

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 1913 and added to in 1955 and partially modernized at an undetermined date.

The school was evaluated on April 4, 2000. The evaluation revealed the following:

1. Two schools exist on this site (ie. Balmoral Junior High and Balmoral Elementary leased to the Weber Academy). Refer to a separate report for the Elementary School.
2. The site size and athletic areas appear adequate. Drainage away from the building appears to be adequate. Two parking areas exist on site. The east parking lot is gravel surfaced in good condition. The west parking lot is paved, but in poor condition. Repair and resurfacing of the lot is required. Sidewalks, except for the main entry walk, are in good condition. The main entry walk is cracked and heaved due to tree root damage. The sidewalk(s) should be relocated to avoid the tree root structure and should be reconstructed.
3. The sandstone exterior of the original building is in reasonably good condition. Sandstone which has moved and is projecting proud of the wall plane on the south facade should be further reviewed. Cornice structure, should also be reviewed to ensure structural integrity exists. All exterior doors of the 1913 building, excepting the main entry doors are damaged and should be replaced. Similarly doors on the 1955 addition should also be replaced. The original 1913 wood frame, single glazed wood sash window and storms are in poor to fair condition and should be replaced with new windows to match and maintain the character of the existing windows. The 1955 concrete addition appears to be in good condition. A roofing report has not been prepared to identify roof conditions for either building. Roofing should be further investigated.

4. Interior materials, finishes and fitments, in the 1913 building are, for the most part original. Plaster walls and ceiling conditions vary from fair in the lower level to good else where in the building. All plaster surfaces should be repaired to acceptable condition. Battleship linoleum and VAT flooring is in fair to poor condition and should be replaced. Similarly carpet areas are worn, exhibit open seams, pulls, etc. and should be replaced. Lower floor doors are damaged and/or not rated and should be replaced. Main and upper floor doors are original panel type oak c/w wired glass and are in good condition. Retention of these doors is suggested provided they are acceptable to the authority having jurisdiction with respect to required ratings at corridor locations. The 1955 addition is primarily of masonry construction and is in reasonably good condition except for the shower areas which should be completely renovated. Minimal millwork exists in the building and is mostly original. All old millwork should be replaced.
5. The building(s) is constructed utilizing combustible and non-combustible construction and is not sprinklered. Numerous code concerns are evident and should be further reviewed. The school is not barrier free accessible. Due to the multi-level nature of the building, we recommend a detailed study should be initiated to determine a feasible design. Present washroom areas are inadequate to accommodate barrier free washrooms. The detailed study should also address provision of adequate washrooms on each level of the school. A hazardous materials audit for the school is available however, extent of materials and costs for removal have not been addressed.
6. The heating system consists of two steam boilers and perimeter convectors. One boiler has broken down during review and the remaining boiler has had trouble maintaining the space temperature when outdoor air temperature is at 5 to 10 C range. Entire heating system requires replacement. Ventilation (no cooling) system consists of two air systems. One served the 1913 building and the second one served the 1955 addition. Existing ventilation equipment exceeded service lives and requires total replacement. Existing pneumatic controls shall be upgraded with new energy management technology. Drainage piping is old cast iron type. Partial replacement was done in the last couple of years. Total replacement is required. Plumbing fixtures appeared to be satisfactory for now. Replace humidification system. Insulate domestic water piping throughout.
7. The electrical service appears to be adequate. The service was upgraded from 400 amp to 800 amp. Upgrade exterior building light fixtures. Upgrade power panels to meet future demands. Minor upgrade of fire alarm system. Replace old battery packs and upgrade exit lighting system. General lighting levels are below average. New light fixtures are required to replace old units with T-8 lamps and electronic ballasts. No power surge protection in power system.

8. 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.
9. 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	\$ 22,000.00
2	Building Exterior	532,000.00
3	Building Interior	844,400.00
4	Mechanical	1,109,099.00
5	Electrical	317,844.00
6	Portables (not applicable)	.00
Total Estimated Cost*		\$ 2,825,343.00

* 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 School Building Area Guidelines and Supplement – Maximum Gross Area of School Building Projects, is in a surplus

Existing Total Area (m ²)	5,921.1
Projected Required Area (m ²)	5,520.0
Surplus (m ²)	401.1

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 Review of projecting, out of plane, sandstone at south façade, cracked and spalling sandstone and integrity of cornice framing.
- 2 Review provision of barrier free access(detailed design study) for exterior access, elevator(s) and washrooms..
- 3 Review code related items.
- 4 Review 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.