

RECAPP Facility Evaluation Report



Graminia School

B4051A
Spruce Grove

Facility Details

Building Name: Graminia School
Address: 51101 R. R. 271
Location: Spruce Grove

Building Id: B4051A
Gross Area (sq. m): 0.00
Replacement Cost: \$9,849,481
Construction Year: 0

Evaluation Details

Evaluation Company: Stephens Kozak Carr and Brown
Evaluation Date: December 1 2004
Evaluator Name: Mr. Eric Lumley

Total Maintenance Events Next 5 years: **\$422,280**
5 year Facility Condition Index (FCI): **4.29%**

General Summary:

The building was constructed in 1982 with additions in 1996 and 2003. Portables from 1975, 1981, 1985, 1987 and 1992 were added in 1996. The building is generally in good condition.

Structural Summary:

The structure is concrete slab-on-grade on foundations. The walls concrete block loadbearing, with steel OWSJ and steel roof deck.

Envelope Summary:

The building envelope is in good condition, with minor repairs needed to a stucco fascia, and life-cycle replacement of the roofing membrane required.

Interior Summary:

All interior finishes are in good condition.

Mechanical Summary:

1982 original school heated by perimeter radiation. 1997 addition heated by radiant panels. Heating system consists of coppertube boilers, circulation pumps, distribution piping. Ventilation provided by four (4) built up air systems. Supply air distribution is low velocity with ceiling return and ducted return for gymnasium. Exhaust fans provided to expel foul odors from school. Plumbing fixtures are flush tank water closets, stall and wall urinals, lavatories, stainless steel sinks.

Fire protection consists of fire extinguishers installed on wall hooks or in cabinets.

Items found during school review which should be addressed are:

- Install backflow preventors.
- Replace 25 year old domestic hot water heater.
- Install bottle traps on science room sinks.
- Conduct study to review alternate humidification.
- Install day tank dyke and roof thimble related to emergency generator.

Mechanical systems and components are in fair to good condition.

Electrical Summary:

The school has a 1200 Amp, 120/208 Volt - 3 Phase - 4 Wire electrical service. Branch circuit panelboards are located throughout the facility, some requiring updating of the directories. The lighting system has been recently retrofitted and upgraded with T8, 32 watt lamps and electronic ballasts. Emergency lighting and power is from a diesel powered generator. Fire alarm system is a Mirtone system, it has some deficiencies. Data system is Category 5/5E. The Bogen Multi-Com 2000 sound & intercommunication system and the Panasonic telephone system is operating satisfactorily. Exterior lighting is lacking in the bus lanes, south of the school. Refer to architectural sections for description of the portables electrical systems.

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*

Concrete skin friction piles and grade beams.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	0	100	DEC-04

A1030 Slab on Grade*

Concrete slab on grade throughout

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	0	100	DEC-04

B1010.01 Floor Structural Frame*(Building Frame)

Loadbearing concrete block walls.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	0	100	DEC-04

B1010.02 Structural Interior Walls Supporting Floors*

Concrete block loadbearing walls throughout.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	0	100	DEC-04

B1020.01 Roof Structural Frame*

Open web steel joists and metal roof decking

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	0	100	DEC-04

B1020.01.02.09 Glue-Lam. Construction: Roof Beams

Exposed glue-lam beams in library

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	0	0	DEC-04

B1020.04 Canopies*

Steel framing

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	0	50	DEC-04

S2 ENVELOPE

B2010.01.02.01 Brick Masonry: Ext. Wall Skin*

Facing brick exterior rainscreen to original 1982 building.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	0	75	DEC-04

B2010.01.02.02 Concrete Block: Ext. Wall Skin*

Concrete block facing to 1997 addition.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	0	75	DEC-04

B2010.01.08 Portland Cement Plaster: Ext. Wall*

Curved stucco fascias over windows and doors in original building.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
3 - Marginal	0	75	DEC-04

Event: Replace stucco finish to one section of fascia

Concern:

Lower portion of stucco fascia has spalled off in one location

Recommendation:

Rectify cause, probably moisture freeze / thaw action, and replace stucco finish to match existing. Approximately 10 sq.m. of new stucco is required.

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Failure Replacement	2005	\$3,240	Low

Updated: March 4 2005



B2010.09 Exterior Soffits*

Metal perforated soffits to canopies in 1997 addition.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	0	20	DEC-04

B2020.01.01.02 Aluminum Windows*

Bronze anodized aluminum windows throughout.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	0	35	DEC-04

B2030.02.01 Metal Doors and Frames

Insulated hollow metal doors in pressed steel frames throughout.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	0	0	DEC-04

B3010.04.04 Modified Bituminous Membrane Roofing (SBS)*

Membrane roofing to 1997 addition.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	0	25	DEC-04

B3010.04.08 Membrane Roofing (Inverted/ Protected)*

Inverted roofing system to original 1982 building. Roofing report available from owner.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
3 - Marginal	0	25	DEC-04

Event: Lifecycle replacement of roofing.

Concern:

Roofing is reaching the end of its life expectancy

Recommendation:

Replace roofing. Approximately 5500 sq.m.

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2008	\$270,000	Unassigned

Updated: March 4 2005

Event: Section identified in roofing report to be replaced in 2005

Concern:

Roofing is at the end of its life expectancy

Recommendation:

Replace section of roofing recommended in roofing report. Approximately 1600 sq.m.

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2005	\$81,000	Unassigned

Updated: March 4 2005

B3010.07 Sheet Metal Roofing*

Metal roofing and fascias to canopies to 1997 addition.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	0	40	DEC-04

B3020.01.01.02 Pyramidal Unit Skylights

Plastic skylight unit in 1997 addition.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	0	0	DEC-04

S3 INTERIOR**C1010.01 Interior Fixed Partitions***

Concrete block and gypsum board stud interior walls

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	0	50	DEC-04

C1010.05 Interior Windows*

Pressed steel frames with wired glass.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	0	40	DEC-04

C1020.01 Interior Swinging Doors*

Hollow metal doors and solid core wood doors in pressed steel frames throughout.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	50	DEC-04

C1020.03 Interior Fire Doors*

Hollow metal fire rated doors and pressed steel fire rated frames.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	0	50	DEC-04

C1020.04 Interior Sliding and Folding Doors*

Anodized aluminum sliding doors to ancillary room in 1997 addition.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	0	40	DEC-04

C1030.01 Visual Display Boards*

White board and vinyl faced tack board throughout.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	0	DEC-04

C1030.02 Fabricated Compartments(Toilets/Showers)*

Floor supported metal toilet partitions.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	0	DEC-04

C1030.06 Handrails*

Pipe handrails to stairs to mechanical rooms and upper storage rooms.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	50	DEC-04

C1030.08 Interior Identifying Devices*

Adequate signage throughout.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
N/A	0	0	DEC-04

C1030.10 Lockers*

Two tier lockers throughout.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	30	DEC-04

C1030.12 Storage Shelving*

Painted adjustable wood shelving in storage rooms.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	0	DEC-04

C1030.14 Toilet, Bath, and Laundry Accessories*

Commercial grade mirrors, soap dispensers, rollpaper towel dispensers, electric hand dryers, in all washrooms.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	20	DEC-04

C2010 Stair Construction*

Steel checker plate stairs to upper mechanical rooms and storage rooms.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	0	100	DEC-04

C2020.05 Resilient Stair Finishes*

Resilient tile treads and rubber nosings to stair to upper mechanical room in 1997 addition.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	0	20	DEC-04

C2020.08 Stair Railings and Balustrades*

Pipe rail handrails.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	0	50	DEC-04

C3010.04 Gypsum Board Wall Finishes*

Gypsum board wall finish on steel studs in original 1982 building and 1997 addition.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	0	40	DEC-04

C3010.06 Tile Wall Finishes*

Ceramic wall tile to washrooms and change rooms.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	0	50	DEC-04

C3010.11 Interior Wall Painting*

Paint finish to interior walls throughout.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
N/A	0	5	DEC-04

C3010.12 Wall Coverings*

Cork tile finish to one wall in each of the administration area offices and conference rooms.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	10	DEC-04

C3010.14 Other Wall Finishes*

Desco Hi-Build epoxy finish to corridor walls throughout original 1982 building.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	0	0	DEC-04

C3020.02 Tile Floor Finishes*

Ceramic mosaic tile finish to washrooms and custodial staorage areas in original 1982 building.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	30	DEC-04

C3020.04 Wood Flooring*

Resilient hardwood flooring in gymnasium.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	25	DEC-04

C3020.07 Resilient Flooring*

Vinyl corlon flooring throughout corridors of original 1982 building.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	20	DEC-04

C3020.08 Carpet Flooring*

Carpeting in administration areas and some classrooms such as the music room and the library.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	10	DEC-04

C3020.11 Floor Painting

Painted concrete floors in mechanical rooms.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	0	DEC-04

C3020.14 Other Floor Finishes*

Desco epoxy flooring to kitchen area and adjacent washrooms in 1997 addition.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	0	0	DEC-04

C3030.02 Ceiling Paneling (Wood)*

Cedar board ceilings in main entrance, library, staff lounge and conference room in office area.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	0	25	DEC-04

C3030.04 Gypsum Board Ceiling Finishes*

Gypsum board finish to storage rooms, offices and washrooms.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	50	DEC-04

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

Acoustic lay-in tile in T-bar grid throughout classrooms and corridors.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	25	DEC-04

C3030.07 Interior Ceiling Painting*

Painted gypsum board ceilings in storage rooms, administration offices and washrooms.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	10	DEC-04

S4 MECHANICAL**D2010.01 Water Closets* 1982 Original Building**

Floor mounted, flush tank, open front seat, elongated bowl.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	0	30	DEC-04

D2010.01 Water Closets* 1997 Addition

Floor mounted, flush tank, open front seat, elongated bowl.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	0	30	DEC-04

D2010.02 Urinals* 1982 Original Building

Stall type, flush valve.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	0	30	DEC-04

D2010.02 Urinals* 1997 Addition

Wall hung, flush valve.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	0	30	DEC-04

D2010.03 Lavatories* 1982 Original School

Stainless steel bowls with time delay faucets. Powers mix valve in instructors office.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	0	30	DEC-04

D2010.03 Lavatories* 1997 Addition

Stainless steel bowls. Time delay faucets.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	0	30	DEC-04

D2010.04 Sinks* 1982 Original Building

Stainless steel which vary in size and function. Swing spout brass.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	0	30	DEC-04

D2010.04 Sinks* 1982

Sinks vary in size and function. Plumbing brass requires upgrade in Room 111, 113.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
3 - Marginal	0	30	DEC-04

D2010.04 Sinks* 1997

Sinks vary in size and function. Classroom sinks complete with bubbler.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	0	30	DEC-04

D2010.05 Showers* 1982

Time delay valves, institutional head, central mix valve. Instructor shower pressure balance mix valve.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	0	30	DEC-04

D2010.08 Drinking Fountains / Coolers*

Wall hung fiberglass in 1997 addition. Wall hung and semi recessed in 1982 original building. Non refrigerated.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	0	30	DEC-04

D2010.09 Other Plumbing Fixtures*

Three compartment sink in kitchen. Utilize chemicals for sterilization. Bubblers installed at 1997 classroom sinks. Dishwasher in staff room.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	0	0	DEC-04

D2020.01.01 Pipes and Tubes: Domestic Water*

Copper piping and fittings. Plastic distribution piping installed on drinking water distribution.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	0	40	DEC-04

D2020.01.02 Valves: Domestic Water

Non rising stem gate valves and ball valves.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	0	DEC-04

D2020.01.03 Piping Specialties (Backflow Preventors)* 1982

Backflow preventor not installed on make up line to heating boilers in 1982 mechanical room. No vacuum breakers installed on plumbing brass in science prep room, science room.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
3 - Marginal	0	0	DEC-04

Event: **Install backflow preventor on make up line to heating system and vacuum breakers on plumbing brass.**

Concern:

No backflow preventor installed on cold water make up line to heating system. No vacuum breakers installed on plumbing brass in Science Prep room, Science room.

Recommendation:

Install backflow preventor on make up line to heating system and vacuum breakers on plumbing brass.

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Code Upgrade	2005	\$1,728	High

Updated: February 28 2005

D2020.02.02 Plumbing Pumps: Domestic Water*

Domestic hot water in line recirculation pumps installed in original school and addition mechanical rooms.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	0	20	DEC-04

D2020.02.02 Plumbing Pumps: Domestic Water* 2003

Two (2) pressure booster pumps, bladder tanks upgraded in 2003. Provides domestic cold water supply pressure for water obtained from site well/cistern storage tank.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
N/A	0	20	DEC-04

D2020.02.04 Domestic Water Conditioning Equipment*

Ultraviolet and carbon filter installed for drinking water. Installed in 2003.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
6 - Excellent	0	0	DEC-04

D2020.02.06 Domestic Water Heaters* 1982

Two heaters installed in mechanical room 104. One heater replaced in 2001, A.O. Smith with damper in flue, 328,500 BTU/hr input, 65 gallon tank. Second heater is original, Rudd Rheem, 324,000 BTU/hr input.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
3 - Marginal	0	20	DEC-04

Event: **Replace twenty three (23) year old domestic hot water heater.**

Concern:

Domestic hot water heater life expectancy exceeded.

Recommendation:

Replace domestic hot water heater.

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2006	\$10,800	Medium

Updated: February 28 2005

D2020.02.06 Domestic Water Heaters* 1997

Installed in mechanical room 204. State heater, 75 gallon storage tank, 75,100 BTU/hr. input, complete with recirculation pump.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	0	20	DEC-04

D2020.03 Water Supply Insulation*: Domestic

Majority of domestic hot, cold and recirculation piping insulated. Some uninsulated piping at domestic hot water heaters and where pipe repairs have been made.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	0	0	DEC-04

D2030.01 Waste and Vent Piping*

Cast iron and copper.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	50	DEC-04

D2030.02 Waste Piping Specialties* 1982

Counter sinks in Science Room 113.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
3 - Marginal	0	50	DEC-04

Event: Install bottle traps.

Concern:

No bottle traps installed on counter sinks in Room 113.

Recommendation:

Install bottle traps.

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Operating Efficiency Upgrade	2005	\$1,080	High

Updated: February 28 2005

D2030.03 Waste Piping Equipment*

Two grinder submersible pumps installed in holding tank in mechanical room.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	0	0	DEC-04

D2040.01 Rain Water Drainage Piping Systems*

Roof drains discharge to grade.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	0	50	DEC-04

D2040.02.04 Roof Drains*

Cast iron and plastic domes, full open flow.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	0	40	DEC-04

D3010.02 Gas Supply Systems*

Gas distribution piping to heating boilers, domestic hot water heaters, direct fired kitchen make up unit, portable furnaces.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	0	50	DEC-04

D3020.01.01 Heating Boilers & Accessories: Steam*

Cast iron sectional boiler for humidification. Complete with pressure relief valve, water level control. Boiler not in operation.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
3 - Marginal	0	35	DEC-04

Event: **Conduct study to review alternate method of humidification.**

Concern:

Steam boiler requires daily blow down and chemical treatment monitoring. Maintenance costs high.

Recommendation:

Conduct study to review alternate method of humidification.

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Study	2005	\$3,240	Low

Updated: February 28 2005

D3020.01.03 Chimneys (&Comb. Air) : Steam Boilers*

Class B chimney.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	0	DEC-04

D3020.01.04 Water Treatment: Steam Boilers*

Chemical treatment and water softener installed.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	0	DEC-04

D3020.02.01 Heating Boilers and Accessories: H.W.* 1982

Two (2) natural draft coppertube Rudd/Rheem boilers, 1,600,000 BTU/hr input. Complete with pressure relief valve, low water cut off, flow switch.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	30	DEC-04

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

One (1) natural draft coppertube Raypak boiler, 1,125,000 BTU/hr input. Complete with pressure relief valve, low water cut off, flow switch, spark ignition.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	0	30	DEC-04

D3020.02.02 Chimneys (&Comb. Air): H.W. Boiler* 1982

Class B chimney. Evidence of down draft occurring.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	30	DEC-04

D3020.02.02 Chimneys (&Comb. Air): H.W. Boiler* 1997

Class B chimney. No fire stop at roof penetration.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	0	DEC-04

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

Chemical pot feeder installed in 1982 original building and 1997 addition mechanical rooms which allows addition of water treatment. Side stream filters installed.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	0	0	DEC-04

D3020.05 Auxiliary Equipment: Heat Generation*

Air cushion expansion tank.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	0	0	DEC-04

D3040.01.01 Air Handling Units: Air Distribution* 1982 AS-1

Provides ventilation air for music room, gymnasium, shower area. Air system located in mechanical room 204 consists of supply fan (6,420 l/s), return fan (4,735 l/s), minimum fresh air damper, motorized fresh, return, exhaust air dampers, heating coil, steam grid humidifier, 50 mm throw away filters, low velocity ductwork distribution, three (3) reheat coils.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	30	DEC-04

D3040.01.01 Air Handling Units: Air Distribution* 1982 AS-2

Provides ventilation air for library, support rooms, general office, staff lounge and associated offices. Air system located in mechanical room 104 consists of supply fan (2,500 l/s), return fan (2,400 l/s), minimum fresh air damper, motorized fresh, return, exhaust air dampers, heating coil, steam grid humidifier, 50 mm throw away filters, low velocity ductwork distribution, ceiling return air, two (2) reheat coils.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	30	DEC-04

D3040.01.01 Air Handling Units: Air Distribution* 1982 AS-3

Provides ventilation air for south and east classrooms. Air system located in mechanical room 104 consists of supply fan (3,400 l/s), return fan (2,400 l/s), minimum fresh air damper, motorized fresh, return, exhaust air dampers, heating coil, steam grid humidifier, 50 mm throw away filters, low velocity ductwork distribution, ceiling return air, three (3) reheat coils.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	30	DEC-04

D3040.01.01 Air Handling Units: Air Distribution* 1997

Air system for kitchen make up air is located on roof. Consists of combination fresh air hood and filter, motorized fresh air damper with end switch, direct fired burner, supply fan, low velocity ductwork distribution. Capacity 1,700 l/s.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	0	30	DEC-04

D3040.01.01 Air Handling Units: Air Distribution* 1997

Air system for addition located in mechanical room 204 consists of supply fan, return fan, minimum fresh air damper, motorized fresh, return, exhaust air dampers, glycol heating coil, water spray humidifier, throw away filters, low velocity ductwork distribution, corridor used for return air. Supply fan capacity 5,345 l/s, return fan capacity 3,539 l/s.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	0	30	DEC-04

D3040.01.02 Fans: Air Distribution*

Circulation fans installed in music room.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	0	0	DEC-04

D3040.01.03 Air Cleaning Devices:Air Distribution*

Air systems complete with throw away filters.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	0	DEC-04

D3040.01.04 Ducts: Air Distribution*

Each air system complete with low velocity supply air ductwork to diffusers or grilles.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	0	50	DEC-04

D3040.01.05 Duct Accessories: Air Distribution*

Balancing dampers provided in branch line ducts to air outlets. Fire dampers installed in fire rated walls.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	0	0	DEC-04

D3040.01.07 Air Outlets & Inlets:Air Distribution*

Air outlets vary as to type. Fixed pattern square diffusers, linear grilles, adjustable side wall grilles, fixed bar.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	0	50	DEC-04

D3040.02 Steam Distribution Systems: Piping/Pumps*

Low pressure steam piping to steam grid humidifiers. Condensate piped to drain.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	30	DEC-04

D3040.03.01 Hot Water Distribution Systems* 1982 Original Building

Two inline pumps circulate heated water via black iron piping to terminal heat transfer units.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	40	DEC-04

D3040.03.01 Hot Water Distribution Systems* 1997 Addition

Two inline pumps circulate heating water via black iron piping to terminal heat transfer equipment.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	0	0	DEC-04

D3040.04 Special Exhaust Systems

Kitchen range hood exhaust fan.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
6 - Excellent	0	30	DEC-04

D3040.04.01 Fans*: Exhaust

Delhi exhaust fans, ceiling, inline. Residential range hoods.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	0	30	DEC-04

D3040.04.03 Ducts*: Exhaust

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

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	0	0	DEC-04

D3040.04.04 Ducts Accessories*: Exhaust

Balancing dampers provided in branch line ducts. Fire dampers installed at duct/rated wall penetrations.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	0	0	DEC-04

D3040.04.05 Air Outlets and Inlets*: Exhaust

Exhaust grilles vary as to year of construction. Egg grate and linear bar installed.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	0	0	DEC-04

D3040.05 Heat Exchangers* 1997

Plate heat exchanger provides heated propylene glycol for classroom air system. Complete with inline circulation pump, expansion tank, chemical pot feeder, hydro filter.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	0	30	DEC-04

D3040.05 Heat Exchangers* 1998

Plate heat exchanger installed in 1982 original building mechanical room provides heated propylene glycol for classroom and office air systems. System complete with inline circulation pump, expansion tank, chemical pot feeder, hydro filter.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	0	30	DEC-04

D3050.01.01 Computer Room Air Conditioning Units* 2003

Gas fired packaged rooftop unit complete with heat recovery, economizer and DX cooling coil. Air system provides 8 l/s of outside air per person on year round basis. Supply air diffusers were blocked off due to cold draft. Found gas line isolation valve shut off. Maintenance will address item.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	0	30	DEC-04

D3050.02 Air Coils*

Duct mounted hot water coils installed in 1997 addition. Eight (8) duct mounted hot water installed in original building air systems.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	0	30	DEC-04

D3050.03 Humidifiers* 1982

Steam grid humidifiers installed in three (3) air systems. Not operational as steam boiler not in operation.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	25	DEC-04

D3050.03 Humidifiers* 1997

Evaporative pad humidifier. Shut down due to high maintenance costs. Pad removal very difficult.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
3 - Marginal	0	25	DEC-04

Event: Study alternate method of humidification.

Concern:

Evaporative pad humidifier. Shut down due to high maintenance costs. Pad removal very difficult. Alberta Infrastructure Standards and Guidelines for school facilities recommends humidification.

Recommendation:

Study alternate methods of humidification.

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Study	2005	\$2,160	Medium

Updated: February 28 2005

D3050.05.02 Fan Coil Units*

Hot water fan coil units (ceiling and wall) installed at building entrances.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	0	0	DEC-04

D3050.05.03 Finned Tube Radiation* 1982

Radiation element installed in radiation enclosure and within millwork along building perimeter.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	0	0	DEC-04

D3050.05.06 Unit Heaters*

Hot water unit heaters installed in 1982 original building emergency generator machine room. Vertical unit heater installed in 1997 mechanical room. Access difficult. Horizontal unit heater installed in 1982 mechanical room.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	0	0	DEC-04

D3050.05.08 Radiant Heating (Ceiling & Floor)* 1977

Ceiling radiant panels installed in 1997 addition.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
6 - Excellent	0	0	DEC-04

D3060.02.01 Electric and Electronic Controls*

Electric thermostats cycle entrance heater fan and mechanical unit heaters to maintain set point.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	30	DEC-04

D3060.02.02 Pneumatic Controls*

Duplex air compressor with air dryer provides control air for pneumatic control components in 1982 original school, 1997 and 2003 additions. Pneumatic damper motors installed on air systems. Pneumatic control valves on radiation. Day/night thermostats required control air pressure cycled via BMS.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	0	40	DEC-04

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

Siemens BMCS provides global control of mechanical systems. Provides scheduling, night set back.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	0	30	DEC-04

D3090 Other Special HVAC Systems and Equipment*

Emergency generator provided with motorized fresh air, relief air and exhaust air dampers. Diesel storage tank and fuel transfer pumps located in gym storage 142. Day tank located adjacent to generator.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
3 - Marginal	0	0	DEC-04

Event: Install fuel containment dyke and thimble at roof penetration.

Concern:

No fuel containment dyke for emergency generator day tank.
Thimble not installed at exhaust pipe/roof penetration.

Recommendation:

Install fuel containment dyke and thimble at roof penetration.

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Operating Efficiency Upgrade	2005	\$3,240	High

Updated: February 28 2005

D4030.01 Fire Extinguisher, Cabinets and Accessories*

ABC, pressurized water, 2-1/2 gallon pump tank fire extinguishers installed on wall hooks, in cabinets.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	0	30	DEC-04

D4090 Other Fire Protection Systems*

Kitchen range hood complete with dry chemical fire suppression system.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	0	0	DEC-04

D4090 Other Fire Protection Systems* 1982

Fire blanket installed in Room 113.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
6 - Excellent	0	0	DEC-04

S5 ELECTRICAL

D5010.01 Main Electrical Transformers*

1983 pad mounted Fortis transformer located south of the school. Transformer No. 2-194-004. Underground primary from utility pole south of the school, north of Graminia Road. Underground secondary from transformer to MDP.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	40	DEC-04

D5010.03 Main Electrical Switchboards (Main Distribution)*

MDP is a Westinghouse CDP, 1200 Amps, 120/208 Volt - 3 Phase - 4 Wire, installed in 1983. No TVSS, no further spaces for additional breakers. MDP located in Meter Room 109. Maximum demand read from demand meter 125kW (350 amps). There is a Siemens CDP in the adjacent storage room for additional breakers. CDP is rated 600 Amps, 120/208 Volt - 3 Phase - 4 Wire, installed in 1997.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	40	DEC-04

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

Westinghouse branch circuit panels, 120/208 Volt - 3 Phase - 4 Wire, 225A bussing, surface and flush, 42 circuits, located in 1983 sections. Some panels are full, some directories inaccurate or missing. Siemens branch circuit panels, 120/208 Volt - 3 Phase - 4 Wire, 225A bussing, surface and flush, 42 circuit, located in 1997 addition. The Computer Room panel has a TVSS integrated into branch circuit panel.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	25	DEC-04

D5010.07 Motor Control Centers (Motor Control)*

Siemens motor control centre located in Mechanical Room 204, multi-section, 400 Amp, 120/208 Volt - 3 Phase - 4 Wire, spaces available for additional starters. Installed in 1997.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	0	0	DEC-04

D5010.07.02 Motor Starters and Accessories*

Loose motor starters provided throughout the school. Westinghouse loose motor starters in Mechanical Room 104, installed in 1983, constant problems with contactors.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
3 - Marginal	0	0	DEC-04

Event: Replace Westinghouse loose starters.

Concern:

Constant maintenance problem.

Recommendation:

Replace motor starters with new motor starters.

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2006	\$5,400	Low

Updated: March 2 2005

D5020.01 Electrical Branch Wiring*

Branch circuit wiring in conduit system, some broken wiring devices and plates. Computer rooms utilize metal wiremold raceways.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	50	DEC-04

D5020.02.01 Lighting Accessories (Lighting Controls)*

GE low voltage system for Gymnasium and Corridor lighting control. Classrooms utilize line voltage switching.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	30	DEC-04

D5020.02.02.01 Interior Incandescent Fixtures*

Staff Room uses incandescent pot lights.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	30	DEC-04

D5020.02.02.02 Interior Florescent Fixtures*

Retrofit program in 2001, T8 lamps (735) and electronic ballasts (master/slave). Staff Offices, general office, library, computer rooms, science rooms, classrooms, corridors - 2X4, recessed, acrylic lenses. Home economics - 2X4, suspended, surface, acrylic lensed. Storage/mechanical/electrical rooms - striplights c/w wire guards.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	0	30	DEC-04

D5020.02.02.03 Interior Metal Halide Fixture*

Large Gym utilizes 350 watt metal halide, industrial, wire guarded fixtures. Small Gym has 350 watt metal halide, box style, industrial fixtures. Lighting upgraded in 2001.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	0	0	DEC-04

D5020.02.02.05 Other Interior Fixtures*

EXIT lighting units are polycarbonate, LED lamps, white body, red letters, powered from emergency distribution system.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	0	0	DEC-04

D5020.02.03 Emergency Lighting*

Selected fluorescent light fixtures on emergency panel EM.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	30	DEC-04

D5020.03.01.04 Exterior H.P. Sodium Fixtures*

Vandal resistant wall packs, 150W source, as older units fail, the new packs are used in replacement. Globe fixtures are used at main entrance, can not obtain replacement globes.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	30	DEC-04

D5020.03.04 Special Purpose Lighting*

In large Gym, spot lights are controlled from a dimmer panel. Dimmers are failing.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	0	DEC-04

D5030.01 Detection and Alarm Fire Alarm*

Mirtone 7532 FACP located in Main Vestibule, 24 active zones, 8 spares, hard-wired, 10" bell/strobes in 1997 section, 10" bells only in 1983 portion. System verified by Tyco-Grinnell. No passive graphic. No smoke detector in Main Server Room and in corridors where coats are present. Adjacent FACP is old Simplex FACP being used as a termination panel.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
3 - Marginal	0	25	DEC-04

Event: **Investigate existing fire alarm system to check code compliance.**

Recommendation:

Provide a fire alarm system analysis.

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Study	2005	\$5,400	High

Updated: March 2 2005

Event: **Replace fire alarm system.**

Recommendation:

Provide new fire alarm system.

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Code Upgrade	2006	\$43,200	High

Updated: March 2 2005

D5030.02.02 Intrusion Detection*

DSC PC 3000 intrusion alarm control panel in general office storage room 122, monitored by Parkland School District. Passive infrared detectors throughout the school. Control pane, is an older version, cannot remote access the system.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	25	DEC-04

D5030.02.04 Video Surveillance*

Mitec video surveillance system, monitor, multiplexer in General Office Storage. Time lapse VCR is broken and being repaired. 4 camera system.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	25	DEC-04

D5030.03 Clock and Program Systems*

Simplex master program clock 2350 in General Office controls synchronous clocks throughout the corridors of the school. Failed clocks are being replaced by battery clocks.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	25	DEC-04

D5030.04.01 Telephone Systems*

Panasonic D1232 telephone system located in Generator Room 102. 25 pair main telephone cable into school. System is operating satisfactorily. Telephone sets are in Staff Areas.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	25	DEC-04

D5030.04.02 Paging Systems*

Paging system is via Bogen Multicom 2000 system. Class change signals are from Bogen system.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	25	DEC-04

D5030.04.04 Data Systems*

Main Server Room located in Room 114. A small data hub located in Office Storage 126. Category 5 & 5E systems.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	0	DEC-04

D5030.05 Public Address and Music Systems*

1997, Bogen MultiCom 2000 sound & intercommunication system, wall mounted in Generator Room 102. DTMF handsets in classrooms with outside line access, recessed speakers in classrooms and corridors. System is operating satisfactorily. Head-end equipment is located in a cold space and it may be an issue.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	0	DEC-04

D5090.02 Packaged Engine Generator Systems (Emergency Power System)*

A CONDEC, 25kVA / 30kW, 120/208 Volt - 3 Phase - 4 Wire, diesel fueled, gen-set located in the Generator Room 102. It has 107 running hours, Schmidtec transfer switch controls the operation of the unit. Emergency panels serve exit lights, selected light fixtures, fire alarm, sound, telephone and security system. Gen-set is original.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	35	DEC-04

S6 EQUIPMENT, FURNISHINGS AND SPECIAL CONSTRUCTION

E1090.03 Food Service Equipment*

Commercial kitchen for hot lunch program, equipped with stainless steel food preparation tables and dish wash-up sinks, gas range and oven, electric food warmer, upright fridge / freezer, chest freezer, reach-in cooler and microwave.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	0	0	DEC-04

E1090.04 Residential Equipment*

Domestic grade microwave and dishwasher in staff lounge. Commercial coffee / hot chocolate dispenser.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	0	DEC-04

E1090.07 Athletic, Recreational, and Therapeutic Equipment*

Basketball hoops with glass backstops to main court in gymnasium. Sidewall backstops have painted wooden backstops. Steel fan shaped basketball backstops in multi-purpose room in 1997 addition.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	0	0	DEC-04

E2010.02.05 Educational Facility Casework*

Combination of plastic laminate finished base cabinets and upper storage cabinets and painted base cabinets with plastic laminate finished counter tops. Open shelving.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
3 - Marginal	0	0	DEC-04

Event: Replace plastic laminate edging to counters

Concern:

Considerable number of counters have damaged plastic laminate edges, making them difficult to keep clean and potentially a safety hazard to students due to loose and broken edging.

Recommendation:

Replace broken edging with new plastic laminate.

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Repair	2006	\$10,800	Low

Updated: March 4 2005



E2010.02.07 Kitchen Casework*

Plastic laminate finished base cabinets.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	0	0	DEC-04

E2010.02.08 Laboratory Casework*

Plastic laminate finished base cabinets and upper cabinets in science rooms.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	0	DEC-04

E2010.02.09 Library Casework*

Combination of wood and steel adjustable shelving units. Custom library charge desk.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	0	DEC-04

E2010.03.01 Blinds*

Vertical blinds throughout administration area, elsewhere horizontal venetian blinds.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	0	DEC-04

E2020 Moveable Furnishings*

Variety of teachers desks, office furniture, student desks and chairs, throughout.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	0	DEC-04

F1010.02.04 Portable and Mobile Buildings

1981 - two groups of four portables each. Frame construction. Resilient tile and sheet flooring. Painted gypsum board walls and painted gypsum board ceilings. Aluminum windows. Exterior wood siding.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
3 - Marginal	0	0	DEC-04

Event: **Replace deteriorated wood siding with low maintenance siding.**

Concern:

Wood siding has deteriorated and rotted in some locations such as window penetrations and downspout locations.

Recommendation:

Replace deteriorated wood siding with low maintenance metal siding. Approximately 260 sq.m.

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Failure Replacement	2006	\$23,760	Low

Updated: March 4 2005

F1010.02.04 Portable and Mobile Buildings

1985 - single portable with corridor. Frame construction. Resilient tile and sheet flooring. Painted gypsum board walls and ceilings. Aluminum windows. Exterior wood siding.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
3 - Marginal	0	0	DEC-04

Event: **Replace deteriorated wood siding with low maintenance siding.**

Concern:

Wood siding is deteriorated and rotted at window penetrations and downspout locations.

Recommendation:

Replace deteriorated wood siding with low maintenance metal siding. Approximately 45 sq.m.

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Failure Replacement	2006	\$4,320	Low

Updated: March 4 2005

F1010.02.04 Portable and Mobile Buildings

1987 - single portable. Frame construction. Resilient tile floor. Painted gypsum board walls and ceiling. Aluminum windows. Exterior wooden siding.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
3 - Marginal	0	0	DEC-04

Event: **Replace deteriorated wood siding with low maintenance siding.**

Concern:

Wood siding has deteriorated and rotted at window penetrations and downspout locations.

Recommendation:

Replace deteriorated wood siding with low maintenance metal siding. Approximately 45 sq.m.

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Failure Replacement	2006	\$4,320	Low

Updated: March 4 2005

F1010.02.04 Portable and Mobile Buildings

1992 - single portable. Frame construction. Resilient tile flooring. Painted gypsum board to walls and ceilings. Aluminum windows. Metal siding to exterior.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	0	DEC-04

F1010.02.04 Portable and Mobile Buildings

1975 - group of two washroom portables. Frame construction. Sheet flooring, painted gypsum board walls and painted gypsum board ceilings. Metal toilet partitions. Aluminum windows. Wood exterior siding.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
3 - Marginal	0	0	DEC-04

Event: Wood siding is deteriorated and in need of replacement with a low-maintenance siding.

Concern:

Wood siding is deteriorated and in need of replacement. Localized areas of rot at window penetrations and downspout locations.

Recommendation:

Replace with low maintenance metal siding. Approximately 90 sq.m.

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Failure Replacement	2006	\$8,640	Low

Updated: March 4 2005



F1010.02.04 Portable and Mobile Buildings

1993 - group of three portables. Frame construction. Resilient tile and sheet flooring. Painted gypsum board walls and ceilings. Aluminum windows. Exterior siding to exterior.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	0	DEC-04

F2020.01 Asbestos*

Unknown. Recommend that a hazardous materials assessment be carried out.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
N/A	0	0	DEC-04

Event: Conduct hazardous materials audit

Concern:

Presence of hazardous materials is unknown

Recommendation:

Conduct hazardous materials audit

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Hazardous Material Management Upgrade	2005	\$3,240	Low

Updated: March 4 2005

Facility Details	
Building Name:	Graminia School
Address:	
Location:	Spruce Grove
Building Id:	S4051
Gross Area (sq. m):	0.00
Replacement Cost:	\$0
Construction Year:	0

Evaluation Details	
Evaluation Company:	
Evaluation Date:	
Evaluator Name:	

Total Maintenance Events Next 5 years:	\$1,080
5 year Facility Condition Index (FCI):	0%

General Summary:

The sports fields, bus drop-off lane and parking lot are in goods condition. An enlarged parking lot is required with asphalt surface.

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

G2010.02.02 Flexible Pavement Roadway (Asphalt)*

Asphalt surfaced access road and bus drop-off lane.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	0	

G2020.02.02 Flexible Paving Parking Lots(Asphalt)*

Asphalt surfaced parking lot

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	0	

Event: Provide asphalt surfacing to parking lot to provide for additional required parking.

Concern:

Overflow parking is on grassed surface

Recommendation:

Provide asphalt surface to overflow parking. Approximately 2000 sq.m.

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Program Functional Upgrade	2006	\$97,200	Low

Updated: February 25 2005

G2020.05 Parking Lot Curbs and Gutters*

Curb at drop-off lane and parking lot.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	0	

G2020.06.03 Parking Lot Signs*

Metal signs on steel angle uprights.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	0	

G2020.06.04 Pavement Markings*

Painted stall lines

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	0	

G2030.04 Rigid Pedestrian Pavement (Concrete)*

Concrete sidewalk to the west and south faces of the building, between the car park and the drop-off lane and the school.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	0	

G2030.06 Exterior Steps and Ramps*

Wood steps and ramps from portables.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	0	

G2040.02 Fences and Gates*

Chain link fence to south of property and around the septic field pump house. Farmers port and wire fence to remainder of site.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	0	

G2040.03 Athletic and Recreational Surfaces*

2 ball diamonds with chain link backstops. 6 soccer fields. Play equipment. Adjacent outdoor hockey rink operated by Community League.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	0	

G2040.05 Site and Street Furnishings*

Concrete site furnishings (tables) at main entrance.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	0	

G2040.06 Exterior Signs*

School sign , individual cast aluminum letters on fascia at main entrance. Site and parking / drop-off signage.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	0	0	

G2040.08 Flagpoles*

Single flagpole located at main entrance.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	0	

G2050.04 Lawns and Grasses*

Site and playing fields are grassed.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	0	

G2050.05 Trees, Plants and Ground Covers*

Landscaped area adjacent to the south and west faces of the building.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	0	

G3010.02 Site Domestic Water Distribution*

Well water and 45,000 litre storage tank. In 2003 two submersible pumps with necessary floats and controls were installed in the tank in the pump house.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	0	0	

G3010.03 Site Fire Protection Water Distribution*

88,000 litre tank for fire fighting installed in 1997.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
3 - Marginal	0	0	

Event: Install new fire hydrant.

Concern:

Existing fire hydrant is inoperative.

Recommendation:

Install new fire hydrant.

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Operating Efficiency Upgrade	2006	\$19,440	High

Updated: February 25 2005

G3020.01 Sanitary Sewage Collection*

Piped sewage system to pump house for septic field.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	0	

G3020.02 Septic Systems*

Septic field

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	0	

G3020.03 Sanitary Sewage Equipment*

Pump and grinder system to feed septic field

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	0	

G3030.01 Storm Water Collection*

Downspouts discharge to splashpads at surface.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	0	0	

G3060.01 Gas Distribution*

Natural gas to internal meter.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	0	0	

G4010.02 Electrical Power Distribution Lines*

Underground primary and secondary power lines. Telus service is underground from pole west of site.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	0	

G4010.04 Car Plugs-ins*

Car parking receptacles and in I-beam posts. Receptacles are timeclock controlled and temperature controlled. Equipment located in existing exterior enclosure in staff parking area. 56 stalls, 2x14 duplex receptacles. There are broken receptacles and device cover plates.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
3 - Marginal	0	0	

Event: Replace coverplates and plug-ins

Concern:

Cover plates are broken

Recommendation:

Replace broken cover plates

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Repair	2006	\$1,080	Low

Updated: February 25 2005

G4020.01 Area Lighting*

HPS wall packs are provided for area lighting. Pole mounted luminaires are provided in staff parking, one pole light in bus lane. There are areas where there is poor lighting, south of the school, and the bus lane.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
3 - Marginal	0	30	

Event: Add wall packs and pole mounted lights.

Concern:

Poor light levels create potential safety hazard and prone to vandalism.

Recommendation:

Add wall packs and light poles.

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Program Functional Upgrade	2006	\$5,400	Medium

Updated: February 25 2005

S8 FUNCTIONAL ASSESSMENT**K40 Current Code Issues**

No cose issues identified.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	0	0	DEC-04

K4010.01 Barrier Free Route: Parking to Entrance

Barrier free access to main entrance

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	0	0	DEC-04

K4010.02 Barrier Free Entrances

Power assisted entrance door.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	0	0	DEC-04

K4010.03 Barrier Free Interior Circulation

Barrier free access throughout.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	0	0	DEC-04

K4010.04 Barrier Free Washrooms

Barrier free washrooms provided.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	0	0	DEC-04