RECAPP Facility Evaluation Report

Grande Yellowhead Reg Div #35



Sheldon Coates Elementary School

B3489A Grande Cache

Grande Cache - Sheldon Coates Elementary School (B3489A)

Facility Details

Building Name: Sheldon Coates Elementary

Address: P. O. Box 30
Location: Grande Cache

Building Id: B3489A
Gross Area (sq. m): 1,913.50
Replacement Cost: \$5,421,547
Construction Year: 1976

Evaluation Details

Evaluation Company: Wade Engineering

Evaluation Date: October 24 2007

Evaluator Name: Mike Pangman/Ron Shannon

Total Maintenance Events Next 5 years: \$698,469 5 year Facility Condition Index (FCI): 12.88%

General Summary:

Located in the town of Grande Cache, with a current enrollment of 172 students the school serves K - 3. Originally constructed in 1976, portables were added in 1981 &1992. All original portables have been removed with one new portable added in 2007. Interior modernization of staff and counseling areas was completed in 1992.

Structural Summary:

Slab on grade with standard strip footing foundations, concrete block and structural steel construction. OWSJ and steel Q deck. Elevation change for gym which sits approx. 1m below rest of school.

Overall condition is Good.

Envelope Summary:

Veneer brick face details most of the school with small area of stucco at main entry and concrete block around gymnasium. Vinyl windows and steel doors with wood canopies and fascia details above. Majority of roofing has been replaced over the past 2 years with the remaining portion expected to be completed in 2008. Plans not available for detailed wall construction, but believe to include 50mm rigid insulation and air barrier.

Overall condition is Good.

Interior Summary:

Painted block, suspended T-Bar acoustic ceiling, sheet lino and VC tile flooring throughout with wood gym floor and nominal carpet. Barrier free compliance requires stair lift required to gymnasium and power assist door entry access.

Overall condition is Acceptable.

Mechanical Summary:

The overall condition is acceptable. The existing mechanical system consists of a hot water heating system, using the perimeter radiation system for general office area and classroom application. Gymnasium is heated and ventilated by air handling unit. Entire heating and ventilation system is in fair condition. A few items are behind on their lifecycle replacements. - Waste piping. - Water treatment equipment. - Portable furnaces. - AHUs. - Hot water ditribution system. - Air in and outlets. - Air coil.

Electrical Summary:

Many electrical sub-panels are at capacity and should be upgraded. Some emergency lighting and exit signage needs upgrading. Exterior security lighting and controls need repair. PA/Music system must be replaced. Overall condition is acceptable.

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*

Grade beam on strip footings

RatingInstalledDesign LifeUpdated4 - Acceptable19760MAR-08

A1030 Slab on Grade*

Slab on grade throughout.

RatingInstalledDesign LifeUpdated4 - Acceptable19760MAR-08

B1010.01 Floor Structural Frame (Building Frame)*

Concrete block

RatingInstalledDesign LifeUpdated4 - Acceptable19760MAR-08

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

Concrete block

RatingInstalledDesign LifeUpdated4 - Acceptable19760MAR-08

B1010.09 Floor Construction Fireproofing*

Non-combustible construction.

RatingInstalledDesign LifeUpdated4 - Acceptable19760MAR-08

B1020.01 Roof Structural Frame*

OWSJ and steel Q deck supported on concrete block and Steel I beam.

RatingInstalledDesign LifeUpdated4 - Acceptable19760MAR-08

B1020.06 Roof Construction Fireproofing*

Fire proof inserts where required with coating applied where necessary when visible.

RatingInstalledDesign LifeUpdated4 - Acceptable19760MAR-08

S2 ENVELOPE

B2010.01.02.01 Brick Masonry: Ext. Wall Skin*

Veneer face brick on majority of school

RatingInstalledDesign LifeUpdated4 - Acceptable197675MAR-08

B2010.01.02.02 Concrete Block: Ext. Wall Skin*

Painted concrete block wall around gymnasium.

RatingInstalledDesign LifeUpdated4 - Acceptable197675MAR-08

B2010.01.06.02 Composite Panels*

Fiberglass panels beneath window openings.

RatingInstalledDesign LifeUpdated4 - Acceptable00MAR-08

B2010.01.06.04 Wood Siding**

Painted cedar siding canopies over window and doors

RatingInstalledDesign LifeUpdated4 - Acceptable197640MAR-08

Event: Replace wood siding on canopies - 48m2

TypeYearCostPriorityLifecycle Replacement2016\$5,949Unassigned

Updated: APR-08

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

Small area of stucco by main entry with acrylic dormer window insert.

RatingInstalledDesign LifeUpdated4 - Acceptable197675MAR-08

B2010.01.09 Expansion Control: Exterior Wall Skin*

Masonry control joints

RatingInstalledDesign LifeUpdated4 - Acceptable19760MAR-08

B2010.01.11 Joint Sealers (caulking): Ext. Wall - 1976 Section**

Caulking around windows and doors

RatingInstalledDesign LifeUpdated2 - Poor198820MAR-08

Event: Replace exterior caulking - 122m

Concern:

Window and door sealants have failed.

Recommendation:

Cut out and replace with new backer rod and Urethane caulking

TypeYearCostPriorityFailure Replacement2008\$6,864Medium

Updated: APR-08

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

RatingInstalledDesign LifeUpdated3 - Marginal199015MAR-08

Event: Paint Exterior Wall (226m2)

Concern:

Exterior gym wall paint is peeling and cracking.

Recommendation: Repaint gym walls.

TypeYearCostPriorityFailure Replacement2011\$6,978Low

Updated: APR-08

B2010.02.03 Masonry Units: Ext. Wall Const. - 1976 Section*

Concrete block walls

RatingInstalledDesign LifeUpdated4 - Acceptable19760MAR-08

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

No plans to confirm but assumed to have air space with ridged insulation min. 25mm.

RatingInstalledDesign LifeUpdated4 - Acceptable19760MAR-08

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B2010.09 Exterior Soffits - 1976 Section*

T & G cedar soffit beneath window and entrance door canopies.

RatingInstalledDesign LifeUpdated4 - Acceptable19760MAR-08

B2020.01.01.06 Vinyl, Fibreglass &Plastic Windows**

Acrylic domed window (skylight style) on vertical plane by main entrance.

RatingInstalledDesign LifeUpdated4 - Acceptable198840MAR-08

Event: Replace domed window.

TypeYearCostPriorityLifecycle Replacement2018\$2,288Unassigned

Updated: MAR-08

B2020.01.01.06 Vinyl, Fibreglass &Plastic Windows**

Vinyl windows with lower insulated spandrel panels and horizontal sliders

RatingInstalledDesign LifeUpdated4 - Acceptable198840MAR-08

Event: Replace windows - 50.4m2

TypeYearCostPriorityLifecycle Replacement2028\$40,326Unassigned

Updated: APR-08

B2030.01.02 Steel-Framed Storefronts: Doors**

RatingInstalledDesign LifeUpdated4 - Acceptable197630MAR-08

Event: Replace Exterior Entrance Doors (18 panels)

TypeYearCostPriorityLifecycle Replacement2013\$60,518Unassigned

Updated: APR-08

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B2030.02 Exterior Utility Doors**

One single and one double panel doors accessing gym and staff areas.

RatingInstalledDesign LifeUpdated4 - Acceptable197640MAR-08

Event: Replace Exterior Utility Doors (3 panels)

TypeYearCostPriorityLifecycle Replacement2013\$2,974Unassigned

Updated: APR-08

B3010.01 Deck Vapor Retarder and Insulation*

2 ply #15 felt fully adhered in hot asphalt vapour retardant and sloped Type II EPS with 25mm fiberboard insulation package average R20

RatingInstalledDesign LifeUpdated5 - Good19760MAR-08

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

4 ply BUR roof over west side of facility

RatingInstalledDesign LifeUpdated2 - Poor197625MAR-08

Event: Replace BUR (590m2)

Concern:

Original BUR roof over west class rooms is beyond expected life with extensive blistering and exposed felt evident.

Recommendation:

Replace balance of original roof. We understand this work has been approved for completion in 2008.

TypeYearCostPriorityFailure Replacement2008\$181,667High

Updated: APR-08

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

SBS roofing has replaced original roofing over the past 3 years.

RatingInstalledDesign LifeUpdated5 - Good200525MAR-08

Event: Replace SBS roof (1323m2)

TypeYearCostPriorityLifecycle Replacement2030\$407,264Unassigned

Updated: APR-08

B3020.02 Other Roofing Openings (Hatch, Vent, etc) - 1976 Section*

Mechanical, electrical vents and openings together with roof access hatch.

RatingInstalledDesign LifeUpdated4 - Acceptable19760MAR-08

S3 INTERIOR

C1010.01.03 Unit Masonry Assemblies: Partitions -

Concrete block walls.

RatingInstalledDesign LifeUpdated4 - Acceptable19760MAR-08

C1010.02 Interior Demountable Partitions*

Wood veneer finish on partition wall installed behind stage curtain creating computer lab. Additional partitions located in administration area.

RatingInstalledDesign LifeUpdated4 - Acceptable19970MAR-08

C1010.05 Interior Windows*

Reinforced glazing set in steel frames at various locations.

RatingInstalledDesign LifeUpdated4 - Acceptable19760MAR-08

C1010.05.11 Pass Windows

Wood rollup screen located in staff/canteen for food pass through.

RatingInstalledDesign LifeUpdated5 - Good19760MAR-08

C1010.07 Interior Partition Firestopping*

Fire rated GWB and blocking inserted where required when visible.

RatingInstalledDesign LifeUpdated4 - Acceptable19760MAR-08

C1020.01 Interior Swinging Doors (& Hardware)*

Wood solid core doors into class rooms and other areas

RatingInstalledDesign LifeUpdated4 - Acceptable197640MAR-08

C1020.03 Interior Fire Doors*

Two sets of double panel fire doors in halls and fire rated doors at mechanical, janitorial, and storage locations.

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

C1020.04 Interior Sliding and Folding Doors*

Glass with aluminum frame slider for entry to administration.

RatingInstalledDesign LifeUpdated4 - Acceptable19760MAR-08

C1030.01 Visual Display Boards**

Standard chalk, tack and white boards throughout the school. Several Display cases are scattered through school halls.

RatingInstalledDesign LifeUpdated4 - Acceptable197620MAR-08

Event: Replace Visual Display Boards (66)

TypeYearCostPriorityLifecycle Replacement2020\$70,814Unassigned

Updated: APR-08

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

Painted steel W/C compartments in wash rooms.

RatingInstalledDesign LifeUpdated4 - Acceptable197630MAR-08

Event: Replace Fabricated Compartments (12)

TypeYearCostPriorityLifecycle Replacement2016\$20,363Unassigned

Updated: APR-08

C1030.08 Interior Identifying Devices*

Emergency exit, class room identification, and directional signs throughout.

RatingInstalledDesign LifeUpdated4 - Acceptable19760MAR-08

C1030.12 Storage Shelving*

Steel and wood, fixed and adjustable standard shelving units.

RatingInstalledDesign LifeUpdated4 - Acceptable19760MAR-08

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C1030.14 Toilet, Bath, and Laundry Accessories*

Plastic: toilet paper, soap and paper towel dispensers in all wash rooms.

RatingInstalledDesign LifeUpdated4 - Acceptable19760MAR-08

C2010.04 Wood Stair Construction

Stairs leading from main hall down to gym and a second set leading from the gym up to the stage.

RatingInstalledDesign LifeUpdated4 - Acceptable19760MAR-08

C2020.05 Resilient Stair Finishes**

Rubber tread and nosing on both sets of stairs.

RatingInstalledDesign LifeUpdated4 - Acceptable197620MAR-08

Event: Replace Stair treads (5m2)

TypeYearCostPriorityLifecycle Replacement2018\$1,373Unassigned

Updated: APR-08

C2020.08 Stair Railings and Balustrades*

Single and double hand rails of 37mm X 140mm for both sets of stairs.

RatingInstalledDesign LifeUpdated4 - Acceptable197640MAR-08

C3010.02 Wall Paneling**

Varnished cedar T & G accent wall around stage opening in gym.

RatingInstalledDesign LifeUpdated4 - Acceptable197630MAR-08

Event: Replace Wall Paneling (28m2)

TypeYearCostPriorityLifecycle Replacement2020\$5,834Unassigned

Updated: APR-08

C3010.06 Tile Wall Finishes**

100mm sq. Ceramic tile wall finish in wash rooms

RatingInstalledDesign LifeUpdated5 - Good197640MAR-08

Event: Replace Tile Wall Finishes (180m2)

TypeYearCostPriorityLifecycle Replacement2016\$60,746Unassigned

Updated: APR-08

C3010.11 Interior Wall Painting*

Painted concrete block and GWB partitions throughout the school, re-coated as needed under operational maintenance.

RatingInstalledDesign LifeUpdated4 - Acceptable197610MAR-08

C3020.01.02 Paint Concrete Floor Finishes*

Painted floors in mechanical and janitorial rooms.

RatingInstalledDesign LifeUpdated4 - Acceptable197610MAR-08

C3020.02 Tile Floor Finishes**

Mosaic ceramic tile in all wash rooms

RatingInstalledDesign LifeUpdated4 - Acceptable197650MAR-08

Event: Replace Tile Floor Finishes (67m2)

TypeYearCostPriorityLifecycle Replacement2026\$22,766Unassigned

Updated: APR-08

C3020.04 Wood Flooring**

Sport cushioned wood floor in gym.

RatingInstalledDesign LifeUpdated4 - Acceptable197630MAR-08

Event: Replace Gym Floor (223m2)

TypeYearCostPriorityLifecycle Replacement2012\$89,118Unassigned

Updated: APR-08

C3020.07 Resilient Flooring - Sheet**

Sheet vinyl flooring located in staff, gym storage and science room together with all hall areas.

RatingInstalledDesign LifeUpdated5 - Good199220MAR-08

Event: Replace Resilient Sheet Flooring (799m2)

TypeYearCostPriorityLifecycle Replacement2020\$108,108Unassigned

Updated: APR-08

C3020.07 Resilient Flooring - Tile - 1992**

VC tile located through most of the classrooms and administration areas.

RatingInstalledDesign LifeUpdated4 - Acceptable199220MAR-08

Event: Replace VC tile (575m2)

TypeYearCostPriorityLifecycle Replacement2022\$38,324Unassigned

Updated: APR-08

C3020.07 Resilient Flooring - Tile - 2000**

VC tile flooring located in councilors offices.

RatingInstalledDesign LifeUpdated5 - Good200020MAR-08

Event: Replace VC tile (27m2)

TypeYearCostPriorityLifecycle Replacement2025\$1,830Unassigned

Updated: APR-08

C3020.08 Carpet Flooring**

High volume low pile carpeting located in library.

RatingInstalledDesign LifeUpdated6 - Excellent200715MAR-08

Event: Replace Carpet Flooring (137m2)

TypeYearCostPriorityLifecycle Replacement2022\$16,817Unassigned

Updated: APR-08

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

Acoustic tile ceiling throughout entire school except gym and mechanical rooms.

RatingInstalledDesign LifeUpdated5 - Good197625MAR-08

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

(1619m2)

TypeYearCostPriorityLifecycle Replacement2018\$104,447Unassigned

Updated: APR-08

C3030.07 Interior Ceiling Painting*

Painted underside of Steel Q Deck in gym and mechanical rooms.

RatingInstalledDesign LifeUpdated4 - Acceptable197620MAR-08

S4 MECHANICAL

D2010.04 Sinks - **

Stainless kitchen and Iron janitorial sinks are original 1976.

RatingInstalledDesign LifeUpdated4 - Acceptable197630MAR-08

Event: Replace Sinks (2)

TypeYearCostPriorityLifecycle Replacement2012\$4,576Unassigned

Updated: APR-08

D2010.08 Drinking Fountains / Coolers - **

All drinking fountains are original 1976 ceramic.

RatingInstalledDesign LifeUpdated4 - Acceptable197635MAR-08

Event: Replace Fountains (3)

TypeYearCostPriorityLifecycle Replacement2012\$6,635Unassigned

Updated: APR-08

D2010.10 Washroom Fixtures (WC, Lav, Urnl) - 1976**

Original washroom equipment installed 1976. Additional disabled washroom equipment replaced 2002. Standard vitreous China flush tank WC's floor standing urinals and vitreous China lavatories.

RatingInstalledDesign LifeUpdated4 - Acceptable197630MAR-08

Event: Replace Fixtures WC (12) Lav (8) Urnl (4)

TypeYearCostPriorityLifecycle Replacement2012\$36,608Unassigned

Updated: APR-08

D2010.10 Washroom Fixtures (WC, Lav, Urnl) - 2002**

Refer to Section D2010.10 Washroom Fixtures (WC, Lav, Urnl) - 1976.

RatingInstalledDesign LifeUpdated4 - Acceptable200235MAR-08

Event: Replace Fixtures WC (1) Lav (1)

TypeYearCostPriorityLifecycle Replacement2037\$3,546Unassigned

Updated: APR-08

D2020.01.01 Pipes and Tubes: Domestic Water - *

All visible piping inspected was copper.

RatingInstalledDesign LifeUpdated4 - Acceptable19760MAR-08

D2020.01.02 Valves: Domestic Water - **

Main domestic water valve in the mechanical room appears to be in reasonable condition.

RatingInstalledDesign LifeUpdated4 - Acceptable197640MAR-08

Event: Replace Valves: Domestic Water (1)

TypeYearCostPriorityLifecycle Replacement2016\$1,144Unassigned

Updated: APR-08

D2020.02.02 Plumbing Pumps: Domestic Water - **

Motor has been changed already around 1996 however the remaining pump is original.

RatingInstalledDesign LifeUpdated4 - Acceptable197620MAR-08

Event: Replace plumbing pump & motor (1)

TypeYearCostPriorityLifecycle Replacement2028\$3,432Unassigned

Updated: APR-08

Event: Replacement pump

Concern:

The circulation pumps bearing assembly is starting to wear and may fail.

Recommendation:

Replace the bearing assembly

Consequences of Deferral:

Possible failure of the circulation pump, this would mean long lag times on hot water supplies throughout the building.

TypeYearCostPriorityFailure Replacement2008\$1,144Low

Updated: MAR-08

D2020.02.06 Domestic Water Heaters - **

1 (189L) DHW tank heater replaced in 2000.

RatingInstalledDesign LifeUpdated4 - Acceptable200020MAR-08

Event: Replace Domestic Water Heaters (1)

TypeYearCostPriorityLifecycle Replacement2020\$8,466Unassigned

Updated: APR-08

D2020.03 Water Supply Insulation: Domestic - *

The majority of piping was well insulated. No insulation was unwrapped for visible inspection of insulation type.

RatingInstalledDesign LifeUpdated4 - Acceptable19760MAR-08

D2030.01 Waste and Vent Piping - *

The cast waste & vent piping runs through the internal walls directly to the rooftop directly above and the waste system below.

RatingInstalledDesign LifeUpdated4 - Acceptable19760MAR-08

D2030.03 Waste Piping Equipment - *

Waste piping equipment is original. None was visible for inspection.

RatingInstalledDesign LifeUpdated4 - Acceptable19760MAR-08

D2040.01 Rain Water Drainage Piping Systems - *

Cast rain water drainage pipes take the rain water through the building and to the municipal drainage system.

RatingInstalledDesign LifeUpdated4 - Acceptable19760MAR-08

D2040.02.04 Roof Drains - *

All roof drains are original. Some (2) of the roof drains have no screen on them, with the remainder having cast screens.

RatingInstalledDesign LifeUpdated4 - Acceptable197640MAR-08

D3010.02 Gas Supply Systems - *

The gas supply system is original. Some leaks have been repaired. The system comes up from under the ground outside the mechanical room and then through the wall to feed the heating and DHW system.

RatingInstalledDesign LifeUpdated4 - Acceptable197660MAR-08

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

Boilers are original 1976, the sediment traps were about to be replaced when the site was visited. No power figures where found on the boilers however the size and age indicate they are likely in the 500kW range

RatingInstalledDesign LifeUpdated4 - Acceptable197635MAR-08

Event: Replace Heating Boilers and Accessories (2)

TypeYearCostPriorityLifecycle Replacement2012\$52,166Unassigned

Updated: APR-08

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

Individual steel chimneys from each boiler join together into one before going through the roof. These chimneys are original and were installed with the boilers in 1976.

RatingInstalledDesign LifeUpdated4 - Acceptable197630MAR-08

Event: Replace Chimneys (2)

TypeYearCostPriorityLifecycle Replacement2012\$8,351Unassigned

Updated: APR-08

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

A standard funnel and valve system were installed originally for additional water treatment chemicals. The system continues to work well.

RatingInstalledDesign LifeUpdated4 - Acceptable19760MAR-08

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

2 AHUs installed in 1976 as original equipment. No make or capacity information was available. LCR costing was based on floor area of the building.

RatingInstalledDesign LifeUpdated4 - Acceptable197630MAR-08

Event: Replace AHUs

TypeYearCostPriorityLifecycle Replacement2012\$103,532Unassigned

Updated: APR-08

D3040.01.03 Air Cleaning Devices: Air Distribution - *

The casing is original 1976 and filters are changed regularly.

RatingInstalledDesign LifeUpdated4 - Acceptable19760MAR-08

D3040.01.04 Ducts: Air Distribution - *

All air ducting is original 1976 feeding through the roof space

RatingInstalledDesign LifeUpdated4 - Acceptable19760MAR-08

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

The current in and outlets are a mixture of types, however they are all operating well.

RatingInstalledDesign LifeUpdated4 - Acceptable19760MAR-08

D3040.03.01 Hot Water Distribution Systems - **

The hot water distribution system is currently the Victaulic piping technology. This is proving prone to leakages. It is recommended that all the Victaulic piping is removed in the 2016 life cycle replacement. Piping replacements costs are based on floor area of the school as access all piping was not visible.

RatingInstalledDesign LifeUpdated3 - Marginal197640MAR-08

Event: Repair Distribution System (200m2)

Concern:

The Victaulic piping technology is starting to have leaks where the seals no longer join properly. This is due to expansion and contraction of the metals over time wearing the seal.

Recommendation:

Replace leaking piping with a new copper piping and conventional joint techniques. Budget to keep the leaks under control until the piping life cycle finishes in 2016.

Consequences of Deferral:

More leaks may develop and water damage be caused.

TypeYearCostPriorityRepair2008\$24,024Medium

Updated: APR-08

Event: Replace Hot Water Distribution (1914m2)

TypeYearCostPriorityLifecycle Replacement2016\$223,424Unassigned

Updated: APR-08

D3040.04.01 Fans: Exhaust - **

Rooftop exhaust fans are positioned above the washrooms and kitchen.

RatingInstalledDesign LifeUpdated4 - Acceptable197630MAR-08

Event: Replace exhaust fans (3)

TypeYearCostPriorityLifecycle Replacement2012\$5,834Unassigned

Updated: APR-08

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D3040.04.03 Ducts: Exhaust - *

Exhaust ducting goes through the roof space up to the exhaust fans on the top of the building. With a grill over one end and an exhaust fan on the roof the type of ducting material could not be seen.

RatingInstalledDesign LifeUpdated4 - Acceptable19760MAR-08

D3040.04.05 Air Outlets and Inlets: Exhaust - *

The low velocity exhaust system has egg crate grills in the internal side and rooftop exhaust fans externally.

RatingInstalledDesign LifeUpdated4 - Acceptable19760MAR-08

D3050.02 Air Coils - **

The library has an air coil to increase the heating there.

RatingInstalledDesign LifeUpdated4 - Acceptable197630MAR-08

Event: Replace Air Coil (1)

TypeYearCostPriorityLifecycle Replacement2012\$6,349Unassigned

Updated: APR-08

D3050.05.02 Fan Coil Units - **

There are fan coil units in each of the entranceways

RatingInstalledDesign LifeUpdated4 - Acceptable197630MAR-08

Event: Replace Fan Coil Units (5)

TypeYearCostPriorityLifecycle Replacement2012\$14,186Unassigned

Updated: APR-08

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D3050.05.03 Finned Tube Radiation**

Finned tube radiation runs around the perimeter of the school. It is original equipment.

RatingInstalledDesign LifeUpdated4 - Acceptable197640MAR-08

Event: Replace Finned Tube Radiation (175m)

TypeYearCostPriorityLifecycle Replacement2026\$90,376Unassigned

Updated: APR-08

D3060.02.01 Electric and Electronic Controls**

Parts of a new DDC system were installed in 2006.

RatingInstalledDesign LifeUpdated5 - Good200630MAR-08

Event: Replace Controls (6)

TypeYearCostPriorityLifecycle Replacement2036\$11,440Unassigned

Updated: APR-08

D3060.02.02 Pneumatic Controls**

The building currently uses pneumatic thermostats and controls together with and air compressor in the mechanical room to run the buildings systems. Budget to replace with DDC controls.

RatingInstalledDesign LifeUpdated4 - Acceptable197640MAR-08

Event: Replace Pneumatic Controls BMS (1) DDC (10)

TypeYearCostPriorityLifecycle Replacement2016\$32,032Unassigned

Updated: APR-08

D4030.01 Fire Extinguisher, Cabinets and Accessories - *

Extinguishers, cabinets and accessory maintenance appear to be up to date.

RatingInstalledDesign LifeUpdated4 - Acceptable197630MAR-08

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S5 ELECTRICAL

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

120/208V, 3ph, 4W, 800A service.

Condition satisfactory, no problems found or reported.

Installed by Peace River Electrical, 1977

New digital meter installed by ATCO Electric, date unknown.

RatingInstalledDesign LifeUpdated4 - Acceptable197740MAR-08

Capacity Size Capacity Unit amps

Event: Replace Main Electrical Switchboards (1)

TypeYearCostPriorityLifecycle Replacement2017\$63,378Unassigned

Updated: APR-08

D5010.05 Electrical Branch Circuit Panelboards (Secondary Distribution) - 1977**

All Westinghouse panels (42 cct.) are past their predicted life cycle and 100% full.

Two new Cutler-Hammer (30) and Federal Pioneer (32) panels were installed in '92 modernization and are 60% full.

RatingInstalledDesign LifeUpdated3 - Marginal197730MAR-08

Event: Replacement Branch Circuit Panelboards (6)

Concern:

Panels are at capacity and past expected life cycle.

Recommendation:
Replace old sub-panels.
Consequences of Deferral:

No room to expand. Possible circuit failure.

TypeYearCostPriorityFailure Replacement2008\$41,870Medium

Updated: APR-08

Event: Replace Branch Circuit Panelboards (6)

TypeYearCostPriorityFailure Replacement2039\$41,870Unassigned

Updated: MAR-08

Grande Cache - Sheldon Coates Elementary School (B3489A)

D5010.05 Electrical Branch Circuit Panelboards (Secondary Distribution) - 1992**

All Westinghouse panels (42 cct.) are past their predicted life cycle and 100% full.

Two new Cutler-Hammer (30) and Federal Pioneer (32) panels were installed in '92 modernization and are 60% full.

RatingInstalledDesign LifeUpdated4 - Acceptable199230MAR-08

Event: Replace Circuit Boards (2)

TypeYearCostPriorityLifecycle Replacement2012\$13,957Unassigned

Updated: APR-08

D5010.07.01 Switchboards, Panelboards, and Motor Control Centers**

New Siemens Apogee (networked) unit installed 2007.

RatingInstalledDesign LifeUpdated6 - Excellent200730APR-08

Event: Replace Motor Control Center (1)

TypeYearCostPriorityLifecycle Replacement2027\$50,565Unassigned

Updated: MAR-08

D5010.07.02 Motor Starters and Accessories - **

Motor starters are original

RatingInstalledDesign LifeUpdated4 - Acceptable197730MAR-08

Event: Replace Motor Starters and Accessories (7)

TypeYearCostPriorityLifecycle Replacement2012\$12,012Unassigned

Updated: APR-08

D5020.01 Electrical Branch Wiring - *

Cu wiring has no reported or observed problems. According to plans, additional wiring installed with 1981 potables and 1992 modernization.

RatingInstalledDesign LifeUpdated4 - Acceptable19770MAR-08

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D5020.02.01 Lighting Accessories (Lighting Controls) - *

Local switches for classrooms and dimmer controls for stage operating normally. No problems reported.

RatingInstalledDesign LifeUpdated4 - Acceptable19760MAR-08

D5020.02.02.01 Interior Incandescent Fixtures - *

A few incandescent fixtures in the front lobby ceiling and elsewhere. Suggest retrofitting to compact fluorescent reflector lamps.

RatingInstalledDesign LifeUpdated4 - Acceptable197630MAR-08

D5020.02.02.02 Interior Florescent Fixtures - **

Retrofit completed in 1993; double T-12s often reduced to one T8 w electronic ballast or new fixture.

RatingInstalledDesign LifeUpdated4 - Acceptable199330MAR-08

Event: Replace Interior Florescent Fixtures (400)

TypeYearCostPriorityLifecycle Replacement2023\$217,246Low

Updated: APR-08

D5020.02.02.05 Other Interior Fixtures - *

Some compact fluorescents in use throughout.

RatingInstalledDesign LifeUpdated4 - Acceptable19930MAR-08

D5020.02.03.02 Emergency Lighting Battery Packs - 1976**

Old Readylite ('77) and new Lumacell lights ('92) installed throughout. Original units now beyond estimated life cycle (see pic)

RatingInstalledDesign LifeUpdated3 - Marginal197620MAR-08



DSC01939.jpg

Event: Replace Emergency Lighting Battery Packs (3)

TypeYearCostPriorityLifecycle Replacement2028\$5,034Unassigned

Updated: MAR-08

Event: Replace Emergency Lighting Battery Packs (3)

Concern:

Original ReadyLite dual incandescent units are well beyond estimated life cycle. Parts are no longer available.

Recommendation: Replace older units.

Consequences of Deferral:

Possible failure of circuitry.

TypeYearCostPriorityFailure Replacement2008\$5,034High

Updated: APR-08

D5020.02.03.02 Emergency Lighting Battery Packs - 1992**

Old Readylite ('77) and new Lumacell lights ('92) installed throughout.

RatingInstalledDesign LifeUpdated4 - Acceptable020APR-08

Event: Replace Battery Packs (6)

TypeYearCostPriorityLifecycle Replacement2012\$10,067Unassigned

Updated: MAR-08

D5020.02.03.03 Exit Signs - *

There is a mix of incandescent and LED (Lumacell combination emergency & exit) signs. Retrofit older with LED lamps.

RatingInstalledDesign LifeUpdated4 - Acceptable19760MAR-08

D5020.03.01.01 Exterior Incandescent Fixtures - *

Quartz halogen motion sensor units installed. No problems observed or reported.

RatingInstalledDesign LifeUpdated4 - Acceptable19760MAR-08

D5020.03.01.03 Exterior Metal Halide Fixtures - *

Wall and ceiling mounted fixtures. No problems observed or reported.

RatingInstalledDesign LifeUpdated4 - Acceptable19760MAR-08



DSCF3802.JPG

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

Wall and ceiling mounted fixtures, some are expired.

RatingInstalledDesign LifeUpdated3 - Marginal19760MAR-08

Event: Repair Exterior H.P. Sodium Fixtures (3)

Concern:

Wall and ceiling mounted fixtures, some are expired.

Recommendation: Repair or replace

Consequences of Deferral:

Lack of security light for premises.

TypeYearCostPriorityRepair2008\$5,377Unassigned

Updated: APR-08

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

Failure of photo-cell controlling exterior lamps. Replace under general maintenance at a cost of under \$1000.

RatingInstalledDesign LifeUpdated4 - Acceptable19760MAR-08

D5030.01 Detection and Fire Alarm - **

Edwards Custom 6500 fire alarm control panel and model PC1832 circuit board with heat and smoke detectors. Now past expected life cycle.

RatingInstalledDesign LifeUpdated4 - Acceptable197625MAR-08

Event: Replace Detection and Fire Alarm

TypeYearCostPriorityLifecycle Replacement2012\$48,162Unassigned

Updated: APR-08

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D5030.02.02 Intrusion Detection - **

New DSC panel and motion sensors.

RatingInstalledDesign LifeUpdated5 - Good200625MAR-08

Event: Replace Intrusion Detection

TypeYearCostPriorityLifecycle Replacement2031\$28,486Unassigned

Updated: APR-08

D5030.03 Clock and Program Systems - *

Clock system seems to have been upgraded to digital system, brand unknown, may have been installed during '92 revamp (see pic).

Rating	<u>Installed</u>	Design Life	<u>Updated</u>
4 - Accentable	1992	25	MAR-08



DSC01938-1.jpg

D5030.04.01 Telephone Systems - *

Meridian / Nortel system. Install date unknown (warranty expired 1993)

Rating	<u>Installed</u>	Design Life	<u>Updated</u>
4 - Acceptable	1991	25	MAR-08



collage2.jpg

D5030.04.05 Local Area Network Systems - *

AB Supernet fiber installed. Cat 5 throughout.

RatingInstalledDesign LifeUpdated4 - Acceptable20030MAR-08

D5030.05 Public Address and Music Systems - **

Dukane Compact 3200 system is well past expected life cycle. Parts unavailable

Rating	<u>Installed</u>	Design Life	<u>Updated</u>
2 - Poor	1976	20	MAR-08

Event: Replace Public Address and Music Systems

Concern:

Dukane Compact 3200 system is past expected life cycle. Problems with reliable operation during announcements, no parts available.

Recommendation:

Replace system

Consequences of Deferral:

Important announcements may not get to all during emergency.

<u>Type</u>	<u>Year</u>	Cost	<u>Priority</u>
Failure Replacement	2008	\$13,957	Medium

Updated: MAR-08

D5030.06 Television Systems - *

New TV's used for video conference and video playback.

RatingInstalledDesign LifeUpdated4 - Acceptable19760MAR-08

D5090.01 Uninterruptible Power Supply Systems**

APC UPS system standard with AB Supernet installation. Another APC UPS is located on the library's teleconference system.

RatingInstalledDesign LifeUpdated5 - Good200330MAR-08

Event: Replace UPS Systems

TypeYearCostPriorityLifecycle Replacement2020\$2,288Unassigned

Updated: MAR-08

S6 EQUIPMENT, FURNISHINGS AND SPECIAL CONSTRUCTION

E1020.03 Theater and Stage Equipment*

Stage lighting remains in place although stage is no longer in use.

RatingInstalledDesign LifeUpdated4 - Acceptable19760MAR-08

E1090.03 Food Service Equipment*

Large commercial exhaust hood over range.

RatingInstalledDesign LifeUpdated4 - Acceptable19760MAR-08

E1090.04 Residential Equipment*

Equipment includes; range, refrigerator, microwave, D/W, toaster etc.

RatingInstalledDesign LifeUpdated4 - Acceptable19760MAR-08

E1090.07 Athletic, Recreational, and Therapeutic Equipment*

Basket ball nets in gym, fixed and manual adjustable. Also sundry other gym equipment and climbing apparatus.

RatingInstalledDesign LifeUpdated4 - Acceptable19760MAR-08

E2010.02 Fixed Casework**

Consists of beech veneer cabinetry with lower counter and some wall mount. Also some painted shelving around room perimeters. Acid resistant counter top in science room.

RatingInstalledDesign LifeUpdated4 - Acceptable197635MAR-08

Event: Replace Fixed Casework (233m)

TypeYearCostPriorityLifecycle Replacement2016\$409,666Unassigned

Updated: APR-08

E2010.03.01 Blinds**

Combination of horizontal metal blinds and drapes for all window coverings.

RatingInstalledDesign LifeUpdated4 - Acceptable197630MAR-08

Event: Replace Blinds (56m2)

TypeYearCostPriorityLifecycle Replacement2013\$12,241Unassigned

Updated: APR-08

F1010.02.04 Portable and Mobile Buildings*

Foundation - Wood frame on piles.

Exterior - Metal channel siding and skirt, PVC windows, and steel doors and stairs.

Interior - Independent furnace, standard white and tack boards, VC tile flooring, Coated GWB with batten walls and ceiling.

RatingInstalledDesign LifeUpdated5 - Good20070MAR-08

F2020.01 Asbestos*

None noted or reported.

RatingInstalledDesign LifeUpdated4 - Acceptable19760MAR-08

F2020.04 Mould*

None noted or reported.

RatingInstalledDesign LifeUpdated4 - Acceptable19760MAR-08

F2020.09 Other Hazardous Materials*

Typical cleaning solvents and materials in janitorial room.

RatingInstalledDesign LifeUpdated4 - Acceptable19760MAR-08

S8 FUNCTIONAL ASSESSMENT

K3010 Building Services

Building provides adequate function for scope of existing education levels.

RatingInstalledDesign LifeUpdated4 - Acceptable19760MAR-08

K3020 Indoor Environment

Clean and fundamentally organized, providing a positive learning environment.

RatingInstalledDesign LifeUpdated4 - Acceptable19760MAR-08

K4010.01 Barrier Free Route: Parking to Entrance*

Curb cut in side walk at main entrance. Un-interrupted travel path from parking to front entrance via dedicated bus lane.

RatingInstalledDesign LifeUpdated4 - Acceptable19760MAR-08

K4010.02 Barrier Free Entrances*

No barrier free accesses evident.

RatingInstalledDesign LifeUpdated2 - Poor19760MAR-08

Event: Install Power Assist Doors (2)

Concern:

No barrier free access to building interior.

Recommendation:

Install power assist doors at main entry.

Type Year Cost Priority
Barrier Free Access Upgrade 2009 \$4,004 Low

Updated: APR-08

K4010.03 Barrier Free Interior Circulation*

Single level throughout most of the schools classrooms and services. No access to gym due to stairs.

RatingInstalledDesign LifeUpdated3 - Marginal19760MAR-08

Event: Install stair lift (1)

Concern:

No barrier free access to gym.

Recommendation:

Install power lift along stairway (6 risers).

Type Year Cost Priority
Barrier Free Access Upgrade 2009 \$4,004 Low

Updated: APR-08

K4010.04 Barrier Free Washrooms*

Barrier free toilet compartments and vanity counters exist in both G & B wash rooms.

RatingInstalledDesign LifeUpdated4 - Acceptable19760MAR-08

RECAPP Facility Evaluation Report



Sheldon Coates Elementary School S3489 Grande Cache

Grande Cache - Sheldon Coates Elementary School (S3489)

Facility Details

Building Name: Sheldon Coates Elementary

Address:

Location: Grande Cache

Building Id: \$3489
Gross Area (sq. m): 0.00
Replacement Cost: \$0
Construction Year: 0

Evaluation Details

Evaluation Company: Wade Engineering

Evaluation Date: October 24 2007

Evaluator Name: Mike Pangman/Ron Shannon

Total Maintenance Events Next 5 years: \$209,352 5 year Facility Condition Index (FCI): 0%

General Summary:

Located in the town of Grande Cache the large grassed site borders a residential street on the east elevation. A dedicated one way bus lane and paved parking are located on the east and north elevations. Site grading is generally from SE to NW with major elevation change along front of school. Chain link fencing surrounds the perimeter of the school enclosing sports fields and playgrounds. Asphalt components require repair, replacement and up-grading. Large maintenance shed abutting west wall of gym.

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)*

Site slopes East to West and South to North. Large berm on east side of school from bus lane up to town street. Good grading around facility sheds water to open fields.

RatingInstalledDesign LifeUpdated5 - Good197650APR-08

G2010.02.02 Flexible Pavement Roadway (Asphalt)**

Dedicated bus lane with separate entry and exits to residential street along east elevation.

RatingInstalledDesign LifeUpdated3 - Marginal197625APR-08

Event: Replace Flexible Pavement Roadway (715m2)

Concern:

Bus lane has received one asphalt overlay. There is noted cracking, alligatoring, heaving and pot hole existence. There is standing pooled water indicating poor drainage.

Recommendation:

Remove re-grade and replace bus lane, entry and exits.

Consequences of Deferral:

Increasingly expensive patching and deterioration of surfaces.

<u>Type</u>	<u>Year</u>	<u>Cos</u> t	<u>Priority</u>
Failure Replacement	2010	\$130,416	Low

Updated: APR-08

G2010.05 Roadway Curbs and Gutters*

With asphalt overlay there is nominal curbing along bus lane on west side. Appears there was asphalt curbing on east side which is now non-existent.

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

Event: Replace Bus Lane Curbing (92m)

Concern:

Curbing has deteriorated with age and will no-longer prevent soil erosion along bus lane.

Recommendation:

Replace curbing at time of bus lane reconstruction.

<u>Type</u>	<u>Year</u>	<u>Cost</u>	Priority
Failure Replacement	2011	\$31,117	Low

Updated: APR-08

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G2020.02.01 Aggregate Parking Lots (Gravel)*

Gravel parking available to staff and visitors total 148m2 in reasonable condition.

RatingInstalledDesign LifeUpdated4 - Acceptable197610APR-08

Event: Overlay with asphalt (148m2)

Concern:

Gravel lot will require ongoing maintenance and grading, erosion will further degrade area.

Recommendation:

Apply asphalt overlay when re-surfacing existing asphalt parking area.

Consequences of Deferral:

Continued erosion and maintenance.

TypeYearCostPriorityProgram Functional Upgrade2011\$5,606Low

Updated: APR-08

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

Staff parking at north end of school provides 20 stalls plus 1 barrier free stall

RatingInstalledDesign LifeUpdated3 - Marginal197625APR-08

Event: Overlay Parking Lot (897m2)

Concern:

Parking lot surface is heaving, alligatoring, cracking and developing pot holes.

Recommendation:

Apply overlay to parking area improving drainage and sealing surface.

TypeYearCostPriorityFailure Replacement2011\$33,634Low

Updated: APR-08

G2020.05 Parking Lot Curbs and Gutters*

Asphalt curbing along south elevation has deteriorated to non-existence.

RatingInstalledDesign LifeUpdated3 - Marginal197625APR-08

Event: Replace Curbing (42m)

Concern:

Curbing no longer exists thus no definition between parking lot and grass leading to gym and stage exits.

Recommendation:

Replace curbing when parking lot is refurbished.

TypeYearCostPriorityFailure Replacement2011\$14,186Low

Updated: APR-08

G2020.06.03 Parking Lot Signs*

Directional, bus lane, staff and visitor signage.

RatingInstalledDesign LifeUpdated4 - Acceptable19760APR-08

G2020.06.04 Pavement Markings*

Staff and Handi-capped stall marking together with curb cut and curbing hi-lites.

RatingInstalledDesign LifeUpdated4 - Acceptable20000APR-08

G2030.04 Rigid Pedestrian Pavement (Concrete)**

Walks parallel school on east side and along bus lane. Extra wide walks along the south side of school also served portables which have since been removed.

RatingInstalledDesign LifeUpdated4 - Acceptable198125APR-08

Event: Replace Pedestrian Concrete Walks (613m2)

TypeYearCostPriorityLifecycle Replacement2015\$150,550Unassigned

Updated: APR-08

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G2030.06 Exterior Steps and Ramps*

- 1) Concrete steps with steel hand rails, leading from parking to staff room exit on north elevation.
- 2) Concrete steps, with no railing leading from east side of bus lane up berm to residential street.

RatingInstalledDesign LifeUpdated4 - Acceptable19760APR-08

G2040.02 Fences and Gates

Chain link fencing surrounds school boundary with fire road access gate and pedestrian stiles for access.

RatingInstalledDesign LifeUpdated4 - Acceptable197630APR-08

G2040.04 Athletic and Recreational Equipment

Playground apparatus in several locations for K - 3, together with sport field accessories such as baseball diamonds and soccer goals.

RatingInstalledDesign LifeUpdated4 - Acceptable010APR-08

G2040.05 Site and Street Furnishings*

Heavy timber picnic tables, garbage receptacles, bike racks and boot scrapers.

RatingInstalledDesign LifeUpdated4 - Acceptable19760APR-08

G2040.06 Exterior Signs*

School identification, directional, parking and school zone signage at various locations.

RatingInstalledDesign LifeUpdated4 - Acceptable19760APR-08

G2040.08 Flagpoles*

2 brushed aluminum poles at front entry of school

RatingInstalledDesign LifeUpdated4 - Acceptable19760APR-08

G2050.04 Lawns and Grasses*

Extensive grass areas around all elevations of the facility, including berm, front, playground and sport fields.

RatingInstalledDesign LifeUpdated4 - Acceptable19760APR-08

G2050.05 Trees, Plants and Ground Covers*

Small trees and shrubs located in front of school

RatingInstalledDesign LifeUpdated4 - Acceptable19760APR-08

G2050.07 Planting Accessories*

Heavy timber lined raised planting beds in front of school containing small shrubs and trees.

RatingInstalledDesign LifeUpdated4 - Acceptable19760APR-08

G3010.02 Site Domestic Water Distribution - *

Town service.

RatingInstalledDesign LifeUpdated4 - Acceptable19760APR-08

G3010.03 Site Fire Protection Water Distribution*

Fire hydrant located across residential street.

RatingInstalledDesign LifeUpdated4 - Acceptable19760APR-08

G3020.01 Sanitary Sewage Collection*

Town service.

RatingInstalledDesign LifeUpdated4 - Acceptable19760APR-08

G3030.01 Storm Water Collection*

Surface drainage, with catch basins located in south play ground areas.

RatingInstalledDesign LifeUpdated4 - Acceptable19760APR-08

G3030.02 Storm Water Equipment*

Internal roof drainage.

RatingInstalledDesign LifeUpdated4 - Acceptable19760APR-08

Grande Cache - Sheldon Coates Elementary School (S3489)

G3060.01 Gas Distribution*

Underground natural gas piping.

RatingInstalledDesign LifeUpdated4 - Acceptable19760APR-08

G4010.01 Electrical Substations*

Pad mounted transformer.

RatingInstalledDesign LifeUpdated4 - Acceptable19760APR-08

G4010.02 Electrical Power Distribution Lines*

Under ground service.

RatingInstalledDesign LifeUpdated4 - Acceptable19760APR-08

G4020.01 Area Lighting - *

HPS wall and pole mounted illumination.

RatingInstalledDesign LifeUpdated4 - Acceptable19760APR-08