

Commonwealth of Massachusetts Office of the State Auditor Suzanne M. Bump

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Official Audit Report-Issued March 6, 2013

Division of Capital Asset Management and Maintenance's Planning, Design, and Construction Activities For the period July 1, 2009 through June 30, 2011



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INTRODUCTION AND SUMMARY OF FINDINGS AND RECOMMENDATIONS

The Division of Capital Asset Management and Maintenance (DCAMM) was established by Chapter 579 of the Acts of 1980 as an independent division within the Executive Office for Administration and Finance to create a professional building design and construction agency, as well as an independent Designer Selection Board for the selection of design consultants. DCAMM annually manages hundreds of millions of dollars in capital construction projects and oversees more than 500 active leases, comprising 7 million square feet of leased space on behalf of the Commonwealth. DCAMM is also responsible for assisting client agencies in maintaining state facilities. During our audit period, DCAMM was administering 138 active construction projects with an estimated cost obligation of \$1,906,808,414, ranging in value from \$9,183 to \$284,834,875.

In accordance with Chapter 11, Section 12, of the Massachusetts General Laws, the Office of the State Auditor (OSA) conducted an audit of DCAMM's contracting activities for construction projects for the period July 1, 2009 through June 30, 2011. Our objective was to evaluate the adequacy of DCAMM's controls over its contracting process from project initiation to final design and construction, including contractor certification, debarment, and evaluation and project management and oversight, to determine whether the controls DCAMM has established over these activities are adequate to ensure that DCAMM is achieving its goals relative to its construction activities in an economic and efficient manner and in compliance with applicable laws, rules, and regulations.

Based on our audit, we found that DCAMM was administering its construction projects in accordance with applicable laws, rules, and regulations. Moreover, we found that DCAMM's oversight of the processing and approval of change orders is supported by policies and procedures that require compliance with regulations and include a multi-tiered approval process. However, our audit identified areas in which DCAMM could improve its administration of its Construction Manager at Risk¹ (CMAR) method of administering construction contracts, its certification that non-Massachusetts-based corporations are in good legal standing within their respective state of incorporation, and the way in which it evaluates each contractor's performance on construction projects.

¹ A construction delivery method in which a construction manager/general contractor is brought on during the design phase to be part of the design team and to propose a guaranteed maximum price at or towards the end of the design development phase.

Highlight of Audit Findings

- The CMAR project management method being used by DCAMM on many of its projects was designed to transfer the risk of increases in project costs from the project owner (DCAMM) to a Construction Manager (CM) by involving in the design phase of the project the CM, who, in collaboration with the project designer, identifies conflicts between design and construction that might otherwise result in unforeseen costs necessitating contract change orders. The CMAR method is also designed to arrive at a mutually agreed-upon Guaranteed Maximum Price (GMP) by the early definition and identification of costs, which will be DCAMM's responsibility. In theory, any future costs not mutually identified then become the responsibility of the CM. Our audit disclosed that DCAMM may not be using the CMAR project management method in the most effective manner because its policies and procedures for monitoring CMAR projects do not contain clear guidance on which party (project owner or CM) bears responsibility for cost growth after the GMP has been established. Rather, we found that DCAMM frequently uses change orders on CMAR projects and that, as a result, it may not be receiving the risk-avoidance benefits anticipated by the CMAR project management method.
- In order to be certified by DCAMM to do business in the Commonwealth, contractors that are incorporated in other states (foreign corporations) must be in good legal standing within their respective state of incorporation. Chapter 149, Section 44D(2), of the General Laws sets forth the requirements for information to be included on all applications for contractor certification. However, DCAMM relies on contractor self-reporting for the certification of out-of-state contractors and an inadequate process for verifying the information contained within the application. As a result, a contractor who does not meet the requirements of Chapter 149 could be certified and potentially awarded a state contract. If fact, we found one instance in which DCAMM approved a contractor certification application for a general carpentry contractor located in Manchester, New Hampshire who had been under investigation by multiple state and federal agencies on offenses ranging from deliberate falsification of official payroll documents to prevailing wage violations.
- Our audit found two problems with the process that DCAMM uses to evaluate the performance of its contractors. First, the Standard Contractor Evaluation form used by DCAMM for this purpose is inflexible and based on predetermined point values assigned to various phases of construction that do not account for the different levels of importance concerning categories for different projects. As a result, these evaluations may not accurately reflect a contractor's performance on a specific project. Second, for projects over \$1,500,000, which require the hiring of an Owner's Project Manager (OPM), both the awarding authority and the OPM must complete and sign separate evaluation forms in accordance with Chapter 149, Section 44A, of the General Laws. If their overall scores are similar, then they are simply averaged and factored into the contractor's Average Project Rating (APR) as a composite score. However, if their scores are significantly different and cannot be reconciled after further investigation by DCAMM, then they are both dismissed and not included in the contractor's Certification File or factored into the contractor's APR, which results in critical information relative to a contractor's performance on certain projects not being factored into the overall performance rating, which is a factor reviewed in awarding future contracts.

Recommendations of the State Auditor

- On each CMAR project, DCAMM should clearly define, to the extent possible, during the construction phase of the project which types of costs it will be responsible for and which types will be the responsibility of the CM.
- DCAMM should establish an effective means of interstate communication and, to the extent possible, verify information provided by potential contractors relative to their certifications.
- DCAMM should consider performing a preliminary risk assessment prior to soliciting bids for construction projects to more accurately identify the key performance measures, whose relative weighting should be used to assess each contractor's performance. Moreover, DCAMM should asses the critical components of a public building project and weigh them accordingly on the accompanying contractor evaluation form for that specific project. Additionally, DCAMM should develop policies and procedures to more thoroughly address the issue of divergent scores and better attempt to accurately assess contractor performance on a contentious job, rather than simply voiding the scores altogether.

OVERVIEW OF AUDITED AGENCY

The Division of Capital Asset Management and Maintenance (DCAMM) is the state agency responsible for major public construction and real estate services for the Commonwealth. DCAMM was established by Chapter 579 of the Acts of 1980 as a division within the Executive Office for Administration and Finance (EOAF) to create a professional building design and construction agency, then called the Division of Capital Planning and Operation (DCPO), as well as an independent Designer Selection Board (DSB) for the selection of design consultants. Chapter 127 of the Acts of 1999 changed the name of DCPO to the Division of Capital Asset Management and Maintenance (DCAMM).

DCAMM manages hundreds of millions of dollars annually in state-funded construction projects and manages more than 500 active leases, comprising 7 million square feet of office space housing state agencies. DCAMM is also responsible for assisting and consulting with client agencies in both constructing and maintaining state facilities. During our audit period, DCAMM was administering 138 active construction projects with an estimated cost obligation of \$1,906,808,414, ranging in value from \$9,183 to \$284,834,875.

DCAMM is administered by a commissioner appointed by the Secretary of the Executive Office for Administration and Finance, with the written approval from the Governor. DCAMM's Commissioner appoints deputy commissioners, associate deputy commissioners, and legal counsel as appropriate to manage and oversee its operations. A description of specific operational components of DCAMM appears in Appendix A of this report.

During our audit period, on March 9, 2011, the Secretary of EOAF appointed a new DCAMM Commissioner, replacing the previous Commissioner who held this office from April 2000 to December 2010.

CONSTRUCTION MANAGER AT RISK

Public construction projects typically involve three stages: study, planning and design, and construction. Prior to fiscal year 2004, the primary method DCAMM used to manage its construction projects was called the Design-Bid-Build (DBB) method. Under this method, a contract is awarded to design the project and then bids are solicited from contractors to perform the construction phase of the project based on the design specifications. However, in order to improve

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the management of risk during the construction process, the construction management industry created a project delivery method known as the Construction Manager at Risk (CMAR) method. CMAR involves the out-sourcing of various administrative and managerial responsibilities as well as risk from the contacting entity to a private Construction Manager (CM). CMAR accomplishes this by hiring the CM firm early in the design process and allowing it to work alongside the design team during the pre-construction phases of a project. During pre-construction, the CM firm acts as a project manager, providing its expertise and consulting services to DCAMM or the awarding authority and the design team. The goal of this arrangement is to ensure accuracy and practicality in the design documents and to mitigate the risk of unforeseen issues and events that could result in costly change orders. During the construction phase of a CMAR project, the CM firm takes on the role of general contractor and is responsible for constructing the project according to the owner's specifications, within a certain dollar amount referred to as the Guaranteed Maximum Price (GMP). This collaboration during the initial phases of a construction project is intended to reduce the risk of conflicts between the design and construction phases, which typically result in costly change orders. CMAR became popular in the school-building industry (where facilities must be completed prior to the start of the school year). These factors, in addition to outsourcing much of the responsibility for pre-qualifying and managing sub-contractors (which drastically reduced overhead expenses on the part of the owner), made CMAR a popular option for projects with a large scope of work. The American Institute of Architects estimated that the CMAR method accounted for more than \$48 billion worth of construction contracts, on average, for each year between 2001 and 2004.

During fiscal year 2004, Chapter 149A of the Massachusetts General Laws enabled DCAMM to use the CMAR method on projects with an estimated cost of at least \$5 million. During our audit period, DCAMM was administering 138 active construction projects with an estimated cost obligation of \$1,906,808,414, of which 27 projects, ranging in value from \$4,542,486² to \$284,834,875, with a total estimated cost obligation of \$1,533,241,180, utilized the CMAR project delivery method.

Once a project has been initiated using the CMAR method, a design team is selected by an autonomous segment of DCAMM referred to as the Designer Selection Board (DSB). The DSB selects a design firm to conduct a feasibility study in order to determine whether a proposed project

² DCAMM has received an exemption from the \$5 million minimum cost value requirement.

can be completed within the requirements set forth by an owner. Upon completion of the feasibility study, the DSB then either keeps the initial design-study team or selects a new designer to develop the project's design documents.

CONSTRUCTION MANAGEMENT FIRM

Procuring a CM firm in accordance with Chapter 149A of the General Laws requires a two-step selection process, by first prequalifying candidates, and subsequently awarding a contract to one of those prequalified contractors. The qualification process begins once a DCAMM selection committee has been established. DCAMM then publicly releases and advertises a Request for Qualifications (RFQ) to solicit qualifications from various CM firms interested in fulfilling the project's contractual requirements. Upon receipt of submissions of qualifications (SOQs) the prequalification committee qualifies no less than three applicants after evaluating every SOQ submittal received within a specified deadline.

Following the qualification stage and the establishment of a proposal selection committee, DCAMM prepares and distributes a Request for Proposals (RFP) to each of the three qualified CM firms. In response to the RFP, each CM firm submits to DCAMM a proposal package consisting of both technical and financial specifications pertaining to the project at hand. After the selection committee receives proposals from all qualified CM firms within the specified deadline, it evaluates and ranks the packages to determine which proposal represents the best value (when considering factors such as expertise, cost, and scheduling) for the Commonwealth. After evaluating and ranking each CM firm, the selection committee will begin non-fee negotiations with the highest-ranked CM firm. If an agreement cannot be reached with the highest-ranked firm during non-fee negotiations, the committee begins non-fee negotiations with the next highest-ranked CM firm. This process continues until the committee reaches an agreement for an acceptable contract with one of the pre-qualified CM firms.

Upon awarding a contract to the CM firm, the GMP negotiation process beings. The GMP is negotiated when the design documents reach the level of completion specified in the RFP. Chapter 149A, Section 7(b), of the General Laws requires that the design documents must be more than 60% complete to effectively establish the GMP. If DCAMM is unable to negotiate an acceptable GMP, the selection committee may begin negotiations with the next highest-ranked remaining CM firm. If the selection committee cannot reach an agreement with the next highest-ranked CM firm, the

procurement process must be terminated and the project must be procured in accordance with the DBB delivery method. During the period at which the project's design documents are being developed, the CM firm's procurement process commences.

AUDIT SCOPE, OBJECTIVES, AND METHODOLOGY

In accordance with Chapter 11, Section 12, of the Massachusetts General Laws, the Office of the State Auditor (OSA) conducted an audit of the Division of Capital Asset Management and Maintenance's (DCAMM's) contracting activities for construction projects for the period July 1, 2009 through June 30, 2011. We conducted this audit in accordance with generally accepted government auditing standards. These standards require that we plan and perform the audit to obtain sufficient, appropriate evidence to provide a reasonable basis for our findings and conclusions based on our audit objectives. We believe that the evidence obtained provides a reasonable basis for our findings and conclusions based on our audit objectives. Our objective was to evaluate the adequacy of DCAMM's controls over its contracting process from project initiation to final design and construction, including contractor certification debarment and evaluation, the method used to manage construction projects, and project monitoring to determine whether proper planning, bidding, awarding, and oversight procedures are in use and in compliance with applicable laws, rules, and regulations.

In order to achieve our objectives, we first assessed the internal controls established and implemented by DCAMM over its contracting process. The purpose of this assessment was to obtain an understanding of management's attitude, the control environment, and the design and effectiveness of DCAMM's processes from project initiation to final design and construction. Specifically, we assessed the controls over contractor certification, contractor debarment, Construction Manager at Risk (CMAR) selection, bidding, and change order processes. We used this assessment in planning and performing our audit tests. We judgmentally selected a sampling of projects, and tested records to support compliance with the control.

For our assessment of DCAMM's project initiation and design activities, we selected a judgmental sample that represented 20% of all design contracts awarded during our audit period. We examined each selected application to ensure compliance with applicable laws, rules, and regulations over the required advertisement, form, and content of publicly awarded design contracts. This included cost breakdowns, technical specifications, legal disclaimers, and insurance information. The advertisements for each contract were verified by using three sources: the Commonwealth Procurement Access and Solicitation System (COMM-Pass) database, the Office of the Secretary of State's Goods and Services Bulletin and Central Register, and documents obtained directly from

DCAMM's Contract Records Division. Each DSB application was obtained directly from the Designer Selection Board (DSB) office on site, and all contracts were obtained directly from DCAMM.

In order to accomplish our objective of determining the integrity of the solicitation, bidding, and awarding process for Construction Manager at Risk (CMAR) jobs, we selected a judgmental sample of six CMAR projects, of a possible 27, that were active over the course of our audit period. For each selected project, we examined documentation to ensure that solicitations and advertisements were properly conducted, qualifications were properly assessed, and proposals were ranked and evaluated in accordance with applicable laws, rules, and regulations. For each selected project, the Requests for Qualifications (RFQ), Requests for Proposals (RFP), and submitted proposals themselves were tested for compliance with Chapter 149A, Sections 5 and 6, of the General Laws to ensure that all applicants were given fair and unbiased consideration by DCAMM.

In order to accomplish our objective of evaluating the effectiveness of DCAMM's project monitoring process, we judgmentally selected a sample of change orders that represented approximately 10% of the total approved change orders executed for the six CMAR projects in our sample. For each change order, we examined documentation to ensure that each request contained the required signatures, cost breakdowns, technical specifications, and narrative summaries regarding the origin and necessity of the scope change, in accordance with applicable laws, rules, and regulations. All criteria tested for the change orders came from DCAMM's Form 13 (Instructions Regarding Change Orders and Contract Modifications), which are similar to the requirements contained in Chapter 7, Sections 42 E and 42 F, and Chapter 30, Section 39N, of the General Laws. As these change orders were associated with CMAR projects, which specifically aim to limit cost growth during the construction phase, the nature and dollar amount of each change order was taken into consideration when evaluating the justification of each request.

While examining DCAMM's project monitoring practices, it came to our attention that several internal and external parties had issued complaints to DCAMM about the effectiveness of DCAMM's Standard Contractor Evaluation Form. Both DCAMM personnel and private sector contractors had raised this issue with the Construction Law Working Group, a consortium of private- and public-sector individuals dedicated to improving the public construction project delivery process. Consequently, during our audit, we conducted testing in this area.

DCAMM's prime and subcontractor certification processes were also tested for compliance with applicable laws, rules, and regulations. Because our primary goal was to identify any unusual patterns in the contractor certification process, we elected to test a consolidated group of applications, as certification is reviewed and granted in "batches" on a monthly basis. To test prime contractor certification practices, we selected the month of June 2011, which contained 61 applications for certification. We performed an assessment of all 61 applications to determine whether any unusual patterns existed regarding the pass/fail rate for the batch as a whole. We then selected a judgmental sample of 13 applications (21% of the sample size) for a more detailed review to ensure that applications were either approved or denied in accordance with all applicable laws, rules, and regulations. Similarly, the month of February 2011 was selected to test the subcontractor certification process. Again, an assessment was performed on all 13 subcontractors that had applied for certifications, and applications, and regulations, and regulations. If applications are examined in greater detail to ensure compliance with applicable laws, rules, and regulations.

During our testing in this area, it came to our attention that there may be certain deficiencies inherent in the certification process for prime and subcontractors located in other states. Specifically, DCAMM relies primarily on the self-reporting of out-of-state contractors and has no process for verifying the information contained within the certification application. Prior to selecting a sample, we performed an analysis of the overall population and determined that, during our audit period, 208 out-of-state firms were certified from 22 different states, 162 of which were from New Hampshire, Rhode Island, Connecticut, and New York. In order to accomplish our objective of evaluating the effectiveness of DCAMM's certification process for out-of-state contractors, we reviewed all 162 contractors certified from these four states during our audit period to ensure that they were in good legal standing at the time of their application and that the self-reported information contained in their applications was both truthful and accurate.

At the conclusion of our audit field work, we provided DCAMM officials with a draft copy of this report for its review and comments. All comments provided by DCAMM officials were considered in the preparation of our final report.

AUDIT FINDINGS

1. DCAMM POLICIES AND PROCEDURES MAY NOT ASSIGN ENOUGH RISK TO GENERAL CONTRACTORS WHEN USING THE CONSTRUCTION MANAGER AT RISK DELIVERY METHOD

The Construction Manager at Risk (CMAR) project management method is designed to provide more accurate project cost estimates by involving both the designer and the Construction Manager (CM) early in the design process. This process is intended to arrive at a Guaranteed Maximum Price (GMP) which should represent the total cost of the project with the exception of any unforeseeable events. Costs increases after the establishment of the GMP, described as change orders, become the responsibility of the CM and/or designer. However, our audit found that the Division of Capital Asset Management and Maintenance (DCAMM) may not be using the CMAR method in the most effective manner because its policies and procedures for monitoring CMAR projects do not contain clear guidance on which party (project owner or CM) bears responsibility for any costs incurred on projects after the GMP has been established.

Based on our interviews with key DCAMM personnel and our testing of 104 change orders (from a population of approximately 1,000 approved change orders totaling \$19,503,472 that were approved for six different CMAR projects after the GMP was established), it appears that DCAMM is not adequately holding CMs financially liable for project cost overruns despite the fact that they are paying these same CMs a fixed Pre-Construction Services Fee to assume this risk. Specifically, of the 104 change orders tested totaling \$2,361,966, we found that the vast majority, 74 totaling \$2,002,456, were requested by either the CM or the designer and were paid by DCAMM. Although our review of the change orders indicated the proper authorizations were obtained, we could find no evidence of a discussion regarding who should have been responsible for the condition requiring the change order.

Although DCAMM continues to experience cost increases due to change orders using the CMAR project management method, it has experienced a decrease in cost growth when compared to using the Designer-Bid-Build (DBB) method. Since 2004 DCAMM has been using the CMAR method almost exclusively on qualified projects. Therefore, we performed a comparison of 12 CMAR projects completed during our audit period with similar-sized projects completed during the 1999-2004 time period using the DBB management method. As shown in the following tables, DCAMM experienced a 7.6% (14.6% - 7%) reduction in change order costs

as a percentage of total construction costs as a result of the improved efficiency of the CMAR project management method. DCAMM management has stated that the CMAR method has also resulted in a number of intangible, immeasurable benefits, including earlier identification of potential costs and the ability to attract higher-quality contractors.

CMAR PROJECT COST GROWTH INFORMATION JULY 1, 2009 THROUGH JUNE 30, 2011 *							
	JULY						
	GMP AMOUNT	TOTAL CHANGE ORDER AMOUNT PRIOR TO GMP	TOTAL CHANGE ORDER AMOUNT APPROVED	NET CHANGE ORDER AMOUNT	NET COST GROWTH PERCENTAGE		
1) BHC0401DC1	\$18,229,833.26	\$306,680.26	\$380,142.20	\$73,461.94	0.4%		
2) BSC0401 DC1	\$72,954,902.00	\$2,658,893.00	\$7,027,307.00	\$4,368,414.00	6.0%		
3) DEP0501 DC1	\$21,305,694.17	\$1,342,153.17	\$5,458,073.48	\$4,115,920.31	19.3%		
4) DFS991 DC1	\$34,225,677.00	\$440,723.00	\$2,504,947.01	\$2,064,224.01	6.0%		
5) GCC0601DC1	\$24,366,666.00	\$1,113,274.00	\$2,298,864.13	\$1,185,590.13	4.9%		
6) ITD0901 DC1	\$63,658,375.58	\$6,870,088.86	\$11,442,976.35	\$4,572,887.49	7.2%		
7) J9810 DC1	\$60,038,810.00	\$3,380,041.00	\$7,692,888.89	\$4,312,847.89	7.2%		
8) JPL971 DC1	\$52,905,783.00	\$0.00	\$4,596,600.43	\$4,596,600.43	8.7%		
9) MMA0701 DC1	\$17,328,314.55	\$634,958.02	\$1,210,843.52	\$575,885.50	3.3%		
10) NSC0601 DC1	\$24,381,536.00	\$151,222.83	\$2,925,797.56	\$2,774,574.73	11.4%		
11) TRC0602 DC1	\$58,622,147.41	\$1,700,321.52	\$4,137,311.09	\$2,436,989.57	4.2%		
12) WOR0101 DC1	\$16,657,000.00	\$7,728.72	\$918,356.54	\$910,627.82	5.5%		
				AVERAGE COST GROWTH	7.0%		

*Information provided by DCAMM.

PROJECT NUMBER	ESTIMATED PROJECT COST	TOTAL CHANGE ORDER AMOUNT APPROVED	NET COST GROWTH PERCENTAGE
CHE0001	\$7,590,683.00	\$1,895,397.00	25.0%
E991	\$10,166,566.81	\$1,842,358.37	18.1%
EJ986	\$18,094,056.33	\$663,862.83	3.7%
G9212	\$42,537,729.00	\$2,766,614.98	6.5%
HCC0100	\$11,391,025.38	\$2,232,558.50	19.6%
HLY0001	\$11,934,999.93	\$1,954,905.10	16.4%
JES913	\$27,622,147.19	\$936,402.53	3.4%
JSB925	\$12,280,779.43	\$756,066.46	6.2%
MH9514	\$7,421,260.51	\$2,325,412.65	31.3%
P972	\$13,038,000.00	\$1,262,798.00	9.7%
TRC0304	\$19,873,455.59	\$6,211,618.59	31.3%
UA9503	\$20,559,259.27	\$780,555.21	3.8%
AVERAGE COST GROWTH			14.6%

D-B-B PROJECT COST GROWTH INFORMATION JULY 1, 2009 THROUGH JUNE 30, 2010*

*Information provided by DCAMM.

Recommendation

Although we acknowledge that the CMAR process is a fairly new project delivery method, and it appears that each iteration of the process has garnered increasingly better results, particularly in the area of cost growth reduction, we also believe that changes to DCAMM's policies and procedures regarding the handling of change orders could be more uniform and rigorous, so as to maximize their return on investment. In order to maximize the benefits of the CMAR method, DCAMM should modify its policies and procedures to define, to the extent possible, which types of change orders will be paid by the project owner and which will be the responsibility of the CM after the determination of the GMP.

Auditee's Response

Types of change orders that we encounter whether 149 (design bid build) or 149A (CMR) on our projects are as follows:

1. Fee change orders: These are changes the designer will get compensation to design and evaluate. These types of changes include latent conditions, owner or DCAMM requested changes, VE (betterment) changes and CM/trade contractor requested changes.

2. Non-fee change orders: This type of change the designer receives no compensation because it relates to an item they should have included in the drawings or an item of work that was not properly coordinated between various subs/trade contractors. It is important to note that although we do not compensate the designer for this type of change, we do pay for the actual cost of the work.

In regards to the first set of CM contracts reviewed by the audit team, the CM was brought on early to review constructability, assist in cost estimating and scheduling. These early contracts did not have strong language with regard to no fee changes, and we allowed the CMs to take a 5% mark up to cover those costs. It should be noted that on these types of changes on a design bid build contract, General Contractors are allowed a 15% mark up.

As we reviewed and studied the results of our first generation CMR contracts, we decided to strengthen the pre-construction section. This was accomplished by improving the review coordination requirements in our contract and disallowing any mark up to the CM for no fee changes. This methodology put the CM on par with the designer.

Contrary to the audit findings, we will pay for the actual work. The reason for this is that because an item was missed or not coordinated during the design does not mean that the Commonwealth receives the work free.

We also discovered that although the CM selection was based on the quality of respondents, it often would come down to price for final selection. With the new language and loss of any mark up to the CM firms for the no fee changes, we feel that we have leveled the playing field. We also feel that by adopting these steps, we will improve the 7% reduction in change orders stated in the audit report from design bid build type of procurements.

If, as suggested in the audit finding, any change (this would have to be no fee only) after the GMP was signed, be the responsibility of the CM than one of two things would happen. Either they would ask for a 7% to 10% CM contingency (presently we allow approximately 2%) or they would not apply for our projects. If this happened and we went from receiving 14 applications down to four or less we would certainly see fee and general conditions increases. It may also lower the standards and quality of teams submitted by the CM.

In the audit report it is stated that because we allow change orders after the GMP that this causes cost overruns. In reality, we set our budgets at the beginning of the projects with both CM and change order contingencies. As a general rule, 1) if the item was missed on a non-trade bid buy; 2) the CM needed to work O.T. to maintain schedule; or 3) allowances as submitted at the time of bid were exceeded, these would come out of the CM contingency.

In closing, I would also note that the CM is quality based selection where we can discuss scope and price prior to signing a contract. We also have an opt-out clause if we cannot agree to a GMP. On the other hand, trade contractors are still procured under a competitive bid process and it is sometimes very litigious. The law gives certain protection to the sub/trade contractors that is sometimes the cause of no fee changes. For example, a gas dryer is shown on the architectural drawings but the gas piping for it was omitted from the plumbing drawings. Although the dryer is shown, if the architectural drawing is not listed in the plumbing section it is not owned by the plumber. The law does not allow us to list all drawings for the trade bidders only those that have work shown on them. When you are dealing with hundreds of drawings and details, I think you can see why some items are missed. This is an example of a no fee change order so the designer and CM would get no markup but the Commonwealth would pay for the actual work.

Auditor's Reply

With regard to the reduction in change order mark ups to the CM, first from 15% to 5%, then from 5% to eliminating mark ups altogether, we acknowledged in the first sentence of the recommendation that significant improvements have been made to the CMAR process thus far, with promising results. Moreover, our macro-analysis of CMAR performance compared to DBB performance revealed a positive trend towards a reduction in cost growth on CMAR projects. Nevertheless, we maintain our contention that these benefits could be maximized further to reduce cost growth on future projects through the establishment of a more uniform and rigorous system for examining and approving change orders.

Our finding did not explicitly state that the Commonwealth does or should receive the work associated with change orders for free, regardless of origin. Our goal in assessing CMAR performance was not to assign fault for individual change orders, but to analyze the alternative project delivery method's overall effect on cost growth in comparison to the more traditional DBB procurement process. We simply used the amount and substance of change orders approved subsequent to the signing of the GMP contract amendment (or the establishment of the Estimated Cost of Construction, in the case of DBB projects), as the most comprehensive method available to achieve this above-stated goal. At no point in our finding or recommendation do we imply that the entirety of change-order-related cost growth is the fault of DCAMM, nor do we imply that sub-contractors performing work associated with "No-Fee" change orders should be financially responsible for the cost of work stemming from an oversight on the part of the CM or Designer.

The language in our finding, and in our subsequent recommendation, did not explicitly state that the CM be held exclusively responsible for funding change orders that occur after the GMP amendment is signed. We did, however, state that we believe a reduction in cost growth after the GMP is signed could be realized by fostering a mutual understanding of which party will be held responsible for which types of change orders, prior to the formalization of the GMP amendment.

The language in the report does not neglect the fact that both CM contingencies and Change Order contingencies are established to offset specific types of unanticipated costs and cost overruns. However, it is our understanding that the contingencies, specifically the Change Order contingency, exist to specifically fund unanticipated costs without having to make more formalized budget increases to the GMP.

Again, our finding did not explicitly state that the Commonwealth does or should receive the work associated with change orders for free, nor did we suggest that a sub-contractor should shoulder the financial burden of an oversight committed by the CM or the Designer during the Pre-Construction phase. Additionally, we acknowledge that DCAMM's practice of eliminating the CM's mark ups for no-fee change orders is a beneficial development, as it eliminates any financial incentive to take advantage of the process by frequently submitting change orders that may not be prudent or necessary. Again, in recognizing the direct correlation between change orders and cost growth, our goal in assessing CMAR performance was to analyze the alternative project delivery method's overall effect on cost growth in a "macro-sense." As such, all aspects of cost growth associated with change orders (e.g., fee or no-fee, hard cost or soft cost) were taken into consideration.

2. INADEQUATE SAFEGUARDS AND CONTROLS OVER OUT-OF-STATE CONTRACTOR CERTIFICATION

Chapter 149, Section 44D(2), of the General Laws and DCAMM's own regulations require DCAMM to ensure that out-of-state contractors are properly certified. In order to accomplish this, DCAMM relies on contractor self-reporting for the certification of out-of-state contractors, and has a limited process for confirming the self-reported information. We believe that DCAMM's controls over the certification of out-of-state contractors are inadequate to ensure the truthfulness and accuracy of submitted information as required by Chapter 149, because they lack a comprehensive and effective mechanism for verifying the legal and administrative standing of out-of-state applications. As a result, a contractor that does not meet the requirements of Chapter 149 could be certified as eligible to be awarded a state contract.

According to Chapter 149, Section 44D (1)(a), of the General Laws, in order to be eligible to bid on state contracts, a contractor has to submit with its bid a Certificate of Eligibility issued by the Commissioner of DCAMM. In order to obtain this certificate, contractors have to submit to DCAMM various information and certify under the penalties of perjury to DCAMM that they are providing complete and accurate information, including "all legal or administrative proceedings currently pending against the applicant or concluded adversely to the applicant within the past five years which relate to the procurement or performance of any public or private construction contract." Further, 810 Code of Massachusetts Regulations (CMR) 4.04, promulgated by DCAMM, states that DCAMM cannot issue a Certificate of Eligibility to a contractor if DCAMM determines that the contractor lacks competence or responsibility.

During our audit period, we determined that 208 out-of-state contractors from 22 states, 162 of whom were from the Massachusetts border states of Rhode Island, Connecticut, New York, and New Hampshire, were issued Certificates of Eligibility from DCAMM. We reviewed the information in all 162 of these contractors' Certificates of Eligibility to ensure that they were in good legal standing at the time certification was granted, and that the self-reported information on their application was both truthful and accurate. This was accomplished by comparing the self-reported information against electronic databases maintained by the states of Rhode Island, New York, and Connecticut, which revealed no discrepancies for the period reviewed. However, in the case of New Hampshire, which does not maintain a comprehensive electronic database, we forwarded the information to the New Hampshire Department of Labor, which reported a discrepancy between the reported information and its internal records regarding one contractor. Specifically, on January 20, 2010, DCAMM approved a contract certification application for a general carpentry contractor based out of Manchester, New Hampshire. On October 12, 2009, an inspector for the New Hampshire Department of Labor served the principal and president of the company with an "Inspector's Report" detailing 71 state and federal wage, labor, and accounting offenses he was being charged with and/or investigated for in connection with several construction jobs in New Hampshire. Upon further investigation and consultation with the New Hampshire Department of Labor, the Unites States Attorney's Office, and personnel from the United States Department of Housing and Urban Development and the United States Department of Transportation, we determined that the company had been under investigation by several state and federal agencies for violations ranging from failure to pay legally mandated

prevailing wages to deliberately falsifying official payroll documents. However, the contractor's DCAMM application for a Certification of Eligibility contained no information pertaining to these pending charges, nor did it indicate any performance, legal or financial-related irregularities on any of the state or federal jobs in question. However, the contractor was still certified by DCAMM, and, although not awarded a contract by DCAMM, was officially eligible to qualify, bid, and possibly be awarded state-funded construction contracts in the Commonwealth from January 10, 2011 through January 12, 2012.

Without the contractor-reported information provided to DCAMM being confirmed, there is the risk that substandard construction work may be performed, or that the safety and rights of construction project workers may not be adequately safeguarded.

Recommendation

Based on the frequent use of out-of-state contractors, we recommend that DCAMM establish an effective means of verification of the legal standing of contractors, specifically in categories such as prevailing wage law, labor regulations, and criminal violations.

Auditee's Response

[The draft report states] that DCAMM "...has [a limited] process for confirming...selfreported information" from out-of-state contractors and, more particularly, that we, "...lack a comprehensive and effective mechanism for verifying the legal and administrative standing of out-of-state applications." At issue is our requirement that applicants certify under the pains and penalties of perjury as to, "...all legal and administrative proceedings currently pending or...concluded adversely...within the past five years."

While the Certification Office routinely checks numerous Massachusetts sources and two Federal sources to verify information provided by Massachusetts-based applicants, the only sources routinely checked which might provide information on out-of-state applicants with no recent history of work in Massachusetts would be the two Federal sources - namely, OSHA and the Federal Debarment List.

The problem appears to be that while Massachusetts provides numerous easily-accessible on line resources (e.g. DIA Stop Work List; Division of Professional Licensure; JTF; Department of Labor Standards; Department of Public Safety; Supplier Diversity Office; Department of Revenue), relevant data is believed to be not so easily accessible for other states- especially for New Hampshire, the state involved in the incident referred to in the draft audit, which apparently has no comprehensive on-line data base.

The draft audit regards this, "verification gap" [my phrase] as presenting, "...the risk that substandard construction work may be performed, or that the safety and rights of construction project workers may not be adequately safeguarded."

Comments:

1) The Auditor's report would seem to presume that our goal is either to maintain a "failsafe" system to assure that no substandard work shall ever be performed, and that the safety and rights of all workers shall always be assured, or to maintain a system in which the risk is held to some minimum acceptable level. The draft audit suggests that the risk under the current system is unacceptably high. However, it is important to note that the Certification Unit's role to ensure that only qualified contractors are allowed to bid on public construction projects and further that the Certification Unit is not an enforcement or investigatory agency.

The issue then becomes whether there are changes that we can make in our procedures that are, (1) affordable in terms of our limited budget and available staff-hours; and, (2) likely to produce relevant data that will significantly reduce the perceived risk.

(a) If a "fail safe" system is not the goal, then the argument can be made that our current system already limits risk to an acceptable level- witness the fact that of 162 applications reviewed by the auditors, only one (1) problem was identified.

(b) Exactly what additional resources might be necessary to modify our current system has not been determined. We do not know what sorts of information are available from other states, nor do we know how easily accessible such information might be. However, the Certification Unit can undertake the research to determine what resources are publically available in border states regarding contractors. At this time the Certification Unit does not have the resources to survey all other states in the United States to obtain the same information. Consequently, the same perceived verification gap could be an issue for contractors that operate out of non-border states.

(c) To the extent that budget and staffing remain the same, devoting resources to modifying our verification system for out-of-state applicants runs a significant risk that overall application processing time will grow and backlogs could develop. The approximate total number of applications runs about 1,300 per year, then 208 represents about 16% of our total annual workload. A change in how we deal with that 16% is very likely to have significant ramifications for our overall performance.

2) The absence of, "a comprehensive and effective mechanism for verifying the legal and administrative standing of out-of-state applicants" does not mean that the public is unprotected. The current system includes numerous safeguards:

a) Self-Reporting under the Pains and Penalties of Perjury:

The application process is a self-reporting system. It must be noted, however, that selfreporting is not at all unusual in either the public or the private sector. In the public sector, for example, the filing of income tax returns is a "self-reporting' system, but, it may be said, DOR and IRS have no "comprehensive and effective mechanism for verifying" information, and they do not routinely seek independent verification of all information provided by all taxpayers on all tax returns. That does not, however, mean that the public's interest in the viability of the revenue producing function is exposed to unnecessary risk. Whoever signs a tax return is held to stand behind the truth and accuracy of the information contained in the return, and there are serious penalties for filing incomplete, misleading and false returns. Similarly, DCAMM's existing procedures protect that public interest because- as the draft audit acknowledges- applications are filed under the (not insignificant) "pains and penalties of perjury". b) Financial Reports and Records

Under current practice, applicants are required to submit certain financial records and reports which include materials prepared and signed by their accountants. These should provide - for both Massachusetts and out-of-state applicants - information as to pending litigation and administrative proceedings.

c) The Possibility of Decertification or Debarment

Just as the possibility of suffering the pains and penalties of perjury helps assure the veracity of self-reported information, the ultimate threats of decertification and debarment serve as inducements to accurate and complete self-reporting.

d) Out-of-State Contractors Doing Business in Massachusetts

To the extent that an out-of-state applicant has a recent history of work in Massachusetts, our local Massachusetts resources- DUA, DIA, Fair Share, etc.- are likely to have available relevant information as to the accuracy of self-reported data.

e) Federal Data

As noted at the outset, there already exists under our current system the possibility that data about out-of-state applications will be revealed when we check OSHA and the Federal Debarment data bases- sources that are federal and therefore cover multiple states.

f) Informal Safeguards

The role of local "watch dogs" such as union organizations and competitor contractors in bringing issues to our attention should not be discounted.

Conclusion as to Finding #2

(1) It is not unreasonable to argue that, despite the lack of a "comprehensive" mechanism for verifying self-reported information from out-of-state contractors, the risk to the public interest is at acceptable levels under the current system of formal and informal controls.

(2) It remains to be determined whether the current verification system can be enhanced with an acceptable expenditure of additional resources in terms of budget and staffhours.

Auditor's Reply

We agree that DCAMM routinely accesses information from the Occupational Safety and Health Administration (OSHA) and the Federal Debarment List; however, these databases do not contain any information relating to an out-of-state contractor's certification status within his or her own state. OSHA would record only certain workplace safety violations, whereas the Federal Debarment List records all types of violations, but only if they have occurred on a federally funded project. Therefore, these two resources do not comprehensively close the "verification gap" referred to in DCAMM's response.

Contrary to DCAMM's comment that no easily accessible online resources exist to verify selfreported information, we were able to readily access and confirm this information on databases maintained by the states of Rhode Island, New York, and Connecticut. With respect to New Hampshire, we transmitted a list of 38 contractors to the New Hampshire Department of Labor requesting confirmation of the self-reported information contained in the contractors' Certification Applications on file at DCAMM. We received confirmation of this self-reported information on 37 of the 38 contractors applying for certification, with one discrepancy.

We agree that the Certification Unit's role is to ensure that only qualified contractors are allowed to bid on public construction projects. Furthermore, as previously mentioned, we were able to readily access databases to confirm the self-reported information supplied to DCAMM from contractors in neighboring states. Therefore, we believe that this process would neither be time consuming nor a financial burden to DCAMM. Furthermore, we maintain that "a fail-safe system," to the extent possible, should always be the goal of the Certification Unit.

We agree that self-reported information under the pains and penalties of perjury, coupled with the consequences of reporting inaccurate information resulting in decertification or debarment from doing business in Massachusetts, is a deterrent. Our report does not take issue with the financial reporting requirements, which are provided by a third-party, but rather is directed at the administrative and legal ramifications of self-reporting. However, based on our ability to readily access information from neighboring states, we believe that this confirmation process further reduces the risk of hiring a contractor who is not in good legal standing within his or her own state.

3. INADEQUATE ASSURANCE THAT THE SCORES ON THE DCAMM STANDARD CONTRACTOR EVALUATION FORMS ACCURATELY REFLECT A CONTRACTOR'S ACTUAL JOB PERFORMANCE

DCAMM requires public awarding authorities to complete a standard contractor evaluation form to evaluate a contractor's performance at the completion of a public building project. The form has three main categories (Project Management, Quality of Workmanship, and On-Site Supervisory Personnel Rating), with various subcategories under each that are assigned a numerical score. The form must be completed by both the awarding authority and its Owner Project Manager (OPM). DCAMM's standard procedure is to average these scores and record the results in a Contractor Certification file, where it is used as a basis for future contract awards. A passing or satisfactory grade is 80.

A review of the form showed that the three main categories are assigned point values, as follows:

Project Management	58
Quality of Workmanship	28
On-Site Supervisory Personnel Rating	14
	<u>100</u>

The project management category is further broken into seven subcategories, as follows:

Scheduling	0-13
Sub-Contractor Management	0-13
Safety and Housekeeping	0 - 9
Change Orders	0 - 9
Working Relationships	0 - 7
Paperwork Processing	<u>0 - 7</u>
	<u>0-58</u>

These point values have been predetermined and are utilized to rate contractors on all completed projects costing over \$1,500,000.

Our analysis of the form disclosed that the point totals and point ranges are inflexible, do not consider the difference in complexity of projects, and do not appear to reflect the relative importance of the category to which they are assigned. For example, the Change Orders category, which essentially evaluates whether a contractor delivered the project on or under budget, is only worth a possible 9 points out of 100, whereas the Scheduling category is worth a possible 13 points out of 100. As a result, evaluating whether a contractor delivered a project on time and on budget comprises only 22 out of 100 points on the Standard Contractor Evaluation Form. These numerical values seem low, considering the importance of these two categories. Therefore, a reviewer could essentially give a contractor a less than satisfactory grade in both the

Scheduling and Change Orders categories because a project was delivered late and over budget, yet that same contractor could still receive a passing grade on the overall evaluation score.

Another issue is that the predefined point values are fixed and therefore do not necessarily reflect a reviewer's perspective of the relative importance of the categories. For example, when building a school, the owner of the project (most likely the school committee for the municipality), also known as the Awarding Authority (AA), would likely consider Scheduling to be of the upmost importance, because the AA needs construction to conclude prior to the start of the semester or school year. However, regardless of the AA's respective views on the most important aspects of a project, the minimum points that a contractor can be awarded with, or penalized for, remains at 13 out of 100.

Yet another issue with the process occurs when the DCAMM's AA and the OPM record significantly different scores for a contractor on a specific project. DCAMM's current policy is to disregard both scores if they cannot be reconciled. As a result, a contractor could receive a very low score from an agency with a stake in the project, without that performance being considered in the determination of future contract awards. For example, DCAMM received widely different scores from the AA and the OPM on a project for a local housing authority. The AA, which obviously was displeased with the work, rated the contractor a total score of 40 out of 100, whereas the OPM gave the contractor a satisfactory total score of 81 out 100. In this case, both evaluations were disregarded and not included in the contractor's certification file.

We have had a number of discussions on these issues with DCAMM management, who has indicated that they are currently being studied by the Contractor's Law Working Group and DCAMM.

Recommendation

DCAMM should perform a preliminary risk assessment prior to soliciting bids for a construction job so that it more accurately applies the variables of that particular project to the numerical evaluation scale. Prior to the onset of construction, DCAMM should assess which aspects of a project are crucial for success and weigh those aspects accordingly on the accompanying evaluation form, rather than pre-define the point range of the various categories and force their application on all projects across the board. In addition, DCAMM should modify its procedures to reconcile different scores on the same project in order to ensure all scores on contractor performance are considered when awarding future contracts.

Auditee's Response

The current contractor evaluation process is being reviewed and the concern raised by this audit will be incorporated in the review. Several likely outcomes of the review are wholesale changes in the evaluation forms and process.

APPENDIX A

DCAMM Operational Components

OFFICE OF FINANCE AND ADMINISTRATION

Division of Capital Asset Management and Maintenance (DCAMM) operations and fiscal activities are managed by an internal Office of Finance and Administration, which is primarily responsible for overseeing spending on all projects the agency manages, as well as daily operational expenses, capital spending plans, oversight of human resources, and the administration of construction and architectural contracts for publicly funded projects.

OFFICE OF THE GENERAL COUNSEL

All DCAMM legal services and support for activities related to public building and real estate are provided by its Office of the General Counsel. The General Counsel at DCAMM plays a critical role in real estate transactions, state facility construction, environmental issues, legislative analysis, and litigation. DCAMM's Office of Certification is also organized under the General Counsel, which is responsible for contractor certification, emergency waiver requests (with respect to rush jobs, sole source selection, or other procurement issues arising from special circumstances), and maintenance of contractor debarment lists and comprehensive contractor certification files. DCAMM's Chief Legal Counsel is appointed by the Commissioner to head this internal office and oversee these functions.

OFFICE OF LEASING AND STATE OFFICE PLANNING

The Office of Leasing and State Office Planning (OLSOP) is a department within DCAMM that is responsible for the Commonwealth's leasing activity and management of office buildings, and provides planning and reconfiguration assistance to agencies to meet changing office needs. On behalf of the Commonwealth of Massachusetts, DCAMM leases more than 7 million square feet of space from both private and public landlords. The Office of Real Estate Management (OREM) is a department within OLSOP responsible for acquiring and disposing of real property for the Commonwealth as well as providing licensing, land use, and legal assistance to entities wishing to use land owned by the state.

DESIGNER SELECTION BOARD

The Designer Selection Board (DSB) is an autonomous segment of DCAMM that is responsible for selecting designers for public construction projects throughout Massachusetts. The DSB was established autonomously to avoid the appearance of undue or biased influence by DCAMM staff on the selection of design firms, although DCAMM does provide input as an interested party. The DSB is made up of 11 board members, of whom eight are selected by the Governor of Massachusetts, three are registered architects, three are registered engineers, and two are representatives of the public who are not architects, designers, engineers, or construction contractors. Three more members may be appointed by the Boston Society of Architects, the Massachusetts Society of Professional Engineers, and the Associated General Contractors (AGC). DCAMM personnel do not hold any voting or other official capacity with the DSB. The Executive Office for Administration and Finance provides the DSB with an Executive Director, staff, and office space.

OFFICE OF PLANNING, DESIGN, AND CONSTRUCTION

The Office of Planning, Design, and Construction (OPDC) is the department within DCAMM responsible for every phase of state building project management, including project initiation and development, planning and design, and actual construction of the facility. OPDC oversees the work of architectural and engineering firms directly involved in public building projects, as well as the general contractors and sub-contractors who perform the actual work. In the early stages of a project, OPDC provides programming services defining the scope of a project, identifying issues and technical requirements, establishing a framework for more detailed design decisions, and determining project feasibility (based on several factors, such as budget, environmental impact, and scheduling). When a building project is initiated, OPDC manages design and construction services such as studies for preventative maintenance, design document development, construction document development, and contractor oversight.

OPDC, which is understandably one of the largest and most important offices within DCAMM, has as its primary function the procurement of goods, services, and oversight needed to complete the high-quality and cost-efficient construction, renovation, and maintenance of public facilities. In furtherance of this goal, OPDC utilizes several different project-delivery management methods.³ Different project management methods can be suited to different types of projects, as they differ in everything from procurement of sub-contractors to project scheduling. However, perhaps most importantly, the different methods of project delivery can be used to alter the final pricing and compensation component of construction projects, shifting the risk of cost overruns between the project owner and the contractor. Until the mid-1990s, when alternative project delivery methods became popular, Design-Bid-Build (DBB) was the predominant option for public construction projects. With its more traditional structure and requirement of hiring the lowest bidder, DBB was intended to be a cost-saving option, but it became associated with inferior quality of the final product, primarily due to its emphasis on hiring the lowest-cost bidder (which did not guarantee the lowest final price).

³ A project delivery management method is a term referring to the comprehensive methods used to procure, select, manage, and compensate designers and contractors for project completion.

APPENDIX B

Report Glossary

<u>Average Project Rating (APR)</u>: The numerical average score derived from the completion of Standard Contractor Evaluation Forms for Building Projects completed within the time frame established in Chapter 149, Section 44D, of the Massachusetts General Laws.

<u>Awarding Authority (Owner)</u>: The public agency, authority, or entity undertaking a public building project. At the state level, this is usually the Division of Capital Asset Management and Maintenance (DCAMM). However, it can also be the UMass Building Authority or the Massachusetts State College Building Authority (MSCBA) for higher education projects, the Massachusetts Port Authority or Department of Transportation for transportation projects, or a city or town for municipal construction projects funded primarily at the local level.

<u>Certification</u>: Process by which general contractors are deemed competent and responsible to engage in public construction projects in the Commonwealth.

<u>Change Order</u>: A document requesting, acknowledging, and approving (or disapproving) work that is either added to or deleted from the project scope, altering the original Guaranteed Maximum Price (GMP) in the contract, the planned completion date, or both.

Construction Contingency: The line item in the GMP schedule that compensates for unforeseen conditions or events within the scope of a public building project.

<u>Construction Contingency Balance</u>: Money remaining after covering the net amount of unforeseen conditions or events within the scope of a project.

<u>Construction Manager at Risk (CMAR)</u>: A public building project delivery management method that includes commitment by a construction management firm early in the construction process during the design phase, and usually involves delivering a project within a GMP.

DCAMM Certification (Certificate of Eligibility): An official document giving a contractor the right to submit qualifications, proposals, and bid packages for DCAMM public building projects.

Designer: An individual, corporation, partnership, sole proprietorship, joint stock company, joint venture, or other entity engaged in the practice of architecture, landscape, or engineering.

Design-Bid-Build: A method of public construction procurement under Chapter 149 of the General Laws under which the design phase is advertised and completed first, and then the project is bid to General Contractors.

Division of Capital Asset Management and Maintenance: A division of the Executive Office for Administration and Finance established under Chapter 7, Section 4A, of the General Laws responsible for facilitating and overseeing public construction projects in the Commonwealth.

Foreign Corporation: A legal entity registered as a corporation outside the State of Massachusetts.

<u>Guaranteed Maximum Price (GMP)</u>: Also known as a not-to exceed price, it is the negotiated maximum cost of a project, agreed to between a CMAR firm and DCAMM, in conjunction with the Designer and <u>Awarding Authority</u>. The GMP is set when the design construction documents are not less than 60% complete.

<u>Green Sheet</u>: A DCAMM form that indicates whether all interested parties agree or disagree with the particulars of a specific Change Order.

Hard Costs: Costs directly associated with materials, equipment, and any other tangible necessities used to complete a building project.

OSHA Violations: Violations of the rules and regulations as set forth by the Occupational Safety and Health Administration. OSHA is responsible for enforcing workplace safety and code enforcement and can levy sanctions against contractors for various infractions, mostly involving safety precautions associated with construction work.

Overall Numeric Rating: A weighted combination of the Average Project Rating and other criteria used to evaluate Certification applications. An ONR of 80 must be achieved for certification.

Owner's Project Manager: An individual or firm contracted, retained, or designated by the Awarding Authority who will act as the Awarding Authority's agent in managing a public building project on behalf of the Awarding Authority in accordance with the requirements set forth in Chapter 149, Section 44A¹/₂, of the General Laws.

Prequalification Committee: A committee established to review and evaluate responses to a Request for Qualifications. The prequalification committee prequalifies CMAR firms that meet required criteria for a building project.

<u>Proposals (Bid Package)</u>: Responses to the Request for Proposals from contractors which contain a technical and price component. The technical component details and explains why a firm is competent to perform the needed CMAR activities.

Public Building Project: Any project for the construction, reconstruction, installation, demolition, maintenance, or repair of a publicly owned or operated facility.

Request for Proposals (RFP): A batch of documents detailing the scope and specific logistical, environmental, fiscal, and competence requirements for a building project. The RFP reflects the strategy and long-/short-term goals of the building project. The RFP is issued to prequalified CMAR firms to submit Proposals.

<u>Request for Qualifications (RFQ)</u>: The initial public notice soliciting CMAR firm qualifications for a building project to prequalify them to receive requests for proposals. The RFQ outlines the project scope and core competencies required by an ideal CMAR firm.

<u>Selection Committee</u>: A committee established to review and evaluate Proposals and rank CMAR firms based on their Proposals.

Standard Contractor Evaluation Form: An evaluation form used for rating a Contractor's performance to be completed by Awarding Authorities and other appropriate parties upon completion of a building project.

<u>Submission of Qualifications (SOQ)</u>: The package CMAR firms submit in response to a Request for Qualifications, detailing specific project competencies and reasons why a CMAR firm should be prequalified by DCAMM's Prequalification Committee to receive a Request for Proposals.

Update Statement: A statement showing current projects, significant changes in financial position, litigation, and other information relevant to the contractor's qualifications between the time the certificate of eligibility was issued and the bid submitted.