School Name: Highwood Elementary
Location: 11 Holmwood Ave. NW

School Code: 9217
Facility Code: 1480

Region: South
Jurisdiction: Calgary

Superintendent: Dr. Donna Michaels
Contact Person: Leanne Soligo
Telephone: 214-1121

Grades: K-6

School Capacity: 450

Building Section	Year of Compl.	No. of Floors	Gross Bldg Area (Sq.M.)	Type of Construction (i.e., structure, roof, cladding)	Description of Mechanical Systems (incl. major upgrades)	Comments/Notes
Original Building	1966	1	3063.20	Precast panels with bock backup, exposed aggregate finish or brick, Deep T concrete slab roof.	Two hot water boilers with central handling.	Portables removed.
Additions/ Expansions						
	Total		3254.20			

Evaluator's Name: Bob Passmore, M.A.A.A.
& Company: Building Science Specialists Ltd.

Upgrading/ Modernization (identify whether minor or major)						
Portable Struct. (identify whether attached/perman. or free-standing/ relocatable)						

List of Reports/ Supplementary Information	CBE Facility Asbestos Database, February 23, 1999

	Evaluation Components	Summary Assessment	Estim. Cost
1	**Site Conditions**	- repair asphalt in playground and in parking lot - repair fencing at parking lot and reinstall parking plugs - provide sidewalk on north facing street - reprofile drainage on north and new main entry walk - repave and widen fire access to west end, City to relocate guy wire.	$142,650
2	**Building Exterior**	- upgrade ladder safety - replace windows and recaulk precast joints - paint exposed concrete fascia and doors	$85,500
3	**Building Interior**	- replace floors in stairwells and washrooms, provide new carpet to Library - paint classrooms - replace ceiling tiles in Gymnasium - provide handicapped elevator to second floor, and handicapped washroom	$213,200
4	**Mechanical Systems**	- provide additional fire extinguisher - provide backflow prevention on domestic, fire and boiler water feed - provide new hot water tank - provide new boilers (2) & expansion tanks - provide ventilation relief air - provide maintenance to Gym HVAC unit - replace washroom exhausts	$116,300
5	**Electrical Systems**	- provide new exterior lighting - install new fire alarm system and upgrade emergency lighting and exit lights, provide connection to emergency power -	$108,200
6	**Portable Buildings**	- n/a	$0.00
7	**Space Adequacy:**		
	7.1 Classrooms	- deficient -24	
	7.2 Science Rooms/Labs	- deficient -100	
	7.3 Ancillary Areas	- deficient -88	
	7.4 Gymnasium	- deficient -206.1	
	7.5 Library/Resource Areas	- deficient -27.4	
	7.6 Administration/Staff Areas	- deficient -314.8	
	7.7 CTS Areas	n/a	
	7.8 Other Non-Instructional Areas (incl. gross-up)	- slightly excessive \ 110.5	
	Overall School Conditions & Estim. Costs	-649.8	$665,850

Section 1	Site Conditions	Rating	Comments/Concerns	Estim. Cost
1.1	**General Site Condions**			
1.1.1	Overall site size.	4	1.84 hectares	
1.1.2	Outdoor athletic areas.	4	Playing fields shared with community, consist of soccer pitches and two baseball diamonds.. A creative play area is located on the south side of the site.	
1.1.3	Outdoor playground areas, including condition of equipment and base.	3	Paved play area to south of school, heavily cracked, should have seal coat provided. Creative play area is in gravel further south.	$11,400
1.1.4	Site landscaping.	4	Mature.	
1.1.5	Site accessories (i.e., perimeter and other fencing, guard rails, bike stands, flag poles).	4	Parking lot fenced from alley to east and school yard to west. Some fencing between community centre to west and school yard.	
1.1.6	Surface drainage conditions (i.e., drains away from building, signs of ponding).	3	Drainage on north side of school is by drainage swale directed under main walkway in 6" pipe that is blocked. Regrade to provide continuous drainage	$10,000
1.1.7	Evidence of sub-soil problems.	4	Some slumping under main walkway to school. Repair as part of 1.1.6 above.	
1.1.8	Safety and security concerns due to site conditions.	3	Sidewalk required along north roadway (see 1.2.1 below) Fire access is blocked on west side by guy wire. City to relocate. Fire lane to be paved as part of 1.2.2 below	$40,000
Other				

Section 1	Site Conditions	Rating	Comments/Concerns	Estim. Cost
1.2	**Access/Drop-Off Areas/Roadways/Bus Lanes**			
1.2.1	Vehicular and pedestrian access points (i.e., size, number, visibility, safety).	3	Access is by city street on north side of building. Main entry on north side. One at east end from parking lot. Student access through front entry. There is no side walk along street. Five buses service the school. Install sidewalk.	$19,000
1.2.2	Surfacing of on-site road network (note whether asphalt or gravel).	3	Parking lot is gravel. A large area off of the alley to the east has been paved (old parking lot), it provides access to the gravel lot. The paving is heavily cracked and sunken. Firelane is paved, on west end of school. Guy wire from utility pole limits use and fire lane needs to be extended from face of school to street. Parking on alley and firelane to be top coated. Walkway to main entry is slumped, replace as part of regrading (see 1.1.6 above). Walkway on east side of gym shows settlement cracking and slumps to east, It should be replaced.	$20,000
1.2.3	Bus lanes/drop-off areas (note whether on-site or off-site).	4	On city street to north.	
1.2.4	Fire vehicle access.	2	At west end from north street. Blocked by guy wire from electrical pole See 1.1.8.	
1.2.5	Signage.	4	One surface mount sign on north face of building near main entry.	
Other				

Section 1	Site Conditions	Rating	Comments/Concerns	Estim. Cost
1.3	**Parking Lots and Sidewalks**			
1.3.1	Number of parking spaces for staff, students and visitors (including stalls for disabled persons).	3	31 staff parking stalls. No Handicapped stall is available. Lot should be resurfaced. Provide handicapped stall.	$23,000
1.3.2	Layout and safety of parking lots.	3	Lot is separated from play area by fencing and attached parking plug raceway. Lot is separated from lane to east by fence. Fence to be realigned and electrical relocated to separate structure.	$16,250
1.3.3	Surfacing and drainage of parking lots (note whether asphalt or gravel).	4	Staff lot is graveled and paved against alley only. Asphalt in very poor condition, resurfacing required (see 1.3.1).	.
1.3.4	Layout and safety of sidewalks.	4	No side walk along north side of building (see 1.2.1 above). On site walks are separated from vehicular traffic.	
1.3.5	Surfacing and drainage of sidewalks (note type of material).	3	Sidewalks are concrete or asphalt. They will be replaced as part of 1.2.2 or 1.1.6 Some minor cracking noted.	
1.3.6	Curb cuts and ramps for barrier free access.	3	Main entry door is handicapped accessible. Curb cut required.	$3,000
Other				
	Overall Site Conditions & Estimated Costs			$142,650

Section 2	Building Exterior	Rating	Comments/Concerns		Estim. Cost
2.1	**Overall Structure**		**Bldg. Section**	**Description/Condition**	
2.1.1	Floor structure and beams (i.e., signs of bending, cracking, heaving, settlement, voids, rust, stains).	4	1966	Minor shrinkage cracking noted in concrete slabs, mainly at entry vestibules.	
2.1.2	Wall structure and columns (i.e., signs of bending, cracking, settlement, voids, rust, stains).	FI	1966	Some crushing noted at beam/column connection on exterior	
2.1.3	Roof structure (i.e., signs of bending, cracking, voids, rust, stains).	4	1966	No problems noted.	
Other					
2.2	**Roofing and Skylights** ***Identify the availability of an up-to-date inspection report or roofing program. Note if roof sections are of different ages and/or in varying states of repair.***		**Bldg. Section or Roof Section**	**Description/Condition/Age**	
2.2.1	Based on the inspection report (and to the extent possible, direct observation), assess and rate roof conditions and estimate costs for required improvements (i.e., covering materials, membrane, insulation, other components).	FI	1966	Roof is SBS, and appears to be in good condition.	
2.2.2	Roof accessories (i.e., ladders, stairs, hatches, masts, exhaust hoods, chimneys, gutters, downspouts, splashpads).	3	1966	Ladder to upper roof requires safety cage	$1,000
2.2.3	Control of ice and snow falling from roof.	4	1966	Roof is flat, SBS. Drainage is to internal drains and municipal system.	
2.2.4	Skylights (i.e., signs of distress, leaks, ice build-up, condensation, deteriorated materials/seals).	4	1966	Three in office -no signs of problems.	
Other					

Section 2	Building Exterior	Rating	Comments/Concerns		Estim. Cost
2.3	**Exterior Walls/Building Envelope**		**Bldg. Section**	**Description/Condition**	
2.3.1	Exterior wall finishes (i.e., signs of deterioration, cracks, brick spalling, efflorescence, water stains).	3	1966	Walls are precast panels or brick. Joints in precast require caulking	$4,500
2.3.2	Fascias, soffits, parapets (i.e., signs of looseness, stains, rust, peeling paint).	3	1966	Exterior columns and precast fascia require paint	$4,000
2.3.3	Building envelope (i.e., evidence of air infiltration/ exfiltration through the exterior wall or ice build up on wall, eaves, canopy).	4	1966	No problems noted	
2.3.4	Interface of roof drainage and ground drainage systems.	4	1966	Roof drainage is internal to municipal system	
2.3.5	Inside faces of exterior walls (i.e., signs of cracks, water stains, dust spots).	4	1966	No problems noted	
Other		3	1966	Cash allowance for repairs to architectural finsihses for removal of boilers.	$30,000
2.4	**Exterior Doors and Windows**		**Bldg. Section**	**Description/Condition**	
2.4.1	Doors (i.e., signs of deterioration, rusting metal, glass cracks, peeling paint, damaged seals, sealed unit failure).	3	1966	Require painting	$1,500
2.4.2	Door accessories (i.e., latches, hardware, screens, locks, alarms, holders, closers, security devices).	4	1966	Hardware appears to be original and still functional.	
2.4.3	Exit door hardware (i.e., safety and/or code concerns).	4	1966	Hardware appears to be original and still functional.	
2.4.4	Windows (i.e., signs of deterioration, rusting metal, glass cracks, peeling paint, damaged seals, sealed unit failure).	3	1966	Sealed unit failure to approximately 50 percent of the windows. They are aluminum frame curtain wall sections. They need to be replaced. Also the window frames in HM at the ends of the stair wells require replacement.	$44,500
2.4.5	Window accessories (i.e., latches, hardware, screens, locks, alarms, holders, closers, security devices).	4	1966	Hardware is still functional (see 2.4.4 above).	
2.4.6	Building envelope (i.e., signs of heavy condensation on doors or windows).	4	1966	Problems noted on windows with broken seals (see 2.4.4 above).	
Other					
	Overall Bldg Exterior Condition & Estim Costs				$85,500

Section 3	Building Interior - Overall Conditions	Rating	Bldg. Section	Comments/Concerns	Estim. Cost
3.1	**Interior Structure**				
3.1.1	Interior walls and partitions (i.e., signs of cracks, spalling, paint peeling).	4	1965	Cracking noted at bean column connection in music room	
3.1.2	Floors (i.e., signs of cracks, heaving, settlement).	4	1965	Cracking noted in vestibules	
Other					
3.2	**Materials and Finishes**				
3.2.1	Floor materials and finishes.	3	1965	Floors are combination of sheet vinyl and 9"VT, carpeted in library and office. Carpet in library requires replacement.	$5,700
		3	1965	Poured epoxy finish in stairwells and washrooms, both floors, requires replacement, patch cracks in slab, with sheet vinyl and rubber tread stairs	$12,500
3.2.2	Wall materials and finishes.	3	1965	Walls are painted concrete block and gypsum board, painting required throughout classrooms.	$17,000
3.2.3	Ceiling materials and finishes.	4	1965	Ceilings are typically 12" fibrous tiles glued to underside of precast T's Lower floor classrooms and corridor are suspended T-bar and 2 x 4 tiles.	
3.2.4	Interior doors and hardware.	4	1965	Original but still operational	
3.2.5	Millwork	4	1965	Original and in good condition.	
3.2.6	Fixed/wall mounted equipment (i.e., writing boards, tackboards, display boards, signs).	4	1965	Tackboards and blackboards are original, but functional. Replace with white boards - CBE policy.	$20,000
3.2.7	Any other fixed/mounted specialty items (i.e., CTS equipment, gymnasium equipment).	4	1965	Gym has climbing apparatus and fold out stage. There are partitions to separate the gym into three areas.	
3.2.8	Washroom materials and finishes.	3	1965	Replace toilet partitions 16 total.	$8,000
Other					

Section 3	Building Interior - Overall Conditions	Rating	Bldg. Section	Comments/Concerns Description/Condition	Estim. Cost
3.3	**Health and Safety Concerns --- *Intent is to identify renovations considered necessary to meet applicable codes, primarily due to safety concerns. Basis of evaluation should be an up-to-date inspection report from the authority having jurisdiction together with direct observations as appropriate. Evaluator should note if in his opinion a comprehensive code evaluation is required.***				
3.3.1	Building construction type - combustible or non-combustible, sprinklered or non-sprinklered.	4	1965	Building is of non combustible construction and non sprinklered.	
3.3.2	Fire separations (i.e., between buildings, wings, zones if non-sprinklered).	4	1965	Fire separations are 8" concrete block. They appear to be intact.	
3.3.3	Fire resistance rating of materials (i.e., corridor walls and doors).	4	1965	Doors are hollow metal in fire separations	
3.3.4	Exiting distances and access to exits.	4	1965	Appear to be adequate	
3.3.5	Barrier-free access.	2	1965	Building is accessible, no handicapped washroom or elevator for second floor access.	$150,000
3.3.6	Availability of hazardous materials audit (i.e., evidence of safety concerns with respect to asbestos, PCB's, chemicals).	4	1965	CBE Asbestos database indicates asbestos present in mudding on piping elbows (chryostile). There is amosite present in the glue-on ceiling tile throughout.	
3.3.7	Other health and safety concerns (i.e., evidence of excessive noise conditions, air quality problems)	4	1965	none noted	
Other			1965		
	Overall Bldg Interior Condition & Estim Costs				$213,200

Section 4	Mechanical Systems	Rating		Comments/Concerns	Estim. Cost
4.1	**Mechanical Site Services**		Bldg. Section	Description/Condition	
4.1.1	Site drainage systems (i.e., surface and underground systems, catch basins).	4	1966	Swales are used to remove water from the site.There are no site catch basins.	
4.1.2	Exterior plumbing systems (i.e., irrigation systems, hose bibs).	4	1966	Hose bibs are provided on the north side only	
4.1.3	Outside storage tanks.	NA		None	
Other					
4.2	**Fire Suppression Systems**		Bldg. Section	Description/Condition	
4.2.1	Fire hydrants and siamese connections.	NA		none	
4.2.2	Fire suppression systems (i.e., pumps, sprinklers, piping, reservoirs, hoses, stand pipes, CO2 systems).	4	1966	The building has a hose and standpipe system on both levels. Exposed standpipes with hose reels are located near the exits on each level.	
4.2.3	Hand extinguishers, blankets and showers (i.e., in CTS areas).	3	1966	Pressurized water extinguishers are located next to the standpipes. Type ABC dry chemical extinguishers are located in the boiler room and office. There are no extinguishers in the ventilation equipment rooms. Provide extinguishers.	$300
4.2.4	Other special situations (e.g., flammable storage areas, science labs, CTS areas).	NA		None	
Other					

Section 4	Mechanical Systems	Rating		Comments/Concerns	Estim. Cost
4.3	**Water Supply and Plumbing Systems**		Bldg. Section	Description/Condition	
4.3.1	Domestic water supply (i.e., pressure, volume, quality - note whether municipal or well supply).	3	1966	A 4" dia. iron water line from city mains supplies domestic and fire lines. Pressure is good. Quality is not always good. The school is at the end of the cities water line. Flushing this line is very difficult. A bypass line was installed ahead of the meter and flooding problems resulted. Provide a wall siamese for flushing.	$2,000
4.3.2	Water treatment system(s).	NA		None	
4.3.3	Pumps and valves (including backflow prevention valves).	5	1966	Twin 2' dia. backflow preventors are installed on the 2" dia. domestic water line. A backflow preventor is installed on the fire line. All required valving is installed.	
4.3.4	Piping and fittings.	5	1966	All water piping is copper tubing with soldered joints. All water piping is insulated with canvas covered fiberglass.	
4.3.5	Plumbing fixtures (i.e., toilets, urinals, sinks)	5	1966	Water closets - wall hung with flush valves. Staff units are tank type. Urinals - stall type with flush tanks. Lavatories are wall hung. Sinks are countertop stainless steel. Drinking fountains are 1 bubbler wall hung. Some staff lavs. are ctp. Slop sinks are wall hung. Most fixtures are new and are in good condition	
4.3.6	Domestic hot water system (i.e., heater, storage tanks, failure alarms, pressure, volume, recirculation).	4	1966	A residential tank type gas fired water heater is provided. A recirculating pump is installed. Both are relatively new.	
4.3.7	Sanitary and storm sewers, including sumps and pits (note whether sewage system is municipal or septic).	4	1966	Storm and sanitary drainage is connected to city mains. Piping is hub and spigot cast iron.	
Other					

Section 4	Mechanical Systems	Rating		Comments/Concerns	Estim. Cost
4.4	**Heating Systems**		Bldg. Section	Description/Condition	
4.4.1	Heating capacity and reliability (including backup capacity).	3	1966	A hot water heating system is installed. Twin packaged gas fired boilers rated at 2,700 MBH output are provided. Twin base mounted pumps are installed. Capacity is good. The boilers have had many problems. They should be replaced. The pumps are old and should be replaced.	$50,000
4.4.2	Heating controls (including use of current energy management technology.	3	1966	The heating system uses a pneumatic control system. An old control compressor is provided c/w a dryer. Replace the compressor.	$7,000
4.4.3	Fresh air for combustion and condition of the combustion chimney.	3	1966	A low wall louvre is installed c/w a short duct to a grille. The duct has a fan mounted in it that is interlocked with the boiler burners. A relief ventilation opening is not installed. Provide the relief opening.	$1,000
4.4.4	Treatment of water used in heating systems.	5	1966	A chemical pot feeder is piped across the circulating pumps.	
4.4.5	Low water cutoff/pressure relief valves and failure alarms (i.e., hot water heating).	4	1966	The boilers have low water cut-offs and pressure relief valves. A low temperature alarm is provided.	
4.4.6	Heating air filtration systems and filters.	NA		None	
4.4.7	Heating humidification systems and components.	NA		None	

Section 4	Mechanical Systems	Rating		Comments/Concerns	Estim. Cost
4.4	**Heating Systems (cont'd)**		Bldg. Section	Description/Condition	
4.4.8	Heating distribution systems (i.e., piping, ductwork) and associated components (i.e., diffusers, radiators).	4	1966	A two pipe steel distribution system is used to provide hot water to the terminals. Heating terminals are radiator/convectors, wall fin convectors, fin element behind bookcases and fan cabinet heaters.	
4.4.9	Heating piping, valve and/or duct insulation.	5	1966	Fiberglass insulation with canvas covering is used on the heating piping.	
4.4.10	Heat exchangers.	NA		None	
4.4.11	Heating mixing boxes, dampers and linkages.	NA		None	
4.4.12	Heating distribution/circulation in larger spaces (i.e., user comfort, temperature of outside wall surfaces).	4	1966	Most areas have space thermostat control and no comfort problems were reported.	
4.4.13	Zone/unit heaters and controls.	5	1966	The fan cabinet heaters have space t'stats that cycle the fan motors.	
Other	Expansion tanks	3	1966	Twin standard expansion tanks with gauge glasses are installed c/w gauge glasses. The tanks are original and will require replacement.	$3,000

Section 4	Mechanical Systems	Rating		Comments/Concerns	Estim. Cost
4.5	**Ventilation Systems**		Bldg. Section	Description/Condition	
4.5.1	Air handling units capacity and condition.	3	1966	Each floor of the school has a built-up constant volume central ventilation system using two swamp coolers with centrifugal fans, an vane axial return/exhaust fan, face and bypass dampers, mixing dampers, exhaust dampers and a heating coil. Major maintenance on the coils, control valves, motors and fans will be required.	$25,000
		3	1966	The gym. has a packaged ventilation unit, with a return/ exhaust fan, heating coil and dampers as per the central units. Major maintenance will be rquired on the coil, control valve, motor and fan will be required	$6,000
4.5.2	Outside air for the occupant load (if possible, reference CFM/occupant).	4	1966	Outside air amounts are not known. The amount of fresh air can be adjusted. No problems were reported.	
4.5.3	Air distribution system (if possible, reference number of air changes/hour).	3	1966	Tempered air is supplied through main ducts with branches to wall grilles in most rooms. Ceiling diffusers are used in the gym. and the offices. All return air to the units uses the corrodors with wall or door grilles. Fire dampers are not installed in any of the fire seperations. Provide fire dampers in walls and doors.	$18,000
4.5.4	Exhaust systems capacity and condition.	3	1966	The boys and girls washrooms have a roof exhauster with connecting ductwork. Staff washrooms have ceiling mounted exhaust fans. The gymnasium has a large roof exhauster drawing through a wall grille. Capacity is good. The fans will require major work or replacement.	$4,000
4.5.5	Separation of out flow from air intakes.	5	1966	The exhaust hood and intake louvers are well seperated on all three ventilaton units.	
4.5.6	Special/dedicated ventilation and/or exhaust systems (i.e., kitchen, labs, CTS areas).	5	1966	The kitchen has a ceiling mounted exhaust fan.	
Other					

Section 4	Mechanical Systems	Rating		Comments/Concerns	Estim. Cost
4.5	**Ventilation Systems (cont'd)** ***Note: Only complete the following items if there are separate ventilation and heating systems.***		Bldg. Section	Description/Condition	
4.5.7	Ventilation controls (including use of current energy management technology).	5	1966	Controls on the ventilating systems are manually set and adjusted. No energy management systems are installed.	
4.5.8	Air filtration systems and filters.	5	1966	Each ventilation unit has a filter section with replacable media filters.	
4.5.9	Humidification system and components.	4	1966	The swamp coolers have humidity sensors in the return air duct They operate solenoid contol valves that connect to spray nozzles. The new plastic media is reported to have very poor water holding capacity which means heavy water usage.	
4.5.10	Heat exchangers.	NA		None	
4.5.11	Ventilation distribution system and components (i.e., ductwork, diffusers, mixing boxes, dampers, linkages).	5	1966	See 4.5.3	
Other					

Section 4	Mechanical Systems	Rating	Comments/Concerns		Estim. Cost
4.6	**Cooling Systems**		Bldg. Section	Description/Condition	
4.6.1	Cooling system capacity and condition (i.e., chillers, cooling towers, condensers).	4	1966	The swamp coolers are used to manually cool the supply air. Capacity is not known. A 10 degree temperature drop is reported to br avilable.	
4.6.2	Cooling distribution system and components (i.e., ductwork, diffusers, mixing boxes, dampers, linkages)	4	1966	See 4.5.3	
4.6.3	Cooling system controls (including use of current energy management technology).	NA		None	
4.6.4	Special/dedicated cooling systems (i.e., labs, CTS areas).	NA		None	
Other					
4.7	**Building Control Systems**		Bldg. Section	Description/Condition	
4.7.1	Building wide/system wide control systems and/or energy management systems.	NA		None provided.	
	Overall Mech Systems Condition & Estim. Costs				$116,300

Section 5	**Electrical Systems**	Rating		Comments/Concerns	Estim. Cost
5.1	**Site Services**		Bldg. Section	Description/Condition	
5.1.1	Primary service capacity and reliability (i.e., access, location, components, installation, bus sizes - note whether overhead or underground).	4	1966	The electric service is brought underground from overhead utiliy lines to a service entrance switchboard in the mechanical room. Service is at 400 amperes, 3 phase, 120/208v. Circuit breakers in the switchboard serve panelboards in the school The demand load is 400 va.	
5.1.2	Site and building exterior lighting (i.e., safety concerns).	3	1966	Wall mounted HID fixturtes are located on the south west corner and over the mechanical room/staff entry. Two wall mounted incandescents are provided at the main entrance, Other sides of the building and parking lot have no lighting. Install HIDs on the building and parking lot lights.	$6,000
5.1.3	Vehicle plug-ins (i.e., number, capacity, condition).	3	1966	The parking lot has plug-ins on both sides.(14 duplex outlets) The plug-ins only work below a set temperature. The sensor is mounted inside the well piping used to run the wiring to the plug-ins. The location is not satisfactory due to solar overheating of the pipe. Relocate sensor.	$1,000
Other					
5.2	**Life Safety Systems**		Bldg. Section	Description/Condition	
5.2.1	Fire and smoke alarm systems (i.e., safety concerns, up-to-date technology, regularly tested).	3	1966	An old single zone control panel is located in the principle's office. Pull stations are located at most exits. 6" dia. alarm bells are located in the corridors and gymnasium. Heat detectors are located in most service and storage rooms. The system has no battery back-up or supervision. Repalce system	$15,000
5.2.2	Emergency lighting systems (i.e., safety concerns, condition).	3	1966	Old battery packs are located in some storage rooms. Remotes are located inadequately in the some corridors, gym., remotes, etc. The packs are old. Replace packs and add remotes	$3,000
5.2.3	Exit lighting and signage (i.e., safety concerns, condition).	3	1966	Illuminated exit signs are located at all main corridor exits, gym. and exits to stairways. They are not connected to the emergency battery packs. Replace exit lights and connect to battery packs.	$2,600
Other					

Section 5	Electrical Systems	Rating		Comments/Concerns	Estim. Cost
5.3	**Power Supply and Distribution**		Bldg. Section	Description/Condition	
5.3.1	Power service surge protection.	4	1966	Only the recently installed computer system has surge protection.	
5.3.2	Panels and wireways capacity and condition.	4	1966	Many panelboards are full or almost full. A new panel board was installed to accomodate the new computer system.	
5.3.3	Emergency generator capacity and condition and/or UPS (if applicable).	NA		None	
5.3.4	General wiring devices and methods.	3	1966	Receptacles are grounded type. Many receptacles and switches are old and should be replaced. Replace devices in poor condition	$600
5.3.5	Motor controls.	5	1966	the large motors have fused disconnects and magnetic starters. Small motors have thermal switches.	
Other					

Section 5	Electrical Systems	Rating		Comments/Concerns	Estim. Cost
5.4	**Lighting Systems**		Bldg. Section	Description/Condition	
5.4.1	Interior lighting systems and components (i.e., illumination levels, conditions, controls).	3	1966	Most occupied rooms have fluorescent lighting. The mechanical room and stairways have incandescent and fluorescent fixtures. Ventilation equipment rooms and janitors rooms use incandescent fixtures. Light levels are as follows: gym. - 538 lux, mechanical room - 216 lux, staff washroom - 432 lux general office - 324 lux, staff room - 108 lux, kitchen - 54 lux at the counter, corridors - 216 to 646 lux, library = 430 lux, girls washroom - 162 lux, classrooms - 432 to 538 lux, stairways - 216 lux, math. lab - 699 lux.See 5.4.3.	
5.4.2	Replacement of ballasts (i.e., health and safety concerns).	3	1966	Ballasts with PCBs. may be still in some fixtures See 5. See 5.4.3.	
5.4.3	Implementation of energy efficiency measures and recommendations.	3	1966	A program of de-lamping fixtures was partially carried out. Most fixtures have had the lamps replaced. Replace all fluorescent fixtures with T-8 lamped equiped fixtures.	$80,000
Other					

Section 5	Electrical Systems	Rating	Bldg. Section	Comments/Concerns Description/Condition	Estim. Cost
5.5	**Network and Communication Systems**				
5.5.1	Telephone system and components (i.e., capacity, reliability, condition).	5	1966	A new telephone service was recently installed with good capacity and reliability.	
5.5.2	Other communication systems (i.e., public address, intercom, CCTV, satellite or cable TV).	5	1966	A new telephone intercom system was recently installed. A public address system is installed with speakers throughout the school. A sound system is installed in the gym. Another old sound system is still in place in the gym but is not used,	
5.5.3	Network cabling (if available, should be category 5 or better).	5	1966	A new computer system with internet access was recently installed with outlets throughout the school.	
5.5.4	Network cabling installation (i.e., in conduit, secured to walls or tables).	5	1966	Cabling is in conduit and is concealed in all finished areas.	
5.5.5	Wiring and telecommunication closets (i.e., size, security, ventilation/cooling, capacity for growth).	5	1966	The telephone service is in a storage space above the nurses office accessed from the gym. fan room. The computer hub is located in the library work room. Ventilation is fair in both locations.	
5.5.6	Provision for dedicated circuits for network equipment (i.e., hubs, switches, computers).	4	1966	The computer hub and computer lab. is on dedicated circuits. The computers in all other areas are on general circuits.	
Other					

Section 5	Electrical Systems	Rating		Comments/Concerns	Estim. Cost
5.6	**Miscellaneous Systems**		Bldg. Section	Description/Condition	
5.6.1	Site and building surveillance system (if applicable).	NA		None.	
5.6.2	Intrusion alarms (if applicable).	4	1966	A security system with motion detectors throughout the building is provided. A central station connection is provided for unoccupied hours.	
5.6.3	Master clock system (if applicable).	NA		None	
Other	Program co-ordinator	4	1966	A program controller is located in the general office to automatically sound the call bell system.	
5.7	**Elevators/Disabled Lifts (If applicable)**				
5.7.1	Elevator/lift size, access and operating features (i.e., sensing devices, buttons, phones, detectors).	NA		None	
5.7.2	Condition of elevators/lifts.	NA		Not applicable	
5.7.3	Lighting and ventilation of elevators/lifts.	NA		Not applicable.	
Other					
	Overall Elect. Systems Condition & Estim Costs				$108,200

Section 6	Portable Buildings	Rating	Comments/Concerns	Estim. Cost
	Note: Separate sheets can be completed, if necessary, for portable buildings of different ages and/or conditions.	**N/a**	**None**	
6.1.1	Foundation and structure (i.e., signs of bending, cracking, settlement, rust, voids, stains).	**N/a**	**None**	
6.1.2	Roof materials and components (i.e., signs of deterioration, leaks, ice build-up).	**N/a**	**None**	
6.1.3	Exterior wall finishes (i.e., signs of deterioration, cracks, water stains).	**N/a**	**None**	
6.1.4	Doors and windows (i.e., signs of deterioration, rusting hardware, glass cracks, peeling paint, damaged seals).	**N/a**	**None**	
6.1.5	Interior finishes (i.e., floors, walls, ceiling).	**N/a**	**None**	
6.1.6	Millwork (i.e., counters, shelving, vanities, cabinets).	**N/a**	**None**	
6.1.7	Fixed/wall mounted equipment (i.e., writing boards, tackboards, display boards, signs)	**N/a**	**None**	
6.1.8	Heating system.	**N/a**	**None**	
6.1.9	Ventilation system.	**N/a**	**None**	
6.1.10	Electrical, communication and data network systems.	**N/a**	**None**	
6.1.11	Health and safety concerns (i.e., fire and smoke alarms, fire protection systems, exiting, fire resistance rating of materials).	**N/a**	**None**	
6.1.12	Barrier-free access.	**N/a**	**None**	
	Overall Portable Bldgs Condition & Estim Costs			$0.00

Section 7	Space Adequacy	This Facility			Equiv. New Facility			Surplus/ Deficiency	Comments/Concerns
		No.	Size	Total Area	No.	Size	Total Area		
7.1	Classrooms	12	78	936	12	80	960	-24	
7.2	Science Rooms/Labs	1	90	90	2	95	190	-100	
7.3	Ancillary Areas (i.e., Art, Computer Labs, Drama, Music,)			312			400	-88	
	Art	1	78		1	130			
	Study/Lunch	1	156						
	Music	1	78		3	90			
7.4	Gymnasium (incl. gym storage)			266.9			473	-206.1	
	Gymnasium		247.8			430			
	Storage		19.1			43			
7.5	Library/Resource Areas			172.6			200	-27.4	
	Library		148.6						
	Office		24						
7.6	Administration/Staff, Physical Education, Storage Areas			190.2			505	-314.8	Staff areas are very small for school
			169.8			427			
			20.4			78			
	Sub-Total			1967.7			2728	-760.3	
7.7	CTS Areas								
	7.7.1 Business Education								
	7.7.2 Home Economics								
	7.7.3 Industrial Arts								
	7.7.4 Other CTS Programs								
7.8	Other Non-Instructional Areas (i.e., circulation, wall area, crush space, wc area)			1095.5			985	110.5	
	Overall Space Adequacy Assessment	16		3063.2	18		3713	-649.8	

Evaluation Component/ Sub-Component	Additional Notes and Comments

Evaluation Component/ Sub-Component	Additional Notes and Comments

Evaluation Component/ Sub-Component	Additional Notes and Comments

Evaluation Component/ Sub-Component	Additional Notes and Comments

Evaluation Component/ Sub-Component	Additional Notes and Comments

Evaluation Component/ Sub-Component	Additional Notes and Comments