

Facilities Architectural Services

Required Minimum Licenses and/or Certifications:

- Registered Architect in State of Washington (RA) within the Firm

Purpose

Scope of Work for Architectural Services establishes guidelines for determining the necessary professional services required to deliver a Washington State Department of Transportation facility project.

Scope of Work for Architectural Services defines the basic services that should be included in each applicable project phase of a facility project for the typical design/bid/build process, and provides further definition of what are considered reimbursable expenses, extra and other services.

Basic Consultant Services

The following is a guide for breaking down the Consultant fee into each phase of work. The intent of this guide is to ensure that design requirements progress in an orderly manner and that essential planning and system development occur at a stage where it is most beneficial to the project. Essential elements of the work should be completed and approved prior to initiating succeeding project phases.

Project Phase

Schematic Design
Design Development
Construction Document
Bidding
Construction
Project Closeout

Consultant basic services are described in detail and categorized into the following project phases:

Schematic Design Services

In the Schematic Design Phase, the prime Consultant provides those services necessary to prepare Schematic Design Documents consisting of drawings and other documents illustrating the general scope, scale, and relationship of project components for approval by the agency. Design should be conceptual in character, based on the requirements developed during the Predesign Phase, approved by the agency, or program requirements provided by the agency, reviewed, and agreed upon by the Consultant. Schematic design includes the following:

**Project Administration**

Services consisting of schematic design administrative functions including consultation, meetings and correspondence, and progress design review conferences.

Disciplines Coordination

Coordination between the prime Consultant's work and other involved consultants for the project. When specialty consultants are used, additional coordination beyond basic services may be required and negotiated for appropriate phases of the work.

Document Checking

Review and coordination of project documents.

Consulting Permitting Authority

Consultations, research of critical applicable regulations, preparation of written and graphic explanatory materials. The services apply to applicable laws, statutes, regulations, and codes.

Data Coordination

Review and coordination of data furnished for the project by the agency.

Architectural Design

Services responding to scope of work (program/predesign) requirements and consisting of preparation of conceptual site and building plans, schematic sections and elevations, preliminary selection of building systems and materials, development of approximate dimensions, areas and volumes.

Structural Design

Services consisting of recommendations regarding basic structural material and systems, analysis, and development of conceptual design solutions.

Mechanical Design

Services consisting of consideration of alternate materials, systems and equipment, and development of conceptual design solutions for energy sources/conservation, heating, ventilating and air conditioning (HVAC), plumbing, fire protection, and general space requirements.

Electrical Design

Services consisting of consideration of alternate systems, recommendations regarding basic electrical materials, systems and equipment, analysis, and development of conceptual design solutions for power service and distribution, lighting, communication raceways, fire detection and alarms, and general space requirements.

Civil/Site Design

Services consisting of site planning including layout of site features, building position, preliminary grading, location of paving for walkways, driveways and parking, and fencing locations. Also included are the normal connections required to service the building such as water, drainage, and sanitary systems, if applicable.

Specifications

Services consisting of preparation for agency's approval of proposed development of prime Consultant's outline specifications, and coordination of outline specifications of other disciplines.

Materials Research

Services consisting of identification of potential of materials, systems, and equipment.

Scheduling

Services consisting of reviewing and updating previously established project schedules or initial development of schedules for decision-making, design, and documentation.

Cost Estimating

Services consisting of development of a probable construction cost from quantity surveys and unit costs of building elements for the project. Costs shall reflect the level of design elements presented in the Schematic Design documents, plus appropriate design contingencies to encompass unidentified scope ultimately included in the program. Assist agency with analyzing scope, schedule, and budget options to stay within the MACC.

Presentations

Services consisting of appropriate presentation(s) of Schematic Design documents by the prime Consultant to agency representatives

Design Development Service

In the Design Development Phase, the prime Consultant shall provide those services necessary to prepare from the approved Schematic Design Documents, the Design Development Documents consisting of drawings and other documents to fix and describe the size and character of the entire project for approval by the agency. Consideration shall be given to availability of materials, equipment and labor, construction sequencing and scheduling, economic analysis of construction and operations, user safety and maintenance requirements, and energy conservation. Design Development includes the following:

Project Administration



Services consisting of design development administrative functions including consultation, meetings and correspondence, and progress design review conferences with user agency.

Disciplines Coordination

Coordination of the prime Consultant's work with other involved consultants for the project.

Document Checking

Review and coordination of documents prepared for the project.

Permitting Authority Consulting

Consultations, research of critical applicable regulations, preparation of written and graphic explanatory materials. The services apply to applicable laws, statutes, regulations, and codes. Assist in obtaining approval from approving agencies as required.

Data Coordination

Review and coordination of data furnished for the project by the agency.

Architectural Design

Services consisting of continued development and expansion of architectural Schematic Design Documents to establish the final scope, relationships, forms, size, and appearance of the project through plans, sections and elevations, typical construction details, three-dimensional sketches, materials selections, and equipment layouts.

Structural Design

Services consisting of continued development of the specific structural system(s) and Schematic Design Documents in sufficient detail to establish basic structural system and dimensions, structural design criteria, foundation design criteria, preliminary sizing of major structural components, critical coordination clearances, and outline specifications or materials lists.

Mechanical Design

Services consisting of continued development and expansion of mechanical Schematic Design Documents and development of outline specifications or materials lists to establish approximate equipment sizes and capacities, preliminary equipment layouts, required space for equipment, chases and clearances, acoustical and vibration control, visual impacts, and energy conservation measures.

Electrical Design



Services consisting of continued development and expansion of electrical Schematic Design Documents and development of outline specifications or materials lists to establish criteria for lighting, electrical and communication raceways, approximate sizes and capacities of major components, preliminary equipment layouts, required space for equipment, chases, and clearances.

Site Design

Services consisting of continued development of civil/site Schematic Design documents and development of outline specifications required for the project that are normally prepared by the architect.

Specifications

Services consisting of preparation for agency's approval of the prime Consultant's outline specifications, coordination of outline specifications of other disciplines, and production of design manual including design criteria, and outline specifications of materials lists.

Scheduling

Services consisting of reviewing and updating previously established schedules for the project.

Cost Estimating

Services consisting of development of a probable construction cost from quantity surveys and unit costs of building elements for the project. Costs shall reflect the level of design elements presented in the Design Development documents, plus appropriate design contingencies to encompass unidentified scope ultimately included in the program. Assist agency with analyzing scope, schedule and budget options to stay within the MACC.

Presentations

Services consisting of appropriate presentation(s) of Design Development documents by the prime Consultant to agency representatives.

Construction Document Services

In the Construction Documents Phase, the prime Consultant shall provide those services necessary to prepare for approval by the agency, from the approved Design Development Documents, Construction Documents consisting of drawings, specifications, and other documents setting forth in detail the requirements for construction of the project, bidding, and contracting for the construction of the project.

Project Administration



Services consisting of construction documents, administrative functions including consultation, meetings and correspondence, and progress design review conferences.

Disciplines Coordination

Coordination of the prime Consultant's work with the work of other involved consultants for the project.

Document Checking

Review and coordination of documents prepared for the project.

Permitting Authority Consulting

Consultations, research of critical applicable regulations, preparation of written and graphic explanatory materials. The services apply to applicable laws, statutes, regulations, and codes. Assist in obtaining approval from approving agencies as required.

Data Coordination

Review and coordination of data furnished for the project by the agency.

Architectural Design

Services consisting of preparation of drawings based on approved Design Development Documents setting forth in detail the architectural construction requirements for the project.

Structural Design

Services consisting of preparation of final structural engineering calculations, drawings and specifications based on approved Design Development Documentation, setting forth in detail the structural construction requirements for the project.

Mechanical Design

Services consisting of preparation of final mechanical engineering calculation, drawings and specifications based on approved Design Development Documentation, setting forth in detail the mechanical construction requirements for the project.

Electrical Design

Services consisting of preparation of final electrical engineering calculation, drawing and specifications based on approved Design Development documentation, setting forth in detail the electrical construction requirements for the project.

Site Design

Services consisting of preparation of final civil/site design drawings and specifications based on approved Design Development documentation required for the project, which



are normally prepared by the architect. See Extra Services for detailed civil design services beyond basic services.

Specifications

Services consisting of activities of development and preparation of bidding documents, specifications, coordination of specifications prepared by other disciplines, and compilation of project manual.

Cost Estimating

Services consisting of development of a probable construction cost from quantity surveys and unit costs of building elements for the project. Costs shall reflect the level of design elements presented in the Construction documents plus appropriate design contingencies to encompass unidentified scope ultimately included in the program. Assist agency with analyzing scope, schedule, and budget options to stay within the MACC.

Scheduling

Services consisting of reviewing and updating previously established schedules for the project.

Bidding Phase

In the Bidding Phase, the prime Consultant, following the agency's approval of the Construction Documents and the most recent statement of probable construction cost, shall provide those services necessary to assist the agency in obtaining bids and in awarding and preparing contracts for construction.

Project Administration

Services consisting of bidding administrative functions.

Disciplines Coordination

Coordination between the prime Consultant's work and the work of other involved consultants for the project.

Bidding Materials

Services consisting of organizing, coordinating, and handling Bidding Documents for reproduction, distribution and retrieval, receipt, and return of document deposits.

Addenda

Services consisting of preparation and distribution of Addenda as may be required during bidding and including supplementary drawings, specifications, instructions, and notice(s) of changes in the bidding schedule and procedure.

Bidding

Services consisting of participation in pre-bid conferences, responses to questions from bidders, and clarification or interpretations of the bidding documents, attendance at bid opening, and documentation and distribution of bidding results.

Bid Evaluation

Services consisting of validation of bids, participation in review of bids and alternates, evaluation of bids, and recommendation on award of contract.

Construction Contract Administration Phase

In the Construction Contract Administration Phase, the prime Consultant shall provide those services necessary for the administration of the construction contract as set forth in the General Conditions of the Contract for Construction.

Project Administration

Services consisting of construction contract administrative functions including consultation, conferences, communications, and progress reports.

Disciplines Coordination

Coordination between the prime Consultant's work and the work of other involved consultants for the project.

Document Checking

Reviewing and checking of documents (required submittals) prepared for the project.

Permitting Authority Consulting

Services relating to applicable laws, statutes, regulations and codes of regulating entities relating to the agency's interests during construction of the project.

Construction Administration

Services consisting of processing of submittals, including receipt, review of and appropriate action on shop drawings, product data, samples, and other submittals required by the contract documents. Distribution of submittals to agency, contractor, and field representatives as required. Maintenance of master file of submittals and related communications.

Construction Field Observation

Services consisting of visits to the site at intervals appropriate to the stage of construction or as otherwise agreed to become generally familiar with the progress and quality of the work and to determine in general if the work is proceeding in accordance with the contract documents, and preparing related reports and communications.



Project Representation

Services consisting of preparation, reproduction, and distribution of clarification documents and interpretations in response to requests for clarification by contractors or the agency.

Documents

Maintenance of records and coordination of communications relative to requests for clarification or information (RFI). Preparation, reproduction and distribution of drawings and specifications to describe work to be added, deleted or modified, review of proposals, review and recommend changes in time for substantial completion, assisting in the preparation of modifications of the contracts and coordination of communications, approvals, notifications, and record-keeping relative to changes in the work.

Scheduling

Services consisting of monitoring the progress of the contractors relative to established schedules and making status reports to the agency.

Cost Accounting

Services consisting of maintenance of records of payments on account of the contract and all changes thereto, evaluation of applications for payment and certification thereof, and review and evaluation of cost data submitted by the contractors for work performed.

Project Closeout

Project Closeout

Services initiated upon notice from the contractor that the work is sufficiently complete, in accordance with the contract documents, to permit occupancy or utilization for the use for which it is intended, and consisting of a detailed inspection for conformity of the work to the contract documents, issuance of certificate of substantial completion, issuance of a list of remaining work required (punch list), final inspections, receipt and transmittal of warranties, affidavits, receipts, releases and waivers of lien or bonds, permits, and issuance of final certificate for payment.

Record Documents (As-Built)

Receive and review the contractors marked up field records. Supply the record documents to the agency (transferring the contractor's record of field changes to the original record drawings may be authorized by the agency as an additional service).

Operations and Maintenance Manuals

Services consisting of processing, reviewing, commenting on, taking appropriate action, and transmitting Operations and Maintenance Manuals provided by the contractor to the agency.

Warranty Period

Continued assistance to investigate contract problems that arise during the warranty period.

Extra Services/Reimbursable and Other Services

The majority of projects should be completed within basic services. However, some projects may require a range of Extra Services/Reimbursable and Other Services. These services typically require specialist expertise and may not neatly fall within one phase of service or another. Extra Services/Reimbursable are those services generally provided by the same prime Consultant providing the basic services and Other Services are those services generally provided by additional specialty consultants either as subs to the prime Consultant or as independent Consultants directly contracted with the agency.

Alternative Cost Studies

Additional costing beyond the reactive estimates required in basic services as requested by the agency.

Energy Life Cycle Cost Analysis

All projects over 25,000 square feet are required by RCW 39.25 to be analyzed for the cost of energy consumption and operation during its entire economic life.

Commissioning and Training

The cost to the A/E of assembly, tabulation, and indexing of all shop drawings and submittals on all equipment, controls, systems, and participating in an independent commissioning of the project and providing initial operator training on the maintenance of systems.

On-Site Representative

On-site observation beyond the periodic site visits required under basic services.

Thermal Scans

The cost of an examination of a structure for thermal loss on existing facilities to be remodeled.

Value Engineering, Participation and Implementation

The cost to the prime Consultant for participation in the value Participation engineering study and implementation of the accepted ideas that generate during the study.

Renderings, Presentations and Models



The cost to for special presentations, renderings, and models required for the project.

Constructability Review Participation and Implementation

The cost to the prime Consultant for participation in the constructability review and implementation of the accepted changes.

Leadership in Energy and Environmental Project Design

The cost of providing services for negotiation, documentation, and associated services required for sustainable design certificates with the U.S. Green Building Council.

Specialty Consultants

The cost of only those additional consultant services beyond A/E services provided under basic services.

Acoustical Consultant

Civil Engineering, additional services may include:

- Studies, reports, and calculations required to determine adequacy of existing systems or those required for permit review such as drainage, fire protection or sewer.
- Storm draining design connections.
- Design or study of issues for “sensitive areas” such as wetlands, steep slopes, or flood plains.
- Water supply connections to wells, treatment systems, storage and off-site main extensions.
- Sanitary sewer design and infrastructure.
- Road pavement improvements.
- Storm water quality and quantity computations, reports, design and details.
- Temporary erosion and sediment computations, reports and drawings.
- Special studies and reports for other agencies.

Communication Consultant

Cost/Scheduling Consultant (Independent)

Electronic/Audio Visual Consultant

Elevator Consultant

Hazardous Material Consultant

Interior Design Consultant

Laboratory Consultant

Landscape Consultant

Kitchen Consultant

Landscape Consultant

Quality Control Consultant

Security Consultant

**Geotechnical Investigation**

The cost of subsurface testing and evaluation.

Commissioning

The cost of independent commissioning of the project.

HVAC Balancing

The cost to balance systems.

Site Survey

Cost of conducting a survey.

Testing

The cost of a technician's services in acquiring and testing samples of materials used in the project as required in the State Building Code.

Energy LCCA Review

Fee to be paid for review of the energy life cycle cost analysis.

Graphics

The cost of special graphic signage design.

Design/Code Plan Check

The cost of an independent plan check, if not available within the local jurisdiction.

Feasibility and Planning Studies

The cost to prepare concept reports, site selection evaluations, and other pre-design tasks.