RECAPP Facility Evaluation Report

Parkland School Division #70

Memorial Composite High School

B4114A

Stony Plain

Report run on: February 4, 2005 2:16 PM

Facility Details

Building Name: Memorial Composite High S
Address: 5116 - 55 Avenue
Location: Stony Plain

Building Id: B4114A
Gross Area (sq. m): 0.00
Replacement Cost: $19,349,823
Construction Year: 0

Evaluation Details

Evaluation Company: O'Neill O'Neill Procinsky Architects
Evaluation Date: May 1 2004
Evaluator Name: Mr. Dermot O'Neill
Evaluator Phone: (780) 482-4813

Total Maintenance Events Next 5 years: **$4,193,460**
5 year Facility Condition Index (FCI): **21.67%**

General Summary:

Memorial Composite High School original school was built in 1962 and has had additions in 1963, 1966 and 1981. Also there was a major modernization in 1981 but it did not include the entire school. Many interior elements remain as original construction. Although the structure is still performing well the remainder of this school in every aspect is substandard. This school requires a complete upgrade and modernization.

Structural Summary:

The original 1962 building and the 1963 addition are supported by a system of cast in place concrete foundation walls and footings. The main floor is constructed from wood joists and wood sheathing, which span over a crawl space. The roof is generally constructed from a system of wood sheathing supported by wood joists and a system of glulam beams and steel columns. The roof over the Art Room and Theatre in the 1962 building is constructed from a system of wood decking supported by open web steel joists. A foundation system similar to the 1962 and 1963 portions supports the 1966 addition. The main floor is constructed from a structural reinforced concrete slab over a crawl space. Mezzanines are constructed from precast double tees supporting concrete topping in turn supporting masonry bearing walls. The roof is constructed from precast double tees supported by masonry bearing walls. The 1981 addition has a concrete slab on grade for the main floor. The roof is a system of metal roof deck supported by either open web steel joists or steel beam purlins in turn supported by a system of steel beams and columns and masonry bearing walls. Overall the structure has performed well.

Envelope Summary:

The building envelope is stone dash conventional stucco with stucco wire on furring, insulation, and air barrier. The entire school has a cedar fascia band that has deteriorated. There are some areas at canopies and parapets where the wall and roof structures are not protected. The roof construction is 40% inverted roofing, 40% built-up gravel roofing, and 20% SBS roofing. All inverted and built-up roofs require replacement. All windows are at the end of their lifecycle. 75% of the doors and frames require replacement.

Interior Summary:

Interior construction for the majority of the school is in very poor condition. Long lasting materials, when used, have stood the test of time (such as concrete block walls). There have not been any major renovations or upgrades since 1981. Even when the 1981 modernization was completed many deficient elements remained; such elements as doors and frames, lockers, floor finishes, wall finishes, ceiling finishes, washroom accessories, millwork, and handrails. All of these elements are very substandard and many do not meet the building code. There are many illegal conditions in this school that are health and safety issues. There are no fire walls and most fire separations are not intact. Exiting and circulation problems are evident. Proper fire protection of the wood frame combustible construction is not provided. Finally there are many hazardous materials within Memorial Composite High School which need to be addressed.

Mechanical Summary:

The 1962 original building has original exhaust fans, boilers, pumps and piping distribution valves. Also there are exhaust fans installed in 1981. Ductwork was installed in 1981 within the crawlspace with branch line ductwork to floor supply and return outlets. Supply ductwork was connected to the indoor air system in 1981. In 1999 the Ancillary 1102 was modernized into the Theatre and a gas fired rooftop unit was installed to provide ventilation. The Art Room 1101 furnace was removed and replace. The heating is via hot water medium to terminal heating units from the original cast iron boiler installed in the 1962 original boiler room. Some plumbing fixture upgrades have occurred.

The 1963 addition has original exhaust fans as well as exhaust fans installed in 1981. Ventilation is provided via the built up air system and ductwork installed in 1981 and is complete with Dx cooling coil. The old gymnasium is heated and ventilated via three furnaces. Main lobby and entrance is heated by furnace as well. Hot water from the existing

1962 heating plant provides the heating media for the original building and the 1963 terminal heating units. Some plumbing fixture upgrades have occurred.

The 1966 addition also has original exhaust fans and exhaust fans installed in 1981. Ventilation is provided via two multizone rooftop units. A cast iron sectional boiler provides heated water to heating elements. Again some plumbing fixture upgrades have occurred in the 1966 building.

the 1981 addition exhaust fans are roof mounted. the buit up air system in the mechanical room 1157 provides ventilation air for the 1981 addition classrooms, some classrooms in the 1962 original school, and some classrooms in the 1966 addition. The air system is complete with a Dx cooling coil. The two built up air systems in the mechanical room 2133 provide ventilation air for the 1981 addition gymnasium and for the 1981 drama area. Direct and indirect fired make up air systems are provided to offset the CTS wing exhaust requirements. Upgrades to the plumbing fixtures have occurred to reduce operation and maintenance costs.

The fire protection consists of fire extinguishers installed on wall hooks or in cabinets. Fire hose cabinets complete with hose, valves and fire extinguishers.
BMCS system provides global control of the mechanical systems.
The existing mechanical heating, plumbing, and ventilation systems are not condusive to maintain an optimum enviroment for teaching and learning. Mechanical systems should be upgraded to provide a quality teaching and learning environment as well as the flexibility and expandability required to fulfill the requirements of the school.

During the review of the school it was indicated that many rooms are cold in the winter and ventilation is poor. Rooms were occupied during the site review and body odor was very noticeable in some of the rooms which indicates there is a lack of ventilation and fresh air. The amount of fresh air introduced into the building through air systems is not known. There are complaints of rooms being too hot which is probably due to a lack of individual room control. Classrooms in the 1981 addition are provided with ventilation via a single zone air system. Classrooms in the 1966 addition are provided with ventilation air via multizone air systems which are past their life expectancy. Parts for the multizone units are no longer available and maintenance as had to jimmy rig controls to maintain air systems operation. The classrooms in the 1966 addition are provided with radiation which is piped in series and does not provide individual room control. Maintenance receives calls regularly to address room temperature complaints due to the air system not operating. Computer classrooms are hot with temperatures as high as 38 degrees. Many system components have reached or already exceed their life expectancy. This has resulted in high operating and maintenance costs. Heating boilers are not centralized resulting in increased maintenance inefficiency. The equipment is not energy efficient and results in unnecessary utility costs.

Even though there are system components which are fairly new, we recommend a total removal of existing mechanical systems and a new system be installed to provide an educational high school facility that meets Alberta Infrastructure Recommendations and Guidelines.

Electrical Summary:

Generally the school is in good condition. However systems and life safety systems have reached the end of their life cycle and replacement parts are no longer available, ie. fire alarm system and sound system. Starters for mechanical equipment are also becoming obsolete. Areas with in the school are lacking fire alarm devices and zoning in reference to two hour fire ratings. The emergency generator fuel source does not meet current codes. There are two different vintages of electrical distribution panels throughout the school noted as 1981 and 1962. The electrical service to the school is rated at 1600 amps at 347/600 volts and there is no surge protection on the main service.

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

A1010.01 Wall Foundations (Continuous Footing)

The original 1962 building and the 1963 addition are supported on continuous footings at the perimeter walls and interior bearing walls.

Rating	Installed	Design Life	Updated
5 - Good	0	0	October 2004

A1010.02 Column Foundations

The 1966 and 1981 additions are supported on spread footings, concrete pedestals, and grade beams.

Rating	Installed	Design Life	Updated
5 - Good	0	0	October 2004

A1010.02.01 Spread Footings

Isolated areas of the the 1963 addition and all of the 1966 and 1981 additions are supported on spread footings.

Rating	Installed	Design Life	Updated
5 - Good	0	0	October 2004

A1020.07 Grade Beams

Cast in place concrete grade beams supported by concrete pedestals and spread footings in the 1966 and 1981 additions.

Rating	Installed	Design Life	Updated
5 - Good	0	0	October 2004

A1030.07 Perimeter Insulation

During the 1981 modernization 25 mm rigid insulation was added to the foundation to 600mm below grade.

Rating	Installed	Design Life	Updated
4 - Acceptable	0	0	October 2004

B1010.01.04.06 Wood Framing: Joists - 1962, 1963

Wood joists and sheathing over crawl space in the original 1962 building and the 1963 addition.

Rating	Installed	Design Life	Updated
4 - Acceptable	0	0	October 2004

B1010.02.01 Cast-in-place Concrete:Structural Wall - 1963

The 1963 Addition has interior concrete foundation walls supporting the floor structure and concrete block classroom demizing walls.

Rating	Installed	Design Life	Updated
4 - Acceptable	0	0	October 2004

B1010.02.08 Wood Framing: Wall - 1963

The 1963 Gymnasium floor is supported by 38 x 89 wood stud walls on concrete strip footings over crawlspace. The wood framed walls are spaced at 3600 on center.

Wood pony walls of 2 x 6 " construction support the stage over the under stage storage adjacent to the 1963 Gymnasium.

Rating	Installed	Design Life	Updated
4 - Acceptable	0	0	November 2004

B1010.03.01 Cast-in-place concrete: Slab - 1966

Structural reinforced cast in place concrete slab over crawl space in the 1966 addition.

Rating	Installed	Design Life	Updated
4 - Acceptable	0	0	October 2004

B1010.03.07 Wood Decking

In the original 1962 building and the 1963 addition, wood sheathing is supported by wood joists.

Rating	Installed	Design Life	Updated
4 - Acceptable	0	0	October 2004

B1010.05 Mezzanine Construction* - 1966

In the 1966 addition, masonry walls support precast concrete double tees and concrete topping which forms a mezzanine in the library.

Rating	Installed	Design Life	Updated
4 - Acceptable	0	80	October 2004

B1010.05 Mezzanine Construction* - 1981

In the 1981 addition masonry walls support structural reinforced concrete slabs.

Rating	Installed	Design Life	Updated
4 - Acceptable	0	80	October 2004

B1020.01.01.05 Structural Steel: Roof Column - 1966

Steel pipe columns supporting wood beams in the 1966 addition.

Rating	Installed	Design Life	Updated
4 - Acceptable	0	0	October 2004

B1020.01.01.05 Structural Steel: Roof Column - 1981

Steel HSS columns supporting steel beams in the 1981 addition.

Rating	Installed	Design Life	Updated
4 - Acceptable	0	0	October 2004

B1020.01.02.03 Structural Metal Framing:Roof Beams - 1981

In the 1981 addition steel beams support open web steel joists and steel beam purlins.

Rating	Installed	Design Life	Updated
4 - Acceptable	0	0	October 2004

B1020.01.02.06 Wood Framing:Roof Beams

In the original 1962 building and the 1963 addition wood glulaminated beams or built up wood beams support wood joists and wood sheathing. One glulam beam in the small gymnasium room 1162 has been reinforced.

Rating	Installed	Design Life	Updated
4 - Acceptable	0	0	October 2004

B1020.01.04.02 Steel Joists - 1962

In the Art Room 1101 and the Theatre 1102 of the 1962 building open web steel joists support wood decking.

Rating	Installed	Design Life	Updated
4 - Acceptable	0	0	October 2004

B1020.01.04.02 Steel Joists - 1981

In the 1981 addition open web steel joists support metal roof decking.

Rating	Installed	Design Life	Updated
5 - Good	0	0	October 2004

B1020.02.03.02 Concrete Masonry Units: Struct. Wal

In the 1966 and 1981 additions masonry walls support the roof structure.

Rating	Installed	Design Life	Updated
3 - Marginal	0	0	October 2004

B1020.03.02 Precast Concrete: Roof Deck - 1966

In the 1966 addition precast concrete double tees form the roof structure.

Rating	Installed	Design Life	Updated
4 - Acceptable	0	0	October 2004

B1020.03.05 Metal Deck

In the 1981 addition, metal roof deck is supported by open web steel joists or steel beam purlins.

Rating	Installed	Design Life	Updated
4 - Acceptable	0	0	October 2004

B1020.03.06 Sheathing: Roof Deck

In the original building and in the 1963 addition, wood sheathing is supported by wood joists. In the Art Room 1101 and Theater 1102 of the 1962 building open web steel joists support wood decking.

Rating	Installed	Design Life	Updated
4 - Acceptable	0	0	October 2004

B1020.04.04 Rough Carpentry: Canopies

In 1981 all entrance canopies were renovated and the wood roof was extended and supported on steel beams, columns, and original block walls.

Rating	Installed	Design Life	Updated
2 - Poor	0	0	October 2004

Event: Provide continuous envelope protection.

Concern:
Canopies over entrance are cold yet where the structure runs back into the building there is no protection from thermal bridging or fascia insulation separating the warm space to the cold.

Recommendation:
Provide proper protection with insulation. caulking and air seal membrane to minimize cold bridging.

Type	Year	Cost	Priority
Energy Efficiency Upgrade	2007	$10,000	N/A

Updated: October 12 2004

S2 ENVELOPE

B2010.01.06.04 Wood Siding*

Fascia panels around the entire school are stained vertical cedar. Some are mounted directly to furring channels, insulation, and block. Some of the cedar is mounted on the face of the cold overhang.

Rating	Installed	Design Life	Updated
3 - Marginal	0	40	October 2004

Event: Replace weathered cedar boards.

Concern:
Cedar fascia around entire school are weathered badly.

Recommendation:
Replace cedar fascia with maintenance free material. 450 m2.

Type	Year	Cost	Priority
Preventative Maintenance	2005	$40,000	Low

Updated: October 12 2004

B2010.01.06.05 Vinyl Siding*

Exterior of cold storage room.

Rating	Installed	Design Life	Updated
4 - Acceptable	0	30	October 2004

B2010.01.08 Portland Cement Plaster: Exterior Wall* - 1962

The 1962 original building has concrete block pilasters between windows with stucco finsh only at Art Room 1101 and Theatre 1102.

Rating	Installed	Design Life	Updated
2 - Poor	0	75	October 2004

Event: Provide air seal, insulation, and rain screen to pilasters.

Concern:
Pilasters at wood windows are exposed, uninsulated structural members. Original wood windows remain extending from structural pilaster to structural pilaster without any air seal tie ins.

Recommendation:
At time of window replacement provide proper air seal, insulation and rainscreen at pilasters that would wrap into the window frame. Window sizes would be reduced to allow a concrete block jambto tie the air seal to.

Type	Year	Cost	Priority
Energy Efficiency Upgrade	2005	$10,000	Low

Updated: October 12 2004

B2010.01.08 Portland Cement Plaster: Ext. Wall*

Entire school was stuccoed in 1981 with a stone dash - stucco.

Rating	Installed	Design Life	Updated
3 - Marginal	0	75	October 2004

Event: Patch and repair cracked stucco.

Concern:
Water has infiltrated stucco system due to flashings that have failed and stucco has cracked due to moisture freeze thaw cycle.

Recommendation:
Patch and repair at time of flashing repairs.

Type	Year	Cost	Priority
Repair	2005	$5,000	Low

Updated: October 12 2004

B2010.01.09 Expansion Control: Exterior Wall Skin*

Back to back stucco control joints at 4 to 7 meters on center.

Rating	Installed	Design Life	Updated
4 - Acceptable	0	0	October 2004

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

Exposed concrete block painted at 1962 entrance vestibule E02.

Rating	Installed	Design Life	Updated
4 - Acceptable	0	15	October 2004

B2010.01.99 Other Exterior Wall Skin*

Glazed ceramic wall tile was added in 1981 located under all windows, above door E07 and at overhead door E13. Ceramic tile is on thin set bed plaster and k-lath on 20 mm vertical strapping over rigid insulation and horizontal strapping on concrete block. Ceramic tile is lead glazed as noted in Hazardous Materials survey.

Rating	Installed	Design Life	Updated
2 - Poor	0	0	October 2004

Event: Remove and replace all lead based glazed ceramic tiles.

Concern:

Lead based glazed ceramic tiles are located under all exterior windows and in stucco as an accent. As indicated in the hazardous materials survey.

Recommendation:

When windows require replacement remove and dispose of ceramic tile as suggested in the hazardous materials survey. Replace ceramic tile.

Type	Year	Cost	Priority
Hazardous Material Management Upgrade	2007	$30,000	Medium

Updated: October 12 2004

B2010.02.03.02 Concrete Masonry: Ext. Wall Const.

The majority of the exterior walls in all building sections are concrete block.

Rating	Installed	Design Life	Updated
4 - Acceptable	0	0	October 2004

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

Cold storage room located between 1966 building and 1992 portables was constructed of wood framing residential construction.

Rating	Installed	Design Life	Updated
1 - Critical	0	100	October 2004

Event: Demolish cold storage room construction. Replace with new construction.

Concern:

Cold storage room construction is wood frame with insulation, gypsum board and wood framing. Gypsum board walls and ceilings have extensive mould. Wood framing is wet and can't dry out. Strong musky smell is present.

Recommendation:

Remove all cold storage construction and replace with appropriate concrete block construction, with ventilation and proper flashing at junctions to adjacent buildings.

Type	Year	Cost	Priority
Hazardous Material Management Upgrade	2004	$40,000	High

Updated: October 12 2004

B2010.03.01 Vapor Retarders: Exterior Wall

Modernized in 1981 it is assumed that wall vapor retarders are present although none were observed on site and drawings do not indicate any vapor retarders.

Rating	Installed	Design Life	Updated
4 - Acceptable	0	0	October 2004

B2010.03.03.01 Batt Insulation: Exterior Wall

Batt insulation is located at exterior gym wall built out profiles and at junctions between 1981 building and 1962, 1963, and 1966 buildings where 1981 roof is higher than adjacent roofs.

Rating	Installed	Design Life	Updated
3 - Marginal	0	0	October 2004

Event: Replace batt insulation.

Concern:

At interface construction between 1981 building and 1962, 1963, and 1966 buildings there is extensive evidence of leaks. Batt insulation has likely been wet and is not performing.

Recommendation:

At time of reroofing or modernization all interfaces should be checked for moisture penetration and damaged insulation should be removed and replaced with new technology envelope.

Type	Year	Cost	Priority
Repair	2007	$10,000	Low

Updated: October 12 2004

B2010.03.03.02 Building Board Insulation: Ext.Wall

In 1981 exterior of school was modernized and 50 mm rigid insulation was added to face of concrete block walls.

Rating	Installed	Design Life	Updated
4 - Acceptable	0	0	October 2004

B2010.04 Exterior Wall Interior Skin - 1962, 1963, 1966

Painted concrete block construction.

Rating	Installed	Design Life	Updated
4 - Acceptable	0	0	October 2004

B2010.04 Exterior Wall Interior Skin- 1981

Painted concrete block walls with some walls having a desco coating.

Rating	Installed	Design Life	Updated
4 - Acceptable	0	0	October 2004

B2010.05 Parapets* - 1962, 1963, 1966

Wood framed parapets were added to the 1962, 1963 and 1966 buildings in 1981 to exterior facade and to interface with the 1981 building.

Rating	Installed	Design Life	Updated
2 - Poor	0	30	October 2004

Event: Replace damaged wood frame construction.

Concern:
Interface parapets between the 1962, 1963, 1966 and 1981 buildings are leaking extensively.

Recommendation:
At time of reroofing replace moisture damaged construction with proper protected envelope construction.

Type	Year	Cost	Priority
Repair	2007	$15,000	Medium

Updated: October 12 2004

B2010.05 Parapets* - 1981

Wood framed truss overhangs are attached to concrete block with concrete block parapets on the exterior walls.

Rating	Installed	Design Life	Updated
3 - Marginal	0	30	October 2004

Event: Insulate concrete block parapets.

Concern:
Concrete block parapets are not protected with insulation on top and inside faces of the block. Roof felts are on plywood attached to the block allowing cold temperatures to penetrate the wall and roof structure.

Recommendation:
At the time of reroofing parapets should be properly protected.

Type	Year	Cost	Priority
Energy Efficiency Upgrade	2007	$7,500	Low

Updated: October 12 2004

B2010.06 Exterior Louvers, Grilles, and Screens*

Mechanical louvres painted throughout the school.

Rating	Installed	Design Life	Updated
3 - Marginal	0	30	October 2004

Event: Paint mechanical louvres.

Concern:
Mechanical louvre paint finish has worn off and metal is exposed.

Recommendation:
Paint louvres to maintain quality of material.

Type	Year	Cost	Priority
Preventative Maintenance	2007	$5,000	Low

Updated: October 12 2004

B2010.06 Exterior Louvers, Grilles, and Screens* - 1981

Cold canopies and overhangs have soffit vents.

Rating	Installed	Design Life	Updated
4 - Acceptable	0	30	October 2004

B2010.09.01 Finish Carpentry:(Plywood/ T&G)Soffits

The 1966 addition has alcove windows with soffits above.

Rating	Installed	Design Life	Updated
3 - Marginal	0	0	October 2004

Event: Replace soffit construction with vented stucco system.

Concern:
Existing soffits are t&g wood which is weathering and not vented.

Recommendation:
Replace with vented soffits typical of entire school.

Type	Year	Cost	Priority
Energy Efficiency Upgrade	2007	$5,000	Low

Updated: October 12 2004

B2010.09.01 Finsh Carpentry:(Plywood/T&G)Soffits - 1962

Existing wood decking runs through from interior to exterior soffit.

Rating	Installed	Design Life	Updated
2 - Poor	0	0	October 2004

Event: Protect wood deck from moisture and air infiltration.

Concern:
Exposed wood roof decking extends from interior ceiling to exterior soffit allowing thermal bridging. Wood decking has weathered.

Recommendation:
At time of replacing windows reduce window height to allow for proper protection of wood decking with insulation and maintenance free finishes.

Type	Year	Cost	Priority
Energy Efficiency Upgrade	2005	$2,500	Low

Updated: October 12 2004

B2010.09.04 Portland Cement Plaster:Soffits - 1981

In 1981 addition exterior soffits are stucco on k-lath with soffit vents. The north elevation of the 1962 abd 1963 buildings were modernized to have stucco soffits with vents.

Rating	Installed	Design Life	Updated
4 - Acceptable	0	0	October 2004

B2020.01.01.02 Aluminum Windows*

The 1981 addition has anodized aluminum windows with double glazing with hopper operable lites and east and south facing windows have between glass venetian blinds.

Rating	Installed	Design Life	Updated
3 - Marginal	0	35	October 2004

Event: Replace windows.

Concern:
Windows have deteriorated. Operable parts are broken and replacement parts are not available. Windows which had replaced original 1963 and 1966 windows were set into existing openings and concrete block structure was not protected with continuous air seal, insulation and rain screen.

Recommendation:
Replace all windows, ensure air seal tie-ins at all locations and return building envelope to all jambs and heads as well as sills.

Type	Year	Cost	Priority
Lifecycle Replacement	2006	$130,000	Low

Updated: October 12 2004

B2030.01.02 Steel-Framed Storefronts

Exterior doors are original from 1962, 1963, 1966 and 1981. Doors and hardware have never been upgraded.

Rating	Installed	Design Life	Updated
2 - Poor	0	15	October 2004

Event: Replace all exterior entrance doors.

Concern:
Entrance doors are heavily used and hardware does not work properly.

Recommendation:
Replace 12 sets of double entrance doors, frames and hardware with new insulated metal half lite doors and frames.

Type	Year	Cost	Priority
Lifecycle Replacement	2004	$60,000	Medium

Updated: October 12 2004

B2030.01.06 Automatic Entrance Doors*

Automatic entrance door located at parking south east corridor H107.

Rating	Installed	Design Life	Updated
4 - Acceptable	0	15	October 2004

B2030.02 Exterior Utility Doors*1962, 1963, 1966

Metal doors and frames.

Rating	Installed	Design Life	Updated
3 - Marginal	0	15	October 2004

Event: Replace utility doors and frames and hardware.

Concern:
Utility doors in the 1962, 1963, and 1966 buildings require replacement. Doors are 30 years old and are failing.

Recommendation:
Replace 12 single man doors with insulated steel doors and frames and hardware.

Type	Year	Cost	Priority
Lifecycle Replacement	2005	$25,000	Low

Updated: October 12 2004

B2030.02.01 Metal Doors and Frames - 1981

Pressed steel frames and insulated metal doors

Rating	Installed	Design Life	Updated
3 - Marginal	0	0	October 2004

Event: Repair and replace utility doors.

Concern:
Utility doors are well used and some doors have failed. Some doors are worn out.

Recommendation:
Replace 8 single leaf doors and frames and repaint and repair 4 single leaf doors and frames.

Type	Year	Cost	Priority
Preventative Maintenance	2005	$22,000	Low

Updated: October 12 2004

B2030.03.02 Sectional Overhead Doors

Insulated metal high lift overhead doors located at CTS areas.

Rating	Installed	Design Life	Updated
2 - Poor	0	0	October 2004

Event: Replace overhead doors.

Concern:
Overhead shop doors in 1109 Building Construction, 1116 Mechanics, 1118 Automotives and cold storage overhead doors are warn out and breaking down.

Recommendation:
Replace 10 overhead doors.

Type	Year	Cost	Priority
Lifecycle Replacement	2007	$47,000	Medium

Updated: October 12 2004

B3010.02.01.01 Asphalt Shingles*

Cold storage area built in 2000 and located between Janitor Room 1141 and Portable Classroom 1206 has asphalt shingles.

Rating	Installed	Design Life	Updated
2 - Poor	0	25	October 2004

Event: Remove asphalt shingles and provide new SBS roofing.

Concern:
Inferface of water shed between existing stucco on concrete block at the Janitor room 1141 and the cold storage and as well between the Portable Classroom 1206 and the Cold Storage Room has failed and moisture is infiltrating under the shingles or between the walls and shingles causing mold growth on interior of finishes of Cold Storage.

Recommendation:
Remove entire cold storage structure. Provide new structure with flat roof construction and SBS membrane.

Type	Year	Cost	Priority
Preventative Maintenance	2004	$10,000	Low

Updated: October 12 2004

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

1962, 1963, and 1966 buildings were reroofed in 1992 with a BUR gravel roof system.

Rating	Installed	Design Life	Updated
2 - Poor	0	25	October 2004

Event: Reroof all BUR roofs with SBS.

Concern:
All built-up roofing is not performing. Roof does not have proper slopes for good drainage. Ponding and blistering is extensive. Repetitious leakage in and around connections to sloped glazing and higher stucco walls.

Recommendation:
Reroof all roofs of built-up gravel roofing for the 1962, 1963, and 1966 buildings. 5000m2.

Type	Year	Cost	Priority
Lifecycle Replacement	2007	$431,000	Low

Updated: October 12 2004

B3010.04.04 Modified Bituminous Membrane Roofing (SBS)* - 1963 Gym

1963 Gymnasium 1162 roof and canopy was reroofed with SBS membrane roofing in 2003.

Rating	Installed	Design Life	Updated
6 - Excellent	0	25	October 2004

B3010.04.04 Modified Bituminous Membrane Roofing (SBS)* - 1981 Gym

The 1981 Gymnasium was reroofed in 2004 with SBS roof membrane.

Rating	Installed	Design Life	Updated
6 - Excellent	0	25	October 2004

B3010.04.08 Membrane Roofing (Inverted/ Protected)* - 1981

The 1981 addition has an inverted roof system.

Rating	Installed	Design Life	Updated
2 - Poor	0	30	October 2004

Event: Replace roof system with SBS.

Concern:
1981 addition has inverted roof system with extensive blistering, water ponding and tree growth. Leaking is evident in ceiling damage.

Recommendation:
Replace all inverted rooofs remaining with SBS roof system. 4831 m2.

Type	Year	Cost	Priority
Lifecycle Replacement	2005	$416,000	Low

Updated: October 12 2004

B3010.08 Flashing and Sheet Metal

Tonecrete desco coating cap flashings on all 1981 parapets. Where roof has been upgraded flashings have been replaced with prefinished metal.

Rating	Installed	Design Life	Updated
3 - Marginal	0	30	October 2004

Event: Repair flashings.

Concern:
Flashings have pulled away at the top of blast walls at 1962 transformer enclosure Room 1104 and 1105. Water has infiltrated assembly and stucco is cracking.

Recommendation:
Repair flashings and ensure proper weather laps.

Type	Year	Cost	Priority
Preventative Maintenance	2004	$2,000	Low

Updated: October 12 2004

Event: Replace parapet flashings.

Concern:
Original parapet flashings remain from 1981 and prior.

Recommendation:
Flashings should be replaced as part of re-roofing. Priced with roof replacement.

Type	Year	Cost	Priority
Lifecycle Replacement	2004	$0	Low

Updated: October 12 2004

B3010.08 Flashing and Sheet Metal

Prefinished metal flashings were replaced with new SBS roof system on the 1963 Gymnasium 1162 and the 1981 Gymnasium 1200.

Rating	Installed	Design Life	Updated
6 - Excellent	0	30	October 2004

B3010.09 Roof Specialties and Accessories*

Steel roof ladder and wooden stairs provided.

Rating	Installed	Design Life	Updated
3 - Marginal	0	25	October 2004

Event: Replace roof ladders and stairs.

Concern:
Exisitng roof ladders do not have safety cages. Exisitng wood stair and handrail are deteriorating. Wood is rotting.

Recommendation:
Replace roof stairs with painted steel stair and rails. Retrofit steel ladders with safety cage to meet building code.

Type	Year	Cost	Priority
Code Repair	2005	$10,000	Medium

Updated: October 12 2004

B3020.01.01.01 Domed Unit Skylights

Individual domed poly carbon skylights are located throughout the 1962, 1963, and 1981 buildings.

Rating	Installed	Design Life	Updated
2 - Poor	0	0	October 2004

Event: Remove deteriorated dome skylights and provide new roof.

Concern:
Small dome skylights have deteriorated and are leaking. The skylights are located inappropriately within washrooms.

Recommendation:
Remove domed skylights at time of reroofing, infill openings and roof over. Cost included in new roofing.

Type	Year	Cost	Priority
Lifecycle Replacement	2007	$10,000	Medium

Updated: October 12 2004

B3020.01.02.04 Sloped Metal-Framed Skylights - 1981

Sloped metal sealed unit skylights located along corridor H103.

Rating	Installed	Design Life	Updated
3 - Marginal	0	0	October 2004

Event: Replace sloped metal skylights.

Concern:
Sloped skylights along corridor H103 are leaking.

Recommendation:
Replace Skylights with new curtain wall skylight frames c/w drainage track.

Type	Year	Cost	Priority
Lifecycle Replacement	2007	$26,400	Low

Updated: October 12 2004

B3020.01.02.05 Vaulted Metal-Framed Skylights - 1981

Curtain wall glazed sealed skylight frame fot skylight at 1145 Seminar Room.

Rating	Installed	Design Life	Updated
3 - Marginal	0	0	October 2004

Event: Repair water damage due to skylight leaks.

Concern:
Vaulted skylight seals and flashings require replacement. Leaks and water damage is evident at skylight perimeter ceilings.

Recommendation:
Reseal skylight and repair damage to interior finishes.

Type	Year	Cost	Priority
Repair	2005	$5,000	Low

Updated: October 12 2004

B3020.02.03 Roof Windows (Clerestory) - 1962

Original clerestory wood windows in the Art Room 1101 and the Theatre/Music Room 1102.

Rating	Installed	Design Life	Updated
2 - Poor	0	0	October 2004

Event: Replace original wood windows.

Concern:
Original clerestory wood windows have deteriorated. Seals are broken and air infiltration is high.

Recommendation:
Replace wood windows with aluminum framed hermetically sealed low e windows.

Type	Year	Cost	Priority
Lifecycle Replacement	2005	$20,000	Low

Updated: October 12 2004

S3 INTERIOR

C1010.01.03 Unit Masonry Assemblies

The majority of the interior partitions are unit masonry in the original school and all additions.

Rating	Installed	Design Life	Updated
3 - Marginal	0	0	October 2004

Event: Repair concrete block cracking.

Concern:

Concrete block walls at the interface between 1962 and 1981 buildings along corridor H103 have cracked. As well there is some cracking of the concrete block walls in the 1963 building corridor adjacent the Gymnasium H101 and H106. This is due to differential movement between the foundations and is not a structural concern but should be repaired.

Recommendation:

Repair concrete block by grinding out the cracks and joints and filling the joints and cracks with elastomeric sealant. Paint to match existing walls.

Type	Year	Cost	Priority
Repair	2005	$5,000	Low

Updated: October 12 2004

C1010.01.07 Framed Partitions (Wood Stud)

Wood stud framing is used in the 1998 theatre modernization room 1102.

Rating	Installed	Design Life	Updated
5 - Good	0	0	October 2004

C1010.01.07 Framed Partitions (Wood Stud) - 1963

Understage storage in gymnasium 1162 ha swood framed demizing walls between storage compartments.

Rating	Installed	Design Life	Updated
2 - Poor	0	0	October 2004

Event: Fire separate understage storage compartments.

Concern:
Understage storage compartments are not fire separated as required by the building code.

Recommendation:
Each compartment must be separated with 1 hour rating by applying firerated gypsum board to the face of the wood studs.

Type	Year	Cost	Priority
Code Upgrade	2004	$10,000	High

Updated: October 12 2004

C1010.03.02 Sliding Partitions

Stacking panel partition to divide lunch study 1153 into two rooms.

Rating	Installed	Design Life	Updated
4 - Acceptable	0	0	October 2004

C1010.03.03 Coiling Partitions - 1966

Roll down cedar wood slat partition divides Lunch Study 1153 from Kitchen 1154.

Rating	Installed	Design Life	Updated
2 - Poor	0	0	October 2004

Event: Replace wood slat coiling shutter with stainless steel.

Concern:
Cedar wood slat coiling shutter does not meet health and safety regulations for kitchen area.

Recommendation:
Replace wood slat coiling shutter with stainless steel.

Type	Year	Cost	Priority
Code Repair	2007	$5,000	Medium

Updated: October 12 2004

C1010.03.03 Coiling Partitions - 1981

Canteen/Storage 1195 has rolling metal shutter.

Rating	Installed	Design Life	Updated
4 - Acceptable	0	0	October 2004

C1010.04.01 Metal Railings

Mezzanine railings located in Theatre Ancillary 1102, CTS Wood shop 1109, CTS Graphics 1112, CTS Welding 1116, and CTS Mechanics 1118, and Gymnasium Mezzanine 1200.

Rating	Installed	Design Life	Updated
2 - Poor	0	0	October 2004

Event: Add guard rail to 1164. Modify mezzanine guardrails.

Concern:

Horizontal mezzanine railings in CTS 1109, 1112, 1116, and 1118 do not meet the building code. There is no guardrail or stair handrail at entrance into Ancillary Drama Room 1164.

Recommendation:

Modify mezzanine railings to meet the building code by adding rails. Provide proper guardrail at landing allowing for a removable portion for moving in large sets and equipment.

Type	Year	Cost	Priority
Code Repair	2005	$13,000	High

Updated: October 12 2004

C1010.05.02 Steel Windows

Borrowed lites are locatedin classrooms throughout the school in pressed steel frames.

Rating	Installed	Design Life	Updated
3 - Marginal	0	0	October 2004

Event: Repair and paint all borrowed lite frames.

Concern:

Interior window frames are showing their age and require repairs and painting.

Recommendation:

Repair damaged frames and paint.

Type	Year	Cost	Priority
Preventative Maintenance	2007	$7,000	Low

Updated: October 12 2004

C1010.05.06 Wood Windows

Wood framed windows are located in the general office area 1142 and on the stage 1163.

Rating	Installed	Design Life	Updated
3 - Marginal	0	0	October 2004

Event: Replace stage windows with psf and wired glass.

Concern:
Windows from Stage 1163 to Gymnasium 1162 are wood framed plexiglass. With revise duse of stage glass may require to be wired.

Recommendation:
Study the code to determine all fire separations required for building classification.

Type	Year	Cost	Priority
Study	2007	$5,000	High

Updated: October 12 2004

C1010.05.12 Sound Control Windows

Sound windows are located in the Theatre 2101, 2102, and 2103.

Rating	Installed	Design Life	Updated
5 - Good	0	0	October 2004

C1010.07 Interior Partition Firestopping*

Fiirestopping at tops of walls and in wall penetrations.

Rating	Installed	Design Life	Updated
1 - Critical	0	0	October 2004

Event: Repair all holes in fire separations. Provide fire separations.

Concern:
Throughout the entire building many walls and ceilings required to be fire separations have holes and gaps that do not meet the building code. In Mechanical room 2107 the walls are only 2.4 m high and the entire area is open above to Graphics/Silk Screening 1112. Under stage stoarge in gymnasium 1162 and stage 1163 is not divided with rated wall construction.

Recommendation:
Patch and repair all walls and ceilings with firestop insulation, sealant and fireguard gypsum board to meet the code. Build up walls as required to have proper fire separations.

Type	Year	Cost	Priority
Code Repair	2005	$75,000	High

Updated: October 12 2004

C1010.08 Other Partitions -Metal Stud

In the administration area in the 1962 building metal stud partitions with gypsum board are used as well as in the corridors of all building additions.

Rating	Installed	Design Life	Updated
3 - Marginal	0	0	October 2004

Event: Replace metal stud and gypsum board with conc. block in public corridors.

Concern:

Through school corridors metal studs with gypsum board is used to provide end walls to lockers and classroom alcoves. Gypsum board walls have been abused .

Recommendation:

Replace gypsum wall board and metal studs with concrete block or provide protection with ceramic tile or a hard surface finish such as plastic laminate.

Type	Year	Cost	Priority
Preventative Maintenance	2005	$20,000	Low

Updated: October 12 2004

C1020.01.01 Metal Doors and Frames - 1962

50% of doors and frames are original and 50 % are from 1981 modernization. Theatre 1102 was modernized in 1998.

Rating	Installed	Design Life	Updated
2 - Poor	0	0	October 2004

Event: Replace 75% of doors frames and hardware.

Concern:

Doors frames and hardware are worn out and require replacement. Doors to storage rooms mechanical rooms and Kiln room require ratings which are not present.

Recommendation:

Replace 10 doors, frames and hardware.

Type	Year	Cost	Priority
Lifecycle Replacement	2005	$20,000	Medium

Updated: October 12 2004

C1020.01.07 Wood Doors - 1963, & 1966

Rating	Installed	Design Life	Updated
2 - Poor	0	0	October 2004

Event: Replace all wood doors and frames.

Concern:
Classroom doors in the 1963 and 1966 additions are original wood doors and wood transom with large glazed panels. These doors would not meet the building code for combustible construction. Doors are very old and worn.

Recommendation:
Replace 30 wood doors and frames in 1963 and 1966 Addition with properly rated doors as required by the building code.

Type	Year	Cost	Priority
Lifecycle Replacement	2005	$40,000	Medium

Updated: October 12 2004

C1020.02.02 Steel-Framed Storefronts

Entrance vestibule doors are pressed steel framed doors with glazing and sidelites.

Rating	Installed	Design Life	Updated
2 - Poor	0	0	October 2004

Event: Replace all vestibule entrance doors.

Concern:
All vestibule entry doors are original to building or addition. Doors and hardware are failing and frames are damaged.

Recommendation:
Replace 9 sets of entry vestibule doors to match exterior entrance doors.

Type	Year	Cost	Priority
Lifecycle Replacement	2005	$40,000	Low

Updated: October 12 2004

C1020.03 Interior Fire Doors*

Corridor control doors for exiting and fire separations do not exist or are not rated. Mechanical room 1157 door is not rated.

Rating	Installed	Design Life	Updated
1 - Critical	0	50	October 2004

Event: Provide fire doors to separate the building into compartments for exiting safety.

Concern:

Fire doors should be in place to control exiting and fire from traveling throughout the school. There are no corridor doors separating buildings into fire compartments. Doors in place are not rated. Some mechanical room doors are not rated with proper hardware.

Recommendation:

Provide fire doors to compartmentalize the school at fire walls and fire separations as required by the building code. 10 sets of doors with hold openers.

Type	Year	Cost	Priority
Code Repair	2004	$25,000	High

Updated: October 12 2004

C1020.05 Interior Large Doors*

Oversized doors to drama studio.

Rating	Installed	Design Life	Updated
4 - Acceptable	0	40	October 2004

C1030.01Visual Display Boards

White boards throughout school. Some chalkboards remain as a teacher preference.

Rating	Installed	Design Life	Updated
4 - Acceptable	0	10	October 2004

C1030.02 Fabricated Compartments(Toilets/Showers)*

Metal partitions for washrooms.

Rating	Installed	Design Life	Updated
2 - Poor	0	20	October 2004

Event: Toilet partitions require replacement.

Concern:
Toilet partitions are broken, warped and parts are inoperable. Some partitions are sized too small for standard stall. Some partitions where handicap grab bars and toilets are provided are not handicap size. Washroom 1139 and 1140 were modernized in1992 and are in good condition.

Recommendation:
Replace all toilet partitions with accessible sizes for standard stalls and barrier free stalls.

Type	Year	Cost	Priority
Lifecycle Replacement	2007	$20,000	Low

Updated: October 12 2004

C1030.08.04 Interior Signage

Signage on all doors for room identification. Barrier free signage is not always present.

Rating	Installed	Design Life	Updated
4 - Acceptable	0	0	October 2004

C1030.10 Lockers*

Metal lockers are original to the building. Some lockers were upgraded in 1981.

Rating	Installed	Design Life	Updated
3 - Marginal	0	30	October 2004

Event: Replace lockers throughout.

Concern:
Lockers are old and broken and not repairable.

Recommendation:
Lockers require replacement.

Type	Year	Cost	Priority
Failure Replacement	2004	$250,000	Low

Updated: October 12 2004

C1030.12.02 Mobile Storage Systems

Mobile ball and equipment storage in Gymnasium Storage room 1204.

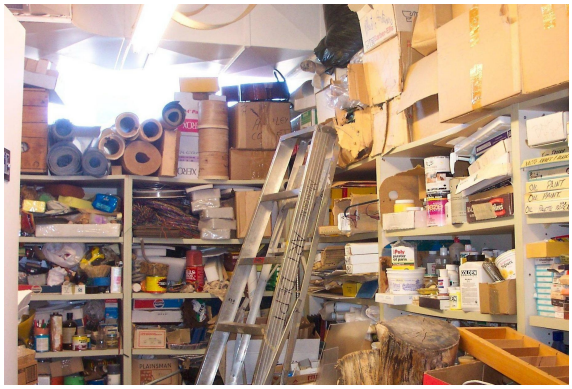
Rating	Installed	Design Life	Updated
4 - Acceptable	0	0	October 2004

C1030.12.04 Prefabricated Wood Storage Shelving

Shelving is painted wood custom millwork.

Rating	Installed	Design Life	Updated
3 - Marginal	0	0	October 2004

Event: Provide support for storage shelving.



Concern:
Some of the storage shelving is overloaded due to longer spans not able to support the weight.

Recommendation:
Provide additional supports for storage shelving.

Type	Year	Cost	Priority
Repair	2007	$3,000	Low

Updated: October 12 2004

C1030.14.01 Toilet Accessories

Washroom accessories are in good condition. Handicap grab bars are not present in washrooms 1196, 1197, 1188, 1189, 1125, and 1127.

Rating	Installed	Design Life	Updated
2 - Poor	0	0	October 2004

Event: Provide washroom grab bars.

Concern:
Washrooms are not barrier free. Even when handicap stalls are provided often the grab bars are not in place.

Recommendation:
Provide handicap grab bars as required by building code.

Type	Year	Cost	Priority
Barrier Free Access Upgrade	2007	$3,000	Medium

Updated: October 12 2004

C1030.14.02 Bath Accessories

Shower Accessories in Gymnasium Change Rooms and Physical Education office.

Rating	Installed	Design Life	Updated
2 - Poor	0	0	October 2004

Event: Replace shower accessories and repair shower cubicles.

Concern:
Showers in change rooms require repairs to cubicle stalls and replacement of shower curtains and soap dish, dispensers and garment hooks.

Recommendation:
Replace shower accesories and repair shower cubicles.

Type	Year	Cost	Priority
Lifecycle Replacement	2007	$7,000	Low

Updated: October 12 2004

C2010.01 Cast-In-Place Concrete Stair Construction

Stair to 1981 Gymnasium 1200 Mezzanine and CTS 1112 Stair to CTS 2107 as well CTS 1117 Stair to Mezzanine 2108 are cast concrete stairs.

Rating	Installed	Design Life	Updated
5 - Good	0	0	October 2004

C2010.03 Metal Stair Construction - 1981

Stair to CTS 1109 to Mezzanine is metal grate stair and CTS 1118 Stair to Mezzanine is metal stringer with wood treads.

Rating	Installed	Design Life	Updated
3 - Marginal	0	0	October 2004

Event: Replace wood treads with metal .

Concern:
Wood treads are not standing up to abuse of shop area.

Recommendation:
Replace with metal grate treads.

Type	Year	Cost	Priority
Preventative Maintenance	2005	$3,000	Medium

Updated: October 12 2004

C2010.04 Wood Stair Construction - 1966

Wood stairs in corridors H102, H104, H105, and H106.

Rating	Installed	Design Life	Updated
2 - Poor	0	0	October 2004

Event: Reduce stair riser height to meet the building code.

Concern:
Corridor circulation stairs are very steep and exceed the maximum stair riser height of 178mm.

Recommendation:
Rebuild stairs in corridors to meet the building code by adding an addition riser.

Type	Year	Cost	Priority
Code Upgrade	2007	$20,000	Medium

Updated: October 12 2004

C2010.04 Wood Stair Construction - 1998

Wood stair from Ancillary 1102 to mezzanine.

Rating	Installed	Design Life	Updated
5 - Good	0	0	October 2004

C2020.01 Tile Stair Finishes*

Quarry tile on stair to 1981 Gymnasium Mezzanine

Rating	Installed	Design Life	Updated
4 - Acceptable	0	30	October 2004

C2020.05 Resilient Stair Finishes* - 1966

Stairs in Hallway H102, H104, H105, and H106 have resilient flooring

Rating	Installed	Design Life	Updated
2 - Poor	0	20	October 2004

Event: Provide new resilient flooring to stairs.

Concern:
Stair flooring has deteriorated and is causing a tripping hazard. Stair sheet flooring does not provide tactile or visual warning strips. Stairs do not meet building code standards.

Recommendation:
Replace flooring with new sheet goods providing proper visual and tactile warning strips and change in colour of treads to risers.

Type	Year	Cost	Priority
Code Repair	2007	$20,000	High

Updated: October 12 2004

C2020.08.06 Metal Railings and Balustrades* - 1966

Metal wall mounted stair railings from 1966 addition have never been upgraded.

Rating	Installed	Design Life	Updated
2 - Poor	0	0	October 2004

Event: Replace all stair rails and balustrades.

Concern:
Stair railings at corridors H102, H104, H105, SED1152, and Corridor H106 are original from 1966 and require replacement. Handrail extensions are not present, openings in balustrades are greater than 200 mm at SED 1152 and intermediate rails are required by code.

Recommendation:
Replace all wall mounted rails and floor mounted guard (at SED 1154) add intermediated rails as required for corridor wide stairs.

Type	Year	Cost	Priority
Code Upgrade	2007	$15,000	Medium

Updated: October 12 2004

C2020.08.06 Metal Railings and Balustrades - 1981

Railings for CTS Mezzanine stairs are horizontal and should be checked for code compliance.

Rating	Installed	Design Life	Updated
3 - Marginal	0	0	October 2004

Event: Study 1981 Mezzanine stair railings for code compliance

Concern:
Stair railings for mezzanine access run horizontally with stairs and should be checked if they meet the building code.

Recommendation:
Study 1981 mezzanine access stair railings for code compliance.

Type	Year	Cost	Priority
Study	2004	$1,000	Medium

Updated: October 12 2004

C3010.02 Wall Paneling*

Cedar wall paneling located in Staff Lounge 1122

Rating	Installed	Design Life	Updated
4 - Acceptable	0	30	October 2004

C3010.04 Gypsum Board Wall Finishes*

Gypsum board walls throughout school.

Rating	Installed	Design Life	Updated
3 - Marginal	0	40	October 2004

Event: Patch holes in gypsum board walls.

Concern:
Gypsum board walls have been cut to repair mechanical and electrical and roof leaks and holes have not been patched. Many holes remain in fire separations. Storage rooms have been added with wood framing but absent of fire rated gypsum board.

Recommendation:
Patch all holes with proper fire rated gypsum board. Firestop to meet building code requirements. Provide fire rated gypsum wallboard to new storage room 1195B.

Type	Year	Cost	Priority
Code Repair	2004	$27,000	High

Updated: October 12 2004

C3010.06 Tile Wall Finishes*

Ceramic tile located in all washrooms, at fountains, kitchen and change rooms.

Rating	Installed	Design Life	Updated
1 - Critical	0	50	October 2004

Event: Remove and replace all ceramic tile.

Concern:
Ceramic tile has been reported to contain a lead based glaze of 4.4 mg/cm2. Tile is cracked and damaged throughout.

Recommendation:
Remove and replace all ceramic tile.

Type	Year	Cost	Priority
Hazardous Materials Abatement	2004	$60,000	Medium

Updated: October 12 2004

C3010.09 Acoustical Wall Treatment*

Fire treated tight knot pine wood paneling on all upper walls in gymnasium.

Rating	Installed	Design Life	Updated
4 - Acceptable	0	15	October 2004

C3010.11 Interior Wall Painting*

Walls throughout school are painted. Hallways have a desco coating.

Rating	Installed	Design Life	Updated
3 - Marginal	0	5	October 2004

Event: Patch repair and paint.

Concern:
Walls throughout the school ar damaged.

Recommendation:
Patch, repair, and paint all walls.

Type	Year	Cost	Priority
Repair	2007	$125,000	Low

Updated: October 12 2004

C3010.13 Wall Trim and Decoration*

Principal 1143 and Vice principal have cork wall decoration from 1981 modernization.

Rating	Installed	Design Life	Updated
4 - Acceptable	0	0	October 2004

C3020.01 Concrete Floor Finishes*

In the 1981 CTS areas 1109, 1112, 1116, and 1118 concrete floors are painted.

Rating	Installed	Design Life	Updated
4 - Acceptable	0	20	October 2004

C3020.02 Tile Floor Finishes*

Quarry tile flooring in the 1981 Addition at Gymnasium Entrance 1200 and corridor H108.

Rating	Installed	Design Life	Updated
3 - Marginal	0	30	October 2004

Event: Repair cracks in floor tile.

Concern:
Flooring material at the interface between the 1962 and 1981 buildings has separated. This is likely due to differential movement between the two buildings and is not considered a structural concern but should be repaired.

Recommendation:
Remove a strip of tile on each side of the crack, clean out the crack in the structure, replace tile leaving a positive gap between the separate structures. Seal the joint with elastomeric sealant and provide an expansion cover plate.

Type	Year	Cost	Priority
Repair	2007	$2,000	Low

Updated: October 16 2004

C3020.02.01 Ceramic Tile - washrooms

Ceramic floor tile is located in all washrooms, change rooms, and janitor rooms.

Rating	Installed	Design Life	Updated
2 - Poor	0	0	October 2004

Event: Replace all ceramic floor tiles.

Concern:
Ceramic floor tiles are cracked and damaged and require replacement throughout school.

Recommendation:
Replace all ceramic floor tiles.

Type	Year	Cost	Priority
Lifecycle Replacement	2004	$25,000	Low

Updated: October 12 2004

C3020.04 Wood Flooring*

Hardwood flooring is located in the Gymnasium 1200 and Gymnasium 1162.

Rating	Installed	Design Life	Updated
3 - Marginal	0	10	October 2004

Event: Refiniish all hardwood floors. Patch damaged hardwood.

Concern:
Due to roof leaks approximately 13 m2 has been damaged and required replacement. Hardwood floor is worn and lines have to be redone.

Recommendation:
Replace damaged floor and resurface all hardwoods.

Type	Year	Cost	Priority
Preventative Maintenance	2007	$30,000	Low

Updated: October 12 2004

C3020.07 Resilient Flooring*

Resilient sheet flooring throughout corridors and classrooms.

Rating	Installed	Design Life	Updated
2 - Poor	0	20	October 2004

Event: Replace all sheet flooring and vinyl flooring.

Concern:
Resilient flooring and vinyl tile flooring requires replacement due to age, wear, and asbestos content.

Recommendation:
Replace all sheet flooring and vinyl tile. Dispose of asbestos containing material as indicated in hazardous material report.

Type	Year	Cost	Priority
Lifecycle Replacement	2005	$320,000	Low

Updated: October 12 2004

C3020.08 Carpet Flooring*

Carpet located in administration area in 1962 and 1981 addition as well in 1998 Theatre modernization.

Rating	Installed	Design Life	Updated
3 - Marginal	0	10	October 2004

Event: Replace carpet to Admin suite offices.

Concern:
Carpet is worn and at the end of it's lifecycle.

Recommendation:
Replace carpet to Administration suite and Library Area 1146.

Type	Year	Cost	Priority
Lifecycle Replacement	2007	$50,000	Low

Updated: October 12 2004

C3030.02 Ceiling Paneling (Wood)*

Cedar paneling in staff lounge 1122, Lunch Study 1153, and Library 1146. During a modernization this would probably be deleted due to it's dated appearance.

Rating	Installed	Design Life	Updated
4 - Acceptable	0	25	October 2004

C3030.03 Plaster Ceiling Finishes*

Textured plaster ceiling finish throughout and covered over with new finishes in some cases.

Rating	Installed	Design Life	Updated
2 - Poor	0	50	October 2004

Event: Remove all textured ceilings and replace with gwb or acoustic t-bar.

Concern:
Hazardous materials survey reports that textured ceilings throughout are likely to contain asbestos. It is also likely that stippled textured ceilings remain behind or above new ceiling finishes. If modernization work is required to access through these materials they must be removed.

Recommendation:
Remove all textured ceilings and abate all asbestos. Replace with g.w.b. or suspended t-bar depending on structural condition of roof.

Type	Year	Cost	Priority
Hazardous Materials Abatement	2004	$325,000	Medium

Updated: October 12 2004

C3030.04 Gypsum Board Ceiling Finishes*

Gypsum ceilings throughout school.

Rating	Installed	Design Life	Updated
3 - Marginal	0	50	October 2004

Event: Patch and repair gypsum ceilings.

Concern:
Rated gypsum board ceilings have holes cut into them for mechanical and electrical repairs and access.

Recommendation:
Patch and repair all rated ceilings and/or provide rated access panel to maintain access as required by the building code.

Type	Year	Cost	Priority
Code Repair	2004	$25,000	Medium

Updated: October 12 2004

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

Acoustic ceiling tiles in suspended t-bar grid is ceiling system in administration offices.

Rating	Installed	Design Life	Updated
3 - Marginal	0	15	October 2004

Event: Replace 50% of ceiling tiles.

Concern:
Due to leaking roof areas ceiling tiles are damaged and stained.

Recommendation:
Replace 50% of the acoustic ceiling t-bar grid.

Type	Year	Cost	Priority
Repair	2007	$40,000	Low

Updated: October 12 2004

D1010.02.02 Wheelchair Lifts

Located in the Staff Work Room 1153A allows barrier free access to the majority of the school.

Rating	Installed	Design Life	Updated
5 - Good	0	0	October 2004

S4 MECHANICAL

D2010.01 Water Closets* 1962 Original Building

Floor mounted, flush tank, open front seat, handicap water closet installed, no handicap lavatory in female and male washroom.

Rating	Installed	Design Life	Updated
4 - Acceptable	0	30	October 2004

D2010.01 Water Closets* 1963

Floor mounted, flush tank, open front seat, except for closed front in female washroom.

Rating	Installed	Design Life	Updated
4 - Acceptable	0	30	October 2004

D2010.01 Water Closets* 1966 Addition

Rooms 1139, 1140 floor mounted, tank, open front seat. One handicap water closet installed.

Rooms 1118, 1119 flush tank. Water saver kits installed in 2002. Kits not functioning and water wastage has increased since installation. Maintenance replacing kits with ordinary flush.

Rating	Installed	Design Life	Updated
4 - Acceptable	0	30	November 2004

D2010.02 Urinals* 1966 Addition

Rooms 1139, 1140 wall hung, flush valve.

Rating	Installed	Design Life	Updated
4 - Acceptable	0	30	October 2004

D2010.02 Urinals* 1966 Addition

Rooms 1118, 1119 stall flush tank. Water matrix system installed.

Rating	Installed	Design Life	Updated
4 - Acceptable	0	30	October 2004

D2010.02 Urinals*1962 Original Building

Wall urinals flush valve.

Rating	Installed	Design Life	Updated
4 - Acceptable	0	30	October 2004

D2010.03 Lavatories* 1962 Original Building

In male washroom porcelain on steel, on/off brass. Sink finish damaged, bottom rusting.

Rating	Installed	Design Life	Updated
3 - Marginal	0	30	October 2004

Event: Replace porcelain on steel lavatories and brass.

Concern:
Lavatories are damaged and rusting. Plumbing bass dated.

Recommendation:
Replace porcelain on steel lavatories and brass with stainless steel bows and time delay faucets.

Type	Year	Cost	Priority
Lifecycle Replacement	2005	$4,000	Medium

Updated: October 8 2004

D2010.03 Lavatories* 1963

Porcelain on steel lavatories, enamel finish damaged, bottom of bowls rusting. Time delay faucets installed in female washrooms. Supply water temperature erratic. Damaged faucets. Pop-up wastes on some lavatories.

Rating	Installed	Design Life	Updated
3 - Marginal	0	30	October 2004

Event: Replace porcelain on steel lavatories and brass.

Concern:
Lavatories are damaged and rusting. Plumbing brass dated.

Recommendation:
Replace porcelain on steel lavatories and brass with stainless steel bowls and time delay faucets.

Type	Year	Cost	Priority
Lifecycle Replacement	2005	$4,000	Medium

Updated: October 8 2004

D2010.03 Lavatories* 1966 Addition

Room 1118, 1119, 1139, 1140 porcelain on steel, porcelain finish chipped, blows rusting, on/off brass. Lav brass left on by students. Pop-up wastes on some lavatories

Rating	Installed	Design Life	Updated
3 - Marginal	0	30	October 2004

Event: Replace porcelain on steel lavatories and brass.

Concern:
Lavatories are damaged and rusting. Plumbing brass dated.

Recommendation:
Replace porcelain on steel lavatories and brass with stainless steel bowls and time delay faucets.

Type	Year	Cost	Priority
Lifecycle Replacement	2005	$12,000	Medium

Updated: October 8 2004

D2010.03 Lavatories* 2001

Male washroom 1189 (1965 addition) upgraded in 2001. Stainless steel bowl, time delay faucet. Not barrier free

Rating	Installed	Design Life	Updated
3 - Marginal	0	30	October 2004

Event: Lavatory in upgraded washroom not barrier free.

Concern:
Lavatory in upgraded washroom not barrier free.

Recommendation:
Change lavatory and brass for barrier free access.

Type	Year	Cost	Priority
Barrier Free Access Upgrade	2005	$1,000	Medium

Updated: October 8 2004

D2010.03 Lavatories*1962 Original Building

In female washroom stainless steel bowls with time delay faucets.

Rating	Installed	Design Life	Updated
5 - Good	0	30	October 2004

D2010.04 Sinks*

Stainless steel which vary in size and function. Aerators missing from some of the brass.

Rating	Installed	Design Life	Updated
5 - Good	0	30	October 2004

D2010.04 Sinks* 1962

Science room 1119 gooseneck brass not suitable for hose. Emergency gas isolation is manual on/off valve.

Rating	Installed	Design Life	Updated
3 - Marginal	0	30	October 2004

Event: Change plumbing brass and install solenoid valve on gas supply.

Concern:
Brass not suitable for science room. Solenoid valve installation required for immediate gas shut down during emergency.

Recommendation:
Install new sink brass and solenoid valve on gas line.

Type	Year	Cost	Priority
Operating Efficiency Upgrade	2005	$4,000	Medium

Updated: October 8 2004

D2010.05 Showers* 1981

Central mix valve.

Rating	Installed	Design Life	Updated
5 - Good	0	30	October 2004

D2010.08 Drinking Fountains / Coolers*

Wall hung new refrigerated. Water flow stream poor at some fountain. Majority of fountains not operating. Brass damaged on some

Rating	Installed	Design Life	Updated
3 - Marginal	0	30	October 2004

Event: Replace existing drinking fountains

Concern:
Water flow stream inadequate. Some drinking fountains not operational

Recommendation:
Replace existing drinking fountains

Type	Year	Cost	Priority
Failure Replacement	2004	$6,000	Medium

Updated: October 8 2004

D2010.09 Other Plumbing Fixtures*

Wall hung cast iron service sink. Floor service sinks. Bradley wash fountains, beauty salon sinks.

Rating	Installed	Design Life	Updated
5 - Good	0	0	October 2004

D2010.09 Other Plumbing Fixtures* 1966

Barrier free stalls provided in male and female washrooms. No barrier free fixtures installed.

Rating	Installed	Design Life	Updated
3 - Marginal	0	0	October 2004

Event: Install barrier free fixtures.

Concern:
No barrier free fixtures installed.

Recommendation:
Install barrier free fixtures.

Type	Year	Cost	Priority
Barrier Free Access Upgrade	2005	$8,000	Low

Updated: October 8 2004

D2020.01.01 Pipes and Tubes: Domestic Water*

Copper piping and fittings. Pipe failures have occurred and pipe section shave been replaced. Access to piping in ceiling space difficult.

Rating	Installed	Design Life	Updated
3 - Marginal	0	40	October 2004

Event: Replace domestic water piping.

Concern:
Sections of domestic water system have failed and many reoccurring leaks causing damage.

Recommendation:
Recommend replacement of domestic water distribution system in its entirety.

Type	Year	Cost	Priority
Failure Replacement	2005	$100,000	Medium

Updated: October 8 2004

D2020.01.02 Valves: Domestic Water

Age of valves varies up to 42 years. Operation of valves suspect many do not hold or operate.

Rating	Installed	Design Life	Updated
3 - Marginal	0	40	October 2004

Event: Replace original valves throughout school.

Concern:
Age varies up to 42 years. Operation of valves suspect.

Recommendation:
Lifecycle replacement of valves.

Type	Year	Cost	Priority
Lifecycle Replacement	2005	$25,000	Low

Updated: October 8 2004

D2020.01.03 Piping Specialties (Backflow Preventors)*

Backflow preventors not installed on make up water line to three (3) heating boiler systems. Vacuum breakers on installed on interior hose bibs.

Rating	Installed	Design Life	Updated
2 - Poor	0	0	October 2004

Event: No backflow preventors or vacuum breakers installed.

Concern:
No backflow preventors on domestic cold water make up lines to chemically treated heating systems. Vacuum breakers not installed on interior hose bibbs

Recommendation:
Install reduced pressure backflow preventors. Install vacuum breakers on interior hose bibbs.

Type	Year	Cost	Priority
Code Upgrade	2004	$4,000	High

Updated: October 8 2004

D2020.02.02 Plumbing Pumps: Domestic Water*

Domestic hot water in line recirculation pumps installed in Mechanical Room 1157, 1194.

Rating	Installed	Design Life	Updated
4 - Acceptable	0	20	October 2004

D2020.02.06 Domestic Water Heaters* 1963

Installed in mechanical room 1157. Serves staff washrooms. Installed in 1996. Complete with recirculation pump.

Rating	Installed	Design Life	Updated
4 - Acceptable	0	20	October 2004

D2020.02.06 Domestic Water Heaters* 1966

Two (2) domestic heaters installed in mechanical room 1194. Heaters are 18 years old. One heater used as booster for kitchen. No check valve installed on cold water line to heaters.

Rating	Installed	Design Life	Updated
3 - Marginal	0	20	October 2004

Event: Replace domestic hot water heaters.

Concern:
Domestic heater life expectancy exceeded.

Recommendation:
Replace domestic hot water heaters. Install check valve on domestic cold water line to heaters.

Type	Year	Cost	Priority
Lifecycle Replacement	2005	$9,000	Medium

Updated: October 8 2004

D2020.02.06 Domestic Water Heaters* 1981

Two (2) domestic hot water heaters installed in mechanical room 2113. Complete with recirculation pump. Heaters replaced in 2000. 662,500 BTU/hr input each. One (1) heater installed in Room 1118 mezzanine in 2000, 180,000 BTU/hr complete with recirculation pump.

Rating	Installed	Design Life	Updated
4 - Acceptable	0	20	October 2004

D2020.03 Water Supply Insulation*: Domestic

Majority of domestic hot, cold and recirculation piping insulated. Some uninsulated piping at domestic hot water heaters and where pipe repairs have been made.

Rating	Installed	Design Life	Updated
4 - Acceptable	0	0	October 2004

D2030.01 Waste and Vent Piping*

Cast iron and copper.

Rating	Installed	Design Life	Updated
4 - Acceptable	0	50	October 2004

D2030.01 Waste and Vent Piping* 1966

Cast iron and copper. Drain line piping below washrooms replaced in crawl space. Sewer line from kitchen and washroom back grades and plugs every month.

Rating	Installed	Design Life	Updated
2 - Poor	0	50	October 2004

Event: Replace sewer line.

Concern:
Sewer line from kitchen and washroom back grades and plugs every month.

Recommendation:
Saw cut existing floor slab, excavate and replace sewer line.

Type	Year	Cost	Priority
Operating Efficiency Upgrade	2005	$16,000	High

Updated: October 8 2004

D2030.02 Waste Piping Specialties*

Two compartment sump in automotive's, wash bay. Science room sinks complete with bottle trap. Art room sink complete with solids interceptor.

Lift pump provided for sink in Room C10.

Rating	Installed	Design Life	Updated
5 - Good	0	50	November 2004

D2030.02 Waste Piping Specialties*

Pot wash sink piped to separate grease interceptor. Garberator and dishwasher discharge into second interceptor.

Rating	Installed	Design Life	Updated
3 - Marginal	0	50	October 2004

Event: Drains are not up to code

Concern:
Garberator and dishwasher are connected to grease interceptor which is code violation. Access to interceptors difficult. Condition of interceptor walls and internals suspect due to age.

Recommendation:
Disconnect garberator and dishwasher form interceptor and connect directly to sanitary drain line. Remove interceptor. Relocate interceptor for ease of access. Replace required interceptor with new.

Type	Year	Cost	Priority
Code Upgrade	2005	$18,000	High

Updated: October 8 2004

D2040.01 Rain Water Drainage Piping Systems*

Some roof drains discharge to grade. Others are collected underground to discharge at grade.

Rating	Installed	Design Life	Updated
6 - Excellent	0	50	October 2004

D2040.02.04 Roof Drains*

Cast iron and plastic domes, full flow.

Rating	Installed	Design Life	Updated
5 - Good	0	40	October 2004

D3010.02 Gas Supply Systems*

Gas distribution piping to heating boilers, domestic hot water heaters, furnaces, multizone rooftop air systems.

Rating	Installed	Design Life	Updated
5 - Good	0	50	October 2004

D3020.01.01 Heating Boilers & Accessories: Steam* 1981

Installed in 1981 for humidification in mechanical room 2113. Boiler tubes have failed and boiler not in operation.

Rating	Installed	Design Life	Updated
3 - Marginal	0	35	October 2004

Event: Conduct study to review alternate method of humidification.

Concern:
Central steam boiler has failed. Daily blow down and chemical treatment monitoring required by maintenance.

Recommendation:
Conduct study to review alternate method of humidification.

Type	Year	Cost	Priority
Study	2004	$3,000	Low

Updated: October 8 2004

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

Class B chimney. Insulated combustion air.

Rating	Installed	Design Life	Updated
4 - Acceptable	0	35	October 2004

D3020.01.04 Water Treatment: Steam Boilers*

Chemical treatment and water softener installed.

Rating	Installed	Design Life	Updated
4 - Acceptable	0	35	October 2004

D3020.02.01 Heating Boilers and Accessories: H.W.* 1962 Original Building

One (1) natural draft cast iron sectional boiler installed in mechanical room 1120, 1,500,000 BTU/hr. input. Complete with low water cut off, relief valve, standing pilot.

Rating	Installed	Design Life	Updated
4 - Acceptable	0	30	October 2004

D3020.02.01 Heating Boilers and Accessories: H.W.* 1966

One (1) natural draft cast iron sectional boiler installed in mechanical room 1194, Peerless 210-10-W. 1,890,000 BTU/hr input. Complete with low water cut off, relief valve, standing pilot.

Rating	Installed	Design Life	Updated
3 - Marginal	0	30	October 2004

Event: Install new heating plant for proposed multizone air systems replacement.

Concern:

New heating plant to provide hot water and glycol heating media for proposed multizone air systems replacement, reheat coils and radiation piping modifications.

Recommendation:

Install new heating plant to provide hot water and glycol heating media for proposed multizone air systems replacement and radiation piping modifications.

Type	Year	Cost	Priority
Operating Efficiency Upgrade	2005	$160,000	High

Updated: October 8 2004

D3020.02.01 Heating Boilers and Accessories: H.W.* 1981

Two (2) natural draft gas fired Superhot boilers, 1,440,000 BTU/hr each. Installed in mechanical room 2113. Complete with low water cut off, relief valve.

Rating	Installed	Design Life	Updated
5 - Good	0	30	October 2004

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

Class B chimney. Insulated combustion air.

Rating	Installed	Design Life	Updated
5 - Good	0	30	October 2004

D3020.02.03 Water Treatment: H. W. Boiler* 1962

Chemical pot feeder allows addition of water treatment.

Rating	Installed	Design Life	Updated
5 - Good	0	30	October 2004

D3020.02.03 Water Treatment: H. W. Boiler* 1966

Chemical pot feeder allows addition of water treatment.

Rating	Installed	Design Life	Updated
5 - Good	0	30	October 2004

D3020.02.03 Water Treatment: H. W. Boiler* 1981

Chemical pot feeder. Allows addition of water treatment.

Rating	Installed	Design Life	Updated
5 - Good	0	30	October 2004

D3020.03.01 Furnaces* 1963

Four (4) furnaces in mechanical room 1157. Three (3) furnaces provide heating and ventilation for gymnasium. One (1) furnace provides heating and ventilation for front lobby and entrance. Motorized fresh and return air dampers installed. Standing pilot.

Rating	Installed	Design Life	Updated
2 - Poor	0	25	October 2004

Event: Install new furnace for lobby and entrance.

Concern:
Furnace in poor condition and standing pilot not energy efficient.

Recommendation:
Install new furnace for lobby and entrance, related chimney and controls.

Type	Year	Cost	Priority
Failure Replacement	2005	$12,000	High

Updated: October 8 2004

Event: Install new packaged rooftop unit for gymnasium.

Concern:
Insufficient fresh air during high occupancy.

Recommendation:
Install new packaged gas fired rooftop unit, related ductwork, controls.

Type	Year	Cost	Priority
Indoor Air Quality Upgrade	2005	$70,000	High

Updated: October 8 2004

D3020.03.01 Furnaces* 1998

Art studio in original school section furnace replaced.

Rating	Installed	Design Life	Updated
6 - Excellent	0	25	October 2004

D3020.03.02 Chimneys (& Comb. Air): Furnace* 1963

Class B chimney. Fire stop at ceiling not installed. Breeching slopes in wrong direction.

Rating	Installed	Design Life	Updated
2 - Poor	0	30	October 2004

Event: Install new breeching with positive slope and install fire stop.

Concern:
Breeching slopes in wrong direction which results in back draft of flue gases into mechanical room. Fire stop at roof deck not installed.

Recommendation:
Install new breeching with positive slope to eliminate back draft of flue gases. Install fire stop at chimney/roof deck penetration.

Type	Year	Cost	Priority
Operating Efficiency Upgrade	2004	$1,400	High

Updated: October 8 2004

D3020.03.02 Chimneys (&Comb. Air): Furnace* 1998

Class B chimney.

Rating	Installed	Design Life	Updated
6 - Excellent	0	30	October 2004

D3030.06.02 Refrigerant Condensing Units* 1966

Roof mounted for Dx cooling coil in air system for office area.

Rating	Installed	Design Life	Updated
3 - Marginal	0	25	October 2004

Event: Replace condensing unit.

Concern:
Condensing unit compressors have failed.

Recommendation:
Replace condensing unit.

Type	Year	Cost	Priority
Failure Replacement	2004	$20,000	High

Updated: October 8 2004

D3030.06.02 Refrigerant Condensing Units* 1981 Addition

Roof mounted for Dx cooling coil in 1981 classroom air system.

Rating	Installed	Design Life	Updated
5 - Good	0	25	October 2004

D3030.08 Other Refrigeration Systems*

Kitchen freezer and cooler air cooled compressors.

Rating	Installed	Design Life	Updated
5 - Good	0	25	October 2004

D3040.01 Air Distribution Systems

Complaints of poor ventilation throughout school. No supply air in school business coordinator office, no ventilation in beauty culture storage rooms, concession no ventilation, custodial office 1181 no ventilation , janitor Room 1141 exhaust not operational. Storage 1164B no ventilation, instructors office 1165 no ventilation, janitor room 1126 no exhaust, room 1118 no ventilation, room 1137 no ventilation and no ventilatioin in various rooms including automotives, welding and carpentry areas.

Rating	Installed	Design Life	Updated
3 - Marginal	0	30	October 2004

Event: No ventilation in various rooms.

Concern:
No ventilation in various rooms.

Recommendation:
Provide ventilation to all rooms.

Type	Year	Cost	Priority
Indoor Air Quality Upgrade	2004	$20,000	Medium

Updated: October 8 2004

D3040.01.01 Air Handling Units: Air Distribution* 1966 Addition

Classrooms west of hallway H105 ventilated by rooftop multizone unit. Air system consists of supply air and return air fans, motorized fresh, return, exhaust air dampers, filters, indirect gas fired heat exchanger, multizone hot/cold deck header.

Rating	Installed	Design Life	Updated
3 - Marginal	0	30	October 2004

Event: Replace multizone air system.

Concern:
Parts no longer available. Maintenance has had to jimmy rig controls to maintain unit operation.

Recommendation:
Replace multizone air system with packaged gas fired custom air system. Remove and replace existing ductwork distribution. Install reheat coils in ductwork for each room with supply air. Install control valves on existing radiation and sequence with reheat coil. Install new heating plant and distribution piping.

Type	Year	Cost	Priority
Lifecycle Replacement	2005	$300,000	High

Updated: October 8 2004

D3040.01.01 Air Handling Units: Air Distribution* 1973

Air system for office area/staff located in mechanical room 1157 consists of supply fan, return fan, motorized fresh, return, exhaust air dampers, heating coil, steam humidifier, Dx cooling coil, throwaway filter. Relief air into mechanical room.

Rating	Installed	Design Life	Updated
4 - Acceptable	0	30	October 2004

D3040.01.01 Air Handling Units: Air Distribution* 1981 Addition MU-1

Beauty culture and support areas 100% fresh air unit provides ventilation air. Air system located in mezzanine in building construction. Unit consists of ducted return air, motorized fresh, return air dampers, supply fan indirect fired in line heater, low velocity ductwork distribution. No fire stop on chimney/roof penetration.

Rating	Installed	Design Life	Updated
3 - Marginal	0	30	October 2004

Event: Determine reason for partial return air from building construction.

Concern:

Air drawn into air system from building construction. Unable to determine reason. Air system internals dust laden and contaminated air supplied into beauty culture area.

Recommendation:

Conduct study related to partial return air from building construction into cosmetology air system.

Type	Year	Cost	Priority
Study	2004	$1,200	High

Updated: October 8 2004

D3040.01.01 Air Handling Units: Air Distribution* 1981 Addition MU-2

100% fresh air unit provides make up air for building construction. Air system located in mezzanine in building construction. Unit consists of motorized fresh air damper, supply fan, direct fired burner, low velocity ductwork, distribution, throw away filters.

Rating	Installed	Design Life	Updated
4 - Acceptable	0	30	October 2004

D3040.01.01 Air Handling Units: Air Distribution* 1981 Addition MU-3

Previously provided 100% make up air for metal workshop and wood work shop. Provide ventilation air for renovated visual communication area. Air system located in mezzanine within visual communication area consists of motorized fresh and return air dampers, filter, supply fan. Direct fired heat section removed and hot water heating coil installed.

Rating	Installed	Design Life	Updated
4 - Acceptable	0	30	October 2004

D3040.01.01 Air Handling Units: Air Distribution* 1981 Addition MU-4

Related mechanics area. Air system located in related mechanics area in mezzanine. Unit consists of motorized fresh, return air dampers, supply fan, indirect fired in line heater, low velocity ductwork, distribution. Unit capable of 100% fresh air. As more welding exhaust fans are energized fresh air dampers open and return air damper closes. Sequence incorrect. Air system has to be actuated during cold weather to maintain space temperature. No fire stop at chimney (roof deck penetration)

Rating	Installed	Design Life	Updated
3 - Marginal	0	30	October 2004

Event: Install additional unit heaters to maintain space temperatures.

Concern:
Insufficient heat to maintain space temperatures.

Recommendation:
Install additional unit heaters.

Type	Year	Cost	Priority
Energy Efficiency Upgrade	2004	$18,000	High

Updated: October 8 2004

D3040.01.01 Air Handling Units: Air Distribution* 1981 Addition MU-5

100% fresh air unit provides make up air for automotives. Air system located in automotives mezzanine in building construction. Unit consists of motorized fresh air damper, supply fan, direct fired burner, low velocity ductwork, distribution, throw away filters.

Rating	Installed	Design Life	Updated
4 - Acceptable	0	30	October 2004

D3040.01.01 Air Handling Units: Air Distribution* 1981 Addition MU-6

100% fresh air unit provides make up air for renovated visual communications area. Air system located in mezzanine. Unit consists of motorized fresh air damper, supply fan, direct fired burner, low velocity ductwork, distribution, throw away filters.

Rating	Installed	Design Life	Updated
4 - Acceptable	0	30	October 2004

D3040.01.01 Air Handling Units: Air Distribution* 1981 Addition MU-7

Previously provided 100% make up air for metal workshop and wood work shop. Provides ventilation air for renovated visual communication area. Air system located in mezzanine within visual communication area consists of motorized fresh and return air dampers, filter, supply fan. Direct fired heat section removed and hot water heating coil installed.

Rating	Installed	Design Life	Updated
5 - Good	0	30	October 2004

D3040.01.01 Air Handling Units: Air Distribution* AS-1 1981

Gymnasium air system located in mechanical room 2113 consists of supply fan, return fan, motorized fresh, return, exhaust air dampers, 50 mm throw away filters, hot water heating coil, steam grid humidifier.

Rating	Installed	Design Life	Updated
3 - Marginal	0	30	October 2004

Event: Upgrade to air system for low/high occupancy functions.

Concern:

Air system is single speed. Heating coil is hot water. Air system not suitable for high occupancy during winter months.

Recommendation:

Install new glycol coil, plate heat exchanger, variable frequency drive, CO2 sensor to vary fresh air.

Type	Year	Cost	Priority
Indoor Air Quality Upgrade	2004	$60,000	Medium

Updated: October 8 2004

D3040.01.01 Air Handling Units: Air Distribution* AS-2 1981

CTS/classroom air system located in mechanical room 2113 consists of supply fan, return fan, motorized fresh, return, exhaust air dampers, 50 mm throw away filters, hot water heating coil, steam grid humidifier.

Rating	Installed	Design Life	Updated
5 - Good	0	30	October 2004

D3040.01.01 Air Handling Units: Air Distribution* AS-3 1981

Classrooms in original building, 1981 addition, partial 1966 addition and partial 1963 addition ventilated by built up air system located in mechanical mezzanine. Air system consists of supply air and return air fans, motorized fresh, return, exhaust dampers, hot water heating coil, steam grid humidifier, Dx cooling coil.

Rating	Installed	Design Life	Updated
4 - Acceptable	0	30	October 2004

D3040.01.01 Air Handling Units: Air Distribution* Kitchen Make Up

Rooftop make up air unit mixed air damper section does not operate. Heat exchanger has failed.

Rating	Installed	Design Life	Updated
1 - Critical	0	30	October 2004

Event: Install new make up air unit for kitchen.

Concern:
Air system used during summer only. Heat section has failed.
No make up air during winter months.

Recommendation:
Install new make up air unit complete with Dx cooling.

Type	Year	Cost	Priority
Failure Replacement	2004	$40,000	High

Updated: October 8 2004

D3040.01.01 Air Handling Units: Air Distribution*1998 Theatre

Rooftop, gas fired unit complete with supply fan, motorized fresh/return air dampers, throwaway filters, indirect fired heat exchanger and exhaust fan.

Rating	Installed	Design Life	Updated
3 - Marginal	0	30	October 2004

Event: Upgrade controls related to temperature complaints.

Concern:
Temperature complaints of either being too hot or too cold.

Recommendation:
Upgrade controls to address temperature complaints of either being too hot or too cold.

Type	Year	Cost	Priority
Operating Efficiency Upgrade	2005	$5,000	Medium

Updated: October 8 2004

D3040.01.02 Fans: Air Distribution*

Circulation fans installed in library, weight room, automatives.

Rating	Installed	Design Life	Updated
N/A	0	30	October 2004

D3040.01.03 Air Cleaning Devices:Air Distribution*

Air systems complete with throw away filters.

Rating	Installed	Design Life	Updated
4 - Acceptable	0	0	October 2004

D3040.01.04 Ducts: Air Distribution*

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

Rating	Installed	Design Life	Updated
5 - Good	0	50	October 2004

D3040.01.05 Duct Accessories: Air Distribution*

Balancing dampers provided in branch line ducts to air outlets. Fire dampers install ed in fire rated walls.

Rating	Installed	Design Life	Updated
5 - Good	0	0	October 2004

D3040.01.07 Air Outlets & Inlets:Air Distribution*

Air outlets vary as to type, fixed square pattern, diffusers, adjustable grilles, sidewall grilles.

Rating	Installed	Design Life	Updated
4 - Acceptable	0	0	October 2004

D3040.02 Steam Distribution Systems: Piping/Pumps*

Low pressure steam piping to steam grid humidifiers. Condensate piped to drain.

Rating	Installed	Design Life	Updated
4 - Acceptable	0	30	October 2004

D3040.03.01 Hot Water Distribution Systems* 1962 Original Building

Two inline pumps circulate heated water via black iron piping to radiation, convectors. Some damage to radiation enclosure.

Rating	Installed	Design Life	Updated
4 - Acceptable	0	0	October 2004

D3040.03.01 Hot Water Distribution Systems* 1966

Two original base mounted pumps circulate heated water via black iron piping to radiation, convectors. Pumps rebuilt 3 to 4 times. Some damage to radiation enclosure. Classroom radiation piped in series. No individual room control resulting in temperature complaints. Access to piping in ceiling space difficult.

Rating	Installed	Design Life	Updated
3 - Marginal	0	0	October 2004

Event: Repipe radiation in classrooms to allow individual room control.

Concern:
Classroom radiation piped in series. No individual room control resulting in temperature complaints.

Recommendation:
Repipe radiation to allow individual room control.

Type	Year	Cost	Priority
Operating Efficiency Upgrade	2005	$25,000	High

Updated: October 8 2004

D3040.03.01 Hot Water Distribution Systems* 1966

Valves in heating system are 38 years old and operation is suspect.

Rating	Installed	Design Life	Updated
3 - Marginal	0	0	October 2004

Event: Replace heating valves.

Concern:
Operation of heating system valves suspect.

Recommendation:
Replace heating system valves.

Type	Year	Cost	Priority
Operating Efficiency Upgrade	2005	$35,000	High

Updated: October 8 2004

D3040.03.01 Hot Water Distribution Systems* 1981 Addition

Two inline pumps circulate heated water via black iron piping to heating elements. Interior offices cold.

Rating	Installed	Design Life	Updated
3 - Marginal	0	0	October 2004

Event: Install hot water reheat coils for interior offices.

Concern:
Interior offices cold and portable electric heaters used to maintain space temperature.

Recommendation:
Install hot water reheat coils for interior offices.

Type	Year	Cost	Priority
Operating Efficiency Upgrade	2005	$14,000	N/A

Updated: October 8 2004

D3040.04 Special Exhaust Systems

2 Recirculated dust collectors, 100% exhaust with related above ground ductwork and hoods. Complete with automatic shaker. One dust collector abandoned due to functional change of area.

Rating	Installed	Design Life	Updated
3 - Marginal	0	30	October 2004

Event: Wood chip discharge thru exhaust air louver

Concern:
Wood chip discharge thru exhaust air louver

Recommendation:
Conduct study to determine reason for discharge of wood chips through exhaust air louvre.

Type	Year	Cost	Priority
Study	2003	$1,000	High

Updated: October 8 2004

D3040.04 Special Exhaust Systems

Welding booths complete with hoods on flexible duct.

Rating	Installed	Design Life	Updated
4 - Acceptable	0	30	October 2004

D3040.04 Special Exhaust Systems

Two kitchen range hoods complete with wire mesh filters. Separate exhaust fans provided floor each hood.

Rating	Installed	Design Life	Updated
3 - Marginal	0	30	October 2004

Event: Replace kitchen range hood, exhaust fans.

Concern:
Exhaust fan outlets do not terminate 1000 mm above finished roof.

Recommendation:
Replace exhaust fans.

Type	Year	Cost	Priority
Code Upgrade	2005	$10,000	High

Updated: October 8 2004

D3040.04 Special Exhaust Systems

Fume hood in science room 1124. No make up air.

Rating	Installed	Design Life	Updated
3 - Marginal	0	30	October 2004

Event: Install make-up air unit.

Concern:
No make up air for fume hood.

Recommendation:
Install make up air unit.

Type	Year	Cost	Priority
Operating Efficiency Upgrade	2005	$18,000	High

Updated: October 8 2004

D3040.04.01 Fans*: Exhaust

Condition and age of exhaust fan varies. Some exhaust fans are original (41 years old), some are damaged. Fans added to all sections in of school in 1981.

Rating	Installed	Design Life	Updated
3 - Marginal	0	30	October 2004

Event: Replace pre 1981 exhaust fans.

Concern:
Pre 1981 exhaust fans damaged. Replacement parts not available.

Recommendation:
Replace pre 1981 exhaust fans.

Type	Year	Cost	Priority
Lifecycle Replacement	2005	$20,000	Medium

Updated: October 8 2004

D3040.04.03 Ducts*: Exhaust

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

Rating	Installed	Design Life	Updated
5 - Good	0	0	October 2004

D3040.04.04 Ducts Accessories*: Exhaust

Balancing dampers provided in branch line ducts.

Rating	Installed	Design Life	Updated
5 - Good	0	0	October 2004

D3040.04.05 Air Outlets and Inlets*: Exhaust

Exhaust air grilles vary as to year of construction. Newer areas complete with egg crate, older areas with linear bar.

Rating	Installed	Design Life	Updated
5 - Good	0	0	October 2004

D3040.06 Other HVAC Distribution Systems*

Crawlspace ventilation.

Rating	Installed	Design Life	Updated
2 - Poor	0	0	October 2004

Event: Install dedicated ventilation system for crawlspace.

Concern:
Crawlspace has no ventilation.

Recommendation:
Install dedicated ventilation system for crawlspace.

Type	Year	Cost	Priority
Code Upgrade	2005	$14,000	Medium

Updated: October 8 2004

D3050.01.01 Computer Room Air Conditioning Units*

Salvaged rooftop unit installed, cooling only, no economizer. Room was hot during review and oscillating fans installed.

Rating	Installed	Design Life	Updated
2 - Poor	0	30	October 2004

Event: Install gas fired packaged rooftop unit for computer rooms.

Concern:
Computer room temperatures have been as high as 38 degrees to 40 degrees Celsius.

Recommendation:
Install gas fired packaged rooftop unit with heat recovery, economizer section and Dx cooling. Total of two (2).

Type	Year	Cost	Priority
Operating Efficiency Upgrade	2004	$40,000	High

Updated: October 8 2004

D3050.01.01 Computer Room Air Conditioning Units*

Server room is hot.

Rating	Installed	Design Life	Updated
2 - Poor	0	30	October 2004

Event: New cooling system for server room needs to be installed.

Concern:
Server room temperatures have been as high as 38-40 degrees C.

Recommendation:
Install ductless air conditioning unit complete with remote condensing unit.

Server room temperatures have been as high as 38-40 degrees C. New cooling system need be installed.

Type	Year	Cost	Priority
Operating Efficiency Upgrade	2004	$15,000	N/A

Updated: October 8 2004

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

Library complete with packaged rooftop unit. Library hot.

Rating	Installed	Design Life	Updated
3 - Marginal	0	30	October 2004

Event: Replace Library packaged rooftop unit

Concern:
Library temperatures excessive

Recommendation:
Replace air system with gas fired packaged rooftop uit with heat recovery, economizer section and DX Cooling

Type	Year	Cost	Priority
Failure Replacement	2004	$20,000	N/A

Updated: October 8 2004

D3050.02 Air Coils*

Three (3) hot water duct installed in administration area.

Rating	Installed	Design Life	Updated
5 - Good	0	30	October 2004

D3050.03 Humidifiers*

Steam grid humidifier installed in three (3) air systems are not operational as steam boiler not in operation.

Rating	Installed	Design Life	Updated
4 - Acceptable	0	25	October 2004

D3050.05.01 Convectors*

Limited number of convectors installed. Some covers damaged.

Rating	Installed	Design Life	Updated
4 - Acceptable	0	35	October 2004

D3050.05.02 Fan Coil Units*

Ceiling fan coil unit installed in Principals office to offset window heat loss. Installed at entrances.

Rating	Installed	Design Life	Updated
4 - Acceptable	0	30	October 2004

D3050.05.03 Finned Tube Radiation*

Installed in rooms in all sections of the school. Radiation enclosure damaged in some rooms.

Rating	Installed	Design Life	Updated
4 - Acceptable	0	35	October 2004

D3050.05.06 Unit Heaters*

Hot water unit heaters installed in carpentry, automotives.

Rating	Installed	Design Life	Updated
5 - Good	0	30	October 2004

D3050.05.08 Radiant Heating (Ceiling & Floor)*

Wall radiant panel installed in 1998 renovation to theatre.

Rating	Installed	Design Life	Updated
6 - Excellent	0	35	October 2004

D3060.02 HVAC Instrumentation and Controls

BMCS enables and controls air systems, heating systems, kitchen exhaust and dishwasher exhaust, several exhaust fans, 1963 addition gymnasium exhaust fans activated by local on/off switch, some radiation convectors have not control valves and heating runs wild.

Rating	Installed	Design Life	Updated
3 - Marginal	0	30	October 2004

Event: Some exhaust fans are not activated and deactivated by BMCS

Concern:
Some exhaust fans are not activated and deactivated by BMCS, radiation in some rooms do not have control valves installed and run wild.

Recommendation:
Interlock all exhaust fans with BMCS. Install thermostats and control valves on wild radiation.

Upgrade control system to activate and deactivate exhaust fans via BMCS. Install control valves and thermostats on wild radiation.

Type	Year	Cost	Priority
Operating Efficiency Upgrade	2005	$30,000	Medium

Updated: October 8 2004

D3060.02.01 Electric and Electronic Controls*

Electric thermostat cycles fan coil units in entrances, unit heaters. Electric thermostats control electric damper actuator on multizone air systems. & zone dampers

Rating	Installed	Design Life	Updated
5 - Good	0	30	October 2004

D3060.02.02 Pneumatic Controls* 1966 Addition

Classroom radiation piped in series and no individual control of radiation.

Rating	Installed	Design Life	Updated
3 - Marginal	0	40	October 2004

Event: Install pneumatic control valves.

Concern:
Radiation piped in series. No individual room control of the heat.

Recommendation:
Install pneumatic control valves on radiation to provide individual room control. Install pneumatic control valves on proposed reheat coils, related to multizone unit replacement.

Type	Year	Cost	Priority
Operating Efficiency Upgrade	2005	$30,000	High

Updated: October 8 2004

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

Siemens BMCS installed and provides global control of the mechanical systems. Provides scheduling, night set back. Install BMCS controls and update system for proposed mechanical systems upgrades. Gymnasium complete with override timer.

Rating	Installed	Design Life	Updated
3 - Marginal	0	25	October 2004

Event: Install BMCS controls and update system for proposed mechanical upgrades.

Concern:
Require BMCS control of proposed mechanical upgrades.

Recommendation:
Install BMCS controls and update system for proposed mechanical systems upgrades.

Type	Year	Cost	Priority
Operating Efficiency Upgrade	2005	$80,000	High

Updated: October 8 2004

D4030.01 Fire Extinguisher, Cabinets and Accessories*

Purple K fire extinguisher not installed in kitchen.

Rating	Installed	Design Life	Updated
3 - Marginal	0	30	October 2004

Event: Install Purple K fire extinguisher in kitchen.

Concern:
Fire extinguisher in kitchen not Purple K.

Recommendation:
Install Purple K fire extinguisher in kitchen.

Type	Year	Cost	Priority
Code Upgrade	2004	$1,000	High

Updated: October 8 2004

D4030.01 Fire Extinguisher, Cabinets and Accessories*

ABC fire extinguishers installed on wall hooks, in cabinets and fire hose cabinets.

Rating	Installed	Design Life	Updated
5 - Good	0	30	October 2004

D4090 Other Fire Protection Systems*

Kitchen range hood complete with dry chemical fire suppression system.

Fire blanket not installed in science room 1119. Blanket installed in science lab 1124.

Rating	Installed	Design Life	Updated
4 - Acceptable	0	0	November 2004

D4090 Other Fire Protection Systems*

Fire hose cabinets complete with 65 mm fire department connection, 40 mm angle valve, fog nozzle, hose, ABC fire extinguisher.

Flammable storage in room 1118, 1116.

Rating	Installed	Design Life	Updated
5 - Good	0	0	November 2004

S5 ELECTRICAL

D5010.01 Main Electrical Transformers*

Padmounted transformer located to the west of the school adjacent the building complete with a disconnect switch.

Rating	Installed	Design Life	Updated
6 - Excellent	0	40	October 2004

D5010.02 Secondary Electrical Transformers (Interior)*

Two dry type transformers within the school rated at 225kva. Both are very warm to the touch and very noise. Recommend load tests and tightining of conductor lugs, or replace, the transformer was installed in 1982.

Rating	Installed	Design Life	Updated
3 - Marginal	0	40	October 2004

Event: two dry type trans. rated at 225kva each replace with new.

Concern:
Both transformers are very warm to the touch, and very noisy, possible failure.

Recommendation:
replace with new

Type	Year	Cost	Priority
Preventative Maintenance	2005	$9,500	Medium

Updated: October 8 2004

D5010.03 Main Electrical Switchboards (Main Distribution)*

The main sevice to the school is rated at 1600amp at 347/600volt complete with ground fault protection.Installed in 1981.The existing distribution is as manufactured by Federal Pioneer. The existing demand is 476KW which repersents approx.458amps of the service is being used.There is no surge protection on the main service.

Rating	Installed	Design Life	Updated
4 - Acceptable	0	40	October 2004

Event: Add surge protection on the power service.

Concern:
No internal surge protection from external surges

Recommendation:
Add surge protection on the power service.

Type	Year	Cost	Priority
Preventative Maintenance	2005	$4,560	Medium

Updated: October 8 2004

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

Panels and wireways capacity and condition.there are combination of different vintages of panels within the school,filler plates are missing in some and some are very dirty and require vaccuming out. The older panels within the school are obsolete and breakers are not available.It was noticed that approx. 80% of the panels were full, no space for additional breakers.The old 1962 panels are full and breakers are obsolete.

Rating	Installed	Design Life	Updated
3 - Marginal	0	30	October 2004

Event: Replace obsolete panels

Concern:
1962 breakers are showing their age and could cause premature tripping.

Recommendation:
Replace obsolete panels with new,vaccum out all panels and tighten all conductor lugs

Type	Year	Cost	Priority
Preventative Maintenance	2005	$20,000	Medium

Updated: October 8 2004

D5010.07 Motor Control Centers (Motor Control)*

Motor control center is not present within the school, all starters are local individual for each piece of mech. equipment , and are as manufactured by CGE, replacement parts are no longer available.

Rating	Installed	Design Life	Updated
3 - Marginal	0	25	October 2004

Event: Replace all starters with new.

Concern:
Majority of the starters are as manufactured by CGE and replacesment parts are not available.

Recommendation:
Replace all starters with new of current technology

Type	Year	Cost	Priority
Preventative Maintenance	2005	$15,000	Medium

Updated: October 8 2004

D5020.01 Electrical Branch Wiring*

U ground type receptacles are broken within hallways and labs. Wireways within computor lab and other areas are obsolete and replacement parts are not available.

Rating	Installed	Design Life	Updated
3 - Marginal	0	50	October 2004

Event: broken devices

Concern:
Safty concern for the staff and students

Recommendation:
Replace devices with new . Replace wireways with new two compartment non metallic type.

Type	Year	Cost	Priority
Repair	2005	$8,500	Medium

Updated: October 8 2004

D5020.02 Interior Lighting

Existing lighting consists of surface wrap around fixtures in the corridors and suspended fixtures within the classrooms complete with t8 lamps and electronic ballast. Existing pot lights are incandescent.All of these fixtures are original and have been retrofitted with energy saving lamps and ballast.Lighting levels are acceptable to AI standards.

Rating	Installed	Design Life	Updated
3 - Marginal	0	35	October 2004

Event: Replace all existing pot ligths with proper compact fluorescent.

Concern:
Existing incandescent pot lights are re lamped with a very costly compact PL lamp

Recommendation:
Replace all incandescent pot with proper compact fluorescent fixtures

Type	Year	Cost	Priority
Operating Efficiency Upgrade	2005	$10,000	Medium

Updated: October 8 2004

D5020.02.01 Lighting Accessories (Lighting Controls)*

Some areas of the school are controlled by low voltage relays, which are very noise and require replacement.

Rating	Installed	Design Life	Updated
3 - Marginal	0	0	October 2004

Event: Up grade low voltage lighting controls.

Concern:
GE Masterswitch is obsolete

Recommendation:
Upgrade low voltage switching to current technolgy

Type	Year	Cost	Priority
Repair	2005	$10,000	Medium

Updated: October 8 2004

D5020.02.02.01 Interior Incandescent Fixtures*

Pot lights located in various areas of the school are incandescent .

Rating	Installed	Design Life	Updated
3 - Marginal	0	0	October 2004

Event: Replace with compact fluorescents

Concern:
Operating costs.

Recommendation:
Replace with compact fluorescent. Costing is covered under lighting section interior lighting 5020

Type	Year	Cost	Priority
Operating Efficiency Upgrade	2005	$0	Medium

Updated: October 8 2004

D5020.02.02.02 Interior Florescent Fixtures*

Primary source of lighting is fluorescent t8 lamps and electronic ballast. Combination of surface and suspended fixtures in classrooms and corridors.

Rating	Installed	Design Life	Updated
6 - Excellent	0	0	October 2004

D5020.02.02.03 Interior Metal Halide Fixture*

Low bay metal halide in the industrail arts areas and high bay in the gyms

Rating	Installed	Design Life	Updated
6 - Excellent	0	0	October 2004

D5020.02.03 Emergency Lighting (Including exit signs)*

All of the exit lights have been replaced with new led type.Emergency lighting is provided by the emergency generator from selected fixtures within corridors and stairwells.

Rating	Installed	Design Life	Updated
6 - Excellent	0	0	October 2004

D5020.03.01.01 Exterior Incandescent Fixtures*

Soffit lighting is all recessed incandescent,fixture type is obsolete.

Rating	Installed	Design Life	Updated
3 - Marginal	0	0	October 2004

Event: Obsolete recessed incandescents. Replace with metal halide.

Concern:
Fixture is obsolete

Recommendation:
Remove 100% of the soffit lighting and utilize low wattage and low cut off metal halide fixtures

Type	Year	Cost	Priority
Operating Efficiency Upgrade	2005	$10,000	Medium

Updated: October 8 2004

D5020.03.01.04 Exterior H.P. Sodium Fixtures*

Parking lot lighting utilizing HPS pole mounted fixtures.

Rating	Installed	Design Life	Updated
4 - Acceptabl e	0	0	October 2004

Event: Replace with new H.P.S. units or Metal Halide

Concern:
Fixtures are showing their age, and are obsolete.

Recommendation:
Replace with new

Type	Year	Cost	Priority
Lifecycle Replacement	2005	$7,500	Medium

Updated: October 8 2004

D5020.03.02 Lighting Accessories (Lighting Controls)*

All lighting is controlled from a combination of low voltage and line voltage.

Rating	Installed	Design Life	Updated
6 - Excellent	0	0	October 2004

D5030.01 Detection and Alarm Fire Alarm*

Existing system is as manufactured by Simplex installed in 1981 monitored to Parkland Emergency Centre,. The existing system is a hard wired system which is becoming obsolete.Numerous areas throughout the school are lacking in devices in reference to two hour fire ratings.

Rating	Installed	Design Life	Updated
1 - Critical	0	25	October 2004

Event: Replace fire alarm system with addressable technology.

Concern:
Existing fire alarm system will be obsolete in the near future

Recommendation:
Replace with new current addessable technology complete with zone isolators, replace existing wiring.

Type	Year	Cost	Priority
Code Upgrade	2005	$60,000	High

Updated: October 8 2004

D5030.02.02 Intrusion Detection*

Intrusion alarm consists of motion sensors in the hallways, entrances, offices monitored to the Parkland Emergency Control Centre.

Rating	Installed	Design Life	Updated
6 - Excellent	0	25	October 2004

D5030.02.04 Video Surveillance*

Located in various areas of the school with split screen monitor in the general office.

Rating	Installed	Design Life	Updated
6 - Excellent	0	25	October 2004

D5030.03 Clock and Program Systems*

Clock and program system is a Simplex 2850 system with digital clocks. The clocks are unreliable and some are not functional. The program horns appear to function properly.System is becoming obsolete and parts are hard to find.

Rating	Installed	Design Life	Updated
5 - Good	0	20	October 2004

Event: Remove simplex 2850 clock

Concern:
Should be and could be part of voice and data system. Existing clocks are unreliable.

Recommendation:
The time clock function by todays standard is all part of the school sound system, recommend new up to date technology sound system .

Type	Year	Cost	Priority
Program Functional Upgrade	2005	$40,000	Medium

Updated: October 8 2004

D5030.04 Voice and Data Systems

The PA system is as manufactured by Raulands installed in 1990 with paging to all areas of the school however wiring for this system utilizes the existing token ring wiring , which is obsolete.Time clock function for class change is not part of this system.

Rating	Installed	Design Life	Updated
3 - Marginal	0	15	October 2004

Event: Replace with current technology.

Concern:
All of the original voice and data wiring is token ring with the voice portion being used for sound, data portion of token ring is not being used ,The existing wiring is obsolete.

Recommendation:
Remove token ring equipment and wiring and replace sound with cat5e for all communication.Classroom change and time clock function is not part of this rauland system, see clock and program section. Recommend to update system to current technology intergrated system.

Type	Year	Cost	Priority
Lifecycle Replacement	2005	$55,000	Medium

Updated: October 8 2004

D5030.04.01 Telephone Systems*

Telephone system is in good condition and incorporates the intercom system to all areas of the building. Telephone hand set in each classroom as manufactured by nortel.

Rating	Installed	Design Life	Updated
6 - Excellent	0	15	October 2004

D5030.04.04 Data Systems*

CAT5 FT4 cable is run open in the crawlspace and through conduit or special raceways in classrooms. Cable system is approximately 5 years old.

Rating	Installed	Design Life	Updated
4 - Acceptable	0	15	October 2004

Event: Replace with cat5 or cat6 cabling.

Concern:
Cat5 cabling does not meet the cabling standards for the future.

Recommendation:
replace all existing cat 5 cabling with cat5e or better throughtout the school

Type	Year	Cost	Priority
Operating Efficiency Upgrade	2005	$30,000	Medium

Updated: October 8 2004

D5030.06 Television Systems*

Cable tv. wiring to each classroom

Rating	Installed	Design Life	Updated
6 - Excellent	0	0	October 2004

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

Emergency generator is a SimPower 70kw 347/600V natural gas fired unit. Tested on a monthly basis and appears in good condition. Unit does not meet code in reference to fuel source.

Rating	Installed	Design Life	Updated
2 - Poor	0	40	October 2004

Event: Fuel source does not meet current code, replace.

Concern:
does not meet code.

Recommendation:
replace unit with new diesel type to meet current code, complete with day tank

Type	Year	Cost	Priority
Code Upgrade	2005	$35,000	High

Updated: October 8 2004

S6 EQUIPMENT, FURNISHINGS AND SPECIAL CONSTRUCTION

E1010.05.01 Barber and Beauty Shop Equipment

1981 Additon Beauty Culture 1107 specialty millwork for trade.

Rating	Installed	Design Life	Updated
2 - Poor	0	0	October 2004

Event: Replace beauty culture casework and equipment.

Concern:
Beauty Culture equipment is dated and does not function properly. Millwork at sinks are mounted at wrong heights. Equipment is at the end of it's service life.

Recommendation:
Replace beauty culture equipment and millwork.

Type	Year	Cost	Priority
Program Functional Upgrade	2005	$30,000	Low

Updated: October 12 2004

E1010.05.03 Display Cases

Display cases with sliding glass doors and glass shelves.

Rating	Installed	Design Life	Updated
4 - Acceptable	0	0	October 2004

E1020.02 Library Equipment*

Library addition from 1981

Rating	Installed	Design Life	Updated
4 - Acceptable	0	0	October 2004

E1030.01 Vehicle Service Equipment*

Cts Mechanics equiptment is well used.

Rating	Installed	Design Life	Updated
4 - Acceptable	0	0	October 2004

E1090.03 Food Service Equipment*

Kitchen equiptment modernized in 1981

Rating	Installed	Design Life	Updated
4 - Acceptable	0	0	October 2004

E1090.07 Athletic, Recreational, and Therapeutic Equipment*

Motorized and side swinging backstops.

Rating	Installed	Design Life	Updated
4 - Acceptable	0	15	October 2004

E2010.02 Fixed Casework

Millwork throughout the school is original to 1981 addition. Some milwork remains in janitor rooms, classrooms, and washrooms from 1962 and 1963.

Rating	Installed	Design Life	Updated
2 - Poor	0	25	October 2004

Event: Replace all millwork from 1981 and prior.

Concern:
Millwork is very worn out and much of it is not functional. Hardware is broken and not replaceable.

Recommendation:
Replace all millwork from 1981 and prior.

Type	Year	Cost	Priority
Failure Replacement	2004	$450,000	Low

Updated: October 12 2004

E2010.02.09 Library Casework*

1981 Library Reception desk is built-in.

Rating	Installed	Design Life	Updated
2 - Poor	0	0	October 2004

Event: Replace library reception desk.

Concern:
Library reception desk is built up on a higher platform. this makes it impossible to service a wheel chair bound person.

Recommendation:
Replace library reception desk with barrier free design.

Type	Year	Cost	Priority
Barrier Free Access Upgrade	2004	$35,000	Low

Updated: October 12 2004

E2010.03.01 Blinds*

Blinds are between the glazing in exterior windows

Rating	Installed	Design Life	Updated
3 - Marginal	0	10	October 2004

Event: Replace all window coverings.

Concern:
Blind operators are broken and replacement parts are not available.

Recommendation:
Replace all window coverings when new windows are replaced.

Type	Year	Cost	Priority
Failure Replacement	2005	$30,000	Low

Updated: October 12 2004

E2010.05 Fixed Multiple Seating*

1998 theatre modernization has fixed theatre seating.

Rating	Installed	Design Life	Updated
6 - Excellent	0	25	October 2004

F1010.02.04 Portable and Mobile Buildings

Stucco finish on wood frame construction, wood floor system on concrete block pilecaps with wood framed infill. Interior wall finish is battened vinyl covered drywall and ceiling is acoustic t-bar system. Roof is a built-up four ply membrane with sloped insulation.

Rating	Installed	Design Life	Updated
4 - Acceptable	0	0	October 2004

F1010.02.04 Portable and Mobile Buildings

Barrier free access provide in ramp. Required exit doors in link corridor are bolted shut.

Rating	Installed	Design Life	Updated
2 - Poor	0	0	October 2004

Event: Remove fixed bolts from exit doors.

Concern:
Exit doors required for 1963 and 1981 addition and for Portables have been bolted closed from interior and not accessible.

Recommendation:
Remove bolts from exit doors.

Type	Year	Cost	Priority
Code Repair	2004	$0	High

Updated: October 12 2004

F1010.02.04 Portable and Mobile Buildings - electrical

the four portable classrooms attached to the school have adequate lighting within the classrooms, and corridors utilizing T8 lamps and electronic ballasts. Emergency lighting and LED exit lights all are adequate and meet the code. Fire alarm devices are present and meet the code.

Rating	Installed	Design Life	Updated
5 - Good	0	0	October 2004

F1010.02.04 Portable and Mobile Buildings - mechanical

Four portables attached to school with heating and ventilation by Lennox Whisperheat furnaces located in each classroom fan room. Furnace is complete with motorized fresh and return air dampers. Three of the four portables hav electric thermostat which cycles furnace fan on heat cycle. No fresh air is provided during the non heat cycle. One portable is complete with programmable thermostat which allows furnace and motorized dampers to operate on occupied/unoccupied mode.

Rating	Installed	Design Life	Updated
2 - Poor	0	0	October 2004

Event: Furnace replacement and provideentrance heating.

Concern:

Outdoor air of 8 l/s per person on year round basis is not provided. Entrance to portables is cold. Sidewall supply air grilles are damaged. Filters are 25mm throw away type. Entrance is heated from supply air from furnace and is cold. Roof mounted exhaust fans are provided for room relief. there are no firestops installed. There is no air gap between drywall and chimney. There is no access door installed for fire damper access. There are no retaining angles at wall and ceiling penetrations where fire dampers should be installed.

Recommendation:

Install furnace package which provides guaranteed 8 l/s per person on a year round basis and unoccupied/occupied modes. Install electric fan coil unit to heat entrance.

Type	Year	Cost	Priority
Operating Efficiency Upgrade	2005	$80,000	High

Updated: October 12 2004

F1010.02.05 Grandstands and Bleachers*

1981 Addition Gymnasium 1200 and mezzanine have pullout bleachers.

Rating	Installed	Design Life	Updated
2 - Poor	0	0	October 2004

Event: Provide guardrails for bleacher ends.

Concern:
Gymnasium bleachers do not have guardrails at outside ends as required by building code.

Recommendation:
Provide sleeves in existing units and removeable guardrails to conform to current code requirements.

Type	Year	Cost	Priority
Code Upgrade	2005	$10,000	Medium

Updated: October 12 2004

F2020.01 Asbestos*

Asbestos was identified in the Hazardous Materials Survey with in flooring, wall texture material, and ceiling texture materials.

Rating	Installed	Design Life	Updated
1 - Critical	0	0	October 2004

Event: Abate asbestos which is required for modernization work.

Concern:
Asbestos untouched and concealed is considered manageable but when modernization of school begins some materials will be required to be removed or demolished for new construction.

Recommendation:
Some costs would be covered in technical section C3030.03.

Type	Year	Cost	Priority
Hazardous Material Management Upgrade	2004	$20,000	Medium

Updated: October 12 2004

F2020.01 Asbestos* - mechanical

Hazardous Materials Survey reports asbestos present in mechanical duct insulation, straight run pipe insulation, pipe fitting insulation and boilers.

Rating	Installed	Design Life	Updated
1 - Critical	0	0	October 2004

Event: Abate exposed mechanical room asbestos.

Concern:
Mechanical rooms 1103 and 1120 contain 50 - 75% Chrysotile Asbestos in mechanical pipe fitting, duct parging, or header insulation.

Recommendation:
Abate asbestos as specified in report.

Type	Year	Cost	Priority
Hazardous Materials Abatement	2004	$10,000	High

Updated: October 12 2004

F2020.03 Mercury*

Hazardous Materials Survey identified mercury in smoke detectors, thermostats, and heat detectors.

Rating	Installed	Design Life	Updated
1 - Critical	0	0	October 2004

Event: Remove mercury containing thermostats, heat detectors and smoke detectors.

Concern:
Heat detectors with americium-241 were observed throughout the school. Smoke detectors containing Americium-241 were observed in rooms 1179, 2107, 2107A and in mezzanine areas over rooms 1118 and 1120. Mercury containing thermostats were identified in rooms 1122, 1123, and 1140A.

Recommendation:
When Memorial School is modernized mercury will be required to be removed through a hazardous materials management plan.

Type	Year	Cost	Priority
Hazardous Material Management Upgrade	2005	$7,000	High

Updated: October 12 2004

F2020.04 Mould*

Mould was identified in hazardous materials report with in Cold Storage area and room 1138B

Rating	Installed	Design Life	Updated
1 - Critical	0	0	October 2004

Event: Remove contaminated material.

Concern:
Mould growth is extreme in cold storage and SED suite 1138B.

Recommendation:
Remove contaminated materials in 1138B as set out in Hazardous Materials Report. Replace construction in Cold Storage area as priced in technical B2010.02.05.

Type	Year	Cost	Priority
Hazardous Materials Abatement	2004	$5,000	High

Updated: October 12 2004

F2020.07 Chloroflorocarbons (CFC Refrigerants)*

Hazardous Materials Survey indentified three mechanical units containing cfc refrigerants.

Rating	Installed	Design Life	Updated
1 - Critical	0	0	October 2004

Event: Remove CFC refrigerants

Concern:
Three mechanical roof top units were identified to have cfc refrigerants.

Recommendation:
When Memorial School is modernized CFCs will be required to be removed through a hazardous materials management plan.

Type	Year	Cost	Priority
Hazardous Material Management Upgrade	2005	$5,000	High

Updated: October 12 2004

S8 FUNCTIONAL ASSESSMENT

K40 Current Code Issues

Roof and floors of 1962 and 1963 buildings area are combustible - remainder are non-combustible. Building construction type is combustible and non combustible in combination.

Rating	Installed	Design Life	Updated
3 - Marginal	0	0	October 2004

Event: Fire rated wood roof structure.

Concern:
Wood roof structure in 1962 original building and 1963 addition requires to be fire rated for 45 Minutes. Many area are exposed wood decking.

Recommendation:
Provide 45 minute fire rated assembly to exposed wood structure.

Type	Year	Cost	Priority
Code Repair	2004	$25,000	High

Updated: October 12 2004

K40 Current Code Issues

Fire separations are not in place. Building is required to be sprinklered as well as fire separations need to be provided.

Rating	Installed	Design Life	Updated
1 - Critical	0	0	October 2004

Event: Provide building code study.

Concern:
Existing school has no fire separations or sprinklers. Wood frame construction must have fire walls. As well as fire lane access around the school. Travel distances to exits or to a safe compartment apppear to exceed the building code allowable.

Recommendation:
Provide building code study.

Type	Year	Cost	Priority
Study	2004	$3,000	High

Updated: October 12 2004

K40 Current Code Issues

It appears that the corridors were meant to be fire separations. Due to the lack of door closers, corridors are no longer fire rated. Travel distances to exits appear suspect.

Rating	Installed	Design Life	Updated
1 - Critical	0	0	October 2004

Event: Provide sprinklers throughout the building.

Concern:
No fire separations are in place. Building doesnot have fire compartments or firewalls.

Recommendation:
Sprinkler the building and divide building into smaller areas with proper firewall, firelane access, and fire separations with rated walls roofs, ceilings and doors.

Type	Year	Cost	Priority
Code Repair	2004	$100,000	High

Updated: October 12 2004

K4010.01 Barrier Free Route: Parking to Entrance

Automatic door provided but no designated parking for handicap.

Rating	Installed	Design Life	Updated
3 - Marginal	0	0	October 2004

Event: Provide designated hanicap parking.

Concern:
There is not any designated parking stalls for handicap.

Recommendation:
Provide handicap parking adjacent to dropped barrier free curb at north west parking lot.

Type	Year	Cost	Priority
Barrier Free Access Upgrade	2004	$1,000	N/A

Updated: October 12 2004

K4010.02 Barrier Free Entrances

One adjacent parking

Rating	Installed	Design Life	Updated
4 - Acceptable	0	0	October 2004

K4010.03 Barrier Free Interior Circulation

Many stairs throughout corridors. Access is limited

Rating	Installed	Design Life	Updated
3 - Marginal	0	0	October 2004

Event: study possible use of ramps and/or lifts.

Concern:
There is limited access to parts of the school due to stairs.

Recommendation:
Study possible ramps or lifts to be incorporated.

Type	Year	Cost	Priority
Barrier Free Access Upgrade	2007	$1,000	Low

Updated: October 12 2004

K4010.04 Barrier Free Washrooms

Barrier free washrooms are limited to 1139 and 1140. No barrier free showers or change rooms.

Rating	Installed	Design Life	Updated
3 - Marginal	0	0	October 2004

Event: Provide hanicap clearances to access entire school.

Concern:
Barrier free access means proper clearances at all doorways and with in rooms. Clearance and adequate space for barrier free showers withno curbs is not provided.

Recommendation:
During modernization provide curbless shower with proper clearances at all washrooms, entrances to classrooms and nay space that another student could access.

Type	Year	Cost	Priority
Barrier Free Access Upgrade	2007	$50,000	Low

Updated: October 12 2004

Facility Details

Building Name: Memorial Composite High S
Address:
Location: Stony Plain

Building Id: S4114
Gross Area (sq. m): 0.00
Replacement Cost: $0
Construction Year: 0

Evaluation Details

Evaluation Company: O'Neill O'Neill Procinsky Architects
Evaluation Date: May 1 2004
Evaluator Name: Mr. Dermot O'Neill
Evaluator Phone: (780) 482-4813

Total Maintenance Events Next 5 years: **$411,000**
5 year Facility Condition Index (FCI): **0%**

General Summary:

Memorial Composite High School site requires several improvements. Paved roadways and parking areas require resurfacing as well regrading is needed to provide drainage for surface drained roof drains. Concrete curbs and pedestrian sidewalks have deteriorated and require replacement. Exterior wood exit stairs and guards from portables require replacement. Additional site benches are required for student gathering. Mechanically Memorial Composite High School requires a new fire hydrant that is within 45 meters (code maximum) of the siamese connection. Electrically the car plug-ins require replacement and site lighting requires upgrading.

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)*

Road way at west side of school.

Rating	Installed	Design Life	Updated
3	0	20	November 2004

Event: Resurface asphalt roadway.

Concern:
Roadway has major cracks.

Recommendation:
Resurface asphalt roadway. 300 m2.

Type	Year	Cost	Priority
Repair	2005	$12,000	Medium

Updated: November 15 2004

G2020.02.02 Flexible Paving Parking Lots(Asphalt)*

Asphalt parking lots

Rating	Installed	Design Life	Updated
3	0	10	November 2004

Event: Resurface asphalt parking area.

Concern:
Parking lots have extensive cracking.

Recommendation:
Resurface parking lot asphalt and ensure proper drainage. 7600m2.

Type	Year	Cost	Priority
Repair	2005	$215,000	Low

Updated: November 15 2004

G2020.05 Parking Lot Curbs and Gutters*

Concrete curbs located on north (front) elevation at the street and on east side of school.

Rating	Installed	Design Life	Updated
3	0	30	November 2004

Event: Replace concrete curbs.

Concern:
Concrete curbs dividing the parking lot and street from pedestrian paving are crumbling.

Recommendation:
Replace concrete curbs north and east of school.

Type	Year	Cost	Priority
Lifecycle Replacement	2005	$12,000	Low

Updated: November 15 2004

G2020.06.01 Traffic Barriers*

Traffic barriers are used to control cars at the bus lane drop off.

Rating	Installed	Design Life	Updated
4	0	0	November 2004

G2020.06.02 Parking Bumpers*

Precast concrete bumpers are located at the end of every parking stall.

Rating	Installed	Design Life	Updated
3	0	0	November 2004

Event: Replace 50% of precast parking bumpers.

Concern:
50% of the precast parking bumpers are broken.

Recommendation:
Replace broken parking bumpers.

Type	Year	Cost	Priority
Lifecycle Replacement	2007	$5,000	Low

Updated: November 15 2004

G2020.06.04 Pavement Markings*

Pavement markings for parking restrictions and parking stalls.

Rating	Installed	Design Life	Updated
3	0	0	November 2004

Event: Paint parking lines.

Concern:
Pavement markings have worn off.

Recommendation:
Repaint pavement markings.

Type	Year	Cost	Priority
Repair	2005	$2,000	Low

Updated: November 15 2004

G2030.02.02 Asphalt Pedestrain Pavement*

Asphalt walkways at southside of building and around portables.

Rating	Installed	Design Life	Updated
3	0	25	November 2004

Event: Resurface asphalt pavement.

Concern:
Asphalt walkway around portables has cracked.

Recommendation:
Resurface asphalt pavement.

Type	Year	Cost	Priority
Repair	2005	$5,000	Low

Updated: November 15 2004

G2030.04 Rigid Pedestrian Pavement (Concrete)*

Concrete sidewalks extend around the entire school.

Rating	Installed	Design Life	Updated
2	0	30	November 2004

Event: Replace 75% of the sidewalks.

Concern:
Concrete walks have cracked and settled. Tripping hazard is a concern.

Recommendation:
Replace 75% of the sidewalks around the school.

Type	Year	Cost	Priority
Repair	2005	$60,000	Medium

Updated: November 15 2004

G2030.06 Exterior Steps and Ramps*

Exterior steps are located at exit from each of the four portables.

Rating	Installed	Design Life	Updated
2	0	25	November 2004

Event: Replace all exit stairs from the portables.

Concern:
Wood exit landings and stairs with wood railings have deteriorated and wood is rotten. There is no guardrail at landing or stair guard on exit stair from the south end of the portables.

Recommendation:
Replace all stairs with new.

Type	Year	Cost	Priority
Lifecycle Replacement	2004	$7,500	High

Updated: November 15 2004

G2040.02 Fences and Gates*

Chainlink fence divides property from the bus transfer center to the west. Chainlink fence around compound at the CTS Mechanics 1981 addition.

Rating	Installed	Design Life	Updated
4	0	30	November 2004

G2040.04.01 Play-Field Equipment and Structures*

Outdoor athletic areas are joint use with adjacent school and community.

Rating	Installed	Design Life	Updated
4	0	0	November 2004

G2040.04.01.02 Playground Equipment*

Outdoor playground areas, including condition of equipment and base are all maintained by the Town of Stony Plain.

Rating	Installed	Design Life	Updated
4	0	0	November 2004

G2040.05.01 Seating

Precast bench supports with wood backs and seats are damaged.

Rating	Installed	Design Life	Updated
3	0	0	November 2004

Event: Provide a student gathering area with benches.

Concern:
Minimal benches are provided. Wooden backs and seats have rotted.

Recommendation:
Repair benches and provide additional benches to create a student gathering area.

Type	Year	Cost	Priority
Repair	2007	$10,000	Low

Updated: November 15 2004

G2040.05.03 Trash and Litter Receptacles

Precast concrete site garbage receptacles are located at all entrances.

Rating	Installed	Design Life	Updated
5	0	0	November 2004

G2040.06 Exterior Signs*

Aluminum letters mounted to the face of the school.

Rating	Installed	Design Life	Updated
4	0	15	November 2004

G2040.08 Flagpoles*

Onel flag pole is located at main entrance.

Rating	Installed	Design Life	Updated
4	0	25	November 2004

G2050.01 Irrigation Systems*

Non freeze hose bibs, vacuum breaker defficient.

Rating	Installed	Design Life	Updated
2	0	0	November 2004

Event: Install vacuum breakers.

Concern:
Potable water contamination

Recommendation:
Non freeze hose bibs. Vacuum breaker defficient. Install vacuum breakers.

Type	Year	Cost	Priority
Preventative Maintenance	2004	$1,000	Medium

Updated: November 15 2004

G2050.04 Lawns and Grasses*

Grass boulevard of 4500 mm around the north, south, and east sides of school.

Rating	Installed	Design Life	Updated
3	0	30	November 2004

Event: Provide sidewalks where grass has been worn out.

Concern:
Grass boulevard has deteriorated at the east and west sides of the school where there is heavy pedestrian traffic.

Recommendation:
Replace worn out grass with sidewalks and public area for student gathering.

Type	Year	Cost	Priority
Repair	2005	$32,000	Low

Updated: November 15 2004

G2050.05 Trees, Plants and Ground Covers*

Large mature trees around the building.

Rating	Installed	Design Life	Updated
4	0	0	November 2004

G3010.02 Site Domestic Water Distribution*

Municipal supplied domestic water distribution. Pressure and volume are adequate. The water line to the school was replaced in 2003.

Rating	Installed	Design Life	Updated
6	0	50	November 2004

G3010.03 Site Fire Protection Water Distribution*

Fire hydrant is not within 45 m of siamese connection.

Rating	Installed	Design Life	Updated
2	0	50	November 2004

Event: Install new fire hydrant with in code required distance.

Concern:
Standpipe and hose system siamese connection are not within 45 meters of the fire hydrant.

Recommendation:
Install new fire hydrant within 45 meters of siamese connection.

Type	Year	Cost	Priority
Code Upgrade	2005	$20,000	High

Updated: November 15 2004

G3020.01 Sanitary Sewage Collection*

Rating	Installed	Design Life	Updated
6	0	0	November 2004

G3030.01 Storm Water Collection*

Roof drains dump water to grade and must surface drain, there are no catchbasins.

Rating	Installed	Design Life	Updated
4	0	50	November 2004

G3060.01 Gas Distribution*

Gas line to interior gas meter.

Rating	Installed	Design Life	Updated
6	0	0	November 2004

G3060.04 Fuel Storage Tanks*

Hazardous Materials Survey reports that one undeground storage tank is located beneath the parking lot adjacent to room 1116.

Rating	Installed	Design Life	Updated
1	0	0	November 2004

Event: Remove used oil storage tank.

Concern:
Under ground tank is beneath pavement. It is difficult to know if there is any leaks or if there has been any soil contamination.

Recommendation:
At time of pavement resurfacing remove tank.

Type	Year	Cost	Priority
Hazardous Materials Abatement	2004	$25,000	High

Updated: November 15 2004

G4010.03 Electrical Power Distribution Equipment*

Utility pad mounted transformer complete with disconnect switch located adjacent the school to the west.

Rating	Installed	Design Life	Updated
5	0	0	November 2004

G4010.04 Car Plugs-ins*

Approx. 90 car posts are controlled with a time clock and thermostat.

Rating	Installed	Design Life	Updated
2	0	0	November 2004

Event: Replace car plug-in rail and receptacle.

Concern:
The majority of the weatherproof receptacles cover plates are broken or missing. Receptacle face plates have been siliconed on to the posts. The posts are obsolete.

Recommendation:
Replace car plug-in rails and receptacles.

Type	Year	Cost	Priority
Repair	2004	$14,000	Medium

Updated: November 15 2004

G4020 Site Lighting

There are 3-HID wall packs on the west wall of the 1981 addition. Recessed HID are located at entrance doors, 7 site lights in the parking lot on east and south areas. All are controlled by photocell.

Rating	Installed	Design Life	Updated
2	0	0	November 2004

Event: Replace with new site lighting.

Concern:
The lighting poles and luminars are showing their age and parts are no longer available. One power feed is not working to one site pole.

Recommendation:
Replace all site lighting with new.

Type	Year	Cost	Priority
Lifecycle Replacement	2005	$10,500	Medium

Updated: November 15 2004