

**1999-610**

**Audit of Project and Contract Approvals  
for Construction Projects**

**Final Report**

**Approved by the Audit and Review Committee  
2000-05-09**



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## Executive Summary

### Authority for the Project

This audit was included in the 1999/2000 Audit and Review Plan approved by the Audit and Review Committee.

### Objective

The objective of the audit is to determine the extent to which project and contract approval processes currently in use for construction projects (as defined in the Supply Manual) comply with approval process requirements identified in the Treasury Board Manual on Capital Plans, Projects and Procurement, the Treasury Board Manual on Contracting, associated Government Regulations, internal delegated authorities and other applicable departmental policies and procedures.

### Scope

The scope of the audit includes construction projects managed by the Real Property Services Branch (RPSB) and associated contracts awarded in support of such construction projects. The lines of enquiry related to the Preliminary Survey Phase included:

1. Project approval;
2. Contract and amendment approval; and,
3. Controls to ensure that project expenditures do not exceed the approved project amount.

The focus of the Preliminary Survey was on higher dollar value projects selected from the National Capital Area (NCA). The Parliamentary Precinct was excluded from the scope of this review. Lease agreements, lease purchase agreements and associated construction projects were also excluded from the scope.

### Key Findings

#### Project Approval:

The RPSB processes and practices governing construction project approval comply with authorities established in the Treasury Board, Departmental guidelines and internal delegated authorities.

A sample of major projects was selected from the RPSB Investment Management Board (IMB) records and from the Project Business Management System (PBMS). These projects were traced

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to documentation which indicated compliance to the project approval processes within the delegated limits of authority.

Considerable difficulty was encountered in locating and accessing the project approval documents for the sample of projects selected from the PBMS. The RPSB does not utilize a standard, logical project numbering/naming convention that facilitates a clear information trail from the project records in the PBMS to supporting project approval documentation. Although the PBMS facilitates the creation of project records using a hierarchical structure with a "Level 1" indicator if the project has "parent" status and Level 2 or 3 etc. assigned to its subsidiary projects, in actual practice, several Level 1 project records can be created by a project manager all of which may be associated with a single project approval. This practice contributes to an excessive manual effort to assemble and match the total project to supporting documentation in order to provide evidence of approval for projects recorded in the PBMS.

*In addition to limiting the ability of the RPSB to provide clear visibility that active and/or completed projects have appropriate approval, the current project identification practices also have an impact related to expenditure control as they limit an effective roll-up and reporting of project costs out of the PBMS to support the monitoring of total project costs.*

**Construction Contracts and Amendment Approval:**

Construction contract approval and change order (amendment) processes were found to comply with Treasury Board and Departmental requirements. These processes are documented and are well understood in the RPSB and the Supply Operations Services Branch (SOSB).

Although this Preliminary Survey did not examine individual construction contracts and change order documents for compliance, the concurrent Audit of Construction Contracting Practices in the National Capital Region (1999-642), conducted by the Audit and Review Branch, examined eight major construction contracts from the NCA and found no significant issues with contract and amendment approvals.

Based on these results, the construction contract approval and change order processes ensure appropriate authorization and approval of contracts and contract amendments.

**Project Expenditure Control:**

Project financial control is applied at the level of individual contract amounts, work order amounts, internal budgeted fees as well as the annual funding allocation given to each project.

There is, however, no official system in use to monitor the total project expenditure against the total amount approved for the project. The total project expenditure includes construction, professional services, salaries and other non-capital funding provided for such activities as operating, maintenance and temporary lease accommodation. The total approved project amount which may be committed over several years is neither recorded in the Financial Management System (FMS) nor in the PBMS. The RPSB relies on individual project leaders and managers to

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monitor and to ensure that the total project expenditure does not exceed the amount approved for each project using informal, desktop systems. There is no requirement to reconcile the information in these desktop systems to official accounting records.

*The quality of construction project financial control information used by the Department as well as the quality of related project reporting could be questioned as it is based on informal records which are not reconciled to official accounting records.*

*An additional related concern is the ability of the RPSB and Regions to reproduce important financial information if the informal records maintained by an individual project manager were lost or destroyed.*

**Recommendations:**

It is recommended that:

1. *the Assistant Deputy Minister, RPSB implement a corporate project identification convention facilitating a linkage of project information across systems to project approval documentation as well as supporting an effective mechanism for monitoring and reporting of costs on a total project basis;*
2. *the Assistant Deputy Minister, RPSB, in collaboration with the Assistant Deputy Minister, Government Operational Service Branch, ensure that official Departmental systems and records are employed to monitor the total project expenditure against the total approved project amount; and,*
3. *the Detailed Examination Phase, which would have reviewed contract files and additional project files for evidence of compliance, not be conducted as:*
  - i) *there are adequate processes and practices governing construction project approval, in the NCA, which comply with authorities established in Treasury Board, Departmental guidelines and internal delegated authorities;*
  - ii) *the construction contract approval and change order (amendment) processes in place, for the NCA, ensure appropriate authorization and approval of contracts and contract amendments; and,*
  - iii) *time is required for the RPSB to effect improvements to the mechanisms in place to monitor the total construction project expenditure against the approved project amounts.*

## 1 Introduction

### 1.1 Authority for the Project

The Audit of Project and Contract Approvals for Construction Projects (1999-610) was authorized as part of the 1999/2000 Audit and Review Plan approved by the Departmental Audit and Review Committee.

### 1.2 Objectives

The objective of the audit is to determine the extent to which project and contract approval processes currently in use for construction projects (as defined in the Supply Manual) comply with approval process requirements identified in the Treasury Board Manual on Capital Plans, Projects and Procurement, the Treasury Board Manual on Contracting, associated Government Regulations, internal delegated authorities and other applicable departmental policies and procedures.

The Preliminary Survey phase was conducted to obtain an understanding of the organizations and activities related to the approval process for major construction projects and associated contracts as well as to identify areas of risk and potential significance. The Preliminary Survey was also intended to determine the need for a Detailed Examination phase, and if required, to select a sample of construction projects for further review, to develop the audit criteria and to define a work plan for the Detailed Examination.

### 1.3 Scope

The scope of the audit includes construction projects managed by the Real Property Services Branch (RPSB) and associated contracts awarded in support of such construction projects.

The Preliminary Survey Phase of this audit followed three lines of enquiry:

1. **Project Approval:** Are there adequate processes and practices in place to obtain project approval for construction projects and do they comply with approval process requirements identified in the Treasury Board Manual on Capital Plans, Projects and Procurement, internal delegated authorities and other applicable departmental policies and procedures?
2. **Construction contract and amendment approval:** Are there adequate processes and practices in place to obtain contract and amendment approval and do they comply with the Treasury Board Manual on Contracting, associated

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Government Regulations, internal delegated authorities and other applicable departmental policies and procedures?

3. **Project expenditure control:** Are there adequate controls in place to ensure that expenditures made through construction contracts, architectural and engineering service agreements, and any other service contracts or associated expenditures, do not exceed the total project approval amount granted?

The focus of the Preliminary Survey was on higher dollar value projects selected from the National Capital Area (NCA). The Parliamentary Precinct was excluded from the scope of this review due to the number of recent reviews in this area. Lease agreements, lease purchase agreements and associated construction projects were also excluded from the scope.

#### **1.4 Background**

The Capital Plans volume of the Treasury Board Manual states that Treasury Board approval for capital projects must be sought where the total estimated cost of the project exceeds the Minister's approval level. All projects submitted for approval must be supported by documentation that adequately describes the full scope of the project including the associated management framework. All projects proposed for approval must be reviewed to ensure that they represent an effective and efficient solution to the operational needs as set out in the department's defined priorities or in the Long-term Capital Plan.

The Treasury Board Contracting Policy states the Minister is ultimately responsible to Parliament for all contracting activity. Although each Minister customarily delegates contracting authority to various levels within the Department, this delegated authority is to be exercised with prudence and probity so that the responsible Minister is acting and is seen to be acting within the letter and the spirit of the Government Contracts Regulations and the Treasury Board's contracting directives. The establishment of dollar limits, above which Treasury Board authority is required, is based on the premise that, at some level of size or complexity, the collective judgement of Ministers should be brought to bear upon a decision to award a contract.

## **2 Results of the Preliminary Survey Phase**

### **2.1 Work Performed**

The Preliminary Survey Phase included a review of key policies/procedures governing construction project approval, contract approval and contract amendments. The PWGSC's delegation of authorities matrix documents were referenced. Also used as references were the Treasury Board Manual on Capital Plans, Projects and Procurement; the Treasury Board Manual on Contracting as well as the Government Contracts Regulations. A review of the RPSB documentation describing project management practices was conducted as well as a review of the control framework within the RPSB for construction projects.

Approximately 20 formal interviews were conducted during this phase with key RPSB, Supply Operation Services Branch (SOSB), Regional and Finance Sector, Government Operational Service Branch (GOSB) personnel. The attached Appendix A lists the individuals who were interviewed.

In order to determine the population of major construction projects recommended to the RPSB Investment Management Board (IMB) and/or to Treasury Board for approval during the last three years, the IMB log was obtained from the Owner/Investor Directorate, RPSB. For comparison purposes, as well as to determine the active and completed construction projects managed by the RPSB during the same period, three listings of Level 1 construction projects were produced from the Project Business Management System (PBMS). The PBMS facilitates the creation of project records using a hierarchical structure with a "Level 1" indicator if the project has "parent" status and Level 2 or 3 etc. assigned to its subsidiary projects.

The first PBMS listing included those construction projects concerning properties for which PWGSC is the custodian and funding was forecasted to be in excess of \$5 million. These projects are funded through the Appropriation Vote of PWGSC. The second listing consisted of Level 1 construction projects administered on behalf of Other Government Departments (OGD) and funding was forecasted to be in excess of \$5 million. These projects are funded from revenue received from OGDs. A third listing was produced for all Level 1 construction projects regardless of the funding amount where PWGSC is the custodian of the asset.

A sample of several projects with funding in excess of \$5 million was selected from the PBMS listings and the IMB log. The respective project managers were interviewed to obtain an understanding of the projects as well as the processes. A search for the appropriate project approval documentation was conducted with the assistance of Client Service Unit (CSU) staff. Considerable consultation with project managers, CSU staff, and Owner/Investor personnel was required in order to assemble related Level 1 projects



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recorded in the PBMS and to trace to the supporting approval documentation, IMB records and Capital Project information reported through the Main Estimates.

Financial information from various sources was collected and reviewed to determine the mechanisms in place to control total project expenditure to approved amounts.

During the review of the selected OGD projects it was determined that the construction project approval is the responsibility of the respective OGD. Since PWGSC is not responsible for the project approval, the Preliminary Survey neither obtained nor reviewed the approval documents for the OGD projects.

The delegation of authorities for contracts, the Supply Manual, pertinent policies, procedures documents as well as change order documentation were reviewed to obtain an understanding of the contract approval and amendment processes. In addition, key personnel working in the Real Property Contracting Directorate (RPCD), SOSB and the Change Order Office, RPSB were interviewed along with selected project managers.

The concurrent Audit of Construction Contracting Practices in the National Capital Region (1999-642) which also included the review of contract approval and amendments in its scope examined, in detail, eight major construction contracts from the NCA. Based on the results from this effort, specific construction contracts and amendments were not reviewed during this Preliminary Survey.

## **2.2 Profile of the Entity**

### **2.2.1 Organization/Roles and Responsibilities**

There is a separation in the responsibility for approvals for construction projects and construction contracting. The RPSB is responsible for the project approval process for those construction projects related to property for which PWGSC is the custodian. This role includes identifying, recommending or obtaining necessary approval internally and, if required, from Treasury Board as well as implementing and managing the construction projects. The SOSB is responsible for the contracting process including approval and amendment control for major construction contracts as well as other contracts for professional services and goods related to construction projects.

**Real Property Services Branch (RPSB)** - The RPSB is a matrix organization consisting of:

- Client Service Units (CSU) - providing primary technical services to clients; and,
- Centres of Expertise (COE) - providing expertise and resources to CSU's.

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The respective roles of the CSUs and COEs regarding construction projects are:

*Client Service Unit* - In both the NCA and the Regions, the CSU is the focal point for client relations on a day-to-day operational basis. Depending on client needs and preferences, CSU teams are established and dedicated to specific clients. In the NCA, CSUs report to the Executive Director whereas in the regions the CSUs report to the respective Regional Director General.

*Centres of Expertise* - The Office Accommodation/Real Estate Services (OA/RES), Architectural and Engineering Services (A&ES), Property and Facilities Management Services (PFM) Sectors, as COEs, are responsible for quality assurance, business development and the framework for national standards and service levels for the four major business lines of RPSB. Where there is a need to harmonize client priorities with government priorities, the COEs are expected to be the champions of overall RPSB program objectives.

*Project Leader* - This is the officer accountable for the overall development and management of the project including incorporation of the Owner/Investor perspective.

*Senior Project Manager (SPM)*- The SPM provides strategic architectural and engineering advice to the CSU and is usually the focal point for the delivery of all A&E professional, technical and project management services, including engineering, architectural and accommodation planning and interior design. The SPM is responsible for project quality assurance.

*Project Manager* - The Project Manager is the officer responsible for the implementation of a specific portion of a project, such as design and construction, including the management, administration and co-ordination of activities for that portion of the project during the Definition and Implementation Phases. The Project Manager represents the service group that acts on behalf of the CSU during the Implementation Phase.

*Investment Management Board (IMB)* - The IMB provides advice to the Assistant Deputy Minister, RPSB, on all real property projects having a value exceeding that delegated to the Directors General of the PWGSC Regions and the NCA. The IMB is chaired by the Director General of OA/RES and includes the Directors General, RPSB; the Director, Owner/Investor Directorate; the Director, Resources and Strategies; the Executive Director, RPSB; and, a Financial Advisor from the Government Operational Services Branch.

The role of IMB, as it relates to project approvals, is to:

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- review and make recommendations to the ADM, RPSB on all investment projects, including capital, having a value exceeding delegated authority, or those projects which the RDGs/Executive Director may wish to refer. (Currently projects over \$2.5 million must be submitted to IMB);
- ensure that project approval submissions are consistent and in compliance with the RPSB Business Plan, the National Investment Strategy, the Framework for Accommodation Management, the National Divestiture Strategy and budget allocations/savings targets; and,
- facilitate project approvals effectively and efficiently while making consistent value-added observations and suggestions.

**Supply Operation Services Branch (SOSB)** - The SOSB is the procurement authority for construction contracts as well as the related architectural and engineering consultants contracts. The SOSB authority is exercised for construction contracts in excess of the RPSB delegated contracting authority of \$25,000.

*Real Property Contracting Directorate (RPCD)*, - The RPCD is the SOSB organization responsible for construction contracts and related contracting.

**PWGSC Regions** - Each PWGSC Region provides construction project management and construction contracting services similar to the NCA model except that in the regions both the RPSB and SOSB report to the same Regional Director General. The CSUs and COEs in each region work along with contracting specialists (often referred to as Real Property Contracting Services) to provide construction project and contracting services. Each region has a Regional Investment Management Board (RIMB) which carries out many of the same functions as the IMB. The RIMB reviews all regional projects between \$1 million to \$2.5 million.

### **2.2.2 Service Delivery/Operational Process**

#### *Project Approval Process*

Project approval processes are described in the RPSB Project Management Standard Practice manual under the subject of Project Delivery System (PDS). The PDS is a generic system applicable to all real property projects, both those funded by the Department and those delivered on behalf of other clients. The phases of the PDS include: planning, definition, implementation, commissioning, operating and evaluation. The attached Appendix B presents an overview chart of the process.

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The process for project approvals for major construction projects, using the NCA model, is as follows:

- The project initiation/approval process considers long and short term capital asset plans and client requirements. It requires the involvement of several RPSB organizations. An annual Building Condition Report, produced by the Property and Facilities Management Sector, feeds in to an Asset Management Plan (5 year) and a Building Management Plan (annual). The Tenant Requirement Package (TRP) and the Client Accommodation Demand Strategy (CADS) are input into the Tenant Accommodation Demand System. This planning supports the development of an Investment Analysis Report (IAR) for each proposed project by the responsible CSU in conjunction with representatives from the Centres of Expertise;
- The IAR, a business case document, is presented to the appropriate authority for project approval. The IAR identifies the optimum solution and defines the project in detail by establishing a project budget, a completion date, an organization framework for delivery and any required controls;
- Depending on the funding required for the project the approval must be requested at the Regional / NCA level or from the IMB. At each level the proposed projects are reviewed using a committee process involving broad based representation;
- A Preliminary Project Approval (PPA) is normally requested when the initial project planning and identification phase is completed and the project definition phase has started or is about to start. This step seeks authority to proceed with all or part of the project's definition phase. The RPSB must clearly demonstrate that a requirement directly related to the achievement of program goals and responsibilities exists;
- The PPA normally includes:
  - the costs for design, documentation, and construction supervision;
  - an implementation cost plan;
  - an identification of risks and forecasts (normally based on Class C estimates +/- 15%);
  - the submission of an IAR to the IMB for recommendation to the ADM, RPSB for all projects over \$2.5 M including regional projects; and,
  - a submission to Treasury Board for the PPA is required for all projects over \$20M for buildings and \$5M for other federal facilities.
- An Effective Project Approval (EPA) must be obtained before starting the project implementation phase. Approval of the EPA establishes the cost and other critical objectives that form the project baseline. Specifically at this stage:

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- the IAR is modified to incorporate the refined design and cost data into a more complete and accurate IAR;
- the IAR is submitted to the IMB for recommendation to the ADM, RPSB;
- a Class B estimate (+/- 10% accuracy) based on specific quantity, quality and location criteria supported with sufficient detail is required;
- the Class B estimate, prepared at the completion of the preliminary design, includes unit costs based on market conditions; and,
- a submission is required to be sent to Treasury Board for EPA for all projects over \$20 million for buildings and \$5 million for other federal facilities.

*Project and Business Management System*

The Project and Business Management System (PBMS) is a project management tool that was developed by the RPSB and is intended to be used by all RPSB staff who are required to manage projects. The PBMS has two main modules:

- The Time Management Module, which helps manage time utilization for both employees and contracted resources for projects; and,
- The Project Management Module which is designed to assist in the management of projects.

The PBMS was designed to provide a source of current and accurate information regarding projects so as to assist the project manager and client to make informed decisions. The PBMS was intended to provide a comprehensive and accurate tracking of project costs incurred throughout RPSB, and to enable the project manager to measure those costs against both revenues and the project budget.

*Contract and Amendment Approval Processes*

A key component in the contracting process is the Procurement Plan or (depending on the estimated amount of the requirement) the Contract Planning and Advance Approval (CPAA) document. One of the aforementioned documents is produced by the RPCD, SOSB following the receipt of the requisition from RPSB. These documents provide information such as the description of the requirement, method of solicitation, basis of selection, anticipated basis of payment and milestones, estimated amount of the contract and the Pre-approved Amount for Anticipated Amendments (explained below) along with the associated risk analysis. The Procurement Plan (or the CPAA) must be approved by the appropriate procurement authority in the SOSB prior to proceeding with solicitation of procurements over \$50,000 including construction, architectural and engineering services contracting.

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The CPAA process allows contracting officers to award contracts without further reference to the approval authority when there are no significant changes from an approved CPAA form. If the procurement action results in a significant change from the originally approved plan, this change must be approved in accordance with sector/region procedures. If there is no significant change, the contracting officer prepares the contract for the appropriate signing authority.

For contracts not pre-approved through the CPAA process (i.e. those for which a formal Procurement Plan was prepared), a Contract Request for authority to enter into a contract must be prepared prior to issuance of the contract. The Contract Request gives an accurate description of the terms and conditions requiring approval and reflects data contained in the applicable files. The Contract Request is submitted for review and approval in accordance with Departmental policy and delegated authority levels.

Another key document is the Procurement Information Form (PIF) which is sent to the Minister's Office to provide information regarding approved procurement plans, revisions to procurement plans and proposed awards. Regional and SOSB Directors General are responsible for providing a PIF for each procurement plan and contract award valued above the appropriate thresholds as required by Departmental policy.

In order to comply with Departmental amendment approval requirements and to meet RPSB business needs, the RPSB and the RPCD have instituted a new process called the Pre-approved Amount for Anticipated Amendments (PAAA) for anticipated change orders which might be required under a construction contract in the NCA. A Change Order is the document used to amend a construction contract.

The PAAA amount is calculated based on a risk assessment by the Project Manager. The PAAA forms part of the total amount included in the approval process. Thus, any Change Order requested on a contract which was part of the PAAA's original approval amount may be approved at a level no higher than the Director, RPCD. The RPCD maintains a log to monitor change order activity to ensure that change orders are within the PAAA. Change order requests not included in (or in excess of) the original PAAA are subject to the standard SOSB approval process for amendments.

The change order process requires all change order documents to be sent to the RPSB Change Order Office. The Change Order Office performs a quality assurance review to determine if the documents provide the necessary information prior to sending them to RPCD, SOSB for approval.

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Appendix C attached presents an overview chart of the contract and amendment approval process.

*Expenditure Control Processes*

Monitoring and control over the project expenditure is provided at the level of the contract amount, work order amount and the internal budgeted fees of a particular project. There is an annual funding allocation given to each project. Commitment against these amounts is monitored by the CSU Finance Clerk using the FMS.

Total project costs and forecasts are maintained and monitored by each project leader using unofficial desk top systems. The total project expenditure includes construction, professional services, salaries and other non-capital funding provided for such activities as operating, maintenance and temporary lease accommodation. Project leaders base their monthly project financial status and forecast reports on these unofficial records. Neither the Financial Management System (FMS) nor the PBMS facilitate expenditure control at the level of the total approved project amount. The total approved project amount which may be committed over several years is not recorded in either of these two systems.

The Owner/Investor Directorate maintains a Capital Project Briefing Note on each Capital project with approval over \$1 million. A Briefing Note contains information such as description, location, approval and project status, cost and forecasts, and priority ranking. The Briefing Notes are recorded in the Real Property Project System (RPPS). The briefing notes are manually updated quarterly by the responsible project leaders for input into RPPS by the Owner/Investor Directorate. In addition to their use for planning and forecasting future expenditures, the Capital Project Briefing Notes are the basis of information published in the Main Estimates to support the annual request for capital appropriation funding.

**2.2.3 PWGSC Level 1 Construction Projects**

To provide perspective, as to volumes, there are currently approximately 2,200 Level 1 construction projects recorded in the PBMS with funding (ranging from a few dollars to millions) for 1999/2000 to improve assets for which PWGSC is the custodian. (\* The NCA total does not include the Parliamentary Precinct.)

Regions	# of Projects	1999/2000 Funding	# of Projects - 2000/01
NCA *	1,060	\$407,240,000	69

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Québec	328	68,735,000	11
Ontario	534	34,726,000	11
Atlantic	118	19,512,000	3
Western	113	16,975,000	5
Pacific	81	16,607,000	2
<b>Total</b>	<b>2,234</b>	<b>\$563,795,000</b>	<b>101</b>

**2.3 Preliminary Findings**

**2.3.1 Project Approval**

The RPSB has documented the processes and practices governing construction project approval in its recently published Project Management Practice Standard as well as in other available resources such as the Owner/Investor Handbook. Analysis of the construction project approval processes and practices indicates that they comply with authorities established in Treasury Board and internal delegated authorities. In addition, the RPSB personnel who were interviewed indicated awareness and acceptance of the processes as well as the authority levels.

The construction project approval process requires business case substantiation through an Investment Analysis Report for each project which is supported by long and short term planning for assets and clients. The process of proposing a project and obtaining approval also involves the scrutiny of several RPSB organizations. Proposed projects must meet pre-established investment criteria including the satisfaction of National and Regional priorities before receiving approval contingent on available funding.

The audit team reviewed the RPSB Investment Management Board (IMB) records and associated project approval records for several major projects. A sample of several projects including some requiring Treasury Board (TB) approval was selected. All projects from the IMB sample were traced to documentation maintained by the Owner/Investor Directorate which indicated compliance to the project approval processes within the delegated limits of authority.

Considerable difficulty, however, was encountered in locating and accessing the project approval documents for a sample of projects selected from the PBMS. The RPSB does not utilize a standard, logical project numbering and naming convention that facilitates a clear information trail from the PBMS project management records to supporting project approval documentation. Conversely, the information trail leading from the approval documentation back to the active and/or completed projects recorded in the PBMS is not clear.



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The PBMS facilitates the creation of project records using a hierarchical structure with a "Level 1" hierarchical indicator if the project has "parent" status and Level 2 or 3 etc. assigned to its subsidiary projects. In actual practice, however, several Level 1 project records can be created by a project manager all of which may be associated with a single project approval. This limits the ability of the RPSB to provide clear visibility that active and/or completed projects have approval. In addition, the current project identification practices also limit an effective roll-up and reporting of project costs out of the PBMS to support the monitoring of total project costs. Total project cost monitoring is discussed in more detail subsequently as related to expenditure control.

There was, in the end, evidence of proper approval for the projects selected in the Preliminary Survey sample. An excessive manual effort, however, was required by both ARB and RPSB personnel in assembling and linking related Level 1 projects selected from the PBMS to the supporting approval evidence in the hard-copy project files.

*Impact: Given the current incomplete information trail, an excessive manual effort is required to trace and obtain evidence of approval from projects recorded in the PBMS to their supporting approval documentation. In addition, the current project identification practice prevents RPSB management from monitoring total project costs using a corporate system such as the PBMS.*

**Conclusion:**

There are adequate processes and practices governing construction project approval which comply with authorities established in Treasury Board, Departmental guidelines and internal delegated authorities.

Current project identification practices neither support efficient access to evidence of project approval for construction projects managed through the PBMS nor do they facilitate project cost monitoring on a total project basis.

**2.3.2 Construction Contract and Amendment Approval**

Construction contract approval and change order (amendment) processes were reviewed and found to comply with Treasury Board and Departmental requirements.

Since 1998, when the RPSB contracting authority was reduced to \$25,000, both the SOSB and the RPSB have been working collaboratively to develop construction contracting practices to meet RPSB business needs while still

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complying with authorities established in Treasury Board and internal delegated authorities as well as other applicable Departmental policies and procedures.

The RPSB and SOSB personnel interviewed indicated awareness and acceptance of the construction contracting processes and authority levels. The construction contracting processes are documented but not yet included in the Supply Manual.

Although this Preliminary Survey did not examine individual construction contracts and change order documents for compliance, the concurrent Audit of Construction Contracting Practices in the National Capital Region (1999-642), conducted by the Audit and Review Branch, examined eight major construction contracts from the NCA and found no significant issues with contract and amendment approvals.

**Conclusion:**

Based on the results of the Audit of Construction Contracting Practices along with the review of procedures conducted in this Preliminary Survey, the construction contract approval and change order processes ensure appropriate authorization and approval of contracts and contract amendments.

**2.3.3 Project Expenditure Control**

Project financial control is applied at the level of individual contract amounts, work order amounts, internal budgeted fees as well as the annual funding allocation given to each project. These amounts are recorded in the FMS and are monitored by the respective Project Leader, Project Manager and GOSB Finance Clerk.

There is, however, no official system in use for monitoring the total project expenditure against the total amount approved for the project. The total project expenditure includes construction, professional services, salaries and other non-capital funding provided for such activities as operating, maintenance and temporary lease accommodation.

The RPSB relies on individual project leaders to maintain informal accounting records for monitoring purposes and assurance that total project expenditure does not exceed the amount approved for each project. Neither the FMS nor the PBMS facilitate expenditure control at the level of the total approved project amount. The total approved project amount which may be committed over several years is not recorded in either of these two systems.

Total project costs and forecasts are maintained and monitored by each Project Leader using unofficial desk top systems. Project Leaders base their monthly project financial status and forecast reports on these unofficial records. In

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addition, these informal project records are the information basis for the Capital Project Briefing (CPB) Notes produced quarterly for projects which have approved forecasted spending over \$1 million.

These CPB Notes are prepared by project leaders and sent to the Owner/Investor Directorate for planning purposes as well as for forecasting future expenditures. They are also the basis of forecast and past expenditure information published in the PWGSC Main Estimates to support the annual request for capital appropriation funding. The past expenditure information on capital projects listed in the Main Estimates is thus neither reconciled nor validated to the Departmental management information systems (PBMS/FMS).

The Preliminary Survey did not perform testing to identify instances whereby the total approved project amount has been exceeded.

*Impact:*

*The quality of project financial control information used by the Department as well as the quality of the expenditure portion of major project information reported in the Main Estimates could be questioned as it is based on informal records which are not reconciled to official accounting records.*

*An additional related concern is the ability of the RPSB (and Regions) to reproduce important financial information if the informal records maintained by a project leader were lost or destroyed.*

**Conclusion:**

Project financial control is applied at the level of individual contract amounts, work order amounts, internal budgeted fees as well as the annual funding allocation given to each project.

Improvement is required, however, in the methods used for monitoring the total project expenditure against the total amount approved for the projects. The total project costs which are used for monitoring and reporting are not maintained on secure Departmental information systems which are reconciled to official accounting records. Reliance on these informal records reduces the confidence in the quality of the information.

## 2.4 Recommendations

It is recommended that:

1. *the Assistant Deputy Minister, RPSB implement a corporate project identification convention facilitating a linkage of project information across systems to project approval documentation as well as supporting an effective mechanism for monitoring and reporting of costs on a total project basis;*
2. *the Assistant Deputy Minister, RPSB, in collaboration with the Assistant Deputy Minister, Government Operational Service Branch, ensure that official Departmental systems and records are employed to monitor the total project expenditure against the total approved project amount; and,*
3. *the Detailed Examination Phase, which would have reviewed contract files and additional project files for evidence of compliance, not be conducted as:*
  - i) *there are adequate processes and practices governing construction project approval, in the NCA, which comply with authorities established in Treasury Board, Departmental guidelines and internal delegated authorities;*
  - ii) *the construction contract approval and change order (amendment) processes in place, for the NCA, ensure appropriate authorization and approval of contracts and contract amendments; and,*
  - iii) *time is required for the RPSB to effect improvements to the mechanisms in place to monitor the total construction project expenditure against the approved project amounts.*

## **Appendix A - List of Persons Interviewed**

### ***Real Property Services Branch***

Garnet Strong, Director, Project Management, Architectural and Engineering Services  
Jim Quinn, Manager, Project Management Operations, Project Management Centre  
Alain Trépanier, Strategic Manager, Strategic Management  
Robert Matte, Manager Quality Assurance, Integrated Support Centre, Project Management  
Denis Lajoic, Manager, Special Projects, National Client Service Unit - PWGSC  
Lyne Alie, Project Manager, National Clients Service Unit - PWGSC  
Paul Frame, Project Manager, Special Projects & Major Initiatives  
David Reuter, Project Manager, Special Projects & Major Initiatives  
Toby Greenbaum, Senior Project Manager, National Client Service Unit - RCMP/NCC/Museums/CSIS  
Monique Morin, Administrative Assistant, National Client Service Unit - RCMP/NCC/Museums/CSIS  
Jackie Bois, Program Administrator, National Client Service Unit - ND  
Peter Harvey, Project Manager AES, National Client Service Unit - Health Canada and Statistics Canada  
Brian Tilley, Advisor, Owner/Investor Directorate  
Pierre Piché, Investment Analyst, Owner/Investor Directorate  
Jim Turpin, Manager, Owner/Investor, Office Accommodation Services/Real Estate Sector, Pacific Region

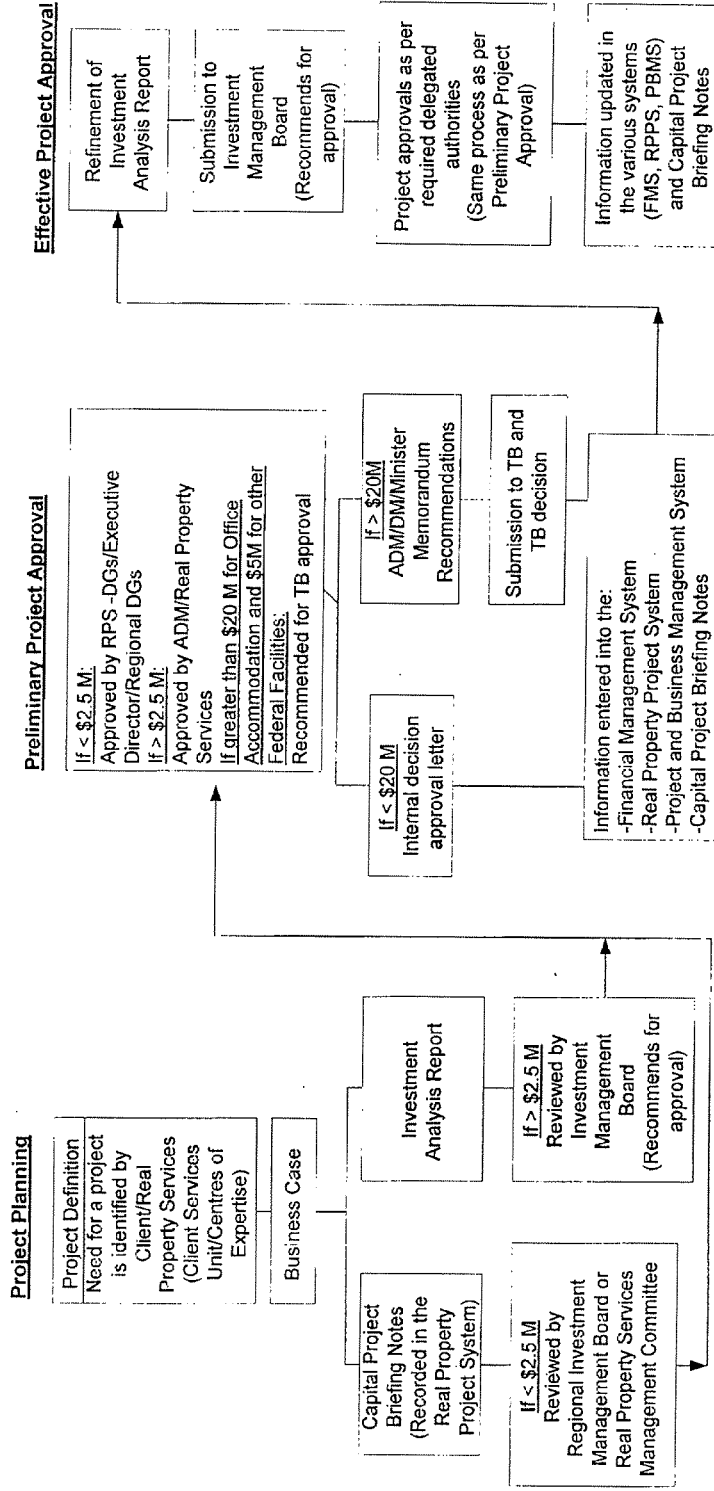
### ***Government Operational Service/ Finance Sector***

Louise Holmes, Manager, Corporate Analysis, TB Submissions, Financial Management Directorate  
Steve Mulvey, Senior Financial Officer, Central Submissions Unit, Corporate Analysis, TB Submissions

### ***Supply Operations Services Branch/Real Property Contracting Directorate***

Yvonne Russell, A/Director, Construction & Maintenance Services Division  
Johanne Camirand, Team Leader, Construction and Maintenance

**Appendix B - Major Construction Project Approval Process - Overview**



**Appendix C - Contract and Amendment Approval Processes - Overview**

