



Instructions for Architects and Engineers

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Approved by:

_____/s/_____
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ABBREVIATIONS/DEFINITIONS

These instructions use the following abbreviations and definitions:

ADA	Americans with Disabilities Act		May be either DES or Client Agency guidelines.
A/E	Architect/Engineer Consultant		
Agreement	The Professional Services Agreement and Conditions of the Agreement between the A/E and the state of Washington, Department of Enterprise Services*, Engineering & Architectural Services	L&I	Department of Labor and Industries
		LCC	Life Cycle Costs for the project; to include all operating costs
		LEED	Leadership in Energy and Environmental Design
		MACC	Maximum Allowable Construction Cost is the total sum available to the contractor for construction, including all alternates. The MACC excludes Washington state sales tax, professional fees, project contingency funds, or other charges that may not be under the scope of the general contractor.
AHJ	Authorities or Agencies Having Jurisdiction		
Amendment	Modification to the Agreement		
CAD	Computer Aided Design		
Client Agency	State agency for whom E&AS is providing services	Minor Works	Projects valued between \$25,000 and \$1 million
CO	Change Order	MWBE	Minority and Women-Owned Business Enterprises
COP	Change Order Proposals	NTE	Not to Exceed
DAHP	Department of Archeology and Historic Preservation	NTP	Notice to Proceed to the Contractor for construction
DES	Department of Enterprise Services	OFM	Office of Financial Management
DOC	Department of Corrections	O&M	Operations and Maintenance
DSHS	Department of Social and Health Services	Owner	State of Washington
Diverse Business	Small business, microbusiness, mini-business, minority-owned business (MBE), and women-owned business (WBE), as defined in RCW 39.26.010 and veteran-owned businesses as defined in RCW 43.60A.010.	PM	Project Manager
E&AS	Engineering & Architectural Services	Predesign	A process of project investigation and definition required by the Office of Financial Management for major projects prior to disbursement of design and construction funds.
E&AS APM	E&AS Assistant Program Manager; oversees the E&AS, DOC, or DSHS PMs	Punch List	A list of incidental corrective work identified by the contractor at Substantial Completion and supplemented as necessary by the A/E upon A/E and Owner inspection at Substantial Completion
E&AS PM	E&AS Project Manager, authorized representative for E&AS, DOC, or DSHS	SFAC	State Facilities Accessibility Committee
EIS	Environmental Impact Statement	RCW	Revised Code of Washington (statutes)
ELCCA	Energy Life Cycle Cost Analysis	USGBC	United States Green Building Council
FA	Field Authorization	VE	Value Engineering
Guidelines	Additional information provided regarding specific aspects of a project.	WAC	Washington Administrative Code (codes)

CHAPTER 1 - GENERAL INFORMATION

1.0 Purpose

These instructions are provided to the Architect/Engineer consultant (A/E) having design Agreements with the Department of Enterprise Services (DES), Engineering and Architectural Services (E&AS) for work at various state agency locations, to support and clarify the [Conditions of the Agreement](#).

These instructions are part of the Owner's project guidelines. They do not modify or eliminate any of the terms or provisions of the Agreement. If conflicts occur between the Agreement and these Instructions, the Agreement shall govern. These instructions do not differentiate between basic and additional services. Refer to the Agreement for definition of basic services and additional services.

There are references to forms and documents throughout this manual with hyperlinks to:

- E&AS main website found at:
<http://www.des.wa.gov/services/facilities/Construction/Pages/default.aspx>
- E&AS forms and reference documents website found at:
<http://www.des.wa.gov/services/facilities/Construction/Forms/Pages/Forms.aspx>

In consultation with the Client Agency, the E&AS Project Manager (E&AS PM) will provide the A/E any guidelines for the particular needs of individual projects, as appropriate.

- [Commissioning](#)
- [Energy Life Cycle Cost Analysis \(ELCCA\)](#)
- [Life Cycle Cost Analysis \(LCCA\)](#)
- Indoor Air Quality
- [Constructability Review](#)
- [Leadership in Energy and Environmental Design \(LEED\)](#)
- [Computer Aided Design \(CAD\)](#)
- [Value Engineering \(VE\)](#)
- Construction Waste Management
- Contractor's Diverse Business Inclusion Plan
- [Life Cycle Cost Tool](#) (OFM Tool) (Excel) | [Instructions](#)

These instructions pertain to standard public bidding (design-bid-build) of state projects. They do not cover the following project delivery methods: Limited Public Works (for projects \$35,000 or less), Small Works Roster (for projects \$300,000 or less), emergency projects, Job Order Contracts, design-build, and general contractor construction manager (GC/CM). The E&AS PM, with concurrence of the Client Agency, will determine the appropriate project delivery method for a project.

1.1 Authority

1.10 Department of Enterprise Services

The Revised Code of Washington ([RCW](#) 43.19.450) authorizes the Department of Enterprise Services, Engineering & Architectural Services to design or to contract for the design and construction of public works projects at state-owned facilities for numerous state agencies.

1.11 E&AS Project Manager (E&AS PM)

The E&AS PM represents the legal contracting authority for the state. The DES/Department of Corrections (DOC) Team Project Managers manage DOC projects and the DES/Department of Social and Health Services (DSHS) Team Project Managers manage DSHS projects. The DES/DOC Team PMs and the DES/DSHS Team PMs are synonymous with the E&AS PMs as used in this document and represent the legal contracting authority for those projects.

1.12 Design/Construction Statutes & Codes

Over 80 statutes and codes including the Revised Codes of Washington (RCW), Washington Administrative Codes (WAC), and local building-related codes apply to the design and construction of state-owned facilities. See the list of most [applicable RCW and WAC sections](#). The A/E is required to conform to all applicable statutes and codes.

1.2 Participants & Responsibilities

1.20 Principal Participants

- The E&AS PM (also referred to as the Owner, as acting for the Client Agency, in the [Conditions of the Agreement](#)):
 - Client Agency
 - A/E
 - Contractor

1.21 Typical Responsibilities

A specific project may require additional or differing responsibilities.

E&AS PM:

In consultation with the Client Agency, the E&AS PM will provide a project scope, schedule and budget, determine which guidelines are applicable to the project, and incorporate them into the scope of services.

- May assign in their place a representative authorized to make decisions at all scheduled meetings if they are unable to attend.
- Conduct the A/E selection process.
- Negotiate and prepare the A/E Agreement for execution and issue the signed Agreement as an authorization to proceed to the A/E.
- Issue an authorization to proceed for various phases of project design, bid, and construction.
- Review and approve invoice vouchers for payment.
- Approve changes in scope of services, schedules, budget, fees, and amend the A/E Agreement.
- Review and approve progress documents submitted by the A/E.
- Arrange for the advertising, receipt, and opening of bids.
- Set up a Pre-Construction conference with the Contractor, A/E, and Client Agency.
- Facilitate resolution of project issues, change orders, disputes, or claims.
- Accept completed work on behalf of the state.

Client Agency:

Where applicable to a particular project/facility as determined by the PM, the Client Agency may:

- Assign a representative authorized to make decisions on behalf of the Agency whom may participate in project related meetings and discussions.

- Assist in developing with the project scope, schedule, and budget. Provide recommendations to the E&AS PM on which guidelines are applicable for incorporation into the project scope of services.
- Participate in the A/E selection process.
- Provide detailed functional requirements, site constraints, existing record drawings and specifications, design standards, maintenance requirements, and other pertinent information to the E&AS PM and A/E.
- Obtain approval from the Department of Archeology and Historic Preservation (DAHP) for projects on buildings 50 years old or older or disturbing more than one cubic foot of soil. ([Executive Order 05-05](#), Archaeological and Cultural Resources).
- Review work and provide recommendations and approvals to the E&AS PM.
- Disburse monies following approval of invoice voucher(s) by the E&AS PM.
- Submit written requests for any changes in scope of services, schedule, budget, or fees to the E&AS PM for review, approval, and incorporation into the legal documents.

A/E Consultant:

Be fully knowledgeable of the state's Instructions for Architects and Engineers, the Conditions of the Agreement, all project relevant guidelines, and understand and provide the services required per these documents.

- Prepare invoice vouchers for payment of A/E services and enter the information into the DES Diversity Compliance system (B2Gnow) at <https://des.diversitycompliance.com>. See Invoice Instructions for A/Es.
- Have a representative authorized to make decisions at all scheduled meetings.
- When applicable, provide services to achieve LEED certification on behalf of the Owner.
- Provide updated construction cost estimates and schedules at a minimum at the end of the Schematic Design, Design Development, and Construction Document phases, and as additionally called for per the Agreement and project guidelines.
- Initiate and obtain design, plan reviews, and approvals from all applicable regulatory agencies.
- Participate in the bid opening process.
- Submit written requests for any changes in scope of services, schedules, budget, or fees to the E&AS PM for approval.
- Attend and participate in leading the Pre-Construction Conference with the Contractor, E&AS PM, and Client Agency.
- Schedule and chair design and construction meetings, establish and distribute agendas for meetings, record meeting minutes and distribute to the E&AS PM, Client Agency, Contractor, and other appropriate parties.
- In a timely manner, review Contractor invoice vouchers and approve for payment.
- Prepare and process change order proposals and field authorizations, and review for compliance with the Contract Document requirements.
- Facilitate completion of project closeout and verify warranty requirements are met during the warranty period(s), including warranty inspections and corrections as required.

1.3 Communications

1.30 Communications between A/E, Client Agency, and E&AS PM

Correspondence and communication to or from the A/E shall go through the E&AS PM. The E&AS PM may authorize exceptions for specific projects or situations.

The E&AS PM may authorize the A/E to communicate directly with Client Agency personnel to expedite the design and to avoid communication delays. This action does not authorize additional work, change in scope, or exclude copying all communications between A/E and Client Agency to the E&AS PM.

1.31 State Project Numbers

E&AS assigns a State Project Number to each project. The State Project Number consists of the fiscal year and an E&AS numerical sequence number, for example 2011-024.

E&AS assigns alphabetical suffixes to specific agreements and contracts for the projects:

- Consultant agreements have suffixes A through F, for example 2011-024 A.
- Construction contracts have suffixes G through Z, for example 2011-024 G (1-1).

All drawings, specifications, reports, and project correspondence **MUST** contain the State Project Number and appropriate suffix. The suffixes are to be used only in reference to a specific agreement or contract.

CHAPTER 2 - PLANNING AND DESIGN

2.0 State Expectations

2.00 Project Design

Intended for long-term use, the project design must provide public facilities that are:

- Of enduring quality
- Energy and water efficient
- Environmentally conscious
- Functional and requiring low maintenance
- Durable
- Flexible for changing uses
- Universally accessible
- Sustainable
- Operationally cost effective
- Compliant with appropriate codes, statutes, and DAHP requirements

The state requires construction documents to be complete, clear, specific, accurate, coordinated between disciplines, quantifiable, and explicit in quality expectations for suitable materials, systems, and workmanship.

Throughout the design phases of a project, the A/E shall work closely with the E&AS PM and Client Agency staff to ascertain and confirm all project requirements. In addition to the guidelines on the [E&AS website](#), the Client Agency may have specific project guidelines. The E&AS PM will communicate these requirements to the A/E.

2.01 Project Budget

The A/E shall design the project within the established Maximum Allowable Construction Cost (MACC). The A/E will not proceed with the next phase of work if the current design phase estimate indicates the project exceeds the MACC, and will work with the E&AS PM and Client Agency to develop cost savings options. Before proceeding with the next phase, the scope of the project will be modified to be within the MACC or the MACC will be modified, as approved by the E&AS PM and Client Agency.

2.02 Project Scheduling

The Client Agency and E&AS PM will initiate the project schedule during budget development and request phases based on planning, design, and construction requirements of the project, and include milestones in the consultant selection advertisement. Once the A/E has been selected, the A/E is responsible for confirming the overall project schedule, with consideration of, but not limited to the following:

- State funding cycles
- Curriculum or school year determinants
- Weather
- Owner mandated reviews and VE, ELCCA, LCCA, accessibility, constructability review, building commissioning, and LEED criteria, as appropriate for the project
- Permitting review

2.1 A/E Contractual Agreements with the State

2.10 Pre-Agreement Meeting

The E&AS PM will conduct a Pre-agreement meeting with the A/E to confirm if the program and “pre-design” scope, schedule, and MACC for the project is clear and sufficient on which the A/E can base a fee proposal. If so, discuss and identify deliverables for basic and additional services in the [Conditions of the Agreement](#) and its [Attachment A](#). The E&AS PM and A/E may use the [Pre-Agreement Conference Checklist](#) as a guide.

2.11 A/E Agreement

The A/E shall prepare a detailed written fee proposal for basic and additional services based on items discussed in the Pre-Agreement meeting. The total design fee shall be a combination of approved basic and additional services. These services and the value of such services are to be jointly agreed to by the A/E and the PM in consultation with the Client Agency.

On building projects with a MACC of \$1 million or more, consult the OFM [Guidelines for Determining Architect/Engineer Fees for Public Works Building Projects](#) and [A/E Fee Schedule](#) when negotiating basic services fees.

On projects with a MACC under \$1 million, the A/E and the E&AS PM may negotiate fees outside of the A/E OFM Fee Schedule, based on the estimated effort for the project.

The A/E shall not proceed with any work prior to receiving a fully signed Agreement or Amendment from E&AS.

2.2 Initial Design Meeting

The E&AS PM will schedule an initial design meeting with the A/E and Client Agency. The agenda will include an introduction of the project participants, review of the project scope, schedule and budget, communications procedures, project guidelines, and existing data.

2.3 Pre-planning and Design

2.30 Program Data

In consultation with the Client Agency, the E&AS PM will provide to the A/E any additional information that further describes the project.

2.31 Existing Project Data

In consultation with the Client Agency, the E&AS PM will provide the A/E information regarding existing circumstances in hard copy or digital format, which may include the following: as-built drawings, studies, surveys, Environmental Impact Statement (EIS), hazardous material, and maintenance surveys.

2.32 Program Data Review and Existing Project Data Review

The A/E shall review all Program Data and Existing Project Data with their sub-consultants to assess the relationship between the existing and proposed project conditions. Following this review, the A/E and their sub-consultants will perform a site investigation to verify existing conditions.

After investigation of existing conditions, the A/E should recommend to the E&AS PM any necessary supplemental information they think would be necessary for the project.

2.33 Permitting Agency Coordination

The A/E shall ascertain the requirements imposed by all permitting agencies having jurisdiction over the work, and shall design the project in accordance with those requirements. The A/E shall inform the E&AS PM and Client Agency of those requirements that may affect the project scope, schedule, or budget. The A/E shall make timely contact with permitting agencies and shall coordinate any interaction required during the implementation of the project. The Client Agency and E&AS PM will cooperate with the A/E in project issues with all Agencies having Jurisdiction (AHJ).

2.34 Utility Coordination

The A/E shall contact utility providers to learn of their energy and conservation incentive and rebate programs applicable to the project. The A/E shall inform the PM and the Client Agency of any opportunities for participation in these programs, and coordinate any interaction required to implement those programs in the project.

The A/E shall determine if the required utilities for the project exist and if they are of adequate size and type of services are available and inform the PM if there will be a need for increased capacity or new utilities.

Utilities may include, but are not limited to electricity, gas, water, storm sewer, TV/Cable, fire and police alarm interface, voice, and data communications.

2.35 Mandated Review Cooperation

The A/E shall fully cooperate with the Owner initiated procedures for LEED criteria, ELCCA, LCCA, VE, commissioning, constructability review, accessibility review, etc.

2.36 Predesign/Scope Development Studies

Predesign studies are required on all projects more than \$5 million (and some projects more than \$1 million), and are required to follow the OFM [Predesign Manual](#). Submittal deadlines are typically July of even years. OFM's approval of the Predesign is required to move into the Design Phase. Prior to establishing an agreement for Design and Construction Phase professional services, there may be a need for additional scope development studies to clarify the scope for the project.

For projects under \$5 million, the E&AS PM may, in consultation with the Client Agency, elect to have a scope development study done to further define the project scope,

scheduling, and budget for a project prior to establishing an Agreement for Design and Construction phase professional services.

The Pre-Design or scope development studies may be done by a different A/E than those used for the Design and Construction phases, and is not part of the Basic Services.

2.4 Schematic Design Phase

2.40 Schematic Design

The A/E shall provide Schematic Design Documents as outlined in the [Conditions of the Agreement](#).

2.41 Schematic Design Meetings

The A/E shall:

- Schedule and conduct all schematic design meetings with the E&AS PM and Client Agency.
- Record and distribute minutes of the meetings in a timely manner.

2.42 Energy Life Cycle Cost Analysis (ELCCA)

An ELCCA is required on projects that meet all of the following criteria (per the [ELCCA Guidelines](#) as called for in [RCW 39.35](#)):

- New Buildings > 25,000 square feet
- Renovations of buildings 25,000 square feet or more.
- Projects that are over 50 percent of the assessed value of the facility
- Projects affecting any energy system

The E&AS PM will contract for ELCCA services early in the Schematic Design phase.

The A/E shall coordinate a meeting to identify and recommend energy conservation measures to incorporate into the ELCCA work plan.

The ELCCA analyst shall prepare and submit a work plan for approval to the DES ELCCA Reviewer, A/E, E&AS PM, and Client Agency early in the Schematic Design phase.

2.43 Leadership in Energy and Environmental Design (LEED) Compliance

State law requires design, construction, and certification of all major facility projects (new construction greater than 5,000 gross square feet or renovation of 50 percent or more of the assessed value) to at least the LEED Silver standard unless the agency and the design team determine the LEED Silver standard to be not practicable. ([RCW 39.35.D 030](#))

The A/E shall schedule and conduct a LEED design charrette early in the Schematic Design phase. ([LEED Guidelines](#))

The A/E shall participate in DES' LEED Quality Assurance process, which includes preparation of a LEED checklist and description of LEED design features at the end of each design phase for approval. See forms on DES' [Green Building](#) website.

2.44 Value Engineering (VE) Review

The state will engage an independent VE consultant for all projects valued over \$5 million that could start as early as during the Schematic Design Phase, (but should be no later than early Design Development Phase). The A/E will be required to participate and provide

support for project VE review. The A/E shall review the VE report and prepare a written response for the Owner's consideration. The A/E shall incorporate approved final VE review decisions into the Schematic Design documents, when applicable. See [VE Guidelines](#).

2.45 Life Cycle Cost Analysis

Projects that meet the criteria below, and begin predesign or design phases in the 2015-17 biennium (or later) will be subject to LCCA requirements as established by [Executive Order 13-03](#) that requires consideration of life cycle and operating costs in public works projects.

- Projects with a total project cost of over \$5,000,000
- Projects with new building square footage of greater than 5,000 square feet

The A/E shall prepare the life cycle cost analysis using the Office of Financial Management's [Life Cycle Cost Tool \(LCCT\)](#) in accordance with the [LCCT instructions](#). Additionally, the A/E shall follow the submittal requirements for predesign, each design phase (schematic design, design development, and construction documents) and construction as outlined in the [OFM Predesign Manual Appendix F](#).

Note, the primary difference between the LCCT and the ELCCA is that the LCCT must quantify all costs associated with a project whereas the ELCCA includes a process focused primarily on evaluating energy using systems. The LCCT is an economic analysis or cost comparison tool. As such, energy modeling and integrated design techniques are not performed within the LCCT; however, these design processes are necessary to achieve a high-performance building or building system. Three viable project alternatives must be evaluated in the LCCT. The alternative representing the lowest life cycle cost should be a primary consideration in making design decisions for the project.

2.46 Schematic Design Review and Approval

The A/E shall schedule a Schematic Design review meeting. For Minor Works projects, at the PM's discretion, this meeting may serve the dual purpose of a final Schematic Design review and approval meeting in lieu of a scheduled Owner Review period. The A/E shall document and respond to Owner review comments in writing and address in the final Schematic Design documents. If an Owner Review period is scheduled, the A/E shall respond to Owner review comments in writing and address in the final Schematic Design documents.

Final Schematic Design documents shall include a construction cost estimate and project schedule.

The A/E shall obtain the E&AS PM's and Client Agency's written approval of the Schematic Design phase.

After getting the Client Agency's approval, the E&AS PM shall provide the A/E authorization to proceed to the Design Development phase.

2.5 Design Development Phase

2.50 Design Development

Based upon the approved Schematic Design documents, the A/E shall prepare Design Development drawings, outline specifications, product information, project schedule, and a construction cost estimate as required by the [Conditions of Agreement](#).

If applicable, VE, LCCA, and ELCCA shall be included in this phase. An early Constructability Review may also be included. The A/E shall incorporate approved recommendations into the final Design Development documents.

2.51 Design Development Meetings

The A/E shall:

- Schedule and conduct all design development meetings with the E&AS PM and Client Agency.
- Record and distribute minutes of the meetings in a timely manner.

2.52 Value Engineering (VE) Review

The state will engage an independent VE consultant for projects valued over \$5 million. The A/E team will be required to participate and provide support for project VE review. The A/E shall review the VE report and prepare written response for the Client Agency's consideration. The A/E shall incorporate approved final VE review decisions into the Design Development documents. See [VE Guidelines](#).

2.53 Energy Life Cycle Cost Analysis (ELCCA)

When required on projects (see paragraph 2.42), the A/E shall implement the ELCCA's Work Plan, complete a report for review by the DES ELCCA Reviewer, E&AS PM and the Client Agency. The DES ELCCA Reviewer, the E&AS PM, and Client Agency shall review the ELCCA report with the A/E and decide what to incorporate into the final Design Development documents. See [ELCCA Guidelines](#).

2.54 Leadership in Energy and Environmental (LEED) Compliance

The A/E will incorporate LEED elements into Design Development documents and provide an updated LEED checklist and description of LEED design features at the end of this phase for approval. (See DES' [LEED Quality Assurance Guidelines](#)).

2.55 Accessibility

In addition to code requirements, it is desirable to include universal design principles to ensure facilities are fully accessible to all.

The State Facilities Accessibility Committee (SFAC) reviews projects valued at more than \$5 million, and all projects on the Capitol Campus, regardless of value. If an accessibility review is required for a project, the A/E shall provide materials to the PM in preparation for the review meeting. The A/E shall attend the SFAC review meeting and answer questions about the project from SFAC. The A/E shall review the SFAC report and prepare a written response for the Client Agency's consideration ([Executive Order 96-04](#), implementing the Americans with Disabilities Act). The A/E shall incorporate the Client Agency's decisions into the response to SFAC as well as into the Design Development documents.

2.56 Utility Coordination

The A/E shall include all relevant utilities representatives in the design process as appropriate to identify elements that will provide incentives to the Owner. The A/E will

coordinate with utility representatives to determine the type of analysis needed to obtain incentives. Additional analysis for LEED and/or the ELCCA process may be required.

2.57 Bidder Design

The A/E shall obtain the E&AS PM approval for the use of contractor bidder design services, which may include but is not limited to traditional areas of work, such as roof trusses, pre-engineered metal buildings, fire suppression systems, and controls. The A/E shall provide a list of all bidder design elements it intends to incorporate in the documents to the E&AS PM for approval prior to proceeding to Construction Documents Phase based on those assumptions.

2.58 Bid Alternates

The A/E shall design the project so that the base bid and all additive alternates do not exceed the MACC, unless otherwise approved by the E&AS PM and Client Agency. The number of alternates should be limited to a maximum of six unless otherwise approved by the E&AS PM. The E&AS PM, Client Agency, and A/E shall discuss the importance and priority of each alternate. The A/E shall place alternates in order of priority. The A/E may only use deductive alternates with approval by the E&AS PM and OFM.

2.59 Design Development Review and Approval

The A/E shall schedule a Design Development review meeting prior to the Owner Review period. The A/E shall respond to Owner review comments in writing and address in the final Design Development documents.

Final Design Development documents shall include an updated detailed construction cost estimate and project schedule. The construction cost estimate, including all approved bid alternates, shall be within the MACC unless otherwise approved by the E&AS PM and Client Agency.

The A/E shall obtain the E&AS PM's and Client Agency's written approval of the Design Development phase.

Only the E&AS PM can provide the A/E with the authorization to proceed to the Construction Document phase.

CHAPTER 3 - CONSTRUCTION DOCUMENTS

3.0 Construction Document Phase

Based on approved Design Development documents the A/E shall prepare the following Construction Documents: Project Manual, construction drawings, detailed construction cost estimate, and project schedule as outlined in the Agreement.

3.01 Meetings

The A/E shall:

Schedule and conduct all Construction Document phase meetings with the E&AS PM and Client Agency.

Record and distribute minutes of the meetings to all participants in a timely manner; otherwise, within seven days following the meeting or two days prior to the next meeting, whichever is sooner.

3.02 Bid Alternates

See Section 2.58 of this document for requirements. Alternate specifications shall describe the Base Bid condition and how the alternate changes that. Alternates shall be clearly shown on the plans, as well.

3.03 LEED Compliance

The A/E will incorporate LEED construction contract requirements into Construction Documents and provide an updated LEED checklist, description of LEED design features for approval, and submit documentation as required to LEED reviewing authority. (See DES' [LEED Quality Assurance Guidelines](#)).

The A/E shall prepare a Metering plan and submit it as part of the DES LEED QA process. A Metering plan template is available on [DES' Green Building website](#). The main purpose of the Metering plan is to make sure metering is installed on energy and water systems to allow the Owner to track and report energy and water consumption as required by statute. Construction documents shall contain reference to LEED requirement in each section as applicable.

3.04 Utility Coordination

Finalize utility incentive analysis and secure a firm incentive offer from the utilities (energy and water) as appropriate, prior to the start of construction.

3.1 Preparation of Documents for Bidding

The A/E shall coordinate the completion of the following items with the E&AS PM and Client Agency for agreement on:

- Refer to the [Pre-Bid Walk-Through Agenda Template](#)
- Bidding strategy, including base bid and alternates
- Construction schedule
- Owner-approved Constructability Review recommendations incorporated into the documents
- Document printing and delivery costs
- Plan review and permit approval status
- [Liquidated Damages Checklist](#)
- Bid date, time, and location
- Bid Advertisement
- Obtain signatures on drawings and project manual
- Special inspections/testing and other services required for the construction phase

3.11 Bid Date, Time, and Location**Bid Date and Time**

When bid documents are ready for bidding, the E&AS PM and A/E will establish a bid date that allows adequate time for competitive bidding. The bid date for major projects should be a minimum of four (4) weeks from the date of advertisement. The bid period for other projects may vary depending on scope, location, number and types of contractors required.

Bid Location

The E&AS PM and A/E shall agree upon a bid location that will encourage bidder participation.

For projects located in Western Washington, E&AS will conduct the bid openings in Olympia unless the E&AS PM approves another location.

3.12 Advertisements

The A/E and E&AS PM shall develop the bid advertisement based on the [Bid Advertisement template](#).

The E&AS PM will determine when a pre-bid walk-through is appropriate for prospective bidders, the A/E, and Client Agency.

Any mandatory pre-bid walk-through requires approval by the E&AS APM.

3.2 Project Manual

The A/E shall prepare the following Project Manual items in the order listed:

3.21 Cover Sheet

The cover sheet shall contain the following information:

- State Project Number for construction will include the project number plus a suffix obtained from the E&AS PM and contract staff (e.g., 2000-024 G (1-1))
- State Project Title, as directed by the E&AS PM
- Date (date of issue for bid, earlier drafts will have date of issue for review with % complete)
- Client Agency (name of state agency for which the project is being constructed, e.g., For: [Client Agency name])
- Contracting Agency: Department of Enterprise Services, Engineering & Architectural Services
- Name of A/E firm
- Bid Set Number: (e.g. Bid Set No. 10)

3.22 Title Sheet

Title sheet shall contain the following information:

- State Project Number (e.g., 2000-024 G (1-1))
- Project Title
- Date (date of issue for bid, earlier drafts will have date of issue for review with % complete)
- Name of state agency for which the project is being constructed (e.g., For: [Client Agency name])
- Owner: State of Washington, Department of Enterprise Services, Engineering & Architectural Services
- Names, telephone numbers, and addresses of A/E firm and subconsultants
- Signature lines with signee title and date for the E&AS PM, Client Agency, and E&AS APM
- Architect/Engineer's signed professional license seal

3.23 Table of Contents

A table of contents shall list the entire contents of the Project Manual. It shall include Division 00, Division 01, Technical Specifications, and Appendices. There shall also be a list of plan sheets following the Table of Contents.

3.24 Division 00

Use reference documents and forms from [E&AS' website](#), in the order listed below. The A/E shall not modify or amend these documents without the explicit approval from E&AS PM, in consultation with E&AS Contracts Section.

00 [Advertisement for Bids](#)

The advertisement includes important information and specific project requirements such as base bid range, date, time, and place of bid opening, date/time and location of pre-bid walk-through, Diverse Business goals, apprenticeship, prevailing wages, and Supplemental Bidder Responsibility Criteria including Diverse Business Inclusion Plan, when applicable.

Apprenticeship: 15% Apprenticeship participation is required on projects estimated at \$1 million or more. ([RCW 39.04.320](#)) The E&AS PM shall establish the requirement for apprenticeship participation based on the construction cost estimate of the base bid and alternates. The A/E in consultation with the E&AS PM will enter the appropriate requirement for apprenticeship participation on the Bid Advertisement and Bid Form.

Prevailing Wage Requirements: The advertisement shall contain information and a link to the [Department of Labor & Industries \(L&I\) website for the prevailing wage rates](#). The Contractor is responsible for obtaining applicable wage rates for the project. The applicable effective date for the prevailing wages is the bid submittal date for the project.

00 [Instructions to Bidders](#)

00 [Bid Proposal Form](#)

The A/E shall fill in the project number and title, bid alternates, time(s) of completion, apprenticeship requirements, and liquidated damages requirements, in consultation with the E&AS PM. The A/E shall assist the E&AS PM in determining liquidated damages amount. See the [Liquidated Damages Checklist](#).

00 [Supplemental Bidder Responsibility Criteria](#)

The E&AS PM may elect to use Supplemental Bidder Responsibility Criteria to ensure the low responsive bidder is also responsible. ([RCW 39.04.350](#)) E&AS requires Supplemental Bidder Responsibility Criteria on all public works construction projects when the MACC is \$1 million or more. The E&AS PM in coordination with the A/E will develop relevant project specific criteria to be included in Division 00. Template forms are available on [E&AS' website](#), and should be included in the documents behind the criteria.

00 [General Conditions](#)

E&AS will provide the General Conditions for Washington State Facility Construction, which shall not be modified.

00 [Supplemental Conditions](#)

E&AS will provide the Supplemental Conditions for Washington State Facilities Construction, which shall not be modified.

00 [Certificate of Insurance](#)

3.25 Division 01 - General Requirements

E&AS will provide template set of Division 01, General Requirements. The A/E shall not modify the administrative process sections; however, the A/E may modify other sections to meet the specific requirements of the project with approval from the E&AS PM. Examples may include site-specific instructions for temporary facilities and utilities, access, staging, etc. The A/E shall not delegate to others duties for which they are responsible under the [Conditions of Agreement](#) (i.e. delegation of responsibility for conducting and providing minutes for construction meetings).

Construction Waste Management:

Consistent with State Construction Project Goals, projects shall be developed to minimize the amount of waste generated and maximize the amount of materials and waste salvaged for reuse and/or recycling in order to minimize the amount of construction waste going to landfills. As appropriate for the project, a section shall be included in Division 01 with reference to the associated Construction Waste Management Reporting Forms. Construction waste management shall also be coordinated with any associated project LEED requirements as appropriate.

3.26 Technical Specification Divisions

The A/E shall prepare technical specifications using current standard Construction Specifications Institute (CSI) "Master Format."

With the intent of providing for competitive bidding and appropriate performance of products and systems on the projects, for each named product specified, the technical specifications should identify three different manufacturers, wherever practicable. The A/E is required to make judgments and recommendations regarding "as approved by A/E" products. The A/E may specify some products by performance specification only. See Section 2.57, Bidder Design of this document.

If the A/E expects to specify proprietary material or material from a sole source, they need to discuss these items with the E&AS PM before preparing the specification. Sole source and proprietary material specifications require a statement of justification from the A/E for E&AS approval.

The A/E shall not incorporate disclaimer statements into the bidding documents without prior approval from E&AS.

Include any reporting requirements for utility incentives.

LEED Compliance: The A/E will incorporate LEED construction contract requirements into construction documents, and require the Contractor to have a person experienced in LEED project submittals and/or accredited in LEED be in charge of all LEED Submittal and monitoring requirements.

Commissioning: When applicable, the Owner will engage an independent commissioning agent for the A/E to include commissioning of equipment and systems in the project specifications. (See the [Commissioning Guidelines](#)).

3.27 Appendices

The A/E shall include all relevant test reports and documents that provide additional site information such as: land surveys, hazardous materials (including the "Good Faith"

asbestos survey), archeological surveys, historic preservation surveys, geotechnical investigations and test borings, building envelope investigations, etc.

3.3 Drawings

3.30 Document Preparation

Drawings shall be prepared using two- and/or three- dimensional CAD programs as appropriate and in format as approved by the E&AS PM. When approved in advance by the E&AS PM, hand-drawn drawings may be used, but shall be formatted in the same manner as all of the drawings. All information on drawings shall be clearly legible when reduced to half-size.

The A/E shall follow the Owner's CAD standards and conventions. The A/E shall provide copies of all CAD files of the construction documents to the Owner in retrievable electronic media and format as approved by the Owner with appropriate instructions for retrieval of data. Refer to the [CAD Project Drawings policy](#).

Drawings prepared for bidding shall be sized as approved by the E&AS PM.

3.31 Title Sheet

The title sheet shall contain the following minimum information:

- State Project Number (e.g., 2000-024 G (1-1))
- State Project Title
- Architect/Engineer's signed professional license seal
- Date (date of issue for bid, earlier drafts will have date of issue for review with % complete)
- Name of state agency for which the project is being constructed (e.g., For: [Client Agency name])
- Contracting Agency: Department of Enterprise Services, Engineering & Architectural Services
- Name, telephone number, and address of A/E firm
- Names, telephone numbers, and addresses of sub-consultants, and
- Signature block for the E&AS PM, Client Agency representatives, and E&AS APM to sign and date
- Signature of SFAC approval when applicable

The title sheet will include, or subsequent sheets will include the project drawing index, vicinity map, symbols, abbreviations, general notes, schedules, etc.

3.32 Typical Sheets

All sheets shall include a title block with the following information:

- State Project Number
- State Project Title
- Sheet contents
- Sheet number
- A/E's professional license seal (stamp) with signature
- Date and revision dates

3.4 Document Review

The A/E and sub-consultants shall conduct a thorough review of the Construction Documents to ensure:

- They address all Owner review comments and the Plan Review comments of permit authorities having jurisdiction.
- Documents are complete.
- Documents have been coordinated between disciplines.
- They are ready for E&AS and Client Agency review and approval.

3.40 Constructability Review

Major projects (more than \$5 million) are required to have a Constructability Review of the Construction Documents prior to bidding. The state will engage an independent consultant(s) for Constructability Review for these projects. The A/E and sub-consultants will be required to participate and provide support for project Constructability Review. (This is listed as an additional service in the Conditions of the Agreement.)

The A/E shall review the Constructability Review report and prepare a written response for with recommendations for the Owner's consideration. In consultation with the A/E, the E&AS PM and Client Agency shall review the Constructability Review report and the A/E's response, and decide what comments and recommendations should be addressed in the final Construction Documents.

The A/E shall incorporate the approved Final Constructability Review comments and recommendations into the Construction Documents prior to bidding. (See the [Constructability Review Guidelines](#).)

3.41 Plan Reviews, Permits, and Associated Fees

The A/E shall ascertain the applicable plan review and permitting agencies' AHJ requirements for the project including scheduling those reviews.

The A/E shall submit the applicable and required documents to the local permitting agency, Department of Health, Fire Marshal, L&I or local electrical review, and other agencies having jurisdiction. The A/E shall respond to AHJ comments and modify the construction documents, as required, in consultation with the E&AS PM.

The A/E shall secure all plan review approvals from AHJ prior to issuance of the bid advertisement, unless otherwise approved in advance by the E&AS PM.

The E&AS PM will coordinate payment of the plan review and building permit fees by the Client Agency.

3.42 Construction Documents Review

The A/E shall schedule a Construction Documents review meeting prior to the Owner Review period. The A/E shall respond to Owner review comments in writing and address in the final Construction Documents.

The A/E shall provide an updated Construction Documents phase detailed, itemized construction cost estimate including the base bid and any alternates, and project schedule with Final Construction Documents as required by the [Conditions of the Agreement](#). See Section 2.58 of this document for bid alternate requirements.

3.5 Document Approval

The A/E shall obtain the E&AS PM's and Client Agency's written approval of the Construction Documents phase.

The E&AS APM is the state's final approval authority for Construction Documents. The A/E shall obtain the signatures of the E&AS PM, Client Agency Representative, and E&AS APM on the title page. The PM will notify the A/E in writing when authorized to proceed to the Bidding phase.

CHAPTER 4 - BIDDING, PRINTING & PERMITS

The discussion in this chapter pertains to standard public bidding (design-bid-build) of state projects.

4.0 Bid Advertisements

E&AS will not advertise projects for bid without the current detailed construction cost estimate on file. ([RCW 39.04.020](#), [39.04.040](#), and [39.04.050](#)). E&AS will send a short form of the bid advertisement for publication in the Seattle Daily Journal of Commerce (DJC) and to local publications as determined by the E&AS PM. The short advertisement contains the project title and bid date and directs bidders to E&AS' [main website](#) for the full advertisement.

4.1 Bid Document Distribution

The A/E shall be responsible for issuing bidding documents electronically to all plan centers listed in the advertisement, other plan centers expressing interest, and to the online bid package provider, issuing bidding documents to prospective bidders, and maintaining the current Planholders list. This may be done through the normal reprographics company the A/E uses.

If a bid document deposit process is used, it must have prior approval by the E&AS PM. The A/E is responsible for receiving and refunding bid document deposits. The A/E shall notify the E&AS PM of non-refunded bid deposits and deduct the amount from the printing cost reimbursables.

4.2 Pre-Bid Walk-Through and Addenda

4.21 Pre-Bid Walk Through

The A/E shall:

- Refer to [Pre-Bid Walk-Through Agenda Template](#)
- Coordinate bidders' Pre-Bid Walk-Through with the E&AS PM and the Client Agency.
- Maintain an attendees sign-in list
- Maintain minutes of questions and responses brought up during the walk through.

Pre-bid walk-throughs shall not be mandatory for all bidders without prior written approval from the E&AS APM.

4.22 Addenda

The A/E shall:

- Develop document revisions as determined necessary based on review or questions.
- Maintain a sign-in sheet for all attendees at the Pre-Bid Walk-Through, and issue via addenda.

- Review all substitution requests submitted, and issue via addenda status of the requests received. For substitutions that affect policy issues, provide recommendation to the E&AS PM and Client Agency and receive approval from the E&AS PM before approving.
- Review the addenda with the E&AS PM for approval before publication.
- Issue Addenda to all planholders, including plan centers.
- Issue the last addendum at least five working days before bid opening unless otherwise approved by the E&AS APM.

4.3 Bid Openings

4.30 Bid Opening Procedures for projects in Olympia

Participants

E&AS will conduct the bid opening. There must be both a reader and recorder for the bid opening.

Updated Construction Cost Estimate

A minimum of one working day prior to the bid opening, the A/E shall submit the base bid estimated construction cost and the estimated cost for each alternate bid item updated to reflect any changes because of addenda, approved by the E&AS PM. E&AS will read the updated construction cost estimate at the bid opening.

Bid Notification

Immediately following the bid opening, E&AS will email the bid results to the A/E, the E&AS PM, the DJC, and the Client Agency, if not in attendance. E&AS will post bid results on its main website within 24 hours of opening.

4.31 Bid Opening Procedures for Alternate Locations

E&AS may approve, in advance, the receipt of bids at locations other than Olympia and will conduct the bid opening. The bid opening procedures will be the same as for Olympia see Section 4.30 of this document, except:

Opening/Recording Bids

There must be both a reader and recorder for the bid opening. The E&AS PM either will read or record while ensuring a standard E&AS bid summary sheet is complete listing those bidders who submitted their bid prior to the bid time. The E&AS PM may provide copies of this summary sheet to those attending the bid opening.

Transmitting and Transporting Bid Results

Immediately following the bid opening, the E&AS PM will call, email, or FAX the bid results summary sheet to the A/E and the Client Agency, if not in attendance. The E&AS PM will email E&AS' Contracts Section promptly and then securely return all original bids, bid bonds, and envelopes to the assigned Contracts Specialist.

4.4 Bid Results

4.40 Disclosing Bid Results

E&AS shall provide the results of bidding to those inquiring and state that "all bids are taken under advisement" until the contract award is made. The A/E is to give no indication of the potentially successful bidder without E&AS' approval/confirmation. The A/E shall not initiate any contact with the bidders unless directed to do so by the E&AS PM. E&AS will post bid results on its main website within 24 hours of opening.

4.41 Bid Evaluation

E&AS' Contracts Section will verify the responsiveness of the bidders.

The E&AS PM, A/E, and Client Agency will determine acceptance or rejection of base bid and alternates. The combination of the base bid and accepted alternate(s) will determine the low responsive bidder.

E&AS' Contracts Section will then evaluate the mandatory responsibility criteria for the low responsive bidder as listed in the [Instructions to Bidders](#).

If the apparent low bid is more than 10 percent below the second low bidder, then the low bidder must give the E&AS PM written verification that no errors exist in the bid submitted and that it is prepared to execute a contract for the bid amount.

If Supplemental Responsibility Criteria have been included in the Bid Advertisement and Project Manual, the E&AS PM requests the low responsive bidder to provide the required documents within two business days. The E&AS PM may ask the A/E and Client Agency to participate in the review of submitted materials and reference checks using score sheets.

In determining bidder responsibility, the E&AS PM considers an overall accounting of the evaluation ratings of all the criteria. If the preliminary determination is that the bidder is not responsible, the bidder may request a hearing where they provide additional information to be considered, as detailed in the [Instructions to Bidders](#).

4.42 Formal Acceptance or Rejection of the Bid

The E&AS PM, A/E, and Client Agency will determine/confirm acceptance or rejection of base bid and alternates. The Client Agency shall confirm their recommendation in writing to E&AS. When the bid is accepted, the E&AS PM will inform the Contractor that its bid is accepted and the Contracts Section will prepare and send the contract to them for acceptance and signature. When the bid(s) is rejected, the E&AS PM or Contracts Specialist will inform the bidder(s) that their bid(s) is rejected.

4.43 Public Review & Protests

Bid protests or requests to review the bids must be in writing to E&AS.

4.5 Construction Contract and Notice to Proceed

E&AS will prepare a construction contract for signatures and send it to the Contractor. The Contractor returns the signed contract, certificate of insurance, payment bond, performance bond, and choice for investment of retainage. The Contractor provides the required forms (AIA Payment Bond and Performance Bond forms, A312). These are not included in the Project Manual.

When the Contracts Section verifies everything is in order, including Client Agency funding approval, E&AS signs the contract. The E&AS Contracts Specialist consults with the E&AS PM for the Notice to Proceed (NTP) date, and then sends the NTP to the Contractor.

4.6 Permits and Fees

The actual cost of the general building permit and the public utility hook-up fees will be a direct reimbursement to the Contractor or paid by the Owner. The Contractor shall not include these fees in his bid amount. Refer to:

- [General Conditions, Part 5](#)
- [Supplemental Conditions 5.02](#)

The Contractor shall pay all other AHJ inspection fees, permits, and business licenses unless otherwise called for in the contract documents.

Pursuant to Section 5.02 of the Supplemental Conditions, the General Contractor will procure all permits and submit copies of each required and valid permit on the project to the A/E.

The A/E will verify the General Contractor provides and maintains a permit and inspection log to track start and expiration dates of permits, required inspection times, actual inspection dates, and approval dates for each permit.

CHAPTER 5 - CONSTRUCTION ADMINISTRATION

5.0 Pre-Construction Conference

5.00 Scheduling the Conference

The A/E and E&AS PM are responsible for scheduling the Pre-Construction Conference with the Contractor and Client Agency. The Pre-Construction Conference should occur after the issuance of written Notice to Proceed (NTP) to the Contractor by E&AS.

5.01 Participants

Those attending will include the A/E, the E&AS PM, Client Agency, the Contractor, and its sub-contractors as appropriate. The PM may include other consultants such as commissioning agent, special inspection and testing firm, etc.

Local building officials may be invited. The building official may charge the Owner for building official time. Therefore, the A/E shall confirm in advance acceptability with Owner regarding payment.

5.02 Meeting Chair

The E&AS PM and the A/E will co-chair the Pre-Construction conference.

The agenda for this meeting will be the standard [E&AS Pre-Construction Conference Checklist](#) as supplemented by pertinent project specific agenda issues and information. Closeout procedures will be discussed as well.

The A/E will record and distribute the minutes including attendance sign-in sheets.

5.1 Submittals

Division 01 and the technical specification sections will detail the required submittals for the project to include cost of materials and other data as required by LEED. At the pre-construction conference, the A/E shall review submittal requirements, i.e., schedule of values, list of subcontractors, progress schedule, materials, equipment, shop drawings, operation and maintenance manuals, and any other submittals required for the project.

The A/E shall maintain an up-to-date log showing all required submittals, and the status of all submittals that have been provided by the Contractor.

The A/E shall review the Contractor's submittals for compliance with the contract documents, provide clear review comments, note the status of the submittal, and return the submittal to the Contractor as called for in the Contract Documents.

Submittals are to be provided and maintained in electronic format unless physically not possible, or with prior PM approval. The A/E shall establish a submittal labelling system approved by the PM, and maintain all submittals in a location accessible by all relevant project participants.

The A/E shall review and recommend to the E&AS PM and the Client Agency to accept or reject substitutions. No substitution requests will be accepted without approval of the E&AS PM, who may coordinate with the Client Agency. All accepted post-bid substitutions that might affect either construction time or cost, must be formally accepted via Change Order (CO).

The A/E shall maintain a complete set of approved submittals, and provide a copy to the PM and to the Client Agency at project closeout.

5.2 Construction Progress Meetings

5.20 Schedule of Progress Meetings

The E&AS PM, A/E, Client Agency, and Contractor shall establish the general schedule for construction progress meetings at the pre-construction conference.

5.21 Participants

The E&AS PM, Client Agency, A/E, Contractor, and subcontractors will attend all regular meetings as determined appropriate/necessary.

Subconsultants, Owner's consultants, specialty sub-contractors including major suppliers and others should attend when applicable.

5.22 Meeting Chair

The A/E will chair the meetings, record and distribute minutes including attendance within seven days or two days prior to the next meeting, whichever is shorter.

5.23 Agenda

The minimum agenda for construction progress meetings shall include:

- State Project Number
- State Project Title
- Date of meeting
- Attendees
- Other project participants to be included on meeting minutes' distribution but not necessarily in attendance
- Previous Minutes with action items from last meeting
- Risk Issues
- Construction Progress Schedule Update
- Review pertinent portions of Site Specific Safety Plan. Address what will occur before next progress meeting and if there have been any incidents
- Field Authorization/Change Order Proposal/Change Order Log and Status
- Submittal Update

- Material Delivery Status
- Requests for Information (RFI's)
- Quality Control/Quality Assurance
- As-built Updates
- Construction Waste Management Update
- Project Closeout
- LEED Requirements and Reporting
- Commissioning Update
- Field Observations
- Inspection and Test Reports
- Progress Payment, Apprenticeship, and Diverse Business Participation (when applicable)
- Discussion
- Action Items (by whom and by when)
- Next Meeting Date & Time

5.24 Contractor Inquiries

The A/E shall document any questions raised by the Contractor during construction meetings. The A/E shall expeditiously respond to Contractor questions presented formally, as RFI's, and/or initiate document revisions via the appropriate change vehicle as defined in the Contract Documents. The A/E shall maintain an RFI log and a change log identifying the vehicle, the associated cost, and impacts to construction schedule. The E&AS PM will approve all changes to the construction contract before the A/E issues them to the Contractor.

5.3 Change Orders

A Change Order (CO) documents a modification to an existing contract. The Owner, Contractor, or the A/E can bring up change issues. When there is time to cost a change for consideration and process it into a change order, a [Change Order Proposal \(COP\) form](#) is used to identify the scope and request a cost and approvals. When there is not enough time to request, cost, and process a change into a change order, a [Field Authorization \(FA\) form](#) is used.

5.30 Change Order Proposal (COP)

The A/E shall prepare and issue COPs to the Contractor for pricing. The Contractor shall return the signed COP to the A/E along with the required cost information. The Contractor, A/E, Client Agency, and the E&AS PM must accept and sign the COP prior to its conversion into a CO. The Contractor should not proceed with the work until E&AS issues the signed CO incorporating the COP.

The A/E shall review the Contractor's COPs for compliance with the [General Conditions \(Part 7\)](#) and ensure that the costs and time requested are reasonable in comparison to industry standards.

The E&AS PM and A/E shall establish an appropriate A/E fee for design services for each COP or FA, in accordance with the [Conditions of Agreement](#). These A/E fees will normally be included as a percentage of the construction cost of the change or a lump sum fee authorized by amendment.

5.31 Field Authorization (FA)

If immediate approval to proceed with a change in the work is necessary to maintain the project schedule, protect property, or for health or safety reasons, the A/E or the E&AS PM may use an FA to authorize the start of that work. The Contractor, A/E, Client Agency and the E&AS PM must all agree to start work by FA.

If necessary, the A/E or the E&AS PM can obtain and record authorization to proceed with FA work. The A/E or the E&AS PM must note on the FA form, the name and date of each telephonic or electronic approval. The A/E shall obtain signatures at the next meeting or as soon as possible to finalize the FA form.

An FA is an authorization to commence the work for a maximum not-to-exceed (NTE) cost. If during the course of the work the Contractor anticipates that the actual cost of the work will exceed the NTE cost or time, the Contractor must provide a revised NTE amount and the FA must be amended to reflect that amount, as approved.

After the work is completed, the Contractor must produce cost data in compliance with the terms of the [General Conditions \(Part 7\)](#). The A/E and the E&AS PM shall review this cost data prior to conversion of an FA into a CO.

The A/E or the E&AS PM may also use FAs to commence COP work already in the COP process. Reference the FA to the COP number.

5.4 Construction Observation

The A/E, with the E&AS PM and Client Agency, shall establish a mutually satisfactory schedule for site visits by A/E and sub-consultant representatives. The A/E shall prepare and distribute written reports for all site visits.

The A/E shall document any construction observed by the A/E to be out of conformance with the contract documents. The A/E shall transmit the report of non-compliance to the Contractor, with copies to the E&AS PM and Client Agency.

The A/E shall also document when the E&AS PM or Client Agency observes construction that appears to be out of conformance.

The A/E shall advise the Contractor regarding interpretation of the drawings or technical specifications.

5.5 Utility Incentive Acceptance Inspections

When utility company incentives have been included in the project requirements, the Contractor shall install and test the applicable conservation measures in accordance with utility company requirements.

The A/E or appropriate subconsultant shall schedule, coordinate, and document all inspections of utility company incentives in a timely manner following installation and testing.

5.6 Processing Contractor's Invoices

[RCW 39.76](#) requires the state to pay properly submitted invoices within 30 days of receipt.

Because the A/E is the first to receive the Contractor's invoice, the date the A/E receives the invoice starts the 30-day timeline.

To expedite this process, the A/E should review a draft invoice prior to submittal of the signed invoice by the Contractor. The A/E shall date stamp receipt of the Contractor's invoice to start the 30-day period. The A/E must review the invoice for completeness including all form attachments, and within 7-days, either sign and send the invoice to the E&AS PM or request in writing that the Contractor make corrections and resubmit the invoice.

The A/E shall confirm:

- The claimed percent complete on all line items in the schedule of values.
- Incomplete punchlist items reflected in each line item and not in the closeout line item.
- The total amount due on the invoice reflects the construction progress to date.
- The amount remaining on the contract is adequate to complete the work.
- The amounts invoiced are correct.
- The following forms are attached:
 - Apprenticeship participation reports with each invoice.
 - Materials stored on site, if applicable.
 - Subcontractor/Supplier List and Statement of MWBE Participation with each invoice and note when a new subcontractor's work is invoiced, when applicable.
 - L&I approved intents to pay prevailing wages with the first invoice and with subsequent invoices when a new subcontractor's work is invoiced, when applicable.

CHAPTER 6 - PROJECT COMPLETION AND CLOSE-OUT

6.0 Project Completion and Acceptance

The A/E team is to take the lead role in monitoring the project completion and closeout process using the E&AS Construction Completion Checklist. The A/E shall diligently monitor the Contractor's progress to complete the work in accordance with the Contract Documents and within the Contract Time for completion.

Upon receipt of the Contractor's written notice of completion with its incidental punch list, the A/E team shall schedule and conduct a punch list inspection with the Contractor, the E&AS PM, and the Client Agency. The A/E shall prepare a supplemental punch list to include incidental corrective work not addressed in the Contractor's punch list; review comments and punch list items generated by the E&AS PM and Client Agency for conformance with the requirements of the Contract Documents; and incorporate enforceable comments and punch list items into a single supplemental punch list. The A/E shall issue the supplemental punch list to the Contractor and monitor the Contractor's performance to ensure the work on both lists are completed.

6.01 Review of O&M Manuals

The A/E team shall provide a detailed list of closeout submittal requirements, review the Close-Out Submittals for compliance with the contract documents, and ensure that the information provided is specific to the equipment and systems installed in the project.

6.02 Training Plan for Client Agency Personnel

The A/E team shall review the Contractor's training plan and training material and monitor the satisfactory progress and completion of the plan.

6.1 Special Procedures

The A/E shall provide coordination and oversight of special procedures that are included in the project. For example:

6.10 Testing and Air Balancing

The A/E shall review the Contractor's testing and air balance plan. The Owner may retain an independent commissioning agent to or have the A/E spot check results to ensure accuracy, and provide for re-balancing if spot checks turn up discrepancies.

6.11 Commissioning

The A/E shall assist the Commissioning Agent by providing information on the design and obtaining needed information from the Contractor, refer to the [Commissioning Guidelines](#).

6.12 Indoor Air Quality

The A/E shall ensure that the Contractor is using proper procedures to air out building, equipment, and furnishings to comply with the Indoor Air Quality Guidelines.

6.13 LEED Reporting Requirements

The A/E shall verify the Contractor provides all required reports and material information and completes their assigned LEED submittals in accordance with the Contract Documents.

The A/E shall also compile and prepare reporting elements for final submission. See [LEED Guidelines](#).

6.14 Apprenticeship Reporting

The A/E shall verify that the Contractor provides apprenticeship participation reports with Contractor's final invoice.

6.2 Substantial Completion

The A/E, E&AS PM, and Client Agency shall determine the date of Substantial Completion. That date establishes the completion of the contract for purposes of liquidated damages and begins the one-year general warranty period. *"Substantial Completion is the stage in the progress of the work (or portion thereof designated and approved by Owner) when the construction is sufficiently complete, in accordance with the contract documents, so the Owner can assume beneficial use of the work (or the designated portion thereof) for the purpose for which it was intended."* ([General Conditions, Paragraph 6.07](#)) Incidental corrective or "Punch List" work may still need to be completed.

The following are prerequisites to establishing Substantial Completion:

- Completion of all contracted work except incidental punch list items
- All systems and parts are functional
- All utilities and meters have been connected, tested, and are functioning properly
- All work is accessible by normal vehicular and pedestrian traffic routes
- All AHJ inspections have been completed and passed, and Certificate of Occupancy and other permits received (If the Contractor obtains a Temporary Certificate of Occupancy, the E&AS PM will determine whether Substantial Completion has been achieved)
- All specified Operations and Maintenance (O&M) training satisfactorily completed
- Specified O&M Manuals submitted, reviewed and approved by A/E, and delivered to Owner.
- Specified maintenance materials (tools, spare parts, extra stock, etc.) delivered to Owner

- Specified Building Commissioning complete, except for incidental corrective issues.
- Specified required Special Inspection and Testing reports received by Owner
- Notice from the A/E that the work is substantially complete

When the above conditions are complete, E&AS will issue a [Certificate of Substantial Completion](#). The recommended time between Substantial Completion and Final Completion is 60 calendar days.

6.3 Prior Occupancy

Prior Occupancy means Owner's use of all or parts of the Project before Substantial Completion. ([General Conditions](#))

The A/E shall prepare a punch list for the portions of the project the Owner is taking over by Prior Occupancy.

The E&AS PM shall prepare a letter describing the agreement of terms for Prior Occupancy including the punch list.

6.4 Final Completion

"Final Completion shall be achieved when the Work is fully and finally complete in accordance with the Contract Documents. The date Final Completion is achieved shall be established by Owner in writing, but in no case shall constitute Final Acceptance which is a subsequent, separate, and distinct action." ([General Conditions, Paragraph 6.09.A](#))

The following are prerequisites to establishing Final Acceptance:

- Completion and acceptance of Punch List work
- All FA and COP items completed and COs processed
- Any and all claims and/or disputes resolved
- All Contract-required LEED submittals and reports complete and uploaded to USGBC
- All specified certificates of warranty, bonds, extra stock receipts, permits, etc. received
- Submittal of completed and acceptable "as-built" record documents to the A/E
- Final Subcontractor/Supplier list with MWBE, Affidavits of Wages Paid, Apprenticeship reporting requirements, and off-site fabrication reports received, as applicable.
- All post-commissioning issues resolved and Final Commissioning Report received
- All other requirements of the contract documents complete
- Final Contractor invoicing received, accepted and processed on to Client Agency for payment

6.5 Final Acceptance

Final Acceptance means Substantial and Final Completion have been achieved, that the work is fully and finally completed in accordance with the contract documents and that all other contract requirements are complete and accepted. ([General Conditions, Paragraph 6.09B](#))

The achievement of Final Acceptance requires the following:

- Receipt of A/E written recommendation of acceptance to Owner
- Receipt of written acknowledgement of acceptance from Client Agency
- Acceptance and determination of the Date of Final Completion by the PM
- Acceptance and determination of the Date of Final Acceptance by the APM

- Final invoice processed with Subcontractor/Supplier list with MWBE, Affidavits of Wages Paid, Apprenticeship reporting requirements, and off-site fabrication reports

When the above conditions are complete, E&AS will issue a **Notice of Final Acceptance**. This notice initiates the statutory 45-day lien period. The state cannot release contract retainage to the Contractor until the end of the statutory lien period, any liens filed are satisfied, and the Client Agency receives letters of release from the Departments of Labor & Industries, Revenue, and Employment Security.

6.6 As-Builts/Record Documents

When requested by the Client Agency, the A/E may, as an additional service, be engaged to provide Record Documents (drawings and/or project manual) incorporating changes made during construction based on the Contractor's submitted and approved as-built documentation. Note: completion of this service is not a condition of determination of Final Completion and Acceptance. Only submission of satisfactorily complete as-built record documents by the Contractor and approval by the A/E are conditions of determination of Final Completion and Acceptance.

6.7 Liens

E&AS' Contracts Section receives, processes, and tracks liens filed by subcontractors or material suppliers. The A/E shall promptly forward to EA&S any liens it receives. The A/E is not normally involved in the process of resolving liens.

6.8 Post-Construction Commissioning

When applicable under specified building commissioning, seasonal functional testing of HVAC systems after occupancy may be scheduled and conducted during the warranty period after closeout of a construction contract. The A/E may be engaged to support seasonal commissioning when the PM deems that design input is needed.

6.9 Warranty Review

The warranty period generally begins on the date of Substantial Completion and extends for a minimum period of one full year. Warranty periods for individual items as specified may be longer.

Should warranty problems arise, the Client Agency may work directly with the Contractor or may relay the problems to the A/E, copying the E&AS PM. The A/E shall then notify the Contractor in writing.

The A/E shall schedule an 11-month walk-through prior to expiration of the warranty period. The Client Agency, A/E, E&AS PM, and the Contractor will attend the walk-through. The A/E shall issue a Warranty Inspection report to said attendees and will work with the Contractor to have all deficiencies corrected.