

# RECAPP Facility Evaluation Report

Black Gold Regional Div #18



## Thorsby Elementary School

B4173A

Thorsby

**Facility Details**

**Building Name:** Thorsby Elementary School  
**Address:** 5303 - 48 Avenue  
**Location:** Thorsby  
  
**Building Id:** B4173A  
**Gross Area (sq. m):** 2,850.90  
**Replacement Cost:** \$6,524,131  
**Construction Year:** 1968

**Evaluation Details**

**Evaluation Company:** John Murray Architectural Associates  
**Evaluation Date:** August 15 2007  
**Evaluator Name:** John Murray

**Total Maintenance Events Next 5 years:** **\$2,659,972**  
**5 year Facility Condition Index (FCI):** **40.77%**

**General Summary:**

Thorsby Elementary school has a current enrollment of 273 students. Original school of 1500m2 was constructed in 1968. In 1981 a further 1337m2 was constructed. A portable classroom was provided in 1981. The current total gross area is 2837 m2. The student capacity is 325 students. The school is in need of renovation.

**Structural Summary:**

The 1968 and 1981 sections have concrete strip foundations and foundation walls. Main floor is slab on grade. Second floor mechanical room OWSJ on masonry concrete block, and concrete topped metal deck structure. Roof is supported on masonry concrete block walls, which support OWSJ and metal deck. There is some settlement to floors and walls at the west end of the school. The overall structure is in good condition.

**Envelope Summary:**

The exterior walls have minimum insulation with paint serving as vapour barrier but no apparent signs of interior issues with finishes. Roof to the 1968 section is asphalt and gravel 4 ply. The 1981 section is an inverted roof. The windows are generally in good condition and are anodized aluminum double glazed. The overall envelope condition is acceptable, has minimum insulation no membrane applied vapour or air barrier. Roof insulation values and vapour barrier are acceptable.

**Interior Summary:**

Interior finishes throughout this school are dated. Fire ratings are questionable to storage rooms, kitchen area and janitor rooms. Painted concrete block is generally in good condition, but GWB demountable partitions are poor. Floor finishes of vinyl tile bumped and uneven. Attempts to refinish washroom floors show a temporary attempt to improve finishes. Gymnasium floor which is wood needs re-finishing, carpeted areas to administration and some classrooms are in need of replacement. Acoustic ceilings are discoloured and damaged except within library. Millwork is old and inadequate in many classrooms, and residential and food service equipment is outdated. Doors are in many cases old and do not meet present day code requirements. Overall interior finishes are in marginal condition.

**Mechanical Summary:**

The existing heating and ventilation system consists of two multi zone packaged units and six gas fired furnaces. Domestic hot water is provided by two gas fired, tank type water heaters complete with hot water recirculation pumps. Conventional plumbing fixtures located throughout the building. Sewer, gas and water service is from Town of Thorsby utility. Storm drainage is surface type. Pneumatic controls. Overall mechanical system, except plumbing fixtures (replaced in 1996 and 2000) is in poor condition. Heating and ventilation equipment is obsolete and can not meet present standards. Control system can only perform basic functions, parts are not available.

**Electrical Summary:**

The Thorsby School was originally built in 1968 with an addition completed in 1981. This school is in acceptable condition with the exception of the interior lighting and the fire alarm system. The interior lighting is still the energy inefficient T-12 lamping and magnetic ballasts in both the original and the addition of this school. The fire alarm is both not up to code and past its life cycle.

**Rating Guide**

<b>Condition Rating</b>	<b>Performance</b>
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 - 1968 Section\*

Concrete strip foundation.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1968	0	DEC-07

### A1010 Standard Foundations - 1981 Section\*

Concrete strip foundation.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
3 - Marginal	1981	0	DEC-07

**Event: Stabalize foundation wall support**

**Concern:**

Foundation has moved causing wall to crack.

**Recommendation:**

Cut back and secure steel to span over crack to stabilize masonry above.

**Consequences of Deferral:**

Possible continued deterioration.

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Repair	2008	\$9,152	Medium

**Updated:** DEC-07

**A1030 Slab on Grade - 1968 Section\***

100mm slab on grade.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
3 - Marginal	1968	0	DEC-07

**Event: Repair Slab on grade**

**Concern:**

The concrete is lifting showing visible bumps in the VC tile.

**Recommendation:**

Lift tile, remove adhesive, chip out exposed sections of aggregate, provide epoxy filler to level surface. (Area 300 sq.m.)  
Flooring costs included in C3020.07

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Repair	2009	\$8,580	High

**Updated:** APR-08

**Event: Study tile lifting.**

**Concern:**

It appears to be a problem of coal in concrete causing tile floor lifting, creating a tripping hazard.

**Recommendation:**

Perform study to determine cause of lifting tile and bump in tile floor and recommendation for solution.

**Consequences of Deferral:**

Floor will continue to degrade.

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Study	2008	\$3,432	High

**Updated:** DEC-07

**A1030 Slab on Grade - 1981 Section\***

100mm concrete slab on grade.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
3 - Marginal	1981	0	DEC-07

**Event:** Level concrete floor slab along west wall of corridor.

**Concern:**

Poor appearance, hard to clean floor.

**Recommendation:**

Epoxy fill crack and level floor.

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Repair	2009	\$9,152	Medium

**Updated:** DEC-07

**B1010.01 Floor Structural Frame (Building Frame) - 1968 Section\***

Mezzanine 100 concrete slab on metal deck, on OWSJ to load bearing concrete block. Stage is wood joists 38 tongue and groove deck supported on 38x89 wood studs.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1968	0	DEC-07

**B1010.02 Structural Interior Walls Supporting Floors (or Roof) - 1968 Section\***

Concrete block walls.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1968	0	DEC-07

**B1010.02 Structural Interior Walls Supporting Floors (or Roof) - 1981 Section\***

Concrete block walls.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1981	0	DEC-07

**B1010.05 Mezzanine Construction - 1968 Section\***

100 concrete floor on metal deck on OWSJ on concrete block walls.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1968	0	DEC-07

**B1010.09 Floor Construction Fireproofing - 1968 Section\***

Metal deck concrete topping to second floor mechanical.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1968	0	DEC-07

**B1020.01 Roof Structural Frame - 1968 Section\***

Metal deck on OWSJ.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1968	0	DEC-07

**B1020.01 Roof Structural Frame - 1981 Section\***

Metal deck on OWSJ.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1981	0	DEC-07

**B1020.06 Roof Construction Fireproofing - 1968 Section\***

Non-combustible.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1968	0	DEC-07

**B1020.06 Roof Construction Fireproofing - 1981 Section\***

Non-combustible.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1981	0	DEC-07

## S2 ENVELOPE

### B2010.01.02.01 Brick Masonry: Ext. Wall Skin - 1968 Section\*

100mm brick veneer.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1968	75	DEC-07

### B2010.01.02.01 Brick Masonry: Ext. Wall Skin - 1981 Section\*

100mm brick veneer.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1981	75	DEC-07

### B2010.01.11 Joint Sealers (caulking): Ext. Wall - 1968 Section\*\*

Expansion joints to masonry wall and between masonry, door and window frames.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
3 - Marginal	1968	20	DEC-07

**Event:** Replace joint sealer

**Concern:**

Existing caulking is brittle and cracked

**Recommendation:**

Remove all old caulking and re-caulk.

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Failure Replacement	2009	\$6,864	High

**Updated:** DEC-07

**B2010.01.11 Joint Sealers (caulking): Ext. Wall - 1981 Section\*\***

Expansion joints to masonry wall and between masonry, door and window frames.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
3 - Marginal	1981	20	DEC-07

**Event: Replace joint sealer.**

**Concern:**

Existing caulking is brittle and cracked.

**Recommendation:**

Remove old caulking and re-caulk.

**Consequences of Deferral:**

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<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Failure Replacement	2009	\$8,008	High

**Updated:** DEC-07

**B2010.01.13 Paints (& Stains): Exterior Wall - 1968 Section\*\***

Steel doors, frames and miscellaneous steel painted.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
3 - Marginal	1968	15	DEC-07

**Event: Paint steel items.**

**Concern:**

Paint peeling.

**Recommendation:**

Re-paint steel doors frames and miscellaneous steel.

**Consequences of Deferral:**

Rusting.

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Failure Replacement	2008	\$4,576	Medium

**Updated:** DEC-07

**B2010.01.13 Paints (& Stains): Exterior Wall - 1981 Section\*\***

Steel doors, frames and miscellaneous steel painted.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
3 - Marginal	1981	15	DEC-07

**Event: Paint steel items.**

**Concern:**

Paint peeling.

**Recommendation:**

Re-paint steel doors frames and miscellaneous steel.

**Consequences of Deferral:**

Rusting.

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Failure Replacement	2008	\$4,576	Medium

**Updated:** DEC-07

**B2010.02.03 Masonry Units: Ext. Wall Const. - 1968 Section\***

100 brick veneer, air space, 200 block zonolite fill.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1968	0	DEC-07

**B2010.02.03 Masonry Units: Ext. Wall Const. - 1981 Section\***

100 brick veneer, air space, 200 block zonolite fill.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
3 - Marginal	1981	0	DEC-07

**Event: Repair cracked block wall.**

**Concern:**

Water penetration into wall insulation.

**Recommendation:**

Rake out joints, repair and repaint wall. (see A1010 - 1981)

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Repair	2009	\$11,440	High

**Updated:** DEC-07

**B2010.03 Exterior Wall Vapor Retarders, Air Barriers, and Insulation - 1968 Section\***

Wall has minimum insulation, zonolite in block, paint is probably vapour barrier.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1968	0	DEC-07

**B2010.03 Exterior Wall Vapor Retarders, Air Barriers, and Insulation - 1981 Section\***

Wall has minimum insulation, zonalite in block corners, paint is probably vapour barrier.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1981	0	DEC-07

**B2010.06 Exterior Louvers, Grilles, and Screens - 1968 Section\***

Anodized and pre-finished metal louvers.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
3 - Marginal	1968	0	DEC-07

**Event: Add door/roof hatch and ladder, replace louver**

**Concern:**

Louver should not be used as roof access. Louver should be repaired.

**Recommendation:**

Replace with new grille and add roof ladder and hatch for roof access, or a door and a fixed ladder.

**Consequences of Deferral:**

Inappropriate use of equipment and poor roof access.

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Repair	2009	\$11,440	High

**Updated:** DEC-07

**B2010.09 Exterior Soffits\***

6mm asbestos board soffit and pre-finished metal fascia

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1981	50	DEC-07

**B2020.01.01.02 Aluminum Windows (Glass & Frame) - 1968 Section\*\***

Anodized dark bronze aluminum, hopper vents and fixed lights, double glazed, Venetian blinds between panes, insulated glassweld panels tops and bottoms.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1968	40	DEC-07

**Event: Replace windows to 1968 section (35)**

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2012	\$120,120	Unassigned

**Updated:** APR-08

**B2020.01.01.02 Aluminum Windows (Glass & Frame) - 1981 Section\*\***

Anodized dark bronze aluminum, hopper vents and fixed lights, double glazed, Venetian blinds between panes, insulated glassweld panels tops and bottoms.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1981	40	DEC-07

**Event: Replace windows (24)**

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2021	\$82,368	Unassigned

**Updated:** DEC-07

**B2030.01.02 Steel-Framed Storefronts: Doors - 1968 Section\*\***

Steel - painted

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
3 - Marginal	1968	30	DEC-07

**Event: Replace doors, frames and hardware.**

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2012	\$28,600	Unassigned

**Updated:** DEC-07

**B2030.01.02 Steel-Framed Storefronts: Doors - 1981 Section\*\***

Steel - painted

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
3 - Marginal	1981	30	DEC-07

**Event: Replace doors, frames and hardware.**

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2012	\$28,600	Unassigned

**Updated:** DEC-07

**B3010.01 Deck Vapor Retarder and Insulation - 1968 Section\***

4-ply Tar and gravel on 25mm fibreboard and sloped, 100 rigid insulation on vapor barrier on GWB.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1993	0	DEC-07

**B3010.01 Deck Vapor Retarder and Insulation - 1981Section\***

Inverted roof, 12 GWB, vapour barrier, 4-ply roof, 75mm rigid insulation and gravel ballast.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1981	0	DEC-07

**B3010.04.01 Built-up Bituminous Roofing (Asphalt & Gravel) - 1968 Section\*\***

Asphalt and gravel 4-ply, 25 fibreboard, sloped 100mm insulation on vapour barrier on GWB.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1993	25	DEC-07

**Event: Replace roof 1500m2**

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2018	\$217,360	Unassigned

**Updated:** DEC-07

**B3010.04.08 Membrane Roofing (Inverted/ Protected) - 1981 Section\*\***

Inverted roof, 12 GWB, vapour barrier, 4-ply roof, 75mm rigid insulation and gravel ballast.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1981	25	DEC-07

**Event: Replace roof 1337m2**

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2012	\$194,480	Unassigned

**Updated:** DEC-07

**B3020.02 Other Roofing Openings (Hatch,Vent, etc) - 1968 Section\***

Access to roof is by step ladder and fresh air combustion grille. See B2010.06.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
2 - Poor	1968	0	DEC-07

### S3 INTERIOR

#### C1010.01.03 Unit Masonry Assemblies: Partitions -

Concrete block walls.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	1968	0	DEC-07

#### C1010.02 Interior Demountable Partitions - \*

Not fire rated, insufficient sound rating.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
2 - Poor	1968	0	DEC-07

**Event:** Replace demountable partitions walls in administration and teaching areas.

**Concern:**

Code compliance, fire + sound.

**Recommendation:**

Replace interior demountable partitions to administration and classrooms. 280m2

**Consequences of Deferral:**

Inappropriate code compliance, fire + sound.

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Code Upgrade	2009	\$148,720	High

**Updated:** DEC-07

#### C1010.04 Interior Balustrades and Screens, Interior Railings - \*

Handrails - steel - painted.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1968	0	DEC-07

**C1020.01 Interior Swinging Doors (& Hardware) - 1969 + 1981 Section\***

Generally steel frames and wood doors, wood door and wood frame to hot lunch room.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
3 - Marginal	1968	40	DEC-07

**Event: Replace 30 doors + hardware.**

**Concern:**

Doors are old and in some case do not meet code. Poor appearance.

**Recommendation:**

Replace 30 doors and hardware @ \$2000 / door.

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Failure Replacement	2009	\$68,640	High

**Updated:** DEC-07

**C1020.03 Interior Fire Doors - 1968 + 1981 Section\***

Doors to some storage rooms, janitor rooms, mechanical rooms and kitchen are unrated.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
3 - Marginal	1968	0	DEC-07

**Event: Code Repair**

**Concern:**

Some doors are unrated.

**Recommendation:**

Replace doors, frames and hardware with rated assemblies including hardware (5 door assemblies + hardware @ \$3000 / door)

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Code Upgrade	2009	\$17,160	High

**Updated:** DEC-07

**C1020.04 Interior Sliding and Folding Doors\***

Panel fold door to stage.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
3 - Marginal	1981	25	DEC-07

**Event: Replace door to stage**

**Concern:**

Door does not operate.

**Recommendation:**

Replace door.

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Failure Replacement	2009	\$34,320	High

**Updated:** DEC-07

**C1030.01 Visual Display Boards - 1968 \_ 1981 Section\*\***

White boards, chalk boards, tack boards.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1981	20	DEC-07

**Event: Add an additional 20 whiteboards**

**Concern:**

Insufficient whiteboards to accommodated teaching program

**Recommendation:**

Add an additional 20 whiteboards to the classrooms.

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Program Functional Upgrade	2010	\$6,864	Medium

**Updated:** APR-08

**Event: Replace 28 visual display boards.**

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2012	\$9,152	Unassigned

**Updated:** APR-08

**C1030.02 Fabricated Compartments(Toilets/Showers) - 1968 Section\*\***

Metal partitions.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
3 - Marginal	1968	30	DEC-07

**Event: Replace 7 partitions**

**Concern:**

Partitions dented, and hand painted.

**Recommendation:**

Replace with new.

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Failure Replacement	2009	\$9,152	High

**Updated:** DEC-07

**C1030.02 Fabricated Compartments(Toilets/Showers) - 1981\*\***

Metal partitions.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1981	30	DEC-07

**Event: Replace 7 partitions**

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2012	\$9,152	Unassigned

**Updated:** DEC-07

**C1030.06 Handrails - \***

Wood stair and hand rail to 2nd level

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
2 - Poor	1968	0	DEC-07

**Event: Replace railing**

**Concern:**

Wood railing not to code.

**Recommendation:**

Replace railing with new railing that meets code requirements.

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Code Upgrade	2008	\$17,160	Low

**Updated:** DEC-07

**C1030.08 Interior Identifying Devices - \***

Cardboard and plastic.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
3 - Marginal	1968	0	DEC-07

**Event: Provide new signage throughout school**

**Concern:**

Signage not professionally prepared or installed.

**Recommendation:**

Provide new signage throughout school.

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Failure Replacement	2008	\$6,864	Medium

**Updated:** DEC-07

**C1030.10 Lockers - 1968 Section\*\***

Metal lockers

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
3 - Marginal	1968	30	DEC-07

**Event: Replace 105 metal lockers single tier**

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2012	\$40,040	Unassigned

**Updated:** DEC-07

**Event: Replace 70 metal lockers signle tier.**

**Concern:**

Lockers damaged and old.

**Recommendation:**

Replace 70 lockers.

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Failure Replacement	2009	\$24,024	High

**Updated:** DEC-07

**C1030.10 Lockers - 1981 Section\*\***

Some metal single tier lockers have been replaced, some are still old.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
3 - Marginal	1981	30	DEC-07

**Event:** Replace metal lockers, single tier, to 1981 section (150)

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2012	\$40,040	Unassigned

**Updated:** APR-08

**C1030.12 Storage Shelving - \***

Storage shelving old and inadequate.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
3 - Marginal	1968	0	DEC-07

**Event:** Provide new shelving.

**Concern:**

Shelving is old and in some areas inadequate. Including storage and classrooms.

**Recommendation:**

Provide new shelving 70m @ \$210/m

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Program Functional Upgrade	2009	\$17,160	High

**Updated:** DEC-07

**C1030.14 Toilet, Bath, and Laundry Accessories - \***

Silver on mirrors is gone. Grab bars, soap dispensers, toilet roll holders.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
3 - Marginal	2000	0	DEC-07

**Event:** Replace mirrors

**Concern:**

Mirrors poor condition

**Recommendation:**

Replace mirrors, 12 @ \$150/MIRROR

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Failure Replacement	2009	\$2,059	High

**Updated:** DEC-07

**C1030.17 Other Fittings\***

Boot racks.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
3 - Marginal	1981	0	DEC-07

**Event: Replace boot racks**

**Concern:**

Dented, rusting and old.

**Recommendation:**

Replace boot racks in 4 locations.

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Failure Replacement	2009	\$8,008	High

**Updated:** DEC-07

**C3010.06 Tile Wall Finishes - \*\***

Ceramic tile to change rooms and showers.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
3 - Marginal	1981	40	DEC-07

**Event: Repair some ceramic tile**

**Concern:**

Appearance

**Recommendation:**

Replace tile broken in change rooms at wall/floor junction.

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Repair	2009	\$1,144	Medium

**Updated:** DEC-07

**Event: Replace 48m2**

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2021	\$13,728	Unassigned

**Updated:** DEC-07

**C3010.09 Acoustical Wall Treatment - \*\***

Gymnasium has poor acoustics.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
3 - Marginal	1981	20	DEC-07

**Event:** Provide acoustic panels in gymnasium.

**Concern:**

Poor acoustics in gymnasium due to no acoustical treatments.

**Recommendation:**

Provide fabric acoustic treatments to upper gymnasium walls.

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Program Functional Upgrade	2009	\$28,600	High

**Updated:** DEC-07

**C3010.11 Interior Wall Painting - \***

Paint to GWB and concrete block.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	2000	10	DEC-07

**C3020.01.01 Epoxy Concrete Floor Finishes - \***

Epoxy floor in washrooms and main entry areas

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
3 - Marginal	1968	0	DEC-07

**Event:** Install ceramic tile to entry and washrooms.

**Concern:**

Worn floor.

**Recommendation:**

Replace epoxy floor with ceramic tile to washrooms and main entry areas. 140m2 / \$280 /m2 + base.

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Failure Replacement	2009	\$45,760	Medium

**Updated:** DEC-07

**C3020.01.02 Paint Concrete Floor Finishes - \***

Painted concrete floors to mechanical room.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
3 - Marginal	1968	10	DEC-07

**Event: Re-paint concrete floors**

**Concern:**

Paint worn.

**Recommendation:**

Re-paint concrete floor in mechanical room. 100m2 @\$20/m2

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Failure Replacement	2009	\$2,288	Low

**Updated:** DEC-07

**C3020.02 Tile Floor Finishes - \*\***

Ceramic tile to change rooms and shower 50x50.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1968	50	DEC-07

**Event: Replace 60m2**

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2018	\$17,160	Unassigned

**Updated:** DEC-07

**C3020.04.01 Wood Strip Flooring - 1968 + 1981 Section**

Maple cushioned wood floor on sleepers.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
3 - Marginal	1981	0	DEC-07

**Event: Refinish floor and line painting.**

**Concern:**

Wood splinters, rough edges, old

**Recommendation:**

Refinish flooring including line painting. 470 m2 @ \$ 25/M2  
= \$12000

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Preventative Maintenance	2008	\$13,728	High

**Updated:** DEC-07

**C3020.07 Resilient Flooring - 1968 + 1981 Section\*\***

Vinyl composition tile, sheet goods and rubber base.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
3 - Marginal	1981	20	DEC-07

**Event: Replace all resilient flooring**

**Concern:**

Sheet goods bubbling and lifting. Some patchy, stained and old.

**Recommendation:**

Replace all resilient flooring. (1600m2 x \$85 = \$64000)

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Failure Replacement	2009	\$155,584	High

**Updated:** DEC-07

**C3020.08 Carpet Flooring - \*\***

Carpet in library is acceptable but administration and some classrooms are very poor.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
3 - Marginal	1981	15	DEC-07

**Event: Replace 75m2 of carpet in library**

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2012	\$7,722	Unassigned

**Updated:** DEC-07

**Event: Replace carpet to staff areas and teaching areas.**

**Concern:**

Rippled carpet in administration areas and classrooms.

**Recommendation:**

Replace carpet ( 300m2 x \$90 = \$18000)

**Consequences of Deferral:**

Tripping hazard.

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Failure Replacement	2008	\$30,888	High

**Updated:** DEC-07

**C3030.06 Acoustic Ceiling Treatment (Susp.T-Bar) - 1968 + 1981 Section\*\***

Acoustic tiles, 610 x 1220 in metal t-bar

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
3 - Marginal	1981	25	DEC-07

**Event: Replace ceiling tile.**

**Concern:**

Ceiling tile damaged and discoloured. Library ceiling tile is OK.

**Recommendation:**

Replace ceiling tile. (2200m2 @ \$50/m2)

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Failure Replacement	2008	\$125,840	High

**Updated:** MAY-08

**C3030.07 Interior Ceiling Painting - \***

Paint on GWB

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1993	20	DEC-07

## S4 MECHANICAL

### D2010.01 Water Closets

Floor mounted, vitreous china,flush tank.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1980	35	DEC-07

#### **Event: Replace 12 WC**

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2015	\$16,016	Unassigned

**Updated:** APR-08

### D2010.03 Lavatories

Majority of lavatories were recently replaced ( approx. 2000) - stainless steel, countertop. Enameled steel, countertop lavatories in staff washrooms (approx. 1968).

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	2003	35	DEC-07

#### **Event: Replace 12 Lavs**

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2035	\$16,016	Unassigned

**Updated:** APR-08

#### **Event: Replace 2 Lavs from 1968**

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2012	\$1,602	Medium

**Updated:** APR-08



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**D2010.04 Sinks\*\***

Stainless steel, countertop, single and double bowl sinks.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1968	30	DEC-07

**Event: Sinks Replacement**

**Concern:**

All sinks are aged and deteriorate.

**Recommendation:**

Replace 4 Sinks

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Failure Replacement	2009	\$10,296	Medium

**Updated:** APR-08



IMG\_4539.JPG

**D2010.08 Drinking Fountains / Coolers - \*\***

Stainless steel, refrigerated, wall hung drinking fountain and porcelain non refrigerated wall hung drinking fountains with self regulating bubbler.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
3 - Marginal	1968	35	DEC-07

**Event: Replace 3 DF**

**Concern:**

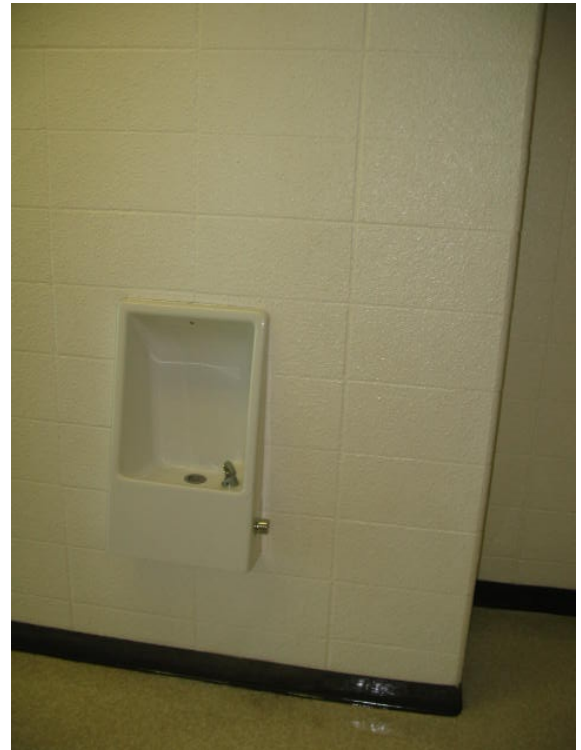
Drinking Fountains are old and deteriorate.

**Recommendation:**

Replace 3 DF.

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Failure Replacement	2008	\$4,576	Medium

**Updated:** APR-08



IMG\_4503.JPG

**D2010.09 Other Plumbing Fixtures\***

36"x24" molded stone mop sink located in Janitor Rooms.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1968	0	DEC-07

**Event: Reploace Two mop sinks**

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2012	\$3,432	Unassigned

**Updated:** DEC-07



IMG\_4524.JPG

**D2020.01.01 Pipes and Tubes: Domestic Water - \***

Copper type L piping distribution to plumbing fixtures.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1980	0	DEC-07

**D2020.01.02 Valves: Domestic Water\*\***

All plumbing fixtures isolated individually.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1980	40	DEC-07

**Event: Replace Isolation Valves**

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2020	\$10,296	Unassigned

**Updated:** APR-08

**D2020.01.03 Piping Specialties (Backflow Preventors)\*\***

Check valve on domestic hot water make up.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	1996	20	DEC-07

**Event: Replace Valve**

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2016	\$1,716	Unassigned

**Updated:** APR-08

**D2020.02.02 Plumbing Pumps: Domestic Water\*\***

Two in-line hot water recirculation pumps serving domestic water heaters. Pump Taco 007-BF5.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	2003	20	DEC-07

**Event: Replace 2 Pumps**

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2023	\$2,288	Unassigned

**Updated:** APR-08

**D2020.02.06 Domestic Water Heaters\*\***

Two gas fired domestic water heaters equal to State model: SBT75, 225MBH heating capacity, 75 USGal storage volume. 200 USGal domestic hot water holding tank installed in 1968.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1996	20	DEC-07

**Event: Replace 2 DWH**

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2016	\$9,152	Unassigned

**Updated:** APR-08

**D2020.03 Water Supply Insulation: Domestic\***

Domestic water lines not insulated in Mechanical Room.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1980	0	DEC-07



IMG\_4553.JPG

**D2030.01 Waste and Vent Piping\***

Combination cast Iron and PVC.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1968	0	DEC-07

**D2040.01 Rain Water Drainage Piping Systems\***

Rain water collection via roof drains and storm water piping to surface run off. Cast iron.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1968	0	DEC-07

**D2040.02.04 Roof Drains\***

Cast Iron sump drains.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1968	40	DEC-07

**D3010.02 Gas Supply Systems\***

Steel schedule 40 ( medium pressure) piping distribution system to furnaces and multi zone units from gas meter. Gas meter set at 4731.5 CFH.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1968	60	DEC-07

**D3020.03.01 Furnaces\*\***

The existing ventilation system consists of one outdoor multizone unit serving Ancillary, one indoor multizone unit serving classrooms and office areas, and six low gas fire forced air furnaces serving Gymnasium and classrooms. Outdoor unit was installed in 1968 and overhauled in 1980. Indoor multi zone unit installed in 1980. All six furnaces were installed in 1996. Furnaces are :

- 1) Lennox model: G20, 2000cfm of S/A and 155MBH heating capacity. Typical of 4.
- 2) Lennox model: 80MGF , 2000cfm of S/A and 143MBH heating capacity. Typical of 2.

Outdoor multi zone unit: Lennox DMS1-275 HVAC packaged, gas fired with multi zone control, 281 MBH cooling - direct expansion, 700 MBH heating, 10,500 cfm S/A - adjustable belt drive blowers.

Climate Master indoor multi zone packaged heating and ventilation unit located in upper mechanical room. Unit consist of mix air dampers section, filter section, supply and return fan sections. Unit can deliver 10,000 cfm of supply air and has 560MBH heating capacity.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
2 - Poor	1980	25	DEC-07

**Event: Heating and Ventilation Systems replacement**

**Concern:**

The existing heating and ventilation system is deteriorated. System cannot provide backup heating. The existing furnaces and multizone units do not provide sufficient amount of fresh air to the building. Classrooms are stuffy and do not have adequate ventilation. The existing air units does not meet present ASHRAE code: 62.1-2004 - Ventilation for Acceptable Indoor Air Quality. Very poor air circulation.

**Recommendation:**

- 1) Replace existing furnace system with an independent central air handling system complete with glycol heating coils. New units should equipped with glycol coils to provide greater quantities of outdoor air.
- 2) Install new boiler plant which should consist of:
  - a) Two boilers to provide 60% hot water heating capacity, each complete with two base mounted pumps.
  - b) Plate heat exchanger complete with glycol circulation pumps.
  - c) Glycol fill assembly.
  - d) Expansion tanks.
- 3) Install reverse return hot water heating piping loop in ceiling space serving perimeter radiation and force flow heaters.
- 4) Install perimeter base board radiation serving classrooms, gymnasium and all common areas.



Furnaces serving Gymnasium.

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Failure Replacement	2008	\$837,637	High

**Updated:** APR-08

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

Fresh air to furnace from wall cap.  
 Combustion air intake from the wall.  
 Combined vents serving furnaces, domestic water heaters and multi zone units.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
2 - Poor	1968	30	DEC-07

**Event: Vents and combustion air ducts upgrade.**

**Concern:**

Existing vents needs to be capped and make good when new ventilation system is installed.  
 The existing combustion air duct will not be adequate for new boiler plant.

**Recommendation:**

Install new type-B vents serving new boiler plant.  
 Install new adequate size combustion air and relief air ducts serving new mechanical room.  
 Install new unit heater to control combustion air temperature.

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Failure Replacement	2008	\$15,101	Medium

**Updated:** APR-08



Combustion air duct.

**D3020.04.03 Fuel-Fired Unit Heaters\*\***

Gas fired unit heater in Mechanical Room equal to Climate Master, 100 MBH heating capacity.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1980	30	DEC-07

**Event: Unit Heater Replacement**

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2012	\$3,661	Unassigned

**Updated:** APR-08



Unit Heater in Mechanical Room.

**D3040.01.04 Ducts: Air Distribution\***

Low velocity supply air system to classrooms, offices and common areas from multizone units and furnaces. Overhead ducts distribution in ceiling space. Exposed round ducts in Gymnasium.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
2 - Poor	1968	0	DEC-07

**Event: Air Distribution System Upgrade**

**Concern:**

The existing ductwork distribution system is not capable to provide sufficient amount of air for new air distribution system. In many areas ducts are undersized and noise problem occurs.

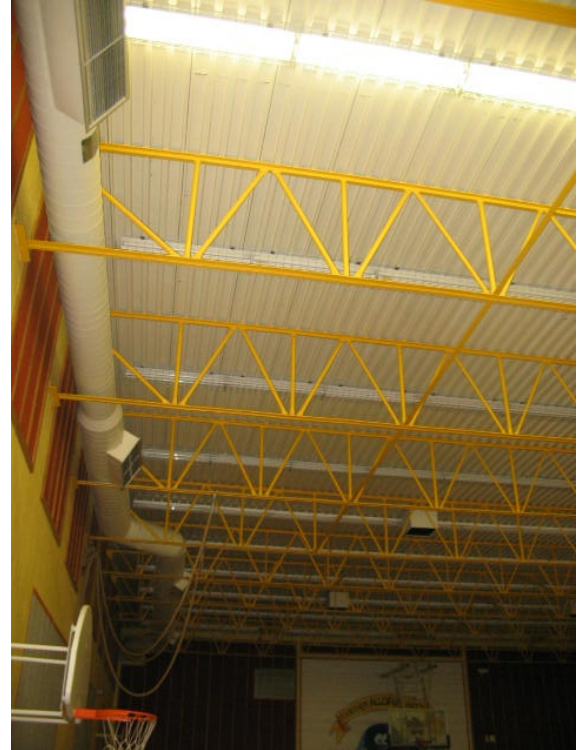
Very poor air distribution in classrooms.

**Recommendation:**

Replace existing air distribution with new galvanized steel ducts up to recent SMACNA standards. Ducts should be properly sized to match new ventilation load.

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Failure Replacement	2008	\$351,437	High

**Updated:** APR-08



Gymnasium supply air duct.

**D3040.01.07 Air Outlets & Inlets:Air Distribution - \***

Ceiling mounted supply air steel registers, single and double deflection. Egg crate grilles for return and exhaust air applications. Replacement cost included in section: D3020.03.01

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
2 - Poor	1968	0	DEC-07



Supply air grille in classroom.

**D3040.04.01 Fans: Exhaust\*\***

Ceiling mounted, inline cabinet fans serving Washrooms and Janitor Rooms equal to Penn Zephyr Z12, 200 cfm of E/A complete with vertical discharge up through the roof.  
Two Broan range hood fans QT230WWN 200 cfm.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1968	30	DEC-07

**Event: Replace 6 EF**

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2012	\$14,872	Unassigned

**Updated:** APR-08

**D3040.04.03 Ducts: Exhaust\***

Galvanized steel exhaust air ducts complete with roof goosenecks.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1968	0	DEC-07

**D3040.04.05 Air Outlets and Inlets: Exhaust\***

Steel egg crate grilles.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1968	0	DEC-07

**D3050.03 Humidifiers\*\***

Electric steam humidifier equal to VAPAC V15 serving indoor multizone unit. Not in use. Not required by Staff.  
Remove humidifier along with multi zone unit. Cost included in section D3020.03.01

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
3 - Marginal	1968	25	DEC-07

**D3060 HVAC Instrumentation and Controls**

Pneumatic and electric controls installed throughout. Powers pneumatic control air compressor. No BMCS control system.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1968	0	DEC-07

**Event: Control System Upgrade**

**Concern:**

The existing control system can only perform basic control functions.

**Recommendation:**

Based on major heating and ventilation upgrade system changes recommended, controls should be upgraded to work with the new equipment installed.

Installation of new BMCS system with remote access is recommended.

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Operating Efficiency Upgrade	2008	\$211,640	High

**Updated:** APR-08



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**D4030.01 Fire Extinguisher, Cabinets and Accessories - \***

Fire extinguishers hand held A.B.C. Inspected yearly.  
Fire hose cabinets.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1996	30	DEC-07

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

The main distribution is a 500amp 120/208 volt Westinghouse Panel.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1968	40	DEC-07

**Event: Replace [D5010.03 Main Electrical Switchboards (Main Distribution)\*\* - ]**

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2012	\$51,480	Unassigned

**Updated:** APR-08

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

The secondary distribution is Westinhouse panels located through out the school.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1981	30	DEC-07

**Event: Replace [D5010.05 Electrical Branch Circuit Panelboards (Secondary Distribution)\*\* - ]**

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2012	\$17,732	Unassigned

**Updated:** APR-08

**D5010.07.02 Motor Starters and Accessories - 1968\*\***

The motor starters are Federal Pioneerare located by the motors they serve.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1968	30	DEC-07

**Event: Failure Replacement [D5010.07.02 Motor Starters and Accessories\*\* - 1968]**

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2012	\$1,716	Unassigned

**Updated:** APR-08

**D5010.07.02 Motor Starters and Accessories - 1981\*\***

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1981	30	DEC-07

**Event: Lifecycle Replacement [D5010.07.02 Motor Starters and Accessories\*\* - 1981]**

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2012	\$1,716	Unassigned

**Updated:** MAY-08

**D5020.01 Electrical Branch Wiring - \***

The branch wiring consists of EMT piping and wiring and BX Armored cable.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1968	0	DEC-07

**D5020.02.01 Lighting Accessories (Lighting Controls) - \***

Lighting controls are line voltage switches.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1968	0	DEC-07

**D5020.02.02.02 Interior Florescent Fixtures - 1968\*\***

The florescent fixtures are T-12 lamping and energy inefficient magnetic ballasts.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1968	30	DEC-07

**Event: Replace [D5020.02.02.02 Interior Florescent Fixtures\*\* - ]**

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2012	\$64,178	Unassigned

**Updated:** APR-08

**D5020.02.02.02 Interior Florescent Fixtures - 1981\*\***

The interior florescent fixtures are energy inefficient T-12 lamping and magnetic ballasts.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1981	30	DEC-07

**Event: Replace Interior Florescent Fixtures**

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2012	\$57,543	Unassigned

**Updated:** MAY-08

**D5020.02.03.02 Emergency Lighting Battery Packs - 1981\*\***

The emergency lighting is Emergilite Battery Packs.The cost to replace the emergency lighting is less than a \$1000.00.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1981	20	DEC-07

**D5020.02.03.02 Emergency Lighting Battery Packs - 1968\*\***

The emergency lighting consists of Emergilite battery packs and remote heads through out the school.The cost of replacing the emergency lighting is less than a \$1000.00

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1968	20	DEC-07

**D5020.02.03.03 Exit Signs - \***

The Emergilite exit signs are tied into the emergency light battery packs.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1968	0	DEC-07

**D5020.03.01.04 Exterior H.P. Sodium Fixtures - \***

The HPS fixtures are both soffit and wall mounted. These illuminate each point of egress to the school.the wattage ranges from 75 to 250 watts.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1968	0	DEC-07

**D5020.03.02 Lighting Accessories: Exterior (Lighting Controls) - \***

The exterior lights are energized by a photocell located on the roof.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1968	0	DEC-07

**D5030.01 Detection and Fire Alarm\*\***

The fire alarm system is an Edwards ESA 2000 complete with bells only.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1968	25	DEC-07

**Event: Replace [D5030.01 Detection and Fire Alarm\*\* - ]**

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2012	\$34,320	Unassigned

**Updated:** DEC-07

**D5030.02.02 Intrusion Detection - 1981\*\***

The security alarm is a Silent Knight 4720 c/w a Regency card swipe at the main entrance.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1968	25	DEC-07

**Event: Replace [D5030.02.02 Intrusion Detection\*\* - ]**

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2012	\$6,864	Unassigned

**Updated:** APR-08

**D5030.03 Clock and Program Systems - \***

The clocks are not tied into the bell system.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1968	25	DEC-07

**D5030.04.01 Telephone Systems - \***

The telephone system is a Alcatel Meridian system and a Rausland Telecenter for paging.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1981	25	DEC-07

**D5030.04.05 Local Area Network Systems - \***

The Network system is Alberta Supernet By Bell.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1981	0	DEC-07

**D5030.05 Public Address and Music Systems - \*\***

The public address system is through the Rausland Tele Center.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1981	20	DEC-07

**Event: Replace [D5030.05 Public Address and Music Systems\*\* - ]**

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2012	\$5,720	Unassigned

**Updated:** APR-08

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

Under stage dollies.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
3 - Marginal	1968	0	DEC-07

**Event: New fronts to under stage dollies.****Concern:**

Damaged fronts to under stage dollies.

**Recommendation:**

Remove damaged ply fronts to dollies, replace with new birch faced panels with hand holds.

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Failure Replacement	2009	\$9,152	High

**Updated:** DEC-07**E1090.03 Food Service Equipment - \***

Griddle, stove, fridge, deep freeze.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
3 - Marginal	1983	0	DEC-07

**Event: Add handwash sink and dishwasher****Concern:**

Handwash sink and dishwasher not provided in kitchen.

**Recommendation:**

Add handwash sink and dishwasher.

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Program Functional Upgrade	2008	\$22,880	High

**Updated:** DEC-07**Event: Replace kitchen equipment****Concern:**

Units are old, unhygienic counter tops and cupboards. Poor venting and fire protection.

**Recommendation:**

Replace kitchen equipment. Stove, fridge, deep freeze, dishwasher and exhaust fan and hood. Replace countertop.

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Failure Replacement	2008	\$28,600	High

**Updated:** DEC-07

**E1090.04 Residential Equipment - \***

Stove, dishwasher, fridge and microwave for staff.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
3 - Marginal	1989	0	DEC-07

**Event: Replace staff room equipment**

**Concern:**

Old equipment, may not last 2 years.

**Recommendation:**

Replace stove, dishwasher, fridge and microwave.

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Failure Replacement	2010	\$6,864	High

**Updated:** APR-08

**E1090.07 Athletic, Recreational, and Therapeutic Equipment - \***

2 glass backed electric backstops, 4 fixed backstops, ropes and climb wall.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1968	0	DEC-07

**E2010.02 Fixed Casework - 1968 + 1981 Section\*\***

Classroom millwork.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
3 - Marginal	1981	35	DEC-07

**Event: Replace 5 classrooms**

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2016	\$34,320	Unassigned

**Updated:** DEC-07

**Event: Replace millwork in 7 classrooms.**

**Concern:**

Broken millwork

**Recommendation:**

Replace millwork in 1968 + 1981 section - 7 classrooms. 40 m @ \$1000/m

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Failure Replacement	2009	\$45,760	High

**Updated:** DEC-07

**E2010.02.09 Library Casework**

Plastic laminate counter tops, birch and mahogany shelving.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1968	0	DEC-07

**E2010.03.01 Blinds - \*\***

Venetian blinds between glass. Costs included in window replacement. (see B2020.01 1968 + 1981 Sections).

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1968	30	DEC-07

**F1010.02.04 Portable and Mobile Buildings - \***

Metal clad one classroom wood frame., interior walls vinyl, GWB, floor sheet vinyl, ceiling acoustic tile, gas fired roof top unit and overhead electrical service from school to panel.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
3 - Marginal	1981	0	DEC-07

**Event: Repair stair and railings.**

**Concern:**

If pressure put on wood railing they could collapse.

**Recommendation:**

Repair stair and railings.

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Repair	2008	\$5,720	High

**Updated:** DEC-07

**F2020.01 Asbestos - \***

No friable asbestos noted.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1968	0	DEC-07

**F2020.04 Mould - \***

None observed.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1968	0	DEC-07

## S8 FUNCTIONAL ASSESSMENT

### K4010.01 Barrier Free Route: Parking to Entrance - \*

Curbs need reducing.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
3 - Marginal	1968	0	DEC-07

**Event:** Curbs need reducing

**Concern:**

Curbs need reducing.

**Recommendation:**

Reduce curbs to recommended standards for access.

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Barrier Free Access Upgrade	2008	\$2,288	High

**Updated:** DEC-07

### K4010.02 Barrier Free Entrances - \*

Front doors require automatic assist access.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
3 - Marginal	1968	0	DEC-07

**Event:** Provide automatic assist access

**Concern:**

No automatic assist doors.

**Recommendation:**

Provide automatic assist access.

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Barrier Free Access Upgrade	2008	\$5,720	High

**Updated:** DEC-07

### K4010.03 Barrier Free Interior Circulation - \*

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1981	0	DEC-07

### K4010.04 Barrier Free Washrooms - \*

Barrier free washrooms provided.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1981	0	DEC-07

# RECAPP Facility Evaluation Report



## Thorsby Elementary School

S4173  
Thorsby

**Facility Details**

**Building Name:** Thorsby Elementary School  
**Address:**  
**Location:** Thorsby  
  
**Building Id:** S4173  
**Gross Area (sq. m):** 0.00  
**Replacement Cost:** \$0  
**Construction Year:** 0

**Evaluation Details**

**Evaluation Company:** John Murray Architectural Associates  
**Evaluation Date:** August 15 2007  
**Evaluator Name:** John Murray

**Total Maintenance Events Next 5 years:** \$70,013  
**5 year Facility Condition Index (FCI):** 0%

**General Summary:**

The Thorsbey Elementary school site is located on a cul-de-sac roadway access, 2.5 km south from highway 39, that just serves the elementary and high school developments. There is bus lane drop off on the north side of the school adjacent to side walk in the cul-de-sac which also provides staff parking. The site has mature trees, shrubs, lawns and annual plantings. There is a sand play lot area and an asphalt hard surface play area. Chain link fencing surrounds the site 1200mm high. The site is in good condition.

**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 road as cul-de-sac provides also angle parking for staff, parallel parking for parents pick-up, and bus parking which as adjacent to sidewalk.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1995	25	DEC-07

**Event: Replace roadways**

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2020	\$40,040	Unassigned

**Updated:** DEC-07

**G2010.05 Roadway Curbs and Gutters\***

Concrete curbs and gutters. Curb high for wheelchair access see K4010.01.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1995	0	DEC-07

**G2020.02.02 Flexible Paving Parking Lots(Asphalt) - \*\***

Parking lots are part of the roadway cul-de-sac.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1968	25	DEC-07

**Event: Replace parking lot surfaces**

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2012	\$62,920	Unassigned

**Updated:** DEC-07

**G2020.06.04 Pavement Markings\***

No line markings to parking lots.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
3 - Marginal	1995	25	DEC-07

**Event: Re-paint line markings**

**Concern:**

No line markings, undefined parking spaces.

**Recommendation:**

Supply line markings.

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Operating Efficiency Upgrade	2008	\$9,152	Medium

**Updated:** DEC-07

**G2030.04 Rigid Pedestrian Pavement (Concrete)\*\***

Concrete walkways.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1995	25	DEC-07

**Event: Replace concrete walkways**

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2020	\$20,592	Unassigned

**Updated:** DEC-07

**G2040.02.01 Chain Link Fences and Gates\***

1200mm high chain link galvanized posts east, south, west, playfield boundary and partial north.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1981	30	DEC-07

**G2040.03 Athletic and Recreational Surfaces\*\***

Asphalt hard play surface with 6 basketball hoops.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1990	25	DEC-07

**Event: Replace play surfaces.**

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2012	\$5,720	Unassigned

**Updated:** DEC-07

**G2040.04.01 Play-Field Equipment and Structures**

1 junior football, 2 junior soccer, 1 baseball diamond with appropriate goal posts, and backstops.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	10	DEC-07

**G2040.05 Site and Street Furnishings - \***

2 steel foot scrappers, 3 steel and wood benches, 3 steel bike racks for 60 bikes, 4 pre-cast concrete waste receptacles and planters

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1990	0	DEC-07

**G2040.06 Exterior Signs - \***

Aluminum individual letters to school acceptable, loading zones marked adequately, staff parking signage deteriorated.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
3 - Marginal	1968	0	DEC-07

**Event:** Replace staff parking signage

**Concern:**

Staff parking signage is deteriorated.

**Recommendation:**

Replace staff parking lot signage.

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Failure Replacement	2009	\$1,373	High

**Updated:** DEC-07

**G2040.08 Flagpoles - \***

1 flagpole aluminum.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1981	0	DEC-07

**G2050.04 Lawns and Grasses - \***

Lawns to building perimeter (with flower beds) and baseball, football, and soccer fields

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1968	0	DEC-07

**G2050.05 Trees, Plants and Ground Covers - \***

Mature trees deciduous and coniferous, well maintained shrubs and flower planting at entry (annuals).

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	1981	0	DEC-07

**G3010.02 Site Domestic Water Distribution - \***

100mm diameter municipal water service from 150mm water main on the 48th Street.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1968	0	DEC-07

**G3010.03 Site Fire Protection Water Distribution - \***

Siamese connection located on the north wall adjacent to Infirm Room.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1968	0	DEC-07

**G3020.01 Sanitary Sewage Collection - \***

100mm diameter sanitary line to 250mm sanitary main on the 48th Ave.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1968	0	DEC-07

**G3030.01 Storm Water Collection - \***

Storm water collection via 100mm roof drains to surface run-off.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1968	0	DEC-07

**G3060.01 Gas Distribution - \***

50mm diameter medium pressure gas service from the main located on 48th Ave to gas meter in Meter Room 06.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1968	0	DEC-07

**G4010.01 Electrical Substations - \***

There is a padmount transformer located at the north east corner of the school.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	1968	0	DEC-07

**G4010.02 Electrical Power Distribution Lines - \***

The distribution lines go underground between the padmount transformer and the Main Distribution Panel.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	1968	0	DEC-07

**G4010.04 Car Plugs-ins - \***

There are car receptacles located at the north side of the school.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1968	0	DEC-07

**G4020.01 Area Lighting - \***

There are two lights that illuminate the parking area as well as two street lights that illuminate the street adjacent to the parking lot. There are also two lights that illuminate the out door skating rink.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1968	0	DEC-07