

RECAPP Facility Evaluation Report

Calgary School District #19



Queensland Downs Elementary School

B2747A

Calgary

Facility Details

Building Name: Queensland Downs Elemen
Address: 199 Queen Charlotte Way S
Location: Calgary

Building Id: B2747A
Gross Area (sq. m): 3,251.70
Replacement Cost: \$7,441,340
Construction Year: 1976

Evaluation Details

Evaluation Company: Jacques Whitford AXYS Ltd.
Evaluation Date: January 8 2008
Evaluator Name: Dallacye Taylor

Total Maintenance Events Next 5 years: **\$1,678,248**
5 year Facility Condition Index (FCI): **22.55%**

General Summary:

The Queensland Downs Elementary School is a single-storey masonry block and cast-in-place concrete structure with a basement, originally constructed in 1976. The school building has a total floor area of approximately 2930 square metres. There are four relocables, with a total floor area of approximately 455 square metres, located on the southwest side of the school. General modernizations were conducted throughout the building interior over the past couple of years.

Structural Summary:

Structural drawings were not reviewed during the assessment, however the school foundations likely consist of a cast-in-place concrete assembly with grade beams and pad footings. All portions of the school have load-bearing masonry block walls and reinforced, cast-in-place concrete floors. The roof structural frame for all sections of the school is comprised of metal deck supported by open web steel joists and steel wide flange beams.

No major or minor work associated with the school structure was identified during the assessment.

The structural elements of the school are in acceptable condition.

Envelope Summary:

Exterior cladding consists of face brick veneer with a horizontal and vertical metal siding trim. The relocatables exterior cladding consists of vertical metal siding and painted plywood skirting along the bottom. All roof sections have a modified bitumen membrane (SBS) assembly. Entrance doors are typically painted metal set in painted metal frames. Windows on the exterior of the building are double-paned, fixed and operable glazing units set in aluminum frames.

No major or minor work associated with the school envelope was identified during the assessment.

The envelope and exterior components of the school are in acceptable condition.

Interior Summary:

The library, the general office and one classroom have carpet flooring and the gymnasium has hardwood flooring. The corridors and classrooms have vinyl flooring and the washrooms typically are tiled. The mechanical spaces and storage rooms have painted/sealed concrete floors. The majority of the interior walls consist of painted masonry block. The majority of the building has either a suspended acoustic panel ceiling system or fireproofed exposed roof structure.

No major or minor work associated with the school interior was identified during the assessment.

The interior finishes of the school are in acceptable condition.

Mechanical Summary:

Ventilation in the school is provided by a central air handling unit, and a separate gymnasium air handling unit. Heating in the building is provided by perimeter radiation and tempered air. The standpipe system supplies hose cabinets and the gymnasium stage area is sprinklered. The HVAC equipment controls are pneumatic.

The followings are recommended actions for the next five years:

- replace original furnace in portable corridor; and,
- expand sprinkler system.

Overall the mechanical systems in the building are in good condition.

Electrical Summary:

The main electrical services are estimated to be 1000 Amps, 120/208 Volts, 3 Phase, 4 wire. The electrical sub-panels and wiring are generally original to the construction of the building. Interior lighting is provided by T12 and T8 fluorescent technology. Interior emergency lighting and exit signs are tied to battery packs. The building is protected by a non-addressable fire alarm system and Regency security system, and is equipped with a Meridian phone system and Nortel LAN.

The following are recommended actions for the next five years:

- replace original electrical branch circuit panelboards with new;
- upgrade original T12 lighting fixtures to T8 technology;
- upgrade original exit signs to LED ones;
- replace original non-addressable fire alarm system with new to meet the fire code.

Overall the electrical systems in the building are in acceptable 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*

Construction drawings were not available for review during the assessment; however the school's foundations presumably consist of cast-in-place concrete pad footings and perimeter grade beams.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1976	0	MAR-08

A1030 Slab on Grade*

A portion of the basement floor and the main floor of the school are constructed at grade. They have a cast-in-place concrete slab-on-grade which is presumed to include conventional steel reinforcement. The main floor area over the basement is a suspended structural concrete slab which is presumed to include conventional steel reinforcement.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1976	0	MAR-08

A2020 Basement Walls (& Crawl Space)*

The basement walls are cast-in-place concrete.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1976	0	MAR-08

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

Cast-in-place concrete walls support the main floor above the basement and load-bearing masonry block walls on the main floor support the roof structure.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1976	0	MAR-08

B1010.07 Exterior Stairs*

There are pre-cast concrete stairs located on the northwest side of the building leading from the gymnasium.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	40	MAR-08

B1020.01 Roof Structural Frame*

The roof structural frame for the school consists of metal decking supported by open web steel joists and steel wide flange beams.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1976	0	MAR-08

S2 ENVELOPE

B2010.01.02.01 Brick Masonry: Ext. Wall Skin*

The school is generally clad with a face brick veneer on all elevations.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1976	75	MAR-08

B2010.01.06.03 Metal Siding**

Pre-finished vertical and horizontal metal trim is situated above the majority of the brick-clad around the school perimeter. There is pre-finished vertical metal siding on the roof around the mechanical penthouse.

The Lifecycle Replacement cost is based on approximately 295 square metres of vertical and horizontal metal siding.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	40	MAR-08

Event: Replace the metal siding

Concern:

The facility has a cost of \$143,791 to replace the metal siding.

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

Updated: APR-08

B2010.01.09 Expansion Control: Exterior Wall Skin*

Construction joints are provided at periodic intervals within the face brick cladding system for expansion control.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1976	0	MAR-08

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

Joint sealant is applied to control joints and on the perimeters of exterior window units and doors on all sides of the building.

The Lifecycle Replacement cost is based on 235 metres of caulking.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1990	20	MAR-08

Event: Replace the caulking

Concern:

The facility has a Lifecycle Replacement cost of \$19,349 to replace the caulking.

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2012	\$5,148	Unassigned

Updated: APR-08

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

Architectural drawings were not available for review as part of the assessment; however the exterior wall assembly for the school is presumably equipped with a vapor retarder and insulation. The type and extent of materials used could not be reviewed visually, and exterior wall cavities were not accessed during the site visit.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1976	0	MAR-08

B2010.06 Exterior Louvers, Grilles, and Screens*

Pre-finished metal louvres are positioned along the building's perimeter to support air flow and ventilation within the school.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1976	0	MAR-08

B2010.09 Exterior Soffits*

There are painted gypsum board soffits under the horizontal metal trim overhangs around the perimeter of the building.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1976	0	MAR-08

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

Exterior windows consist of fixed and operable, double glazed units set in pre-finished aluminum frames. The window units generally contain integral blinds.

There are approximately 23 exterior windows around the building.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	40	MAR-08

Event: Replace the exterior windows

Concern:

The facility has a cost of \$110,720 to replace the exterior windows.

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2016	\$45,760	Unassigned

Updated: APR-08

B2030.01.02 Steel-Framed Storefronts: Doors**

The majority of the exterior doors are painted metal doors set in painted metal frames with no sidelights. The main entrance doors are painted metal doors set in painted metal frames with sidelights.

There are approximately 13 exterior doors around the building.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	30	MAR-08

Event: Replace the entrance doors

Concern:

The facility has a cost of \$44,238 to replace the exterior doors.

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2012	\$32,032	Unassigned

Updated: MAR-08

B3010.01 Deck Vapor Retarder and Insulation*

Architectural drawings were not available for review during the assessment and no ceiling cavities were entered as part of the site visit. The roof deck is presumed to have a vapour barrier and insulation.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1976	0	MAR-08

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

The roof is equipped with a modified bitumen membrane (SBS) assembly.

The roof area is approximately 2815 square meters.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
3 - Marginal	1976	25	MAR-08

Event: Replace the SBS roof system

Concern:

The roof was reported to be original or approximately 31 years of age. Although there were no reported leaks or evidence of water damage, the underlying membrane materials was generally visible across all accessed areas.

Recommendation:

Replace all roof systems.

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Failure Replacement	2010	\$388,960	Medium

Updated: APR-08

B3020.01 Skylights**

There are four aluminum-framed skylights with plexi-glass storm glazing.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1976	25	MAR-08

Event: Replace the skylights

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2012	\$6,292	Unassigned

Updated: MAR-08

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

A painted metal door and a fixed (wall-mounted) internal ladder provide access to the school roof.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1976	0	MAR-08

S3 INTERIOR

C1010.01.03 Unit Masonry Assemblies: Partitions

Interior load-bearing fixed partitions in the school consist of masonry block walls.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1976	0	MAR-08

C1010.01.07 Framed Partitions (Stud)

The remainder of the non-loadbearing walls are steel-framed.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1976	0	MAR-08

C1010.02 Interior Demountable Partitions*

The majority of the interior non-loadbearing walls are demountable partitions.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1976	0	MAR-08

C1010.03.01 According Folding Partitions

A soft, accordian type partition is used for separation in the gymnasium. Similar partitions are also used as separations between classrooms.

The Lifecycle Replacement cost is based on approximately 80 lineal metres of operable folding partitions.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
3 - Marginal	1976	30	MAR-08

Event: Replace the gymnasium's folding partition

Concern:

The gymnasium's folding partiton is in marginal condition due to high usage.

Recommendation:

Replace the gymnasium's folding partition.

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Failure Replacement	2009	\$13,728	Low

Updated: APR-08

Event: Replace the remaining operable folding partitions

Concern:

The facility has a cost of \$11,841 to replace the operable folding partitions.

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2012	\$17,160	Unassigned

Updated: APR-08

C1010.05 Interior Windows*

Interior windows are present in various locations such as the library, in classrooms, etc. The windows consist of single-pane or tempered glass set in painted metal frames.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1976	0	MAR-08

C1010.06 Interior Glazed Partitions and Storefronts*

The front of the office consists of interior glazed partitions.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1976	0	MAR-08

C1020.01 Interior Swinging Doors (& Hardware)*

Interior swinging doors generally consist of painted or stained wood doors set in painted metal frames with or without inset glazing or glazing sidelights with single-paned wired glass.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1976	40	MAR-08

C1020.03 Interior Fire Doors*

Interior fire doors in corridors throughout the building are painted metal doors set in painted metal frames and stained wood doors with glazing set in painted metal frames.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1976	0	MAR-08

C1030.01 Visual Display Boards**

Whiteboards and blackboards are provided in the classrooms throughout the school. There are approximately 28 visual display boards in the building.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1976	20	MAR-08

Event: Replace the visual display boards

Concern:

The facility has a cost of \$41,754 to replace the visual display boards.

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

Updated: APR-08

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

Painted metal stall partitions are provided in the student washrooms and girls dressing room. There are approximately 19 washroom stalls and five shower stalls.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1976	30	MAR-08

Event: Replace the washroom and shower stalls

Concern:

The facility has a cost of \$10,360 to replace the washroom and shower stalls.

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

Updated: APR-08

C1030.12 Storage Shelving*

There are several moveable wood shelving units throughout the school.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1976	0	MAR-08

C1030.14 Toilet, Bath, and Laundry Accessories*

Wall-mounted mirrors as well as soap and paper towel dispensers are provided in each washroom in the building. Toilet paper dispensers are also provided in each washroom stall.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1976	0	MAR-08

C2010 Stair Construction*

There are cast-in-place concrete stairs leading up to classrooms from the lunch/study room and leading down to the basement.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	100	MAR-08

C2020.05 Resilient Stair Finishes**

The stairs leading up to the classrooms have a vinyl tile finish.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1976	20	MAR-08

Event: Replace the vinyl tiles on the interior stairs

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2012	\$1,144	Unassigned

Updated: MAR-08

C2020.08 Stair Railings and Balustrades*

All of the stairs in the school have painted metal railings.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	40	MAR-08

C3010.06 Tile Wall Finishes**

There are tile finishes around the urinals in the boys washrooms and around the shower area in the girls and boys dressing rooms.

The Lifecycle Replacement cost is based on 40 square metres of ceramic tile wall finish.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1976	40	MAR-08

Event: Replace the tile wall finish

Concern:

The facility has a cost of \$38,533 to replace the tile wall finish.

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2016	\$13,728	Unassigned

Updated: APR-08

C3010.08 Stone Facing Wall Finishes: Interior*

The wall that connects to the relocatables is exposed brick veneer and was formerly an exterior wall.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1976	0	MAR-08

C3010.11 Interior Wall Painting*

The masonry concrete walls are painted throughout the school.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	2000	10	MAR-08

C3020.01.02 Paint Concrete Floor Finishes*

Concrete floors in mechanical and storage rooms throughout the building have a painted/sealed finish.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
2 - Poor	1976	10	MAR-08

Event: Repaint the service room floors

Concern:

The paint floor finishes in the service rooms were generally worn.

Recommendation:

Repaint the concrete service room floors.

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Failure Replacement	2009	\$3,432	Low

Updated: APR-08

C3020.02 Tile Floor Finishes**

Quarry tile floors are provided in the washrooms and the majority of the entrances.

The Lifecycle Replacement cost is based on approximately 240 square metres of quarry tile floor finish.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1976	50	MAR-08

Event: Replace the tile floor finish

Concern:

The facility has a cost of \$12,173 to replace the tile floor finish.

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2026	\$82,368	Unassigned

Updated: APR-08

C3020.04 Wood Flooring**

The gymnasium has a hardwood floor with painted sports lines.

The Lifecycle Replacement cost is based on approximately 448 square metres of wood flooring.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	2007	30	MAR-08

Event: Replace the wood flooring

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2037	\$151,008	Unassigned

Updated: APR-08

C3020.07 Resilient Flooring**

Classrooms and corridors throughout the building have a vinyl tile flooring.

The Lifecycle Replacement cost is based on approximately 1235 square metres of vinyl flooring.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1976	20	MAR-08

Event: Replace the vinyl flooring

Concern:

The facility has a cost of \$75,126 to replace the vinyl flooring.

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2012	\$70,928	Unassigned

Updated: APR-08

C3020.08 Carpet Flooring**

Carpet flooring is provided in the library, main office and the remainder of the classrooms.

The Lifecycle Replacement cost is based on approximately 480 square metres of carpet flooring.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1990	15	MAR-08

Event: Replace the carpet flooring

Concern:

The facility has a cost of \$8,445 to replace the carpet flooring.

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

Updated: APR-08

C3030.01 Concrete Ceiling Finishes (Unpainted)*

The basement ceiling is exposed cast-in-place concrete.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1976	100	MAR-08

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

The classrooms, library and portions of the school's corridors are finished with a suspended T-bar grid ceiling with in-laid acoustic panels.

The Lifecycle Replacement cost is based on approximately 2700 square metres of acoustic ceiling tiles.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1976	25	MAR-08

Event: Replace the acoustic ceiling tiles

Concern:

The facility has a cost of \$46,281 to replace the acoustic ceiling tiles.

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2012	\$148,720	Unassigned

Updated: APR-08

S4 MECHANICAL

D2010.04 Sinks**

There are approximately 16 stainless steel sinks and 3 iron enamel service sinks throughout the building.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1976	30	MAR-08

Event: Replace 19 miscellaneous sinks

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2012	\$29,744	Unassigned

Updated: APR-08

D2010.05 Showers**

There are two showers provided in the physical education offices. The showers in the dressing rooms are used for storage.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1976	30	MAR-08

Event: Replace 2 showers

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2012	\$1,144	Unassigned

Updated: APR-08

D2010.08 Drinking Fountains / Coolers**

There are approximately 6 vitreous china non-refrigerated drinking fountains throughout the school.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1976	35	MAR-08

Event: Replace 6 non-refrigerated drinking fountains

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2012	\$11,440	Unassigned

Updated: APR-08

D2010.09 Other Plumbing Fixtures*

There are some laboratory plumbing fixtures located in the science room.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1976	0	MAR-08

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

There are approximately 21 vitreous china water closets, 7 floor-mounted vitreous china urinals, and 20 vitreous china lavatories in washrooms.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1976	30	MAR-08

Event: Replace washroom plumbing fixtures

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2012	\$64,064	Unassigned

Updated: APR-08

D2020.01.01 Pipes and Tubes: Domestic Water*

Domestic piping is generally copper and original to the building.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1976	0	MAR-08

D2020.01.02 Valves: Domestic Water**

There are isolation valves in place on the domestic plumbing lines.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1976	40	MAR-08

Event: Replace 10 domestic water valves

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2016	\$11,440	Unassigned

Updated: APR-08

D2020.01.03 Piping Specialties (Backflow Preventors)**

There are backflow prevention devices on the domestic water lines (1997, 2"), boiler feeds (1993, 3/4"), standpipe (1997, 3"), water softener (1997, 3/4") and irrigation system (1997, 2").

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1997	20	MAR-08

Event: Replace backflow preventors

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2012	\$17,160	Unassigned

Updated: APR-08

D2020.02.02 Plumbing Pumps: Domestic Water**

A domestic hot water recirculating pump is provided.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1976	20	MAR-08

Event: Replace the DHW recirculation pump

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2012	\$2,288	Unassigned

Updated: APR-08

D2020.02.06 Domestic Water Heaters**

A John Wood gas-fired domestic hot water heater with 40 USG storage and 38 MBH input is located in the boiler room.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	2000	20	MAR-08

Event: Replace domestic water heater

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2020	\$3,432	Unassigned

Updated: APR-08

D2030.01 Waste and Vent Piping*

Waste and vent piping is generally cast iron and original to the building.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1976	0	MAR-08

D2030.03 Waste Piping Equipment - Sump Pump*

A sump pump is provided in the basement to remove water that has accumulated in a sump pit.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1976	0	MAR-08

D2040.01 Rain Water Drainage Piping Systems*

Interior rain water drainage piping is generally cast iron and original to the building. The system is connected to the city storm system.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1976	0	MAR-08

D2040.02.04 Roof Drains*

The roof system incorporates drains which are each fitted with gravel/debris strainers.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1976	40	MAR-08

D3010.02 Gas Supply Systems*

Natural gas piping feeds the central heating boilers, domestic hot water heater, furnaces, and make-up air units.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1976	60	MAR-08

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

There are two Bryan CL-180-W natural gas fired boilers located in the boiler room. The capacities are 1,800 MBH each.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1976	35	MAR-08

Event: Replace two heating boilers

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2012	\$109,824	Unassigned

Updated: APR-08

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

Combustion air inlet terminate in a cold trap, and the boiler flues exit through the roof.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	2007	30	MAR-08

Event: Replace chimneys for boilers

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2037	\$11,440	Unassigned

Updated: APR-08

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

Pot feeders are connected to the boilers. A water treatment program is provided for the heating hot water system.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1976	0	MAR-08

D3030.06.02 Refrigerant Condensing Units**

There is a Carrier air-cooled condensing unit on the roof serving the school. The cooling capacity is approximately 40 tons.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1976	25	MAR-08

Event: Replace the 40 ton condensing unit

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2012	\$41,184	Unassigned

Updated: APR-08

D3040.01.01 Air Handling Units: Air Distribution**

The general ventilation in the school is provided by a central air handling unit located in the boiler room. The central AHU is equipped with a heating coil, sprayed DX cooling coil, filter section, mixing section and supply and return fans. A separate air handling unit in the gymnasium penthouse provides ventilation for the gymnasium.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1976	30	MAR-08

Event: Replace 2 air handling units

Concern:

Estimate based on the volume of the school and on 6 air changes per hour.

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2012	\$125,840	Unassigned

Updated: APR-08

D3040.01.04 Ducts: Air Distribution*

The air distribution ductwork is original and located in the ceiling space.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1976	0	MAR-08

D3040.01.07 Air Outlets & Inlets:Air Distribution*

T-Bar ceiling-mounted diffusers are located throughout the building to provide supply air.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1997	0	MAR-08

D3040.03.01 Hot Water Distribution Systems - Circulation pumps**

Three original Toshiba 2 HP hot water circulation pumps are used to circulate the heating hot water from the boilers.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1976	40	MAR-08

Event: Replace 3 heating hot water circulation pumps

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2012	\$16,016	Unassigned

Updated: APR-08

D3040.03.01 Hot Water Distribution Systems**

Hot water distribution is through original insulated steel piping to air handling units, radiation heaters, unit heater, and fan coil units in the building.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1976	40	MAR-08

Event: Replace heating hot water distribution system

Concern:

Estimate based on the perimeter of the building.

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2016	\$74,360	Unassigned

Updated: APR-08

D3040.04.01 Fans: Exhaust**

There are approximately 6 exhaust fans/ventilators on the roof.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1976	30	MAR-08

Event: Replace 6 roof top exhaust fans

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2012	\$12,584	Unassigned

Updated: APR-08

D3040.04.05 Air Outlets and Inlets: Exhaust*

Sidewall and ceiling mounted grilles serve as exhaust air inlets. The return air is exhausted through the ceiling space.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1976	0	MAR-08

D3050.02 Air Coils**

Reheat coils are provided for the gymnasium ventilation system.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1976	30	MAR-08

Event: Replace 5 reheat coils

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2012	\$4,576	Unassigned

Updated: APR-08

D3050.03 Humidifiers**

A spray humidifier is provided in the main air handling unit.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1976	25	MAR-08

Event: Replace spray humidifier in main AHU

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2012	\$17,160	Unassigned

Updated: APR-08

D3050.05.02 Fan Coil Units**

Approximately 6 fan coil units are provided at the entrances of the building.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1976	30	MAR-08

Event: Replace 6 fan coil units

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2012	\$21,736	Unassigned

Updated: APR-08

D3050.05.03 Finned Tube Radiation**

Finned tube baseboard and wall-mounted radiation heaters are installed throughout the building.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1976	40	MAR-08

Event: Replace 100 fin tube radiation heating units

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2016	\$153,296	Unassigned

Updated: APR-08

D3050.05.06 Unit Heaters**

An original Dunham Bush hot water suspended unit heater is provided in the boiler room.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1976	30	MAR-08

Event: Replace hot water unit heater

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

Updated: MAR-08

D3060.02.02 Pneumatic Controls**

The HVAC equipment is controlled by an original pneumatic system. The air compressor and drier were replaced in 2007.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1976	30	MAR-08

Event: Replace pneumatic control system

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2012	\$37,752	Unassigned

Updated: APR-08

D4010 Sprinklers: Fire Protection*

The gymnasium stage area is covered by a wet sprinkler system. The building was compliant with the fire code at the time of construction.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1976	60	MAR-08

Event: Expand sprinkler system coverage to the balance of the building

Concern:

There is no sprinkler system provided for the balance of the building. The current Building Code requires that a sprinkler system covers the entire area of the building.

Recommendation:

Install a sprinkler system through the remainder of the school. Estimate based on the area of the school.

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Code Upgrade	2008	\$104,104	Medium

Updated: MAR-08

D4020 Standpipes*

The standpipe system supplies hose cabinets in the building.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1976	60	MAR-08

D4030.01 Fire Extinguisher, Cabinets and Accessories*

Handheld fire extinguishers are located throughout the building and are checked annually.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1976	30	MAR-08

S5 ELECTRICAL

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

The main electrical service is estimated to be 1000 Amps, 120/208 volt, 3 Phase, 4 wire, and manufactured by CEB.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1976	40	MAR-08

Event: Replace main electrical switchboard

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2016	\$58,344	Unassigned

Updated: APR-08

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

Electrical sub-panels are generally original. The majority of the original panels are manufactured by CEB and Westinghouse.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
3 - Marginal	1976	30	MAR-08

Event: Replace 10 original and install 4 additional electrical sub-panels

Concern:

The original CEB electrical sub panelboards are obsolete and almost at their full capacities without room for further expansion. Cost of the maintenance is high and replacement parts are hard to obtain.

Recommendation:

Replace all the original electrical sub-panelboards with new and install 4 additional branch circuit panelboards.

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2008	\$78,936	Unassigned

Updated: MAR-08

D5010.07.02 Motor Starters and Accessories**

Motor starters are provided for pumps, fans, and compressors in the school. The majority of the motor starters were manufactured by Allen Bradley.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1976	30	MAR-08

Event: Replace 10 motor starters

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

Updated: APR-08

D5020.01 Electrical Branch Wiring*

The electrical wiring in the building is standard copper in conduit. Flexible conduit and cabling is provided to most of the motors and other mechanical equipment.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1976	0	MAR-08

D5020.02.02.02 Interior Florescent Fixtures**

Fluorescent fixtures are used throughout the school and consist of recessed and surface-mounted T12 and T8 fixtures. T8 fixtures are installed in the library, main office and in the relocatable classrooms.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1976	30	MAR-08

Event: Upgrade original T12 lightings to T8

Concern:

The original T12 fluorescent lighting fixtures are less efficient than T8 technology.

Recommendation:

Replace existing fluorescent fixtures with T8 bulb and electronic ballast equivalents. Estimate based on replacement of 200 units.

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Energy Efficiency Upgrade	2010	\$88,088	Medium

Updated: MAR-08

D5020.02.02.05 Other Interior Fixtures*

Mercury vapor fixtures are provided in the gymnasium.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1976	0	MAR-08

D5020.02.03.02 Emergency Lighting Battery Packs**

Low voltage emergency lighting fixtures powered by battery packs are installed throughout the school.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	2000	20	MAR-08

Event: Replace 20 emergency lighting fixtures with battery packs

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2020	\$27,456	Unassigned

Updated: APR-08

D5020.02.03.03 Exit Signs*

Standard incandescent Exit signs are installed throughout the building.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1976	0	MAR-08

Event: Upgrade to LED Exit signs

Concern:

Incandescent fixtures are less energy efficient than those using current LED technology.

Recommendation:

Upgrade the rest of original exit signs to LED fixtures. Estimate based on the replacement of 20 LED exit signs.

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Energy Efficiency Upgrade	2010	\$13,728	Low

Updated: MAR-08

D5020.03.01.01 Exterior Incandescent Fixtures*

Some exterior incandescent fixtures are installed at the entrances of the building.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1976	0	MAR-08

D5020.03.01.03 Exterior Metal Halide Fixtures*

Exterior lighting around the building is provided by wall-mounted Metal Halide fixtures.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1976	0	MAR-08

D5030.01 Detection and Fire Alarm**

A non-addressable fire alarm system is connected to bells, manual pull stations and detectors throughout the building.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1976	25	MAR-08

Event: Replace fire alarm system

Concern:

The non-addressable fire alarm panel does not meet the current code requirement. There is no panel at the main entrance to the building.

Recommendation:

Replace the current system with the addressable fire alarm system. Estimate based on the replacement of fire control panel with smoke/heat detectors, pull stations, strobes, and bells.

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Code Upgrade	2011	\$50,336	Medium

Updated: MAR-08

D5030.02.02 Intrusion Detection**

The building is equipped with Regency security system connected with motion detectors throughout the building.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1998	25	MAR-08

Event: Replace security panel and motion detectors

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2023	\$20,592	Unassigned

Updated: APR-08

D5030.03 Clock and Program Systems*

Original Simplex program timer signals class changes over speakers.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1976	25	MAR-08

D5030.04.01 Telephone Systems*

The building is served by a Nortel Meridien telephone system.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1997	25	MAR-08

D5030.04.05 Local Area Network Systems*

Nortel Ethernet Routing Switch 5520 system is installed complete with Category 5 cable.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1976	0	MAR-08

D5030.05 Public Address and Music Systems**

The building is served by original PA system. Speakers are installed throughout the building.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1976	20	MAR-08

Event: Replace PA system and speakers

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2012	\$11,440	Unassigned

Updated: APR-08

S6 EQUIPMENT, FURNISHINGS AND SPECIAL CONSTRUCTION

E1020.03 Theater and Stage Equipment*

The stage area located adjacent to the gymnasium is equipped with theater curtains for performances.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1976	0	MAR-08

E1090.04 Residential Equipment*

Residential-style appliances are provided in the staff lounge. Appliances include a refrigerator, stove, oven, microwave and dishwasher.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1976	0	MAR-08

E1090.07 Athletic, Recreational, and Therapeutic Equipment*

Fixed basketball and climbing equipment are mounted to the walls of the gymnasium.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1976	0	MAR-08

E2010.02 Fixed Casework**

Fixed wooden casework with laminated countertops are typically provided in each classroom, the office, the kitchen and the staff room throughout the building.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1976	35	MAR-08

Event: Replace the fixed casework

Concern:

The facility has a cost of \$169,434 to replace the fixed casework.

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2012	\$205,920	Unassigned

Updated: APR-08

E2010.03.01 Blinds**

There are horizontal blinds throughout the school on exterior and interior windows.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1976	30	MAR-08

Event: Replace the horizontal blinds

Concern:

The facility has a cost of \$26,106 to replace the horizontal blinds.

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

Updated: APR-08

E2020 Moveable Furnishings

Moveable furnishings in the school generally consist of desks and chairs for students and teaching staff.

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

F1010.02.04 Portable and Mobile Buildings*

There are four relocatable classrooms on the southwest side of the building that are original to the main school. The units are integrated with the original school building and have a wood frame. The type and extent of foundations used for the relocatable classrooms is unknown.

The exterior cladding consists of vertical pre-finished metal siding with a top horizontal pre-finished metal siding trim along the perimeter and a painted gypsum board bottom trim. There are painted gypsum board soffits under the pre-finished metal trim. The windows are fixed and operable with sealed, insulating glazing units set in aluminum frames. The doors are painted solid core wood set in metal frames. The roof is equipped with torched on asphalt shingles with internal roof drains.

The interior partitions are demountable panels separating the classrooms from the corridors. The interior finishes generally consist of carpet and vinyl flooring with acoustical ceiling tiles. There are moveable wood casework along various walls with visual boards and projector screens for teaching purposes.

The classrooms are not equipped with washrooms. HVAC for each of the relocatables is provided by forced air furnaces with rooftop condensers. The furnaces are located in each of the classrooms. Electrical services are provided from sub-panels located in each classroom unit.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	30	MAR-08

Event: Replace the furnace serving the connecting corridor

Concern:

The original furnace serving the relocatable corridors has passed its life expectancy. Cost of maintenance is high and replacement parts are hard to obtain.

Recommendation:

Replace the furnace serving the corridor connecting the main school with the relocatables.

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Failure Replacement	2009	\$3,432	Low

Updated: APR-08

F2020.01 Asbestos*

Construction materials suspected to contain asbestos in the building includes vinyl floor tile, pipe elbows and insulation serving mechanical equipment, and gypsum board joint compound.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1976	0	MAR-08

F2020.04 Mould*

No suspected mould growth was noted on visible surfaces during the assessment. Wall cavities and the majority of the ceiling cavities were not reviewed during the site visit.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1976	0	MAR-08

F2020.09 Other Hazardous Materials*

No other hazardous building materials were identified during the review of the facility.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1976	0	MAR-08

S8 FUNCTIONAL ASSESSMENT

K4010.02 Barrier Free Entrances*

Exterior doors on the building perimeter are manually-operated, pivot-type doors.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
3 - Marginal	1976	0	MAR-08

Event: Install automatic door openers

Concern:

Exterior doors at the building's main entrance are manually-operated, pivot-type doors (i.e., automated entry to the building is not provided).

Recommendation:

Install automated door openers at the building's main entrance to provide barrier-free access to the school interior.

Consequences of Deferral:

Non-compliance with barrier-free standards and poor accessibility for handicapped persons.

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Barrier Free Access Upgrade	2008	\$3,432	Low

Updated: APR-08

K4010.03 Barrier Free Interior Circulation*

All areas of the school are generally accessible to handicapped persons. The access to the classrooms off of the lunch/study room are only accessible by stairs.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
3 - Marginal	1976	0	MAR-08

Event: Install ramp from the lunch/study room to the stage

Concern:

Access to the classrooms from the lunch/study room are only provided by stairs.

Recommendation:

Install a ramp.

Consequences of Deferral:

Non-compliance with barrier-free standards and poor accessibility for handicapped persons.

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Barrier Free Access Upgrade	2008	\$11,440	Low

Updated: APR-08

K4010.04 Barrier Free Washrooms*

Barrier-free washroom stalls are provided in student washrooms in the building.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1976	0	MAR-08

RECAPP Facility Evaluation Report



Queensland Downs Elementary School

S2747
Calgary

Facility Details	
Building Name:	Queensland Downs Elemen
Address:	
Location:	Calgary
Building Id:	S2747
Gross Area (sq. m):	0.00
Replacement Cost:	\$0
Construction Year:	0

Evaluation Details	
Evaluation Company:	Jacques Whitford AXYS Ltd.
Evaluation Date:	January 8 2008
Evaluator Name:	Dallacye Taylor

Total Maintenance Events Next 5 years:	\$98,384
5 year Facility Condition Index (FCI):	0%

General Summary:

The site is occupied by the Queensland Downs Elementary School, which is located in the center of the property. The site features include a paved staff parking lot to the northwest side and a grass surface surrounding the south, east and north sides of the building. The site has soccer fields and baseball diamonds. There are concrete sidewalks on the west side of the building. Athletic asphalt and gravel surfaces are located on the south, east and north sides of the building which include basketball hoops and bike racks. Landscaped areas are reportedly not equipped with an in-ground irrigation system. Site drainage on paved surfaces is provided by catch basins. Drainage on landscaped areas is provided by land infiltration and/or overland flow.

Site components were observed to be in acceptable 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)**

There is an asphalt-paved roadway, approximately 330 square meters in area between the parking areas on the northwest side of the building.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
3 - Marginal	1976	25	MAR-08

Event: Repave the asphalt paved roadway

Concern:

The asphalt roadway appears to be original or approximately 31 years of age, with limited evidence of repairs. Although the area was partly snow-covered at the time of the assessment, transverse and longitudinal cracking, loss of binding asphalt material and alligator cracking were all observed.

Recommendation:

Repave the asphalt roadway including some areas where rebuilding of the substrate will be required.

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Failure Replacement	2008	\$51,480	Low

Updated: APR-08

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

There is an asphalt paved staff parking lot, approximately 120 square meters in area on the northwest side of the building.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
3 - Marginal	1976	25	MAR-08

Event: Repave the asphalt parking lot

Concern:

The asphalt parking area appears to be original or approximately 31 years of age, with limited evidence of repairs. Although the area was partly snow-covered at the time of the assessment, transverse and longitudinal cracking, loss of binding asphalt material and alligator cracking were all observed.

Recommendation:

Repave the asphalt parking lot including some rebuilding of the substrate and repainting of the parking lines. The facility has a Lifecycle Replacement cost of \$24,499 to repave the asphalt parking lot.

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Failure Replacement	2008	\$17,160	Low

Updated: APR-08

G2020.05 Parking Lot Curbs and Gutters*

There are concrete parking lot curbs around the perimeter of the building.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1976	0	MAR-08

G2020.06.03 Parking Lot Signs*

There are a parking lot signs at the entrances on the north side of the parking lot.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1976	0	MAR-08

G2030.04 Rigid Pedestrian Pavement (Concrete)**

There are concrete sidewalks along the main entrance of the building on the west side.

The Lifecycle Replacement cost is based on approximately 90 square meters of sidewalk.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1976	25	MAR-08

Event: Replace the concrete sidewalk

Concern:

The facility has a cost of \$19,352 to replace the concrete sidewalk.

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2012	\$20,592	Unassigned

Updated: APR-08

G2030.06 Exterior Steps and Ramps*

There are pre-cast concrete stairs on the northwest corner of the building.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1976	0	MAR-08

G2040.03 Athletic and Recreational Surfaces**

The majority of the athletic and recreational surfaces are asphalt and gravel. Approximately 145 square meters of the play area appeared to be paved.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1976	25	MAR-08

Event: Replace the asphalt athletic and recreational surfaces

Concern:

The asphalt surface of the play areas appear to be original or approximately 31 years of age, with limited evidence of repairs. Although the area was partly snow-covered at the time of the assessment, transverse and longitudinal cracking and ravelling was observed. The facility has a cost of \$4,470 to replace the asphalt athletic and recreational surfaces.

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Failure Replacement	2011	\$9,152	Low

Updated: MAR-08

G2040.06 Exterior Signs*

The school's name is presented in pre-finished metal letters located on the horizontal metal siding on the west side of the building.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1976	0	MAR-08

G2040.08 Flagpoles*

A flagpole is located outside the main entrance on the west side of the school.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1976	0	MAR-08

G2050.04 Lawns and Grasses*

Grassed play fields are provided on the south, east and north sides of the building. There is a grassed landscaped area on the west side of the building.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1976	0	MAR-08

G2050.05 Trees, Plants and Ground Covers*

Large trees and bushes are situated on the west side of the property.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1976	0	MAR-08

G3010.02 Site Domestic Water Distribution*

Domestic cold water enters the main mechanical room via underground conduit on the east side of the building.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1976	0	MAR-08

G3010.03 Site Fire Protection Water Distribution*

Fire protection for the property consists of municipal fire hydrants positioned near the site.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1976	0	MAR-08

G3020.01 Sanitary Sewage Collection*

Sanitary sewage generated on-site is discharged to the municipal sanitary sewer system via underground conduit.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1976	0	MAR-08

G3030.01 Storm Water Collection*

Storm water collected on landscaped surfaces is drained via natural infiltration and/or overland flow. Storm water collected on paved surfaces is drained toward catch basins, which discharge to the municipal storm sewer system.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1976	0	MAR-08

G3060.01 Gas Distribution*

Natural gas to fuel the building's heating systems and equipment is provided via underground conduit to the boiler room, situated at the east side of the school.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1976	0	MAR-08

G4010.02 Electrical Power Distribution Lines*

Electricity for the building is provided via underground conduit from a utility-owned, pad-mounted transformer situated on the asphalt-paved recreational surface to the north of the building.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1976	0	MAR-08

G4010.04 Car Plugs-ins*

Vehicle plug-in receptacles are mounted on painted metal posts at each parking stall.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1976	0	MAR-08