Alberta Infrastructure School Facilities Branch

School Facility Evaluation Project Part I - Facility Profile and Summary

Fairview Junior High School December 1, 1999

School Name:	Fairview Junior High School	School Code:	633	
Location:	7840 Fairmount Drive S.E., Calgary, Alberta	Facility Code:	1616	
Region:	South	Superindendent:	Dr Donna Michaels	
Jurisdiction:	Calgary Board of Education	Contact Person:	Leanne Soligo	
	District No 19	Telephone:	214-1143	
Grades:	7 to 9	School Capacity:	1015	

	Year of	No. of	Gross Bldg Area	Type of Construction (i.e., structure, roof	Description of Mechanical Systems (incl.	
Building Section	Compl.	Floors	(Sq.M.)	cladding)	major upgrades)	Comments/Notes
Original Building	1961	2	7306.3	Steel wide-flange columns with concrete fill on the interior side Concrete floor slabs Wood roof deck	Original building has 2 low pressure steam boilers with perimeter radiators and unit ventilators in classrooms.	
Additions/ Expansions	1967	2	<u>2292.5</u> 9,598.8		Gas-fired furnaces and rooftop multi-zone units.	

Evaluator's Name:

Doug Cambell

& Company:

Carruthers & Associates Architects Inc.

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Upgrading/ Modernization (identify whether minor or major)						
Portable Struct. (identify whether attached/perman. or free-standing/ relocatable)						
List of Reports/ Supplementary Information	Roof plan s Asbestos re	howing port pr	roof replaceme epared for the (ent dates of all wings Calgary Board of Education by En	rironmental Health Professionals	

11/22/2000

2

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Evaluation Components	Summary Assessment	Estim. Cost
Site Conditions	The site needs regrading to divert water around the building. Regrading and resurfacing is needed for turf playgrounds. Additional parking spaces are needed and the parking lot should be paved.	\$37,00
Building Exterior	Some minor separations are occurring between the original structure and the new addition. The curtain wall system of the 1961 structure has leaks and is not performing to current standards. Exterior doors and hardware in the 1961 wing should be replaced.	\$80,00
Building Interior	Interior finishes are worn and vandalized in several areas. Repairs and refinishing are needed.Corridor doors do not meet code requirements for fire separations and should be replaced with steel doors and frames, with modern hardware.An elevator is required for handicapped access.	\$540,00
Mechanical Systems	Building systems are old and outdated, air heating units for 1967 wing are very poor, most systems need updating and replacement.	\$911,00
Electrical Systems	Provide new panelboards, branch circuit wiring, and lighting to replace existing. All life safety (fire alarm, emergency lights, and exit signs) need upgrade. Energy efficiency performance will be improved with new lighting and LED exit signs.	\$328,00
Portable Buildings	None	\$
Space Adequacy:		
7.1 Classrooms	Deficiency: 42m2	
7.2 Science Rooms/Labs	Deficiency:71m2	
7.3 Ancillary Areas	Deficiency:244.9m2	
7.4 Gymnasium	Deficiency:20.3m2	
7.5 Library/Resource Areas	Surplus: 26.2m2	
7.6 Administration/Staff Areas	Deficiency:54m2	
7.7 CTS Areas	Surplus: 436.6m2	
7.8 Other Non-Instructional Areas (incl. gross-up)	Deficiency44.2m2	
Overall School Conditions & Estim. Costs		\$1,896,00

Section 1	Site Conditions	Rating	Comments/Concerns	Estim. Cost
1.1	General Site Conditions			
1.1.1	Overall site size.	4	Site area of 5.949 ha. (14.7 ac.) for both the Fairview and Le Roi Daniels schools is too small. A site of 15 - 16 acres is preferred for two schools of this size. However, the schools share an adjacent city park.	
1.1.2	Outdoor athletic areas.	3	The single soccer field is worn by heavy student traffic and should be resodded. There is no outdoor basketball court.	\$5,000
1.1.3	Outdoor playground areas, including condition of equipment and base.	3	Playground equipment near the school is in good condition. It is owned by the City of Calgary rather than the Board of Education, but the school has access to it.	\$4,000
1.1.4	Site landscaping.	4	Minimal - mostly grass.	
1.1.5	Site accessories (i.e., perimeter and other fencing, guard rails, bike stands, flag poles).	3	Site stair rails and guards (at west retaining wall) do not meet code requirements. Flag pole is rusty	\$8,000
1.1.6	Surface drainage conditions (i.e., drains away from building, signs of ponding).	3	The school is built into a slope. Runoff drains toward the building at the north and west sides. Some regrading is required on these sides to drain away from the building. Some ponding occurs at the north end of the courtyard.	\$9,000
1.1.7	Evidence of sub-soil problems.	4	None	
1.1.8	Safety and security concerns due to site conditions.	4	The building design creates secluded area not visible from the street. These show evidence of vandalism.	
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).	4	Pedestrian access is from Fairmount Drive and from the east parking lot.	
1.2.2	Surfacing of on-site road network (note whether asphalt or gravel).	4	Asphalt	
1.2.3	Bus lanes/drop-off areas (note whether on-site or off-site).	4	Bus drop-off is on Fairmount Drive, which is a busy road, particularly during rush hours.	
1.2.4	Fire vehicle access.	F. I.	Access from Fairmount Drive. Possible access from the north and from the east parking lot, but distances may be too great.	
1.2.5	Signage.	3	Better signs needed from rear access to the office.	\$2,000
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	60 stalls are provided for two schools. This is not enough.	\$3,000
1.3.2	Layout and safety of parking lots.	4	OK	
1.3.3	Surfacing and drainage of parking lots (note whether asphalt or gravel).	3	Gravel - should be paved	\$6,000
1.3.4	Layout and safety of sidewalks.	4	OK	
1.3.5	Surfacing and drainage of sidewalks (note type of material).	4	Concrete, with some asphalt patches. Concrete sidewalk at the south of the SW wing is extensively cracked.	
1.3.6	Curb cuts and ramps for barrier free access.	4	No curb cuts. Both Fairmount Drive sidewalks have stairs. The rear entry from the parking lot provides access to the building, but interior stairs make most of it inaccessible.	
Other				
	Overall Site Conditions & Estimated Costs			\$37,000

Section 2	Building Exterior	Rating		Comments/Concerns	Estim. Cost
2.1	Overall Structure		Bldg. Section	Description/Condition	
	Floor structure and beams (i.e., signs of bending, cracking, heaving, settlement, voids, rust, stains).	F. I.	Original New addition	Floors slope down toward the outer wall, indicating differential settlement within the structure. Minor cracks are seen in the foundation walls in the SE and SW wings. SW wing - concrete floor slab in the entry is settling and moving. Quarry tile flooring is cracking and the door frame is bending at both ends.	
	Wall structure and columns (i.e., signs of bending, cracking, settlement, voids, rust, stains).	3	Original New addition	Minor separations occur between the walls of the original building and the new addition. SW end of the bridge between the SW and SE wings - joint separating and bricks breaking due to excessive loading. East wall of SE new addition - separation between the brick wall cladding and the concrete panels at the window openings. Requires caulking. NW wall of the library - expansion joint in the brick cladding is opening - requires caulking. East end of north wall (Industrial Arts room - window unit is separating from concrete column parging is spalling away at front concrete entry step.	\$4,000
	Roof structure (i.e., signs of bending, cracking, voids, rust, stains).	4		Good condition	
Other					

Section 2	Building Exterior	Rating	Comments/Concerns	Estim. Cost
	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	
	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).	4	Roofing report attached. New roofs were installed as follows: Original building: 1999 New addition: 1991 Some ponding occurs on all sections.	
	Roof accessories (i.e., ladders, stairs, hatches, masts, exhaust hoods, chimneys, gutters, downspouts, splashpads).	4	ОК	
2.2.3	Control of ice and snow falling from roof.	N/A	Flat roofs	
	Skylights (i.e., signs of distress, leaks, ice build-up, condensation, deteriorated materials/seals).	N/A	No skylights	
Other				

Section 2	Building Exterior	Rating		Comments/Concerns	Estim. Cost
2.3	Exterior Walls/Building Envelope		Bldg. Section	<u>Description/Condition</u>	
2.3.1	Exterior wall finishes (i.e., signs of deterioration, cracks, brick spalling, effluorescence, water stains).	F. I.	Original	Gaps between curtain wall and structural columns are evident in several places. In some, daylight is visible from the inside. The curtain wall has been re-caulked on the west side only. The curtain wall system is 40 years old and does not perform nearly as well as modern wall systems with several sections having failed. Replacement is recommended.	
2.3.2	Fascias, soffits, parapets (i.e., signs of looseness, stains, rust, peeling paint).	3		Some movement of precast caps apparent	\$3,000
2.3.3	Building envelope (i.e., evidence of air infiltration/ exfiltration through the exterior wall or ice build up on wall, eaves, canopy).	F. I.		See 2.3.1 above. Leaks around the curtain wall system allow air and water penetration of the envelope. Water stains on ceilings (west walls and in the Art Room) appear to have been remedied by caulking of the wall system and re-roofing.	
2.3.4	Interface of roof drainage and ground drainage systems.	4		Roof drainage is internal roof drains from flat roofs.	
2.3.5	Inside faces of exterior walls (i.e., signs of cracks, water stains, dust spots).	3	Original	Several stepping cracks in the concrete block walls and in the plaster indicate differential settlement. Water stains are evident at many locations at window sills and heads, and on ceiling tiles. Clerestory windows above stairwell in the centre of the west wing have prominent leaks, with water stains, cracked concrete framing and peeling paint. Multiple layers of caulking on the outside indicate that this is a longstanding problem, but recent re-roofing appears to have fixed it.	See 2.1.2
Other					

Section 2	Building Exterior	Rating		Comments/Concerns	Estim. Cost
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).	2	Original	Mostly wood exterior doors in wood frames. Weather strippings are gone and paint is chipped. Replace with steel doors in steel frames.	\$59,000
		3	1967	Steel doors in aluminum frames. Weather strippings are gone and paint is chipped.	\$10,000
2.4.2	Door accessories (i.e., latches, hardware, screens, locks, alarms, holders, closers, security devices).	3		Original throughout. The hardware in this school receives heavy use, and much is worn out and due for replacement.	See 2.4.1
2.4.3	Exit door hardware (i.e., safety and/or code concerns).	3		Original throughout. The hardware in this school receives heavy use, and much is worn out and due for replacement.	See 2.4.1
2.4.4	2.4.4 Windows (i.e., signs of deterioration, rusting metal, glass cracks, peeling paint, damaged seals, sealed unit failure).	F. I.	Original	Curtain wall, with double-pane sealed units in aluminum frames. Leaks are occurring in many places because of glazing tape failure, sealed unit failure or breakdown of exterior caulking. Also, many weather seals are missing at the opening units.	See 2.3.1
		3	1967	Double-pane sealed units in aluminum frames. One window in the lower floor of the SE wing has the exterior sill pried loose, leaving the glass seals exposed.	\$1,000
2.4.5	Window accessories (i.e., latches, hardware, screens, locks, alarms, holders, closers, security devices).			Hinges of the opening units are loose, preventing a proper seal, and many handles are broken off.	See 2.3.1
2.4.6	Building envelope (i.e., signs of heavy condensation on doors or windows).	2		Weeping holes in brick have been filled with caulking - remove.	\$3,000
Other					
	Overall Bldg Exterior Condition & Estim Costs				\$80,000

School Facility Evaluation Project

Part II - Physical Condition

Section 3	Building Interior - Overall Conditions	Rating		Comments/Concerns	Estim. Cost
3.1	Interior Structure		Bldg. Section	<u>Description/Condition</u>	
	Interior walls and partitions (i.e., signs of cracks, spalling, paint peeling).	3	1967	Stepping cracks in concrete block partitions and cracks in GWB indicate differential settlement. Patch and repaint.	\$7,00
3.1.2	Floors (i.e., signs of cracks, heaving, settlement).	4	Original	Concrete floors are uneven throughout.	
Other		3	1967	SW entry vestibule: concrete floor slab is settling unevenly, causing broken quarry tiles. Floor tiles are lifting and breaking at classroom entries where they have been laid over expansion joints in the floor slab. Quarry tile at SE and W entries are breaking due to weather and heavy traffic.	\$8,000
3.2	Materials and Finishes		Bldg. Section	<u>Description/Condition</u>	
3.2.1	Floor materials and finishes.	3	1961	Corridors: VAT floor tile, some breaking at joints between wings Classrooms: VAT floor tile Music room carpet is stained and worn. Gymnasium wood floor has gaps and lifting boards, and has been sanded thin. Auxiliary gymnasium wood floor has squeaks, broken boards and a very worn surface Lunchroom floor and some class floors pockmarked by unprotected steel chair legs.	\$350,000
		4	1967	Corridors and classrooms: Vinyl floor tile Library: new carpet	
3.2.2	Wall materials and finishes.	3	1961	Corridors: Painted concrete block. Much of the rubber baseboard is broken or missing. Walls above some wall-mounted convector cabinets are dirty from dust in circulating air Classrooms: Painted concrete block Gymnasium: wood wainscot to 2 m., stipple spray above - contains asbestos.	\$15,000
		3	1967	Corridors: concrete block walls Classrooms: Painted GWB partition walls. Classroom walls have many areas of chipped paint and gouged GWB due to vandalism.	\$10,000
3.2.3	Ceiling materials and finishes.	4	1961	Corridors and classrooms: acoustic ceiling tile Gymnasium: Open web steel joists with acoustic tiles - some tiles loose.	
			1967	Classrooms: suspended T-bar ceiling. Library: Suspended stipple sprayed panels. T-bar frame seriously bent at the front of the NW science room	

School Facility Evaluation Project

Part II - Physical Condition

Section 3	Building Interior - Overall Conditions	Rating		Comments/Concerns	Estim. Cost
3.2	Materials and Finishes (cont'd)		Bldg. Section	Description/Condition	
3.2.4	Interior doors and hardware.	3	1961	Classrooms: painted wood doors in wood frames; original hardware is worn. Corridors:Wood doors in steel frames with closers but D-pulls only, with no latches or panic bars - replace doors and hardware to meet building code. Some door vents are broken or missing.	\$30,000
		4	1967	Classroom doors: wood	
3.2.5	Millwork	4	Original	Bookshelves one side - wood with p-lam tops. Window sills are painted wood.	
		4	1961 addition	Cabinets are wood with p-lam tops. Original construction was not sturdy enough, and the cabinets are now worn.	
3.2.6	Fixed/wall mounted equipment (i.e., writing boards, tackboards, display boards, signs).	4		Typically greenboards and whiteboards in aluminum frames. Greenboards are worn out. Home Economics room has reidential-quality cabinets that are not strong enough for constant use.	
3.2.7	Any other fixed/mounted specialty items (i.e., CTS equipment, gymnasium equipment).	3		Industrial Arts room has minimal tools. Some clocks are hanging loose	\$40,000
3.2.8	Washroom materials and finishes.	3	1961	Mosaic tile floors, ceramic wall tiles to 1.5 m. with painted GWB above, stipple spray ceiling. Locker rooms: quarry tile floors, painted concrete block walls and ceilings. No handicapped stalls. Locker rooms are grubby and worn.	\$20,000
Other					

Section 3	Building Interior - Overall Conditions	Rating		Comments/Concerns	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.		Bldg. Section	<u>Description/Condition</u>	
3.3.1	Building construction type - combustible or non-combustible, sprinklered or non-sprinklered.		1961 1967	Combustible: Steel columns filled with concrete on the interior, with curtain wall exterior, concrete floor slabs and wood roof deck on steel joists. Concrete column and beam walls with brick-clad infill; Concrete precast double T floors and roof structure. Non-sprinklered throughout.	
3.3.2	Fire separations (i.e., between buildings, wings, zones if non-sprinklered).	2		Inadequate fire separations between wings - wood doors in wood frames with no latches or panic hardware. Doors in lower SE corridor have been removed completely.	See 3.2.4 above
3.3.3	Fire resistance rating of materials (i.e., corridor walls and doors).	4		Corridor walls concrete block	
3.3.4	Exiting distances and access to exits.	F. I.		Study required	
3.3.5	Barrier-free access.	3		Very little. Only the lower east wing is wheelchair-accessible. Washrooms do not have handicapped-accessible stalls.	\$60,000
3.3.6	Availability of hazardous materials audit (i.e., evidence of safety concerns with respect to asbestos, PCB's, chemicals).	3		Report attached. Asbestos is present in the ceiling plenum of the library and in floor tiles and sprayed stipple ceiling.	
3.3.7	Other health and safety concerns (i.e., evidence of excessive noise conditions, air quality problems)	3		Ventilation intakes are located close to the ground, so dirt and dust are drawn into the interior.	See Section 4
Other					
	Overall Bldg Interior Condition & Estim Costs				\$540,000

Section 4	Mechanical Systems	Rating		Comments/Concerns	Estim. Cost
\$4	Mechanical Site Services				
4.1.1	Site drainage systems (i.e., surface and underground systems, catch basins).	4		Site drainage consists of grading to catch basins and swales allow to run-off to streets.	
4.1.2	Exterior plumbing systems (i.e., irrigation systems, hose bibs).	4		Building has exterior hose bibbs.	
4.1.3	Outside storage tanks.	N/A		Not applicable.	
Other					
\$4	Fire Suppression Systems		Bldg. Section	Description/Condition	
4.2.1	Fire hydrants and siamese connections.	4		Street hydrant is located in front of school.	
4.2.2	Fire suppression systems (i.e., pumps, sprinklers, piping, reservoirs, hoses, stand pipes, CO2 systems).	4		Fire protection consists of 40 mm hose and valve system tied to building service.	
4.2.3	Hand extinguishers, blankets and showers (i.e., in CTS areas).	4		Hand extinguishers located throughout.	
4.2.4	Other special situations (e.g., flammable storage areas, science labs, CTS areas).			Not applicable.	
Other					

School Facility Evaluation Project

Part II - Physical Condition

Section 4	Mechanical Systems	Rating		Comments/Concerns	Estim. Cost
\$4	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).	4	All Sections	100 mm service from street, service runs to 65 mm meter and service to building standpipe and hose system.	
4.3.2	Water treatment system(s).	N/A		Not applicable.	
4.3.3	Pumps and valves (including backflow prevention valves).	4		Backflow protection provided on domestic water services.	
		2		No backflow protection on standpipe take-off.	\$5,000
4.3.4	Piping and fittings.	4		All piping on domestic is copper and is in good shape for age of facility.	
4.3.5	Plumbing fixtures (i.e., toilets, urinals, sinks)	4		Fixtures are adequate, require on going maintenance as necessary.	
4.3.6	Domestic hot water system (i.e., heater, storage tanks, failure alarms, pressure, volume, recirculation).	4		New domestic hot water heaters (2) at 58,000 BTUH each installed in 1998.	
4.3.7	Sanitary and storm sewers, including sumps and pits (note whether sewage system is municipal or septic).	4		Sanitary and storm tied to municipal services. Sanitary life stations are provided in 1959 building boiler room and on each wing of the 1967 addition to pump gray water from sinks to main building gravity sewers.	
Other					

Section 4	Mechanical Systems	Rating		Comments/Concerns	Estim. Cost
\$4	Heating Systems		Bldg. <u>Section</u>	Description/Condition	
4.4.1	Heating capacity and reliability (including backup capacity).	3		Original 1959 school has two (2) low pressure steam boilers (Liberty boilers each with 93.9 square meters of heating surface). Steam is distributed to heating devices throughout 1959 school. Units are old and inefficient.	\$310,000
4.4.2	Heating controls (including use of current energy management technology.	2		1967 addition is gas fired heating by means of furnaces and roof top multi-zone units. Equipment is poor, outdated and hard to repair. New systems are needed.	\$90,000
		3		Controls are old, pneumatic based, no current energy technology.	See 4.7.1
4.4.3	Fresh air for combustion and condition of the combustion chimney.	4		Combustion air for current system is adequate.	
4.4.4	Treatment of water used in heating systems.	4		Good treatment programs are in place.	
4.4.5	Low water cutoff/pressure relief valves and failure alarms (i.e., hot water heating).	4		Devices are in place.	
4.4.6	Heating air filtration systems and filters.	4		50 mm fiberglass filters in place.	
4.4.7	Heating humidification systems and components.			No humidification in school.	
\$4	Heating Systems (cont'd)		Bldg. <u>Section</u>	Description/Condition	
4.4.8	Heating distribution systems (i.e., piping, ductwork) and associated components	3		Generally piping and ductwork is in good shape, but due to the age, it should be changed. Underground ductwork in 1967 addition should be abandoned. Portions have already collapsed.	See 4.4.1
4.4.9	Heating piping, valve and/or duct insulation.	3		Insulation is good in some areas, however should be updated and changed under heating upgrades.	See 4.4.1
4.4.10	Heat exchangers.	4		One small steam to glycol exchanger system added in 1982 for Industrial Arts make-up air unit.	
4.4.11	Heating mixing boxes, dampers and linkages.	3		Generally unit ventilators in all classrooms are old and controls are a continual maintenance problem to keep operational as intended.	See 4.4.1 8 4.5.1
4.4.12	Heating distribution/circulation in larger spaces (i.e., user comfort, temperature of outside wall surfaces).	3		Temperature control is old and gives rise to hot/cold complaints in many areas.	See 4.7.1
4.4.13	Zone/unit heaters and controls.	3		All units are old, but performing adequately.	See 4.4.1
Other					

School Facility Evaluation Project

Part II - Physical Condition

Section 4	Mechanical Systems	Rating		Comments/Concerns	Estim. Cost
\$5	Ventilation Systems		Bldg. <u>Section</u>	Description/Condition	
4.5.1	Air handling units capacity and condition.	3		1959 school has only unit ventilators and general exhaust fans for classrooms. Industrial Arts has separate air handling unit. Additional ventilation was added for general office.	\$345,000
		2		1967 wing depends on gas fired furnaces and roof multi-zone units. Systems are old, prone to breakdown with no back-up heat wise if unit fails.	\$100,000
4.5.2	Outside air for the occupant load (if possible, reference CFM/occupant).	2		Outside air per occupant is variable to non existing in many areas due to improper operation of unit ventilators, poor control on gas fired ventilation units. School is very negative indicating insufficient make-up air relative to constant exhaust.	See 4.5.1
4.5.3	Air distribution system (if possible, reference number of air changes/hour).	3		Air change rate based on original design would be in the order of six to eight AC. However, due to poor operation of units, due to age and controls systems are likely considerably less than original design.	See 4.5.1
4.5.4	Exhaust systems capacity and condition.	4		Industrial arts exhaust including dust collection is satisfactory. Generally washroom exhausts are okay.	
4.5.5	Separation of out flow from air intakes	4		Satisfactory.	
4.5.6	Special/dedicated ventilation and/or exhaust systems (i.e., kitchen, labs, CTS areas).	2		Lunch room kitchen exhaust is very poor.	\$5,000
Other					

Section 4	Mechanical Systems	Rating		Comments/Concerns	Estim. Cost
\$5	Ventilation Systems (cont'd)		Bldg.		
	Note: Only complete the following items if there are separate ventilation and heating systems.		Section	<u>Description/Condition</u>	
4.5.7	Ventilation controls (including use of current energy management technology).	3		Ventilation controls are operated manually as to unit ventilators. Time clocks are used for main exhaust fans. Generally controls are old and subject to problems.	See 4.7.
4.5.8	Air filtration systems and filters.	4		All systems have 50 mm fiberglass filters.	
4.5.9	Humidification system and components.			No humidification systems.	
4.5.10	Heat exchangers.	3		Exchangers on gas fired equipment are old and in case of multi-zone units a continual problems.	See 4.5.
4.5.11	Ventilation distribution system and components (i.e., ductwork, diffusers, mixing boxes, dampers, linkages).	4		Ductwork which is not below grade is satisfactory.	See 4.5.
Other					
\$5	Cooling Systems		Bldg. Section	Description/Condition	
4.6.1	Cooling system capacity and condition (i.e., chillers, cooling towers, condensers).	3		1967 wing has cooling added to furnaces and roof mounted multi-zone has cooling. Systems are original and old and prone to breakdown.	\$50,000
4.6.2	Cooling distribution system and components (i.e., ductwork, diffusers, mixing boxes, dampers, linkages)			Part of 4.5.1	See 4.5.1
4.6.3	Cooling system controls (including use of current energy management technology).	3		Electrical controls only.	See 4.6.1
4.6.4	Special/dedicated cooling systems (i.e., labs, CTS areas).	3		Swamp coolers added to Art room and Home Economics room on 1959 wing. If cooling required then costs are shown.	\$6,000
Other					
\$5	Building Control Systems		Bldg. Section	Description/Condition	
4.7.1	Building wide/system wide control systems and/or energy management systems.	3		Building controls are pneumatic/electric, no energy management beyond some time clock functions, controls are old. Major alarms are tied to off-site monitoring.	
	Overall Mech Systems Condition & Estim. Costs	2		Building systems are old and outdated, air heating units for 1967 wing are very poor, most systems need updating and replacement.	\$911,000
				Evaluator: Dale Way, Hemisphere Engineering	

Section 5	Electrical Systems	Rating		Comments/Concerns	Estim. Cost
5.1	Site Services		Bldng.	Description/Condition	
5.1.1	Primary service capacity and reliability (i.e., access, location, components, installation, bus sizes - note whether overhead or underground).	4			
		3		Additional wall packs required at entrances and building perimeter.	\$3,500
5.1.2	Site and building exterior lighting (i.e., safety concerns).	3		Approximately 20 car plug ins require repairs, coverplates and re-installation.	\$3,000
5.1.3	Vehicle plug-ins (i.e., number, capacity, condition).				
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).	2		Existing fire alarm system is 18 years old, requires additional bells and strobes to meet 1997 code.	\$40,000
5.2.2	Emergency lighting systems (i.e., safety concerns, condition).	2		Existing system is base building and does not meet 1997 code.	\$22,000
5.2.3	Exit lighting and signage (i.e., safety concerns, condition).	2		Existing system is base building, is not connected onto emergency power, and does not meet 1997 codes.	\$10,000
Other					

Electrical Systems	Rating		Comments/Concerns	Estim. Cost
Power Supply and Distribution		Bldng. Section	<u>Description/Condition</u>	
Power service surge protection.	2	1961	None in place.	\$2,50
Panels and wireways capacity and condition.	3	1961	Most panels have been upgraded, some additional panels required to provide dedicated circuits for computer and convenience outlets as well as future needs.	\$7,50
Emergency generator capacity and condition and/or UPS (if applicable).	N/A	1961		
General wiring devices and methods.	3	1961	Additional outlets required to meet computer and convenience.	\$15,00
Motor controls.	3	1961	Existing starters are base building, obsolete and require replacement.	\$7,50
	F.I.	1961	Provide additional control and wiring to meet mechanical upgrades.	\$10,00
	Power Supply and Distribution Power service surge protection. Panels and wireways capacity and condition. Emergency generator capacity and condition and/or UPS (if applicable). General wiring devices and methods.	Power Supply and Distribution Power service surge protection. Panels and wireways capacity and condition. Emergency generator capacity and condition and/or UPS (if applicable). General wiring devices and methods. 3 Motor controls.	Power Supply and Distribution Bldng. Section Power service surge protection. 2 1961 Panels and wireways capacity and condition. 3 1961 Emergency generator capacity and condition and/or UPS (if applicable). General wiring devices and methods. 3 1961 Motor controls. 3 1961	Power Supply and Distribution Bldng. Section Power service surge protection. 2 1961 None in place. Panels and wireways capacity and condition. 3 1961 Most panels have been upgraded, some additional panels required to provide dedicated circuits for computer and convenience outlets as well as future needs. Emergency generator capacity and condition and/or UPS (if applicable). General wiring devices and methods. 3 1961 Additional outlets required to meet computer and convenience. Motor controls. 3 1961 Existing starters are base building, obsolete and require replacement.

Fairview Junior High School December 1, 1999

Section 5	Electrical Systems	Rating		Comments/Concerns	Estim. Cost
5.3	Power Supply and Distribution		Bldng. Section	Description/Condition	
5.3.1	Power service surge protection.	N/A	1968		
5.3.2	Panels and wireways capacity and condition.	3	1968	Existing panels are in good condition and some additional panels will be required to provide dedicated circuits for computer and convenience as well as future.	\$5,000
5.3.3	Emergency generator capacity and condition and/or UPS (if applicable).	N/A	1968		
5.3.4	General wiring devices and methods.	3	1968	Additional outlets required to meet computer and convenience.	\$8,000
5.3.5	Motor controls.	3	1968	Existing starters are obsolete and require replacement.	\$3,000
Other		3	1968	Provide additional control and wiring to meet mechanical upgrade.	\$3,500

Section 5	Electrical Systems	Rating		Comments/Concerns	Estim. Cost
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	1961	Existing lighting consists of pendant fluorescent in classroom and surface wrap around and blade fixtures. All fixtures are near 40 years old at the end of their life and should be replaced. New lighting will use T-8 lamps and electronic ballasts.	\$125,000
5.4.2	Replacement of ballasts (i.e., health and safety concerns).	2	1961	Existing ballasts may contain PCB's. Estimated cost for safe removal.	\$5,000
5.4.3	Implementation of energy efficiency measures and recommendations.	F1	1961		Refer to Items 5.4.1 and 5.2.3
Other					
5.4	Lighting Systems		Bldg. Section	Description/Condition	
5.4.1	Interior lighting systems and components (i.e., illumination levels, conditions, controls).	3	1968	Existing lighting consists of surface wraps and pendant plastic blades in classrooms and some incandescent in entranceways. Lighting levels are at 20 fc in library, 30 - 50 fc in classrooms, and 15 - 20 fc in corridors. Existing pendant fixtures need replacement and surface wrap may be retrofitted. All new lighting will be T-8 lamps and electronic ballasts.	\$35,000
5.4.2	Replacement of ballasts (i.e., health and safety concerns).	4	1968		
5.4.3	Implementation of energy efficiency measures and recommendations.	F1	1968		Refer to Item 5.4.1 and 5.2.3
Other					

Section 5	Electrical Systems	Rating		Comments/Concerns	Estim. Cost
5.5	Network and Communication Systems		Bldg. Section	<u>Description/Condition</u>	
5.5.1	Telephone system and components (ie. capacity, reliability, condition).	4			
5.5.2	Other communication systems (ie. public address, intercom, CCTV, satellite or cable TV)	2		Additional speakers and amplifier upgrade required.	\$7,500
5.5.3	Network cabling (if available, should be category 5 or better).	4			
5.5.4	Network cabling installation (ie. in conduit, secured to walls or tables)	4			
5.5.5	Wiring and intercommunication closets (ie. size, security, ventilation/cooling, capacity for growth).	4			
5.5.6	Provision for dedicated circuits for network equipment (ie. hubs, switches, computers).	3		Provide additional dedicated circuits for computer outlets.	\$15,000
Other					

Section 5	Electrical Systems Miscellaneous Systems	Rating		Comments/Concerns				
5.6			Bldg. Section	Description/Condition				
5.6.1	Site and building surveillance system (if applicable).	N/A						
5.6.2	Intrusion alarms (if applicable).	4						
5.6.3	Master clock system (if applicable).	4						
Other								
5.7	Elevators/Disabled Lifts (if applicable)							
5.7.1	Elevator/lift size, access and operating features (ie. sensing devices, buttons, phones, detectors).							
5.7.2	Condition of elevators/lifts.							
5.7.3	Lighting and ventilation of elevators/lifts.	N/A						
Other								
	Overall Elect. Systems Condition & Estim Costs	3		Several of the school systems need replacement to provide a new life cycle as well as to meet code.	\$328,000			
				Evaluator: Gary Mctighe, Stebnicki, Robertson & Associates				

Section 7	Space Adequacy	This Facility			E	quiv. Nev	v Facility	Surplus/	
		No.	Size	Total Area	No.	Size	Total Area	Deficiency	Comments/Concerns
7.1	Classrooms	28	78.5	2198	28	80	2240	-42	
7.2	Science Rooms/Labs	5	105.8	529	5	120	600	-71	
7.3	Ancillary Areas (i.e., Art, Computer Labs, Drama, Music,)	3	125	375.1	2,4	130,90	620	-244.9	
7.4	Gymnasium (incl. gym storage)	1		876.1	1		897	-20.3	
7.5	Library/Resource Areas	1		444.2	1		418	26.2	
7.6	Administration/Staff, Physical Education, Storage Areas			723.1			836.6	-54	
7.7	CTS Areas 7.7.1 Business Education				3	115	345	-345	Confirm Inclusion of Business Education Classrooms
	7.7.2 Home Economics	1		120.4	1		160	-39.6	Confirm inclusion of Business Education Classrooms
	7.7.3 Industrial Arts	1		228	1		280	-52	
	7.7.4 Other CTS Programs								
7.8	Other Non-Instructional Areas (i.e., circulation, wall area, crush space, wc area)			2829			2873.2	-44.2	
	Overall Space Adequacy Assessment			8322.9			9269.8	-886.8	Net Capacity=970, Design instructional Area=5560 Reported Area=9598.8

Evaluation Component/ Sub-Component	Additional Notes and Comments