RECAPP Facility Evaluation Report

Calgary RCSSD #1



St. Thomas More Elementary School
B2828A
Calgary

Calgary - St. Thomas More Elementary School (B2828A)

Facility Details

Building Name: St. Thomas More Elementar

Address: 6110 Temple Drive N. E.

Location: Calgary

Building Id: B2828A

Gross Area (sq. m): 2,929.21

Replacement Cost: \$6,703,339

Construction Year: 1981

Evaluation Details

Evaluation Company: BCW Architects

Evaluation Date: October 25 2007

Evaluator Name: Roger LeBlanc

Total Maintenance Events Next 5 years: \$2,273,815 5 year Facility Condition Index (FCI): 33.92%

General Summary:

St. Thomas More is an elementary school constructed in the year 1981. It is a single story structure with a gross area of 2929m². There is a question of mould in the NW corner of the school as the interior drywall was being replaced at the time of the review, and there are investigative core holes in the exterior brick on the west side of the school. If not already done, a study should be conducted to determine the exact cause and extent to this problem.

Structural Summary:

This building was constructed in 1981. The building is sitting on concrete foundation walls with interior load bearing masonry walls running up to an OWSJ roof construction. This building is a single story structure and it is in an overall good condition.

Envelope Summary:

The exterior walls constructed with brick, and deep profiled pre-finished metal siding. Windows are double glazed sealed unit in anodized aluminum frame, vented unit. The exterior is in an overall good condition; some minor work is required.

Interior Summary:

Floors in common areas and classrooms are vinyl tile. The administration area is carpeted. Washroom floors are quarry tile, wall with ceramic tile. Gymnasium is wood flooring. Walls are painted concrete block and gypsum board. Ceilings are suspended T-bar ceiling grids with 2x4 acoustic ceiling tile. The interiors are in need of some repairs, but are in an acceptable condition.

Mechanical Summary:

Heating is provided to the main building by 3 gas fired, natural draft, modular boilers in the mechanical mezzanine feeding perimeter radiation and heating coils within two AHU. Controls are pneumatic. Portable units ventilation and heating provided via individual furnaces.

Domestic Hot water is provided via a single gas fired DHWH installed within the last 5 years. Plumbing, sanitary and domestic water lines are in reasonable condition.

The building doesn't meet current code requirements in regards to sprinklers and boiler room ventilation.

Overall the mechanical system is in acceptable condition.

Electrical Summary:

This school has a Westinghouse 800 Amp 120/208 Volt electrical service. There are five Westinghouse branch circuit panels located throughout the building. The lighting consists of T-12 florescent fixtures as well as some HID fixtures. Emergency lighting consists of Lumacell battery packs and remote heads. The fire alarm system has been upgraded to a Simplex 2001 that was last verified in Dec. Of 2006. Overall the electrical portion of this facility is in good condition.

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

S1 STRUCTURAL

A1010 Standard Foundations*

Small shrinkage cracks in concrete foundation wall.

RatingInstalledDesign LifeUpdated4 - Acceptable0100FEB-08

A1030 Slab on Grade*

Visible concrete slabs show no signs of problems.

RatingInstalledDesign LifeUpdated4 - Acceptable0100FEB-08

B1010.01 Floor Structural Frame (Building Frame)*

Concrete foundation walls.

RatingInstalledDesign LifeUpdated4 - Acceptable0100FEB-08

B1010.02 Structural Interior Walls Supporting Floors (or Roof)*

Interior block walls.

RatingInstalledDesign LifeUpdated5 - Good0100FEB-08

B1010.03 Floor Decks, Slabs, and Toppings*

Visible concrete slabs show no signs of damage.

RatingInstalledDesign LifeUpdated4 - Acceptable0100FEB-08

B1010.05 Mezzanine Construction*

Steel/Concrete mezzanine.

RatingInstalledDesign LifeUpdated4 - Acceptable0100FEB-08

B1010.06 Ramps: Exterior*

Concrete ramp at main entrance.

RatingInstalledDesign LifeUpdated4 - Acceptable040FEB-08

B1010.07 Exterior Stairs*

Two sets of stairs to gymnasium exterior entrances. Edge between stairs and concrete sidewalk needs to be repaired(See Site report for recommendations).

RatingInstalledDesign LifeUpdated4 - Acceptable040FEB-08

B1010.09 Floor Construction Fireproofing*

No unprotected locations were noted.

RatingInstalledDesign LifeUpdated5 - Good050FEB-08

B1010.10 Floor Construction Firestopping*

No unprotected penetrations were noted.

RatingInstalledDesign LifeUpdated5 - Good050FEB-08

B1020.01 Roof Structural Frame*

Open Web Steel joist.

Rating Installed Design Life Updated
5 - Good 0 100 FEB-08

B1020.06 Roof Construction Fireproofing*

No unprotected locations were noted.

RatingInstalledDesign LifeUpdated5 - Good050FEB-08

B1020.07 Roof Construction Firestopping*

No unprotected penetrations were noted.

RatingInstalledDesign LifeUpdated5 - Good00FEB-08

S2 ENVELOPE

B2010.01.02.01 Brick Masonry: Ext. Wall Skin

Giant brick stack bond.

RatingInstalledDesign LifeUpdated5 - Good19810FEB-08

B2010.01.06.03 Metal Siding**

Horizontal prefinished metal siding.

RatingInstalledDesign LifeUpdated4 - Acceptable198140FEB-08

Event: Replace Siding Panels

TypeYearCostPriorityLifecycle Replacement2021\$276,848Low

Updated: APR-08

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

RatingInstalledDesign LifeUpdated4 - Acceptable198120FEB-08

Event: Repair Joint Sealers

TypeYearCostPriorityLifecycle Replacement2012\$37,066Low

Updated: APR-08

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

Paint / stain wood siding for portable structures.

RatingInstalledDesign LifeUpdated4 - Acceptable198115FEB-08

Event: Repair Paints & Stains

TypeYearCostPriorityLifecycle Replacement2012\$24,710Low

Updated: APR-08

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

Windows are operable units with aluminum frames, double window, single glazed units, condensation damage and leakage signs are evident. Energy efficiency would be very poor.

Windows are still functional but should be replaced with insulated and sealed units to reduce condensation (interior damage) and ensure energy efficiency.

RatingInstalledDesign LifeUpdated2 - Poor198140FEB-08

Event: Replace Exterior Standard Windows

TypeYearCostPriorityLifecycle Replacement2008\$212,784Medium

Updated: FEB-08

B2030.01.02 Steel-Framed Storefronts: Doors**

RatingInstalledDesign LifeUpdated4 - Acceptable198130FEB-08

Event: Replace Exterior Entrance Doors

TypeYearCostPriorityLifecycle Replacement2012\$85,342Low

Updated: APR-08

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

RatingInstalledDesign LifeUpdated4 - Acceptable198125FEB-08

Event: Replace Membrane Roofing

TypeYearCostPriorityLifecycle Replacement2012\$661,232Low

Updated: APR-08

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B3010.08.02 Metal Gutters and Downspouts**

Prefinished metal scupper.

RatingInstalledDesign LifeUpdated4 - Acceptable198130FEB-08

Event: Replace Metal Gutters and Downspouts

TypeYearCostPriorityLifecycle Replacement2012\$61,547Low

Updated: APR-08

S3 INTERIOR

C1010.03 Interior Operable Folding Panel Partitions**

RatingInstalledDesign LifeUpdated4 - Acceptable198130FEB-08

Event: Replace Folding Panel Partitions

TypeYearCostPriorityLifecycle Replacement2012\$22,766Low

Updated: APR-08

C1030.01 Visual Display Boards**

Wood and tack visual display boards.

RatingInstalledDesign LifeUpdated4 - Acceptable198120FEB-08

Event: Replace Visual Display Boards

TypeYearCostPriorityLifecycle Replacement2012\$80,538Low

Updated: APR-08

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

Some partitions have been replaced, others in need.

Shower partitions in Gym need not be replaced as area is used for storage and not showers

RatingInstalledDesign LifeUpdated3 - Marginal198130FEB-08

Event: Replace Toilets/Showers

TypeYearCostPriorityLifecycle Replacement2009\$19,906Low

Updated: FEB-08

C1030.17 Other Fittings*

Open wood lockers provided only.

RatingInstalledDesign LifeUpdated4 - Acceptable198130FEB-08

C3010.02 Wall Paneling**

Dated, but still functioning and acceptable

RatingInstalledDesign LifeUpdated4 - Acceptable198130FEB-08

Event: Replace Wall Paneling

TypeYearCostPriorityLifecycle Replacement2012\$122,179Low

Updated: APR-08

C3010.06 Tile Wall Finishes**

Ceramic wall tile finish in washrooms.

RatingInstalledDesign LifeUpdated4 - Acceptable198140FEB-08

Event: Replace Tile Wall Finishes

TypeYearCostPriorityLifecycle Replacement2021\$74,360Low

Updated: APR-08

C3010.09 Acoustical Wall Treatment**

Spray on acoustic treatment in gym subject to damage from activities, questionable material.

RatingInstalledDesign LifeUpdated4 - Acceptable198120FEB-08

Event: Replace Acoustical Wall Treatment

TypeYearCostPriorityLifecycle Replacement2012\$106,163Low

Updated: APR-08

C3020.02 Tile Floor Finishes**

Mosaic tile in washroom floor.

RatingInstalledDesign LifeUpdated4 - Acceptable198150FEB-08

Event: Replace Tile Floor Finishes

TypeYearCostPriorityLifecycle Replacement2031\$23,491Low

Updated: APR-08

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C3020.07 Resilient Flooring**

Sheet goods in portable area nearing end of life span if portables are to remain

RatingInstalledDesign LifeUpdated2 - Poor198120FEB-08

Event: Replace Resilient Flooring

TypeYearCostPriorityLifecycle Replacement2008\$144,945Medium

Updated: FEB-08

C3020.08 Carpet Flooring**

Carpet in office area.

RatingInstalledDesign LifeUpdated4 - Acceptable198115FEB-08

Event: Replace Carpet Flooring

TypeYearCostPriorityLifecycle Replacement2012\$16,297Low

Updated: APR-08

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

Prefinished metal 'T' bar ceiling grids with 2x4 ceiling tiles.

RatingInstalledDesign LifeUpdated4 - Acceptable198125FEB-08

Event: Replace Acoustic Ceiling Treatment (Susp.T-Bar)

TypeYearCostPriorityLifecycle Replacement2012\$89,232Low

Updated: APR-08

S4 MECHANICAL

D2010.04 Sinks - **

Janitor sink, cast iron enameled basin. General purpose sinks with 8" centre set

RatingInstalledDesign LifeUpdated4 - Acceptable198130FEB-08

Event: Replace 9 sinks

TypeYearCostPriorityLifecycle Replacement2012\$9,152Low

Updated: APR-08

D2010.05 Showers - **

12 individual showers in change rooms. Tempered water supply. Mixing valve in mechanical room.

RatingInstalledDesign LifeUpdated4 - Acceptable198130FEB-08

Event: Replace 12 Showers

TypeYearCostPriorityLifecycle Replacement2012\$5,720Low

Updated: APR-08

D2010.08 Drinking Fountains / Coolers - **

Crane brand. Non-refrigerated, wall mounted drinking fountains throughout. All in good condition

RatingInstalledDesign LifeUpdated4 - Acceptable198135FEB-08

Event: Replace Drinking Fountains

TypeYearCostPriorityLifecycle Replacement2016\$5,963Low

Updated: APR-08

D2010.10 Washroom Fixtures (WC, Lav, Urnl) - **

Crane brand fixtures.

Typically floor mounted, flush valve, open front seat WC. 19 units total

Floor mounted, flush tank urinals. 6 units total

Counter mounted Lavs. 15 units total

RatingInstalledDesign LifeUpdated4 - Acceptable198130FEB-08

Event: Replace 19 WC, 15 Lav & 6 Urnl

TypeYearCostPriorityLifecycle Replacement2012\$46,468Low

Updated: APR-08

D2020.01.01 Pipes and Tubes: Domestic Water - *

4" domestic water service. 3" water main feed to 2" water meter. Provides acceptable volume and pressure. Copper tubing throughout. Majority original to building. Some replaced as required.

RatingInstalledDesign LifeUpdated5 - Good19810FEB-08

D2020.01.02 Valves: Domestic Water - **

Majority original to building. Some replaced as required

RatingInstalledDesign LifeUpdated5 - Good198140FEB-08

Event: Replace original Domestic Water valves

Concern:

Original valves are not reliable, may leak or may not be operable.

Recommendation:

Replace remaining valves original to building

TypeYearCostPriorityLifecycle Replacement2021\$18,096Low

Updated: APR-08

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

Double check backflow preventers on DCW and irrigation lines. Appear regularly inspected and in good condition. Dual 3/1" backflow preventers on boiler makeup feed.

RatingInstalledDesign LifeUpdated5 - Good200020FEB-08

Event: Replace Backflow Preventors

Concern:

Failure resulting in contamination of building or city water supplies

Recommendation:

Continue routine inspection and replace as required

TypeYearCostPriorityLifecycle Replacement2012\$10,725Medium

Updated: APR-08

D2020.02.02 Plumbing Pumps: Domestic Water - **

3/4" Inline domestic hot water recirculation pump. Taco brand original to building.

RatingInstalledDesign LifeUpdated4 - Acceptable198120FEB-08

Capacity Size
1/8
Capacity Unit

Event: Replace DHWR pump

TypeYearCostPriorityLifecycle Replacement2012\$2,601Low

Updated: APR-08

D2020.02.06 Domestic Water Heaters - **

Single AO Smith "Master Fit" model "BTRC 199", natural draft, gas fired Domestic Hot Water Heater installed within the last 5 years and located with in the Mechanical Mezzanine.

179.1 MBH input 173.6 MBH output 288 liters storage 80% efficiency

RatingInstalledDesign LifeUpdated5 - Good200320FEB-08

Capacity Size Capacity Unit

Event: Replace DHWH

TypeYearCostPriorityLifecycle Replacement2020\$6,818Low

Updated: APR-08

D2020.03 Water Supply Insulation: Domestic - *

RatingInstalledDesign LifeUpdated5 - Good19810FEB-08

D2030.01 Waste and Vent Piping - *

Cast iron piping tied to city mains

RatingInstalledDesign LifeUpdated4 - Acceptable19810FEB-08

D2040.01 Rain Water Drainage Piping Systems - *

Cast iron piping tied to city mains.

RatingInstalledDesign LifeUpdated4 - Acceptable19810FEB-08

D2040.02.04 Roof Drains - *

Full flow roof drains installed throughout

RatingInstalledDesign LifeUpdated4 - Acceptable198140FEB-08

D3010.02 Gas Supply Systems - *

Gas piping to DHWH and Boilers. Painted orange and tagged in mezzanine and meter room.

RatingInstalledDesign LifeUpdated4 - Acceptable198160FEB-08

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

Heating water to perimeter radiation and AHU heating coil provided by 4 "multi temp" atmospheric, gas fired, modular boilers. Three Model "MR600B" and one model "MR900B"

Model MR600B (built 1981) 480MBH input 432MBH output

Model MR900B (built 1981) 810MBH input 648MBH output

Total output approx. 1,944 MBH

Boilers are old however appear in reasonable condition.

RatingInstalledDesign LifeUpdated4 - Acceptable198135FEB-08

Capacity Size Capacity Unit 6770 kW

Event: Replace Boilers

Concern:

Poor chemical treatment in the past may have lead to internal corrosion and could lead to loss of efficiency and system failures.

Recommendation:

Replace Boilers

TypeYearCostPriorityLifecycle Replacement2012\$66,415Low

Updated: APR-08

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

Flues in acceptable condition. Combustion air ducted to low level and heated via unit heater. No high level ventilation.

RatingInstalledDesign LifeUpdated4 - Acceptable198130FEB-08

Event: Provide High Level Ventilation

Concern:

Boiler room does not have high level ventilation in accordance with current gas code. Refer Natural Gas and Propane Installation Code - B149.1 section 8.4.1

Recommendation:

Provide high level ventilation in accordance with current code

Consequences of Deferral:

Potential for contaminants to build up in boiler room, possibly leading to adverse health effects and potential for explosion.

TypeYearCostPriorityCode Upgrade2008\$5,720Medium

Updated: APR-08

Event: Replace Flues

Recommendation:

Replace flues when boilers are replaced

TypeYearCostPriorityLifecycle Replacement2012\$14,240Low

Updated: APR-08

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

Chemical pot feeder installed. Treatment added as required.

RatingInstalledDesign LifeUpdated4 - Acceptable19810FEB-08

D3020.03.01 Furnaces - **

There are 6 furnaces serving the portable units. They are a combination of International Comfort Products brand units installed in 1997 and Lennox brand units installed in 1999. All appear in reasonable condition.

3x

Lennox model G24M3/4-100S-12 (installed in 1999) 100 MBH input

2x

International Comfort Products model GDEO75B12G1 (installed in 1997) 75 MBH input

1x

International Comfort Products model PAC III-90N-400-FF (installed 1997) 90 MBH input

RatingInstalledDesign LifeUpdated4 - Acceptable199725FEB-08

Capacity Size Capacity Unit
Various N/A

Event: Replace 6 Furnaces

TypeYearCostPriorityLifecycle Replacement2015\$33,225Low

Updated: APR-08

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

RatingInstalledDesign LifeUpdated4 - Acceptable19810FEB-08

D3040.01.01 Air Handling Units: Air Distribution - **

The main building is served via two Trane brand AHU located in the mechanical mezzanine. The first unit serving the gym and the other serving the remainder of the main building. Both are provided with hot water heating coils both are original to the building. Both also complete with humidifiers.

Gym - Trane Torrivent model 1-7XLPHFTH Classrooms - Trane Torrivent model 21LPHCTHR

Portable units are served by gas furnaces

RatingInstalledDesign LifeUpdated4 - Acceptable198130FEB-08

Event: Replace Air Handling Units

TypeYearCostPriorityLifecycle Replacement2012\$171,600Low

Updated: APR-08

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D3040.01.03 Air Cleaning Devices: Air Distribution - *

Panel filters in AHU and furnaces. Appear regularly serviced and in good condition.

RatingInstalledDesign LifeUpdated5 - Good19810FEB-08

D3040.01.04 Ducts: Air Distribution - *

RatingInstalledDesign LifeUpdated5 - Good19810FEB-08

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

Combination of side blow and square cone diffusers. typically eggcrate return. All in reasonable condition.

RatingInstalledDesign LifeUpdated5 - Good19810FEB-08

D3040.03.01 Hot Water Distribution Systems - **

Heating water is distributed via two parallel 5 hp pumps installed in 2006. Pumps are in good condition. Each AHU has a return water pump in reasonable condition.

Rating Installed Design Life Updated
5 - Good 2006 40 FEB-08

Event: Replace 2 supply and 2 return HW Distribution

<u>pumps</u>

TypeYearCostPriorityLifecycle Replacement2030\$224,068Low

Updated: APR-08

D3040.04.01 Fans: Exhaust - **

RatingInstalledDesign LifeUpdated4 - Acceptable198130FEB-08

Event: Replace Roof Mounted Exhaust Fans

TypeYearCostPriorityLifecycle Replacement2012\$9,353Low

Updated: APR-08

D3040.04.03 Ducts: Exhaust - *

RatingInstalledDesign LifeUpdated4 - Acceptable19810FEB-08

D3040.04.05 Air Outlets and Inlets: Exhaust - *

Typically eggcrate. Reasonable condition.

RatingInstalledDesign LifeUpdated4 - Acceptable19810FEB-08

D3050.02 Air Coils - **

AHU heating coils appear in reasonable condition

RatingInstalledDesign LifeUpdated4 - Acceptable198130FEB-08

Event: Replace Heating Coils

Recommendation:

Replace with AHU when required

TypeYearCostPriorityLifecycle Replacement2012\$5,114Low

Updated: APR-08

D3050.03 Humidifiers - **

Humidification is provided via "Aladin Air" model "HWC-L" humidifiers in each of the two AHU S/A ducts. Neither appear original to the building and both appear in good condition.

RatingInstalledDesign LifeUpdated5 - Good200025FEB-08

Event: Replace Humidifiers

TypeYearCostPriorityLifecycle Replacement2012\$7,928Low

Updated: APR-08

D3050.05.03 Finned Tube Radiation - **

RatingInstalledDesign LifeUpdated4 - Acceptable198140FEB-08

Event: Replace Finned Tube Radiation

TypeYearCostPriorityLifecycle Replacement2021\$106,801Low

Updated: APR-08

D3050.07 Other Terminal and Packaged Units - *

Unit heaters in entry vestibules.

RatingInstalledDesign LifeUpdated4 - Acceptable19810FEB-08

D3060.02.02 Pneumatic Controls**

Paragon controller EC-128 panel for energy management. Pneumatic Controls serving main building heating systems. Barber Coleman Compressor and filter drier appears to have recently been upgraded.

RatingInstalledDesign LifeUpdated4 - Acceptable198140FEB-08

Event: Replace pneumatic controls

TypeYearCostPriorityLifecycle Replacement2012\$40,040Low

Updated: APR-08

D3060.02.02 Pneumatic Controls**

Boiler control panel updated in 2005. AHU controls appear reasonable. Furnace controls appear reasonable.

RatingInstalledDesign LifeUpdated4 - Acceptable198130FEB-08

Event: Replace Pneumaitc controls

TypeYearCostPriorityLifecycle Replacement2012\$28,600Low

Updated: APR-08

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D4010 Sprinklers: Fire Protection - *

Building is not sprinklered

RatingInstalledDesign LifeUpdated4 - Acceptable198160FEB-08

Event: Provide sprinklers

Concern:

The Building is not Sprinklered. Current code may require sprinklers to be installed.

Recommendation:

Propose study to determine requirement for sprinklers under current code

 Type
 Year
 Cost
 Priority

 Study
 2011
 \$9,152
 Medium

Updated: APR-08

D4030.01 Fire Extinguisher, Cabinets and Accessories - *

ABC fire extinguishers distributed throughout. All appear sufficiently located, regularly inspected and in good condition.

Rating	<u>Installed</u>	Design Life	Updated
5 - Good	1981	30	FEB-08

S5 ELECTRICAL

D5010.01 Main Electrical Transformer

The utility transformer is located 7meters west of the west entrance to the building. The pad mount transformer size is 150KVA and feeds an 800 Amp electrical service located in the back of the caretakers room.

RatingInstalledDesign LifeUpdated4 - Acceptable19810FEB-08

Capacity Size Capacity Unit

D5010.03 Main Electrical Switchboards (Main Distribution) - **

The main distribution for this building is a Westinghouse 12131 CDP board that is 800 amp 120/208 Volt 3 Phase 4 Wire. The CDP consists of five breakers feeding branch circuit panels throughout the school and a breaker feeding motor control centre.

RatingInstalledDesign LifeUpdated5 - Good198140FEB-08

Event: Replace Main Distribution

TypeYearCostPriorityLifecycle Replacement2021\$43,472Unassigned

Updated: APR-08

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

The branch circuit panel boards are Westinghouse 225 Amp 120/208 Volt and there are five located throughout the building including one that is located in the portables.

RatingInstalledDesign LifeUpdated5 - Good198130FEB-08

<u>Capacity Size</u> <u>Capacity Unit</u> 225 amps

Event: Replace Branch Circuit Panelboards

Recommendation:

According to the theoretical design life the panels are up fro replacement in 2011 but again do not appear to be showing any signs of failure.

TypeYearCostPriorityLifecycle Replacement2012\$24,663Low

Updated: APR-08

D5010.07.02 Motor Starters and Accessories - **

There is a Westinghouse fourplex motor control centre located i the mechanical room that controls various pumps and motors.

RatingInstalledDesign LifeUpdated5 - Good198130FEB-08

Event: Replace Motor Control Centre

Concern:

The motor control centre appears to be in good operating condition and should easily exceed it's theoretical design life.

TypeYearCostPriorityLifecycle Replacement2012\$4,253Low

Updated: APR-08

D5020.01 Electrical Branch Wiring - *

Branch circuit wiring consists of EMT and PVC conduit as well as armored flexible cable throughout the building.

RatingInstalledDesign LifeUpdated5 - Good19810FEB-08

D5020.02.01 Lighting Accessories (Lighting Controls) - *

Lighting in this building consists of a combination of low voltage and line voltage switching. A low voltage switching cabinet is located near the entrance to the gymnasium which operates the gymnasium lighting as well as various rooms throughout the building.

RatingInstalledDesign LifeUpdated5 - Good19810FEB-08

D5020.02.02.01 Interior Incandescent Fixtures - *

Only one incandescent fixture is located in the building and that was in the infirmary.

RatingInstalledDesign LifeUpdated5 - Good198130FEB-08

D5020.02.02.02 Interior Florescent Fixtures - **

This building consists of florescent fixtures throughout the classrooms, hallways, storage rooms and bathrooms.

RatingInstalledDesign LifeUpdated4 - Acceptable198130FEB-08

Event: Retrofit florescent fixtures with T-8 lamps

Concern:

All the florescent fixtures currently have T-12 lamps that are very inefficient.

Recommendation:

Retrofit fixtures with T-8 lamps and ballasts.

TypeYearCostPriorityLifecycle Replacement2012\$26,312Low

Updated: APR-08

D5020.02.02.03 Interior Metal Halide Fixture - *

There are 18 Metal Halide HID fixtures located in the Gymnasium. They appear to be in good operating condition.

RatingInstalledDesign LifeUpdated4 - Acceptable19810FEB-08

D5020.02.03.02 Emergency Lighting Battery Packs - **

Emergency Lighting is provided by 12 Volt DC Lumacell battery packs complete with both integral and remote heads.

RatingInstalledDesign LifeUpdated4 - Acceptable198120FEB-08

Event: Replace Emergency Lighting Battery Packs

Concern:

The battery packs have exceeded there theoretical design life and should be replaced in the near future.

Recommendation:

Emergency Lighting should be replaced in the near future.

TypeYearCostPriorityLifecycle Replacement2012\$10,447Low

Updated: APR-08

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D5020.02.03.03 Exit Signs - *

Exit signs have recently been upgraded to EmergyLite LED technology. It appears that some of the exit signs have already been damaged.

RatingInstalledDesign LifeUpdated4 - Acceptable20040FEB-08

D5020.03.01.01 Exterior Incandescent Fixtures - *

There are two incandescent pot lights located at each entrance to the building.

RatingInstalledDesign LifeUpdated5 - Good19810FEB-08

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

There appears to be 400 Watt HPS HID fixtures located on all sides of the exterior of the building. As well there are two 70 Watt HPS fixture located on the east and north sides of the building.

RatingInstalledDesign LifeUpdated5 - Good19810FEB-08

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

The exterior lighting appears to be controlled by a photo cell which operates a contactor located in the electrical room.

RatingInstalledDesign LifeUpdated5 - Good19810FEB-08

D5030.01 Detection and Fire Alarm - **

A Simplex 2001 fire alarm panel is located at the front entrance of the school. The system was last verified in Dec. of 2006 and is monitored by Altex security. It appears that the panel was replaced in approximately 2001.

RatingInstalledDesign LifeUpdated5 - Good200125FEB-08

Event: Replace Main Fire Alarm Panel

TypeYearCostPriorityLifecycle Replacement2026\$45,764Unassigned

Updated: APR-08

D5030.02.02 Intrusion Detection - **

This building is protected by a Silent Knight security system and is monitored by Altex security. The system was installed in the year 2000

RatingInstalledDesign LifeUpdated5 - Good200025FEB-08

Event: Replace Intrusion Detection

TypeYearCostPriorityLifecycle Replacement2025\$26,920Unassigned

Updated: APR-08

D5030.04.01 Telephone Systems - *

The telephone system is operational although, the telephone system has exceeded it's theoretical design life and should be replaced in the near future.

RatingInstalledDesign LifeUpdated4 - Acceptable198125FEB-08

D5030.04.05 Local Area Network Systems - *

The data rack is located in the caretakers office and consists of a Nortel server complete with UPS back up. It appears to have a fiber link that was installed by Bell.

RatingInstalledDesign LifeUpdated5 - Good19810FEB-08

D5030.05 Public Address and Music Systems - **

The public address system is a Rauland Communication System that has speakers located throughout the building. It also has a Sony CD player incorporated with it.

RatingInstalledDesign LifeUpdated4 - Acceptable198120FEB-08

Event: Replace Public Address System

Concern:

Although the speakers appear to be in good condition throughout the building the system itself has exceeded it's theoretical design life.

Recommendation:

Replace the public address system and utilize the existing speakers.

TypeYearCostPriorityLifecycle Replacement2012\$28,600Low

Updated: APR-08

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D5030.06 Television Systems - *

Shaw Cable is supplied to the building and there are five outlets that were installed throughout the building in approximately 1997.

Rating	<u>Installed</u>	Design Life	<u>Updated</u>
5 - Good	1981	0	FEB-08

S6 EQUIPMENT, FURNISHINGS AND SPECIAL CONSTRUCTION

E2010.02 Fixed Casework**

Wood cabinets and shelves.

RatingInstalledDesign LifeUpdated4 - Acceptable198135FEB-08

Event: Replace Fixed Casework

TypeYearCostPriorityLifecycle Replacement2016\$326,040Low

Updated: APR-08

E2010.03.01 Blinds**

Venetian blinds and heavy duty drapes.

RatingInstalledDesign LifeUpdated4 - Acceptable198130FEB-08

Event: Replace Blinds

TypeYearCostPriorityLifecycle Replacement2012\$49,993Low

Updated: APR-08

F1010.02.04 Portable and Mobile Buildings*

Architectural: wood framed construction bearing on concrete ads. Envelope includes metal cladding, 2 ply SBS roof membrane and aluminum framed field glazed windows complete with wire mesh security grilles. Interior components include vinyl tile, solid core wood doors, pressed steel frames, acoustic tile ceilings, painted gypsum board, painted/clear finish millwork and white boards. Carpeting in the portables is in need of replacement.

Electrical: Power for the single phase 120/208 Volt panels in each portable is fed from the main CDP located in the electrical room. Communications and paging is connected to the main building systems. The smoke detectors and pull stations have there own zone in the schools fire alarm panel. Emergency lighting is tested on a regular basis and is operational. Lighting consists of surface mount fluorescent fixtures with T-12 lamps.

Mechanical: Heating and Ventilation provided via self contained, natural gas fired furnace unit c/w stainless steel heat exchanger, wall louvre, supply fan and 25 mm disposable filters. Sprinkler system not installed. Fire extinguishers installed throughout.

RatingInstalledDesign LifeUpdated3 - Marginal030FEB-08

Event: Replace Portable Carpets

TypeYearCostPriorityFailure Replacement2008\$26,884Low

Updated: FEB-08

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F2020.01 Asbestos*

No findings at the time of review.

RatingInstalledDesign LifeUpdated5 - Good00FEB-08

F2020.04 Mould*

No mould observed or reported during inspection.

RatingInstalledDesign LifeUpdated5 - Good00FEB-08

F2020.09 Other Hazardous Materials*

No hazardous materials find at the time of review.

RatingInstalledDesign LifeUpdated5 - Good00FEB-08

S8 FUNCTIONAL ASSESSMENT

K4010.01 Barrier Free Route: Parking to Entrance*

Paved parking lot with handicap stall and correct markings.

RatingInstalledDesign LifeUpdated5 - Good00FEB-08

K4010.02 Barrier Free Entrances*

No power operators.

RatingInstalledDesign LifeUpdated2 - Poor00FEB-08

Event: Install Power Door Operators

TypeYearCostPriorityBarrier Free Access Upgrade 2008\$5,720Medium

Updated: FEB-08

K4010.04 Barrier Free Washrooms*

Handicap stall with grab bars.

RatingInstalledDesign LifeUpdated4 - Acceptable00FEB-08

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RECAPP Facility Evaluation Report



St. Thomas More School S2828 Calgary

Calgary - St. Thomas More School (S2828)

Facility Details

Building Name: St. Thomas More School

Address:

Location: Calgary

Building Id: \$2828
Gross Area (sq. m): 0.00
Replacement Cost: \$0
Construction Year: 0

Evaluation Details

Evaluation Company: Celtic Project Services Ltd.

Evaluation Date: November 5 2007

Evaluator Name: Bob Cotterall / Jay Robertson

Total Maintenance Events Next 5 years: \$105,114 5 year Facility Condition Index (FCI): 0%

General Summary:

St. Thomas More is an elementary school. It is a single story structure with a gross area of 2929m². This includes a portable section attached to the north side of the building. There is an asphalt paved parking lot on the west side of the site with grass fields located on the north side of the school, an activity centre is on north east corner of the school, basketball courts are located on the east side of the school. There is some site concrete work that needs to be repaired. Overall 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) - **

Main access roadway runs along the south side of the side.

RatingInstalledDesign LifeUpdated5 - Good198125FEB-08

Event: Replace Roadway

TypeYearCostPriorityLifecycle Replacement2012\$14,542Low

Updated: APR-08

G2010.05 Roadway Curbs and Gutters - *

Concrete curb and gutter located on south side of site.

RatingInstalledDesign LifeUpdated5 - Good19810FEB-08

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

Parking lot located in the SE corner of the site. 28 parking stalls plus one Handi-cap.

RatingInstalledDesign LifeUpdated4 - Acceptable198125FEB-08

Event: Replace Paving

Concern:

Minor cracking in the Asphalt.

TypeYearCostPriorityLifecycle Replacement2012\$29,360Low

Updated: APR-08

G2020.05 Parking Lot Curbs and Gutters - *

Concrete curb running north/south on both sides of the parking lot.

RatingInstalledDesign LifeUpdated2 - Poor19810FEB-08

Event: Repair Curbs

Concern:

Major cracking and chipping along edges of parking lot.

Recommendation: Replace concrete.

Consequences of Deferral:

Safety hazard via tripping by loose chunks of concrete or un-

level edges.

TypeYearCostPriorityRepair2008\$20,419Medium

Updated: FEB-08

G2020.06.03 Parking Lot Signs - *

Four signs within parking lot.

RatingInstalledDesign LifeUpdated5 - Good19810FEB-08

G2020.06.04 Pavement Markings - *

Line markings and Handi-cap logo in good condition.

RatingInstalledDesign LifeUpdated5 - Good19810FEB-08

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

Minor cracking in some locations. Running along the south edge of the site with an access link to the main entrance.

RatingInstalledDesign LifeUpdated4 - Acceptable198125FEB-08

Event: Replace Concrete

TypeYearCostPriorityLifecycle Replacement2012\$24,415Low

Updated: APR-08

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G2030.06 Exterior Steps and Ramps - *

Cast in place concrete ramp at main entrance in good condition, Cast in place concrete stairs to gym on exterior entrances have settlement problems.

RatingInstalledDesign LifeUpdated2 - Poor19810FEB-08

Event: Repair Exterior Steps

Concern:

Settlement at both locations for exterior exits of gymnasium. Settlement between slab and stairs has caused a raised edge between the two.

Recommendation:

Repair sub-grade and replace slab.

Consequences of Deferral:

Serious tripping hazard with a potential for a fall into a 5' below grade stairwell.

TypeYearCostPriorityRepair2008\$11,265High

Updated: APR-08

G2040.02.01 Chain Link Fences and Gates*

Fence located at south east corner of the site.

RatingInstalledDesign LifeUpdated5 - Good030FEB-08

G2040.02.04 Wire Fences and Gates*

Post and Cable fence located along north side of the site.

RatingInstalledDesign LifeUpdated5 - Good00FEB-08

G2040.03 Athletic and Recreational Surfaces - **

Basketball court on east side of site.

RatingInstalledDesign LifeUpdated4 - Acceptable198125FEB-08

Event: Replace Asphalt

TypeYearCostPriorityLifecycle Replacement2012\$5,114Low

Updated: APR-08

G2040.04.01 Play-Field Equipment and Structures

Activity center located on north east side of the school. Ball directors with two basketball nets on the east side of the school.

RatingInstalledDesign LifeUpdated5 - Good010FEB-08

G2040.05.04 Bicycle Racks

Bike racks at NE corner of site.

RatingInstalledDesign LifeUpdated5 - Good00FEB-08

G2040.06 Exterior Signs - *

Exterior signage on building at main entrance area.

RatingInstalledDesign LifeUpdated5 - Good19810FEB-08

G2040.08 Flagpoles - *

One flagpole located at main entrance area.

RatingInstalledDesign LifeUpdated5 - Good19810FEB-08

G2040.09 Covers and Shelters - *

Garbage enclosure located at NW corner of the site.

RatingInstalledDesign LifeUpdated4 - Acceptable19810FEB-08

G2040.11 Retaining Walls - *

Retaining walls for Gymnasium stairwells on the south side of the school.

RatingInstalledDesign LifeUpdated5 - Good19810FEB-08

G2050.04 Lawns and Grasses - *

Some gravel patches north of the parking lot. The remainder of the site is good.

RatingInstalledDesign LifeUpdated4 - Acceptable19810FEB-08

G2050.05 Trees, Plants and Ground Covers - *

Trees surrounding the site, Shrubs located on West and South edges of the building.

RatingInstalledDesign LifeUpdated5 - Good19810FEB-08

G3010.02 Site Domestic Water Distribution - *

RatingInstalledDesign LifeUpdated5 - Good19810FEB-08

G3010.03 Site Fire Protection Water Distribution - *

Fire Hydrant located on SW corner of the school.

RatingInstalledDesign LifeUpdated5 - Good19810FEB-08

G3030.01 Storm Water Collection - *

Catch Basins located in the grass on the SE corner of the school, and in the Asphalt on the NW corner of the site.

RatingInstalledDesign LifeUpdated5 - Good19810FEB-08

G3060.01 Gas Distribution - *

RatingInstalledDesign LifeUpdated5 - Good19810FEB-08

G4010.03 Electrical Power Distribution Equipment - *

Site electrical power and communications services enter the site underground. Primary electrical service runs to padmount transformer. Secondary electrical service continues to building below grade.

RatingInstalledDesign LifeUpdated5 - Good19810FEB-08

G4010.04 Car Plugs-ins - *

12 concrete support posts. 6 on the East side / 6 on the West side.

RatingInstalledDesign LifeUpdated5 - Good19810FEB-08

G4020.01 Area Lighting - *

3 Street lights around the site (East, West, South).

Rating	Installed	Design Life	Updated
5 - Good	1981	0	FEB-08