



# School Construction Assistance Program

## SUMMARY HANDBOOK



June 2009



## **Office of Superintendent of Public Instruction**

**Randy I. Dorn**

Superintendent of Public Instruction

**Jennifer Priddy, Assistant Superintendent**

K12 Financial Resources

**Gordon Beck**

Director of School Facilities & Organization

Old Capitol Building

P.O. Box 47200

Olympia, WA 98504-7200

For more information about the contents of this document, please contact:

Gordon Beck, Director of School Facilities & Organization, OSPI

E-mail: [Gordon.Beck@k12.wa.us](mailto:Gordon.Beck@k12.wa.us) | Phone: 360.725.6265

To order more copies of this document,

please call 1-888-59-LEARN (1-888-595-3276)

or visit our web site at <http://www.k12.wa.us/publications>

This material is available in alternative format upon request.

Contact the Resource Center at (888) 595-3276, TTY (360) 664-3631

# SUMMARY HANDBOOK

## INTRODUCTION

School Facilities & Organization of the Office of Superintendent of Public Instruction (OSPI) is responsible for administering the K-12 Capital Budget and the School Construction Assistance Program (SCAP). It also provides support for facility management activities, school district organization, and programs related to high performance school buildings, school preservation, and small repairs. School district organization mainly involves district boundary changes, which primarily transfer district territory, but may also include annexations and consolidations. The SCAP assists school districts with funding for new construction and modernization of existing buildings.

The full **School Facilities Manual** (the Manual) outlines the process for planning, design, construction, maintenance, and operation of school facilities and provides detailed information about the state School Construction Assistance Program. It serves as a guide to the services offered by OSPI, and to the procedures required for obtaining state assistance in planning, design, and construction of school facilities.

This **Summary Handbook** is a shorter, high-level companion document to the School Facilities Manual to help navigate the SCAP process. The handbook provides an overview of the school construction process and references specific Manual chapters. All forms identified here and in the Manual are available on the OSPI School Facilities website.

## HANDBOOK ORGANIZATION

### SCAP Program Overview 2

### Steps In the School Construction Process 3

- I. Getting Started: Preliminary Planning 4
- II. Financing School Construction 6
- III. Predesign Analysis 8
- IV. Preparing for Construction 12
- V. Construction Process 14
- VI. Post-Construction: Next Steps 16

### Contact Information 17

#### HELPFUL HINT

You can find the complete **School Facilities Manual** on OSPI's School Facilities website:

<http://www.k12.wa.us/SchFacilities/default.aspx>

# SCAP PROGRAM OVERVIEW

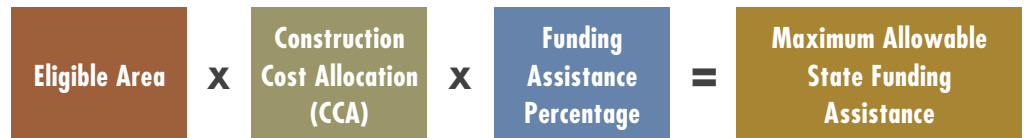
## HELPFUL HINT

Consult your OSPI Regional Coordinator for Eligibility Calculation assistance

OSPI's School Facilities & Organization is responsible for administering state funding to construct new school facilities or modernize existing school facilities through the School Construction Assistance Program.

New construction projects aim to accommodate "unhoused students," while modernization or new-in-lieu projects renovate or replace existing facilities.

State funding contributions to construction costs are determined by a funding formula based on three main factors: eligible area, Construction Cost Allocation, and a state funding assistance percentage (formerly known as matching ratio). The amount the state contributes varies by district as a result of the state funding assistance percentage, and by project due to eligible recognized construction costs. The following graphic is a high-level representation of the School Construction Assistance Program funding formula:



Other costs associated with the project may also be eligible for state funding, including:

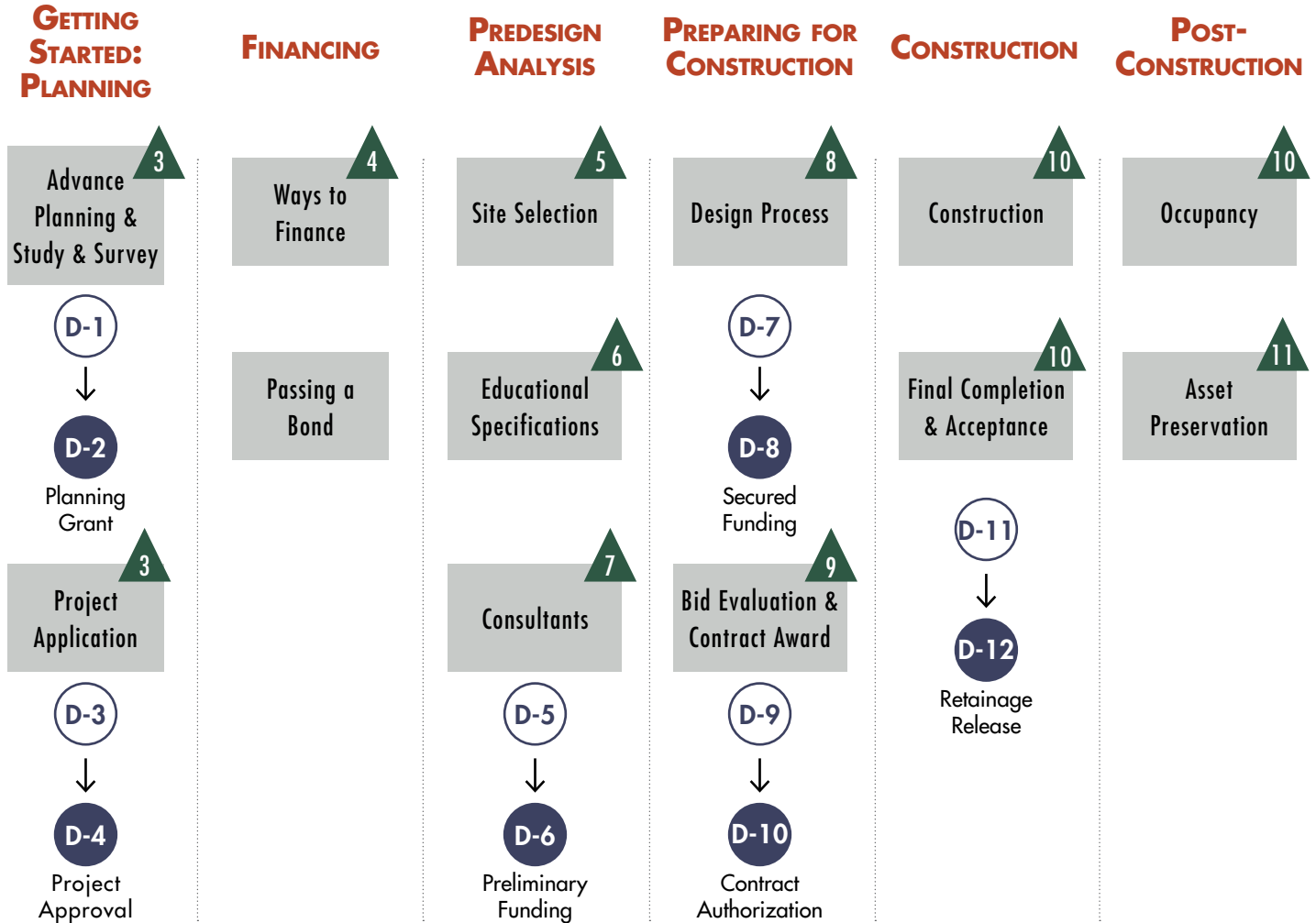
- » Study and Survey
- » Architectural and engineering fees
- » Educational specifications
- » Construction management
- » Value engineering studies
- » Energy conservation reports
- » Constructability review reports
- » Building commissioning reports
- » Furniture and equipment
- » Testing and inspections




The state contribution to these other project costs is also determined by the state funding assistance percentage and various combinations of eligible area, Construction Cost Allocation, and other factors.

# STEPS IN THE SCHOOL CONSTRUCTION PROCESS

The graphic below is a simplified version of the School Facilities Development Process Phases schematic taken from the Manual (page 1-6). It shows the general phases of school construction for the Design-Bid-Build process, as well as steps within phases, D-forms, and reference chapters in the Manual.

## THE SCHOOL FACILITIES DEVELOPMENT PROCESS (Design-Bid-Build Process)



-  Form from School District to OSPI
-  Form from OSPI to School District
-  Chapter number in the full Manual



## Advance Planning and Study and Survey

The process of constructing or modernizing a school building originates with the individual school district that determines the need for and type of school construction project. To jumpstart the process, districts should gather data, analyze their needs, and create a plan to achieve their goals.

There are several components for a school district to complete during this **advance planning process**, which culminates with a **Study and Survey**.

**Study and Survey** is an analysis of the school district's facilities, educational programs and plans, student population projections, capital finance and operating capabilities, and needs for new construction, modernization or replacement of facilities. The following are the necessary components for a district to complete a Study and Survey document:

### Potential Planning Team Participants

- » School district board of directors
- » School district administrators, staff, and students
- » Local citizens
- » Educational consultants
- » Financial consultants
- » Architects and engineers

- » **Develop an educational plan**
  - › An analysis of the community's present status and a projection of its future character
  - › What do citizens expect from their schools and what are the community's educational needs?
  - › How do expectations or goals connect with the facilities long-range plan?
- » **Prepare enrollment projections**
  - › What are birth, population, or enrollment trends?
  - › What are the non-public enrollment figures and virtual school enrollees?
  - › What are the enrollment projections?
- » **Evaluate existing facilities**
  - › Physical condition assessment, including information about the major systems, subsystems, and components such as architectural, structural, mechanical, and electrical elements. Are there urgent capital issues?
  - › Educational adequacy assessment, identifying the capability of the school building to support the educational program. Elements of evaluation include health and safety issues, spatial relationships, circulation patterns, environmental issues, technology capability, issues of accessibility, and more
- » **Evaluate the District's financial capabilities**
  - › Determine the assessed valuation of the district, any outstanding bonded indebtedness, and the current bonding capacity, and compare the results to the estimated project cost. It could be advantageous for the district to enlist the services of a financial consultant to assist at this stage of planning

### HELPFUL HINT

OSPI provides **annual enrollment projections** for each district. This information can be found on OSPI Facilities & Organization website:

<http://www.k12.wa.us/SchFacilities/Programs/EnrollmentProjections.aspx>

- » **Determine Potential State Funding Assistance**
  - › The OSPI Regional Coordinator can provide an overview of the state funding process and will assist with determining potential financial eligibility
- » **Consider an appropriate public works construction method**
  - › School districts may consider GC/CM (General Contractor/Construction Manager), Design/Build, or traditional Design/Bid/Build public works methods
  - › Approval by the Capital Projects Advisory Review Board (CPARB) is required for GC/CM or Design/Build
- » **Prepare the Long-Range Facilities Plan**
  - › The long-range plan identifies and conveys “where we are, where we want to go, and how we are going to get there”

**Components of the Study and Survey**

1. Inventory and area analysis
2. Long-range educational and facilities plans
3. Demographic data
4. Financial assessment
5. Existence of housing emergency
6. Racial balance
7. Facility requirements, current and future
8. Cost/benefit analysis
9. Deferred maintenance
10. Timeline for project completion
11. Neighboring school districts’ facility space inventory
12. Potential need for changes to school district boundaries

**STUDY AND SURVEY ASSISTANCE**

A district may apply for a Study and Survey grant from OSPI.

The district needs to submit a **Study and Survey Application (Form D-1)** to OSPI. If approved, OSPI will issue a **Planning Grant Award (Form D-2)**, which notifies the district of the amount of the grant, and allows one year for completion.



**Getting Started With the Project Application**

The district submits the Study and Survey together with an **Application for Project Approval (Form D-3)**, if appropriate, for review by OSPI. After reviewing these documents, OSPI issues **Project Approval (Form D-4)** notifying the district of approved eligibility for state assistance for the school project.

The district can now prepare educational specifications, select and/or evaluate a site, and select and contract for architectural/engineering and construction management services.



**HELPFUL HINT**

When completing Form D-3, estimate the total square feet of the project generously rather than conservatively, as it is easier to adjust square footage downward on Form D-7 than upward



### Ways to Finance School Construction

The state can provide funding assistance to help the district pay for school construction funding; however, to receive state funding assistance, a school district must raise revenues to demonstrate local support for the proposed project (referred to as “local validation of the project”).

Districts may obtain local funds to finance capital improvements from some or all of the following sources:

- » Unlimited Tax General Obligation (UTGO) bonds
- » Non-voted limited general obligation bonds
- » Sale of short-term obligations
- » Voter-authorized capital levies
- » Proceeds from investments of capital project fund moneys
- » Mitigation and impact fees

Most commonly, school districts finance local portions of large capital projects through the sale of UTGO bonds. The districts can issue UTGO bonds provided that they are: (a) approved by a super majority (60%) of the qualified voters within the district, (b) within the district’s constitutional and statutory debt limitations, and (c) for capital purposes.

#### Potential Bond Financing Participants:

It takes a team to fund a capital project:

- » **School District staff** – superintendent, business manager or other designated person with expertise in finance serve as project coordinator
- » **School Board officials** – approve the project and its financing
- » **Architects and engineers** – provide design and cost information for the improvements sought to be financed by the district
- » **Bond counsel** – provides legal services, prepares the bond resolution
- » **Financial advisor** – works with bond counsel and advises the district regarding market conditions, bond maturity schedule, and call provisions
- » **Underwriter** – purchases and markets the bonds
- » **Bond insurance companies** – guarantee to the holder of the bonds the payment of principal and interest
- » **Rating agencies** – assign bond rating

#### HELPFUL HINT

The League of Education Voters is an excellent resource that provides school bond guidance and sample materials:

<http://www.levylibrary.org>

#### CONSTRUCTION ASSISTANCE

State funding assistance is available for eligible construction costs. Parameters for state assistance are defined in WAC 392-343-020(2) (a). The grant amount is based on School Construction Assistance Program funding formula.



## Passing the School Bond

The **School district board** must approve the bond election resolution stating the purpose, term, and amount of the issue, and other information. The resolution approving the ballot proposition must be delivered to the county auditor at least 45 days prior to the proposed election date.

The **school district** can provide factual information to the community about the proposed bond, but it cannot advocate on behalf of the issues. Factual information can be communicated through district newsletters, brochures, postcards, websites and press releases.

It is useful for school districts to encourage formation of a **Bond Committee**, which can develop promotional materials in support of the bond request. The Committee may be comprised of citizens, school staff, business leaders, organizations, and others. Most school districts already have a levy committee in place which could also serve as the bond committee.

To ensure a successful bond measure, the Bond Committee should consider the following suggestions:

- » Build a strong campaign team and work closely with the school district to obtain and share information
- » Develop a calendar of events and schedule regular meetings throughout the campaign
- » Raise campaign funds
- » Build a database to target voters
- » Conduct a voter registration drive
- » Formulate a communications campaign – advertisements, community and car signs, press releases, mail pieces, handouts, and enlist the help of faith groups, preschools, and speakers
- » Develop a public relations campaign, with key messages and the story of why the project is needed
- » Develop a phone drive – considered by many to be the most cost-effective and efficient way to reach voters
- » Develop a project website with key information and links

### HELPFUL HINT

The bond committee should follow the guidelines and rules of operation established by the Public Disclosure Commission:

<http://www.pdc.wa.gov>

### III. PREDESIGN ANALYSIS



In addition to financing, there are a number of tasks school districts must complete at this phase of the process, including site selection and acquisition, and educational specifications.

Each task is described in further detail below and is an input into the school district's **Application for Preliminary Funding Status (Form D-5)**.

## Site Selection

MANUAL  
CHAPTER 5

### Potential Site Selection Team Participants

- » School district project manager
- » Realtor
- » Appraiser
- » Attorney
- » Architect
- » Civil engineer
- » Geotechnical engineer
- » Land surveyor
- » Traffic engineer
- » Archeologist
- » Wetlands consultant

### The High-Performance Public Buildings

law is in effect for all public K-12 schools. The intent is that state-funded school facilities be designed and built to high-performance green building standards. The standard for K-12 schools is the Washington Sustainable Schools Protocol (WSSP). LEED Silver is an alternative compliance path.

OSPI assists school districts in understanding these requirements through additional technical assistance and the resources found on its website:

<http://www.k12.wa.us/SchFacilities/Programs/HighPerformanceSchoolBuildings.aspx>

### Site Review

The selection of a school facility site is a process that requires considerable input from a number of stakeholders. The Site Selection Team is organized by the school and examines potential sites, considering the following components:

- » Site characteristics
- » History of site uses
- » Legal requirements
- » Location considerations
- » Infrastructure considerations
- » Site access
- » Health and safety

After evaluation, the Site Selection Team recommends one or more sites for purchase to the school district's board. Site recommendations for projects receiving state funding assistance are described in WAC 392-342-020.

Before construction, school districts should consider completing a site review or predesign conference with all appropriate local code agencies, to understand and ensure compliance with building, fire, and health codes.

There are a number of other federal and state laws and requirements to keep in mind when evaluating a site:

- » **High-Performance Public Buildings Act.** The Washington Sustainable Schools Protocol is the green building standard for schools (see sidebar)
- » **State Environmental Protection Act (SEPA).** If the school district is a lead agency, it may need to complete the environmental check-list included in the SEPA rules (WAC 197-11-960) to determine the project's impact on the environment. A district's compliance with SEPA must be certified to OSPI
- » **Growth Management Act (GMA) and Comprehensive Plans.** If the district proposes to locate a school facility within a designated urban growth area (UGA), the district must ensure that the facilities are aligned with the local jurisdiction's Comprehensive Plan land use and capital facilities elements
- » **Hazardous Waste Laws.** Federal and state laws require the identification, investigation, and clean up of sites contaminated with hazardous waste. To minimize risk, school districts are advised to examine the history of a property and the activities conducted upon it prior to leasing or purchase

## Site Acquisition

School districts can acquire a site by:

- » Purchase from the owner
- » Acceptance as a gift from the owner
- » Condemnation of private property with purchase at fair market value
- » Receipt of surplus government property
- » Lease of state-owned property

**Funding.** Site acquisition costs are ineligible for state funding assistance. The school district can obtain funds for site acquisition through similar financing means described in the previous section under Ways to Finance School Construction. See Chapter 5 of the Manual for more information.

**Timing.** A school district can acquire a site either several years prior to development or at the time of development.

## Site Survey and Title Review

Prior to the development of design studies for site utilization and building placement, the district should ensure that a survey of the site's physical characteristics and a title search is conducted.

## Consultants

During this phase in the process the complete project team is selected.

**Potential Project Team Participants.** Each team member is a resource and brings expertise to the project. A project team usually consists of the following members:

- » **Administrative and instructional staff** can assist in the development of the educational specifications that translate into a new facility plan
- » **District support staff** can provide insight into factors such as student flow, security, kitchen equipment, safety, maintenance, and operating costs
- » **Citizens** ensure that a school facility realizes its potential as a community resource
- » **Legal counsel** prepares and reviews contracts for consultant and construction design services and advises on issues resulting from the building project
- » **Education planner** facilitates educational specifications process and guides team members to consensus
- » **Architect/engineer** translates the educational specifications into design concepts which are then developed into building plans and specifications
- » **Engineering consultants** work on the design and engineering of heating, ventilation, lighting/electrical, plumbing, sewer and storm water systems, and building structures
- » **Construction management team member** performs a variety of professional activities and may be a qualified school district staff or professional (see sidebar)

### Construction Management:

The school district is responsible for developing a project construction management plan to achieve the goals of the school district, the state, and the community – on budget and on schedule.

Construction Manager (CM) is a delivery system that applies project management techniques to planning, design, construction, and project commissioning, to control time and costs, and to ensure quality. For construction projects less than 50,000 sf, OSPI recommends that a qualified construction manager is selected and gets involved with the project during the planning phase. For projects over 50,000 sf, it is required to have a qualified construction manager involved in the planning phase to receive state funding assistance.

### III. Predesign Analysis

#### Potential Educational Specification Team Participants

This team should represent diversified interests, skills, and knowledge and can include:

- » Teaching staff
- » Maintenance and operations staff
- » Students
- » Parents
- » Other community members

#### EDUCATIONAL SPECIFICATIONS ASSISTANCE

To prepare the educational specifications, school districts may choose to work with a consultant. To receive state funding assistance, a consultant must assist with preparing educational specifications. See WAC 392-343-065 for eligibility requirements.

#### ARCHITECTURAL AND ENGINEERING FEE ASSISTANCE

State funding assistance for architectural and engineering fees is available. Parameters for state assistance are defined in WAC 392-343-070, and the grant amount is based on the Construction Cost Allocation.

- » **Technical Consultants** assist in the development of a variety of specialized areas including: acoustics, computer networking, energy conservation, food service, land surveying, soil engineering, wetlands biology, value engineering, constructability reviews, commissioning and high performance building design
- » **Project Representative** from the school board participates fully in all project-related activities

The school board and/or district administrators are responsible for assembling and managing the project team. Because the project may last several years, an individual's availability for the project duration should be a consideration in selection.

#### Educational Specifications

Educational specifications define and communicate the district's goals and programmatic requirements to the architect and engineer. Specifications outline how a given facility should accommodate the district's program, based on the objectives defined in the **Study and Survey**. Educational specifications are required for state funding assistance of school facility construction and modernization projects exceeding 15,000 square feet. A suggested outline for educational specifications is as follows:

- » **Project rationale** describing the planned project and its intended use
- » **Community data** describing the location and community education needs
- » **Education plans** describing the curriculum, instructional method, and staffing
- » **General building considerations** describing the circulation, vehicle access, technology and communication, community use, maintenance, and other considerations
- » **Activity areas** describing area objectives, planned usage, types of instructional and non-instructional activities, the relationship to other activities, the number of students and staff, duration of utilization, spatial requirements, support requirements, environmental variables, furniture and equipment, and other considerations

#### Selecting Architectural and Engineering Consultants

**The Process.** State law (RCW 39.80) establishes specific requirements for selecting and contracting with architectural and engineering consultants. The typical method of selection is described briefly below:

1. The district publishes in advance its requirement for professional services
2. A public announcement invites submittals of statements of qualifications from potential consultants
3. The district reviews the qualifications in order to select a smaller number of qualified firms to interview

4. The district interviews applicants to address specific questions and obtain more detailed information
5. The district is required by law to select the most highly qualified firm based on the district’s developed criteria. It is important to document the district’s evaluation and ranking process

**Contracting.** The school district contracts with the selected firm. The district should request a scope of services, which usually include: basic services, additional services, and a process for dealing with change orders.

**ENERGY CONSERVATION  
REPORT ASSISTANCE**

State funding assistance is available for energy conservation report preparation. See Chapter 2 for more information.

**VALUE ENGINEERING,  
CONSTRUCTABILITY REVIEW, AND  
COMMISSIONING ASSISTANCE**

State funding assistance is available. Parameters for state assistance are defined in WAC 392-343-080, and the grant amount is based on the Construction Cost Allocation.

**Front Funding:** A district may proceed with a project at its own financial risk. This process is commonly known as “front-funding.” At such time as state moneys become available, reimbursement may be made for the project provided that it complies with provisions of chapter WAC 392-344.

If the district elects to front-fund a project, it must comply with all the rules and regulations designated by OSPI as if the district were receiving state moneys in the normal manner.

All front-funded projects require that the district submit a formal request on Form D-5, indicating the availability of local funds to cover total project cost.

Other Consultant Services

MANUAL  
CHAPTER 8

**Energy Conservation Reports.** School districts must ensure that energy conservation and renewable energy systems are considered in major construction. By state law, all public facilities have to undergo an energy life cycle cost analysis.

**Value Engineering Studies.** Value engineering is an approach to optimize both cost and performance in a facility.

**Constructability Review Reports.** The review is performed by an independent consultant with the goal of achieving the lowest possible bid and to minimize the chances of change orders and claims after construction begins. Performing a constructability review of design involves reviewing the contract documents and identifying a potential claim or problem areas and deficiencies that may occur during the construction phase of a project. The purpose is to identify errors, ambiguities, omissions, discrepancies, and conflicts in the construction documents.

**Building Commissioning Reports.** Commissioning is a systematic process that may begin in the design phase, and continuing at least one year after project closeout. Commissioning should include the training of operating staff and should ensure that all building systems perform interactively according to the documented design intent and the owner’s operational needs.

After a school district receives **Project Approval (Form D-4)** from OSPI, it has one year to complete **Preliminary Funding Status (Form D-5)** with educational specifications and certification of availability of capital funds. After review, OSPI may issue **Approval of Preliminary Funding Status (Form D-6 or D-6(1))** for front-funded projects).

**Note:** *Until Authorization to Proceed with Bid Opening (Form D-8 or Form D-8(1)) is issued by OSPI, the project has neither secured state funding nor received authorization to open bids.*



## IV. PREPARING FOR CONSTRUCTION



### Design Process

MANUAL  
CHAPTER 8

#### Regulatory Requirements:

All construction documents must be in compliance with federal, state, and local codes pertaining to uniform building, mechanical, plumbing, and fire codes; environmental health standards; national electric codes; and accessibility standards

#### HELPFUL HINT

When obtaining jurisdictional approval (such as city or state permits), make sure to factor in enough time for the permitting process

The Design-Bid-Build process incorporates all prior planning, educational specifications, site studies, codes and regulations, high-performance standards, and financial parameters for constructing the school. [Note: Alternative processes include Design-Build and General Contractor-Construction Manager, neither of which is described in detail in the Manual]. The process normally consists of three basic phases:

- » **Schematic Design.** The architect/engineer team in consultation with the Planning Team and local code agencies completes the following:
  - › Written description of the project, including how the design responds to educational specifications
  - › Zoning and building codes
  - › Conceptual site plans
  - › Incorporation of high-performance features
  - › Preliminary building sections, systems, and materials
  - › Approximate dimensions
  - › Sketches/models to explain the concept
  - › Project schedule
  - › Preliminary construction cost estimates
- » **Design Development.** After the schematic design is approved by the school board, the architect/engineer team develops the following design components:
  - › Site plan, buildings plans, sections, and elevations to establish the final project scope
  - › Specifications regarding how the building is to be constructed
  - › Specifications regarding final material selection and descriptions of the architectural, structural, mechanical, and electrical systems
  - › Area analysis
  - › Sketches, study models, product and material literature, and other samples to explain the project
  - › Updated project schedule
  - › Detailed construction cost estimate
- » **Construction Documents.** After design development is approved by the school board, the architect/engineer team develops the construction documents, which form the construction contract. These documents include two components:
  - › The Project Manual, which includes bidding requirement, contract forms, and contract conditions and specifications
  - › The Drawings, which show the configuration, location, relationships and dimensions of work to be done

After the completion of the three design phases described above, the school district is ready to complete and submit **Form D-7, Application to Proceed with Bid Opening**. Form D-7 must be submitted within one year of the approval of Form D-5.

If D-7 is approved, OSPI will issue an **Authorization to Proceed with Bid Opening (Form D-8)** or **Form D-8(1)** for front-funded projects, accompanied by a statement of eligibility and a breakdown of all costs.



## Bidding and Contract Award

MANUAL  
CHAPTER 9

The process of bidding a construction project includes the following steps:

**Bid Advertising.** For projects receiving state funding assistance, school districts must advertise for bids. Advertisements should be published once a week for two consecutive weeks in a trade journal (such as the Daily Journal of Commerce and a local publication) and should include: a brief project description; submittal deadline; location of bidding documents and any required deposit; notification that all subcontractors whose work exceeds 10% of the project budget be listed; and any other relevant bid conditions.

**Bid Opening.** The bid opening cannot occur without authorization from OSPI (Form D-8 or Form D-8(1) for front-funded projects). Bid forms provide for a separate base bid amount and alternates (e.g. new construction, modernization, non-matchable construction, etc.). All open bids must be tabulated.

**Bid Evaluation.** The school board considers all bids and the qualifications of the bidders. Bidders must be a registered contractor in the State of Washington. The school district board adopts a recommendation for awarding the contract to the lowest responsible bidder with selected itemized alternate bids.

### HELPFUL HINT

Share a sample bid form with your Regional Coordinator early in the process so that the breakdown of construction costs can be reviewed

After evaluating the bids and determining the contract amount, the school district submits its **Application for Authorization to Sign Contracts (Form D-9)**.

If D-9 is approved, OSPI will issue **Authorization to Sign Contracts with Secured Funding Status (Form D-10)** [or **Authorization to Sign Contracts - Front Funded Status (Form D-10(1))** for front-funded projects], which allocates state funds for the project and authorizes the school district to sign the construction contract.

Upon contract award, the school district must forward a signed and certified copy of the contract(s) to OSPI.





## Before Construction: Process Planning

### Key Documents

Before the start of construction, a school district shall receive and accept the following documents:

- » Agreement between the contractor and school district
- » Required performance bonds and required surety
- » Certificates of insurance
- » Prevailing wage rate statement
- » Retainage bond or escrow agreement

School districts should also receive the following planning documents before the first payment request (and preferably before the start of construction):

- » List of subcontractors and suppliers
- » Schedule of values
- » Schedule of construction activities, which includes the sequence of activities, the delivery of key equipment and supplies, and the dates of all events and milestones; the critical path method analysis is a useful format for this schedule
- » Proof of issuance of building permit
- » Product ordering timing schedule
- » Proof of insurance

### Development of the Cash Flow Schedule

After receiving the schedule of values and schedule of construction activities, the Construction/Project Management Team meets to establish a cash flow schedule. This schedule estimates the monies required, on a monthly basis, to complete the scheduled construction activities. An anticipated contractor payment schedule is required to be submitted with Form D-9, prior to contract signing.

### Special Inspections and Testing

Two types of testing procedures are typically required on construction projects: those required by local building and life safety codes, and those performed on behalf of the district. Inspections and tests may be required at various stages of the project: before, during, and after construction.

### Preconstruction Conference

Prior to the start of construction, OSPI recommends inviting the district representative/construction manager; architect and engineers; general contractor; major subcontractors; and building and other officials to a preconstruction conference. The conference should include discussions relevant to the project's schedule, procedures, and ongoing coordination.

#### CONSTRUCTION MANAGEMENT ASSISTANCE

State funding assistance is available for construction management services (WAC 392-343-102).

#### ASSISTANCE FOR SPECIAL INSPECTIONS AND TESTING

State funding assistance is available for inspections and testing required by Chapter 17 of the most current International Building Code (IBC). The grant amount is based on actual costs (WAC 392-343-100).



## During Construction

During the construction process, regular job progress meetings are recommended to resolve issues as they occur, provide on-site direction, and confirm project status.

Other unforeseen events that may arise during the construction process include:

- » **Change orders.** A change order modifies the original construction contract, authorizing a change in work due to corrections or clarifications to contract documents, modified project requirements, or unforeseen site conditions. A change order is required whenever there is a change in contract time, amount, or both.
- » **Dispute resolution.** Disputes may arise during the construction process. Contracts should identify a formal dispute resolution procedure and should be reviewed by the district's legal counsel. Methods of dispute resolution include partnership (preemptive method), arbitration, mediation, or as a final resort, litigation (the most costly of the methods).

### HELPFUL HINT

State funding assistance is not available for change orders or dispute resolutions

## Project Completion and Acceptance

### Substantial Completion

The date of substantial completion is an important point in project development, designating a date when a district may begin to occupy the facility and when the contractor begins to turn control of the facility over to the district. Determining substantial completion follows a process that involves the contractor, the architect/engineer, and the district, and culminates in issue of a *certificate of substantial completion*.

### Final Completion and Acceptance

Once the project work is completed and the contractor completes all the deficiencies, the Project Team conducts a final inspection to determine compliance with contract terms. When compliance is confirmed, the architect/engineer issues a certificate of completion to the school district, along with an area analysis of the completed project.

Upon confirmation of final completion by the architect/engineer, the district officially accepts the work by adopting a school board resolution stating that the work has been completed satisfactorily (separate resolution for each prime contractor).

### HELPFUL HINT

Occupancy often occurs before final acceptance

The school district submits the [Application for Release of Retainage \(Form D-11\)](#). See Chapter 2 of the Manual for a list of the required documentation and schedule.

Upon receipt of all documents, OSPI will issue a [Release of Retainage \(Form D-12\)](#).



## VI. POST-CONSTRUCTION: NEXT STEPS



### Occupancy

MANUAL  
CHAPTER 10

The facility is now ready to be occupied, and the school district's staff should be oriented to its functioning, operating, and maintenance requirements. During project closeout, it is useful to provide staff with operation and maintenance manuals; record drawings; and parts, materials, and supplies. A post-occupancy evaluation of the facility near the end of the first year is also recommended.

### Facility Management

MANUAL  
CHAPTER 11

The school district is responsible for the operation and maintenance of the facility. Three activities of planned facility management include:

- » **Capital Improvements:** changes to the current design condition of the facility through acquisition, alteration, or modifications that add to the physical value of the facility.
- » **Operational Management:** tasks or projects that are active, proactive, or reactive in maintaining the day to day health, safety, and instructional quality of the school facility. This type of management currently occurs in school districts across the state.
- » **Infrastructure Management:** tasks or projects that are proactive, predictive, or preventative in maintaining the school facility over its 30-year expected life cycle. This type of management currently occurs sporadically in school districts, but is now required for state assisted facilities built after 1994. The program that manages infrastructure maintenance is called the Asset Preservation Program (APP).

# CONTACT INFORMATION

## Regional Coordinators

- » Jeanne Rynne, Northwest WA Regional Coordinator
  - › [jeanne.rynne@k12.wa.us](mailto:jeanne.rynne@k12.wa.us)
  - › (360) 725-6269
- » Tom Kuehn, Southwest WA Regional Coordinator
  - › [tom.kuehn@k12.wa.us](mailto:tom.kuehn@k12.wa.us)
  - › (360) 725-6221
- » Gary Miller, Eastern WA Regional Coordinator
  - › [gary.miller@k12.wa.us](mailto:gary.miller@k12.wa.us)
  - › (509) 456-2866



## Other OSPI Facilities & Organization Contacts

- » Angie Wirkkala, Business Manager
  - › [angie.wirkkala@k12.wa.us](mailto:angie.wirkkala@k12.wa.us)
  - › (360) 725-6267
- » Brenda Hetland, Financial Consultant
  - › [brenda.hetland@k12.wa.us](mailto:brenda.hetland@k12.wa.us)
  - › (360) 725-6263
- » Carrie Hert, Administrative Assistant
  - › [carrie.hert@k12.wa.us](mailto:carrie.hert@k12.wa.us)
  - › (360) 725-4953
- » Fatima Salahuddin, Secretary
  - › [fatima.salahuddin@k12.wa.us](mailto:fatima.salahuddin@k12.wa.us)
  - › (360) 725-6266
- » Gordon Beck, Director
  - › [gordon.beck@k12.wa.us](mailto:gordon.beck@k12.wa.us)
  - › (360) 725-6261
- » Lois Epperson, Disbursement Officer
  - › [lois.epperson@k12.wa.us](mailto:lois.epperson@k12.wa.us)
  - › (360) 725-6187
- » Lorrell Noahr, Program Development Manager
  - › [lorrell.noahr@k12.wa.us](mailto:lorrell.noahr@k12.wa.us)
  - › (360) 725-0414
- » Patricia Jatczak, Program Development Manager
  - › [patricia.jatczak@k12.wa.us](mailto:patricia.jatczak@k12.wa.us)
  - › (360) 725-4973
- » Ron Zier, Program Administrator
  - › [ron.zier@k12.wa.us](mailto:ron.zier@k12.wa.us)
  - › (360) 725-6418
- » Scott Black, Program Development Manager
  - › [scott.black@k12.wa.us](mailto:scott.black@k12.wa.us)
  - › (360) 725-6268

**Other questions or comments on this report?**

**Write us at [Gordon.Beck@k12.wa.us](mailto:Gordon.Beck@k12.wa.us) or call**

**360.725.6265**

