RECAPP Facility Evaluation Report

Battle River Reg Div #31



Daysland School

B2990A Daysland

Facility Details

Building Name: Daysland School

Address: 5210 - 50 Street

Location: Daysland

Building Id: B2990A Gross Area (sq. m): 0.00

Replacement Cost: \$10.637.190

Construction Year: 0

Evaluation Details

Evaluation Company: Wade Engineering Ltd.

Evaluation Date: November 21 2006

Evaluator Name: Ron Shannon

Total Maintenance Events Next 5 years: \$428,200

5 year Facility Condition Index (FCI):

4.03%

General Summary:

Located in the town of Daysland, school borders main street on east with side streets on south and west elevations. Current enrollment is 326 students, grades K-12. Original school built in 1927, with additions in 1954, 57, 63, 67, and 1988. School was completely modernized in 1988 with extensive exterior and architectural upgrades and a second upgrade in 1998. Large grassed site, with playgrounds, football field and dirt track.

Structural Summary:

1927- 2 storey wood frame construction with full basement. Gymnasium (1957) wood frame construction with slab on grade, glue-lam beam and wood deck. All other areas concrete block and steel post and beam with block infill. Roof structural frame a combination of OWSJ and glue lam beam with wood and steel deck in flat and sloped configurations. There were structural deflections noted in the basement of the 1927 building, which will require investigation and repairs.

Overall condition is marginal.

Envelope Summary:

Exterior upgrades completed in 1988, with 100mm veneer brick and stucco finish throughout. Painted wood fascia and trim in various locations. Windows a mixture of commercial aluminum, PVC and fiberglass window systems. Entry doors are painted steel frames and slab with Barrier Free access and paddle activated assists. Roofing consists of highslope roofing with cedar shingles and steel eavestroughs and downspouts, and flat roofing. There is a large sloped fiberglass skylight/roof assembly attached to the gym. Roof ages vary throughout and several areas require replacement.

Overall condition is marginal.

Interior Summary:

Interior paint, architectural finishes and flooring were all upgraded in 1988 and minor upgrades in 1998. A mixture of resilient flooring and carpeting throughout, carpet replacement required in some locations.

Overall rating is acceptable.

Mechanical Summary:

The facility is heated with two hot water boilers, wall finned tube radiation and radiation panels. Four air handling units provide ventilation to the entire building. One domestic hot water heater provides domestic hot water for the whole school. The control system consists of pneumatic system and siemens DDC system.

The backflow preventor for the heating system and the domestic hot water heater should be replaced due to life cycle replacement.

Overall, the mechanical system is in acceptable condition.

Electrical Summary:

Incoming service is 800 amp, 120/208V, 3 phase in good condition. Branch circuit panelboards are located throughout the facility with some spare capacity. The interior lighting is half T8 and half T12 fluorescent technology, with the exception of the gymnasium which uses 400W metal fixtures. All exit lights are incandescent. Fire alarm system is a outdated Edwards 6500 fire alarm system. Telephone system has recently been replaced with a new Cisco Systems internet phone.

Overall, the building is in good condition with the exception of the following areas of improvement:

- T12 lighting in the Jr/Sr High and Metal halide lighting in gymnasiumFire Alarm system is outdated and maintenance will get difficult.

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*

1927- Standard concrete foundation - full basement

RatingInstalledDesign LifeUpdated4 - Acceptable1927100MAR-07

A1030 Slab on Grade*

All areas except 1927

Rating	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	100	MAR-07

A2020 Basement Walls (& Crawl Space)* 1927

1927 Full basement for mechanical rooms with dirt crawl space under hallways

RatingInstalledDesign LifeUpdated3 - Marginal1927100MAR-07

Event: Repair foundation (7.5 m2)

Concern:

1927 - A localized failure of exterior foundation wall under main entry, backfill movement has caused significant deflection in wood framing of foundation under ramp to east entrance with visual evidence of fungal activity and wood rot in the wood flooring at the same location, due to water entry.

Also, settling of crawl space soil has bowed wood frame, load bearing partition wall adjacent to above location.

Recommendation:

Excavate surrounding grade and complete repairs to foundation walls, and replace damaged wood sub-floor in mechanical room. Dig back settled soils in adjacent crawl space, and restore wood framing supports under main hallway and replace sub-soils in crawlspace.

Consequences of Deferral:

Potential structural collapse and safety concern



Updated: MAR-07

Event: Structural review on foundation

Concern:

1927 wing - A localized failure of exterior foundation wall under main entry, backfill movement has caved in wood framing on foundation with visual evidence of fungal activity ad wood rot in flooring due to water entry. Also, movement/settling of crawl space soil in adjacent room has bowed wood frame partition wall immediately adjacent to this location.

Recommendation:

Investigate to determine exact details of existing construction and evaluate extent of localized failure to exterior foundation wall. Investigation should also review current condition of interior concrete foundation walls in mechanical room as there is significant loss of material noted along the base of the walls with excessive lime deposits and calcification of the concrete noted.

Consequences of Deferral:

Potential structural collapse and safety concern

TypeYearCostPriorityStudy2007\$5,000Unassigned

Updated: MAR-07



B1010.01 Floor Structural Frame*(Building Frame)

1927 - Wood frame construction with wood post, beam and floor joist. Gymnasium (1957) wood frame construction, glue lam beam and wood deck.

RatingInstalledDesign LifeUpdated4 - Acceptable1927100MAR-07

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

Various years - All additions, a mixture of load bearing concrete block and infill, steel post and beam, glue lam beam

RatingInstalledDesign LifeUpdated4 - Acceptable0100MAR-07

B1010.02 Structural Interior Walls Supporting Floors (or Roof)*1927

1927, 57 Gym - Wood frame construction

RatingInstalledDesign LifeUpdated4 - Acceptable1927100MAR-07

B1010.03 Floor Decks, Slabs, and Toppings*

Gymnasium - 2nd floor mechanical room - concrete slab on steel post and concrete block 1967 mechanical room - wood joist and plywood floor on steel post and concrete block

RatingInstalledDesign LifeUpdated4 - Acceptable1957100MAR-07

B1010.05 Mezzanine Construction*

IA-117 - raised classroom on wood frame construction, plywood floor ECS-113 - small mezzanine in kindergarten room, wood joist and deck on steel post construction

RatingInstalledDesign LifeUpdated4 - Acceptable196780MAR-07

B1010.06 Ramps: Exterior**

Concrete barrier free ramp with painted steel handrails at entrance to 1927 building.

RatingInstalledDesign LifeUpdated5 - Good198840MAR-07

B1010.07 Exterior Stairs**

Concrete stairs with steel hand rails at west entrance to 1927 building.

Rating Installed Design Life Updated 2 - Poor 1957 40 MAR-07

Event: Replace exterior stairs

Concern:

Entry stairs have severe spalling and cracking. Steps have

been previously repaired.

Recommendation:

Replace existing with new cast in place concrete stairs

Consequences of Deferral:

Potential safety hazard

TypeYearCostPriorityFailure Replacement2007\$3,500Unassigned

Updated: MAR-07

B1010.09 Floor Construction Fireproofing*

Taped gypsum board in place.

RatingInstalledDesign LifeUpdated4 - Acceptable192750MAR-07

B1010.10 Floor Construction Firestopping*

Fire caulking noted on penetrations

RatingInstalledDesign LifeUpdated4 - Acceptable050MAR-07

B1020.01 Roof Structural Frame*

Glue lam beam wood deck - 1927, 57 gymnasium OWSJ with metal deck various years Glue lam beam with metal deck various years

RatingInstalledDesign LifeUpdated4 - Acceptable0100MAR-07

B1020.06 Roof Construction Fireproofing*

RatingInstalledDesign LifeUpdated4 - Acceptable050MAR-07

S2 ENVELOPE

B2010.01.02.01 Brick Masonry: Ext. Wall Skin*

All years - 100mm face brick.

RatingInstalledDesign LifeUpdated4 - Acceptable075MAR-07

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

25 mm rigid insulation with cementitious stucco, 1967 addition only

RatingInstalledDesign LifeUpdated4 - Acceptable198875MAR-07

B2010.01.06.04 Wood Siding**

Plywood paneling below windows and cedar fascia below roof flashing.

RatingInstalledDesign LifeUpdated4 - Acceptable198840MAR-07

B2010.01.08 Cement Plaster (Stucco): Ext. Wall*

All additions - rock dash stucco on upper and lower elevations various locations. Parging on lower wall areas to grade.

RatingInstalledDesign LifeUpdated4 - Acceptable075MAR-07

Event: Repair Parging

Concern:

Parging damaged and missing on 1927 building and various locations, some locations over wood frame construction.

Recommendation:

Knock loose material off and apply new cementitious parging.

TypeYearCostPriorityRepair2008\$2,500Medium

Updated: MAR-07

B2010.01.09 Expansion Control: Exterior Wall Skin*

Metal vertical stucco bead

RatingInstalledDesign LifeUpdated4 - Acceptable075MAR-07

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

Sealant installed at window frame to exterior wall skin and penetrations.

RatingInstalledDesign LifeUpdated3 - Marginal198820MAR-07

Event: Replace exterior sealant (100 m)

Recommendation:

Cut out and replace failed sealants with new construction grade silicone sealant

TypeYearCostPriorityFailure Replacement2008\$2,500Medium

Updated: MAR-07

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

Exterior latex paint on wood fascia and plywood panels below windows

RatingInstalledDesign LifeUpdated3 - Marginal198815MAR-07

Event: Repaint exterior fascia and panelling(103 m2)

Concern:

Paint finish weathered and delaminating schedule with B2010.01.11 Joint Sealers (caulking): Ext. Wall

TypeYearCostPriorityFailure Replacement2007\$3,000High

Updated: MAR-07

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

All years except 1927 and gymnasium Concrete block

RatingInstalledDesign LifeUpdated4 - Acceptable1957100MAR-07

B2010.02.05 Wood Framing*: Ext. Wall Const.

RatingInstalledDesign LifeUpdated4 - Acceptable1927100MAR-07

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

Polyethylene vapour retarder and fiberglass batt cavity insulation in wood construction. Rigid exterior insulation in various locations (EIFS)

RatingInstalledDesign LifeUpdated4 - Acceptable030MAR-07

B2010.06 Exterior Louvers, Grilles, and Screens*

Mechanical louvers in various locations

RatingInstalledDesign LifeUpdated4 - Acceptable030MAR-07

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

Hopper style venting aluminum windows in 1927 building

RatingInstalledDesign LifeUpdated4 - Acceptable198840MAR-07

B2020.01.01.06 Vinyl, Fibreglass &Plastic Windows**

A mixture of PVC and fiberglass windows throughout

RatingInstalledDesign LifeUpdated5 - Good198840MAR-07

B2020.02 Storefronts**

Painted steel entry systems throughout

RatingInstalledDesign LifeUpdated5 - Good198840MAR-07

B2030.01.06 Automatic Entrance Doors**

Paddle activated power assists on entry doors in two locations

RatingInstalledDesign LifeUpdated4 - Acceptable198830MAR-07

B2030.03 Large Exterior Special Doors (Overhead)*

Insulated steel sectional overhead door in industrial arts shop (3m wide).

RatingInstalledDesign LifeUpdated5 - Good198830MAR-07

B2030.05 Other Exterior Doors**

Steel exit doors

RatingInstalledDesign LifeUpdated4 - Acceptable198830MAR-07

B3010.01 Deck Vapor Retarder and Insulation*

Hot mopped asphalt vapour retarder with rigid installation

RatingInstalledDesign LifeUpdated4 - Acceptable198825MAR-07

B3010.02.01.07 Wood Shingles

Cedar shingles on 30-40% of roof areas (10/12 pitch)

RatingInstalledDesign LifeUpdated4 - Acceptable198830MAR-07

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

4 Ply asphalt and gravel in various locations, various ages

RatingInstalledDesign LifeUpdated3 - Marginal198825MAR-07

Event: Replace 4 Ply A & G Roofing (600 m2)

Concern:

Blisters, ridges and suspect wet insulation. Various roof areas are past end of serviceable life.

Recommendation:

Remove and replace failed roofing with new 2 ply SBS membrane and upgrade R value to a minimum R15.

TypeYearCostPriorityFailure Replacement2007\$96,000Unassigned

Updated: MAR-07

Event: Replace 4 ply A & G roofing (900 m2)

Recommendation:

Replace A & G roofing with 2 ply SBS and upgrade R values.

TypeYearCostPriorityLifecycle Replacement2010\$145,000Low

Updated: MAR-07

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

SBS Roofing on link between original building between 1927 wing and rest of school.

RatingInstalledDesign LifeUpdated4 - Acceptable199825MAR-07

B3010.08.02 Metal Gutters and Downspouts**

125mm eavestrough with 100mm downspouts, pre-finished steel, on all sloped roofing

RatingInstalledDesign LifeUpdated4 - Acceptable198830MAR-07

Event: Repair eavestroughing

Concern:

Ice damming problems have damaged troughs and downspouts.

Recommendation:

Replace damaged sections of trough and downspouts and resecure loose sections.

TypeYearCostPriorityRepair2007\$1,500High

Updated: MAR-07

B3010.11 Roof Covering Other**

Fiberglass composite sloped roofing panels (life expectancy of system is rated at 40+ years). Installed over 143/ANC (175m2).

RatingInstalledDesign LifeUpdated3 - Marginal198820MAR-07

Event: Roof repair

Concern:

Ice damming problems at low end of roof cause periodic water entry at curbs and control joints to adjacent roof sections.

TypeYearCostPriorityRepair2007\$3,500Unassigned

Updated: MAR-07

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

Access hatch to roof from mechanical room above 114

RatingInstalledDesign LifeUpdated4 - Acceptable198825MAR-07

S3 INTERIOR

C1010.01 Interior Fixed Partitions*

A mixture of wood and concrete block and partition walls throughout, all years.

RatingInstalledDesign LifeUpdated4 - Acceptable050MAR-07

C1010.03 Interior Operable Folding Panel Partitions**

Folding aluminum frame acoustical partition with vinyl covered gypsum on stage (3 sets).

RatingInstalledDesign LifeUpdated4 - Acceptable196730MAR-07

Event: Replace stage partitions (80 m2)

TypeYearCostPriorityLifecycle Replacement2010\$30,300Low

Updated: MAR-07

C1010.04 Interior Balustrades and Screens, Interior Railings*

Steel railing with wood handrail in kindergarten on mezzanine play area.

RatingInstalledDesign LifeUpdated4 - Acceptable040MAR-07

C1010.05 Interior Windows*

Painted steel frame with wired safety glass.

RatingInstalledDesign LifeUpdated4 - Acceptable040MAR-07

C1010.06 Interior Glazed Partitions and Storefronts*

Steel and/or wood frames with single pane glass in fixed partitions.

RatingInstalledDesign LifeUpdated4 - Acceptable030MAR-07

C1010.07 Interior Partition Firestopping*

Firestopping in place where viewed.

RatingInstalledDesign LifeUpdated4 - Acceptable050MAR-07

C1020.01 Interior Swinging Doors**

Steel frame with solid core wood and steel doors throughout.

RatingInstalledDesign LifeUpdated4 - Acceptable198840MAR-07

C1020.03 Interior Fire Doors*

Fire rated doors in required areas.

RatingInstalledDesign LifeUpdated4 - Acceptable198850MAR-07

C1030.01 Visual Display Boards**

White boards, tack boards and a few green boards. (Design life is over 40 years)

RatingInstalledDesign LifeUpdated5 - Good198820MAR-07

Event: Replace visual display boards (30 classrooms)

TypeYearCostPriorityLifecycle Replacement2010\$45,000Low

Updated: MAR-07

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

Standard steel compartments.

RatingInstalledDesign LifeUpdated4 - Acceptable198830MAR-07

C1030.06 Handrails*

Painted steel handrails on barrier free ramp at entry in 1954 wing.

RatingInstalledDesign LifeUpdated5 - Good050MAR-07

C1030.08 Interior Identifying Devices*

Laminate door signage, emergency exit lighting and some directional signage.

RatingInstalledDesign LifeUpdated5 - Good020MAR-07

C1030.10 Lockers**

Full and 1/2 size steel lockers.

RatingInstalledDesign LifeUpdated4 - Acceptable198830MAR-07

C1030.12 Storage Shelving*

Wood and/or metal adjustable and fixed shelving throughout.

RatingInstalledDesign LifeUpdated5 - Good020MAR-07

C1030.14 Toilet, Bath, and Laundry Accessories*

Steel with acrylic face- toilet, towel and soap dispensers.

RatingInstalledDesign LifeUpdated5 - Good020MAR-07

C1030.17 Other Fittings*

SS kick plates on some doors.

RatingInstalledDesign LifeUpdated5 - Good010MAR-07

C2010 Stair Construction*

1927 wing and gym - wood construction, concrete all years, steel in mechanical rooms.

 Rating
 Installed
 Design Life
 Updated

 4 - Acceptable
 0
 100
 MAR-07

C2020.05 Resilient Stair Finishes**

VC tile with rubber tread nosing and heavy duty vinyl treads.

RatingInstalledDesign LifeUpdated4 - Acceptable198820MAR-07

C2020.06 Carpet Stair Finishes**

Stairs to weight room 1957 wing.

RatingInstalledDesign LifeUpdated4 - Acceptable198810MAR-07

Event: Resurface gymnasium stairs

Concern:

Carpet worn and not suitable for current use of room.

Recommendation:

Install VC tile with rubber nosings on stairs.

TypeYearCostPriorityFailure Replacement2008\$1,000High

Updated: MAR-07

C2020.08 Stair Railings and Balustrades*

Painted steel and wood railings throughout.

1927 basement mechanical room - 4 riser stairs from mechanical room to stairwell does not have a hand rail. Hand rails should be installed (<500).

RatingInstalledDesign LifeUpdated5 - Good050MAR-07

C2020.11 Other Stair Finishes*

Painted concrete in mechanical room.

RatingInstalledDesign LifeUpdated4 - Acceptable198810MAR-07

C2030.01 Ramp Construction*

Concrete ramp in vestibule of 1954 building.

RatingInstalledDesign LifeUpdated5 - Good1988100MAR-07

C2030.02 Ramp Finishes*

Heavy duty sheet linoleum.

RatingInstalledDesign LifeUpdated5 - Good19880MAR-07

C2030.03 Ramp Railings*

Painted Steel.

RatingInstalledDesign LifeUpdated5 - Good198850MAR-07

C3010.01 Concrete Wall Finishes*

Painted concrete and textured stipple.

Paint is delaminating and concrete repairs are required in mechanical room, repaint walls with latex concrete paint when complete (approx \$750).

RatingInstalledDesign LifeUpdated3 - Marginal0100MAR-07

C3010.04 Gypsum Board Wall Finishes*

Painted gypsum board in various locations.

RatingInstalledDesign LifeUpdated4 - Acceptable060MAR-07

C3010.06 Tile Wall Finishes**

In bathrooms and shower rooms

RatingInstalledDesign LifeUpdated4 - Acceptable198840MAR-07

C3010.09 Acoustical Wall Treatment**

Acoustic (fabric over foam) panels on gymnasium walls.

RatingInstalledDesign LifeUpdated4 - Acceptable198830MAR-07

C3010.11 Interior Wall Painting**

Latex paint throughout. Rooms are repainted on an ongoing basis.

RatingInstalledDesign LifeUpdated4 - Acceptable199810MAR-07

Event: Repaint shower rooms in gym-52m2

Concern:

Paint is delaminating on block walls in shower rooms.

Recommendation:

Scrape loose paint and seal walls with fungal resistant latex

paint.

Consequences of Deferral:

Potential for mould growth

TypeYearCostPriorityFailure Replacement2007\$2,600Unassigned

Updated: MAR-07

C3020.01.02 Paint Concrete Floor Finishes**

Mechanical rooms and industrial art shop

RatingInstalledDesign LifeUpdated4 - Acceptable198810MAR-07

Event: Repaint concrete floors (485m2)

TypeYearCostPriorityLifecycle Replacement2010\$28,500Low

Updated: MAR-07

C3020.02 Tile Floor Finishes**

Washrooms and shower room floors and some vestibules

RatingInstalledDesign LifeUpdated4 - Acceptable198850MAR-07

C3020.04 Wood Flooring**

Hardwood floor in gymnasium and on stage.

RatingInstalledDesign LifeUpdated4 - Acceptable198830MAR-07

C3020.07 Resilient Flooring**

VC Tile and sheet linoleum throughout - ages vary - various areas have been replaced since 1988 - overall in good condition.

RatingInstalledDesign LifeUpdated3 - Marginal198820MAR-07

Event: Area Replacement

Concern:

Room 119 has damaged linoleum and seam repairs required in various locations.

Recommendation:

Cut out and replace damaged area (3.2 m2), complete seam repairs in various locations.

TypeYearCostPriorityRepair2007\$3,500Medium

Updated: MAR-07

C3020.08 Carpet Flooring**

Carpet in various locations throughout, age of carpet varies.

RatingInstalledDesign LifeUpdated3 - Marginal199815MAR-07

Event: Install resilient flooring (70 m2)

Concern:

Weight room installed adjacent to gymnasium stage currently has carpet flooring in poor condition. No protection for underlying wood deck.

Recommendation:

Replace carpet with heavy duty PVC/ Rubberized sports floor to protect wood flooring and provide proper substrate.

TypeYearCostPriorityProgram Functional Upgrade2007\$10,000Unassigned

Updated: MAR-07

Event: Replace Carpet (26 m2)

Concern:

Room 109 carpet shows excessive wear and requires replacement.

Recommendation:

Replace with new high traffic fully adhered carpet.

TypeYearCostPriorityFailure Replacement2008\$2,000High

Updated: MAR-07

C3030.04 Gypsum Board Ceiling Finishes*

Storage rooms, mechanical rooms and various locations.

RatingInstalledDesign LifeUpdated4 - Acceptable050MAR-07

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

Throughout hallways and classrooms

RatingInstalledDesign LifeUpdated4 - Acceptable198825MAR-07

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C3030.07 Interior Ceiling Painting**

Latex paint throughout.

RatingInstalledDesign LifeUpdated5 - Good198820MAR-07

Event: Repaint ceiling

Recommendation:

Repaint general office and vestibules with gypsum finishes.

TypeYearCostPriorityLifecycle Replacement2010\$5,000Low

Updated: MAR-07

S4 MECHANICAL

D2010.01 Water Closets**

Floor mounted, flush valve, open front seat, regular and elongated rim bowl. Majority of water closets were installed in 1988 and 1998.

RatingInstalledDesign LifeUpdated4 - Acceptable198835MAR-07

D2010.02 Urinals**

Wall urinal, flush valve. Majority of urinals were installed in 1988 and 1998.

RatingInstalledDesign LifeUpdated4 - Acceptable198835MAR-07

D2010.03 Lavatories**

Porcelain steel or iron enamel bowl, On/off brass.

RatingInstalledDesign LifeUpdated4 - Acceptable198835MAR-07

D2010.04 Sinks**

Stainless steel sinks installed in 1988 and 1998.

RatingInstalledDesign LifeUpdated4 - Acceptable198830MAR-07

D2010.05 Showers**

Central mixing valve, on/off valve, shower head. These showers were installed in 1988.

RatingInstalledDesign LifeUpdated4 - Acceptable198830MAR-07

D2010.08 Drinking Fountains / Coolers**

Vitreous china and stainless steel draining fountains were installed in 1988 and 1998.

RatingInstalledDesign LifeUpdated4 - Acceptable198835MAR-07

D2020.01.01 Pipes and Tubes: Domestic Water*

Copper piping and fittings.

RatingInstalledDesign LifeUpdated4 - Acceptable198840MAR-07

D2020.01.02 Valves: Domestic Water**

Gate isolation valves.

RatingInstalledDesign LifeUpdated4 - Acceptable198840MAR-07

D2020.01.03 Piping Specialties (Backflow Preventors)**

Backflow preventor was installed on heating system cold water makeup line.

RatingInstalledDesign LifeUpdated4 - Acceptable198820MAR-07

Event: Backflow Preventor Replacement

TypeYearCostPriorityLifecycle Replacement2010\$6,300Low

Updated: MAR-07

D2020.02.02 Plumbing Pumps: Domestic Water**

RatingInstalledDesign LifeUpdated4 - Acceptable198820MAR-07

D2020.02.06 Domestic Water Heaters**

Two Jetglas domestic hot water heaters (model: 80T5053N, input 454,500 Btu/hr).

RatingInstalledDesign LifeUpdated4 - Acceptable198820MAR-07

Event: Domestic Hot Water Heater Replacement

TypeYearCostPriorityLifecycle Replacement2010\$21,500Low

Updated: MAR-07

D2020.03 Water Supply Insulation: Domestic*

Majority of domestic hot, cold water and recirculation piping was insulated.

RatingInstalledDesign LifeUpdated4 - Acceptable198830MAR-07

D2030.01 Waste and Vent Piping*

Sanitary sewer piping connects to the town's system.

RatingInstalledDesign LifeUpdated4 - Acceptable198850MAR-07

D2040.02.04 Roof Drains**

Full open, cast iron dome strainers.

RatingInstalledDesign LifeUpdated4 - Acceptable198840MAR-07

D3010.02 Gas Supply Systems*

Gas distribution piping to heating boilers and domestic hot water heaters.

RatingInstalledDesign LifeUpdated4 - Acceptable198860MAR-07

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

Two Raypak water tube boilers (model E3000, input 2,700,000 Btu/hr) heat the entire school.

RatingInstalledDesign LifeUpdated4 - Acceptable198835MAR-07

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

Two chimneys were installed in 1988.

RatingInstalledDesign LifeUpdated4 - Acceptable198830MAR-07

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

Chemical pot feeder.

RatingInstalledDesign LifeUpdated4 - Acceptable198830MAR-07

D3030.06.01 Refrigeration Compressors**

DX cooling coils were installed in air handling unit to service the computer lab at elementary school.

RatingInstalledDesign LifeUpdated4 - Acceptable199825MAR-07

D3040.01.01 Air Handling Units: Air Distribution**

One air handling unit (Engineered Air LM-8-D) installed in 1989 provides ventilation for the administration area. One air handling unit (Engineered Air LM-15-C) provides ventilation for the class rooms. One air handling unit (Engineered Air LM-8-D) provides ventilation for the Gym. One air handling unit (engineered Air LM-8-C) with DX cooling coil provide ventilation for the elementary school. One roof top unit (Engineered Air DGS-95-8) installed in 1989 provide make up air for industrial art area.

RatingInstalledDesign LifeUpdated4 - Acceptable198830MAR-07

D3040.01.03 Air Cleaning Devices: Air Distribution*

Each air system complete with replaceable filter media.

RatingInstalledDesign LifeUpdated4 - Acceptable198830MAR-07

D3040.01.04 Ducts: Air Distribution*

Each air system complete with low velocity supply air ductwork to diffusers or grilles.

RatingInstalledDesign LifeUpdated4 - Acceptable198850MAR-07

D3040.01.07 Air Outlets & Inlets:Air Distribution*

Air outlets vary as to type. Fixed pattern square diffusers, adjustable bar, round, fixed bar, egg crate.

RatingInstalledDesign LifeUpdated4 - Acceptable198830MAR-07

D3040.03.01 Hot Water Distribution Systems**

Inline pumps circulate heated water to radiation, unit heaters and fan coils.

RatingInstalledDesign LifeUpdated4 - Acceptable198840MAR-07

D3040.04.01 Fans: Exhaust**

Exhaust fans vary as to type. Inline, dome, roof centrifugal fans.

RatingInstalledDesign LifeUpdated4 - Acceptable198830MAR-07

D3040.04.03 Ducts: Exhaust*

Low velocity exhaust air ductwork to exhaust air outlets and fans.

Rating	Installed	Design Life	Updated
4 - Acceptable	1988	50	MAR-07

D3040.04.05 Air Outlets and Inlets: Exhaust*

Egg crate and linear bar outlets were installed in 1988 and 1998.

RatingInstalledDesign LifeUpdated4 - Acceptable198830MAR-07

D3040.05 Heat Exchangers**

The plate and frame heat exchanger was installed in 1998 for glycol system.

RatingInstalledDesign LifeUpdated4 - Acceptable199830MAR-07

D3050.01.02 Packaged Rooftop Air Conditioning Units (& Heating Units)**

Bryant DX roof top unit was installed in 1980 to service the common area.

RatingInstalledDesign LifeUpdated4 - Acceptable198030MAR-07

D3050.05.02 Fan Coil Units**

Fan coil units were installed in 1988 and 1998 at the building entrances.

RatingInstalledDesign LifeUpdated4 - Acceptable198830MAR-07

D3050.05.03 Finned Tube Radiation**

Wall finned tube radiation was installed in 1988 to service the junior high and high school sections.

RatingInstalledDesign LifeUpdated4 - Acceptable198840MAR-07

D3050.05.08 Radiant Heating (Ceiling & Floor)**

Ceiling radiation panels were installed in 1998 to service the elementary school section.

RatingInstalledDesign LifeUpdated4 - Acceptable199835MAR-07

D3060.02.03 Pneumatic and Electric Controls

Pneumatic and electric thermostats control wall finned tube radiation, radiation panels, unit heaters and fan coil units.

RatingInstalledDesign LifeUpdated4 - Acceptable198840MAR-07

D3060.02.05 Building Systems Controls (BMCS, EMCS)**

Siemens building control system was installed in 2000.

RatingInstalledDesign LifeUpdated4 - Acceptable200025MAR-07

D4030.01 Fire Extinguisher, Cabinets and Accessories**

Fire extinguishers installed in 1988 and 1998 are located throughout the school and are accessible.

RatingInstalledDesign LifeUpdated4 - Acceptable198830MAR-07

D4090.06 Smoke Protection & Exhaust Fans**

Fire dampers were installed in Engineered Air air handling units.

Rating	<u>Installed</u>	Design Life	<u>Updated</u>
4 - Acceptable	1988	50	MAR-07

S5 ELECTRICAL

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

800A, 120/208V, 3 phase, 4 wire Siemens main distribution complete with 800A main disconnect. Some spare capacity.

RatingInstalledDesign LifeUpdated4 - Acceptable198940MAR-07

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

Branch circuit panels located throughout school with year of installation varying due to multiple school expansions and upgrades over the years. Majority of panels are Siemens/ITE 120/208V, 225A, 42 cct panels installed after 1988.

RatingInstalledDesign LifeUpdated4 - Acceptable198830MAR-07

D5010.07 Motor Control Centers (Motor Control)**

School has two MCC units, one for the Jr/Sr High (1988) and one for Elementary (1998). Both are Siemens 208V, 3phase. With spare capacity.

RatingInstalledDesign LifeUpdated4 - Acceptable198830MAR-07

D5020.01 Electrical Branch Wiring*

Conduit and BX throughout. Some surface wiremold for computer and additional receptacles in classrooms.

RatingInstalledDesign LifeUpdated4 - Acceptable050MAR-07

D5020.02.02.02 Interior Florescent Fixtures**

Primary lighting source in the school is either T8 or T12 fluorescent. Jr/Sr High is still T12 technology and is in need of an upgrade. The elementary side is utilizing T8 fluorescent lamps and electronic ballasts.

RatingInstalledDesign LifeUpdated3 - Marginal198830MAR-07

Event: Jr/Sr High Lighting Upgrade

Concern:

Lighting is inefficient. **Recommendation:**

Retrofit existing fixtures with T8 fluorescent lamps and

electronic ballasts.

TypeYearCostPriorityEnergy Efficiency Upgrade2011\$75,000Medium

Updated: MAR-07

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D5020.02.02.03 Interior Metal Halide Fixture*

Gymnasium uses 400W Metal Halide fixtures.

RatingInstalledDesign LifeUpdated3 - Marginal198830MAR-07

Event: Lighting Upgrade

Recommendation:

Replace old MH fixtures with new 4-lamp T5HO fixtures.

TypeYearCostPriorityLifecycle Replacement2011\$14,500Low

Updated: MAR-07

D5020.02.03.02 Emergency Lighting Battery Packs**

Emergency battery packs complete with remote heads located throughout the school.

RatingInstalledDesign LifeUpdated4 - Acceptable198820MAR-07

D5020.02.03.03 Exit Signs*

Exit Signs have DC connection and utilize incandescent lamps

RatingInstalledDesign LifeUpdated3 - Marginal030MAR-07

Event: Energy Efficiency Upgrade

Concern:

Retrofit existing exit signs with LED retrofit kits

TypeYearCostPriorityEnergy Efficiency Upgrade2011\$1,500Medium

Updated: MAR-07

D5020.03.01.04 Exterior H.P. Sodium Fixtures*

High Pressure Sodium fixtures are located along the perimeter of the school.

RatingInstalledDesign LifeUpdated4 - Acceptable198830MAR-07

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

All exterior lights on photocell control.

RatingInstalledDesign LifeUpdated4 - Acceptable030MAR-07

D5030.01 Detection and Fire Alarm**

Fire alarm panel is an antiquated Edwards 6500. 20 of 24 zones used. Maintenance will become difficult as parts will be hard to locate.

Notification devices for the Jr/Sr High School do not include strobe .

RatingInstalledDesign LifeUpdated3 - Marginal198825MAR-07

Event: Lifecycle Replacement

Concern:

Fire Alarm panel is outdated and will soon reach the end of its life cycle. Maintenance will be difficult since parts are difficult to obtain.

Recommendation:

Replace system with a new addressable fire alarm system including strobe notification for the Jr/Sr High.

TypeYearCostPriorityLifecycle Replacement2011\$100,000Low

Updated: MAR-07

D5030.02.02 Intrusion Detection**

Silent knight Regency security system with PIR motion sensors throughout. Keypad access at front entrance.

RatingInstalledDesign LifeUpdated4 - Acceptable199825MAR-07

D5030.02.04 Video Surveillance**

Video surveillance cameras located throughout the interior and exterior of school. Video Recorder equipment is located in server rack and is monitored in main office.

RatingInstalledDesign LifeUpdated4 - Acceptable200025MAR-07

D5030.03 Clock and Program Systems**

Edwards 2470 Timing System is not used anymore and has been abandoned. Battery operated clocks used instead with bell timing through PA system.

RatingInstalledDesign LifeUpdated4 - Acceptable025MAR-07

D5030.04.01 Telephone Systems**

Cisco Systems 7900 series IP phone system over the data network.

RatingInstalledDesign LifeUpdated5 - Good200625MAR-07

D5030.04.04 Data Systems**

Cat5 cable throughout school. Server cabinet located in custodians office. Dual rack with Cisco and Netconnect switching. Video surveillence recorder equipment mounted on rack. Stand-alone APC Smart-UPS units provides back-up power.

RatingInstalledDesign LifeUpdated4 - Acceptable199825MAR-07

D5030.05 Public Address and Music Systems**

Telcor XL PA system installed in 2006. Tied into phone system and acts as timer for bells.

RatingInstalledDesign LifeUpdated5 - Good200620MAR-07

D5030.06 Television Systems*

Some classrooms equipped with TV sets with VCR/DVD combos and cable.

RatingInstalledDesign LifeUpdated4 - Acceptable020MAR-07

D5090.01 Uninterruptible Power Supply Systems**

Stand-alone APC 1400 Smart-UPS units for server equipment.

RatingInstalledDesign LifeUpdated4 - Acceptable199830MAR-07

S6 EQUIPMENT, FURNISHINGS AND SPECIAL CONSTRUCTION

E1020.02 Library Equipment*

Wall mounted adjustable shelving, free standing wood bookshelves. Various tables and chairs and study carrels.

RatingInstalledDesign LifeUpdated5 - Good025MAR-07

E1020.03 Theater and Stage Equipment*

Stage drapery, pot lighting and sound system

RatingInstalledDesign LifeUpdated4 - Acceptable198825MAR-07

E1020.07 Laboratory Equipment*

Chemical fume hood, acid resistant laminate tops, gas burners and various laboratory equipment, steel chemical storage cabinet and eye wash station.

Rating	<u>Installed</u>	Design Life	<u>Updated</u>
5 - Good	0	25	MAR-07

E1090.04 Residential Equipment*

Electric ranges, refrigerators, stoves, microwaves and dishwasher - in staff room and HEC.

RatingInstalledDesign LifeUpdated4 - Acceptable025MAR-07

E1090.07 Athletic, Recreational, and Therapeutic Equipment*

Electric winch operated folding and fixed basketball nets, scoreboard, clock, various free weights and dedicated equipment, tumbling mats and other various equipment.

Rating	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	15	MAR-07

E2010.02 Fixed Casework**

Upper and lower cabinets with birch and laminate faced doors, laminate counter tops. Open wood casework in some classrooms, standard fittings throughout.

Rating	Installed	Design Life	<u>Updated</u>
5 - Good	1988	35	MAR-07

E2010.03.01 Blinds**

Horizontal and vertical vinyl and / or aluminum blinds in classrooms and offices

RatingInstalledDesign LifeUpdated4 - Acceptable198830MAR-07

E2010.03.06 Curtains and Drapes**

Curtain in HEC room

RatingInstalledDesign LifeUpdated5 - Good198830MAR-07

E2020 Moveable Furnishings*

Desks, chairs, standard office accessories, couches and tables.

RatingInstalledDesign LifeUpdated4 - Acceptable020MAR-07

F1010.02.04 Portable and Mobile Buildings*

Wood framed garage with gravel floor located on north elevation with shingled roof, vinyl siding and sectional overhead door used for maintenance storage shed (55m2)

Rating Installed Design Life Updated
5 - Good 0 25 MAR-07

F1010.02.05 Grandstands and Bleachers**

Folding grandstands, (2) - 6 tier by 4.8m long.

RatingInstalledDesign LifeUpdated4 - Acceptable196550MAR-07

F1020.02.13 Paint Booths*

Industrial arts- finishing booth with exhaust fan for wood working stains and finishes.

RatingInstalledDesign LifeUpdated4 - Acceptable050MAR-07

F2020.01 Asbestos*

None known or reported

RatingInstalledDesign LifeUpdated4 - Acceptable00MAR-07

F2020.04 Mould*

1927 wing - mechanical room, floor and east wall water damaged. See A2020 Basement Walls (& Crawl Space)* 1927 for details.

RatingInstalledDesign LifeUpdated4 - Acceptable00MAR-07

F2020.09 Other Hazardous Materials*

None known or reported.

RatingInstalledDesign LifeUpdated4 - Acceptable00MAR-07

S8 FUNCTIONAL ASSESSMENT

K4010.01 Barrier Free Route: Parking to Entrance

Unrestricted access from front street.

RatingInstalledDesign LifeUpdated5 - Good00MAR-07

K4010.02 Barrier Free Entrances

Wheel chair ramp provided to 1927 building, paddle activated power assists on two sets of entry doors

RatingInstalledDesign LifeUpdated5 - Good00MAR-07

K4010.03 Barrier Free Interior Circulation

Acceptable access throughout, ramp provided at 1954 entry. No provisions for access to second floor in 1927 wing.

RatingInstalledDesign LifeUpdated4 - Acceptable00MAR-07

K4010.04 Barrier Free Washrooms

Barrier free washrooms provided

RatingInstalledDesign LifeUpdated5 - Good00MAR-07

RECAPP Facility Evaluation Report



Daysland School S2990 Daysland

Daysland - Daysland School (S2990)

Facility Details

Building Name: Daysland School

Address:

Location: Daysland

Building Id: \$2990
Gross Area (sq. m): 0.00
Replacement Cost: \$0
Construction Year: 0

Evaluation Details

Evaluation Company: Wade Engineering Ltd.

Evaluation Date: December 6 2006

Evaluator Name: Ron Shannon

Total Maintenance Events Next 5 years: \$48,700 5 year Facility Condition Index (FCI): 0%

General Summary:

Situated in the town of Daysland, Alberta; site borders main street on east elevation with road way on south and west elevations. Bus lane at front street with school parking provided on the north east corner and west elevation outside perimeter fencing. A large grassed site with mature trees, play structures, asphalt surfaced basketball court, and a football field surrounded by a dirt track. Site slopes from south east to north west with localized grading problems on the north elevation and in the courtyard area by the 1954 wing. Concrete replacement required in a few locations and west entry steps to 1927 wing require replacement.

Overall condition is acceptable.

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

G1030 Site Earthwork (Site Grading)*

General site grading slopes from south east to north west.

Localized grading problems result in back slope to the foundation at the north east corner and in the courtyard area between the 1954 wing and 1963 addition. Repair will some re-sloping and new sod along south elevation of 1963 addition and west side of 1954 addition to redirect surface drainage to adjacent field. Sidewalks will need to be replaced, repair costs are included in [G2030.04 Rigid Pedestrian Pavement (Concrete)**]

Rating	<u>Installed</u>	Design Life	<u>Updated</u>
4 - Acceptable	0	50	MAR-07

G2020.02.01 Aggregate Parking Lots (Gravel)**

Southwest along fence line at street, northeast corner by shed.

Rating	<u>Installed</u>	Design Life	Updated
4 - Acceptable	1988	10	MAR-07

Event: Fill pot holes as requried

Concern:

Parking surfaces are in good condition overall. Minor pot holes to be filled on a periodic basis.

TypeYearCostPriorityPreventative Maintenance2008\$1,500Medium

Updated: MAR-07

Event: Resurface gravel parking

TypeYearCostPriorityLifecycle Replacement2010\$6,200Low

Updated: MAR-07

G2020.06.01 Traffic Barriers*

Concrete filled steel bollards at overhead door to IA shop.

Rating	<u>Installed</u>	Design Life	<u>Updated</u>
5 - Good	1988	25	MAR-07

G2020.06.03 Parking Lot Signs*

Staff parking signs on fence.

Rating	<u>Installed</u>	Design Life	<u>Updated</u>
4 - Acceptable	0	25	MAR-07

G2030.04 Rigid Pedestrian Pavement (Concrete)**

Theoretical life is incorrect.

Sidewalks on northeast elevation and southwest along 1963 addition and west elevation of 1927 building and link. Sidewalks from front street to main entrances.

RatingInstalledDesign LifeUpdated3 - Marginal196315MAR-07

Event: Sidewalk Replacement (176m2)

Concern:

Localized grading problems result in back slope to the foundation at the north east corner and in the courtyard area between the 1954 wing and 1963 addition. Standing water and ice formation is a constant concern.

Sections of sidewalk have improper slope and collect water and grade requires correction. Localized sidewalk failures in three locations.

Recommendation:

Replace damaged sections of sidewalk, remove sidewalks and re-slope grade and replace sod along south elevation of 1963 addition and west side of 1954 addition to redirect surface drainage to adjacent field. Pour new sidewalks after completion of grade corrections.

Consequences of Deferral:

Safety concerns and water entry into vestibules.

TypeYearCostPriorityFailure Replacement2007\$41,000Unassigned

Updated: MAR-07

G2040.02 Fences and Gates**

Galvanized fencing around west and north elevations. One gate installed by staff parking.

RatingInstalledDesign LifeUpdated5 - Good198830MAR-07

G2040.03 Athletic and Recreational Surfaces**

Asphalt basketball court. Sand filled volley ball court. Football field with surrounding dirt running track.

RatingInstalledDesign LifeUpdated4 - Acceptable198825MAR-07

G2040.04 Athletic and Recreational Equipment*

New playground equipment in two locations.

RatingInstalledDesign LifeUpdated5 - Good010MAR-07

G2040.06 Exterior Signs*

Bus loading, school identification.

RatingInstalledDesign LifeUpdated5 - Good025MAR-07

G2040.08 Flagpoles*

One flagpole.

RatingInstalledDesign LifeUpdated4 - Acceptable030MAR-07

G2050.04 Lawns and Grasses*

RatingInstalledDesign LifeUpdated4 - Acceptable198815MAR-07

G2050.05 Trees, Plants and Ground Covers*

Various deciduous and evergreen trees, and shrubs on site.

RatingInstalledDesign LifeUpdated4 - Acceptable010MAR-07

G2050.07 Planting Accessories*

Concrete planters at east elevation by ramp.

RatingInstalledDesign LifeUpdated5 - Good010MAR-07

G3010.02 Site Domestic Water Distribution*

Town service.

RatingInstalledDesign LifeUpdated4 - Acceptable050MAR-07

G3010.03 Site Fire Protection Water Distribution*

2 hydrants on east elevation, within 20 meters of school.

RatingInstalledDesign LifeUpdated4 - Acceptable050MAR-07

G3020.01 Sanitary Sewage Collection*

Town service.

RatingInstalledDesign LifeUpdated4 - Acceptable050MAR-07

G3030.01 Storm Water Collection*

Surface drainage.

RatingInstalledDesign LifeUpdated4 - Acceptable050MAR-07

G3060.01 Gas Distribution*

Natural Gas distribution

RatingInstalledDesign LifeUpdated4 - Acceptable050MAR-07

G4010.01 Electrical Substations*

Pad mounted transformer behind 1927 wing.

RatingInstalledDesign LifeUpdated4 - Acceptable050MAR-07

G4010.02 Electrical Power Distribution Lines*

Underground service.

RatingInstalledDesign LifeUpdated4 - Acceptable050MAR-07

G4010.04 Car Plugs-ins*

Staff parking.

RatingInstalledDesign LifeUpdated4 - Acceptable025MAR-07

G4020.01 Area Lighting*

RatingInstalledDesign LifeUpdated4 - Acceptable025MAR-07

G4030.03.02 Microwave Transmission and Reception Equipment

Internet tower.

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