



## **School Review Impact Assessment Report Milton Centennial School**

**May 28, 2008**

On March 26, 2008, the South Shore Regional School Board decided that Milton Centennial School (MCS) should be taken through the formal School Review Process as set out in Sections 14-23 of the Ministerial Education Act Regulations. One requirement of the regulations is that an Impact Assessment Report be submitted to the Board by May 31. The following information has been prepared to meet this legislative requirement.

The option being assessed is to close Milton Centennial School and have all the students in Grades P-1 attend Dr. J.C. Wickwire Academy (DJCWA). Also as part of this option, DJCWA would be re-configured as a Grade P-5 school by transferring its Grade 6 to South Queens Junior High School (SQJHS) and SQJHS would be re-configured as a Grade 6-8 school by transferring its Grade 9 to Liverpool Regional High School.

### **Part 1: School Information**

**School:** Milton Centennial School (MCS)

**School Configuration:** Grade Primary and Grade 1

**Address:** PO Box 500, Milton, N.S., B0T 1P0

**Principal:** Ms. Pat Morash

### **Enrolment History and Projection:**

#### **History**

2003/4	2004/5	2005/6	2006/7	2007/8	Decrease	%
175	154	142	163	138	37	21%

#### **Projection**

2008/9	2009/10	2010/11	2011/12	2012/13	Decrease	%
128	120	112	104	96	32	25%

It is important to note that the Grade Primary enrolments can only be based on the recent historical trend for Grade Primary. The projections would be more accurate if Grade Primary enrolments could be predicted using Department of Health pre-school children data, but this type of data can no longer be accessed by school boards as in the past. Given that Milton Centennial School has only Grade Primary and Grade 1 means that half of the total enrolment

cannot be predicted accurately with actual numbers of children who are ready to enter Grade Primary.

The enrolment decreased by 21% over the past 5 years and is projected to decrease by 25% in the next five. In other words, the significant decline is expected to continue at the same rate.

### **Population Patterns**

The data and observations in this section are based on information obtained from the Planning Department for the Region of Queens Municipality.

#### Population for Queens: (Statistics Canada)

1986 -	13,125
1991 -	12,923
1996 -	12,325
2001 -	11,723
2006 -	11,212

#### % Change:

1986 - 1991 -	-1.5%
1991 - 1996 -	-4.6%
1996 - 2001 -	-4.9%
2001 - 2006 -	-4.4%

The average decline is 3.9% over the last 4 census periods (20 years) and 4.8% over the last 2 census periods (10 years).

Projecting population changes is difficult at best. If an average of the change over the last 2 census periods (4.8%) is used, the population for Queens could be in the area of 10,674 by 2011, assuming that all other variables remain constant.

Regarding municipal planning, one of the main development projects underway is the creation of a new multi purpose recreational facility in Brooklyn. With this, some interest has been expressed about a new commercial and residential development in the area.

Also, the Region is extending municipal sewer and water services into Brooklyn. These services have the potential to open up some lands in that area to future development.

Based on the information available, there is no reason to expect a major change in the population trend for Queens County soon.

### **Capital Construction Planning**

Over the past year, the construction of a new elementary school to replace North Queens Elementary School has been completed---North Queens Elementary was destroyed by fire in the fall of 2005.

Presently under a lease agreement with the Department of Education, the community of Greenfield is building a new elementary school to replace the existing building.

The only other capital construction project of the SSRSB is a fairly major renovation project to upgrade South Queens Junior High School.

Prior to this year, the SSRSB had approved 2 major capital construction/renovation projects as top priorities: The addition of a cafeteria to Bridgewater Elementary School and upgrades to Centre Consolidated School. Recently, it approved renovations to New Germany Elementary School and submitted a request to the Department of Education to construct a new school to consolidate Centre Consolidated School, Lunenburg Academy, and Lunenburg Junior-Senior High School.

Very recently, the SSRSB received funding from the Department of Education to construct a new building at Park View Education Centre to house a new "Skilled Trades" program. As a regional program, students from other areas of the region will be able to access this program.

### **Physical Condition of Milton Centennial School**

In 2002, Connor Architects and Planners completed an assessment of the physical condition of Milton Centennial School (See final attachment for full report). As stated in the executive summary, "The overall condition of this school is good to fair to poor, with specific areas that require repair and upgrading or replacement". A full list of the repairs and maintenance required in 2002 is provided in the "Conclusions and Recommendations" of that report.

For the purpose of this report, an updated assessment was completed recently by the Manager of Facility Maintenance. A summary of his assessment is attached as Appendix A.

As noted at the end of Appendix A, the total estimated cost to maintain the building (excluding annual maintenance of \$8,000) is \$294,000. Normally, to expect that all of these improvements will be achieved within the next 5 years is unreasonable. It is reasonable to expect the more urgent items to have priority soon, including window, brickwork, ramps/aprons, hot water and boiler, flooring, electrical and barrier free access; these items are estimated to be about \$150,000. This school needs some upgrades soon and the cost is significant.

### **Building Use**

The gross square footage is 15,124 sq. ft.

Teaching Space	Number	Notes
Regular classroom	11	
Gymnasium	0	
Multi-purpose room	1	For P-1 physical education
Cafeteria	0	
Library	1	
Music room	0	
Art room	0	
Resource room	1	

Computer room	1	
Science lab(s)	0	Not applicable
Technology Ed.	0	Not applicable
Family Studies	0	Not applicable
Other spaces	1	Kitchen for hot lunch daily

One classroom is not being used for instructional purposes. It is used as a staff room, conference/meeting room, and Physical Education storage space.

## **Part 2: Impact Analysis**

### **Capability of MCS to Deliver the Public School Program (PSP)**

From a Facility Perspective: Within a few limitations as a facility, Milton Centennial School has been able to facilitate the delivery of the public school program and there is no reason to suggest that the facility will become a barrier to successful program delivery if the status quo remains. This assessment is made with the assumption that the urgent and major maintenance requirements will be completed in a timely fashion.

The obvious physical or facility limitations that define the status quo are the lack of a modern gymnasium and a cafeteria.

From an Educational Perspective: There is no evidence to suggest that Milton Centennial School is or will be unable to deliver the PSP successfully in Grades Primary and Grade 1, if the status quo remains. The reasons behind the recommendation to close this school are primarily related to operational factors which are explained in the sections below. This is not to say that no educational benefits would result in having the students attend Dr. J.C. Wickwire Academy and these are also noted below.

### **Educational Benefits**

MCS Grade P-1 to DJCWA: Although educational benefits in transferring the Grade Primary-1 students from MCS to DJCWA are not obviously distinct in comparing the capability of each school to deliver the educational program, some potential benefits to students are related to school size.

Primarily they are related to economies of scale in the utilization of staff resources, especially with respect to how the services of specialists on staff can be applied when grades P-5 or P-6 are in the same school. Having 6 or 7 elementary grades together potentially provides greater flexibility and capacity for a team of specialists to meet the needs of students.

Milton Consolidated School and its staff have gained a very positive reputation among parents and the community about the educational program and how it is delivered to the Grade Primary and Grade 1 students. The success of the Family Literacy Project is one example that supports this. Also, the focus on early elementary programs through the current P-1 configuration, is an obvious benefit which is supported by the Reading Recovery statistics. Data collected over a seven year period suggest that, with the exception of one year, an

above average number of grade 1 students from MCS have successfully completed the program. Of 131 students who were eligible for this level of support at Milton, 107 students or 81% successfully completed the program compared with a 68% average for the Lunenburg-Queens region over the same period. Because of the unique configuration at MCS, teachers have similar grade level assignments and there is more opportunity for professional dialogue on similar expectations and best classroom practice, in part because Reading Recovery teachers, who are highly trained, work closely with p-1 classroom teachers. Because the staff of MCS will transfer to DJCWA with the students, the level of expertise will be carried forward too.

Likewise, the program and its delivery at Dr. J.C. Wickwire Academy are held in high regard. Understandably, it is difficult to move from the comfort and security of the known to the unknown, but in this case, an effectively executed transition by both professional staffs should minimize the levels of anxiety and concern for students and families. It is important to keep in mind that the students of MCS would be making the move with their own teachers to the school where they may have siblings already attending.

Another educational benefit of transferring the students to DJCWA is related to grade configuration. Although any grade configuration can be made to work successfully, as in the case of MCS, the most commonly accepted configuration recommended for elementary schools is P-5 or P-6. P-8 is also supported by educational research on grade configuration. A configuration of P-1, P-2 or P-3 is not a preferred or recommended choice when designing or setting up new schools, if a choice can be made. Often, other operational factors dictate what the configuration must be. The decision to configure MCS as a P-1 school when DJCWA opened was based on the classroom space available and the number of students to fill these spaces.

In fact, the South Shore Regional School Board decided in 2002 to close Milton Centennial School in 2004/05, if the renovations were completed to accommodate the larger enrolments. That decision was based on both educational and operational arguments that had been developed through a thorough review process by an ad hoc committee of the Board. There is no reason to question the educational and operational reasons behind the original decision in 2002 and under the circumstances at the time.

Perhaps the most definite educational benefit of this option is to reduce the number of schools that students have to attend from Grade Primary to Grade 12. The educational research on grade configuration does make the case for keeping the number of moves from one school to another to a minimum. In this case, not only will the students of MCS have to make one less move, but also, they will be moving into a school which their siblings are already attending. Stated from another perspective, there are obvious benefits for families in not having their elementary school age children attending separate elementary schools at the same time.

DJCWA Grade 6 to South Queens Junior High School: Just as a P-5 or P-6 configuration is supported in the professional research, a Grade 6-8 or 6-9 middle school is a recommended configuration. There is quite strong support for a Grade 6-8 configuration in which the "middle school philosophy" can be applied as the best fit. From a research perspective, it can be

argued that Grade 6 students, at their stage of development, can be best served with Grade 7 and 8 students if the opportunity to set this configuration exists.

SQJHS Grade 9 to Liverpool Regional High School: There is evidence in the research that Grade 9 can fit in either the junior high or senior high configuration. Whether in junior high or senior high, the research recommends that Grade 9 be designed as a transitional year for students between junior high school and high school. In their emotional, behavioral and intellectual development, Grade 9 students are just a bit beyond Grade 8 and not quite ready for Grade 10; they need a year of transition.

The inclusion of Grade 9 at Liverpool Regional High offers an advantage to the students in all grades because the enrolment and number of teachers would increase, thus creating greater flexibility in setting teaching assignments and student schedules to match their course selections.

### **Transportation**

Approximately 4 of the buses operating now serving MCS and DJCWA would have to complete an additional morning run. For the most part, this would not increase bus travel time for students. Students who live close to the Milton school and currently attend this school would be affected most directly. They would have to be transported to Dr J.C. Wickwire Academy beginning in Grade Primary, instead of Grade 2, as is the case now.

It is reasonable to expect a minimal increase in transportation costs because 4 buses would have to complete another morning run.

Because DJCWA, SQJHS and LRHS are in close proximity, the re-configuration of all 3 schools should require only a few minor adjustments in the transportation service.

### **Extra-curricular Activities**

The Grade P-1 students of Milton Centennial have enjoyed the advantages of a strong extra-curricular activity program with a high level of commitment and support from the school community. Nevertheless, there are advantages in having all Grade P-6 students from the same families attend a single school during their elementary school years, compared to having them attend 2 separate schools. The collective energy and commitment of these families can be applied more constructively when focused on one school instead of two.

Some students may have difficulty adjusting to the larger numbers of students while others will be excited by the new type of environment and the larger number of students. A reasonable period of transition and adjustment should overcome any problems. Having the teachers of MCS present at DJCWA should be beneficial especially for the Grade 1 students from MCS in making the transition smoothly.

It is recognized that there will be a period of adjustment for the staff and students at Dr. J. C. Wickwire also. Having the younger children new to the school and the older children in Grade 6 off to SQJHS will change the environment in various ways and will surely affect the type of

extra-curricular program. This is not to say that having to go through a period of adjustment and change would produce only disadvantages; the potential for benefits is just as real. For example, the younger children could benefit from having the older children as role models in the extra-curricular activities.

Generally, no problems are anticipated in regard to extra-curricular activities for the Grade 6 students at SQJSHS and the Grade 9 students at LRHS. The students would simply make the move to their new school a year earlier than in the past. The Grade 6-8 and 9-12 configuration are very common and no particular concerns about participation by the younger students in extra-curricular activities are characteristic.

Regarding participation in athletics, the Grade 6 students would be eligible to participate with the Grade 7 and 8 students. The interest level and enthusiasm of Grade 6 students to participate with Grade 7 and 8 students is generally recognized as a benefit to the athletic program of a middle school. The re-configuration of SQJHS would cause some changes with respect to the competitive interscholastic program. The loss of the Grade 9 students would be a disadvantage in terms of the ability of SQJHS to compete with other junior high schools, but on the other hand, they would be eligible to participate on the senior high teams at LRHS.

### **Property Service Efficiencies**

The property services efficiencies in closing Milton Centennial School are obvious. The cost of operating and maintaining the facility would be eliminated. Furthermore, the inclusion of the students at DJCWA would have a minimal impact on its operating costs. Some one-time, relatively minor property services costs would be necessary because of some facility and furniture changes to accommodate the smaller Grade P-1 children.

The total annual property services cost for MCS for the 2007/08 fiscal year was \$193,158.00. This cost included custodial salaries, benefits and supplies, security, electricity, heating fuel and garbage and snow removal. Also, it included a one-time, major environmental expenditure of \$82,000.00 because of an oil spill. In comparison, the total property service cost for 2006/07 was \$98,114.00. Based on these 2 years and excluding the cost of the oil spill, a saving of approximately \$100,000 per year can be expected from the closure of MCS, excluding any major maintenance/repairs.

As reported in Appendix A, the annual maintenance for MCS is expected to be about \$8,000, on average. The \$82,000.00 in 2007/08 was not used to calculate this average and the annual figure of \$8,000.00 is included in the total property service cost of \$100,000.00.

South Queens Junior High is already scheduled for a major capital upgrade to be completed over the next few years. If 95-100 Grade 6 students were transferred in and approximately the same number of Grade 9 students were transferred out to LRHS, the impact on the facility and property service efficiencies should be negligible because the total enrolment would be unchanged.

There is a question about what facility adjustments or enhancements have to be made at Liverpool Regional High School to accommodate Grade 9. The enrolment will continue to decline for LRHS and SQJHS and the availability of space is becoming less of a concern each year. If the Grade 9 students could be accommodated with some level of inconvenience, it would only be for a year or so because of the declining enrolments.

### **Staff Allocation Efficiencies**

The closure of Milton Consolidated School would result in improved efficiency in the allocation of staff positions. The small enrolment of MCS requires that the teaching staff allocation is greater than what the staffing formula would normally provide. Because the students would be moving to a school with a much larger enrolment, some full-time-equivalent (FTE) teaching positions would be saved. For example, by applying next year's projected enrolments in the staffing formula, the total allocation for MCS and DJCWA would be reduced by 1.25 FTE positions if all students attended DJCWA next year.

Likewise, some reductions in the following staff allocations could result: administrative assistant positions, library clerk positions and custodial positions. Given the complexity of adjusting all the staff allocations for the 4 schools involved in this closure and re-configuration, an accurate numerical analysis is not viable at this time. It is reasonable to expect that some staffing efficiencies could be found, but the total dollar value would not be significant relatively speaking.

### **Operational and Capital Requirements**

As noted in previous sections, if MCS continues to operate, the combined annual property services costs can be expected to be approximately \$100,000.00 and, given the escalating costs of salaries, electricity, fuel and materials, these costs will continue to increase annually.

More significantly, maintaining the status quo would require major capital expenditures to keep MCS operating. The figures presented in a previous section are \$150,000 over the next 2 or 3 years, minimally, or \$294,000 over a longer period.

The financial advantage of closing Milton Centennial would have to be compared against a loss of operating revenue because school boards in Nova Scotia receive a dollar amount for each square foot of space used by students in schools. In this case, the SSRSB received \$78,416 for MCS for this present fiscal year.

### **Impact on the Community of Milton Centennial School**

The impact on the community of Milton Centennial School would be a sense of loss and concern about the effect on the identity of the community. The sense of loss would be that of any community that sees the closure of its school as another indicator that the community is growing smaller. MCS has been very important in the lives of several generations of families over many years.

On the other hand, the sense of loss and concern may not be as severe as what would be expected under different circumstances. The loss of the school and what it has contributed to the sense of identity of the community is understood, but the students will be moving a relatively



short distance, on the same buses, to the school that they would attend eventually in Grade 2, possibly with or following their siblings. From the perspective of many of the parents, DJCWA would not be an unfamiliar setting or environment.

### **Community Use of School**

Various groups in the communities around MCS use the school, some on a regular basis and some on an annual basis, but there is a community hall nearby and other facilities in Liverpool are accessible. The effect of closing MCS should not have a serious negative impact on the community from the perspective of available community facilities.

### **Part 3: Information for Receiving Schools**

**School:** Dr. John C. Wickwire Academy (DJCWA)

**Address:** PO Box 1180, Liverpool, N.S., B0T 1K0

**Principal:** Ms. Misty Nauss; Vice-Principal: Mr. Terry Stewart

### **Enrolment History and Projection**

The enrolment of Dr. J.C. Wickwire Academy decreased from 523 in 2000/01 to 419 for this school year, 2007/08, a decrease of 20%. The following tables show a continuous decline at least until 2012/13.

#### **History Grades 2-6**

2003/4	2004/5	2005/6	2006/7	2007/8	Decrease	%
476	463	452	432	419	57	12%

#### **Projection Grades 2-6**

2008/9	2009/10	2010/11	2011/12	2012/13	Decrease	%
399	385	371	357	343	56	14%

The enrolment history combined with the 5-year projection shows that the enrolment of Dr. J.C. Wickwire Academy will decrease from 476 in 2003/04 to 343 in 2012/13, a decrease of 28%, assuming the status quo in grade configuration and without including the students from MCS.

It is noteworthy for comparison purposes to see how the enrolment would be affected if the configuration of DJCWA remained as P-6. The next table shows the Grade P-6 enrolment with the MCS enrolments included.

#### **Projection: DJCWA Grade P-6 including MCS**

2008/9	2009/10	2010/11	2011/12	2012/13
527	505	483	461	439

It is relevant and important for this assessment that the enrolment of DJCWA in 2009/10 would be 505 if Grade 6 was not transferred to SQJHS; the enrolment was 523 in 2000/01. In 2012/13 the enrolment would be only 40 more than it is at present.

If the decision is made to transfer the Grade P-1 students from MCS to DJCWA and transfer the Grade 6 students to South Queens Junior High School, the changes could occur in September, 2009, at the earliest possible date. The table below combines the Grade P-1 enrolment from MCS with the Grade 2-5 enrolment from DJCWA over the next 5 years.

**Projection for DJCWA P-5 including MCS P-1**

2008/9	2009/10	2010/11	2011/12	2012/13
446	409	421	380	360

The P-5 enrolment at DJCWA in 2009/10 would be 409, 10 more than the present enrolment, and it would decrease in the subsequent 3 years.

The enrolment of South Queens Junior High School has declined from 353 in 2000/01 to the present enrolment of 315, a decline of 11%. The next table provides a 5-year enrolment projection for SQJHS. According to this data, the decline will continue to be significant.

**Projection for SQJHS**

2008/9	2009/10	2010/11	2011/12	2012/13	Decrease	%
309	299	297	260	260	49	16%

The enrolment of Liverpool Regional High School has declined from 359 in 2000/01 to the present enrolment of 335, a decline of 7%. The final table provides a 5-year projection for Liverpool Regional High School.

**Projection for LRHS**

2008/9	2009/10	2010/11	2011/12	2012/13	Decrease	%
345	308	315	306	296	46	13%

**School Configurations**

The configuration of DJCWA would be Grade P-5. SQJHS would be Grade 6-8 and LRHS would be Grade 9-12.

**Physical Condition of Building**

Dr. J.C. Wickwire Academy is relatively new, having been constructed in 1996. The building has been maintained and requires no major capital upgrades.

**Building Use**

Gross square footage: 62,016 sq. ft.

Teaching Space	Number	Notes
Regular classroom	23	
Gymnasium	1	
Cafeteria	1	
Library	1	
Music room	1	
Arts and Craft room	1	Counted in 23 classrooms
PST room	2	Counted in 23 classrooms
Computer room	1	
Guidance room	1	Counted in 23 classrooms
Learning Centre	1	Counted in 23 classrooms
Sensory room	1	
Conference room	1	

Although the total enrolment would be less than previous enrolments when this school was in its first year of operation, the addition of Grades P-1 would cause some facility use pressures in relation to how the building is used now. There would be times in a weekly schedule when the specialists might have difficulty finding a suitable space; on the other hand, there could be times when 2 classrooms would not have students in them full-time. There should be no major problems in building use that could not be easily solved.

**Part 4: Conclusion**

The enrolments of all the 4 schools that would be affected by the closure of Milton Consolidated School are projected to continue their significant decline. Since 2002, when the South Shore Regional school Board first approved the closure of Milton Centennial School, the enrolment decline predicted at that time has been confirmed and perhaps has proven to be even more extreme. The overall plan or option approved at that time required changes in the configurations of Dr. J.C. Wickwire Academy, South Queens Junior High School, and Liverpool Regional High School. Because of the greater certainty now regarding the enrolments, other options can be considered.

Option A: As originally intended and approved in 2002, close MCS, and reconfigure DJCWA as a Grade P-6 school, SQJHS as Grade 6-8 and LRHS as Grade 9-12.

Option B: Because the reconfigured enrolment of DJCWA, by 2009/10, would be less than its enrolment in 2000/01 (prior enrolments were even larger), close MCS and reconfigure DJCWA as a Grade P-6 school, with no change to SQJHS and LRHS.

Option C: Because the total enrolments of all schools are declining, close MCS, reconfigure DJCWA as a Grade P-5 school and SQJHS as a Grade 6-9 school, with no change to LRHS. This option is more dependent on the capital renovations being completed at SQJHS before any changes are made.

The overall conclusion is that Milton Consolidated School should be closed under Option A, B, C and, furthermore, these 3 options need to be thoroughly considered over the next 12 months through a school review process. Not only do the options need to be examined, but also, the timing to make the changes needs to be determined, whether September of 2009 or 2010.

There is some uncertainty about when the capital renovations at SQJHS will be completed and about how many classrooms need to be added at LRHS. Option B could be implemented in September 2009 because SQJHS and LRHS would not be affected. The timing of Option A and Option C would depend on the completion date for the renovations.

It is important for all the schools and communities named in this report to have these questions answered as soon as possible. The answers can only be finalized if the formal review process starts right away.

## **Appendix A**

### **Recent Assessment of Physical Condition of Milton Centennial School**

The roof was replaced in 2005 and a new public address system was installed in 2006.

The paving is in poor condition and should be replaced with new asphalt. The estimated cost is \$50,000.00.

Ramps and aprons should be replaced with an estimated cost of \$8,000.

To re-point/re-build brickwork is estimated at \$10,000.

All windows should be replaced along with the panels; estimated cost of \$80,000.

Flooring replacement is ongoing depending on budget and priority. Flooring that needs to be replaced soon has an estimated cost of \$5,000.

The hot water heating mains in the boiler room and isolation valves should be replaced at an estimated cost of \$10,000.

The boiler is past its expected life cycle. A new energy efficient boiler should be installed at an estimated cost of \$15,000.

Because of a leak, two 250-gallon tanks were installed for temporary use this year. New above ground tanks will be permanently installed this summer. The estimated cost is \$3,000.

To replace and relocate main electrical and original panel boards has an estimated cost of \$40,000. To replace lamps & ballast with T-8 and electronic ballast has an estimated cost of \$5,000.

Indoor air quality and environmental issues: There are air quality problems in the school. The only ventilation is provided by exhaust fans. This causes problems when doors are opening because contaminants and water vapour are drawn into the building---due to the negative pressure caused by the exhaust fans. The best solution would be a simple air exchange system with an approximate cost of \$40,000.

Costs associated with maintenance, repair and operation exceeding normal expectations: Actual maintenance costs for last fiscal year were \$8,000 and the estimated maintenance cost ongoing is the same amount.

Ability to provide barrier free accessibility to the buildings and grounds: To construct ramps, install lever door knobs and automatic openers on main entrance doors has an estimated cost of \$8,000. To upgrade washrooms for barrier free access is estimated at \$20,000.

The total estimated cost to maintain the building, excluding maintenance, is \$294,000.



## **EXECUTIVE SUMMARY AND OVERVIEW**

### **Architectural**

#### **1.1 Executive Summary**

The overall condition of this school is good to fair to poor, with specific areas that require repair and upgrading or replacement.

The cost to complete these repairs and upgrades to bring this school up to standards required will be in the order of \$14.50 per square foot.

Carrying out these upgrades and repairs should extend the life of this building by 25 to 35 years. The cost of the upgrades and repairs along with the functions, of the respective areas, relative to cost of new construction, places value in extending life of this building for ongoing use.

#### **1.2 Overview**

##### **1.2.1 Introduction**

This single storey elementary school is located in Milton, near Liverpool, and was constructed in 1967/1968. The gross floor area is 15,124 ft<sup>2</sup>. The student population is 95 and comprises grades primary and grade 1.

##### **1.2.2 Site**

The site had heavy snow cover during the inspection, therefore, the visual inspection of the site was somewhat impeded.

The site is located off School Street and all vehicular and pedestrian access to the school property is from this street. The school is sited in the south-west corner of the site. From School Street towards the north the site is relatively flat, the site rises gently from east to west. To the west of the school there is a gravel driveway that provides access to a parking area and allows the school buses to drive around the school. The site is shared, to the north, with a former school building that is now used for adult education.

The asphalt paving extends from the north face of the building, around the east face to School Street. The paving is in fair to poor condition.

There is also parking directly off School Street to the east of the school.

The asphalt and grassed play areas are located to the east of the school.

The playground equipment is located to the west of the building. The playground equipment is in good condition.

Two steel gates can prevent vehicle access to the site, one on the east side and one on the west side.

### ***1.2.3 Building Exterior***

The building exterior is clad with clay brick, with windows and coloured panels at regular intervals. There is a large copper fascia around the complete perimeter of the roof. The roof is dead flat, with a raised section over the centrally located gymnasium/multipurpose area. The roof is drained by a combination of original perimeter roof scuppers and later added roof drains. There is one main entrance to the building accessed under a canopy, and there are three other entrances/exits. All entrances/exits are located in recesses at the building corners. The windows are aluminum vertical sliders in wooden frames. All exterior doors are aluminum with single glazing.

In general, the condition of the exterior elements is fair to poor.

### ***1.2.4 Building Interior***

The building is laid out with a rectangular central service core and multipurpose room, a wide rectangular corridor with entrances/exits at each corner, and the classrooms of the corridor on east and west sides of the building. To south of the corridor are located the offices and teacher's room. The boiler room is also located on this end, with access only from the exterior. To the north of the corridor there are areas that have been created by the sub-division of classrooms to create a Resource room, a Special room for handicapped students' toilet needs, an anteroom and meeting room.

The walls are all painted concrete block, the floors are vinyl asbestos tile on a concrete floor slab, and the ceilings are: exposed glue laminated wooden beams and wooden roof deck, and in the corridors and services areas acoustic tile on suspended T bar grid.

The general condition of the interior components of the building is good to fair.

### ***1.2.5 Special Considerations***

The building does not meet barrier-free access requirements. Although efforts have been made to try and make barrier free accessibility easier, it does not meet the latest requirements.

For further discussion on barrier-free access, refer to Section 8 and Appendix "A".

### ***1.2.6 Conclusions and Recommendations – ARCHITECTURAL***

- The building site requires only moderate repair and maintenance.



- The building exterior requires extensive maintenance, repair and replacement.
- The building interior has been well maintained and requires minor repair and maintenance.
- Build up grade at edge of asphalt various locations to make even transition with paving.
- Patch the worst areas of asphalt paving, as required. Repair the broken edges. At the main entrance to the school completely remove all the asphalt paving, right up to the entrance doors, re-grade and install new ramp, curbs and apron in concrete. Remove asphalt from around base of brick columns.
- Remove all concrete aprons and re-pour new concrete aprons. At the main entrance install new concrete ramp curbs and apron. Construct ramp and aprons to barrier access standards.
- At front entrance to building, remove asphalt curbs and pour concrete curbs.
- Paint new pavement markings as required.
- At damaged concrete bases for brick columns, remove loose surface concrete to stable concrete, treat with bonding agent and pour new base minimum 2" larger than brick column.
- *Some of this had been done*  
Re-point the clay brick cladding, as required, approximately 25% of the clay brick cladding. Rebuild those areas that require rebuilding, approximately 10% of the clay brick cladding. This rebuilding should be carried out in conjunction with roof replacement.
- Repair the copper brick cap and fascia, as required when the roof is replaced. The copper roof fascia and scuppers will have to be replaced at that time along with portions of the main fascia. These repairs should be carried out in conjunction with roof replacement.
- Carry maintenance on each exterior door, replace the thresholds, exterior door handles, weather-stripping and caulking.
- The aluminum window sashes should be replaced with more energy efficient windows. The exterior wood trim should be replaced with new wooded trim. And the damaged coloured panel replaced. The windows around the raised portion above the multi-purpose room/gym should be replaced with completely new windows, or removed and replaced with new wall in-fill panels.
- The complete roof should be stripped to the roof deck, and the roof replaced including new insulation sloped to the roof drains, and all accessories. The perimeter

should be modified to eliminate all the scuppers, and provide an alternative method of draining canopy.

- Repair the damaged resilient floor tile as required. Replace the floor tile in each vestibule at entrance/exits.
- Replace all curtains and curtain hardware.

## **Mechanical**

### ***1.1 General Mechanical***

In general, the physical condition of the HVAC, Plumbing and Fire Protection systems for this building is fair to poor.

During the building survey the mechanical systems were not verified for design performance, only the condition of the equipment.

### ***1.2 HVAC***

There are no supply air ventilation systems for this building, only exhaust fans for the corridor and washroom areas. Airflows were not reviewed for the exhaust systems.

### ***1.3 Plumbing***

The plumbing systems are in fair to poor condition. There is piping, insulation, pumps, etc. that should be replaced.

### ***1.4 Fire Protection***

The building does not have a complete sprinkler system.

### ***1.5 Controls***

The building controls are limited for this building.

### ***1.6 Recommendations - MECHANICAL***

1. Repair roof drain body
2. Upgrade domestic hot water recirculating pump and connections.
3. Upgrade the hot water supply and hot water return piping in the boiler room.
4. Replace hot water shut off valves.
5. Replace hot water circulating pumps
6. Upgrade the domestic cold water and domestic hot water piping insulation
7. Upgrade the heating hot water supply and return piping insulation.

## **Electrical**

### ***1.1 Building Systems***

Electrical systems include service entrance equipment, power distribution, devices, raceways, lighting, control, fire alarm, emergency lighting systems, telephone, public address and data communication. Existing systems are generally operational and serve their intended functions. Expansion capability is limited.

### ***1.2 Conclusions and Recommendations - ELECTRICAL***

Electrical systems include service entrance equipment, power distribution, devices, raceways, lighting, control, fire alarm, emergency lighting systems, telephone, public address and data communication. Existing systems are generally operational and serve their intended functions. Expansion capability is limited. In the long term, service entrance, distribution panelboards, lighting and public address system are recommended for replacement or upgrade. The system generally meets the needs of students and staff but upgrades are required to meet current codes and standards.