

RECAPP Facility Evaluation Report

Calgary RCSSD #1



Bishop Grandin Senior High School

B2538A

Calgary

Facility Details

Building Name: Bishop Grandin Senior High
Address: 111 Haddon Road S. W.
Location: Calgary

Building Id: B2538A
Gross Area (sq. m): 0.00
Replacement Cost: \$32,696,747
Construction Year: 0

Evaluation Details

Evaluation Company: Asset Evolution Inc.
Evaluation Date: October 12 2005
Evaluator Name: Mr. Mario Plastina

Total Maintenance Events Next 5 years: \$1,125,640
5 year Facility Condition Index (FCI): 3.44%

General Summary:

Bishop Grandin Senior High School is situated on 4.58 ha of land and has a total building area is 19805.90m2. The 3-storey school was originally constructed in 1966. In 1989 a theatre was added at the south-east corner of the building.

The school has several classrooms, science labs, a library, music room, shops, gymnasium, theatre, cafeteria and chapel.

The student capacity is approximately 1900

Structural Summary:

The foundation consists of cast in place walls and columns. The floors comprise of precast concrete suspended slab construction. The roof comprises of a precast concrete roof structure supported by exterior & interior concrete walls. The structural walls and columns are either precast or poured in place concrete. Poured in place concrete utility service tunnels are located at the lower level.

The components recommended for replacement and/or major repair within the years 2005 to 2009 are as follows:

- Repair concrete surface of Exterior Ramp - North Elevation.

Overall the structural components are generally in good condition.

Envelope Summary:

The exterior cladding consists of precast concrete panels & column cluster panels. The panels have a river stone finish.

The windows are aluminum frame double glazed units with operable awning type panels. The windows in the main stairwell are the original stained glazed panels.

The original 1966 building has a modified bituminous membrane roof assembly (SBS) replaced in 1992. The 1989 theatre addition also has a modified bituminous membrane roof assembly (SBS) installed in 1989

The main entrance has two sets of painted steel doors with a rail & glazed infill panels. Full glazed window panels are also part of the assembly. The majority of the exit doors have a painted steel door & frame assembly with GWG panels. The stairwell exit doors are prefinished steel doors & frame. Metal overhead doors are located along the west elevation for the workshops.

Overall, the building envelope appears to be in good condition.

Interior Summary:

Sheet vinyl flooring is located throughout the corridors, basement washrooms and in several classrooms of the 1969 addition. Vinyl asbestos tiles (VAT) are located in several classrooms, in the cooking lab & home economics room. Carpet flooring is found in the 1989 theatre, staff room, administration offices, chapel, library and music room. The wood shop, gymnasium and stage area has a hardwood floor finish. The majority of the utility areas and mechanical rooms in the basement have a paint finish on the concrete slab.

The majority of the interior walls are gypsum board or masonry block walls. Wood paneling is located in the main entrance lobby, A/V theatre, gym mezzanine, music room- 201 and in the 1989 theatre.

The majority of the ceiling throughout the school have a 2'-0"x4'-0" or a 2'-0"x 2'-0"suspended acoustical tile ceiling. Gypsum board ceiling are located primarily in the theatre, change rooms & utility rooms. The staff room, cafeteria, music room 201, library and some of the corridors have a sprayed stucco finish on the gypsum board ceiling.

Classrooms - The interior swing doors generally consist of solid core stained wood doors with a glazed insert in a painted pressed metal frame. The hardware typically is single cylinder with a stainless steel finish. Several doors have metal grilles.

The technical's recommended for replacement and/or major repair within the years 2005 to 2009 are as follows:

- Replace entrance vestibule doors
- Replace millwork in the home economic lab, cooking lab and beauty culture lab
- Replace folding panel partition
- Replace and /or repair damaged seats in the teaching theatre & A/V theatre.
- Provided power operators for barrier free access at the east & west entrance of the 1966 original building.
- Modify & upgrade existing washrooms at each floor level to meet barrier free standards.
- Upgrade Elevators - Cabs And Controls

Overall, the interior finishes are in good condition.

Mechanical Summary:

Heating for the building is provided by two gas-fired Cleaver Brooks hot water boilers. Heating for the building is provided by a constant volume system. Heating hot water is provided to the induction terminal units in the classrooms, finned tub radiation units throughout the school, heating coils in the Shop, Theatre and Gymnasium AHU's and to the shell tube hot water to glycol heat exchanger which serves the glycol coils in classroom and Music Room AHU's.

Ventilation for the building is provided by exhaust fans and the air handling unit systems. The air handling unit systems provides supply air and general exhaust with local exhaust fans serving washrooms, labs, shops and service spaces.

Air conditioning is provided by a McQuay chiller which provides chilled water to cooling coils in the classroom and Theatre AHU units and rejects heat through a Baltimore Aircoil Company (BAC) cooling tower. In addition to the main air conditioning system a Mitsubishi Mr. Slim cooling system provides air conditioning to the Computer Room in the Library. The Mr. Slim cooling system consists of a split DX system with a roof top air cooled condenser.

HVAC control is provided by a pneumatic system with some DDC, Johnson Controls Metasys system controls the music room HVAC equipment.

The plumbing piping within the building includes copper supply lines and black iron waste piping. Plumbing fixtures include; porcelain lavatories with manual dual controls faucets, Bradley wash fountains in the shops, enamel sinks in the science rooms, floor mounted toilets with manual flush valves, floor mounted urinals with flush tanks, wall mounted water fountains and cast-iron enamel slop sinks. Domestic hot water is provided by two commercial type gas-fired hot water heaters.

Based on the age and condition of the mechanical systems the following components are recommended for replacement within the years 2005 to 2009.

- Replace washroom lavatories.
- Replace drinking fountains and water coolers.

- Repair Bradley wash fountains.
- Replace local exhaust fans.
- Replace induction units.
- Upgrade controls.

Overall the mechanical systems are in acceptable condition.

Electrical Summary:

The main service to the building is fed underground to the main Federal Pacific switchboard which is rated at 1,200A 3 phase 4 wire. There are two main Allen Bradley motor controls centers in the building one located in the boiler room and the other located in the fan room. Individual Federal Pacific, Westinghouse, Siemens and Allen Bradley motor controls are also located in these areas and other mechanical/electrical room located throughout the school. Distribution panels for interior lights and receptacles were found in the electrical/mechanical rooms and distributed throughout the building.

The wiring in the building is standard wiring in conduit. Flexible conduit and cable are provided for final connections to mechanical equipment

There are a variety of different types of interior fluorescent lighting fixtures within the building including surface mount, pendant and inlay fixtures. Generally the classroom fixtures are pendant type units. Although some high efficiency T8 lamped and electronic ballasted fixtures were identified a majority of the fluorescent fixtures are equipped with inefficient T-12 lamps and magnetic ballasts. Incandescent lighting is also present in the building and include, directional lighting in the classrooms, pot lights at the main entrance, Chapel and in the Theatre and utility lighting in service areas. The exit lighting in the building consists of incandescent units. Emergency lighting is provided by selected light fixtures which are powered by a gas-fired generator. The exterior lighting consists of wall mounted high pressure sodium units, eight light standards and several recessed incandescent fixtures.

The building is equipped with an Edwards ESA2000 fire alarm system. Detection and end devices include, smoke and heat detectors, bells and pull stations. Fire suppression consists of fire extinguishers and a standpipe system.

The building is equipped with a Silent Knight security system that monitors door contacts and motion detectors.

The building is equipped with a natural gas powered Kohler generator (75 kW), which supplies power for emergency lighting and heating pumps.

It is recommended, as routine maintenance, that a program for annual examination of major electronic 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.

Based on the age and condition of the electrical systems the following components are recommended for replacement within the years 2005 to 2009.

- Replace the original secondary transformers.
- Replace the main switchboard.
- Replace the branch panelboards.
- Replace motor control centers and individual motor controls.
- Upgrade interior incandescent lighting.
- Upgrade interior fluorescent lighting with high efficiency T8 lamps and electronic ballasts.
- Replace exterior incandescent lighting.
- Replace emergency generator.
- Upgrade exit signs with LED units.

Overall the electrical components are in marginal 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*

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

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	100	OCT-05

A1030 Slab on Grade*

Cast-in-place concrete slab-on-grade.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	100	OCT-05

A2020 Basement Walls (& Crawl Space)*

The basement wall (lower level) comprise primarily of concrete masonry block walls.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	100	OCT-05

B1010.01 Floor Structural Frame*(Building Frame)

Typical floor assembly - Precast concrete suspended floors supported by structural reinforced concrete block walls & cast in place concrete.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	100	OCT-05

B1010.02 Structural Interior Walls Supporting Floors*

Structural reinforced concrete block walls & cast in place concrete.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	100	OCT-05

B1010.03 Floor Decks, Slabs, and Toppings*

Cast-in-place concrete assembly.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	100	OCT-05

B1010.05 Mezzanine Construction*

The mezzanines typically have cast in place concrete slab assembly.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	100	OCT-05

B1010.06 Ramps: Exterior**

Exterior poured in place concrete ramps are located at the main entrance area (east elevation) and at the north entrance doors.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
3 - Marginal	0	40	OCT-05

Event: **Repair concrete surface of Exterior Ramp - North Elevation.**

Concern:

The concrete surface has deteriorated in isolated location of the ramp to the lower level - North elevation.

Recommendation:

Repair concrete surface of Exterior Ramp - North Elevation.

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Repair	2006	\$10,700	Medium

Updated: February 1 2006

B1010.07 Exterior Stairs**

Poured in place concrete landing & stairs are located at all the school entrances.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	0	40	OCT-05

B1010.09 Floor Construction Fireproofing*

Floor Construction Fireproofing - Not visible during site visit

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	100	OCT-05

B1010.10 Floor Construction Firestopping*

Floor Construction Firestopping - Not visible during site visit

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	100	OCT-05

B1020.01 Roof Structural Frame*

Precast concrete roof structure supported by exterior & interior concrete walls.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	100	OCT-05

B1020.06 Roof Construction Fireproofing*

Roof Construction Fireproofing - Not visible during site visit

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	100	OCT-05

S2 ENVELOPE

B2010.01.01 Precast Concrete: Exterior Wall Skin*

The majority of the exterior walls have a combination of precast concrete panel along with precast river stone panels. The main entrance has a precast mural projection above the staff room exterior balcony.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	0	75	OCT-05

B2010.01.02.01 Brick Masonry: Ext. Wall Skin*

Brick cladding is located along the west elevation of the school.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	0	75	OCT-05

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

Sealant is located around all window, doors, brick cladding and precast panel assemblies.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	15	OCT-05

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

The interior face of the exterior precast walls has a concrete block wall assembly.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	100	OCT-05

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

Exterior Wall Vapor Retarders, Air Barriers, and Insulation - Not visible during site visit

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	20	OCT-05

B2010.06 Exterior Louvers, Grilles, and Screens*

Exterior louvres are located on the roof level and on the exterior walls outside the storage area of the work shops.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	0	20	OCT-05

B2010.09 Exterior Soffits*

The precast structure is exposed in majority of the soffits. Some of the entrance soffits have a exterior painted stucco finish.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	20	OCT-05

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

(2000) - The windows were replaced throughout the classrooms. The windows are aluminum frame double glazed units with operable awning type panels.

The windows in the main stairwell are the original stained glazed panels.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	0	35	OCT-05

B2030.01.02 Steel-Framed Storefronts**

The main entrance has two sets of painted steel doors with a rail & glazed infill panels. Full glazed window panels are also part of the assembly. The majority of the exit doors have a painted steel door & frame assembly with GWG panels.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	30	OCT-05

B2030.03 Large Exterior Special Doors*

Nine non-insulated sectional overhead doors are located primarily in the automotive, welding and building construction shops & storage area.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	30	OCT-05

B3010.01 Deck Vapor Retarder and Insulation*

Deck Vapor Retarder and Insulation - Not visible during site visit

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	50	OCT-05

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

Original 1966 Building - Modified bituminous membrane roof assembly (SBS) replaced in 1992
 1989 Addition - Modified bituminous membrane roof assembly (SBS) installed in 1989

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	0	25	OCT-05

B3010.07 Sheet Metal Roofing**

Sheet metal was observed on several surfaces throughout the roof.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	40	OCT-05

B3010.08.02 Metal Gutters and Downspouts**

Downspouts & metal gutters discharge water to the lower level from the sloped gymnasium roof

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	25	OCT-05

S3 INTERIOR

C1010.01 Interior Fixed Partitions*

Interior partitions typically consist of painted masonry block walls, gypsum board partitions and interior percast concrete walls.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	0	50	OCT-05

C1010.04 Interior Balustrades and Screens, Interior Railings*

The majority of the mezzanine levels have perforated metal screens with painted steel handrails or painted steel railings with rubber handrails.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	40	OCT-05

C1010.06 Interior Glazed Partitions and Storefronts*

Interior glazed partitions are located in the stairwells, general office area & in the merchandising room.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	0	40	OCT-05

C1010.07 Interior Partition Firestopping*

Interior Partition Firestopping - Not visible during site visit

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	50	OCT-05

C1020.01 Interior Swinging Doors**

Classroom - The interior swing doors generally consist of solid core clear finished wood doors with a glazed insert in a painted pressed metal frame. The hardware typically is single cylinder with a stainless steel finish. Several doors have metal grilles.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	50	OCT-05

C1020.03 Interior Fire Doors*

The stairwell doors and corridors have painted steel doors with GWG and painted steel frames. The doors typically have GWG transoms and sidelites. The doors are rated and labeled.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
3 - Marginal	0	50	OCT-05

Event: Replace entrance vestibule doors

Concern:

Overall, the vestibule doors are original, worn and dented. The hardware is several locations is missing and the doors do not open & close properly.

Recommendation:

Replace entrance vestibule doors

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Failure Replacement	2007	\$32,100	High

Updated: February 1 2006

C1020.04 Interior Sliding and Folding Doors*

One folding door partition is located in the staff room.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
3 - Marginal	0	30	OCT-05

Event: Replace folding panel partition

Concern:

The folding partition is torn and the locking mechanism does not close properly.

Recommendation:

Replace folding panel partition

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Failure Replacement	2007	\$10,700	Medium

Updated: February 1 2006



C1030.01 Visual Display Boards**

Tackboards, sliding chalkboards and whiteboards are located in most classrooms, shops and labs.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	10	OCT-05

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

Prefinished metal washroom partitions are located in all men's & women's washrooms.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	20	OCT-05

C1030.08 Interior Identifying Devices*

Signage panels with room number or room name are located above & on the interior doors

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	10	OCT-05

C1030.10 Lockers**

Prefinished metal lockers are located throughout the corridors and boy's & girl's change rooms.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	0	30	OCT-05

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.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	0	20	OCT-05

C2010 Stair Construction*

The stairwells typically have a poured in place concrete assembly. The feature stair in the main entrance has open treads supported by a precast concrete element.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
N/A	0	100	OCT-05

C2020.01 Tile Stair Finishes*

The exit stairwells have a ceramic tile floor finish on the stairs and landings.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	0	30	OCT-05

C2020.05 Resilient Stair Finishes**

The main feature stair has a sheet vinyl finish on the landing and rubber on the stair treads.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	0	20	OCT-05

C2020.08 Stair Railings and Balustrades*

The main stair has a solid wood handrail with a clear finish and floor mounted prefinished steel pickets. The interior stairwells have a rubber finish on painted steel handrails with painted steel pickets.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	0	50	OCT-05

C2020.11 Other Stair Finishes*

The stairwells in the utility areas and shops with mezzanines have a paint finish on the concrete stairs.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	0	OCT-05

C3010.01 Concrete Wall Finishes*

Concrete block walls are located throughout the entire school.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	100	OCT-05

C3010.02 Wall Paneling**

Wood paneling is located in the main entrance lobby, A/V theatre, gym mezzanine, music room- 201 and in the 1989 theatre.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	0	30	OCT-05

C3010.04 Gypsum Board Wall Finishes*

The majority of the non-load bearing wall partitions consist of a gypsum board finish. Many of the interior office walls, corridor walls and interior face of the exterior walls have gypsum board partitions.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	0	40	OCT-05

C3010.06.01 Ceramic Tile

A 4"x4" ceramic tile wall finish is located on washroom walls, cafeteria kitchen walls, and student showers.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	50	OCT-05

C3010.08 Stone Facing Wall Finishes: Interior*

Interior corridors have precast stone art panels.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	0	50	OCT-05

C3010.09 Acoustical Wall Treatment**

Acoustical wall panels are located throughout the music rooms and in the music practice rooms.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	0	20	OCT-05

C3010.11 Interior Wall Painting**

The majority of the interior walls have a paint finish.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	0	5	OCT-05

C3020.01 Concrete Floor Finishes (Paint)*

Painted/sealed concrete floors are located in most of the mechanical & electrical utility rooms, custodial rooms, the art room, communications room and in the most of the shops.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	75	OCT-05

C3020.02 Tile Floor Finishes-Ceramic tile**

Ceramic tile flooring is located throughout the stairwells, entrance vestibules, cafeteria, washrooms, change rooms and shower areas.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	30	OCT-05

C3020.04 Wood Flooring**

Hardwood flooring is located in the Gymnasium, stage area and building construction workshop. The gym floor was refinished in 1999.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	0	25	OCT-05

C3020.07 Resilient Flooring Sheet Vinyl**

Sheet Vinyl flooring is located throughout the majority of the corridors, classrooms and cafeteria. New sheet vinyl was installed in the corridors between 2003 and 2004.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	0	20	OCT-05

C3020.07 Resilient Flooring VAT**

Vinyl asbestos tiles (VAT) are located in several classrooms, in the cooking lab & home economics room.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	20	OCT-05

C3020.08 Carpet Flooring**

Carpet flooring is found in the 1989 theatre, staff room, administration offices, chapel, library and music room.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	10	OCT-05

C3020.14 Other Floor Finishes**

An epoxy floor finish is located in the change rooms.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	0	OCT-05

C3030.01 Concrete Ceiling Finishes*

The precast concrete floor structure is exposed in the main entrance corridor. The roof structure is exposed in the gymnasium and in most of the shop area.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	100	OCT-05

C3030.02 Ceiling Paneling (Wood)*

A suspended wood ceiling is located in the, main entrance and library. Prefinished decorative wood panels are suspended in the entrance lobby area.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	0	25	OCT-05

C3030.04 Gypsum Board Ceiling Finishes*

Gypsum board ceiling are located primarily in the theatre, change rooms & utility rooms. The staff room, cafeteria, music room 201, library and some of the corridors have a sprayed stucco finish on the gypsum board ceiling.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	50	OCT-05

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

The majority of the ceiling throughout the school have a 2'-0"x4'-0" or a 2'-0"x 2'-0"suspended acoustical tile ceiling.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	0	25	OCT-05

C3030.07 Interior Ceiling Painting**

All the interior gypsum board ceilings have a paint finish.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	10	OCT-05

D1010.01.01 Electric Traction Passenger Elevators**

The building is served by two original geared Turnbull passenger elevators (907 kgs capacity or 12 persons). The elevators serve all 3 levels.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
3 - Marginal	0	30	OCT-05

Event: Upgrade Elevators - Cabs And Controls

Concern:

The elevator's controls and equipment are original, inefficient, and have surpassed their theoretical useful life. Replacement parts are difficult to find. The elevators are also used as a barrier free elevators and are not equipped with Braille markings, audible/voice signal indicating floor level and directional arrows.

Recommendation:

Upgrade the elevator's controls and cabs and upgrade elevators for barrier free access.

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Failure Replacement	2008	\$171,200	Low

Updated: February 1 2006

S4 MECHANICAL

D2010.01 Water Closets**

Floor mounted water closets with manual flush valves in the Men's and Women's washrooms and flush tank units in staff washrooms.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	30	OCT-05

D2010.02 Urinals**

Original floor mounted urinals (Crane) with flush tanks.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	30	OCT-05

D2010.03 Lavatories**

The lavatories in the Men's and Women's washrooms consist of wall-mounted porcelain lavatories with manual dual control faucets. Enamel vanity sinks were identified in staff washrooms.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
2 - Poor	0	30	OCT-05

Event: Replace The Wall Mounted Lavatories

Concern:

Broken and damaged lavatories were identified in the Men's washrooms. The manual faucet controls are generally old and outdated and require increased maintenance. Replacement parts for the faucets controls are difficult to find.

Recommendation:

Replace the porcelain lavatories and faucet controls.

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Failure Replacement	2007	\$96,300	Medium

Updated: February 1 2006

D2010.04 Sinks**

Stainless sinks in the Cafeteria kitchen. Enamel cast iron slop sinks. Enamel lab sinks.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	30	OCT-05

D2010.05 Showers**

Communal showers are located in the Men's and Women's locker rooms. The showers are equipped with Bradley shower wash fountains which have six heads and six mixing valves. The showers do not appear to be used.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	30	OCT-05

D2010.08 Drinking Fountains / Coolers**

Wall mounted enamel water fountains and free standing refrigerated water coolers were identified.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
3 - Marginal	0	30	OCT-05

Event: Replace Drinking Fountains And Water Coolers

Concern:

The wall mounted water fountains are discolored and in some instances chipped. The water coolers have reached the end of their expected useful life and require increased maintenance.

Recommendation:

Replace the aged and damaged water fountains and water coolers.

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Failure Replacement	2009	\$32,100	Low

Updated: February 1 2006

D2010.09 Other Plumbing Fixtures**

Bradley wash fountains with stainless steel wash basins are located in the shops, Art and Communication rooms.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
3 - Marginal	0	0	OCT-05

Event: Repair Bradley Wash Fountains.

Concern:

It was reported that several of the Bradley wash fountains do not operate and require increased maintenance.

Recommendation:

Repair Bradley wash fountains.

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Repair	2006	\$10,700	Low

Updated: February 1 2006

D2020.01.01 Pipes and Tubes: Domestic Water*

The plumbing piping is generally copper tubing.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	40	OCT-05

D2020.01.03 Piping Specialties (Backflow Preventors)**

Backflow preventors are supplied on the non potable boiler make-up water lines, on the main domestic water line, on the standpipe system, water irrigation system line and on the cooling tower water line. The back flow Preventors are inspected regularly as indicated by the inspection tags.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	30	OCT-05

D2020.02.02 Plumbing Pumps: Domestic Water**

Domestic hot water circulating pump, Boiler Room.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	20	OCT-05

D2020.02.06 Domestic Water Heaters**

(2002) Two commercial size A.O. Smith (246 L) domestic hot water heaters located in the Boiler Room.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	20	OCT-05

D2030.01 Waste and Vent Piping*

The building's black iron waste piping is connected to the municipal system. The vent piping is through the roof.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	50	OCT-05

D2030.03.03 Pumps: Waste

Sump pumps located in the mechanical rooms and shop areas.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	30	OCT-05

D2040.01 Rain Water Drainage Piping Systems*

The rain water drainage piping system consists of roof drains connected to internal rainwater leaders that connect to the municipal storm water system.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	50	OCT-05

D2040.02.04 Roof Drains**

The roof drains are dome and collar type drains.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	40	OCT-05

D3010.02 Gas Supply Systems*

The main underground gas service enters the meter room adjacent the boiler room, at the southwest corner of the building.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	50	OCT-05

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

Two gas-fired Cleaver Brooks hot water boilers located in the main mechanical room in the southwest corner of the building. Boiler # 1 was re-tubed in 2003 and Boiler #2 was retubed in 2005.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	30	OCT-05

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

The boiler's insulated metal breeching is connected to a masonry stack.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	30	OCT-05

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

The boiler water supply is treated using a chemical feeder system.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	30	OCT-05

D3030.02 Centrifugal Water Chillers**

(2000) McQuay chiller with Microtech controls.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	30	OCT-05

D3030.05 Cooling Towers**

(2000) Baltimore Aircoil Company (BAC) cooling tower with its own water treatment. The cooling tower is located in a fence off area to the southwest of the building, adjacent the boiler room.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	25	OCT-05

D3040.01.01 Air Handling Units: Air Distribution**

There are several air handling units within the building. The three main air handling units are located in the fan room, one serves the Gymnasium, another serves the shop area and the third serves the classroom areas. A Trane (1997) unit which is located in storage room D204 serves the Music Room. Two Haakon air handlers, which are located in the mechanical room adjacent the Theatre, provides HVAC to the Theatre and some classrooms. All air handling units with the exception of the shop and Gymnasium air handling units which only have heating coils, are equipped with heat in and cooling coils. The Music room (Trane) and classroom air handling units have glycol heating coils and the other AHU'S are equipped with hot water heating coils.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	30	OCT-05

D3040.01.02 Fans: Air Distribution*

Chicago Blower return fans for the three main air handling units and a return fan for the Music Room AHU.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	30	OCT-05

D3040.01.03 Air Cleaning Devices:Air Distribution*

Low efficiency filters.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	30	OCT-05

D3040.01.04 Ducts: Air Distribution*

The duct system includes all component related to the air distribution systems in the building. The air distribution systems include ducting for fresh air, return air, supply air. The duct systems include ductwork, insulation and other related components.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	50	OCT-05

D3040.01.07 Air Outlets & Inlets:Air Distribution*

The air outlets and inlets are of varying types and include air diffusers, dampers and supply and return grilles.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	30	OCT-05

D3040.03.01 Hot Water Distribution Systems**

Heating piping system is generally black iron. Piping system components include piping, insulation and cover, valves and pumps. The base mounted heating hot water circulation pumps observed in the Boiler Room include the Gymnasium heating pump, the shop heating pump, the main heating pump and the shop preheat pump. Glycol pumps are also located in the boiler room and fan room.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	40	OCT-05

D3040.03.02 Chilled Water Distribution Systems**

The chilled water piping system is generally black iron. Piping system components include piping, insulation and cover, valves and pumps. The chilled water circulating pumps are located in the boiler room.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	0	OCT-05

D3040.04.01 Fans: Exhaust**

Constant volume local exhaust fans serve the washrooms, shops, Industrial Arts, Theatre and labs.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
3 - Marginal	0	30	OCT-05

Event: Replace Local Exhaust Fans

Concern:

The exhaust fans have surpassed their expected useful life. It was reported that the exhaust fans do not operate properly and that in some cases the units can not meet the ventilation requirements for the particular spaces they serve (Arts room).

Recommendation:

Replace the local exhaust fans.

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Failure Replacement	2007	\$42,800	Medium

Updated: February 1 2006

D3040.04.03 Ducts: Exhaust*

The exhaust duct distribution systems includes the galvanized metal duct systems, insulation, and other related components.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	0	OCT-05

D3040.05 Heat Exchangers**

A shell tube, hot water to glycol, heat exchanger located in the fan room serves the glycol heating loop in the main classroom AHU. A plate, hot water to glycol, heat exchanger was observed in the boiler room and its serves the glycol heating loop in the Music Room's AHU.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	30	OCT-05

D3050.01.01 Computer Room Air Conditioning Units**

One Mitsubishi Mr Slim split DX air conditioning system provides cooling for the computer room in the Library. The air cooled condenser is located on the roof.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	30	OCT-05

D3050.05.03 Finned Tube Radiation**

Finned tube radiation units are located in the stairwells, corridors washrooms and along some of the perimeter walls.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	40	OCT-05

D3050.05.04 Induction Units**

Induction units are generally located in the perimeter classrooms, offices and in the Chapel.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
3 - Marginal	0	35	OCT-05

Event: Replace The induction Units

Concern:

It was reported that some of the induction units are not operating properly and require increased maintenance. The units has surpassed their expected useful life.

Recommendation:

Replace the induction units.

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Failure Replacement	2009	\$256,800	Low

Updated: February 1 2006

D3050.05.06 Unit Heaters**

Dunham Bush hot water unit heaters were observed in the shop areas and the Industrial Arts room. A Trane unit heater was observed in the storage room that houses the Music Room's AHU.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	30	OCT-05

D3060.02.01 Electric and Electronic Controls**

Johnson Controls Metasys system controls the Music room AHU.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	40	OCT-05

D3060.02.02 Pneumatic Controls**

Control components include monitoring and measurement devices (Temperature sensors, pressure sensors, pressure gages, transmitters, etc) and include the control air supply system (compressor, receiver, and dryer). At the time of the site visit the original compressor and receiver tank were being used, however the new (2005) DeVair compressor was on site and ready for installation.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	40	OCT-05

Event: Upgrade Controls

Concern:

Existing controls are inefficient contributing to operating and maintenance challenges. Few energy management strategies can be implemented.

Recommendation:

Install new central DDC building management system in association with the induction unit replacements.

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Operating Efficiency Upgrade	2009	\$214,000	Low

Updated: February 1 2006

D4020 Standpipes*

Fire suppression in the building is provided by a standpipe system. The fire hose storage system typically consists of hose pin rack within a metal cabinet.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	50	OCT-05

D4030.01 Fire Extinguisher, Cabinets and Accessories**

Portable wall mounted fire extinguishers and fire extinguishers stored in the fire hose metal cabinets are located throughout the school.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
3 - Marginal	0	30	OCT-05

D4090 Other Fire Protection Systems*

Range Guard Karbaloy fire suppression system installed in the hood above the Cafeteria's gas-fired equipment.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	0	OCT-05

D4090.06 Smoke Protection & Exhaust Fans**

Smoke detection devices were identified on the return duct work.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	0	OCT-05

S5 ELECTRICAL

D5010.02 Secondary Electrical Transformers (Interior)**

There are several secondary transformers located throughout the school. Transformers are located in the boiler room, the fan room, the Theatre's electrical/mechanical room, the main electrical room (Delta 75kVA) and the storage room A114. Some transformers have been replaced over the years, however original transformers still remain in operation.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	40	OCT-05

D5010.02 Secondary Electrical Transformers (Interior)** - Original

There are several secondary transformers located throughout the school. Transformers are located in the boiler room, the fan room, the Theatre's electrical/mechanical room, the main electrical room (Delta 75kVA) and the storage room A114. Some transformers have been replaced over the years, however original transformers still remain in operation.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
2 - Poor	0	40	OCT-05

Event: Replace Original Electrical Transformers.

Concern:

The original transformers are approaching the end of their expected useful life and were showing signs of age. Some of the original transformers were radiating elevated heat levels.

Recommendation:

Replace the original transformers.

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Failure Replacement	2007	\$80,250	Medium

Updated: February 1 2006

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

The 1,200 A 3 phase 4 wire Federal Pacific main distribution switchboard is located in the main electrical room in the west section of the building, opposite the welding shop.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
2 - Poor	0	40	OCT-05

Event: Replace Main Electrical Switchboard

Concern:

The main switchboard is approaching the end of its service life. Replacement parts are no longer available.

Recommendation:

Replace the main distribution switchboard.

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Failure Replacement	2007	\$42,800	Medium

Updated: February 1 2006

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

The panelboards, which control receptacles and interior lighting, are located throughout the school in corridors and electrical / mechanical rooms. The panelboards are generally manufactured by Federal Pacific.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
2 - Poor	0	25	OCT-05

Event: Replace Original Distribution Panelboards

Concern:

Some of the original panelboards are, outdated and in some cases full to capacity with no room for future expansion. It was reported that the shops can no longer add new equipment due to the lack of power.

Recommendation:

Replace outdated panelboards

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Program Functional Upgrade	2007	\$85,600	Medium

Updated: February 1 2006

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

Allen Bradley motor control centers are located in the boiler room and in the fan room.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
2 - Poor	0	30	OCT-05

Event: Replace Motor Control Centers.

Concern:

The original MCC's have surpassed their theoretical useful life. Typically as the equipment ages the internal components and locking mechanisms begin to fail. Replacement parts are difficult to find.

Recommendation:

Replace motor control centers.

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Failure Replacement	2007	\$74,900	Medium

Updated: February 1 2006

D5010.07.02 Motor Starters and Accessories**

Westinghouse, Allen Bradley, Siemens, Cutler Hammer and Federal Pacific motors starters are located in the various electrical and mechanical rooms within the school.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
2 - Poor	0	0	OCT-05

Event: Replace Motor Starters and Accessories

Concern:

The original stand alone motor starters have surpassed their theoretical useful life. Typically as the motor starters age the internal components and locking mechanisms begin to fail. Replacement parts are difficult to find.

Recommendation:

Replace motor starters and accessories.

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Failure Replacement	2007	\$42,800	Medium

Updated: February 1 2006

D5020.01 Electrical Branch Wiring*

The electrical wiring in the building is standard wire in conduit. Flexible conduit and cable are provided for final connections to mechanical equipment.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	50	OCT-05

D5020.02.01 Lighting Accessories (Lighting Controls)*

Classroom lighting in the school is generally controlled by line voltage switches and corridor lighting is controlled by panel breakers.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	30	OCT-05

D5020.02.02.01 Interior Incandescent Fixtures*

Incandescent fixtures include, directional lighting in the classrooms, pot lights (main entrance, Chapel and Theatre), specialty fixtures in the Theatre and utility lighting in service rooms.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
3 - Marginal	0	30	OCT-05

Event: Upgrade Incandescent Fixtures With High Efficiency Lamps

Concern:

The incandescent bulbs are inefficient.

Recommendation:

Replace incandescent bulbs with high efficiency lamps.

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Energy Efficiency Upgrade	2008	\$8,560	Low

Updated: February 1 2006

D5020.02.02.02 Interior Florescent Fixtures**

The interior florescent lighting fixtures consists of a variety of different types including surface mount, pendant and inlay type fixtures. Generally the classroom fixtures are pendant type units. Some fixtures are equipped with high efficiency T8 lamps and electronic ballasts however a majority of the florescent fixtures are equipped with inefficient T-12 lamps and magnetic ballasts.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
3 - Marginal	0	30	OCT-05

Event: Upgrade Interior Florescent Lighting Fixtures With High Efficiency T8 Technology.

Concern:

Replace all florescent fixtures (T12 lamps and magnetic ballasts) with energy efficient type units complete with electronic ballasts and T-8 lamps.

Recommendation:

Upgrade lighting to high efficiency units.

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Energy Efficiency Upgrade	2008	\$288,900	Low

Updated: February 1 2006

D5020.02.03 Emergency Lighting*

Emergency lighting is provided by selected light fixtures which are powered by a natural gas-fired generator.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	0	OCT-05

D5020.02.03.03 Exit Signs

Incandescent exit signs are located throughout the school.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
2 - Poor	0	0	OCT-05

Event: Replace Exits Signs

Concern:

The exist signs are inefficient, aged and require increased maintenance. Poorly illuminated fixtures were identified.

Recommendation:

Replace exist signs with LED type units.

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Failure Replacement	2006	\$26,750	Medium

Updated: February 1 2006

D5020.02.05 Special Purpose Lighting*

Special purpose lighting, including spot lighting, was found in the Theatre.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	30	OCT-05

D5020.03.01.01 Exterior Incandescent Fixtures*

Recessed incandescent light fixture are located in the overhangs in front the exit doors on the north elevation.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
2 - Poor	0	25	OCT-05

Event: Replace The exterior Incandescent Fixtures

Concern:

Broken and damaged light fixtures were identified.

Recommendation:

Replace the recessed incandescent light fixtures.

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Repair	2006	\$2,140	Low

Updated: February 1 2006

D5020.03.01.04 Exterior H.P. Sodium Fixtures*

There are 8 exterior wall mounted HID light fixtures located around the perimeter of the building.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	25	OCT-05

D5020.03.02 Lighting Accessories (Lighting Controls)*

Photocells and timers for the exterior HID fixtures.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	25	OCT-05

D5030.01 Detection and Fire Alarm**

The existing fire alarm system is an Edwards ESA2000 system. Detection and end devices include, smoke and heat detection, pull stations, bells and duct smoke detection. A graphic annunciator panel is located at the front entrance.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	25	OCT-05

D5030.02.02 Intrusion Detection**

The Silent Knight "Regency" security system monitors exterior door contacts and motion detectors installed in the corridors and sensitive areas. A push-button security pad is located at the front entrance.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	25	OCT-05

D5030.03 Clock and Program Systems**

Original clock system with hardwired clocks. Some clocks have been replaced with battery operated units.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	25	OCT-05

D5030.04.01 Telephone Systems**

Telephones are in most classrooms and are used for intercom, paging, and external calling. The telephone service is provided by Telus and the hardware consists of a NT Meridian 1 system.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	25	OCT-05

D5030.04.05 Local Area Network Systems*

Computers, servers, network cabling, network hubs & switches and peripheral I/O devices. Cabling is category 5. The Library is wireless.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	25	OCT-05

D5030.05 Public Address and Music Systems**

The Public Address system is a stand alone console located in the administration office and is a Dukane system. Surface mounted speakers are located in the classrooms and hallways.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	0	OCT-05

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

A Kohler (75 KW) natural gas fired generator is located in the fan room. The generator provides emergency power to corridor lights and stairwell lights as well as to various heating pumps to maintain minimum temperature levels in the building.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
3 - Marginal	0	35	OCT-05

Event: Replace Natural Gas-Fired Generator.

Concern:

The original emergency generator has surpassed its useful life and does not provide enough power for all the emergency loads. The existing generator will not operate if the natural gas supply is shut off.

Recommendation:

Replace existing emergency generator and transfer switch.

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Failure Replacement	2007	\$107,000	Medium

Updated: February 1 2006

S6 EQUIPMENT, FURNISHINGS AND SPECIAL CONSTRUCTION

E1020.02 Library Equipment*

The library has entrance and exit bars for security.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	0	25	OCT-05

E1020.03 Theater and Stage Equipment*

Stage, curtains, lighting equipped and fixed seating is located throughout the 1989 addition.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	25	OCT-05

E1090.02 Solid Waste Handling Equipment*

Waste bins are located along the south and west elevations of the building.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	25	OCT-05

E1090.03 Food Service Equipment*

The cafeteria has a complete kitchen facility with stainless steel tables, built in ovens, refrigerators, deep fryers, fumehoods and several smaller appliances. The kitchen facility is leased and maintained by an independent caterer.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	25	OCT-05

E1090.04 Residential Equipment*

The home economic cooking labs are equipped with refrigerator, stoves, microwaves and several small kitchen appliances.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	25	OCT-05

E1090.07 Athletic, Recreational, and Therapeutic Equipment*

A electronic scoreboard, movable basketball hoops are located in the gymnasium. Exercise equipment is the in the weight room and on the stage area. Divider screens are located in the gymnasium.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	15	OCT-05

E2010.02.05 Educational Facility Casework*

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

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	35	OCT-05

E2010.02.07 Kitchen Casework*

The cafeteria kitchen has wood preparation tables. The staff room has custom wood upper and lower cabinets with plastic laminate counter-tops.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	35	OCT-05

E2010.02.08 Laboratory Casework*

Each science laboratory is equipped with upper wood cabinets, lower cupboards c/w counter-top, open fixed shelving. Most of the other labs, such as; home economics, art, communications and music all have fixed storage wood cabinets throughout the room.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
3 - Marginal	0	35	OCT-05

Event: **Replace millwork in the home economic lab, cooking lab and beauty culture lab**

Concern:

The millwork in the home economic lab, cooking lab and beauty culture lab area is worn, dated and not fully functional.

Recommendation:

Replace millwork in the home economic lab, cooking lab and beauty culture lab

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Failure Replacement	2008	\$64,200	Low

Updated: February 1 2006

E2010.02.09 Library Casework*

The library has fixed and moveable wood shelving casework.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	35	OCT-05

E2010.02.99 Other Casework*

Glass display cabinets are located in the corridors & entrance area.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	0	OCT-05

E2010.03.06 Curtains and Drapes**

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

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	35	OCT-05

E2010.05 Fixed Multiple Seating**

Fixed seating is located in the 1989 theatre addition. Fixed seating is also located in the teaching theatre, currently used as a classroom and in A/V theatre.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
3 - Marginal	0	35	OCT-05

Event: **Replace and /or repair damaged seats in the A/V theatre & teaching theatre**

Concern:

Several of the seats are badly torn.

Recommendation:

Replace and /or repair damaged seats in the teaching theatre & A/V theatre.

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Failure Replacement	2006	\$21,400	Medium

Updated: February 1 2006



E2020 Moveable Furnishings*

Desks with plastic laminate tops are located throughout the classrooms. Labs & shops have metal base stools. The chapel has wood chairs with fabric covered seats.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	0	OCT-05

F1010.02.05 Grandstands and Bleachers**

Wood bleachers on retractable metal frames are located in gymnasium.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	50	OCT-05

F1020.02.13 Paint Booths*

A paint booth is located in the Building Construction shop

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	50	OCT-05

F2020.01 Asbestos*

Suspected asbestos-containing materials observed in the building include vinyl tile flooring in the school corridors, classrooms, texture coated ceilings, gymnasium wallboard and piping insulation.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	0	OCT-05

F2020.02 PCBs*

PCB's in lighting ballasts

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	0	OCT-05

F2020.04 Mould*

No mould known or reported

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	0	OCT-05

F2020.09 Other Hazardous Materials*

No hazardous material known or reported

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	0	OCT-05

S8 FUNCTIONAL ASSESSMENT

K40 Current Code Issues

1966 - Original construction
1989 - Theatre Addition

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	0	OCT-05

K4010.01 Barrier Free Route: Parking to Entrance

Barrier free access from the parking area to the building entrance is available on the west elevation (rear of school). A designated handicap area is provided. Barrier free ramps to the main building entrance are located from Haddon Road S.W.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	0	OCT-05

K4010.02 Barrier Free Entrances

No automatic door entrances are provided.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
3 - Marginal	0	0	OCT-05

Event: Provided power operators for barrier free access at the east & west entrance of the 1966 original building.

Concern:

No automatic access is currently provided from any exterior entrance doors.

Recommendation:

Provided power operators for barrier free access at the east & west entrance of the 1966 original building.

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Barrier Free Access Upgrade	2006	\$7,490	Low

Updated: February 1 2006

K4010.03 Barrier Free Interior Circulation

Two elevators are located in the main lobby area. See elevators for details.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	0	OCT-05

K4010.04 Barrier Free Washrooms

Barrier free washroom are currently not provided .

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
3 - Marginal	0	0	OCT-05

Event: **Modify & upgrade existing washrooms at each floor level to meet barrier free standards.**

Concern:

No barrier free washroom are currently located in the school.

Recommendation:

Modify & upgrade existing washrooms at each floor level to meet barrier free standards.

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Barrier Free Access Upgrade	2006	\$107,000	Low

Updated: February 1 2006

Facility Details

Building Name: Bishop Grandin High School
Address:
Location: Calgary

Building Id: S2538
Gross Area (sq. m): 0.00
Replacement Cost: \$0
Construction Year: 0

Evaluation Details

Evaluation Company:

Evaluation Date:

Evaluator Name:

Total Maintenance Events Next 5 years: \$32,100
5 year Facility Condition Index (FCI): 0%

General Summary:

Bishop Grandin Senior High School is situated on 4.58 ha of land and has a total building area is 19805.90m2.

The site include two large asphalt paved parking areas for students and staff along the west end of the site. The areas are accessible from 86th Avenue S.W. An asphalt paved parking area is also located along the south elevation of the school and along the main entrance of the school east elevation. The parking area & roadway on the east elevation is accessible via Haddon Road S.W. This area is used primarily for a drop-off - pick up.
 A sodded football/soccer field is located on the south end of the property. A baseball field is located at the south-west end of the site. Grass, shrubs and trees are located along the north, east & west ends of the property. A retaining wall is located along the roadway between the football field and the south roadway. Waste Disposal is located at the south-west corner of the school. Pedestrian concrete walkways, ramps & stairs are located at most of the school entrances. The site slopes east towards the building and water penetrating into the building was a concern in the past, however staff indicated repairs have been made to the site.

There are no portables on site.

The site technical's recommended for replacement and/or major repair within the years 2005 to 2009 are as follows:

- Repair Car Plug-Ins
- Repair damaged retaining wall

Overall the site was observed to be in good condition.

Structural Summary:

Envelope Summary:

Interior Summary:

Mechanical Summary:

Electrical Summary:

Rating Guide

Condition Rating	Performance
1 - Critical	Unsafe, high risk of injury or critical system failure.
2 - Poor	Does not meet requirements, has significant deficiencies. May have high operating/maintenance costs.
3 - Marginal	Meets minimum requirements, has significant deficiencies. May have above average operating maintenance costs.
4 - Acceptable	Meets present requirements, minor deficiencies. Average operating/maintenance costs.
5 - Good	Meets all present requirements. No deficiencies.
6 - Excellent	As new/state of the art, meets present and foreseeable requirements.

S7 SITE

G2010.02.02 Flexible Pavement Roadway (Asphalt)**

An asphalt paved roadway to the two main parking areas is located and accessible from 86th Avenue S.W along the north end of the site.

An asphalt paved roadway to the parking area at the north end of the site is located and accessible from Haddon Road S.W.

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

G2010.02.02 Flexible Pavement Roadway (Asphalt)**- Main entrance

(2000) - Main roadway at main entrance (East elevation). Access from Haddon Road S.W.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	0	20	

G2010.05 Roadway Curbs and Gutters*

Poured in place concrete curbs are located along the edge of the roadway.

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

G2010.05 Roadway Curbs and Gutters*- Main entrance

(2000) - Poured in place concrete curbs are located along the edge of the roadway.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	0	30	

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

An asphalt paved parking areas is located and accessible from 86th Avenue S.W along the north end of the site.

An asphalt paved parking area at the north end of the site is located and accessible from Haddon Road S.W.

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

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

(2000) - An asphalt paved parking areas is located and accessible from Haddon Road S.W. The area also the pick-up /drop-off area.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	0	10	

G2020.02.04 Pavement Markings

The parking lots have yellow painted lines identifying the parking spaces.

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

G2020.02.04 Pavement Markings - Main entrance

(2000) - The parking lots have yellow painted lines identifying the parking spaces.

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

G2020.05 Parking Lot Curbs and Gutters*

Poured in place concrete curbs are located at each parking space.

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

G2020.05 Parking Lot Curbs and Gutters*-Main entrance

(2000) - Poured in place concrete curbs are located at each parking space.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	0	30	

G2020.06.03 Parking Lot Signs*

Metal signs on the chain-link are located in the parking areas.

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

G2030.04 Rigid Pedestrian Pavement (Concrete)**

Poured in place concrete walkways lead to all the school entrances from the asphalt paved areas.

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

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

(2000) - Poured in place concrete walkways lead to the main school entrance.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	0	30	

G2030.06 Exterior Steps and Ramps*

Poured in place concrete stairs and ramps at the north school entrance.

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

G2030.06 Exterior Steps and Ramps*- Main entrance

(2000) - Poured in place concrete stairs and ramps to the main entrance.

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

G2040.02 Fences and Gates**

Chain-link fencing is located along most of the property boundary and the parking area.

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

G2040.03 Athletic and Recreational Surfaces**

A sodded baseball field with backstops is located at the south-west corner of the site. A sodded football / soccer field with goal posts is located at the south-east end of the property. A gravel running track is located around the field.

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

G2040.04 Athletic and Recreational Equipment*

A sodded baseball field with backstops is located at the south-west corner of the site. A sodded football / soccer field with goal posts is located at the south-east end of the property.

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

G2040.06 Exterior Signs*

Exterior wall-mounted signage is provided on several of the building's entrances. School signage is located on the east wall.

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

G2040.08 Flagpoles*

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

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

G2040.11 Retaining Walls*

A poured in place concrete retaining wall is located between the roadway and football field along the north elevation.

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

Event: Repair damaged retaining wall

Concern:

The retaining wall along the north roadway is damaged and cracked in several isolated locations.

Recommendation:

Repair damaged retaining wall.

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Repair	2006	\$26,750	Medium

Updated: February 6 2006

G2050.01 Irrigation Systems*

(1995) Toro irrigation system for the grassed areas.

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

G2050.04 Lawns and Grasses*

Grassed areas are located along the north and east sides of the school.

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

G2050.05 Trees, Plants and Ground Covers*

Mature trees and shrubs are located along the north, south & east sides of the site.

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

G3010 Water Supply

The underground municipal water supply enters the building in the mechanical room in the south section of the building.

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

G3010.03 Site Fire Protection Water Distribution*

There is no Siamese connection however a fire hydrant is located on an adjacent side street.

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

G3020.01 Sanitary Sewage Collection*

The building's black iron sanitary lines are connected to the municipal system.

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

G3030.01 Storm Water Collection*

Catch basins in the parking areas, lane ways and walkways and positive drainage away from the building.

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

G3060.01 Gas Distribution*

The main gas lines enters the building at the meter room in the south section of the building.

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

G4010.02 Electrical Power Distribution Lines*

An underground electrical feed from the local power authority.

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

G4010.04 Car Plugs-ins*

There are approximately 45 duplex car plug-ins outlets in the various parking areas around the building (7 outlets at the front drop off loop, 12 outlets at the auto shop parking area, 12 outlets in the staff parking lot to the west of the building and 14 outlets in the staff parking area to the south of the building). The duplex outlets are either mounted on individual metal posts or attached to wooden member that is attached to the chain link fencing (auto shop and west parking areas).

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

Event: Repair Car Plug-Ins

Concern:

Several of the plug-in metal posts are out of plumb due to vehicular impact.

Recommendation:

Repair car plug-in posts.

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Repair	2007	\$5,350	Low

Updated: February 6 2006

G4020.01 Area Lighting*

Area lighting is provided by, approximately 8 wall mounted HPS units, one light standard with four heads (parking area to the west of the building), two single headed light standards (parking area to the south of the building) and four single headed light standards at the main entrance. Incandescent canopy lights were also identified at the north exits. A second parking lot standard with four lamps was noted in the shared parking lot to the west of the building.

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