

School Review Impact Assessment Report Centre Consolidated School

May 30, 2008

On March 26, 2008, the South Shore Regional School Board decided that Centre Consolidated School 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.

More specifically, the following recommendation from the School Utilization Report, Part 2 is the reason behind this school review: That a comprehensive study be carried out to weigh the advantages and disadvantages of constructing a new Grade P-9 school to replace Centre Consolidated School, Lunenburg Academy and Lunenburg Junior-Senior High School. The school review process provides a way to formally carry out this study.

Part 1: School Information

School: Centre Consolidated School

School Configuration: Grades Primary – 9

Address: RR#2, Lunenburg, N.S., B0J 2C0

Principal: Mr. Glen Matthews; Vice-Principal: Ms. Carol Hughes

Enrolment History and Projection

The enrolment decreased to 461 for this school year, 2007-08, from 613 in 2000-01, a decrease of 24.8%. The following table shows a decline of 16% over the past 5 years.

History

2003/4	2004/5	2005/6	2006/7	2007/8	Decrease	%
551	533	513	489	461	90	16%

Projection

2008/9	2009/10	2010/11	2011/12	2012/13	Decrease	%
445	424	403	382	361	84	19%

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.

The enrolment history combined with the 5-year projection shows that the enrolment of Centre Consolidated School will decrease from 551 in 2003/4 to 361 in 2012/13, a decrease of 34%.

Population patterns

The information in this section was provided by the office of the Town of Lunenburg. Some additional information may be available at a later date from the office of the Municipality of the District of Lunenburg.

Town of Lunenburg: The 2001 population of the Town of Lunenburg reported by Statistics Canada was 2,568. In 2006 the census population was 2,317, a decrease of 9.8%. The reported number of dwellings in 2006 was 1,124, representing a density of 2.28 persons/dwelling. This is a typical density for a community with a similar population.

A total of 55 residential building lots are being developed in several projects within the serviced boundary of the Town. A value of 3.5 persons per home can be applied to these lots reflecting anticipated occupancy by younger families with children. When fully developed, these lots would add a total of 193 to the population. In addition a conservative growth rate for the existing population of 1% over 20 years would add another 510 people. The total population projected for 2027 is 3,020.

The Town of Lunenburg has several infrastructure projects planned over the next five (5) years. In particular, construction of a new \$7.0 million water filtration plant will begin in 2008/09. Sewer main upgrades will be made throughout the Town. An addition to the Lunenburg War Memorial Arena will house new change rooms for sports teams. The Town of Lunenburg's new soccer field will open this fall. The new track and softball field will celebrate its official opening this spring. Both facilities are located immediately adjacent to the Lunenburg Jr.-Sr. High School complex.

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 Building

In October of 2003, the MacDonnell Group completed a "Building Condition Study" of Centre Consolidated School (See final attachment for full report). As stated in the Conclusions and Recommendations, "The overall condition of the school is fair for a building of its age". However, the report states also, that "the school is substandard by current codes for new construction in the areas of ventilation and accessibility". A list of 8 health and safety improvements and life-cycle maintenance items are recommended, with the re-roofing and ventilation improvements to be completed in "the next 2-3 years".

For the purpose of this report, an updated assessment was completed recently by the Coordinator of Property Services. A summary of his assessment is attached as Appendix A.

Although many improvements have been made in recent years, much needs to be done over the next few years at a very significant cost of over \$2,000,000. Perhaps the main point to be emphasized is that there is a serious question about whether or not the very substantial upgrades required should be completed on such an old facility. More directly, it may not be a good use of scarce taxpayer dollars even to hire a professional architect to answer the question. It might be better to simply decide to build a new school.

Building Use

Gross square footage: 69,000.

Teaching Space	Number	Notes
Regular classroom	27	
Gymnasium	2	Elementary and junior high
Cafeteria	0	
Library	1	
Music room	1	
Art room	0	
Resource room	2	Elem. and J.H. Learning Centres
Computer room	1	
Science lab(s)	1	
Technology Ed.	1	
Family Studies	1	
Other spaces	1	Conference room

Part 2: Impact Analysis

Capability to Deliver Public School Program

From a Facility Perspective: As a facility, Centre Consolidated 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 configuration continues, especially because the enrolment decline is expected to be significant for several years. This assessment is made with the assumption that the maintenance requirements reported above will be carried out within a reasonable period of time.

Educational Benefits

The main educational benefits of the consolidation are related to achieving an optimal enrolment in the new Grade P-9 school and eliminating the disadvantages of the small enrolments in the 2 Lunenburg schools. The enrolment of Lunenburg Academy is definitely approaching the lower limit at which the ability of the school to deliver the program effectively is at risk. The enrolment of LJSHS is reaching the point of being extreme in terms of the barriers and risks to effective program delivery. Although the present enrolment of Centre Consolidated School is in the optimal range, the effects of the declining enrolment could be avoided by bringing together all students from these 3 schools.

Other educational benefits are related to having all that a new educational facility has to offer, compared to the restrictions or limitations of old facilities. These benefits include larger, modernly equipped classrooms and specialist rooms for music, art and drama, new computer and communications technology, suitable work spaces for student services staff, and a larger, fully-equipped gymnasium, cafeteria and stage.

The consolidation of Centre Consolidated School, Lunenburg Academy and Lunenburg Junior-Senior High School would create indirect benefits for all SSRSB students in terms of system-wide staffing allocations. The obvious savings would result from having one principal instead of three and from reductions in the number of FTE positions for vice-principals—financial savings in administrative allowances are additional. The positions and dollars saved by this consolidation could be allocated to benefit other schools in the system. Although not necessarily large, a related saving would result through an overall reduction in the number of administrative assistant, library technician, and lunch and bus supervisor positions.

Transportation

Regarding the consolidation of three schools in a new construction, the impact on student transportation cannot be known until the location of the new school is determined.

Extra-curricular Activities

Generally, the long tradition of providing strong extra-curricular programs in each of the 3 schools can be expected to be carried forward to the new school. With a larger student body and staff, the potential benefits surely outweigh the disadvantages of consolidation. Experience

shows consistently that a high level of excitement and enthusiasm contributes quickly to a sense of identity and spirit as a new school, for both students and staff.

Property Service Efficiencies

The impact on property services efficiencies of replacing 3 older facilities with one new one would be very significant, especially from the perspective of the operational expenditures for the SSRSB. Generally the improved efficiencies are related to economies of scale and to the fact that maintenance and capital upgrades for the 3 old facilities would no longer be necessary.

The economies of scale efficiencies in property services result directly from operating one school instead of three. One of the most obvious financial savings would result from a reduction in the number of custodial and custodial supervisor positions. Although a detailed financial analysis is not possible until the square footage of the new school is known, it is reasonable to expect that the number of custodial FTE's would be less while the number of custodial supervisor positions would be reduced from 3 to 1. Other less obvious economies of scale could be expressed numerically once the size of the new school is known. For example, regional maintenance staff would be traveling to one school site instead of 3, care of grounds and snow removal would be required for 1 instead of 3, and the cost of cleaning supplies could be less, depending on the square footage of the new school.

The total 2007/08 property service costs of LJSHS, Centre Consolidated School and Lunenburg Academy are summarized in the following table---costs for 2006/07 are included for comparison.

Property Services Costs per Square Foot

School	Property Services Cost for 2007/08	Operating Cost per Sq. Ft. for 2007/08	Operating Cost per Sq. Ft. for 2006/07
Centre Consolidated	\$413,025.00	\$11.67	\$6.46
Lunenburg Academy	226,985.00	\$5.54	\$4.22
Lunenburg Jr.-Sr. High	202,793.00	\$5.73	\$6.32
Total	\$842,803.00	Not applicable	Not applicable

The property services cost includes custodial and maintenance costs---heating fuel and electricity are included in maintenance. The total cost of operating the three schools for the 2007/08 fiscal year was \$842,803.00. (The total cost per square foot cannot be determined by adding the column; the figures can be used only to compare schools.)

The main reason for the difference between the costs per square foot for the 2 years is that the cost of building maintenance varies from year to year. The maintenance costs for 2007/08 included approximately \$41,000 at Centre Consolidated, 32,000 at Lunenburg Academy, and \$5,000 at LJSHS, for a total of \$78,000. For the previous year, the costs were approximately \$180,000, \$68,000, and \$48,000, respectively, for a total of \$296,000. Obviously, the annual variance is significant, as is the total cost of maintaining these 3 schools.

The total capital upgrades have been reported individually in the impact assessment reports for CCS, LA, and LJSHS. The total of the estimated cost for all the capital upgrades that should be completed within the next few years is summarized in the following table.

Total Cost of Capital Requirements

	Capital Requirements next few years
Centre Consolidated School	\$2,000,000.00
Lunenburg Academy	\$550,000.00
Lunenburg Jr.-Sen. High School	\$800,000.00
Total	\$3,350,000.00

All in all, the property services efficiencies for Option 2 equate to the possibility of saving as much as half a million dollars per year on maintenance and over 3 million dollars on capital upgrades to the 3 schools.

As a final note on property services costs, it must not be forgotten that an annual rental fee of \$50,000 for LJSHS to use the Town's recreational facilities would be eliminated by the consolidation.

Impact on the Community

The impact on the communities of Centre Consolidated School, Lunenburg Academy and Lunenburg Junior-Senior High School can be defined only in general terms until the location of the new school is known. It is reasonable to assume that it will be located in the Town of Lunenburg because support has been expressed openly, already, by all 3 school communities to locate in the Town. If this occurs, the impact of having a larger new school constructed in the Town is likely to be positive in most respects. A new modern building and a large student body from the Town and the surrounding communities served presently by Centre Consolidated School can generate considerable advantage for the new school and the broader community.

In contrast, major disadvantages of a new school construction for the community are not obvious.

Community Use of School

As with the effect on the community, the impact of the construction of a new school on the community use of CCS, LA and LJSHS depends very much on the location of the new school. At this point in the process, it may be appropriate to simply observe that the communities would have one new modern facility to replace what they are using now and some use of the present facilities might still be possible after the new school was in operation.

The potential advantages, at least generally, seem to outweigh the disadvantages for most communities. Of course, in having only one facility to serve a larger community, some communities would experience more disadvantage than others, depending on the location.

Part 4 Conclusion

The consolidation of Centre Consolidated School, Lunenburg Academy and Lunenburg Junior Senior High is based on direct educational benefits for students and on operational and financial efficiencies that would produce indirect benefits for all students under the jurisdiction of the South Shore Regional School Board.

The most obvious educational benefits are those for the Grade 6-9 students of LJSHS. In a separate impact assessment report, it has been emphasized that the problems caused by declining enrolment of LJSHS will only worsen and possibly become extreme. The consolidation would eliminate these problems.

The operational efficiencies are directly related to operating 1 new school instead of 3 for the combined student body. The total property services cost to operate a new school can be expected to be less than the total for the 3 schools. The main financial efficiency would be to eliminate the estimated capital cost of \$3,350,000.00 of upgrading the 3 old facilities.

Appendix A

Recent Assessment of Physical Condition of Centre Consolidated School

Improvements completed in recent years:

- All washrooms have been renovated during the past two years with accessible stalls
- All stairs have new treads
- All washrooms have been renovated with new stalls, fixtures and ceramic tile
- A new underground fiberglass 3000 Gal tank was installed in 1988
- New exhaust fans were recently installed in all washrooms
- A new public address system installed in 2005.

Wood siding requires replacement (**\$50,000.00**), if no rot is discovered.

Complete new fire escape has been built on the elementary wing. Junior high fire escape requires replacement (**\$12,000.00**).

All windows have been replaced, except the industrial arts wing (**\$ 80,000.00**).

All areas of the school have been re-roofed with 2-ply Modified, except the industrial arts wing (**\$125,000.00**).

Flooring is an ongoing project with replacement on a yearly basis pending funding—usually two classrooms per year. About ¼ of the building has had the flooring replaced. The original tile flooring contains asbestos (**\$5,000.00 per year**).

Note:

In the next few years the mechanical and electrical systems will have to be replaced to extend the life of this building to meet the demands required of it. The replacement of these systems is very expensive (**\$2,000,000.00**).

Indoor air quality and environmental issues:

Although air quality problems have not been significant, the continuous upgrading of the building could cause problems associated with air quality without the installation of a ventilation system. The only ventilation in the school is washroom exhaust and exhaust in the Elem. Gym. Most of the pipe insulation is asbestos.

Note:

The construction of the building doesn't support the installation of a ventilation system as per ASHRAE standards, due to limited ceiling space and structural issues pertaining to the installation of Air Handling Units. A detailed engineering study would have to be completed to see if the building could support the installation of a ventilation system. Estimated cost for such a study (**\$15,000.00**)

Cost associated with maintenance, repair and operation that exceed what is normally expected:

Maintenance for this building is minimal as there has been a significant amount of work done on the building envelope over the past 10 years such as windows, roofing and washrooms. One of the major concerns is the condition of the plumbing and heating distribution system. Also, some maintenance issues are associated with maintaining the sewage plant and field bed system. Cost associated with repairing these systems can be expensive.

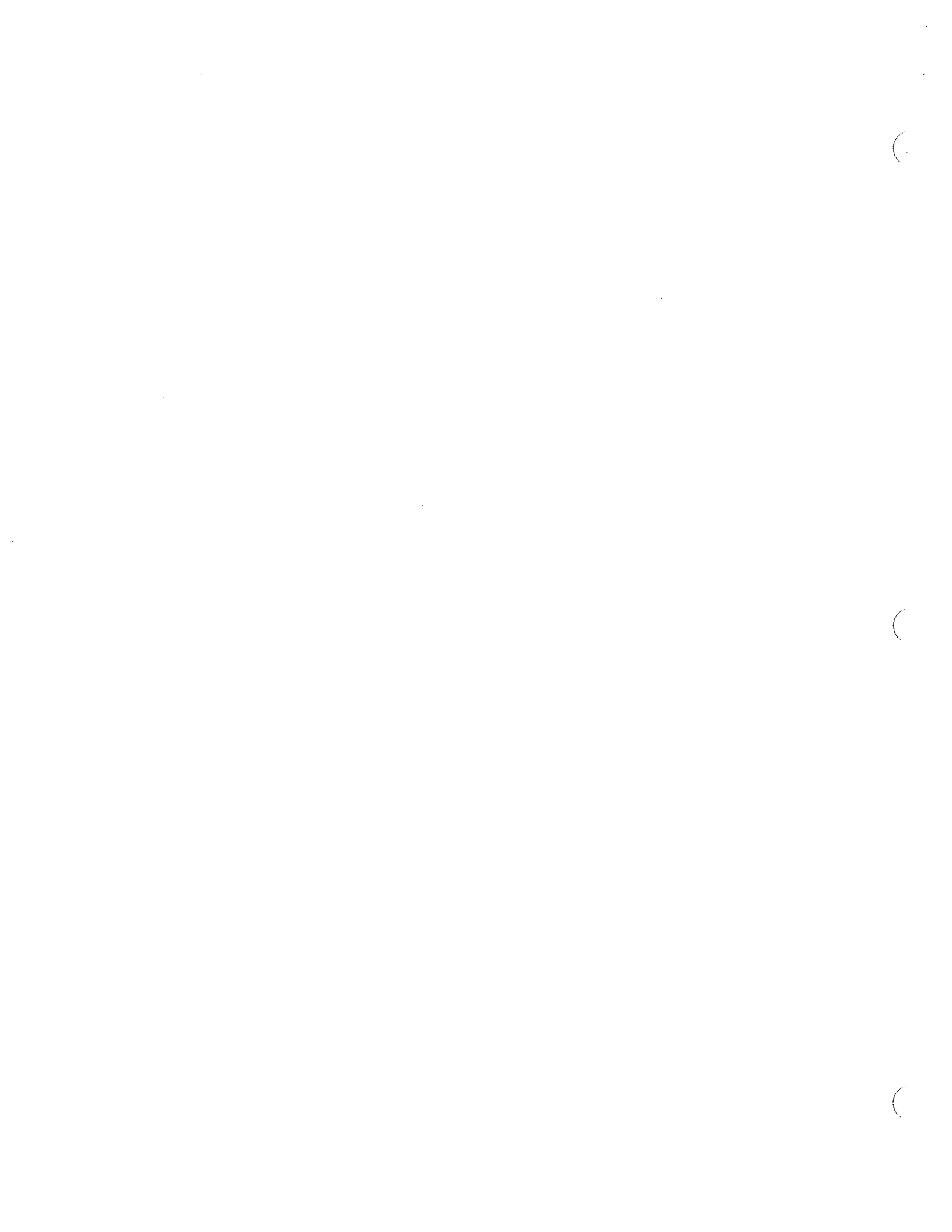
Total Maintenance cost for 2007/08 Fiscal Year (**\$41,306.95**) this includes \$7,000.00 for Playground Maintenance.

Ability to provide barrier free accessibility to the buildings and grounds:

Accessibility to all areas of the school is difficult due to elevation changes between the Elem. & Jr. High Buildings; currently need two elevator devices. Automatic door operators and ramp upgrades would also have to be done. Estimated cost (**\$150,000.00**).

Total estimated cost: **\$2,302,000.00** not including maintenance

Estimated maintenance ongoing: **\$50,000.00 per year**





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Building Condition Study
Centre Consolidated School*

1.2 Building Summary

1.2.1 General

Centre Consolidated School was built in 1957 and had a major addition around 1974. It has an enrolment of approximately 650 students. The school includes a two-storey elementary wing, a two-storey high school wing and a single-storey wing which are all connected by a single storey entrance area. The school has a gross area of approximately 69,000 sq. ft.

The two-storey wings include the classrooms, a music room, multi-purpose rooms and washrooms. Offices, the gymnasium, locker rooms and showers and the kitchen are near the front entrance, with classrooms, industrial arts and service rooms in the single-storey wing beyond.

1.2.2 Architectural

Centre Consolidated School is a two storey wood and steel frame structure with a single storey industrial arts addition of brick and block at the rear of the building. There are two wings to the original structure joined by a single storey administration section. The gymnasium and boiler room are located behind this section. The junior section is located in the eastern wing. This wing has central corridors with classrooms on either side and an exit at the end of the wing. There is an exterior stairway from the upper floor.

A corridor connects the junior wing and the industrial arts section. These two portions of the building form a courtyard covered in asphalt which is used for basketball. The industrial arts section contains rooms for wood working and home economics. There are also washrooms that are used by the staff and one abandoned washroom which is used for storage.

The elementary wing is located at the western end of the school and is oriented perpendicular to the administration and junior wing. This is also a two storey structure with interior stairs in the middle and at the end of the floors.

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The interior walls are wall board, the floor is tile in all areas and the ceilings are suspended T-bar in the corridor and classrooms.

1.2.3 Structural

The school structure includes single- and two-storey wood and steel frame structures and first floor slabs-on-grade.

1.2.4 Mechanical

The school is heated by a hot water boiler plant fired with No. 2 light oil. Boiler water is circulated through a steel piping system by three base-mounted pumps. The heating piping system is connected to perimeter heat in all rooms. Classrooms are typically heated with wall fin convector heaters controlled by a wall mounted pneumatic thermostat which activates pneumatic zone valves in each room. The fuel oil supply is from a buried oil tank with fuel oil piping run underground into the Boiler room.

The school is ventilated by roof exhaust fans, a kitchen exhaust hood and a filtration unit in the woodworking shop. Dedicated make-up air was not provided. Make up air apparently via operable windows.

Consideration should be given to the installation of a ventilation system in keeping with current NS Transportation and Public Works criteria for schools, and the replacement of the controls with a digital energy management system.

The plumbing system consists of a site water supply and treatment system connected to various plumbing fixtures, water is supplied by on-site well(s) and a concrete reservoir tank. Sanitary drainage from the fixtures leaves the building and is connected to a small primary sewage treatment plant. Domestic hot water is generated by an oil -fired hot water heater apparently recently installed.

The school has a wet pipe fire protection/sprinkler system with on-site water storage using pressure tanks.

1.2.5 Electrical

Power is supplied via a pole mounted transformer bank to two service masts at the building. One service is 20/240/1P that enters a 600A main disconnect. The second service is 120/240/1P that enters a 200A main disconnect.

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1.3 Conclusion and Recommendations

The overall condition of the school is fair for a building of its age. However, the school is substandard by current codes for new construction in the areas of ventilation and accessibility.

Recommended health and safety improvements and life-cycle maintenance items include:

- site grading and paving,
- replacement of wood siding,
- re-roofing,
- allowance for future replacement of heating plant,
- heating and ventilation control upgrade - installation of digital energy management system, and
- minor architectural, mechanical and electrical items detailed in the report.

The following health and safety improvements are also recommended for consideration:

- Accessibility improvements, including an elevator, and
- Ventilation - installation of a ventilation system.

These items are expected to cost in the order of \$6 per square foot and, together with routine maintenance, may extend the usable life of the building by, say, 15 years. The work is advised when compared with the replacement cost of approximately \$135 per square foot.

Priorities for maintenance and/or rehabilitation were assessed on the basis of:

- Priority #1 "Must do": serious code violations or other situations threatening health, safety or short-term preservation of assets,
- Priority #2 "Should do": less threatening code violations, fire safety and health issues and poor functional or construction conditions that will require correction in the short-term and conditions that do not meet the requirements or current expectations of authorities, and
- Priority #3 "Could do": minor functional or construction improvements that are likely to fall under the "Should do" category within 3-5 years.

By these standards, it is recommended that some re-roofing and code compliance issues proceed immediately and that site-work, accessibility and ventilation improvements be carried out in the next 2-3 years.



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The upgrade to controls has economic merit and is recommended if ventilation improvements are made.

A more detailed description is included in the following checklist, commentary and photo record.