Nova Scotia Health

Capital Spending Manual

Volume I

Facility Planning & Construction Requirements

Acute Care, Mental Health, Primary Health Care, Provincial Programs

REVISED

August 26, 2013

Your Health Matters

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1. Introduction

Nova Scotia's health care system is supported by a portfolio of 150 buildings with a replacement cost in the order of $2.4 billion (2005$). This portfolio consists of 44 acute care facilities, 71 nursing homes, 35 residential care facilities and numerous leased spaces. Services are provided through a network of well over 100 organizations. Most of these organizations have capital spending needs.

In an effort to clarify policies, processes and mutual expectations with regard to the application and spending of capital funds, the Department of Health and Wellness (DHW) is assembling information in a series of four volumes to comprise the Capital Spending Manual. This is the first volume with the other three volumes tentatively titled: Volume II Facility Repair / Renewal Projects, Volume III Clinical Equipment, Volume IV Continuing Care Facilities, and Volume V Information Technology.

This document will be updated from time to time. The most current version of this document is available at www.gov.ns.ca/health/csm.pdf. Electronic copies of the working documents contained in the Appendix are available by contacting Karen Davison at Karen.Davison@gov.ns.ca

2. Application

This volume provides direction and guidance to District Health Authorities, the IWK Health Centre and providers of Provincial Programs (the Organizations) as they seek capital improvements to facilities under their control.

The provision of quality health care requires a physical environment which is conducive to service delivery. The method of provision of health care services is ever changing as a consequence of improved methods of care delivery, changing technology and variable (usually growing) service demands. As facilities age, their ability to meet current expectations is further eroded. The adjustments of spacial features to match this dynamic environment is a continual challenge.

At some point, the need for physical change becomes a significant pressure precipitating a request to the DHW for capital funding. **The document is applicable to projects where buildings are being significantly modified or built to meet clinical program needs, source of funding and project value notwithstanding.** The Department's Infrastructure and Equipment Stewardship Committee (I&E Committee) through the Director, Infrastructure Management is responsible for the interpretation and application of these requirements.

This document does not apply to:

i. Repair/Renewal projects (replacement of deteriorated or failing building components);
ii. Clinical equipment unless embedded in a capital building project;
iii. Continuing Care projects funded through operating costs.

3. Legislative Framework

Following are extracts from the Hospital Regulations made under Section 17 of the Hospitals Act (January 1, 2001). (This act takes precedence over the District Health Authorities Act.)

Article 2 (1)

... *a board shall not carry out or cause to be carried out any construction of or alterations to a hospital building without the prior written approval of the Minister*.

Article 2 (2)

A Board may initiate proposals to the Minister for construction of or alterations to a hospital building or the Minister may request a board to initiate proposals for construction of or alterations to a hospital building.

Article 2 (3)

A board shall not employ or contract with consultants, architects or others, or spend any funds related to the commencement of planning or studies into the construction of or alterations to a hospital building without the prior written approval of the Minister.

Article 4 (1)

A board shall not purchase, lease or otherwise acquire except by gift, donation or testamentary disposition any equipment in excess of a value as designated from time to time by the Minister, or any building or land related to a hospital without the prior written approval of the Minister.

Article 4 (2)

A board shall not sell, mortgage or otherwise transfer any equipment or any building or land related to a hospital without the prior written approval of the Minister.

Under Order in Council 94-912, the Minister of Health and Wellness has the authority to approve capital projects not to exceed one million dollars. Projects exceeding this threshold require an Order in Council approval of a capital project.

4. Roles and Responsibilities

Department of Health and Wellness:

i. Maintains legislative and fiscal accountability;
ii. Manages the health care infrastructure;
iii. Allocates capital funding based on government priorities and provincial needs;
iv. Reviews, prioritizes and approves capital requests;
v. Sets out conditions of funding;
vi. Monitors and ensures accountability for spending;
vii. The Department of Health and Wellness and the District Health Authority ensure the Infrastructure Management Group challenges the design, budget and time-line of the project, and that the Infrastructure Management Group applies an appropriate/ proven Project Management Methodology such as one defined in PMBOK or equivalent.

The Organizations:

i. Identifies, prioritizes and seeks funding of capital needs;
ii. Implements approved projects in accordance with conditions of funding;
iii. Identifies sources of funds;
iv. Supports community funding activities and formalizes project commitments;
v. Maintains (and provides as requested) project records demonstrating public accountability.

5. Project Funding

a. Department of Health and Wellness Grant Funding

As part of the government's annual budget process, the Department is provided with an allocation for capital grant funding. This Capital Fund allocation is the source of funds for capital projects (among other needs) and is intended to be allocated and spent in the year in which it is provided. The first draw against the Capital Fund are previous approvals which span multiple years. At the beginning of the fiscal year and at other times, the Department makes commitments against the balance of this fund.

The ability to make new commitments is a function of projected needs of ongoing projects therefore accurate and current project cash flow projections by the Organizations is critical to enable effective use of these funds. It is the responsibility of the Organizations to provide the Department with project cash flow requirements as part of the project proposal and approval process. For ongoing projects, Organizations are required to confirm requirements in February for projects continuing into the next fiscal year and at any time when significant variance can be identified.

Unless otherwise approved by the Deputy Minister in writing, the Department provides 75% of the cost of a project with the remaining 25% required to be provided by the Organizations through community fund raising.

b. Community Funding

The provision of the 25% community share of project costs is integral to projects proceeding. Prior to the Department making a funding commitment, the ability of the Organizations to provide these funds must be demonstrated. A formal commitment from the Organization's fund raising foundation and a statement of funding availability and/or provision of a fund raising plan will be required prior to project approval.

Where fund raising to meet the project commitment is accepted by the Department as being beyond the ability of the community to reach in the short term, the Department may provide an interest bearing loan to the Organization on the basis of a long term fund raising plan. Any outstanding balances due to the Department from past projects must be incorporated into any subsequent debt discussions. The details of funding provision and payback of borrowed funds will be stipulated in a letter of agreement signed by the Department's Chief Financial Officer, the Chief Executive Officer and the Board Chair of the Organization.

This agreement is subject to the approval of Executive Council and must be in place prior to the project being given approval to proceed.

c. Department of Finance Loans

Projects for which a business case can be demonstrated and that involve revenue from a non-government source as a means of debt reduction may be eligible for an interest bearing loan provided by the Department of Finance on the recommendation of the Department of Health. The Department will facilitate the loan application, with acceptance subject to approval of Executive Council.

6. Project Submissions

The process of making a capital project request begins with recognition and articulation of a spacial problem or opportunity. While most spacial matters can be overcome through operational adjustments, matters of significance that cannot be addressed within the operational jurisdiction of the organization must be brought to the attention of the Department.

In order for the Department to fulfill its responsibility of managing the heath care infrastructure, it must be kept informed of significant and ongoing spacial limitations. The annual Business Plan submission is the opportunity to inform the Department of the Organization's capital priorities. Once a project is approved, the project is not to be included in subsequent Business Plan submissions even if the project spans several years as project cash flows are not based on Business Plan submissions. A capital project submission in the Business Plan is, in itself, not sufficient to start the project request process.

Requests to address capital matters must be submitted by means of a letter from the Chief Executive Officer and with a completed **Capital Project Request form (Appendix I)**. The request is to be addressed to the appropriate Branch Executive Director with a copy to the Director, Infrastructure Management. This letter starts the dialogue between the Department and the Organization toward addressing the issue. Prior to engaging external consultants or spending significant amounts on problem definition and/or solutions, approval of the Department is required.

On receipt of the capital request, the Department will acknowledge the request confirming that the request has been logged and provide a Capital Request Number (CRN) which is to be referenced in any future correspondence.

7. Project Approval

A project usually evolves through multiple steps or stages. Certain stages are approval milestones requiring explicit approval of the Department. The project approval process, at any stage, includes review and recommendations by staff and support of the DHW's Infrastructure and Equipment Stewardship Committee (I&E). The staff review is carried out by the appropriate program branches, Finance and Infrastructure Management. The DHW Program Leads are required to sign off on schematics acknowledging that they understand and agree with the plans presented by the design consultants. The Committee makes recommendations to the Deputy Minister. Depending on magnitude, content and legislative requirements, projects are approved by the Deputy Minister, the Minister or Executive Council.

The Department's advice of capital project approval will be provided, in writing, by the Minister, Deputy Minister or Chief Financial Officer indicating a Project Approval Number (PAN) and conditions of funding. The PAN serves as the Department's commitment record and must be referenced in subsequent correspondence and claims for reimbursement.

For projects exceeding $100,000, a Capital Funding Agreement (CFA) will be provided by the Department for acceptance and signature of the CEO and Board Chair. The CFA sets out expectations of the Department and the specific obligations of the Organization with regard to project implementation, reporting and reimbursement. Failure to abide by the conditions set out in the CFA may result in delayed payments, or project cancellation. A CFA template is attached as Appendix II.

The Project Submission / Approval process is shown in Figure 1 which concludes with issuance of the Capital Funding Agreement and formation by the Organization of the Project Steering Committee.

8. The Planning Process

Planning for physical facilities must be conceived logically, planned rationally and should support an organization's intended strategic action. During this stage, foremost consideration should be given to patient safety and quality of care. In addition, a facility's role must be in keeping with the overall provincial plan for health care delivery.

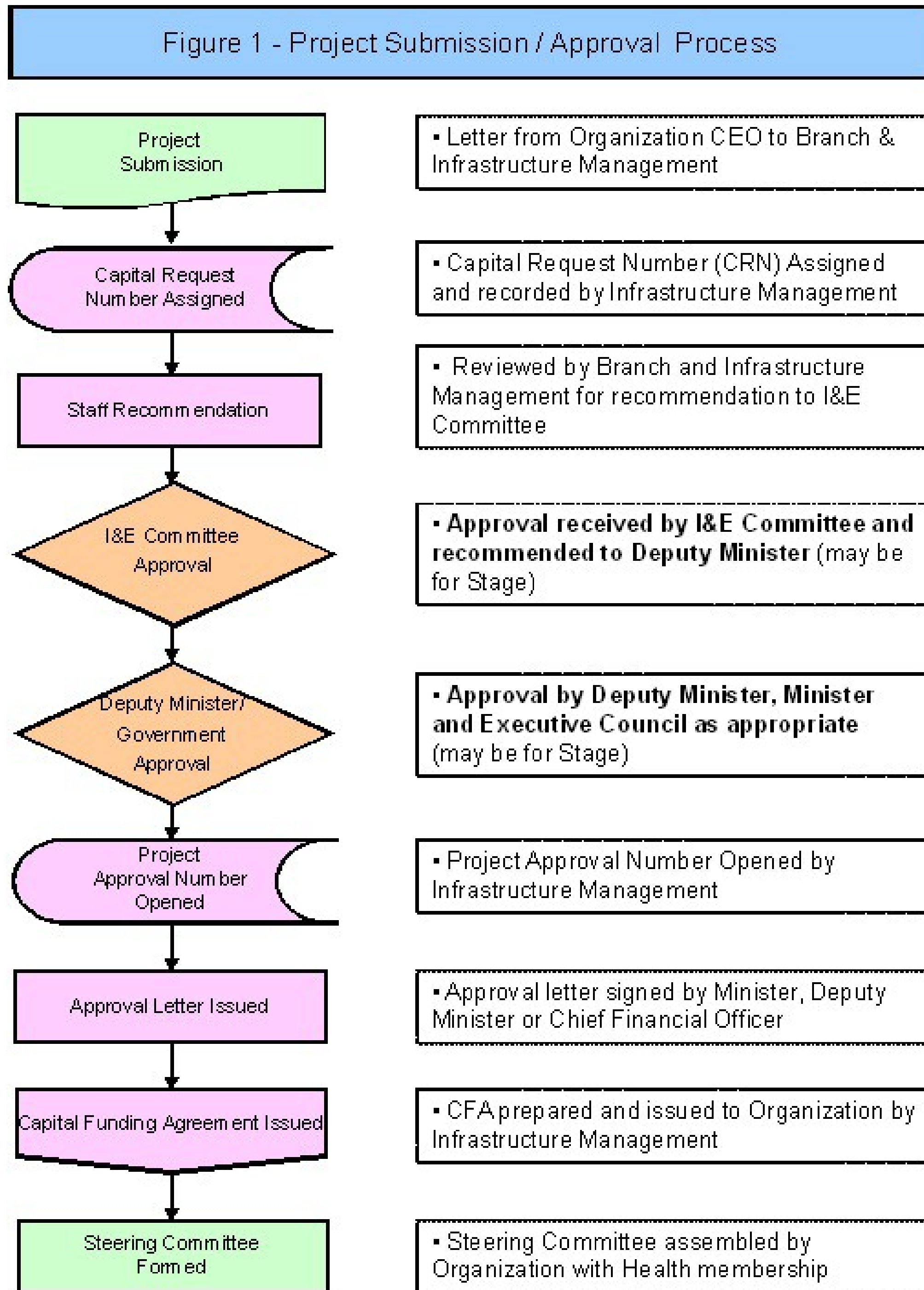
Figure 1 - Project Submission / Approval Process
Project Submission
▪ Letter from Organization CEO to Branch & Infrastructure Management
Capital Request Number Assigned
▪ Capital Request Number (CRN) Assigned and recorded by Infrastructure Management
Staff Recommendation
▪ Reviewed by Branch and Infrastructure Management for recommendation to I&E Committee
I&E Committee Approval
▪ Approval received by I&E Committee and recommended to Deputy Minister (may be for Stage)
Deputy Minister/ Government Approval
▪ Approval by Deputy Minister, Minister and Executive Council as appropriate (may be for Stage)
Project Approval Number Opened
▪ Project Approval Number Opened by Infrastructure Management
Approval Letter Issued
▪ Approval letter signed by Minister, Deputy Minister or Chief Financial Officer
Capital Funding Agreement Issued
▪ CFA prepared and issued to Organization by Infrastructure Management
Steering Committee Formed
▪ Steering Committee assembled by Organization with Health membership

Most large projects (usually greater than $1M) that involve significant space creation or reallocation will follow a multi-step formal facility planning process which proceeds through Role Study, Master Program, Master Plan, Functional Program leading to Design. With the support and ongoing involvement of the Department, this process, lead by the Organization, engages the multiple stakeholders in moving the project forward.

This rigorous process serves to move the project from concept and scope of programs and services to be provided, through to spacial needs and relationships, capital costs and operating impact. At all stages of the process, the reality of operating cost limitations must be considered and is often a major factor in determining project magnitude and viability. Throughout the planning process, the Department of Health is an active participant.

As shown in the Facility Planning Process Figure 2, Departmental approval is required after the Role Study Master Program, Master Plan and Functional Program stages. The expected contents of each stage is outlined in Appendix III Planning Definitions. Approval of the Functional Program including capital budget and operating impact is a major milestone and confirms the Department's commitment to go forward to Design.

Smaller or less involved projects may see steps combined or omitted at the discretion of the Department.

9. The Design Process

The Design Process as outlined in Figure 3 serves to transcribe the approved Functional Program into documents suitable for tendering the project. This process involves successive levels of detail and continual decision making, bearing in mind capital cost and operating implications throughout the process. Please note the following:

- The Department of Health and Wellness (DHW) requires the Schematic Design (which includes a "Class C" budget estimate) to be completed for projects where the DHW is the prime authority having jurisdiction, prior to a Submission to Cabinet for funding approval.

- The DHW requires the Design Development Phase (which includes a "Class B" budget estimate) to be completed for larger projects where the Department of Transportation and Infrastructure Renewal (TIR) is the prime authority having jurisdiction, prior to a Submission to Cabinet for funding approval.

- Depending upon construction method, the DHW requires 30%, 60% and 90% estimates and reviews during the design stage of a project.

- As part of the process of managing the project, it is the responsibility of the manager to challenge the design, budget and time-line of the project and apply a well-established / recognized Project Management Methodology.

As a member of the Steering Committee (page 17), the Department is an active participant as the design solution moves through the Schematic and Design Development stages. Particular attention is focused on requirements for quality service delivery and patient safety throughout the development stages. At the completion of Design Development a formal Design Concept Submission is to be prepared. Subject to acceptance of this document by the Steering Committee and the Board of the Organization, the package is to be submitted for approval by the Department.

The Design Concept Submission is to include:

i Description of the design solution and rationale;

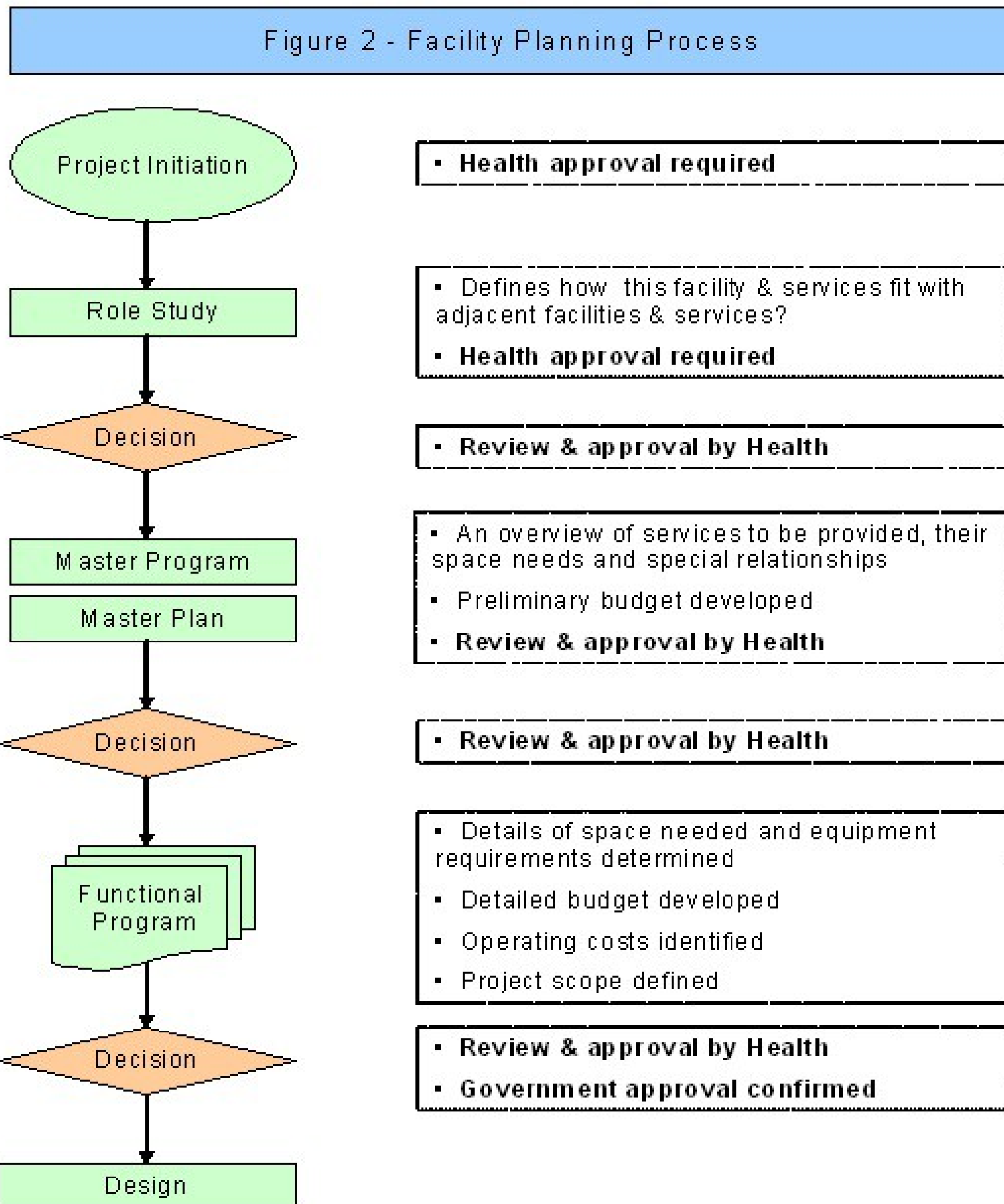
Figure 2 - Facility Planning Process
Project Initiation
Role Study
Decision
Master Program
Master Plan
Decision
Functional Program
Decision
Design
• Health approval required
• Defines how this facility & services fit with adjacent facilities & services?
• Health approval required
• Review & approval by Health
• An overview of services to be provided, their space needs and special relationships
• Preliminary budget developed
• Review & approval by Health
• Review & approval by Health
• Details of space needed and equipment requirements determined
• Detailed budget developed
• Operating costs identified
• Project scope defined
• Review & approval by Health
• Government approval confirmed

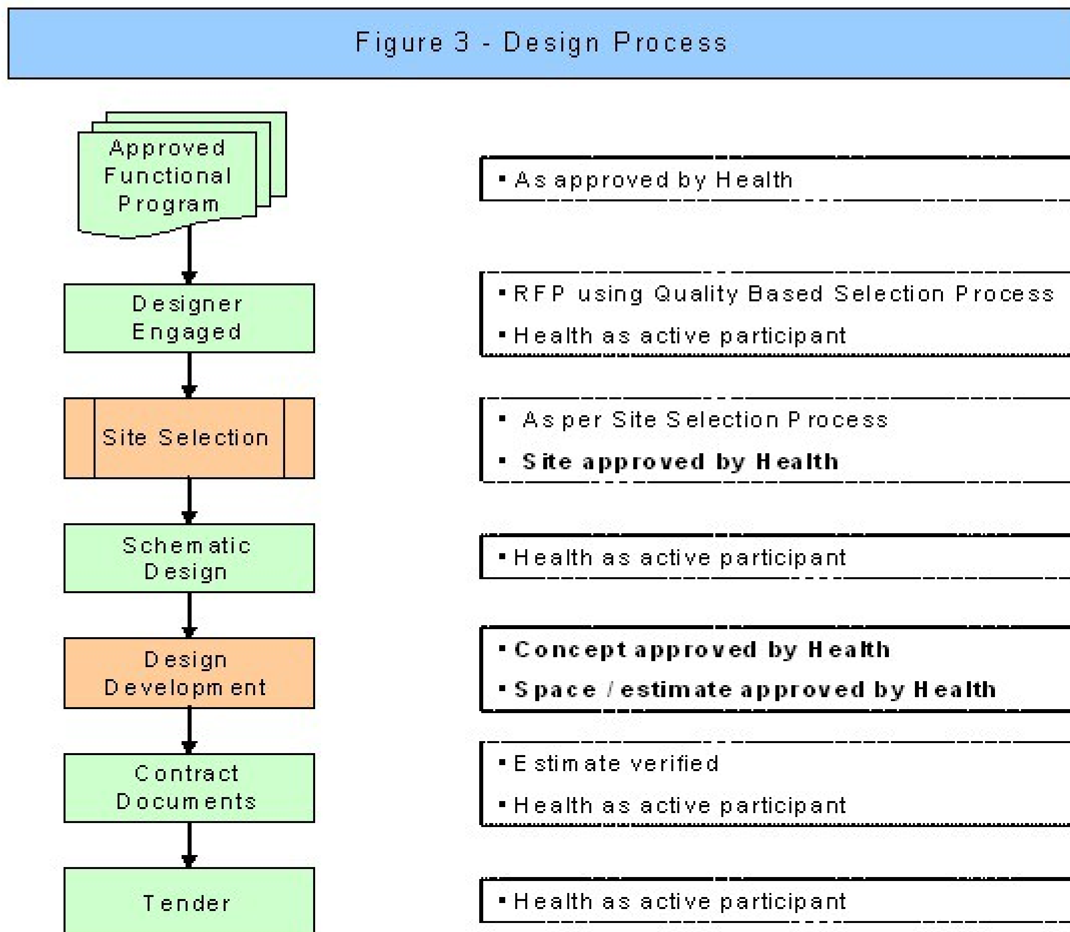
Figure 3 - Design Process
Approved Functional Program
Designer Engaged
Site Selection
Schematic Design
Design Development
Contract Documents
Tender
As approved by Health
RFP using Quality Based Selection Process
Health as active participant
As per Site Selection Process
Site approved by Health
Health as active participant
Concept approved by Health
Space / estimate approved by Health
Estimate verified
Health as active participant
Health as active participant

ii. Floor plans with room type indications;
iii. Exterior elevation(s) with commentary on exterior cladding system;
iv. An exterior rendering;
v. Large scale plan of key areas;
vi. Clear identification of grossing factor;
vii. Space table with comparison to approved Functional Program;
viii. The DHW accepts only the CSA Z317.11.02 methodology for area measurement
ix. Commentary on space table comparison;
x. Confirmation of operating cost impact;
xi. Finish Schedule by room type;
xii. Overview of mechanical and electrical systems;
xiii. Current Project Estimate compared to Approved Budget;
xiv. Anticipated schedule leading to occupancy.

10. Construction Process

With approval of the Design Concept Submission, the Organization is able to proceed to Tender. Unless tender results will cause the project to exceed the Approved Budget, specific approval of the Department to award the contract is not required. Figure 4 indicates the typical construction, commissioning and occupancy steps.

The typical method of tendering the project is through a market request for a lump sum price at the completion of design. Organizations may choose alternate methods depending on the size and complexity of the project and other considerations. Tendering by trade package with a Construction Manager is also a viable option when appropriate. It is imperative that the method of tendering the project be carefully considered at the outset weighing considerations of competitive bidding, budget control and risk management. The Department of Transportation and Public Works can provide general advice on options and rationale for various options.

Throughout the construction process methods of quality control and contract supervision are to be in place. An efficient yet accountable means of change order approval is paramount.

Prior to occupancy, a formal Commissioning process guided by CSA Z318.0-05 is required for a facility defined as a Health Care Facility by the Standard. Consideration of the approach to this activity must be considered very early in the design process and referenced in the agreement with the designer whether part of the designer's responsibilities or carried out by another party. Time for this activity must be acknowledged on schedules leading up to occupancy.

Indoor air quality concerns are common in new facilities including health care facilities. It is imperative that a period of time be allowed in the project schedule for a flush out of the furnished building. During this time air exchange is to be maximized for a given duration prior to full time occupancy. Commissioning, deficiency correction or other activities may be occurring during the flush out period. Time for flush out must be acknowledged on schedules leading up to occupancy.

11. Occupancy / Wrap Up Process

Occupancy of a new health care facility is a project in itself. Figure 5 indicates the typical steps in closing a project starting at occupancy. Meticulous planning is required to minimize disruption to services and ensure the safety and comfort of patients. Organizations are encouraged to seek advice, well in advance, from others who have managed major moves to learn from those experiences.

Capital projects involve spending large sums to reach certain objectives. The Department is anxious to continually improve our collective ability to implement projects and learn from past investments. To this end, a Post Occupancy Evaluation is required. The scope of the evaluation is to be determined in consultation with the Department but might address the project delivery process, space functionality, building infrastructure issues and cost. This evaluation could be completed in house or by external consultants. A budget line is to be maintained for this work. The means of implementation and quality of the product is subject to the approval of the Department. The Post Occupancy Evaluation is to be carried out one year to eighteen months after occupancy.

From the day of occupancy and well into the first year, start up problems must be anticipated and managed. These problems will be the result of design and contractor errors and omissions, changed user expectations, incorrect assumptions, misunderstandings and building system tuning. Some of the problems presented will be straight forward warranty repairs required of the contractor. Others will require considerable effort and debate between the designer, contractor and users to resolve and often require further expenditures. It is imperative that the Organizations remain committed to resolving these matters promptly and within the project framework. It is not uncommon for project activities to continue through to and well beyond the one year warranty inspection.

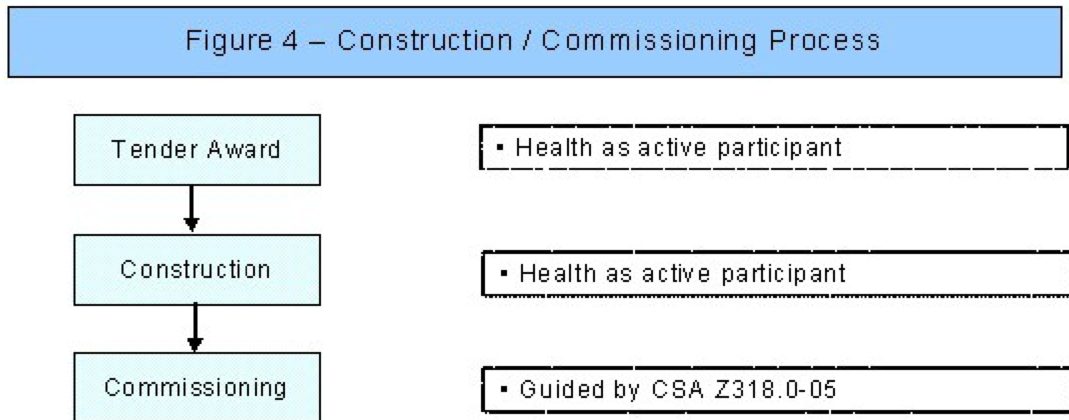
Figure 4 – Construction / Commissioning Process
Tender Award
Construction
Commissioning
▪ Health as active participant
▪ Health as active participant
▪ Guided by CSA Z318.0-05

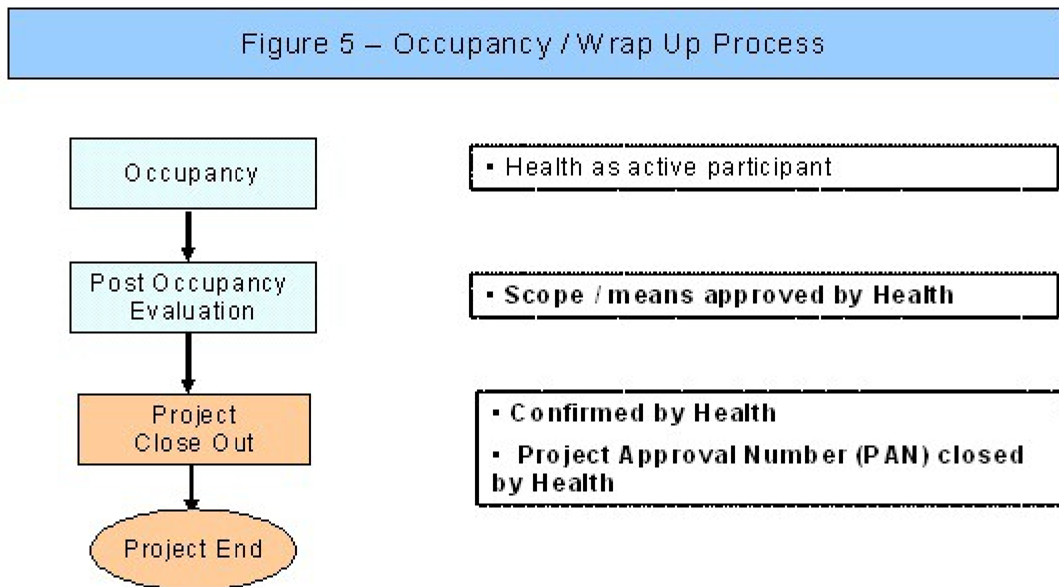
Figure 5 – Occupancy / Wrap Up Process
Occupancy
Post Occupancy Evaluation
Project Close Out
Project End
▪ Health as active participant
▪ Scope / means approved by Health
▪ Confirmed by Health
▪ Project Approval Number (PAN) closed by Health

At the conclusion of the physical project, project records must be finalized and accounting reconciled. The accounts reconciliation includes confirmation with the Department that conditions of payment as per the CFA have been met and all amounts accepted as final. When this is confirmed, the Department will issue notice in writing that the project is completed and the PAN is closed. The target for project closure is 18 months after occupancy.

12. Project Costs

Predicting and controlling projects costs is fundamental to project management and is the responsibility of the Organizations. Responsible project estimating, commitment control, contingency management, cost projections and adjustments handled in an effective and systematic manor are key to ensuring costs are successfully managed.

Project costs are defined as the costs that can be specifically and clearly associated with the implementation of the approved project and appropriate to be capitalized.

Initial start up costs associated with the project can be handled as a one time adjustment to the Organization's operating budget. Project costs may include costs incurred prior to the formal approval of the project but only for those activities specifically endorsed by the Department. Project costs are to be budgeted to include costs to be incurred up until one year after occupancy plus the Post Occupancy Evaluation costs be in which may occur up until eighteen months after occupancy.

It is imperative that Organizations commit sufficient resources to cost management and set up a project accounting system. The Department has developed a Project Accounting Framework that is required to be used unless otherwise agreed. This framework serves as the basis for developing the project budget, controlling commitments and reporting against the approved budget.

The Project Accounting Framework (in MS Excel) consists of the Capital Project Budget and Checklist, Account Report, Cost Summary and Cash Flow projection. The basis of the system is a project cost breakdown under eight major headings Pre-design, Design, Construction, Project Management, Furnishings and Equipment, Commissioning, Occupation and De-commissioning. Organizations are expected to develop the necessary working sheets within the structure as needed. Other approaches to project accounting may be approved if they provide for effective control, across project comparison and acceptable budget reporting.

The Capital Budget and Checklist (Appendix IV) is the foundation of the system and will usually be the basis for the initial project budget approval. Once approved, the project budget is the basis for comparison of commitments and projections.

Reallocation of dollars across the major headings is acceptable to enable management of costs. A budget reallocation is to be approved by the Department and on approval, forms the revised approved budget for subsequent comparisons.

13. Project Delivery

a. Project Management

Managing a major capital project is a high-risk activity. Organizations are responsible for ensuring that the necessary resources are in place to manage the risk and enable effective and efficient implementation of the project.

Project scope, cost and time are variables requiring careful management by experienced personnel. Project consultants need to be managed and provided with a source of internal information and decision making to ensure efficient project progress. While the expertise to manage a consultant's contract and coordinate internal input may be available in-house, projects of significant size or complexity require a committed resource. Contracting for a professional owner's representative and/or project management services can be a legitimate project cost.

Developing a project accounting system that enables ongoing budget comparison, commitment control, contingency and change management is inherent to effective project management. Sufficient and knowledgeable resources must to be put to this task.

Larger and/or complex projects require that a project delivery plan be carefully considered including engaging a project management or construction management team and/or additional technical skills commensurate with the project scope and risk.

b. Project Steering Committee

Most projects require ongoing input and oversight through a Steering Committee made up of management, stakeholders and the Department (one or more members). The Steering Committee's Terms of Reference is to include the oversight of the project's scope, quality, budget and schedule.

DHW members on the Committee will represent the Department's interests in the project and provide advice and input that will aid the DHW's formal approval at each milestone.

Steering Committee meetings are to take place regularly as the project progresses with decisions to be recorded in the minutes and copied to all members. The Committee's Terms of Reference and membership are to be acceptable to the Department.

c. Reporting

To demonstrate accountability, organizations are required to provide written reports to the Department indicating status, cost projections versus approved budget, and timing verses planned schedule and any other significant issues. The prescribed reports (in MS Excel) are as follows:

Project Status Report (Appendix IV) is to be submitted monthly. This report is for distribution within the Department and is to be written at an issue overview level.

Project Budget Report (Appendix V) is to be submitted monthly when project spending is ongoing. It is imperative that project costs and projections be constantly compare with the approved project budget. Completion of this report indicating current commitments and cost projections by category serves to confirm proper cost management is in place and enables effective contingency planning and cost decisions to be made.

Project Cash Flow Report (Appendix V) Is to be submitted quarterly or more often as cash flow deviations become apparent. Cash flow needs by Quarter and fiscal year are to be based on estimated times of submissions to Health for cost reimbursement and are to be based on careful review of scheduled activities and their related costs. The Department will strive to match changes in project cash flows from those previous approved but acceptance cannot be taken for granted and requires written acceptance of the Department. The earlier advice is provided the greater the chance the adjustment can be accommodated.

d. Reimbursement

With project approval in place and a Project Approval Number assigned, Organizations are able to make claims for cost reimbursement. The Department requires claims to be made monthly as expenditures are being incurred. Claims are to be based on actual costs as invoiced and be submitted using a Capital Grant Request For Payment Form (Appendix VI) supported by copies of paid invoices.

Ongoing compliance with the conditions of the Capital Funding Agreement (including reporting) is a prerequisite for claim processing. Claims submitted without the Capital Grant Request Form completed and fully supported will be returned to the Organizations without being processed.

Unless other arrangements are in place at the time of project approval, each claim will be paid at 75% of substantiated costs.

On any occasion when funds are provided in advance, the Organizations are required to hold such funds in trust for the defined project and submit supporting invoices to confirm project expenditures on a monthly basis as incurred. Any amounts not supported are to be returned on request.

At the end of the project, the final claim is to be identified by the Organization confirming that there are no outstanding accounts and that no further claims will be submitted. Prior to closing the project account and closing the Project Approval Number, the Department will confirm that conditions have been met and costs reconciled.

14. Space and Construction Standards

The Department does not produce specific standards relative to use of space and quality of construction. The Department requires Organizations to follow municipal and provincial legislation and Canadian or International standards that represent best practice in Canada.

From time to time, the Department may produce specific Guidelines which capture knowledge learned from local research or other projects that may be applicable to a particular capital project. It is the Organization's responsibility to contact the Department to determine if any Guidelines exist or other specific expectations exist that are relevant to their project and incorporate these if so advised. The Department has produced *Guidelines for Acute Care Facility Planning and Infection Control* (Dec. 8, 2004). The Department is also producing Principles of Human Factors Engineering for Facility Design (pending).

Considering health care facilities are (for the most part) public assets with a long service life, the Department requires facilities to be built for the long term, meaning they are to be of robust construction, flexible and adaptable. Furthermore, facilities are to be designed to strongly encourage component maintenance, serviceability and longevity.

Facilities are to be designed to minimize operating costs and energy usage. As a minimum, new facilities are to meet the requirements of the Canadian Building Incentive Program (CBIP).

The Canadian Standards Association (CSA) has produced a number of standards specifically applicable to construction in the health care sector (typically the Z series of standards). Some of these are listed below for ease of reference.

Z317.5-98	Illumination Systems in Health Care Facilities
Z317.1-99	Special Requirements for Plumbing Installations in Health Care Facilities
Z317.2-01	Special Requirements For Heating, Ventilation, & Air Conditioning (HVAC) Systems in Health Care Facilities
Z317.11-02	Area Measurement for Health Care Facilities
Z317.13.03	Infection Control During Construction or Renovation of Health Care Facilities
Z318.0-05	Commissioning of Health Care Facilities

Organizations are encouraged to check the CSA web site http://www.csa.ca for a current and complete list. Unless otherwise agreed as stated herein, Organizations are required to meet the requirements of these Standards as applicable.

15. Procurement

Where a Capital Funding Agreement has been signed, Organizations are required to abide by the Province of Nova Scotia Policies on Government Procurement which will overrule procurement policies of the Organizations. Organizations are encouraged to use the Office of Economic Development, Procurement Branch website for project notices but other web posting services can be used.

Organizations are required to abide by the Government Procurement Process: Professional Services: Architects and Professional Engineering Services.

The province and the Construction Association of Nova Scotia have jointly issued the Construction Contract Guidelines. The objective of these Guidelines is to maintain a high level of confidence in the procurement and contract administration process by ensuring that bidding is fair, equitable, consistent, efficient, and undertaken in an open and competitive manner. Organizations are required to abide by this document.

These and other documents are available at the Government Procurement website www.gov.ns.ca/tenders.

16. Site Selection Process

Projects which require procurement of a new site are required to use the process set out in Figure 6 unless otherwise approved by the Department. This site selection model is based on the use of a consulting team with broad technical expertise reporting to the Project Steering Committee or sub-committee. The team reports to and takes direction from the Committee. Using the expertise of the consulting team, the Committee determines the selection criteria to be used to select the site.

The process is driven by the selection criteria starting with target area determination and concluding with confirmation of purchase and development costs. It begins with the generation of a list of possible sites meeting the target area criteria (i.e. 25 acre site within a 10 kilometer radius of highway 102, intersection 18). This initial list is generated from a public advertisement and other sources. The list of possible sites are evaluated using a high level criteria. Opportunities for public input should be provided at this early stage.

Those sites found acceptable after the first pass are further evaluated and ranked using more detailed criteria leading to a short list of possible sites. The final stage includes a Phase 1 Environmental Assessment, appraisal of fair market value, and estimates of development costs of two or three preferred sites. The fair market value assessment should be carried out by a professional appraiser with an AACI (Accredited Appraiser, Canadian Institute) designation or CRA (Canadian Residential Appraiser) as applicable.

Once the preferred site(s) are identified, purchase negotiation can proceed. If negotiations are successful a conditional purchase sale agreement can be put in place noting that the sale is conditional on the approval of Health (and other conditions as appropriate).

Beyond the initial public consultation opportunities, a high degree of confidentiality by all persons involved in the site selection process is critical to ensuring successful negotiations. The Organization may choose to have those involved sign confidentiality agreements. The Committee should debate whether to release the number and location of sites in play at any point in the process.

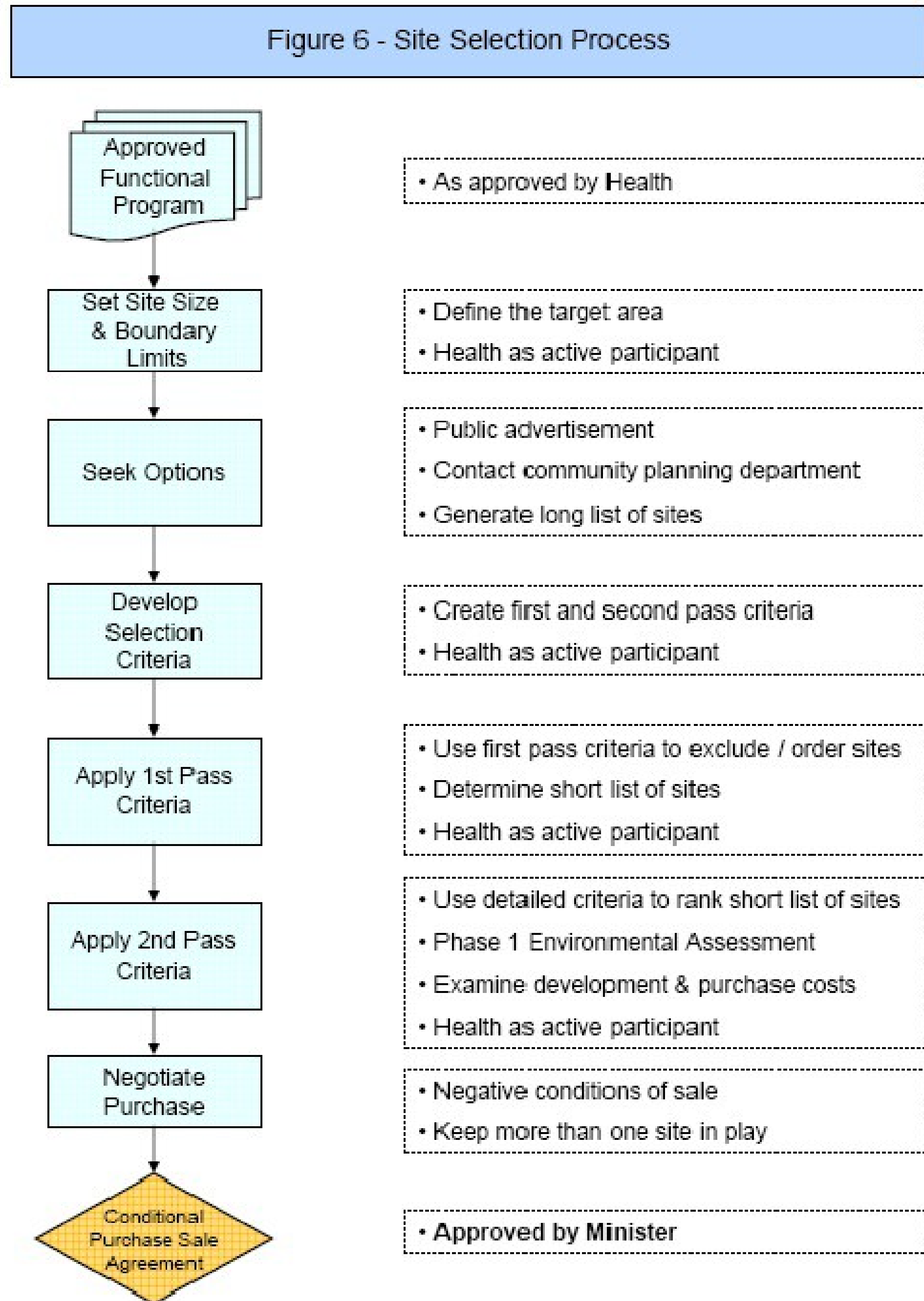
Figure 6 - Site Selection Process
Approved Functional Program
• As approved by Health
Set Site Size & Boundary Limits
• Define the target area
• Health as active participant
Seek Options
• Public advertisement
• Contact community planning department
• Generate long list of sites
Develop Selection Criteria
• Create first and second pass criteria
• Health as active participant
Apply 1st Pass Criteria
• Use first pass criteria to exclude / order sites
• Determine short list of sites
• Health as active participant
Apply 2nd Pass Criteria
• Use detailed criteria to rank short list of sites
• Phase 1 Environmental Assessment
• Examine development & purchase costs
• Health as active participant
Negotiate Purchase
• Negative conditions of sale
• Keep more than one site in play
Conditional Purchase Sale Agreement
• Approved by Minister

17. Project Communications

Once a project has been approved, all formal media releases are to be coordinated with and approved by the Department's Communication's Branch. The Department is to be provided with copies of any perspectives or renderings prior to public release. The Minister may choose to make formal announcements at specific milestones and will advise the Organization in advance of any release.

It is the Organization's responsibility to keep the Department appraised of any development which could require the Minister to respond publically and ensure information is provided in a timely fashion.

For projects valued at one million dollars or greater, a project sign is to be erected on the site in a prominent location acknowledging the contribution of the province. The size and details of the project sign are subject to the approval of the Department.

Appendix I - Capital Project Request

District Health Authority / Provincial Programs

CAPITAL PROJECT REQUEST	
(Please fill in all yellow areas)	
DHA Name:	
Facility Name:	
Project Name:	
Description: Brief description of the project outlining what needs to be done)	
Impact: (Why it needs to be done and what are the consequences of not doing it.)	
Operating Consequences: (How would this project affect efficiencies, service provision and operating cost of the facility?)	

Background: (What is the source of this information? Has a consultant been involved or has a study been produced?)	
Project Estimate: (What is the estimated cost of the project including construction, equipment, consulting, taxes, etc.? What is the source of this information?)	
Project Timing: (What is the urgency of this project?)	
Funding Source: (What other source of funding exist for this project? Are their revenue opportunities resulting from this project?)	

Signature:	
CEO:	
Date:	

Appendix II

Approval Number:	AOX-X	NOVA SCOTIA Health

Executive Council approved this capital project under OIC #XXX on XXX.

Under this authority, the Department of Health and Wellness will fund this capital project in an amount not to exceed **seven million five hundred thousand dollars ($7,500,000)** which represents seventy-five (75%) of the estimated project cost of ten million dollars ($10,000,000) subject to the conditions outlined below:

1. **The Sample District Health Authority is accountable to the Minister in all respects to spend the funds to achieve the agreed project scope, budget, schedule, and best value for the province. The Minister as represented by the Department of Health reserves the right to:**

   a. Participate in the development of the project;
   b. Review, approve, reject, or require amendments to the project deliverables in whole or in part to meet the overall objectives of the Minister;
   c. Stipulate aspects of the project delivery process;
   d. Audit the project delivery process, project accounts, or any other aspects of the project at the discretion of the Minister.

2. **The Sample District Health Authority is responsible for:**

   a. Maintaining the Department of Health current on all aspects of the project and reporting to the Department of Health in the prescribed format;
   b. Implementing an appropriate project delivery process which demonstrates public accountability and abides by provincial procurement policies;
   c. Ensuring the approved budget is not exceeded without the written permission of the Minister;
   d. Providing the local share of project costs when prescribed.

3. **Claims for reimbursement of funds spent by the District Health Authority are to be:**

   a. Based on invoiced costs;
   b. Submitted in the prescribed format;
   c. In accordance with the agreed project cash flow;
   d. Subject to these conditions being met.

Prepared By:

Manager, Infrastructure Management	Date
Approved By Department of Health and Wellness:	**Accepted By District Health Authority:**
Chief Financial Officer	CEO
Deputy Minister	Board Chair

Appendix III - Planning Definitions

Role Study

The Role Study is a strategic planning process (5-10 year planning horizon) which identifies and confirms the role of an organization within the context of the organization's and the province's total health care delivery system. Furthermore, the Role Study determines the programs and services that will be implemented to fulfill the organization's role at or across its service locations.

Key components of the Role Study include:

i. A organizational profile that contains an inventory of existing services, demographics, population health indicators and relationships with other health and non-health services providers;

ii An analysis of the existing situation with future trends, best practices, population projections and statement of possible new or enhanced programs; and

iii. A narrative document defining the future role and the specific programs / services to be provided by an organization at (a) service location(s).

Expected Outcome:

A clearly defined role that is supported by key stakeholders (the Board, staff, the community, DHW) that will move the organization forward over the next 10 years.

Master Program

The Master Program is a narrative document that describes the future planning requirements (space, staffing and operating budget) for the service location / site, in keeping with the approved role.

Hence the Master Program is usually the second step in the facility planning process. In the absence of a Role Study, the Master Program should reflect the organization's mission, vision and strategic plan. The Master Program is a strategic space plan with a planning horizon of 10 years.

Key components of the Master Program include:

i. Each program / department is described in terms of current and future goals, key processes or departmental activities, planning assumptions, preferred interdepartmental relationships, an analysis of current and future service volumes, current and future staffing requirements and a list of rooms and room areas required for the department to function;

ii. Workload projections become the prime determinant of space requirements. By acknowledging the workload projections as the basic determinant of rooms and useable space that will be provided for all inpatient and outpatient services, the approving authority is making, in effect, a qualified commitment to the institutions, service areas. With this in mind, it is important that the workload projections be as accurate and as objective as possible;

iii. Room areas are provided in net usable area, departmental gross area, and building gross area;

iv. In the case of expansion or renovations to existing facilities, both existing and proposed space should be outlined;

v. An estimate of capital costs, typical cost per square foot and equipment and soft costs (equipment is based on a percentage of the construction costs at this stage of the planning process); and

vi. Statement outlining the impact on future operating costs.

Expected Outcome:

A comprehensive document that clearly outlines the scope of services in regard to what exists and what should be planned (current and future goals, current and projected utilization, staffing and type and sizes of physical space) to meet the needs of patients / clients accessing services and to support staff in delivering those services.

This document will include an estimate of the capital cost and impact on future operating costs that have been determined through this programming process.

Depending on the size and complexity of the project, Master Program may be combined with the Functional Program.

Master Plan

In conjunction with the Master Programming process a Master Plan is developed. The Master Plan illustrates graphically (to scale) the spacial relationships amongst the Master Program components (departments / services) to show comparative sizes as well as relationships.

The level of detail contained in the Master Plan will be dependant on a number of project related factors including whether or not the site has been selected, whether the project is a new facility, a redevelopment of an existing facility or expansion of an existing facility. For instance if the site has been identified and confirmed the Master Plan could include a block schematic diagram placed on the site to confirm site viability. The diagram illustrates where each department / service should be located relative to other departments as well as vertical and horizontal circulation patterns and entrances and exits.

Key components of a Master Plan include:

i. Department / services relationship diagram;
ii. If a new site, block schematics.

Expected outcome:

A graphic solution depicting the preferred relationships amongst departments / services.

Projects where site location of the facility is confirmed a block schematic drawing placing the potential facility on the site.

Functional Program

The Functional Program is a narrative document that expands on the Master Program. The document contains the basic information required for architectural design. The Functional Program builds on the overall plan for the facility by detailing the departmental / services programs. The complexity of the facility will drive the level of detail required in the Functional Program.

Key components of the Functional Program include:

i. Overall planning assumptions that act as guiding principles during the design phase that are consistent with the organization's philosophy of health services delivery; major operating policies and or processes that influence staffing, location and design; functional relationships of key spaces within departments and/or services as well as major space occupying equipment and specific design or environmental requirements;

ii. Identification of the function and activity in every room type including a brief description of the use of the room, number of people in the room on average, special design considerations including medical gases, plumbing and lighting features, types and quantity of equipment and furnishings, technological requirements and communication services;

iii. Whereas an existing facility is being redeveloped the requirements could be reduced depending on the extent of renovation required. The need for detailing every room type may not be required;

iv. Operating Cost projection including impact on the current operating budget; and

v. A detailed Project Budget that includes planning construction, equipment and soft costs consistent with the Department's template Capital Project Budget and Checklist.

Expected Outcome:

The Functional Program combined with the Master Program and Master Plan provides a comprehensive project plan that describes key operations, quantifies space and staffing and identifies associated capital and operating costs required in making the project a reality.

Appendix IV

Great Area District Health Authority

SAMPLE ONLY - replace blue shaded information

CAPITAL PROJECT STATUS REPORT

Facility Name:	**North Shore Hospital**		
Project Name:	**Emergency Department Renewal**		
Project Approval #:	**A03-89**	**Project Budget:**	**$5,670,000**
Status Report #:	**4**	**Date of This Report:**	**38026**
		Date of Last Report:	**37942**

Current Activity: (What happened in this period? What will happen in the next period?	Working drawings are nearing completion for a planned tender date of March 23, 2004 for the main building. The project steering committee continues to meet regularly providing oversight of the project (last meeting on January 18th). A meeting to address program space reductions took place on January 5th with officials of the Department of Health and Wellness to confirm changes agreed with District leadership. The process to specify and purchase equipment is gearing up. Equipment required to be built in has been pre- purchased (e.g. Radiology, sterilizers, OR lights, etc.).
Project Pressures and Issues: (What major issues and/or challenges have been overcome and/or are facing the project in the next period?)	Issues relative to site access continue and have yet to be fully resolved. This has resulted in separating the site access roads and paving from the building tender. Discussions are continuing with HRM and the Transportation and Public Works to resolve the access issues. Resolution by the end of March will enable this tender to close in June. There are some community concerns over the fact that the emergency department is not planned to operate 24/7. It is anticipated that the ER will be closed after 10:00 pm & on weekends.

Schedule & Occupation Date: (What is the planned schedule of events and completion / occupation date? How has the planned schedule of events changed since the last report?)	Despite numerous issues, the schedule has only been impacted slightly. The intended contract completion date of April 5, 2004 will not be met. Substantial completion is now expected by May 20, 2004. Following four weeks of commissioning and move-in activities, the first use is set for June 22, 2004, and a public opening event planned for July, 2004.
Budget Commentary: (Is the project on budget? If not, how is this being addressed? What risks remain and what contingencies are available to address these risks?)	The construction budget at the end of design development was 10% over the budgeted amount. The designers have been conscious of this as contract documents have been developing. A pretender estimate is anticipated within three weeks which will verify if the construction budget is intact. The only room to adjust for an overage in the project budget is in the equipment line.

Report Prepared By:	
Project Manager:	
Date:	

Appendix V

NOVA SCOTIA
Department of Health

Capital Project Account Report

MASTER

Project Name:

Organization:

Month Ending:

Beds =

Gross Sq Ft =

Date:

	Category	Account	Item	Budget	Committed +	Forecast =	Projected Cost	Variance over/(under)	Notes
1	Pre-design	1.010	Role Study	$0			$0	$0	
		1.020	Master Planning	$0			$0	$0	
		1.030	Functional Program	$0			$0	$0	
		1.050	Site Selection Consultant	$0			$0	$0	
		1.062	Site Selection Process	$0			$0	$0	
		1.064	Site Survey	$0			$0	$0	
		1.066	Site Assessment	$0			$0	$0	
		1.068	Land Aquisition	$0			$0	$0	
		1.070	Design Consultant Selection	$0			$0	$0	
		1.080	Expenses	$0			$0	$0	
		1.090	Contingency (10%)	$0			$0	$0	
			Total Pre-design	$0	$0	$0	$0	$0	
						%	%		
2	Design	2.010	Prime Consultant	$0			$0	$0	
		2.021	Additional Services	$0			$0	$0	
		2.023	User Manual Preparation	$0			$0	$0	
		2.024	Staff Instructions	$0			$0	$0	
		2.025	As Built Dwgs	$0			$0	$0	
		2.029	Expenses	$0			$0	$0	
		2.030	Specialist Consultants	$0			$0	$0	
		2.031	Dietary Consultant	$0			$0	$0	
		2.032	Equipment Consulting	$0			$0	$0	
		2.033	Fire Safety Plan Consultant	$0			$0	$0	
		2.039	Expenses	$0			$0	$0	
		2.040	Liability Insurance	$0			$0	$0	
		2.050	Cost Consultant	$0			$0	$0	
		2.060	Roofing Inspection	$0			$0	$0	
		2.065	Site Inspector	$0			$0	$0	
		2.070	Interior Design	$0			$0	$0	
		2.080	Signage	$0			$0	$0	
		2.090	Models & Perspectives	$0			$0	$0	
		2.110	Travel	$0			$0	$0	
		2.900	Contingency (5%)	$0			$0	$0	
			Total Design	$0	$0	$0	$0	$0	
						%	%		
3	Construction	3.010	Construction Contracts	$0			$0	$0	
		3.015	Construction Insurance	$0			$0	$0	
		3.020	Pre Purchased Equipment	$0			$0	$0	
		3.030	Signage	$0			$0	$0	
		3.040	General Requirements	$0			$0	$0	
		3.070	Permits	$0			$0	$0	
		3.080	Temporary Works	$0			$0	$0	
		3.900	Contingency (5%)	$0			$0	$0	
			Total Construction	$0	$0	$0	$0	$0	
						%	%		
4	Project Management								
		4.010	Project Managment fee	$0			$0	$0	
		4.015	Project staff	$0			$0	$0	
		4.030	Investigations/Studys *	$0			$0	$0	
		4.040	Materials/Testing	$0			$0	$0	
		4.050	Legal	$0			$0	$0	
		4.060	Accounting	$0			$0	$0	
		4.070	Public Relations	$0			$0	$0	
		4.080	Financing	$0			$0	$0	
		4.090	Printing/Tendering	$0			$0	$0	
		4.095	Non-refund Tender Deposit	$0			$0	$0	
		4.100	Meeting Expenses	$0			$0	$0	
		4.110	Travel	$0			$0	$0	
		4.900	Contingency (5%)	$0			$0	$0	
			Total Project Management	$0	$0	$0	$0	$0	
						%	%		
5	Furnishings & Equipment	5.010	Kitchen	#VALUE!			$0	#VALUE!	
		5.020	Clinical-built in	#REF!			$0	#REF!	
		5.021	Clinical-movable	#REF!			$0	#REF!	
		5.025	Radiology	$0			$0	$0	
		5.030	Office equipment	$0			$0	$0	
		5.040	Communications	$0			$0	$0	
		5.050	Computer Equipment	$0			$0	$0	
		5.060	Furnishings	$0			$0	$0	
		5.070	Draperies	$0			$0	$0	
		5.080	Artwork/donor recognition	$0			$0	$0	
		5.900	Contingency (3%)	$0			$0	$0	
			Total Furn & Equip	#VALUE!	$0	$0	$0	#VALUE!	
						%	%		

6	Commissioning	6.010	Plan Preparation	$0			$0	$0
		6.020	Consultants'	$0			$0	$0
		6.030	Contractors Assistance	$0			$0	$0
		6.040	Materials	$0			$0	$0
		6.045	Manuals/Training	$0			$0	$0
		6.050	Equipment	$0			$0	$0
		6.060	Staff Time	$0			$0	$0
		6.070	Printing	$0			$0	$0
		6.080	Utilities/Services	$0			$0	$0
		6.110	Travel	$0			$0	$0
		6.900	Contingency (5%)	$0			$0	$0
			Total Commissioning	$0	$0	$0	$0	$0
						%	%	
7	Post Occupancy	7.080	Post-Occupation Changes	$0			$0	$0
		7.090	Post-Occupancy Evaluation	$0			$0	$0
		7.900	Contingency (3%)	$0			$0	$0
			Total Occupation	$0	$0	$0	$0	$0
						%	%	
8	De-commissioning							
		8.010	Existing Building Demolition	$0		$0	$0	$0
		8.020	Hazardous Materials Survey	$0		$0	$0	$0
		8.030	Contingency	$0		$0	$0	$0
			Total Decommissioning	$0	$0	$0	$0	$0
9	Projected Cost			#NAME?	#NAME?	#NAME?	#NAME?	#NAME?
10	H & T Burden (net)			#NAME?	$0	$0	$0	#NAME?
11	Total Project Cost			#NAME?	$0	$0	$0	#NAME?
	Ratios							
	Construction Cost/Gsf			#DIV/0!				#DIV/0!
	Construction Cost/Bed			#DIV/0!				#DIV/0!
	Project Cost/GSF			#NAME?				#NAME?
	Project Cost/Bed			#NAME?				#NAME?

Appendix VI

Capital Grant Request For Payment

DHA: ____________________ **For Period:** ____________________

Project Approval Number: ____________ **Claim Number:** ____________________

Project: ____

Project Status: (check one) *As per attached Project Status Report*

Planning ☐ Tender ☐ Design ☐ Construction ☐ Complete ☐

Approved Project Amount	$
Local Share	$
Approved Net DHW Funding	$

Total Claimed to Date (As per attached summary)	$
This Claim	$
Net of HST	$
DHW Share (75%)	$
Balance DHW Grant	$

Attachments:

☐ Invoice Summary
☐ Project Status Report
☐ Project Budget Report
☐ Revised Cash flow ***(Revised Cash flow must be recent within the last three months)***

I hereby certify that this claim as supported by the attached listing of vendor invoices and invoice copies are for costs incurred that are within the approved scope of work for this project.

______________________________ ______________________________

CEO **Date**