RECAPP Facility Evaluation Report

E Central Francophone Ed Reg#3

Ecole Du Sommet School

B4089A

St. Paul

Report run on: January 26, 2005 3:28 PM

Facility Details

Building Name: Ecole Du Sommet School
Address: 4617 - 50 Avenue
Location: St. Paul

Building Id: B4089A
Gross Area (sq. m): 0.00
Replacement Cost: $4,703,154
Construction Year: 0

Evaluation Details

Evaluation Company: Burgess Bredo Architect
Evaluation Date: May 1 2004
Evaluator Name: Mr. Burgess Bredo
Evaluator Phone: (780) 431-1484

Total Maintenance Events Next 5 years: **$66,400**
5 year Facility Condition Index (FCI): **1.41%**

General Summary:

The original masonry single story building was constructed in 1967 with an area of 548.0 sq.m. Masonry and steel additions were added in 1978 (272.4 sq.m.) and 1997 (1,337.0 sq.m.). Two wood framed portables are also attached to the school. Current capacity is 275 students.

School is in good condition

Structural Summary:

Foundation system is typically concrete spread footings and grade beams with concrete slab on grade. Wood framed floor, roof and walls in 1953. 1965 addition has glu-lam beams bearing on concrete block while 1972 addition has steel roof structure and concrete block.

Structural systems are in good condition

Envelope Summary:

Exterior finishes include brick, metal siding and stucco. 1967 phase aluminum windows require replacement in addition to minor envelope issues. Aluminum entrances and hollow metal doors are in good condition.

Built up roof membrane roofing and SBS roofing ahve been problematic in the past but drainage concerns appear to have been addressed. Roof access needs to be improved.

Interior Summary:

Partitions are a combination of concrete block, wood frame and metal stud with gypsum board.

Ceiling finishes are typically acoustic tile and gypsum board. Wall finishes are ceramic tile or paint and in good condition. Floor finishes include vinyl tile, sheet vinyl, ceramic tile and carpet. Some floor finishes and millwork require replacement.

Solid core wood doors and hollow metal doors require some work including; replace damaged doors and upgrade door hardware to barrier free levers. Code issues inclue reversing swing on doors to classrooms, study of repair include wood in return air plenum and repair of fire rated partition,

Barrier free access is good but does require a designated parking stall and power assisted door operators at main entrance.

Building interior is in good condition

Mechanical Summary:

In 1997 gymnasium, washroom, administration area and two classroom addition occurred. Addition is heated via one (1) heating boiler, two (2) circulation pumps, piping distribution to perimeter heating elements. Two gas fired rooftop units provide ventilation air to the addition. One air system serves the gymnasium and support areas. Other system serves classrooms, administration and support areas. Packaged gas fired unit with air conditioning was provided for the stage area. Supply air ductwork is low velocity with ceiling return air plenum for classroom air system. Gym return air is ducted direct to air system. Plumbing fixtures are flush tank, lavatories stainless steel bowls with on/off brass. Exhaust fans provided to exhaust washrooms and gymnasium change/shower rooms. Fire protection consists of ABC fire extinguishers installed in cabinets.

Items found during school review which should be addressed are:

- Ceiling space used as return air plenum. Contains unprotected wood which is a code violation.
- Ceiling diffusers in rated ceilings have no fire blankets installed.
- Computer room and server rooms are hot, temperatures as high as 37oC to 40oC have occurred resulting in poor learning environment.
- BMCS is limited to seven day program and requires reprogramming every seven days in lieu of yearly program related to current events. Other control upgrades which are recommended are: Interlock of exhaust fans with respective air systems; automate gymnasium air system two speed control.
- Operational problems with gymnasium air system.
- Gymnasium humidification de-energized. Alternate method of humidification required.

The 1967, 1978 portion of the school is heated via eight (8) furnaces. Majority of distribution ductwork is underground with ceiling distribution from one (1) furnace only. Ceiling space is used as return air plenum. Plumbing fixtures are flush tank, counter top lavatories, wall hung urinals with battery operated electronic flush valves. Fire protection consists of ABC fire extinguishers installed on wall hooks.

Items found during school review which should be addressed are:

- Science room has no make up air for fume hood. Window has to be opened to provide positive draw through fume hood. Make up air unit required.
- Science room storage room and chemical storage cabinet not exhausted. Corrosion of door brass and storage cabinet occurring, fumes migrate into classroom. Continuous exhaust required.
- Science room cold. Students have to wear winter coats, etc. during class instruction.
- Science room plumbing brass not lab quality. Kitchen brass and hose spray installed.
- Entrance heated by ceiling electric force flow and is cold.
- Ceiling space used as return air plenum. Contains unprotected wood which is a code violation. Study required regarding most cost effective way to upgrade.
- 1978 addition furnaces have no fresh air. Required 8 l/s per person of fresh air not provided during occupancy.
- 1967 original school fresh air and return dampers positions fixed. No modulation of fresh air and return dampers.
- 1967 supply air distribution is underground. Ductwork cleaning companies have indicated ductwork cannot be cleaned. Dust on desks in classrooms on daily basis suggests ductwork is contaminated with dust. Air quality compromised.
- Furnace fan and burner cycle on heat demand from thermostat. 8 l/s of fresh air per person not provided during building occupancy.
- Some fire extinguishers are installed too high and should be lowered to 1500 mm to handle.
- Recommend heating and ventilation upgrade which would include new boiler, pumps, piping distribution, radiation or radiant panels, gas fired rooftop unit, low velocity ductwork distribution, ducted return air.
- No recirculation pump and piping for domestic hot water system.
- Domestic water heaters life expectancy exceeded.
- No fire damper access doors and incorrect fire damper installation.
- No washroom exhaust.

Mechanical systems and components are in fair to poor condition in 1967, 1978 portion of building portion replacement is recommended.

Electrical Summary:

Underground power and telephone service to building, electrified parking stalls, and basic electrical installation in school. Parking lot has no illumination and should be provided with pole mounted lights. The fluorescent lighting in the school should be upgraded to use T8 lamps with electronic ballasts. Upgrade emergency lighting and fire alarm systems.

Electrical systems are in good condition.

Rating Guide	
Condition Rating	**Performance**
1 - Critical	Unsafe, high risk of injury or critical system failure.
2 - Poor	Does not meet requirements, has significant deficiencies. May have high operating/maintenance costs.

3 - Marginal	Meets minimum requirements, has significant deficiencies. May have above average operating maintenance costs.
4 - Acceptable	Meets present requirements, minor deficiencies. Average operating/maintenance costs.
5 - Good	Meets all present requirements. No deficiencies.
6 - Excellent	As new/state of the art, meets present and foreseeable requirements.

S1 STRUCTURAL

A1010 Standard Foundations*

Perimeter grade beams bearing on strip footings.

Rating	Installed	Design Life	Updated
5	0	100	October 2004

A1030 Slab on Grade*

Concrete slab on grade in most areas. Concrete risers and treads down to pit in student gathering area.

Rating	Installed	Design Life	Updated
5	0	100	October 2004

B1010.01 Floor Structural Frame*

Wood frame floor assembly at stage and mechanical room.

Rating	Installed	Design Life	Updated
5	0	100	October 2004

B1010.02 Structural Interior Walls Supporting Floors*

Load bearing concrete block and wood frame walls supporting suspended floor assemblies.

Rating	Installed	Design Life	Updated
5	0	100	October 2004

B1010.03 Floor Decks, Slabs, and Toppings*

Plywood deck on wood frame at stage and stage mezzanine. Concrete topping slab and plywood deck at mechanical room.

Rating	Installed	Design Life	Updated
5	0	100	October 2004

B1010.05 Mezzanine Construction*

Wood frame floor assembly at mezzanine overlooking stage.

Rating	Installed	Design Life	Updated
5	0	80	October 2004

B1020.01 Roof Structural Frame*

1967, 1978
Open web steel joists bearing on concrete block throughout.
1997
Open web steel joists bearing on concrete block in gym. Parallel chord and pitched wood roof trusses bearing on concrete block walls in balance.

Rating	Installed	Design Life	Updated
5	0	100	October 2004

B1020.03 Roof Decks, Slabs, and Sheathing

1967, 1978
Metal deck throughout
1997
Metal deck at gym, plywood deck in balance.

Rating	Installed	Design Life	Updated
5	0	0	October 2004

B1020.04 Canopies*

1968
Folded plate cast in place concrete canopy bearing on steel columns at east entrance.

Rating	Installed	Design Life	Updated
5	0	50	October 2004

S2 ENVELOPE

B2010.01.02.01 Brick Masonry: Ext. Wall Skin*

Face brick as outer wythe in cavity wall throughout. Some damage noted in 1968 phase but quite minor.

Rating	Installed	Design Life	Updated
5	0	75	October 2004

B2010.01.06.03 Metal Siding*

1968, 1978
Metal siding at upper portion of exterior walls.

Rating	Installed	Design Life	Updated
5	0	40	October 2004

B2010.01.08 Portland Cement Plaster: Ext. Wall*

1997
Stucco on portions of upper exterior walls.

Rating	Installed	Design Life	Updated
5	0	75	October 2004

B2010.01.09 Expansion Control: Exterior Wall Skin*

Caulked control joints at dissimilar materials and in long walls throughout.

Rating	Installed	Design Life	Updated
5	0	0	October 2004

B2010.02.03 Masonry Units: Ext. Wall Const.*

Concrete block walls as inner wythe of cavity wall.

Rating	Installed	Design Life	Updated
5	0	0	October 2004

B2010.03 Exterior Wall Vapor Retarders, Air Barriers, and Insulation*

1968, 1978
Assumed to be applied vapour barrier and rigid insulation in cavity.
1997
Sheet membrane vapour barrier and rigid insulation in cavity.

Rating	Installed	Design Life	Updated
5	0	30	October 2004

B2010.05 Parapets*

Pre-finished cap flashings where exposed to view and galvanized where not exposed to view in most areas.

Rating	Installed	Design Life	Updated
5	0	30	October 2004

B2010.06 Exterior Louvers, Grilles, and Screens*

Painted and clear anodized aluminum grilles throughout.

Rating	Installed	Design Life	Updated
5	0	30	October 2004

B2010.09 Exterior Soffits*

Pre-finished vented metal soffit panels.

Rating	Installed	Design Life	Updated
5	0	30	October 2004

B2020.01.01.02 Aluminum Windows*

1968, 1978
Aluminum framed windows with vent along bottom and spandrel panels along bottom throughout.

Rating	Installed	Design Life	Updated
3	0	35	October 2004

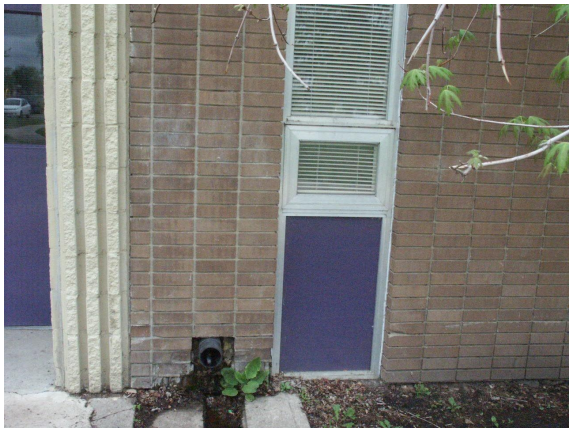
Event: Replace aluminum windows

Concern:
Windows in 1968 phase lack thermal break and screens are glued in place. Reports of drafty windows throughout.

Recommendation:
Replace aluminum windows (30 sq.m.)

Type	Year	Cost	Priority
Lifecycle Replacement	2007	$15,000	Low

Updated: October 16 2004



B2020.01.01.06 Vinyl, Fibreglass &Plastic Windows*

1997
Vinyl window frames with double glazed sealed units and applied vinyl frame to the inside to simulate divided lites.

Rating	Installed	Design Life	Updated
5	0	30	October 2004

B2030.01 Exterior Entrance Doors

1968, 1978
Glazed aluminum set in pressed steel frame at major entrances; insulated hollow metal with and without glazing set in pressed steel frames in balance.

Rating	Installed	Design Life	Updated
5	0	30	October 2004

B3010.01.03 Roof and Deck Insulation

1997
Blow-in Fiberglas insulation at pitched wood roof trusses.

Rating	Installed	Design Life	Updated
5	0	0	October 2004

B3010.02.01.01 Asphalt Shingles*

1997
Asphalt shingles at pitched wood roof trusses.

Rating	Installed	Design Life	Updated
5	0	25	October 2004

B3010.04.01 Built-up Bituminous Roofing (Asphalt & Gravel)*

1978
Built up roof with gravel ballast.

Rating	Installed	Design Life	Updated
4	0	25	October 2004

B3010.04.04 Modified Bituminous Membrane Roofing (SBS)*

1968
Original roofing replaced with two ply SBS membrane; date uncertain.
1997
Two ply SBS roofing. Drainage by scuppers has been problematic in past but heat tracing has resolved problem for the time being. Continue to monitor.

Rating	Installed	Design Life	Updated
4	0	25	October 2004

B3010.07 Sheet Metal Roofing*

1997
Pre-finished standing seam roofing panels over cupola at main entrance.

Rating	Installed	Design Life	Updated
5	0	40	October 2004

B3010.08.02 Metal Gutters and Downspouts*

1997
Pre-finished metal eaves trough and downspouts from cupola and gym roof spilling onto lower roof area.

Rating	Installed	Design Life	Updated
3	0	30	October 2004

Event: Repair cupola eaves trough

Concern:
Eaves trough appears to be leaking or sloping the wrong way. Stucco is wet below.

Recommendation:
Engage roofer to investigate cause of leakage and repair.

Type	Year	Cost	Priority
Repair	2004	$1,000	Low

Updated: October 16 2004

B3010.09 Roof Specialties and Accessories*

Steel ladder to roof hatch. Steel framed catwalk added in 2002 to improve access from 1997 to 1978/1968 roof areas.

Rating	Installed	Design Life	Updated
5	0	25	October 2004

Event: Add roof access ladders.

Concern:
Roof access to gym roof is not provided.

Recommendation:
Introduce permanent steel ladders for access to all levels of roof.

Type	Year	Cost	Priority
Preventative Maintenance	2005	$500	Low

Updated: October 16 2004

B3020.02 Other Roofing Openings*

Manufactured roof hatch sitting in built up wood roof curb.

Rating	Installed	Design Life	Updated
5	0	0	October 2004

S3 INTERIOR

C1010.01 Interior Fixed Partitions*

Concrete block partitions, wood frame with gypsum board and metal stud frame with gypsum board.

Rating	Installed	Design Life	Updated
4	0	50	October 2004

C1010.02 Interior Demountable Partitions*

2000
Metal stud and vinyl clad gypsum board at demountable partitions added to classroom 3.

Rating	Installed	Design Life	Updated
6	0	30	October 2004

C1010.03 Interior Operable Folding Panel Partitions*

1997
Folding panel partition at gym stage.

Rating	Installed	Design Life	Updated
6	0	30	October 2004

C1010.05 Interior Windows*

Single glazing set in pressed steel frames throughout. Glass appears to be laminated or tempered.

Rating	Installed	Design Life	Updated
5	0	40	October 2004

C1020.01 Interior Swinging Doors*

Painted and clear finish solid core wood doors with and without glazed lites set in pressed steel frames throughout.

Rating	Installed	Design Life	Updated
3	0	40	October 2004

Event: Replace damaged doors

Concern:
Some doors are damaged and need replacement.

Recommendation:
Replace approximately 5 damaged doors.

Type	Year	Cost	Priority
Lifecycle Replacement	2010	$3,000	Low

Updated: October 16 2004

Event: Replace door hardware

Concern:
Hardware is a variety of makes and styles; many have round knobs where lever design required for barrier free access.

Recommendation:
Replace locksets on approximately 20 doors.

Type	Year	Cost	Priority
Barrier Free Access Upgrade	2010	$6,000	Low

Updated: October 16 2004

C1020.02 Interior Entrance Doors*

Glazed aluminum entrance doors set in aluminum frames at main entrance vestibule. Glazed hollow metal doors set in pressed steel frames at balance of vestibules.

Rating	Installed	Design Life	Updated
5	0	50	October 2004

C1020.03 Interior Fire Doors*

Hollow metal and solid core wood set in pressed steel frames.

Rating	Installed	Design Life	Updated
3	0	50	October 2004

Event: Reverse swing on exit doors.

Concern:
Doors to classrooms are rated and must swing in direction of exit; a number of these doors swing in to the classroom.

Recommendation:
Reverse swing on exit doors (5 doors).

Type	Year	Cost	Priority
Code Repair	2004	$2,500	Medium

Updated: October 16 2004

C1030.01 Visual Display Boards*

Whiteboards and tackboards throughout.

Rating	Installed	Design Life	Updated
4	0	10	October 2004

C1030.02 Fabricated Compartments(Toilets/Showers)*

1968
Floor supported metal toilet partitions in washrooms.
1997
Concrete block partitions in washrooms.

Rating	Installed	Design Life	Updated
3	0	20	October 2004

Event: Replace toilet partitions.

Concern:
Toilet partitions in 1968 phase are in poor condition

Recommendation:
Replace toilet partitions (4 cubicles) with metal partitions

Type	Year	Cost	Priority
Failure Replacement	2005	$1,200	Low

Updated: October 16 2004

C1030.08 Interior Identifying Devices*

Plastic lamicoid signage.

Rating	Installed	Design Life	Updated
5	0	20	October 2004

C1030.10 Lockers*

Full height lockers in selected locations.

Rating	Installed	Design Life	Updated
5	0	30	October 2004

C1030.12 Storage Shelving*

Painted and clear finish plywood storage shelving.

Rating	Installed	Design Life	Updated
5	0	20	October 2004

C1030.14 Toilet, Bath, and Laundry Accessories*

Commercial grade mirrors, soap dispensers, paper towel dispensers and toilet tissue holders in all washrooms.

Rating	Installed	Design Life	Updated
5	0	20	October 2004

C2010 Stair Construction (Including Ramps)*

Wood framed stairs to gym stage and stage mezzanine.

Rating	Installed	Design Life	Updated
5	0	100	October 2004

C2020.05 Resilient Stair Finishes*

Vinyl tile on risers and treads.

Rating	Installed	Design Life	Updated
5	0	20	October 2004

C2020.08 Stair Railings and Balustrades*

Metal handrail on one side. Metal railing at edge of conversation pit.

Rating	Installed	Design Life	Updated
5	0	50	October 2004

C3010.04 Gypsum Board Wall Finishes*

Gypsum board at wood and metal stud framed partitions.

Rating	Installed	Design Life	Updated
5	0	40	October 2004

C3010.06 Tile Wall Finishes*

Ceramic wall tile in washrooms.

Rating	Installed	Design Life	Updated
5	0	50	October 2004

C3010.09 Acoustical Wall Treatment*

Fabric and insulation acoustic panels on upper portion of gym walls

Rating	Installed	Design Life	Updated
5	0	15	October 2004

C3010.11 Interior Wall Painting*

All wall surfaces are painted.

Rating	Installed	Design Life	Updated
5	0	5	October 2004

C3020.02 Tile Floor Finishes*

Ceramic floor tile in washrooms throughout.

Rating	Installed	Design Life	Updated
5	0	30	October 2004

C3020.04 Wood Flooring*

1997
Sprung hard wood gym flooring.

Rating	Installed	Design Life	Updated
6	0	10	October 2004

C3020.07 Resilient Flooring*

1997
Sheet vinyl to corridors and selected classrooms.

Rating	Installed	Design Life	Updated
5	0	20	October 2004

C3020.07 Resilient Flooring* 1968

1968, 1978
Vinyl tile and vinyl asbestos tile to selected corridors and 3 classrooms.

Rating	Installed	Design Life	Updated
3	0	20	October 2004

Event: Replace vinyl tile

Concern:
Vinyl tile in poor condition.

Recommendation:
Replace vinyl tile in corridors and 3 classrooms (385 sq.m.)

Type	Year	Cost	Priority
Lifecycle Replacement	2007	$16,000	Low

Updated: October 16 2004

C3020.08 Carpet Flooring*

1997
Carpet in administration office areas and staff areas.

Rating	Installed	Design Life	Updated
5	0	10	October 2004

C3030.04 Gypsum Board Ceiling Finishes*

Gypsum board ceilings in washrooms, shower rooms, storage rooms, mechanical and electrical rooms.

Rating	Installed	Design Life	Updated
5	0	50	October 2004

C3030.06 Acoustic Ceiling Treatment (Susp.T-Bar)*

Suspended t-bar grid system with acoustic tiles in corridors, classrooms and office rooms.

Rating	Installed	Design Life	Updated
5	0	15	October 2004

C3030.07 Interior Ceiling Painting*

Gypsum board ceilings are painted.

Rating	Installed	Design Life	Updated
5	0	10	October 2004

S4 MECHANICAL

D2010.01 Water Closets*

Floor mounted, flush tank, open front seat

Rating	Installed	Design Life	Updated
6	0	30	October 2004

D2010.02 Urinals*

Wall hung urinals, battery operated electronic flush valve.

Rating	Installed	Design Life	Updated
6	0	30	October 2004

D2010.03 Lavatories*

In 1997 staff washrooms pedestal style lavatories installed with on/off brass. In 1997 washrooms and change rooms stainless steel bowl with on/off brass. 1967, 1978 portion of school porcelain on steel lavatories complete with on/off brass.

Rating	Installed	Design Life	Updated
5	0	30	October 2004

D2010.04 Sinks*

Stainless steel sinks installed in 1997 staff room and science room and in three classrooms in 1967, 1978 portion of school.

Rating	Installed	Design Life	Updated
5	0	30	October 2004

D2010.05 Showers* - 1997

Pressure balance mixing valve with on/off control. Institutional shower head.

Rating	Installed	Design Life	Updated
5	0	30	October 2004

D2010.08 Drinking Fountains / Coolers*

Wall hung. Non refrigerated.

Rating	Installed	Design Life	Updated
5	0	30	October 2004

D2010.09 Other Plumbing Fixtures*

Science room sinks provided with bottle traps and kitchen style brass and hose spray. Brass inappropriate for lab.

Rating	Installed	Design Life	Updated
3	0	0	October 2004

Event: Install lab brass.

Concern:
Science room sink brass not suitable for lab usage. Kitchen style brass installed.

Recommendation:
Install lab brass with outlet suitable for hose connection.

Type	Year	Cost	Priority
Program Functional Upgrade	2005	$1,600	Low

Updated: October 16 2004

D2010.09 Other Plumbing Fixtures*

Handicap lavatory not provided.

Rating	Installed	Design Life	Updated
3	0	0	October 2004

Event: Install handicap lavatory.

Concern:
Barrier free water closet provided. However barrier free lavatory or sink not provided.

Recommendation:
Install offset waste assembly, insulate offset waste, install brass with lever handles.

Type	Year	Cost	Priority
Barrier Free Access Upgrade	2005	$1,400	Medium

Updated: October 16 2004

D2010.09 Other Plumbing Fixtures*

Floor mounted janitor sink installed in 1997 addition electrical room. Wall mounted installed in 1968, 1978 portion.

Rating	Installed	Design Life	Updated
5	0	0	October 2004

D2020.01.01 Pipes and Tubes: Domestic Water*

Copper piping and fittings.

Rating	Installed	Design Life	Updated
5	0	40	October 2004

D2020.01.02 Valves: Domestic Water

1967, 1978 portion of school gate isolation valves. 1997 addition ball valves.

Rating	Installed	Design Life	Updated
5	0	40	October 2004

D2020.01.03 Piping Specialties (Backflow Preventors)*

Backflow preventor installed on make up line to boiler. No vacuum breakers installed on exterior non freeze hose bibbs.

Rating	Installed	Design Life	Updated
4	0	0	October 2004

D2020.02.02 Plumbing Pumps: Domestic Water*

1967, 1978 portion of school has no recirculation pump. Have to run fixtures for long period of time to get hot water.

Rating	Installed	Design Life	Updated
3	0	20	October 2004

Event: Add domestic hot water recirculation pump and piping in 1967, 1978 portion of school.

Concern:
Need to run water for extended period of time prior to obtaining hot water.

Recommendation:
Install domestic hot water recirculation pump and piping.

Type	Year	Cost	Priority
Operating Efficiency Upgrade	2005	$2,400	Low

Updated: October 16 2004

D2020.02.06 Domestic Water Heaters*

Jetglass water heater services 1967, 1978 portion of school tank is approximately 20 years old. No recirculation pump. 1997 addition State heater, 324,000 BTU/hr input.

Rating	Installed	Design Life	Updated
3	0	20	October 2004

Event: 1967, 1978 portion of school replace domestic hot water heater.

Concern:
Domestic hot water tank expectancy exceeded.

Recommendation:
Install new domestic hot water heater.

Type	Year	Cost	Priority
Lifecycle Replacement	2005	$4,000	Low

Updated: October 16 2004

D2020.03 Water Supply Insulation*: Domestic

Domestic hot, cold and recirculation piping insulated.

Rating	Installed	Design Life	Updated
5	0	0	October 2004

D2030.01 Waste and Vent Piping*

1997 addition plastic underground, cast iron and copper above ground 1967, 1978 portion cast iron and copper.

Rating	Installed	Design Life	Updated
5	0	50	October 2004

D2040.01 Rain Water Drainage Piping Systems*

Rain water leaders discharge to grade.

Rating	Installed	Design Life	Updated
5	0	50	October 2004

D2040.02.04 Roof Drains*

Full open flow. Cast iron dome strainer.

Rating	Installed	Design Life	Updated
5	0	40	October 2004

D3010.02 Gas Supply Systems*

Gas distribution piping installed to heating boiler, domestic hot water heaters, rooftop gas fired air systems, science room gas lines are rusting.

Rating	Installed	Design Life	Updated
5	0	50	October 2004

D3020.02.01 Heating Boilers and Accessories: H.W.* 1997

One (1) natural draft, steel tube boiler, 1,200,000 BTU/hr. input. Boiler complete with low water cut off, relief valve, flow switch.

Rating	Installed	Design Life	Updated
6	0	30	October 2004

D3020.02.02 Chimneys (& Comb. Air): H.W. Boiler*

Class B chimney.

Rating	Installed	Design Life	Updated
6	0	30	October 2004

D3020.02.03 Water Treatment: H. W. Boiler*

Chemical pot feeder, side stream filter installed.

Rating	Installed	Design Life	Updated
6	0	30	October 2004

D3020.03.01 Furnaces* 1967

Six (6) Downflow furnaces. Furnaces are Engineered Air. Two (2) furnaces run continuous 24 hours a day and burners fire on heat demand. Maintenance could not explain why furnaces run continuous. Remaining furnaces fan and burner energized on thermostat heat demand. No fresh air introduced during room occupancy. Fresh air damper is fixed. No modulation of fresh air and return dampers provided. Evidence of backdraft condition at furnaces. Zoning is poor. One classroom can be served by two different furnaces. Temperature and noise complaints resulting in poor learning environment.

Rating	Installed	Design Life	Updated
2	0	25	October 2004

Event: Replace furnaces.

Concern:

Minimum of outside air of 8 l/s per person not maintained during room occupancy. Evidence of downdraft of products of combustion at furnaces. Zoning is poor resulting in temperature complaints. Temperature and noise complaints resulting in poor learning environment.

Recommendation:

Replace furnaces with gas fired packaged rooftop unit with related ductwork and air terminals for ventilation upgrade. Install heating boiler, radiation or radiant panels, piping distribution for heating upgrade.

Type	Year	Cost	Priority
Indoor Air Quality Upgrade	2005	$225,000	High

Updated: October 16 2004

D3020.03.01 Furnaces* 1978

One downflow furnace and one upflow furnace. One furnace ventilates and heats science room via underground supply air ductwork. Second furnace ventilates and heats classroom and locker/corridor area via ceiling distribution ductwork. No fresh air provided to furnaces resulting in no fresh air provided for occupants during building occupancy. Evidence of downdraft condition at furnaces. Science room is cold during winter. Furnace fans and burners clycle to maintain thermostat set point on heat demand.

Rating	Installed	Design Life	Updated
2	0	25	October 2004

Event: Replace furnaces.

Concern:

Minimum of outside air of 8 l/s per person not maintained during room occupancy. Evidence of downdraft of products of combustion at furnaces. Science room cold. Poor learning environment.

Recommendation:

Connect new distribution ductwork and heating to proposed 1967 rooftop unit and boiler upgrade.

Type	Year	Cost	Priority
Indoor Air Quality Upgrade	2005	$25,000	High

Updated: October 16 2004

D3020.03.02 Chimneys (&Comb. Air): Furnace* 1967

Class B chimney. Combustion air unheated and room is extremely cold during winter.

Rating	Installed	Design Life	Updated
5	0	30	October 2004

D3020.03.02 Chimneys (&Comb. Air): Furnace* 1978

Class B chimney. Fire stop not installed and chimney in contact with drywall ceiling opening.

Rating	Installed	Design Life	Updated
4	0	30	October 2004

D3040.01 Air Distribution Systems 1967 & 1978

Underslab ductwork supply for seven (7) furnaces and ceiling distribution ductwork for one (1) furnace. Maintenance indicated in rooms served by furnances dust build up is noted on desks, etc. on a daily basis indicating probability of distribution ductwork being dust laden. Maintenance hade requested ductwork cleaning companies to provide quotes to clean underground ductwork and companies have not provided quotes as they indicated a proper cleaning job could not be done. Zoning is poor resulting in temperature complaints. Some rooms are served by two (2) furnaces. No air in one room and room is cold. Science room is cold during winter. Students have to wear winter clothing to keep warm. Ceiling space used as a return air plenum and 1967 portion of school has exposed wood structure.

Rating	Installed	Design Life	Updated
2	0	30	October 2004

Event: Abandon underground ductwork and install above ground ductwork.

Concern:

Dust build up on furniture in classrooms indicates probability of dust laden underground ductwork. Unable to clean underground ductwork.

Recommendation:

Above ground supply air distribution be installed. Construction costs included in D3040.03.01 Furnaces 1967.

Type	Year	Cost	Priority
Indoor Air Quality Upgrade	2005	$0	High

Updated: October 16 2004

D3040.01 Air Distribution Systems 1997

For classrooms low velocity supply air ductwork to wall supply air grilles. Administration corridors, stage low velocity supply air ductwork to ceiling diffusers. Gymnasium exposed low velocity ductwork with supply air grilles. Ceiling space utilized as return air plenum for classroom and stage air system.

Rating	Installed	Design Life	Updated
5	0	30	October 2004

D3040.01.01 Air Handling Units: Air Distribution* 1997

Two (2) new air handling systems similar in configuration, units complete with supply fan, return fan, motorized fresh, return dampers, gravity relief damper, gas fired heat exchanger, filter section.

Rating	Installed	Design Life	Updated
3	0	30	October 2004

Event: Upgrade air systems.

Concern:
No hasp locks to eliminate unauthorized access into units. Maintenance have found sleeping bags, food, beverages inside air system plenums. Chimney not insulated. Caulking on ductwork joints cracked and moisture migrating into ductwork.

Recommendation:
Install hasp to allow installation of locks. Install insulated chimney. Re-caulk ductwork joints.

Type	Year	Cost	Priority
Operating Efficiency Upgrade	2004	$4,800	Medium

Updated: October 16 2004

D3040.01.01 Air Handling Units: Air Distribution* 1997

Two (2) new air systems similar in configuration. Units complete with supply fan, return fan, motorized fresh and return dampers, gravity relief damper, gas fired heat exchanger, filter section.

Rating	Installed	Design Life	Updated
2	0	30	October 2004

Event: Study operational problems with gymnasium air system.

Concern:
Gym air system has to be de-energized during presentation in gymnasium. Air system is two (2) speed. Maintenance has to jumper wiring in rooftop unit to change fan speeds.

Recommendation:
Conduct study to determine possible acoustic treatment to reduce air system noise and have unit speed changed without having to go to rooftop unit control panel.

Type	Year	Cost	Priority
Study	2004	$2,400	High

Updated: October 16 2004

D3040.01.03 Air Cleaning Devices:Air Distribution*

Furnaces complete with 25mm throw away filters. Rooftop units complete with 50mm throw away filters. Access to filters on downflow units poor. Have to remove breeching within furance to gain access to filters.

Rating	Installed	Design Life	Updated
4	0	0	October 2004

D3040.01.04 Ducts: Air Distribution* 1967, 1978

Underground ductwork. for seven of eight furnaces and ceiling distribution ductwork for one furnace. Ceiling space containing exposed wood utilized as return air plenum.

Rating	Installed	Design Life	Updated
2	0	50	October 2004

D3040.01.04 Ducts: Air Distribution*1997

Low velocity supply air ductwork to ceiling outlets or wall outlets. Ceiling space containing exposed wood utilized as return air plenum.

Rating	Installed	Design Life	Updated
2	0	50	October 2004

D3040.01.05 Duct Accessories: Air Distribution* 1967, 1978

Underground ductwork distribution balancing dampers provided in floor supply air grilles or supply air boot. Fire dampers had no access doors. In 1978 furnace room t-bar grid used as retaining angle in lieu of manufacturer's installation instruction of 40 mm x 40 mm, 16 gauge. Ductwork as installed does not allow for breakaway joint.

Rating	Installed	Design Life	Updated
2	0	0	October 2004

Event: Install fire damper access doors and upgrade installation.

Concern:

No fire damper access doors. Unable to inspect fire dampers. Improper retaining angles installed on fire dampers. Ductwork as installed does not allow for breakaway joint on some ducts.

Recommendation:

Install fire damper access doors. Install proper retaining angles and breakaway joints to maintain U.L. label rating.

Type	Year	Cost	Priority
Code Repair	2005	$2,400	High

Updated: October 16 2004

D3040.01.05 Duct Accessories: Air Distribution* 1997

On ceiling supply air ductwork distribution balancing dampers provided in branch line duct to air outlets. Fire dampers provided in fire rated walls and floors. Fire flaps installed on grilles and diffusers in fire rated ceilings.

Rating	Installed	Design Life	Updated
3	0	0	October 2004

Event: Install fire blanket on fire rated ceiling diffusers.

Concern:
No fire blanket installed on supply air diffusers in fire rated ceilings.

Recommendation:
Install fire blanket.

Type	Year	Cost	Priority
Code Repair	2005	$2,000	High

Updated: October 16 2004

D3040.01.07 Air Outlets & Inlets:Air Distribution*

In 1997 addition square ceiling diffusers and egg crate in t-bar ceilings. Linear supply air and wall egg crate in classrooms. In 1967, 1978 square ceiling diffusers and egg crate in t-bar ceilings. Floor register supply air and linear return air.

Rating	Installed	Design Life	Updated
5	0	0	October 2004

D3040.03.01 Hot Water Distribution Systems*

Black iron piping to radiation, radiant panels, unit heaters, fan coil units. Two inline circulation pumps.

Rating	Installed	Design Life	Updated
3	0	0	October 2004

Event: Temperature complaints.

Concern:
Heating complaints (cold) in reception principals office and staff room. In winter as outdoor temperature increases maintenance has to manually shut heating in principals office, reception, entrances, corridors due to over heating.

Recommendation:
Conduct study to review complaints and provide recommendations.

Type	Year	Cost	Priority
Study	2004	$1,800	Medium

Updated: October 16 2004

D3040.04 Special Exhaust Systems

Science room fume hood. No makeup air. Window has to be opened during hood operation.

Rating	Installed	Design Life	Updated
2	0	30	October 2004

Event: Install science room fume hood.

Concern:
No make up air for fume hood. Window has to be opened during hood operation. If not opened flow tests indicate poor hood performance.

Recommendation:
Install indirect gas fired rooftop makeup air unit.

Type	Year	Cost	Priority
Operating Efficiency Upgrade	2005	$10,000	High

Updated: October 16 2004

D3040.04 Special Exhaust Systems

Science room chemical storage closet and chemical storage cabinet under fume hood not exhausted.

Rating	Installed	Design Life	Updated
2	0	30	October 2004

Event: Exhaust science room chemical storage.

Concern:
Chemical storage closet and chemical storage cabinet under fume hood not exhausted. Corrosion of closet door hardware and storage cabinet under fume hood occurring. Fumes migrate into classrooms.

Recommendation:
Exhaust storage closet and storage cabinet under fume hood continuous.

Type	Year	Cost	Priority
Indoor Air Quality Upgrade	2004	$4,000	High

Updated: October 16 2004

D3040.04.01 Fans*: Exhaust - 1967, 1978

Washrooms not provided with exhaust. Floor supply air grille installed with non ducted ceiling diffuser installed in ceiling grid relieving air into ceiling space used as a return air plenum.

Rating	Installed	Design Life	Updated
2	0	30	October 2004

Event: Add washroom exhaust.

Concern:
Exhaust not installed for washrooms.

Recommendation:
Install roof mounted exhaust fan, related ductwork and grilles.

Type	Year	Cost	Priority
Indoor Air Quality Upgrade	2004	$2,800	High

Updated: October 16 2004

D3040.04.01 Fans*: Exhaust 1997

Roof mounted exhaust fans for washrooms, change rooms. Separation of outflow from air intakes adequate.

Rating	Installed	Design Life	Updated
6	0	30	October 2004

D3040.04.03 Ducts*: Exhaust - 1997

Low velocity exhaust air ductwork to exhaust air outlets and fans.

Rating	Installed	Design Life	Updated
4	0	0	October 2004

D3040.04.04 Ducts Accessories*: Exhaust - 1997

Balancing dampers provided in branch line ducts.

Rating	Installed	Design Life	Updated
6	0	0	October 2004

D3040.04.05 Air Outlets and Inlets*: Exhaust - 1997

Egg crate exhaust air grilles.

Rating	Installed	Design Life	Updated
6	0	0	October 2004

D3040.05 Heat Exchangers*

Plate heat exchanger provides heated glycol for roof edge snow melt system to eliminate ice damming.

Rating	Installed	Design Life	Updated
6	0	30	October 2004

D3050.01.01 Computer Room Air Conditioning Units*

Computer room temperatures have been as high as 35 degree to 40 degree celcius. Server room overheats.

Rating	Installed	Design Life	Updated
2	0	30	October 2004

Event: Provide auxiliary cooling for computer room.

Concern:
Computer room temperatures have been as high as 35 degree to 40 degree Celsius. Temperatures have been this high during exams and classes.

Recommendation:
Install ductless air conditioning unit with remote roof mounted condensing unit.

Type	Year	Cost	Priority
Operating Efficiency Upgrade	2004	$18,000	High

Updated: October 16 2004

D3050.01.02 Packaged Rooftop Air Conditioning Units (& Heating Units)* - 1997

Packaged gas fired rooftop heating and air conditioning unit provide for stage.

Rating	Installed	Design Life	Updated
6	0	30	October 2004

D3050.03 Humidifiers* 1967 and 1978

Residential drum type humidifiers installed and are not operational. Humidifiers become contaminated within a short period of time and without frequent maintenance humidifiers cease to function. Humidification would be a high maintenance cost and could affect air quality with stagnant water sitting in humidifer pan. Lack of vapor barrier and construction of existing walls suspect. Recommend humidifiers not be installed.

Rating	Installed	Design Life	Updated
4	0	25	October 2004

D3050.03 Humidifiers* 1997

Gymnasium provided with evaporative type humidifier with heated water circulated through humidifier pan. Maintenance difficult due to height units are installed at. Recommended alternate method of humidification be considered. Maintenance indicated water makeup and heated water supply have been shut off to units. Damage to floor has occurred in the past. Humidifiers not interlocked with air system supply fan.

Rating	Installed	Design Life	Updated
3	0	25	October 2004

Event: Study gymnasium humidification.

Concern:
Access to humidifiers difficult to maintain units. Manlift required. Damage to wood floor has occurred in the past.

Recommendation:
Conduct study to determine alternate method of humidification.

Type	Year	Cost	Priority
Study	2004	$1,800	Medium

Updated: October 16 2004

D3050.05.02 Fan Coil Units* - 1967, 1978

Electric fan coil unit installed in 1978 addition entrances.

Rating	Installed	Design Life	Updated
3	0	30	October 2004

Event: Install hot water fan coil unit.

Concern:
Entrance cold during cold weather.

Recommendation:
Install hot water fan coil unit.

Type	Year	Cost	Priority
Operating Efficiency Upgrade	2005	$3,000	Low

Updated: October 16 2004

D3050.05.02 Fan Coil Units* 1997

Hot water fan coil units installed in 1997 addition entrances.

Rating	Installed	Design Life	Updated
6	0	30	October 2004

D3050.05.03 Finned Tube Radiation*

Radiation installed in gymnasium, administration rooms, classrooms.

Rating	Installed	Design Life	Updated
6	0	35	October 2004

D3050.05.06 Unit Heaters*

Two (2) unit heaters installed in 1997 addition mechanical room. One unit tempers combustion air. Other unit heats room.

Rating	Installed	Design Life	Updated
5	0	30	October 2004

D3050.05.08 Radiant Heating (Ceiling & Floor)*

Radiant panels installed in boys and girls shower room and stage.

Rating	Installed	Design Life	Updated
6	0	35	October 2004

D3060.02 HVAC Instrumentation and Controls - 1967, 1978

Electric thermostats cycle furnaces to maintain set point.

Rating	Installed	Design Life	Updated
4	0	30	October 2004

D3060.02 HVAC Instrumentation and Controls - 1997

BMCS enables air systems and air system factory installed control package provides conditioned supply air enables heating system and circulation pumps. Electric thermostats cycle control valves to maintain set point. Electric thermostats cycle fan coil units in entrances, combustion air and mechanical room unit heaters. Momentary start stop provided to energize gym air system.

Rating	Installed	Design Life	Updated
4	0	30	October 2004

D3060.02.01 Electric and Electronic Controls*

Electric thermostats cycle furnaces in 1967, 1978 portion of school to maintain set point. Electric thermostats cycle control valves on radiation in 1997 addition.

Rating	Installed	Design Life	Updated
4	0	30	October 2004

D3060.02.05 Building Systems Controls(BMCS, EMCS)*

Automatic Controls BMCS installed. Work station installed in electrical room.

Rating	Installed	Design Life	Updated
3	0	25	October 2004

Event: Study upgrade of BMCS and controls.

Concern:

Stage air system has to be operational for change room exhaust fan to operate. Exhaust fan not related to air system. Washroom exhaust fans and furnaces not interlocked with BMCS. Gym two speed control not automatic. BMCS has to be re-programmed every seven days to maintain current event status. Gymnasium fresh air dampers require manual positioning.

Recommendation:

Conduct study to review existing BMCS system and provide recommendations to improve operating efficiency, reduce maintenance and provide outside air to maintain building air quality.

Type	Year	Cost	Priority
Study	2004	$2,400	Medium

Updated: October 16 2004

D4030.01 Fire Extinguisher, Cabinets and Accessories*

ABC extinguishers on wall hooks or in cabinets. Some extinguishers are installed too high and should be lowered to have handle of extinguisher 1500 mm above floor.

Rating	Installed	Design Life	Updated
5	0	30	October 2004

D4090 Other Fire Protection Systems*

Fire blanket and emergency gas shut off provided in science room.

Rating	Installed	Design Life	Updated
6	0	0	October 2004

S5 ELECTRICAL

D5010.03 Main Electrical Switchboards (Main Distribution)*

800 Amp 120/208V 3 Phase 4 Wire FPE main distribution switchboard complete with Liebert surge supressor.

Rating	Installed	Design Life	Updated
3	0	40	October 2004

Event: Provide security fence to main service switchgear.

Concern:
Switchboard is located in gym storage room. Students are storing and resting sporting good in front of and against switchgear without maintaining code required 1 meter clearance.

Recommendation:
Build a chain link security fence with gate around switchgear to maintain code required 1 meter clearance.

Type	Year	Cost	Priority
Preventative Maintenance	2004	$3,000	Medium

Updated: October 16 2004

D5010.05 Electrical Branch Circuit Panelboards (Secondary Distribution)*

Panelboards located throughout school generally manufactured by FPE. Panelboards generally are loaded to near capacity with minimal spare spaces, however, appear to service present needs.

Rating	Installed	Design Life	Updated
3	0	30	October 2004

Event: Add tamper cover to main circuit breaker in panel in southwest corridor.

Concern:
Existing panel in southwest corridor has a main circuit breaker which is exposed to tampering.

Recommendation:
Provide tamper cover over main circuit breaker.

Type	Year	Cost	Priority
Preventative Maintenance	2004	$800	Medium

Updated: October 16 2004

D5010.07.02 Motor Starters and Accessories*

Generally magnetic and manual motor starters by Square D.

Rating	Installed	Design Life	Updated
4	0	0	October 2004

D5020.01 Electrical Branch Wiring*

Generally ivory devices with stainless steel coverplates and conduit wireway.

Rating	Installed	Design Life	Updated
3	0	50	October 2004

Event: Restore operation of receptacle outlets in west classroom of south corridor.

Concern:
Several receptacles in classroom are no longer working due to a recent renovation in the classroom.

Recommendation:
Restore power service to receptacles in classroom.

Type	Year	Cost	Priority
Repair	2004	$1,500	Low

Updated: October 16 2004

D5020.02.01 Lighting Accessories (Lighting Controls)*

Rooms provided with separate switch to control lights.

Rating	Installed	Design Life	Updated
3	0	0	October 2004

Event: Provide motion sensors to lights in washrooms and change rooms.

Concern:
Lights in washrooms and change rooms are operated from light switch.

Recommendation:
Recommend lighting control be changed to include a motion sensor to control light operation, all for energy savings.

Type	Year	Cost	Priority
Energy Efficiency Upgrade	2006	$2,000	Low

Updated: October 16 2004

D5020.02.02.02 Interior Florescent Fixtures*

Combination of recess and surface mounted light fixtures complete with T12 lamps with magnetic ballast.

Rating	Installed	Design Life	Updated
3	0	0	October 2004

Event: Retrofit fluorescent fixtures to use T8 lamps with electronic ballasts.

Concern:

Existing fluorescent fixtures use T12 lamps with magnetic ballasts and are energy inefficient.

Recommendation:

Retrofit light fixtures to use T8 lamps with electronic ballasts.

Type	Year	Cost	Priority
Energy Efficiency Upgrade	2007	$50,000	Low

Updated: October 16 2004

D5020.02.02.03 Interior Metal Halide Fixture*

Metal halide uplighting provided in main front entry vestibule.

Rating	Installed	Design Life	Updated
4	0	0	October 2004

D5020.02.03 Emergency Lighting*

DC type battery pack units with remote heads and exit signs.

Rating	Installed	Design Life	Updated
3	0	0	October 2004

Event: Exit lights are not L.E.D. type.

Concern:
Exit signs use incandescent lamps and are energy inefficient.

Recommendation:
Retrofit exit signs with LED lamps.

Type	Year	Cost	Priority
Energy Efficiency Upgrade	2006	$1,500	Low

Updated: October 16 2004

Event: Upgrade emergency lighting system.

Concern:
Existing emergency lighting system does not comply with present code requirements as insufficient heads provided in corridors and vestibules.

Recommendation:
Upgrade emergency lighting system to provide additional battery pack units and remote heads as required to provide proper illumination.

Type	Year	Cost	Priority
Code Upgrade	2004	$3,000	Medium

Updated: October 16 2004

D5020.03.01.04 Exterior H.P. Sodium Fixtures*

Wall mounted high pressure sodium light fixtures installed around building perimeter.

Rating	Installed	Design Life	Updated
4	0	0	October 2004

D5020.03.02 Lighting Accessories (Lighting Controls)*

Exterior lighting photocell controlled.

Rating	Installed	Design Life	Updated
4	0	0	October 2004

D5030.01 Detection and Alarm Fire Alarm*

1978. Edwards ESI 6616 fire alarm panel with fire detection devices installed throughout building with remote anunciator located at front entrance.

Rating	Installed	Design Life	Updated
2	0	25	October 2004

Event: Provide additional fire alarm devices to service renovated classroom.

Concern:
Some renovations have been done to one classroom in north wing, second west classroom from the north. As a result, the fire alarm cannot be heard in the rooms constructed in this classroom. In addition, there is an exterior door in this room which does not have a fire pull station.

Recommendation:
Provide fire alarm bell and fire pull station to classroom.

Type	Year	Cost	Priority
Code Upgrade	2004	$2,500	High

Updated: October 16 2004

D5030.02.02 Intrusion Detection*

Knight security system model 892 complete with door contacts, motion sensors, and alarm keypad.

Rating	Installed	Design Life	Updated
4	0	25	October 2004

D5030.03 Clock and Program Systems*

Battery operated clocks in classrooms. Class change through Rauland model 2490 time clock.

Rating	Installed	Design Life	Updated
4	0	20	October 2004

D5030.04.01 Telephone Systems*

Trillium phone system.

Rating	Installed	Design Life	Updated
4	0	15	October 2004

D5030.04.02 Paging Systems*

Paging through call system with speakers in corridors and classrooms.

Rating	Installed	Design Life	Updated
4	0	15	October 2004

D5030.04.03 Call Systems*

Rauland 5500 call system with service to classrooms.

Rating	Installed	Design Life	Updated
4	0	15	October 2004

D5030.04.04 Data Systems*

Category 5 data cabling to data outlets. One main hub located in closet in computer room.

Rating	Installed	Design Life	Updated
4	0	15	October 2004

S6 EQUIPMENT, FURNISHINGS AND SPECIAL CONSTRUCTION

E1010.07 Vending Equipment

Vending machines located in student gathering area.

Rating	Installed	Design Life	Updated
5	0	0	October 2004

E1090 Other Equipment

Metal boot racks located at entrance vestibules.

Rating	Installed	Design Life	Updated
5	0	0	October 2004

E1090.04 Residential Equipment*

Residential range, refrigerator, dishwasher and microwave ovens in staff room.

Rating	Installed	Design Life	Updated
5	0	10	October 2004

E1090.07 Athletic, Recreational, and Therapeutic Equipment*

Six wall hung plywood basketball backboards.

Rating	Installed	Design Life	Updated
5	0	15	October 2004

E2010.02.05 Educational Facility Casework*

1968
Painted plywood casework with plastic laminate and linoleum clad tops in most classrooms.

Rating	Installed	Design Life	Updated
3	0	0	October 2004

Event: Replace selected millwork

Concern:
Plastic laminate coming off countertops in areas. Doors at storage cabinets in 1965 classrooms are warped in areas. Painted millwork is a maintenance issue.

Recommendation:
Replace millwork in 2 classrooms (23 m.).

Type	Year	Cost	Priority
Lifecycle Replacement	2005	$12,000	Low

Updated: October 16 2004

E2010.02.05 Educational Facility Casework* 1997

1997
Clear finish plywood casework with plastic laminate clad tops in most classrooms.

Rating	Installed	Design Life	Updated
6	0	0	October 2004

E2010.02.07 Kitchen Casework*

1997
Clear finish plywood cabinets with plastic laminate countertops in staff room.

Rating	Installed	Design Life	Updated
6	0	0	October 2004

E2010.02.08 Laboratory Casework*

1997
Clear finish plywood cabinets with plastic laminate countertops throughout.

Rating	Installed	Design Life	Updated
6	0	0	October 2004

E2010.02.99 Other Casework*

1997
Plastic laminate clad vanities in washrooms. Clear finish plywood cabinet with plastic laminate clad countertop at reception in office area.

Rating	Installed	Design Life	Updated
6	0	0	October 2004

E2010.03.01 Blinds*

Horizontal aluminum blinds throughout.

Rating	Installed	Design Life	Updated
5	0	10	October 2004

E2020 Moveable Furnishings*

Wide variety of educational and office furnishings including desks, tables, bookshelves and chairs.

Rating	Installed	Design Life	Updated
5	0	20	October 2004

F1010.02.04 Portable and Mobile Buildings 1

Eastern most portable of 2 located at southeast corner of school.

Architectural: Glu-lam beams and wood framed construction bearing on concrete pads. Envelope includes metal cladding, 2 ply SBS roof membrane and aluminum framed windows. Interior components include vinyl tile, acoustic tile ceiling, solid core wood doors, pressed steel frames, painted gypsum board walls, painted/clear finish millwork and chalkboards/whiteboards/ tackboards.

Mechanical: Heating and ventilation provided via downflow furnace with distribution ductwork in crawlspace to floor grilles and returned via return air located on furnace room wall. Motorized fresh and return air dampers provided. Indication of backdraft condition occurring. Chimneys have moisture stains and soot particles noted on furnace draft hood. Room thermostat cycles furnace to maintain set point. Furnaces are Climatemaster manufacture and are original. Offices adjacent to portable classrooms have electric heat installed. No ventilation. ABC fire extinguisher installed in each classroom.

Electrical: Recess mounted fluorescent light fixtures with acrylic lens, T12 lamps, and magnetic ballasts. Basic electric installation with combined telephone/intercom handset to classroom, wall mounted intercom speaker, and ivory devices with stainless steel coverplates.

Rating	Installed	Design Life	Updated
3	0	0	October 2004

Event: Replace door hardware

Concern:
Doors to classroom and storage have round locksets where code requires levers.

Recommendation:
Replace round door locksets with lever design (3 doors).

Type	Year	Cost	Priority
Barrier Free Access Upgrade	2010	$900	Low

Updated: October 16 2004

Event: Replace mechanical system

Concern:
Classrooms are cold during winter. Poor air quality and poor learning environment. Furnace room fresh air ductwork not insulated.

Recommendation:
Remove existing mechanical and replace with new.

Type	Year	Cost	Priority
Indoor Air Quality Upgrade	2005	$25,000	High

Updated: October 16 2004

Event: Upgrade fluorescent light fixtures

Concern:
Existing T12 fluorescent fixtures are not energy efficient.

Recommendation:
Upgrade light fixtures to use T8 lamps with electronic ballasts

Type	Year	Cost	Priority
Energy Efficiency Upgrade	2006	$3,500	Low

Updated: October 16 2004

F1010.02.04 Portable and Mobile Buildings 2

Western most portable of 2 located at southeast corner of school.

Architectural: Glu-lam beams and wood framed construction bearing on concrete pads. Envelope includes metal cladding, 2 ply SBS roof membrane and aluminum framed windows. Interior components include vinyl tile, acoustic tile ceiling, solid core wood doors, pressed steel frames, painted gypsum board walls, painted/clear finish millwork and chalkboards/whiteboards/ tackboards.

Mechanical: Heating and ventilation provided via downflow furnace with distribution ductwork in crawlspace to floor grilles and returned via return air located on furnace room wall. Motorized fresh and return air dampers provided. Indication of backdraft condition occurring. Chimneys have moisture stains and soot particles noted on furnace draft hood. Room thermostat cycles furnace to maintain set point. Furnaces are Climatemaster manufacture and are original. Offices adjacent to portable classrooms have electric heat installed. No ventilation. ABC fire extinguisher installed in each classroom.

Electrical: Recess mounted fluorescent light fixtures with acrylic lens, T12 lamps, and magnetic ballasts. Basic electric installation with combined telephone/intercom handset to classroom, wall mounted intercom speaker, and ivory devices with stainless steel coverplates.

Rating	Installed	Design Life	Updated
3	0	0	October 2004

Event: Replace door locksets.

Concern:
Doors to classroom and storage have round locksets where code requires levers.

Recommendation:
Replace round door locksets with lever design (2 doors).

Type	Year	Cost	Priority
Barrier Free Access Upgrade	2010	$900	Low

Updated: October 16 2004

Event: Replace mechanical system

Concern:
Classrooms are cold during winter. Poor air quality and poor learning environment.

Recommendation:
Remove existing mechanical and replace with new.

Type	Year	Cost	Priority
Indoor Air Quality Upgrade	2005	$25,000	High

Updated: October 16 2004

Event: Upgrade fluorescent light fixtures

Concern:
Existing T12 fluorescent fixtures are not energy efficient.

Recommendation:
Upgrade light fixtures to use T8 lamps with electronic ballasts

Type	Year	Cost	Priority
Energy Efficiency Upgrade	2006	$3,500	Low

Updated: October 16 2004

F1010.02.04 Portable and Mobile Buildings Link

Includes link complete with stair and ramp. Wood framed construction bearing on concrete pads. Envelope includes metal cladding, 2 ply SBS roof membrane and hollow metal doors set in pressed steel frames. Interior components include vinyl tile, solid core wood doors, pressed steel frames, painted gypsum board walls and ceiling. Metal shelving in storage room.

Rating	Installed	Design Life	Updated
3	0	0	October 2004

Event: Provide access to exit from courtyard

Concern:
Exit at north end of link leads to an enclosed and locked courtyard which is full of outdoor storage items.

Recommendation:
Clean out or re-organize outdoor storage to provide clear exit path. Introduce exterior panic device on chain link gate (costed) or remove lock.

Type	Year	Cost	Priority
Code Repair	2004	$1,500	Medium

Updated: October 16 2004

Event: Replace warped door

Concern:
Exerior door is warped.

Recommendation:
Replace exterior warped door

Type	Year	Cost	Priority
Failure Replacement	2007	$500	Low

Updated: October 16 2004

Event: Upgrade fluorescent light fixtures and exit signs.

Concern:
Existing T12 fluorescent fixtures and exits signs are not energy efficient.

Recommendation:
Upgrade light fixtures to use T8 lamps with electronic ballasts. Upgrade exit signs to LED type lamps (3 signs).

Type	Year	Cost	Priority
Energy Efficiency Upgrade	2004	$1,200	Low

Updated: October 16 2004

F2020 Hazardous Components Abatement

HAZMAT audit not available. Hazardous materials readily apparent are limited to vinyl asbestos tile.

Rating	Installed	Design Life	Updated
4	0	0	October 2004

S8 FUNCTIONAL ASSESSMENT

K40 Current Code Issues

Code analysis not undertaken at this time. Washroom doors have been removed for convenience. This has the effect of joining washrooms to corridors and it is assumed that walls around washrooms would complete fire separation of corridors.

Rating	Installed	Design Life	Updated
3	0	0	October 2004

Event: Repair fire separations

Concern:
Fire separation required at storage rooms: 45 minutes required (ABC 3.3.2.5.4)

Recommendation:
Extend gypsum board to underside of roof assembly

Type	Year	Cost	Priority
Code Repair	2004	$2,500	Medium

Updated: October 16 2004

Event: Study wood in return air plenum

Concern:
Wood framing is not permitted in return air plenums (ABC 3.6.5.1).

Recommendation:
Undertake study to review extent of wood in return air plenums, devise remedial action and make recommendations as to most cost effective repair.

Type	Year	Cost	Priority
Study	2004	$2,000	Low

Updated: October 16 2004

K4010.01 Barrier Free Route: Parking to Entrance

Access provided from drop off at front of school to main entrance.

Rating	Installed	Design Life	Updated
3	0	0	October 2004

Event: Provide BFA curb cut

Concern:
No designated BFA parking provided.

Recommendation:
Develop designated BFA parking and provide curb cut.

Type	Year	Cost	Priority
Barrier Free Access Upgrade	2004	$1,500	Low

Updated: October 16 2004

K4010.02 Barrier Free Entrances

Barrier free access required to main entrance doors.

Rating	Installed	Design Life	Updated
3	0	0	October 2004

Event: Provide power assisted door operators.

Concern:
No power assisted door operators provided at main entrance.

Recommendation:
Provide power assisted door operators.

Type	Year	Cost	Priority
Barrier Free Access Upgrade	2004	$4,000	Low

Updated: October 16 2004

K4010.03 Barrier Free Interior Circulation

Access good to all areas. Public counter at main entrance reception area.

Rating	Installed	Design Life	Updated
5	0	0	October 2004

K4010.04 Barrier Free Washrooms

1997
Designated washrooms provided; clearances at doors is minimal.

Rating	Installed	Design Life	Updated
4	0	0	October 2004

Facility Details

Building Name: Ecole Du Sommet School
Address:
Location: St. Paul

Building Id: S4089
Gross Area (sq. m): 0.00
Replacement Cost: $0
Construction Year: 0

Evaluation Details

Evaluation Company: Burgess Bredo Architect
Evaluation Date: May 1 2004
Evaluator Name: Mr. Burgess Bredo
Evaluator Phone: (780) 431-1484

Total Maintenance Events Next 5 years: **$18,000**
5 year Facility Condition Index (FCI): **0%**

General Summary:

Fair sized site with good access and sufficient parking shared with Community Centre. Site issues include concrete sidewalks, surface drainage and exterior lighting.

Structural Summary:

Envelope Summary:

Interior Summary:

Mechanical Summary:

Electrical Summary:

Rating Guide	
Condition Rating	**Performance**
1 - Critical	Unsafe, high risk of injury or critical system failure.
2 - Poor	Does not meet requirements, has significant deficiencies. May have high operating/maintenance costs.
3 - Marginal	Meets minimum requirements, has significant deficiencies. May have above average operating maintenance costs.
4 - Acceptable	Meets present requirements, minor deficiencies. Average operating/maintenance costs.
5 - Good	Meets all present requirements. No deficiencies.
6 - Excellent	As new/state of the art, meets present and foreseeable requirements.

S7 SITE

G2010.02.01 Aggregate Roadway (Gravel)*

Gravel roadway from parking lot to garbage bin.

Rating	Installed	Design Life	Updated
4	0	10	October 2004

G2020.02.02 Flexible Paving Parking Lots(Asphalt)*

Asphalt parking lot for approximately 58 cars located along east side of site. Shared with Community Centre.

Rating	Installed	Design Life	Updated
5	0	10	October 2004

G2020.06.02 Parking Bumpers*

Precast concrete bumpers located in parking lot.

Rating	Installed	Design Life	Updated
5	0	0	October 2004

G2030.04 Rigid Pedestrian Pavement (Concrete)*

Concrete sidewalks provided around site.

Rating	Installed	Design Life	Updated
3	0	0	October 2004

Event: Replace concrete sidewalks in two locations

Concern:
Cracking of sidewalks throughout is relatively normal. Cracking which produces displacement creates tripping hazard.

Recommendation:
Replace concrete sidewalks in two locations to eliminate tripping hazards.

Type	Year	Cost	Priority
Repair	2005	$3,000	Low

Updated: October 18 2004

G2040.02 Fences and Gates*

Chain link fencing provided along portions of east, west and south sides of playground; around basketball courts.

Rating	Installed	Design Life	Updated
5	0	0	October 2004

G2040.03 Athletic and Recreational Surfaces*

Asphalt surfaces at basketball area southeast of school; balance of play areas are rough grasses. Baseball diamonds complete with chain link backstops, soccer field, football field, basketball back boards.

Rating	Installed	Design Life	Updated
4	0	0	October 2004

G2040.05 Trash and Litter Receptacles

Garbage bin located at south east corner of school.

Rating	Installed	Design Life	Updated
4	0	0	October 2004

G2040.05.04 Bicycle Racks

Bike rack adjacent main entrance.

Rating	Installed	Design Life	Updated
5	0	0	October 2004

G2040.06 Exterior Signs*

Wood stand alone sign on north side; aluminum letters mounted on building at main entrance.

Rating	Installed	Design Life	Updated
5	0	0	October 2004

G2040.08 Flagpoles*

One aluminum flag pole located at north east corner of site.

Rating	Installed	Design Life	Updated
5	0	0	October 2004

G2050.04 Lawns and Grasses*

Lawn areas to the north of school; rough grasses over balance of site.

Rating	Installed	Design Life	Updated
5	0	30	October 2004

G2050.05 Trees, Plants and Ground Covers*

Mature trees along north side of school.

Rating	Installed	Design Life	Updated
5	0	0	October 2004

G2050.07 Planting Accessories*

Preserved wood edging at planter at south west corner of school.

Rating	Installed	Design Life	Updated
5	0	0	October 2004

G3010.02 Site Domestic Water Distribution*

Municipal supplied. Pressure and volume adequate. Monitor for line failures due to use of cast iron material and age of line

Rating	Installed	Design Life	Updated
5	0	0	October 2004

G3010.03 Site Fire Protection Water Distribution*

No siamese connection, fire hydrant located within 90 m of front entrance.

Rating	Installed	Design Life	Updated
6	0	0	October 2004

G3020.01 Sanitary Sewage Collection*

Gravity sanitary sewer connected to municipal main.

Rating	Installed	Design Life	Updated
5	0	0	October 2004

G3030.01 Storm Water Collection*

Surface drainage conditions. Roof drainage to grade. No catch basins.

Rating	Installed	Design Life	Updated
5	0	0	October 2004

Event: Improve site drainage

Concern:
The site is quite flat and this leads to drainage problems in several areas, notably ice build-up from roof in run-off at north west exit doors from the gym and to the south from there.

Recommendation:
Re-grade where possible; introduce concrete gutters to drain water to the south west corner of school and then north.

Type	Year	Cost	Priority
Maintenance	2005	$15,000	Low

Updated: October 18 2004

G3060.01 Gas Distribution*

Gas line to interior gas meter.

Rating	Installed	Design Life	Updated
6	0	0	October 2004

G4010.02 Electrical Power Distribution Lines*

120/208V/3PH/4W underground power service extending from utility pad mounted transformer to main distribution switchboard installed in building.

Rating	Installed	Design Life	Updated
4	0	0	October 2004

G4010.04 Car Plugs-ins*

42 electrified parking stalls with service provided from duplex receptacles mounted on fence, and steel channels. Installation completed approximately in 2002.

Rating	Installed	Design Life	Updated
5	0	0	October 2004

G4020.01 Area Lighting*

Wall mounted HPS lights along building perimeter.

Rating	Installed	Design Life	Updated
3	0	0	October 2004

Event: Provide light standards to parking lot.

Concern:
No lighting provided to parking area.

Recommendation:
Provide approximately 6 light standards to illuminate parking area.

Type	Year	Cost	Priority
Program Functional Upgrade	2004	$15,000	Low

Updated: October 18 2004

G4030.02 Site Voice and Data*

Underground telephone service from TELUS.

Rating	Installed	Design Life	Updated
4	0	0	October 2004