# H. D. Cartwright Junior High Calgary Board of Education

## School Facilities Evaluation Project April 16, 2000

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## **Evaluation Team**

**Typical Photographs** 

Architectural

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**Building Science Specialists** 

Photo page 1

# **Executive Summary**

In March 2000, Alberta Infrastructure engaged Building Science Specialists to evaluate the condition of 21 schools within the Calgary Board of Education. A standardized form, developed by Alberta Infrastructure and supplied to the evaluation team by the regional coordinator was used to document the condition and recommendations.

The original building was constructed in 1971. A Music Room addition was added in 1995. Minor renovations have been made to the building, upgrading the Office. A handicapped elevator has been installed with minor revisions to the upper floor classroom layout. An area on the north side, which once housed the community centre, is now the Drama Room.

The school is constructed concrete slab on grade and suspended slab at the second floor. Walls are concrete block, both interior and exterior. The structure is steel frame, with OWSJ and flat metal deck roofs.

### **Summary of Observations and Recommendations**

The school jurisdiction has a roof replacement program. No reports are available for the roof and further investigation is required. The presence of hazardous materials in the building is not anticipated. Asbestos has been removed. There may be PCB's in the light ballasts. These issues are dealt with as the jurisdiction undertakes upgrading. The costs associated with removing hazardous materials have not been included in any of the costing.

#### **Architectural**

The exterior of the building is finished brick, concrete block and stucco. Expansion joints require new caulking. The parking lot requires resurfacing and the main approach walks should be replaced. Handicapped accessibility is addressed. The administration area has been upgraded with new carpet and millwork over the last two years. Some additional architectural work is required to accommodate the recommended mechanical and electrical renovations; a cash allowance has been included.

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#### Mechanical

The mechanical systems, both heating and ventilations will require major upgrades over the next few years, including boiler replacement and component replacement in the ventilation's system. A new hot water tank is required. The siamese connection needs to be relocated closer to the fire hydrant, or a new hydrant is required.

### **Electrical**

Additional exterior lighting in the parking lot is required Emergency lighting and battery packs require upgrading. Upgrade lighting throughout to T-8's.

## Costing

The estimated construction costs for the remedial work in the attached evaluation form has been based on the Costing Unit Rate Chart developed by Alberta Infrastructure. Where this data was incomplete or inappropriate to the recommended work, unit costs based on the local Calgary market were used.

1. 2. 3. 4. 5.	Site related work Building exterior Building interior	\$40,000.00 \$26,000.00 \$44,450.00
	Mechanical systems Electrical systems Portables – n/a	\$115,150.00 \$119,000.00
	Total Estimated Costs	\$344,600.00

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## **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 Gross Area (square metres) 4883.2 Projected required total gross area (square metres) 4538

Overage / (Deficiency) (square metres) 345.2

## **Further Investigation**

Further investigation is required to determine the impact of the removal of hazardous material during any renovation work. Code related issues with respect to fire separations should be reviewed at the time of renovation. The roof and condition of roof accessories needs to be determined. The extent and reasons for cracking in the stairwells should be investigated.

#### **School Plan Data Information**

The plan information for the building was supplied by the school jurisdiction. Area information was provided by Alberta Infrastructure. The information generally appears to be up to date with some minor room function revisions.