

## EXECUTIVE OVERVIEW

In November 1999 Alberta Infrastructure engaged Gowling and Gibb Architects to evaluate the conditions of several schools by using the SFEP building conditions form. The form was developed by Alberta Infrastructure and supplied by the regional coordinator for our use.

The school was constructed in 1957, added to in 1964 and 1974 and partially modernized in 1999.

The school was evaluated on March 23, 2000. The evaluation revealed the following:

1. The site size and athletic fields appear to be adequate. The paved playground and on-site roadway is in poor condition with cracking, heaving and ponding evident. Grades from these areas may be contributing to water seepage into the building and should be further reviewed and designed to rectify conditions. A play structure exists on site and appears to be in good condition. Two gravel-surfaced parking lots in good condition exist on-site. Concrete entry should be removed and replaced with landscaped materials. The main entry to the school is located at the “back” of the school; is difficult to locate, raises security concerns and should be further reviewed.
2. Exterior doors are damaged, weather checked, and should be replaced. Wood frames windows with retrofitted thermal glazing in wood sash are in poor condition. All windows, together with in-fill construction, should be replaced. Exterior wall materials (brick and stucco) are in good condition with minor stucco staining below windowsill locations. A roofing report has not been prepared to identify roofing conditions. Roofing should be further investigated.
3. The school has recently undergone a partial modernization however extensive original materials, finishes, and fitments remain. To complete the modernization, flooring, acoustic ceilings, doors and remaining millwork should be upgraded. The existing barrier-free exterior ramp should be replaced and a two-stop elevator should be added to the school. Washrooms are not barrier-free and should be provided for each sex on both the main and second floors.
4. The building is constructed of combustible and non-combustible construction and is not sprinklered. One fire zone between the 1964 and 1974 buildings appear to be missing. Zone

doors in some instances are non-latching and are not fitted with automatic hold open releases. Stairway doors are non-latching and one stair is not located within a fire-rated enclosure. Storage cubicles are located within a fire-rated stair enclosure and the main electrical service room located under the east stair is within the path of exit travel. The second floor assembly does not appear to be fire-rated as only wax building paper applied to the underside of the floor joist was visible at one observed location. A review of code related items should be initiated. A hazardous material audit is available however, extent of materials and costs for removal have not been addressed.

5. The heating system consists of one steam boiler in the 1957 original building and 1964 one hot water boiler in the 1964 addition. Both heating systems are in good operating condition. Replace boilers and heating systems as they have exceeded their service lives. Ventilation (no cooling) in 1957 construction consists of individual unit ventilators in the classroom and gymnasium. Existing ventilation system requires replacement as equipment has exceeded the service lives. Ventilation (no cooling) in 1964 addition consists of an air handler to service all the classrooms. Built up ventilation and exhaust systems are in poor shape. No fire damper in existing ductwork. Existing pneumatic controls shall be upgraded with new energy management technology. Water service requires upgrading. Existing 4" cast iron service required. North wing (1957) sanitary drainage piping is old and rusty. Replace small portion of galvanized water pipe with copper. Replace plumbing fixtures and trims.
6. The electrical service size is adequate. General lighting levels are below average. Replace existing exterior lights and upgrade car plugs. Install network cabling to all classrooms. The distribution panels require replacement, as the distribution system is inadequate. Life safety systems require minor upgrading as they were upgraded in 1999. New light fixtures are required to replace the original units with T-8 lamps and electronic ballasts. No power surge protection in power system.
7. Supplemental information (i.e. Roofing Report, Authority having jurisdiction Reports) has not been obtained by the district and has been identified as requiring further information.
8. Functional and program issues have not been addressed.

## Summary of Observations and Recommendations

Evaluation rating 3 or less.

The estimated construction costs for the remedial work identified in the attached evaluation forms has been based on the Costing Unit Rate Chart developed by Alberta Infrastructure. Items not identified in the rate chart have been individually estimated.

1	Site Related Work	\$ 7,000.00
2	Building Exterior	459,900.00
3	Building Interior	617,050.00
4	Mechanical	814,438.00
5	Electrical	285,500.00
6	Portables (not applicable)	<u>0.00</u>
Total Estimated Cost*		\$ 2,183,888.00

\* Items that have been identified as requiring further investigation have not been included in the estimated costs.

## Space Adequacy

The existing area according to the School Building Area Guidelines and Supplement – Maximum Gross Area of School Building Projects, is deficient

Existing Total Area (m <sup>2</sup> )	4,737.5
Projected Required Area (m <sup>2</sup> )	5,110.0
Deficient (m <sup>2</sup> )	772.5

### **Further Investigation**

The District provided no reports/supplemental information, as they have not been done. The following items require further investigation:

- 1 Roofing Investigation Report
- 2 Authority having jurisdiction Report(s)

During the building review several items were identified as requiring further investigation. Included are the following:

- 1 Grade modifications at the playground and on-site roadways - design required.
- 2 Review seepage in the basement (1957 building) area.
- 3 Location of the main entry re: safety and security.
- 4 Fire zones separations and corridor flame spread ratings.
- 5 Review apparent lack of second floor assembly fire rating.
- 6 Extent of hazardous materials and abatement costs.
- 7 Outside air for occupant load & air quantities for air distribution.
- 8 Review for M.C.C. replacement.

### **School Data Plan Information**

The plan information for this building is not current. It is recommended that the building plans and corresponding areas be upgraded.