RECAPP Facility Evaluation Report

Edmonton School District No. 7



McKernan Elementary / Junior High School
B3213A
Edmonton

Facility Details

Building Name: McKernan Elementary / Juni

Address: 11330 - 76 Avenue

Location: Edmonton

Building Id: B3213A Gross Area (sq. m): 7,549.40 Replacement Cost: \$16,453,710

Construction Year: 1952

Evaluation Details

Evaluation Company: A&E Architectural & Engineering Group

Inc.

Evaluation Date: October 26 2007
Evaluator Name: Vic Maybroda

Total Maintenance Events Next 5 years: \$5,648,239 5 year Facility Condition Index (FCI): 34,33%

General Summary:

McKernan is a two story school facility of 7, 549.40 sq. M in area. The original school constructed in 1952 contained 4,890.00 sq. M with additions of 760.20 sq. M constructed in 1953 and 1,895.20 sq. M constructed in 1973. Major modernization was undertaken in 1993.

The schools houses 22 classrooms, 2 gymnasiums, a music room, an art room, an audio/visual room, 3 science rooms, a home economics room, a library, a drama room, industrial arts area, administration and ancillary support facilities.

At time of site visit there were 538 enrolled students.

Structural Summary:

All sections consist of concrete foundation walls and concrete piers on spread footings with concrete slab on metal decking supported by metal joists over a crawl/space/basement. Basement floors are concrete slab on grade. Load bearing concrete block and isolated metal beams/columns support the second floor of concrete slab on metal decking on metal joists. Roof construction consists of metal decking on metal joists.

Overall with exception of settlement issues the structural elements appear to be in acceptable condition.

Envelope Summary:

All section have face brick wall cladding with the 1952 and 1953 sections having stone window sills and parapets. Precast concrete panels are located over various entries of the 1973 section. Windows of the 1952 and 1953 section are a combination of glass block over sealed fixed and opening units. The windows of the 1973 section consist of sealed fixed and opening units. Painted wood canopies are located at major entries to all sections. Wood doors in metal frames with sealed fixed glazing are located in all sections. Roofing over the 1952 and 1953 sections are built-up asphalt membrane system. The roof over the 1973 section has been replaced with a SBS roofing system in 2007 with parapets and associated flashing to be installed.

Overall the envelope elements appear to be in acceptable condition.

Interior Summary:

Flooring consists of vinyl composite tile (VCT), carpeting, ceramic tile, terrazzo, wood strip and painted concrete. Walls are painted concrete block and gypsum wallboard, prefinished vinyl, and ceramic tile with wood strip wall panels located in the main gymnasium. Isolated concrete columns are finished with ceramic tile. Ceilings consist of suspended acoustical tile and painted gypsum wall board. Painted lockers are located in corridors and shower room spaces. Casework is of painted wood with plastic laminated counter tops. White, green and tackboards are located in teaching and administration spaces. Doors are painted wood in painted metal frames.

Basement mechanical room spaces have severe wall damage to exposed elements.

With exception to basement areas and flooring settlement conditions the interior elements appear to be in acceptable condition.

Mechanical Summary:

The mechanical systems for this building are in good condition for the age of the components and have been well maintained. The school requires a ventilation upgrade to provide current standards for outdoor air quantities for occupants and for ventilation rates. The existing pneuamtic control system should be replaced with a new DDC Building Management System.

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Electrical Summary:

The school was initially built in 1951 and built addition in 1997; major modernization was taken place in 2003. The electrical systems are well maintained and in good condition. The electrical power distribution system meets current school requirements and can be easily expanded to meet future expansion.

The lighting systems are adequate and meet accepted standards for lighting levels. New fire alarm was installed in 1988.

The electrical systems are well maintained and 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 - 1953 Section*

Concrete strip footings with concrete footings supporting concrete piers.

RatingInstalledDesign LifeUpdated4 - Acceptable0100MAR-08

A1010 Standard Foundations - 1973 Section*

Concrete strip footings.

RatingInstalledDesign LifeUpdated4 - Acceptable19520MAR-08

A1010 Standard Foundations -1952 Section*

Concrete strip footings with concrete footings supporting concrete piers.

RatingInstalledDesign LifeUpdated4 - Acceptable0100MAR-08

A1030 Slab on Grade - 1952 Section*

Cast-in-place concrete located in basement mechanical room spaces.

RatingInstalledDesign LifeUpdated4 - Acceptable0100MAR-08

A1030 Slab on Grade - 1953 Section*

Cast-in-place concrete located in basement storage space.

RatingInstalledDesign LifeUpdated4 - Acceptable0100MAR-08

A1030 Slab on Grade - 1973 Section*

Cast-in-place concrete.

RatingInstalledDesign LifeUpdated4 - Acceptable19730MAR-08

A2020 Basement Walls (& Crawl Space) - 1952 Section*

Cast-in-place concrete foundation walls in mechanical/storage rooms. Concrete piers located in crawl spaces.

RatingInstalledDesign LifeUpdated3 - Marginal19520MAR-08



Exterior mechanical room wall.

Event: Repair Water Infiltration to Basement Spaces

Concern:

Water infiltration into basement spaces causing severe damage in structural and built=in elements with possible mold build-up. Weeping tile installed in 2003 does not appear to have solved the situation.

Recommendation:

Review effectiveness of installed weeping tile.

Review if moisture resistant membrane on exterior basement wall was installed.

Review installation and operation of sump pumps.

Replace damaged doors, frames and related elements.

<u>Type</u>	<u>Year</u>	<u>Cos</u> t	<u>Priority</u>
Failure Replacement	2008	\$48,620	High

Updated: APR-08

A2020 Basement Walls (& Crawl Space) - 1953 Section*

Cast-in-place concrete basement walls. Concrete piers located in crawl space.

Rating	<u>Installed</u>	Design Life	<u>Updated</u>
4 - Acceptable	1953	0	MAR-08

B1010.01 Floor Structural Frame (Building Frame) - 1952 Section*

Concrete floor beams supported on concrete foundation walls and concrete piers in crawl space areas. OWS joists and metal deck supporting second floor concrete slab.

RatingInstalledDesign LifeUpdated3 - Marginal19520MAR-08

Event: Repair Floor Settlement

Concern:

Floor settlement in administration area leaving floors with noticeable slopes.

Recommendation:

Build-up existing flooring to alleviate sloped floors.

TypeYearCostPriorityRepair2008\$17,160High

Updated: APR-08

B1010.01 Floor Structural Frame (Building Frame) - 1952 Section*

Concrete beams and columns located in main entry fover/student general purpose area supporting second floor.

RatingInstalledDesign LifeUpdated5 - Good0100MAR-08

B1010.01 Floor Structural Frame (Building Frame) - 1953 Section*

Concrete floor beams supported on concrete foundation walls and concrete piers. OWS joists and metal deck supporting second floor concrete slab.

RatingInstalledDesign LifeUpdated4 - Acceptable19530MAR-08

B1010.01 Floor Structural Frame (Building Frame) - 1973 Section*

OWS joists and metal deck supporting second floor slab.

RatingInstalledDesign LifeUpdated4 - Acceptable19730MAR-08

B1010.02 Structural Interior Walls Supporting Floors (or Roof) - 1952 Section*

Concrete block supporting framing elements.

RatingInstalledDesign LifeUpdated4 - Acceptable19520MAR-08

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B1010.02 Structural Interior Walls Supporting Floors (or Roof) - 1953 Section*

Concrete block supporting framing elements.

RatingInstalledDesign LifeUpdated4 - Acceptable19530MAR-08

B1010.02 Structural Interior Walls Supporting Floors (or Roof) - 1973 Section*

Concrete block supporting framing elements.

RatingInstalledDesign LifeUpdated4 - Acceptable19730MAR-08

B1010.03 Floor Decks, Slabs, and Toppings - All Sections*

Concrete slab on all floor levels.

RatingInstalledDesign LifeUpdated4 - Acceptable19520MAR-08

B1020.01 Roof Structural Frame - All Sections*

OWS joists supporting metal decking.

RatingInstalledDesign LifeUpdated4 - Acceptable19520MAR-08

B1020.04 Canopies - 1952 Section*

Wood framed.

RatingInstalledDesign LifeUpdated4 - Acceptable19520MAR-08

B1020.04 Canopies - 1973 Section*

Metal framing members.

RatingInstalledDesign LifeUpdated4 - Acceptable19730MAR-08

S2 ENVELOPE

B2010.01.01 Precast Concrete: Exterior Wall Skin - 1973 Section*

Precast concrete fascia elements and wall panels at entry vestibule.

Rating	<u>Installed</u>	Design Life	<u>Updated</u>
4 - Acceptable	1973	75	MAR-08



Precast elements at east entrance to 1973 addition.

B2010.01.02.01 Brick Masonry: Ext. Wall Skin - All Sections*

Face brick.

Rating	<u>Installed</u>	Design Life	<u>Updated</u>
4 - Acceptable	1952	75	MAR-08

B2010.01.03 Stone Assemblies: Exterior Wall Skin - 1952 and 1953 Sections*

Stone units around window units and stone parapet coping stones. Remedial repairs to coping stones were undertaken in 2001.

RatingInstalledDesign LifeUpdated4 - Acceptable195275MAR-08

Event: Repair Stone Sills and Parapet Members

Concern:

Isolated areas of window stone sills and parapet coping units require repointing.

One parapet coping stone has been dislodged and fell onto canopy roof of rear east entry vestibule.

Recommendation:

Review existing stone assemblies and undertake repointing of effected units.

TypeYearCostPriorityRepair2011\$14,300Medium

Updated: APR-08

B2010.01.09 Expansion Control: Exterior Wall Skin - All Sections*

Vertical control/construction joints at acceptable intervals in face brick cladding.

RatingInstalledDesign LifeUpdated4 - Acceptable19520MAR-08

B2010.01.11 Joint Sealers (caulking): Ext. Wall - 1952 Section**

Caulking around all exterior wall openings.

RatingInstalledDesign LifeUpdated4 - Acceptable195220MAR-08

Event: Repair Joint Sealers (caulking): Ext. Wall** - 1952

Section]

TypeYearCostPriorityLifecycle Replacement2012\$36,299Unassigned

Updated: APR-08

B2010.01.11 Joint Sealers (caulking): Ext. Wall - 1953 Section**

Caulking around all exterior wall openings.

RatingInstalledDesign LifeUpdated4 - Acceptable195320MAR-08

Event: Repair [B2010.01.11 Joint Sealers (caulking): Ext.

Wall** - 1953 Section]

TypeYearCostPriorityLifecycle Replacement2012\$10,856Unassigned

Updated: APR-08

B2010.01.11 Joint Sealers (caulking): Ext. Wall - 1973 Section**

Caulking around all exterior wall openings.

RatingInstalledDesign LifeUpdated4 - Acceptable197320MAR-08

Event: Repair [B2010.01.11 Joint Sealers (caulking): Ext.

Wall** - 1973 Section]

TypeYearCostPriorityLifecycle Replacement2012\$17,098Unassigned

Updated: APR-08

B2010.01.13 Paints (& Stains): Exterior Wall - 1952 Section**

Painted wood finished canopy elements.

RatingInstalledDesign LifeUpdated4 - Acceptable195215MAR-08

Event: Repair Paints (& Stains): Exterior Wall** - 1952

Section]

TypeYearCostPriorityLifecycle Replacement2012\$2,496Unassigned

Updated: APR-08

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

No visible effervescene viewed or reported during site visit.

RatingInstalledDesign LifeUpdated4 - Acceptable19520MAR-08

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B2010.06 Exterior Louvers, Grilles, and Screens - 1973 Section*

Painted metal louvres to mechanical spaces.

Painted metal grill over north vestibule entry doors.

RatingInstalledDesign LifeUpdated4 - Acceptable19730MAR-08

B2010.09 Exterior Soffits - 1952 Section*

Painted plywood.

RatingInstalledDesign LifeUpdated4 - Acceptable19520MAR-08

B2010.09 Exterior Soffits - 1973 Section*

Textured stucco.

RatingInstalledDesign LifeUpdated4 - Acceptable19730MAR-08

B2020.01 Exterior Standard Windows - All Sections

Windows and Glass Block set in wood frames.

Various areas of second floor classrooms exhibiting condensation on perimeter finishes due to building movement and sealant failure.

Design Life Updated Rating Installed 4 - Acceptable 40 MAR-08 1989



Material finishes adjacent to windows and glass block contained in wood frames.

Replace 341 Exterior Standard Windows - All Event: **Sections**

Priority Type Year Cost Lifecycle Replacement 2029 \$275,418 Unassigned

Updated: APR-08

B2020.04 Other Exterior Windows - 1952 & 1953 Sections*

Glass block units located over exterior window units.

Rating	<u>Installed</u>	Design Life	Updated
4 - Acceptable	0	0	MAR-08



View of glass block over window units 1952 Section.

B2030.01 Exterior Entrance Doors - All Sections

Painted wood doors in painted metal frames.

RatingInstalledDesign LifeUpdated4 - Acceptable195230MAR-08



Typical exterior entrance doors all sections.

Event: Replace 17 Exterior Entrance Doors & Hardware -

All Sections

TypeYearCostPriorityLifecycle Replacement2012\$42,900Unassigned

Updated: APR-08

B2030.02 Exterior Utility Doors - All Sections**

Painted wood doors in painted metal frames with original hardware.

RatingInstalledDesign LifeUpdated4 - Acceptable195240MAR-08

Event: Replace 4 Exterior Utility Doors and Hardware** -

All Sections

TypeYearCostPriorityLifecycle Replacement2012\$11,440Unassigned

Updated: APR-08

B3010.01 Deck Vapor Retarder and Insulation - 1952 Section*

No leaks visible or reported.

RatingInstalledDesign LifeUpdated4 - Acceptable19520MAR-08

B3010.01 Deck Vapor Retarder and Insulation - 1953 Section*

No leaks visible or reported.

RatingInstalledDesign LifeUpdated4 - Acceptable19530MAR-08

B3010.01 Deck Vapor Retarder and Insulation - 1973 Section*

Roof replaced 2007.

RatingInstalledDesign LifeUpdated5 - Good20070MAR-08

B3010.04 Membrane Roofing - 1952 and 1953 Sections

Built-up asphalt roofing for both sections.

RatingInstalledDesign LifeUpdated4 - Acceptable195225MAR-08



View of asphalt built-up roofing - 1952 and 1953 Sections.

Event: Replace 5,650 sq. M Membrane Roofing - 1952 &

1953 Section

TypeYearCostPriorityLifecycle Replacement2012\$583,440Unassigned

Updated: APR-08

B3010.04 Membrane Roofing - 1973 Section

SBS roofing membrane.

Perimeter flashing not installed at time of site visit.

RatingInstalledDesign LifeUpdated5 - Good200725MAR-08

Event: Replace 1890 Sq. M SBS Membrane Roofing - 1973

<u>Section</u>

TypeYearCostPriorityLifecycle Replacement2032\$250,862Unassigned

Updated: APR-08

B3020.02 Other Roofing Openings (Hatch, Vent, etc) - All Sections*

Plumbing vents, roof drains, brick chimney vents.

RatingInstalledDesign LifeUpdated4 - Acceptable19520MAR-08

S3 INTERIOR

C1010.01.03 Unit Masonry Assemblies: Partitions

Painted concrete block.

RatingInstalledDesign LifeUpdated4 - Acceptable1952100MAR-08

C1010.01.03 Unit Masonry Assemblies: Partitions -

Painted concrete block.

RatingInstalledDesign LifeUpdated3 - Marginal19520MAR-08

Event: Repair Wall cracks in 1952 and 1973 Sections

Concern:

Settlement cracks in concrete block walls in wash rooms spaces causing potential health concern as well safety issue. Wall cracks in 2nd floor classroom and computer room over administration spaces.

Recommendation:

Review condition of walls in all sections, repair and make good finishes

TypeYearCostPriorityRepair2009\$28,600High

Updated: APR-08



Wall crack in staff wash room of 1952 section.

C1010.01.07 Framed Partitions (Stud)

Partitions located in various areas of 1952 and 1972 Sections.

Rating	<u>Installed</u>	Design Life	Updated
4 - Accentable	1952	100	MAR-08

C1010.01.07 Framed Partitions (Stud) -

Wood stud partitions located in administration spaces.

RatingInstalledDesign LifeUpdated3 - Marginal19520MAR-08

Event: Repair Gypsum Wallboard to Stud Walls

Concern:

Wall cracks disconcerting to school occupants.

Recommendation:

Repair cracks and make good finishes.

TypeYearCostPriorityRepair2009\$5,720Medium

Updated: APR-08



schools 003.jpg

C1010.05 Interior Windows - *

Sealed glazed unit in painted metal frame between Principals office and General Office.

RatingInstalledDesign LifeUpdated4 - Acceptable19520MAR-08

C1010.06 Interior Glazed Partitions and Storefronts - *

Fixed glazed partition with painted wood door in painted metal frame between Student Gathering Space and General office.

RatingInstalledDesign LifeUpdated4 - Acceptable19520MAR-08

C1020.01 Interior Swinging Doors (& Hardware) - *

Painted wood doors in pressed steel frames with original hardware in all sections.

RatingInstalledDesign LifeUpdated4 - Acceptable195240MAR-08

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C1020.03 Interior Fire Doors - All Sections*

Fire rated doors and frames in all sections upgraded in 1987.

RatingInstalledDesign LifeUpdated4 - Acceptable19520MAR-08

C1030.01 Visual Display Boards - All Sections**

White, green and tack boards located in all sections.

RatingInstalledDesign LifeUpdated4 - Acceptable195220MAR-08

Event: Replace Visual Display Boards** - All Sections

TypeYearCostPriorityLifecycle Replacement2012\$146,002Unassigned

Updated: APR-08

C1030.02 Fabricated Compartments(Toilets/Showers) - All Sections**

Painted metal toilet partitions located in 1952 and 1973 Sections.

RatingInstalledDesign LifeUpdated4 - Acceptable199330MAR-08

Event: Replace 24 Fabricated

Compartments(Toilets/Showers)**

TypeYearCostPriorityLifecycle Replacement2023\$32,947Unassigned

Updated: APR-08

C1030.06 Handrails - All Sections*

Painted metal handrails.

RatingInstalledDesign LifeUpdated4 - Acceptable19520MAR-08

C1030.08 Interior Identifying Devices - All Sections*

Room names and numbers.

RatingInstalledDesign LifeUpdated4 - Acceptable19520MAR-08

Event: Install Interior Doors Identifiation Devices to 152

Doors

Concern:

Individual interior doors are not identified by name or room

number.

Recommendation:

Install room names and numbers on all interior doors for

maintenance purposes.

TypeYearCostPriorityOperating Efficiency Upgrade 2011\$34,778Medium

Updated: APR-08

C1030.10 Lockers - All Sections**

Painted full height metal lockers located in corridors of all sections.

RatingInstalledDesign LifeUpdated4 - Acceptable195230MAR-08



Corridor view with lockers.

Event: Replace 336 Lockers (All Sections)

TypeYearCostPriorityLifecycle Replacement2012\$230,630Unassigned

Updated: APR-08

C1030.12 Storage Shelving - All Sections*

Painted wood.

RatingInstalledDesign LifeUpdated4 - Acceptable19520MAR-08

C1030.14 Toilet, Bath, and Laundry Accessories - All Sections*

Toilet paper dispensers, hand dryers, mirrors and soap dispensers.

Rating	<u>Installed</u>	Design Life	<u>Updated</u>
4 - Acceptable	1993	0	MAR-08



Typical upgraded washroom.

C2010 Stair Construction - All Sections*

Concrete stairs between floor levels and to storage room above stage of south gymnasium.

Wood stair to stage from south gymnasium and corridor stair adjacent to south gymnasium of 1952 Section.

Rating	<u>Installed</u>	Design Life	<u>Updated</u>
4 - Acceptable	1952	0	MAR-08

C2020.02 Terrazzo Stair Finishes - 1952 & 1953 Sections*

Terrazzo finishes to stairs connecting main & second floor levels.

Rating	<u>Installed</u>	Design Life	<u>Updated</u>
4 - Acceptable	1952	60	MAR-08

C2020.05 Resilient Stair Finishes - 1952 & 1973 Sections**

VCT to stage stairs of 1952 Section. VCT to connecting stair of 1973 Section.

RatingInstalledDesign LifeUpdated4 - Acceptable199320MAR-08

Event: Replace Resilient Stair Finishes - 1952 & 1973

Sections

TypeYearCostPriorityLifecycle Replacement2013\$7,855Unassigned

Updated: APR-08

C2020.08 Stair Railings and Balustrades - All Sections*

Painted metal railings and balustrades to interconnecting stairs.

RatingInstalledDesign LifeUpdated4 - Acceptable19520MAR-08

C3010.02 Wall Paneling - **

Stained wood wall panels located in north gymnasium.

Rating	<u>Installed</u>	Design Life	<u>Updated</u>
4 - Acceptable	1973	30	MAR-08



Stained wood wall panels in north gymnasium of 1973 Section.

Event: Replace 280 sq. M Wall Paneling** - 1973 Section

TypeYearCostPriorityLifecycle Replacement2012\$64,064Unassigned

Updated: APR-08

C3010.06 Tile Wall Finishes -1952 & 1972 Sections**

Ceramic wall tile located in various staff and student wash rooms.

RatingInstalledDesign LifeUpdated5 - Good199340MAR-08

Event: Replace 440 sq. M Tile Wall Finishes** - 1952 &

1973 Sections

TypeYearCostPriorityLifecycle Replacement2033\$118,290Unassigned

Updated: APR-08

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C3010.09 Acoustical Wall Treatment - 1952 Section**

Wall panels located on north wall of south gymnasium.

Rating	<u>Installed</u>	Design Life	<u>Updated</u>
5 - Good	1993	20	MAR-08



View of South Gymnasium.

Event: Replace 50 sq. M Acoustical Wall Treatment

TypeYearCostPriorityLifecycle Replacement2012\$9,495Unassigned

Updated: MAR-08

C3010.11 Interior Wall Painting - All Sections*

Rating	Installed	Design Life	<u>Updated</u>
4 - Acceptable	1993	10	MAR-08

C3010.12 Wall Coverings - *

Vinyl wall covering located in administration area of 1952 Section.

Rating	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1993	15	MAR-08

C3020.01.02 Paint Concrete Floor Finishes - 1952 Section*

Located in basement mechanical and storage rooms.

Rating	<u>Installed</u>	Design Life	<u>Updated</u>
4 - Acceptable	1993	10	MAR-08

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C3020.02 Tile Floor Finishes - 1973 Section**

Ceramic tile located in boys and girls wash rooms.

RatingInstalledDesign LifeUpdated4 - Acceptable197350MAR-08

Event: Replace 32 sq. M Tile Floor Finishes** - 1973

<u>Section</u>

TypeYearCostPriorityLifecycle Replacement2023\$8,694Unassigned

Updated: APR-08

C3020.03 Terrazzo Floor Finishes - 1952 & 1973 Sections*

Located in corridors, stairways and wash rooms of 1952 & 1973 Sections.

RatingInstalledDesign LifeUpdated4 - Acceptable195275MAR-08

C3020.04 Wood Flooring - **

Located in South Gymnasium, Stage & Industrial Arts area of 1952 Section. Located in North Gymnasium of 1973 Section.

RatingInstalledDesign LifeUpdated4 - Acceptable199330MAR-08

Event: Replace 930 sq. M Wood Flooring** - 1952 & 1973

<u>Sections</u>

TypeYearCostPriorityLifecycle Replacement2023\$297,898Unassigned

Updated: APR-08

C3020.07 Resilient Flooring - All Sections**

Located in classrooms, corridors and ancillary spaces in all sections.

RatingInstalledDesign LifeUpdated4 - Acceptable199320MAR-08

Event: Replace 3,020 sq. M Resilient Flooring** - All

Sections

TypeYearCostPriorityLifecycle Replacement2013\$311,168Unassigned

Updated: APR-08

C3020.08 Carpet Flooring - All Sections**

Located in classrooms, administration and ancillary spaces.

RatingInstalledDesign LifeUpdated4 - Acceptable199315MAR-08

Event: Replace 733 sq. M Carpet Flooring** - All Sections

TypeYearCostPriorityLifecycle Replacement2012\$71,271Unassigned

Updated: APR-08

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

Located in classrooms, corridors, administration and ancillary spaces.

RatingInstalledDesign LifeUpdated4 - Acceptable199325MAR-08

Event: Replace 3,020 sq. M Acoustic Ceiling Treatment

(Susp.T-Bar)** - All Sections

TypeYearCostPriorityLifecycle Replacement2018\$155,470Unassigned

Updated: APR-08

C3030.07 Interior Ceiling Painting - All Sections*

Located in support spaces.

RatingInstalledDesign LifeUpdated4 - Acceptable199320MAR-08

D1010.01.02 Hydraulic Passenger Elevators - **

One hydraulic elevator located in the 1952 Section.

RatingInstalledDesign LifeUpdated4 - Acceptable195230MAR-08

Event: Replace Hydraulic Passenger Elevator**

TypeYearCostPriorityLifecycle Replacement2012\$68,640Unassigned

Updated: APR-08

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S4 MECHANICAL

D2010.04 Sinks - 1952 Original**

There are two (2) original Lavatory sinks and two (2) Mop Sinks that are part of the original building. The Lavatory sinks have separate cold and hot water taps and need to be replaced by code as they are a scolding hazard. The Original Mop sinks are located in the Janitor Room and the Home Economics Classroom, they are wall hung, steel, sinks, are leaking and need to be replaced as they are rusting and are no longer acceptable by code.

Rating	<u>Installed</u>	Design Life	<u>Updated</u>
3 - Marginal	1952	30	MAR-08

Event: Replace Two (2) Mop Sinks

Concern:

Mop sinks located in the Janitor Room and the Home Economics Classroom are wall hung, steel, sinks, are leaking and need to be replaced as they are rusting and are no longer acceptable by code.

Recommendation:

Replace existing sinks with Molded Stone 24"x24" floor mounted Mop Sinks.

<u>Type</u>	<u>Year</u>	<u>Cos</u> t	Priority
Failure Replacement	2008	\$3,432	High

Updated: MAR-08



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D2010.04 Sinks - 1993 Modernization**

Twenty-six (26) single bowl, ledge back, stainless steel sink complete with faucet to meter and mix hot and cold water and 6" swing spout serving classrooms. Four (4) Single bowl, ledge back, stainless steel sink complete with faucet to meter and mix hot and cold water 8" swing spout and vacuum breakers serving Science Classroom. There are three (3) mop sinks serving the school, two (2) are floor mounted Molded Stone one is 24"x24"x10" MSB-2424, one (1) is a 24"x36"x10" both are complete with 830AA valve breakers located in the Janitor Rooms and Custodial Rooms.

Rating	Installed	Design Life	Updated
4 - Acceptable	1993	30	MAR-08

Event: Replace Thirty-Three (33) Sinks

TypeYearCostPriorityLifecycle Replacement2012\$31,746Unassigned

Updated: APR-08

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D2010.05 Showers - **

The school has ten (10) showers, five (5) for the Boy's and five (5) for the Girls Change Rooms. They are standard shower heads complete with individual push button valves. The water is controlled by a Symmons temcontroller mixing valve model 5400 located in the instructor's office for both the change rooms.

RatingInstalledDesign LifeUpdated4 - Acceptable197330MAR-08

Event: Replace Ten (10) Showers

TypeYearCostPriorityLifecycle Replacement2012\$13,499Unassigned

Updated: APR-08

D2010.08 Drinking Fountains / Coolers - **

The school has eight (8) drinking fountains, they are wall hung, vitreous china, double sided water fountains, in acceptable condition.

RatingInstalledDesign LifeUpdated4 - Acceptable199335MAR-08

Event: Replace Eight (8) Drinking Fountains

TypeYearCostPriorityLifecycle Replacement2028\$10,744Unassigned

Updated: APR-08

D2010.09 Other Plumbing Fixtures - *

Non-Freeze Hose Bibs located around the permimeter of the school, provide access to domestic cold water to garden hoses.

RatingInstalledDesign LifeUpdated4 - Acceptable19520MAR-08

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D2010.10 Washroom Fixtures (WC, Lav, Urnl) - 1952 Original Building**

Washrooms in the original building are equipped with twenty-eight (28) flush valve, elongated, vitreous china water closets by Crane, complete with elongated open front seats. There are twelve (12) urinals that are stall type, floor mounted, top inlet, flush valve, vitreous china complete with Cambridge Brass valves. Twenty (20) oval, stainless steel, lavatories complete with Symmons mixing valve. There are two (2) lavatories in the original building that have separate hot/cold water taps. This is in violation of the Code and these sinks /faucets should be replaced immediately as there is a scolding danger.

RatingInstalledDesign LifeUpdated4 - Acceptable199330MAR-08

Event: Replace Sixty (60) Washroom Fixtures

TypeYearCostPriorityLifecycle Replacement2023\$63,812Unassigned

Updated: APR-08

Event: Replace Two (2) Lavatories

Concern:

Lavatories with separate hot/cold faucets pose a scolding danger.

Recommendation:

Replace the lavatories with wall hung lavatories with a tap complete with mixing tank.

TypeYearCostPriorityCode Upgrade2008\$2,013High

Updated: MAR-08

D2010.10 Washroom Fixtures (WC, Lav, Urnl) - 1973 Addition**

Washrooms in the north addition are serviced by four (4) Cranada, oval, vitreous china lavatories complete with push type, mixing valve. Two (2) American standard floor mounted, top inlet, timed flush tank, urinals. There are seven (7) water closets are American Standard, vitreous china, not elongated, flush valve, complete with open front seat.

There are three (3) lavatories in the Boy's and Girl's Dressing Rooms and the Instructors Room are vitreous china wall hung by American Standard, complete with mixing valve, and cold water fountain faucet. Three (3) water closets are American Standard, vitreous china, not elongated, flush valve, complete with open front seat.

RatingInstalledDesign LifeUpdated4 - Acceptable035MAR-08

Event: Replace Nineteen (19) Washroom Fixtures

TypeYearCostPriorityLifecycle Replacement2012\$19,980Unassigned

Updated: MAR-08

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D2020.01.01 Pipes and Tubes: Domestic Water - *

Domestic Cold and Hot Water lines are steel construction. During the inspection rust has been observed in some of the unused lavatories suggesting that the DCW and DHW lines are being corroded and are rusted. The whole domestic water system should be replaced into copper type-"L" tubing.

RatingInstalledDesign LifeUpdated2 - Poor19520MAR-08

Event: Domestic Water Lines

Concern:

The Domestic Water lines are of steel construction, they are rusted and corroded.

Recommendation:

Change all of the domestic water lines in the school into type - "L" copper lines.

TypeYearCostPriorityFailure Replacement2008\$228,800High

Updated: APR-08



Rust present in lavatories, suggest that the water lines are rusted.

D2020.01.02 Valves: Domestic Water - **

All plumbing fixtures are individually isolated.

RatingInstalledDesign LifeUpdated4 - Acceptable199340MAR-08

Event: Valves: Domestic Water

TypeYearCostPriorityLifecycle Replacement2033\$45,611Unassigned

Updated: APR-08

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

The school's main water line does not have a backflow preventor. There is a backflow preventer for the boiler feed system.

RatingInstalledDesign LifeUpdated4 - Acceptable195220MAR-08

Event: Replace Backflow Preventors

TypeYearCostPriorityLifecycle Replacement2008\$35,241Unassigned

Updated: APR-08

D2020.02.02 Plumbing Pumps: Domestic Water - **

Two (2) pumps serve the DHW recirculation, The South side of the school is circulated by a Armstrong circulating pump model ASTRO-30B. The North side of the school is circulated by a Grundfos Type UP 15-42SF circulating pump.

RatingInstalledDesign LifeUpdated4 - Acceptable199320MAR-08

Event: Replace Two (2) Domestic Water Circulating

Pumps

TypeYearCostPriorityLifecycle Replacement2013\$3,928Unassigned

Updated: APR-08

D2020.02.06 Domestic Water Heaters - **

Two (2) DWH provide the school with DHW. The DHW in South side of school is provided by a gas fired State SBT75-120-NE8-DCGA, 75 gallon, 108,000 BTU input with a heat recovery capacity of 90.76 Gal/hr. The DWH in the North side of the school is provided by a 2 element electric water heater by John Wood, model JWA-1204B, with a 100 gallon capacity.

RatingInstalledDesign LifeUpdated4 - Acceptable199320MAR-08

Event: Replace Three (3) Domestic Water Heaters

TypeYearCostPriorityLifecycle Replacement2013\$15,936Unassigned

Updated: APR-08

D2020.03 Water Supply Insulation: Domestic - *

4" municipal water system enters the South Mechanical Room from the North side, the valves show signs of corrosion and rust.

Change water lines and valves.

For replacement costs refer to Section D2020.01 Pipes and Tubes: Domestic Water.

RatingInstalledDesign LifeUpdated4 - Acceptable19520MAR-08

D2030.01 Waste and Vent Piping - *

ABS piping system throughout the school connected to steel pipes. Each fixture vented to atmosphere. Traps are provided where necessary. Sanitary drainage effluent is collected into common sanitary main. Flows by gravity @ 1% slope, leaving the building at the North. There are signs of rust on the interior of the school's sanitary system.

Replace steel lines with cast iron sanitary lines. For replacement cost refer to section D2020.01.01 Pipes and Tubes: Domestic Water.

RatingInstalledDesign LifeUpdated3 - Marginal19520MAR-08

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D2030.03 Waste Piping Equipment - *

A sump pit is present in the South Mechanical Room, it is complete with a sump pump, connected to a 2" pump out line. The pump is activated by a high level switch.

RatingInstalledDesign LifeUpdated3 - Marginal19520MAR-08

Event: Sump Pumps in South Mechanical Room

Concern:

Sump pit is served with a single sump pump that was installed in 1952, this pump shows signs of corrosion, shows excessive vibrations and is in need of replacement.

Recommendation:

Replace existing sump pump with two new sump pumps in order to have back-up capabilities.

TypeYearCostPriorityFailure Replacement2008\$4,004High

Updated: MAR-08

D2040.01 Rain Water Drainage Piping Systems - *

Roof drains are connected to the main storm line providing the school's storm drainage which connects to the municipal main.

RatingInstalledDesign LifeUpdated4 - Acceptable19520MAR-08

D2040.02.04 Roof Drains - *

4" roof drains on gravel roof connected to the storm system. The roof drains are in poor condition as gravel traps are damaged and on some roof drains not existent. Need replacement

RatingInstalledDesign LifeUpdated2 - Poor195240MAR-08

Event: Roof Drains

Concern:

Roof Drains are destroyed, allow gravel to get into storm system.

Recommendation:

Install new roof drains.

TypeYearCostPriorityFailure Replacement2008\$2,288Low

Updated: MAR-08



Typical condition of Roof Drains serving the school.

D3010.02 Gas Supply Systems - *

The School is serviced by a 4" gas line entering the South Mechanical Room from the North. Main Gas line is corroded.

RatingInstalledDesign LifeUpdated3 - Marginal195260MAR-08

Event: Gas Supply Systems

Concern:

Main gas line entering the school shows signs of corrosion.

Recommendation:

Replace gas line entering school.

TypeYearCostPriorityFailure Replacement2008\$11,440Medium

Updated: MAR-08



Rust and corrosion on main gas line.

D3020.02.01 Heating Boilers and Accessories: Steam - **

The School is serviced by two Vulcan Firetube steam boilers located that been in operation since 1951, complete with a steam to water Shell & Tube Heat exchanger serving the north side of the school, chemical pot feeder, expansion tanks and cold water make-up. The steam is circulated through the steam lines by two (2) Century 8-824662-07 pumps. The system is controlled by a Westinghouse controller. All heating pipes are insulated, the heating pipes have signs of water leakage and are in critical condition. The chemical pot feeders, valves, expansion tank, cold water tank and lines are all corroded. The South side of the school has perimeter finned tube radiation heating, in the Classrooms, Office Areas and the Gym. The North side of the school does not have perimeter heating.

RatingInstalledDesign LifeUpdated2 - Poor195235MAR-08

Event: Replace Two (2) Steam Boilers and Entire Heating System

Concern:

The schools heating system is in poor condition. The present steam boilers have been in operation since 1951, they show signs of corrosion on valves, hot water lines, chemical feeders, all the equipment that is associated with the Heating Boilers. The boilers are often failing, need constant repair and maintenance, costs for maintenance and service are extensive and are incurred often, and operating costs are very high as this steam system is a very inefficient system. The controls on the system are pneumatic and outdated. The condition of this system is poorl and failure is imminent.

Recommendation:

Replace the whole school's heating system with a new hydronic boiler system, perimeter heating, and force flow heating system to serve the whole school (North and South) as the North side of the school is only heated through the AHU. The cost estimate in this section includes all perimeter heating, force flow heating for the whole school.

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Failure Replacement	2008	\$1,487,200	High

Updated: MAR-08



The following pictures show the condition of the Heating system in the school. All the components are corroded, rusted, show signs of age, and are a sign of imminent system failure.

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

The Chimney and combustion air vents are original brick chimneys from 1951.

RatingInstalledDesign LifeUpdated3 - Marginal195230MAR-08

Event: Chimneys (&Comb. Air): Steam Boiler

TypeYearCostPriorityCode Upgrade2008\$43,705Unassigned

Updated: APR-08

D3020.02.03 Water Treatment: Steam Boiler - *

Chemical pot feeder, expansion tanks and cold water make-up, in critical condition.

Total replacement is recommended, refer to section D3020.02.01 Heating Boilers and Accessories: H.W. for total pricing.

RatingInstalledDesign LifeUpdated4 - Acceptable19520MAR-08

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

The school's ventilation is provided by three (3) Air Handling Units (AHU) serving the two floors of the school. Two (2) AHUs serving the Southern portion of the school are located in the South Mechanical Room. These units take in fresh air through the roof, they use steam to warm up the air in the heating coils, and are controlled by pneumatic Johnson Controls. A single AHU serves the North side of the school and is located in the North Mechanical Room, and is complete with Return and Supply Air Fans, a hot water heating coil and a PYR-A-LARM model DIA-6 air duct smoke detector. The AHU is the only form of heating to the North side of the school. The Supply Fan for this AHU is a Robbins & Myer 10 Hp @ 1,740 rpm Type N BOW1. Fan is connected to a 208V, 3 phase, 60 Hz power supply. The AHU for the South side of the school do not meet current outdoor air requirements for the school, they are inefficient, and costly to repair.

Rating	<u>Installed</u>	Design Life	<u>Updated</u>
3 - Marginal	1952	30	MAR-08

Event: Replace Three (3) Air Handling Units

Concern:

The AHU have been in operation since 1951 serving the south side of the school and since 1973 serving the north side. All three (3) units have served their lifetime, they are noisy, inefficient, do not provided current standards of outdoor air, and cause poor circulation of air in the school.

Recommendation:

Replace the AHU with new AHUs along with the Heating Boiler system replacement. The Cost estimate is total cost for AHU and equipment.

<u>Type</u>	<u>Year</u>	<u>Cos</u> t	<u>Priority</u>
Failure Replacement	2008	\$915,200	High

Updated: MAR-08

D3040.01.02 Fans: Air Distribution (Remote from AHU) - *

Return Air Fan for the North AHU is a Centri Cook Vane CVBC-88 fan. Fan is connected to a 208V, 3 phase, 60 Hz power supply.

Replace fan, refer to Section D3040.01.01 Air Handling Units: Air Distribution for complete cost of replacement with new ventilation system.

RatingInstalledDesign LifeUpdated3 - Marginal19520MAR-08

Event: Return Air Fan

Concern:

Fan vibrates excessively, is noisy in operation (above normal operating noise level).

Recommendation:

Replace fan, refer to Section D3040.01.01 Air Handling Units: Air Distribution for complete cost of replacement with new ventilation system.

TypeYearCostPriorityFailure Replacement2008\$0Low

Updated: MAR-08

D3040.01.03 Air Cleaning Devices: Air Distribution - *

Standard replaceable medium filters used in all AHUs.

RatingInstalledDesign LifeUpdated3 - Marginal19520MAR-08

D3040.01.04 Ducts: Air Distribution - *

All ducts are galvanized steel ducts that distribute air to the whole school. South end of the school there is a basement portion in the Industrial Arts Classroom, where there are 4 newly constructed rooms, none of which have a supply or return air ducts, there is no fire protection (fire dampers) at any of the walls, no transfer air ducts and they are not built to code.

RatingInstalledDesign LifeUpdated3 - Marginal19520MAR-08

Event: Ducts: Air Distribution

Concern:

Basement Rooms in Industrial Arts have no air supply or return. All Classrooms have original grilles that do not allow the air in the classroom to be dispersed equally.

Recommendation:

Ensure Basement Rooms have supply and return air, as well as fire separation at walls. In the estimate the Grilles in the Classrooms are also included.

TypeYearCostPriorityIndoor Air Quality Upgrade2008\$57,200Medium

Updated: MAR-08

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

Wall mounted grilles and registers serving the perimeter finned tubed radiation. Grilles do allow for air to be dispersed equally in the Classroom and in turn do not provide fresh air to Classrooms efficiently. These grilles need to be replaced. For costs refer to Section D3040.01.04 Ducts: Air Distribution.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1952	0	MAR-08

D3040.03.01 Hot Water Distribution Systems - **

All heating pipes are insulated, the heating pipes have signs of water leakage, corrosion.

Replace heating pipes along with new Heating Boiler system that will provide the school's heating. For the cost of the replacement refer to section D3020.02.01 Heating Boilers and Accessories: H.W.

Rating	Installed	Design Life	Updated
4 - Accentable	1952	40	MAR-08

D3040.04.01 Fans: Exhaust - **

There are four (4) exhaust fans serving the school's Washrooms, Locker Rooms and Home Economics Room. The South first and second floor Washrooms are serviced by a Ventilating set MV 5 10G fans that have exceeded their lifetime. The Home Economics Room is serviced by a Greenheck CUBE-141 roof exhaust fan that has an exhaust air capacity of 2,539 CFM at a static pressure of 1 inch. There are two exhaust fans serving the Locker Rooms and Washrooms on the North side of the building they are Canadian General Electric 3J522AX5 1/4 Hp and have exceeded their lifecycle.

RatingInstalledDesign LifeUpdated4 - Acceptable195230MAR-08

Event: Replace One (1) Home Economics Exhaust Fan

TypeYearCostPriorityLifecycle Replacement2023\$11,440Unassigned

Updated: MAR-08

Event: Replace Three (3) Original - 1952 - Exhaust Fans

TypeYearCostPriorityLifecycle Replacement2012\$17,160Unassigned

Updated: MAR-08

D3040.04.03 Ducts: Exhaust - *

Exhaust ducts are galvanized steel, in acceptable condition. No signs of damage present.

RatingInstalledDesign LifeUpdated4 - Acceptable19520MAR-08

D3040.04.05 Air Outlets and Inlets: Exhaust - *

Exhaust air outlets are egg crate grilles throughout school in acceptable condition.

RatingInstalledDesign LifeUpdated4 - Acceptable19520MAR-08

D3040.05 Heat Exchangers - **

Steam to water Shell & Tube Heat Exchanger serving the North side of the school.

Replace along with new Heating Boiler System, for cost of replacement refer to section D3020.01 Heating Boilers and Accessories: H.W.

RatingInstalledDesign LifeUpdated4 - Acceptable197330MAR-08

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D3050.01 Unitary Air Conditioning Equipment -

The school has one (1) Computer Room that has heat generation and need split-system air conditioning units installed. There are also two (2) Printing Offices one in the Office area on the first floor and the second one on the second floor that overheat and need a split-system A/C unit.

RatingInstalledDesign LifeUpdated3 - Marginal195230MAR-08

Event: Unitary Air Conditioning Equipment

Concern:

One (1) Computer Room, and two (2) Printing Offices on the First and Second floors have a build up of heat generation.

Recommendation:

Install split system A/C units for each of the areas.

TypeYearCostPriorityIndoor Air Quality Upgrade2008\$11,440Medium

Updated: MAR-08

D3050.05.02 Fan Coil Units - **

The heating supply for the North section of the school is only provided by the AHU and the Fan Coils, when a Fan Coil is dirty and gets clogged with no air supply going through it, the affected Classrooms are left without any heat. Fan coils to be replaced with the new Ventilation system

Rating	<u>Installed</u>	Design Life	<u>Updated</u>
4 - Acceptable	1952	30	MAR-08

Event: Replace Fan Coil Units

TypeYearCostPriorityLifecycle Replacement2008\$114,315Unassigned

Updated: APR-08

D3050.05.03 Finned Tube Radiation - **

The South side of the school has perimeter finned tube radiation heating, in the Classrooms, Office Areas and the Gym. The North side of the school does not have perimeter heating. For replacement costs refer to section D3020.02.01 Heating Boilers and Accessories: H.W.**.

Rating	<u>Installed</u>	Design Life	<u>Updated</u>
4 - Acceptable	1952	40	MAR-08

D3060.02 HVAC Instrumentation and Controls -

Pneumatic Johnson Controls control the school's Boiler and Ventilation system. Upgrade controls along with Boiler and Ventilation system.

RatingInstalledDesign LifeUpdated4 - Acceptable195230MAR-08

Event: Instrumentation and Controls

TypeYearCostPriorityLifecycle Replacement2012\$464,464Unassigned

Updated: APR-08

D4010 Sprinklers: Fire Protection*

No Sprinkler system in school.

RatingInstalledDesign LifeUpdated4 - Acceptable060MAR-08

Event: Install a sprinkler system.

Concern:

The school is not equipped with a sprinkler system

Recommendation: Install a sprinkler system.

TypeYearCostPriorityCode Upgrade2008\$136,022Medium

Updated: MAY-08

D4030.01 Fire Extinguisher, Cabinets and Accessories - *

There are two types of fire extinguishers in the school, 2-1/2 gallon pump tank extinguishers that have exceeded their lifetime, and 5 lbs ABC wall hung fire extinguishers.

RatingInstalledDesign LifeUpdated4 - Acceptable195230MAR-08

Event: 2-1/2 Gallon Pump Tank Extinguishers

Concern:

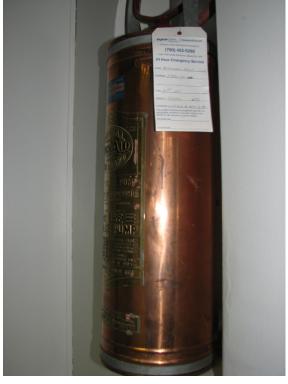
The 2-1/2 gallon pump tank extinguishers have exceeded their lifetime. They are original 1951 cylinders.

Recommendation:

Replace old pump tank fire extinguishers with new 5 lbs. ABC fire extinguishers.

TypeYearCostPriorityLifecycle Replacement2008\$2,860Unassigned

Updated: MAR-08



1951 original Pump Tank Fire extinguishers.

S5 ELECTRICAL

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

The main distribution was installed in 1973 building addition. The system is 120/208V, 1200A, 3 phase and 4 wire.

RatingInstalledDesign LifeUpdated5 - Good197340MAR-08

Event: Replace Main Electrical Switchboards

TypeYearCostPriorityLifecycle Replacement2013\$91,520Unassigned

Updated: APR-08

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

Panels were installed for computer lab upgrading.

RatingInstalledDesign LifeUpdated5 - Good200130MAR-08

Event: Replace Two Electrical Branch Circuit Panelboards

TypeYearCostPriorityLifecycle Replacement2031\$10,296Unassigned

Updated: APR-08

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

Panels were installed during 1973 building addition.

RatingInstalledDesign LifeUpdated5 - Good197330MAR-08

Event: Replace Four Electrical Branch Circuit

Panelboards

TypeYearCostPriorityLifecycle Replacement2012\$20,592Low

Updated: APR-08

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

Panels were installed during 1993 modernization.

RatingInstalledDesign LifeUpdated5 - Good199330MAR-08

Event: Replace Eight Electrical Branch Circuit

<u>Panelboards</u>

TypeYearCostPriorityLifecycle Replacement2023\$41,184Unassigned

Updated: APR-08

D5010.07.02 Motor Starters and Accessories - **

Magnetic start/stop stations for individual mechanical equipment controls.

RatingInstalledDesign LifeUpdated5 - Good197330MAR-08

Event: Replace 14 Motor Starters and Accessories

TypeYearCostPriorityLifecycle Replacement2012\$8,008Low

Updated: APR-08

D5020.01 Electrical Branch Wiring - *

Most 1951 wires were replaced during 1973 addition and 1993 modernization.

RatingInstalledDesign LifeUpdated5 - Good19730MAR-08

D5020.02.01 Lighting Accessories (Lighting Controls) - *

The lights in the classrooms and office are controlled locally and the hallway lights are centrally controlled in the administration office.

Rating Installed Design Life Updated
5 - Good 1973 0 MAR-08

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D5020.02.02.02 Interior Florescent Fixtures - **

The entire school fluorescent light fixtures are T-12 lamp fixtures.

RatingInstalledDesign LifeUpdated5 - Good197330MAR-08

Event: Replace 1180 Florescent Fixtures

TypeYearCostPriorityLifecycle Replacement2012\$161,990Low

Updated: APR-08

D5020.02.03.02 Emergency Lighting Battery Packs - **

RatingInstalledDesign LifeUpdated5 - Good198820MAR-08

Event: Replace 44 Emergency Lighting Battery Packs

TypeYearCostPriorityLifecycle Replacement2012\$17,618Low

Updated: APR-08

D5020.02.03.03 Exit Signs - *

The Exit signs were retrofit to LED type lamps.

RatingInstalledDesign LifeUpdated5 - Good20020MAR-08

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

Fixtures were installed in 1988 and have fair lighting level coverage

RatingInstalledDesign LifeUpdated5 - Good19980MAR-08

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

All the exterior lights are controlled by photocell

RatingInstalledDesign LifeUpdated5 - Good19730MAR-08

D5030.01 Detection and Fire Alarm - **

Edwards 6632 hardwired fire alarm system

RatingInstalledDesign LifeUpdated5 - Good198725MAR-08

Event: Replace Fire Alarm System

TypeYearCostPriorityLifecycle Replacement2012\$108,680Unassigned

Updated: APR-08

D5030.02.02 Intrusion Detection - **

Magnun Alori 3000 system is installed for the security system and has motion sensors installed through entire building hallways.

RatingInstalledDesign LifeUpdated5 - Good200025MAR-08

Event: Replace Intrusion Detection System

TypeYearCostPriorityLifecycle Replacement2025\$22,880Unassigned

Updated: APR-08

D5030.03 Clock and Program Systems - *

Simplex timer and program system was used and connected to school PA system.

RatingInstalledDesign LifeUpdated5 - Good200325MAR-08

D5030.04.01 Telephone Systems - *

Nortel 93 system is used for telephone system

RatingInstalledDesign LifeUpdated5 - Good199725MAR-08

D5030.04.05 Local Area Network Systems - *

The major network cabling was installed in 1994; the new computer room was completed in 2001

RatingInstalledDesign LifeUpdated5 - Good19940MAR-08

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D5030.05 Public Address and Music Systems - **

The Bogen system is installed to perform PA and Music, call and paging functions through entire school.

RatingInstalledDesign LifeUpdated5 - Good199720MAR-08

Event: Replace Public Address and Music Systems

TypeYearCostPriorityLifecycle Replacement2017\$40,040Unassigned

Updated: APR-08

S6 EQUIPMENT, FURNISHINGS AND SPECIAL CONSTRUCTION

E1020.02 Library Equipment - *

Stained wood shelving and plastic laminated counter tops.

RatingInstalledDesign LifeUpdated4 - Acceptable19930MAR-08

E1020.03 Theater and Stage Equipment - *

Stage curtains and theatrical lighting.

RatingInstalledDesign LifeUpdated4 - Acceptable19520MAR-08

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

Basketball hoops, badminton equipment and floor mats in both gymnasiums.

RatingInstalledDesign LifeUpdated4 - Acceptable19930MAR-08

E2010.02 Fixed Casework - All sections**

Painted and stained millwork with plastic laminated counter tops in all sections.

RatingInstalledDesign LifeUpdated4 - Acceptable195235MAR-08

Event: Replace 400 M Fixed Casework All Sections

TypeYearCostPriorityLifecycle Replacement2012\$493,705Unassigned

Updated: APR-08

E2010.03.01 Blinds - All Sections**

RatingInstalledDesign LifeUpdated4 - Acceptable195230MAR-08

Event: Replace 320 Blinds- All Sections

TypeYearCostPriorityLifecycle Replacement2012\$76,984Unassigned

Updated: APR-08

F2020.01 Asbestos - All Sections*

Hazardous material management report of December 2000 identified various areas containing asbestos materials.

With exception of hazardous materials stored in the crawl space and material covering mechanical fittings the facility was found to be in good condition.

Asbestos abatement has been undertaken in 2006

RatingInstalledDesign LifeUpdated4 - Acceptable19520MAR-08

F2020.04 Mould - All Sections*

No mould was viewed or reported but the potential exists in the basement mechanical room of 1952 Section if no action is undertaken to remove moisture problems .Refer to A2020 - 1952 Section.

Previous mould remedial action was undertaken in 2001.

RatingInstalledDesign LifeUpdated4 - Acceptable19520MAR-08

S8 FUNCTIONAL ASSESSMENT

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

Direct access from parking area to east vestibule of 1952 Section.

RatingInstalledDesign LifeUpdated4 - Acceptable19520MAR-08

K4010.02 Barrier Free Entrances - *

East vestibule doors power equipped meeting BFA requirements.

RatingInstalledDesign LifeUpdated4 - Acceptable19930MAR-08

K4010.03 Barrier Free Interior Circulation - *

Elevator provided and ramps in corridors between elevation changes.

RatingInstalledDesign LifeUpdated4 - Acceptable19520MAR-08

K4010.04 Barrier Free Washrooms - *

Designated BFA wash rooms in 1952 section.

RatingInstalledDesign LifeUpdated4 - Acceptable19520MAR-08

RECAPP Facility Evaluation Report



Mckernan Elementary / Junior High School S3213 Edmonton

Facility Details

Building Name: Mckernan Elementary / Junic

Address:

Location: Edmonton

Building Id: \$3213
Gross Area (sq. m): 0.00
Replacement Cost: \$0
Construction Year: 0

Evaluation Details

Evaluation Company: A&E Architectural & Engineering Group

Inc.

Evaluation Date: October 25 2007
Evaluator Name: Vic Maybroda

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

General Summary:

Vehicle access to a internal asphalt paved parking area is accessed from 114th Street by means of an asphalt surfaced driveway. Adjacent to the laneway is an asphalt surfaced play area surrounded by a 3 metre high chain link fence. A bus drop-off area is located on 76th avenue with pedestrian access provided by concrete surfaced walkways to the main entry and to the east entry of the 1973 Section. A sand surfaced creative play area shared with the local community group is located northeast of the 1973 Section. Mature trees are located in the playground area, around the school perimeter and a developed planting area between the school and 76th Avenue. Grassed soccer pitches and ball fields are located east of the school.

Grading slopes away from the school and appears to provide adequate surface drainage.

Overall the site elements appear to be 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 surfaced driveway connecting 114th street and the parking area.

RatingInstalledDesign LifeUpdated4 - Acceptable200225MAR-08

Event: Replace 180 sq. M Flexible Pavement Roadway

(Asphalt)**

TypeYearCostPriorityLifecycle Replacement2027\$26,312Unassigned

Updated: APR-08

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

Located as an internal courtyard between the three school sections and non expandable.

RatingInstalledDesign LifeUpdated4 - Acceptable200225MAR-08



Event: Replace 1200 sq. M Flexible Paving Parking

Lots(Asphalt)**

TypeYearCostPriorityLifecycle Replacement2027\$171,600Unassigned

Updated: APR-08

G2020.06.03 Parking Lot Signs - *

Staff and BFA signage provided but not clearly defined.

RatingInstalledDesign LifeUpdated4 - Acceptable22020MAR-08

G2020.06.04 Pavement Markings - *

Painted lines defining parking stalls.

RatingInstalledDesign LifeUpdated5 - Good20020MAR-08

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

Concrete walkways accessing main entry from 76th avenue and from 76th avenue to east entry of 1973 section.

RatingInstalledDesign LifeUpdated4 - Acceptable195225MAR-08

Event: Replace 370 sq. M Rigid Pedestrian Pavement

(Concrete)**

TypeYearCostPriorityLifecycle Replacement2012\$71,786Unassigned

Updated: APR-08

G2040.02 Fences and Gates

3 metre high chin link fence around asphalt surfaced play area.

RatingInstalledDesign LifeUpdated4 - Acceptable198930MAR-08

Event: Replace 76 M Chain Link Fence 3 M High

TypeYearCostPriorityLifecycle Replacement2019\$10,868Unassigned

Updated: APR-08

G2040.02 Fences and Gates -

RatingInstalledDesign LifeUpdated4 - Acceptable195230MAR-08

Event: Replace 370 M Fences and Gates 1.8 M High

Recommendation:

Replace 370 M Fences and Gates 1.8 M High

TypeYearCostPriorityLifecycle Replacement2012\$42,328Unassigned

Updated: APR-08

G2040.03 Athletic and Recreational Surfaces - **

Asphalt surfaced play area adjacent paved laneway and parking lot,

RatingInstalledDesign LifeUpdated4 - Acceptable198925MAR-08



Event: Replace 310 sq. M Athletic and Recreational

Surfaces**

TypeYearCostPriorityLifecycle Replacement2014\$35,464Unassigned

Updated: APR-08

G2040.05 Site and Street Furnishings - *

Bike racks, concrete seating and tables.

RatingInstalledDesign LifeUpdated4 - Acceptable19520MAR-08

G2040.06 Exterior Signs - *

School identification sign located on face of building.

RatingInstalledDesign LifeUpdated4 - Acceptable19520MAR-08

G2040.08 Flagpoles - *

One metal free standing and one mounted one building face.

RatingInstalledDesign LifeUpdated4 - Acceptable19520MAR-08

G2050.04 Lawns and Grasses - *

Sodded area adjacent school perimeter. Grassed playing fields.

RatingInstalledDesign LifeUpdated4 - Acceptable19520MAR-08

G2050.05 Trees, Plants and Ground Covers - *

Well developed mature adjacent creative play area and adjacent to school building. Large shade trees south of school entry in seating area.

RatingInstalledDesign LifeUpdated5 - Good19520MAR-08

G3010.02 Site Domestic Water Distribution - *

100mm underground line from municipal service.

RatingInstalledDesign LifeUpdated4 - Acceptable19520MAR-08

G3010.03 Site Fire Protection Water Distribution - *

Fire hydrants located adjacent school on 114th street.

RatingInstalledDesign LifeUpdated4 - Acceptable19520MAR-08

G3020.01 Sanitary Sewage Collection - *

Underground to 250mm line in easement south of school building.

RatingInstalledDesign LifeUpdated4 - Acceptable19520MAR-08

G3030.01 Storm Water Collection - *

Underground to 300mm line in 114th street.

No catch basins located in asphalt surfaced parking area.

RatingInstalledDesign LifeUpdated4 - Acceptable19520MAR-08

G3060.01 Gas Distribution - *

100mm underground line from service easement east of school building.

RatingInstalledDesign LifeUpdated4 - Acceptable19520MAR-08

G4010.02 Electrical Power Distribution Lines - *

Underground from municipal laneway.

RatingInstalledDesign LifeUpdated4 - Acceptable19520MAR-08

G4010.04 Car Plugs-ins - *

Mounted on building faces.

RatingInstalledDesign LifeUpdated4 - Acceptable20020MAR-08

G4020.01 Area Lighting - *

Security lighting mounted on building faces.

Rating	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1998	0	MAR-08