

RECAPP Facility Evaluation Report

Wetaskiwin Regional Div #11



Norwood Elementary School

B4250A
Wetaskiwin

Facility Details

Building Name: Norwood Elementary School
Address: 5505 - 44 Street
Location: Wetaskiwin

Building Id: B4250A
Gross Area (sq. m): 0.00
Replacement Cost: \$5,552,510
Construction Year: 0

Evaluation Details

Evaluation Company: Najfeldt Architect
Evaluation Date: April 1 1999
Evaluator Name: Janusz Najfeldt

Total Maintenance Events Next 5 years: **\$353,754**
5 year Facility Condition Index (FCI): **6.37%**

General Summary:

The original single storey 2370m2 school (wood frame construction, flat roof, brick and stucco panel exterior with some metal cladding) was constructed in 1981.

Single storey 725m2 total portable units (wood frame construction, flat roof, brick and stucco exterior) were added in 1992.

The current total gross area of the building is 3095m2.

The student capacity is 375.

There are 13 portables in a single cluster of rooms (725 SM.) including access corridors

- 5 classrooms (79.7 SM. each),
- 1 special needs classroom (TMH/DMH Program Classroom) with a total area of 145.6 SM. including w.c., storage and therapy room
- 2 Counseling Rooms (8.45 SM. each) and
- 1 Mechanical Room (12.25 SM.)

The building is in good overall condition.

Structural Summary:

Floor structure is concrete slab on grade on reinforced concrete grade beams and piles.

Wall structure is wood frame load bearing walls throughout except concrete masonry perimeter gymnasium walls.

Roof structure consists of metal deck on OWSJ over the gymnasium and wood joists on glulam beams over the remainder.

Differential settlement at junction between exterior frame walls and interior walls has been recorded. Some cracks above doorway openings at load bearing interior walls also reported.

Envelope Summary:

Exterior walls are conventional wood framing with brick veneer and metal/wood fascias. Some original cedar clad fascias on the west elevation have been replaced with pre-finished metal cladding as recommended in a 1999-2000 facility audit. Original cedar soffits and fascias (on east side of building) remain. Portables are clad with a combination of brick veneer (base) and cement stucco panels with metal fascias.

Windows are anodized aluminum throughout including all portables. Operable windows are provided in the portables only.

Exterior doors are insulated hollow metal in pressed steel frames.

The original BUR roof system has been replaced with a 2 ply SBS (Modified) system except for the low roof area east of the gymnasium.

Roof leaks were reported at the junction of the low roof and gymnasium exterior wall.

The building envelope is in good condition.

Interior Summary:

Floors in classrooms are generally a combination of original and replacement VCT. Corridor floors are finished in quarry tile (1981 and 1992). The Administration Suite, Library, Computer Lab and Classrooms 6&7 are carpeted.

Interior partitions are painted exposed concrete masonry in the gymnasium area or painted GWB. Ceilings are principally acoustic tile on standard t-bar suspension with some GWB ceilings in support areas.

Investigation recommended to pin point source of movement cracks evident throughout the building. Some carpets were replace in 2000. Exterior doors and frames have been painted since 2000. An acoustic spray was applied to the underside of the gymnasium metal deck and the supporting OWSJ painted in 2004.

Interior finishes are in acceptable condition.

Mechanical Summary:

The mechanical installation generally appears in acceptable condition. Building is heated with hot water. Classrooms

are heated with forced air from reheat coils in ductwork. Two built-up air handling units located in mezzanine mechanical room provide heating and ventilation to school. New building EMS system is required and existing pneumatic thermostats need to be replaced with new units.

Electrical Summary:

Electrical installation generally appears in acceptable condition. Main power service is 120/208V/3PH/4W with 600 amp fused main disconnect switch. Fluorescent lighting in school is hard metric size with T12 lamps. Fire alarm system is old and needs to be replaced. DC type emergency lighting system.

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*

1981- Reinforced concrete piles and grade beams throughout the facility. Differential settlement at junction between exterior frame walls and interior walls have been recorded.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
3 - Marginal	0	100	FEB-06

Event: Investigate differential settlement.

Concern:

Differential settlement at junction of exterior walls and interior partitions has been recorded resulting in separation of partitions at exterior walls or cracks in GWB in many locations. Some cracks at GWB sills at exterior windows were noted but separation of interior partitions at exterior walls not in evidence.

Recommendation:

Investigate differential settlement at junction of exterior walls and interior partitions. Also review reported cracks at doorways at interior partitions.

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Study	2006	\$6,840	Low

Updated: DEC-06

A1030 Slab on Grade*

1981-Reinforced concrete slab on grade throughout.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	100	FEB-06

B1010.05 Mezzanine Construction*

Cast-in-place reinforced concrete mechanical mezzanine slab supported on concrete masonry interior partitions adjacent gymnasium high roof area.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	100	FEB-06

B1020.01 Roof Structural Frame*

1981- Conventional wood framing on glulam beams at low roof. Exposed metal deck on OWSJ for long spans at gymnasium.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	100	FEB-06

B1020.02 Structural Interior Walls Supporting Roofs

1981- Concrete masonry load bearing interior partitions at gymnasium and mechanical room. Load bearing wood frame interior partitions throughout.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	0	FEB-06

S2 ENVELOPE

B2010.01.02.01 Brick Masonry: Ext. Wall Skin*

1981-Original brick veneer at all elevations. Some minor damage to bricks noted near southeast gymnasium exit and south facade at Administrative Suite.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	75	FEB-06

B2010.01.06.03 Metal Siding**

Bulk of original 1981 cedar siding replaced with new pre-finished metal cladding in 2003 except for some areas at east side of school.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	0	40	FEB-06

B2010.01.06.04 Wood Siding**

1981- Original stained cedar siding at fascias where not replaced with metal cladding.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
2 - Poor	0	40	FEB-06

Event: Replace existing wood cladding.**Concern:**

Original cedar siding at fascias on east side of building damaged and requires stain.

Recommendation:

Replace existing wood cladding with new pre-finished metal cladding at fascias at east side of building (approximately 40m²).

Consequences of Deferral:

Cedar siding will continue to deteriorate. Potential for water damage to exterior envelope.

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Failure Replacement	2006	\$13,680	Medium

Updated: DEC-06



B2010.01.11 Joint Sealers (caulking): Ext. Wall**

1981- Sealant around all aluminum exterior windows and doors.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
2 - Poor	0	15	FEB-06

Event: Recaulk all aluminum window sills and jambs.**Concern:**

Caulking at existing aluminum window sills and window jambs has failed.

Recommendation:

Remove existing caulking at all existing aluminum windows and replace with new caulking appropriate for substrate.

Consequences of Deferral:

Water and outside air infiltration.

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Failure Replacement	2006	\$1,710	Low

Updated: DEC-06

**B2010.01.13 Paints (& Stains): Exterior Wall****

1981- Original stained cedar siding at fascias where not replaced with metal cladding.

Original cedar siding at fascias on east side of building damaged and requires stain. Refer to B2010.01.06.04 Wood Siding.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
3 - Marginal	0	15	JUN-06

B2010.02.05 Wood Framing*: Ext. Wall Const.

1981- Conventional wood framing at exterior wall on reinforced concrete grade beams throughout.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	100	FEB-06

B2010.06 Exterior Louvers, Grilles, and Screens*

1981- Original painted metal louvers at Mechanical Room.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
3 - Marginal	0	20	FEB-06

Event: Repaint exterior mechanical louvers.**Concern:**

Paint peeling at metal mechanical louvers at Mechanical Mezzanine.

Recommendation:

Strip existing paint at existing mechanical louvers on east and west side of Mechanical Mezzanine and repaint with appropriate high quality paint.

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Failure Replacement	2006	\$1,368	Medium

Updated: DEC-06

B2010.09 Exterior Soffits*

1981- Original cedar soffits throughout at fascias above windows. Although replacement recommended in 2000 wood soffits performing reasonably well.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	20	FEB-06

B2020.01.01.02 Aluminum Windows (Glass & Frame)**

1981-Original anodized aluminum windows c/w integral horizontal blinds throughout. Operable vents provided in portables classrooms but not within original school.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
3 - Marginal	0	35	FEB-06

Event: Provide new aluminum operable vents in existing aluminum frames.

Concern:

No operable windows throughout original school. Identified as significant deficiency by staff.

Recommendation:

Provide new aluminum awning type operable vents complete with new hardware in existing aluminum frames at all classrooms and Administrative Suite (approximately 25 units @ 0.6m²)

Consequences of Deferral:

Poor indoor air quality. Lack of ventilation.

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Indoor Air Quality Upgrade	2006	\$19,380	Medium

Updated: NOV-06

B2030.01.02 Steel-Framed Storefronts**

1981- Insulated hollow metal doors in pressed steel frames throughout.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	15	FEB-06

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

1981- Original BUR roof system at low roof adjacent gymnasium over stage area. Balance of roof replaced with new 2 ply SBS (Modified) roof system since 2000.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
3 - Marginal	0	25	JUN-06

Event: Replace original BUR roof.**Concern:**

Original BUR roof replaced with new 2 ply SBS throughout except approximately 100m² adjacent gymnasium over stage area.

Recommendation:

Replace original BUR roof with new SBS (Modified) roof system including metal flashing at low roof adjacent gymnasium (approximately 100m²).

Consequences of Deferral:

Roof will fail similar to low roof area at west side of gymnasium before replacement.



<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Failure Replacement	2006	\$12,540	High

Updated: DEC-06

B3010.04.04 Modified Bituminous Membrane Roofing (SBS)**

New Modified Bituminous Membrane Roofing throughout except protables and low roof area above stage.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	0	25	FEB-06

B3010.08.02 Metal Gutters and Downspouts**

1981-Prefinished metal gutters and metal RWL at high gym roof discharge on to low roof area at east side of gymnasium.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	30	FEB-06

S3 INTERIOR

C1010.01 Interior Fixed Partitions*

1981- Conventional wood frame GWB clad load bearing and non-load bearing partitions throughout. Some settlement cracks reported at junction of exterior walls and at interior doorways. Refer to Item A1010 Standard Foundations. Load bearing concrete masonry partitions at gymnasium and mechanical mezzanine.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	50	FEB-06

C1010.02 Interior Demountable Partitions*

Some interior demountable partitions at west side classrooms with vinyl clad GWB and PVC battens and base.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	30	FEB-06

C1010.03 Interior Operable Folding Panel Partitions**

New folding (sectional) partition with sound gasket installed at stage/gymnasium in 2005.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	0	30	FEB-06

C1010.05 Interior Windows*

Georgian wired glass and tempered glass set in pressed steel frames at door sidelights and interior windows.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	40	FEB-06

C1020.01 Interior Swinging Doors**

Painted solid core wood doors and hollow metal doors (at fire rated partitions) complete with pressed steel frames throughout the building. Some labeled SCW doors. Original finish hardware with knob locksets and passage sets.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
3 - Marginal	0	50	FEB-06

Event: Install lever style latchsets.

Concern:

Current doors fitted with knob style latchsets which limit barrier free access.

Recommendation:

Install lever style latchsets on approximately 44 doors.

Consequences of Deferral:

Limited barrier free access.

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Barrier Free Access Upgrade	2006	\$16,644	Low

Updated: FEB-06

C1020.03 Interior Fire Doors*

Labeled fire rated solid core wood doors or hollow metal doors in fire rated ULC labeled pressed steel frames.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	50	FEB-06

C1020.04 Interior Sliding and Folding Doors*

1981-Painted SCWD sliding doors at Administration Suite storage and corridor storage adjacent Library.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	25	FEB-06

C1030.01 Visual Display Boards**

Chalkboards, whiteboards and tackboards c/w map rails located throughout the school.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	10	FEB-06

C1030.02 Fabricated Compartments(Toilets/Showers)**

1981-Floor mounted metal toilet partitions at student washrooms (3 compartments at boy's washroom and 6 compartments at girl's washroom) and staff washrooms (single compartments at both). Some rust noted at base partitions in boys washroom but replacement not required.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	20	FEB-06

C1030.08 Interior Identifying Devices*

PVC door sign plates c/w plastic raised lettering.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	10	FEB-06

C1030.10 Lockers**

1981- 62 floor mounted single tier metal lockers at corridors adjacent Library.
1992- 68 two tier floor mounted metal lockers at portables.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	30	FEB-06

C1030.12 Storage Shelving*

19mm melamine shelving at Storage Room and storage closets.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	20	FEB-06

C1030.14 Toilet, Bath, and Laundry Accessories*

1981-Institutional grade mirrors, soap dispensers, paper towel dispensers and toilet tissue holders in student and staff washrooms.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
3 - Marginal	0	20	FEB-06

Event: Replace wall mounted mirrors.**Concern:**

Oxidization apparent at mirrored finish.

Recommendation:

Replace wall mounted mirrors in student and staff washrooms (total of 6 units 457w x 610h stainless steel channel frame with polished 5mm float glass)

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Failure Replacement	2006	\$1,368	Medium

Updated: DEC-06

**C2010 Stair Construction***

1981- painted steel stair to mechanical mezzanine c/w metal pans and steel channel stringers.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	0	100	FEB-06

C2020.08 Stair Railings and Balustrades*

1981- Painted steel pipe handrail and guardrail at mechanical mezzanine.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
3 - Marginal	0	50	FEB-06

Event: Modify existing mechanical mezzanine guardrail.**Concern:**

Height and construction of existing guardrail does not conform to ABC 1997. ABC requires that guardrails be 1070mm high and openings be limited to 100mm.

Recommendation:

Add additional vertical steel rails between existing horizontal rails at 100mm o.c. and add horizontal rail above existing top rail to 1070mm high (approximately 5500mm). Re-paint guardrail.

Consequences of Deferral:

Potential hazard.

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Code Upgrade	2006	\$4,104	Low

Updated: DEC-06



C3010.04 Gypsum Board Wall Finishes*

1981-Gypsum wall board finish on conventional wood framing throughout. Some settlement cracks reported at interior door ways.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	40	FEB-06

C3010.06 Tile Wall Finishes**

1981-Ceramic wall tile (at urinals) and backsplash at student washrooms and staff washrooms.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
3 - Marginal	0	50	FEB-06

Event: Replace tile backsplashes.

Concern:

1981-Ceramic wall tile backsplashes at student washrooms in poor condition. Backsplash in student washrooms to be replaced with vanities. Refer to E2010.02.99 Other Casework.

Recommendation:

Replace ceramic tile backsplash as required in conjunction with replacement of plastic laminate cald vanities.

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Failure Replacement	2006	\$20,000	Low

Updated: NOV-06

C3010.11 Interior Wall Painting**

All interior wall surfaces are painted. Gymnasium walls repainted in 2004. Library and student washrooms will be painted in 2006 as part of scheduled maintenance.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	0	5	FEB-06

C3020.01 Concrete Floor Finishes (Paint)*

Mechanical mezzanine concrete floor slab and curbs painted.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	75	FEB-06

C3020.02 Tile Floor Finishes**

1981- Quarry tile in corridors and student washrooms.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	30	FEB-06

C3020.04 Wood Flooring**

Sprung wood gym flooring in gymnasium. Wood floor re-coated and lines touched up in 2005.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	0	25	FEB-06

C3020.07 Resilient Flooring**

1981- VCT in Science Classroom. Sheet flooring in staff washrooms. Replacement of resilient flooring in staff washrooms recommended in 2000.

2003/2004- New VCT flooring in classrooms.

2005- New VCT flooring at stage.

2006- New sheet flooring at small (single fixture) boy's and girl's washrooms.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
3 - Marginal	0	20	FEB-06

Event: Replace original 1981 resilient flooring.**Concern:**

Original VCT in Science Classroom acceptable but will require replacement in next five years.

Recommendation:

Replace original resilient flooring and/or VCT in the following areas: Science Classroom (98m²).

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Failure Replacement	2007	\$4,446	Low

Updated: DEC-06

C3020.08 Carpet Flooring**

1981- Original carpet in Classrooms 6 and 7.

2003- New carpet installed in library, computer lab, administrative suite and access ramp to stage area.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
3 - Marginal	0	10	FEB-06

Event: Replace original carpet.**Concern:**

Original carpet in Classrooms 6 and 7 worn.

Recommendation:

Replace carpet in Classrooms 6 and 7 with new VCT flooring (approximately 140m²).

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Failure Replacement	2006	\$11,628	Medium

Updated: DEC-06

C3030.04 Gypsum Board Ceiling Finishes*

1981- Gypsum board ceiling finish in service rooms.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	50	FEB-06

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

Acoustic panel ceilings on t-bar suspension throughout classrooms, administrative suite and public corridors. Some water damaged tiles adjacent gymnasium to be replaced as part of regular maintenance.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	25	FEB-06

C3030.07 Interior Ceiling Painting**

1981- GWB ceilings are painted.

2000- original paint at exposed metal roof deck and OWSJ at gymnasium ceiling power brushed, stripped off and deck primed. Acoustic spray fibre applied to underside of metal deck. Open web steel joists repainted.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	10	JUN-06

S4 MECHANICAL

D2010.01 Water Closets**

Mostly floor mounted water closets with flush valves, floor mounted tank type water closets in staff room.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	30	FEB-06

D2010.02 Urinals**

Floor mounted urinals with flush valves.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	30	FEB-06

D2010.03 Lavatories**

Recess enameled steel lavatories in washroom with 101 mm taps, wall hung china lavatories in staff room.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	30	JUN-06

D2010.04 Sinks**

Floor mounted janitor sink, stainless steel sink in staff room, and some stainless steel sinks in corridors fitted with bubbler drinking fountain

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	30	FEB-06

D2010.05 Showers**

Wall mounted shower in gym change rooms complete with metered shower valve and mixing valve located in PE office.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	30	FEB-06

D2010.08 Drinking Fountains / Coolers**

China wall hung drinking fountains.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	30	FEB-06

D2020.01.01 Pipes and Tubes: Domestic Water*

Appears to be copper water piping.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	40	FEB-06

D2020.01.03 Piping Specialties (Backflow Preventors)**

Backflow preventor provided on main domestic water service.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	30	FEB-06

D2020.02.02 Plumbing Pumps: Domestic Water**

B&G hot water recirculation pump.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	20	FEB-06

D2020.02.04 Domestic Water Conditioning Equipment**

Novatec water softener provided to water makeup to steam boiler.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	10	FEB-06

D2020.02.06 Domestic Water Heaters**

Two State 58.5 MBH input 50 gal hot water heaters, new in 2004.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	0	20	FEB-06

D2020.03 Water Supply Insulation*: Domestic

Fiberglass pipe insulation on hot and cold water lines.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	30	FEB-06

D2030.01 Waste and Vent Piping*

Metallic piping.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	50	FEB-06

D2040.01 Rain Water Drainage Piping Systems*

Metallic piping.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	50	FEB-06

D2040.02.04 Roof Drains**

Dome type roof drains with at least one roof drain installed per roof area.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	40	FEB-06

D3010.02 Gas Supply Systems*

Schedule 40 steel gas distribution piping.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	50	FEB-06

D3020.01.01 Heating Boilers & Accessories: Steam**

Weil McLain 450 MBH input steam boiler providing steam for humidification to air handling units. Boiler installation includes condensate return system, water makeup with backflow preventors, and operating safety controls.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	35	FEB-06

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

Galvanized steel chimney to roof.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	35	FEB-06

D3020.01.04 Water Treatment: Steam Boilers*

Chemical treatment provided to boiler.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	35	FEB-06

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

Two Rheem 835.2 MBH copper tube hot water boilers complete with circulating pumps, and water makeup with PRV and backflow preventor.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	30	FEB-06

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

Galvanized steel chimney to roof.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	30	FEB-06

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

Boiler heating system treated with SAI chemicals.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	30	FEB-06

D3040.01.01 Air Handling Units: Air Distribution**

Two built-up air handling units located in mezzanine mechanical room, each with a mixing section, filter section, and heating coil. One air handling unit serves gymnasium and second serves building.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	30	FEB-06

D3040.01.02 Fans: Air Distribution*

Axial type Trane fans for return air duty to air handling units.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	30	FEB-06

D3040.01.04 Ducts: Air Distribution*

Galvanized steel ductwork installed in ceiling spaces.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	50	FEB-06

D3040.01.07 Air Outlets & Inlets:Air Distribution*

Slot type ceiling supply diffusers in most rooms. Return air grilles also in most rooms.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	30	FEB-06

D3040.02 Steam Distribution Systems: Piping/Pumps**

Schedule 40 steel piping.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	30	FEB-06

D3040.03.01 Hot Water Distribution Systems**

Mostly schedule 40 steel piping and some copper piping.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	40	FEB-06

D3040.04.01 Fans: Exhaust**

Approximately five roof mounted cabinet type exhaust fans providing service to washrooms.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	30	FEB-06

D3040.04.03 Ducts: Exhaust*

Galvanized steel ductwork extending from fans to grilles.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	0	FEB-06

D3040.04.05 Air Outlets and Inlets: Exhaust*

Ceiling mounted exhaust grilles.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	0	FEB-06

D3050.01.01 Computer Room Air Conditioning Units**

Computer room is an interior classroom and does not have air conditioning. Adjacent server room also has no air conditioning.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
3 - Marginal	0	30	FEB-06

Event: Provide air conditioning system to computer room.**Concern:**

Existing computer room is an interior zone and overheats during most times.

Recommendation:

Provide dedicated air conditioning system to room complete with distribution ductwork and diffusers.

Consequences of Deferral:

Classroom will continue to overheat.

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Operating Efficiency Upgrade	2006	\$56,999	High

Updated: FEB-06

Event: Provide air conditioning unit to server room.**Concern:**

Server room presently has minimal ventilation and is overheating.

Recommendation:

Provide dedicated cooling unit to server room.

Consequences of Deferral:

Equipment in room could fail from the excess heat.

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Operating Efficiency Upgrade	2006	\$22,800	High

Updated: FEB-06

D3050.02 Air Coils**

Reheat coils provided for service to each classroom and common area.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	30	FEB-06

D3050.03 Humidifiers**

Steam humidifier grid in two air handling units with steam provide from steam boiler.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	25	FEB-06

D3050.05.02 Fan Coil Units**

Fan coil units located in entrance vestibules.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	30	FEB-06

D3050.05.03 Finned Tube Radiation**

Finned tube radiation in office areas and corridors.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	40	FEB-06

D3050.05.06 Unit Heaters**

Hot water unit heater in storage room and mechanical room.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	30	FEB-06

D3060.02.02 Pneumatic Controls**

Pneumatic thermostats and heating zone valves.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
2 - Poor	0	40	FEB-06

Event: Replace pneumatic thermostats.**Concern:**

Existing pneumatic thermostats are obsolete, in poor shape, and most provide unreliable operation.

Recommendation:

Replace thermostats with new. Estimate 30 thermostats required @ \$500. per thermostat.

Consequences of Deferral:

Thermostats could fail leaving providing poor temperature control to building.

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Failure Replacement	2006	\$17,100	High

Updated: FEB-06

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

Building DDC control system does not exist.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
3 - Marginal	0	30	FEB-06

Event: Provide building EMS system to school**Concern:**

School controls are old pneumatic style, are outdated, and do not provide reliable operation.

Recommendation:

Replace pneumatic controls with new DDC control system.
Estimate 50 points required @ \$1,000. per point.

Consequences of Deferral:

Existing control system is not energy efficient.

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Failure Replacement	2007	\$56,999	Medium

Updated: FEB-06

D4030.01 Fire Extinguisher, Cabinets and Accessories**

ABC fire extinguishers in cabinets.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	30	FEB-06

S5 ELECTRICAL**D5010.03 Main Electrical Switchboards (Main Distribution)****

Sylvania main distribution switchboard, 120/208V/3PH/4W with 600 amp main fused switch, and branch fused switches.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	40	FEB-06

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

Sylvania branch circuit panelboards located throughout school.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	25	FEB-06

D5010.07.02 Motor Starters and Accessories**

Westinghouse combination motor starters.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	0	FEB-06

D5020.01 Electrical Branch Wiring*

Wiring installed in conduit. Ivory devices with stainless steel coverplates.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	50	FEB-06

D5020.02.01 Lighting Accessories (Lighting Controls)*

Line voltage switching provided in classrooms. Some low voltage switching in corridors and gymnasium.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	30	FEB-06

D5020.02.02.01 Interior Incandescent Fixtures*

Incandescent light fixtures in some storage rooms.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	30	JUN-06

D5020.02.02.02 Interior Florescent Fixtures**

Recess mounted 600x1200 fluorescent light fixtures with T12 lamps.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	30	FEB-06

D5020.02.02.03 Interior Metal Halide Fixture*

Pendant type light fixtures with remote ballasts installed in gymnasium.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	30	FEB-06

D5020.02.03 Emergency Lighting*

DC battery type emergency lighting system complete with remote heads and exit signs.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	0	FEB-06

D5020.03.01.04 Exterior H.P. Sodium Fixtures*

Wall mounted fixtures installed along perimeter of building. Some recessed pot lights at front entrance.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	25	FEB-06

D5020.03.02 Lighting Accessories (Lighting Controls)*

Exterior lighting photocell controlled.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	25	FEB-06

D5030.01 Detection and Fire Alarm**

Edwards 2280 fire alarm system complete with alarm bells and fire detection devices.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
3 - Marginal	0	25	FEB-06

Event: Replace fire alarm system.**Concern:**

Existing fire alarm system is very old, in poor shape, and repair parts for fire alarm panel are no longer available.

Recommendation:

Replace fire alarm system with new fire alarm system designed to comply with current codes. Estimate cost as being \$23./SM x 3095 SM building area.

Consequences of Deferral:

Fire alarm system could fail leaving school with a system which would be a life safety concern.

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Failure Replacement	2006	\$81,508	High

Updated: FEB-06

D5030.02.02 Intrusion Detection**

Basic security alarm system complete with alarm keypad, motion sensors, and door contacts. System is monitored by a central station.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	25	FEB-06

D5030.03 Clock and Program Systems**

Battery type wall mounted clocks in classrooms. Amano master time clock for class change.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	25	FEB-06

D5030.04.01 Telephone Systems**

Basic telephone system in school from 51 mm main telephone service conduit.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	25	FEB-06

D5030.04.02 Paging Systems*

Bogen school intercom/paging system complete with speakers and return call switches in classrooms and speakers in corridors.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
3 - Marginal	0	25	FEB-06

Event: Replace intercom/paging system.**Concern:**

Existing school intercom/paging system is very old, in poor shape, and does not meet needs of school.

Recommendation:

Provide integrated intercom system with telephone system in school. Estimate cost as being \$23./SM x 3095 SM building area.

Consequences of Deferral:

System could fail.

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Failure Replacement	2006	\$81,508	High

Updated: DEC-06

D5030.04.04 Data Systems**

Cat 5 data system with wiring installed to central hub.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	25	FEB-06

D5030.05 Public Address and Music Systems**

Amplifier with speakers provided to gymnasium.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	20	FEB-06

D5030.06 Television Systems*

Cable TV service in each classroom.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	20	FEB-06

S6 EQUIPMENT, FURNISHINGS AND SPECIAL CONSTRUCTION**E1020.03 Theater and Stage Equipment***

Curtain backdrop at stage area. Folding partition between stage and gymnasium c/w sound seal.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	25	FEB-06

E1090.04 Residential Equipment*

Residential grade refrigerator, dishwasher, range and microwave ovens (2) at Staff Room/Kitchen adjacent gymnasium. TMH/DMH (special needs program): residential grade refrigerator, electric range, washer and dryer.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	25	FEB-06

E1090.07 Athletic, Recreational, and Therapeutic Equipment*

Backstops, gymnasium equipment, exercise equipment.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	15	FEB-06

E2010.02.05 Educational Facility Casework*

Melamine storage shelves c/w plastic laminate countertops on casters.
Some clear finish plywood with plastic laminate countertops fixed book/storage shelves.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	35	JUN-06

E2010.02.07 Kitchen Casework*

1981- Painted plywood casework c/w plastic laminate clad countertops in Staff Room/Kitchen.
1992- Plastic laminate clad/ clear finish plywood casework in TMH/DMH special purpose room.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
3 - Marginal	0	35	FEB-06

Event: Refinish cabinet doors.**Concern:**

Finish worn on kitchen cabinet doors. Refer to F1020.02 Special Purpose Rooms.

Recommendation:

Refinish kitchen cabinet doors with new clear finish (14 doors).

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Preventative Maintenance	2006	\$10,000	Low

Updated: NOV-06

E2010.02.09 Library Casework*

1981- 19mm Melamine shelving throughout.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	35	FEB-06

E2010.02.99 Other Casework*

1981- Plastic laminate clad plywood vanities in staff and student washrooms c/w chrome supports.

1981- Display case at main entrance c/w tempered glass shelving and sliding doors.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
3 - Marginal	0	0	JUN-06

Event: Replace plastic laminate clad vanities and chrome supports.**Concern:**

Washroom vanities at student washrooms in poor condition, seams between horizontal surface and backing wall and chrome supports rusted. Chrome supports rusted at staff washrooms.

Recommendation:

Replace plastic laminate clad vanities student washrooms (approximately 6M.) Provide one barrier free lavatory in student washrooms c/w fittings as per ABC 1997. Replace chrome supports at staff washrooms (2 required). Replace ceramic tile backsplash as required.

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Failure Replacement	2006	\$5,928	Low

Updated: FEB-06

**E2010.03.01 Blinds****

1981-Double glazed aluminum exterior windows with integral horizontal blinds throughout.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	35	FEB-06

F1010.02.04 Portable and Mobile Buildings*

There are 13 portables in a single cluster of rooms (725 SM.) including access corridors

- 5 classrooms (79.7 SM. each),
- 1 special needs classroom (TMH/DMH Program Classroom) with a total area of 145.6 SM. including w/c, storage and therapy room
- 2 Counseling Rooms (8.45 SM. each) and
- 1 Mechanical Room (12.25 SM.)

Architectural: conventional wood frame construction on concrete reinforced slab on grade. Building envelope includes prefinished metal fascias, cement stucco and brick veneer exterior walls and EPDM roofing system. Windows are anodized aluminum with awning type operators. Interiors components and finishes include solid core wood doors in pressed steel frames, vinyl composite tile flooring, suspended acoustic tile ceilings, painted GWB, painted plywood casework and white/tack boards.

Mechanical: Mechanical installation appears in good condition. Glycol hot water heating through perimeter radiation in classrooms and corridors, and force flow unit at entry complete with electric zone valves for perimeter radiation. One Superhot 600 MBH input boiler with two Grundfoss circulating pumps, expansion tank, and PRV water make-up with back flow preventor. 100% Engineered Air make-up air furnace with glycol heating coil, exhaust air from corridor ceiling space with exhaust fan located in vestibule ceiling space. Washroom provided to ancillary room complete with lavatory, tank type floor mounted water closet, and exhaust fan. Ancillary room also fitted with stainless steel kitchen sink.

Electrical: Electrical installation appears in good condition. Westinghouse panel boards provided with one per classroom and one in mechanical room. Mixture of fluorescent lighting with some surface mounted wraps and some recess mounted 2'x4' in t-bar ceiling. Fixtures have T8 lamps with electronic ballasts. Wall mounted battery clock in each classroom. Ivory devices with stainless steel cover plates. Light switches provided in corridor and classrooms. DC battery pack emergency lighting system in corridors. 10" fire alarm bell with flashing strobe light in corridor. Sepa emergency. Generally recessed light fixtures in classrooms 136 - 142 inclusive are in poor shape with many lenses missing and/or cracked and fixtures overall in poor shape.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
3 - Marginal	0	0	JUN-06

Event: Provide return air grilles in classrooms.**Concern:**

No return air grilles provided in classrooms to facilitate air returning to corridor ceiling space and exhaust fan.

Recommendation:

Provide two return air grilles per classroom. Estimate 14 return air grilles required at \$200.00 per grille.

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Failure Replacement	2006	\$3,192	Medium

Updated: FEB-06

Event: Replace original linoleum flooring throughout portables classrooms.**Concern:**

Original linoleum flooring showing signs of wear at special needs classroom/washrooms. Original carpet in classrooms worn.

Recommendation:

Replace original linoleum/carpet flooring in all portables classrooms (5 x 80m2), special needs classroom c/w 2 washrooms and storage (200m2) and 2 Counselling Offices (34m2).

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Failure Replacement	2007	\$28,955	Low

Updated: FEB-06

F1020.02 Special Purpose Rooms*

TMH/DMH Program Classroom for the severely disabled.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
3 - Marginal	0	0	FEB-06

Event: Refinish cabinet doors.

Concern:

Finish worn on kitchen cabinet doors.

Recommendation:

Refinish kitchen cabinet doors with new clear finish (14 doors).

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Repair	2006	\$1,824	Low

Updated: FEB-06

S8 FUNCTIONAL ASSESSMENT

K3020 Indoor Environment

Lack of operable window units in all classrooms and administrative suite was reported to be a significant deficiency. Refer to B2020.01.01.02 Aluminum Windows.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
3 - Marginal	0	0	FEB-06

Event: Provide operable windows.

Concern:

Lack of operable window units in all classrooms and administrative suite was reported to be a significant deficiency. Refer to B2020.01.01.02 Aluminum Windows.

Recommendation:

Provide new aluminum awning type operable vents complete with new hardware in existing aluminum frames at all classrooms and Administrative Suite (approximately 25 units @ 0.6m²)

Consequences of Deferral:

Poor indoor air quality. Lack of ventilation.

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Indoor Air Quality Upgrade	2006	\$0	Medium

Updated: FEB-06

K40 Current Code Issues

The school is a single storey slab on grade (except for the mechanical mezzanine) therefore there are no code issues related to fire separations between floors. Access to exits, doors (ULC labeled doors and frames) and finish hardware appear to meet current codes. The non-combustible roof in the gymnasium is not fire rated. The fire rating of combustible elements of the low roof assembly was not confirmed.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	0	JUN-06

K4010.01 Barrier Free Route: Parking to Entrance

Since the school operates a special needs program (TMH/DMH Program) barrier free access to the main entrance is critical. Barrier free access from the south parking lot (staff parking) not provided. Access to the main entrance doors is from a municipal lay-by lane on 44th. Street. At minimum a curb cut is required at the municipal sidewalk.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
3 - Marginal	0	0	FEB-06

Event: Provide curb cut.**Concern:**

No curb cut is at the municipal sidewalk. Refer to G2030.04 Rigid Pedestrian Pavement (Concrete).

Recommendation:

Provide curb cut at concrete sidewalk at city lay-by lane at 44st. in front of main entrance.

Consequences of Deferral:

Restricted access and inconvenience.

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Barrier Free Access Upgrade	2006	\$0	Unassigned

Updated: FEB-06

K4010.02 Barrier Free Entrances

Level access (at grade) is provided at the main entrance doors on the west side. The main entrance door threshold should be bevelled to facilitate wheelchair access. No automatic door operators are provided.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
3 - Marginal	0	0	FEB-06

Event: Provide automatic door operator.**Concern:**

No automatic door operator at main entrance. Main door threshold not bevelled to facilitate wheelchair access. Barrier free access critical in light of TMH/DMH Program.

Recommendation:

Provide automatic door operators at main entrance doors. Provide bevel from existing sidewalk to door threshold with patching mortar to approximately 400mm beyond foundation wall.

Consequences of Deferral:

Barrier free access will be compromised.

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Barrier Free Access Upgrade	2006	\$18,810	Medium

Updated: FEB-06

K4010.03 Barrier Free Interior Circulation

Barrier free circulation is provided throughout the school. Ramp provided adjacent gymnasium to provide barrier free access to the elevated stage area.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	0	FEB-06

K4010.04 Barrier Free Washrooms

Barrier free washroom provided within special needs classroom. Barrier free water closet stalls provided in student washrooms. Appropriate accessories provided (grab bars, 800mm wide doors) although TP dispensers mounted too high. Lavatories to be redesigned with new fittings as required to conform to ABC 1997.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
3 - Marginal	0	0	FEB-06

Event: Provide new barrier free lavatories.**Concern:**

Lavatories in student washrooms do not conform to ABC 1997 in terms of barrier free access. Refer to E2010.02.99 Other Casework.

Recommendation:

Replace plastic laminate clad vanities student washrooms (approximately 6M.) Provide one barrier free lavatory in student washrooms c/w fittings as per ABC 1997.

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Barrier Free Access Upgrade	2006	\$0	Medium

Updated: FEB-06

Facility Details**Building Name:** Norwood Elementary School**Address:****Location:** Wetaskiwin**Building Id:** S4250**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:** **\$103,738****5 year Facility Condition Index (FCI):** **0%****General Summary:**

Norwood Elementary School site is bounded by 44th. street to the west and 56th. avenue to the north. At 0.81 ha (2.0 acres) the site is comparatively small. There are no athletic fields on site. Students have access to an adjacent municipal sports field with soccer field and baseball diamond. The city owned field also includes a playground structure on a pea gravel base. Access to a gravel staff parking lot on the south side of the building is from 44th. street. A 1999-2000 School Audit recommended paving the staff parking lot and the replacement of a section of the municipal sidewalk at the bus drop-off adjacent the main (east) entrance.

The site is not fenced except for the north side.

With the adjacent municipal field the site provides adequate amenities. General condition of the site is acceptable.

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)****

A gravel roadway provides access to staff parking to the south of the building.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	0	FEB-06

G2020.02.01 Aggregate Parking Lots (Gravel)**

25 on-site parking stalls are provided for staff to the south of the building. The parking lot is gravel with drainage to a catch basin. The existing parking lot was assessed as too soft and paving was recommended in 2000.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
3 - Marginal	0	0	FEB-06

Event: Pave staff parking lot.**Concern:**

Gravel parking surface soft. Potholes are prevalent and drainage to catch basin affected.

Recommendation:

Soft subgrade areas to be excavated and replaced with suitable compacted soil. Re-grade, provide suitable granular base and sub-base. Install asphalt paving at staff parking lot at south side of building (approximately 1200m²).

Consequences of Deferral:

Poor surface drainage and continued deterioration.

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Failure Replacement	2006	\$99,178	Medium

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**G2020.06.02 Parking Bumpers***

Precast concrete curb stops are provided in the staff parking.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	0	FEB-06

G2030.04 Rigid Pedestrian Pavement (Concrete)**

No on-site bus drop-off. City lay-by lane on 44th. street at front entrance of school. Concrete sidewalks to four pedestrian access points at main entrance, south staff entrance, two north entrances. Concrete apron adjacent mechanical room replaced since 2000.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
3 - Marginal	0	0	FEB-06

Event: Provide curb cut at lay-by lane at front of school.

Concern:

No curb cut at city lay-by lane at front of school for barrier free access.

Recommendation:

Provide curb cut at concrete sidewalk at city lay-by lane at 44st. in front of main entrance.

Consequences of Deferral:

Restricted access and inconvenience.

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Code Repair	2006	\$4,560	Medium

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G2040.02 Fences and Gates**

Continuous 1525mm high chain link fence along north property line extends to municipal playing field. No additional fencing.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	0	JUN-06

G2040.04 Athletic and Recreational Equipment*

Play structure including slides, swings, benches, soccer goals and backstops on municipal playing field.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	25	JUN-06

G2040.05 Site and Street Furnishings*

Two painted free standing metal bicycle racks at west side of building adjacent main entrance. Some minor damage noted.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	20	FEB-06

G2040.06 Exterior Signs*

School signage mounted on metal fascia above main entrance.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	0	FEB-06

G2040.08 Flagpoles*

One aluminum flag pole at west side of school adjacent main entrance. Some minor damage noted to base.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	0	FEB-06

G2050.04 Lawns and Grasses*

Lawn areas at east, north and west sides of building.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	0	FEB-06

G2050.05 Trees, Plants and Ground Covers*

Mature spruce trees at north and west sides. Some mature deciduous trees (elms) along 44th. street. Hedge buffer between parking and front yard at southwest corner. Shrubs in planting beds along west wall.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	0	FEB-06

G3010.02 Site Domestic Water Distribution*

101 mm main water service as obtained from local municipal service in street.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	0	FEB-06

G3020.01 Sanitary Sewage Collection*

Main sewer service to building connected to local municipal service in street.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	0	FEB-06

G3030.01 Storm Water Collection*

Main storm service to building connected to local municipal service in street.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	0	FEB-06

G3060.01 Gas Distribution*

Natural gas service obtained from ATCO gas in street.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	0	FEB-06

G4010.02 Electrical Power Distribution Lines*

Main underground power service extending to building from utility pad mounted transformer located on east side of building.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	0	FEB-06

G4010.04 Car Plugs-ins*

Six metal parking posts with receptacles providing service to 18 stalls. Four wall mounted receptacles providing service to eight parking stalls.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	0	FEB-06

G4020.01 Area Lighting*

Two pole mounted HPS light fixtures installed along walkway by building.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	30	FEB-06

G4030.02 Site Voice and Data*

Main underground telephone service to building from Telus.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	0	FEB-06