

School Facilities Evaluation Project

Evaluation Team: **Kasian Kennedy Architecture**

Date of Tour: **November 17, 1999**

School Name: **St. Andrew School**

City, Town: **Edmonton**

School District: **Edmonton R.C.S Reg. Division No. 40**

Executive Summary:

ARCHITECTURAL

The site is generally in good condition. Settlement problems are causing a lot of roofing problems. Roof drains, which were at one time in the lowest sections of the roof, are no longer at the low point. Much ponding occurs as a result. There is no evidence of building envelope failure as far as walls are concerned. Doors and hardware in the 1946 section of the school are a continuous source of required maintenance and repair. The settlement of the 1946 building is constantly causing doors to require adjustment. None of the classroom floors in the 1946 section are level - they all slope down toward the exterior walls. The same is true of the second floor area in this section. All of this is a direct result of settlement of the building and are isolated to the 1946 section. It is likely that the floor tile used in the 1971 (gymnasium) section is vinyl asbestos tile. The carpet throughout the second floor needs to be replaced. No fire separation exists between the crawl spaces and the classrooms above.

MECHANICAL

Surface drainage slopes to streets and there are no catch basins on site. Piping is in poor condition with many leaks and blockages. Continuous piping leaks have been reported in the steam heating and condensate return system. Overheating occurs in all areas except during severe winter conditions. The Gymnasium is consistently cold. There is no supply air ventilation system. Some areas have exhaust only. There is no air conditioning or humidification in this school.

ELECTRICAL

Lighting is poor at most exits. Interior lighting is the older style fluorescent wrap arounds with original ballasts, which likely contain PCBs. The main distribution panel has only 6 breaker spaces for future use. Some of the panels have been upgraded to new panels in the 1946 and 1951 sections. The remaining original panels are obsolete with no space for additions. There is no isolation between equipment/mechanical and technology (user) loads. There are local interconnected hubs in various locations. They have been added in a piecemeal, non-structured manner, without dedicated closets/hub rooms. There are dedicated circuits only in the recently renovated computer room, library areas.

Summary of Observations & Recommendations:

ARCHITECTURAL

1. Flooring problems should be corrected.
2. Roofing problems should be fixed.
3. The crawl space should be fire separated from the floor above.
4. The settlement problem in the 1946 section should be reviewed.
5. Enrolment is very low, relative to capacity and future use of this school should be carefully considered before any upgrading occurs.

MECHANICAL

1. Piping should be replaced or repaired properly and heating system should be upgraded.
2. Ventilation system should be upgraded.
3. Consideration should be given to providing humidification and air conditioning, if this school is to remain open.

ELECTRICAL

1. Electrical distribution should be upgraded with the addition and replacement of new panels.
2. Exit lights and gymnasium lighting should be upgraded.
3. Communication network should be restructured.

Further Investigations Required:

ARCHITECTURAL

- Further investigation is required to determine the best method of correction for the settlement problem.
- Vinyl floor tiles should be tested to verify asbestos content.

MECHANICAL

- None

ELECTRICAL

- Vintage of older style fluorescent wrap arounds is not known; may be pre 1968 and original ballasts would likely contain PCBs.