School Name: King Edward Junior High School
Location: 1720 - 30th Avenue S. W., Calgary

Region: South
Jurisdiction: Cagary Public School Board
District No. 19

Grades: ECS to 9

School Code: 125
Facility Code: 1594

Superintendent: Dr. Donna Michaels
Contact Person: Leanne Soligo
Telephone: (403) 214-1123

School Capacity: 615

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	1912	3	3,768.90	Sandstone exterior, brick interior bearing walls, concrete floors, wood roof		
Additions/ Expansions	1956	2	1787.4	Concrete block walls, wood roof, stucco cladding		
	1968	2	1,898.6	Wood frame walls and roof, brick cladding		

Evaluator's Name: Doug Campbell
& Company: Carruthers & Associates

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

List of Reports/ Supplementary Information	Roof plan showing roofing replacement dates of all wings Asbestos report prepared for the Calgary Board of Education

	Evaluation Components	Summary Assessment	Estim. Cost
1	**Site Conditions**	Site area is inadequate. Playing fields need regrading and resodding of worn areas. Basketball court needs levelling and repaving.	$126,400
2	**Building Exterior**	Sandstone has several cracks and requires an ongoing maintenance programme. Shingles of the 1912 roof should be replaced, together with the eaves troughs, fascias and some soffits. The 1968 wing roof is also due be replaced. Exterior windows and doors are deteriorating and should be replaced with modern units that suit the historic character of the building.	$408,500
3	**Building Interior**	The interior has not been well maintained. Flooring is largely worn out and wall and ceiling finishes need upgrading. None of the corridor doors meets code requirements for fire separations, and new doors, frames and hardware are required.	$523,130
4	**Mechanical Systems**	Building overall has old and outdated systems and equipment which needs updating and replacement.	$615,000
5	**Electrical Systems**	In general, all electrical components require replacement and upgrade to provide new life cycle. Life safety systems (ie. fire alarm, exit signs, and emergency lighting) do not meet today's code. Provide new panels, branch circuit wiring, lighting to replace existing obsolete, and provide new life cycle.	$507,000
6	**Portable Buildings**	N/A	
7	**Space Adequacy:**		
	7.1 Classrooms	Surplus 0.5m2	
	7.2 Science Rooms/Labs	Deficiency 140.6m2	
	7.3 Ancillary Areas	Deficiency 105.1m2	
	7.4 Gymnasium	Surplus 60.6m2	
	7.5 Library/Resource Areas	Surplus 173.8m2	
	7.6 Administration/Staff Areas	Surplus 24.0m2	
	7.7 CTS Areas	Surplus 81.9m2	
	7.8 Other Non-Instructional Areas (incl. gross-up)	Surplus 171.7m2	
	Overall School Conditions & Estim. Costs		$2,180,030

Section 1	Site Conditions	Rating	Comments/Concerns	Estim. Cost
1.1	**General Site Conditions**			
1.1.1	Overall site size.	F.I.	Site area of 15,127.62 sq. m. (1.51 Ha. = 3.738 Ac.) is too small for adequate playgrounds.	
1.1.2	Outdoor athletic areas.	3	2 undersized soccer fields (forming one full-sized field), baseball diamond, and separate basketball court. Fields have worn and rutted turf from intense use. Basketball court slopes to one end, the surface is cracked and uneven and the retaining wall supporting the court is cracked and leaning. Remove paving, level the wall, regrade and resurface basketball court. 30,000 Resod worn portions of west schoolyard. 16,000	$46,000
1.1.3	Outdoor playground areas, including condition of equipment and base.	3	Timber frame play structure is worn from 20 years of use. There is lead-based paint in the slides and preserved-wood timbers have a hazard of toxic slivers. Replace	$40,000
1.1.4	Site landscaping.	3	Mainly grass, with shrubs and mature trees at the south sidewalk. Lawn is worn to dirt at the front sidewalk. Provide paved gathering area.	$6,000
1.1.5	Site accessories (i.e., perimeter and other fencing, guard rails, bike stands, flag poles).	3	Chain link fence at the west perimeter is leaning. Repair	$4,000
1.1.6	Surface drainage conditions (i.e., drains away from building, signs of ponding).	3	Paved play surface NW of the building is flat, causing some ponding and icing in winter. Paving drains toward the building in this area. However, asphalt paving is built up to the level of the lower floor window sills; snow and standing water have caused damage to the window frames. Remove asphalt, regrade, repave.	$12,000
1.1.7	Evidence of sub-soil problems.	5	None	
1.1.8	Safety and security concerns due to site conditions.	3	Tree roots are lifting some paving in the front walk, causing tripping hazard. Repair. East side concrete steps are breaking, and railings are coming loose. Replace the steps. South steps to 1912 building are cracked, and some concrete is spalling; sidewalk has cracked concrete pavers.	$6,000
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).	4	Pedestrian access and drop-offs on south, east and north sides are easily visible. Vehicle access through east parking lot and north and south streets - good.	
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 29th Avenue, north of the school. Bus drop-off in the parking lot is no longer used.	
1.2.4	Fire vehicle access.	4	3 streets	
1.2.5	Signage.	4	Entries and drop-offs marked.	
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).	4	32 stalls total	
1.3.2	Layout and safety of parking lots.	4	Clear path through lot.	
1.3.3	Surfacing and drainage of parking lots (note whether asphalt or gravel).	3	Asphalt surface; drainage by catch basins Surface has minor cracks along the centre area - patch.	$2,000
1.3.4	Layout and safety of sidewalks.	4	City sidewalks around the property; entry sidewalks at the south (main), north and northeast. Asphalt surfacing around the west and north sides - play surfaces.	
1.3.5	Surfacing and drainage of sidewalks (note type of material).	3	Entry sidewalks concrete. Asphalt area north of the building does not drain well and becomes icy. Regrade and provide gutter.	$2,400
1.3.6	Curb cuts and ramps for barrier free access.	3	Curb cut for the NE sidewalk. Northeast walk is the only wheelchair-accessible one, but it is too steep and long for this purpose. Provide proper ramp.	$8,000
Other				
	Overall Site Conditions & Estimated Costs			$126,400

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).	3	1912	Concrete foundation shows small cracks, particularly in the courtyard (east wall of the original building). Patch	$2,500
2.1.2	Wall structure and columns (i.e., signs of bending, cracking, settlement, voids, rust, stains).	3	1912	There are several cracks in the original sandstone walls. The most prominent are in the centre of the west wall , the north wall and in the east wall, now located in the courtyard. These run vertically for 2 to 3 m., across several blocks. In the east wall they generally begin at window openings. One crack however, occurs in the lower surface of a window lintel block. Patch, and provide ongoing maintenance.	$1,500
			1956	Concrete window sills cracked. Gymnasium was re-stuccoed 5 or 6 year ago to cover cracks in the concrete block wall. Patch	
2.1.3	Roof structure (i.e., signs of bending, cracking, voids, rust, stains).	2	1912	NW and SW eaves of west stair tower are drooping. Reinstall, with flashings.	$12,000
Other					

Section 2	Building Exterior	Rating	Comments/Concerns		Estim. Cost
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).	2		Roofing summary attached.	
			1912	Shingled, with standing seam metal on flat top section. East wing re-roofed in 1995, main block re-roofed 1981. Reshingle main block, including flashings and eaves troughs. A serious leak into the 1912 third floor east wing indicates a roofing failure. Investigate and repair. 700 sq. m.45,000	
			1956	Re-roofed 1995	$90,000
			1968	Re-roofed 1978 - due for new roofing. Leaks into the ground floor classrooms during heavy rains indicate that an interior drain pipe is leaking. 770 sq. m.45,000	
2.2.2	Roof accessories (i.e., ladders, stairs, hatches, masts, exhaust hoods, chimneys, gutters, downspouts, splashpads).	4		OK	
2.2.3	Control of ice and snow falling from roof.	3	1912	This has caused a problem in recent years. Install roof baffles to control falling snow and ice (cost included in 2.2.1 above). New eaves troughs will help to eliminate icicles.	Cost included in 2.2.1 above
2.2.4	Skylights (i.e., signs of distress, leaks, ice build-up, condensation, deteriorated materials/seals).	N/A		N/A	
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, effluorescence, water stains).	2	1912	Sandstone has cracks, as noted above. Concrete patches to north sandstone wall are spalling. Water stains on the sandstone indicate that the eaves troughs and roofing are leaking. Water may be entering the wall system.	$9,000
			1968	Library courtyard: flat window sills retain water, causing peeling paint. Slope sills, repaint.	
2.3.2	Fascias, soffits, parapets (i.e., signs of looseness, stains, rust, peeling paint).	2	1912	Fascias and soffits are bent and appear loose in places. These should be replaced , along with new roofing and eaves troughs.	$15,000
2.3.3	Building envelope (i.e., evidence of air infiltration/ exfiltration through the exterior wall or ice build up on wall, eaves, canopy).	2	1912	Much of the caulking around the original wood window frames has fallen out, allowing air infiltration. Replace with windows (see 2.4.4 below)	
			1964	Window caulking cracked and brittle. Replace.	$10,000
2.3.4	Interface of roof drainage and ground drainage systems.	N/A			
2.3.5	Inside faces of exterior walls (i.e., signs of cracks, water stains, dust spots).	3	1912	Classroom partition walls on north and east sides have cracks radiating from the junction of the exterior wall and the floor slab above, indicating settlement of the structure. However, such cracks are to be expected in a building of this type and age. Patch and repaint.	$12,000
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	1912	Original wood doors in wood frames - refinish and install new weather strips.2000	
			1956	Original wood doors - worn, with chipped paint. The door from the Home Economics room to the stairwell exit is wood and has a grille in the bottom. Replace.5000	$14,000
			1968	Wood doors in aluminum frames, weather seals missing - daylight visible at bottom. Replace.7000	
2.4.2	Door accessories (i.e., latches, hardware, screens, locks, alarms, holders, closers, security devices).	2		Original hardware worn beyond its usable life. Replace.	$7,000
2.4.3	Exit door hardware (i.e., safety and/or code concerns).			Many latches and panic bars have stiff operation - worn beyond their usable life and should be replaced (included in 2.4.2 above).	
2.4.4	Windows (i.e., signs of deterioration, rusting metal, glass cracks, peeling paint, damaged seals, sealed unit failure).	2	1912	Original windows - single-glazed wood windows with exterior single-glazed storms Frames have peeling paint and loose, cracked putty seals. Most are painted shut. Replace	
			1956	Lower floor has single-pane windows in aluminum frames. Putty seals are deteriorating, and weather seals are missing. Some original unsealed double-pane in wood frames, with peeling paint. Replace.	
			1968	Double-paned sealed units in aluminum frames. Caulking is hard and cracked, and some are missing weather seals. NW classroom: cracked paint on interior wall indicates rain penetration. Replace seals and damaged sealed units, recaulk.	$225,500
2.4.5	Window accessories (i.e., latches, hardware, screens, locks, alarms, holders, closers, security devices).	2	1912	Original	
		3	1968	Hinge mechanisms are loose, preventing proper seal, and some handles are broken off.Included in 2.4.4	$10,000
2.4.6	Building envelope (i.e., signs of heavy condensation on doors or windows).	2	All	Yes	Refer to 2.3.3 & 2.4.4.
Other					
	Overall Bldg Exterior Condition & Estim Costs	2			$408,500

Section 3	Building Interior - Overall Conditions	Rating	Comments/Concerns		Estim. Cost
3.1	**Interior Structure**		**Bldg. Section**	**Description/Condition**	
3.1.1	Interior walls and partitions (i.e., signs of cracks, spalling, paint peeling).		1912	Cracking around windows indicates differential settlement. Peeling paint around windows indicates air and moisture infiltration. Patch and caulk. 35500	
		2	1968	North corridor - walls have cracks above doors in GWB. Patch and repaint-1000	$4,500
3.1.2	Floors (i.e., signs of cracks, heaving, settlement).	4			
Other					
3.2	**Materials and Finishes**		**Bldg. Section**	**Description/Condition**	
3.2.1	Floor materials and finishes.	2	1912	Corridors terrazzo, classes linoleum Stairs have stone or rubber treads, sometimes mixed in the same flight. Most are worn. Replace. 14,400	
			1956	VAT floor tiles and linoleum - floor uneven, tiles lifting in several areas. Industrial Arts and Drama rooms have ceramic tile floors - worn. Replace. Gymnasium floor is wood on sleepers - very squeaky throughout, with some dead spots. Replace.67,400	$96,050
			1968	VCT in classrooms and corridors. Library carpet is stained and frayed. Replace.14,250	
3.2.2	Wall materials and finishes.	2	1912	Painted plaster corridors and classrooms - patch and paint	$40,000
		4	1956	Painted plaster classrooms; corridors have wood wainscot and painted plaster above.	
			1968	Painted GWB corridors and classrooms	
3.2.3	Ceiling materials and finishes.	2	1912	Painted plaster corridors and classrooms - patch, smooth surdace and repaint	$32,000
		3	1956	Acoustic ceiling tiles - some loose in corridors and Gymnasium	
			1968	Acoustic ceiling panels - replace as needed	$4,000

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	1912	Original wood doors and hardware.	
			1956	Original wood doors with round knobs.	
			1964	Wood doors with original round knobs. Refinish all doors and replace hardware.	$18,000
3.2.5	Millwork	2	1912	Very little millwork in the original school. Rooms have a variety of mismatched freestanding units. Provide bookcases.	
			1956 & 1968	There is more millwork here - wood cabinets with p-lam tops along one wall - some additional cabinetwork required..	$25,000
3.2.6	Fixed/wall mounted equipment (i.e., writing boards, tackboards, display boards, signs).	3		Typically chalkboards on wall (1912) or 2 walls - poor condition.	$21,580
3.2.7	Any other fixed/mounted specialty items (i.e., CTS equipment, gymnasium equipment).	2		Lockers poor - replace	$60,000
3.2.8	Washroom materials and finishes.	3	1912	Terrazzo floors, painted plaster walls and ceiling - several areas of peeling paint. Patch and paint	$40,000
		2	1956	Quarry tile floor, painted plaster walls and ceiling. These rooms are in a state of disrepair, with peeling and battered walls and inadequate fixtures. Showers are open to the room. Redesign and rebuild.	$80,000
		4	1968	Lino floors, ceramic tile walls, painted GWB ceiling	
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***		**Bldg. Section**	**Description/Condition**	
3.3.1	Building construction type - combustible or non-combustible, sprinklered or non-sprinklered.	4	1912 1956 1968	Combustible (masonry exterior and corridor walls, wood roof) Combustible (wood frame walls and roof) Combustible	
3.3.2	Fire separations (i.e., between buildings, wings, zones if non-sprinklered).	2		No interior fire separations to building code standards. Wood corridor doors have magnetic hold-opens, but most have no latches or panic bars, and many have no seals. Replace with steel doors and frames.	$12,000
3.3.3	Fire resistance rating of materials (i.e., corridor walls and doors).	4	1912 1956 1968	Corridor walls masonry/plaster; interior doors wood in wood frames Corridor walls wood frame/plaster; interior doors wood in wood or steel frames Corridor walls GWB; interior doors wood or steel frames	
3.3.4	Exiting distances and access to exits.	F. I.		Study required	
3.3.5	Barrier-free access.	2		Interior stairs make upper floors and much of ground floor inaccessible. Washrooms do not have handicapped stalls. An elevator is needed to make the entire school wheelchair-accessible.	$90,000
3.3.6	Availability of hazardous materials audit (i.e., evidence of safety concerns with respect to asbestos, PCB's, chemicals).	F.I.		Asbestos report attached Asbestos spray material on ceilings: Industrial Arts and Home Economics ceilings and Gymnasium walls Loose sprayed asbestos in the boiler room is peeling off. Asbestos board is present in ventilation cabinets.	
3.3.7	Other health and safety concerns (i.e., evidence of excessive noise conditions, air quality problems)	3		Many stair treads worn and cracked, causing tripping hazard. Washrooms in the 1912 and 1956 wings have insufficient sinks in the washrooms. Costs included in items above.	
Other					
	Overall Bldg Interior Condition & Estim Costs				$523,130

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		Site drainage consists of grading to swalls to run-off to streets and catch basins.	
4.1.2	Exterior plumbing systems (i.e., irrigation systems, hose bibs).	4		Building has exterior hose bibbs only.	
4.1.3	Outside storage tanks.	N/A		Not applicable.	
Other					
4.2	**Fire Suppression Systems**		**Bldg. Section**	**Description/Condition**	
4.2.1	Fire hydrants and siamese connections.	4		Street hydrant is located in front of school at north end.	
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 in cabinets 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					

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).	4	All Sections	100 mm service from street. 50 mm meter and service to building stand pipe system.	
4.3.2	Water treatment system(s).	4		Not applicable.	
4.3.3	Pumps and valves (including backflow prevention valves).	2		Backflow protection on all services not installed.	$10,000
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		One self contained hot water heater gas fired with separate storage tank. Capacity 270,000 BTUH input.	
4.3.7	Sanitary and storm sewers, including sumps and pits (note whether sewage system is municipal or septic).	4		Services tied to municipal services.	
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).	2		Original 1912 portion has 2 low pressure steam boilers installed in 1912, converted to gas in 1940's. These units serve all of 1912 school and portion of 1967 addition.	$120,000
		3		1967 addition has one 60 HP low pressure steam boiler which serve steam to hot water heat exchangers to provide heat to addition . No backup and boiler is at the end of its life expectancy.	$155,000
4.4.2	Heating controls (including use of current energy management technology.	3		Existing controls are pneumatic based, old and do not use current technology beyond night set back.	See 4.7.1
4.4.3	Fresh air for combustion and condition of the combustion chimney.	3		Combustion air duct in 1967 boiler room is inadequate due to freezing problem and the gas fired duct furnace used for preheat is not operating satisfactorily.	See 4.4.1
4.4.4	Treatment of water used in heating systems.	4		Regular program in place and kept current.	
4.4.5	Low water cutoff/pressure relief valves and failure alarms (i.e., hot water heating).	4		In place and functioning.	
4.4.6	Heating air filtration systems and filters.	4		All air systems have 50 mm filters in place.	
4.4.7	Heating humidification systems and components.	3		No humidification in place, however, swamp coolers are used on the 1912 air system and the 1967 system uses a sprayed dehumidifier. Systems are not used in winter.	See 4.5.1

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		Piping and ductwork in good shape generally. Piping for original 1912 and to some extent 1967areas could be expected to experience failures due to age.	
4.4.9	Heating piping, valve and/or duct insulation.	3		Piping is generally insulated, however noted to be missing in several locations.	See 4.4.1
4.4.10	Heat exchangers.	3		1967 has three exchangers of shell and tube design. Generally reaching life expectancy.	See 4.4.1
4.4.11	Heating mixing boxes, dampers and linkages.	2		Some unit ventilators used in portion of 1967 addition units are in need of replacement.	See 4.4.1 and 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 currently performing adequately.	See 4.4.1
Other					

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.	2		1912 portion has a central air handling unit with single supply fan, heating, mixed air, swamp cooler and individual ducted zones to classrooms. Depends on gravity relief while functioning, has poor control and distribution.	$130,000
		3		1967 portion has a central air handling unit which consists of supply and return fan minimum outside with preheat coil, plus full free cooling capability, and sprayed dehumidifier system is adequate however does not serve all areas of addition. Overall system needs upgrade and expansion. Industrial Arts had a separate unit installed in 1989 which is adequate.	$160,000
4.5.2	Outside air for the occupant load (if possible, reference CFM/occupant).	3		General outside air to classrooms is inconsistent, portions of 1967 addition are poor.	See 4.5.1
4.5.3	Air distribution system (if possible, reference number of air changes/hour).	3		Air is distributed to all areas. Air distribution is poor within classrooms on the 1912 portion. Air change rate in portions of 1967 wings is adequate, as high as 10 AC, however not all areas covered.	See 4.5.1
4.5.4	Exhaust systems capacity and condition.	2		1912 portion combines washroom exhaust with building relief, cross contamination is possible. Exhaust is provided on 1967, however general and washroom exhaust is combined in several areas.	$40,000
4.5.5	Separation of out flow from air intakes.	4		Separation of exhausts and intakes is good.	
4.5.6	Special/dedicated ventilation and/or exhaust systems (i.e., kitchen, labs, CTS areas).	4		Industrial Arts has separate dust collection system and separate paint and welding exhaust system.	
Other					

Section 4	Mechanical Systems	Rating	Comments/Concerns		Estim. Cost
4.5	**Ventilation Systems (cont'd)**		**Bldg. Section**	**Description/Condition**	
	Note: Only complete the following items if there are separate ventilation and heating systems.				
4.5.7	Ventilation controls (including use of current energy management technology).	3		Ventilation controls are operated manually as to start/stop functions, dampers and coils are pneumatic, systems operate on mixed air and discharge sensor. Outside air dampers have no minimum position and close on lower temperatures negating ventilation needs at winter conditions for 1912 wing, 1967 wing has minimum outside air control.	See 4.7.1
4.5.8	Air filtration systems and filters.	4		All systems have 50 mm fiberglass filters.	
4.5.9	Humidification system and components.			No humidity systems except for swamp coolers or sprayed coil during summer.	
4.5.10	Heat exchangers.			Not applicable.	
4.5.11	Ventilation distribution system and components (i.e., ductwork, diffusers, mixing boxes, dampers,	4		Distribution in good shape as currently installed for 1967 wing.	See 4.5.1
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).			Not applicable.	
4.6.2	Cooling distribution system and components (i.e., ductwork, diffusers, mixing boxes, dampers, linkages)			Not applicable.	
4.6.3	Cooling system controls (including use of current energy management technology).			Not applicable.	
4.6.4	Special/dedicated cooling systems (i.e., labs, CTS areas).			Not applicable.	
Other					
4.7	**Building Control Systems**		**Bldg. Section**	**Description/Condition**	
4.7.1	Building wide/system wide control systems and/or energy management systems.	4		Building controls are pneumatic, no energy management systems, controls are old, poor control of air systems as to maintaining minimum outside air, no automatic control of summer ventilation fans. Major alarms are tied to off-site monitoring.	
	Overall Mech Systems Condition & Estim. Costs			Building overall has old and outdated systems and equipment which needs updating and replacement.	$615,000
				Evaluator: Dale Way, Hemisphere Engineering	

Section 5	Electrical Systems	Rating	Comments/Concerns		Estim. Cost
$5	**Site Services**				
5.1.1	Primary service capacity and reliability (i.e., access, location, components, installation, bus sizes - note whether overhead or underground).	**4**		U/G primary to pad mounted transformer located on north side of school.	
5.1.2	Site and building exterior lighting (i.e., safety concerns).	**3**		Minimal site lighting. Lamps missing.	$3,500
5.1.3	Vehicle plug-ins (i.e., number, capacity, condition).	**4**		16 car plugs	
Other					
$5	**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**		Coverage is poor. Bells only - no strobes in this building. System should be upgraded/replaced.	$90,000
5.2.2	Emergency lighting systems (i.e., safety concerns, condition).	**2**		Poor coverage, battery packs and remote heads. 1988 upgrade. Does not meet 1997 code.	$30,000
5.2.3	Exit lighting and signage (i.e., safety concerns, condition).	**2**		Exit lights have not been upgraded. No emergency power to exit lights. Does not meet 1997 code.	$13,000
Other					

Section 5	Electrical Systems	Rating	Comments/Concerns		Estim. Cost
$5	**Power Supply and Distribution**		**Bldg. Section**	**Description/Condition**	
5.3.1	Power service surge protection.	**3**		No surge protection	$1,500
5.3.2	Panels and wireways capacity and condition.	**3**		Panels for most part are full, some very old. 1950's vintage - others are 1960's.	$32,000
5.3.3	Emergency generator capacity and condition and/or UPS (if applicable).	**N/A**			
5.3.4	General wiring devices and methods.	**3**		Marginal coverage in most areas. Additional outlets required to meet convenience and other needs.	$25,000
5.3.5	Motor controls.	**3**		1960's vintage controls. Still functional but obsolete. New starters will be installed.	$15,000
Other		**3**		Provide additional distribution, control, wiring to meet mechanical upgrades.	$15,000

Section 5	Electrical Systems	Rating	Comments/Concerns		Estim. Cost
$5	**Lighting Systems**		**Bldg. Section**	**Description/Condition**	
5.4.1	Interior lighting systems and components (i.e., illumination levels, conditions, controls).	**3**		Lighting consists of surface mounted and suspended fluorescent egg crate style fixture. Lighting levels - corridors 10 - 15 fc, gym 15 - 1 fc, classrooms 45 fc. Lighting needs replacement with new fixtures c/w T-8 lamps and electronic ballasts.	$195,000
5.4.2	Replacement of ballasts (i.e., health and safety concerns).	**3**		Existing ballasts 1960's vintage are inefficient and contain PCB's.	$5,500
5.4.3	Implementation of energy efficiency measures and recommendations.	**N/A**		No upgrading done at this time.	Refer to Items 5.4.1 and 5.3.2
Other					
$6	**Network and Communication Systems**		**Bldg. Section**	**Description/Condition**	
5.5.1	Telephone system and components (i.e., capacity, reliability, condition).	**4**		System coverage is adequate for existing use.	
5.5.2	Other communication systems (i.e., public address, intercom, CCTV, satellite or cable TV).	**3**		Public address is functional. Very old. Additional speakers and upgrade of components is required.	$12,000
5.5.3	Network cabling (if available, should be category 5 or better).	**3**		Hub located in lower level.	$3,000
5.5.4	Network cabling installation (i.e., in conduit, secured to walls or tables).	**3**		Cables in conduit, some open wiring.	$3,000
5.5.5	Wiring and telecommunication closets (i.e., size, security, ventilation/cooling, capacity for growth).	**3**		Mounted on terminal board, open to storage closet. Does not meet CBE or BICSI standards.	$6,500
5.5.6	Provision for dedicated circuits for network equipment (i.e., hubs, switches, computers).	**3**		Additional outlets are required to meet computer and network needs.	$20,000
Other		**3**		Existing system does not provide for 2 - 4 cable drops in all classrooms and teaching areas to provide a local area network.	$32,000

Section 5	Electrical Systems	Rating	Comments/Concerns		Estim. Cost
$6	**Miscellaneous Systems**		**Bldg. Section**	**Description/Condition**	
5.6.1	Site and building surveillance system (if applicable).	**N/A**			
5.6.2	Intrusion alarms (if applicable).	**3**		Coverage in hallways and critical rooms, require additional sensors and wiring.	$4,000
5.6.3	Master clock system (if applicable).	**3**		System is very old. Clocks being replaced with battery clocks when they fail.	$1,000
Other					
$6	**Elevators/Disabled Lifts (If applicable)**				
5.7.1	Elevator/lift size, access and operating features (i.e., 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**		Existing systems are past life cycle and need replacement to meet code and users needs.	$507,000
				Evaluator: Gary Mctighe, Stebnicki, Robertson & Associates	

Section 7	Space Adequacy	This Facility			Equiv. New Facility			Surplus/ Deficiency	Comments/Concerns
		No.	Size	Total Area	No.	Size	Total Area		
7.1	Classrooms	18	79.9	1439.5	18	80	1440	0.5	
7.2	Science Rooms/Labs	2	109.7	219.4	3	120	360	-140.6	
7.3	Ancillary Areas (i.e., Art, Computer Labs, Drama, Music,)	4		294.9	4		400	-105.1	Drama room is poorly finished with peeling plaster walls and ineffective acoustic wall panels. It has no stage, only three theatre lights and no storage or change rooms.
7.4	Gymnasium (incl. gym storage)	1		715.6	1		655	60.6	
7.5	Library/Resource Areas	1		431.8	1		258	173.8	
7.6	Administration/Staff, Physical Education, Storage Areas			545.3			521.3	24	
7.7	CTS Areas								
	7.7.1 Business Education								
	7.7.2 Home Economics	1		148.6	1	160	160	24	Minimal equipment - 2 stoves and two refrigerators for cooking, with cabinets of poor residential quality - not tough enough for constant student use. The dryer vents directly into the room rather than outside.
	7.7.3 Industrial Arts	1		166.2	1	280	280	-113.8	The workshop has few power tools and insufficient space to work properly for teaching or any but simple wood projects.
	7.7.4 Other CTS Programs								
7.8	Other Non-Instructional Areas (i.e., circulation, wall area, crush space, wc area)			1741.1			1569.4	171.7	
	Overall Space Adequacy Assessment			5702.4			5643.7	95.1	Net Capacity=570, Design instructional Area=3553 Reported Area=7454

Evaluation Component/ Sub-Component	Additional Notes and Comments