



OFFICE OF THE PROCUREMENT OMBUDSMAN



CHAPTER 1

PROCUREMENT PRACTICES REVIEW *CONSTRUCTION CONTRACT AMENDMENTS*

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STRENGTHENING THE CONFIDENCE OF CANADIANS IN PUBLIC PROCUREMENT

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Executive Summary

1.1 The Office of the Procurement Ombudsman (OPO) reviewed the practices of some federal departments and agencies in the management of amendments to construction contracts. The OPO believes that it was important to review this area given the government's intention to inject billions of dollars into the Canadian economy, through stimulus spending on infrastructure. A considerable amount of this spending will be for federal construction projects. Treasury Board had previously increased construction contract delegations of some departments and agencies for specific programs and real property renewal projects. The OPO wanted to find out if there were adequate management frameworks in place to allow for effective management of these increased delegations by looking specifically at the management of construction contract amendments.

1.2 The construction industry has a long history of co-operation with the Government of Canada; the industry has had a voice in the development of the government's policies and procedures for contracting and managing construction services. Construction industry practices are generally conservative, a trend solidified by a large number of construction-related court cases. Consequently, the industry expects that federal government construction contracts will be managed in a consistent manner. Consistent practices are thought to support fairness, access for interested and qualified suppliers, and openness in procurement.

1.3 Until recently, Public Works and Government Services Canada (PWGSC) was the principal purchaser of construction services for the federal Government's departments and agencies. The other departments and agencies had limited or no responsibility for construction contracts. The necessity to renew real property assets changed that, and other organizations have been given increased responsibility for managing construction contracts and contract amendments. Recent programs such as the twinning of the Trans-Canada Highway through Banff, the renewal of national historic and visitor facilities, the Small Craft Harbours Program and other recapitalization activities have resulted in a significant increase in contracting and contract management in departments and agencies that previously carried out little or no construction contracting.

1.4 PWGSC was a participant in our review because it is the major player in the construction and management of real property for the Government of Canada. PWGSC annually awards approximately \$700 million in construction contracts and manages 1,800 new construction contracts of one kind or another. PWGSC's management framework for construction contract amendments, which included their policies, procedures, guidelines and practices, served as a basis against which we compared selected departments and agencies. The departments and agencies reviewed were the Parks Canada Agency, Atlantic Service Centre; Royal Canadian Mounted Police, Atlantic Region; and Department of Fisheries and Oceans, Newfoundland and Labrador Region.

1.5 The OPO found that PWGSC has identified the risks associated with construction contract amendments and has developed detailed procedures, tools and training programs to manage these risks. Contract amendments are made with the same care as new contracts. PWGSC contract officers are required to maintain a complete file, or audit trail, which justifies the reason a construction contract amendment is required and demonstrates that the price is fair and reasonable. The contract officers are expected to follow this management framework, a framework that is designed to promote fairness, openness and transparency, protect the public purse, while complying with government-wide rules for contract amendments.

1.6 The RCMP has developed a number of detailed policies and procedures related to construction project delivery and property management. But there are limited policies, procedures or guidance on how to handle construction contract amendments. The Department of Fisheries and Ocean's policies and procedures on construction contract amendments are inadequate. Their procedures manual says that the project officer is to inform the departmental Contract Services of the need for an amendment; Contract Services is to issue the amendment; and the contract officer is to complete a contract file checklist. Our file review revealed that the required documentation was seldomly completed for amendments.

1.7 As renewal and stimulus funding flows to government departments and agencies, the OPO recommends that other departments and agencies consider adopting and adapting PWGSC's management framework for construction contract amendments. The OPO found that the Parks Canada Agency is taking this approach. Its policies and procedures are in the draft stage but are being tested in the field.

1.8 DFO and the RCMP reported that it is challenging to find the human resources necessary to effectively manage the increasing numbers of contracts. The Parks Canada Agency recognized that contracting for construction requires specialized skills and knowledge, and the Agency is recruiting staff with experience in the construction industry.

1.9 To build public trust, the government must demonstrate that procurement is well managed and that public funds are spent appropriately. In conducting its review, the OPO expected to see contract amendment files with full and complete records that revealed the decision-making processes. The OPO expected to find the following documentation for construction contract amendments on each file:

- A clear description of the change requirements;
- A justification or rationale for the change;
- Quotes from the contractor;
- Confirmation that the price quote received from the contractor was fair and reasonable;
- Confirmation that the change was within the scope of the contract;

- Identification of the type of change – e.g. an unknown site condition, an error or omission, a design change; and
- Signed copies of contract amendments that have been issued to the contractor.

1.10 With the exception of PWGSC, many files in the selected departments and agencies were incomplete and critical information was missing. It was often not evident from the file that a signed contract amendment had been sent to the contractor or that there had been a mutual understanding between the contractor and the government over the requirements of the contract amendment.

1.11 Our review indicates that the framework for management of construction contract amendments is not well developed outside PWGSC. In addition we found considerable variability in the management of these amendments. The OPO concluded that other departments and agencies would benefit by adopting the PWGSC policies and procedures for construction contract amendments and adjusting them to fit within their own environment and risk factors. Other departments can learn from PWGSC, the department with expertise, experience and a good relationship with the construction industry. The OPO believes that fairness, openness and transparency in procurement would be promoted by the adoption of this management framework.

All departments and agencies involved in this review were given an opportunity to review this report and their comments were taken into consideration when it was finalized.

Introduction

Context

Values and Ethics

1.12 The Code of Conduct for Procurement requires that public servants perform their duties in a manner that instils public confidence in the integrity, objectivity and impartiality of government. In relation to procurement, the root of this confidence is embodied in the principles of fairness, openness and transparency. According to the Auditor General of Canada, the principles of openness and transparency, in particular, constitute the foundation of ethical behaviour (Fraser 2004).

1.13 As defined in Public Works and Government Services Canada's Supply Manual, "contract amendments are used to formally delete, modify, or introduce new conditions to the original contract." When issued, contract amendments become part of the contract. As such, the identical standards of ethical conduct and principles of fairness, openness and transparency apply to the approval and issuance of a contract amendment as they do in a contract.

Treasury Board Policy

1.14 The Treasury Board (TB) Contracting Policy provides guidance in the establishment of a framework for the management of contracts within the Government of Canada. This document states that although contract amendments are permissible, contracts should not be amended unless such amendments are in the best interest of the government; contract amendments should be made with the same care that went into the original contract, and with respect to contract documentation, procurement files shall be established and structured to facilitate management oversight with a complete audit trail that contains contracting details related to relevant communications and decisions, including the identification of involved officials and contracting approval authorities.

Trade Agreements

1.15 The WTO-AGP [Article XV (f)] is explicit in stating that limited tendering procedures may be used:

when additional construction services which were not included in the initial contract but which were within the objectives of the original tender documentation have, through unforeseeable circumstances, become necessary to complete the construction services described therein, and the entity needs to award contracts for the additional construction services to the contractor carrying out the construction services concerned since the separation of the additional construction services from the initial contract would be difficult for technical or economic reasons and cause significant inconvenience to the entity. However, the total value of contracts awarded for the additional construction services may not exceed 50 per cent of the amount of the main contract.

Canadian International Trade Tribunal (CITT)

1.16 The CITT has determined that changes or additions to the work of existing contracts that appear to be materially different from the original specifications are new procurements. Consequently, the issue of a contract amendment that falls within this limitation could amount to limited tendering or sole sourcing. If no adequate justification is provided for the limited tendering, the CITT is of the view that Canada would be in violation of the limited tendering exceptions of Article 506 of the Agreement on Internal Trade, Article 1016 of the North American Free Trade Agreement and Article XV of the World Trade Organization's Agreement on Government Procurement (WTO-AGP).

1.17 The Canadian International Trade Tribunal, in five separate decisions (Bell Mobility, PR2008-008 and PR2008-009; Bajaj Inc., PR-2003-010; Tendering Publications Limited, PR2002-002 and Rolls-Royce Industries Canada Inc., PR-99-053), ruled that the contract amendments issued were in fact new procurements that were not justified under the limited tendering exceptions of various trade agreements.

Why it Matters

The Industry

1.18 In the Government of Canada, construction contracting and the management of construction contracts are carried out predominantly by Public Works and Government Services Canada (PWGSC). Annually, PWGSC awards approximately \$700 million in construction contracts and manages approximately 1,800 new construction contracting instruments (PWGSC, Office of Audit and Evaluation Report).

1.19 The construction industry is a key economic driver in the Canadian economy, representing 12% of gross domestic product (Construction Sector Council 2006). According to Statistics Canada, for every one job that the construction industry creates, it will in turn generate three jobs in the general economy. For every \$1 million invested in non-residential construction, 15 to 20 person-years of employment are created (Defence Construction Canada 2009).

1.20 According to Hao, Shen, Neelamkavil and Thomas (2008), more than 95% of Canadian construction companies are small enterprises. The importance of small and medium enterprises to Canada is evident in the establishment of the Office of Small and Medium Enterprises (OSME) within PWGSC to advocate for small and medium suppliers that want to do business with the government. As stated on the OSME Web site: "SMEs are critical to the Canadian economy: The success of SMEs affects the well-being of the Canadian economy and society as engines of job creation, economic growth and innovation."

1.21 The industry, therefore, is a significant factor in the federal supply chain, as well as a major contributor to the Canadian economy. So much so that the Government of Canada invested heavily in the industry through the rollout of funding for infrastructure projects as part of the government's stimulus package in response to the global recession in 2008 and 2009.

Risk

1.22 By nature, construction is risky. “Based on statistics gathered in the past three decades on topics such as disputes in the construction industry, arbitration, accidents at work and exposure to natural hazards, it is clear that construction projects are sensitive to an extremely large matrix of hazards, and thus to risks” (Kendrick 2009). Risks to successful delivery include:

- The extended time required to plan, approve, design and implement a construction project, which could result in technological redundancies by the time the project is constructed;
- Conflicting requirements of the stakeholders involved in the process, such as owners, designers, contractors, subcontractors, government regulators, suppliers manufacturers, insurers and bonding companies;
- Unanticipated conditions at the site;
- Natural forces such as weather and other related hazards that result in delay;
- Selection of materials that may include unproved products;
- Errors and omissions in the initial design; and
- Unpredictable vulnerabilities such as injury, regulatory issues and funding problems.

1.23 In construction contracting, a contract amendment is known as a change order. A change order is issued when an alteration to the work is required as a result of either unanticipated site conditions, corrections to the original drawings or specifications, architectural or engineering design changes, or extensions to the completion date. Changes that are authorized and issued to the contractor in the form of an amendment become part of the construction contract.

1.24 Although contract amendments are common in construction contracts, the effort of managing these changes is a burden to stakeholders. Because of the nature of construction and the risks, conflicts among owners and contractors are commonplace. Owners and contractors often are at odds regarding design versus construction issues, and the responsibility and liability of each party in solving the problem (Shapiro 2005).

1.25 Construction contracts anticipate, plan and incorporate processes related to contract changes in their terms and conditions. Change clauses in construction contracts typically address the impact of the change on the scope, schedule and budget. The construction industry has identified changes to the work after contract award as a major cause of project delay, cost overrun and disputes, and as having an impact on quality and performance, all of which are risks contributing to project failure (Hao, Shen, Neelamkavil and Thomas 2008).

1.26 In some circumstances, for example, lump-sum contracts in which unit pricing was not included in the bid, the costs associated with contract changes cannot be determined using competitive pricing. In these circumstances, adding or modifying the

work without the advantage of competition could result in a challenge to Canada's objective to achieve value for money.

1.27 Not all changes may be owner-generated. McGuinness and Bauld (2009) suggest that contract changes "may be the result of deficient work by the contractor or its subcontractors or other suppliers." Isaac and Navon (2008), cited in Hao, Shen, Neelamkavil and Thomas (2008), indicate that the principal causes of changes are owner-initiated changes and design errors and omissions. In the latter case, the cost of the design errors and omissions may not be the owner's to bear; it may be that they should be the subject of an insurance claim. Changes and change requests, therefore, should be evaluated by qualified individuals on a case-by-case basis.

1.28 To minimize the impact of these risks, contracting and project authorities alike must ensure that a sound management framework is in place to manage the construction contract amendment process.

1.29 Given the significant risks of construction projects, the importance of the industry on the economy, and the risks posed to project delivery through contract changes, we determined that a review of the practices of selected departments and agencies in the issuance of construction contract amendments would be timely and appropriate.

Focus of the Review

Review Objectives

1.30 Our overall objective for this review was to determine whether a management framework for the approval and issuance of construction contract amendments was in place within a selected department or agency and to confirm that the practices of the organization in approving and issuing construction contract amendments support the principles of fairness, openness and transparency and are consistent with the government's applicable legislation, policies, directives and guidelines.

Sub-Objectives

1.31 To determine whether a management control framework for construction contract amendments is in place within a selected department or agency.

1.32 To determine whether the management control framework for construction contract amendments, within selected departments or agencies, is applied in their practices.

Scope and Period of Review

1.33 The practice review of construction contract amendments concentrated on the following lines of inquiry.

1.34 First, we selected a number of departments and agencies that carry out construction contracting and manage construction contracts under their own delegated contracting authority and reviewed their policies and procedures on the management of

construction contract amendments to determine whether or not the policies and procedures reflected the relevant legislation, central agency policies, directives and guidelines and supported the principles of fairness, openness and transparency.

1.35 Second, we reviewed contract files containing construction contract amendments to determine whether or not the amendments were approved and issued in accordance with the organization's documented policies and procedures. We did not assess the merit of the contract amendment itself; rather, we concentrated on whether or not it was issued in accordance with the organization's written policies.

1.36 Finally, based on the annual volume and value of PWGSC construction contracting activity, its well-established experience and long-standing relationship with the Canadian construction industry, we expected that PWGSC would provide evidence of sound practices in the management of construction contract amendments. As a result, we reviewed PWGSC policies and procedures related to construction contract amendments, interviewed representatives of PWGSC's Real Property Branch and Real Property Contracting Directorate, and carried out a review of their files.

1.37 Our review concentrated on construction contracts awarded from April 1, 2008, to the end of the investigation phase in January 2010.

Review Methodology

1.38 For efficiency, we concentrated on construction contracts implemented and managed in the Atlantic Region.

1.39 We selected the following three government offices for review:

- a) Fisheries and Oceans Canada (DFO), Newfoundland and Labrador Region St. John's, Newfoundland, office
- b) Parks Canada (PC), Atlantic Service Centre, Halifax, Nova Scotia
- c) Royal Canadian Mounted Police (RCMP), Atlantic Region, Halifax, Nova Scotia

1.40 It was our objective to review an equal number of construction contract files with contract amendments from all organizations for each of the two fiscal years (FY 2008-2009 and FY 2009-2010). Because some of the organizations we selected, such as the RCMP and Parks Canada, did not begin to exercise their higher authorities for construction contracting until this fiscal year, we were not able to review the anticipated number of files.

1.41 Departmental and agency personnel involved in the monitoring and management of the construction contract amendment processes were interviewed to verify that they are aware of their organization's policies and procedures and how these are applied in the approval and issuance of contract amendments. Individuals interviewed at the Department of Fisheries and Oceans, Parks Canada Agency and Royal Canadian Mounted Police were from the Purchasing and Supply group. Thirty-seven files were reviewed at the Department of Fisheries and Oceans in St John's; fifteen files at the

Royal Canadian Mounted Police, Atlantic Region, in Halifax, and only four files at the Parks Canada Agency, Atlantic Service Centre, in Halifax.

Review Observations

1.42 Owing to the inherent risks in construction, we expected to find solid management frameworks in place for contract changes. In terms of the management framework, we looked for the following:

- Detailed written policies and procedures that were developed to mitigate the risks in construction projects and to take into account the standard practices of the industry;
- Adequate tools to allow for quick responses to changed requirements or circumstances;
- Experienced human resources who were provided with training specifically related to construction contracting;
- Standards for documentation and record keeping; and
- Clear definitions of the roles and responsibilities of the stakeholders

Management Control Framework

Inconsistent policies and procedures

1.43 We found a range of adequacy in policies and procedures from the very good, for example, the detailed documentation of PWGSC's *National Project Management System (NPMS)* and *Supply Manual*, to the minimal, for example, DFO's *Material Management Checklist* and *Construction Contracting Greater than LDV (Low Dollar Value)* documents.

1.44 PWGSC's NPMS chapter on Managing Construction Contract Changes provides comprehensive information on the change management process, including the requirements to initiate a change, how to determine costs, including the need to assess the impact of the change on the project schedule, standard forms and what is necessary to complete each form, direction on how to negotiate costs and approvals, checklists for managing, samples and information on PWGSC's emergency and urgent contract change processes. In addition to these Real Property Branch documents, Real Property Contracting has a checklist of required records related to changes that are to be included in the contract file. Among other items, the requirements of this checklist include:

- a copy of the contemplated change notice and site instructions prepared by the project manager;
- the need for a summary of the change requirements;

- the categorization of the change;
- the necessity to have quotations from the contractor;
- written confirmation that the quoted costs are fair and reasonable;
- confirmation that funding is available; and
- copies of signed contract changes that have been issued to the contractor.

1.45 The Parks Canada Agency recognized that it needed to strengthen its construction contract process and decided to adapt the PWGSC documents and templates for its use to reflect the Agency's own assessed risks. Although they have been rolled out, Parks Canada policies and procedures are at the draft stage.

1.46 The RCMP has developed a fair amount of detailed policies and procedures related to project delivery and property management. But the procedures on construction contract amendments lack sufficient detail as to how the process is to be undertaken, guidance on the responsibilities and accountabilities of the property managers and procurement officers in the process, and what is deemed to be necessary for the contract file.

1.47 The Department of Fisheries and Oceans' policies and procedures on construction contract changes consist of three sentences in the section on Contract Administration in the procedures entitled Construction Contracting Greater than LDV. The requirements stipulate that the responsibility centre manager is to inform Contract Services of the need for an amendment, and Contract Services is to issue the amendment. DFO also has a contract file checklist related to contract amendments that is more informative. The checklist stipulates that the file must have a clear rationale, financial commitment, signed amendment by the contractor and a signed copy of the amendment on each file.

1.48 The file review confirmed that most departments and agencies reviewed followed their published policies and procedures on construction changes. However, despite the fact that each of the 37 DFO files reviewed contained the Material Management Checklist, the section of the checklist on contract amendments was never completed.

1.49 Unless adequate and detailed information is provided as guidance for personnel in their decision-making processes, it cannot be stated that the management framework for construction contract amendments conforms to the principles of fairness, openness and transparency.

Lack of clearly defined roles and responsibilities

1.50 All departments and agencies subject to this review had split the responsibilities and accountabilities for the management of construction contracts between the project management function and the contract administrative function. Typically, project or property managers were responsible for the day-to-day management of the project, while procurement or contracting officers were responsible for administering the

contract. However, with the exception of PWGSC in the National Capital Area, it is not clear from the policies and procedures of any of the departments or agencies involved in this review what the specific roles, responsibilities and accountabilities of each of these functions are. This could lead to confusion and irregularities in the process.

Variability in Construction Contract Change Management Systems

1.51 We found a fair degree of variability in the management of construction contract amendments among the selected departments and agencies resulting from differences in how risk in a construction contract is perceived by these government entities. For example, PWGSC and DFO have delegated limited contracting authority to authorize contract amendments to their project managers, whereas project managers at Parks Canada and the RCMP have no delegated contracting authority and cannot authorize contract changes.

1.52 PWGSC is the only department reviewed that expanded its management toolkit and developed more than one mechanism to expedite the change process to ensure that contract changes are approved and issued in a timely fashion. PWGSC's short-form process serves to ensure that approvals of contract changes are carried out with minimal delay. The delegation of some contracting authority for the approval of contract amendments to project managers and senior project managers allows for quick decisions and approvals. In addition, PWGSC has established a pre-approval process, which is supported by a contract risk assessment that serves to facilitate prompt approvals of changes during the implementation of the work.

1.53 To ensure quality in the change management process, Parks Canada and PWGSC have incorporated the requirement for third-party review before approvals are received into their change management procedures.

1.54 Both DFO and the RCMP stated that they believe lower dollar value changes and lower dollar value construction contracts to be less risky than higher dollar value ones. As a result, the lower dollar value changes were handled in a less formal manner. On the other hand, the Parks Canada and PWGSC processes do not discriminate between low and high dollar value changes and are handled in the same manner.

1.55 In addition to the interdepartmental variability, our interviews indicated that since some of the departments and agencies we reviewed have a decentralized regime, their regions are not obliged to follow centralized procedures. We were told that, as a result, we could expect to see intradepartmental variability as well.

1.56 Construction industry practices are conservative and do not vary much over the years. The high degree of jurisprudence associated with construction has served to further solidify these practices. The industry has a long history of co-operation and participation with the Government of Canada in the development of the government's policies and procedures for the contracting and management of construction services. Consequently, the industry expects that federal government construction contracts will be managed in a consistent manner.

1.57 In our opinion, the variability between and within the federal government in how it manages construction contract changes hampers the fairness and openness of the process. It is our concern that this variability could be perceived by suppliers as added risk that could prevent them from bidding, thereby reducing competition on these federal tenders. Suppliers that have not dealt with a government department or agency in the past and are unfamiliar with the way the organization will manage its construction contracts could do either one of two things to minimize risk: a) not submit a bid to the organization, or b) bid, but include in their bid prices a cost for this additional risk. Conversely, a supplier that is familiar with the organization and knows what the risks are will be able to assess these costs more accurately and will have a bidding advantage.

Human Resources

1.58 In the recent past, PWGSC was the principal purchaser of construction services for federal government departments and agencies. Delegated authorities for the contracting of these services other than PWGSC were low, typically no greater than \$400,000 for most federal entities. As a result, construction contracting activity, independent of that procured and managed by PWGSC, was not carried out at very high volumes.

1.59 Recently, programs such as the twinning of the Trans-Canada Highway through Banff, national historic and visitor facilities, Small Craft Harbours and other recapitalization programs have resulted in an increase in delegated contracting authority. Departments and agencies that may have carried out little or no construction contracting under their own authority are now taking on increased responsibilities and increases in the volume and value of construction contracts they handle. We found that this has posed significant human resource challenges. Construction contracting requires qualified and knowledgeable personnel with an understanding of the risks associated with this commodity. Inexperienced procurement personnel, and personnel who are essentially procurement generalists with little exposure to construction and its associated risks, impact the organization's ability to carry out effective oversight, which in turn, impacts the fairness and openness of the process.

1.60 We found, through our interviews, that some organizations, such as DFO and the RCMP, were experiencing human resource challenges in obtaining experienced construction contracting personnel. Notwithstanding the fact that staffing and recruitment is an ongoing endeavour, in these organizations the contracting units were short-staffed relative to the increased workload that they managed. This impacted the ability of individual staff to acquire the specialized knowledge needed to understand the unique risks and issues associated with construction contracting.

1.61 Parks Canada recognized that construction contracting required specialized skills and knowledge, and as a result it decided to recruit staff who have experience in this commodity and who would be able to participate immediately in the development and mentoring of other staff to build this capability. It also segregated responsibilities within the contracting unit so that personnel dealing with construction contracts were not expected to be generalists but could specialize in the commodity.

1.62 Contracting for construction services at PWGSC is carried out by a dedicated unit of contracting personnel, supported by a commodity team, who benefit from on-the-job training and mentoring by experienced managers and officers. In addition to the on-the-job training in construction, this department has invested in co-training for real property contracting and project management personnel, as well as mandatory training for all procurement professionals. For example, there is a mandatory Construction Administration course for project and senior managers.

File Review

Transparency

1.63 The stated objectives of the government in carrying out contracting are that it shall be undertaken in a manner that will withstand public scrutiny, facilitate access and competition, and reflect fairness. Contracting in the Government of Canada is to be conducted in a manner that promotes public trust. To build this trust, the government must demonstrate that its transactions are well managed and that public funds are spent judiciously. To do so, transparency in the government's decision-making processes is essential.

1.64 Contract changes generally serve to alter the original contract in such a manner that it becomes part of the contract. Therefore, the contract file must contain a complete record of all information relevant to the change to the same extent as would be required when awarding a contract so that Canadians and parliamentarians can know the true cost of projects.

1.65 We expected to see files that supported the written policies and procedures of the organization and in which decisions related to the contract amendment were documented. Instead, with the exception of the PWGSC files, we found that many of the files reviewed in all three organizations were incomplete.

1.66 We were told by all the departments and agencies we reviewed that the records were split between the contract file and the project file. Notwithstanding this fact, we still expected the contract file to contain key documents, in accordance with the TBS Contracting Policy, which states that a contract file must contain "a complete audit trail that contains contracting details related to relevant communications and decisions." Instead, we found that critical information necessary to reveal the decision-making process was missing. Time and again, the type information missing from files included:

- a justification or rationale for the change;
- confirmation that the price quote received from the contractor is fair and reasonable;
- confirmation that the change was within the scope of the contract; and
- identification of the type of change – e.g. unknown site condition, error or omission, design change;

1.67 In addition, we found that often there was no evidence in the file that a signed change or contract amendment had been sent to the contractor, or that there had been a meeting of the minds between the contractor and the project authority over the requirements of the change in the work.

Recommendations

Management Framework

Ensure that a management framework for construction contract amendments, which includes the identification of roles and responsibilities, is in place and accessible to all personnel engaged in the process

1.68 It is important to understand that there is a correlation between ineffective frameworks for the management of construction contract amendments and delay claims, contract disputes and potential project failure. The lack of a solid and detailed management framework increases the risk for both the contractor and the organization. An effective framework must consist of detailed, published and accessible policies and procedures that provide guidance on processes related to the issuance and approval of contract changes. The framework must also define in a clear and straightforward manner the roles, responsibilities and accountabilities of each of the stakeholders in the process.

1.69 We recommend that sound policies and procedures for the management of construction contract changes that are sufficiently detailed to provide guidance and direction for personnel involved in the process be developed, and that a matrix of roles and responsibilities be included within the policies and procedures.

Review internal processes for managing construction contract changes and compare with other federal organizations

1.70 We are concerned that the variability in the management of construction contracts across the Government of Canada may result in higher costs and decreased competition, which could impact the fairness and openness of the procurement of construction services. We recommend that all government organizations involved in the procurement of construction services participate in the Treasury Board Advisory Committee on Contracts – Construction (TBACC-C) in order to share best practices and learn from other organizations with similar challenges.

1.71 We found that PWGSC's policies and procedures for the management of construction contracts, including contract amendments, represent best practices in the development of a sound management framework. Therefore, we recommend that organizations that are developing independent policies and procedures for the management of construction contracts follow the example of Parks Canada and adapt the PWGSC documents rather than starting afresh.

1.72 We are concerned that organizations that do not build into their system sufficient flexibility, as PWGSC has done, to respond to requirements for contract changes in a

timely manner are at risk of claims for delay from the contractor, as well as irregularities and non-conformances with their own procedures. We recommend that these organizations:

- carry out a risk assessment to determine their organization's level of comfort with the delegation of a limited amount of contract amendment authority to the project or property manager; and/or
- consider adapting other PWGSC contract amendment pre-approval processes for their purposes.

Ensure that the individuals dealing with construction contracting have appropriate knowledge and training in the commodity

1.73 As in other knowledge-based occupations, owing to current demographic trends, the human resource capabilities in the procurement of construction services have been deteriorating for a number of years. Representatives of the construction industry have told us that they see reduced expertise in the procurement community and that there is a trend toward lumping commercial services with construction. They also stated that in their experience the public procurement personnel handling capital projects do not always understand the peculiarities of construction.

1.74 We recommend that all departments and agencies involved in construction contracting, including PWGSC, work in partnership with the Canada School of the Public Service to develop training programs to be designed and delivered specifically to construction procurement and contract management personnel.

File Review

Ensure that files are complete and that decision-making processes are identifiable

1.75 We recommend that departments and agencies develop a list of key documents to support the decision-making processes in construction contract amendments. These key documents must then be included in all contract files to improve transparency in the contract amendment process. Contracting files for construction contract changes should contain, at a minimum, the following records:

- A change request or contemplated change notice;
- Justification/reason for the change;
- Categorization of the change (i.e. unknown site condition, correction to drawing or specification, architectural or engineering design change, owner-generated change, time extension);
- Estimated value of the change;
- Price quote from the contractor;
- Verification that the price quoted is fair and reasonable;

- Confirmation that funding is available;
- Necessary approvals to issue the change; and
- Signed change/contract amendment with evidence it was sent to the contractor (e.g. fax or e-mail receipt).

Ensure monitoring and reporting capabilities

1.76 Keeping statistics on the category and types of contract changes and the number of construction contract amendments issued on construction projects provides useful indicators of performance, as well as identifiers of systemic problems in the planning and management of construction contracts. We recommend that construction contract changes, at a minimum, be categorized as follows:

- Unforeseen site conditions;
- Corrections to the original drawings or specifications, errors and omissions;
- Design errors and omissions;
- Soil conditions;
- Client requests;
- Human Resources and Social Development Canada requests; and
- Delay or negligence by the Crown.

1.77 We recommend that organizations develop a capability to generate reports on the types and numbers of contract amendments in order to analyse trends and improve processes.

Conclusion

1.78 We found that some government organizations are developing policies and procedures on their own to manage construction contracts. We found that these organizations had not systematically addressed the inherent risks that are unique to construction in their management framework for contract amendments. Construction is an industry that has developed specific standards and practices over time and that is supported by strong and effective associations. Standard procurement policies and procedures designed for generic services may not fit without modification. Departments may not always be able to reduce the risks inherent in the construction contract amendment process without addressing the uniqueness of the construction commodity.

1.79 We concluded that other departments and agencies would benefit by adapting the PWGSC policies and procedures for construction contract amendments and modifying them to their own environment and risk factors. Other departments can learn from PWGSC, the department with expertise, experience and a good relationship with the construction industry.

1.80 We concluded that personnel assigned to construction contracting would benefit from training designed specifically for construction. We concluded that standards for proper record keeping should be developed and that statistics should be kept on the type and number of contract amendments issued so that problems can be identified and processes improved.

1.81 The Office of the Procurement Ombudsman feels that fairness, openness and transparency would be promoted by the adoption of these recommendations to improve the management framework for construction contract amendments.

All departments and agencies involved in this review were given an opportunity to review this report and their comments were taken into consideration when it was finalized.

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