical and Electrical - for mechanical design, consideration and recommendations regarding systems and equipment, development of conceptual design solutions for energy sources/conservation and general space requirements. For electrical design, consideration and recommendations regarding basic electrical systems and equipment, analysis and development of conceptual design solutions for energy sources/conservation, service distribution, and general space requirements;

1.1.1.5.4 Civil - site planning analysis including layout of site features, building position, general topography, location of paving for walkways, driveways and parking. Also must include connections for building utilities such as water, sewer, gas/steam and power;

1.1.1.5.5 Budget – further develop/refine the project budget in conjunction with the Owner and assist in the review of soft costs and preliminary construction budget. Provide a conceptual level cost estimate based on the master plan (if incorporated in this Agreement) concept designs; and,

1.1.1.5.6 Scheduling/Phasing – further develop/refine the project schedule in conjunction with the Owner. Perform review, analysis, and adjustments to the project schedule and phasing plan(s) (if a phased project).

1.1.2 The Programming Document shall contain the following items:

- 1.1.2.1 Executive Summary with Project Statement;
  - 1.1.2.2 Project Summary and Design Goals;
  - 1.1.2.3 Space Program;
  - 1.1.2.4 Planning and Design Criteria including, but not limited to, codes, zoning, clustering and layout criteria, building massing, blocking and stacking diagrams, space planning module, dimensional criteria, envelope interface, physical accessibility and ADA, style issues and constraints;
  - 1.1.2.5 Building Performance Criteria including, but not limited to, general notes and comments on: building envelope, structure, interior construction, hvac systems, plumbing systems, fire suppression systems, electrical systems, and information technology systems;
  - 1.1.2.6 Site Requirements including, but not limited to, preliminary building siting, site analysis, parking, traffic flow, grading and landscaping;
  - 1.1.2.7 Budget and cost of the work involving estimates of construction, design fees and all other identifiable costs; and,
  - 1.1.2.8 Schedules for funding, design, and construction.
- 1.1.3 The Programming Documents, upon completion and approval by the Owner, shall become the Project Program.
- 1.1.4 For the purposes of Commissioning, the Architect/Engineer shall begin preparation of the Basis of Design Document as defined by ASHRAE describing the general scope of systems to be incorporated into the Project.

## **SCHEMATIC DESIGN**

- 1.1.1 The Architect/Engineer shall provide Schematic Design Documents based on the Programming effort (or Owner's Initial Information document and any additionally documented and agreed upon parameters if no Programming services are provided), Project Schedule, and Project Budget including the budgeted Construction Cost. Schematic Design Documents shall establish the design of the Project illustrating the scale and relationship of the Project components. The Schematic Design Documents shall include an initial site plan and preliminary building plans, sections and elevations. As coordinated between the Architect/Engineer and the Owner, the Schematic Design Documents may include study models, perspective sketches, electronic modeling or combinations of these media. Preliminary selections of major building systems and construction materials shall be noted on the drawings or described in writing.
- 1.1.2 The Schematic Design Phase effort shall:
- 1.1.2.1 Define the specific technical needs for the project based upon the Project Program and subsequent changes to the concept and other data gathered from the Owner;
  - 1.1.2.2 Define detailed requirements for the project, covering items such as design objectives, limitations, and criteria; gross area and space requirements; spatial relationships; needs and options for flexibility or expandability; special equipment and systems; site requirements; project schedule and budget requirements;
  - 1.1.2.3 Define space concepts and flow diagrams, functional relationships, access, circulation, and flow patterns within the building and on the site; and,

1.1.2.4 Investigate and define data concerning existing conditions, assembling and reviewing information to identify and document areas to be involved in alterations, additions, repairs or demolition.

1.1.3 The Schematic Design Documents and Services shall at a minimum consist of the following:

1.1.3.1 Architectural Design - Services responding to the Project Program and requirements and consisting of preparation of a site plan and building plans for each level or floor, key sections, all elevations, preliminary selection of building systems and materials, development of approximate dimensions, areas and volumes, and review of project documents presently consisting of the Project Program and budget and incorporation of site soil investigation and surveys;

1.1.3.2 Structural Design - Recommendations regarding structural materials and systems, selection of the foundation system, outline structural systems plan, analysis and development of conceptual design solutions;

1.1.3.3 Mechanical Design - Consideration and recommendations regarding materials, systems and equipment, development of design solutions for energy sources/conservation, heating, ventilating and air conditioning, plumbing, fire protection and general space requirements;

1.1.3.4 Electrical Design - consideration and recommendations regarding basic electrical materials, systems and equipment, analysis and development of design solutions for power service, distribution, lighting, information technology, communication, fire detection, alarms and general space requirements;

1.1.3.5 Commissioning Assistance - The mechanical and electrical design is to be summarized to provide a comprehensive description of the operation of the mechanical and electrical systems in the building with specific reference to meeting the requirements included in the Design Intent Document. This document is to be revised as necessary throughout the design and the original and all revisions are to be submitted to, and approved by, the Owner;

1.1.3.6 Civil Design - Site planning analysis including layout of site features, building position, preliminary grading, location of paving for walkways, driveways and parking. Also includes normal connections for building utilities such as water, sewer, gas/steam and power;

1.1.3.7 Budget - Review the project budget and assist in the analysis of "soft" costs and establishment of a budget Construction Cost;

1.1.3.8 Specifications - Outline specifications necessary to indicate the general scope of services that will form the basis of the specifications for the construction documents; and,

1.1.3.9 Scheduling/Phasing - Review and analysis of the project schedule and phasing plan developed along with the project program.

1.1.4 If Programming services are included in this Agreement, the Architect/Engineer shall provide revised and updated information for incorporation into the Programming Document. If Programming services are not included in this Agreement, the final Schematic Documents shall contain a summary of the following as determined in conjunction with the Owner as part of the Schematic Design process which shall then form the updated and agreed upon Project Program:

1.1.4.1 Executive Summary with Project Statement;

1.1.4.2 Project Summary and Design Goals;

- 1.1.4.3 Planning and Design Criteria;
  - 1.1.4.4 Building Performance Criteria;
  - 1.1.4.5 Site Requirements;
  - 1.1.4.6 Project Budget; and,
  - 1.1.4.7 Project Schedule.
- 1.1.5 For the purposes of Commissioning, the Architect/Engineer shall provide a Design Intent Document for review and approval by the Owner, for the commissioning of the project which shall include the basis of the design in a room-by-room itemization of mechanical and electrical requirements as described in the Programming Document with the following information:
- 1.1.5.1 Temperature requirements;
  - 1.1.5.2 Humidity requirements (if special needs are identified);
  - 1.1.5.3 Exhaust requirements (e.g. fume hoods);
  - 1.1.5.4 Pressurization requirements;
  - 1.1.5.5 Maximum permissible sound level;
  - 1.1.5.6 Maximum occupancy;
  - 1.1.5.7 Schedule of occupancy;
  - 1.1.5.8 Number of computers or specialized equipment;
  - 1.1.5.9 Special power quality;
  - 1.1.5.10 Light levels; and,
  - 1.1.5.11 Special lighting systems or levels.

### **DESIGN DEVELOPMENT (or Preliminary Design)**

- 1.1.1 The Architect/Engineer and Owner may agree to have the Schematic Design and Design Development Phases combined into a single phase. This combination shall be the Preliminary Design Phase and shall consist primarily of services as identified within this Design Development Phase.
- 1.1.2 The Architect/Engineer shall prepare, for approval by the Owner, Design Development Documents consisting of drawings, sketches, specifications, Estimate of Construction Cost, and similar documents necessary to fix and describe the size and character of the entire Project as to the architectural, structural, mechanical, electrical systems and other elements as defined in the Project Scope.
- 1.1.3 Design Development Documents and Services shall at a minimum consist of the following:
  - 1.1.3.1 Architectural Design - Services consisting of the continued development and expansion of the schematic design documents (or the Owner's Initial Information document and any additionally documented and agreed upon parameters if no Programming services are provided if Preliminary Design) in order to proceed with establishment of

the final design documents. Documents shall consist of the final scope, relationships, forms, size and appearance. Building plans, sections and elevations, selection of building systems and materials, development of dimensions, areas and volumes are also included;

- 1.1.3.2 Structural Design - Development of specific structural materials and systems, analysis and development of design solutions. Basic structural system and dimensions, design criteria, foundation design criteria, sizing of structural components and clearances;
- 1.1.3.3 Mechanical Design - Development of specific mechanical materials and systems, analysis and development of design solutions. Basic mechanical system and dimensions, design criteria for energy sources/conservation, heating, ventilating and air conditioning, plumbing, fire protection, vibration and acoustical control, visual impacts, equipment layouts, sizes and weights of major components, chases and specific space requirements;
- 1.1.3.4 Electrical Design - Development of specific electrical materials and systems, analysis and development of design solutions. Basic electrical system and dimensions, design criteria for energy sources/conservation, power service, distribution, lighting, information technology, communication, fire detection, alarms, chases, equipment layouts and clearances and specific space requirements;
- 1.1.3.5 Commissioning - Coordinate with and support the commissioning process; provide the commissioning authority with all necessary information, assist with development of the commissioning scope, provide one (1) design review set;
- 1.1.3.6 Civil Design - Basic civil engineering features regarding building position, preliminary grading, location of paving for walkways, driveways, parking, all utilities, easements, boundary conditions, property limits;
- 1.1.3.7 Project Budget - Maintain the design development phase in accordance within the established budget Construction Cost, continually review the project budget to coordinate appropriate design factors and limitations;
- 1.1.3.8 Specifications - Development and coordination of outline specifications necessary to delineate the appropriate functions and minimum quality of the project; and,
- 1.1.3.9 Scheduling - Develop and maintain a CPM or bar chart project schedule of all activities to include investigations, data gathering, design phases, reviews, advertising, bidding, contract award, construction, construction phasing, punch list and project completion. Perform reviews and revisions of schedule indicating all milestones and anticipated impacts upon delivery of the project based upon issues and factors discovered during the design development phase.

## **CONSTRUCTION DOCUMENTS**

- 1.1.1 The Architect/Engineer shall provide Construction Documents based on the approved Design Development (or Preliminary Design) Documents and updated Construction Cost. The Construction Documents shall set forth in detail the requirements for construction of the Project. The Construction Documents shall include Drawings and Specifications that establish in detail the quality levels of materials and systems required for the Project.
- 1.1.2 During the development of the Construction Documents, the Architect/Engineer shall review and assist the Owner in the development and preparation of: (1) bidding and procurement information; (2) bidding or proposal forms; and, (2) the Conditions of the Contract for Construction (General, Supplementary and other Conditions). The Architect also shall compile

the Project Manual (Specifications) that includes all of the Owner's "boiler plate" information and the Owner's Conditions of the Contract for Construction and Specifications.

1.1.3 The Architect/Engineer shall provide those services necessary to prepare final construction documents consisting of specifications, drawings and other documents of sufficient detail to fix and describe the final size and character of the project for approval by the Owner.

1.1.4 Construction Document Services consists of the following:

1.1.4.1 General – Review and checking of Design Development (or Preliminary Design) Documents to ensure all Owner-criteria is incorporated. The Architect/Engineer shall perform continuous review of the design and design process to ensure the highest level of quality control. 95% complete documents relate to the total effort required by the Architect/Engineer and all consultants to produce construction documents that are ready for bidding. The effort to perform final coordination checking, final corrections, incorporation of comments, and inclusion of the Owner's boiler plate constitutes the remaining 5% of the total effort necessary to produce the Contract Documents. Drawing index contains all drawings and all sheet titles agree. All alternates have been identified and properly delineated. All details are referenced. All details are complete with dimensions, notations and materials. All details (A, S, M, P, E, C, etc.) are specific to the project and have been edited to reflect the actual project conditions.

1.1.4.2 Architectural Design Services - Continued development and expansion of the design in order to proceed with and result in the final design documents. Documents shall consist of the final scope, relationships, forms, size and appearance. Complete floor plans, sections and elevations, selection of building systems and materials, development of dimensions, areas and volumes are to be included. Reflected ceiling plans must contain all light fixtures and HVAC grilles, registers and diffusers. Door and room finish schedules must be complete. Floor plans, elevations, and sections are completely dimensioned;

1.1.4.3 Structural Design - Continued development of specific structural materials and systems, analysis and development of design solutions. Complete and detailed structural system and dimensions, design, foundation, sizing of structural components and clearances, details, elevations plans and specifications. All details are specific to the project and ready for fabrication drawing development. All plans have been coordinated and verified against architectural and mechanical drawings;

1.1.4.4 Mechanical Design - Continued development of utilities, specific mechanical materials and systems, analysis and development of design solutions. Complete and detailed mechanical system and dimensions, heating, ventilating and air conditioning, plumbing, fire protection, vibration and acoustical control, equipment details, sizes, elevations, schedules, plans and specifications. Coordination of utilities serving the building with locations shown on civil plans;

1.1.4.5 Electrical Design - Continued development of specific data systems, electrical materials and systems, analysis and development of design solutions. Complete and detailed electrical system and dimensions, power service, distribution, lighting, information technology, communication, fire detection, alarms, chases, equipment layouts, circuits, panel board schedules, plans and specifications. Coordination of utilities serving the building with locations shown on civil plans;

1.1.4.6 Civil Design – Incorporate completed site survey and geotechnical analysis including layout of the entire site. Complete and detailed civil design regarding building location, final grading, location of paving for walkways, driveways, parking, all utilities, easements, boundary conditions, property limits, plans and specifications. All benchmark information, building corners, essential topographical information has been included;

- 1.1.4.7 Budget - Ensure the design is in accordance with the established budget Construction Cost. Continually review the project budget to coordinate appropriate design factors and limitations;
  - 1.1.4.8 Specifications - Complete development and coordination of all specifications necessary to describe and detail the entire project and to set the level of quality acceptable to the Owner. All Division 1 items pertain to the specific project and have been edited for completeness. Index contains all sections in the body of specifications. All specification sections apply to the specific project;
  - 1.1.4.9 Scheduling - Maintain the established project schedule. Perform reviews and revisions of the schedule indicating all milestones and anticipated impacts upon delivery of the project based upon issues and factors discovered during the design;
  - 1.1.4.10 Third-Party Coordination Review – The Owner may choose to have the documents reviewed through an independent, third-party. This does not relieve the Architect from the responsibility to provide the Owner with a fully-coordinated set of construction documents;
  - 1.1.4.11 Coordinate with the commissioning authority, provide the commissioning authority with all necessary information, assist with completion of the commissioning scope, provide one (1) design review set, and incorporate the commissioning specifications into the Project Manual (Specifications).
- 1.1.5 The Architect/Engineer is expressly required to specify materials, supplies, equipment, and systems to be completely free of all forms of asbestos.
- 1.1.6 The Architect/Engineer shall assist the Owner in filing the required documents for the approval of governmental authorities having interest in the Project. The Owner may request the Architect/Engineer to pay the plan review fee to the building code jurisdiction. The Owner shall then compensate the Architect/Engineer for the plan review fee through an addendum or as a supplemental service.
- 1.1.7 The Architect/Engineer shall request the “Boiler Plate” and essential bidding information from the Owner upon submission of the 95% Plans and Specifications for final review by the Owner. The Architect/Engineer shall provide and then coordinate the Division One specifications with the General Conditions of the Contract for Construction.
- 1.1.8 Prior to bidding, the Architect/Engineer shall provide Construction Documents including the Estimate of Construction for review and approval to the Agency point of contact and two (2) sets to the Owner. This review shall constitute the 95% submission of the design effort where the remaining 5% consists of incorporation of final review comments and the Owner’s “boiler plate” information.
- 1.1.9 The Architect/Engineer shall incorporate code review comments and make all corrections, additions, or deletions to the Plans and Specifications prior to distribution for bidding purposes, without the use of addenda, unless approved by the Owner.

## **BIDDING**

- 1.1.1 Unless approved by the Owner, the Architect/Engineer shall make all corrections, additions, or deletions to the final Plans and Specifications prior to distribution for bidding purposes and without the use addenda. No documents shall be distributed for bidding purposes without the express, written approval of the Owner.

- 1.1.2 The Architect/Engineer shall procure and administer the reproduction of Bidding Documents and distribution to prospective bidders and plans exchanges. If the number of sets for bidding purposes is not established in this Agreement, the Owner shall reimburse the Architect/Engineer for the direct costs of reproduction and distribution for all sets determined to be necessary for bidding. However, the Architect/Engineer and Owner shall agree on the number sets necessary at the time of bidding and the Architect/Engineer shall not exceed that number without approval of the Owner.
- 1.1.3 The Architect/Engineer, following the Owner's approval of the Plans and Specifications and the final Estimate of Construction Cost, shall assist the Owner in obtaining bids and in awarding the Construction Contract(s). Any interpretation of the Plans and Specifications by the Architect/Engineer will be issued by addenda to all plan holders. The Architect/Engineer will not issue any addenda within seven (7) calendar days of the bid opening without the permission of the Owner.
- 1.1.4 The Architect/Engineer shall arrange, attend, and conduct a pre-bid walk-through for the project unless the Owner specifically requests no walk-through. The pre-bid walk-through shall be scheduled and conducted not less than ten (10) calendar days prior to the bid opening. The Architect/Engineer shall prepare and submit to the Owner an agenda for the pre-bid walk-through. As a minimum, the agenda shall thoroughly address the Instruction to Bidders, Conditions of the Contract for Construction, site conditions, construction staging, permits, general scope of the Project, and all unique situations. The Architect/Engineer shall require the attendance and participation of any consultants when the cost, size and/or complexity of the Project in the opinion of the Owner necessitate their attendance.
- 1.1.5 The Architect/Engineer shall provide bidding services to include the following:
- 1.1.5.1 Organizing, coordinating, publishing, handling and distribution of all bidding documents including addenda and receipt and return of deposits;
  - 1.1.5.2 Assist the Owner in obtaining either competitive bids or negotiated proposals and maintaining the plan holders' list, assist in contacting and informing prospective bidders;
  - 1.1.5.3 Coordination and responses between the disciplines for all questions, clarifications, and addenda;
  - 1.1.5.4 Continue to coordinate with, and support, the commissioning process. The commissioning authority (CxA) may make a presentation during the pre-bid walkthrough to explain the commissioning process to all interested parties;
  - 1.1.5.5 Addenda - Preparation and distribution as may be required including any and all supplementary drawings, specifications, instructions and notices of changes. No addenda shall be issued by the Architect/Engineer within seven (7) calendar days of the bid date unless approved by the Owner;
  - 1.1.5.6 Budget - Remain aware of bidding climate and perform analysis of possible bid results in comparison to the project budget if market conditions alter from the final Estimate of Construction Cost or if errors/omissions are discovered in the final Estimate;
  - 1.1.5.7 Substitutions - Consideration, analysis, comparisons and recommendations relative to requested substitutions proposed by bidders;
  - 1.1.5.8 Bid Evaluation - Perform validation of the bids received and provide recommendations regarding the award of contracts as requested by the Owner;
  - 1.1.5.9 Coordinate and conduct negotiations in cooperation with the Owner and the Contractor in the event that the bids received are over the project budget but within the statutory 7% deductive negotiating range should the Owner choose this option. If negotiations

are successful, develop all documentation, drawings, drawing revisions, specifications, changes, and alterations including all related pricing in a manner similar to an addendum for formal pricing and signature by the contractor; and,

- 1.1.5.10 Redesign - Perform redesign in coordination with the Owner and publication of construction documents for re-bidding or after negotiations if the project is not awardable within the Owner's project budget.

## **CONSTRUCTION ADMINISTRATION**

1.1.1 The Architect/Engineer shall provide administration of the Construction Contract as set forth in this Agreement inclusive of the General Conditions of the Contract for Construction. The Architect/Engineer shall provide those services necessary to perform Construction Contract Administration to deliver a quality Project for the Owner which shall be inclusive of the following:

- 1.1.1.1 Construction contract administration involves all aspects of consultation, communication, progress reports, observations, meetings and functions necessary to maintain the project quality, budget, schedule and coordination;
- 1.1.1.2 Upon issuance of the Notice To Proceed from the Owner to the Contractor, coordinate and conduct a pre-construction conference with the Owner, Agency, and the successful contractor and appropriate subcontractors. Describe the overall project administration, all Division 1 requirements, general scope of the project, Agency issues and concerns to be met by the Contractor during construction;
- 1.1.1.3 Continue to coordinate with, and support, the commissioning process. The commissioning authority (CxA) may make a presentation during the pre-construction conference to explain the commissioning process to all interested parties. Direct questions regarding commissioning to the CxA. One (1) copy of approved submittals related to the CxA's efforts will be routed to the CxA for use in developing inspections and tests. Presence of the CxA on the job does not diminish the Architect/Engineer's responsibilities;
- 1.1.1.4 Coordination - Services between the architectural work and all disciplines involved in the design of the project;
- 1.1.1.5 Documents - Maintain sufficient sets of construction documents including all requests for information, requests for clarification, change orders, addenda, pay requests, shop drawings, submittals, etc. necessary to delivery a quality project within budget and on time. Services consist of preparation, reproduction, and distribution of all clarification/information/change order documents in response to the Contractor or the Owner. Documents shall describe in sufficient detail, all work to be added, deleted, modified, review of proposals, review recommended changes for impacts on substantial completion date;
- 1.1.1.6 Shop Drawings and Submittals - Perform review and comparison of all drawings and submissions by the Contractor for conformance to the construction documents. Provide appropriate actions in a timely fashion in order to inform the Contractor regarding the shop drawings and submittals but in no instance shall responses or actions be longer than fourteen (14) calendar days:
  - 1.1.1.6.1 Review and approve or take appropriate action upon the Contractor's submittals such as Shop Drawings, Product Data and Samples, checking for conformance with information given and the design intent expressed in the Contract Documents. Review of such submittals is not conducted for the purpose of determining the accuracy and completeness of other details such as dimensions and quantities, or for substantiating instructions for installation or performance of equipment

or systems, all of which remain the responsibility of the Contractor as required by the Contract Documents. The Architect/Engineer's review shall not constitute approval of safety precautions or, unless otherwise specifically stated by the Architect/Engineer, of any construction means, methods, techniques, sequences or procedures. The Architect/Engineer's approval of a specific item shall not indicate approval of an assembly of which the item is a component;

- 1.1.1.6.2 Review of shop drawings and submittals shall also include verification that materials, products, and systems being proposed by the Contractor are not asbestos-containing materials, products, or systems.
  - 1.1.1.6.3 If professional design services or certifications by a design professional related to systems, materials, or equipment are specifically required of the Contractor by the Contract Documents, the Architect/Engineer shall specify appropriate performance and design criteria that such services must satisfy. Shop Drawings and other submittals related to the Work designed or certified by the design professional retained by the Contractor shall bear such professional's written approval when submitted to the Architect/Engineer. The Architect/Engineer shall be entitled to rely upon the adequacy, accuracy and completeness of the services, certifications or approvals performed by such design professionals; and,
  - 1.1.1.6.4 The costs and expenses to the Architect/Engineer of more than one (1) review of each Shop Drawing, Product Data item, sample and submittals of the Contractor may be billed by the Architect/Engineer directly to the Contractor. The Owner shall not be liable to the Architect/Engineer for multiple reviews.
- 1.1.1.7 Representation - Serve as the representative of the Owner throughout the duration of the project, protecting the Owner's interest in obtaining delivery of the project in accordance with the Construction Documents. The Architect/Engineer shall be the representative of the Owner throughout the duration of this Contract and as such shall advise and consult with the Owner. Unless prior approval is received from the Owner, the Architect/Engineer is expressly prohibited from giving the Contractor direction that affects the construction contract amount, time, or both. The Architect/Engineer shall have authority to act on behalf of the Owner to the extent provided in the General Conditions of the Construction Contract unless otherwise modified in writing;
- 1.1.1.8 Schedules - Monitor the Contractor's progress relative to established schedules and make status reports accordingly. Compare the Contractor's schedule to current pay requests for accuracy and stage of completion. The Architect/Engineer shall take no action concerning the Contractor's schedule which may be interpreted as an approval or endorsement. However, the Architect/Engineer shall provide comments, concerns, inaccuracies, conflicts, etc. to the Contractor;
- 1.1.1.9 Pay Requests - Review and take appropriate action on all pay requests with regard to the Contractor's Schedule of Values, Progress Schedule, stored materials and stage of construction observed. Provide recommendations to the Owner with regard to payment based on observations at the site and the Contractor's Form 101, Periodic Estimate for Partial Payment request, the Architect/Engineer shall determine the amount owing to the Contractor and shall act upon the Contractor's Periodic Estimate for Partial Payment within seven (7) days of receipt. Certification of the Contractor's Form 101 shall constitute a representation by the Architect/Engineer to the Owner that the work has progressed to the point indicated; that to the best of the Architect/Engineer's knowledge, information and belief, the quality of the work is in accordance with the Plans and Specifications and that the Contractor is entitled to payment in the amount certified. If in the Architect/Engineer's opinion the Contractor is not entitled to the amount indicated on Form 101, he shall evaluate what percentage is due and revise the form accordingly and forward it to the Owner or return the Periodic Estimate for Partial Payment to the Contractor for revision. The

Architect/Engineer shall send the Contractor a copy of any revised pay request forwarded to the Owner;

- 1.1.1.10 Change Orders - Prepare, reproduce, and distribute all change orders for the requisite approvals. Perform estimates of cost, negotiate price, and determine impacts upon the Contractor and the date for project completion;
  - 1.1.1.10.1 The Architect/Engineer shall comprehensively complete the areas of "Justification for Change," "Justification for Cost Adjustment," and the "Justification for Schedule Adjustment" on the Change Order.
  - 1.1.1.10.2 It is the Architect/Engineer's responsibility to review Change Order pricing and time extension requests for their appropriateness and to make recommendations to the Owner.
  - 1.1.1.10.3 The Architect/Engineer may authorize minor changes in the Work not involving an adjustment in Contract Sum or an extension of the Contract Time which are consistent with the intent of the Contract Documents. If necessary, the Architect/Engineer shall prepare, reproduce and distribute Drawings and Specifications to describe Work to be added, deleted or modified.
  - 1.1.1.10.4 The Architect/Engineer shall not order or direct any changes in the Work without the approval of the Owner that involve adjustment of the Contract Sum or Contract Time.
- 1.1.1.11 Construction Change Directives - Prepare, reproduce and distribute construction change directives for those items where time is critical and/or a reasonable price cannot be negotiated with the Contractor. If the Contractor and Owner cannot agree on price and/or for the change but the Owner directs that it be performed, price and/or time will be negotiated at a later date;
- 1.1.1.12 The Architect/Engineer shall visit the project site as specified in the Agreement and as appropriate to the stage of construction:
  - 1.1.1.12.1 to become generally familiar with and to keep the Owner informed about the progress and quality of the portion of the Work completed;
  - 1.1.1.12.2 to endeavor to guard the Owner against defects and deficiencies in the Work; and,
  - 1.1.1.12.3 to determine in general if the Work is being performed in a manner indicating that the Work, when fully completed, will be in accordance with the Contract Documents.
- 1.1.1.13 Meetings - The Architect/Engineer shall conduct job meetings as part of project site visits with the Contractor, Owner, and Agency. The Architect/Engineer shall take minutes of the meeting and distribute typewritten copies to all parties attending the meeting within five (5) calendar days. The Architect/Engineer shall furnish the Owner with written field reports within five (5) calendar days of a project site visit. Any representative of the Architect/Engineer sent to the Project site shall be subject to the Owner's approval;
- 1.1.1.14 Field Observations - Services consisting of site visits at intervals appropriate to the stage of construction and/or as otherwise generally agreed upon in order to become familiar with the overall progress and quality of the work in accordance with the Construction Documents. The Architect/Engineer shall maintain a photographic log of the progress of the work and shall prepare and distribute field reports along with meeting minutes. The Architect/Engineer shall report to the Owner known deviations from the Contract Documents and from the most recent construction schedule submitted by the Contractor;
- 1.1.1.15 Requests For Information (RFI) – The Architect/Engineer shall investigate and respond to Contractor requests for information in a timely fashion and in no instance in more than seven (7) calendar days. Should an RFI require additional time, the

Architect/Engineer shall inform the Owner and Contractor of such within the seven (7) day period. The Owner shall not be liable to the Architect/Engineer for the Contractor's failure to carefully investigate, study and compare the Contract Documents or if the Contractor should use the request for information process to seek extensions of the Contract for Construction, compensation, or hinder the Work in any manner;

1.1.1.16 Cost Accounting - Maintain records of the Project Budget and all impacts thereupon which include, but are not limited to, testing services, incidental impacts, potential claims and all changes; and,

1.1.1.17 Project Closeout:

1.1.1.17.1 Services to be initiated upon notice from the Contractor that the work is substantially complete, in accordance with the Construction Documents, to permit beneficial occupancy or utilization, and consisting of a detailed inspection for conformity of the Work, compilation of a punch list, inspection of punch list items as completed by the Contractor, issuance of certificate of substantial completion, final inspections, review and approval of operations and maintenance manuals, receipt and transmittal of warranties, affidavits, lien waivers, permits and issuance of final certificate for payment.

1.1.1.17.1.1 The costs and expenses to the Architect/Engineer of more than one (1) substantial completion and one (1) final acceptance inspection may be billed by the Architect/Engineer directly to the Contractor. The Owner shall not be liable to the Architect/Engineer for multiple inspections to validate Substantial Completion or Final Acceptance; and,

1.1.1.17.1.2 The Architect/Engineer shall endeavor to have the Contractor complete all punch list items within thirty (30) calendar days of issuing Substantial Completion. The Architect/Engineer shall conduct inspections as part of his contracted site visits to determine Substantial Completion and Final Acceptance. The Architect/Engineer shall not authorize Substantial Completion or Final Completion without the approval of the Owner. Final payment shall not be approved by the Architect/Engineer prior to receipt and approval of all closeout items and consent of the Owner;

1.1.1.17.2 Record Documents – the Architect/Engineer shall furnish the Owner two (2) sets of final, reproducible as-built Record Drawings that have incorporated changes made during the construction process which reflect the as-built conditions. The Architect/Engineer shall also furnish the Owner with two (2) full sets of Record Drawings in AutoCAD electronic media format (both .dwg and .plt files) and all Project Manuals (Specifications) on compact discs labeled with the Project name and the Owner's project number. One (1) set of reproducible drawings and one (1) set of the discs shall be sent to the Agency. All items shall be provided not less than thirty (30) calendar days after the date of Final Acceptance;

1.1.1.17.3 O&M Manuals - Processing, reviewing and taking appropriate action on Operations and Maintenance Manuals provided by the Contractor. Approved O&M Manuals are to be provided to the Agency;

1.1.1.17.4 The Architect/Engineer shall receive from the Contractor and forward to the Owner:

1.1.1.17.4.1 consent of surety or sureties to reduction in or partial release of retainage or the making of final payment; and,

1.1.1.17.4.2 affidavits, receipts, releases and waivers of liens or bonds indemnifying the Owner against liens.

1.1.1.17.5 Commissioning Report - The CxA will prepare the commissioning report for submittal to the Owner, Architect/Engineer, Contractor and the agency. The Architect/Engineer shall respond to issues in the commissioning report; and,

1.1.1.17.6 Warranty Period - Investigate contractual and construction problems which arise during the warranty period. Perform inspection of the project, document warranty problems, and assist the Owner in having the Contractor provide corrective action.

1.1.1.17.6.1 The Architect/Engineer shall conduct a warranty inspection within thirty (30) calendar days prior to the expiration of the warranty period to determine if any defects in the work exist. The Architect/Engineer shall notify the Owner, both verbally and in writing of defects, and whether or not the defective work is covered by the warranty. All warranty work or repairs shall be under the direction of the Architect/Engineer. The Architect/Engineer shall notify the Owner of defective work and shall then, in conjunction with the Owner, notify the Contractor in accordance with the General Conditions of the Construction Contract.

1.1.1.17.6.2 The warranty period commences upon substantial completion and continues for a period of one year from the date of Final Acceptance as defined in the General Conditions of the Contract for Construction. Unless noted otherwise, the date of Final Acceptance shall be the date of the Architect/Engineer's approval of the final pay request.

1.1.2 The Architect/Engineer shall be the interpreter of the requirements of the Contract Documents. All interpretations, responses to requests for information, and decisions concerning the Contract Documents shall be in writing and issued to the Contractor and Owner by the Architect/Engineer. The Architect/Engineer shall not be responsible for the Contractor's failure to perform the Work in accordance with the requirements of the Contract Documents. The Architect/Engineer shall be responsible for the Architect/Engineer's negligent acts, errors, or omissions, but shall not have control over or charge of and shall not be responsible for acts or omissions of the Contractor, Subcontractors, or their agents or employees, or of any other persons or entities performing portions of the Work.

1.1.3 The Architect/Engineer shall have authority to reject work that does not conform to the Contract Documents. Whenever the Architect/Engineer considers it necessary or advisable, the Architect/Engineer will have authority to require inspection or testing of the Work in accordance with the provisions of the Contract Documents, whether or not such Work is fabricated, installed or completed. However, neither this authority of the Architect nor a decision made in good faith either to exercise or not to exercise such authority shall give rise to a duty or responsibility of the Architect/Engineer to the Contractor, Subcontractors, material and equipment suppliers, their agents or employees or other persons or entities performing portions of the Work. The Architect/Engineer shall advise the Owner of any and all rejected work and whether or not it may be necessary to stop work. The Owner will issue any Stop Work Orders to the Contractor. The Architect/Engineer shall neither have control over or charge of, nor be responsible for, the

construction means, methods, techniques, sequences or procedures, or for safety precautions and programs in connection with the Work, since these are solely the Contractor's rights and responsibilities under the Contract Documents.

- 1.1.4 A change in services or fees will be negotiated for work done on Change Orders only if the Change Order is Owner-initiated. As the Architect/Engineer is responsible for the professional quality, technical accuracy, and coordination of all services required under this Agreement, the Architect/Engineer shall be liable to the Owner for costs and/or damages resulting from errors, deficiencies, or omissions in designs and services furnished.
- 1.1.4.1 When a Change Order to the Contract for Construction is required because of errors, deficiencies, or omissions, the Owner shall consider the extent to which the Architect/Engineer may be reasonably liable.
- 1.1.4.2 Change Orders as a result of errors, deficiencies, or omissions through defective design, insufficient information in the Contract Documents, foreseeable conditions, deficient planning, phasing and foresight, deficient coordination between disciplines or negligence by the Architect/Engineer shall be performed at his expense as follows:
- 1.1.4.2.1 Errors - The Architect/Engineer shall be responsible for all costs in order to make the Owner whole which shall include, but not be limited to, design, testing, and construction expenses.
- 1.1.4.2.2 Deficiencies and Omissions - The Architect/Engineer shall be responsible for all design and those costs over-and-above what the Owner would have paid had the omission been included in the as-bid Contract Documents. Over-and-above costs may be negotiated between the Owner and Architect/Engineer.
- 1.1.5 The Architect/Engineer shall not be reimbursed nor receive additional fees for time extensions of the Construction Contract for negligent, deficient, or poor performance with regard to: submittals and shop drawings, requests for information, pay requests, all Change Orders other than Owner-initiated Change Orders. Should the Contract for Construction be delayed for an extended period, regardless of fault or cause, any additional fees for the Architect/Engineer shall be determined after Substantial Completion or after all claims and/or disputes have been resolved. In all instances, compensation shall be limited to additional site visits, processing of pay requests, and participation in disputes/claims as defined in this Agreement that occur between Owner and Contractor for which the Architect/Engineer is not at fault either partly or wholly.
- 1.1.6 The Architect/Engineer shall interpret and decide matters concerning performance of the Owner and Contractor under and requirements of, the Contract Documents upon written request of either the Owner or Contractor. The Architect/Engineer's response to such requests shall be made in writing within any time limits agreed upon or otherwise with reasonable promptness.
- 1.1.7 Interpretations and decisions of the Architect/Engineer shall be consistent with the intent of and reasonably inferable from the Contract Documents and shall be in writing or in the form of drawings. When making such interpretations and initial decisions, the Architect shall endeavor to secure faithful performance by both Owner and Contractor, shall not show partiality to either, and shall not be liable for the results of interpretations or decisions so rendered in good faith.
- 1.1.8 The Architect/Engineer shall render initial decisions on claims, disputes or other matters in question between the Owner and Contractor as provided in the Contract Documents.

**[END OF PERFORMANCE AND DOCUMENT SUBMISSION REQUIREMENTS]**