

# Designing and Constructing Public Facilities

Legal Requirements  
Recommended Practices  
Sources of Assistance

Commonwealth of Massachusetts  
Office of the Inspector General  
**Gregory W. Sullivan**  
Inspector General

Fall 2005

## Massachusetts Office of the Inspector General

**Address:**

Room 1311  
John McCormack State Office Building  
One Ashburton Place  
Boston, MA 02108

**Phone:**

(617) 727-9140  
(617) 727-9140 (MCPPO Program)  
(800) 322-1323 (confidential 24-hour  
hotline)

**Internet and Fax:**

[www.mass.gov/ig](http://www.mass.gov/ig)  
(617) 723-2334 (fax)

Copyright 2005 by the Commonwealth of Massachusetts  
Office of the Inspector General, Boston, Massachusetts  
All rights reserved

First edition published 1985, revised 1989, 1998, 2000, 2003, 2005



The Commonwealth of Massachusetts  
Office of the Inspector General

GREGORY W. SULLIVAN  
INSPECTOR GENERAL

JOHN W. MCCORMACK  
STATE OFFICE BUILDING  
ONE ASHBURTON PLACE  
ROOM 1311  
BOSTON, MA 02108  
TEL: (617) 727-9140  
FAX: (617) 723-2334

September 2005

Dear Public Official:

I am pleased to present this sixth edition of *Designing and Constructing Public Facilities*, which provides information and guidance to public officials undertaking public construction projects.

In July 2004, legislation containing the most sweeping reforms to public building construction contracting in the past 25 years was enacted. Chapter 193 of the Acts of 2004, entitled "An Act Further Regulating Public Construction in the Commonwealth," resulted from the work of many public and private constituencies, including the Office of the Inspector General, that comprised the Special Commission on Public Construction Reform.

This updated manual incorporates the procedural requirements of Chapter 193 of the Acts of 2004, including amendments to the law and regulations promulgated by the Division of Capital Asset Management (DCAM) to implement several provisions of the law. This manual has also been updated to reflect recent interpretations by the Office of the Attorney General and to include current contact information for agencies and offices that are involved in the public construction process.

To assist public officials in implementing the new law, my office and DCAM have jointly issued memoranda and guidelines to public officials, public contractors, subcontractors, and designers regarding the new requirements. These publications can be downloaded from my office's website at [www.mass.gov/ig](http://www.mass.gov/ig) and from DCAM's website at [www.mass.gov/cam](http://www.mass.gov/cam).

You may download this manual from our website at [www.mass.gov/ig](http://www.mass.gov/ig) or purchase additional printed copies from the State Book Store, Room 116, State House, Boston, MA 02133, (617) 727-2834 or order a copy online at <http://www.sec.state.ma.us>.

My office's Massachusetts Certified Public Purchasing Official (MCCPO) program offers seminars on public construction laws and best practices. For additional information on the MCCPO program and my office's other activities, contact us or visit our website.

Sincerely,

A handwritten signature in cursive script that reads "Gregory W. Sullivan".

Gregory W. Sullivan  
Inspector General

This page intentionally left blank.

# CONTENTS

<b>Foreword</b> .....	<b>i</b>
What's Included and What's Not.....	i
What's Required and What's Not.....	i
Construction Expertise .....	ii
The Massachusetts Certified Public Purchasing Official (MCPPO) Program .....	ii
Using this Manual .....	iii
<b>I. Public Construction in Massachusetts</b> .....	<b>1</b>
Project Delivery Methods for Public Construction.....	1
The Design-Bid-Build Project Delivery Method.....	1
Alternative Project Delivery Methods.....	3
Noncompliance with the Construction Bid Laws .....	3
In-House and Volunteer Construction.....	3
Before You Begin: Preliminary Planning.....	4
Planning and Staffing for Project Oversight.....	4
Project Record-Keeping .....	7
Authority to Contract.....	7
Affirmative Marketing Program .....	8
<b>II. The Designer Selection Process</b> .....	<b>9</b>
The Designer Selection Law For Building Projects.....	10
Designer Selection Thresholds and Applicability .....	10
Other Design Services for Building Projects .....	12
Who Can Perform Design Services .....	14
Using the Same Designer for Study and Final Design Services .....	15
Selecting Designers for Municipal Building Projects: The Basic Steps.....	16
Step 1: Adopt written procedures.....	18
Step 2: Develop the RFQ and contract for design services. ....	20
Step 3: Advertise the contract.....	26
Step 4: Evaluate applicants and select at least three finalists.....	27
Step 5: Rank the finalists. ....	27
Step 6: Finalize the contract.....	28
Step 7: Award and publicize the contract.....	30
Emergency Contracts .....	31
Design Contracts for Non-Building Public Works Projects.....	31
Design-Related Contracts Subject to M.G.L. c. 30B.....	32

<b>III. The Planning Stage.....</b>	<b>35</b>
Design Contract Oversight .....	35
The Study .....	36
Value Engineering .....	38
Using Full-Time Employees and Volunteers for Design Services.....	41
<b>IV. The Design Stage.....</b>	<b>43</b>
Proprietary Specifications.....	44
Estimated Quantities .....	47
Building Projects > \$100,000: Additional Legal Requirements for Bid Documents..	47
Evaluating the Designer’s Performance .....	51
<b>V. Procuring Building Construction Contracts Under M.G.L. c. 149 ..</b>	<b>53</b>
Building Contracts Estimated to Cost Less Than \$10,000.....	54
Building Contracts Estimated to Cost Between \$10,000 and \$25,000.....	54
Building Contracts Estimated to Cost Between \$25,000 and \$100,000.....	55
Building Contracts Estimated to Cost More Than \$100,000 .....	56
Certification.....	57
Filed Sub-Bidding .....	60
Contractor and Subcontractor Prequalification Requirements for Building	
Contracts Estimated to Cost \$10 Million or More.....	61
Step 1: Establish a Prequalification Committee. ....	62
Step 2: Prepare the request for qualifications (RFQ). ....	63
Step 3: Advertise the RFQ and receive statements of qualifications.....	67
Step 4: Evaluate and prequalify contractors or subcontractors. ....	68
Step 5: Notify applicants; post and publish public notice of prequalified	
contractors and subcontractors. ....	70
Step 6: Solicit bids or filed sub-bids from prequalified contractors or	
subcontractors. ....	71
The Construction Bidding Process for Building Contracts	
Estimated to Cost More Than \$100,000 .....	72
Step 1: Prepare the bid documents.....	72
Step 2: Advertise the work. ....	73
Step 3: Receive, open, and review sub-bids. ....	75
Step 4: Distribute the filed sub-bidder list to all bidders. ....	77
Step 5: Receive, open, and review general bids. ....	77
Step 6: Award the contract to the lowest responsible and eligible bidder. ....	82
Step 7: Obtain bonds and execute the contract. ....	82
Step 8: Return bid deposits and publicize the contract. ....	83
Emergencies.....	84

In-House and Volunteer Construction.....	85
<b>VI. Procuring Public Works Construction Contracts Under M.G.L. c. 30, §39M .....</b>	<b>89</b>
Step 1: Prepare the IFB. ....	90
Step 2: Advertise and distribute the IFB.....	92
Step 3: Receive, open, and review bids.....	93
Step 4: Award the contract to the lowest responsible and eligible bidder. ....	96
Step 5: Obtain bonds and execute the contract. ....	96
Step 6: Return bid deposits and publicize the contract award.....	97
Emergencies.....	97
Bidding Smaller Public Works Construction Contracts and Construction Materials Contracts Under M.G.L. c. 30B, §5.....	97
<b>VII. The Construction Stage .....</b>	<b>103</b>
Payment Procedures .....	103
Payroll Records .....	104
Substitutions .....	104
Change Orders .....	105
Change Order Approval Procedures .....	106
Change Order Pricing .....	108
Avoiding Change Orders .....	108
Project Closeout .....	109
Building Contracts .....	110
Non-Building Contracts.....	110
Evaluating Contractor and Subcontractor Performance on Building Contracts > \$100,000 .....	111
Invoking the Performance Bond .....	113
<b>VIII. Procuring Modular Construction .....</b>	<b>115</b>
Projects Covered by the Modular Procurement Law .....	115
Leasing Modular Buildings .....	116
Repair and Maintenance of Modular Buildings .....	116
Planning for Modular Construction .....	116
Emergencies.....	117
Modular Construction Project Oversight .....	118
Modular Procurement: The Basic Steps .....	118
Step 1: Document your decision to replace a modular building (if required)....	118
Step 2: Prepare the RFP. ....	119
Step 3: Provide public notice of the RFP. ....	119
Step 4: Distribute the RFP.....	120

Step 5: Designate the individual(s) responsible for evaluating proposals.....	120
Step 6: Receive the sealed price and non-price proposals.....	120
Step 7: Open and register the proposals.....	121
Step 8: Evaluate the non-price proposals.....	121
Step 9: Evaluate the price proposals.....	123
Step 10: Identify the most advantageous proposal.....	124
Step 11: Negotiate changes (if any) to the proposal.....	124
Step 12: Award and publicize the contract.....	125

**IX. Using Alternative Project Delivery Methods Under M.G.L. c. 149A**  
**..... 127**

Optional Construction Management At Risk Delivery Method for Building Construction Contracts of \$5 Million or More.....	127
Obtaining OIG Approval to Use CM at Risk.....	128
Procuring the CM at Risk Contract.....	130
Step 1: Establish a Prequalification Committee.....	130
Step 2: Prepare and advertise the RFQ for CM at risk services.....	130
Step 3: Evaluate the statements of qualifications and prequalify at least three CM at risk firms.....	133
Step 4: Establish a Selection Committee.....	133
Step 5: Prepare the RFP and distribute it to the prequalified CM at risk firms. .....	133
Step 6: Receive, evaluate, and rank the CM at risk proposals.....	135
Step 7: Negotiate non-fee contract terms with the selected proposer and award the CM at risk contract.....	136
Negotiating the Guaranteed Maximum Price.....	136
Procuring Trade Contracts Estimated to Cost More Than \$20,000.....	137
Step 1: Establish a Trade Contractor Prequalification Committee.....	138
Step 2: Prepare and advertise a request for qualifications (RFQ) for trade contractor services for each trade contract.....	138
Step 3: Evaluate responses and prequalify trade contractors receiving a point score of 70 or higher.....	140
Step 4: Prepare the Request for Bids (RFB) and distribute it to the prequalified trade contractors.....	140
Step 5: Receive, open, and review trade contract bids.....	142
Step 6: The CM at risk firm executes the Trade Contractor Agreement with the prequalified trade contractor submitting the lowest bid for each trade contract. .....	142
Procuring Other Subcontracts Estimated to Cost More Than \$20,000.....	143
Undertaking Construction Work Prior to Execution of the GMP Amendment ...	143
Optional Design-Build Delivery Method for Public Works Construction Contracts of \$5 Million or More.....	145
Obtaining Approval to Use Design-Build.....	145
Procuring the Design-Build Contract.....	146
Step 1: Contract with or assign a design professional.....	147
Step 2: Solicit letters of interest from design-build entities.....	147

Step 3: Prepare the RFQ for design-build services .....	148
Step 4: Develop a scope of work statement defining the public works project. .....	149
Step 5: Develop and issue a draft RFP (optional).....	149
Step 6: Distribute the RFQ.....	149
Step 7: Designate the individuals responsible for evaluating responses to the RFQ.....	149
Step 8: Evaluate and rate the responses, and shortlist at least two design-build entities.....	149
Step 9: Prepare the RFP and distribute it to the prequalified design-build entities.....	150
Step 10: Evaluate the proposals, negotiate with the selected proposer, and award the contract.....	152
Step 11: Execute the contract and notify the unsuccessful design-build entities.....	152
<b>Appendix A: Additional Sources of Assistance .....</b>	<b>A-1</b>
<b>Appendix B: Statutory Forms .....</b>	<b>B-1</b>
<b>Appendix C: Code of Conduct for Public Employees .....</b>	<b>C-1</b>
<b>Appendix D: Model RFP for Modular Construction .....</b>	<b>D-1</b>
Modular Construction RFP: Recommended Outline and Contents.....	D-3
Part I. General Information .....	D-3
<i>Non-Price Proposal Submission Requirements</i> .....	D-4
<i>Price Proposal Submission Requirements</i> .....	D-5
Part IV. Evaluation Criteria .....	D-7
Part V. Contract Terms.....	D-7

## Index

This page intentionally left blank.

## ***Foreword***

---

The Office of the Inspector General designed this manual for officials of local and regional governments who manage or oversee public construction projects and need a ready reference on the legal and procedural requirements of the procurement laws that apply to public design and construction contracts in Massachusetts. The manual provides an overview of the design and construction process in lay terms; it also identifies those steps in the process that are governed by specific statutory requirements and offers guidance and suggestions regarding those steps not governed by statute.

### **What's Included and What's Not**

This manual focuses on design and construction projects undertaken by a city or town; an agency, board, district, or commission within a city or town; a regional district; a local housing authority; an independent local authority; or a county. This manual often uses the generic term “awarding authority” to refer to the public jurisdiction that has legal authority to undertake a project.

However, you should be aware that counties, local housing authorities, and other independent authorities are sometimes subject to different rules from those that apply to municipalities. This manual covers only the major differences in these rules. Projects funded in part by a state or federal agency may be subject to additional requirements established by the funding agency. Local ordinances, by-laws, and charters may also impose requirements that are unique to each jurisdiction.

### **What's Required and What's Not**

We have tried throughout this manual to draw clear distinctions between required practices, which are mandated by law, and recommended practices, which you are free to accept, modify, or reject in light of each project's individual circumstances. For required practices, we have included references to the appropriate chapters and sections of the Massachusetts General Laws (M.G.L.). If you have a question about a

specific requirement, or if you are dealing with a particularly complex or unusual situation, take the time to read the relevant statute or code and consult with your local attorney. Copies of the Massachusetts General Laws are available in most municipal libraries, from your local attorney, or online at [www.mass.gov/legis/laws/mgl/index.htm](http://www.mass.gov/legis/laws/mgl/index.htm).

You should also be aware that some provisions of the law may be subject to differing interpretations. Although we have made every effort to interpret these requirements in light of relevant legislative history, case law, and administrative rulings, our interpretations represent the opinions of the Office of the Inspector General and are not legally binding.

The Office of the Attorney General has been responsible since September 1993 for ensuring that procurements of public design and construction contracts comply with Massachusetts public bid laws. The Division of Fair Labor and Business Practices within the Office of the Attorney General handles bid protests.

If you need information on legal requirements, consult your local attorney. Further assistance may be available from the various state agencies involved with the public construction process. These agencies are listed in Appendix A of this manual.

### **Construction Expertise**

Reading this manual will not, by itself, make you an expert in public construction. A major public construction project should be administered by knowledgeable and experienced personnel. You are required by law to contract with or assign a qualified owner's project manager to oversee building projects with an estimated construction cost of \$1.5 million or more. Skimping on project management and oversight to save money is a shortsighted and often costly strategy.

### **The Massachusetts Certified Public Purchasing Official (MCPPO) Program**

The Office of the Inspector General's MCPPO program, a certification program for public purchasing officials, promotes professionalism and excellence in public procurement by preparing participants to make best value procurements for their

jurisdictions. There are three core seminars: Public Contracting Overview, Supplies and Services Contracting, and Design and Construction Contracting. Each seminar spans three days and concludes with a written examination. The Office delivers the seminars in various locations throughout the year. Public purchasing officials who complete the Public Contracting Overview seminar (a prerequisite for the other seminars) and at least one other seminar may apply for an MCPPO designation. The designation for which you are eligible is determined by the specific seminars you complete and your education and experience. The designations are as follows: MCPPO, MCPPO for Design and Construction Contracting, and MCPPO for Supplies and Services Contracting. Individuals with less experience may apply for an Associate designation. Once certified, purchasing officials must maintain their skills and knowledge to attain recertification every three years. Additional information about the program can be obtained by calling the Office at 617-727-9140 or by visiting our website at [www.mass.gov/ig](http://www.mass.gov/ig).

### Using this Manual

This manual is generally organized in the sequence of a typical construction project. The sequence begins in Chapter I which, after providing some general information about the design-bid-build project delivery method, identifies preliminary planning issues concerning roles, staffing, and project controls – issues that should be addressed at the outset of a project to ensure success. Chapter II discusses designer selection, which is the procurement process you will use in contracting with architects and engineers. Chapter II departs from the strict sequence of project stages because you may undertake a designer selection process at multiple points over the course of a construction project. The next five chapters proceed in sequence from the planning stage (Chapter III) into the design stage (Chapter IV), through construction bidding (Chapters V and VI) and concluding with the construction stage, the period from commencement of construction through project closeout (Chapter VII). Chapter VIII discusses the basic steps for procuring modular buildings. Chapter IX summarizes the new statutory requirements for using two optional alternative delivery methods for construction contracts estimated to cost \$5 million or more.

This page intentionally left blank.

# ***I. Public Construction in Massachusetts***

---

Massachusetts awarding authorities are responsible for a variety of construction projects, including schools, police and fire stations, roads, bridges, and wastewater treatment plants. The goal of public construction is to deliver public facilities that meet the needs of the citizens and public employees who will use them and that represent sound investments of tax dollars. High-quality, cost-effective design and construction services are key to achieving this goal on each public construction project. The procurement and contracting procedures required by the public construction laws in Massachusetts differ in some respects depending upon whether the project entails “vertical” construction, such as a building, or “horizontal” construction, such as a roadway. Massachusetts laws have long required advertising and bidding of both vertical and horizontal public construction projects (referred to in this manual as “building” and “non-building” projects). Where appropriate and necessary, this manual makes clear the differences in requirements applicable to the different types of projects. If you have questions about which bid law applies to a contract, consult your local attorney or the Fair Labor and Business Practices Division of the Office of the Attorney General early in the design stage.

## **Project Delivery Methods for Public Construction**

### **The Design-Bid-Build Project Delivery Method**

The design and construction contracting process for public construction projects in Massachusetts typically involves three stages: planning, design, and construction. In the planning stage, project requirements are defined and often documented in a study, environmental report, or other planning document. The design stage results in a complete set of plans and specifications describing the project to be built. In the construction stage, bids are solicited on the completed design, and the selected contractor completes the construction. This project delivery method is often referred to as the design-bid-build method. The design-bid-build delivery method is required by

M.G.L. c. 149, the public building construction law, and M.G.L. c. 30, §39M, the public works construction law.

The design-bid-build project delivery method for public construction involves at least three participants: the public owner, the designer, and the contractor:

The **public owner** is responsible for defining the project scope, budget, and schedule; procuring and managing the project design and construction services; paying for the project, which typically involves financing; and operating and maintaining the completed facility. On some projects, an **owner's project manager** will assist the public owner with some or all of these tasks.

The **designer** is the architect or engineer responsible for assisting the public owner in developing the project scope, budget, and schedule and, within those parameters, preparing the detailed plans and specifications<sup>1</sup> that define the facility to be constructed. The designer may subcontract specialized portions of the design work, such as structural or mechanical design components, to subconsultants. The public owner may decide to expand the designer's duties to include oversight of the contractor's performance during the construction stage of the project.

The **contractor** is responsible for providing the labor, materials, and equipment to construct the project in accordance with the plans and specifications. On building projects, major components of the project are typically performed by subcontractors working under the contractor's direction.

Under the design-bid-build method, the designer and the contractor each contracts separately with the owner in an arrangement that provides checks and balances for the project.

---

<sup>1</sup> Plans consist of the construction drawings; specifications provide a detailed written description of the construction work, including dimensions and materials, represented in the plans.

**Alternative Project Delivery Methods**

Certain project delivery methods depart from the design-bid-build process. Two such alternative project delivery methods, construction management at risk and design-build, are available to Massachusetts awarding authorities for certain types of projects with an estimated construction of \$5 million or more, subject to specific conditions. The legal requirements for employing these alternative project delivery methods are found in M.G.L. c. 149A; these requirements are summarized in Chapter IX of this manual.

**Noncompliance with the Construction Bid Laws**

The law contains severe civil and criminal penalties for those public officials who seek to evade the requirements of the public construction laws by failing to publicly advertise contracts or by splitting contracts into smaller contracts. [M.G.L. c. 149, §44J(7)] Contractors should also be aware that contracts awarded in violation of these requirements may be held unenforceable by a court, whether or not the contractor was acting in good faith.

If even part of the subject matter of a contract falls under the construction bid laws, a jurisdiction cannot avoid the bid requirements by calling the agreement something else or combining the construction work with other services. For example, it would not be legal for a municipality to enter into an unadvertised contract with a developer to design, build, and operate a municipally owned sports arena on public land.

**In-House and Volunteer Construction**

You may use qualified employees for construction work without putting it out to bid, provided that the work falls within the scope of the employees' normal duties and expertise. The bidding requirements of M.G.L. c. 30, §39M apply to the purchase of materials used in construction work for both building and non-building projects.

The use of volunteer labor is sometimes proposed as a cost-saving measure, particularly on smaller projects. Although the law does not prohibit this practice, we discourage using volunteers for larger projects or those involving structural, mechanical,

or electrical work. Deficient work could have costly consequences for these types of projects. If volunteers are used, qualified supervision is essential.

Keep in mind, too, that the bid laws apply to any agreement to spend public funds on public building construction or public works construction. Thus, a town cannot “give” the local civic association \$20,000 to buy materials and fix up the town bandstand.

### **Before You Begin: Preliminary Planning**

A construction project is an inherently complex and risky undertaking. The unique attributes of each project make the construction process far less predictable – and therefore more risky – than the procurement process for most other types of supplies and services. You can reduce your jurisdiction’s exposure to risk by instituting workable procedures for project oversight and record-keeping at the outset of the project. You should also ensure that all employees who will communicate with the owner’s project manager, the designer, or the contractor understand the limits of their authority to make decisions on behalf of your jurisdiction.

### **Planning and Staffing for Project Oversight**

Contracting out the design and construction of a project does not absolve you as the public owner from responsibility and accountability for the project. To protect your jurisdiction’s interests, it is essential that you plan and provide for sufficient and effective supervision and oversight of the project by experienced staff and/or consultants at every stage of a public construction project. While some jurisdictions have traditionally relied on temporary or permanent volunteer building committees to oversee project design and construction, it may be unrealistic to assume that a part-time, volunteer committee will have the time and expertise to provide the necessary oversight functions.

Early in the planning process is the optimal time to develop an oversight plan that defines the roles and responsibilities of those who will supervise the project. On major projects, there will often be three key people supervising the work: the owner’s project manager, the designer or construction manager, and the clerk of the works. On smaller

projects, some of the oversight functions may be combined so that only one or two key supervisory staff are needed.

**The owner's project manager.** The owner's project manager is the official or firm designated by the public owner to serve as the focal point of responsibility and accountability on the project from the study and design stages through construction completion. Even if the project will be under the supervision of a committee or board, such as a town building committee, all communication between the jurisdiction and any other party should be channeled through the owner's project manager. In addition to coordinating the work of the project participants, the owner's project manager closely monitors the project budget and schedule, and maintains a central file of project records. The scope of the owner's project manager's duties and authority will vary depending on the needs of the jurisdiction and the complexity of the project.

For building projects on which the construction work is estimated to cost \$1.5 million or more, you are required to contract with or assign an owner's project manager to serve as your jurisdiction's agent throughout the planning, design, and construction stages of the project. [M.G.L. c. 149, §44A<sup>1</sup>/<sub>2</sub>] The specific qualifications and duties of the owner's project manager required for these projects are discussed in Chapter II of this manual.

We recommend that you contract with or assign a full-time owner's project manager on any large or complex construction project. Consider hiring an owner's project manager on a temporary basis if your jurisdiction lacks available staff with the necessary expertise.<sup>2</sup> The owner's project manager should, of course, have fiscal, procurement, and construction experience. If you contract with a project management firm for these services, the owner's project manager will typically serve as the construction manager during the construction stage of the project.

---

<sup>2</sup> Note that the function and responsibilities of the owner's project manager or construction manager differ from those of the designer's project manager, who is responsible for managing the design contract on behalf of the project designer.

**The construction manager.** The construction manager (who may also be your owner's project manager) typically coordinates and oversees the construction process, monitors the construction schedule and budget, reviews and approves contractor submissions, inspects completed work, and approves contractor payments. Some jurisdictions contract with the project designer for construction management services during the construction stage of the project; others hire or contract with a professional construction manager rather than including construction management services in the design contract. Bear in mind that the skills required to design a building or highway project are very different from those required to manage and oversee the construction stage of that project. If you plan to contract with a single design firm for both design and construction management services, make sure that you focus on both sets of skills in evaluating designers for the project.

**The clerk of the works.** The clerk of the works serves as the public owner's representative at the project site. This individual's general function is to observe and record the progress of the construction. For major projects, the clerk of the works should be a full-time employee or contractor with substantial construction experience. (If you are contracting with a construction management firm, the firm may provide a site representative who functions as a clerk of the works.) This individual's job responsibilities will generally include:

- observing the progress of construction;
- monitoring contractor staffing, equipment, and materials deliveries;
- coordinating the project schedule; and
- on-site project record-keeping, including preparation of daily logs and progress reports.

The early part of the planning stage is also the time to decide how to manage the relationships among the various parties. Your objective is to complete the project successfully – that is, to build a high-quality facility that meets your needs, on time and within your budget. Although the construction field has traditionally been prone to conflict and litigation, you can take steps to reduce these risks. A well-written contract

is the most important protection against unnecessary disputes. But even with a well-written contract, you have to oversee the construction process to increase the likelihood of a successful project.

Partnering is one approach to construction project management that has gained increasing acceptance in the construction field. This approach seeks to avoid conflict, and to address conflicts quickly when they arise, through the use of specific team-building and dispute resolution techniques. Partnering requires all parties to consider the interests of the other parties and to work toward achieving mutually agreed-upon objectives. It does not, however, require you to give up or undercut your jurisdiction's interests in any way.

### **Project Record-Keeping**

Good record-keeping is essential to efficient and effective contract administration and oversight. Thus, before embarking on the project, it makes sense to institute a centralized project record-keeping system that will ensure thorough, accurate documentation of the project from the planning stages through construction completion. Responsibility for maintaining the project records should be assigned to the owner's project manager. Examples of project records that must be maintained include all project-related meeting minutes, contracts and amendments, programs and feasibility studies, plans and specifications, shop drawings,<sup>3</sup> change orders,<sup>4</sup> invoices and payment requisitions, correspondence, as-built drawings, and warranties.

### **Authority to Contract**

Any contract signed by an individual who lacks the authority to bind your jurisdiction will be legally unenforceable. If you do not know who within your jurisdiction is authorized to enter into contracts, or what kinds of contracts are permissible, you should review

---

<sup>3</sup> Shop drawings are detailed drawings of specific construction components or systems called for in the plans and specifications. The general contractor submits shop drawings to the designer for approval.

<sup>4</sup> Change orders are owner-approved modifications to the construction contract that affect the contract scope, price, and/or schedule.

your jurisdiction's enabling legislation, charter, or local rules; you should also consult your local attorney.

**Affirmative Marketing Program**

Massachusetts awarding authorities are required to incorporate participation goals for minority-owned business enterprises (MBEs) and women-owned business enterprises (WBEs) into the design and construction procurement process for capital facility projects under the control of the Division of Capital Asset Management (DCAM) and on state-assisted building projects that include any funding, including grants and reimbursements, from the Commonwealth. [M.G.L. c. 7, §40N] The current participation goals are available from DCAM's website at <http://www.mass.gov/cam>. For information regarding participation goal reductions or waivers, you may contact DCAM or SOMWBA, which has oversight responsibility for the affirmative marketing program pertaining to state-assisted building projects. A list of certified MBEs and WBEs is available on SOMWBA's website at [www.somwba.state.ma.us](http://www.somwba.state.ma.us).

## ***II. The Designer Selection Process***

---

Construction projects typically require the services of registered architects, engineers, and other professional consultants to plan the work that will ultimately be carried out by construction contractors. The term “designer” is used to refer to the individuals or firms hired to do the architectural and engineering work for a project. In this manual, the term also includes consultants hired for preliminary planning (including the preparation of programs, feasibility studies, and environmental reports), for value engineering reviews, and for construction supervision.

In the life cycle of a public facility, you may contract with designers for different services at different times. For example, you might contract with:

- a designer to prepare a feasibility study;
- a value engineering specialist to review the study in order to recommend potential changes to save money or improve the facility’s function;
- an owner’s project manager to serve as your jurisdiction’s agent during the planning, design, and construction stages of the project;
- the study designer or another designer to develop design and bid documents;
- a value engineering specialist as the design is being developed to review the design development documents;
- a construction manager to provide construction management services; and
- various architects and engineers in subsequent years after the facility is opened to identify the need for renovations, repairs, or replacement.

This chapter presents information on designer selection. Subsequent chapters will cover the sequence of project development from planning through construction project closeout.

Selecting a qualified designer is essential to the success of a construction project. For building projects, state law requires a designer selection process that is aimed at obtaining high-quality design services for public buildings, while ensuring that qualified

designers have the opportunity to compete for public business through a fair, open process. These procedures are found in M.G.L. c. 7, §§38A½-O, the designer selection law. For non-building, or public works, contracts, the selection of designers is not subject to the designer selection law.

The first section of this chapter summarizes the requirements of the designer selection law for contracts with designers providing services in connection with building projects. The chapter then discusses best practices for procuring design services in connection with non-building projects. The chapter concludes with a brief note on procuring design-related contracts subject to M.G.L. c. 30B.

### **The Designer Selection Law For Building Projects**

#### **Designer Selection Thresholds and Applicability**

M.G.L. c. 7, §§38A½-O contains procedures for selecting designers for building projects through an advertised, competitive, qualifications-based selection (or QBS) process. While the concepts set forth in the following text are relevant to the designer selection process for both state and local governments, the text principally focuses on the designer selection procedures that apply to local governments.

For local governments, the designer selection law applies to any contract for design services for any building construction, reconstruction, alteration, remodeling, or repair project that has an estimated construction cost of more than \$100,000. According to guidelines published by the Designer Selection Board (DSB), if there is no estimated cost of construction, the designer selection law should be followed if the design fee is estimated to cost \$10,000 or more. If you do not know the estimated construction cost, as is often the case in the preliminary planning stages of a project, we recommend that you consult the DSB for guidance.

Design services subject to the designer selection law include master plans, feasibility and other studies, surveys, soil tests, cost estimates or programs; preparation of drawings, plans, and specifications, including schematic and preliminary designs;

supervision or administration of a construction contract; and construction management and scheduling. [M.G.L. c. 7, §38A½(b)]

The basic designer selection responsibilities of various public owners such as cities and towns, housing authorities, state agencies, charter schools, counties, and independent state authorities are briefly summarized below.

Even if a building is only a small part of a project, the project is still a building project. A \$1 million project to build an outdoor ice skating rink would not be subject to the designer selection law, but if the project included a \$150,000 building, the entire project would be subject to the designer selection law.

**Cities and towns** are required to adopt their own procedures for selecting designers for building projects; these procedures must conform to the purposes and intent of the designer selection process outlined in M.G.L. c. 7. **Regional school districts** and **Horace Mann charter schools** are subject to the same requirements.

**Housing authorities** must follow the procedures established by the Department of Housing and Community Development (DHCD) for design of state-funded housing. DHCD's procedures follow the M.G.L. c. 7 process and are approved by the DSB. The DHCD procedures prescribe the role of DHCD and of the local housing authority in the selection process. For design of federally funded housing, housing authorities are required by the U.S. Department of Housing and Urban Development (HUD) rules to select designers in accordance with the procedures outlined in the designer selection law.

**Executive departments of the Commonwealth of Massachusetts** and **Commonwealth charter schools** are subject to the jurisdiction of the Designer Selection Board (DSB) when the design fee is \$10,000 or more and the construction project is estimated to cost \$100,000 or more.<sup>5</sup> [M.G.L. c. 7, §38C(e)] The DSB carries out a formal, advertised selection process following the procedures outlined

---

<sup>5</sup> The DSB is an independent board, the majority of whose members are architects and engineers. The DSB members are appointed for a fixed term and serve as volunteers to select designers for larger state building projects. The DSB was created to ensure the professionalism of the selection process and to insulate it from political influence.

in M.G.L. c. 7. For each project, the DSB ranks the applicants according to their qualifications for that project and submits the names of the three highest-ranked designers to the Commissioner of the Division of Capital Asset Management (DCAM). The Commissioner appoints one of these three designers; if the Commissioner does not appoint the highest-ranked designer, he or she must explain the reason in writing.

If the design fee is less than \$10,000 or the project is estimated to cost less than \$100,000, a state department or Commonwealth charter school may procure its own design services. The Operational Services Division regulations will apply to the procurement of these design services.

**Counties**, like state departments, are subject to the jurisdiction of the DSB for projects with a design fee of \$10,000 or more and the construction project is estimated to cost \$100,000 or more. This means that counties present their project requirements to the DSB, and the DSB solicits qualifications, ranks the applicants, and submits the names of the three highest ranked designers to county officials.

Most **independent state authorities**, such as the Massachusetts Convention Center Authority and the Massachusetts Port Authority, are also subject to DSB jurisdiction but may seek an exemption from DSB jurisdiction by submitting to the DSB a set of procedures that comply with the M.G.L. c. 7 process. In general, independent state authorities have their own architect/engineer selection boards that follow DSB-approved procedures. (The Massachusetts State College Building Authority and the University of Massachusetts Building Authority are exempt from the designer selection law.)

### **Other Design Services for Building Projects**

**Owner's project manager contracts.** Before contracting for design services in connection with a public building contract estimated to cost \$1.5 million or more,

each awarding authority<sup>6</sup> is required to contract with or assign an owner's project manager to serve as its jurisdiction's agent during the planning, design, and implementation of the construction work. [M.G.L. c. 149, §44A½(a)] The individual or entity serving in this role must be engaged in the practice of providing project management services for building construction and supervision. In addition, the owner's project manager must either be a registered architect or engineer with at least five years of experience in building construction and supervision or possess at least seven years of experience in building construction and supervision. An existing employee may be assigned to serve as the owner's project manager if that employee meets or exceeds these requirements and has building construction and supervision experience relating to projects of similar size and scope of complexity as the project to which the employee is assigned. The owner's project manager must be independent of the project designer, general contractor, and any subcontractor.

The duties of the owner's project manager must include, but need not be limited to, providing advice and consultation with respect to the following issues:

[D]esign, value engineering, scope of the work, cost estimating, general contractor and subcontractor prequalification, pursuant to section 44D½ or 44D¾ when applicable, scheduling, construction and the selection, negotiation with and oversight of a designer and general contractor for the project, ensuring the preparation of time schedules which shall serve as control standards for monitoring performance of the building project, and assisting in project evaluation including, but not limited to, written evaluations of the performance of the design professional, contractors, and subcontractors. [M.G.L. c. 149, §44A½(a)]

The DCAM has issued *Owner's Project Manager Guidelines*, which provide guidance on the role of the owner's project manager through the different project stages. These *Guidelines* can be accessed at DCAM's website: [www.mass.gov/cam](http://www.mass.gov/cam).

---

<sup>6</sup> The Massachusetts State College Building Authority and the University of Massachusetts Building Authority are exempt from this requirement. [M.G.L. c. 7, §38A½(b)]

The services of an owner's project manager must be procured using a qualifications-based selection process. [M.G.L. c. 149, §44A½(c)] We recommend that you follow your jurisdiction's designer selection process to select the owner's project manager.

**Exempt design contracts for building projects estimated to cost more than \$100,000.** Contracts for modular buildings are not subject to the designer selection law. You may procure contracts for the fabrication or installation of modular buildings using a request for proposals process in accordance with the provisions of M.G.L. c. 149, §44E. (Chapter VIII of this manual provides detailed information on the statutory requirements for procuring modular buildings.)

Contracts for energy management services that may include improvements to a building are not subject to the designer selection law and may be procured using a request for proposals process in accordance with the provisions of M.G.L. c. 25A, §11C. Information on energy management services contracting may be obtained from the state's Division of Energy Resources. (See Appendix A for information on contacting the Division.)

Contracts for the design of a building that is appurtenant to a sewer, water, or highway system and is required as an integral part of that system, are exempt from the designer selection law. [M.G.L. c. 7, §39A(g½)]

**Design contracts for building projects estimated to cost \$100,000 or less.** To select designers for smaller building projects – those whose estimated construction cost is \$100,000 or less – we recommend soliciting qualifications and price information from at least three design firms.

### **Who Can Perform Design Services**

Design services generally require the participation of registered architects, landscape architects, or engineers. In such cases, if the designer is an individual, he or she must be registered in the appropriate discipline. If the designer is a partnership, a majority of the partners must be registered in the appropriate discipline. If the designer is a corporation, sole proprietorship, joint stock company, or other entity, the chief executive

officer, the person in charge of the project, and either a majority of directors or a majority of the ownership interest must all be registered in the appropriate discipline. [M.G.L. c. 7, §38A½(b)]

The designer selection law also applies to contracts with consultants who are not architects and engineers if the consultants provide any of the services that fall within the definition of “design services” set forth in Section 38A½(b) of the designer selection law. Design services such as the preparation of a study evaluating alternatives and recommending solutions involving work on a building may be undertaken by someone other than an architect or engineer. For example, a municipality may hire an industrial hygienist to inspect school buildings for exposed asbestos. The industrial hygienist will generally prepare a study, survey, or program and a cost estimate for the asbestos removal. Because these activities constitute design services for a building alteration or repair, the designer selection law applies to the selection of the industrial hygienist. Similarly, since construction supervision is a design service under the designer selection law, a contract with a construction management firm to oversee the project scope, budget, and schedule during the construction phase of a building project estimated to cost more than \$100,000 would be subject to the designer selection law.

### **Using the Same Designer for Study and Final Design Services**

Awarding authorities may contract with the same designer for study and final design services, provided that both scopes of work are included in the original solicitation or that the awarding authority has advertised for final design services in accordance with the designer selection law. However, you may elect to commission an independent review, by a knowledgeable and competent individual or business doing such work, of the feasibility study to ensure its reasonableness and adequacy prior to allowing the designer to continue with the final design work under a contract for study and final design services. [M.G.L. c. 7, §38H(i)] The rationale for doing so is that allowing study consultants to recommend the scope and budget of design contracts in which they have a financial interest can undermine sound planning and invite excessive project costs. The reviewer that you select to perform an independent review should have no connection with either the study consultant and no vested interest in the study results.

The procurement of a contract for an independent review is not subject to the designer selection law but is subject to M.G.L. c. 30B.<sup>7</sup> In general, the fee for an independent review will be less than \$25,000; if so, you may use an informal quotation solicitation process to select a qualified independent reviewer.

A value engineering review of a study can serve as an independent review. A contract for value engineering must be procured using the designer selection law procedures. (Chapter III provides additional information on value engineering.)

### Selecting Designers for Municipal Building Projects: The Basic Steps

This section describes the basic steps of the designer selection process for municipal building projects subject to the designer selection law.<sup>8</sup> Municipalities may deviate in minor respects from the state's designer selection process, provided that the process complies with the requirements set forth in M.G.L. c. 7, §38K and the purposes and intent of the designer selection law that applies to the state's designer selection process, set forth in M.G.L. c. 7, §§38A½-O. Exactly how much deviation from the state's process is permitted at the local level is a matter subject to legal interpretation. If you do wish to deviate from the state's process, we recommend that you consult with your local attorney. In tailoring the state's process for local use, pay particular attention to the following areas.

**Applicability.** Specify whether the designer selection procedures will be used for only those building projects covered by the designer selection law or whether they will also be used for other types of local construction projects. Specify whether all agencies and boards within your jurisdiction are subject to the procedures or whether some agencies (for example, a school committee) will be subject to other procedures.

---

<sup>7</sup> M.G.L. c. 30B governs procurements of supplies and services by municipalities and other local jurisdictions. The Inspector General's manual entitled *Municipal, County, District, and Local Authority Procurement of Supplies, Services, and Real Property* contains detailed information on the requirements of M.G.L. c. 30B. You may download this manual from our website at [www.mass.gov/ig](http://www.mass.gov/ig) or order it from the State Book Store.

<sup>8</sup> As previously noted, regional school districts and Horace Mann charter schools are subject to these municipal designer selection procedures.

**Advertising.** The advertising requirements discussed below in Step 3 are mandatory.

**Standard designer selection form.** Local awarding authorities are required to use a standard designer selection form published by the DSB (discussed below).

**Selection of finalists.** Specify who will be responsible for reviewing the applications and selecting and ranking the finalists. On state projects, the DSB performs this function. The use of a designer selection committee is not required at the local level, although we do recommend its use for larger projects. Having a committee guards against favoritism or personal bias that can result when a single person is asked to make a subjective judgment. Including trained professionals in addition to lay people on the committee helps ensure that evaluations take account of standards and experience in the design profession. If a committee is to be used, specify who will appoint its members and whether it will be a standing committee for all design projects or an ad hoc committee selected for each project. Also note that committee members who have financial or other connections to a design firm applying for a contract may not participate in the selection process for that contract. [M.G.L. c. 268A]

**Fee negotiations with top-ranked finalist.** Your written procedures must include a procedure for the submission of a fee proposal by the top-ranked finalist and negotiation of a fee with the top-ranked finalist when the design fee has not been set. [M.G.L. c. 7, §38K(a)(ii)] Specify who will select the top-ranked finalist from among the finalists and conduct the fee negotiations under these circumstances.

**Emergencies.** The law permits expedited designer selections in case of emergency. [M.G.L. c. 7, §38J] An emergency is defined as a situation where expedited action is necessary to protect the health or safety of people or to meet deadlines imposed by a court of law or a federal agency. Note that not every urgent situation meets the statutory definition of an emergency. We recommend that your emergency procedures identify who has authority to determine that an emergency

exists, specify the emergency designer selection procedures to be used, and provide for such competition as is reasonably possible under the emergency circumstances.

The basic steps of the municipal designer selection process are as follows:

1. Adopt written procedures.
2. Develop the RFQ and contract for design services.
3. Advertise the contract.
4. Evaluate applicants and select at least three finalists.
5. Rank the finalists.
6. Finalize the contract.
7. Award and publicize the contract.

**Step 1: Adopt written procedures.**

Municipalities must adopt written procedures for selecting designers on projects subject to the designer selection law. [M.G.L. c. 7, §38K(a)] These procedures must be adopted before selecting a designer for your project. Most cities and towns have already developed and adopted such procedures. To assist municipalities in developing designer selection procedures, the Office of the Inspector General has developed *Model Designer Selection Procedures for Municipalities and Other Local Public Agencies* (“*Model Procedures*”). This document can be downloaded from our website at [www.mass.gov/iq/publ/dsbguide.htm](http://www.mass.gov/iq/publ/dsbguide.htm).

Formal adoption of the designer selection procedures requires appropriate action at the jurisdiction level, as determined by your local ordinances or by-laws. Your local attorney can provide advice regarding the specific actions required.

### Designer Selection Procedures for State-Funded Housing

Design contracts for state-funded housing are subject to detailed designer selection procedures developed by the state Department of Housing and Community Development (DHCD) under an exemption granted every two years by the state Designer Selection Board. The highlights of the DHCD procedures for awarding design contracts subject to M.G.L. c. 7 are summarized below.

Design fees for all DHCD-funded projects are set by DHCD prior to initiating the designer selection process. DHCD requires housing authorities to advertise design projects subject to the designer selection law in the *McGraw-Hill Construction Reports* and newsletters or bulletins of relevant professional associations and the State Office of Minority and Women Business Assistance (SOMWBA), as well as the *Central Register* and a newspaper of general circulation, at least two weeks before the application deadline. Applicants must have their Master File Brochures on file at DHCD at the time that they submit an application for a specific design project. (The Master File Brochure contains a summary of the designer's qualifications and experience and must be updated yearly.) Applications are sent to the housing authority, which reviews each application for completeness before forwarding the applications and other procurement materials to DHCD.

DHCD's independent nine-member Designer Selection Committee (DSC) reviews the application packages and selects three to five finalists based on the required submissions, predefined criteria, and any information provided by the housing authority. Design contracts are subject to specific minority and women-owned business participation requirements established by DHCD. Housing authorities have the option of setting up a local or regional screening committee to interview and rank the finalists selected by the DSC. Otherwise, the DSC ranks the finalists for the housing authority. The housing authority must interview the first-ranked finalist and provide a written explanation if the first-ranked finalist is not selected.

DHCD has established modified designer selection procedures for the following types of design contracts:

- design contracts for projects that receive funding from both state and federal sources,
- design contracts for building projects whose estimated construction cost is less than \$100,000 or that entail design fees of less than \$10,000, and
- emergency design contracts.

DHCD provides extensive training and technical assistance to housing authorities on contracting for design and construction services. DHCD also provides a standard design services contract that must be used for DHCD-funded projects. Appendix A includes information on how to contact DHCD.

**Step 2: Develop the RFQ and contract for design services.**

**Define the project scope.** The first step in selecting a designer is to decide what you want the designer to do. Do you simply want the designer to advise you on the repairs your 1910 fire station needs, or do you also want the designer to study the feasibility of renovating it to house administrative offices? Such decisions need to be made before you advertise for design services. The written scope of services you include in the request for qualifications (RFQ) must conform substantially to the contract that you will ultimately sign. The scope of services may combine design work on different facilities or in different parts of one facility. If you are considering allowing the study designer to compete for the subsequent design contract, you should make this clear in the project scope.

You should also consider whether or not it makes sense to contract with the designer to provide construction management services on the project after the design stage is completed. In making this decision, consider the role of the owner's project manager, if any. In addition, keep in mind that the skills required to design a building or renovations to a building are very different from the skills required to manage a building construction or renovation project. If you plan to contract with a single design firm for both design and construction management services, your evaluation process should focus on both sets of skills. Alternatively, you could hire or contract with a professional construction manager rather than including construction management services in the design contract. Under this scenario, the designer would develop the design and prepare the final plans and specifications; the construction manager would coordinate the construction process, monitor construction schedules, and approve contractor payments.

Even where you contract separately with a construction manager, you will generally require the designer to retain some involvement with the project through its completion. The degree of contract oversight that the designer will exercise is a decision that you must make for every project. It is critical to your interests as owner to define the specific tasks for which the designer will be responsible during the

construction phase and to specify who will be responsible for any tasks that are not included in the designer's contract.

Generally speaking, the scope of work should include defined deliverables, and a timetable for producing each deliverable. By including a schedule for deliverables, you help ensure that the design progresses according to your expectations and the project schedule. If you plan to conduct a value engineering review, this review should be incorporated into the schedule. (Value engineering is discussed in the next chapter.)

**Draft the evaluation criteria.** The RFQ should state all the criteria that will be used to evaluate designers submitting applications for the project. We recommend that you use the following criteria to evaluate applicants for building design contracts:

- |                                   |  |
|-----------------------------------|--|
| <b>Experience</b>                 | Ensure that the firm and the specific individuals proposed for the job have sufficient and appropriate experience on projects similar to the proposed project.   |
| <b>Quality of work</b>            | Contact the owners of other projects on which the firm has worked and ask them to evaluate the firm's performance as a designer, construction manager, or both. You may use your own jurisdiction as a reference, provided that you have a reasonable basis for evaluating the applicant's past performance. |
| <b>Public sector knowledge</b>    | If the scope of work includes preparation of plans and specifications and assistance during the bidding and construction stages, ensure that the firm is familiar with Massachusetts public construction laws and procedures.  |
| <b>Professional registrations</b> | Ensure that the firm has the professional licenses required for this project.  |
| <b>Subconsultants</b>             | Review and rate the qualifications of key subconsultants who will be employed by the designer.   |
| <b>Capacity</b>                   | Ensure that the firm has the capacity to undertake your project in a timely manner, based on its size and the number and volume of current projects.   |

**Include the standard designer application form developed by the DSB.** You must ask all designers to provide you with the same information. [M.G.L. c. 7,

§38K(a)(ii)] All cities, towns, and other public agencies not within the DSB's jurisdiction must use a standard designer application form published by the DSB. [M.G.L. c. 7, §38K(b)] This form, entitled "Standard Designer Application Form for Municipalities and Public Agencies Not Within DSB Jurisdiction," can be downloaded from the DSB's website at [www.mass.gov/cam/DSB/fin\\_dselectboard\\_ct.html](http://www.mass.gov/cam/DSB/fin_dselectboard_ct.html). Note that the designer selection law does not allow you to require a fee proposal in the application.

**Set the fee or not-to-exceed fee limit.** You need to decide whether to set the fee for the design contract or to set a not-to-exceed fee limit and negotiate the fee after selecting a designer. If you set the fee, the fee will be binding for all applicants. If you plan to negotiate the fee, the not-to-exceed fee limit will provide a cost ceiling for the fee negotiations. By ensuring that the design fee or not-to-exceed fee limit for the fee negotiations is reasonable and realistic, you will increase the likelihood of obtaining high-quality, cost-effective design services.

Under the designer selection law, the design fee contained in the contract must be stated as a fixed dollar amount; it may not be expressed as a percentage of the construction cost. [M.G.L. c. 7, §38G(c)] In establishing the design fee, you should take into consideration not only the estimated construction cost, but also the nature and complexity of the project. The contract can provide for equitable adjustments if the scope of services is changed. [M.G.L. c. 7, §38G(c)] This means that if, as the contract proceeds, it becomes necessary for the designer to do more or less work than originally contemplated, the fee can be increased or decreased. The adjustment is often determined by a formula set forth in the contract (for example, an hourly rate for principals or other employees). But if the amount of work – and, thus, the fee – is increased substantially, it may make sense to advertise and award a new contract, based on a new scope of services.

**Develop the contract terms.** It is important to develop the design contract before you solicit applications from designers. By making the key decisions concerning the contract scope, terms and conditions, and design fee early in the process, you will

increase the likelihood of attracting applicants with the requisite experience. If you do not already have a standard contract for design services, ask your local attorney to develop one. The contract used by DCAM is a good model for local awarding authorities. Model contracts issued by the American Institute of Architects (AIA) are commonly used, but we do not recommend their use for public projects. The AIA contracts are written to protect the designer's interests and contain insufficient protections for your jurisdiction. Moreover, they do not contain some statutorily required provisions for public contracts in Massachusetts. Once you have developed a standard contract, you can use it over and over again with only minor modifications for each project. The sidebar on the following pages provides more detailed information on the components of the design contract.

### The Design Contract for Public Building Projects

These are some essential elements that every design contract subject to M.G.L. c. 7 must contain:

**Scope.** The contract must clearly define the scope of services to be performed, including a list of all deliverables and other work products to be produced by the designer.

**Key personnel.** The qualifications of the designer's proposed project team – particularly the designer's proposed project manager, senior staff, and subconsultants – should be a key factor in the selection process. To prevent the designer from substituting less experienced personnel after the contract is awarded, the contract should specify the names and time commitments (for example, staff to be committed to the project on a full-time basis) of the key personnel listed in the designer's application. The contract should include a provision stating that no substitutions may be made without your jurisdiction's written approval.

**Payment terms.** Most designers, particularly on larger projects, will expect to receive periodic payments. It is preferable to link these payments to progress, such as the completion of designated milestones, rather than simply paying a certain amount each month. The contract should also specify who will bear the cost of redesign if the plans are unsatisfactory or if the construction bids exceed either the cost estimate or the available appropriation. In addition, the contract must prohibit the designer from receiving any extra payments for additional work that should have reasonably been anticipated by the designer. [M.G.L. c. 7, §38H(j)]

**Errors and omission insurance.** Errors and omission insurance, which protects the awarding authority in the event of errors or negligence on the part of the designer, is required on all design work other than planning studies. [M.G.L. c. 7, §38H(f)] The minimum amount of required insurance is 10 percent of the estimated construction cost or \$1 million, whichever is less. The awarding authority may choose to increase this requirement. Generally, the insurance is obtained by the designer, although some awarding authorities may find it less expensive to obtain the insurance themselves on large projects. The decision concerning who will pay the insurance premiums should be made before a final fee is negotiated. If you are requiring the designer to obtain all or a portion of the insurance coverage, the designer must provide you with a certificate of insurance coverage before you award the contract. You may also require that the designer's subconsultants obtain insurance; if you do so, you should require each subconsultant to provide a certificate of coverage before you award the contract.

**Other statutory requirements.** State law contains several certifications and

requirements relating to non-collusion in the submission of applications and to financial reports that the designer must file. [M.G.L. c. 7, §38H(e)] The following provisions must be included in the design contract:

- certification that the designer or construction manager has not given, offered or agreed to give any person, corporation or other entity any gift, contribution, or offer of employment as an inducement for, or in connection with, the award of the contract for design services;
- certification that no consultant to or subcontractor for the designer or construction manager has given, offered or agreed to give any gift, contribution, or offer of employment to the designer or construction manager, or to any other person, corporation, or entity as an inducement for, or in connection with, the award to the consultant or subcontractor of a contract by the designer or construction manager;
- certification that no person, corporation or other entity, other than a bona fide full-time employee of the designer or construction manager, has been retained or hired by the designer or construction manager to solicit for or in any way assist the designer or construction manager in obtaining the contract for design services upon an agreement or understanding that such person, corporation, or other entity be paid a fee or other consideration contingent upon the award of the contract to the designer; and
- certification with respect to contracts which exceed \$10,000 or which are for the design of a building for which the budgeted or estimated construction costs exceed \$100,000 that the designer has internal accounting controls as required by M.G.L. c. 30, §39R(c) and that the designer has filed and will continue to file an audited financial statement as required by M.G.L. c. 30, §39R(d).

Note also that any person contracting with a governmental body must certify in writing that he or she has complied with state tax laws, reporting of employees and contractors, and withholding and remitting of child support. [M.G.L. c. 62C, §49A]

**Right to use documents.** It is in your interest to include a provision giving your jurisdiction the right to use all design documents prepared by the designer. We recommend that your design contract include a provision similar to the following provision contained in the Commonwealth's design contract:

The Commonwealth shall have unlimited rights, for the benefit of the Commonwealth, in all drawings, designs, specifications, notes and other work developed in the performance of this contract, including the right to use same on any other Commonwealth projects without additional cost to the Commonwealth; and with respect thereto the Designer agrees and hereby grants to the Commonwealth an irrevocable royalty-free license to all such data which he may cover by copyright and to all designs as to which he may assert any rights or establish any claim under any patent or copyright laws. The Designer shall not be responsible for changes made in the documents without the Designer's authorization, nor for the Division's use of the documents on projects other than the Project, unless this is a contract for design services for a master plan or prototype.

**Step 3: Advertise the contract.**

You must publish notices in a newspaper of general circulation in the area in which the project is or will be located and in the *Central Register* inviting applications from interested designers. The *Central Register* is a weekly publication issued by the Secretary of the Commonwealth containing a variety of notices related to public construction projects and real property transactions in Massachusetts. The necessary forms and information for publishing notices in the *Central Register* are available from the Secretary of the Commonwealth's website at [www.mass.gov/sec](http://www.mass.gov/sec). The notice must be published at least two weeks before the deadline for receiving applications. [M.G.L. c. 7, §38D]

The published notice must contain detailed project information. The following list may be useful as a guide to preparing the notice:

- Describe the overall project, including the specific designer services you are seeking, the time period within which the project is to be completed, and the estimated construction cost, if available. [M.G.L. c. 7, §38D(b)(i)]
- If a study or program has already been completed, indicate when and where it is available for inspection. If no study or program is available, say so. [M.G.L. c. 7, §38D(b)(ii)]
- List any specific professional qualifications required for the design contract. [M.G.L. c. 7, §38D(b)(iii)] For example, if you plan to contract with the designer for construction management services, specify the required construction management qualifications and experience. Note that under state law, a registered architect must prepare plans and specifications involving any building whose size equals 35,000 cubic feet or more. [M.G.L. c. 112, §60L]
- Specify any categories of work for which you will require the designer to list the subconsultants he or she plans to use. [M.G.L. c. 7, §38D(b)(iv)] This information is particularly important for those projects where a significant portion of the work will be done by subconsultants and where the awarding authority will want to evaluate the qualifications of the subconsultants as well as the designer.
- If a briefing session will be held for potential applicants, indicate when and where. [M.G.L. c. 7, §38D(b)(ii)] While not required, a briefing session is often useful on large or complex projects to provide an opportunity for potential applicants to ask questions and learn more about the project.

- State whether the designer's fee has been set and the amount, or whether the fee is to be negotiated. [M.G.L. c. 7, §38D(b)(v)]
- Indicate how to obtain the RFQ, where and when to submit the completed applications, and whom to contact for further information. (Note that this is the only item *not* required by law, although it is included in the Office of the Inspector General's *Model Procedures*.)

**Step 4: Evaluate applicants and select at least three finalists.**

The applications should be evaluated by a designated local official or by a designer selection committee. The law requires you to treat all applicants uniformly and fairly: for example, you should solicit the same information from each applicant and apply the same evaluation criteria and methods to each application. At least three finalists must be selected from among the applicants. [M.G.L. c. 7, §38K(a)(ii)]

Local jurisdictions can request that the DSB review applications and select finalists for them. [M.G.L. c. 7, §38K(c)] Jurisdictions considering this approach should contact DSB to determine the time and other requirements of the DSB to conduct such a review.

**Step 5: Rank the finalists.**

After you have shortlisted the pool of applicants to at least three finalists, you should focus on the finalists' past performance. References from the owners of projects designed by the finalists are the best source of information about the designers' skills and past performance. You may seek additional information from the finalists or request that they appear before the selection body, provided that you treat all finalists equally. [M.G.L. c. 7, §38K(a)(ii)] For example, if you give one finalist the opportunity to make an oral presentation, you must give all finalists that opportunity.

If you plan to conduct interviews, decide in advance what information you expect to obtain and which of the design firms' key personnel you wish to interview. Be careful to ensure that you will interview key personnel who will work on your project. And remember that while an interview that showcases a designer's marketing or communication skills may reflect the designer's ability to communicate with local boards and committees, an interview is not likely to reveal the information you need most about

the designer's capabilities. For this reason, we encourage you to rely primarily on project references to evaluate designers' past performance.

After evaluating the finalists, you should rank them in order of qualifications and document the reasons for the rankings. After the finalists have been ranked, a designated local official or committee chooses one of the finalists. This almost always should be the top-ranked finalist. In rare cases, you may have a valid reason to skip the top-ranked finalist and choose one of the other finalists for negotiation; in such cases you should clearly document the reasons for such a decision in the procurement file. [M.G.L. c. 7, §38G(a)]

These are some additional points to keep in mind concerning the evaluation process:

**Open meetings.** If a board or committee has been set up to evaluate applications, it is subject to the state's open meeting law. [M.G.L. c. 39, §23B; M.G.L. c. 34, §9G]

**Record-keeping.** Local awarding authorities are required to prepare a written explanation of the reasons for selecting the designer that was awarded the contract. [M.G.L. c. 7, §38K(a)iii] A permanent file must be maintained for each design procurement, containing copies of public notices; the applications received; the evaluations, rankings, and reasons for the rankings; the written explanation of the selection decision; the notification of award; and other relevant information describing the selection process. In addition, if the evaluations and rankings are prepared by a committee, the file must contain the recorded votes of the committee. [M.G.L. c. 7, §38L]

### **Step 6: Finalize the contract.**

If you have established a fixed fee, we recommend obtaining the following information from the top-ranked finalist:

- amount of time to be devoted to each phase of the project by key individuals, such as the designer's project manager;
- hourly rates the designer will use to calculate prices for additional work that is not included in the initial scope; and

- the markup, if any, that the designer will add to costs, including subconsultant fees, resulting from a change in the scope of work.<sup>9</sup>

When you review this information, you must decide whether you are satisfied with the level of effort devoted to the project by key individuals. If not, you can attempt to negotiate with the designer to increase the time commitment of one or more individuals to the project. Similarly, if you consider the rates for contract changes to be too high, you can attempt to negotiate lower rates.

If you are unable to reach a satisfactory agreement about the commitment of staff to the project or the rates for pricing contract changes, you can terminate the negotiations and begin negotiations with the second-ranked designer. On the other hand, if you are satisfied with the outcome of these negotiations and you have set a fixed fee, you can simply award the contract to the top-ranked finalist.

If you have set a not-to-exceed fee limit, you should ask the top-ranked designer to submit a fee proposal that includes a proposed lump-sum fixed fee along with the following information:

- percentage of time to be devoted to the project by key individuals, such as the project manager;
- hourly rates for the designer's personnel and the estimated number of hours each will devote to the project;
- hourly rates the designer proposes to charge for each subconsultant and the estimated number of hours that will be devoted by each subconsultant;
- an itemized breakdown of all other costs included in the fee proposal; and
- the markup, if any, that the designer will add to costs, including subconsultant fees, resulting from a change in the scope of work.

You will want to determine whether the resources the designer promises to devote to the project (for example, key personnel staff hours and subconsultants) are sufficient

---

<sup>9</sup> It is generally unwise to allow the designer to charge on a cost plus a percentage of cost basis for extra work because this cost structure provides the designer with an incentive to incur more costs than necessary.

and consistent with the fee proposal. You will also consider the reasonableness of the proposed fees. You may negotiate the fee proposal. As is the case with any negotiation, you will need to base your negotiating position on information about what is reasonable in the industry. You should not, through your negotiations, agree to lower the fee by lowering the qualifications of key personnel and subconsultants who will work on your project nor should you scale back the scope of services. To do so would undermine the basis of your selection of the top-ranked finalist.

If you cannot negotiate a reasonable fee with the top-ranked designer, you should terminate the negotiations and move on to the next-highest-ranked designer. However, if it becomes apparent in the course of negotiations with designers that the not-to-exceed fee limit is inadequate for the full scope of services, you should cancel the procurement rather than agreeing to a scaled-down scope. You should then reassess the project requirements and decide whether you should do additional in-house planning work or seek additional funding for a higher not-to-exceed fee limit for the study. Bear in mind that by skimping on costs in the planning and design stages of a project, you generally increase the risks of more costly problems later.

**Step 7: Award and publicize the contract.**

If you have set a not-to-exceed fee limit, you should determine whether the fee proposal submitted by the designer is within the not-to-exceed fee limit and is acceptable to you or can be negotiated to an acceptable level. If so, or if you have set the fee, you award the contract to the designer. As previously noted, if you are requiring the designer to obtain all or a portion of the mandatory errors and omission insurance, the designer must provide you with a certificate of insurance coverage before you award the contract. You are required to document the reasons for the selection and the recorded vote, if a vote was taken, on the selection. Finally, the name of the designer awarded the contract must be published in the *Central Register*. A form for this purpose may be downloaded from the Secretary of the Commonwealth's website at [www.mass.gov/sec](http://www.mass.gov/sec).

**Emergency Contracts**

You may conduct an expedited designer selection process whenever the health or safety of any persons will be endangered because of the time required for the selection under your normal designer selection procedures or when a deadline for action that is set by a court or federal agency cannot be met if the designer selection procedures are followed. [M.G.L. c. 7, §38J] Your emergency procedures should be established in your written designer selection procedures. We recommend that your emergency procedures identify who has authority to determine that an emergency exists and that the procedures provide for such competition as is reasonably possible under the emergency circumstances.

**Design Contracts for Non-Building Public Works Projects**

The designer selection law does not apply to contracts for the design of non-building, or public works, projects such as highway and sewer projects. Local awarding authorities and others not within the jurisdiction of the Operational Services Division have discretion to decide how to select designers for public works projects.<sup>10</sup> In contrast to the rules for selecting designers for building projects, you may solicit prices from designers and use price as a criterion in awarding a contract.

Although you are not legally required to solicit competition for public works design contracts, there is no reasonable rationale for failing to do so for construction projects estimated to cost more than \$100,000. Similarly, it is often advisable to perform a review of a study prior to deciding whether the study designer should provide final design services on the same project. A value engineering review of the study before beginning the design stage can also be beneficial for construction projects estimated to cost \$1 million or more. (Value engineering is discussed in the next chapter.)

---

<sup>10</sup> Executive branch departments of the Commonwealth must comply with the procurement policies and procedures of the Operational Services Division in procuring these design services.

The request for proposals (RFP) process outlined in M.G.L. c. 30B is a good model to adopt in developing competitive procurement procedures for a public works design contract. This process calls for establishing evaluation criteria and soliciting separate price and non-price proposals. The non-price proposals are evaluated using the published criteria. After the proposals have been ranked, the prices are opened. You select the most advantageous proposal by weighing both qualifications and price. Whatever selection method you use, bear in mind that fostering competition among qualified individuals or firms is the best way to obtain high-quality services at a favorable price.

Although no state procurement law applies to local design contracts for non-building public works projects, many of the issues discussed earlier in this chapter regarding the designer selection law are also relevant to these contracts. We encourage you to review the previous discussion, keeping in mind that you may alter some of the requirements to meet your needs. For example, you should:

- adopt written procedures in advance specifying how you will solicit and award these design contracts (Step 1);
- develop the RFP, including a project scope, evaluation criteria (that may, in the case of non-building design contracts, include fee proposals), and contract terms, many of which should resemble the terms of a building design contract (Step 2); and
- advertise the contract (Step 3).

You should then receive and evaluate proposals based on the evaluation criteria stated in the RFP, award a contract, and publicize the award. The designer with whom you contract must certify in writing that he or she has complied with state tax laws, reporting of employees and contractors, and withholding and remitting of child support. [M.G.L. c. 62C, §49A]

### **Design-Related Contracts Subject to M.G.L. c. 30B**

Contracts for architectural, engineering, or other professional services that do not relate to a public construction project are subject to the competitive requirements of M.G.L. c. 30B. For example, you must follow M.G.L. c. 30B in selecting an engineering firm to

conduct traffic counts at every major intersection in your community if the traffic counts are not being conducted in connection with a public road construction or repair contract. A contract with an engineering firm to operate and maintain a public facility such as a wastewater treatment plant is also subject to M.G.L. c. 30B. For guidance in awarding contracts under M.G.L. c. 30B, consult our manual entitled *Municipal, County, District, and Local Authority Procurement of Supplies, Services, and Real Property*.<sup>11</sup>

---

<sup>11</sup> You may download this manual from our website at [www.mass.gov/ig](http://www.mass.gov/ig) or order it from the State Book Store.

This page intentionally left blank.

### ***III. The Planning Stage***

---

As is the case with all procurements, care exercised in the early planning stage of a project is a sound investment in the project's success. This chapter begins with a brief summary of tasks relating to designer oversight and then discusses a major planning stage product: the study. This chapter discusses our recommendation for value engineering at the end of the planning stage for larger construction projects and concludes with a brief discussion of issues to consider when you are deciding whether to use employees or volunteers to perform design work.

#### **Design Contract Oversight**

Chapter I discussed the importance of hiring or designating a qualified owner's project manager to administer and oversee the project on behalf of your jurisdiction. The owner's project manager's major duties relating to the designer during the planning and design stages of the project might include the following:

- advising and assisting your jurisdiction with evaluating designers and negotiating the design contract during the designer selection process;
- reviewing the designer's contract and any subsequent amendments;
- monitoring the designer's progress and working with the designer to resolve any problems hindering the project's completion;
- ensuring that users and others affected by the project are properly consulted;
- providing advice on design options presented by the designer, or, where decisions need to be made by others, seeing that the decisions are made and communicated to the designer; and
- reviewing and approving invoices for payment submitted by the designer.

The owner's project manager also should be responsible for the many other tasks that are required to complete a project but that may not be within the scope of the designer's responsibilities. These might include overseeing acquisition of the project site, working with your local attorney to draft the construction contract and related documents,

analyzing insurance options for the construction stage, ensuring that project financing is available, and assisting the project's users in preparing for a smooth transition.

As discussed in Chapters I and II of this manual, you are required to hire or assign an owner's project manager for building projects estimated to cost \$1.5 million or more. The duties of the owner's project manager related to planning must include, but need not be limited to, providing advice and consultation with respect to design, scope of the project, value engineering, and cost estimating. [M.G.L. c. 149, c. 44A½]

### The Study

The design work for a construction project often begins with a feasibility study. Local jurisdictions are not legally required to complete a study for every project. As a practical matter, however, you need to know enough about the project to write a scope of services for the design work. It is risky to proceed beyond the planning stage before firm decisions have been made on what the project will include, how much it will cost, and how it will be financed. If you have not figured out the approximate size of the new school building or determined the most cost-effective approach to improving the water treatment facility – in short, if you have not prepared a study – you are not ready to begin the design stage. A valuable source of information on the study process is a Division of Capital Asset Management (DCAM) publication entitled *Guidelines for the Preparation of Studies for Building Projects*. This publication may be downloaded from DCAM's website at [www.mass.gov/cam/dlforms/STUguide.pdf](http://www.mass.gov/cam/dlforms/STUguide.pdf).

The study typically addresses a series of planning issues and questions, such as the following:

**Program.** A program, a document that describes the project requirements in terms of size, location, cost, and other major criteria, should answer questions such as the following: What are the specific functions and requirements that the proposed project must meet? How many people will use a facility? How many and what types of vehicles will use a road? What is the peak demand going to be? What functions will the facility be required to accommodate? How much space will those functions

require? What are the performance requirements or standards for each component of the facility and for the facility as a whole? What special equipment or construction is needed? The program is one of the major products of a study.

**Alternatives.** What are the available alternatives for meeting the functional requirements of the project, and what are their relative costs and benefits? For example, the study might review alternate sites or analyze the relative costs and benefits of new construction versus renovation and expansion.

**Surveys and field tests.** The study may incorporate tests to obtain data on the cost and feasibility of various sites or design alternatives.

**Environmental impacts.** What are the expected environmental impacts of the project and how can negative impacts be mitigated? For some projects, an environmental impact study will be required under state or federal statutes.

**Cost and financing.** How much will the project cost to build? How much will it cost to operate and maintain? Where will the money come from?

These issues may be addressed in a single study or in a series of progressively more detailed studies. Of course, the precise study focus and content will depend on the project under consideration.

Studies may be prepared by local officials or volunteer citizen committees working with professional consultants. Nevertheless, many aspects of a study, such as the development of reliable construction cost estimates, require professional expertise. The cost of a proper study is very small in comparison to the total cost of a construction project and represents a worthwhile investment. In the long run, the problems created by inadequate planning can cost far more than the study.

The study should also involve the future users of the building or facility. The time to find out that the Fire Department plans to buy a new truck five feet longer than the current trucks is now, not after bidding the construction plans for a fire station that will be too

short or for a nearby intersection that will have too small a turning radius for the new truck.

### **Value Engineering**

Value engineering is a specialized design review technique aimed at analyzing the functions of a facility or project and matching those functions with the most cost-effective design possible. Value engineering is sometimes called value analysis, value management, or the value method. Scheduling a value engineering review early in the project design can identify opportunities to improve the design and reduce life-cycle costs<sup>12</sup> without sacrificing significant time or investment of resources.

For projects with an estimated construction cost of \$1 million or more, we recommend that you schedule a value engineering review at the end of the planning stage of the project, after the program has been completed and a design approach has been selected. (This phase of the project development is sometimes referred to as the concept design phase.) For projects with an estimated construction cost of \$10 million or more, we recommend that you schedule a second value engineering review near or at the end of the schematic design phase, when the design is approximately 10 to 30 percent complete.

Value engineering focuses on the total life-cycle cost of the facility or project over its useful life. Accordingly, a value engineering proposal may recommend reducing or increasing expenditures for construction to achieve significant future cost savings over the useful life of the asset. Evaluating the cost of implementing the value engineering proposal against the life-cycle cost savings offered by the proposal can be a useful process that promotes sound public spending decisions, flags wasteful design elements such as unnecessary features or overdesigned components, and improves design quality.

---

<sup>12</sup> “Life-cycle cost” refers to the total cost over the useful life of the facility or project. Thus, life-cycle costs include the initial capital costs for construction or purchase as well as all significant future costs, such as operation, maintenance, and energy costs.

Value engineering is widely used by the federal government as well as many state and local awarding authorities for highway projects, buildings, wastewater treatment plants, and a host of other types of construction projects. The Federal Highway Administration, which promotes value engineering for federally funded highway projects undertaken by the states, defines value engineering as:

The systematic application of recognized techniques by a multi-disciplined team to identify the function of a product or service, establish a worth for that function, generate alternatives through the use of creative thinking, and provide the needed functions to accomplish the original purpose of the project, reliably, at the lowest life-cycle cost without sacrificing safety, necessary quality, and environmental attributes of the project.<sup>13</sup>

The Boston Society of Architects describes value engineering as a technique that can promote best value construction contracting:

In its purest form, *value engineering* [VE] refers to detailed, systematic procedures intended to seek out optimum value for both the initial and long-term investments of a construction project. The goal is to eliminate or modify features that add cost to a facility but do not add to its quality, useful life, utility or appearance. Using a non-adversarial, problem-solving approach, value engineers look at trade-offs between design concepts, construction techniques, materials, building types and up-front versus life-cycle costs to arrive at the best overall value.<sup>14</sup>

Depending upon the project size and complexity, the value engineering review may be conducted by a single value engineering specialist or by a value engineering team led by the value engineering specialist. For most municipal projects, a value engineering review generally should not take more than two or three days.

For building projects that are subject to the designer selection law, value engineering services must be procured using the designer selection procedures contained in M.G.L. c. 7 (discussed in the previous chapter). For non-building projects, we recommend that you solicit competitive quotations or proposals from qualified value engineering

---

<sup>13</sup> 23 C.F.R. §627.3.

<sup>14</sup> Boston Society of Architects, *What Every Owner Needs to Know About Value Engineering*, May 1996.

specialists. In either case, the value engineering specialist you select should be independent, with no business connection to the project designer or the other project participants. We recommend that you require, at a minimum, that at least one individual with whom you contract be a registered professional architect or engineer with at least five years of direct experience with the type of project you plan to build.

### **Value Engineering Process Example**

The value engineering process often involves a variation of a multi-step job plan similar to this example adapted from the eight-step job plan developed by the Washington State Department of Transportation:

#### **Eight-Step Job Plan**

1. Selection phase – Select the right projects, team, timing, processes, or elements.
2. Investigation phase – Investigate the background information, technical input reports (such as traffic, soils, hydraulic, environmental, accidents) and field data, function analysis, team focus, and objectives.
3. Speculation phase – Be creative and brainstorm alternative proposals and solutions.
4. Evaluation phase – Analyze alternatives, technical evaluation, life-cycle costs, documentation of logic, and rationale.
5. Development phase – Develop technical and economic supporting data to prove the feasibility of the desirable concepts or ideas. Develop team recommendations. Recommend long-term as well as interim solutions as applicable.
6. Presentation phase – Present the findings and recommendations of the VE team in an oral presentation at the conclusion of the study, and in a written report and workbook following the completion of the study. In many cases, the way the findings are presented can be as important as the findings themselves.
7. Implementation phase – The recommendation formulated by the VE team are given a fair and thorough evaluation by the appropriate managers of the department. Prepare an implementation plan, including the response from the managers and a schedule for accomplishing the recommendations.
8. Audit phase – Establish a record system to track the results and accomplishments of the VE program and to compile the appropriate statistical analysis as requested by management personnel.

**Using Full-Time Employees and Volunteers for Design Services**

You may use full-time employees or volunteers to perform design services. Before doing so, however, consider whether they have the appropriate qualifications for the work to be performed. Would you contract with them to do the work if they were not employees or volunteers? For a feasibility study, do they have the necessary technical expertise in the area to be studied? Do they have experience with projects similar in size, use, and complexity? And keep in mind that if you do not have a design contract in place, you may sacrifice important public protections such as errors and omissions insurance, a definite scope of services, and an enforceable agreement on the schedule.

This page intentionally left blank.

## ***IV. The Design Stage***

---

The role of the designer during the design stage of a design-bid-build project is to translate the functional requirements established in the program into a set of biddable construction documents. The design stage typically includes the following tasks and final products:

- Surveys and field tests to provide additional information about conditions at the site. The magnitude of this task will depend in part on the amount of field work done during the planning stage.
- Additional consultations with the project's users, abutters, and other affected individuals and groups.
- Preparation of sketches and schematic drawings, including site plans, floor plans, and façade drawings, which show the size and layout of the project.
- Analysis of major building components, including foundations; structures; electrical systems; and heating, ventilating, and air conditioning (HVAC) systems.
- Preparation of final plans, specifications, and other bid documents. The plans are the construction drawings. The specifications are the written materials that prescribe the amount and quality of materials to be furnished, the construction techniques to be used, and other construction-related information.
- Updated project cost estimates, based on the final plans and specifications.

The design stage on major projects is often divided into three phases: preliminary or schematic design, design development, and preparation of construction documents. During each phase, the designer is required to prepare and submit for approval specific deliverables. Major project decisions are made during the preliminary or schematic design phase. After the preliminary or schematic design has been developed and approved by the owner, the designer proceeds with the detailed design development. After the owner has approved the design development documents, the designer prepares the construction documents.

The construction documents include 100 percent complete plans and specifications that competing contractors will use to prepare their bids and that the selected contractor will follow in constructing the project. A well-developed and complete set of plans and

specifications should generate reliable bid prices and enable the construction process to proceed smoothly and efficiently. Conversely, flawed or incomplete plans and specifications can lead to a host of headaches ranging from excessive and expensive construction change orders to life-threatening construction defects.

For projects with an estimated cost of construction of \$10 million or more, we recommend that you conduct one value engineering review at the end of the planning stage of the project and a second value engineering review near or at the end of the preliminary or schematic design phase, when the design is approximately 10 to 30 percent complete. (The previous chapter of this manual provides a more detailed discussion of value engineering.) For larger and more complex projects you may determine that it is worth the investment to schedule a third value engineering review near or at the end of the design development phase, when the design is approximately 50 to 75 percent complete.

If you have assigned an owner's project manager to the project, this person will assist you in reviewing the design deliverables produced by the project designer at the end of each design phase. If you plan to hire or contract with a construction manager to oversee the construction stage of the project, we recommend that you bring this person or firm on board before the plans and specifications are finalized and put out to bid. A "constructability review" of the construction documents by a knowledgeable construction manager may identify potential problems that can and should be corrected or opportunities that should be considered by the designer. Identifying such problems and opportunities before bids are solicited and construction work begins may save you money and aggravation.

### **Proprietary Specifications**

In general, the contract materials specifications prepared by the project designer must be written so that they can be met by more than one vendor or manufacturer. For every item specified, the specifications must either name a minimum of three brands of material or provide a material description that can be met by at least three vendors or

manufacturers, and for the equal of any of the named or described materials. [M.G.L. c. 30, §39M(b)]

Proprietary specifications – that is, specifications that restrict competition to one vendor or manufacturer of an item – may be used only for “sound reasons in the public interest.” [M.G.L. c. 30, §39M(b)] You must document these reasons and provide them in writing to anyone making a written request for this information. If you use proprietary specifications for one or more items, the specifications for those items must include an “or equal” clause: that is, a provision allowing bidders to furnish items that are equal to the specified items. Under the law, an item is considered equal if:

- it is at least equal in quality, durability, appearance, strength, and design;
- it will perform the intended function at least equally; and
- it conforms substantially, even with deviations, to the detailed requirements contained in the specifications.

The awarding authority makes the determination as to whether a bid item is equal to the item named in a specification. [M.G.L. c. 30, §39M(b)]

### Case Law Update: "Or Equal" Specifications

The Massachusetts Appeals Court decided a case dealing with "or equal" specifications under M.G.L. c. 30, §39M. The case, *E. Amanti & Sons, Inc. v. R.C. Griffin, Inc.*, 53 Mass. App. Ct. 245 (2002), involved specifications for an emergency vehicle exhaust system as part of an IFB by a town for construction of a new fire station. The town required that the emergency vehicle exhaust system be as specified by Plymo Vent or equal as approved by the fire department. Amanti, the HVAC sub-bidder, sought approval to use an emergency vehicle exhaust system manufactured by Carmon. The town's architect initially agreed but later found that the alternative exhaust system did not meet the performance requirement in the specifications. Amanti requested that the architect name two additional exhaust systems which were equivalent to the Plymo Vent system. The architect responded with the names of two other manufacturers, but the architect did not know whether their products met the specified safety features. Ultimately, Amanti furnished the Plymo Vent system under protest.

M.G.L. c. 30, §39M (b) requires that specifications be written "to provide for full competition for each item of material to be furnished under the contract; except, however, that said specifications may be otherwise written for sound reasons in the public interest stated in writing in the public records of the awarding authority or promptly given in writing by the awarding authority to anyone making a written request therefore, in either instance such writing to be prepared after reasonable investigation." M.G.L. c. 30, §39M (b) further provides that "for each item of material the specifications shall provide for either a minimum of three named brands of material or a description of material which can be met by a minimum of three manufacturers or producers, and for the equal of any one of said named or described materials."

The lower court found that the town's specifications were proprietary. Although the town made a reasonable investigation, it did not make a written report in the public record or respond in writing to written requests about the specifications. The lower court found the town liable for Amanti's lost profits for having failed to disclose to bidders that Plymo Vent was a sole source.

On appeal, the town contended that its bid specifications complied with M.G.L. c. 30, §39M because the statute does not prohibit specifications from occupying a middle ground between specifications that allow for full competition and those that are proprietary. Amanti argued that the town did not comply with M.G.L. c. 30, §39M because it required a sole source for the vent system without notifying bidders that it was the only vent system that would meet the town's needs. The Appeals Court stated that "[p]roviding the name of a single vendor and placing the burden on the bidder to discover alternatives did not constitute competitive specifications." [*E. Amanti & Sons, Inc. v. R.C. Griffin, Inc.*, 53 Mass. App. Ct. 245, 253] The Appeals Court agreed with the lower court and upheld the decision requiring that the town pay Amanti for lost profits.

### Estimated Quantities

When it is impossible to pinpoint the exact quantities of the materials or other items to be included in the final plans and specifications, you may use estimated quantities for bidding purposes. For example, if you are bidding pothole repairs to town streets, the designer should estimate the number of cubic yards of bituminous concrete you will need and require bidders to submit both a unit price *and* a total price based on the estimate. The contract will be awarded to the responsible and eligible bidder with the lowest total price, based on the estimated quantity or quantities. Then, when the work is performed, actual payments will be based on the actual quantity multiplied by the unit price in the bid.

### Building Contracts > \$100,000: Additional Legal Requirements for Bid Documents

The following legal requirements apply to building construction contracts whose estimated cost exceeds \$100,000:<sup>15</sup>

**Certification.** General contractors bidding on these contracts must be certified by the Division of Capital Asset Management (DCAM). The bid package must specify the category of work in which the general contractor must be certified. If you determine that your project will require the use of a certification category that is not one of the 27 standard categories of work in which DCAM certifies general contractors, you will need approval from DCAM. This issue should be discussed with DCAM as early in the design process as possible. Beginning on January 1, 2006, subcontractors that wish to submit filed sub-bids must also be certified by DCAM in the appropriate subtrade category.

**Filed sub-bids.** The filed sub-bid process, which is described in detail in the next chapter, applies to the following categories of work if performed under M.G.L. c. 149 contracts:

---

<sup>15</sup> The next chapter contains detailed information on the bidding requirements for building contracts estimated to cost more than \$100,000.

Roofing and flashing	Metal windows
Waterproofing, damp-proofing, and caulking	Miscellaneous and ornamental iron
Lathing and plastering	Acoustical tile
Marble	Tile
Terrazzo	Resilient floors
Glass and glazing	Painting
Plumbing	Heating, ventilating, and air conditioning (HVAC)
Electrical work <sup>16</sup>	Masonry work
Elevators	

If the estimated value of the subtrade work in any of these categories is greater than \$20,000, the work must be bid separately under the filed sub-bid procedures set forth in M.G.L. c. 149.<sup>17</sup> To accommodate the filed sub-bid process, the designer must prepare separate plans and specifications for each filed sub-bid category. [M.G.L. c. 149, §44F(1)(a)]

Note, however, that if a filed sub-bid category constitutes the predominant work on a project, this work may be included as part of the main construction contract and need not be segregated into a separate contract for filed sub-bidding. [M.G.L. c. 149, §44F(3)] For example, for a project to repair the roofs of several town buildings, you could require the general contractor to be certified in the category of “roofing and flashing.”

To ensure that the sub-bidders on your project are qualified, you may establish your own qualification requirements that all sub-bidders must meet. For example, if the project calls for metal windows to be installed in a building, your bid documents could require that any sub-bidder for metal windows have successfully completed three jobs of similar size and scope to your project within the last five years. If a

<sup>16</sup> This category includes direct electrical radiation for heating.

<sup>17</sup> The awarding authority may combine marble, tile, and terrazzo into a single sub-bid category, provided that the sub-bidders are required to show on their bid forms the amounts for each category separately as well as the total amount. [M.G.L. c. 149, §44F(1)(a)]

sub-bidder does not possess the required experience, it is not an eligible sub-bidder on your contract.

**Minimum scale.** Plans prepared for M.G.L. c. 149 contracts must have a minimum scale of 1/8 inch = 1 foot. This requirement does not apply to site plans. [M.G.L. c. 149, §44B(1)]

**Alternates.** Alternates are options, for which the bidders must submit separate prices, that the awarding authority may include in a bid package. The awarding authority reserves the right to select or reject the optional work, based on the prices received. For M.G.L. c. 149 contracts, you may include alternates in the bid package only if they are ranked numerically in order of priority. Later, when evaluating the bids, you may select a specific alternate only after all of the higher-ranking alternates have been selected. [M.G.L. c. 149, §44G(B)]

### Case Law Update: Ordered Alternates

The Massachusetts Appeals Court decided a case, *J.F. White Contracting Co. v. Massport Authority*, 51 Mass. App. Ct. 857 (2001), involving the use of alternates in a M.G.L. c. 30, §39M bid. The use of ordered alternates is explicitly permitted in M.G.L. c. 149 bids. Such alternate pricing is commonly used in M.G.L. c. 30, §39M bids, but the statute does not include any reference to its use.

Massport had solicited bids for a bridge renovation project. Massport asked bidders for alternate pricing: one price for the use of "type 5" cement concrete for the project and one price for the use of "silica fume" concrete. J.F. White Contracting Co. (White) was the lowest bidder for the type 5 concrete, and M. DeMatteo Construction Co. (DeMatteo) was the lowest bidder for the silica fume concrete. Massport elected to award the contract to DeMatteo even though its overall price was higher because it considered the silica fume concrete to be the superior product and because the price differential was minimal. White filed suit challenging Massport's use of alternate pricing in the bid.

White's request for a preliminary injunction to prevent Massport from awarding the contract to DeMatteo was denied by the Superior Court, and the Appeals Court affirmed that decision. The Court stated that Massport was not prohibited from using alternate pricing in the manner that it did in this case. Massport's invitation for bids fully explained the alternatives under consideration, and bidders were placed on an equal footing to win the contract.

**Energy system life-cycle cost estimates.** Under M.G. L. c. 149, you are required to develop energy system life-cycle cost estimates for the following categories of projects:<sup>18</sup>

- new buildings, where the estimated construction cost is greater than \$100,000;
- additions to existing buildings, where the increase in gross floor space is at least 10 percent and the estimated construction cost is greater than \$100,000; and

<sup>18</sup> M.G.L. c. 149, §44M requires summaries of the life-cycle cost estimates to be filed with the Building Code Commission (now called the State Board of Building Regulations and Standards) and with the Director of the Office of Consumer Affairs and Business Regulation prior to the preparation of plans and specifications, in accordance with rules and regulations promulgated by the Director of the Office of Consumer Affairs and Business Regulation. As of March 2005, these rules and regulations had not been promulgated.

- modification or replacement of an energy system in an existing building, where the estimated cost is greater than \$25,000. [M.G.L. c. 149, §44M]

**Prohibition on allowances.** Allowances are sometimes used in construction bidding to cover items for which the design has not been completed. This use of allowances is not permitted for building contracts subject to M.G.L. c. 149. If design work is not complete on a particular item, it must be deleted from the scope of work and procured under a separate contract at a later date. [M.G.L. c. 149, §44G(A)]

### Evaluating the Designer's Performance

Most public agencies in Massachusetts, including state agencies, cities, towns, and other public jurisdictions, must complete and submit a designer evaluation form to DCAM and the DSB upon completion of a building project under their control. [M.G.L. c. 7, §38E] A copy of the completed evaluation form must also be mailed to the designer. At the schematic design phase, the public owner is required to provide the designer with a preliminary, informational, written evaluation of the designer's performance on the project. DCAM has developed designer evaluation forms pertaining to the design and construction phases of a project for use by public agencies. These forms can be downloaded from DCAM's website at [www.mass.gov/cam/forms](http://www.mass.gov/cam/forms).

M.G.L. c. 7, §38E provides qualified immunity to individuals responsible for completing designer evaluations on behalf of public owners. If a designer initiates a lawsuit in response to a completed evaluation, the awarding authority is required to provide legal representation and indemnification for the individual completing the evaluation on behalf of the awarding authority.

Any public agency that fails to complete the required designer evaluation and submit it, together with any written response by the designer, to DCAM within 70 days of completing a project will be ineligible to receive any state funds for public building or public works projects. [M.G.L. c. 7, §38E]

This page intentionally left blank.

## ***V. Procuring Building Construction Contracts Under M.G.L. c. 149***

---

**M.G.L. c. 149, §§44A-M** governs all contracts for the construction, reconstruction, installation, demolition, maintenance, or repair of a building. Although the statutes do not define “building,” court decisions have indicated that the word is to be taken in its common and ordinary sense. If a structure has walls and a roof and encloses space that is to be used for some purpose, it is a building. Size is irrelevant, as is the fact that it may be part of a larger non-building project. If a building is included in the project, the contract must be procured under M.G.L. c. 149, unless it falls within the following exceptions:

- If a sewer or water supply project includes buildings whose sole function is to house pumps and related equipment, the project may be bid under M.G.L. c. 30, §39M. [M.G.L. c. 149, §44A(2)]
- Energy-saving improvements to public buildings may be procured using a request for proposals process outlined in M.G.L. c. 25A, §11C.

Note that modular buildings may be procured using a request for proposals process outlined in M.G.L. c. 149, §44E(4). Additional information on procuring modular buildings can be found later in this manual.

Note also that M.G.L. c. 149 applies to contracts for maintenance or repair work as well as construction. For example, painting, plumbing repair, and asbestos removal contracts are subject to the requirements of these laws. While major repair contracts are bid based on detailed specifications prepared for a particular project, contracts for maintenance materials and services can generally be bid on an annual basis. It may make sense, for example, to award an annual interior painting contract for all public school buildings in a town, based on estimated quantities of the required labor and materials.

The specific procedural requirements that apply to each M.G.L. c. 149 contract depend on the estimated contract cost. The following section summarizes the required procurement procedures corresponding to contract cost estimates within the dollar thresholds specified in M.G.L. c. 149.

### **Building Contracts Estimated to Cost Less Than \$10,000**

If the estimated contract cost is less than \$10,000, you must seek at least three written price quotations from contractors that customarily provide the services you are seeking. You must award the contract to the responsible contractor offering the lowest price quotation.

You are required to keep a record of:

- The names and addresses of all contractors from whom price quotations were sought,
- The names of all contractors submitting price quotations, and
- The date and amount of each price quotation. [M.G.L. c. 149, §44A(2)(A)]

If the contract exceeds \$2,000,<sup>19</sup> the contractor must furnish a payment bond in the amount of at least 50 percent of the contract price.<sup>20</sup> [M.G.L. c. 149, §29] A **payment bond** is a bond, obtained by the contractor from a surety company, that guarantees payment to materials suppliers and/or subcontractors in the event that the general contractor fails to pay the materials suppliers and/or subcontractors.

### **Building Contracts Estimated to Cost Between \$10,000 and \$25,000**

If the estimated contract cost is between \$10,000 and \$25,000, you are required to seek written responses from contractors through public notification of the contract at least two weeks before the deadline for receiving responses. The solicitation must include a scope of work statement that defines the work to be performed and provides prospective offerors with sufficient information regarding your jurisdiction's objectives and requirements as well as the time period in which the work is to be completed.

---

<sup>19</sup> For state agencies, this threshold is \$5,000.

<sup>20</sup> As will be discussed, M.G.L. c. 149 contracts that exceed \$100,000 require the contractor to furnish the awarding authority with a payment bond in the amount of 100 percent of the contract price.

At a minimum, you are required to post the solicitation in a conspicuous place in or near your jurisdiction's primary office and either on your jurisdiction's website, on Comm-PASS,<sup>21</sup> or in the *Central Register*. You must award the contract to the responsible contractor offering to perform the contract at the lowest price. [M.G.L. c. 149, §44A(2)(B)] The selected contractor must furnish a payment bond in the amount of at least 50 percent of the contract price.

### **Building Contracts Estimated to Cost Between \$25,000 and \$100,000**

M.G.L. c. 149, §44A(2)(C) requires building contracts estimated to cost between \$25,000 and \$100,000 to be bid in accordance with the procedures set forth in M.G.L. c. 30, §39M, the bid law that applies to contracts for public works construction services and to contracts for construction materials. [M.G.L. c. 149, §44A(2)(C)] This bidding procedure is summarized below, and a more detailed discussion of M.G.L. c. 30, §39M requirements and procedures is provided in Chapter VI.

For building contracts estimated to cost between \$25,000 and \$100,000, you are required to solicit competitive sealed bids by advertising a notice inviting bids in the *Central Register* and in a newspaper of general circulation in the locality of the project at least two weeks prior to the deadline for submitting bids. The notice must also be posted in your jurisdiction's office at least one week prior to the deadline. Bidders must submit a five percent bid deposit with their bids. A **bid deposit** guarantees the bid price submitted by each vendor: if the low bidder will not honor its bid price, you may collect all or part of the bid deposit. The bid deposit may be in the form of a certified, treasurer's or cashier's check from a responsible bank or trust company payable to the awarding authority; cash; or a bid bond from a surety company. Each bidder must sign a certificate of good faith under penalties of perjury.

---

<sup>21</sup> Comm-PASS is the Commonwealth's Procurement Access and Solicitation System. Any public agency in Massachusetts can post solicitations on Comm-PASS free of charge. For additional information, you may visit the Comm-PASS website at [www.comm-pass.com](http://www.comm-pass.com).

Construction bids are publicly opened and read at the time they are due. You must award the contract to the lowest responsible and eligible bidder. Under M.G.L. c. 30, §39M, the “lowest responsible and eligible bidder” is defined as:

The bidder (1) whose bid is the lowest of those bidders possessing the skill, ability and integrity necessary for the faithful performance of the work; (2) who shall certify that he is able to furnish labor that can work in harmony with all other elements of labor employed or to be employed in the work; (3) who, where the provisions of section eight B of chapter twenty-nine<sup>22</sup> apply, shall have been deemed qualified thereunder; and (4) who obtains within ten days of the notification of contract award the security by bond required under section twenty-nine of chapter one hundred and forty-nine; provided that for the purposes of this section the term “security by bond” shall mean the bond of a surety company qualified to do business under the laws of the commonwealth and satisfactory to the awarding authority. [M.G.L. c. 30, §39M(c)]

If the low bidder satisfies the requirements, you make an award to that bidder. If not, you reject that bidder and proceed to evaluate and award to the next lowest bidder.

The contractor must furnish a payment bond in the amount of at least 50 percent of the contract price. The contractor has ten days from the date of notification of the contract award to obtain the payment bond. You are not required to obtain a performance bond, although you may decide to do so. If the selected contractor fails to execute the contract or to furnish the required bond or bonds, you should award the contract to the next lowest responsible and eligible bidder.

### **Building Contracts Estimated to Cost More Than \$100,000**

Building contracts estimated to cost more than \$100,000 are subject to two unique requirements that do not apply to smaller building contracts or to public works construction contracts: certification and filed sub-bidding. Building contracts estimated to cost \$10 million or more are subject to additional requirements for prequalification of general contractors and subcontractors submitting filed sub-bids. The steps for bidding

---

<sup>22</sup> M.G.L. c. 29, §8B established a contractor prequalification process for contracts awarded by the Massachusetts Highway Department and the Metropolitan District Commission. The latter was abolished in 2003.

building contracts estimated to cost more than \$100,000 are discussed later in this chapter, after the section on contractor and subcontractor prequalification.

### **Certification**

M.G.L. c. 149 requires general contractors bidding on public building construction projects estimated to cost more than \$100,000 to be certified by the Division of Capital Asset Management (DCAM). As of January 1, 2006, contractors submitting filed sub-bids on such contracts must also be certified by DCAM. The sub-bidder certification procedures, which differ in some respects from the contractor certification procedures, are discussed later in this section. The filed sub-bid system is discussed in the following section of this report.

DCAM's Contractor Certification Office certifies contractors to bid on public projects in specific categories of work. The purpose of contractor certification is to identify those contractors that pose an unacceptable risk to awarding authorities and to disqualify such contractors from bidding on public building projects.

Each bidder must submit with its bid a **Certificate of Eligibility** issued by DCAM. [M.G.L. c. 149, §44D] To obtain a Certificate of Eligibility, a contractor must submit a qualifications statement to DCAM, which reviews the contractor's qualifications, past performance, financial condition, bonding capacity, and other relevant information. Because of the time required to obtain a certificate, a contractor generally must apply for certification well in advance of a project. Certificates must be renewed annually.

To evaluate contractors applying for certification, DCAM determines whether the contractor meets certain minimum eligibility requirements and whether the application contains all of the required forms and information. Then DCAM evaluates the contractor's past performance using contractor evaluations and numerical ratings provided by public and private owners of projects<sup>23</sup> completed by the contractor within the last five years. When necessary, DCAM supplements the written evaluations submitted by public owners with telephone evaluations from public owners who have

---

<sup>23</sup> Chapter VII contains a discussion of this contractor evaluation requirement.

not submitted the required evaluation forms and, in some cases, from private owners. After calculating the average project rating, DCAM assigns ratings to other criteria pertaining to the applicant's experience and work history over the past five years. An overall numerical rating is then calculated by assigning a weight of 70 percent to the average project rating and 30 percent to the other criteria. If either the average project rating or the overall numerical rating for an applicant is below 80, the applicant is denied certification.

Each certificate contains three important pieces of information: the category or categories of work for which the contractor is qualified; the Single Project Limit, which represents the maximum bid that the bidder may submit on a single project;<sup>24</sup> and the Aggregate Work Limit, which represents the maximum annual value of all work the bidder may perform, including the annual value of the contract for which the bid is submitted. DCAM issues certificates for the following categories of work:

General building construction	Mechanical systems
Alarm systems	Modular construction/Prefabrication <sup>27</sup>
Asbestos removal <sup>25</sup>	Painting
Deleading <sup>26</sup>	Plumbing
Demolition	Pumping stations
Doors and windows	Roofing
Electrical	Sewage and water treatment plants
Elevators	Telecommunications systems
Energy management systems	Waterproofing
Exterior siding	Historical building renovation
Fire protection sprinkler systems	Historical masonry
Floor covering	Historical roofing
HVAC	Historical painting
Masonry	

---

<sup>24</sup> For certain contractors, DCAM assigns a separate project limit for general building construction. This separate "General Building Construction Limit" will appear on the contractor's certificate above the contractor's Single Project Limit.

<sup>25</sup> Asbestos removal contractors must also be licensed by the Division of Occupational Safety.

<sup>26</sup> Deleading contractors must also be licensed by the Division of Occupational Safety.

For each contract, the awarding authority must designate the category or categories of work for which the general contractor must be certified and include this information in the published notices inviting bids. Awarding authorities may request DCAM to establish special categories of work when there is good reason to limit bidding to contractors possessing skills or abilities not covered by the above listed standard categories. Special categories are awarded on a project-specific basis. [810 CMR 4.03(3)]

A valid Certificate of Eligibility indicates that a bidder on a M.G.L. c. 149 project has been certified by DCAM for a certain category of work, but the final determination of bidder responsibility is always in your hands. In addition to a Certificate of Eligibility, each M.G.L. c. 149 bidder must submit an **Update Statement**<sup>28</sup> showing recent and current projects, any significant changes in financial position, relevant litigation involving the bidder, and the names and qualifications of the supervisors proposed for the project. As will be discussed, you will use the references listed on the Update Statement as a source of information in evaluating the qualifications of general bidders and determining bidder responsibility.

As of January 1, 2006, subcontractors submitting filed sub-bids on M.G.L. c. 149 contracts estimated to cost more than \$100,000 must also be certified by DCAM in the appropriate class of work, and filed sub-bidders must include a valid Certificate of Eligibility and completed Update Statement with their sub-bids. The certification and evaluation requirements for sub-bidders are similar to the contractor certification and evaluation requirements summarized above. However, DCAM's evaluation of sub-bidders' past performance is based on projects completed by sub-bidders within the last

---

<sup>27</sup> Modular buildings may be procured using a request for proposals process outlined in M.G.L. c. 149, §44E. Chapter VIII of this manual provides detailed guidance on modular construction procurement procedures.

<sup>28</sup> The Update Statement submitted by a general bidder or filed sub-bidder is not a public record and must be removed from bid documents before these documents are offered for public inspection. [810 CMR 8.06] A blank Update Statement may be downloaded from DCAM's website at [www.mass.gov/cam/forms](http://www.mass.gov/cam/forms).

three years rather than the last five years, and the Certificates of Eligibility issued to sub-bidders do not include a Single Project Limit or Aggregate Work Limit.

### **Filed Sub-Bidding**

For many years Massachusetts has used the “filed sub-bid” system for selecting certain subcontractors on certain public building construction projects subject to M.G.L. c. 149. A subcontractor must be selected through the filed sub-bid system if the following three conditions are met:

1. the contract is being bid under M.G.L. c. 149 with an estimated construction cost that exceeds \$100,000,
2. the subcontractor’s work falls under a filed sub-bid category of work listed in Chapter IV, and
3. the estimated cost of the subcontract is greater than \$20,000.

Subcontractors must submit sub-bids for the work in each filed sub-bid category directly to the awarding authority, using the standard Form for Sub-Bid contained in Appendix B of this manual. Subcontractors may submit unrestricted sub-bids, meaning that their sub-bids are available for use by any general contractor, or they may restrict their sub-bids so that only certain general contractors can use them.

In addition, you may have identified certain classes of work which, in your opinion based upon an investigation of the work involved, are estimated to cost in excess of \$10,000 and are customarily performed by sub-subcontractors. If your specifications have included this work, sub-bidders must also list all sub-subs they plan to use and their bid prices. This sub-sub-bid work is often referred to as “Paragraph E work,” since such work is listed under Paragraph E on the standard bid form.

After screening the sub-bidders, the public owner provides a list of eligible sub-bidders and their sub-bid prices to all interested contractors. This list is called a filed sub-bid tabulation sheet. Each general contractor must select, in each sub-bid category, the subcontractor it wishes to use (provided it is not restricted by the subcontractor). The general contractor must list in its general bid the names of the selected subcontractors

and the respective sub-bid amounts. General contractors are *not* required to take the lowest sub-bid in each category.

A general contractor may also submit a filed sub-bid, provided that the general contractor customarily performs the work covered by the sub-bid category with its own employees and that the contractor is qualified to perform the work. The rule is that if a general contractor submits a filed sub-bid, it must list itself for that subtrade on its general bid. The exception to this rule is that the general contractor may list the lowest responsible and eligible sub-bidder on its general bid if:

1. the other sub-bid is lower than the general bidder's sub-bid,
2. the other sub-bid is available for the general bidder's use, and
3. the other sub-bid is not restricted to the general bidder's use alone or the general bidder's use and the use of another general bidder or other general bidders. [M.G.L. c. 149, §44F(5)]

### **Contractor and Subcontractor Prequalification Requirements for Building Contracts Estimated to Cost \$10 Million or More**

For building contracts estimated to cost \$10 million or more, general bidders and filed sub-bidders must be prequalified by your jurisdiction in accordance with the detailed prequalification procedures contained in M.G.L. c. 149. Awarding authorities may elect to institute these prequalification procedures for building contracts estimated to cost between \$100,000 and \$10 million.<sup>29</sup> On M.G.L. c. 149 contracts for which prequalification procedures are required or adopted, you will not follow Step 2 of the bidding process for M.G.L. c. 149 contracts estimated to cost more than \$100,000. Instead, you will provide the bid documents only to prequalified general bidders and filed sub-bidders.

---

<sup>29</sup> If you elect to use a prequalification process on a building contracts estimated to cost between \$100,000 and \$10 million, you are not required to prequalify subcontractors in all subtrade categories. However, if you elect to prequalify subcontractors in a particular subtrade category, then all subcontractors submitting filed sub-bids for that subtrade category must be prequalified. [810 CMR 10.03(4)]

The following agencies are exempt from the mandatory contractor and subcontractor prequalification requirements contained in M.G.L. c. 149 but may elect to follow them: DCAM, the Massachusetts Port Authority, the Massachusetts Water Resources Authority, the Massachusetts State College Building Authority, and the University of Massachusetts Building Authority.

The detailed legal requirements for prequalifying general bidders and filed sub-bidders on these larger building construction contracts are found in M.G.L. c. 149, §§44D<sup>1</sup>/<sub>2</sub> and 44D<sup>3</sup>/<sub>4</sub> and in regulations promulgated by DCAM: 810 CMR 9.00 and 810 CMR 10.00. These requirements are summarized below; however, the following summary is not comprehensive. Awarding authorities embarking on a prequalification process should consult the relevant provisions of M.G.L. c. 149 and the DCAM regulations cited above.

The basic steps for prequalifying contractors and subcontractors to bid on public building contracts estimated to cost \$10 million or more are as follows:

1. Establish a Prequalification Committee.
2. Prepare the request for qualifications (RFQ).
3. Advertise the RFQ and receive statements of qualifications.
4. Evaluate and prequalify contractors or subcontractors.
5. Notify applicants; post and publish public notice of prequalified contractors or subcontractors.
6. Solicit bids or filed sub-bids from prequalified contractors or subcontractors.

**Step 1: Establish a Prequalification Committee.**

Before issuing a request for qualifications (RFQ) for general bidders or filed sub-bidders, you must establish a Prequalification Committee consisting of one representative of the project designer and three representatives of your jurisdiction, one of which will be the owner's project manager, if an owner's project manager is required. If you are prequalifying both general bidders and filed sub-bidders for a construction contract, the Prequalification Committee members for each prequalification process should be the same to the extent possible. The representative of the project designer

must either have prepared the design documents or be the designer's designated representative for the building project. If the owner's project manager is a consultant, the scope of services of your contract with the owner's project manager must include the Prequalification Committee services and related costs. At its initial meeting, the Prequalification Committee must designate one of the three representatives of your jurisdiction to serve as chairperson. The chairperson will be responsible for coordinating the committee meetings and managing the evaluation process. [810 CMR 9.04]

**Step 2: Prepare the request for qualifications (RFQ).**

The RFQ must include an RFQ Interest Form in a form consistent with the RFQ Interest Form prescribed by DCAM in two documents available at [www.mass.gov/cam](http://www.mass.gov/cam): *Standard Forms for General Contractor Prequalification* and *Standard Forms for Subcontractor Prequalification*. You are required to maintain a list of all firms that have submitted an RFQ Interest Form with their responses to the RFQ and to provide notice of any addenda or other communications regarding the prequalification process to all firms that have submitted the RFQ Interest Form. [810 CMR 9.05; 810 CMR 10.05]

The RFQ must also include a standard Statement of Qualifications (SOQ) in a form consistent with the Statement of Qualifications prescribed by DCAM in *Standard Forms for General Contractor Prequalification* and *Standard Forms for Subcontractor Prequalification*. Your jurisdiction may customize the SOQ to include project-specific information pertaining to the evaluation criteria listed below, but the standard SOQ may not otherwise be modified or changed. You are required to make the SOQ available in both electronic and paper form to interested general contractors and subcontractors.

In preparing the RFQ, you must use only the evaluation criteria, information requirements, and point rating system specified in M.G.L. c. 149. The required evaluation criteria, information requirements, and point rating system for prequalification of contractors and subcontractors are listed below. Where the requirements for contractors and subcontractors differ, these differences are noted.

**1. Management experience (50 points; minimum of 25 points required for approval)**

- Business owners: Name, title, and years with firm of the owner(s) of the business.
- Management personnel: Names, title, education and construction experience, years with firm, and list of projects completed by all management personnel who will have any direct or indirect responsibility for the building project.
- Similar project experience: Project name(s), description, original contract sum, final contract sum with explanation, and date completed of similar projects. Your jurisdiction has the discretion to include in the RFQ a description of what you consider a “similar project.”
- Terminations: A list of any projects on which the firm was terminated or failed to complete the work, including an explanation for each instance listed.
- Legal proceedings – general contractors: A list of all legal or administrative proceedings currently pending against the general contractor or concluded adversely to the general contractor within the past five years that relate to the procurement or performance of any public or private construction contract.
- Legal proceedings – subcontractors: A list of all legal or administrative proceedings currently pending against the subcontractor or concluded adversely to the subcontractor within the past three years that relate to the procurement or performance of any public or private construction contract. Legal proceedings shall not include any actions that primarily involve personal injury or workers’ compensation claims, or where the sole cause of action involves the subcontractor’s exercise of its rights for direct payment under M.G.L. c. 30, §39M.
- Safety record: The three-year history of the firm’s workers’ compensation experience modifier.
- Compliance record - general contractors: Information on and evidence of the firm’s compliance record with respect to minority business enterprise and women business enterprise inclusion goals and workforce inclusion goals, if applicable, on building projects within the past five years.

**2. References (30 points; minimum of 15 points required for approval)**

- Project references: A list of references from owners and architects for all “similar projects” provided in response to section (iii) of “Management Experience” (above), including project names and names of the owners and architects, with a current address, telephone and fax number, and contact person for each project.
- Credit references: A list of at least five credit references, including the telephone and fax numbers of contact persons from key suppliers, vendors, and banks.
- Public project records: A list of all public building construction projects subject to M.G.L. c. 149 completed during the past three years, including the owner’s

name, current address, telephone and fax number, and contact person for each project.

**3. Capacity to complete projects (20 points; minimum of 10 points required for approval)**

- General contractors: An audited financial statement for the most recent fiscal year.<sup>30</sup>
- Subcontractors: Annual revenue for the prior three fiscal years.<sup>31</sup> (Note that the RFQ for subcontractors may not require submission of financial statements.)
- Revenue under contract for the next three fiscal years.<sup>32</sup>

**4. Mandatory requirements for which no points are assigned**

- A commitment letter, issued by a surety company licensed to do business in the Commonwealth and whose name appears on United States Treasury Department Circular 570, for payment and performance bonds indicating that the contractor or subcontractor is bondable<sup>33</sup> for 100 percent of the estimated contract or subcontract value. If the commitment letter is written by another party on behalf of a surety company, the commitment letter must be accompanied by an authorized power of attorney from a surety company.
- General contractors: A Certificate of Eligibility issued by DCAM showing single and aggregate capacity ratings sufficient for the project, and a completed Update Statement.
- Subcontractors: A Certificate of Eligibility issued by DCAM and a completed Update Statement.<sup>34</sup>

The RFQ must identify the specific point allocation for each category and subcategory of information. Within each category of information, the Prequalification Committee may

---

<sup>30</sup> Financial information submitted in response to this requirement is not a public record. General contractors may submit this information in a separate, sealed, stapled envelope clearly labeled with the general contractor's name, the project name, the project number, and a notation that the envelope contains confidential financial information.

<sup>31</sup> Financial information submitted in response to this requirement is not a public record. See the previous footnote 28.

<sup>32</sup> Financial information submitted in response to this requirement is not a public record. See the previous footnote 28.

<sup>33</sup> This commitment letter constitutes a written determination by the surety that, based on the information known at the time, it would approve the issuance of payment and performance bonds for 100 percent of the estimated contract or subcontract value.

<sup>34</sup> For subcontractors, this requirement will take effect January 1, 2006.

use discretion in allocating points among the subcategories, consistent with the total points for the category.

For prequalification of both general contractors and subcontractors, the RFQ and public notice must include the following information:

1. For general contractors, the RFQ must include a statement indicating that the RFQ will be used to prequalify general contractors that will be invited to submit bids pursuant to M.G.L. c. 149, §44E. For subcontractors, the RFQ must include a statement indicating that the RFQ will be used to prequalify subcontractors that will be invited to submit filed sub-bids pursuant to M.G.L. c. 149, §§44E and 44F.
2. The location or locations where interested general contractors or subcontractors can obtain a full copy of the RFQ, including the actual and electronic addresses where copies may be obtained.
3. The time and date for receipt of responses to the RFQ, which must be at least two weeks after the date of the advertisement.
4. The mailing and physical addresses of the office to which responses are to be delivered.
5. The time frame in which the public agency will respond to the responses.
6. A general description of the building project, including a description of the physical location of the project and work to be performed.
7. The anticipated schedule for the building project from the time a notice to proceed is issued by your jurisdiction.
8. The estimated construction cost for the project and estimated construction cost for each and every subtrade for which subcontractors will be prequalified to submit filed sub-bids.
9. A listing of the project team, including the awarding authority, the designer, and the awarding authority's owner's project manager, if applicable.
10. A detailed description of the evaluation procedure and criteria for prequalification of general contractors or subcontractors, including the point rating system and specific point allocations for each evaluation category and subcategory, and the anticipated schedule for the start and completion of the evaluation process.
11. A prohibition against any unauthorized communication or contact with your jurisdiction outside of the official pre-bid meetings. (Authorized communications are inquiries made to your jurisdiction for general information about obtaining the RFQ,

RFQ submission deadlines, and the existence of any relevant addenda to the RFQ; and inquiries made at any official pre-RFQ meeting held by your jurisdiction.)

12. Any limitations desired by your jurisdiction on the size of and number of pages to be included in the response to the RFQ.

If inclusion of all of the above information in the text of the public notice is not practicable due to space and cost limitations, you must include items 1 through 9 above, but you may state in the public notice that all further required public information, including the prequalification evaluation criteria and selection process, is included in the RFQ. [810 CMR 9.07; 810 CMR 10.07]

The general contractor or subcontractor submitting the statement of qualifications in response to the RFQ must sign the statement of qualifications under pains and penalties of perjury.

### **Step 3: Advertise the RFQ and receive statements of qualifications.**

At least two weeks before the deadline for submitting responses to the RFQ, you must advertise the RFQ in a newspaper of general circulation in the area in which the building project is located, in the *Central Register*, and on Comm-PASS.<sup>35</sup> If you so choose, you may also post the public notice on your jurisdiction's website.

The SOQs are not opened publicly but must be opened in the presence of one or more witnesses at the time specified in the RFQ. The opening of the SOQs by the Prequalification Committee will satisfy this requirement.

The Prequalification Committee is required to prepare a register of responders that includes the name of each general contractor or subcontractor that submitted a SOQ in response to the RFQ. The register of responders must be open for public inspection. After the SOQs have been evaluated by the Prequalification Committee, the SOQs must

---

<sup>35</sup> Comm-PASS is the Commonwealth's Procurement Access and Solicitation System. Any public agency in Massachusetts can post solicitations on Comm-PASS free of charge. For additional information, you may visit the Comm-PASS website at [www.comm-pass.com](http://www.comm-pass.com).

be made available to the public with the exception of the financial information they contain, which is not a public record. [M.G.L. c. 149, §44D½(g)]

**Step 4: Evaluate and prequalify contractors or subcontractors.**

Immediately after opening the responses to the RFQ, the Prequalification Committee is required to review the register of responders and obtain copies of each SOQ and all supporting documentation. The Prequalification Committee may delegate the checking of references to individuals that are not committee members, provided that the Prequalification Committee develops a written reference check form with uniform questions to be asked by those checking general contractor and subcontractor references. The chairperson of the Prequalification Committee may delegate additional administrative tasks necessary to facilitate the prequalification process. [810 CMR 9.08; 810 CMR 10.08]

The Prequalification Committee is responsible for evaluating each SOQ submitted in response to the RFQ, using only the evaluation criteria contained in the RFQ. After Prequalification Committee members have completed their individual reviews of the SOQs, the Prequalification Committee must collectively evaluate the responses to the RFQ. The Prequalification Committee may consult with other representatives of your jurisdiction, the designer, client or user agency (if applicable), or legal counsel as necessary to expedite the evaluation process. The Prequalification Committee may also contact interested general contractors and subcontractors to clarify or verify timely information submitted by an interested general contractor or subcontractor in its SOQ. After the evaluation process is completed, the chairperson must complete a Prequalification Evaluation Report, in a form consistent with the Prequalification Evaluation Report prescribed by DCAM in the *DCAM Guidelines for Prequalification*. This report must reflect the consensus of the Prequalification Committee regarding the score received by the general contractor or subcontractor for each evaluation category and subcategory and must indicate the total points awarded. The report may be customized by the Prequalification Committee only to reflect project-specific information. [810 CMR 9.08; 810 CMR 10.08]

Only general contractors and subcontractors receiving the minimum number of points in each of the four general evaluation categories as well as a total minimum score of 70 points may be prequalified to submit bids and filed sub-bids. All general contractors and subcontractors that fulfill these requirements must be invited to submit bids and filed sub-bids. [810 CMR 9.08; 810 CMR 10.08]

The Prequalification Committee must select at least three qualified general contractors to submit bids on the construction contract. If the Prequalification Committee prequalifies fewer than three general contractors for a M.G.L. c. 149 construction contract estimated to cost \$10 million or more (for which contractor prequalification is mandatory), your jurisdiction must reject all responses and issue at least one new RFQ. If that RFQ produces fewer than three prequalified general contractors, you have two options: you may solicit general bids pursuant to M.G.L. c. 149, §§44B-E, or, if at least two general bidders have been prequalified, you may invite bids from the two prequalified general bidders.

If the Prequalification Committee prequalifies fewer than three general contractors for a M.G.L. c. 149 construction contract estimated to cost between \$100,000 and \$10 million (for which contractor prequalification is optional), you have three options: you may reject all responses and issue a new RFQ, you may solicit general bids pursuant to M.G.L. c. 149, or, if at least two general contractors have been prequalified, you may invite general bids from the two prequalified general contractors. If you reissue an RFQ for general bidders, your RFQ may stipulate that a general contractor that was prequalified for a particular project during the first RFQ process will remain prequalified for that project, without any further submissions by the general contractor or review by your jurisdiction, for up to 120 days from the due date of responses to the first RFQ. [M.G.L. c. 149, §44D½(i)]

Similarly, the Prequalification Committee must select at least three qualified subcontractors to submit filed sub-bids for each category of work subject to the filed sub-bidding requirements of M.G.L. c. 149. If the Prequalification Committee prequalifies fewer than three subcontractors for a particular trade in connection with a

M.G.L. c. 149 construction contract estimated to cost \$10 million or more (for which subcontractor prequalification is mandatory), you must reject all responses and issue at least one new RFQ. If that RFQ produces fewer than three prequalified subcontractors, you have two options: you may solicit filed sub-bids pursuant to M.G.L. c. 149, §§44B-E, or, if at least two sub-bidders have been prequalified, you may invite bids from the two prequalified subcontractors.

If the Prequalification Committee prequalifies fewer than three subcontractors for a M.G.L. c. 149 construction contract estimated to cost between \$100,000 and \$10 million (for which subcontractor prequalification is optional), you have three options: you may reject all responses and issue a new RFQ, you may solicit filed sub-bids pursuant to M.G.L. c. 149, or, if at least two subcontractors have been prequalified, you may invite filed sub-bids from the two prequalified general contractors. If you reissue an RFQ for subcontractors, your RFQ may stipulate that a subcontractor that was prequalified for a particular project during the first RFQ process will remain prequalified for that project, without any further submissions by the subcontractor or review by your jurisdiction, for up to 120 days from the due date of responses to the first RFQ. [M.G.L. c. 149, §44D<sup>3</sup>/<sub>4</sub>(i)]

**Step 5: Notify applicants; post and publish public notice of prequalified contractors and subcontractors.**

Within 14 days of the completion of the Prequalification Committee's evaluation process, your jurisdiction is required to send, via first class mail, postage prepaid:

- written notices to all contractors and subcontractors that were not prequalified, advising them that they did not achieve a sufficient score from the Prequalification Committee to be prequalified, and
- written notices to all prequalified contractors and subcontractors, advising them that they have been prequalified by the Prequalification Committee to submit bids or filed sub-bids on the project.

Also within 14 days of the completion of the Prequalification Committee's evaluation process, your jurisdiction is required to publish a public notice listing all general contractors or subcontractors that have been prequalified for the building project and

stating that only prequalified general contractors or subcontractors are eligible to submit bids or filed sub-bids. The notice must be posted in your jurisdiction's bid room or place of business where general bids are customarily received for building projects and on Comm-PASS. You may also post the public notice on your jurisdiction's website.

General contractors and subcontractors submitting SOQs in response to an RFQ may obtain their scores upon written request to your jurisdiction. M.G.L. c. 149, §§44D $\frac{1}{2}$  and 44D $\frac{3}{4}$  provide that the decisions of the Prequalification Committee shall be final and shall not be subject to appeal except on grounds of fraud or collusion. According to DCAM regulations, the burden shall be on the appealing party to prove by a preponderance of evidence that such fraud or collusion existed. [810 CMR 9.11; 810 CMR 10.11]

**Step 6: Solicit bids or filed sub-bids from prequalified contractors or subcontractors.**

A copy of the public notice referenced in the previous Step 5 must be sent via first class mail, postage prepaid, to all prequalified general contractors or subcontractors along with an invitation to bid. The invitation to bid must state where prequalified general contractors and subcontractors can obtain copies of the plans and specifications for the project and must specify the deadlines for submitting bids and filed sub-bids. The invitation to bid must be issued at least two weeks prior to the deadlines for submitting bids and filed sub-bids. Any other parties interested in obtaining the plans and specifications may do so by providing a deposit designated by your jurisdiction. [810 CMR 9.10; 810 CMR 10.10]

For contracts estimated to cost \$10 million or more, or for contracts estimated to cost between \$100,000 and \$10 million for which you have elected to prequalify the general bidders and filed sub-bidders, you will solicit bids and filed sub-bids only from general bidders and filed sub-bidders that have been prequalified by your jurisdiction using the procedures summarized above, provided that you have complied with the above requirements.

### **The Construction Bidding Process for Building Contracts Estimated to Cost More Than \$100,000**

The basic steps for bidding M.G.L. c. 149 contracts estimated to cost more than \$100,000 are as follows:

1. Prepare the bid documents.
2. Advertise the work.<sup>36</sup>
3. Receive, open, and review sub-bids.
4. Distribute the filed sub-bidder list to all bidders.
5. Receive, open and review general bids.
6. Award the contract to the lowest responsible and eligible bidder.
7. Obtain bonds and execute the contract.
8. Return bid deposits and publicize the contract.

#### **Step 1: Prepare the bid documents.**

The bid documents consist of the package of materials, distributed to interested bidders, that form the basis for their bids. There are three major components of the bid document package:

**Plans and specifications.** These are the construction drawings and related written materials, prepared by the project designer, that explain in detail how the project is to be built.

**Standard forms.** The package should contain several standard forms for the bidder to complete. These include a form for submitting general bids, a form for submitting sub-bids, and blank Update Statement forms for the general bidder and filed sub-bidders.<sup>37</sup> You must also request a prevailing wage sheet from the Division of Occupational Safety (DOS) within the Department of Labor and Workforce

---

<sup>36</sup> This step does not apply to contracts for which general bidders and filed sub-bidders have been prequalified.

<sup>37</sup> This requirement applies to filed sub-bidders as of January 1, 2006.

Development and include the sheet – or reference it – in the bid documents.<sup>38</sup> (Appendix B of this manual contains copies of the Form for General Bid and the Form for Sub-Bid. The Request for Prevailing Wage Rates form may be downloaded from the DOS website at [www.mass.gov/dos](http://www.mass.gov/dos).)

**Terms and conditions.** The bid package should also contain the various business and legal terms and conditions to which the contractor must agree. By necessity, the contract will be a lengthy and complex document, and a discussion of all the terms and conditions is beyond the scope of this manual. However, a brief section at the end of this chapter lists some particular provisions of which you should be aware.

We recommend that you develop a standard construction contract, which can then be used repeatedly with only minor modifications for each individual project. DCAM's standard contract for state projects can be used as a guide in developing a contract, although some changes are needed to reflect the slightly different legal requirements at the local level. As with any legal document, you should consult your local attorney when developing a standard construction contract.

**Bid deposit.** Each bidder must submit with its bid a bid deposit equal to five percent of the amount of the bid. The bid deposit may be in the form of a certified, treasurer's, or cashier's check payable to the awarding authority from a responsible bank or trust company; cash; or a bid bond from a licensed surety. [M.G.L. c. 149, §44B(2)]

### **Step 2: Advertise the work.**<sup>39</sup>

At least two weeks prior to the deadline for submitting bids, a notice inviting bids must appear in the *Central Register*, published by the Secretary of the Commonwealth, and in a local newspaper. See the Secretary of the Commonwealth's website at

---

<sup>38</sup> Since you are required to provide the prevailing wage sheet at no cost to anyone who requests it, it makes sense to include the sheet in the bid documents.

<sup>39</sup> This step does not apply to contracts for which general bidders and filed sub-bidders have been prequalified.

[www.mass.gov/sec](http://www.mass.gov/sec) for information on submitting notices to the *Central Register*. A notice must also be posted in the awarding authority's office at least one week prior to the deadline.<sup>40</sup> The notice must contain the following information:

- a description of the project in sufficient detail to allow bidders to determine if they are eligible and interested,
- where and when bid documents can be obtained,
- where and when bids are due,
- where and when the bids will be opened, and
- a reference to the payment of prevailing wages.<sup>41</sup>
- the contractor certification category of work for the general contractor,
- the filed sub-bid categories of work (where required),
- the place and time for submitting filed sub-bids (where required), and
- the place and time for opening filed sub-bids (where required).

The bid documents must be made available to all who request them. Keep a full record of the names and addresses of all who receive the documents. If it becomes necessary to issue an addendum<sup>42</sup> to the bid package, send the addendum to all who have obtained the original bid documents. To avoid misunderstandings or protests, you should require bidders to acknowledge on their bid forms that they have received all addenda to the original bid documents. The statutory bid form contains a space for this acknowledgment. Addenda that include substantive changes to the bid documents should be issued no later than two working days before the bid opening date.

---

<sup>40</sup> The public notice requirements for projects subject to both M.G.L. c. 149 and M.G.L. c. 30, §39M are contained in M.G.L. c. 149, §44J.

<sup>41</sup> The reference to prevailing wages must be included either in the notice or in the invitation for bids. [M.G.L. c. 149, §27]

<sup>42</sup> Before bid openings, any changes or corrections to the plans, specifications, or contract terms and conditions must be distributed in an addendum.

Each bidder is entitled to one free set of bid documents.<sup>43</sup> The list of contractors who have requested the bid documents must be updated daily, posted in the awarding authority's office, and sent weekly to the *Central Register*. [M.G.L. c. 149, §44B]

For larger or more complex projects, it may make sense to schedule an optional or mandatory prebid conference, which may include a tour of the site or facility. If you do so, you must notify all bidders requesting bid documents of the date, time, and location of the prebid conference. Be sure to record the names of firms in attendance, the questions asked by attendees, and the answers provided by your representatives at the conference. This information should then be distributed to all firms receiving the bid documents.

### **Step 3: Receive, open, and review sub-bids.**

The deadline for receipt of filed sub-bids is at least four and one half working days prior to the day on which general bids are opened.<sup>44</sup> [M.G.L. c. 149, §44F(3)] Filed sub-bids are subject to the same requirement for bid deposits as are general bids (see Step 1, above). The sub-bids are publicly opened and read. As of January 1, 2006, you are required to check each sub-bid to ensure that it contains the required Certificate of Eligibility and Update Statement from the sub-bidder. According to DCAM regulations, awarding authorities must consider the information submitted in each filed sub-bidder's Update Statement and must review the filed sub-bidder's certification file maintained by DCAM. [810 CMR 8.11]

You *must* reject a sub-bid that contains no bid deposit; does not conform with any other statutory bidding requirement in matters of substance; is on a form not completely filled in; is incomplete, conditional or obscure; or contains any addition not called for. [M.G.L. c. 149, §44F(3)]

You *may*, at your discretion, reject a sub-bid when:

---

<sup>43</sup> You may require a deposit, which must be refunded when the bid documents are returned.

<sup>44</sup> M.G.L. c. 149 provides that sub-bids must be filed before noon at least four working days before the general bid opening.

- you determine that a sub-bidder is not competent to perform the work;
- you receive fewer than three available sub-bids in a sub-trade category, and the prices are not reasonable for acceptance without further competition;
- the sub-bid includes only a minor or trivial deviation from a statutory requirement; or
- the sub-bid deviates from your own requirement rather than from a statutory requirement.

When considering sub-bidder competence, you should consult with your project designer. Your determination of a sub-bidder's competence will not be overturned unless it can be found that your determination was made in an illegal or arbitrary manner.<sup>45</sup>

---

<sup>45</sup> As discussed in the previous chapter, you may establish qualifications for sub-bidders in the bid documents.

### **Filed Sub-Bids: Special Circumstances**

#### **If you receive no sub-bids, or only restricted sub-bids, in a particular category . . .**

You may issue a directive to the general bidders to include that subtrade work within the general's scope of work. The winning general contractor can then select a subcontractor, subject to the approval of the awarding authority. If you determine that the proposed subcontractor is unqualified, the general contractor is obligated to substitute a different subcontractor (again, subject to your approval), but the price of the contract is *not* adjusted because of the substitution. [M.G.L. c. 149, §44F(4)(a)(1)]

#### **If you receive only one or two available sub-bids in a particular category . . .**

If you find that the sub-bids are reasonable, you may proceed in the normal manner. But if the sub-bids are unreasonably high, you may reject them and use the following alternate procedure [M.G.L. c. 149, §44F(4)(a)(2)]:

- Specify in an addendum issued with the list of sub-bidders an amount for each of the general bidders to carry in their bids for that category of work.
- Issue a request for sub-bids in writing to at least three qualified firms, and publicly open their bids at the time and place specified in the written request for sub-bids.
- Select the lowest sub-bidder to which the winning general contractor has no objection and adjust the general contract price to reflect the difference between the amount stated in the addendum and the actual subcontract cost.

#### **If a sub-bidder wants to withdraw its sub-bid before the sub-bid opening . . .**

M.G.L. c. 149 does not directly address when sub-bidders may withdraw bids. As a practical matter, if a sub-bidder wants to withdraw its sub-bid before the sub-bid opening, you should let it do so. It is probably best to get a written request and return the sub-bid and bid deposit unopened.

#### **Step 4: Distribute the filed sub-bidder list to all bidders.**

Mail the list of the sub-bidders and their sub-bid amounts to everyone on record as having received the bid documents. This list, which is often called a "filed sub-bid tabulation sheet," must be sent out at least two working days before the general bids are opened. [M.G.L. c. 149, §44F(3)]

#### **Step 5: Receive, open, and review general bids.**

All bids must be publicly opened and read at the time at which they are due. [M.G.L. c. 149, §44J(4)] The following items should be checked for each bid:

- Is the bid for the right project?
- Is the bid amount specified?
- Is the bid signed?
- Is a bid deposit included?

M.G.L. c. 149 does not specify when a general bidder may withdraw its bid. As a practical matter, if general bids have not been opened, you should obtain a written request and return the bid and bid deposit unopened.

- Has the bidder acknowledged receipt of any and all addenda issued by the awarding authority?
- Has the bidder submitted a Certificate of Eligibility and an Update Statement?

All bid documents, with the exception of the Update Statements, are open for public inspection.

The law requires that the contract be awarded to the lowest *responsible* and *eligible* bidder. [M.G.L. c. 149, §44A]

“Responsible” means:

Demonstrably possessing the skill, ability and integrity necessary to faithfully perform the work called for by a particular contract, based upon a determination of competent workmanship and financial soundness in accordance with the provisions of section forty-four D of this chapter. [M.G.L. c. 149, §44A(1)]

“Eligible” means:

able to meet all requirements for bidders or offerers set forth in sections forty-four A through forty-four H of this chapter and not debarred from bidding under section forty-four C of this chapter or any other applicable law, and who shall certify that he is able to furnish labor that can work in harmony with all other elements of labor employed or to be employed on the work. [M.G.L. c. 149, §44A(1)]

You review the apparent low bid to verify that the bidder has submitted a current Certificate of Eligibility for the appropriate category of work and an Update Statement.<sup>46</sup>

---

<sup>46</sup> See *Richard W. Reid, Inc. v. Massachusetts Water Resources Authority*, 55 Mass. App. Ct. 1116 (2002)

You also verify that the amount of the bid, including all alternates,<sup>47</sup> does not exceed the appropriate project limit (General Building Construction Limit or Single Project Limit) listed on the Certificate of Eligibility and that the bidder will not exceed the Aggregate Work Limit listed on the Certificate of Eligibility if the bidder is awarded the contract.<sup>48</sup>

There are two major components to the current system of qualifying contractors for public building projects in Massachusetts: contractor certification by the Division of Capital Asset Management (DCAM) and determination of bidder responsibility by public owners. Certification, discussed earlier in this chapter, is intended to exclude from bidding general contractors and, as of January 1, 2006, subcontractors whose past performance, financial condition, or qualifications render them unqualified for public building projects. A valid Certificate of Eligibility indicates that a general bidder or filed sub-bidder on a M.G.L. c. 149 contract has been certified by DCAM for a certain category of work, but the final determination of bidder responsibility is always in your hands.

Public owners are obligated to make a separate and final determination of bidder responsibility for a particular building contract using the Update Statement,<sup>49</sup> which lists the bidder's recent and current projects, any significant changes in financial position, relevant litigation involving the bidder, and the names and qualifications of the supervisors proposed for the project. To determine whether a bidder is responsible, you should contact the project references listed on the bidder's Update Statement to verify that the bidder is qualified to perform the specific work called for in the contract you are awarding. Specific, factual questions are most likely to elicit accurate, objective information that can assist you in determining if the bidder has the necessary skill, ability, and integrity to faithfully perform the work. For example:

---

<sup>47</sup> This requirement applies even if you choose not to accept some or all of the alternates. [810 CMR: 8.06]

<sup>48</sup> The Update Statement includes detailed instructions to awarding authorities on how to determine whether the low bidder is within its Aggregate Work Limit.

<sup>49</sup> The Update Statement is not a public record and must be removed from bid documents before these documents are offered for public inspection. A blank Update Statement form may be downloaded from DCAM's website at [www.mass.gov/cam/forms](http://www.mass.gov/cam/forms).

- Did the contractor perform the work in accordance with the plans and specifications?
- Did the contractor provide sufficient oversight of the work performed by subcontractors?
- Did the contractor adhere to the contract schedule? If not, were schedule delays attributable to the contractor?
- Did the contractor request change orders on the project? How many, and for what purpose? Of the change order requests, how many were determined to be justified by unforeseen conditions or other circumstances external to the contractor?

You may also use the questions listed in the contractor evaluation form (available from DCAM's website at [www.mass.gov/cam](http://www.mass.gov/cam)) to conduct reference checks based on the Update Statement. If, during the course of your reference checks, you obtain reliable information indicating that the apparent lowest bidder is not responsible, you have the right and the obligation to reject that bid and select the next lowest responsible and eligible bidder.

Prior to awarding a building contract, according to DCAM regulations, an awarding authority must inspect DCAM's certification files for any general contractor and sub-bidder under consideration for the purpose of establishing the qualifications of the general contractor and sub-bidders to perform the construction work. DCAM will make these files available when the awarding authority certifies in writing that it shall use all non-public and/or proprietary information obtained from this examination solely for the purpose of determining the qualifications of the general contractor and subcontractors and that it shall not make any of the non-public and/or proprietary information public.<sup>50</sup> [810 CMR 8.08; 810 CMR 8.15]

---

<sup>50</sup> The contractor and subcontractor evaluations submitted by awarding authorities to DCAM are public records. All other records and information contained in the certification files of contractors and subcontractors are not public records; however, this information is accessible to awarding authorities through the procedure described above.

If you determine that the low bidder is not responsible and eligible, you are required to reject the bidder and evaluate the next lowest bidder. You are also required to notify DCAM of this action. [M.G.L. c. 149, §44D]

The following are some additional issues to consider in reviewing construction bids:

**Analysis of bid price.** If the low bid is significantly higher than the designer's construction cost estimate, it is often useful to understand why before awarding the contract. Ask the designer to analyze the bids. You can then decide whether to proceed with the award; wait and rebid the project at another time, if the differences resulted from temporary market conditions; or return to the design stage to reduce the project scope.

**Debarments.** A debarred contractor is not eligible for the award of public contracts during the period of its debarment. Debarments may be made for violations of the public contracting statutes or other laws, or for repeatedly deficient performance. The *Central Register* publishes the names of contractors debarred by DCAM or the Office of the Attorney General. Debarred federal contractors are published on the federal government's Excluded Parties List System, available at <http://epls.arnet.gov>.

**Rejection of bids.** An awarding authority has the power to reject any and all general bids if it is in the public interest to do so. For example, if all bids are significantly higher than the designer's construction cost estimate, you may choose to reject all bids and rebid the project after scaling back the design.

**Substitution of sub-bidders.** The awarding authority may require the winning general contractor to use a different sub-bidder than one listed on the general contractor's bid form unless the general contractor objects to the change and has a reasonable basis for its objection. The substituted sub-bidder must appear on the list of eligible sub-bidders distributed by the awarding authority. If a switch in sub-bidders is made, the total contract price is adjusted to reflect the difference in the sub-bid prices. In most cases, you will want to substitute a sub-bidder with a lower

price than the one listed on the general contractor's bid. For the unusual case where an awarding authority wants to substitute a sub-bidder with a higher price than the one named on the general contractor's bid, the statutorily mandated procedure could result in the award of the general contract to a different general bidder. [M.G.L. c. 149, §44F(4)(b)]

**Step 6: Award the contract to the lowest responsible and eligible bidder.**

You must award the contract within 30 working days after the general bid opening. If the contract award must be approved by an officer, board, or agency of the federal government, you must make the award within 30 working days of receiving that approval. [M.G.L. c. 149, §44A(3)] However, if the general bidder you first select fails to execute the contract or obtain the proper bonding, the 30-day rule does not apply, provided that the second lowest general bidder consents to accepting the contract after 30 days.

**Step 7: Obtain bonds and execute the contract.**

After the lowest responsible and eligible bidder is notified of the contract award, this bidder must provide you with evidence of a performance bond and a payment bond, each in the full amount of the contract price. A **performance bond** is a bond, obtained by the contractor from a surety company, that is payable to the awarding authority in the event that the contractor fails to perform the contracted work. As noted earlier, a **payment bond** is a bond, obtained by the contractor from a surety company, that guarantees payment to materials suppliers and/or subcontractors in the event that the general contractor fails to pay the materials suppliers and/or subcontractors. Note that performance and payment bonds must be issued by a surety qualified to do business under the laws of the Commonwealth of Massachusetts and satisfactory to the awarding authority. We recommend that you accept performance and payment bonds only from sureties licensed by the Massachusetts Division of Insurance. Check with the Division of Insurance if you have any concerns about the legitimacy or reliability of a particular surety.

The general contractor has five working days after receiving the contract from you to furnish the required payment and performance bonds and execute the contract. [M.G.L. c. 149, §44E(2)] If the selected bidder on the general contract fails to execute a contract or furnish the necessary bonds, you should select the next lowest responsible and eligible bidder. [M.G.L. c. 149, §44A(3)]

The selected general bidder must present a subcontract to each selected filed sub-bidder. These subcontracts must be executed within five working days of presentation. The subcontract form is specified at M.G.L. c. 149, §44F(4)(c). The general contractor may request subcontractors to furnish performance and payment bonds. [M.G.L. c. 149, §44F(3)] However, if the subcontractors have been prequalified in accordance with the procedures discussed earlier in this chapter, each prequalified subcontractor must furnish the general contractor with performance and payment bonds in the full amount of the subcontract price.

If a subcontractor fails to execute the subcontract or to furnish the necessary bonds, the general bidder and the awarding authority must select from the other non-rejected filed sub-bidders the lowest responsible and eligible sub-bidder to which the general bidder has no objection.<sup>51</sup> The contract price is adjusted by the difference between the amount of the sub-bid and the amount of the original sub-bidder's sub-bid. [M.G.L. c. 149, §44F(4)(c)] Your local attorney can advise you regarding the specific contracting requirements applicable to your jurisdiction.

A list of required and recommended contract provisions for both M.G.L. c. 149 contracts and M.G.L. c. 30, §39M contracts is provided at the end of this chapter.

#### **Step 8: Return bid deposits and publicize the contract.**

Bid deposits of general contractors must be returned within five working days after the bid opening, except that the deposits of the three lowest responsible and eligible

---

<sup>51</sup> In certain circumstances, an awarding authority may also retain the ability to reject all sub-bids under M.G.L. c. 149, §44E(1). See *Annese Electrical Services, Inc. v. City of Newton*, 431 Mass. 763 (2000).

bidders must be retained until a contract is executed or, if no award is made, until the expiration of the time for making an award. [M.G.L. c. 149, §44B(3)] If a low bidder fails to sign a contract or provide the necessary bonds, you are required to keep that bidder's deposit as damages unless the contractor's failure was due to death, disability, a bona fide clerical or mechanical error of a substantial nature, or other similar unforeseen circumstance. [M.G.L. c. 149, §44B(3)] Note, however, that the amount you retain may not exceed the difference between the original bidder's price and the bid price of the next lowest responsible and eligible bidder. [M.G. L. c. 149, §44B(3)]

You must keep the following sub-bid deposits until the general contract is executed and delivered:

- all sub-bidders named on the bids of the three lowest responsible and eligible general bidders, and
- the bid deposits of the three lowest responsible and eligible sub-bidders in each sub-bid category [M.G.L. c. 149, §44B(3)]

The remaining bid deposits from sub-bidders must be returned within five working days of the general bid opening.

Finally, the name of the firm or firms awarded the contract must be published in the *Central Register*. A form for this purpose may be downloaded from the Secretary of the Commonwealth's website at [www.mass.gov/sec](http://www.mass.gov/sec). [M.G.L. c. 9, §20A]

### **Emergencies**

For M.G.L. c. 149 projects, you may dispense with the normal bidding procedures for work needed to preserve the health or safety of people or property, or to alleviate an imminent security threat. The prior approval of DCAM is required unless the urgency of the situation makes it impossible to contact DCAM in advance. In such a case, you may start the emergency work, but you must contact DCAM as soon as possible to request approval. If DCAM subsequently disapproves the emergency request, work must be stopped immediately, although the contractor is still entitled to payment for the fair value of the labor and materials provided prior to the stop work order. [M.G.L. c. 149, §44A(4)] If DCAM determines that an emergency waiver is warranted, DCAM may

waive public notice and public bidding requirements for the work. The waiver must be obtained in writing. [M.G.L. c. 149, §44J(6)]

Although formal bidding may not be required, you should solicit as many informal quotations or bids as is possible under the circumstances. Note also that other M.G.L. c. 149 requirements, including prevailing wage requirements, will still apply to the contract.

You may not artificially create an emergency simply by putting off normal maintenance and repair work. If you knew or should have known that a roof needed repair, and you had time to fix it using the normal bidding procedures, you may have difficulty justifying the use of emergency procedures when it starts leaking.<sup>52</sup>

### **In-House and Volunteer Construction**

You may use qualified employees for construction work without putting it out to bid, provided the work falls within the scope of the employees' normal duties and expertise. The bidding requirements of M.G.L. c. 30, §39M apply to the purchase of materials used in construction work for both building and non-building projects.

The use of volunteer labor is often proposed as a cost-saving measure, particularly in smaller towns. Although the law does not prohibit this practice, we discourage using volunteers for larger projects or those involving structural, mechanical, or electrical work. Deficient work could have costly consequences for these types of projects. If volunteers are used, qualified supervision is essential.

Keep in mind, too, that any agreement to spend public funds on public construction must be consistent with the bid laws. Thus, a town cannot "give" the local civic association \$20,000 to buy materials and fix up the town's bandstand.

---

<sup>52</sup> See *Safford v. Lowell*, 225 Mass. 220 (1926).

### The Public Building Construction Contract

In developing a public building construction contract, you should be aware of statutory requirements and sound business practices. The following is a list of required and recommended contract provisions:

**Employment.** The contract must contain various provisions relating to wages and employment conditions, including but not limited to, the payment of prevailing wage rates as set by the Department of Labor and Workforce Development (DLWD), hiring preferences for veterans and residents of Massachusetts, and workers' compensation coverage. [M.G.L. c. 149, §§26-37] Note that you must obtain the prevailing wage rates applicable to the project from DLWD in advance of the bidding process.

**Change orders and adjustments.** The contract must contain provisions requiring the awarding authority to adjust the price if field conditions differ substantially or materially from the plans or if the awarding authority suspends or delays the work for 15 days or more. [M.G.L. c. 30, §§39N-39O] The contract should also include terms governing the adoption and pricing of change orders. Finally, the contract should clearly specify who is authorized to approve change orders on behalf of the awarding authority, and should state that the awarding authority is not obligated to pay for change orders that are not approved in writing. (See M.G.L. c. 44, §31C and M.G.L. c. 30, §39I.)

**Performance and payment bonds.** The contract should include the requirements for performance and/or payment bonds.

**Foreign corporations.** Contractors and subcontractors that are incorporated outside of Massachusetts must certify compliance with certain corporation laws. You are required to notify the Secretary of the Commonwealth and the Department of Revenue whenever awarding a contract or subcontract to an out-of-state corporation. [M.G.L. c. 30, §39L]

**Payment procedures.** The contract must contain statutory language governing payment procedures. [M.G.L. c. 30, §§39F, 39G, and 39K]

**Weather protection.** M.G.L. c. 149 contracts must require the contractor to provide weather protection during winter months, in accordance with standard specifications issued by DCAM. [M.G.L. c. 149, §44G(D)]

**Financial reporting.** Contractors must agree to keep certain financial records, make them available for inspection by certain state agencies, and file periodic financial reports. [M.G.L. c. 30, §39R]

**Auditor's certification.** For cities and towns, the contract must contain a certification by the municipal auditor or accountant stating that appropriated funds are available for the contract and that the official signing the contract has been authorized to do so. The certification should also identify any other municipal officials who have been authorized to make decisions under the contract, such as approval of change orders and invoices. [M.G.L. c. 44, §31C]

**Interpretations and approvals.** The contract must contain provisions requiring prompt decisions by the awarding authority on interpretations of the specifications and other approvals. [M.G.L. c. 30, §39P]

**Liability insurance.** You may either require the general contractor to provide project insurance covering both the contractor and your jurisdiction or arrange to insure your jurisdiction separately.

**Tax compliance.** Any person contracting with the Commonwealth of Massachusetts or any subdivision of the Commonwealth, including a city, town, or district, must certify in writing that he or she has complied with all state laws relating to taxes, reporting of employees and contractors, and child support. [M.G.L. c. 62C, §49A]

**Liquidated damages.** You may want to include a provision for imposing liquidated damages on the contractor for late completion. Liquidated damages represent the dollar damages your jurisdiction will incur in the event of a breach of contract.

This page intentionally left blank.

## ***VI. Procuring Public Works Construction Contracts Under M.G.L. c. 30, §39M***

---

**M.G.L. c. 30, §39M** governs all contracts for construction, reconstruction, alteration, remodeling, or repair estimated to cost more than \$10,000 that do not include work on a building. These contracts generally fall into the category of public works projects, or “horizontal construction” projects. Public works projects include not only the construction and repair of roads, bridges, water mains, sewers, and the like, but also work on improvement to public land such as public parks, outdoor swimming pools, and parking lots.

In addition, M.G.L. c. 149, §44A(2)(C) requires building contracts estimated to cost between \$25,000 and \$100,000 to be bid in accordance with the procedures set forth in M.G.L. c. 30, §39M. (The M.G.L. c. 149 procurement procedures that apply to building contracts at various dollar thresholds are summarized in Chapter V.)

M.G.L. c. 30, §39M allows local jurisdictions subject to M.G.L. c. 30B<sup>53</sup> to use the bid procedures contained in M.G.L. c. 30B, §5 for public works construction work estimated to cost more than \$10,000 but not more than \$25,000. [M.G.L. c. 30, §39M(d)] Unlike M.G.L. c. 30, §39M, M.G.L. c. 30B, §5 contains no bid deposit requirement or *Central Register* advertising requirement.

Finally, M.G.L. c. 30, §39M governs the purchase of construction materials estimated to cost more than \$10,000 for either public works or public building projects. For example, M.G.L. c. 30, §39M applies to a \$30,000 purchase of guard rail or a \$30,000 purchase of wall partitions (without labor).<sup>54</sup> Local jurisdictions subject to M.G.L. c. 30B may instead use the bid procedures contained in M.G.L. c. 30B, §5 for contracts for construction materials if the purchase entails no labor. [M.G.L. c. 30, §39M(d)].

---

<sup>53</sup> Jurisdictions subject to M.G.L. c. 30B include cities, towns, regional school districts, counties, and local authorities.

<sup>54</sup> Note, however, that if the purchase of wall partitions included installation services, the entire contract would be subject to M.G.L. c. 149 rather than M.G.L. c. 30, §39M.

Public works construction contracts estimated to cost \$10,000 or less are not subject to the competitive provisions of M.G.L. c. 30, §39M. We recommend that you solicit at least three informal quotations for such contracts and select the qualified contractor offering to perform the contract at the lowest price.

The six steps to bidding a project under M.G.L. c. 30, 39M are as follows:

1. Prepare the invitation for bids (IFB).
2. Advertise and distribute the IFB.
3. Receive, open, and review bids.
4. Award the contract to the lowest responsible and eligible bidder.
5. Obtain bonds and execute the contract.
6. Return bid deposits and publicize the contract award.

**Step 1: Prepare the IFB.**

The IFB is the package of materials distributed to interested bidders. The major components of the IFB package are summarized below:

**Plans and specifications.** These are the construction drawings and related written materials, prepared by the project designer, that explain in detail how the project is to be built.

**Standard forms and requirements.** There is no prescribed form for submitting M.G.L. c. 30, §39M bids; you may either use the M.G.L. c. 149 bid form<sup>55</sup> or develop your own bid form. You should tell bidders the form in which price information should be submitted. For example, in some instances you may want bidders to submit unit prices for labor or materials in addition to a lump-sum bid price for the contract. Providing a pricing form in your IFB will make it easier for you to determine the low bidder.

---

<sup>55</sup> Appendix B of this manual contains a copy of the M.G.L. c. 149 Form for General Bid.

You should tell bidders whether you are awarding one contract or multiple contracts. You may award one contract to the lowest total price bid for all items listed in the IFB, or you may award multiple contracts: one contract to the low bidder for each item listed in the IFB.

All M.G.L. c. 30, §39M bids must contain language certifying that the bid has been made without collusion or fraud.

You must also request a prevailing wage sheet from the Division of Occupational Safety (DOS) within the Department of Labor and Workforce Development and include the sheet – or reference it – in the bid documents.<sup>56</sup> (The Request for Prevailing Wage Rates form may be downloaded from the DOS website at [www.mass.gov/dos](http://www.mass.gov/dos).)

Although M.G.L. c. 30, §39M does not mandate a contractor prequalification process, prequalification of bidders by the Massachusetts Highway Department (MassHighway) is required for contracts of \$50,000 or more where:

- the awarding authority receives State Aid funds under M.G.L. c. 90, §34, or
- the work is on a state road, regardless of whether the awarding authority receives State Aid funds under M.G.L. c. 90, §34.

The procedures you must follow for M.G.L. c. 90 projects are set forth in MassHighway's *State Aid Manual*, which can be found at <http://166.90.180.162/mhd/downloads/stateaid/stateaid.pdf>. Appendix A includes contact information for MassHighway.

For all other M.G.L. c. 30, §39M projects, you as the public owner are required to determine whether the apparent low bidder is responsible and eligible. Accordingly, we recommend that you include in your bid package a requirement that bidders submit a comprehensive list of ongoing projects, projects completed within the past five years, and project contact names and telephone numbers. You can then check

---

<sup>56</sup> Since you are required to provide the prevailing wage sheet at no cost to anyone who requests it, it makes sense to include the sheet in the bid documents.

a selected list of project references. It is a good idea to require bidders to certify under the penalties of perjury that the project information contained in the bids is accurate and complete.

You may establish experience or quality requirements that the contractor must meet. For example, if you are procuring a contract for sewer pipe repair using trenchless technology, you may want to require that the contractor have at least five years of experience in performing this type of service.

**Terms and conditions.** The bid package should also contain the various business and legal terms and conditions to which the contractor must agree. By necessity, the contract will be a lengthy and complex document, and a discussion of all the terms and

We recommend that you develop a standard public works construction contract, which can then be used repeatedly with only minor modifications for each individual project. As with any legal document, you should consult your local attorney when developing a standard construction contract.

conditions is beyond the scope of this manual. However, a brief section at the end of this chapter lists some particular provisions of which you should be aware.

**Bid deposit.** Each bidder must submit with its bid a bid deposit equal to five percent of the amount of the bid. The bid deposit may be in the form of a certified, treasurer's, or cashier's check payable to the awarding authority from a responsible bank or trust company; cash; or a bid bond from a licensed surety. [M.G.L. c. 30, §39M(a)]

### **Step 2: Advertise and distribute the IFB.**

The second step is to advertise and distribute the IFB. The contract must be advertised in the *Central Register* and a newspaper of general circulation in the locality of the project at least two weeks prior to the bid deadline. A notice must also be posted in your jurisdiction at least one week prior to the bid deadline.<sup>57</sup>

---

<sup>57</sup> The public notice requirements for projects subject to both M.G.L. c. 149 and M.G.L. c. 30, §39M are contained in M.G.L. c. 149, §44J.

Your advertisement must contain the following information:

- a description of the project in sufficient detail to allow bidders to determine if they are eligible and interested,
- where and when bidding documents can be obtained,
- where and when bids are due,
- where and when the bids will be opened, and
- a reference to the payment of prevailing wages.<sup>58</sup>

The bid documents must be made available to all who request them. (As previously noted, however, if the project is a M.G.L. c. 90 project, the IFB may be distributed only to contractors who have been prequalified by MassHighway. ) Keep a full record of the names and addresses of all who receive the documents. If it becomes necessary to issue an addendum<sup>59</sup> to the bid package, send the addendum to all who have obtained the original bid documents. To avoid misunderstandings or protests, you should require bidders to acknowledge in their bid forms that they have received all addenda to the original bid documents.

For larger or more complex projects, it may make sense to schedule an optional or mandatory prebid conference, which may include a tour of the site or facility. If you do so, you must notify all bidders requesting bid documents of the date, time, and location of the prebid conference. Be sure to record the names of firms in attendance, the questions asked by attendees, and the answers provided by your representatives at the conference. This information should then be distributed to all firms receiving the bid documents.

**Step 3: Receive, open, and review bids.**

All bids must be publicly opened and read at the time at which they are due. [M.G.L. c.

---

<sup>58</sup> The reference to prevailing wages must be included either in the notice or in the invitation for bids. [M.G.L. c. 149, §27]

<sup>59</sup> Before bid openings, any changes or corrections to the plans, specifications, or contract terms and conditions must be distributed in an addendum.

149, §44J(4)] The following items should be checked for each bid:

- Is the bid for the right project?
- Is the bid amount specified?
- Is the bid signed?
- Is a bid deposit included?
- Has the bidder acknowledged receipt of any and all addenda issued by the awarding authority?

M.G.L. c. 30, §39M does not specify when a bidder may withdraw its bid. As a practical matter, if bids have not been opened, you should obtain a written request and return the bid and bid deposit unopened.

All bid documents are open for public inspection.

M.G.L. c. 30, §39M requires that public construction contracts be awarded to the “lowest responsible and eligible bidder,” defined as:

The bidder (1) whose bid is the lowest of those bidders possessing the skill, ability and integrity necessary for the faithful performance of the work; (2) who shall certify that he is able to furnish labor that can work in harmony with all other elements of labor employed or to be employed in the work; (3) who, where the provisions of section eight B of chapter twenty-nine<sup>60</sup> apply, shall have been deemed qualified thereunder; and (4) who obtains within ten days of the notification of contract award the security by bond required under section twenty-nine of chapter one hundred and forty-nine; provided that for the purposes of this section the term “security by bond” shall mean the bond of a surety company qualified to do business under the laws of the commonwealth and satisfactory to the awarding authority. [M.G.L. c. 30, §39M(c)]

On M.G.L. c. 30, §39M projects, you review the qualifications of the apparent low bidder after the bids are opened. You may request any information from the bidder needed to determine if the bidder is responsible.

In checking the references of the apparent low bidder, you will find that specific, factual questions are most likely to elicit accurate, objective information that can assist you in

---

<sup>60</sup> M.G.L. c. 29, §8B established a contractor prequalification process for contracts awarded by the Massachusetts Highway Department and the Metropolitan District Commission. The latter was abolished in 2003.

determining if the bidder has the necessary skill, ability, and integrity to faithfully perform the work. For example:

- Did the contractor perform the work in accordance with the plans and specifications?
- Did the contractor provide sufficient oversight of the work performed by subcontractors?
- Did the contractor adhere to the contract schedule? If not, were schedule delays attributable to the contractor?
- Did the contractor request change orders on the project? How many, and for what purpose? Of the change order requests, how many were determined to be justified by unforeseen conditions or other circumstances external to the contractor?

If, during the course of your reference checks, you obtain reliable information indicating that the apparent lowest bidder is not responsible, you have the right and the obligation to reject that bid and select the next lowest responsible and eligible bidder.

The following are some additional issues to consider in reviewing construction bids:

**Analysis of bid price.** If the low bid is significantly higher than the designer's construction cost estimate, it is often useful to understand why before awarding the contract. Ask the designer to analyze the bids. You can then decide whether to proceed with the award; wait and rebid the project at another time, if the differences resulted from temporary market conditions; or return to the design stage to reduce the project scope.

**Debarments.** A debarred contractor is not eligible for the award of public contracts during the period of its debarment. Debarments may be made for violations of the public contracting statutes or other laws, or for repeatedly deficient performance. The *Central Register* publishes the names of contractors debarred by the Division of Capital Asset Management (DCAM) or the Office of the Attorney General. Debarred federal contractors are published on the federal government's Excluded Parties List System, available at <http://epls.arnet.gov>.

**Rejection of bids.** An awarding authority has the power to reject any and all bids if it is in the public interest to do so. For example, if all bids are significantly higher than the designer's construction cost estimate, you may choose to reject all bids and rebid the project after scaling back the design.

**Step 4: Award the contract to the lowest responsible and eligible bidder.**

Unlike M.G.L. c. 149, M.G.L. c. 30, §39M sets no specific time limits for the contract award.

**Step 5: Obtain bonds and execute the contract.**

After you award the contract to the lowest responsible and eligible bidder, your next step is to obtain the required bond or bonds and execute the contract. For any public works construction contract that exceeds \$2,000,<sup>61</sup> the contractor must furnish a payment bond in the amount of at least 50 percent of the contract price. [M.G.L. c. 149, §29] A **payment bond** is a bond, obtained by the contractor from a surety company, that guarantees payment to materials suppliers and/or subcontractors in the event that the general contractor fails to pay the materials suppliers and/or subcontractors. M.G.L. c. 30, §39M contracts do not require performance bonds; however, you may require a performance bond on such contracts if you so choose. A **performance bond** is a bond, obtained by the contractor from a surety company, that is payable to the awarding authority in the event that the contractor fails to perform the contract. Note that performance and payment bonds must be issued by a surety qualified to do business under the laws of the Commonwealth of Massachusetts and satisfactory to the awarding authority. You should accept performance and payment bonds only from sureties licensed by the Massachusetts Division of Insurance. Check with the Division of Insurance if you have any concerns about the legitimacy or reliability of a particular surety.

The contractor has 10 days from the date of notification of contract award to obtain the payment bond. Unlike M.G.L. c. 149, M.G.L. c. 30, §39M sets no specific time limits for

---

<sup>61</sup> For state agencies, this threshold is \$5,000.

the execution of the contract. If the selected bidder fails to execute a contract or furnish the necessary bonds, you should select the next lowest responsible and eligible bidder.

A list of required and recommended contract provisions for M.G.L. c. 30, §39M contracts is provided at the end of this chapter

**Step 6: Return bid deposits and publicize the contract award.**

Your last step is to return bid deposits and publicize the contract award. Unlike M.G.L. c. 149, M.G.L. c. 30, §39M sets no specific time limits for the return of bid deposits. The name of the firm or firms awarded the contract must be published in the *Central Register*. A form for this purpose may be downloaded from the Secretary of the Commonwealth's website at [www.mass.gov/sec](http://www.mass.gov/sec). [M.G.L. c. 9, §20A]

**Emergencies**

For M.G.L. c. 30, §39M projects, you may dispense with the normal bid process only in cases of “extreme emergency caused by enemy attack, sabotage, other such hostile actions or resulting from an imminent security threat, explosion, fire, flood, earthquake, hurricane, tornado or other such catastrophe.” Only work necessary for “temporary repair and restoration to service of any and all public work in order to preserve health and safety of persons and property” may be performed under an emergency contract. [M.G.L. c. 30, §39M(a)] You must obtain a written waiver of the public notice requirements from DCAM. [M.G.L. c. 149, §44J(6)]

Although formal bidding may not be required, you should solicit three or more informal quotations or bids if possible under the circumstances. Note also that you may not artificially create an emergency simply by putting off normal maintenance and repair work.

**Bidding Smaller Public Works Construction Contracts and Construction Materials Contracts Under M.G.L. c. 30B, §5**

Local jurisdictions may award contracts estimated to cost more than \$10,000 but not more than \$25,000 for public works construction, or contracts of any amount for construction materials, either by following the M.G.L. c. 30, §39M procedures

summarized earlier in this chapter or by following the bid procedures contained in M.G.L. c. 30B, §5. [M.G.L. c. 30, §39M(d)(4)] The M.G.L. c. 30B, §5 bid procedures differ slightly from the M.G.L. c. 30, §39M bid procedures. For example, M.G.L. c. 30, §39M requires you to advertise the contract in the *Central Register*, whereas M.G.L. c. 30B, §5 does not. In addition, M.G.L. c. 30, §39M requires you to obtain a bid deposit from the bidder totaling five percent of the bid amount; M.G.L. c. 30B, §5 does not. For more information on M.G.L. c. 30B, §5 bid procedures, we recommend that you consult the manual issued by the Office of the Inspector General entitled *Municipal, County, District, and Local Authority Procurement of Supplies, Services, and Real Property*.<sup>62</sup>

Whether you choose to procure a public works construction contract under M.G.L. c. 30, §39M or M.G.L. c. 30B, §5, the bidding process must comply with the legal requirements that apply to contracts for construction-related work, such as applicable prevailing wage and payment bond requirements.

The key requirements for each method of procuring construction services or materials totaling between \$10,000 and \$25,000 are presented on the following page.

---

<sup>62</sup> You may download this manual from our website at [www.mass.gov/ig](http://www.mass.gov/ig) or order it from the State Book Store.

**Contracts for Public Works Construction Services  
Estimated to Cost \$10,000 to \$25,000  
or for Construction Materials:  
Comparison of Bidding Procedures**

<b>Requirement</b>	<b>M.G.L. c. 30B, §5</b>	<b>M.G.L. c. 30, §39M</b>
Competitive process	Bids	Bids
Office posting	Yes	Yes
Newspaper	Yes	Yes
<i>Central Register</i>	No	Yes
Bid deposit	No	Yes
Performance bond	No	No
Payment bond for construction contracts	Yes	Yes
Contractor prequalification	No	No
Prevailing wages	Yes	Yes

### **The Public Works Construction Contract**

In developing a public works construction contract, you should be aware of statutory requirements and sound business practices. The following is a list of required and recommended contract provisions:

**Employment.** The contract must contain various provisions relating to wages and employment conditions including, but not limited to, the payment of prevailing wage rates as set by the Department of Labor and Workforce Development (DLWD), hiring preferences for veterans and residents of Massachusetts, and workers' compensation coverage. [M.G.L. c. 149, §§26-37] Note that you must obtain the prevailing wage rates applicable to the project from DLWD in advance of the bidding process.

**Change orders and adjustments.** The contract must contain provisions requiring the awarding authority to adjust the price if field conditions differ substantially or materially from the plans or if the awarding authority suspends or delays the work for 15 days or more. [M.G.L. c. 30, §§39N-39O] The contract should also include terms governing the adoption and pricing of change orders. Finally, the contract should clearly specify who is authorized to approve change orders on behalf of the awarding authority and should state that the awarding authority is not obligated to pay for change orders that are not approved in writing. (See M.G.L. c. 44, §31C and M.G.L. c. 30, §39I.)

**Performance and payment bonds.** The contract should include the requirements for performance and/or payment bonds.

**Foreign corporations.** Contractors and subcontractors that are incorporated outside of Massachusetts must certify compliance with certain corporation laws. You are required to notify the Secretary of the Commonwealth and the Department of Revenue whenever awarding a contract or subcontract to an out-of-state corporation. [M.G.L. c. 30, §39L]

**Payment procedures.** The contract must contain statutory language governing payment procedures. [M.G.L. c. 30, §§39F, 39G, 39K]

**Financial reporting.** Contractors must agree to keep certain financial records, make them available for inspection by certain state agencies, and file periodic financial reports. [M.G.L. c. 30, §39R]

**Auditor's certification.** For cities and towns, the contract must contain a certification by the municipal auditor or accountant stating that appropriated funds are available for the contract and that the official signing the contract has been authorized to do so. The certification should also identify any other municipal officials who have been authorized to make decisions under the contract, such as approval of change orders and invoices. [M.G.L. c. 44, §31C]

**Interpretations and approvals.** The contract must contain provisions requiring prompt decisions by the awarding authority on interpretations of the specifications and other approvals. [M.G.L. c. 30, §39P]

**Liability insurance.** You may either require the general contractor to provide project insurance covering both the contractor and your jurisdiction or you may arrange to insure your jurisdiction separately.

**Tax compliance.** Any person contracting with the Commonwealth of Massachusetts or any subdivision of the Commonwealth, including a city, town, or district, must certify in writing that he or she has complied with all state laws relating to taxes, reporting of employees and contractors, and child support. [M.G.L. c. 62C, §49A]

**Liquidated damages.** You may want to include a provision for imposing liquidated damages on the contractor for late completion. Liquidated damages represent the dollar damages your jurisdiction will incur in the event of a breach of contract.

This page intentionally left blank.

## VII. The Construction Stage

---

Once the building or public works contract is awarded, the general contractor will mobilize its work force and begin construction. The general contractor's job is to complete the project in accordance with the plans and specifications prepared by the designer.

### Navigating the Requirements

For the reader's convenience, we have provided symbols at the beginning of each section and subsection of this chapter, indicating whether the text contained in the section or subsection relates exclusively to contracts subject to M.G.L. c. 149, exclusively to contracts subject to M.G.L. c. 30, §39M, or to both categories of contracts. The symbol **149** designates contracts subject to M.G.L. c. 149; the symbol **30** designates contracts subject to M.G.L. c. 30, §39M.

**149** **30**

### Payment Procedures

You must comply with specific payment procedures on all public building contracts.<sup>63</sup> Although the procedures covering building and non-building contracts are similar, they differ in several important respects. Rules and procedures for making final payments to contractors on building and non-building contracts are discussed later in this chapter.

For building contracts costing more than \$2,000,<sup>64</sup> the contract must contain specific provisions, found in M.G.L. c. 30, §39K, regarding periodic estimates and payments to contractors. These provisions also detail the amounts the awarding authority must withhold<sup>65</sup> and how arithmetic errors in contractor invoices must be handled.

---

<sup>63</sup> Local housing authorities are subject to different payment procedures, and should contact the Department of Housing and Community Development for further information on these procedures.

<sup>64</sup> For contracts awarded by the Commonwealth, this threshold is \$5,000.

<sup>65</sup> The owner is entitled to withhold from its periodic payments five percent of their dollar value (referred to as "retainage"), the value of all claims by the owner against the contractor, and the total of all outstanding claims for direct payment.

The payment procedures for non-building contracts bid under M.G.L. c. 30, §39M are somewhat different. These procedures are found in M.G.L. c. 30, §39G.

**149** **30****Payroll Records**

During the construction project, it is the awarding authority's responsibility to monitor contractors' compliance with the prevailing wage law. Weekly payroll records must be collected from all contractors and kept on file for all projects subject to the law. The Division of Occupational Safety will usually send you a preprinted weekly payroll report form when you request a prevailing wage rate sheet. These weekly payroll records must be maintained by the awarding authority for three years following completion of the construction project.

**149** **30****Substitutions**

The general contractor will often submit requests to substitute particular items as being "equal" to those required in the specifications. Your obligation is to assure that the proffered item does, in fact, meet the specifications. Your owner's project manager, construction manager, or designer providing construction management services should review substitution requests and approve or make recommendations to you regarding such requests.

Whenever you are required to interpret specifications or approve substitutions of equipment, materials, or construction methods for those specified in the contract, you must make a decision within 30 days of the contractor's written submission. If extended investigation or study is required, then you must give the contractor written notice within 30 days of the reason that the decision cannot be made and the date by which the decision will be made. [M.G.L. c. 30, §39P]

**149** **30****Change Orders**

The contractor is obligated to perform all of the construction work in conformity with the contract plans and specifications. However, changes to the construction plans and specifications may be necessitated or warranted for a variety of reasons, including:

- site conditions that differ from those shown in the construction plans;
- circumstances requiring the awarding authority to suspend, delay, or interrupt all or part of the work; or
- requests by the awarding authority or the contractor for changes to the plans and specifications.

A change order is an amendment to the construction contract that alters one or more items specified in the original contract documents, such as construction materials, methods, or equipment; the services provided by the contractor, subcontractors, or suppliers; and/or the contract schedule. A change order may have no effect on the contract cost, may increase the contract cost, or may decrease the contract cost through a credit from the contractor. Similarly, a change order may have no effect on the contract schedule, may extend the schedule, or may accelerate the schedule. The following discussion of change orders applies to both M.G.L. c. 149 contracts and M.G.L. c. 30, §39M contracts.

Change orders must be in writing. Within 30 days after a change order is issued, the awarding authority must issue a certificate, signed under penalties of perjury, containing the following information:

- an explanation of why the change is needed;<sup>66</sup>
- a statement that any substitute work is of the same cost and quality, or that the contract price has been equitably adjusted; and
- a statement that the change will not significantly hurt the project and that it is in the best interest of the awarding authority. [M.G.L. c. 30, §39I]

---

<sup>66</sup> If the change involves any substitution or elimination of materials, fixtures, or equipment, the certificate must state the reasons why such items were included in the first instance and the reasons for substitution or elimination.

**149** **30****Change Order Approval Procedures**

The construction contract should include detailed change order management and approval procedures. The procedures should spell out the responsibilities of the parties, specify who is authorized to approve change orders on behalf of the awarding authority, and establish a claims resolution process that avoids project delays. The procedures should also specify all pricing requirements such as bonds, insurance, and administrative markups. If the change order work will impact the project schedule, the change order should specify the revised date for substantial completion of the project. Each type of change order requires specific change order approval procedures, summarized below.

**Unforeseen site conditions.** The contract must contain a specific provision in its entirety, found in M.G.L. c. 30, §39N, for adjusting the contract price where site conditions differ substantially or materially from the conditions indicated in the construction plans or contract documents. The provision states that either the awarding authority or the contractor may request an equitable adjustment in the contract price after discovery that the hidden physical conditions on the site differ from the construction plans or contract. The request must be in writing and must be made as soon as possible after discovery of the condition. The awarding authority must investigate the site conditions and, if the conditions cause an increase or decrease in the cost of the work, make an equitable adjustment in the contract price and modify the contract in writing. [M.G.L. c. 30, §39N]

**Suspension, delay, interruption, or failure to act by the awarding authority.** The contract must also contain specific provisions in their entirety, found in M.G.L. c. 30, §39O, which allow the awarding authority, at its convenience, to suspend, delay, or interrupt the work. The provisions state that the general contractor must be informed in writing. If there is a suspension, delay, or interruption to the project of 15 days or more, or if the awarding authority fails to act in a timely manner as required by the contract, the awarding authority must make an adjustment in the contract

price to cover increased costs of the general contractor. However, the price increases may not include profit to the general contractor.<sup>67</sup> [M.G.L. c. 30, §39O]

The contractor must submit the amount of the claim for increased costs to the awarding authority in writing as soon as practicable after the end of the suspension, delay, interruption, or failure to act by the awarding authority. This claim must be submitted no later than the date of the final payment under the contract. The awarding authority may not approve any costs in the claim, except for costs due to a suspension order, that were incurred more than 20 days before the general contractor notified the awarding authority in writing of the awarding authority's act or failure to act. [M.G.L. c. 30, §39O]

**Changes to plans and specifications.** Changed circumstances may warrant owner-generated design changes, and incomplete or flawed plans and specifications may warrant contractor-generated design changes. Keep in mind that work performed under a change order will almost always cost more than the same work would have cost if it had been included in the original plans and specifications that were put out to bid. Two factors contribute to the high cost of change orders: noncompetitive pricing of the work and contractually required administrative markups.<sup>68</sup> If change orders are not carefully controlled, they can cause substantial project cost overruns. For this reason, change orders should be regarded as a last resort.

You may not use change orders to make substantial changes to the project scope. Massachusetts courts have held that amendments to publicly bid contracts must be incidental to the original contract scope. If the parties to the contract could negotiate major changes to the contract scope and price after the contract was signed, one of

---

<sup>67</sup> Note that the contractor is not entitled to increased costs for suspension, delay, interruption, or failure to act under this provision if the contractor is entitled to such increased costs under another provision of the contract.

<sup>68</sup> Construction contracts typically permit the contractor and subcontractor to charge administrative fees based on a percentage of the cost of every service and item procured under a change order.

the purposes of the construction bid laws – to promote fair competition on a level playing field – would be undermined. Similarly, a competitively bid contract cannot later be renegotiated to incorporate fundamentally different business terms. We urge you to consult your local attorney with any questions about the legality of specific change order proposals.

**149** **30**

### **Change Order Pricing**

If the contract sets forth a basis for payment, such as an hourly rate for millwork or a unit price for gravel, the contract rate or unit price will be used to compute the price of the change order. If the contract contains no basis for payment, you will have to negotiate the change order price with the contractor. For some items or services, you may want to require the contractor to obtain competitive quotations. You may also want to obtain market prices independently in order to verify the reasonableness of the prices requested by the contractor. If the cost of a major change order appears excessive, consider the feasibility of bidding the additional work or procuring the needed items separately after the construction project is completed. For all change order work, you should require the contractor to provide full documentation for each component of the work. If a change order results in an increase in the contract price for a city or town, the municipal auditor or accountant must also sign the change order, certifying that appropriated funds are available to cover the increased cost. [M.G.L. c. 44, §31C]

If the change order will entail a credit to your jurisdiction, you should take steps to verify that the dollar amount of the credit reasonably reflects the cost of the work being deleted from the construction contract. If you determine that the items or services to be deleted are worth significantly more than the credit offered by the contractor, it may make more sense to require the contractor to provide them than to delete them from the scope of the construction work.

**149** **30**

### **Avoiding Change Orders**

Avoiding change orders means investing time and resources in the planning and design stages of the project. A careful study can help ensure that the final plans and specifications accurately reflect your jurisdiction's needs, thereby reducing the need for

you to make changes to the design during construction. Similarly, a sufficiently detailed set of final plans and specifications will improve the contractor's ability to execute the project and coordinate the work of the subcontractors. One way to identify problems with the plans and specifications is to hold a prebid conference at which prospective bidders can raise questions or concerns about the bid documents. During the construction stage, requests from future users of the facility for design changes should be closely reviewed to determine whether the value to the project of the proposed changes exceeds their estimated construction cost.

**149** **30****Project Closeout**

As the construction project nears an end, the general contractor will notify you that the work is substantially complete. At this point the owner's project manager, construction manager, and/or designer should inspect the project in order to verify that the project has reached substantial completion. For building contracts, "substantial completion" refers to the point at which either the value of the remaining work to be done is less than one percent of the original contract price or the awarding authority takes possession of the building for occupancy, whichever comes first. [M.G.L. c. 30, §39K] For public works contracts, "substantial completion" refers to the point at which either the value of the remaining work to be done is less than one percent of the total contract price, including change orders, or substantially all of the work has been completed and opened to public use except for minor incomplete or unsatisfactory work items that do not materially impair the usefulness of the work required by the contract. [M.G.L. c. 30, §39G]

The next step is to prepare a punch list detailing all of the remaining items that must be completed by the contractor before release of the final contract payment. Upon completion of the punch list items, the contractor will submit an invoice for final payment that includes any amounts that have been withheld from prior invoices.

**149 Building Contracts**

State law requires the following final payment procedures for building contracts:

- You must make payment on the contractor's final invoice within 65 days after the contract is 99 percent completed (or even earlier, if the contractor substantially completes the work and you as the awarding authority take possession). The designer will certify when the work is complete. This certification should be in writing.
- You must continue to hold back funds to cover items you believe have not been satisfactorily completed, funds equal to your outstanding claims against the contractor, and funds for direct payment to subcontractors.<sup>69</sup>
- Your contract must contain specific provisions, found in M.G.L. c. 30, §39K, detailing these final payment procedures. You have some recourse when a general contractor fails to complete a punch list after receiving a written notice. After a specific notice period, you may terminate the contract and complete the work at the expense of the original general contractor. [M.G.L. c. 30, §39K]

**30 Non-Building Contracts**

For non-building contracts, state law requires a more complex process for project closeout and final payment procedure:

- Upon substantial completion of the contract, the contractor must present written certification that the work is substantially complete. Within 21 days, you must respond to this certification by sending the contractor either a written declaration that the work is substantially complete or an itemized list of incomplete or unsatisfactory items. If you choose to send an itemized list, you may also include a date by which the items must be completed, as long as that date is not before the contractual completion date. If you do not respond within 21 days, the contractor's certification that the work is complete becomes the effective declaration of substantial completion.
- Within 15 days of the effective declaration of substantial completion, you must send the contractor by certified mail, return receipt requested, a complete list of all incomplete or unsatisfactory work items. Unless delayed for reasons beyond the contractor's control, the contractor must complete the items listed within 45 days after receipt of the list (or by the contractual completion date, whichever is later). If the contractor fails to complete the work by then, you may cancel the contract and complete the incomplete or unsatisfactory work items at the contractor's expense, subsequent to seven days written notice by certified mail, return receipt requested.

---

<sup>69</sup> M.G.L. c. 30, §39F specifies a procedure under which a subcontractor may seek direct payment from the owner if the subcontractor does not receive the contractually required payments from the general contractor.

- Within 65 days after the effective declaration of substantial completion, you must send the contractor a substantial completion estimate. This estimate will be the balance of the contract price minus a one percent retention for final completion, amounts to cover any outstanding claims, any amounts estimated to cover incomplete or unsatisfactory work, and the sum of all demands for direct payment made by subcontractors.<sup>70</sup> If you fail to send a substantial completion estimate within 65 days, the amount owed to the contractor may be subject to interest charges.
- The contractor will send a notice when work is completed. Within 30 days after you receive the notice, you must send the contractor a final estimate for the contract balance due. If you determine that incomplete or unsatisfactory work remains, continue to hold back an amount you estimate would cover that work. If you fail to send the contractor a final estimate within 30 days, the amount may be subject to interest charges. [M.G.L. c. 30, §39G]

**149****Evaluating Contractor and Subcontractor Performance  
on Building Contracts > \$100,000**

An awarding authority must complete a standard contractor evaluation form for the general contractor and all subcontractors performing filed sub-bid work on a M.G.L. c. 149 building contract that is under their control and exceeds \$100,000.<sup>71</sup> [M.G.L. c. 149, §44D(7); 810 CMR 8.00] The evaluation form contains written comments as well as numerical ratings reflecting the contractor's performance on the project. The standard contractor evaluation form may be downloaded from DCAM's website at [www.mass.gov/cam/forms](http://www.mass.gov/cam/forms).

According to DCAM regulations, the owner's project manager is required to complete the contractor and subcontractor evaluations pertaining to all building contracts for which an owner's project manager is required: i.e., building contracts of \$1.5 million or more. [810 CMR 8.09] The awarding authority, designer, or any other party responsible for project oversight may complete the contractor and subcontractor

---

<sup>70</sup> M.G.L. c. 30, §39F specifies a procedure under which a subcontractor may seek direct payment from the owner if the subcontractor does not receive the contractually required payments from the general contractor.

<sup>71</sup> This dollar threshold is not found in the statute or DCAM regulations; it represents an interpretation of the Office of the Attorney General.

evaluations pertaining to building contracts for which an owner's project manager is not required – i.e., building contracts costing between \$100,000 and \$1.5 million.

The awarding authority must certify as to the accuracy of the contents of each completed evaluation form and may not negotiate the contents of the evaluation form or the project rating with the contractor or subcontractor, or its representative, for any reason. [810 CMR 8.02(4); 810 CMR 8.09(3)] The completed evaluation is then sent to DCAM for use in deciding whether to certify the contractor to bid, or the subcontractor to file sub-bids, on future public building projects. A copy of the completed evaluation form must also be mailed to the contractor or subcontractor, who has 30 days in which to submit a written response to DCAM. [M.G.L. c. 149, §44D(7)]

Your jurisdiction must submit to DCAM a properly completed standard contractor evaluation form for the general contractor within 70 calendar days of contract completion or termination. At approximately the 50 percent completion stage of the contract, you are required to provide the general contractor with a preliminary, informational, written evaluation of the contractor's performance on the project. Any public agency that fails to complete the required contractor evaluation and submit it to DCAM, together with any written response by any contractor, within 70 days of completing a project will be ineligible to receive any state funds for public building or public works projects. [M.G.L. c. 149, §44D(7)]

M.G.L. c. 149, §44D provides qualified immunity to individuals responsible for completing contractor and subcontractor evaluations on behalf of public owners. If a contractor initiates a lawsuit in response to a completed evaluation, the awarding authority is required to provide legal representation and indemnification for the individual completing the evaluation on behalf of the awarding authority.

As of January 1, 2006, your jurisdiction must submit to DCAM a properly completed standard contractor evaluation form for each subcontractor performing filed sub-bid work on the contract within 90 days of contract completion or termination. You are not required to provide a preliminary, informational evaluation to each subcontractor at the 50 percent completion stage. [M.G.L. c. 44D(16)] Any public agency that fails to complete a required subcontractor evaluation and submit it to DCAM, together with any

written response by the subcontractor, within 90 days of completing a project will be ineligible to receive any state funds for public building or public works projects. [M.G.L. c. 149, §44D(16)]

**149** **30****Invoking the Performance Bond**

If the contractor fails to complete the project in a satisfactory manner, you may need to invoke the contractor's performance bond.<sup>72</sup> In such cases, the surety that issued the bond is responsible for the cost of completing the work. Typically the surety will arrange for another contractor to complete the work. Attempts to invoke a performance bond will usually involve extensive negotiations with the contractor and the surety, so you should seek assistance from your local attorney as early in the process as possible. Note that the performance bond must remain in effect for at least one year after the project's completion, and longer if necessary, to cover guarantees or pending claims. [M.G.L. c. 30, §40]

---

<sup>72</sup> M.G.L. c. 30, §39M contracts do not require performance bonds; however, you may require a performance bond if you so choose.

This page intentionally left blank.

## ***VIII. Procuring Modular Construction***

---

Public agencies may procure modular buildings by following an alternative procurement process contained in M.G.L. c. 149, §44E(4). These procedures apply to the acquisition and installation of modular buildings, including the solicitation and evaluation of proposals, the award of contracts, and the installation of modular units.

The purpose of the modular procurement law is to allow awarding authorities to choose this alternative to the conventional mode of building construction by following specific planning and contracting procedures that ensure fair competition. This law, like other public construction laws, is intended to deliver facilities that are properly designed and built, at a fair cost, in a reasonable and controlled time period.

### **Projects Covered by the Modular Procurement Law**

The modular procurement law defines a modular building as a predesigned building or units of a predesigned building assembled and equipped with internal plumbing, electrical or similar systems prior to movement to the site where such units are attached to each other and the building is affixed to a foundation and connected to external utilities. The modular procurement law also applies to any portable structure with walls, a floor, and a roof, designed or used for the shelter of persons or property, transportable in one or more sections and affixed to a foundation and connected to external utilities. [M.G.L. c. 149, §44A(1)]

Generally, modular construction involves the manufacture and transport of sectional units from a factory to another site where the units are connected. Site preparation work, construction of foundations, and attachment of modular buildings to utilities can be included as part of the modular building procurement or can be bid separately through the conventional construction bidding procedures.

Modular construction departs from the design-bid-build process in several respects. Design and construction of the prefabricated modular units are combined in the manufacturing process, and specialized subtrade work may be done by the

manufacturer, so there is no separate filed sub-bid procedure. The modular construction procurement process is also different. Instead of selecting a designer to prepare detailed plans and specifications for the construction work, you issue a request for proposals (RFP) for modular construction that describes the project requirements in detail, lists all criteria that will be used to compare competing proposals, and states all of the terms and conditions that will apply to the procurement. (Appendix D of this manual includes an outline and recommended contents of a modular construction RFP. The model RFP provided in the appendix can be adapted to suit your jurisdiction's needs.) Each responsive offeror submits a proposal to provide a predesigned building (or buildings) that meets the stated requirements, in accordance with the terms set forth in the RFP. A proposal is then selected through the evaluation process described in this chapter.

### **Leasing Modular Buildings**

You must follow the modular procurement procedures if you lease a modular building. [M.G.L. c. 149, §44E(4)] All terms and conditions of the lease arrangement must be included in the RFP.

### **Repair and Maintenance of Modular Buildings**

Repair and maintenance services for an existing modular building are subject to the designer selection and construction bid laws discussed in previous chapters of this manual unless the work will be performed under a warranty agreement procured under the original contract.

## **Planning for Modular Construction**

Modular buildings are usually considered for one or more of the following reasons: portability, speed of construction, low initial cost, and availability of financing options such as lease-purchase financing. In addition to these factors, however, you should also weigh possible trade-offs, such as energy efficiency, maintenance costs, durability, and acceptability to the community. Do not rely on information from modular industry sales representatives to assess these trade-offs.

The best way to evaluate the benefits of modular construction is to undertake a study that assesses all of the feasible alternatives, including both conventional and modular construction, and other options such as leasing space until new construction can be completed. (Chapter III of this manual provides detailed information on preparing a study.) The study will also define the program requirements of the project and provide you with cost estimates. Keep in mind that modular buildings may provide an immediate, temporary solution to a space shortage, but the long-term costs of this approach may in some cases be higher than for other approaches. The study should clarify these costs and trade-offs.

It is generally advisable to contract with a design professional to prepare the study. In addition, you will likely need to contract with a design professional to prepare the RFP and evaluate the proposals.

### **Emergencies**

As in the case of nonmodular building construction services, you may make an emergency modular procurement only for the work that is necessary to preserve the health or safety of persons or property, or to alleviate an imminent security threat, in an emergency. Under the emergency provisions of the law, you may award the emergency contract on the basis of such competitive bids or proposals as you are able to obtain in time to address the extreme emergency, without a public opening of the bids or proposals. The prior approval of the Division of Capital Asset Management (DCAM) is required unless the urgency of situation makes it impossible to contact DCAM in advance. In that event, emergency work can be started, but DCAM must be notified as soon as possible. DCAM must also waive the public notice requirement. [M.G.L. c. 149, §§44J(1), (6)] Not every urgent situation will meet the legal definition of an emergency. (Chapters V and VI of this manual contain more information on emergency construction contracting.)

### Modular Construction Project Oversight

Like a conventional construction project, a modular construction project requires oversight of every stage, including the site preparation work, the construction of foundations, the installation and assembly of the modular units, and the attachment to utilities. You may want to consider hiring or contracting with a professional project manager who is knowledgeable and experienced in modular construction.

### Modular Procurement: The Basic Steps

This section describes the basic steps in the modular procurement process, which are listed below.

1. Document your decision to replace a modular building (if required).
2. Prepare the RFP.
3. Provide public notice of the RFP.
4. Distribute the RFP.
5. Designate the individual(s) responsible for evaluating proposals.
6. Receive the sealed price and non-price proposals.
7. Open and register the proposals.
8. Evaluate the non-price proposals
9. Evaluate the price proposals.
10. Identify the most advantageous proposal.
11. Negotiate changes (if any) to the proposal.
12. Award the contract.

#### **Step 1: Document your decision to replace a modular building (if required).**

If you are procuring a modular building to replace another modular building, M.G.L. c. 149, §44E(4) requires you to certify that such a replacement is necessary, cost-effective over the long-term, and not detrimental to public policy. You are also required to provide a detailed written explanation of your reasons for such certification.

**Step 2: Prepare the RFP.**

A modular building RFP should provide a detailed description of the proposed project, including all program and preliminary design requirements. The level of design detail contained in the RFP will typically consist of plans and specifications that resemble schematic design documents. These technical specifications should be prepared by a qualified design professional. You may want to involve the same design professional in the evaluation of proposals to ensure that the proposal you choose meets your technical requirements. Chapter II provides more information on procuring design services.

In addition to the technical specifications, the RFP should specify the criteria that will be used to evaluate and rate the proposals. The evaluation criteria should focus primarily on the proposer's past performance and on the performance of similar modular buildings fabricated by the same manufacturer.

Proposers for a modular building contract must be certified by DCAM to perform modular construction. In addition to requiring a Certificate of Eligibility and an Update Statement, you should obtain information about the proposer's past performance and the performance of the proposed manufacturer's buildings from references provided by each proposer. The references should be from public and private owners of comparable modular building projects.

M.G.L. c. 149, §44E(4) lists the information that must be contained in the RFP. The RFP must require proposals to be submitted in two parts, in separate, sealed envelopes: a non-price proposal and a price proposal. A detailed listing of the RFP contents and a model RFP for modular construction are provided in Appendix E of this manual.

**Step 3: Provide public notice of the RFP.**

You must publish the RFP advertisement at least once in the *Central Register* and in a local newspaper not less than two weeks prior to the proposal deadline. In addition, you must post the advertisement in the offices of the awarding authority at least one week prior to the deadline. [M.G.L. c. 149, §44J] The advertisement should describe the

overall project in sufficient detail to allow offerors to determine whether they are qualified and wish to submit proposals. It should also state when and where the RFP can be obtained, the deadline and place for submission of proposals, and the time and place for the opening of proposals. If a preproposal meeting will be held, the advertisement should list the time and place of that meeting.

**Step 4: Distribute the RFP.**

You must make the RFP available on an equal basis to all who request a copy. If you charge vendors a fee for copies of the RFP, you must charge all vendors. Keep a record of all vendors who receive the RFP. If you later issue an addendum to the RFP, send the addendum to all those who have already received the RFP. To avoid misunderstandings or protests, include a requirement in the RFP that vendors acknowledge in writing their receipt of any addenda. Also, if vendors are likely to require additional time to respond to the addendum, extend the proposal due date.

**Step 5: Designate the individual(s) responsible for evaluating proposals.**

You must select one or more individuals to evaluate the non-price proposals. The evaluators should include a qualified design professional.

**Step 6: Receive the sealed price and non-price proposals.**

You must maintain a register of proposals received. It is good practice to note on the sealed price and non-price proposal packages the date and time they were received, and to provide proposers with receipts for their proposals upon request.

Prior to opening the non-price proposals, a proposer may correct, modify, or withdraw the proposal (non-price and price). Any correction or modification to a proposal must be submitted in writing. Because the original proposals must be submitted as sealed packages, the RFP should require that corrections or modifications also be sealed when submitted.

You may not accept a late proposal. If you do receive a late proposal, you should note the time of receipt and return the proposal unopened to the proposer.

You may not accept a late correction or modification to a proposal. If you do receive a late correction or modification, you should treat it as a late proposal, and evaluate only the original proposal that was received by the deadline

**Step 7: Open and register the proposals.**

You *may not* open the proposals publicly. The proposal contents are to be kept confidential and not disclosed to competing proposers until the evaluation process is completed or until the time for acceptance specified in the RFP, whichever occurs first.

You must separate the price and non-price proposals. The non-price must be opened at the time specified in the RFP in the presence of one or more witnesses. At the time of the opening, you must prepare and make available for public inspection a register of proposals, which includes the name of each proposer and the number of proposal modifications submitted by each proposer. You should also record the name(s) of the witness(es).

You may open the price proposals immediately after opening the non-price proposals or at a later time. However, be sure that you do not disclose the price proposals to the non-price proposal evaluator(s) until they have completed their evaluations. The separation of non-price and price proposals is an important element of the RFP process. The process is structured to allow an orderly, fair comparison of the proposals.

A proposal may be withdrawn after it has been opened only if a mistake is clearly evident on the face of the document, but the intended correct answer is not evident. For example, if a proposer incorrectly multiplied unit prices by estimated quantities and added the incorrect subtotals to arrive at a total price, the mistake would be evident but the intended proposal would not.

**Step 8: Evaluate the non-price proposals.**

After opening the non-price proposals, the evaluators should first examine each proposal to determine whether it is responsive to the RFP requirements. A proposal should include specifications for a modular building or buildings that meet all of the

requirements set forth in the RFP, as well as the required Certificate of Eligibility and Update Statement. A proposal that does not meet requirements specified in your RFP is nonresponsive and should be rejected.

In determining the responsiveness of a proposal, however, you must waive or allow the offeror to correct minor informalities. Minor informalities are errors of form that do not cast doubt on the intended meaning of the proposal or the qualifications of the offeror. If a mistake and the intended offer are clearly evident in a proposal, you must correct the mistake to reflect the offeror's intent, and notify the offeror in writing of the correction. In the event that a mistake is evident, but the correct intended offer is not, you may permit the offeror to withdraw the proposal.

After rejecting the nonresponsive non-price proposals, the evaluators then evaluate and rate the responsive proposals. The law requires evaluators to:

- Assign each proposal a rating of highly advantageous, advantageous, not advantageous, or unacceptable for each evaluation criterion, and the reasons for each rating.
- Assign each proposal a composite rating, and the reasons for this rating.
- Note any recommendations for revisions to the proposed plan for providing modular buildings, to be obtained by negotiation prior to awarding a contract.
- Verify whether the modular buildings were or will be manufactured within the Commonwealth, and if not, whether they were or will be manufactured within the United States.

The rating system embodied in this legislation discourages assigning numerical values to ratings. The ratings are expressed in qualitative terms because they reflect your evaluators' qualitative judgments. The evaluators have the discretion to determine whether changes in the offeror's proposal would render it more advantageous; if so, the evaluators should note in the written evaluation the necessary changes. The award of a contract should be conditioned on the negotiation of the changes noted in the evaluation, provided the offeror agrees to make these revisions without increasing the cost. [M.G.L. c. 149, §44E(4)]

Once ratings have been assigned on each criterion, evaluators assign an overall rating to each proposal and explain in writing their reasons for their composite rating of each proposal. The reasons should reflect the relative importance of the evaluation criteria.

Alternatively, a review of the Update Statement may raise doubts about an offeror's qualifications, but the evaluators may decide that disqualification is not warranted. (The Update Statement is discussed in more detail in Chapter V). The modular procurement procedures allow evaluators to assign ratings to offerors' qualifications and to consider the relative ratings in this category when choosing the most advantageous proposal.

#### **Step 9: Evaluate the price proposals.**

You will evaluate the price proposals following the method you specified in the RFP to determine the best proposal price. The price evaluation can be performed while non-price proposals are being evaluated as long as the prices are not disclosed to the individuals responsible for evaluating the non-price proposals. Evaluators will first determine whether each price proposal meets the submission requirements and includes the required bid deposit. Evaluators will then compare the proposal price with the Single Project Limit and Aggregate Work Limit listed on the offeror's Certificate of Eligibility to ascertain whether the offeror is eligible for a contract award. (Chapter V provides additional information on the Single Project Limit and Aggregate Work Limit.)

As in the case of the non-price proposals, you must waive or allow the offeror to correct minor informalities. For example, the omission of a unit price figure is a minor informality that must be waived if the intended figure is readily ascertainable from other figures in the proposal. If a mistake and the intended offer are clearly evident in a proposal, you must correct the mistake to reflect the offeror's intent and notify the offeror in writing of the correction. In the event that a mistake is evident, but the correct intended offer is not, you may permit the offeror to withdraw the proposal. For example, an offeror might incorrectly multiply unit prices by estimated quantities and then add the incorrect subtotals to arrive at a total price. In this case, the mistakes are evident, but the intended offer is not.

**Step 10: Identify the most advantageous proposal.**

You must identify the most advantageous proposal, taking into consideration the proposal evaluations and the proposal prices. The decision may be easy when, for example, the lowest-priced proposal receives the highest overall ratings, or all proposals receive the same rating and the differences are so insignificant that you decide to select the lowest-priced proposal.

In other cases, you will have to carefully consider whether it is worthwhile for your jurisdiction to spend more money for a better proposal. For example, if one proposal is rated “highly advantageous” and has a higher price than the lowest-priced “advantageous” proposal, you need to determine which proposal best meets the needs of your jurisdiction.<sup>73</sup> The extra benefits afforded by the “highly advantageous” proposal may or may not be worth the cost premium you would incur by selecting that proposal. There is no mechanical process for making the tradeoff.

**Step 11: Negotiate changes (if any) to the proposal.**

The awarding authority may condition the award on successful negotiation of any revisions recommended in the evaluation, but these negotiations are limited in scope. The only items that are subject to negotiation are the specific revisions noted by the evaluators during the evaluation process. If any of the proposal revisions recommended by the evaluators are not included in the contract, the reasons for omitting them should be stated in writing. Contract terms, scope of work, and price are *not* subject to negotiation. You may not agree to pay more than the offeror’s proposal price for changes needed to make the proposal comply with the RFP requirements, nor is it permissible to adjust the price indirectly (for example, reducing the scope of work or the contractor’s responsibilities or quality of the product). To allow one offeror to change a proposal price or any other term of the RFP would violate the precepts of fair competition.

---

<sup>73</sup> If revisions to a proposal’s plan for providing the modular buildings would result in its selection as most advantageous, taking into consideration the proposal evaluations and prices, you may select the proposal conditioned upon satisfactory negotiations to incorporate the recommended revisions.

**Step 12: Award and publicize the contract.**

You must give written notice of the award decision to the selected proposer within the time for acceptance that you specified in the RFP. The time for acceptance may be extended by agreement of the parties.

If you do not award the contract to the offeror who submitted the lowest price, you must explain the reasons for the award in writing and retain this written explanation in your files for at least six years from the date of final payment under the contract.

Finally, the name of the firm awarded the contract should be published in the *Central Register*. A form for this purpose may be downloaded from the Secretary of the Commonwealth's website at [www.mass.gov/sec](http://www.mass.gov/sec).

This page intentionally left blank.

## ***IX. Using Alternative Project Delivery Methods Under M.G.L. c. 149A***

---

Construction projects typically involve three phases: planning, design, and construction. On a design-bid-build project, these phases run sequentially: a designer prepares a fully detailed design for the project, construction bids are solicited on the 100 percent complete bidding documents, and the selected contractor – the lowest eligible and responsible bidder – then begins construction. The contractor has no involvement in the process until the construction stage.

M.G.L. c. 149A, enacted in July 2004, permits Massachusetts awarding authorities to use two alternative delivery methods that differ substantially from the design-bid-build process, subject to specific conditions. For building construction contracts estimated to cost \$5 million or more, awarding authorities have the option of using the construction management at risk delivery method. For public works construction contracts estimated to cost \$5 million or more, awarding authorities have the option of using the design-build delivery method. This chapter summarizes the requirements for using these alternative delivery methods under M.G.L. c. 149A.

### **Optional Construction Management At Risk Delivery Method for Building Construction Contracts of \$5 Million or More**

On a construction management at risk (CM at risk) project undertaken pursuant to M.G.L. c. 149A, a CM at risk firm is hired early in the design stage of the project. During the preconstruction period, the CM at risk firm acts as a construction manager, advising the owner on planning issues such as the project siting, budget, and schedule as well as on the development of the project design. At a predetermined point during design development, the owner and the contractor agree on a guaranteed maximum price (GMP) for the construction work. During the construction stage of a CM at risk project, the CM at risk firm – which has until this point acted as a construction manager – takes on the role of the project's general contractor and assumes the risk of constructing the project in accordance with the owner's specifications for an amount not to exceed the

GMP. Because of this dual construction manager/general contractor role assumed by the CM at risk firm, the CM at risk delivery method is sometimes called CM/GC.

The CM at risk contract is structured as a cost-plus contract with a GMP. The awarding authority pays the CM at risk firm the actual cost of the agreed-upon work plus an agreed-upon construction management fee, and the sum of these payments cannot exceed the GMP unless the owner changes the scope of the project or unforeseen conditions arise. The awarding authority is responsible for monitoring and auditing all project costs.

As in the case of a design-bid-build project, on a CM at risk project the owner holds separate contracts with the designer and the CM at risk firm. The CM at risk firm holds the subcontracts and is responsible for ensuring that all construction work is completed on schedule and in accordance with the specifications. CM at risk projects are sometimes fast-tracked: that is, portions of the design that are completed early, such as the site work, can be bid and built while the rest of the design is being completed. The CM at risk firm assumes the role of general contractor on the construction work for the fast-tracked package while continuing to provide construction management input on the design work that is still underway.

It is important to keep in mind that the role of the CM at risk firm on a CM at risk project is very different from the role of a construction manager hired for a fee to serve as your jurisdiction's agent, helping to manage the project budget, schedule, and quality on a design-bid-build project. A CM at risk firm does not represent the owner and has no obligation to protect the owner's interests on a CM at risk project.

### **Obtaining OIG Approval to Use CM at Risk**

Public awarding authorities are required to obtain the prior approval of the Office of the Inspector General (OIG) before using CM at risk for a public building project. The Division of Capital Asset Management (DCAM), the Massachusetts Port Authority, the Massachusetts Water Resources Authority, the Massachusetts State College Building Authority, and the University of Massachusetts Building Authority are exempt from the requirement to obtain prior OIG approval for each CM at risk project; however, these

exempt agencies are required to submit their CM at risk procedures to the OIG for review and approval on an annual basis.

Before submitting an application to the OIG, you are required to procure or otherwise employ the services of an owner's project manager, who may assist you in procuring the design contract. Under M.G.L. c. 149A, the individual assigned by the owner's project manager to provide the project management services for the project must be a registered architect or professional engineer with at least five years of experience in the construction and supervision of construction of buildings of similar size and complexity *or* must have at least seven years of experience in the construction and supervision of construction of buildings of similar size and complexity.<sup>74</sup> You are also required to procure the services of a designer in accordance with the requirements of the designer selection law before submitting an application to the OIG. Under M.G.L. c. 149A, the owner's project manager, the designer, and the CM at risk firm must be independent of one another.

To receive approval from the OIG, your application must demonstrate the following:

- The public agency has authorization from its governing body to contract with a CM at risk firm;
- The public agency has the capacity, a plan, and procedures to effectively procure and manage a CM at risk contract for the specific project and has retained the services of a qualified owner's project manager;
- The public agency has in place procedures to ensure fairness in competition, evaluation, and reporting of results at every stage of the procurement process;
- The building project has an estimated construction value of \$5 million or more; and
- The public agency has determined that the use of construction management at risk services is appropriate for the building project and has stated in writing the reasons for the determination. [M.G.L. c. 149A, §4(a)]

---

<sup>74</sup> Note that these experience requirements differ slightly from those that apply to an owner's project manager hired or assigned to a M.G.L. c. 149 building project with an estimated construction cost of \$1.5 million or more.

The OIG has issued *Procedures Relative to Receiving a Notice to Proceed to Use Construction Management at Risk Services*. This document, which is available at [www.mass.gov/ig](http://www.mass.gov/ig), contains the Construction Management at Risk Application to Proceed as well as detailed instructions for completing the application.

### **Procuring the CM at Risk Contract**

M.G.L. c. 149A requires a two-phase process to select the CM at risk firm. The major steps in the selection and contracting process are as follows:

1. Establish a Prequalification Committee.
2. Prepare and advertise the RFQ for CM at risk services.
3. Evaluate the statements of qualifications and prequalify at least three CM at risk firms.
4. Establish a Selection Committee.
5. Prepare the RFP and distribute it to the prequalified CM at risk firms.
6. Receive, evaluate, and rank the CM at risk proposals.
7. Negotiate non-fee contract terms with the selected proposer and award the CM at risk contract.

#### **Step 1: Establish a Prequalification Committee.**

. The Prequalification Committee's role will be to review and evaluate responses to a request for qualifications (RFQ) that you will issue for CM at risk services. The Prequalification Committee must be comprised of a representative of the designer, the owner's project manager, and at least two representatives of your jurisdiction.

#### **Step 2: Prepare and advertise the RFQ for CM at risk services.**

You will advertise for statements of qualifications from CM at risk firms, following the procedures set forth in M.G.L. c. 149A. The RFQ and public notice must include the following information:<sup>75</sup>

---

<sup>75</sup> As will be discussed, this information must also be included in the RFP.

1. The time and date for receipt of RFQ responses, the address of the office to which the responses must be delivered, and the time frame in which the public agency will respond to the responses;
2. A general description of the project, including preliminary concept designs and key factors important to the final selection;
3. The evaluation procedure and criteria for selection, including any rating system;
4. A specific description of the scope of services expected of the selected CM at risk firm during the design, preconstruction, and construction phases of the project;
5. A general description of the anticipated schedule and estimated construction cost for the building project;
6. A listing of the project team, including the public agency, the designer, and the public agency's owner's project manager;
7. The criteria for the selection of the CM at risk firm, including minimum experience, requirements for presentations, and the schedule for the selection process;
8. A prohibition against any unauthorized communication or contact with the public agency outside of official preproposal meetings;
9. If desired by the public agency, a limitation on the size and number of pages to be included in the response to the RFQ; and
10. A statement indicating that the RFQ will be used to prequalify CM at risk firms that will be invited to submit proposals in response to a request for proposals issued pursuant M.G.L. c. 149A, §6. [M.G.L. c. 149A, §5(c)]

If space considerations make it difficult to include the evaluation procedures and criteria in the public notice, we recommend that you reference this information in the public notice. However, essential information such as the submission requirements, scope of services, and project description should be included in the public notice as well as the RFQ.

Your RFQ must inform interested CM at risk firms of the required contents of their statements of qualifications. M.G.L. c. 149A requires the following information to be included in each statement of qualifications submitted by a CM at risk firm:

1. A cover letter or executive summary detailing the key elements and factors that differentiate the firm from other responders;

2. A completed qualifications application similar in form to AIA Document A305, 1986 edition, listing general business information and financial capacity;
3. A list of lawsuits and arbitrations to which the firm is a party in regard to construction contracts within the past three years, including a list of all convictions or fines for violations of state or federal law;
4. A project organization chart with specific information on key project personnel or consultants;
5. An audited financial statement<sup>76</sup> for the most recent fiscal year and a letter from the firm's surety company confirming its ability to provide performance and payment bonds for the building project under consideration;
6. Information on the firm's safety record, including its workers' compensation experience modifier, for the past three years;
7. Information on and evidence of the firm's compliance record with respect to minority- and women-owned business enterprise participation goals;
8. Information regarding the firm's experience on similar building projects, including references from the owners and architects of these projects;
9. Information regarding the firm's experience on similar projects that used the CM at risk delivery method, including references from the owners and architects of these projects;
10. Information on any projects where the firm was terminated, failed to complete the work, or paid liquidated damages;
11. Specific examples of the firm's project management reports or other illustrations of the company's operating philosophy;
12. A Certificate of Eligibility issued by DCAM, showing a capacity rating sufficient for the project, and an Update Statement; and
13. Any other relevant information that the public agency deems desirable.  
[M.G.L. c. 149A, §5(d)]

The CM at risk firms responding to the RFQ must sign their statements of qualifications under the pains and penalties of perjury.

---

<sup>76</sup> M.G.L. c. 149A, §5(d)(5) states: "[T]he financial information submitted shall remain confidential and shall not be a public record to the fullest extent permissible under the law."

The RFQ must be advertised, at least two weeks before the deadline for submitting responses to the RFQ, in a newspaper of general circulation in the area in which the building project is located, in the *Central Register*, and on Comm-Pass.<sup>77</sup>

**Step 3: Evaluate the statements of qualifications and prequalify at least three CM at risk firms.**

The Prequalification Committee will evaluate the statements of qualifications received from CM at risk firms on the basis of the evaluation criteria set forth in the RFQ. The Prequalification Committee is required to select at least three qualified CM at risk firms to receive the request for proposals (RFP). If the Prequalification Committee is unable to identify at least three qualified CM at risk firms, you are required to readvertise the RFQ following the procedures outlined above. Alternatively, you may elect to procure the construction work in accordance with the bidding requirements of M.G.L. c. 149 (discussed in Chapter V of this manual). M.G.L. c. 149A provides that the decision of the Prequalification Committee shall be final and shall not be subject to appeal except on grounds of fraud or collusion. [M.G.L. c. 149A, §5(f)]

**Step 4: Establish a Selection Committee.**

Before issuing the RFP for CM at risk services to the prequalified CM at risk firms, you are required to establish a Selection Committee to review and evaluate responses to the RFP. The membership requirements for this committee are identical to those for the Prequalification Committee, and you may appoint the same individuals to both committees.

**Step 5: Prepare the RFP and distribute it to the prequalified CM at risk firms.**

The following information must be included in the RFP:

1. All information required by M.G.L. c. 149A to be included in the RFQ and public notice (listed under the previous Step 2);

---

<sup>77</sup> Comm-PASS is the Commonwealth's Procurement Access and Solicitation System. Any public agency in Massachusetts can post solicitations on Comm-PASS free of charge. For additional information, you may visit the Comm-PASS website at [www.comm-pass.com](http://www.comm-pass.com).

2. The date, time, and place for submission of proposals;
3. A clear description of the submission requirements, including separate price and technical components;
4. Detailed information concerning the project scope, including any preliminary design information, geotechnical reports, existing conditions surveys, and specifications;
5. Specific information on the project schedule, including the schedule for design deliverables, site availability, and occupancy expectations;
6. A detailed description of the scope of work and deliverables expected from the CM at risk firm during the preconstruction phase;
7. The MBE/WBE inclusion goals and workforce inclusion goals for the building project;
8. A clear description of the communication guidelines to be followed during the procurement process, including any measures to ensure that the selection process will be open and fair;
9. The form of the contract and general and supplemental conditions, including any incentive provisions and any damages for delay provisions;
10. The project budget;
11. A fully developed schedule of cost items listing the public agency's determination of what will be considered fee, cost of the work, and general conditions items;
12. Specific information on the evaluation criteria, including any point scale or measurement system;
13. The timetable and process for establishing a guaranteed maximum price, including the status of design and limitations on the amount and use of contingency; and
14. A list of the trade contractor<sup>78</sup> classes of work to be required in the trade contractor prequalification plan. [M.G.L. c. 149A, §6(b)]

Each CM at risk proposal must contain a price component and a technical component. M.G.L. c. 149A prescribes the contents of these proposal components, and these requirements should be incorporated into the RFP.

---

<sup>78</sup> On a CM at risk contract, trade contractors are subcontractors that perform work in subtrade categories that are subject to filed sub-bidding on a M.G.L. c. 149 contract. The required procedures for procuring trade contracts are discussed later in this chapter.

The **price component** of each CM at risk proposal must include:

- The fee for preconstruction services with appropriate detail,
- The fee for construction services with explanation of the basis, and
- The estimated cost of general conditions with appropriate detail. [M.G.L. c. 149A, §6(c)(1)]

The **technical component** of each CM at risk proposal must include:

- A detailed project approach, including preconstruction services;
- Supplemental, relevant project references;
- A listing of the project team members with position descriptions and relevant time commitments of these team members during the project;
- The construction management plan indicating approach to control of cost, schedule, quality, documents, and claims;
- Preliminary definition of trade contractor and subcontractor bid packages and scopes of work;
- An affidavit of prevailing wage compliance pursuant to M.G.L. c. 149, §§26 and 27;
- A commitment letter from a surety licensed to do business in the Commonwealth and whose name appears on United States Treasury Department Circular 570 stating the surety's willingness to bond the building contract in the full sum of the contract at 110 percent of the budget for the building project;
- A technical challenges and solutions plan; and
- Any qualifications or exceptions to the terms of the form of contract or supplemental conditions as included in the RFP. [M.G.L. c. 149A, §6(c)(2)]

**Step 6: Receive, evaluate, and rank the CM at risk proposals.**

The Selection Committee is required to evaluate the CM at risk proposals in accordance with the evaluation criteria contained in the RFP. The Selection Committee may conduct interviews as long as all firms submitting proposals are interviewed. Based on the evaluations, the Selection Committee must rank the CM at risk proposals.

**Step 7: Negotiate non-fee contract terms with the selected proposer and award the CM at risk contract.**

The Selection Committee will begin non-fee negotiations with the highest-ranked CM at risk firm. If the Selection Committee determines that these negotiations will not result in an acceptable contract for your jurisdiction, it will terminate these negotiations and begin non-fee negotiations with the next highest-ranked CM at risk firm. This process will continue until the Selection Committee reaches agreement on an acceptable contract with and awards the contract to one of the prequalified CM at risk firms. The list of prequalified CM at risk firms and the Selection Committee's rankings of the firms' proposals will be public records after the contract award. M.G.L. c. 149A provides that the decision of the Selection Committee shall be final and shall not be subject to appeal except on grounds of fraud or collusion. [M.G.L. c. 149A, §6(d)]

**Negotiating the Guaranteed Maximum Price**

The agreed-upon GMP for the construction work will be an amendment to your contract with the CM at risk firm. You will negotiate the GMP with the CM at risk firm when the design reaches the level of completion specified in your RFP. The design documents must be no less developed than 60 percent. [M.G.L. c. 149A, §7(b)(1)]

The GMP amendment to the contract is required to include:

- A detailed line-item cost breakdown by trade, including cost of pre-GMP work;
- Dollar amounts for the CM at risk firm's contingency;
- Dollar amounts for the CM at risk firm's general conditions and fees, including for pre-GMP work;
- A list of all drawings, specifications, and other information on which the GMP is based;
- A list of allowances and statement of their basis;
- A list of any assumptions or clarifications on which the GMP is based;
- The dates for substantial and final completion on which the GMP is based; and
- A schedule of applicable alternates and unit prices. [M.G.L. c. 149A, §7(b)(4)]

Within five business days of the date on which the GMP amendment is executed, the CM at risk firm is required to furnish you with performance and payment bonds in the full amount of the GMP.

If you are unable to negotiate an acceptable GMP at this point, your Selection Committee may begin negotiations with the next highest-ranked proposer. If a contract and GMP cannot be successfully negotiated with this CM at risk firm, you must terminate the procurement process and procure the construction work in accordance with the requirements of M.G.L. c. 149. After terminating a CM at risk procurement process, a public agency may not reapply for approval to use the CM at risk delivery method on this same building project unless the building project has been materially changed in form or function. [M.G.L. c. 149A, §7(c)]

### **Procuring Trade Contracts Estimated to Cost More Than \$20,000**

There will be two types of subcontractors on a CM at risk project: trade contractors, which perform subtrade work that would be subject to filed sub-bidding on a M.G.L. c. 149 contract, and other subcontractors. Based on information provided by the CM at risk firm regarding scope of each trade contract, your jurisdiction will conduct a two-phase trade contractor selection process for all sub-bid classes of work that meet or exceed \$20,000. The steps of the trade contractor selection process are summarized below:

1. Establish a Trade Contractor Prequalification Committee.
2. Prepare and advertise a request for qualifications (RFQ) for trade contractor services for each trade contract.
3. Evaluate responses and prequalify trade contractors receiving a point score of 70 or higher.
4. Prepare the Request for Bids (RFB) and distribute it to the prequalified trade contractors.
5. Receive, open, and review trade contract bids.
6. The CM at risk firm executes the Trade Contractor Agreement with the prequalified trade contractor submitting the lowest bid for each trade contract.

**Step 1: Establish a Trade Contractor Prequalification Committee.**

The Trade Contractor Prequalification Committee must be comprised of a representative of the designer, a representative of the CM at risk firm, and two representatives of your jurisdiction.

**Step 2: Prepare and advertise a request for qualifications (RFQ) for trade contractor services for each trade contract.**

M.G.L. c. 149A contains detailed provisions governing the RFQ evaluation criteria, information requirements, and point rating system to be used in prequalifying trade contractors. You are required to advertise the RFQ in a newspaper of general circulation in the area in which the building project is located, in the *Central Register*, and on the Comm-Pass system not less than two weeks prior to the deadline for responses to the RFQ. The following information must be included in the trade contractor RFQ and the public notice of the RFQ:

- The date, time, and place for submission of responses to the RFQ;
- Relevant information about the project and the bidding process;<sup>79</sup>
- The specific criteria for trade contractor prequalification and selection;<sup>80</sup>
- A statement indicating that the RFQ will be used to prequalify trade contractors that will be invited to submit bids on subtrade work; and
- A statement indicating that the responders' names are to be posted but that the responses will not be opened publicly. [M.G.L. c. 149A, §8(c)]

---

<sup>79</sup> We recommend that you include the estimated value of the subcontract since, as will be discussed, trade contractors responding to the RFQ are required to submit a commitment letter for performance and payment bonds in the amount of 110 percent of the estimated trade contract value.

<sup>80</sup> If space considerations make it difficult to include this information in the public notice, we recommend that you reference this information instead. However, essential information such as the submission requirements and project description should be included in the public notice as well as the RFQ.

The RFQ must require only the specific information prescribed by M.G.L. c. 149A and must identify the specific point allocation for each category and subcategory of information. Within each category, the public agency may use its discretion in allocating points among subcategories, consistent with the total points for each category. The evaluation criteria and corresponding point ratings required by M.G.L. c. 149A are as follows:

1. Management experience (50 points; minimum of 25 points required for approval).
  - Business owners: Name, title, years with firm of the owner(s) of the business.
  - Management personnel: Names, title, education and construction experience, years with firm, and list of projects completed by all management personnel.
  - Similar project experience: Project name(s), description of scope, original trade contract sum, final trade contract sum with explanation, and date completed of similar projects.
  - Terminations: A list of any projects on which the trade contractor was terminated or failed to complete the work.
  - Lawsuits: A list of commercial lawsuits in which the trade contractor is a defendant or defendant-in-counterclaim with regard to construction contracts within the last three years. The lawsuits shall not include any actions that primarily involve personal injury or workers' compensation claims, or where the sole cause of action involves the trade contractor's exercise of its rights for direct payment under M.G.L. c. 30, §39F.
  - Safety record: The three-year history of the trade contractor's workers' compensation experience modifier.
2. References (30 points; minimum of 15 points required for approval).
  - Client references: A list of client references for all projects listed under "Similar project experience" (as described in the third bullet under "Management experience"), including the project name, client's name, address, telephone and fax numbers, and contact person.
  - Credit references: A list of a minimum of five credit references, including the telephone and fax numbers of contact persons from key suppliers, vendors, and banks.
  - Public project record: A list of all public building construction projects subject to M.G.L. c. 149 completed during the past three years, including the client's name, address, telephone and fax numbers, and contact person for each project.
3. Capacity to complete projects (20 points; minimum of 10 points required for approval).

- Annual revenue for the prior three fiscal years. (Note that the RFQ may not require trade contractors to submit financial statements.)
  - Revenue under contract for the next three fiscal years
4. Mandatory commitment letter, for which no points are assigned, for payment and performance bonds in the amount of 110 percent of the estimated trade contract value, issued by a surety company licensed to do business in the Commonwealth and whose name appears on United States Treasury Department Circular 570.

Each response to the RFQ must be signed under pains and penalties of perjury.

**Step 3: Evaluate responses and prequalify trade contractors receiving a point score of 70 or higher.**

The Trade Contractor Prequalification Committee will review and score the responses using the evaluation criteria listed above. All trade contractors receiving a point score of 70 or higher must be prequalified to bid. M.G.L. c. 149A permits five points to be added to the total score of each minority-owned business enterprise and women-owned business enterprise, consistent with your jurisdiction's MBE/WBE participation goals for the project. [M.G.L. c. 149A, §8]

After the trade contractor prequalification process has been completed, you are required to notify all prequalified trade contractors that they have received approval to bid and to inform them of the schedule for the Request for Bids (RFB) process, discussed below. You must make each trade contractor's score available to the trade contractor itself, but M.G.L. c. 149A states that the score will not be a public record and will not be open to public inspection, "to the fullest extent possible under the law." M.G.L. c. 149A also provides that the decision of the Trade Contractor Prequalification Committee shall be final and not subject to appeal except on the grounds of fraud or collusion. [M.G.L. c. 149A, §8(f)]

**Step 4: Prepare the Request for Bids (RFB) and distribute it to the prequalified trade contractors.**

The next step is to send each prequalified trade contractor a Request for Bids (RFB), which must include the following information:

- The date, time, and place for submission of bids;

- Fully detailed drawings and specifications by class of work in accordance with the filed sub-bid categories set forth in M.G.L. c. 149, §44F(1);<sup>81</sup>
- A detailed definition of the trade contractor's scope of work, including alternates and allowances, if any, within that scope of work;
- A project schedule indicating the planned sequence and duration of each trade contractor's work;
- A list of prequalified trade contractors;
- A trade contractor bid form requiring a listing of price, addenda, alternates and allowances, if any, for the trade work; certification that the trade contractor will perform the complete trade work with employees on its own payroll, except for work customarily performed by sub-trade subcontractors within the trade; and the names of all sub-trade subcontractors to be used if awarded the trade contract and each sub-trade contract sum;
- An affidavit stating that all sub-trade subcontractors named on the bid form have been prequalified by the trade contractor using criteria similar to the criteria for the prequalification of trade contractors;
- An affidavit of tax compliance;
- An affidavit of prevailing wage compliance pursuant to M.G.L. c. 149, §§26 and 27;
- A non-collusion affidavit;
- A requirement for the bidder to furnish a five percent bid bond from a surety company licensed to do business in the Commonwealth and whose name appears on U.S. Treasury Department Circular 570;
- The budget for the project and the budget amount for the trade contract scope of work as provided in the project GMP, if available, or as provided in the most recent project budget; and
- A Trade Contractor Agreement form as set forth in M.G.L. c. 149A, including all exhibits. [M.G.L. c. 149A, §8(g)]

---

<sup>81</sup> The materials specifications must conform to the requirements for full competition contained in M.G.L. c. 30, §39M (discussed in Chapter IV of this manual in the section entitled "Proprietary Specifications").

**Step 5: Receive, open, and review trade contract bids.**

Trade contractors must submit their bids in accordance with the requirements contained in the RFB package. The bids must be opened publicly by your jurisdiction. Any bid that does not include the required bid bond or affidavits or that is incomplete, conditional, obscure, or contains additions not required in the RFB must be rejected.

**Step 6: The CM at risk firm executes the Trade Contractor Agreement with the prequalified trade contractor submitting the lowest bid for each trade contract.**

Each trade contract must be awarded to the lowest prequalified bidder in that category. However, if your jurisdiction receives fewer than three responsive bids and the lowest bid exceeds the estimated cost of the trade contract work, the CM at risk firm must attempt to negotiate an acceptable price with the lowest prequalified bidder. If the CM at risk firm is unsuccessful in doing so, the CM at risk firm must terminate negotiations with the lowest prequalified bidder and initiate negotiations with the second-lowest prequalified bidder. If the CM at risk firm is unable to negotiate an acceptable price for the trade contract with either the lowest or the second-lowest prequalified bidder, the CM at risk firm must then solicit additional bids for the work on behalf of and with the consent of your jurisdiction. In soliciting these additional bids, the CM at risk firm must use the procedures required by M.G.L. c. 149A for selecting subcontractors that are not trade contractors on the CM at risk project. These subcontractor selection procedures are discussed later in this section.

The selected trade contractor must return the signed Trade Contractor Agreement to the CM at risk firm within ten business days of receiving the Trade Contractor Agreement from the CM at risk firm. Along with the executed Trade Contractor Agreement, the trade contractor must provide the CM at risk firm with performance and payment bonds in the full amount of the contract and insurance certificates required by the Trade Contractor Agreement.<sup>82</sup>

---

<sup>82</sup> The Trade Contractor Agreement requires the trade contractor, upon execution of the Agreement and before commencing any work, to provide the CM at risk firm with “evidence of workers’ compensation insurance as required by law and evidence of public liability and property damage insurance of the type and in limits required to be

**Procuring Other Subcontracts Estimated to Cost More Than \$20,000**

The CM at risk firm is responsible for managing the procurement of subcontracts that are not trade contracts, in collaboration with your jurisdiction, when those subcontracts are estimated to cost more than \$20,000. The CM at risk firm is first required to draw up a list of the required qualifications for each subcontract and to select three subcontractors that meet the qualifications. The CM at risk firm then submits the required qualifications and list of three subcontractors to your jurisdiction for approval. You are allowed to eliminate subcontractors or to add subcontractors to the list, provided that any subcontractor added to the list is acceptable to the CM at risk firm.

After your jurisdiction has approved the list of subcontractors for a subcontract, the CM at risk firm invites bids from the approved subcontractors. The bids must be based on detailed bidding information developed by the CM at risk firm. For each subcontract, the CM at risk firm selects a subcontractor and presents the bids and the selection decision(s) to your jurisdiction, along with a written explanation of the reason for the subcontract award. [M.G.L. c. 149A, §8(j)]

For subcontracts estimated to cost \$20,000 or less, the CM at risk firm may use any subcontractor selection method that has been approved by your jurisdiction.

**Undertaking Construction Work Prior to Execution of the GMP Amendment**

M.G.L. c. 149A sets forth the specific conditions under which you may undertake portions of the construction work before your jurisdiction has executed the GMP amendment to the contract with the CM at risk firm. For any such work, you must execute a separate amendment to your contract with the CM at risk firm detailing the scope of the fast-tracked work and dollar amount of the amendment, which must include the cost of construction, the general conditions, and any additional fee to be paid to the CM at risk firm. Also, any work performed before the GMP amendment is executed is subject to the trade contractor selection process discussed earlier in this chapter.

---

furnished to the Public Agency by the Construction Management at Risk Firm.” [M.G.L. c. 149A, §8(k)]

If you undertake construction work under such a contract amendment and subsequently fail to negotiate a GMP amendment with the CM at risk firm, any trade contracts between the CM at risk firm and trade contractors for work scheduled to begin before execution of the GMP amendment may be assigned to your jurisdiction or to another CM at risk firm designated by your jurisdiction, without the consent of the trade contractors. In this case, your jurisdiction or the designated CM at risk firm and the trade contractors will be bound by the terms of the trade contractor agreements. [M.G.L. c. 149A, §8]

CM at risk contracts are subject to the statutory provisions that apply to other public construction contracts in Massachusetts governing:

- Payment of prevailing wages [M.G.L. c. 149, §§26, 27, 27A, 27B, 27C, and 27D];
- Payment bonds [M.G.L. 149, §29];
- Prohibition on subcontractor indemnification [M.G.L. c. 149, §29C];
- Workers' compensation insurance [M.G.L. c. 149, §34A];
- Subcontractor rights to payment, including direct payment [M.G.L. c. 30, 39F];
- Finality of decisions on construction contracts [M.G.L. c. 30, §39J];
- Rights of contractors to payment [M.G.L. c. 30, 39K];
- Equitable contract adjustments for differing site conditions. [M.G.L. c. 30, 39N];
- Delays and suspensions by owner and additional costs for contractors and subcontractors [M.G.L. c. 30, §39O];
- Timing of owner decisions [M.G.L.. c. 30, §39P]; and
- Contractor record-keeping [M.G.L. c. 30, 39R].

Awarding authorities considering the CM at risk option should consult M.G.L. c. 149A and the OIG's website at [www.mass.gov/ig](http://www.mass.gov/ig) for additional information on CM at risk project requirements.

### **Optional Design-Build Delivery Method for Public Works Construction Contracts of \$5 Million or More**

On a design-build project, the owner selects and executes a single contract with a single entity – e.g., a design-build firm, joint venture, or contractor that subcontracts with a designer – to design and construct the project. Thus, design and construction are combined into a single stage, with no separate bid for construction based on complete plans and specifications. Instead, design-build contracts are procured based on a scope of work statement and performance requirements.

Contracting for project design and construction from a single design-build entity enables construction schedules to be accelerated by beginning construction work before the design is complete and eliminating the time required to solicit competitive construction bids. This contractual arrangement also enables single-point accountability for the project and, because the designer is a member of the contractor's team, facilitates collaboration and communication between the designer and the contractor.

However, because the designer represents the design-build entity rather than the owner on a design-build project, the owner cannot rely on the designer to detect and report construction defects or otherwise act on behalf of the owner. The designer is not the owner's agent and has no responsibility for protecting the owner's interests.

#### **Obtaining Approval to Use Design-Build**

Public awarding authorities are required to obtain the prior approval of the OIG before using design-build for a public works project. The Massachusetts Highway Department, the Massachusetts Port Authority, and the Massachusetts Water Resources Authority are exempt from the requirement to obtain prior OIG approval for design-build contracts; however, these exempt agencies are required to submit their design-build procedures to the OIG for review and approval on an annual basis.

To receive approval from the OIG, your application must demonstrate the following:

- The awarding authority has authorization from its governing body to enter into a design-build contract;

- The awarding authority has the capacity, a plan, and procedures in place, and approval by the governing body, where appropriate, to effectively procure and manage a design-build entity for the specific project;
- The awarding authority has in place procedures to ensure fairness in competition, evaluation, and reporting of results in the procurement process;
- The public works project has an estimated construction value of \$5 million or more; and
- The awarding authority has determined that the use of design-build is appropriate for the public works project and has stated in writing the reasons for the determination. [M.G.L. c. 149A, §16(a)]

The OIG has issued *Procedures Relative to Receiving a Notice to Proceed to Use Design-Build Services*. This document, which is available [www.mass.gov/ig](http://www.mass.gov/ig), contains the Design-Build Application to Proceed as well as detailed instructions for completing the application.

### **Procuring the Design-Build Contract**

M.G.L. c. 149A requires you to select the design-build entity by prequalifying and soliciting proposals from design-build entities. The major steps in the process are as follows:

1. Contract with or assign a design professional.
2. Solicit letters of interest from design-build entities.
3. Prepare the RFQ for design-build services..
4. Develop a scope of work statement defining the public works project.
5. Develop and issue a draft RFP (optional).
6. Distribute the RFQ.
7. Designate the individuals responsible for evaluating responses to the RFQ.
8. Evaluate and rate the responses, and shortlist at least two design-build entities.
9. Prepare the RFP and distribute it to the prequalified design-build entities.

10. Evaluate the proposals, negotiate with the selected proposer, and award the contract.
11. Execute the contract and notify the unsuccessful design-build entities.

**Step 1: Contract with or assign a design professional.**

You are required to contract with or assign a design professional<sup>83</sup> to provide technical advice and professional expertise to your jurisdiction. If you contract for these services, you are required to select the design professional in accordance with the designer selection law, M.G.L. c. 7, §§38A½-O. (The procurement process required by the designer selection law is discussed in Chapter II of this manual.) This design professional is ineligible to participate in any way as a member of any design-build entity competing for the contract. You are required to contract with or assign the design professional before you issue the request for qualifications (RFQ) discussed in Step 3 below and use the services of the design professional for the duration of the design-build selection process. You may also choose to expand the design professional's role by, for example, assigning the design professional to serve as your owner's project manager during the design-build contract period. The design professional that you select should be familiar with and experienced in the design-build delivery method.

**Step 2: Solicit letters of interest from design-build entities.**

You are required to advertise for letters of interest in a newspaper of general circulation in the area in which the project is located and in the *Central Register* not less than two weeks before the deadline for submitting the letters of interest. The public notice and solicitation must include the following information:

- The time and date for receipt of letters of interest;
- The address of the office to which the responses are to be delivered;
- The time frame for your jurisdiction's response to the letters of interest;

---

<sup>83</sup> M.G.L. c. 149A, §15 states that "design professional" has the same meaning as "designer," as defined in M.G.L. c. 7, §38A½.

- A general description of the project, including the estimated construction cost and the schedule for completion of the construction work;
- The evaluation criteria that will be used to identify qualified design-build entities; and
- A statement indicating that a request for qualifications (RFQ), will be used to identify qualified design-build entities to submit proposals for the design-build contract. [M.G.L. c. 149A, §17(a)]

**Step 3: Prepare the RFQ for design-build services.**

The RFQ, which you will provide to all design-build entities submitting letters of interest, must solicit the following information from each “major participant,” which M.G.L. c. 149A defines as a private entity that would have a major role in the design or construction of the project as a member of the design-build entity [M.G.L. c. 149A, §15]:

- Work experience on projects similar in size and scope for the past three years;
- Any terminations from work or failure to complete work in the past three years;
- Any lawsuits filed against any of the major participants within the past three years;
- Any prior business record of the officers or principals of the major participants for the past three years;
- The safety record of the major participants for the past three years;
- A complete public project record for the three years preceding the RFQ response;
- References, including references from previous clients, bank references, and surety references;
- Bonding capacity, as evidenced by a commitment letter from an approved surety; and
- Any other performance measures that will be used as a basis for evaluating responses to the RFQ. [M.G.L. c. 149A, §§17(c) and 17(d)]

The RFQ must state the date by which responses to the RFQ are due; the RFQ should also specify the time and place for submission of responses. You may not accept late responses.

**Step 4: Develop a scope of work statement defining the public works project.**

With the assistance of the design professional, you are required to develop a scope of work statement that defines the public works project and provides prospective design-build entities with sufficient information regarding your jurisdiction's objectives and requirements. The scope of work statement must include criteria and preliminary design, general budget parameters, and general schedule requirements. [M.G.L. c. 149A, §18]

**Step 5: Develop and issue a draft RFP (optional).**

After the scope of work statement has been completed, your jurisdiction may elect to develop a draft RFP and issue the draft RFP at the same time and in the same manner as the issuance of the RFQ. Design-build entities responding to the RFQ may simultaneously submit written comments to your jurisdiction regarding the draft RFP. Your jurisdiction has the sole discretion to decide whether to incorporate any of these comments into the final RFP issued to prequalified design-build entities.

**Step 6: Distribute the RFQ.**

You must provide the RFQ to every design-build entity that submitted a letter of interest.

**Step 7: Designate the individuals responsible for evaluating responses to the RFQ.**

The individuals you designate to evaluate the responses must have design-build experience.

**Step 8: Evaluate and rate the responses, and shortlist at least two design-build entities.**

The responses submitted by design-build entities must include all information required by the RFQ. The designated evaluators are required to evaluate the responses solely on the basis of the information solicited by and evaluation criteria contained in the RFQ. All information received in the responses must be investigated and verified. M.G.L. c. 149A, §17(d) provides: "All financial information, trade secrets or other information customarily regarded as confidential business information shall not be deemed to be

public information and shall remain confidential to the extent permissible under current law.”

The evaluators will rate each response and prepare written evaluations that specify in writing:

- For each evaluation criterion, a rating of each response as advantageous, not advantageous, or unacceptable, and the reasons for the rating; and
- A composite rating of each response as advantageous, not advantageous, or unacceptable, and the reasons for the rating. [M.G.L. c. 149A, §17(d)]

Design-build entities whose responses received a composite rating of advantageous will be eligible to receive the RFP for design-build services. Your jurisdiction may select any number of design-build entities to receive the RFP, but if you select fewer than two, you are required to readvertise the contract and restart the RFQ process. [M.G.L. c. 149A, §17(f)]

### **Step 9: Prepare the RFP and distribute it to the prequalified design-build entities.**

The RFP must contain:

- **Detailed scope of work.** The scope of work must include design concepts; technical requirements; performance criteria; construction requirements; time constraints; and all other requirements that have been determined by your jurisdiction to have a substantial impact on the cost, schedule, and quality of the project and the project development process. [M.G.L. c. 149A, §19(1)]
- **Cost basis (low bid or best value) and submission requirements.** M.G.L. c. 149A provides two options for evaluating design-bid proposals: low bid or best value.<sup>84</sup> (The evaluation procedures for each option are discussed below.) If the basis for award will be low bid, proposers will submit one complete, sealed proposal package that includes price information. If the basis for award will be best value, proposers must simultaneously submit two separate, sealed proposals: a sealed technical proposal and a sealed price proposal.

---

<sup>84</sup> According to M.G.L. c. 149A: “If the scope of work requires substantial engineering judgment, the quality of which may vary significantly as determined by the awarding authority, then the basis of award shall be best value.” [M.G.L. c. 149A, §20]

- **Evaluation criteria.** The RFP must include all criteria to be used in evaluating and scoring proposals. For best value procurements, the RFP must specify the scoring process, quality criteria, and relative weight of each criterion. The RFP must also state the method by which an “overall value rating” for each proposal will be calculated. The overall value rating must be calculated either by dividing the total price by the quality score or by using another objective formula clearly detailed in the RFP. [M.G.L. c. 149A, §20(2)]
- **Bid deposit requirement.** The bid deposit must be in the form of a bid bond; cash; or certified check, treasurer’s check, or cashier’s check issued by a responsible bank or trust company, payable to your jurisdiction, in the amount of five percent of the value of the bid.
- **Noncollusion statement.** Each design-build entity submitting a proposal must certify as follows on the proposal: “The undersigned certifies under penalties of perjury that this bid is in all respects bona fide, fair and made without collusion or fraud with any other person. As used in this paragraph, the word “person” shall mean any natural person, joint venture, partnership, corporation, or other business or legal entity.” The statement must be signed by the person signing the proposal, accompanied by the company name. [M.G.L. c. 149A, §19(6)]
- **Proposal submission information.** The RFP must specify the date by which proposals must be submitted to your jurisdiction; it should also specify the time and place for proposal submissions. For best value procurements, the RFP must also designate the time and place at which price proposals will be publicly opened after the evaluation of the technical proposals is completed.
- **Stipend information (optional).** The RFP may provide for a stipend, or honorarium, to unsuccessful proposers that submit responsive proposals. If you choose to pay a stipend, the RFP should specify the terms under which the stipend will be paid. M.G.L. c. 149A provides that an awarding authority must pay a stipend to an unsuccessful proposer if the awarding authority uses ideas and designs contained in the unsuccessful proposer’s proposal. [M.G.L. c. 149A, §19(6)]

If you so choose, your RFP may provide for a process to review conceptual technical submittals from proposers before the full proposals are submitted for the purpose of identifying defects that would cause proposals to be rejected as nonresponsive. All such technical submittals and responses must be treated as confidential until after the contract is awarded. [M.G.L. c. 149A, §19(4)]

**Step 10: Evaluate the proposals, negotiate with the selected proposer, and award the contract.**

The evaluation procedures required by M.G.L. c. 149A depend upon whether the basis for the contract award will be low bid or best value.

**Low bid.** You will open the proposals publicly on the date and at the time and location stated in the RFP. You will then enter into non-fee negotiations with the responsible proposer submitting a responsive proposal at the lowest price.

**Best value.** For best value procurements, you are required to establish a Selection Committee that will first open, evaluate, and score each technical proposal from a responsible proposer based on the quality criteria and using the relative weights contained in the RFP. The price proposals must remain sealed during this technical proposal evaluation process, and the technical proposals must be treated as confidential.

After the technical proposals have been evaluated, your jurisdiction is required to open the sealed price proposals publicly, at the place and time designated in the RFP. At this public opening, you are required to calculate the overall value rating for each proposal, using the method detailed in the RFP. (See the previous Step 9.) You will then enter into good-faith negotiations with the responsible proposer offering the lowest price per quality score point. If two or more proposers have offered the same lowest price per quality score point, you will enter into good-faith negotiations with the responsible proposer that offered the lowest price.

**Step 11: Execute the contract and notify the unsuccessful design-build entities.**

After completing successful negotiations with the selected proposer, you will execute the design-build contract. You are required to provide written notification to all other proposers, informing them that their proposals were not accepted.

Awarding authorities considering the design-build option should consult M.G.L. c. 149A and the OIG's website at [www.mass.gov/ig](http://www.mass.gov/ig) for additional information on the requirements for using this method to deliver public works projects.

## **Appendix A: Additional Sources of Assistance**

---

This directory lists some major state agencies and offices that are involved in the public construction process. Feel free to contact them or visit their Internet sites for further information and advice.

### **Office of the Attorney General**

Enforces and interprets the public construction bid laws, designer selection, and the prevailing wage law.

**Office of the Attorney General  
Fair Labor and Business Practices Division  
200 Portland Street  
Boston, MA 02114**

**Telephone: 617-727-3465  
Fax: 617-722-3066**

**Internet: [www.mass.gov/ag](http://www.mass.gov/ag)**

### **Board of Building Regulations and Standards**

Regulates state building code requirements; maintains current lists of Massachusetts certified producers of manufactured buildings and of licensed Third Party Inspection Agencies for Massachusetts Manufactured Building Program.

**Executive Office of Public Safety  
Board of Building Regulations  
and Standards  
One Ashburton Place, Room 1301  
Boston, MA 02108**

**Telephone: 617-727-7532  
Fax: 617-227-1754**

**Internet: [www.mass.gov/bbrs](http://www.mass.gov/bbrs)**

### ***Central Register***

Published by the Secretary of the Commonwealth. The website contains forms you may download, complete, and submit for publication.

**Secretary of the Commonwealth  
State Publication & Regulations Division  
One Ashburton Place  
Room 1613  
Boston, MA 02108**

**Telephone: 617-727-9136  
Fax: 617-742-4822**

**Email: [regs@sec.state.ma.us](mailto:regs@sec.state.ma.us)  
Internet: [www.mass.gov/sec](http://www.mass.gov/sec)**

## **Division of Capital Asset Management (DCAM)**

Supervises design and construction of state building projects, certifies contractors, issues emergency waivers for construction. For emergencies and contractor certification information, select the Office of the General Counsel from the automated voice messaging system at the Division's general number.

## **Designer Selection Board (DSB)**

Selects designers for state and county building projects and for municipal and district projects on request, issues designer selection guidelines.

## **Division of Energy Resources**

Enforces and interprets M.G.L. c. 25A, which governs the procurement of energy management services contracts. Provides technical assistance on energy-saving improvements.

## **State Ethics Commission**

Administers and enforces financial disclosure and conflict of interest laws, renders written advisory opinions upon request.

**Division of Capital Asset Management**  
One Ashburton Place  
Room 1505  
Boston, MA 02108

**Telephone: 617-727-4050**  
**Fax: 617-727-5363**

**Email: [INFO.DCAM@state.ma.us](mailto:INFO.DCAM@state.ma.us)**  
**Internet: [www.mass.gov/cam](http://www.mass.gov/cam)**

**Designer Selection Board**  
One Ashburton Place  
Room 1609  
Boston, MA 02108

**Telephone: 617-727-6008**

**Internet: [www.mass.gov/cam/DSB/index.html](http://www.mass.gov/cam/DSB/index.html)**

**Division of Energy Resources**  
100 Cambridge Street  
Suite 1020  
Boston, MA 02114

**Telephone: 617-727-4732**  
**Fax: 617-727-0030**

**Internet: [www.mass.gov/doer](http://www.mass.gov/doer)**

**State Ethics Commission**  
One Ashburton Place  
Room 619  
Boston, MA 02108

**Telephone: 617-727-0060**  
**Fax: 617-723-5851**

**Internet: [www.mass.gov/ethics](http://www.mass.gov/ethics)**

## **Massachusetts Highway Department (MassHighway)**

Oversees, funds, and prequalifies contractors for certain highway construction projects.

**MassHighway**  
10 Park Plaza, Suite 3510  
Boston, MA 02116

**Telephone: 617-973-7800**  
**Fax: 617-973-8040**

**Internet: [www.mass.gov/mhd](http://www.mass.gov/mhd)**

## **Department of Housing and Community Development (DHCD)**

Oversees and funds certain public housing projects.

**Department of Housing and  
Community Development**  
100 Cambridge Street  
Suite 300  
Boston, MA 02114

**Telephone: 617-727-7765**  
**Fax: 617-727-5060**

**Internet: [www.mass.gov/dhcd](http://www.mass.gov/dhcd)**

## **Office of the Inspector General**

Investigates complaints and allegations of wrongdoing; conducts analyses of legislation; provides training to and certifies public purchasing officials through the MCPPO program; interprets M.G.L. c. 30B, the Uniform Procurement Act, for local officials.

**Office of the Inspector General**  
One Ashburton Place  
Room 1311  
Boston, MA 02108

**Telephone: 617-727-9140**  
**Hotline: 800-322-1323**  
**Fax: 617-723-2334**

**Internet: [www.mass.gov/ig](http://www.mass.gov/ig)**

## **Department of Labor and Workforce Development**

Establishes prevailing wage rates, issues licenses for asbestos and lead work, provides apprentice training registration.

**Division of Occupational Safety**  
**Department of Labor and  
Workforce Development**  
399 Washington Street  
5th Floor  
Boston, MA 02108

**Telephone: 617-727-7047 or  
617-727-1933 or 800-425-0004**  
**Fax: 617-727-7568**

**Internet: [www.mass.gov/dos](http://www.mass.gov/dos)**

## **Division of Professional Licensure**

Includes 32 boards of professional licensure that license and maintain lists of registered architects, engineers, land surveyors, and landscape architects.

**Division of Professional Licensure**  
239 Causeway Street  
Boston, MA 02114

**Telephone: 617-727-3074**

**Fax: 617-727-2197**

**Internet: [www.mass.gov/reg](http://www.mass.gov/reg)**

## **School Building Assistance Program**

Disburses funds to cities, towns and regional school districts to finance or refinance costs of approved school projects. Collects and maintains data on all public school facilities in the Commonwealth. Conducts school surveys to ascertain capital needs.

**Massachusetts**  
**School Building Authority**  
3 Center Plaza, Suite 430  
Boston, MA 02108

**Telephone: 617-720-4466**

**Fax: 617-720-5260**

**Internet: [www.mass.gov/msba](http://www.mass.gov/msba)**

## ***Appendix B: Statutory Forms***

---

### **Forms**

Form for General Bid

B-3

Form for Sub-Bid

B-5

This page intentionally left blank.

## FORM FOR GENERAL BID

To the Awarding Authority:

A. The Undersigned proposes to furnish all labor and materials required for \_\_\_\_\_ (project) in \_\_\_\_\_, Massachusetts, in accordance with the accompanying plans and specifications prepared by \_\_\_\_\_ (name of architect or engineer) for the contract price specified below, subject to additions and deductions according to the terms of the specifications.

B. This bid includes addenda numbered \_\_\_\_\_

C. The proposed contract price is \_\_\_\_\_ dollars (\$\_\_\_\_\_).

For alternate No. \_\_\_\_\_ Add \$\_\_\_\_\_; Subtract \$\_\_\_\_\_

(Repeat preceding line for each alternate)

D. The subdivision of the proposed contract price is as follows:

Item 1. The work of the general contractor, being all work other than that covered by Item 2. \$\_\_\_\_\_

Item 2. Sub-bids as follows: –

Sub-trade	Name of Sub-bidder	Amount	Bonds required, indicated by "Yes" or "No"
_____	_____	\$ _____	_____
_____	_____	\$ _____	_____
	Total of Item 2	\$ _____	_____

The undersigned agrees that each of the above named sub-bidders will be used for the work indicated at the amount stated, unless a substitution is made. The undersigned further agrees to pay the premiums for the performance and payment bonds furnished by sub-bidders as requested herein and that all of the cost of all such premiums is included in the amount set forth in Item 1 of this bid.

The undersigned agrees that if he is selected as general contractor, he will promptly confer with the awarding authority on the question of sub-bidders; and that the awarding authority may substitute for any sub-bid listed above a sub-bid filed with the awarding authority by another sub-bidder for the sub-trade against whose standing and ability the undersigned makes no objection; and that the undersigned will use all such finally selected sub-bidders at the amounts named in their respective sub-bids and be in every way as responsible for them and their work as if they had been originally named in this general bid, the total contract price being adjusted to conform thereto.

**FORM FOR GENERAL BID – PAGE 2**

E. The undersigned agrees that, if he is selected as general contractor, he will within five days, Saturdays, Sundays and legal holidays excluded, after presentation thereof by the awarding authority, execute a contract in accordance with the terms of this bid and furnish a performance bond and also a labor and materials or payment bond, each of a surety company qualified to do business under the laws of the commonwealth and satisfactory to the awarding authority and each in the sum of the contract price, the premiums for which are to be paid by the general contractor and are included in the contract price.

The undersigned hereby certifies that he is able to furnish labor that can work in harmony with all other elements of labor employed or to be employed on the work and that he will comply fully with all laws and regulations applicable to awards made subject to section forty-four A.

The undersigned further certifies under the penalties of perjury that this bid is in all respects bona fide, fair and made without collusion or fraud with any other person. As used in this subsection the word "person" shall mean any natural person, joint venture, partnership, corporation or other business or legal entity. The undersigned further certifies under penalty of perjury that the said undersigned is not presently debarred from doing public construction work in the commonwealth under the provisions of section twenty-nine F of chapter twenty-nine, or any other applicable debarment provisions of any other chapter of the General Laws or any rule or regulation promulgated thereunder.

Date \_\_\_\_\_

\_\_\_\_\_  
(Name of General Bidder)

By \_\_\_\_\_  
(Name of Person Signing Bid and Title)

\_\_\_\_\_  
(Business Address)

\_\_\_\_\_  
(City and State)

**FORM FOR SUB-BID**

To all General Bidders Except those Excluded:

A. The undersigned proposes to furnish all labor and materials required for completing, in accordance with the hereinafter described plans, specifications and addenda, all the work specified in Section No. \_\_\_\_\_ of the specifications and in any plans specified in such section, prepared by \_\_\_\_\_ (name of architect or engineer) for \_\_\_\_\_ (project) in \_\_\_\_\_ (city or town), Massachusetts, for the contract sum of \_\_\_\_\_ dollars (\$\_\_\_\_\_).

For Alternate No. \_\_\_\_\_; Add \$\_\_\_\_\_ Subtract \$\_\_\_\_\_

[Repeat preceding line for each alternate]

B. This sub-bid includes addenda numbered \_\_\_\_\_

C. This sub-bid

may be used by any general bidder except:

\_\_\_\_\_  
\_\_\_\_\_

may only be used by the following general bidders:

\_\_\_\_\_  
\_\_\_\_\_

[To exclude general bidders, insert "X" in one box only and fill in blank following that box. Do not answer C if no general bidders are excluded.]

D. The undersigned agrees that, if he is selected as a sub-bidder, he will, within 5 days, Saturdays, Sundays and legal holidays excluded, after presentation of a subcontract by the general bidder selected as the general contractor, execute with such general bidder a subcontract in accordance with the terms of this sub-bid, and contingent upon the execution of the general contract, and, if requested so to do in the general bid by the general bidder, who shall pay the premiums therefor, or if prequalification is required pursuant to section 44D 3/4, furnish a performance and payment bond of a surety company qualified to do business under the laws of the commonwealth and satisfactory to the awarding authority, in the full sum of the subcontract price.

**E. FORM FOR SUB-BID – PAGE 2**

F. The names of all persons, firms and corporations furnishing to the undersigned labor or labor and materials for the class or classes or part thereof of work for which the provisions of the section of the specifications for this sub-trade require a listing in this paragraph, including the undersigned if customarily furnished by persons on his own payroll and in the absence of a contrary provision in the specifications, the name of each such class of work or part thereto and the bid price for such class of work or part thereof are:

Name	Class of Work	Bid price
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____

[Do not give bid price for any class or part thereof furnished by undersigned.]

G. The undersigned agrees that the above list of bids to the undersigned represents bona fide bids based on the hereinbefore described plans, specifications and addenda and that, if the undersigned is awarded the contract, they will be used for the work indicated at the amounts stated, if satisfactory to the awarding authority.

H. The undersigned further agrees to be bound to the general contractor by the terms of the hereinbefore described plans, specifications, including all general conditions stated therein, and addenda, and to assume toward him all the obligations and responsibilities that he, by those documents, assumes toward the owner.

I. The undersigned offers the following information as evidence of his qualifications to perform the work as bid upon according to all the requirements of the plans and specifications: –

1. Have been in business under present business name \_\_\_\_\_ years.

2. Ever failed to complete any work awarded? \_\_\_\_\_

3. List one or more recent buildings with names of the general contractor and architect on which you served as a sub-contractor for work of similar character as required for the above-named building.

	Building	Architect	General Contractor	Amount of Contract
(a)	_____	_____	_____	_____
(b)	_____	_____	_____	_____
(c)	_____	_____	_____	_____

4. Bank reference \_\_\_\_\_

**FORM FOR SUB-BID – PAGE 3**

J. The undersigned hereby certifies that he is able to furnish labor that can work in harmony with all other elements of labor employed or to be employed on the work and that he will comply fully with all laws and regulations applicable to awards of subcontracts subject to section forty-four F.

The undersigned further certifies under penalties of perjury that this sub-bid is in all respects bona fide, fair and made without collusion or fraud with any other person. As used in this subsection the word "person" shall mean any natural person, joint venture, partnership, corporation or other business or legal entity. The undersigned further certifies under penalty of perjury that the said undersigned is not presently debarred from doing public construction work in the commonwealth under the provisions of section twenty-nine F of chapter twenty-nine, or any other applicable debarment provisions of any other chapter of the General Laws or any rule or regulation promulgated thereunder.

Date \_\_\_\_\_

\_\_\_\_\_  
(Name of Sub-bidder)

By \_\_\_\_\_  
(Title and Name of Person Signing Bid)

\_\_\_\_\_  
(Business Address)

\_\_\_\_\_  
(City and State)

This page intentionally left blank.

# **Appendix C: Code of Conduct for Public Employees**

## **Introduction**

The Massachusetts conflict of interest law, Chapter 268A of the Massachusetts General Laws, prohibits public employees from soliciting or accepting gratuities of substantial value for or because of their official duties. The law covers all state, county, and municipal employees, as well as employees of independent state authorities, districts, and commissions. The State Ethics Commission, which enforces the conflict of interest law, is authorized to impose civil fines of up to \$2,000 for each violation of the law and to recover damages. The law also carries criminal penalties, including fines and terms of imprisonment.

The conflict of interest law encourages public agencies to establish and enforce standards of conduct. This Code of Conduct is designed to supplement the conflict of interest law by setting standards of conduct for all employees with respect to relationships with individuals and entities with whom the public sector conducts official business. The purpose of this Code is to preserve the integrity of these relationships and to maintain the highest level of public confidence in the impartial operation of government.

This Code prohibits certain activities that could result in a conflict of interest or create the appearance of a conflict of interest. Exceptions to the Code's prohibitions are limited to specific circumstances in which an overriding public interest is served by the exception or in which the relationship in question is primarily personal.

The Massachusetts Office of the Inspector General has developed this Code for use by public agencies throughout the Commonwealth. Five major areas are addressed by this Code: gifts and gratuities, reimbursement of travel expenses, honoraria, testimonial and retirement functions, and groundbreaking and dedication ceremonies. This Code is not all-inclusive. It does not regulate every conceivable situation in which a public employee may be offered gifts or other items of monetary value. It does not address other activities prohibited by the conflict of interest law, such as bribery, participation in official matters affecting one's financial interests or those of one's family or business, and misuse of one's official position. For information or advice on matters not covered by this Code, guidance may be sought from local counsel and from the State Ethics Commission. As used in this Code, "we" and "our" refer to the agency adopting this Code; "you" refers to the agency's employees or members.

**(Revised 8/98)**

This page left intentionally blank.

# Code of Conduct

## I. Gifts and Gratuities

### A. General Restrictions

You may not solicit or accept, directly or indirectly, any gift, gratuity, favor, entertainment, loan, or other item of monetary value from a person, public agency, or private entity you know or have reason to know:

1. Has had, has, or is seeking to obtain contractual or other business or financial relations with us;
2. Conducts or is seeking to conduct business or other activities that are regulated or monitored by us; or
3. Has interests that may be or may give the reasonable impression of being substantially affected by the performance or nonperformance of your official duties.

*Example: You may not accept a restaurant lunch from a consultant employed by a firm under contract to us.*

*Example: You may not accept a Christmas gift from a vendor seeking business with us.*

*Example: You may not accept a ticket to a sporting event from an individual whose business we regulate.*

### B. Exceptions

1. You may accept gifts in cases involving a family or personal relationship when the circumstances make clear that the relationship is the motivation for the gift.
2. You may accept nonalcoholic beverages, such as coffee or tea, from public or private entities.
3. You may attend and accept food and beverages at seasonal or celebratory functions, such as Christmas, birthday, or retirement parties, hosted by public entities.
4. You may accept food and beverages in connection with attendance at working meetings held in the office of a public entity.
5. You may accept food and beverages in connection with attendance at widely attended meetings or gatherings held by a private trade or

professional association in an office or other business setting when you are attending the meeting or gathering in your official capacity for informational, educational, or other similar purposes.

*Example: You may accept a modest meal served in a restaurant function room in conjunction with an informational, widely attended meeting hosted by a professional association.*

*Example: You may not accept food and beverages at a hospitality suite hosted by one or more private firms.*

6. You may accept loans from banks or other financial institutions to finance proper and usual customer activities, such as home mortgage loans and automobile loans. If the bank or financial institution is an entity with which you have or might reasonably expect to have dealings in your official capacity, you must be able to demonstrate that the loan has been granted on current customary terms; you must also provide written disclosure of the loan to your supervisor. The previous sentence does not apply if your duties or anticipated duties with respect to the bank are limited to obtaining third-party records.

7. You may accept unsolicited advertising or promotional materials of nominal value.

*Example: You may accept an unsolicited, inexpensive promotional pen or calendar.*

*Example: You may not accept a leather portfolio.*

## **II. Reimbursement of Travel Expenses**

### **A. General Restrictions**

You may not accept reimbursement for travel expenses from a person or entity who falls within the scope of Section IA, above.

### **B. Exceptions**

1. If you deliver a speech or participate in a conference, we may elect to accept reimbursement from the sponsor of the speech or conference for your actual and necessary travel expenses. In this case, we – not the sponsor – will pay or reimburse you in accordance with our travel policy, and bill the sponsor for the appropriate amount.

2. If we determine that employee travel is a necessary component of a vendor evaluation process, we may elect to require competing vendors to reimburse us for actual and necessary travel expenses incurred in connection with the evaluation. In this case, we – not the vendors – will pay

or reimburse you in accordance with our travel policy. The publicly advertised request for proposals or invitation for bids must set forth our procedures for calculating and billing all competing vendors for the appropriate amounts.

### **III. Honoraria**

#### **A. General Restrictions**

1. You may not accept honoraria or other monetary compensation from an outside source in return for a public appearance, speech, lecture, publication, or discussion unless all of the following conditions are met:
2. Preparation or delivery of the public appearance, speech, lecture, publication, or discussion is not part of your official duties;
3. Neither the sponsor nor the source, if different, of the honorarium is a person or entity who falls within the scope of Section IA, above;
4. You do not use office supplies or facilities not available to the general public in the preparation or delivery of the public appearance, speech, lecture, publication, or discussion; and
5. You do not take office time for the preparation or delivery of the public appearance, speech, lecture, publication, or discussion.

*Example: You may accept an honorarium for a magazine article prepared outside working hours.*

*Example: You may not accept an honorarium for delivering a speech in your official capacity.*

#### **B. Exceptions**

1. You may accept awards, certificates, or other items of nominal value given for a speech, participation in a conference, or a public contribution or achievement.

*Example: You may accept a framed certificate of appreciation.*

*Example: You may not accept an engraved pewter bowl.*

## IV. Testimonial and Retirement Functions

### A. General Restrictions<sup>85</sup>

1. You may not solicit contributions, sell tickets, or otherwise seek or accept payment for a testimonial or retirement function, or any function having a similar purpose, held for yourself or any other employee, if the contributor is a person or entity who falls within the scope of Section IA, above, and the admission price or payment exceeds the actual per-person cost of food and beverages served at the function.

*Example: You may not offer or sell tickets to a testimonial dinner to contractors doing business with us if the ticket price includes a contribution toward a gift.*

2. You may not accept food, beverages, or gifts at any testimonial or retirement function, or any function having a similar purpose, if such food, beverages, or gifts are paid for or subsidized by a person or entity who falls within the scope of Section IA, above.

*Example: You may not accept a free admission to a retirement luncheon if the cost of your admission is paid, directly or indirectly, by one or more contractors doing business with us.*

*Example: You may not accept a retirement gift if the gift was paid for with the proceeds of tickets purchased by contractors doing business with us.*

### B. Exceptions

None.

## V. Groundbreaking and Dedication Ceremonies

### A. General Restrictions

1. You may not request or require any person or entity who falls within the scope of Section IA, above, to sponsor or contribute to any groundbreaking ceremony, dedication ceremony, or similar occasion involving a public works project. If we determine that a groundbreaking or dedication ceremony for a public works project serves a legitimate public purpose, we may elect to fund such a ceremony. We may plan and pay for the

---

<sup>85</sup> M.G.L. c. 268, §9A prohibits anyone from selling, offering for sale, or accepting payment for tickets to, or soliciting or accepting contributions for, testimonial dinners or functions held on behalf of anyone employed by a law enforcement, regulatory, or investigatory agency of the Commonwealth or any political subdivision of the Commonwealth. The law carries a maximum fine of \$500.

ceremony. Alternatively, we may include the ceremony-related services in the construction bid specifications for the public works project.

2. You may not accept food, beverages, or gifts at any groundbreaking ceremony, dedication ceremony, or similar occasion involving a public works project if the food, beverages, or gifts are paid for or subsidized by a person or entity who falls within the scope of Section IA, above.

**B. Exceptions**

None.

This page intentionally left blank.

## ***Appendix D: Model RFP for Modular Construction***

---

This appendix includes an outline and recommended contents for a modular construction request for proposals (RFP) as well as a model RFP that you may tailor to your jurisdiction's needs. Chapter VIII of this manual contains additional information on procuring modular construction.

This page intentionally left blank.

## Modular Construction RFP: Recommended Outline and Contents

### Part I. General Information

It is appropriate to include the following information in this section:

- A description of the project in general terms. The building program<sup>86</sup> should be summarized in this section, and the program itself should be appended to the RFP. The program summary will include, at a minimum, a description of the space needed, its function, and minimum area. The program or study will generally include site drawings showing the proposed location of the modular buildings in relationship to existing buildings and to existing utility services to which the new work can be connected, as well as the results of any surveys or tests performed on the site.
- A brief explanation of the procedure for evaluating responsive proposals and statement that the evaluation will consider only the criteria contained in the RFP.
- The rules for modification or withdrawal of proposals. Under the modular procurement law, an offeror may correct, modify, or withdraw a proposal in writing prior to the time set for opening proposals. After the proposals have been opened, an offeror may not change the price, or any other provisions of the proposal in a manner that is prejudicial to the awarding authority or to fair competition. [M.G.L. c. 149, §44E(4)]
- A statement that all terms and conditions of the procurement are contained in the RFP and that the contract awarded will be subject to these terms.
- A statement that the awarding authority reserves the right to reject all proposals, if it is in the public interest to do so.
- The deadline for the submission of proposals, the maximum time for acceptance of a proposal, and the maximum number of days for the completion of the required work by the selected contractor upon execution of the contract.
- Information on where to direct questions about the RFP and the deadline for submitting questions.

---

<sup>86</sup> The development of the program is part of the planning stage of a building project. The program is discussed in more detail in Chapter III.

## **Part II. Proposal Submission Requirements**

Instructions for proposal submission should include:

- The place where proposals are to be delivered, the time and date by which proposals must be received, the time set for opening proposals, and the maximum time for proposal acceptance by the awarding authority. [M.G.L. c. 149, §44E(4)]
- A statement that late proposals will not be considered.
- The times, dates, and places of any preproposal informational meetings and site visits, and a statement clarifying whether these meetings and site visits are required for all offerors.
- A statement that every proposal must be in two parts, submitted in clearly marked, separate, sealed envelopes: non-price proposal and price proposal. [M.G.L. c. 149, §44E(4)]
- A list of all documents that must be included in the envelopes containing the non-price and price information. To facilitate the evaluation of the proposals, you may want to provide standard formats for the submission of the non-price proposal and the price proposal.

### *Non-Price Proposal Submission Requirements*

The RFP should require proposers to include the following information in the non-price proposal:

- A Certificate of Eligibility in Modular/Prefabricated Construction and an Update Statement. [M.G.L. c. 149, §44E(4)]
- Proof of certification by the State Board of Building Regulations and Standards. This certification shows that the manufacturer meets state building code requirements.
- Plans and specifications for the proposed modular buildings. Each offeror should be required to submit drawings that show the architectural floor plans and factory details of the buildings; their interconnecting areas such as corridors, passageways, stairs, and ramps; the proposed installation plan; and all manufacturer's specifications governing the materials, equipment, and fixtures used in the buildings.
- A complete description of all warranties that apply to the building, its equipment and components, and the installation work.

- Non-collusion certification: i.e., the offeror's certification that the proposal is made without collusion or fraud. A standard form should be included in the RFP for such certification.
- Labor certification. If the contractor is required to perform any work in connection with the site preparation, site assembly, or installation of modular units, the offeror must certify that he/she is able to furnish labor that can work in concert with other elements of labor employed at the installation site. [M.G.L. c. 149, §44E(4)]
- Tax certification. Each offeror must certify compliance with state tax laws, reporting of employees and contractors, and withholding and remitting of child support. [M.G.L. c. 62C, §49A]
- Foreign corporation registration. Any out-of-state corporation must submit a certificate of registration from the Massachusetts Secretary of the Commonwealth. [M.G.L. c. 30, §39L]
- A statement that the offeror will complete the project by a stated deadline. Alternatively, each offeror can be required to submit a proposed project timetable that ensures completion by the deadline.
- The offeror's certification of where the proposed modular units are or will be manufactured: within Massachusetts, outside Massachusetts but within the U.S., or outside the U.S. [M.G.L. c. 149, §44E(4)]
- Certification of compliance with building codes. Each offeror should certify that the proposed plans comply with all applicable building codes.
- Letter of transmittal. Each offeror should submit a statement signed by an individual certifying that he/she is authorized to bind the offeror contractually, and that in the event that the offeror is selected for a contract award, the offeror will execute a contract in accordance with all terms stated in the RFP and will furnish to the awarding authority a payment bond and a performance bond, each in the sum of the contract price, as required by M.G.L. c. 149, §44E(4).

#### *Price Proposal Submission Requirements*

The RFP should require proposers to include the following information in the price proposal:

- A firm price proposal that states a total fixed project price. This proposal should contain the offeror's name, address, and telephone number as well as the title of the person submitting the proposal. It must be signed by an individual authorized to bind the offeror.

- Bid deposit. While a bid deposit is not mandated by law, the awarding authority may choose to require a bid deposit. If you choose to do so, you must require the bid deposit from all offerors. The RFP must specify the amount or percentage of the contract price required and the form of the deposit (e.g., surety bond, cash, certified check, or cashier's check). If the bid deposit is based on a percentage of the contract price, you should require proposers to submit the bid deposit with the price proposal rather than with the non-price proposal.

### **Part III. Purchase Description/Scope of Services**

This section should include preliminary plans and specifications and the scope of services. Preliminary plans and specifications should describe the proposed project in sufficient detail to permit proposers to submit meaningful, competitive proposals. The level of design detail will likely resemble a schematic design. The specifications should avoid the use of proprietary brand names or other unnecessarily restrictive terms. Whenever possible, specifications for construction materials, fixtures, and systems should be stated in terms of testing standards that measure qualities such as strength, durability, capacity, flammability, and R-value.<sup>87</sup>

This section of the RFP should also specify the scope of services to be included in the modular construction contract. You will have to decide at the outset whether to include site preparation and installation work in the RFP, to contract separately for some or all of this work under the construction bid laws, or to have the work performed by qualified employees. This section of the RFP should fully describe the contractor's responsibilities with respect to preparing the site; constructing foundations, ramps, stairs, and connecting corridors; assembling and installing the modular units at the site; attaching the units to existing utilities; obtaining all necessary plan approvals and permits, including building permits, permits required for transporting modular units from the factory to the site, and occupancy permits; removing all debris from the site upon completion; and any other required services. If the RFP calls for the lease of modular buildings, the scope of services should include the contractor's responsibilities for removal of the units at the end of the lease term and restoration of the site to its original condition.

---

<sup>87</sup> R-value, or resistance value, is the measure of the resistance of a building material to heat flow; the higher the R-value, the greater the resistance.

## **Part IV. Evaluation Criteria**

This section must include criteria for determining the acceptability of a proposal based on quality of materials, workmanship, results of inspections and tests, suitability for a particular purpose, and all other measures to be used in the evaluation process.

In developing your evaluation criteria, avoid the use of vague standards like “general quality of construction and appearance” or “reasonableness of technical approach,” which provide little guidance to offerors or to evaluators. Proposals should be compared and evaluated on the basis of specific and concrete factors that are closely related to your project requirements. We recommend using evaluation criteria such as the following:

- The contractor’s qualifications to perform the work, to be evaluated on the basis of the contractor’s performance on other modular projects, and
- The quality of the proposed modular building.

## **Part V. Contract Terms**

The RFP must contain all of the contract terms and provisions applicable to the modular procurement. Your local attorney can assist you in developing a modular construction contract, which will resemble a conventional construction contract in most respects. The contract will be a complex document, and a discussion of all of the terms is beyond the scope of this manual. Nevertheless, you should be aware of the following specific provisions:

**Prevailing wages and hiring preferences.** The modular procurement law exempts the work involved in the manufacture of modular buildings from the state laws requiring payment of prevailing wage rates and hiring preferences for veterans and residents of Massachusetts. [M.G.L. c. 149, §§26-27G] However, these exemptions do not apply to the work performed on modular buildings at the building site. Any contract that includes site work (such as construction of foundations, attachment to utilities, or installation and assembly of modular units) must contain provisions regarding these legal requirements. Note that the awarding authority must obtain the prevailing wage rates applicable to the project from the Department of Labor and

Workforce Development prior to issuing the RFP, and these rates should be included in the RFP.

**Adjustments.** The contract is subject to certain statutory provisions governing price adjustment. [M.G.L. c. 30, §§39N-O] The contract should also include terms governing the adoption and pricing of change orders.

**Performance and payment bonds.** The contract must include a provision requiring the selected offeror to furnish the awarding authority with a payment bond and a performance bond, each in the sum of the contract price, issued by a surety qualified to issue bonds in the Commonwealth and satisfactory to the awarding authority. [M.G.L. c. 149, §44E]

**Foreign corporations.** Any contractor incorporated outside of Massachusetts must certify compliance with certain corporation laws. The awarding authority must notify the Secretary of the Commonwealth and the Department of Revenue whenever a contract is awarded to an out-of-state corporation. [M.G.L. c. 30, §39L]

**Payment procedures.** The contract must contain statutory language governing payment procedures. [M.G.L. c. 30, §39K]

**Financial reporting.** Contractors must agree to keep certain financial records, make them available for inspection by certain state agencies, and file periodic financial reports. [M.G.L. c. 30, §39R]

**Auditor's certification.** For a city or town, the contract must contain a certification by the municipal auditor or accountant stating that appropriated funds are available for the contract and that the official signing the contract has been authorized to do so. The certification should also identify any other municipal officials who have been authorized to make decisions under the contract, such as approval of change orders and invoices. [M.G.L. c. 44, §31C]

**Liability insurance.** The awarding authority may either require the contractor to provide project insurance, covering both the contractor and the awarding authority, or it may arrange to insure itself separately.

**Tax compliance.** Any person contracting with the Commonwealth of Massachusetts or any subdivision of the Commonwealth, including a city, town or district, must certify in writing that he or she has complied with state tax laws, reporting of employees and contractors, and withholding and remitting of child support. [M.G.L. c. 62C, §49A]

**Liquidated damages.** You may want to include a provision for imposing liquidated damages<sup>88</sup> on the contractor for late completion.

---

<sup>88</sup> Liquidated damages represent the dollar damages your jurisdiction will incur in the event of a breach of contract.

This page intentionally left blank.

This document is a model RFP for Modular Building Construction. The [bracketed] information is provided as instructions and should not form the text of an RFP.

## Model Request for Proposals for Modular Building Construction

### Part I. General Information

Pursuant to M.G.L. c. 149, §44E(4), \_\_\_\_\_ requests proposals from qualified contractors for the design, prefabrication, site assembly/installation, and all services required to complete and deliver \_\_\_\_\_ modular building units ready for use and occupancy.

[This section will include a description of the space needed, its function, minimum area, and any special requirements. This section will also refer to the program, which should be appended to the RFP.]

All proposals are to be submitted no later than the deadline stated in Part II, "Proposal Submission Requirements," and the non-price proposals will be opened at that time. Every proposal must be in two parts, submitted in two separate, clearly marked, sealed envelopes: 1) non-price proposal, and 2) price proposal, in accordance with all submission requirements set forth in Part II of this RFP. **Late proposals will not be accepted.**

Each proposal submitted in response to this RFP is subject to all of the contract terms set forth in Part V, "Contract Terms," and any contract awarded will incorporate all of these contract terms.

\_\_\_\_\_ will consider only responsive proposals from responsible contractors for a contract award. A responsive proposal is a proposal that complies with requirements stated in Part II and Part III of this Request for Proposals (RFP). A responsible contractor is a contractor that demonstrably possesses the skill, ability, and integrity necessary to faithfully perform the work called for in this procurement.

Each responsive proposal from a responsible contractor will be evaluated solely according to the criteria set forth in Part IV of this RFP, "Evaluation Criteria." Each non-price proposal will be assigned a rating of *highly advantageous*, *advantageous*, *not advantageous*, or *unacceptable* with respect to each criterion, and the reasons for each

**This document is a model RFP for Modular Building Construction. The [bracketed] information is provided as instructions and should not form the text of an RFP.**

rating will be set forth in writing. A composite rating for each non-price proposal will be set forth in writing, along with the reasons for the rating. The evaluation committee will determine the most advantageous proposal from a responsible and responsive offeror, taking into consideration the non-price proposal ratings and proposal price. If the contract is awarded to an offeror that did not submit the lowest price, the evaluation committee will set forth a written explanation of the reasons for the award.

In determining the most advantageous proposal, \_\_\_\_\_ shall give preference, other considerations being equal, first to modular buildings manufactured within Massachusetts, and second to modular buildings manufactured outside of Massachusetts but within the United States.

Proposals will not be opened publicly, but will be opened in the presence of one or more witnesses at the time stated below. The contents of proposals shall remain confidential, and shall not be disclosed to competing offerors until the completion of the evaluation or until the maximum time for acceptance, as stated below. At the opening of proposals, \_\_\_\_\_ shall prepare a register of proposals for public inspection.

An offeror may correct, modify, or withdraw a proposal by written notice received in the office designated herein for proposal submission prior to the time set for the opening of proposals. After the opening, a contractor may not change the price or any other provision of the proposal in a manner prejudicial to the interest of \_\_\_\_\_ or to fair competition. \_\_\_\_\_ shall waive minor informalities or allow the offeror to correct them. If a mistake and the intended offer are clearly evident on the face of the document, \_\_\_\_\_ shall correct the mistake to reflect the intended correct offer and so notify the offeror in writing, and the offeror may not withdraw the offer. \_\_\_\_\_ may permit an offeror to withdraw an offer if a mistake is evident on the face of the document but the intended correct offer is not similarly evident.

\_\_\_\_\_ reserves the right to cancel this procurement at any time before a contract is executed and approved, in which event \_\_\_\_\_ will reject all proposals received in response to this RFP.

**This document is a model RFP for Modular Building Construction. The [bracketed] information is provided as instructions and should not form the text of an RFP.**

\_\_\_\_\_ shall award a contract by written notice to the selected offeror by no later than \_\_\_\_\_, unless the time for contract award is extended by mutual agreement between \_\_\_\_\_ and the selected offeror.

Work is to start \_\_\_ days from the date of notification of award under this RFP, and the contractor's performance under the contract must be completed within \_\_\_ days from the date of notification of award.

All inquiries from prospective offerors concerning this RFP must be submitted in writing and addressed to \_\_\_\_\_. Inquiries must be received no later than \_\_\_\_\_. All responses to questions shall be in writing, will be simultaneously distributed to all recipients of the RFP, and will be made available to all interested parties.

## **Part II. Proposal Submission Requirements**

[This section will include instructions for submitting a responsive proposal. It should list all documents and information that each proposal must contain.]

All proposals are to be delivered to \_\_\_\_\_, no later than \_\_\_ a.m. on \_\_\_\_\_. Non-price proposals will be opened at that time. \_\_\_\_\_ will select a contractor no later than \_\_\_\_\_. **Late proposals will not be accepted.**

[If a mandatory pre-proposal meeting and/or site visit is required, the following information must be provided.]

A pre-proposal meeting will be held at \_\_\_\_\_ on \_\_\_\_\_ at \_\_\_ a.m.

Attendance at this pre-proposal meeting is mandatory, and any proposal submitted by an offeror who was not present at this meeting will be rejected as nonresponsive.

All offerors are required to visit the site before submitting a proposal. Submission of a proposal constitutes an acknowledgement that the offeror has examined the site and is familiar with existing conditions.

Every proposal must be in two parts, submitted in separate, clearly marked, sealed envelopes: 1) non-price proposal and 2) price proposal.

This document is a model RFP for Modular Building Construction. The [bracketed] information is provided as instructions and should not form the text of an RFP.

The following information must appear on each envelope:

Contractor's Name:  
Project Name:  
Either "Non-Price Submission" or "Price Submission"

The **non-price proposal** must consist of the following documents:

1. Current Certificate of Eligibility for Modular/Prefabricated Construction.
2. Contractor Update Statement.
3. Certification by the State Board of Building Regulations and Standards that the manufacturer of the modular buildings meets state building code requirements.
4. A set of detailed plans and specifications for the proposed modular buildings. Proposals must include all manufacturer's specifications governing the materials and equipment used in the modular buildings. The plans submitted with each proposal must provide all drawings necessary to portray to \_\_\_\_\_ all pertinent design details of the modular buildings and the passageways connecting them to existing buildings, including:
  - an installation plan showing the proposed accurate location of the modular buildings on the property; an indication of the locations on the modular buildings at which utility service connections are proposed; and locations of existing utility services to which the proposed modular buildings can be connected.
  - mounting plans and details.
  - architectural type floor plans.
  - factory plans and details of passageway elements and entrance ramps.
  - factory plans and details of manufacture of structural elements including floors, walls, and roof.
  - factory plans and details of service appurtenances including electrical, plumbing, HVAC, fire protection, and communications systems. Such details must include all light fixtures, outlets, switches, controls, smoke detectors, and location and capacity/rating of all equipment, fixtures, and appliances.
  - factory details of windows and doors.
  - factory finish details for wall finishes, floor finishes, exterior skin finish, and trim.
5. The complete terms of all warranties provided by the manufacturer or by the offeror relative to the design, manufacture, and installation of the modular buildings, including both general warranties and special warranties associated with particular components and equipment.
6. Certification of financial interest disclosure and of non-collusion, signed and submitted on Form \_\_\_\_\_ appended to this RFP.

**This document is a model RFP for Modular Building Construction. The [bracketed] information is provided as instructions and should not form the text of an RFP.**

7. Certification that the offeror can furnish labor that can work in concert with other elements of labor employed at the installation site, signed and submitted on Form \_\_\_\_\_ appended to this RFP.
8. Certification of compliance with the registration requirements for foreign corporations, under M.G.L. c. 30, §39L, signed and submitted on Form \_\_\_\_\_ appended to this RFP.
9. Certification of compliance with state tax laws, reporting of employees and contractors, and withholding and remitting of child support, as required by M.G.L. c. 62C, §49A, signed and submitted on Form \_\_\_\_\_ appended to this RFP.
10. Certification that the proposed modular buildings will be either (1) manufactured within Massachusetts, or (2) manufactured outside of Massachusetts but within the United States, or (3) manufactured outside of the United States, signed and submitted on Form \_\_\_\_\_ appended to this RFP.
11. Certification that the proposed modular building plans comply with all building codes.
12. Letter of transmittal, signed by an individual authorized to bind the offeror contractually, certifying that the offeror will, if accepted for a contract award, execute a contract in accordance with the terms of this proposals within \_\_\_ working days of the notice of award and will furnish to \_\_\_\_\_ a payment bond and a performance bond, each in the sum of the contract price, as required by M.G.L. c. 149, §44E, signed and submitted on Form \_\_\_\_\_ appended to this RFP.
13. Certification that the offeror, if awarded a contract, will guarantee completion of all work required within \_\_\_ days from the date of notification of award, signed and submitted on Form \_\_\_\_\_ appended to this RFP.

The **price proposal** must consist of the following documents:

1. A firm, fixed price that includes the furnishing of all materials, services, labor, performance and payment bonds, insurance, and other costs incurred in the performance the contract, signed by an individual authorized to bind the offeror contractually, and submitted on Form \_\_\_\_\_ appended to this RFP.
2. A bid deposit, in the amount of \_\_\_\_\_% of the total contract price, in the form of \_\_\_\_\_ [if required by the awarding authority].

### **Part III. Purchase Description/Scope of Services**

The contractor's responsibilities will include all of the following:

**This document is a model RFP for Modular Building Construction. The [bracketed] information is provided as instructions and should not form the text of an RFP.**

[This section will refer to the preliminary plans and specifications, which should be appended to the RFP. This section will also completely describe the scope of the work under the contract, which may include some or all of the following work:

- design and fabrication of modular units in accordance with all specifications set forth in this RFP and all program requirements and applicable building codes.
- site design in accordance with all specifications set forth in this RFP and all program requirements and applicable building codes.
- all site clearance and site preparation work, including grading, tree and stump removal, and relocation of power lines and underground utilities, if required.
- all excavation work and construction of foundations in accordance with the plans and specifications set forth in this RFP.
- delivery of all modular units and construction materials to the construction site.
- acquisition of all permits required for the transportation of modular units from the factory to the construction site.
- acquisition of all required building permits.
- complete installation and assembly of modular units in accordance with all plans and specifications set forth in this RFP and all applicable building codes.
- connection of all electrical, telecommunication, water, and sanitary service in accordance with the plans and specifications set forth in this RFP.
- acquisition of all use and occupancy permits.
- finish grading and removal of all debris from the site.
- all repairs and corrective work required by applicable warranties.

Specifications should be prepared with close attention to the RFP requirements and state building code requirements for:

- foundations, or concrete footings, anchoring and skirting.
- exterior stairs, entrance ramps, and corridors.
- floors: joists, bottom board, insulation, subflooring, weight load capacity, and floor coverings.

**This document is a model RFP for Modular Building Construction. The [bracketed] information is provided as instructions and should not form the text of an RFP.**

- walls: studs, insulation, composition, siding, weight load capacity, wind load capacity, ceiling height, sound proofing, and interior finishes.
- roof: composition, sheathing, framing, weight load capacity, pitch, insulation, eaves and downspouts, and ceiling materials.
- doors: number, size, construction of frames, materials, weatherstripping, and lockset and hardware details.
- windows: number, size, construction of frames, glazing, weatherstripping, screens, and lock and hardware details.
- HVAC systems: functional requirements for and description of heating, ventilation, and cooling systems.
- plumbing: requirements for supply, waste, and vent lines, and fittings; size, type, and capacity of water heaters; and description of plumbing fixture requirements, including sinks, water closets, and water fountains.
- electrical systems: service requirements, capacity, and outlets.
- lighting: illumination requirements and type of fixtures.
- fire protection: alarms, smoke detectors, and sprinkler systems.
- miscellaneous: communication systems, exit signs, tack boards, chalkboards, and special features.]

#### **Part IV. Evaluation Criteria**

Non-price proposals that meet all of the submission requirements in Part II of this RFP will be evaluated and rated solely on the basis of the evaluation criteria contained in this section. Each responsive non-price proposal will be assigned a rating for each of the following evaluation criteria:

[This section must include all criteria by which proposals will be evaluated. The following categories of criteria are recommended for a typical modular procurement.]

1. The offeror's qualifications to perform the work, to be evaluated on the basis of performance on past and current projects. Projects will be evaluated according to:
  - Quality of work and compliance with construction specifications.
  - Adherence to project budget.
  - Compliance with project schedule.

**This document is a model RFP for Modular Building Construction. The [bracketed] information is provided as instructions and should not form the text of an RFP.**

2. The quality of the proposed manufactured building, to be evaluated on the basis of the specifications contained in the proposal and references from owners or users of similar buildings fabricated by the same manufacturer.

In evaluating each non-price proposal, the evaluation committee shall assign a rating of *highly advantageous*, *advantageous*, *not advantageous*, or *unacceptable* for each of the criteria. The evaluation committee may identify any revisions necessary to change a rating on a criterion from *unacceptable* to *advantageous* and shall specify such changes in writing.

The evaluation committee shall assign a composite rating of *highly advantageous*, *advantageous*, *not advantageous*, or *unacceptable* for each non-price proposal. Each composite rating shall be justified in writing. After a composite rating has been assigned for each proposal on the basis of the evaluation criteria in this section, the evaluation committee shall review the price proposals and determine the most advantageous proposal, taking into consideration the non-price proposal ratings and the price. If the evaluation committee selects a proposal other than the lowest-priced proposal, the evaluation committee shall explain in writing why the added benefits of the proposal justify its higher price. The award of a contract to any offeror whose non-price proposal was rated *unacceptable* with respect to one or more criteria will be conditioned on the negotiation of the revisions recommended by the evaluation committee at no increase in the proposed price.

## **Part V – Contract Terms**

[All contract terms and conditions must be included in the RFP. We recommend that your local attorney develop a standard modular construction contract for your jurisdiction, incorporating the contract provisions discussed earlier in this appendix. You may not negotiate material changes to substantive contract terms.]

Any contract awarded on the basis of this RFP will be subject to the contract terms in this section.

# Index

---

- addenda, 63, 67, 74, 77, 78, 93, 94, 120, 141
- advertising requirements, 1, 3, 17, 19, 26, 67, 73, 89, 92, 98, 119, 130, 133, 138, 147, 150
- affirmative marketing program, 8
- Aggregate Work Limit, 58, 60, 79, 123
- allowances
  - in construction management at risk*, 136, 141
  - prohibition under M.G.L. c. 149*, 51
- alternates, 49, 79, 136, 141
- alternative project delivery methods. *See* design-build, *See* construction management at risk, *See* modular construction
- American Institute of Architects (AIA), model design contract, 23
- architect, iii, 2, 9, 14, 15, 26, 40, *See also* designer
- Attorney General, Office of the, ii, 1, 81, 95
- authority to contract, 4, 7
  - emergencies*, 31
- best value, ii, 39, *See also* design-build
- bid bonds. *See* bonds, bid
- bid deposit, 55, 73, 78, 83, 89, 92, 94, 97, 98, 99, 123, 151
  - sub-bid deposit*, 75, 84
- bid protests. *See* protests
- bid-splitting, 3
- bonding company. *See* surety
- bonding requirements, 56, 82, 83, 84, 86, 94, 96, 98, 99, 100, 106
- bonds
  - bid*, 55, 73, 92, 141, 142, 151
  - payment*, 54, 55, 56, 82, 83, 86, 96, 98, 99, 100, 106, 132, 137, 142, 144
  - performance*, 56, 65, 82, 86, 96, 99, 100, 106, 113, 140
- building program. *See* program
- building projects. *See* M.G.L. c. 149
- Central Register*, 19, 26, 30, 55, 67, 73, 75, 81, 84, 89, 92, 95, 97, 98, 99, 119, 125, 133, 138, 147
- Certificate of Eligibility (DCAM), 57, 59
  - bidders*, 65, 78, 79
  - construction management at risk firms*, 132
  - modular construction*, 119, 122, 123
  - sub-bidders*, 59, 65, 75
- certification of contractors, 47, 48, 59, 74, 79, 119, *See also* filed sub-bidding: certification of sub-bidders
  - categories of work*, 47, 57, 58, 59, 74, 78, 79, *See also* filed sub-bidding, *categories of work*
- certification of public purchasing officials. *See* Massachusetts Certified Public Purchasing Official program
- change orders, 7, 44, 80, 86, 87, 95, 100, 101, 105–9
  - credit from change orders*, 105, 108
- Chapter 149. *See* M.G.L. c. 149
- Chapter 30, Section 39M. *See* M.G.L. c. 30, §39M
- Chapter 30B. *See* M.G.L. c. 30B
- Chapter 7. *See* M.G.L. c. 7
- clerical errors, 84
- clerk of the works, 4, 6
- closeout of construction projects, 9, 109–11

**Comm-PASS, 55, 67, 71, 133, 138**

**composite rating**

*design-build, 150*

*modular construction, 122, 123*

**constructability review, 44**

**construction contract. See  
contracts, construction**

**construction documents, 43, 44**

**construction management at risk,  
127–44**

*defined, 127–28*

*guaranteed maximum price (GMP),  
127, 134, 136–37*

*OIG approval, 128–30*

*subcontracts, 143*

*trade contracts, 137–42*

**construction management  
services, 6, 9, 11, 15, 20, 26, 104**

**construction manager, 4, 5, 9, 20,  
24, 44, 104, 109, 128**  
*defined, 6*

**contractor**

*defined, 2*

**contractor evaluations, 57, 80, 111**

**contracts**

*design, 24–25*

*public buildings construction, 86*

*public works construction, 100*

**counties, i**

*designer selection, 12*

**DCAM. See Division of Capital  
Asset Management**

**debarment, 78, 81, 95**

**deliverables, 21, 24, 43, 44, 134**

**Department of Housing and  
Community Development  
(DHCD), 11, 19, 103**

**Department of Labor and  
Workforce Development  
(DLWD), 73, 86, 91, 100**

**deposit. See also bid deposit**  
*for bid documents, 75*

**design contract. See contracts,  
design**

**design development, 9, 43, 44**

**design-bid-build project delivery  
method, 3, 115**

**design-build, 127, 145–52**

*best value, 150–52*

*defined, 145*

*low bid, 152*

*OIG approval, 145–46*

**designer, 4**

*as construction manager, 6, 104,  
109*

*bid analysis, 81, 95*

*certification of substantial  
completion, 110*

*defined, 2, 9*

*in construction management at risk,  
129*

*oversight of, 35*

*preparation of filed sub-bid plans  
and specifications, 48*

*repair and maintenance of modular  
buildings, 116*

*role in design phases, 43*

*role in design-bid-build, 2*

*selecting designers for building  
projects, 16–31*

*selecting designers for non-building  
projects, 31–32*

*sub-bidder competence, 76*

*who can perform designer services,  
14–15*

**designer evaluations, 51**

**Designer Selection Board (DSB),  
10, 11, 12, 17, 19, 22, 27, 51**

**designer selection committee, 17,  
19, 27, 28**

**designer selection for non-  
building (public works)  
projects, 31–32**

**designer selection law. See M.G.L.  
c. 7**

**differing site conditions. See site  
conditions**

**direct payment, 64, 110, 111, 139, 144**

**Division of Capital Asset**

**Management, 8, 12, 13, 23, 36, 47, 51, 57, 58, 59, 62, 63, 65, 68, 75, 79, 80, 81, 84, 87, 95, 97, 111, 112, 117, 119, 128, 132**

**Division of Fair Labor and Business Practices. See Attorney General, Office of the**

**Division of Insurance, 82, 96**

**Division of Occupational Safety, 72, 91, 104**

**eligible bidder, 47, 74, 78–84, 80, 91, 95**

*defined, 56, 78, 94*

*sub-bidder, 49, 60, 61, 81, 83, 84*

**eligible proposer (modular construction), 123**

**emergencies**

*building construction bidding, 84–85*

*design contracts, 18, 19, 31*

*modular construction, 117*

*public works construction bidding, 97*

**energy management services, 14, 53**

**engineer, iii, 2, 9, 14, 15, 40, See also designer**

**errors and omissions insurance. See insurance**

**estimated quantities, 47, 53**

**evaluation committee. See designer selection committee**

**evaluation criteria, 21, 27, 32, 63, 66, 67, 68, 116, 119, 123, 131, 133, 134, 135, 138, 139, 149, 151**

**feasibility study. See study**

**fee proposals for design contracts, 22, 29, 30, 32**

**filed sub-bidding, 47–48, 60–61, 72, 74, 75, 76, 77, 83, 116**

*categories of work, 47–48, 60, 74, 76, 77*

*certification of sub-bidders, 47, 57, 59*

*sub-bid deposit, 84*

*sub-bidder competence, 76*

*substitution of filed sub-bidders, 77, 81*

*withdrawals, 77*

**financing, 2, 36, 37, 116**

**fixed fee for design contracts, 28, 29**

**foreign corporations, 86, 100**

**guaranteed maximum price (GMP). See construction management at risk**

**housing authorities, i, 11, 103**  
*designer selection, 19*

**immunity, 51, 111**

**independent review, 16**

**Inspector General, Office of the, i, ii, 16, 18, 27, 98, 128**

**insurance**

*errors and omissions insurance, 24, 41*

*liability insurance, 87, 101*

**key personnel, 4, 21, 24, 27, 28, 29, 132**

**latent physical conditions. See site conditions**

**leasing**

*modular buildings, 116*

**liability insurance. See insurance**

**life-cycle cost estimate, 50**

**liquidated damages, 87, 101, 132**

**M.G.L. c. 149. See also filed sub-bidding**

*certification, 57*

*change orders, 105–9*

*closeout of building projects, 110*

*construction contract, 100–101, 100–101*

*emergencies, 97*

*legal requirements for bid documents, 47–51*  
*life-cycle cost estimate, 50*  
*modular construction, 115–25*  
*projects covered, 53*  
*steps of construction bidding, 61–84*  
*volunteer labor, 85*  
*withdrawal of bids, 78, 94*

**M.G.L. c. 149A. See construction management at risk, See design-build**

**M.G.L. c. 30, §39M**

*change orders, 105–9*  
*closeout of non-building (public works) projects, 110–11*  
*emergencies, 97*  
*payment procedures, 103*  
*procurement of small building contracts, 97–99*  
*procuring design contracts for non-building (public works) projects, 31–32*  
*projects covered, 53*  
*proprietary specifications, 45*  
*pumping stations, 53*  
*qualifying contractors, 56, 94*  
*steps of construction bidding, 61–75, 77–97*  
*volunteers, 85*  
*withdrawal of bids, 78, 94*

**M.G.L. c. 30B**

*contracts for independent review of studies, 16*  
*design-related contracts, 32*  
*model for procuring public works design contracts, 32*  
*procurement of construction materials, 89, 97–99*  
*procurement of small building contracts, 89, 97–99*

**M.G.L. c. 7**

*contracts exempt from the designer selection law, 14*  
*design contract contents, 24–25*  
*designer selection for building projects, 16–31*  
*designer selection procedures for building projects, 10–14*  
*emergency designer selection, 18*

**maintenance and repair contracts, 15, 47, 48, 53, 85, 89, 97**  
*design services for, 9, 53*  
*modular buildings, 116*

**Massachusetts Certified Public Purchasing Official (MCPPO) program, ii–iii**

**Massachusetts Highway Department (MassHighway), 91, 93, 145**

**MassHighway. See Massachusetts Highway Department**

**Master File Brochure, 19**

**MCPPO. See Massachusetts Certified Public Purchasing Official program**

**minor informalities, 122, 123**

**modular construction, 115–25**  
*exemption from construction bid law, 53*  
*exemption from designer selection law, 14*

**negotiation**

*of change order prices, 108*  
*of changes in contract scope, 107*  
*of fee proposal, 30*  
*of modular construction proposals, 122, 124*  
*with CM at risk firm, 136–37*  
*with design-build proposer, 152*  
*with general contractors, 113*  
*with top-ranked design contract finalist, 17, 22, 24, 28, 30*

**non-building (public works) design contracts, 31–32**

**non-building projects. See M.G.L. c. 30, §39M**

**non-collusion affidavit, 141**

**non-collusion statement, 24, 151**

**non-price (technical) proposals, 32, 119, 120, 121, 122, 123, 135, 150, 151, 152**

**not-to-exceed fee limit for design contracts, 22, 27, 29, 30**

**owner**  
*defined, 2*

**owner's project manager, ii, 2, 4, 5, 9, 13, 14, 20, 35, 36, 44, 62, 66, 104, 111, 130, 131**  
*in construction management at risk, 129*  
*in design-build, 147*

**Paragraph E work, 60**

**partnering, 7**

**payment bonds. See bonds, payment**

**payment procedures on**  
**construction contracts, 86, 100, 103**  
*final payment, 109–11*

**payment terms of design contracts, 24**

**payroll records, 104**

**planning, 1, 4, 6, 7, 9, 10, 15, 24, 30, 35–41, 43, 108, 115, 116–17, 127**

**plans and specifications, 1, 2, 7, 21, 26, 43, 44, 50, 80, 95, 103, 105, 106, 116, 119**  
*changes, 107*  
*defined, 72, 90*  
*final plans and specifications, 20, 43, 47, 108*  
*for filed sub-bid categories, 48*

**prequalification. See also certification of contractors**  
*building projects, 61–71*  
*construction management at risk contractor, 130–33*  
*construction management at risk trade contract, 138–40*  
*design-build, 148–50*  
*MassHighway projects, 56, 91, 94, 99*

**prevailing wage law, requirements of, 72, 73, 74, 85, 86, 91, 98, 99, 100, 104, 135, 141, 144**

**price proposals, 32, 119, 120, 121, 123, 135, 150, 151, 152**

**program, 7, 9, 15, 26, 38, 43, 117, 119**  
*defined, 36*

**project manager, 5, 7, 24, 28, 29, 35, 109, 118. See owner's project manager**

**proposals. See fee proposals, non-price (technical) proposals, price proposals, modular construction**

**protests, ii, 74, 93, 120**

**public building projects. See M.G.L. c. 149, M.G.L. c. 30, §39M**

**public notice. See advertising requirements**

**public records, 59. See record-keeping**

**public works design contracts, 31–32**

**public works projects. See M.G.L. c. 30, §39M**

**pumping stations, 53**

**qualifying contractors, 79**  
*non-building (public works) projects, 56, 94*  
*sub-bidders, 48, 61, 77*

**quotations, 16, 39, 54, 85, 90, 97, 108**

**ranking finalists for design contracts under M.G.L. c. 7, 17, 28**

**rating modular construction proposals, 119, 122, 123, 124. See also composite rating**

**record-keeping, 4, 5, 6, 7, 28, 74, 75, 93, 120, 121**  
*by contractors, 87, 101*

**records. See record-keeping**

**register of proposals for modular construction, 120, 121**

**rejection**

*of bidder, 56*  
*of bids, 80, 81, 95, 96*  
*of proposals, 120, 122, 151*  
*of sub-bids, 75, 77, 83*

**repair contracts. See maintenance and repair contracts**

**responsible bidder, 47, 78–84, 79, 91**

*defined, 56, 78, 94*  
*sub-bidder, 61, 84*

**responsive proposals, 116, 121, 122**

**retainage, 103**

**schematic design, 38, 43, 44, 119**

**scope of services, 20, 22, 24, 30, 36, 41, 131**

**scope of work, 21, 29, 51, 54, 77, 124, 134, 141, 145, 149, 150**

**Secretary of the Commonwealth, 26, 30, 73, 84, 86, 97, 100, 125**

**Single Project Limit, 58, 60, 79, 123**

**site conditions, 43, 105, 106, 144**

**sound business practices, 86, 100**

**specifications, 53, 60, 87, 104, See also plans and specifications, M.G.L. c. 30, §39M: proprietary specifications**

**study, 1, 5, 9, 15, 20, 26, 30, 31, 35, 36–38, 41, 108, 117**

**sub-bids. See filed sub-bidding**

**substantial completion, 106, 109, 110, 111, 136**

**substitution**

*of equal materials, 104, 105*  
*of filed sub-bidders. See filed sub-bidding*  
*of less experienced personnel, 24*

**surety, 54, 55, 56, 65, 73, 82, 92, 94, 96, 113, 132, 135, 140, 141, 148**

**technical proposals. See non-price proposals**

**trade contractor. See construction management at risk trade contracts**

**unforeseen site conditions. See site conditions**

**Update Statement, 59, 65, 72, 78, 79, 80, 94, 95**

*bidders, 78*  
*construction management at risk, 132*  
*modular construction, 119, 122, 123*  
*sub-bidders, 59, 75*

**value engineering, 9, 16, 21, 31, 35, 38, 44**

**volunteers**

*on building committee, 4*  
*use for construction labor, 85*  
*use for project design, 35, 37, 41*

**withdrawal**

*of general bids, 78, 94*  
*of modular construction proposal, 120, 121, 122, 123*  
*of sub-bids, 77*