

Guidelines for Determining Architect/Engineer Fees for Public Works Building Projects (effective July 1, 2025)

When budgeting for state capital projects, the estimated value of the Architectural/Engineering (A/E) Basic Services fee (Exhibit A) can be determined by using these fee guidelines. The guidelines are divided into three levels determined by the type and complexity of the building. They are used in the preparation of capital budget requests for Washington State agency public works building projects.

The payment of A/E fees represents some of the most important dollars spent on a project. These funds are an investment affecting both the quality and successful completion of a project. Recognizing this, calculation of a fee structure to obtain quality design at a reasonable cost presents a challenge. There are pros and cons associated with any system used to set fees, and there is great variation in the types and complexity of state construction projects.

These fee guidelines originally were the outcome of a 2014 study coordinated by the Office of Financial Management (OFM) to review other fee guidelines and identify approaches used by other states, with a follow-up study in 2022 to provide updates and adjustments. The initial study included state agencies, the Washington Council of the American Institute of Architects, American Council of Engineering Companies of Washington, and state universities. The 2022 update included engagement with state agencies, state higher education institutions, and the Capital Projects Advisory Review Board.

Use of the Guidelines

These fee guidelines should be used in preparing capital budget requests to determine the maximum amount that may be payable for A/E basic service fees in fixed price agreements and percent of construction cost agreements. The guidelines define the standard basic services (based on the definition of basic services) that should be included in each design phase of state public works projects for:

- Design/Bid/Build (DBB)
- GC/CM
- Design Build – Performance Based
- Design Build – Bridging Documents
- Design Build – Progressive

They also provide further definition of what are considered reimbursable expenses, extra and other services.

It is strongly recommended that agencies pay design consultant fees using this guidance as a maximum, as these fee schedules are incorporated into the C-100 form for capital project cost estimates. Project costs may not exceed the project's appropriation. Agencies should be prepared to justify their decision to exceed the maximum.

Percent Fee Compensation

The standard fee schedule has been prepared to establish a basis for determining the scope and cost of design services and to focus the attention of agencies on the quality, capability, and prior performance of the firms being selected for public works projects.

The fee schedule is used to prepare agency capital project budget requests. The actual contracts for basic services payable to the A/E shall be a negotiated fixed amount or percentage of the maximum allowable construction cost of the project not including fees, licenses, permits, sales taxes, contingencies, and change orders caused by A/E errors or omissions or change orders which do not require design consultant services. Based on the specific circumstances of each project, the final negotiated fee may be above or below the guidelines shown on the schedule. In addition to the basic services fee, allowances will be negotiated for services not covered in the basic services contract

Basic Services

The budget for A/E basic services is based on the Maximum Allowable Construction Cost, or **MACC**, plus **Construction Contingency** as reflected in the C-100 cost estimating form.

The negotiated fee for A/E basic services should be based on the **MACC** only as shown in Exhibit A – A/E Fee Schedule. Any design services required to support work related an expenditure from the Construction Contingency should be negotiated and funded as needed from the Construction Contingency.

Remodel Design

A/E costs and effort may vary greatly between individual remodel projects of the same dollar amount. Consequently, each project will be analyzed on an individual basis. As a general rule, the fee will be based on the building type classification. Generally, when program changes are significant or, if warranted by other conditions, fees noted under those schedules may be increased by up to three percent for basic services. Factors to be considered include:

- Age and character of the building
- Availability and accuracy of existing plans and specifications
- Extent and type of program revisions
- Requirement to maintain the building's existing character
- Extent of mechanical and electrical involvement

Phased construction in occupied buildings may substantially affect the construction schedule. More field observation and coordination may require consideration of additional fees beyond the basic services contract amount.

Fee Modifications

It is recognized that there may be considerable variance between projects of a similar size and type that may necessitate modification of the A/E fee schedule. Examples of special circumstances that may necessitate such modifications include:

- Unusual site conditions
- Unique problems requiring specialized or extensive consulting services
- Renovations required by additions to an existing structure
- Unusually slow or fast development schedule (fast track, design build, GC/CM)
- Contractor design (fire protection systems)
- Large portions of work outside the control of the prime architect (wetlands mitigation)

Other circumstances where a fee modification may be appropriate include the following:

Repetitive Design

Where all or part of a project is a site adaptation of a previous design, the basic services fee shall be negotiated, recognizing the reduced level of services. This usually reduces the program analysis, design, and bidding document preparation costs to an amount necessary to update the documents for site work, code revisions, etc. Reductions must be considered on a case-by-case basis

Equipment and Substantially Reduced Work Requirements

Where a project involves a substantial amount of expensive equipment that may be relatively easy to accommodate, fees should be reduced accordingly. Likewise, any contract or modification to a contract where work requirements are substantially less than indicated by the application of a percentage fee need to be addressed separately. Projects with disproportionate elements of high cost, such as earth moving, may be relatively easy to design and fees should be reduced accordingly.

Prototype Design

The initial design of a prototype facility, such as a housing unit at an institution, may warrant a full design fee based on the previous development of the prototype. Generally, the fee for A/E basic services for all additional replications of the prototype constructed at the same time or at other locations in the future shall be calculated at 40 percent of full fees.

Policy Regarding Geographic Location of Consultant

It is the state's policy to obtain the highest quality design services for a fair and equitable payment to the design firm. The state recognizes that the investment for quality design services is directly related to a well-organized construction process and maximum functionality of the completed project. With this in mind, proposals for design services will be accepted from all firms wishing to work for the state, and evaluated based on the firm's capability, competency, and experience in successfully completing similar projects.

The fee structure should be appropriate for each project, regardless of the location of the consultant. The basic services fee includes all travel costs associated with the performance of basic services within a 50-mile radius of the project. General expenses for the cost of travel and per diem between 50 and 350 miles shall be based on state rates and may be reimbursable to the extent they are reasonable and negotiated within the A/E agreement. Travel expenses beyond 350 miles for both the agency and consultants must be justified in writing when submitting a budget request or allotments to OFM.

Application of Guidelines to Alternative Delivery Projects

General Contractor as Construction Manager (GC/CM)

The proposed fee table for the GC/CM delivery method includes additional A/E fees to cover the additional coordination and reconciliation inherent in the delivery method. The basic and extra services should follow the AE guidelines in all other respects.

Where the GC/CM scope includes "design assist", with transfer of elements of the AE services to the contractor or subcontractor, (for example: deferred approvals, design detailing, etc.), the AE Fee must be reduced accordingly.

Design Build

The fee for Design Build contracts should be based on the services required and whether the services are to be provided by an agency retained A/E or by the Design Build Entity. The fee tables are structured for agency retained A/E. They may be used as guidance for budgeting for the design build entity architectural service.

Fee budgets for services provided by agency retained A/E should be included on tab B: Consultant Services in the C-100. Fee budgets for services provided by the design build entity are part of the construction contract and should be included on tab C: Construction Contracts.

While there are many variations of design build contract, the state commonly uses three forms of Design Build contract. These are:

- Performance Based
- Bridging Documents
- Progressive

For performance based design build and progressive design build, contracts are procured based on a predesign Basis of Design (BOD). This is prepared prior to the start of basic services as defined by the state, and so there will be basic A/E services included on tab B: Consultant Services.

For bridging design build, the design build contract is procured based on partially complete design documents. prior to bidding, the basic services are identical to those required for conventional design bid build. following the award there is no further involvement for the agency ae consultant. in consequence, the design bid build fee table can be used up to the point of bidding.

A/E Basic Services

A/E Basic Design Services consist of the services described in the following pages. These design services include normal architectural, structural, civil, mechanical, and electrical engineering services.

Basic Services Fee Breakdown

The following is a guide for splitting the A/E fee into approximate percentages for each phase of work. Although it is not intended to be absolute, significant deviations should be closely reviewed. The intent of the guidelines is to ensure that design requirements progress in an orderly manner and that essential planning and system development occur when most beneficial to the project. Essential elements of the work should be completed and approved prior to initiating succeeding design phases. For a more detailed explanation of activities normally included in each phase, see the A/E Basic Services section.

The basic fee categories are described below:

Percent of Basic Services Fee	
Schematic Design	18
Design Development	20
Construction Document	31
Bidding	2
Construction	27
Project Closeout	2

Schematic Design Services (18 Percent)

In the schematic design phase, the A/E 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 and reviewed and agreed upon by the A/E.

Schematic design includes the following:

Project Administration	Services related to schematic design administrative functions including consultation, meetings and correspondence, and progress design review conferences.
Disciplines Coordination	Coordination between the architectural work and engineering 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 User Agency	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.
Sustainability, Energy Modeling, Well Building and Resilience	Services related to designing, evaluating and modeling for sustainability, well building and resilience to the degree required by statute, regulation, code or Washington state policy, including any required energy modeling or simulation.
LEED Certification	Services related to LEED certification to a silver level, including preparation of any documentation and material required to support an application.
BIM Coordination	Services consisting of setting up and managing Building Information Model (BIM), including creation of integrated data structure, naming conventions, clash detection, etc.
Specifications	Services consisting of preparation for agency's approval of proposed development of architectural outline specifications, and coordination of outline specifications of other disciplines.
Materials Research	Services consisting of identification of potential of architectural 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. Parametric 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. Reconcile contingencies with project risk register. Reconcile statement of probable construction cost with C-100 budget forms. Assist user 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 A/E to agency representatives.
Energy Life Cycle Cost Analysis (ELCCA)	Prepare and submit ELCCA preliminary report as required by Chapter 39.35 RCW, in accordance with Energy Life Cycle Cost Analysis guidelines for public agencies in Washington state, published by DES
Life Cycle Cost Analysis (LCCA):	Perform Life Cycle Cost Analysis of major building systems and components as required by Chapter 39.35 RCW and EO 13-03 for all projects valued over \$5,000,000 or projects constructing new building space over 5,000 square feet, using the OFM Life Cycle Cost Tool (LCCT).
Commissioning and Training	Cost to the A/E for supporting any independent commissioning of the project, including providing documentation and reviewing design concepts as part of any design phase commissioning.
Risk Management	Review and update risk register developed in the predesign/budget submission process. Establish risk management protocols appropriate to the scale of the project. <ul style="list-style-type: none"> • For projects valued over \$50,000,000, the risk management process should include a formal quantitative risk register and risk based contingency valuation • For projects valued between \$10,000,000 and \$50,000,000 the risk management process should include a formal qualitative risk register • For projects under \$10,000,000 the risk management process may be an informal qualitative risk documentation
Escalation and Market Assessment	Review and update escalation and market assessment developed in the predesign/ budget submission process. At completion of the schematic design phase, update escalation and market assessment. <ul style="list-style-type: none"> • For projects valued over \$50,000,000, the escalation and market assessment should include a formal report identifying key cost and escalation drivers, together with an assessment of the market capacity and readiness to deliver the project. • For projects valued under \$50,000,000 the escalation and market assessment may be an informal qualitative market assessment documentation.

Design Development Services (20 Percent)

In the design development phase, the A/E shall provide those services necessary to use the approved schematic design documents to prepare 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 architectural work and the work of engineering with other involved consultants for the project.
Document Checking	Review and coordination of documents prepared for the project.
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. Assist in obtaining approval from approving agencies as required.
Data Coordination User Agency	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.
Civil/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. See the Extra Services section for detailed civil design services beyond basic services.
Sustainability, Energy Modeling, Well Building and Resilience	Services related to designing, evaluating, and modeling for sustainability, well building and resilience to the degree required by statute, regulation, code, or Washington state policy, including any required energy modeling or simulation.
LEED Certification	Services related to LEED certification to a silver level, including preparation of any documentation and material required to support an application.
BIM Coordination	Services consisting of managing the Building Information Model
Specifications	Services consisting of preparation for the agency's approval of proposed General and Supplementary Conditions of the Contract for construction, development of architectural outline specifications, coordination of outline specifications of other disciplines, and production of design manual including design criteria, and outline specifications of materials lists.
Materials Research	Services consisting of identification of potential of architectural materials, systems, and equipment.
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. Parametric costs reflect the level of design elements

	<p>presented in the design development documents, plus appropriate design contingencies to encompass unidentified scope ultimately included in the program.</p> <p>Reconcile contingencies with project risk register.</p> <p>Reconcile statement of probable construction cost with schematic estimate and C-100 budget forms.</p> <p>Assist user agency with analyzing scope, schedule, and budget options to stay within the MACC</p>
Presentations	Services consisting of appropriate presentation(s) of design development documents by the A/E to agency representatives.
Energy Life Cycle Cost Analysis (ELCCA)	Update ELCCA preliminary report in response to review comments. Present to VE review team if required. Implement recommendations and decisions based on the report.
Life Cycle Cost Analysis (LCCA):	Perform Life Cycle Cost Analysis of major building systems and components as required by Chapter 39.35 RCW and EO 13-03 for all projects valued over \$5,000,000 or projects constructing new building space over 5,000 square feet, using the OFM Life Cycle Cost Tool (LCCT).
Commissioning and Training	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.
Risk Management	Review and update risk register. Maintain risk management protocols appropriate to the scale of the project developed in the schematic phase.
Escalation and Market Assessment	Review and update escalation and market assessment developed in the schematic phase.

Construction Document Services (31 Percent)

In the construction documents phase, the A/E shall provide the services necessary to prepare for approval by the agency – from the approved design development documents; construction documents consisting of drawings, specifications, and other documents describing the requirements for construction of the project; and 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 architectural work and the work of engineering with other involved consultants for the project
Document Checking	Review and coordination of documents prepared for the project.
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. Assist in obtaining approval from approving agencies as required
Data Coordination User Agency	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, which details structural construction requirements for 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
Civil/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 the Extra Services section for detailed civil design services beyond basic services.
Sustainability, Energy Modeling, Well Building and Resilience	Services related to designing, evaluating and modeling for sustainability, well building and resilience to the degree required by statute, regulation, code or Washington state policy, including any required energy modeling or simulation.

LEED Certification	Services related to LEED certification to a silver level, including preparation of any documentation and material required to support an application.
BIM Coordination	Services consisting of managing Building Information Model
Specifications	Services consisting of activities of development and preparation of bidding documents, Conditions of the Contract, architectural specifications, coordination of specifications prepared by other disciplines, and compilation of the project manual
User Agency Assistance	Provide necessary information to user agency for the preparation of OFM requirements for release of allotments including preparation of cost statistics
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. Cost Estimates 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. Reconcile Contingencies with project risk register. Reconcile statement of probable construction cost with design development estimate and C-100 budget forms. Assist user 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 A/E to agency representatives
Constructability Review participation and Implementation	Cost to the A/E for participation in the constructability review and implementation of the accepted changes
Life Cycle Cost Analysis (LCCA):	Review Life Cycle Cost Analysis of major building systems and components and document anticipated Total Cost of Ownership using the OFM Life Cycle Cost Tool (LCCT).
Commissioning and Training	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.
Risk Management	Review and update risk register. Maintain risk management protocols appropriate to the scale of the project developed in the design development phase.
Escalation and Market Assessment	Review and update escalation and market assessment developed in the design development phase.

Bidding Phase (2 Percent)

In the bidding phase, the A/E, following the agency's approval of the construction documents and the most recent statement of probable construction cost, shall provide those services necessary for the A/E to assist the agency in obtaining bids and in awarding and preparing contracts for construction. In the case of phased construction, the agency may authorize bidding of portions of the work.

Project Administration	Services consisting of bidding administrative functions.
Disciplines Coordination	Coordination of the architectural work and the work of engineering with 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
Analysis of Substitutions	Services consisting of consideration, analysis, comparisons, and recommendations relative to substitutions proposed by bidders prior to receipt of bids.
Bid Evaluation	Services consisting of validation of bids, participation in review of bids and alternates, evaluation of bids, and recommendation on award of contract.

LEED Certification	Services related to reviewing contractor commitments or bid qualifications related to LEED credits and certification to a silver level.
Contract Agreements	Assist using agency in notification of contract award, assistance in preparation of construction contract agreements when required, preparation and distribution of sets of contract documents for execution of the contract, receipt, distribution and processing, for agency approval, of required certificates of insurance, bonds and similar documents, and preparation and distribution to contractor(s) on behalf of the agency, of notice(s) to proceed with the work.
Sustainability, Energy Modeling, Well Building and Resilience	Services related to evaluating, contractor proposals for sustainability, well building and resilience to the degree required by statute, regulation, code, or Washington state policy, including any required energy modeling or simulation.
Risk Management	Review and update risk register to reflect bidding conditions and any bid qualification. Maintain risk management protocols appropriate to the scale of the project.

Construction Contract Administration Phase (27 Percent)

In the construction contract administration phase, the A/E shall provide 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/ Document Checking	Coordination between the architectural work and the work of engineering and other involved consultants for the project. Reviewing and checking of documents (required submittals) prepared for the project.
Consulting Permitting Authority	Services relating to applicable laws, statutes, regulations and codes of regulating entities relating to the agency's interests during construction of the project.
Data Coordination User Agency	Review and coordination of data furnished for the project by the agency
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. A/E to chair project meetings.
Project Representation	Services consisting of assisting the agency in selection of full- or part-time project representative(s).
Documents	Services consisting of preparation, reproduction, and distribution of clarification documents and interpretations in response to requests for clarification by contractors or the user agency. 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. Additional fees for changes to the scope of a project shall be negotiated.
Sustainability, Energy Modeling, Well Building and Resilience	Services related to tracking, documenting and evaluating for sustainability, well building and resilience to the degree required by statute, regulation, code or Washington state policy, including any required energy modeling or simulation.
LEED Certification	Services related to LEED certification to a silver level, including preparation, collection or collation of any documentation and material required to support an application.
BIM Coordination	Services consisting of managing Building Information Model during construction, including incorporating changes and as-built documents prepared by the contractor.
Scheduling	Services consisting of monitoring the progress of the contractors relative to established schedules and making status reports to the user 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.

	Reconcile contingencies with project risk register.
Risk Management	Review and update risk register. Maintain risk management protocols appropriate to the scale of the project.

Project Closeout (2 Percent)

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- Builts)	Receive and review the contractors marked up field records. Supply the record documents to user agency. (Transferring the contractor's record of field changes to the original record drawings may be authorized by the owner 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 user agency.
Warranty Period	Continued assistance to investigate contract problems that arise during the warranty period.
Sustainability, Energy Modeling, Well Building and Resilience	Services related to compiling documentation and preparation of submissions for sustainability, well building and resilience to the degree required by statute, regulation, code or Washington state policy, including any required energy modeling or simulation.
LEED Certification	Services related to LEED certification to a silver level, including completion of all documentation required to complete the application and responding to questions related to the application
Cost Estimating	Reconcile final account with C-100 budget forms, and prepare project close-out accounting using [***] for submission to OFM database.
Commissioning and Training	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.
Risk Management	Review and reconcile risk register with project experience. Prepare project risk closeout report

A/E Extra Services/Reimbursables and Other Services

The majority of projects should be completed within the structure of the basic fee schedule. However, some projects will be more complex and require a range of Extra Services/Reimbursables and Other Services, which will be negotiated for specific tasks. These services typically require specialist expertise and may not neatly fall within one phase of service or another. As projects become more complex, they demand a variety of special studies and services. Extra Services/Reimbursables are services generally provided by the same A/E providing the basic services, and Other Services are those services generally provided by additional specialty consultants, either as subs to the prime A/E or as independent consultants directly contracted with the agency.

Extra services are not intended as an adjustment to basic services and should reflect actual anticipated cost. The following provides a guideline for evaluating the pricing of Extra and Other services, and establishing the eligibility of reimbursable expenses.

A/E Extra Services/Reimbursable Expenses

When drafting the A/E agreement, the Project Manager should review the following list in determining eligible reimbursable items. It is not all inclusive and should only be used as a guide.

Alternative Cost Studies	Additional costing beyond the cost estimating services required in basic services as requested by the agency
Enhanced Commissioning	Costs related to attendance on, and cooperation with, enhanced commissioning work, to the extent they are in excess of services included for basic commissioning.

	Enhanced Commissioning can include a range of additional commissioning services undertaken by an external commissioning agent, including whole building and envelope commissioning.
On-Site Representative	On-site observation beyond the periodic site visits required under basic services for construction field observation.
Thermal Scans	Cost of an examination of a structure for thermal loss on existing facilities to be remodeled.
Value Engineering Participation and Implementation	Cost to the A/E for participation in an independent value engineering study and implementation of the accepted ideas that generate during the study.
Environmental and Sustainability Certifications (LEED, Living Building Challenge, etc.)	Cost of providing services directly related to obtaining certification for a sustainability certification in excess of LEED Silver, including negotiation, documentation, and associated required services.
Separate Bid Packages	Cost to the A/E for preparation of separate bid packages typically used in GC/CM type projects.
Professional Liability Insurance	Where coverage is required in excess of \$1 million, reimbursement of excess premium costs will be considered as a reimbursable cost.
Consultant Selection Cost	Additional costs for private sector members of a selection committee if required (Chapter 39.80 RCW).
Specialty Consultants	<p>Cost of only those additional consultant services beyond A/E services provided under basic services.</p> <p>Specialty consultants include, but are not limited to:</p> <ul style="list-style-type: none"> Acoustical Consultant Civil Engineering additional services may include: <ul style="list-style-type: none"> 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 drainage design and 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 and pavement improvements Storm water quality and quantity computations, reports, design and details Temporary erosion and sediment control reports and drawings Special studies and reports for other agencies Communications Consultant Cost Estimating Consultant Electronic/Audio Visual Consultant Elevator Consultant Hazardous Material Consultant Hospital/Laboratory Consultant Interior Design Consultant Indoor Air Quality Consultant Kitchen Consultant Landscape Consultant Quality Control Consultant Security Consultant <p>Cost of Specialty Consultants should not normally be greater than 50% of the Basic A/E Fee</p>
Geotechnical Investigation	Cost of subsurface testing and evaluation.
Entitlements, Environmental Permitting, Agency Approvals, etc.	Costs associated with any entitlements, permits or approvals, including any surveys, facility evaluations, preparation of reports or applications, monitoring, etc.
Commissioning	Cost of an independent commissioning of the project.
HVAC Balancing	Cost to balance systems.
Site Survey	Cost of conducting a survey independent from design A/E.
Testing	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.
Value Engineering	Cost for performing the required value engineering study on a project by an independent multi-disciplined team.
Constructability Review/Plan Check	Cost for an independent consultant or contractor to review bid documents and determine if a project can be built as designed.

Graphics	Cost of special graphic and signage design.
Design/Code Plan Check	Cost of an independent plan check if not available within the local jurisdiction.
Travel and Per Diem	Customary and approved costs to A/E during the course of basic and additional services (based on state rates and limited to between 50 and 350 miles).
Renderings, Presentations and Models	Cost for special presentations, renderings, and physical models required for the project.
Document Reproduction	Cost of printing and mailing documents.
Advertising	Cost of required advertisements and placing bidding documents in plan centers announcing the bidding of the project.

D. Non-Eligible Expenses

- Consultants hired at A/E's option to perform basic services required by contract.
- Postage and handling of submittals, bid documents, correspondence, etc.
- Telephone expenses (local calls and line service).
- Copies of documents used by the A/E to perform normal services and not provided to owner.

A/E Fee Schedule - Building Types

Schedule A	Schedule B	Schedule C
Art galleries Auditoriums (with stage) Communications buildings Courthouses Detention/correctional facilities, maximum Exposition buildings Extended care facilities Fish hatcheries Heating and power plants Hospitals Laboratories (research) Medical office facilities and clinics Mental institutions Museums Observatories Research facilities Sewer treatment plants Special schools Theaters and similar facilities Veterinary hospitals Water treatment plants	Apartment buildings Archive building Armories Auditoriums (without stage) College classroom facilities Computer rooms Convention facilities Day care facilities Detention/correctional facilities, minimum and medium Dining halls/institutes Dormitories Fire and police stations Gymnasiums Laundry and cleaning facilities Libraries Neighborhood centers and similar recreation facilities Nursing homes Office buildings Recreational building Residences Schools (primary and secondary) Science labs (teaching) Stadiums, multi-purpose Storage facilities, cold Transportation terminals Vocational schools	Civil and utility projects Emergency generator facilities Farm structures Greenhouses Guard towers Industrial buildings without special facilities Parking structures and garages Printing plants Prototype facilities (for any replication of previously designed facility) Service garages Shop and maintenance facilities Simple loft-type structures (without special equipment) Stadiums, grandstand type Warehouses

Definitions

Maximum Allowable Construction Cost

The maximum allowable construction cost (MACC) is defined as the total sum available to the general contractor for construction purposes, including all alternates.

The **MACC** includes all construction related allowances, including the **design contingency**. The **MACC** excludes:

- Washington state sales tax,
- Professional fees, including any services provided by or retained under, the **general contractor**, such as design services or professional construction management services
- Project contingency funds, or
- Other charges that may not be under the scope of the general contractor.

Contingencies

Contingencies and allowances follow the guidance set forth in ASTM E2168 Standard Classification for Allowance, Contingency, and Reserve Sums in Building Construction Estimating

Design Contingency and Allowances

Design contingency and allowances are amounts included in the cost estimate within the MACC. They are used for planned project items until they can be better defined. The design contingency and allowances cover events and activities that are directly controllable within the project design.

Design contingency and allowances reduce as the design progresses, and should be entirely eliminated by the time the design is completed.

Construction Contingency

The Construction Contingency is a contingency included in the project budget to address in-scope changes to the contract sum after bid and award. It is used for unintended, not directly controllable project occurrences, such as unforeseen site conditions or design coordination. The Construction Contingency is not part of the MACC.

Design Build/GMP Contingency

A Design Build or GMP contingency is an allowance included in the contractual GMP to address scope required within the Design Build or GMP contract, but not fully defined in the GMP buy-out. The design build/GMP contingency covers events and activities that are directly controllable within the project design, and is included in the MACC.

Risk Management

Specific Technical Components of Risk Management

Identification of Risk

Characterization and Quantification of Risk

Characterize and quantify the risk. Characterization identifies the non-numeric aspects of the risk, while quantification addresses the numeric aspects.

Characterization covers a range of aspects, including:

- Drivers and outcomes of the risk
- Owner and controller of the risk
- Phase of the project during which the risk is active
- Point of closure of the risk
- Epistemic nature of the risk (degree to which further knowledge will reduce the risk)

Quantification covers:

- The probability distribution of the risk event occurring
- The cost/benefit of the risk event occurring

Document the identified risks along with their characterization and their quantification in the form of a risk register.

Identification of Mitigation Strategies

Identify and document mitigation strategies including:

- Possible actions that could be taken to reduce or eliminate the risk
- Identification of cost of mitigation action
- Identification of responsible parties
- Assignment for development and implementation of the strategy

Optimization of allocation of risk

Identify and document how the risk is allocated.

Establishment of appropriate contingencies

Identify and document contingency allowances related to risks, including sunsetting of specific risks.

Risk and contingency management process

Establish a risk and contingency management process including:

- Regular and routine updating of the Risk Register
- Monitoring of the contingency Drawdown Schedule
- Preparation of recovery actions if required.

Escalation and Market Study

For projects valued at over \$25,000,000, the escalation and market study should include structured research and documentation of local market conditions that will affect the bid cost.

For projects valued below \$25,000,000 the escalation and market study may be an informal assessment identifying the key market readiness for the project, and major escalation or market risks.

Specific Technical Components of Escalation and Market Studies

Data shall be gathered by interviewing local firms having knowledge of the construction activity in the area and the skills / capacity to complete the respective project. Possible sources include but are not limited to: general and subcontractors, builder's associations, local government officials, architectural and engineering firms, builders' exchange and construction-reporting firms, and lenders.

Evaluate recent and expected future bidding conditions that may influence the cost of the project. Address both the general construction market, and project specific market.

Evaluate labor supply, strike possibilities, availability of skilled labor covering all major sub trades.

Evaluate material availability: shortages, oversupplies, or normal market conditions.

Evaluate the project readiness among general and sub-contractors, including their willingness to bid on state projects. Identify the anticipated number of bidders (both general and sub-contractors), and their respective experience on similar projects.

Identify projects in the market area currently in the planning, design, bid, and construction phase.

Document sources of data.

Appendix A: A/E Fee schedule

Fee calculation

The fee is calculated based on the formulas listed below, adjusted to reflect project specific modifications in basic services. For schedule B, the fee is based on the average of the schedule A and schedule C fee.

Design/bid/build and Design/build

Schedule A	$102 \div (630 + (\text{MACC} \div (5357 \div 2418)) ^ 0.38)$
Schedule C	$(9.40 \div (50.0 + (\text{MACC} \div (5357 \div 2418)) ^ 0.25)) - 0.02$

GC/CM

Schedule A	$100 \div (545 + (\text{MACC} \div (5357 \div 2418)) ^ 0.38)$
Schedule C	$(9.20 \div (43.0 + (\text{MACC} \div (5357 \div 2418)) ^ 0.25)) - 0.02$

Hourly Rates

Multiplier	Negotiated rate within a range of 2 to 3.2 times employee direct base salary (not including fringe benefits, taxes, retirement contributions, or profit sharing).
Employee of Firm	Negotiated rate not to exceed a maximum of \$250 per hour.
Principal of Firm	A Principal is defined as a partner of a partnership, a principal stockholder of a corporation, or a duly authorized officer. The negotiated rate is not to exceed \$350 per hour.
Special Consulting Services	When special consulting services not normally associated with traditional project design are necessary, the fee may be outside of the above guidelines (such as expert witness or special investigations)
Service Charge on Sub-Consultant	Up to ten percent service charge may be added to sub-consultant work added to the original agreement.

Fee Table

MACC (\$)	Design-Bid-Build			GC/CM - C		
	A	B	C	A	B	C
1,000,000	13.23%	11.81%	10.38%			
2,000,000	12.54%	11.09%	9.63%			
3,000,000	12.09%	10.63%	9.18%			
4,000,000	11.74%	10.30%	8.85%			
5,000,000	11.47%	10.03%	8.59%	12.43%	10.84%	9.25%
6,000,000	11.23%	9.80%	8.38%	12.15%	10.58%	9.01%
7,000,000	11.03%	9.61%	8.20%	11.90%	10.35%	8.80%
8,000,000	10.85%	9.45%	8.04%	11.69%	10.16%	8.62%
9,000,000	10.69%	9.30%	7.91%	11.50%	9.98%	8.47%
10,000,000	10.54%	9.16%	7.78%	11.33%	9.83%	8.33%
11,000,000	10.40%	9.04%	7.67%	11.17%	9.68%	8.20%
12,000,000	10.28%	8.92%	7.57%	11.02%	9.55%	8.08%
13,000,000	10.17%	8.82%	7.47%	10.89%	9.43%	7.98%
14,000,000	10.06%	8.72%	7.39%	10.77%	9.32%	7.88%
15,000,000	9.96%	8.63%	7.31%	10.65%	9.22%	7.79%
16,000,000	9.87%	8.55%	7.23%	10.54%	9.12%	7.70%
17,000,000	9.78%	8.47%	7.16%	10.43%	9.03%	7.62%
18,000,000	9.69%	8.39%	7.09%	10.34%	8.94%	7.54%
19,000,000	9.61%	8.32%	7.03%	10.24%	8.86%	7.47%
20,000,000	9.54%	8.25%	6.97%	10.16%	8.78%	7.41%
25,000,000	9.20%	7.95%	6.71%	9.77%	8.44%	7.11%
30,000,000	8.92%	7.71%	6.49%	9.45%	8.16%	6.88%
35,000,000	8.69%	7.50%	6.32%	9.18%	7.93%	6.68%
40,000,000	8.48%	7.32%	6.16%	8.95%	7.73%	6.50%
45,000,000	8.30%	7.16%	6.03%	8.75%	7.55%	6.35%
50,000,000	8.14%	7.02%	5.90%	8.56%	7.39%	6.22%
55,000,000	8.00%	6.90%	5.80%	8.40%	7.25%	6.10%
60,000,000	7.86%	6.78%	5.70%	8.25%	7.12%	5.99%
65,000,000	7.74%	6.67%	5.61%	8.11%	7.00%	5.89%
70,000,000	7.62%	6.57%	5.52%	7.98%	6.89%	5.80%
75,000,000	7.52%	6.48%	5.44%	7.86%	6.79%	5.71%
80,000,000	7.42%	6.40%	5.37%	7.75%	6.69%	5.63%
85,000,000	7.33%	6.32%	5.30%	7.65%	6.61%	5.56%
90,000,000	7.24%	6.24%	5.24%	7.55%	6.52%	5.49%
95,000,000	7.16%	6.17%	5.18%	7.46%	6.44%	5.42%
100,000,000	7.08%	6.10%	5.12%	7.38%	6.37%	5.36%
125,000,000	6.75%	5.81%	4.88%	7.01%	6.05%	5.10%
150,000,000	6.47%	5.58%	4.68%	6.71%	5.79%	4.88%
175,000,000	6.25%	5.38%	4.52%	6.46%	5.58%	4.70%
200,000,000	6.05%	5.21%	4.37%	6.25%	5.40%	4.55%
250,000,000	5.74%	4.94%	4.14%	5.91%	5.10%	4.30%