# 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 1963, added to in 1967 and minimally modernized at an undetermined date.

The school was evaluated on March 21, 2000. The evaluation revealed the following:

- 1. The site size and athletic areas appears to be adequate. Paved playground areas are in poor condition and should be repaired and overlay paved. One new play structure and one timber structure, which should be replaced, exist on site. Grades at the west and south sides of the 1967 school slope toward the building and should be regraded to provide positive drainage. A possible ground water or drainage problem exists on the south side of the 1963 building as rust stairs and efflorescence are visible in the basement meter room area. Further investigation should be initiated to identify and rectify the problem. The paved parking lot is in poor condition and should be repaired and overlay paved.
- 2. Exterior doors are in damaged and weathered conditioned and should be replaced. Windows are also in poor condition, with thermal bridging and seal failure evident. All windows should be replaced. Block mortar has spalled on one glu-lam seat location and should be further reviewed. A roofing report has not been prepared to identify roofing condition. Roofing should be further investigated.
- 3. Interior materials, finishes and fitmets, except for the administration area, appear to be original. Flooring is in fair to poor condition and should be replaced. Block, brick and gypsum board walls are generally in good condition requiring minor patching and painting. Existing glue-on acoustic tile, exhibits staining, damage and, in some areas, sagging. Ceilings should be replaced with suspended acoustic T-bar to accommodate new lighting and ventilation systems. Doors are in fair to poor condition, fitted with non-rated grilles and in some cases do not appear

to be rated in the 1963 building. All doors in the 1963 portion of the school and a minor number in the 1967 area should be replaced. Original millwork and blackboards are outdated, worn and should be replaced. Similarly damaged folding partitions and folding walls should be replaced and repaired respectively.

- 4. The building is constructed of combustible and non-combustible construction and is not sprinklered. Fire separation zones appear to be present although concealed construction above zone doors should be further reviewed to confirm continuity of the fire separations. Zone doors are non-latching, not fitted with automatic hold-on release and should be replaced. The single storey school is at grade barrier free accessible however, barrier free washrooms are not provided. Existing washrooms (2) should be modified to provide barrier free accessibility.
- 5. The heating system consists of one steam boiler and perimeter baseboard radiation units. Convector is installed to convert steam to not water with a total of five circulation pumps installed. The heating system is fully functional and appears to be in good working condition. Replace boiler system as it exceeded service life. Ventilation, (no cooling) consists of four systems: a) AHU to serve gymnasium, b) AHU to serve the library, c) Built up fan system with supply air fan, return air fan, mixing section, filters and two swamp coolers to serve the east wing classrooms and office, d) Climate charger system with spray humidification to serve the west wing classrooms. Replace systems as they exceed service life. No fire dampers in existing ductwork. Existing pneumatic controls to be upgraded with new energy management technology. Plumbing fixtures appear to be satisfactory. Replace out of date flush valves.
- 6. The electrical service appears to be adequate. General lighting levels are below average. Portion of lights are turned off due to energy saving under the energy program. New light fixtures are required to replace the old units with T-8 lamps and electronic ballasts. Additional exterior lights are also required. Upgrade power panels to meet computer and convenience outlet requirements with sufficient space for future. Install network cabling to include missing classrooms. The existing fire safety system is totally out-of-date and requires complete upgrading (fire alarm, emergency and exit lighting systems). 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 <u>Costing Unit Rate Chart</u> developed by Alberta Infrastructure. Items not identified in the rate chart have been individually estimated.

1	Site Related Work	\$ 84,850.00
2	Building Exterior	327,350.00
3	Building Interior	461,050.00
4	Mechanical	697,692.00
5	Electrical	260,496.00
6	Portables (not applicable)	0.00
Total Estimated Cost*		\$ 1,831,438.00

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

### **Space Adequacy**

The existing area according to the <u>School Building Area Guidelines</u> and <u>Supplement – Maximum Gross</u> <u>Area of School Building Projects</u>, is in surplus

Existing Total Area (m <sup>2</sup> )	4, 357.4
Projected Required Area (m <sup>2</sup> )	3, 983.0
Surplus (m <sup>2</sup> )	374.4

## **Further Investigation**

No reports/supplemental information was provided by the District, 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 Possible sub-soil problems re: basement area rust/efflorescence
- 2 Mortar spalling at glu-lam seating
- 3 Floor cracking at corridors
- 4 Review of wall construction re: flame spread rating
- 5 Outside air for occupant load & air qualities for air distribution
- 6 Humidification in east (1963) building
- 7 Review for MCC 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.