School Name: King George Elementary and Junior High School
Location: 2108 - 10th Street N. W., Calgary

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

Grades: ECS to 9

School Code: 9606
Facility Code: 1595

Superintendent: Dr Donna Michaels
Contact Person: Leanne Soligo
Telephone: 214-1123

School Capacity: 600

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	2,534.50	Sandstone exterior, brick interior bearing walls, concrete floors, wood roof		
Additions/ Expansions	1960	2	3,248.0	Concrete frame with infill walls of brick-cladding and aluminum-frame curtain wall, concrete floors wood roof, stucco cladding		

Evaluator's Name: Doug Cambell
& Company: Caruthers & Associates Architects Inc

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

List of Reports/ Supplementary Information	

	Evaluation Components	Summary Assessment	Estim. Cost
1	**Site Conditions**	Site Suraces and Equipment are old and need replacement.	$75,800
2	**Building Exterior**	Exterior sandston need maintenance repair Extiorior Windows erquire replacement.	$295,500
3	**Building Interior**	A variety of interior finishes are in need of replacement and chaulkboards and tackboardsneed to be replaced.	$305,284
4	**Mechanical Systems**	Mechanical systems are old, ventilation needs upgrading in 1912 portion. Steam heating in 1912 areas are 95 years old No current controls technology is in place.	$555,000
5	**Electrical Systems**	New distribution, branch circuit wiring, lighting, and motor control need replacement. All life safety systems (ie. fire alarm, emergency lights, exit signs) are in poor condition and need upgrade to meet 1997 code.Energy efficiency performance will be improved with new lighting and LED exit signs.	$411,000
6	**Portable Buildings**	N/A	$0
7	**Space Adequacy:**		
	7.1 Classrooms	Deficiency: 17.6m2	
	7.2 Science Rooms/Labs	Deficiency: 205.4m2	
	7.3 Ancillary Areas	Deficiency: 135.2m2	
	7.4 Gymnasium	Surplus: 139.5m2	
	7.5 Library/Resource Areas	Deficiency: 29.24m2	
	7.6 Administration/Staff Areas	Surplus: 200m2	
	7.7 CTS Areas	Deficiency: 107.6m2	
	7.8 Other Non-Instructional Areas (incl. gross-up)	Deficiency: 56.3m2	
	Overall School Conditions & Estim. Costs		$1,642,584

Section 1	Site Conditions	Rating	Comments/Concerns	Estim. Cost
1.1	**General Site Conditions**			
1.1.1	Overall site size.	4	Site area of 9,362.36 sq. m. (0.936 ha. = 2.3 ac.) is too small for a school of this size. However, the school has access to an adjacent City of Calgary park of approximately 1.769 ha. (4.37 ac.) including a play structure and baseball diamond.	
1.1.2	Outdoor athletic areas.		NA See 1.1.1	
1.1.3	Outdoor playground areas, including condition of equipment and base.	3	Asphalt-paved play area to the east of the school has plastic basketball-type fixtures on poles. The paved surface is cracked and uneven. The play structure on the city park lands is relatively new and in good condition. It is maintained by the school board.	$7,500
1.1.4	Site landscaping.	4	Mainly grass, with some shrubs and trees to south and on the west lawn. Lawns at entry areas are worn to dirt by pedestrian traffic.	
1.1.5	Site accessories (i.e., perimeter and other fencing, guard rails, bike stands, flag poles).	3	Chain link fence at the northwest entry has snags in the wire mesh. The wire should be replaced.	$800
1.1.6	Surface drainage conditions (i.e., drains away from building, signs of ponding).	3	Asphalt paving at the south and east sides slopes toward the building, causing ponding and damage to the sandstone.	$15,000
1.1.7	Evidence of sub-soil problems.	N/A	None	
1.1.8	Safety and security concerns due to site conditions.	4	Access to the south parking lot from 20th Avenue (see 1.2.1 below).	
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).	FI	Primary drop-off points are on busy streets - 20th Avenue on the south and 10th Street on the west. Vehicle access to and from the south parking lot is difficult due to heavy traffic on 20th Avenue.	
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).	FI	No lay-by or drop-off lanes. Bus drop-off is on 10th Street N.W. This is a very busy street during morning and evening rush hours.	
1.2.4	Fire vehicle access.	4	3 streets	
1.2.5	Signage.	3	No handicapped access or drop-off signs.	$4,000
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	22 stalls total in two lots - to the south and east of the building. This is inadequate.	$40,000
1.3.2	Layout and safety of parking lots.	3	South lot is too narrow to meet City of Calgary by-law standards. See 1.2.1 above.	Included in 1.3.1
1.3.3	Surfacing and drainage of parking lots (note whether asphalt or gravel).	4	Asphalt surface. Catch basins in east lot.	
1.3.4	Layout and safety of sidewalks.	3	City sidewalks around the east, south and west; laneway to the north. Entry sidewalk at the west (main), but access to the south is directly from the parking lot. Concrete pavers are lifting at the east entry, causing a tripping hazard.	$8,500
1.3.5	Surfacing and drainage of sidewalks (note type of material).	4	West sidewalk and east entry walk are of concrete.	
1.3.6	Curb cuts and ramps for barrier free access.	4	No curb cuts. West sidewalk is the only wheelchair-accessible one.	
Other				
	Overall Site Conditions & Estimated Costs			$75,800

Section 2	Building Exterior	Rating	Comments/Concerns		Estim. Cost
2.1	**Overall Structure**		**Bldg. Section**	**Description/Condition**	
2.1.1	Floor structure and beams (i.e., signs of bending, cracking, heaving, settlement, voids, rust, stains).	4	1912	Minor settlement evident in basement staff room floor - east wall.	
2.1.2	Wall structure and columns (i.e., signs of bending, cracking, settlement, voids, rust, stains).	3	1912 1960	There are many small cracks in the original sandstone walls. None appear to affect structural stability, and a monitoring programme is in place. West wall at south end: mortar and bricks are broken at the top corners of the windows, indicating an excessive load from the steel angle lintel supporting bricks above the windows. East wall at north end: Some failure of the mortar joints and separation of bricks.	$4,000
2.1.3	Roof structure (i.e., signs of bending, cracking, voids, rust, stains).	4	1960		
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***		**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).	4 2	1960	Roofs generally are in good condition. Roofing summary attached. Roofs replaced in the following years: 1912 wing - 1991 1960 wing - 1987 SW corner of gymnasium roof has ponding against the third floor walls of the 1912 and 1960 buildings.	$10,000
2.2.2	Roof accessories (i.e., ladders, stairs, hatches, masts, exhaust hoods, chimneys, gutters, downspouts, splashpads).			OK	
2.2.3	Control of ice and snow falling from roof.	2	1912	Leaking gutters allow formation of long icicles, causing a hazard to pedestrians below. Snow restraints of wire and reinforcing bars are installed in the valleys of the 1912 building to help prevent snow slides from the steep roof.	$3,500
2.2.4	Skylights (i.e., signs of distress, leaks, ice build-up, condensation, deteriorated materials/seals).	2		Skylights over NE classroom leaking.Reseal.	$1,500
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 multiple small cracks, as noted above. Lower portions of the wall have been patched with coloured mortar, particularly on the south and east sides. Most patches are effective, but some are spalling, and some new areas of sandstone have lost their dressed faces, exposing the soft stone within. These must be addressed quickly to prevent further deterioration. Water stains on the sandstone indicate that the eaves troughs and roofing are leaking. Water may be entering the wall system. Stone on the east wall is discoloured by rust from the exterior fire stair.-40,000	$50,000
			1960	Bricks on the north wall are stained, and some mortar is deteriorating, indicating water flowing over the surface. East wall: tile cladding of the concrete wall and column surfaces is cracked.10,000	
2.3.2	Fascias, soffits, parapets (i.e., signs of looseness, stains, rust, peeling paint).	2		Fascias and soffits are bent, and have extensive peeling (probably lead-based) paint. Some decorative stamped metal modillions are missing. All of these elements should be repaired or replaced, along with eaves troughs and flashings, to ensure proper drainage and prevent water damage to the wall structure.	$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	Caulking around the original wood window frames should be replaced.	
			1960	Caulking around the window frames is cracked and brittle.Replace	$5,000
2.3.4	Interface of roof drainage and ground drainage systems.	2	1912	Eaves-troughs with downspouts to grade. Replace - See 2.3.2	
			1960	Interior drainage from flat roofs.	$10,000
2.3.5	Inside faces of exterior walls (i.e., signs of cracks, water stains, dust spots).	3	1960	Leaks around window frames, particularly on the west side, indicate water infiltration. See 2.3.3	
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 1960	Original wood doors in wood frames. Replace Original wood doors in steel frames. Replace	$14,000
2.4.2	Door accessories (i.e., latches, hardware, screens, locks, alarms, holders, closers, security devices).	2	1912	Original hardware worn beyond its usable life. Replace with doors	$7,000
2.4.3	Exit door hardware (i.e., safety and/or code concerns).	2		Many latches and panic bars have stiff operation - worn beyond their usable life and should be replaced .	$3,000
2.4.4	Windows (i.e., signs of deterioration, rusting metal, glass cracks, peeling paint, damaged seals, sealed unit failure).	2	1912 1956 1960	Original windows - single-glazed wood windows with exterior single-glazed storms Interior varnish finish of the frames has been well maintained, but exterior frames have extensive peeling paint. There is some evidence of water penetration between the windows, but little to the interior. Replace with new double sealed units Windows are double-pane sealed units in aluminum frames. Caulking is hard and cracked, and some are missing weather seals. West classrooms: cracked paint on interior wall indicates rain penetration. Re-Caulk	$227,500
2.4.5	Window accessories (i.e., latches, hardware, screens, locks, alarms, holders, closers, security devices).	3	1912 1960	Original Hinge mechanisms are loose, preventing proper seal. Repair	$1,500
2.4.6	Building envelope (i.e., signs of heavy condensation on doors or windows).	3	1960	See 2.4.4 above	See 2.4.4 above
Other					
	Overall Bldg Exterior Condition & Estim Costs				$352,000

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).	4			
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.	3 3	1912 1960	Corridors - Terrazzo on lower floor, linoleum on main and upper Classrooms - linoleum.Replace Stair treads of slate (original) and composite materials are worn.Replace Corridors and classrooms - Vinyl floor tiles Library, music room and northeast classrooms: - carpet is worn, with fraying patches Replace Ceramic tiles in NW entry vestibule. Gymnasium floor is wood on sleepers - squeaky in some places.	$63,339
3.2.2	Wall materials and finishes.	4	1912 1960	Corridors - brick; Classrooms - painted plaster Corridors - brick (west wing) and painted concrete block (north wing); Classrooms - painted plaster; Library - painted concrete block Gymnasium - painted plaster Painted GWB corridors and classrooms	
3.2.3	Ceiling materials and finishes.	3	1912 1960	Corridors and classrooms - acoustic tile Corridors and classrooms - Acoustic ceiling tiles; some loose in Library and Gymnasium Replace Northeast classrooms - open web steel joists with painted wood deck.	$1,500

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.	2	1912	Classrooms - original wood doors in wood frames, with original hardware. Stairwells - steel doors in steel frames.	
			1960	Classrooms - original wood doors in wood frames, with original hardware. Stairwells - wood doors in steel frames **Replace with metal doors.**	$40,000
3.2.5	Millwork	3	1912	Very little millwork in the original school. Rooms have a variety of mismatched freestanding units.	
			1960	There is more millwork here - typically wood cabinets with p-lam tops in generally good condition.	$25,000
3.2.6	Fixed/wall mounted equipment (i.e., writing boards, tackboards, display boards, signs).	3		Typically chalkboards on one wall (1912) or two walls.	$18,945
3.2.7	Any other fixed/mounted specialty items (i.e., CTS equipment, gymnasium equipment).	3		Many lockers are damaged.	$45,000
3.2.8	Washroom materials and finishes.	4	1912	Terrazzo floors, painted plaster walls and ceiling.	
			1960	Mosaic tile floor, glazed brick or painted concrete block and painted plaster ceiling. Upper floor plaster ceilings have cracks.	
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**	**Description/Condition**	
3.3.1	Building construction type - combustible or non-combustible, sprinklered or non-sprinklered.	4	1912 1960	Combustible (masonry exterior and corridor walls, wood roof) Combustible (wood roof) Non-sprinklered	
3.3.2	Fire separations (i.e., between buildings, wings, zones if non-sprinklered).	2	1912 1960	No interior fire separations to building code standards. Stairwell doors have no latches or panic bars, and many have no seals. Classrooms open into the stairwells at both ends. 1912 and 1960 wings are separated by a steel door in a steel frame. Revise entrances. Stairwell doors do not meet current exit requirements.	$12,000
3.3.3	Fire resistance rating of materials (i.e., corridor walls and doors).	4	1912 1960	Corridor walls brick; classroom doors wood in wood frames; stairwell doors steel in steel frames Corridor walls brick or concrete block; classroom doors wood in wood frames stairwell doors wood in steel frames, some with unwired glass.	
3.3.4	Exiting distances and access to exits.	FI		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.7500 Elevator Required for upper floors 80,000	$87,500
3.3.6	Availability of hazardous materials audit (i.e., evidence of safety concerns with respect to asbestos, PCB's, chemicals).	3		Asbestos report attached	FI
3.3.7	Other health and safety concerns (i.e., evidence of excessive noise conditions, air quality problems)	2		Many stair treads worn and cracked, causing tripping hazard. See 3.2.1 Air diffusers in the north wing are noisy, and classes in this area need more sound damping material. See section 4 Washrooms in the 1912 wing have only 2 sinks in each washroom. Add 6 sinks	$12,000
Other					
	Overall Bldg Interior Condition & Estim Costs				$305,284

Section 4	Mechanical Systems	Rating	Comments/Concerns		Estim. Cost
4.1	**Mechanical Site Services**				
4.1.1	Site drainage systems (i.e., surface and underground systems, catch basins).	4		Site drainage consists of catch basins and proper grading to pick-up points.	
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					
4.2	**Fire Suppression Systems**		**Bldg. Section**	**Description/Condition**	
4.2.1	Fire hydrants and siamese connections.	4		Street fire hydrant is located close to 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 in cabinets tied to building main 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		100 mm service from street to 50 mm domestic water meter and service take off 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).	3		No backflow protection on domestic water services or line tied to fire hoses.	$10,000
4.3.4	Piping and fittings.	4		All piping on domestic water is copper and is in good shape for the age of the 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 gas fired in boiler room replaced in 1993, 50,000 BTUH input with integral storage.	
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.	
Other					

Section 4	Mechanical Systems	Rating	Comments/Concerns		Estim. Cost
4.4	**Heating Systems**		**Bldg. Section**	**Description/Condition**	
4.4.1	Heating capacity and reliability (including backup capacity).	3		Two low pressure steam boilers installed in 1912 converted to gas in 1940's. Units supply heat for the entire school including 1962 addition. Due to age boilers should be replaced.	$300,000
4.4.2	Heating controls (including use of current energy management technology.	3		Controls are old, pneumatic based, no current energy technology beyond night set back.	See 4.7.1
4.4.3	Fresh air for combustion and condition of the combustion chimney.	4		Combustion air is in place and acceptable.	
4.4.4	Treatment of water used in heating systems.	4		Treatment systems are current.	
4.4.5	Low water cutoff/pressure relief valves and failure alarms (i.e., hot water heating).	4		Acceptable.	
4.4.6	Heating air filtration systems and filters.	4		Fiberglass media.	
4.4.7	Heating humidification systems and components.			Not applicable.	

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	3		School is all steam distribution and should be replaced due to age.	See 4.4.1
4.4.9	Heating piping, valve and/or duct insulation.	4		Generally piping insulated throughout.	
4.4.10	Heat exchangers.	N/A		Not applicable.	
4.4.11	Heating mixing boxes, dampers and linkages.	3		Unit ventilators have mixing sections in 1962 portion and are an ongoing maintenance concern.	See 4.4.1 & 4.5.1
4.4.12	Heating distribution/circulation in larger spaces (i.e., user comfort, temperature of outside wall surfaces).	3		On going problems with proper temperature control.	See 4.4.1 & 4.7.1
4.4.13	Zone/unit heaters and controls.	3		Same as 4.4.12	See 4.4.1 & 4.7.1
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.	3		1962 portion has no air supply system and depends on unit ventilators, which do not operate effectively under all conditions. Gym portion is okay and has own air system. General office has new furnace and cooling, and is okay. Cost is for classroom upgrade only.	$85,000
		3		1912 portion has central air handling unit with single supply fan, heating coil, mixed air and individual zone supply to classrooms. Depends on Gravity relief system, while functional has poor control and distribution.	$110,000
4.5.2	Outside air for the occupant load (if possible, reference CFM/occupant).	3		Generally outside air to classrooms is inconsistent. Operable windows help.	See 4.5.1
4.5.3	Air distribution system (if possible, reference number of air changes/hour).	3		Due to age of equipment, actual air changes are likely inconsistent and below original design intent.	See 4.5.1
4.5.4	Exhaust systems capacity and condition.	3		1962 portion has one central exhaust fan which exhausts classrooms, washrooms have dedicated exhaust and gym has separate exhaust. 1912 system has all washrooms and classrooms tied to common, relief, return or exhaust system. Attic fans have been installed to assist overall building air movement.	$40,000
4.5.5	Separation of out flow from air intakes	4		Separation of exhaust and intakes is acceptable.	
4.5.6	Special/dedicated ventilation and/or exhaust systems (i.e., kitchen, labs, CTS areas).	2		Kitchen used for lunch room needs proper exhaust system.	$10,000
Other					
4.5	**Ventilation Systems (cont'd)**		**Bldg. Section**	**Description/Condition**	

Section 4	Mechanical Systems	Rating	Comments/Concerns		Estim. Cost
	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 system have pneumatic controls but are operated manually as to stop/start, no minimum position for outside air dampers, generally poor controllability.	See 4.7.1
4.5.8	Air filtration systems and filters.	4		Systems have 50 mm fiberglass filters.	
4.5.9	Humidification system and components.	N/A		Not applicable.	
4.5.10	Heat exchangers.	N/A		Not applicable.	
4.5.11	Ventilation distribution system and components (i.e., ductwork, diffusers, mixing boxes, dampers, linkages).	2		Generally distribution ductwork is old and needs replacement.	See 4.5.1

Section 4	Mechanical Systems	Rating	Comments/Concerns		Estim. Cost
Other					
4.6	**Cooling Systems**		**Bldg. Section**	**Description/Condition**	
4.6.1	Cooling system capacity and condition (i.e., chillers, cooling towers, condensers).	N/A		Not applicable.	
4.6.2	Cooling distribution system and components (i.e., ductwork, diffusers, mixing boxes, dampers, linkages)	N/A		Not applicable.	
4.6.3	Cooling system controls (including use of current energy management technology).	N/A		Not applicable.	
4.6.4	Special/dedicated cooling systems (i.e., labs, CTS areas).	N/A		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.			Building controls are pneumatic, no energy management, are old, poor control of existing air system and unit ventilators as to minimum outside air. Major alarms are tied to off site monitoring.	
	Overall Mech Systems Condition & Estim. Costs			The building overall has old and outdated equipment which needs updating and replacement.	$555,000
				Evaluator: Dale Way, Hemisphere Engineering	

Section 5	Electrical Systems	Rating	Comments/Concerns		Estim. Cost
5.1	**Site Services**				
5.1.1	Primary service capacity and reliability (i.e., access, location, components, installation, bus sizes - note whether overhead or underground).	**4**		School served from existing O.H. lines.	
5.1.2	Site and building exterior lighting (i.e., safety concerns).	**3**		Minimal exterior lighting. Additional fixtures required at entrances and building perimeter.	$2,500
5.1.3	Vehicle plug-ins (i.e., number, capacity, condition).	**4**		20 car plug-ins.	
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**		F.A. coverage is minimal. Horn strobes located throughout school at this time. System should be upgraded/replaced.	$68,000
5.2.2	Emergency lighting systems (i.e., safety concerns, condition).	**1**		Poor coverage, battery packs and remote heads.	$25,000
5.2.3	Exit lighting and signage (i.e., safety concerns, condition).	**2**		Original fixtures from 1960. Should be upgraded and connected to emergency lighting batteries and additional added to meet 1997 code.	$3,000
Other					

Section 5	Electrical Systems	Rating	Comments/Concerns		Estim. Cost
5.3	**Power Supply and Distribution**		**Bldg. Section**	**Description/Condition**	
5.3.1	Power service surge protection.	**1**		No surge protection	$1,500
5.3.2	Panels and wireways capacity and condition.	**2**		Panels full, no spaces. Most equipment 40 years old and will be replaced with new.	$35,000
5.3.3	Emergency generator capacity and condition and/or UPS (if applicable).	**N/A**		No generator.	
5.3.4	General wiring devices and methods.	**3**		Coverage is acceptable in office areas, classrooms have few outlets. Additional outlets will be installed to meet convenience and other needs.	$27,000
5.3.5	Motor controls.	**3**		Controls are 40 years old, still operational but obsolete. New starters will be installed.	$10,000
Other		**3**		New wiring and controls will be installed to meet mechanical upgrades.	$20,000

Section 5	Electrical Systems	Rating	Comments/Concerns		Estim. Cost
5.4	**Lighting Systems**		**Bldg. Section**	**Description/Condition**	
5.4.1	Interior lighting systems and components (i.e., illumination levels, conditions, controls).	**2**		Lighting in most areas is surface mounted or suspended metal or plastic egg crate style fixtures, 1960's vintage. Lighting levels - hallways 20 - 40 fc, gym 40 fc, library 75 fc, classrooms 45 fc. Maintenance of these fixtures is challenging. New fluorescent fixtures will be installed c/w T-8 lamps and electronic ballasts.	$150,000
5.4.2	Replacement of ballasts (i.e., health and safety concerns).	**2**		Existing ballasts 1960 and contain PCB's. Cost is for safe removal.	$8,000
5.4.3	Implementation of energy efficiency measures and recommendations.	**2**		Only library has been upgraded.	Refer to Items 5.4.1 and 5.3.2
Other					

Section 5	Electrical Systems	Rating	Comments/Concerns		Estim. Cost
5.5	**Network and Communication Systems**		**Bldg. Section**	**Description/Condition**	
5.5.1	Telephone system and components (i.e., capacity, reliability, condition).	**4**			
5.5.2	Other communication systems (i.e., public address, intercom, CCTV, satellite or cable TV).	**3**		Public address system is accessed through phone system, only ALL CALL is available. Staff would prefer zone selection.	$5,000
5.5.3	Network cabling (if available, should be category 5 or better).	**3**		Hub located adjacent to office.	$2,000
5.5.4	Network cabling installation (i.e., in conduit, secured to walls or tables).	**3**		Cables installed in conduit, some open wiring.	$2,000
5.5.5	Wiring and telecommunication closets (i.e., size, security, ventilation/cooling, capacity for growth).	**3**		Some cabling in cabinet, other in open adjacent to cabinet. Does not meet CBE or BICSI standards.	$9,000
5.5.6	Provision for dedicated circuits for network equipment (i.e., hubs, switches, computers).	**3**		Additional outlets are required to meet new computers and network needs.	$16,000
Other		**3**		Existing system does not provide for 2 - 4 cable drops in all classrooms and teaching areas to provide a local area network.	$24,000

Section 5	Electrical Systems	Rating	Comments/Concerns		Estim. Cost
5.6	**Miscellaneous Systems**		**Bldg. Section**	**Description/Condition**	
5.6.1	Site and building surveillance system (if applicable).	**N/A**			
5.6.2	Intrusion alarms (if applicable).	**3**		Coverage in hallways and critical rooms, motion sensors. Additional sensors and wiring are required.	$2,000
5.6.3	Master clock system (if applicable).	**3**		Located in office. Functional at this time. If clocks fail, they are replaced with battery operated clocks.	$1,000
Other					
5.7	**Elevators/Disabled Lifts (If applicable)**				
5.7.1	Elevator/lift size, access and operating features (i.e., sensing devices, buttons, phones, detectors).	**N/A**			
5.7.2	Condition of elevators/lifts.	**N/A**			
5.7.3	Lighting and ventilation of elevators/lifts.	**N/A**			
Other					
	Overall Elect. Systems Condition & Estim Costs	**3**		Existing system is past life cycle and needs replacement to meet code and users needs.	$411,000
				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	16	78.9	1262.4	16	80	1280	-17.6	
7.2	Science Rooms/Labs	2	77.3	154.6	3	120	360	-205.4	
7.3	Ancillary Areas (i.e., Art, Computer Labs, Drama, Music,)	3		264.8	1 3	130 90	400	-135.2	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		619.5	1		759	139.5	
7.5	Library/Resource Areas	1		222.8	1		252	-29.2	
7.6	Administration/Staff, Physical Education, Storage Areas			722.7			522.7	200	
7.7	CTS Areas								
	7.7.1 Business Education								
	7.7.2 Home Economics	2		188.3	2	260	260	-71.7	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	2		244.1	1	280	280	-35.9	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)			1572.6			1628.8	-56.2	
	Overall Space Adequacy Assessment			5251.8			5742.5	-211.7	Net Capacity=555, Design instructional Area=3593 Reported Area=5782.5

Evaluation Component/ Sub-Component	Additional Notes and Comments