RECAPP Facility Evaluation Report

Edmonton School District No. 7

Crawford Plains School

B3082A
Edmonton

Report run on: January 22, 2007 11:36 AM

Facility Details

Building Name: Crawford Plains School
Address: 4210 - 12 Avenue
Location: Edmonton

Building Id: B3082A
Gross Area (sq. m): 0.00
Replacement Cost: $6,395,558
Construction Year: 0

Evaluation Details

Evaluation Company: Asset Evolution Incorporated (AEI)
Evaluation Date: May 10 2006
Evaluator Name: Mario Plastina

Total Maintenance Events Next 5 years: **$501,500**
5 year Facility Condition Index (FCI): **7.84%**

General Summary:

Crawford Plains School is a one-storey school with mezzanines above some of the classroom areas. Two mechanical rooms are located on the second floor. The school has a total building area of 3716.00m2. The original school was built in 1983 with an area of 3241.0m2. In 1988, a 4-classroom addition (Pods) was added at the north -west end of the school with a total building area of 475.m2.

No Portables are located on site.

The school is comprised of 17 classrooms (8 classrooms with mezzanine areas), a gymnasium, a library with a computer lab above on the mezzanine level, science rooms and 2 ancillary rooms.

The 2006 student enrollment is 335 children.

Structural Summary:

Original 1983 building - The foundations consist of cast-in-place concrete grade beams and spread footings. The original building has cast-in-place concrete slabs-on-grade with conventional steel reinforcement. The roof comprises of a metal roof deck with steel structure supported by exterior & interior concrete walls. The structural walls and columns are poured in place concrete.

1988 4-classroom Pod Addition - Structure - Wood frame construction with structural steel & concrete piers bearing on undisturbed soil.

Overall the structural components are in acceptable condition.

Envelope Summary:

Original 1983 school - The lower portion of the exterior cladding consists primarily of brick around the perimeter of the school. The upper portion of the exterior walls are clad with an EFIS (stucco) assembly. The exterior window units are double glazed aluminum frame with operable awning units above fixed glazed panels. Metal screens have been fastened to several of the windows for safety concerns. The majority of the exterior doors are painted steel doors & frames with glazed panels, however several of the original painted wood doors remain. The roof covering above the flat areas of the original school has a built-up roof assembly. The roof above the sloped areas of the original school was replaced in 2001 with an SBS assembly.

1988 POD Addition - The exterior cladding on the 1988 addition (POD) has prefinished metal siding around the perimeter of the building. Painted plywood is located directly below and above the window assembly and along the skirt of the building. The windows are vinyl clad units with operable sliders. The roof has a built-up roof assembly. The majority of the exterior doors are wood doors & frames with glazed panels & screens.

Overall, the envelope of the building is in acceptable to marginal condition.

Interior Summary:

Original - 1983 school

12"x12" Vinyl composite tile (VCT) is located throughout the corridors and (25%) of each classroom area. The majority of the classroom area (75%) including the mezzanines, interior stairs, computer room, staff room, administration area,

and portions of the library have a carpet floor finish. The washrooms and change rooms have a ceramic tile floor finish. The gymnasium has a hardwood floor finish. The majority of the utility areas and second floor mechanical rooms have a paint finish on the concrete slab.

The majority of the interior walls are painted masonry block walls and gypsum board with a vinyl wall covering. The general office area has glazed walls with GWG panels.

The interior doors are either stained wood doors and/or painted steel doors in hollow metal frames. Several classroom doors have sidelights with GWG inserts.

The majority of the school has a suspended 2'x2' acoustical tile ceiling. The structure is painted and exposed in the gymnasium & classrooms. Painted gymsum board ceilings are located in the washrooms and change rooms.

1988- Addition (Pods)
A portion of the classrooms (25%) & all the corridors have a VCT floor finish. The flooring in the classroom is (75%) carpeting.
The interior walls are gypsum board with a vinyl wall covering.
The interior doors are painted metal doors in hollow metal frames.
The additions has a suspended 2'x4' acoustical tile ceiling assembly.

Overall, the interior finishes are in acceptable condition.

Mechanical Summary:

Space heating for the 1983 building is provided by two gas-fired Lochinvar hot water atmospheric boilers. Mid-efficiency gas-fired furnaces provide space heating to the pods classrooms. Hot water is distributed to the heating coils in 3 Air Handling Units (AHU), perimeter hot water radiators, convector, unit heater and forced flow heaters at the entrances. All the furnaces in the pods are original except the ones in Classroom#15 and #16 which were replaced in 2003.

Ventilation is provided by the 3 AHU's located in Mechanical Penthouse and Ground Floor mechanical room. One of the AHU's is serving the Gymnasium. The other AHU's are serving the rest of the building. Two HydroTherm steam boilers in Mechanical Room 202 which serve as steam humidifiers to serve the three AHU's. Special exhaust system consists of exhaust fan and hood is serving the electric Kiln in room 118.

The pneumatic HVAC control system consists of air compressor, thermostats, control valves for perimeter hot water radiators and forced flow heaters. The thermostats for forced flow heaters are equipped with temperature and fan speed control. Furnaces in the Pods are controlled independently by digital thermostats.

The plumbing fixtures include stainless steel sinks, stainless steel lavatories, flush valve floor mounted water closets, flush tank floor mounted water closets, flush valve floor mounted urinals, showers, janitor sinks, anti-scalding mixing valve, floor drains, non-freeze type hose bibb, wall mounted porcelain drinking fountains and wall mounted stainless steel drinking fountains. Most of the plumbing fixtures are original. Both water and gas meters are located in the Mechanical Room 128.

Fire protection system includes standpipe system, sprinkler system, duct smoke detector and fire extinguishers. This building is fully sprinkler protected. Two fire hose cabinets are located in Gymnasium. The air handling units are monitored by the duct smoke detectors. A diesel emergency generator provides emergency power to the building.

Based on the age and condition of the mechanical systems, the following components are recommended for repair and replacement within the years 2006 to 2010.

-Provide gas pipe support on roof
-Replace original furnaces and associated flues in Pods

Overall the mechanical systems are in acceptable condition.

Electrical Summary:

Crawford Plains School is fed from an EPCOR padmounted transformer located on the school grounds. The main switchboard is rated at 1200A, 120/208V. There are individual motor starters for the major mechanical equipment. A 21.5kW emergency generator is located in the main electrical room.

The wiring in the building is typically standard wiring in conduit.

The interior fluorescent lighting fixtures have T-12 lamps and magnetic ballasts. The exit lighting in the building consists of metal units that have been retrofitted with LED lamps. The emergency lighting is fed from standard fluorescent fixtures fed from an emergency panel. The exterior lighting consists of wall mounted H.I.D fixtures and incandescent fixtures.

The building is equipped with a Simplex 2002 system. Detection and end devices include, smoke and heat detectors, bells and pull stations.
The various communications and security systems within the school include; a DSC Maxsys PC4020 security system that monitors motion detectors, a Bogen P.A. system and a Norstar/Meridian telephone system.

It is recommended, as routine maintenance, that a program for annual examination of major electrical components be instituted. Maintenance should include thermographic scans for hot spots and power shut down to allow examination of interior components for accumulated debris and signs of corrosion.

Overall the electrical components for Crawford Plains School were observed to be in acceptable to 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*

Original 1983 building - The foundations consist of cast-in-place concrete grade beams and spread footings.

1988 Pod Addition - Structural steel & concrete piers bearing on undisturbed soil.

Rating	Installed	Design Life	Updated
4 - Acceptable	0	100	AUG-06

A1030 Slab on Grade*

Original 1983 building - The building has cast-in-place concrete slabs-on-grade with conventional steel reinforcement.

Rating	Installed	Design Life	Updated
4 - Acceptable	0	100	AUG-06

B1010.01 Floor Structural Frame*(Building Frame)

Original 1983 building - Concrete structural flat slab supported by steel joists spanning between steel beams & column and foundation walls.

1988 Pod Addition - Structure - Wood frame construction with structural steel & concrete piers bearing on undisturbed soil.

Rating	Installed	Design Life	Updated
4 - Acceptable	0	100	AUG-06

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

Original 1983 building - Structural reinforced concrete block walls

Rating	Installed	Design Life	Updated
4 - Acceptable	0	100	AUG-06

B1010.05 Mezzanine Construction*

1983 Original school - Mezzanine has a metal roof deck with steel structure supported by exterior & interior concrete walls.

Rating	Installed	Design Life	Updated
4 - Acceptable	0	80	AUG-06

B1010.09 Floor Construction Fireproofing*

Rating	Installed	Design Life	Updated
4 - Acceptable	0	50	AUG-06

B1010.10 Floor Construction Firestopping*

Rating	Installed	Design Life	Updated
4 - Acceptable	0	50	AUG-06

B1020.01 Roof Structural Frame*

1983 Original school - Metal roof deck with steel structure supported by exterior & interior concrete walls.

1988 Pod Additions - Roof Structure - Wood frame construction assembly

Rating	Installed	Design Life	Updated
4 - Acceptable	0	100	AUG-06

B1020.06 Roof Construction Fireproofing*

Rating	Installed	Design Life	Updated
4 - Acceptable	0	50	AUG-06

S2 ENVELOPE

B2010.01.02.01 Brick Masonry: Ext. Wall Skin*

1983 Original building - The lower portion of the exterior cladding consists primarily of brick.

Rating	Installed	Design Life	Updated
4 - Acceptable	0	75	AUG-06

B2010.01.05 Exterior Insulation and Finish Systems (EIFS)*

1983 Original building - The upper portion of the exterior walls have a EFIS (stucco) assembly.

Rating	Installed	Design Life	Updated
4 - Acceptable	1983	75	AUG-06

B2010.01.06.03 Metal Siding**

The exterior cladding on the 1988 addition (POD) has prefinished metal siding around the exterior perimeter.

Rating	Installed	Design Life	Updated
3 - Marginal	1988	40	AUG-06

Event: Replace all damaged panels.

Concern:
Several areas of the exterior metal cladding are damaged.
Recommendation:
Replace all damaged panels. Repaint exterior metal panels.

Type	Year	Cost	Priority
Repair	2007	$10,000	Medium

Updated: AUG-06

B2010.01.06.04 Wood Siding**

1988 POD addition - Painted plywood panels are located above & below the window assembly and at the top and bottom of the elevation.

Rating	Installed	Design Life	Updated
2 - Poor	1988	40	AUG-06

Event: Conduct a study to determine if mould is evident.

Concern:
Potential mould in wall and floor assembly.
Recommendation:
Conduct a study to determine if mould is evident.

Type	Year	Cost	Priority
Study	2006	$5,000	Low

Updated: AUG-06

Event: Replace all damaged exterior painted plywood.

Concern:
The wood panels are rotted and water has penetrated the exterior wall assembly. Potential mould problem.
Recommendation:
Replace all damaged exterior painted plywood. Budget $10,000 / exterior damaged wall assembly including removal and re-installation of windows.

Type	Year	Cost	Priority
Failure Replacement	2007	$40,000	Unassigned

Updated: AUG-06

B2010.01.09 Expansion Control: Exterior Wall Skin*

Expansion/control joints are located throughout the brick and stucco cladding assembly.

Rating	Installed	Design Life	Updated
4 - Acceptable	1983	75	AUG-06

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

Sealant is located around all window, door and exterior cladding assemblies.

Rating	Installed	Design Life	Updated
3 - Marginal	1983	20	AUG-06

Event: Replace building sealant

Concern:
The sealant around the windows and doors has deteriorated and is brittle.
Recommendation:
Replace sealant around windows and doors.

Type	Year	Cost	Priority
Failure Replacement	2009	$10,000	Medium

Updated: AUG-06

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

An EFIS(Stucco) assembly on the original 1983 school has a paint finish.

Rating	Installed	Design Life	Updated
3 - Marginal	1983	15	AUG-06

Event: Repair & repaint exterior stucco walls

Concern:
Several cracks were observed on the exterior wall assembly. The paint finish is aged and worn.
Recommendation:
Repair and repaint exterior stucco assembly.

Type	Year	Cost	Priority
Failure Replacement	2009	$75,000	High

Updated: AUG-06

B2010.02.03 Masonry Units: Ext. Wall Const.*

1983 Original building - Interior concrete block construction on the exterior wall assembly.

Rating	Installed	Design Life	Updated
4 - Acceptable	0	100	AUG-06

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

1988 Additions - Wood frame construction assembly. See B2010.01.06.04 Wood Siding** for details.

Rating	Installed	Design Life	Updated
4 - Acceptable	0	30	AUG-06

B2010.06 Exterior Louvers, Grilles, and Screens*

Prefinished metal security screens are present on several classroom windows.

Rating	Installed	Design Life	Updated
4 - Acceptable	0	30	AUG-06

B2010.09 Exterior Soffits*

Exterior soffits consist of a prefinished stucco finish.

Rating	Installed	Design Life	Updated
4 - Acceptable	0	30	AUG-06

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

1983 Original building - The exterior window units are double glazed aluminum frame with single hung units combined with fixed glazed panels. Metal screens have been fastened to several of the windows for safety concerns.

Rating	Installed	Design Life	Updated
4 - Acceptable	1983	40	AUG-06

B2020.01.01.06 Vinyl, Fibreglass &Plastic Windows**

1988 Addition - The windows are double glazed vinyl frame units with operable sliders. See B2010.01.06.04 Wood Siding** for details.

Rating	Installed	Design Life	Updated
4 - Acceptable	0	40	AUG-06

B2030.01.02 Steel-Framed Storefronts**

Several of the entrance doors are painted steel doors with painted steel frames and GWG inserts .

Rating	Installed	Design Life	Updated
4 - Acceptable	1983	30	AUG-06

B2030.01.10 Wood Entrance Door**

The original doors are wood slabs in painted steel frames.

Rating	Installed	Design Life	Updated
3 - Marginal	1983	30	AUG-06

Event: Replace all exterior wood doors

Concern:
Several of the original wood doors are worn, rotted and deteriorated.

Recommendation:
Replace all wood doors.

Type	Year	Cost	Priority
Failure Replacement	2007	$30,000	High

Updated: AUG-06

B3010.01 Deck Vapor Retarder and Insulation*

Rating	Installed	Design Life	Updated
4 - Acceptable	0	25	AUG-06

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

Original 1983 building - The roof covering on the flat roof surfaces has a built-up roof assembly.

1988 Pod Addition - The roof has a built-up roof assembly.

Rating	Installed	Design Life	Updated
3 - Marginal	1983	25	AUG-06

Event: Replace original built-up roof assembly.

Concern:
Several leaks were evident from the number of stains observed on the interior ceiling tiles. Over the years, numerous repairs have been conducted on the built-up roof

Recommendation:
Replace complete built-up roof assembly on the 1983 original building.

Type	Year	Cost	Priority
Failure Replacement	2008	$200,000	High

Updated: AUG-06

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

(2001) All the sloped roof sections have been replaced with a SBS assembly.

Rating	Installed	Design Life	Updated
4 - Acceptable	2001	25	AUG-06

B3010.08.02 Metal Gutters and Downspouts**

Metal gutters and downspouts are located around the perimeter of the sloped roof . The downspouts discharge to the lower flat roof levels, which are equipped with roof drains and internal rainwater leaders.

Rating	Installed	Design Life	Updated
4 - Acceptable	1983	30	AUG-06

S3 INTERIOR

C1010.01 Interior Fixed Partitions*

Interior partitions typically consist of painted masonry block walls and painted gypsum board walls.

Rating	Installed	Design Life	Updated
4 - Acceptable	0	50	AUG-06

C1010.05 Interior Windows*

Interior glazed windows are located in the main office area and vestibule areas.

Rating	Installed	Design Life	Updated
4 - Acceptable	0	40	AUG-06

C1010.07 Interior Partition Firestopping*

Rating	Installed	Design Life	Updated
4 - Acceptable	0	50	AUG-06

C1020.01 Interior Swinging Doors**

The interior swing doors generally consist of solid core painted and/or clear finished wood doors in painted steel frames and tempered glass panes.

Rating	Installed	Design Life	Updated
4 - Acceptable	1983	40	AUG-06

C1020.03 Interior Fire Doors*

Fire doors are located in the common area corridors between the original building and each addition. The doors are rated and labeled.

Rating	Installed	Design Life	Updated
4 - Acceptable	0	50	AUG-06

C1020.04 Interior Sliding and Folding Doors*

Accordion sliding doors are located each classroom pod.

Rating	Installed	Design Life	Updated
4 - Acceptable	0	25	AUG-06

C1030.01 Visual Display Boards**

Tackboards, chalkboards and whiteboards are located in each classroom area.

Rating	Installed	Design Life	Updated
4 - Acceptable	1983	20	AUG-06

Event: Lifecycle Replacement

Type	Year	Cost	Priority
Lifecycle Replacement	2010	$10,000	Low

Updated: AUG-06

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

1983 Original building - Painted metal washroom stall partitions are located in each boy's & girls change rooms

Rating	Installed	Design Life	Updated
4 - Acceptable	1983	30	AUG-06

C1030.06 Handrails*

Painted steel handrails are located at the top of the mezzanine area.

Rating	Installed	Design Life	Updated
1 - Critical	2006	50	AUG-06

Event: Increase railing height to conform to building code

Concern:
The height of the handrail on the mezzanine level does not conform to the building code. An existing 41cm step from the floor does not allow the proper height to conform to the code.

Recommendation:
The railing height must be increase to conform to the code height. Modify the railings on 8 mezzanine levels

Type	Year	Cost	Priority
Code Repair	2006	$16,000	Unassigned

Updated: AUG-06

C1030.08 Interior Identifying Devices*

The room number or room name is painted on the interior doors.

Rating	Installed	Design Life	Updated
4 - Acceptable	0	20	AUG-06

C1030.12 Storage Shelving*

Clear finish plywood storage shelving throughout.

Rating	Installed	Design Life	Updated
4 - Acceptable	0	20	AUG-06

C1030.14 Toilet, Bath, and Laundry Accessories*

The washrooms are equipped with typical washroom accessories: Paper towel dispensers, toilet paper dispensers, hand-soap dispensers, waste bins and mirrors.

Rating	Installed	Design Life	Updated
4 - Acceptable	0	20	AUG-06

C2010 Stair Construction*

The stairs to the upper mechanical penthouse are steel stairs with concrete filled pans. The stairs to the mezzanine levels are painted steel stairs with concrete filled pans and a carpet finish.

Rating	Installed	Design Life	Updated
4 - Acceptable	0	100	AUG-06

C2020.06 Carpet Stair Finishes**

Carpet floor finish on the stairs to the mezzanine levels.

Rating	Installed	Design Life	Updated
4 - Acceptable	2004	10	AUG-06

C2020.08 Stair Railings and Balustrades*

Painted steel handrails on the stairwell stairs to the mechanical penthouse and mezzanine levels

Rating	Installed	Design Life	Updated
4 - Acceptable	0	50	AUG-06

C3010.04 Gypsum Board Wall Finishes*

Several of the demising walls in the building consist of painted gypsum walls.

Rating	Installed	Design Life	Updated
4 - Acceptable	0	60	AUG-06

C3010.06 Tile Wall Finishes**

The interior walls in the changerooms have a 4"x4" ceramic tile wall finish.

Rating	Installed	Design Life	Updated
4 - Acceptable	1983	40	AUG-06

C3010.09 Acoustical Wall Treatment**

Acoustical ceiling panels are suspended below the painted steel structure throughout the school

Rating	Installed	Design Life	Updated
4 - Acceptable	2000	20	AUG-06

C3010.11 Interior Wall Painting**

The interior partitions throughout the school have a paint finish.

Rating	Installed	Design Life	Updated
4 - Acceptable	2001	10	AUG-06

C3010.12 Wall Coverings**

1983 Original Building & 1988 Addition - A majority of the interior demising walls in the building consist of gypsum walls with a vinyl and/or fabric wall covering.

Rating	Installed	Design Life	Updated
4 - Acceptable	2004	15	AUG-06

C3020.01.02 Paint Concrete Floor Finishes**

Painted/sealed concrete floors are located in the gym storage room, mechanical room and custodial rooms.

Rating	Installed	Design Life	Updated
4 - Acceptable	2001	10	AUG-06

C3020.02 Tile Floor Finishes**

Ceramic tile flooring is located in the washrooms and change rooms.

Rating	Installed	Design Life	Updated
4 - Acceptable	1983	50	AUG-06

C3020.04 Wood Flooring**

Hardwood flooring is located in the gymnasium

Rating	Installed	Design Life	Updated
4 - Acceptable	1983	30	AUG-06

C3020.07 Resilient Flooring**VCT

1983 Original Building - VCT is located throughout the portions of the classrooms and corridors

1988 Additions - VCT is located throughout the corridor.

Rating	Installed	Design Life	Updated
4 - Acceptable	2004	20	AUG-06

C3020.08 Carpet Flooring**

(2004) - Carpeting is located in most of the classroom area, mezzanine, office area, music room and library.

Rating	Installed	Design Life	Updated
5 - Good	2004	15	AUG-06

C3030.04 Gypsum Board Ceiling Finishes*

Gypsum board ceilings are located in the washrooms & change rooms.

Rating	Installed	Design Life	Updated
4 - Acceptable	0	50	AUG-06

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

The majority of the ceilings have a 2'x4' and/or 2'x2' suspended acoustical tile assembly.

Rating	Installed	Design Life	Updated
3 - Marginal	1983	25	AUG-06

Event: **Replace all damaged, missing and stained tiles ceiling tiles**

Concern:

Several stained and damaged tiles were observed due to the roof leaks.

Recommendation:

Replace all damaged, missing and stained tiles.

Type	Year	Cost	Priority
Failure Replacement	2006	$5,000	Medium

Updated: AUG-06

C3030.07 Interior Ceiling Painting**

All gypsum board ceilings & exposed steel structures have a paint finish.

Rating	Installed	Design Life	Updated
3 - Marginal	2001	20	AUG-06

Event: Repair & repaint ceiling

Concern:
Water damaged to the ceiling was observed in the boy's change.

Recommendation:
Repair and repaint ceiling.

Type	Year	Cost	Priority
Repair	2006	$1,500	Medium

Updated: AUG-06

S4 MECHANICAL

D2010.01 Water Closets**

Original floor mounted water closets with flushometers in the Boys and Girls Washrooms; flush tanks units in the Staff Washrooms and Physical Education washroom.

Rating	Installed	Design Life	Updated
4 - Acceptable	1983	35	AUG-06

D2010.02 Urinals**

Original floor mounted urinals with flushometers in Boy's Washrooms.

Rating	Installed	Design Life	Updated
4 - Acceptable	1983	35	AUG-06

D2010.03 Lavatories**

Original stainless steel, counter top lavatories in Washrooms completed with metering self-closing faucets.

Rating	Installed	Design Life	Updated
4 - Acceptable	1983	35	AUG-06

D2010.04 Sinks**

Sinks includes floor mounted mop receptor type service sink in Custodian Storage Room, stainless steel double-compartment kitchen sink in Staff Room and stainless steel hand sinks in classrooms. Typical hand sinks in classrooms consist of manual operated hot and cold water faucets and drinking fountain.

Rating	Installed	Design Life	Updated
4 - Acceptable	1983	30	AUG-06

D2010.05 Showers**

Shower heads and metered faucets are located in Boys and Girls Change Room. The shower rooms are constructed with ceramic tile wall and floor with floor drains. The supply water temperature for showers is controlled by an anti-scalding valve.

Rating	Installed	Design Life	Updated
4 - Acceptable	1983	30	AUG-06

D2010.08 Drinking Fountains / Coolers**

Original vitreous china wall mounted percelain drinking fountains and stainless steel drinking fountains are located in the corridors. The stainless steel sinks in the classrooms are also equipped with drinking fountains.

Rating	Installed	Design Life	Updated
4 - Acceptable	1983	35	AUG-06

D2020.01.01 Pipes and Tubes: Domestic Water*

Incoming water meter is located in Mechanical Room 128. Original 100mm incoming water main was replaced with new PVC pipe in 2005 because of a water leak happened in 2005. 50mm diameter water main with 25mm water meter is serving the whole building. Generally, the water pipes are original copper pipes.

Rating	Installed	Design Life	Updated
4 - Acceptable	1983	40	AUG-06

D2020.01.02 Valves: Domestic Water**

Sinks, lavatories, water closets and drinking fountains are equipped with isolating valves. An anti-scalding mixing valve in change room is serving the shower.

Rating	Installed	Design Life	Updated
4 - Acceptable	1983	40	AUG-06

D2020.01.03 Piping Specialties (Backflow Preventors)**

A fill assembly equips with backflow preventor and pressure reducing valve is serving the hot water and steam boiler systems. This device was installed in 1997.

Rating	Installed	Design Life	Updated
4 - Acceptable	1997	20	AUG-06

D2020.02.02 Plumbing Pumps: Domestic Water**

A domestic hot water recirculating pump located in boiler room to serve the domestic hot water system in the building.

Rating	Installed	Design Life	Updated
4 - Acceptable	1983	20	AUG-06

Event: Replace domestic hot water recirculating pump

Type	Year	Cost	Priority
Lifecycle Replacement	2010	$3,000	Low

Updated: AUG-06

D2020.02.06 Domestic Water Heaters**

Two gas-fired domestic hot water heaters locate in the Mechanical Room 201 and 128 respectively. The heater is A.O. Smith model BTRC120-110, Gas Input=120MBH, Recovery Rate=116.36 Gallon per Hour.

Rating	Installed	Design Life	Updated
4 - Acceptable	1983	20	AUG-06

Event: Replace domestic hot water heaters

Type	Year	Cost	Priority
Lifecycle Replacement	2010	$12,000	Low

Updated: AUG-06

D2020.03 Water Supply Insulation: Domestic*

Original domestic water pipe insulation in the building.

Rating	Installed	Design Life	Updated
4 - Acceptable	1983	30	AUG-06

D2030.01 Waste and Vent Piping*

The sanitary system consists of black steel pipes and connects to the municipal sewage. The vent pipes are through the roof type.

Rating	Installed	Design Life	Updated
4 - Acceptable	1983	50	AUG-06

D2040.01 Rain Water Drainage Piping Systems*

The rain water drainage system consists of roof drains, rain water leaders and internal pipes connected to the municipal storm pipe.

Rating	Installed	Design Life	Updated
4 - Acceptable	1983	50	AUG-06

D2040.02.04 Roof Drains**

The roof drains are conventional type without storm water management control device.

Rating	Installed	Design Life	Updated
4 - Acceptable	1983	40	AUG-06

D3010.02 Gas Supply Systems*

The underground incoming 75mm diameter medium pressure gas main along with pressure regulator and gas meter is located in the ground floor Mechanical Room. After the meter, 7" water gauge pressure gas main is serving the two steam boilers, two hot water boilers and two domestic hot water tank in ground floor mechanical room. Gas pipe is running on roof to feed the furnaces in Pods. The support for the gas pipe on roof is deteriorating and requires repairs.

Rating	Installed	Design Life	Updated
3 - Marginal	1983	60	AUG-06

Event: Replace the gas pipe support on roof

Concern:
The deteriorated gas pipe supports on roof may penetrate the roof membrane and cause roof leak. Or the gas pipes may move because of the insecure support and cause gas leak.

Recommendation:
Replace existing gas pipe support on roof by new.

Consequences of Deferral:
Roof leak or gas leak.

Type	Year	Cost	Priority
Failure Replacement	2006	$7,500	Medium

Updated: OCT-06

D3020.01.01 Heating Boilers & Accessories: Steam**

Steam humidifier system consists of two gas-fired cast iron sectional steam boiler and burner in Mechanical Room. Boiler is HydroTherm model VGAM500S; gas input=500MBH and output=400MBH. These boilers provide steam to the humidifiers for the three Air Handling Units.

Rating	Installed	Design Life	Updated
4 - Acceptable	1983	35	AUG-06

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

B-vent chimney is serving the steam boiler system. Chimney is insulated inside the Mechanical Room.

Rating	Installed	Design Life	Updated
4 - Acceptable	1983	35	AUG-06

D3020.01.04 Water Treatment: Steam Boilers*

The existing chemical treatment system consists of a chemical barrel and a feeding pump locate beside the steam boiler. This system has been abandoned along with the steam boiler.

Rating	Installed	Design Life	Updated
4 - Acceptable	1983	35	AUG-06

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

(2006) Heating boiler system consists of two gas-fired hot water boilers and burners. Boiler is Louchinvar Model Chn1261. These boilers are the source to serve the space heating in the whole building.

Rating	Installed	Design Life	Updated
4 - Acceptable	1983	35	AUG-06

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

Chimney system includes B-vent and rain cap for each hot water boiler. Chimney is insulated inside the Mechanical Room.

Rating	Installed	Design Life	Updated
4 - Acceptable	1983	30	AUG-06

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

The water treatment system for hot water system includes strainers, water filter and chemical treatment.

Rating	Installed	Design Life	Updated
4 - Acceptable	1983	30	AUG-06

D3020.03.01 Furnaces** - Furnace #1 to #2

Each pod classroom is served by a mid-efficiency gas-fired furnace. The furnaces are located in the classroom furnace rooms. Supply air is discharged from the bottom of unit and distributed with ductwork along the perimeter wall. Return air is taken from the top of the unit ducted from the sidewall grille. Two furnaces are original. They are Lennox model G8R-120-1; gas input=120MBH; output=96MBH.

Rating	Installed	Design Life	Updated
4 - Acceptable	1988	25	AUG-06

Event: Replace furnace #1 and #2 with new

Concern:
The original furnaces have exceeded their life expectancy. Sign of rusting has shown on the unit housing.

Recommendation:
Replace original mid-efficiency furnaces with new of the same capacity.

Consequences of Deferral:
No heat in Pod Classrooms

Type	Year	Cost	Priority
Failure Replacement	2007	$16,500	Medium

Updated: NOV-06

D3020.03.01 Furnaces** - Furnace #3 to #4

Two original furnaces in two of the pod classrooms were replaced with mid-efficiency gas-fired furnace in 2005. These furnaces are Carrier model 58CTA070-10116; gas input=66MBH, output=53MBH.

Rating	Installed	Design Life	Updated
4 - Acceptable	2005	25	AUG-06

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

The flue pipes for furnace #1 to 4 are B-vents through roof. Combustion air is taken from outdoor and controlled by motorized damper.

Rating	Installed	Design Life	Updated
4 - Acceptable	1983	30	AUG-06

D3040.01.01 Air Handling Units: Air Distribution** - AHU-1Classroom

Two packaged Air Handling Units (AHU) locate in mechanical penthouse and one packaged AHU locates in ground floor mechanical room. This AHU locates in ground floor mechanical room serving the classroom area. It is equipped with hot water coil, supply air fan and steam humidifier. A duct smoke detector is monitoring the equipment and will shut down the AHU when smoke situation is detected. This unit is Bohn model HD-221-MF; 7080L/S at 0.803kPa.

Rating	Installed	Design Life	Updated
4 - Acceptable	1983	30	AUG-06

D3040.01.01 Air Handling Units: Air Distribution** - AHU-2 Gymnasium

Two packaged Air Handling Units (AHU) locate in mechanical penthouse and one packaged AHU locates in ground floor mechanical room. This AHU locates in mechanical penthouse serving the Gymnasium. It is equipped with hot water coil, supply air fan and steam humidifier. A duct smoke detector is monitoring the equipment and will shut down the AHU when smoke situation is detected. This unit is Bohn model HD-12-ALF; 3398L/S at 0.57kPa.

Rating	Installed	Design Life	Updated
4 - Acceptable	1983	30	AUG-06

D3040.01.01 Air Handling Units: Air Distribution** - AHU-3 Classroom, Office and General Area

Two packaged Air Handling Units (AHU) locate in mechanical penthouse and one packaged AHU locates in ground floor mechanical room. This AHU locates in mechanical penthouse serving the Classrooms, offices and general areas. It is equipped with hot water coil, supply air fan and steam humidifier. A duct smoke detector is monitoring the equipment and will shut down the AHU when smoke situation is detected. This unit is Bohn model HD-06-ALF; 2360L/S at 0.55kPa.

Rating	Installed	Design Life	Updated
4 - Acceptable	1983	30	AUG-06

D3040.01.02 Fans: Air Distribution*

Three belt driven in-line axial return air fans located in mechanical penthouse and ground floor mechanical room. Each fan is interlocked to AHU-1, AHU-2 and AHU-3 system respectively.

Rating	Installed	Design Life	Updated
4 - Acceptable	1983	30	AUG-06

D3040.01.03 Air Cleaning Devices:Air Distribution*

The air cleaning devices include the air filters in the Air Handling Units and furnaces.

Rating	Installed	Design Life	Updated
4 - Acceptable	1982	30	AUG-06

D3040.01.04 Ducts: Air Distribution*

Air distribution duct system includes supply air ducts, return air ducts, duct insulation, volume dampers, fire dampers, acoustic lining and motorized dampers. Round exposed duct is serving the Gymnasium at high level and return at mid level by side wall grille. Ventilation air to other areas is distributed by supply and return air duct in corridor. Variety of exposed round ducts with round diffusers, ducts within ceiling diffusers are serving the classrooms and other areas. Supply air duct in Pod Classrooms is built under the cabinet along perimeter wall. Air is supplied through the floor register built on top of cabinet.

Rating	Installed	Design Life	Updated
4 - Acceptable	1983	50	AUG-06

D3040.01.07 Air Outlets & Inlets:Air Distribution*

Air outlets and inlets for air distribution system includes ceiling mounted or wall mounted linear diffusers, eggcrates return air grille, door grilles, square ceiling diffusers, opposed type volume dampers for diffusers, outdoor louvers, volume damper for return air grilles and residential type floor registers in Pods.

Rating	Installed	Design Life	Updated
4 - Acceptable	1983	30	AUG-06

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

Steam distribution system includes steam pipes, pipe insulation and steam condensate return sump and pumps.

Rating	Installed	Design Life	Updated
4 - Acceptable	1983	30	AUG-06

D3040.03.01 Hot Water Distribution Systems**

Hot water distribution system includes two hot water main circulating pumps, two Air Handling unit circulating pumps, hot water pipes, pipe insulation, pressure gauges, thermometers, regulating valves, strainers, shut-off valves, control valves, 3-way mixing valves, pressure different valves, two expansion tanks and air vents. The two expansion tank include one Tacco vertical tank and one horizontal tank. The two main circulating pumps are in-line centrifugal pumps. They are Grundfos model UPS 65-160. The other two hot water circulating pumps are Grundfos UPS-65-120.

Rating	Installed	Design Life	Updated
4 - Acceptable	1983	40	AUG-06

D3040.04.01 Fans: Exhaust**

About thirteen rooftop centrifugal cabinet fans, one special exhaust fan with hood to serve the kilt, one kitchen range hood in the Kitchen and one inline exhaust fan to serve the crawl space under the Pods.

Rating	Installed	Design Life	Updated
4 - Acceptable	1983	30	AUG-06

D3040.04.03 Ducts: Exhaust*

All exhaust fans are connected with ductwork to serve washrooms, kitchen and change rooms.

Rating	Installed	Design Life	Updated
4 - Acceptable	1983	50	AUG-06

D3040.04.05 Air Outlets and Inlets: Exhaust*

Exhaust outlets and inlets include aluminum wall mounted exhaust air grilles and eggcrate.

Rating	Installed	Design Life	Updated
4 - Acceptable	1983	30	AUG-06

D3050.02 Air Coils**

Hot water reheat coils are located in the air distribution ductwork to provide temperature control in the classrooms and offices.

Rating	Installed	Design Life	Updated
4 - Acceptable	1983	30	AUG-06

D3050.03 Humidifiers**

Three steam humidifiers are serving the Air Handling Units, AHU-1, AHU-2 and AHU-3.

Rating	Installed	Design Life	Updated
4 - Acceptable	1983	25	AUG-06

Event: Replace steam humidifiers in air handling units

Type	Year	Cost	Priority
Lifecycle Replacement	2010	$15,000	Low

Updated: AUG-06

D3050.05.01 Convectors**

Hot water convectors are located in washrooms and change rooms.

Rating	Installed	Design Life	Updated
4 - Acceptable	1983	40	AUG-06

D3050.05.03 Finned Tube Radiation**

Perimeter finned tube radiators are located in classrooms, washrooms and offices.

Rating	Installed	Design Life	Updated
4 - Acceptable	1983	40	AUG-06

D3050.05.06 Unit Heaters**

A hot water unit heater is located in mechanical penthouse.

Rating	Installed	Design Life	Updated
4 - Acceptable	1983	30	AUG-06

D3050.05.07 Unit Ventilators**

Ceiling mounted hot water forced flow heaters are located at each exit. They are controlled by a thermostat with fan speed control.

Rating	Installed	Design Life	Updated
4 - Acceptable	1983	30	AUG-06

D3060.02.01 Electric and Electronic Controls**

The furnaces in Pod classrooms are controlled by the digital thermostat.

Rating	Installed	Design Life	Updated
4 - Acceptable	1988	30	AUG-06

D3060.02.02 Pneumatic Controls**

The pneumatic control system consists of air compressor and zone sensors to control the control valves, 3-way valves and actuators for motorized dampers. A remote alarm system will notify the main office if the boilers fail.

Rating	Installed	Design Life	Updated
4 - Acceptable	1983	40	AUG-06

D4010 Sprinklers: Fire Protection*

This building is sprinkler protected. Sprinkler system is fed from a 250mm diameter fire main completed with main check valve and jockey pump in ground floor mechanical room. The siamese connection is located at exterior wall on east side of building.

Rating	Installed	Design Life	Updated
4 - Acceptable	1983	60	AUG-06

D4020 Standpipes*

Fire hose cabinets are located in Gymnasium only. It is fed from the same cold water main with domestic water system.

Rating	Installed	Design Life	Updated
4 - Acceptable	1983	60	AUG-06

D4030.01 Fire Extinguisher, Cabinets and Accessories**

ABC type and water type fire extinguishers with hand pump locate mainly in corridor. Most of the fire extinguishers are housed in a recessed wall mounted cabinet. Water type fire extinguisher may not be able to meet today's fire protection requirement.

Rating	Installed	Design Life	Updated
4 - Acceptable	1983	30	AUG-06

S5 ELECTRICAL

D5010.01 Main Electrical Transformers**

The incoming hydro service to Crawford Plains School is a 120/208V, 3-phase, 4-wire service from an exterior padmounted transformer located on the East side of the school property. The padmounted transformer is owned and maintained by EPCOR. The EPCOR meter is located in the main electrical room.

Rating	Installed	Design Life	Updated
4 - Acceptable	1983	40	AUG-06

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

The main electrical switchboard is a Square D switchboard rated at 1200A, 120/208V, 3-phase, 4-wire. The switchboard has a 1200A main breaker and a distribution section with moulded case breakers feeding the transfer switch and branch circuit panels within the school. The main electrical switchboard is original equipment that was installed when the school was constructed.

Rating	Installed	Design Life	Updated
4 - Acceptable	1983	40	AUG-06

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

The majority of the electrical branch circuit panelboards are Square D panels that appear to have been installed when the building was originally constructed. The panels for car plug-ins are equipped with contactors. Nova NL-16 panels have been installed in the pod classrooms.

Rating	Installed	Design Life	Updated
4 - Acceptable	1983	30	AUG-06

D5010.07.02 Motor Starters and Accessories**

The motor starters within the school are individual motor starters (Westinghouse) or motor rated starter switches.

Rating	Installed	Design Life	Updated
4 - Acceptable	1983	30	AUG-06

D5020.01 Electrical Branch Wiring*

The majority of the cabling is standard building wire in EMT conduit. Armoured cable has been provided, in selected locations, for final connections to mechanical and miscellaneous equipment.

Rating	Installed	Design Life	Updated
4 - Acceptable	1983	50	AUG-06

D5020.02.01 Lighting Accessories (Lighting Controls)*

Lighting is typically controlled by individual 120V switches within the individual rooms.

Rating	Installed	Design Life	Updated
4 - Acceptable	1983	30	AUG-06

D5020.02.02.01 Interior Incandescent Fixtures*

Incandescent track lighting fixtures have been provided in the main corridor. Incandescent lighting fixtures have also been installed in some of the service rooms and washrooms.

Rating	Installed	Design Life	Updated
4 - Acceptable	1983	30	AUG-06

D5020.02.02.02 Interior Florescent Fixtures**

The typical classroom lighting consists of suspended two lamp fluorescent fixtures. Two lamp fluorescent fixtures with wire guards have been provided in the gymnasium. The typical fixture in the pod classrooms is a surface mounted wrap-around fluorescent fixture. The fluorescent lighting fixtures throughout the school have T12 lamps and magnetic ballasts.

Rating	Installed	Design Life	Updated
4 - Acceptable	1983	30	AUG-06

D5020.02.02.05 Other Interior Fixtures*

Theatrical spots and floodlighting fixtures have been provided for stage lighting in the gymnasium.

Rating	Installed	Design Life	Updated
4 - Acceptable	1983	30	AUG-06

D5020.02.03.01 Emergency Lighting Built-in*

Existing building fluorescent lighting fixtures, fed from emergency panels, are utilized for emergency lighting.

Rating	Installed	Design Life	Updated
4 - Acceptable	1983	35	AUG-06

D5020.02.03.02 Emergency Lighting Battery Packs**

An emergency lighting battery unit has been installed in the vicinity of the emergency generator.

Rating	Installed	Design Life	Updated
4 - Acceptable	1995	20	AUG-06

D5020.02.03.03 Exit Signs*

The majority of the exit signs are metal, stencil faced exit signs that have been retrofitted with LED lamps.

Rating	Installed	Design Life	Updated
4 - Acceptable	1995	30	AUG-06

D5020.03.01.01 Exterior Incandescent Fixtures*

Incandescent surface mounted fixtures are mounted on the exterior walls of the pod. Some of the fixtures have yellowed or damaged lenses.

Rating	Installed	Design Life	Updated
3 - Marginal	1988	30	AUG-06

Event: Repalce Exterior Incandescent Fixtures

Concern:
The exterior incandescent lighting fixtures for the pod are in poor condition. Several of the fixtures have damaged or yellowed lenses.

Recommendation:
Replace exterior incandescent fixtures for the pod.

Consequences of Deferral:
Security concern if fixtures do not function.

Type	Year	Cost	Priority
Failure Replacement	2007	$5,000	Medium

Updated: AUG-06

D5020.03.01.04 Exterior H.P. Sodium Fixtures*

The exterior lighting for the school consists of H.P.S surface mounted fixtures on the exterior walls and canopies as well as some floodlighting fixtures.

Rating	Installed	Design Life	Updated
4 - Acceptable	1983	30	AUG-06

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

Timers have been provided for exterior lighting control.

Rating	Installed	Design Life	Updated
4 - Acceptable	1983	30	AUG-06

D5030.01 Detection and Fire Alarm**

The fire alarm system control panel is a Simplex 2002 panel with 13 active zones and 7 spare zones. The control panel is located in the general office and there is a remote annunciator at the main entrance. The audible devices within the school are 10" dia. Bells. Strobes have not been installed. Duct mounted smoke detection has been provided for the gymnasium air handling unit.

Rating	Installed	Design Life	Updated
4 - Acceptable	1983	25	AUG-06

Event: Replace fire alarm system

Concern:
The fire alarm system has reached its theoretical life expectancy.

Type	Year	Cost	Priority
Lifecycle Replacement	2010	$45,000	Low

Updated: AUG-06

D5030.02.02 Intrusion Detection**

The security system is a DSC Maxsys PC 4020 system with the main panel located in the storage room by the Custodial office. A security system keypad has been provided. PIR smoke detectors have been provided throughout the school.

Rating	Installed	Design Life	Updated
5 - Good	2002	25	AUG-06

D5030.03 Clock and Program Systems**

The clocks within the school are battery powered clocks. The Simplex 2350 Master Time System located in the general office is utilized for class change bells only.

Rating	Installed	Design Life	Updated
4 - Acceptable	1983	25	AUG-06

D5030.04.01 Telephone Systems**

The telephone system is a Norstar Meridian system. Meridian handsets are located in the classrooms and selected areas such as the general office. The main telephone equipment is located in the main electrical room.

Rating	Installed	Design Life	Updated
4 - Acceptable	1995	25	AUG-06

D5030.04.04 Data Systems**

Data system servers are located in room 118 and outside classroom 154. Cat. 5 cables are used for the network wiring within the school. Supernet has been installed in the school.

Rating	Installed	Design Life	Updated
4 - Acceptable	1997	25	AUG-06

D5030.05 Public Address and Music Systems**

The public address system utilizes a Bogen amplifier system with paging over the telephone system. Speakers are typically round, recessed ceiling mounted units. The Bogen unit is located in the main electrical room room. A separate sound system has been provided for the gymnasium with wall mounted speakers.

Rating	Installed	Design Life	Updated
4 - Acceptable	1995	20	AUG-06

D5030.06 Television Systems*

Coaxial cable for television systems has been brought into the school. Cable TV outlets have been provided in selected rooms.

Rating	Installed	Design Life	Updated
4 - Acceptable	1997	20	AUG-06

D5090.02 Packaged Engine Generator Systems (Emergency Power System)**

An emergency generator is located in the main electrical room. The generator is rated 21.5kW, 26.5kVA at 120/208V. A Schmidtec transfer switch has been installed for the emergency power distribution system. Generator is tested weekly.

Rating	Installed	Design Life	Updated
4 - Acceptable	1983	35	AUG-06

S6 EQUIPMENT, FURNISHINGS AND SPECIAL CONSTRUCTION

E1090.01.01 Vacuum Cleaning Systems*

A central vacuum system is located in the classroom storage area.

Rating	Installed	Design Life	Updated
4 - Acceptable	0	25	AUG-06

E1090.07 Athletic, Recreational, and Therapeutic Equipment*

Basketball hoops and a climbing apparatus are located in the gymnasium.

Rating	Installed	Design Life	Updated
4 - Acceptable	0	15	AUG-06

E2010.02 Fixed Casework**

Original 1983 building

Each classroom is equipped with custom wood open faced and/or painted cabinet units.
Each washroom has plastic laminate counter-tops.
The staff room is equipped with custom plastic laminate cabinet units
The library has fixed and moveable wood shelving casework.
Glass display cabinets are located in the corridors & entrance area.

1988 Additions - Each classroom is equipped with custom wood open faced and/or painted cabinet units.

Rating	Installed	Design Life	Updated
4 - Acceptable	1983	35	AUG-06

E2010.03.01 Blinds**

Horizontal blinds are located in the library, staff room and most of the classrooms.

Rating	Installed	Design Life	Updated
4 - Acceptable	1983	30	AUG-06

E2010.03.06 Curtains and Drapes**

A curtain is located in the gymnasium.

Rating	Installed	Design Life	Updated
4 - Acceptable	1983	30	AUG-06

E2010.05 Fixed Multiple Seating**

Fixed stained wood benches are located in the vestibule entrance areas.

Rating	Installed	Design Life	Updated
4 - Acceptable	1983	35	AUG-06

E2020 Moveable Furnishings*

Desks with plastic laminate tops are located throughout the classrooms.

Rating	Installed	Design Life	Updated
4 - Acceptable	0	20	AUG-06

F2020.01 Asbestos*

No asbestos known or reported

Rating	Installed	Design Life	Updated
4 - Acceptable	0	0	AUG-06

F2020.04 Mould*

No mould is known or reported, however a study is required in investigate potential mould in the 1988 (pod) addition. A budget has been attached to the exterior wall element - See B2010.01.06.04 Wood Siding**

Rating	Installed	Design Life	Updated
4 - Acceptable	0	0	AUG-06

F2020.09 Other Hazardous Materials*

No other hazardous material known or reported

Rating	Installed	Design Life	Updated
4 - Acceptable	0	0	AUG-06

S8 FUNCTIONAL ASSESSMENT

K4010.01 Barrier Free Route: Parking to Entrance

Barrier free access from the parking area to the building entrance is available on the east elevation (front of school). Signage for a designated handicap parking space is not provided. Curb cuts are not provided.

Rating	Installed	Design Life	Updated
3 - Marginal	0	0	AUG-06

Event: Provide curb cuts

Concern:
No curb cuts are provided at the walkway and parking area.
Recommendation:
Provide curb cuts for accessibility

Type	Year	Cost	Priority
Barrier Free Access Upgrade	2006	$5,000	Medium

Updated: AUG-06

K4010.02 Barrier Free Entrances

No automatic door entrances are provided.

Rating	Installed	Design Life	Updated
3 - Marginal	0	0	AUG-06

Event: Provided power operators for barrier free access

Concern:
No automatic access is currently provided from any exterior entrance doors.
Recommendation:
Provided power operators for barrier free access at the east entrance of the original 1983 building.

Type	Year	Cost	Priority
Barrier Free Access Upgrade	2006	$3,500	Medium

Updated: AUG-06

K4010.03 Barrier Free Interior Circulation

Barrier free access is provided to most areas of the school. No access is provided to the computer area & mezzanine levels.

Rating	Installed	Design Life	Updated
4 - Acceptable	0	0	AUG-06

K4010.04 Barrier Free Washrooms

Barrier free washrooms are provided.

Rating	Installed	Design Life	Updated
4 - Acceptable	0	0	AUG-06

RECAPP Facility Evaluation Report

Crawford Plains School

S3082

Edmonton

Report run on: January 22, 2007 3:24 PM

Facility Details

Building Name: Crawford Plains School
Address:
Location: Edmonton

Building Id: S3082
Gross Area (sq. m): 0.00
Replacement Cost: $0
Construction Year: 0

Evaluation Details

Evaluation Company: Asset Evolution Incorporated (AEI)
Evaluation Date: May 10 2006
Evaluator Name: Mario Plastina

Total Maintenance Events Next 5 years: **$131,000**
5 year Facility Condition Index (FCI): **0%**

General Summary:

The site of Crawford Plains School includes an asphalt paved roadway & parking area accessible from 12th Avenue N.W. All playing field areas are located on the adjacent City of Edmonton Parks & Recreation lands. Grass, shrubs and trees are located throughout the property. An asphalt & concrete paved playground is located east of the school. Pedestrian concrete walkways are located at the main entrances and along the east elevation of the school. Site drainage slopes away from the building with no problems indicated or observed.

There are no portables on site.

Overall the site elements are 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)**

An asphalt paved roadway to the main parking areas is accessible from 12th Avenue N.W. located at the south-east corner of the site.

Rating	Installed	Design Life	Updated
4 - Acceptable	1983	25	AUG-06

Event: Replace PaveedRoadway

Concern:
Reached theoretical useful life.

Type	Year	Cost	Priority
Lifecycle Replacement	2010	$25,000	Low

Updated: AUG-06

G2020.02.01 Aggregate Parking Lots (Gravel)**

Due to the lack of parking areas cars are parked on a gravel surface adjacent to the parking area.

Rating	Installed	Design Life	Updated
4 - Acceptable	2001	10	AUG-06

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

The asphalt paved parking area is located at the south-east end of the property.

Rating	Installed	Design Life	Updated
4 - Acceptable	1983	10	AUG-06

Event: Replace Paving Parking Lots

Concern:
Reached theoretical useful life.

Type	Year	Cost	Priority
Lifecycle Replacement	2010	$75,000	Low

Updated: AUG-06

G2020.05 Parking Lot Curbs and Gutters*

Precast concrete curbs are located around the perimeter of the parking lot

Rating	Installed	Design Life	Updated
4 - Acceptable	0	25	AUG-06

G2020.06.01 Traffic Barriers*

A steel gate is located at the top-end of the parking area (north) .

Rating	Installed	Design Life	Updated
5 - Good	0	25	AUG-06

G2020.06.03 Parking Lot Signs*

Parking numbers are indicating on assigned parking spaces.

Rating	Installed	Design Life	Updated
4 - Acceptable	0	25	AUG-06

G2020.06.04 Pavement Markings*

The parking spaces are marked with yellow painted lines. Repaint lines when the parking area is resurfaced.

Rating	Installed	Design Life	Updated
4 - Acceptable	0	25	AUG-06

G2030.03 Pedestrian Unit Pavers**

Pedestrian unit pavers are located at the entrances along the east end of the site.

Rating	Installed	Design Life	Updated
5 - Good	1983	20	AUG-06

Event: Replace walkways

Concern:
Reached theoretical useful life.

Type	Year	Cost	Priority
Lifecycle Replacement	2010	$15,000	Low

Updated: AUG-06

G2030.04 Rigid Pedestrian Pavement (Concrete)**

A concrete paved playground area is located between the school and the parking area. Poured in place concrete walkways lead to all the school entrances. The lifecycle should be more than 15 years for concrete surfaces.

Rating	Installed	Design Life	Updated
4 - Acceptable	1983	15	AUG-06

G2030.06 Exterior Steps and Ramps*

A raised concrete seating area with pressure treated retaining walls is located adjacent to the main entrance of the school.

Rating	Installed	Design Life	Updated
4 - Acceptable	0	15	AUG-06

G2040.02 Fences and Gates**

Chain-link fencing is located along portions of the property boundary. Painted steel railing is located along the parking area.

Rating	Installed	Design Life	Updated
4 - Acceptable	1983	30	AUG-06

G2040.03 Athletic and Recreational Surfaces**

(1996)Basketball hoops are located adjacent to the asphalt paved playground at the north end of the property.

Rating	Installed	Design Life	Updated
5 - Good	1996	25	AUG-06

G2040.05 Site and Street Furnishings*

Bicycle racks are located at the south-east end of the school.

Rating	Installed	Design Life	Updated
4 - Acceptable	0	15	AUG-06

G2040.06 Exterior Signs*

A steel framed tower is located above the entrance of the school. Exterior wall-mounted signage is provided on the buildings main entrance. School signage is located on the south wall. A free-standing signage panel is located adjacent to the main entrance.

Rating	Installed	Design Life	Updated
4 - Acceptable	0	25	AUG-06

G2040.08 Flagpoles*

A flagpole is located on the south elevation of the property adjacent to the main entrance.

Rating	Installed	Design Life	Updated
4 - Acceptable	0	30	AUG-06

G2040.11 Retaining Walls*

Pressure treated wood retaining walls are located along the parking area and around the raised concrete sitting area.

Rating	Installed	Design Life	Updated
4 - Acceptable	0	50	AUG-06

G2050.04 Lawns and Grasses*

Grassed areas are located around the perimeter of the school.

Rating	Installed	Design Life	Updated
5 - Good	0	15	AUG-06

G2050.05 Trees, Plants and Ground Covers*

Mature trees and shrubs are located along the south & east sides of the site. Small shrubs are also located throughout the parking area.

Rating	Installed	Design Life	Updated
5 - Good	0	10	AUG-06

G3010.02 Site Domestic Water Distribution*

Incoming 100mm diameter water main is located in Mechanical Room 128 on the east of building. Original 100mm incoming water main was replaced with new PVC pipe in 2005 because of a water leak happened in 2005.

Rating	Installed	Design Life	Updated
4 - Acceptable	2005	50	AUG-06

G3010.03 Site Fire Protection Water Distribution*

Incoming 250mm diameter fire main located in Mechanical Room 128 on the east of building. Original fire main was replaced with new PVC pipe in 2005 because of a water leak happened in 2005.

Rating	Installed	Design Life	Updated
4 - Acceptable	2005	50	AUG-06

G3020.01 Sanitary Sewage Collection*

Building sanitary system is connected to municipal sanitary main.

Rating	Installed	Design Life	Updated
4 - Acceptable	1983	50	AUG-06

G3030.01 Storm Water Collection*

Building sanitary system is connected to municipal storm main. Storm water system include underground drain pipes, maintenance holes, catch basin and area drain.

Rating	Installed	Design Life	Updated
4 - Acceptable	1983	50	AUG-06

G3060.01 Gas Distribution*

The underground municipal incoming 75mm diameter medium pressure gas main is located in the Mechanical Room on east side of building.

Rating	Installed	Design Life	Updated
4 - Acceptable	1983	50	AUG-06

G4010.03 Electrical Power Distribution Equipment*

An EPCOR padmounted transformer is located on the site. The transformer and secondary feeder into the building were installed in 1982. The transformer is owned and maintained by EPCOR.

Rating	Installed	Design Life	Updated
4 - Acceptable	1983	50	AUG-06

G4010.04 Car Plugs-ins*

There are 11 energized parking stalls. Plug-in receptacles for block heaters are mounted on metal railings in the parking areas. An adequate number of car plug-ins have been provided.

Rating	Installed	Design Life	Updated
4 - Acceptable	1983	25	AUG-06

Event: Replace Car Plugs-ins*

Concern:
The car plug-ins have reached their theoretical life expectancy.

Type	Year	Cost	Priority
Lifecycle Replacement	2010	$6,000	Low

Updated: AUG-06

G4020.01 Area Lighting*

Pole mounted shoebox style exterior luminaires have been provided in the parking area.

Rating	Installed	Design Life	Updated
4 - Acceptable	1983	25	AUG-06

Event: Replace Area Lighting

Concern:
The area lighting has reached its theoretical life expectancy.

Type	Year	Cost	Priority
Lifecycle Replacement	2010	$10,000	Low

Updated: AUG-06