

EXECUTIVE SUMMARY

Project Overview

In November 1999 the Alberta Infrastructure School Facilities Branch engaged Carruthers & Associates Architects Inc. to investigate and report on the physical condition of 10 schools in Calgary under the jurisdiction of the Calgary Board of Education. We are now pleased to present the results of our investigations, in the form of charts as specified by Alberta Infrastructure.

Construction History

Montgomery:	1955,	1,808.9 m. ²	12 classrooms, gymnasium, offices, washrooms.
Additions:	1956	1,598.7 m. ²	11 classrooms, library & ind. Arts
	1982	197.12 m. ²	Link to MacKay School
MacKay:	1952	2,811.37 m. ²	5 classrooms, gym, offices, washrooms
	1960	960.3 m. ²	
	1966	771.7 m. ²	

Evaluation Date: November 24, 1999

Building Summary

Original building – Montgomery: Combustible: concrete floors, concrete block walls with stucco cladding, roof of wood joists with wood deck.

1962 addition: Combustible: concrete floors, concrete block walls, roof of open web steel joists with wood deck.

1982 link: Combustible: concrete floor, concrete block walls, wood roof

Original Building – MacKay: Combustible: concrete floor, wood frame walls and roof

1960 addition: Combustible: concrete floor, concrete block walls, wood roof joists with wood deck

1966 addition: Combustible: concrete floor, concrete block walls, open web steel joists with wood deck

Mechanical: Hot water radiators throughout, with one new and two original boilers. Ventilation by individual class units except for one rooftop unit on the east wing of the MacKay School. Air changes are generally inadequate.

Summary of Observations and Recommendations

The site is inadequate in size. Paved and turf athletic surfaces are uneven and worn out and should be resurfaced.

The athletic fields drain directly against the east MacKay wing foundation. Regrading and underground drainage are required.

The original 1952 MacKay School is dilapidated to the point of being unsuitable for public school use. Its finishes are worn, its structure shows differential settlement and its cladding is cracked and peeling. It is highly combustible and deficient in fire exiting provisions.

The original 1955 Montgomery School is better, but requires extensive replacement of exterior windows and doors and interior finishes.

The Montgomery 1962 and MacKay 1960 and 1966 additions need minor patching and refinishing of floors, walls and ceilings, as well as upgrading of millwork.

The 1981 link has structural flaws: a leaning wall and separation from the 1955 Montgomery School. Further structural investigations are needed.

Also, the foundations of the 1955 MacKay gymnasium have structural cracks, and should be investigated.

Roofs on the Montgomery gym and northeast wings are close to 20 years old and due for replacement, including flashings and insulation to slope roof surface to drains.

The building requires exterior ramps and two elevators to become handicapped-accessible.

Mechanical: The system requires two new boilers, a new steam distribution system, controls and a central ventilation system.

Electrical: Upgrades are needed for the exterior lighting, fire and smoke alarms and lighting, panels and wiring and interior lighting.

Estimated Costs:

Site:	\$217,000
Building exterior:	\$895,000
Building interior:	\$772,000
Mechanical:	\$560,000
Electrical:	<u>\$309,000</u>
TOTAL:	\$2,753,000

Space Adequacy:

Total area this facility:	6564.2 m. ²
Equivalent new facility requirements:	<u>6411.7 m.²</u>
Space Surplus:	152.5 m. ²

Further Investigation:

Structural analysis of the 1981 link and the MacKay School gym and south classrooms.

Building code exiting compliance study is needed, particularly for the MacKay wing.

Asbestos is present in some finishes - costs of removal should be investigated.