School Facilities Evaluation Project

Evaluation Team:	Henderson Inglis Partridge Hemisphere Engineering Inc.
Date of Tour:	December 1999
School Name/City, Town:	Holy Cross, Edmonton
School District:	Edmonton RCSSD No. 40

Executive Summary:

ARCHITECTURAL

In November of 1999 Alberta Infrastructure engaged Henderson Inglis Partridge Architects to evaluate the conditions of several schools by using a facilities conditions form. The form was developed by Alberta Infrastructure and supplied by the regional coordinator for use by Henderson Inglis Partridge. The school was evaluated on December the 7th and a return visit occurred on December the 15th 1999.

Holy Cross was originally built in 1963 with two additions in 1968, and 1972. The school is a three-storey concrete/masonry structure with one level partially below grade. Three minor modernizations occurred in 1987, 1996 and 1997. The exterior has remained relatively intact and is in reasonable condition with exception of the ceramic tile and metal finishes on the original portion of the school. Recommendations are to replace these panels with stucco, which is found on the balance of the school. This will make all the exterior finishes maintenance free and help unify the palette of materials used on the school.

The site was found to be exceptional in all areas and will likely not require upgrading or additional funding in the near future. A program of regular maintenance will ensure that this aspect of the school continues to maintain its' high standards.

The interior of the school requires major modernization to bring the building to current standards of quality for finishes and equipment. Most finishes and millwork are original and nearing the end of their life expectancy. Washrooms are a specific area of concern and are not only poor in terms of finishes, but also grossly inadequate in area, and number available for staff. Access for the physically disabled is limited to the main entrance and secondary entrances only.

MECHANICAL

Install new ventilation system with separate perimeter heat in gymnasiums; Install new furnace systems with humidification; clean existing duct distribution; miscellaneous upgrades required.

ELECTRICAL

Portions of the school are inadequate in reference to lighting levels and light fixtures are obsolete and should be replaced with current technology.

Overloading of circuitry throughout the gym area has been a problem.

Broken receptacles throughout the school.

COST ESTIMATES

The total estimated cost of remedial work for this school is **$1,376,500**

The estimated construction cost for the remedial work identified in the attached evaluation forms has been based on Costing Unit Rate Chart developed by Alberta Infrastructure. Items of unit costs not identified in the rate chart or individual items, which were deemed more appropriate to estimate individually, were assessed based on experience of Henderson Inglis Partridge Architects in the Edmonton area.

SPACE ADEQUACY ASSESSMENT

The existing area according to the School Building Area Guidelines has a deficiency of 680.3 square metres. This number does not include specific areas, which were missing in the guidelines for equivalent new facilities such as Home Economics, Industrial Arts and Other CTS Programs. It also does not address specific user needs or anticipated future needs.

Further Investigations Required:

ARCHITECTURAL

There are four main areas, which require further investigation. The first is the roof, which according to records, has not been re-inspected since construction of the newest portion of the school in 1972. A thorough inspection by qualified roofing inspectors is recommended.

The next major area requiring further investigation is building code issues. Edmonton Catholic Schools provided a document entitled "Educational Facilities Master Plan 2007" dated March 1998 to the study team. This documented a physical evaluation of the schools

similar to this study. The Educational Facilities Master Plan gives Holy Cross a 1 or unacceptable or unsafe rating with reference to Building Code issues. No specifics are given for the reasons for this rating. The study team for the 1999 evaluation did not evaluate the school in terms of 1997 Alberta Building Code, rather made some generalized comments about safety issues within the school. It is possible that the scope of work suggested by this evaluation or other modernizations contemplated by the School Jurisdiction may be considered by a plans examiner with the responsible authority to be a substantial alteration to the building and therefore 1997 Alberta Building Code Compliance may be deemed a requirement. The scope of work or costs for 1997 Alberta Building Code Compliance has not been identified.

The third item relates to the exterior envelope around the large gymnasium. Users are complaining that the space and the walls specifically, are very cold during the winter months. These walls are constructed of masonry, and as such, will have little insulation, and no vapour barrier. Depending on the type of insulation used, there may areas of the walls, which have no insulation at all. It is highly likely that loose fill insulation was used in the cores of the concrete block and this has consequently slipped or settled in the cores, leaving patches of wall without any insulation. An investigation of the original contract documents is required to determine the type of insulation used. Once it has been established that a loose fill was installed, thermal imaging can be used to determine whether certain portions of the wall are colder than others. This will then allow for a more compressive design for re-insulating.

The last item requiring further investigation is the existing flooring. Most flooring appears to be of the vinyl asbestos type, which contains asbestos fibres, bound in resin and is thus not considered hazardous on its' own. However, removal of this flooring should be undertaken with precautionary measures because any abrasive action on the tile will release small amounts of fibre into the air. This includes scraping, sanding, and chiseling actions. Further investigation should be done to determine if existing flooring is of this type.

MECHANICAL

None

ELECTRICAL

None