Part I - Facility Profile and Summary

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School Name:	Grant Mac	Ewan Elen	nentary		School Code:	9378
Location:	180 Falshii				Facility Code:	1581
Region:	South				Superindendent:	Dr. Donna Michaels
Jurisdiction:	Calgary				Contact Person:	LeAnne Soligo
					Telephone:	214-1121
Grades:	K-6				School Capacity:	600
	Year of	No. of	Gross Bldg Area	Type of Construction (i.e., structure, roof,	Description of Mechanical Systems	
uilding Section riginal Building	Compl. 1985	Floors	(Sq.M.) 885.97	cladding) Wood frame, with flat roof and vertical	(incl. major upgrades)	Comments/Notes Portables
				metal siding	Rooftop packaged HVAC units	
dditions/ Expansions	1988		196.21	As above	As above	Portables
	1988		3220.05	Concrete block with brick and synthetic stucco exterior, OWSJ and steel joists, both flat and sloped roofs F27BUR on flat and metal shingles on slopes.	2 Hot water boilers and central ventilation system.	
	Total		4302.23			

**School: Glendale Elementary** 

Date: April 13, 2000

Evaluator's Name:

& Company:

Bob Passmore, M.A.A.A.

Building Science Specialists Ltd.

Lineau alle	/ Ml ! t'				None noted	T	1
opgradir	ng/ Modernization				None noted		
(identify	whether minor or						
major)							
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			l				
Portable	Struct. (identify	1985	ľ		As above		Relocated from Crescent Heights High
whathar	attached/perman.	1303			7.5 45000		Relocated from Crescent Heights High
whether	allacheu/perman.						School, attached
or free-st	tanding/						
relocatab	ble)						
		1987			As above		Built on site, attached.
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			l				
$\vdash$						<u> </u>	
List of Re	eports/	CBF Facility	/ Ashestos	database, Februar	rv 23 1999	•	·
Supplem	nentary Information	23 <b>2</b> . aomity	,		· / · · · · ·		
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Evaluation Components	Summary Assessment		Estim. Co
Site Conditions	- resurface parking lot - provide continuous rail to handicapped ramp from north street to school.		\$21,000
2 Building Exterior	- further investigation of setlement to central core and area of exterior should be undertaken		\$0
Building Interior	- provide new carpet in classrooms		\$41,000
Mechanical Systems	- provide backflow prevention to domestic water service - provide two new hot water heaters and pumps		\$14,00
Electrical Systems	- upgrade to T-8 lamps		\$72,00
Portable Buildings	- upgrade floor finishes - replace 13 small rooftop HVAC units		\$98,00
Space Adequacy:	<u> </u>		
7.1 Classrooms	- Deficient	-61.1	
7.2 Science Rooms/Labs	- Deficient	-95.9	
7.3 Ancillary Areas	- Deficient	-87.5	
7.4 Gymnasium	- Slightly excessive	26.2	
7.5 Library/Resource Areas	- Deficient	-260	
7.6 Administration/Staff Areas	- Deficient	-299.4	
7.7 CTS Areas			
7.8 Other Non-Instructional Areas (incl. grosup)	- Slightly excessive	553.93	
Overall School Conditions & Estim. Costs		-223.77	\$246,00

Site Conditions	Rating	Comments/Concerns	Estim. Cost
General Site Condions			
Overall site size.	4	3.34 hectares	
Outdoor athletic areas.	4	Two small soccer pitches cross a large one, large paved area with four basketball hoops	
Outdoor playground areas, including condition of equipment and base.	4	Two graveled creative play areas, one newer on NE side of the site and one older on SW corner of site.	
Site landscaping.	4	Some smaller trees and shrubs, grassed at front	
Site accessories (i.e., perimeter and other fencing, guard rails, bike stands, flag poles).			
Surface drainage conditions (i.e., drains away from building, signs of ponding).	4	Drainage away from building on all sides.	
Evidence of sub-soil problems.	4	There is some minor slab subsidence along the west side of the building.	
Safety and security concerns due to site conditions.	4	None noted.	
,			
	General Site Condions Overall site size.  Outdoor athletic areas.  Outdoor playground areas, including condition of equipment and base.  Site landscaping.  Site accessories (i.e., perimeter and other fencing, guard rails, bike stands, flag poles).  Surface drainage conditions (i.e., drains away from building, signs of ponding).  Evidence of sub-soil problems.  Safety and security concerns due to site conditions.	General Site Condions Overall site size.  Outdoor athletic areas.  Outdoor playground areas, including condition of equipment and base.  Site landscaping.  Site accessories (i.e., perimeter and other fencing, guard rails, bike stands, flag poles).  Surface drainage conditions (i.e., drains away from building, signs of ponding).  Evidence of sub-soil problems.  4  Safety and security concerns due to site conditions.	General Site Condions Overall site size.  4 3.34 hectares  Outdoor athletic areas.  4 Two small soccer pitches cross a large one, large paved area with four basketball hoops  Outdoor playground areas, including condition of equipment and base.  Site landscaping.  4 Some smaller trees and shrubs, grassed at front  Site accessories (i.e., perimeter and other fencing, guard rails, bike stands, flag poles).  4 There is no chain link fence to site. Site is separated from lanes and rear avenue by wood post and cable fence. Bike racks are located between the portable pods and can be locked off.  Surface drainage conditions (i.e., drains away from building, signs of ponding).  Evidence of sub-soil problems.  4 None noted.

ction 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).	N/A	city streets	
	Surfacing of on-site road network (note whether asphalt or gravel).	3	Teacher/visitor parking to south west is paved. Cracks in asphalt of parking lot should be sealed.	\$7,000
	Bus lanes/drop-off areas (note whether on-site or off-site).	N/A	City streets	
1.2.4	Fire vehicle access.	5	Paved fire lane on NE side, also access from parking lot on SW side to paved fire lane.	
1.2.5	Signage.	4	Wall mounted sign on north elevation, east of main entry.	
Other				
1.3	Parking Lots and Sidewalks			
1.3.1	Number of parking spaces for staff, students and visitors (including stalls for disabled persons).	3	40 stalls, no designated handicapped stall or handicapped access to school from parking lot.	\$8,000
1.3.2	Layout and safety of parking lots.	4	Fenced from play area. And separated from school with retaining wall and railing.	
	Surfacing and drainage of parking lots (note whether asphalt or gravel).	4	Asphalt area is sloped to an area drain. Some cracking of asphalt noted	
1.3.4	Layout and safety of sidewalks.	4	Sidewalks from north approach main entry up a series of steps and NE side of school by ramp. An on site sidewalk adjacent to the north face of the building allows pedestrian traffic east and west. Other walkways are city sidewalks.	
	Surfacing and drainage of sidewalks (note type of material).	4	Concrete, slope well to east away from building	
1.3.6	Curb cuts and ramps for barrier free access.	2	Curb cut / fire access in city sidewalk, Walk ramps from sidewalk to NE entry. There are no continuous handrails.	\$6,000
Other				
	•		1	

Section 2	Building Exterior	Rating		Comments/Concerns	Estim. Cost
2.1	Overall Structure		Bldg. Section	<u>Description/Condition</u>	
2.1.1	Floor structure and beams (i.e., signs of bending, cracking, heaving, settlement, voids, rust, stains).	4	1987	No problems noted, except at transition to portables, see Section Six.	
2.1.2	Wall structure and columns (i.e., signs of bending, cracking, settlement, voids, rust, stains).	FI	1987	Settlement cracking noted at exterior wall and interior intersection walls. Wall/floor between Classroom One and Conference room moves up and down with seasons.	
2.1.3	Roof structure (i.e., signs of bending, cracking, voids, rust, stains).	4		No evidence of problems	
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.				
	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	1987	Flat roofs are BUR. Sloped roofs are metal shingles.	
2.2.2	Roof accessories (i.e., ladders, stairs, hatches, masts, exhaust hoods, chimneys, gutters, downspouts, splashpads).	FI	1987	No problems noted.	
2.2.3	Control of ice and snow falling from roof.	5	1987	Roofs slope to inside and drain internally.	
2.2.4	Skylights (i.e., signs of distress, leaks, ice build-up, condensation, deteriorated materials/seals).	5	1987	Clerestory lighting into library and sloped skylight glazing into centre court area.	
Other					

ection 2	Building Exterior	Rating		Comments/Concerns	Estim. Cos
2.3	Exterior Walls/Building Envelope		Bldg.	<u>Description/Condition</u>	
2.3.1	Exterior wall finishes (i.e., signs of deterioration, cracks, brick spalling, efflorescence, water stains).	5	Section 1987	Areas of brick appear to be in good condition.	
		FI	1987	Areas of synthetic stucco below the windows along the north elevation are showing cracks at the joints and cracking at the base flashings.	
2.3.2	Fascias, soffits, parapets (i.e., signs of looseness, stains, rust, peeling paint).	5	1987	No problems noted	
	Building envelope (i.e., evidence of air infiltration/ exfiltration through the exterior wall or ice build up on wall, eaves, canopy).	4	1987	No evidence of problems	
2.3.4	Interface of roof drainage and ground drainage systems.	5	1987	Roof drains internally into storm system	
2.3.5	Inside faces of exterior walls (i.e., signs of cracks, water stains, dust spots).	4	1987	No evidence of problems	
Other					
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).	5	1987	No problems noted	
2.4.2	Door accessories (i.e., latches, hardware, screens, locks, alarms, holders, closers, security devices).	5	1987	No evidence of problems, hardware appears to be original.	
2.4.3	Exit door hardware (i.e., safety and/or code concerns).	4	1987	Hardware functions as required	
	Windows (i.e., signs of deterioration, rusting metal, glass cracks, peeling paint, damaged seals, sealed unit failure).	5	1987	No problems noted	
2.4.5	Window accessories (i.e., latches, hardware, screens, locks, alarms, holders, closers, security devices).	4	1987	No problems noted.	
2.4.6	Building envelope (i.e., signs of heavy condensation on doors or windows).	4	1987	No problems noted.	
Other					
	Overall Bldg Exterior Condition & Estim Costs				\$0

Section 3	Building Interior - Overall Conditions	Rating		Comments/Concerns	Estim. Cost
3.1	Interior Structure		Bldg. Section	<u>Description/Condition</u>	
3.1.1	Interior walls and partitions (i.e., signs of cracks, spalling, paint peeling).	FI	1987	Walls are painted concrete block. Significant cracking occurring to walls surrounding the central area washrooms and kitchen. These have been patched (remortared) Reason for settlement should be established.	
3.1.2	Floors (i.e., signs of cracks, heaving, settlement).	4	1987	Floors are concrete slab on grade. Some settlement between portables and corridor floor.	
Other					
3.2	Materials and Finishes		Bldg. Section	Description/Condition	
3.2.1	Floor materials and finishes.	3	1987	Floor finishes are VT in corridors and single washrooms. Boys and girls change rooms for gymnasium, entry vestibules and gang washrooms in core are ceramic tile. Classrooms are a combination of Vtile and carpet. Carpet requires replacement in classrooms and library	\$41,000
3.2.2	Wall materials and finishes.	4	1987	Walls are painted concrete block. Generally in good condition.	
3.2.3	Ceiling materials and finishes.	4	1987	Ceilings are suspended T-bar.	
3.2.4	Interior doors and hardware.	4	1987	Doors are hollow metal in HM frames throughout. Hardware appears to function properly.	
3.2.5	Millwork	4	1987	Millwork is original, no problems noted.	
3.2.6	Fixed/wall mounted equipment (i.e., writing boards, tackboards, display boards, signs).	4	1987	All tackboards and chalkboards are original - adequate. Upgrading to whiteboards in rooms with computers.	
3.2.7	Any other fixed/mounted specialty items (i.e., CTS equipment, gymnasium equipment).	4	1987	Gymnasium has fold out climbing wall.	
3.2.8	Washroom materials and finishes.	4	1987	In gang washrooms the sinks are wall hung on painted concrete block walls, floors are ceramic tile. Partitions are original and in good condition. Single washrooms are concrete block walls, VT floors with sinks in counter tops.	
Other					

tion 3	Building Interior - Overall Conditions	Rating		Comments/Concerns	Estim. Cos
	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-		Bldg. Section	Description/Condition	
	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.	5	1987	Building is noncombustible construction, sprinklered throughout (except for portables).	
3.3.2	Fire separations (i.e., between buildings, wings, zones if non-sprinklered).	5	1987	Appear to be adequate.	
3.3.3	Fire resistance rating of materials (i.e., corridor walls and doors).	5	1987	Appear to be adequate.	
3.3.4	Exiting distances and access to exits.	5	1987	Appear to be adequate.	
3.3.5	Barrier-free access.	4	1987	Facility is accessible, at NE entry. There are handicapped washroom facilities in the central core.	
	Availability of hazardous materials audit (i.e., evidence of safety concerns with respect to asbestos, PCB's, chemicals).	4	1987	CBE Faciltiy Asbestos database indicates there is no asbestos present	
3.3.7	Other health and safety concerns (i.e., evidence of excessive noise conditions, air quality problems)	4	1987	No evidence of other problems	
Other					
	Overall Bldg Interior Condition & Estim Costs				\$41,000

#### Part I - Facility Profile and Summary

tion 4	Mechanical Systems	Rating		Comments/Concerns	Estim. Cos
	Mechanical Site Services		Bldg.	Description/Condition	
			Section		
4.1.1	Site drainage systems (i.e., surface and		1987	Catch basins are located on grass slopes on the south and north sides. Two catch basins are	
	underground systems, catch basins).			provided on the parking lot. They drain to city storm drains.	
		5		provide a survey and the survey and	
4.1.2	Exterior plumbing systems (i.e., irrigation		1987	A lawn irrigation system is installed but not used. A non-freeze wall hydrant is installed on the east	
	systems, hose bibs).			side.	
		4			
440	0.4-144 41			No	
4.1.3	Outside storage tanks.			None.	
		NA			
		INA			
Other					
0					
			D		
4.2	Fire Suppression Systems		Bldg.	<u>Description/Condition</u>	
404	Fine burdeness and alternations		Section		
4.2.1	Fire hydrants and siamese connections.		1987	Fire hydrants are provided on the north and east sides. A siamese for the sprinkler system is located	
		5		on the east side.	
		3			
4.2.2	Fire suppression systems (i.e., pumps,		1987	A wet pipe sprinkler system is installed throughout the building. The alarm valve is located in a room	
	sprinklers, piping, reservoirs, hoses, stand			on the east side.	
	pipes, CO2 systems).	5		on the east state.	
	pipes, OOZ systems).				
4.2.3	Hand extinguishers, blankets and showers		1987	Hand 20 or 30 lb. type ABC fire extinguishers are located in the corridors and in the service rooms.	
	(i.e., in CTS areas).				
		5			
40.			4007		
4.2.4	Other special situations (e.g., flammable		1987	A 5 lb. type Abc extinguisher is provided in the science room.	
	storage areas, science labs, CTS areas).	4			
		4			
Other					
Other					
Other					

**School: Glendale Elementary** 

Date: April 13, 2000

School: Glendale Elementary Date:April 13, 2000

Section 4	Mechanical Systems	Rating		Comments/Concerns	Estim. Cost
4.3	Water Supply and Plumbing Systems		Bldg.	<u>Description/Condition</u>	
4.3.1	Domestic water supply (i.e., pressure, volume, quality - note whether municipal or well supply).	5	Section 1987	An 8" dia. iron water service from city mains supplies the domestic and fire systems in the building. Pressure, quality and volume are good.	
4.3.2	Water treatment system(s).	NA		None	
4.3.3	Pumps and valves (including backflow prevention valves).	3	1987	Backflow protection is provided only on the irrigation and fire systems. The boiler feedwater and glycol systems also have backflow protection. Install backflow protection on the domestic water service.	\$5,000.00
4.3.4	Piping and fittings.	5	1987	Water piping is insulated copper tubing with soldered joints.	
4.3.5	Plumbing fixtures (i.e., toilets, urinals, sinks)	5	1987	Water closets are regular rim, elongated rim and low height flush valve types. Lavatories are primarily wall hung with some ctp. typeDrinking fountains are single bubbler type. Sinks are ctp. stainless steel. Tha slop sink is wall hung vitreous china. Showers have automatic mixing valve protection Condition is good.	
4.3.6	Domestic hot water system (i.e., heater, storage tanks, failure alarms, pressure, volume, recirculation).	3	1987	Two large tank type gas fired water heaters are installed. They are nearing their life expectancy. A recirculating pump is provided. Provide new tanks and pump.	\$9,000.00
4.3.7	Sanitary and storm sewers, including sumps and pits (note whether sewage system is municipal or septic).	5	1987	Storm and sanitary drains are connected to city mains. Piping in the building is mechanical joint cast iron.	
Other					

Section 4	Mechanical Systems	Rating		Comments/Concerns	Estim. Cost
4.4	Heating Systems		Bldg.	Description/Condition	
4.4.1	Heating capacity and reliability (including backup capacity).	5	Section 1987	Twin factory assembled gas fired boilers with an output of 1,920 MBH each are provided. Reliability and capacity are good. Two heating and two glycol mix in-line circulators are installed.	
4.4.2	Heating controls (including use of current energy management technology.	5	1987	Heating system controls are pneumatic, The heating and cooling systems are controlled from a remote location and energy management is implimented.	
4.4.3	Fresh air for combustion and condition of the combustion chimney.	5	1987	A combustion air duct is provided and is used with a ducted unit heater to mix outdoor air with heated indoor air. Twin insulated boilerstacks are installed.	
4.4.4	Treatment of water used in heating systems.	5	1987	Pot type chemical feeders are installed on the heating and the glycol systems.	
4.4.5	Low water cutoff/pressure relief valves and failure alarms (i.e., hot water heating).	5	1987	Low water cut-offs and pressure relief valves are installed on both boilers. Low temperature sensors are located throughout the building. The remote station receives the notification.	
4.4.6	Heating air filtration systems and filters.	5	1987	The ventilation system that is used for heating using reheat coils iin many locations is provided with replaceable media filters. See 4.5.3	
4.4.7	Heating humidification systems and components.	5	1987	The ventilation system that is used for hearing in many locations is provided with a hunidification system. See 4.5.3	

Section 4	Mechanical Systems	Rating		Comments/Concerns	Estim. Cost
4.4	Heating Systems (cont'd)		Bldg.	<u>Description/Condition</u>	
4.4.8	Heating distribution systems (i.e., piping, ductwork) and associated components (i.e., diffusers, radiators).	5	Section 1987	Heating piping is a two pipe pumped system. Exterior rooms are heated by wall fin convectors or cabinet enclosed wall fin element. Interior and some interior rooms have reheat coils in the supply ductwork. Building entrances use fan cabinet heaters.	
4.4.9	Heating piping, valve and/or duct insulation.	5	1987	Heating piping uses insulated threaded and screwed steel piping. Supply ducts are insulated with fibergass blanket with foil facing. Return and outdoor air ducts use fiberglass duct liner.	
4.4.10	Heat exchangers.	5	1987	Two heat exchangers are usedd to heat the water mixed with glycol mix used in the ventilation unit heating coils.	
4.4.11	Heating mixing boxes, dampers and linkages.	5	1987	Each of the two central ventilation units used for heating has automatic controls including motorized mixing dampers, exhaust dampers and fresh air dampers.	
4.4.12	Heating distribution/circulation in larger spaces (i.e., user comfort, temperature of outside wall surfaces).	5	1987	No problems with user comfort were noted.	
4.4.13	Zone/unit heaters and controls.	5	1987	A wall mounted thermostat cycles the fan motor on the combustion air unit heater to heat the boiler room and in the fan cabinet heaters to heat vestibules Constant volume boxes conteain reheat coils with motorized valves controlled by space t'stats.	
Other					

Section 4	Mechanical Systems	Rating		Comments/Concerns	Estim. Cost
4.5	Ventilation Systems		Bldg.	Description/Condition	
4.5.1	Air handling units capacity and condition.	5	Section 1987	Two rooftop packaged constant volume heating, ventilation and cooling units are installed with heated service corridors built on to the units. A seperate packaged ventilation unit with heating coil and mixing dampers is used for the gymnasium.	
4.5.2	Outside air for the occupant load (if possible, reference CFM/occupant).	5	1987	The amount of fresh air per occupant is not known. However it can be adjusted by changing minimum outdoor air damper settings.	
4.5.3	Air distribution system (if possible, reference number of air changes/hour).	5	1987	Tempered air is delivered by supply ducts concealed in the ceilings to ceiling supply diffusers or wall supply grilles. Ceiling or wall mounted return air grilles bring return air via concealed ductwork to the return/exhaust fans. Supply ducts deliver air to constant volume boxes with reheat coils located in the ceilings.	
4.5.4	Exhaust systems capacity and condition.	5	1987	Exhaust fans are used to exhaust the washrooms. Roof exhausters and small ceiling mounted exhaust fans are used.	
4.5.5	Separation of out flow from air intakes.	5	1987	Good seperartion is provided.	
4.5.6	Special/dedicated ventilation and/or exhaust systems (i.e., kitchen, labs, CTS areas).	5	1987	The pyramid attic spaces are provided with roof exhaust fans that are operated by humidistats that cycle on a rise in humidity.	
Other	Expansion tanks	5	1978	The main hot water heating system is provided with a diaphragm type expansion tank. Two diaphragm tanks are piped into the glycol systems.	

Section 4	Mechanical Systems	Rating		Comments/Concerns	Estim. Cost
	Ventilation Systems (cont'd)		Bldg.	Description/Condition	
	, , , , , , , , , , , , , , , , , , , ,		Section		
	Note: Only complete the following				
	items if there are separate ventilation				
	and heating systems.				
4.5.7	Ventilation controls (including use of		1987	The central HVAC units use pneumatic motorized controls on air dampers and mixing and heating	
	current energy management technology).			terminal supply line valves.	
		5			
		3			
4.5.8	Air filtration systems and filters.		1987	Both central ventilation units have replaceable media filter sections.	
		5			
4.5.9	Humidification system and components.		1987	Both central ventilation units have return air duct mounted humidistats controlling solenoid valves on	
				spray humidifier sections.	
		5			
		3			
4.5.10	Heat exchangers.		1987	Twin shell and tube heat exchangers located on the mezzanine above the boilers are used to heat the glycol solution in the ventilation unit heating coils.	
				are grycor solution in the ventilation unit fleating cons.	
		5			
4.5.11	Ventilation distribution system and		1987	The two central ventilation units distribute tempered air to all locations except the gym. They use a	
	components (i.e., ductwork, diffusers,			vane axial return/exhaust fan, exhaust/return/fresh air dampers, heating coil, direct expansion cooling	
	mixing boxes, dampers, linkages).	5		coil, spray humidifier and filters. Ceiling supply diffusers and wall grilles with ceiling return grilles are	
		3		used The gym unit delivers air through floor grilles and uses a wall return air grille.	
0"					
Other					

#### School: Glendale Elementary Date:April 13, 2000

Section 4	Mechanical Systems	Rating		Comments/Concerns	Estim. Cost
4.6	Cooling Systems		Bldg.	Description/Condition	
4.6.1	Cooling system capacity and condition (i.e., chillers, cooling towers, condensers).	5	Section 1987	Each of the central HVAC units has a dedicated condensing unit with mutiple compressers and condensing fans.	
	Cooling distribution system and components (i.e., ductwork, diffusers, mixing boxes, dampers, linkages)	5	1987	See section 4.5.1 and 4.5.11	
	Cooling system controls (including use of current energy management technology).	5	1987	The condensing section controls are factory packaged. The energy management system employs free cooling when it is available.	
4.6.4	Special/dedicated cooling systems (i.e., labs, CTS areas).	NA		None	
Other					
4.7	Building Control Systems		Bldg.	Description/Condition	
4.7.1	Building wide/system wide control systems and/or energy management systems.	5	Section 1987	The heating and cooling systems are controlled by a remote energy management company. They monitor the building space temperatures and control space temperatures, employ equipment operation management, temperature setback etc.	
	Overall Mech Systems Condition & Estim. Costs				\$14,000

Section 5	Electrical Systems	Rating		Comments/Concerns	Estim. Cost
5.1	Site Services		Bldg.	Description/Condition	
5.1.1	Primary service capacity and reliability (i.e., access, location, components, installation, bus sizes - note whether overhead or underground).	5	Section 1987	Electrical is brought underground to the building from overhead lines to a pad mounted transformer and then to the electrical service in the mechanical room. A switchboard with a 1200 amp. main switch and panel and fused equipment switches. A motor control center is provided. Demand reading is 320 va	
5.1.2	Site and building exterior lighting (i.e., safety concerns).	5	1987	The parking lot and all sides of the building have wall mounted HID fixtures.	
5.1.3	Vehicle plug-ins (i.e., number, capacity, condition).	5	1987	The parking lot has 20 duplex plug-ins located on both sides of the parking lot. Condition and capacity is good.	
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).	5	1987	A zoned fire alarm system with an annunciator equipped control panel is installed. It has trouble supervision and battery back-up. Strobe/alarms are provided Pull stations are in all exits. Smoke detectors are located for the doors to the portables. Duct detectors are in the ventilation ducts.	
5.2.2	Emergency lighting systems (i.e., safety concerns, condition).	5	1987	Battery packs are provided in several storage rooms with remote heads in all corridors, exits, gymnasium, change rooms, computer room and library.	
5.2.3	Exit lighting and signage (i.e., safety concerns, condition).	5	1987	Illuminated exit signs are located at all corridor and gymnasium exits,	
Other					

Section 5	Electrical Systems	Rating		Comments/Concerns	Estim. Cost
5.3	Power Supply and Distribution		Bldg. Section	<u>Description/Condition</u>	
5.3.1	Power service surge protection.		1987	Only the recently installed computer hub has surge protection.	
		5			
5.3.2	Panels and wireways capacity and condition.	5	1987	Panelboards in all parts of the building have spaces. Wiring is run in metal conduits. Capacity and condition is good.	
5.3.3	Emergency generator capacity and condition and/or UPS (if applicable).	NA		None	
5.3.4	General wiring devices and methods.	5	1987	Wiring devices are in good condition. Receptacles are grounded type.	
5.3.5	Motor controls.	5	1987	All large motors have magnetic starters, some with hand/off/auto. controls. Smaller motors have thermal switches.	
Other					
5.4	Lighting Systems		Bldg. Section	<u>Description/Condition</u>	
5.4.1	Interior lighting systems and components (i.e., illumination levels, conditions, controls).	3	1978	Most rooms in the building use ceiling or wall mounted fluorescent fixtures. Ceiling fixtures are recessed one or two lamp fixtures. The gymnasium has indirect lighting from HID fixtures. Light levels are as follows: gymnasium -432 lux, corridor - 324 lux, meter room - 432 lux, mechanical room - 216 lux, change rooms - 432 lux, conference room - 432 lux, staff lounge - 108 lux, health service - 1076 lux, muti-purpose room - 862 lux, computer room - 754 to 970 lux, classrooms - 324 to 754 lux, library - 484 lux. See 5.4.3.	
5.4.2	Replacement of ballasts (i.e., health and safety concerns).	4	1978	The fluorescent fixture ballasts do not have PCBs. See 5.4.3.	
5.4.3	Implementation of energy efficiency measures and recommendations.	3	1987	Some teachers have reduced the number of lamps in the fixtures. Fixtures do not have energy efficient ballasts or lamps. Replace all fluorescent fixtures with T-8 lamp equipped fluorescents.	\$72,000
Other					

Section 5	Electrical Systems	Rating		Comments/Concerns	Estim. Cost
5.5	Network and Communication Systems		Bldg.	Description/Condition	
5.5.1	Telephone system and components (i.e., capacity, reliability, condition).	5	Section 1987	Telephone service has adequate capacity. The system is reliable and is in good condition.	
5.5.2	Other communication systems (i.e., public address, intercom, CCTV, satellite or cable TV).	5	1987	A telephone intercom system is installed throughout the school. A control panel for the public address system is located in the general office. Speakers are located throughout the building. A sound panel is provided for the gymnasium on the stage. It is not used.	
5.5.3	Network cabling (if available, should be category 5 or better).	5	1987	A new computer system with internet access and outlets throughout the school is provided.	
5.5.4	Network cabling installation (i.e., in conduit, secured to walls or tables).	5	1987	Cabling is in conduit and concealed in all finished areas.	
5.5.5	Wiring and telecommunication closets (i.e., size, security, ventilation/cooling, capacity for growth).	5	1987	The telephone distribution is from the mezzanine of the boiler room. Capacity is available for expansion. Space is warm.	
5.5.6	Provision for dedicated circuits for network equipment (i.e., hubs, switches, computers).	5	1987	The computer hub is in and distribution is from the library office. It has dedicated circuits. Computer circuits in the computer room are dedicated. Other areas have general circuits.	
Other	Central cable television system.	4	1987	An antenna is mounted on the roof and it is wired through a receiver/amplifier to outlets in all classrooms. (It is not used)	

Section 5	Electrical Systems	Rating		Comments/Concerns	Estim. Cost
5.6	Miscellaneous Systems		Bldg.	Description/Condition	
5.6.1	Site and building surveillance system (if applicable).	NA	Section	None	
5.6.2	Intrusion alarms (if applicable).	5	1987	A motion detection security system is installed in all parts of the building. A central station connection is provided for off hours.	
5.6.3	Master clock system (if applicable).	5	1987	A master clock system is installed in three rooms in the building.	
Other	Program co-ordinator	5	1987	A programmer located in the general office is used to sound the call bells automatically.	
5.7	Elevators/Disabled Lifts (If applicable)		Bldg.	Description/Condition	
5.7.1	Elevator/lift size, access and operating features (i.e., sensing devices, buttons, phones, detectors).	NA	<u>Section</u>	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				\$72,000

Section 6	Portable Buildings	Rating	omments/Concerns			
	Note: Separate sheets can be completed, if necessary, for portable buildings of different ages and/or conditions.		Comments for portables address both 1985 and 1987 buildings			
6.1.1	Foundation and structure (i.e., signs of bending, cracking, settlement, rust, voids, stains).	FI	Wood frame, some smell emanating from subfloor in wet weather.			
6.1.2	Roof materials and components (i.e., signs of deterioration, leaks, ice build-up).	FI	BUR, no report available. Some leakage at corridor/ classroom connection			
6.1.3	Exterior wall finishes (i.e., signs of deterioration, cracks, water stains).	4	Vertical metal siding			
6.1.4	Doors and windows (i.e., signs of deterioration, rusting hardware, glass cracks, peeling paint, damaged seals).	4	Doors are wood, windows are aluminum frame, both appear to be adequate.			
6.1.5	Interior finishes (i.e., floors, walls, ceiling).	3	Replace floor finishes in classrooms, both carpet and VT	\$33,000		
6.1.6	Millwork (i.e., counters, shelving, vanities, cabinets).	4	Original, but adequate.			
6.1.7	Fixed/wall mounted equipment (i.e., writing boards, tackboards, display boards, signs)	4	Original, but adequate.			
6.1.8	Heating system.	3	Rooftop packaged HVAC units(13) are provided for each classroom and for the corridor. These are old and should be replaced. Parts are not available for the existing units.	\$65,000		
6.1.9	Ventilation system.	4	The rooftop units supplied an adjustable amount of fresh air to the room.			
6.1.10	Electrical, communication and data network systems.	4	A dedicated panelboard with spare capacity is provided in each portable. The building telephone intercom system is in each portable.			
6.1.11	Health and safety concerns (i.e., fire and smoke alarms, fire protection systems, exiting, fire resistance rating of materials).	4	The portables have exit lights and emergency battery pack supplied remote heads. The building fire alarm system is extended to the portables with pull stations, alarms and smoke detectors.			
6.1.12	Barrier-free access.	4	Accessible from school			
	Overall Portable Bldgs Condition & Estim Costs			\$98,000		

	Space Adequacy		This Fa	cility	Ec	uiv. Nev	w Facility	Surplus/ Deficiency	Comments/Concerns
Section 7		No.	Size	Total Area	No.	Size	Total Area		
7.1	Classrooms	17		1378.9	18	80	1440	-61.1	
			81.1				1		
			80.2						
			86.4						
			78.6						
7.2	Science Rooms/Labs	1	94.1	94.1	2	95	190	-95.9	
7.3	Ancillary Areas (i.e., Art, Computer Labs, Drama, Music,)	4		312.5			400	-87.5	
			87.4		1	130		1	
			80.2		3	90			
			98.7						
			46.2						
7.4	Gymnasium (incl. gym storage)			499.2			473	26.2	
	Gymnasium		457.8			430			
	Storage		41.4			43			
7.5	Library/Resource Areas		291.5	291.5			260	31.5	
	Administration/Staff, Physical Education,			224.6			524	-299.4	
Ų	Storage Areas			224.6			524	-299.4	
	Administration/Staff, Physical Education		245.4			427			
	Storage		57.8			97			
	Sub-Total			2800.8	Ì		3287	-486.2	
7.7	OTO Assess								1
	CTS Areas 7.7.1 Business Education	1			1		<del>                                     </del>	+	
ļ	7.7.1 Business Education								
	7.7.2 Home Economics								
	7.7.3 Industrial Arts								
	7.7.4 Other CTS Programs								
	Other Non-Instructional Areas (i.e., circulation, wall area, crush space, wc area)			1501.4			1239	262.4	Circulation space seems excessive
	Overall Space Adequacy Assessment	22		4302.2	24		4526	-223.8	

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

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