School Facilities Evaluation Project

Evaluation Team: **Kasian Kennedy Architecture** Date of Tour: **December 02, 1999**

School Name: **St. Monica School** City, Town: **Edmonton** School District: **Edmonton R.C.S Reg. Division No. 40**

Executive Summary:

ARCHITECTURAL

The site is in good condition throughout. There are no deficiencies to report, except that there is no outdoor playground area. Exterior walls of the gymnasium have been clad with acrylic stucco on insulation some time ago. The stucco is in fairly good condition presently but, extends right to grade. The detail at the base of the stucco is subject to damage from the normal freeze / thaw cycles of the adjacent concrete sidewalks. The settlement problems at this school, which are noted in the body of the report, have not yet significantly damaged the exterior wall finishes. Interior finishes at this school are in fairly good condition except at locations where the building is experiencing settlement. There are a number of occurrences of painted surfaces on exterior walls peeling and blistering, which is caused by frosting of the exterior walls. Exterior walls of this school are very poorly insulated. Many suspended ceilings in this school are incomplete. They do not extend tight to the perimeter walls of the room.

MECHANICAL

In general, the mechanical systems and components in this school are in good condition and are well maintained. The furnaces are approaching 30 years of service and will require replacement at some time in the future. Portions of the exhaust system and the entire humidification system require replacement. Adjustments to the current air distribution system could improve general comfort conditions in the building, and provisions for removing seepage from the underground ductwork should be made. There is no air conditioning in this school.

ELECTRICAL

Overall, the electrical systems are in good condition.

Summary of Observations & Recommendations:

ARCHITECTURAL

1. There is no outdoor playground area at this school.
2. There is much evidence of settlement of the exterior wall structure along the south side of the building and of the floor structure.
3. There is no roof access or fixed access ladder.
4. The stucco finish extends to grade and there is no room for the adjacent sidewalk to move as it experiences normal freeze / thaw cycles.
5. There is a lot of evidence of condensation and frosting on the interior surfaces of exterior walls. The exterior wall assembly of this building consists of nothing more than a single wythe of concrete block, which is an unacceptable wall assembly for this climate.
6. The glazing of the window adjacent to the south building entry has cracked due to stresses caused by settlement in the area.
7. The floor slab at the Staff Washrooms is experiencing movement.
8. Epoxy floor finishes need to be re-finished due to cracking and damage.
9. Paint finish has blistered and peeled on the exterior concrete block walls.
10. Ceilings are incomplete in Classrooms 2, 3, and 4 as well as in the Library Resource Area.

MECHANICAL

1. Old hose bibs do not have vacuum breakers.
2. There are no handicapped plumbing facilities.
3. Recommend changing out furnaces within 5 years.
4. Humidifier located in main furnace room is not functional.
5. Underground ductwork serving gymnasium shows evidence of groundwater seepage. Recommend that duct be inspected and that sump pumps be installed in duct plenum.
6. Floor level supply air outlet in gymnasium requires replacement.
7. Damper and actuator on outdoor air intake requires replacement.
8. Recommend reconfiguration of supply air system to provide warm air down along perimeter walls.
9. Gymnasium Exhaust fan is not functional and requires replacement.

ELECTRICAL

1. Original school has standard incandescent lamp exit signage, which does not conform to code.
2. Capacity needs to be increased for additional power requirements, which are presently not available today.
3. Surge protection should be provided.
4. Additional power requirements are needed to ensure hub is on dedicated circuit.

Further Investigations Required:

ARCHITECTURAL

- None

MECHANICAL

- Recommend that furnace heat exchangers be inspected for cracks, leakage.

ELECTRICAL

- None