Highwood Elementary Calgary Board of Education

School Facilities Evaluation Project April 16, 2000

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Typical Photographs

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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 two-storey building was constructed in 1966. Minor renovations to increase the size of the library have occurred. Two portables have just been removed.

The original building is constructed of concrete slab on grade. Second floor is precast concrete T's. The walls are precast exposed aggregate panels with block backup, or brick with block backup. Interior walls are concrete block bearing walls. Roofs are flat on deep concrete T's.

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 expected in piping elbow insulation and the boiler insulation and some interior finishes. 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 in brick or exposed aggregate. Sitework includes repaving the courtyard and parking lot as well as repairs to fencing and car plugs. Recontouring of the front yard is required and the additions of a sidewalk as well as revamping the fire access. Some exterior painting is required as well as complete window replacement. Handicapped accessibility must be addressed. Floor finish replacement is required in some areas. Some additional architectural work is required to accommodate the recommended mechanical and electrical renovations, a cash allowance is included.

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Mechanical

The heating plant is original to the building and requires replacement. The ventilation system requires considerable upgrading. A new hot water tank is required. Backflow prevention is required.

Electrical

Additional exterior lighting is required. A new fire alarm system with exit lights connected to the emergency power system is required. Upgrade fluorescent lighting to T-8's throughout.

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.	Site related work	\$142,650.00
2.	Building exterior	\$85,500.00
3.	Building interior	\$213,200.00
4.	Mechanical systems	\$116,300.00
5.	Electrical systems	\$108,200.00
6.	Portables – n/a	
	Total Estimated Costs	\$665,850.00

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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) 3063.2 Projected required total gross area (square metres) 3713

Overage / (Deficiency) (square metres) (649.8)

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. There is no report on the roof; it requires further review, as do the roof accessories.

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.