



## **Policy Manual – Finance**

### **F.C.01 New School Design & Construction (including Major Retrofits) – PROCEDURES**

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#### **PROCEDURES**

The Board's current practices with respect to capital construction of new schools have proven to be effective in delivering school construction projects, including new school construction, additions, alterations and renovations, on time and within budget.

This procedure is intended to outline the steps taken by the Board when construction of a new school, addition and/or major retrofit is to be carried out. The Ministry of Education has adopted recommended practices by the Expert Panel on Capital Standards as part of their Capital Approval Process when school boards plan and construct new capital projects. This procedure reflects adherence to this process as well as outlines the design input, architect role, awarding of tenders and approval of a project budget.

#### **Multi-Year Accommodation Plan**

1. Annually the board prepares a Multi-Year Accommodation Plan (MYAP). The MYAP provides current and projected demographic and residential development trends as well a long-term enrolment forecast at the system level and on a school-by-school basis. In addition, the MYAP includes data on school capacity, facility condition, utilization, and accommodation pressure.
2. One of the main purposes of the MYAP is to identify accommodation strategies and more specifically new capital construction for the Board, which would help support business case development for the Ministry of Education's Capital Priorities process. In addition, the MYAP is used for boundary reviews, program analysis, school accommodation reviews and facility partnerships.

#### **Capital Priorities**

1. The Capital Priorities program is the Ministry of Education's process that provides school boards with an opportunity to identify their most urgent and pressing pupil accommodation needs. The launch of the program varies and the number of business cases/projects a board can submit is limited.
2. A prioritized business case list will be developed and submitted to the Board of Trustees for approval. The approved list will be submitted to the Ministry; once receiving Ministry approval the pre-design process begins.

### **Point 1: Pre-Design**

For new school construction, major additions or retrofits that cost more than 50% of the value of the existing school or costs more than \$3,000,000, the Board follows the process below:

1. Prior to the selection of an architect, staff generate a “scope of work” for the project. Depending on the size of the site, capacity needs, program requirements and funding award, a decision is made whether to use a repeat design or new design for the construction project.
2. At this point staff complete the Ministry required Facility Space Template. Facility space templates have been developed to capture instructional and operational elements and calculate the approximate square footage for new elementary and secondary schools based on Ministry prescribed loading factors.
3. For each capital project, the Board will appoint a Project Manager (namely internal staff unless external resources are required).

Once the Ministry approves the submitted Space Template the Board can proceed to retain an architect.

### **Architect Selection**

In accordance to the Board’s purchasing policy, which complies with the requirements of the Broader Public Sector Procurement directive, a prequalified list of architects is maintained; the list is differentiated by size/dollar value of the project and complexity.

A tender is issued to prequalified architects, which amongst other things will request a preliminary drawing of the construction project within the scope of the approved space template.

A repeat design school usually requires that we use the original architect; this normally leads to a fee reduction by the architect and other efficiencies due to the duplication. However, it should be noted that each site is unique and thus some redesign is required.

Some projects are more complex than others and therefore the selection of the architect will place more emphasis on their quality of work, working relationship with the board and local municipality rather than on their (percentage) fee.

### **Design Process**

Once an architect is approved by the Board of Trustees, a meeting is held to go over the preliminary design they submitted through the tender process and to share details of the approved space template. This would include the number of classrooms, resource areas, gymnasium, washrooms, office areas, staff room, library and child care if part of the approved project and overall gross floor area. The concept drawing is shared with various curriculum program areas (library, special education, tech if secondary school, etc.) and their feedback is shared with the architect. In addition, ongoing meetings with facilities and planning staff are held to review the design at various stages. Several exchanges of this nature may take place before a final plan is established.

If the design is a repeat, staff will also use the feedback received from occupants of recently constructed schools.

As soon as the site details are known the architect will apply for Site Plan Approval, this can take 8-12 months depending on the project and municipality. The Building Permit process is shorter; it is based on the technical review and conforms to the building code.

### ***Point 2: Pre-Tender***

1. The Ministry requires the use of an independent cost consultant to review the design, provide costing analysis and advice, and report on options that the Board can review to ensure the proposed capital project is within the approved budget, prior to tendering the project.

The cost consultant's report must be based on drawings that are at least 80% complete.

2. In addition, an Approval to Proceed request from must be submitted confirming that the total estimated project costs do not exceed the board's identified funding.

Once Ministry approval is received (that is, sufficient funding has been identified) the Board can proceed to tender.

### **Construction Company Selection**

While there are a number of ways to construct a school, the Board generally uses a 'stipulated sum' method for construction projects since the design is known, specified and contractors bid one amount to deliver the project. However, other methods may include Project Management whereby the Board awards the project in stages directly to sub trades and, Construction Management whereby a General Contractor is selected that then manages the project and selection of sub trades abiding by the purchasing policy.

In accordance to the Board's purchasing policy, which complies with the requirements of the Broader Public Sector Procurement directive, purchasing staff generate and publicly advertise the tender document to pre-qualified General Contractors for various sizes of projects.

### **Tender and Award of Contract**

There are various methods that can be used to manage the tendering of a capital project; however, the Board has generally used a single closing method in which the cost and all other mandatory information such as extras, are received in one envelope. The content of the tender document is managed by the Facility Services department and architect while the process is managed by the Purchasing Department.

Following receipt of the tender, the package is reviewed by the architect, Chairperson, Facility Services and Purchasing Department. It should be noted that only new site construction projects are opened in a public forum.

**Point 3: Post-Tender**

1. The total project cost is calculated and reviewed. This would include the construction tender amount and all other costs such as architect fees, permits, site costs, contingencies and furniture and equipment.
2. If the tender and overall project cost is within the approved funding amount, then the Board can accept the tender bid, in accordance to the Board's Purchasing Policy.
3. If the tender exceeds the approved funding amount, the Board will either identify additional funding available or make design changes to reduce the project cost. In either case, the board must demonstrate to the Ministry that sufficient funding is available to complete the project.

A recommendation is made and then presented to the Board of Trustees for approval. Following Board approval, a letter of intent is sent to the successful general contractor, followed by a Board issued Purchase order. The architect prepares a formal legal contract (CCDC2) which is signed by the Board and general contractor.

**Construction**

It takes approximately 12-18 months to build an elementary school and 24 months to build a secondary school. During the building phase, the Board's Manager of Physical Construction oversees the project, addresses, and resolves issues as they arise. Contingency funds built into the construction contract are used for any unforeseen alterations needed during construction. In addition, cash allowances are also included in the construction contract and are used for items not pre-priced at the time the project was tendered.

Regular construction updates are brought to the Committee of the Whole meetings.

**Occupancy**

The architect will obtain the necessary approvals from the consultants used (mechanical, etc.) and Municipality (Building/Fire Departments) to confirm that the building was constructed in accordance to the design and therefore is ready for occupancy.

**Deficiencies**

A list of deficiencies is generated by the architect for each sub trade. The list is forwarded to the General Contractor to address. Items are sometimes challenged and settlement after occupancy can be challenging. Therefore, it is important to identify deficiencies as soon as possible. Withholding of payment from the general contractor until the deficiencies are rectified is often done. However, it should be noted that at some point, the Board may proceed to complete the work under an alternate work arrangement and negotiate settlement with the general contractor.