S	chool Name:	Archbish	op McDo	nald High		School Code:	403
Location:		10810 - 1	42 stree	t Edmonton, Alb	perta T5N 2P7	Facility Code:	2054
R	egion:	Central				Superintendent:	Dr. Dale W. Ripley
Ju	urisdiction:	Edmonto	n RCSSI	O No. 40		Contact Person:	Mr. Garnet McKee
						Telephone:	(780) 453-4500 (Garnet)
G	irades:	X-XII				School Capacity:	Total 880
		Year of	No. of	Gross Bldg Area	Turne of Construction (i.e. structure	Description of Mechanical Systems	
Building S	Section	Compl.	Floors	(Sq.M.)	Type of Construction (i.e., structure, roof, cladding)	(incl. major upgrades)	Comments/Notes
Original I		1965	2	7639.4	Masonry/B.U.R.	2 pipe induction system with cooling/heating and primary ventilation with recirculation.	
	s/ Expansions						
						Evaluator's Name:	Bill Vance
						& Company:	Henderson Inglis Partridge

1			0	
Upgrading/	1984	78.0		-Minor Modernization upgrade C.R.141.
Modernization	1987	147.8		-Minor Modernization upgrade C.R.204. -Minor Modernization install & upgrade
(identify whether	1907	147.0		computer network system.
minor or major)	1992			-Minor Modernization convert Home Ec.
	1332			To an Art Rm. & upgrade kiln. Facilities.
	1993			-Minor Modernization upgrade acoustics
				& finishes in Drama Theater.
				-Minor Modernization expand & upgrade
	1996			Library to a Resource Center. H.C.
				elevator & 2nd floor corridor.
				-Minor Modernization upgrade Music
	1997			Rm. acoustic wall panels.
				-Minor Modernization convert infirmary
				into Office, expand Staff Rm.
	1998			
	1990			
Portable Struct.				4 portables dates of construction
(identify whether				unknown. Have been at school
attached/perman. or				approximately 3 years.
free-standing/				
relocatable)				
List of Reports/	See Section	8 for complete list.		
Supplementary				
Information				

Evalua	tion Components	Summary Assessment	Estim. Cost
1 Site Cor	nditions	Some concrete work required. South entrance is full of pedestrian vehicular conflict and in need of further investigation to find a solution .	\$30,000
2 Building	g Exterior	Window problems and leaks related to prefinished metal panel at window locations require attention.	\$327,500
3 Building	g Interior	Floors in heavy traffic areas and original ceilings need replacing. Should occur at same time as ventilation system installation.	\$225,000
4 Mechan	ical Systems	Underground supply air ducts fill with groundwater; limited capability of delivering adequate outside air; replace ventilation system; provide humidification.	\$935,500
5 Electric	al Systems	Insufficieint receptacles in classrooms and work areas. In addition to receptacle circuit upgrading luminaires should be replaced with energy efficient type.	\$574,000
6 Portable	e Buildings	Generally good condition with heating in one portable requiring attention.	\$22,000
7 Space A			
7.1 Clas	ssrooms	Deficient 109.5 S.M.	
7.2 Scie	ence Rooms/Labs	Deficient 83.9 S.M.	
7.3 And	illary Areas	Deficient 96.5 S.M.	
7.4 Gyn	nnasium	Deficient 390.2 S.M.	
7.5 Libr	rary/Resource Areas	Deficient 180.9 S.M.	
7.6 Adn	ninistration/Staff Areas	Surplus 408.3 S.M.	
7.7 CTS	Areas	Deficient 345 S.M.	
7.8 Othe gross-u	er Non-Instructional Areas (incl. p)	Surplus 448.1 S.M.	
Overall	School Conditions & Estim. Costs	School in need of Arch., Mech., and Elec., work Overall Area deficiency of 349.6 S.M.	\$2,114,000

Section 1	Site Conditions	Rating	Comments/Concerns	Estim. Cost
1.1	General Site Condions			\$0
1.1.1	Overall site size.	4	Size appears adequate. Expansion potential to west & to north.	
1.1.2	Outdoor athletic areas.		Snow cover makes thorough inspection difficult. No obvious problems & none identified by staff.	
	Outdoor playground areas, including condition of equipment and base.	4	Same as 1.1.2	
1.1.4	Site landscaping.		Snow cover makes thorough inspection difficult. No obvious problems & none identified by staff.	
	Site accessories (i.e., perimeter and other fencing, guard rails, bike stands, flag poles).	4		
	Surface drainage conditions (i.e., drains away from building, signs of ponding).	4	No apparent signs of drainage problems.	
1.1.7	Evidence of sub-soil problems.		Sidewalk/entry slabs east entrances have settled. North has been mudjacked, south requires same.	Costs have been identified in 1.3.5.
1.1.8	Safety and security concerns due to site conditions.	4		
Other				

Section 1	Site Conditions	Rating	Comments/Concerns	Estim. Cost
1.2	Access/Drop-Off Areas/Roadways/Bus Lanes			\$20,000
1.2.1	Vehicular and pedestrian access points (i.e., size, number, visibility, safety).	3	Functional main pedestrian access (south) empties on to congested lane/parking area. East entrances are off very busy street with little set back. Further investigation is required to identify potential solutions and associated costs. Adequate pedestrian access in terms of number/size. Complete detailed study.	\$10,000
1.2.2	Surfacing of on-site road network (note whether asphalt or gravel).	4	On site road network asphalt or gravel. Snow cover makes thorough assessment difficult. Mini-plan gravel walk appears to be used as vehicular access to parking east side of school.	
1.2.3	Bus lanes/drop-off areas (note whether on-site or off- site).	3	Buses drop-off on city of Edmonton streets. Unofficial vehicular drop-off South side of school combined with lane traffic leads to congestion. As indicated in 1.2.1 above further investigation is required to identify potential solutions and associated costs. Complete detailed study.	\$10,000
1.2.4	Fire vehicle access.	4	Access to front appears good. Access to school through City of Edmonton streets.	
1.2.5	Signage.	4	No concerns evident or raised by staff.	
Other				

Section 1	Site Conditions	Rating	Comments/Concerns	Estim. Cost
1.3	Parking Lots and Sidewalks			\$10,000
1.3.1	Number of parking spaces for staff, students and visitors (including stalls for disabled persons).	4	Approximately 75 stalls including 1 H.C. stall.	
1.3.2	Layout and safety of parking lots.		Congestion due to conflict with lane/supermarket/school traffic. Location of parking access leads to congestion. As indicated in 1.2.1 above further investigation is required to identify potential solutions and associated costs.	Costs in 1.2.1 & 1.2.3
1.3.3	Surfacing and drainage of parking lots (note whether asphalt or gravel).		Winter conditions make assessment difficult. No apparent or obvious concerns.	
1.3.4	Layout and safety of sidewalks.	4		
1.3.5	Surfacing and drainage of sidewalks (note type of material).		Settlement in slab by Southeast entrance. Poor concrete finish slab outside north entrance.	\$10,000
1.3.6	Curb cuts and ramps for barrier free access.		School appears accessible from south (functional main entrance) Level access no cub cuts required.	
Other				
	Overall Site Conditions & Estimated Costs			\$30,000

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School Facility Evaluation Project

School: Archbishop Macdonald Date: 1999-11-16

Section 2	Building Exterior	Rating		Comments/Concerns	Estim. Cost
2.1	Overall Structure		Bldg. Section	Description/Condition	\$0
2.1.1	Floor structure and beams (i.e., signs of bending, cracking, heaving, settlement, voids, rust, stains).	4		Concrete structure appears solid/stable.	
2.1.2	Wall structure and columns (i.e., signs of bending, cracking, settlement, voids, rust, stains).	4		Concrete structure appears solid/stable.	
2.1.3	Roof structure (i.e., signs of bending, cracking, voids, rust, stains).	4		Roof not accessed winter conditions. No apparent problems from perimeter visual inspection from ground.	
Other					

Section 2	Building Exterior	Rating		Comments/Concerns	Estim. Cost
2.2	Roofing and Skylights		Bldg.	Description/Condition/Age	
	Identify the availability of an up-to-date inspection		Section		\$0
	report or roofing program. Note if roof sections are		or Roof		Ψ0
	of different ages and/or in varying states of repair.		Section		
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	1966	Reroofed 1988/1989 inspection reports not supplied by jurisdiction. No roofing Reports identified after research in Edmonton Catholic Schools Service Centre Library. No specific problem with roof identified by staff.	
2.2.2	Roof accessories (i.e., ladders, stairs, hatches, masts, exhaust hoods, chimneys, gutters, downspouts, splashpads).	4		Roof not accessed winter conditions. No apparent problems from perimeter visual inspection from ground.	
2.2.3	Control of ice and snow falling from roof.	4		Flat Roof.	
2.2.4	Skylights (i.e., signs of distress, leaks, ice build-up, condensation, deteriorated materials/seals).			None	
Other					

Section 2 Building Exterior Comments/Concerns Rating Estim. Cost 2.3 Exterior Walls/Building Envelope Bldg. \$15,000 Section **Description/Condition** \$15,000 2.3.1 Exterior wall finishes (i.e., signs of deterioration, cracks, 3 Typical prefinished metal panel (blue) leaks in heavy rain conditions otherwise exterior brick spalling, effluorescence, water stains). finishes good. 2.3.2 Fascias, soffits, parapets (i.e., signs of looseness, 4 No apparent signs of problems. stains, rust, peeling paint). 2.3.3 Building envelope (i.e., evidence of air infiltration/ 4 No apparent signs of problems. exfiltration through the exterior wall or ice build up on wall, eaves, canopy). 2.3.4 Interface of roof drainage and ground drainage Flat Roof with roof drains presumed to be tied into storm system. 4 systems. 2.3.5 Inside faces of exterior walls (i.e., signs of cracks, water 3 Some water stains noted by staff at blue prefinished panel. Cost of Pane stains, dust spots). None observed. work has been identified in 2.3.1 Other 2.4 Exterior Doors and Windows Bldg. \$312,500 Section **Description/Condition** 3 Heavy traffic areas showing signs of age. \$5,000 2.4.1 Doors (i.e., signs of deterioration, rusting metal, glass cracks, peeling paint, damaged seals, sealed unit failure).

	Building Exterior	Rating	Comments/Concerns	Estim. Cost
2.4.2	Door accessories (i.e., latches, hardware, screens, locks, alarms, holders, closers, security devices).	3	Heavy traffic areas showing signs of age.	\$500
2.4.3	Exit door hardware (i.e., safety and/or code concerns).	3	Heavy traffic areas showing signs of age.	\$5,000
2.4.4	Windows (i.e., signs of deterioration, rusting metal, glass cracks, peeling paint, damaged seals, sealed unit failure).	3	Original windows showing signs of age. Leaks reported east/west sides of building.	\$50,000
2.4.5	Window accessories (i.e., latches, hardware, screens, locks, alarms, holders, closers, security devices).	3	Levers/hardware not all functional showing signs of age.	\$5,000
	Building envelope (i.e., signs of heavy condensation on doors or windows).	3	Original windows not performing satisfactorily. Poor performance due to age.	Costs identified in 2.4.4 and 2.4.5 above.
Other		3	Mechanical Systems Upgrades may require additional building space to accommodate requirements. Allowance is based on 3% of Gross Building Area.	\$247,000
	Overall Bldg Exterior Condition & Estim Costs			\$327,500

ection 3	Building Interior - Overall Conditions	Rating		Comments/Concerns	Estim. Cost
3.1	Interior Structure		Bldg.	Description (Constition	\$
3.1.1	Interior walls and partitions (i.e., signs of cracks, spalling, paint peeling).	4	<u>Section</u>	Description/Condition Generally painted block or plaster/gypsum board above lockers, good condition.	
3.1.2	Floors (i.e., signs of cracks, heaving, settlement).	4		Floor structure appears solid.	
Other					
3.2	Materials and Finishes		Bldg.		foor of
3.2.1	Floor materials and finishes.	3	Section	Description/Condition Generally vct in classrooms generally good condition. Corridors patching loose tiles evident. Corridors identified for replacement. Music room, office area & resource center carpeting good condition. The floor in boy's lockers, grout appears soiled/blotch tile.	\$225,00
3.2.2	Wall materials and finishes.	4		Generally painted block on plasterboard & in good condition.	
3.2.3	Ceiling materials and finishes.	3		Ceiling tile age particularly evident in corridor areas where chipped & soiled. Different tiles present (replacements) Classrooms areas also show age. With installation of ventilation system ceilings should be replaced.	\$150,0
3.2	Materials and Finishes (cont'd)		Bldg. Section		

Section 3	Building Interior - Overall Conditions	Rating	Comments/Concerns	Estim. Cost
3.2.4	Interior doors and hardware.	3	Doors/hardware showing signs of age. Maintenance supervision identified hardware as high maintaince item.	\$5,000
3.2.5	Millwork	4	Very little in the way of built-ins in typical classroom. Resource room & music room recently new.	
3.2.6	Fixed/wall mounted equipment (i.e., writing boards, tackboards, display boards, signs).	4	No obvious deficiencies. Lockers appear in good condition.	
3.2.7	Any other fixed/mounted specialty items (i.e., CTS equipment, gymnasium equipment).	4	Generally seems ok.	
3.2.8	Washroom materials and finishes.	3	1"x1" tile floor - shows age particularly in boys. Metal toilet partitions & walls ok.	\$5,000
Other	Lockers.			
3.3	Health and Safety Concerns Intent is to identify		Bldg.	\$0
	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.	F.I.	Section Description/Condition No up to date inspection report provided. Educational Facilities Master Plan 2007 Edmonton Catholic Schools gives Archbishop Macdonald a totally adequate rating for Building Code issues. Although compliance with 1997 code is not a requirement now, modifications of a substantial nature may lead to a requirement for compliance. Costs for Compliance have not been identified.	ψ0

Section 3	Building Interior - Overall Conditions	Rating	Comments/Concerns	Estim. Cost
	Building construction type - combustible or non- combustible, sprinklered or non-sprinklered.	4	Non combustible non Sprinklered.	
	Fire separations (i.e., between buildings, wings, zones if non-sprinklered).	4	No obvious fire separations other than stair enclosures. Wood doors Georgian wire glass. Corridor to boiler room and portables equipped with doors.	
	Fire resistance rating of materials (i.e., corridor walls and doors).	4	Not possible to determine ratings. No obvious deficiencies.	
3.3.4	Exiting distances and access to exits.	4	No obvious deficiencies.	
3.3.5	Barrier-free access.	4	Generally good H.C. lift installed 2 years ago. Stage not accessible.	
	Availability of hazardous materials audit (i.e., evidence of safety concerns with respect to asbestos, PCB's, chemicals).	4	No audit provided by jurisdiction. No obvious concerns. No audit identified at Edmonton Catholic Schools Service Centre Library visit.	
3.3.7	Other health and safety concerns (i.e., evidence of excessive noise conditions, air quality problems)	3	Air quality problem cited by staff related to particles being disturbed by air system from basement problem (sump pump). Covered in Mech. Section 4.5.11	
Other				1
	Overall Bldg Interior Condition & Estim Costs			\$225,000

Section 4 Mechanical Systems		Rating		Comments/Concerns				
4.1	Mechanical Site Services				\$150,000			
	Site drainage systems (i.e., surface and underground systems, catch basins).	1		Surface drainage only - no evidence of catch basins. Ground water is reported to be entering underground supply duct system.	\$150,000			
4.1.2	Exterior plumbing systems (i.e., irrigation systems, hose bibs).	4		Adequate outside hose bibbs distributed around perimeter of school.				
4.1.3	Outside storage tanks.	N/A						
Other		N/A						
4.2	Fire Suppression Systems		Bldg.		\$0			
4.2.1	Fire hydrants and siamese connections.	4	<u>Section</u>	Description/Condition No siamese connection noted. Adequate fire hydrants to east of the building at northeast and southeast corners.				
	Fire suppression systems (i.e., pumps, sprinklers, piping, reservoirs, hoses, stand pipes, CO2 systems).	4		No sprinkler systems; standpipe distribution throughout.				
4.2.3	Hand extinguishers, blankets and showers (i.e., in CTS areas).	4		Adequate hand extinguishers are distributed throughout.				
4.2.4	Other special situations (e.g., flammable storage areas, science labs, CTS areas).	N/A						
Other								

School Facility Evaluation Project

Section 4	Mechanical Systems	Rating		Comments/Concerns	Estim. Cost
4.3	Water Supply and Plumbing Systems		Bldg.		\$52,500
4.3.1	Domestic water supply (i.e., pressure, volume, quality - note whether municipal or well supply).	4	<u>Section</u>	Description/Condition 4" domestic water supply extended to Municipal supply.	
4.3.2	Water treatment system(s).	N/A			
4.3.3	Pumps and valves (including backflow prevention valves).	4		Double check backflow preventer on standpipe and on domestic supply valved in good condition.	
4.3.4	Piping and fittings.	4		No leaks reported; No sign of deterioration.	
4.3.5	Plumbing fixtures (i.e., toilets, urinals, sinks)	3		Worn out; need to replace on a need basis; stall type urinals should be replaced.	\$50,000
4.3.6	Domestic hot water system (i.e., heater, storage tanks, failure alarms, pressure, volume, recirculation).	4		Recently replaced 2 @ State domestic hot water gas fired Model SBT80 725 NEGDF 795,000 btuh input; 80 USG storage complete with auxiliary storage tanks/ recirculation pumps	
4.3.7	Sanitary and storm sewers, including sumps and pits (note whether sewage system is municipal or septic).	4		Sewer systems are working adequately.	
Other		1		No master gas shut-off valve in Chem Lab.	\$2,500

Section 4	Mechanical Systems	Rating		Comments/Concerns	Estim. Cost
4.4	Heating Systems		Bldg.		\$50,000
4.4.1	Heating capacity and reliability (including backup capacity).	4	<u>Section</u>	Description/Condition Duplex hot water boilers - Clever Brooks Model CB 760 - 150 @ 6,275,000 btuh (input). Boilers have been recently retubed (1998;1996)	
4.4.2	Heating controls (including use of current energy management technology.	4		Use of Andover control system; individual room temperature controls.	
4.4.3	Fresh air for combustion and condition of the combustion chimney.	4		Adequate combustion air.	
4.4.4	Treatment of water used in heating systems.	4		Good treatment program in place.	
	Low water cutoff/pressure relief valves and failure alarms (i.e., hot water heating).	4		Adequate boiler controls.	
4.4.6	Heating air filtration systems and filters.	4		Induction system used for heating system distribution; filters protecting coils are clean.	
4.4.7	Heating humidification systems and components.	3		No humidification system is in place.	\$25,000

Section 4	Mechanical Systems	Rating		Comments/Concerns	Estim. Cost
4.4	Heating Systems (cont'd)		Bldg.		
4.4.8	Heating distribution systems (i.e., piping, ductwork) and associated components (i.e., diffusers, radiators).	4	<u>Section</u>	Description/Condition No leaks or deficiencies noted or replaced.	
4.4.9	Heating piping, valve and/or duct insulation.	4		Piping insulation in good condition.	
4.4.10	Heat exchangers.	N/A			
4.4.11	Heating mixing boxes, dampers and linkages.	N/A			
4.4.12	Heating distribution/circulation in larger spaces (i.e., user comfort, temperature of outside wall surfaces).	4		Adequate comfort conditions.	
4.4.13	Zone/unit heaters and controls.	3		Entrance heaters are worn.	\$25,000
Other					

Section 4	Mechanical Systems	Rating	Comments/Concerns			
4.5	Ventilation Systems		Bldg.		\$683,000	
151	Air handling units capacity and condition.	3	Section	Description/Condition Single axial supply fan; single axial return fan; built-up system complete with FA/RA/EA	\$150,000	
4.0.1		5		motorized dampers; cooling coil	\$130,000	
4.5.2	Outside air for the occupant load (if possible, reference CFM/occupant).	2		No heating coil in air system; probably unable to deliver adequate O/A to occupied spaces - considering induction system, should be almost full outside air	\$35,000	
4.5.3	Air distribution system (if possible, reference number of air changes/hour).	3		High pressure U/G duct distribution to induction units in room - difficult to balance - ducts fill with ground water	\$383,000	
4.5.4	Exhaust systems capacity and condition.	3		Exhaust systems appear marginally adequate.	\$30,000	
4.5.5	Separation of out flow from air intakes.	4		Adequate separation of exhaust air from intake plenum.		
4.5.6	Special/dedicated ventilation and/or exhaust systems (i.e., kitchen, labs, CTS areas).	4		Adequate lab/fume hood exhaust; kitchen exhaust.		
Other						
4.5	Ventilation Systems (cont'd)		Bldg. Section	Description/Condition		
	Note: Only complete the following items if there are separate ventilation and heating systems.					
	opurate ventuation and neuting systems.					

	Mechanical Systems	Rating	Comments/Concerns	Estim. Cost
4.5.7	Ventilation controls (including use of current energy management technology).	3	Pneumatic controls - Quincey model QTH 15-80, 3 h.p. motor (Simplex) complete with refrigerated air dryer; Andover building control system to start/stop system. Upgrade controls to direct digital, consistent with ventilation system upgrade.	\$60,000
4.5.8	Air filtration systems and filters.	4	Filters clean; roll type filter on air system.	
4.5.9	Humidification system and components.	3	No humidification system.	Ref. Item 4.4.7
4.5.10	Heat exchangers.	N/A		
	Ventilation distribution system and components (i.e., ductwork, diffusers, mixing boxes, dampers, linkages).	2	Duct system needs cleaning due to accumulation of ground water and spread of dissolved salts. These are probably fouling the induction unit nozzles.	Ref. Item 4.5.3
Other		2	Duct system requires cleaning.	\$25,000

Section 4	Mechanical Systems	Rating	Comments/Concerns					
4.6	Cooling Systems		Bldg. Section	Description/Condition	\$0			
4.6.1	Cooling system capacity and condition (i.e., chillers, cooling towers, condensers).	4		Carrier split system - Model 5H120-149; air cooled condenser on roof.				
4.6.2	Cooling distribution system and components (i.e., ductwork, diffusers, mixing boxes, dampers, linkages)	4		Cooling coil in air handling unit in good condition.				
4.6.3	Cooling system controls (including use of current energy management technology).	4		Managed by Andover control system.				
4.6.4	Special/dedicated cooling systems (i.e., labs, CTS areas).	4		Separate air system serves student lounge and weight room.				
Other								
4.7	Building Control Systems		Bldg.					
4.7.1	Building wide/system wide control systems and/or energy management systems.	4	Section	Description/Condition Andover DDC Management System.	\$0			
	Overall Mech Systems Condition & Estim. Costs				\$935,500			

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School Facility Evaluation Project

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Section 5	Electrical Systems	Rating Comments/Concerns		Comments/Concerns	Estim. Cost
5.1	Site Services				\$0
5.1.1	Primary service capacity and reliability (i.e., access, location, components, installation, bus sizes - note whether overhead or underground).	4	1966	-Main distribution (1968) 2000A, 3 phase, 208/120 VAC -Dual full size Westinghouse 1200A CDP's with breaker spaces for future - Vault in building (north centre) -Meter peak demand 213 KVA (assessed capacity 432 KVA @ 1200A current transformers)	
5.1.2	Site and building exterior lighting (i.e., safety concerns).	4	1966	-HPS wall units, canopy and door incandescent luminaires	
5.1.3	Vehicle plug-ins (i.e., number, capacity, condition).	4	All	-Electrified plugs for parking area, separate panel; relay cabinet for ECS central control	
Othe	r	4	1966	-Telephone service overhead to building and then to main backboard outside of mechanical room	
5.2	Life Safety Systems		Bldg. Section	Description/Condition	\$0
5.2.1	Fire and smoke alarm systems (i.e., safety concerns, up to-date technology, regularly tested).	4	1966	-Simplex 4005 system, non addressable -10 zones in use, space for some additional device zones -Annunciator and graphic mimic at main entry -Generally devices exist where required in storage rooms, IA areas, etc. -Recently verified	
5.2.2	Emergency lighting systems (i.e., safety concerns, condition).	4	1966	-Dual head battery packs in key corridors, gymnasium, computer rooms and in mechanical rooms -Tested every 3 months	
5.2.3	Exit lighting and signage (i.e., safety concerns, condition).	4	1966	-Exit luminaires generally where required Old style luminaires in part of the building -Most exits not connected to battery back-up or emergency power (exits at portables battery supplied) -Exits are incandescent	
Othe	n				

Comments/Concerns Section 5 Electrical Systems Rating Estim. Cost 5.3 Power Supply and Distribution Bldg. \$271,000 Section **Description/Condition** 3 \$8,000 5.3.1 Power service surge protection. -None -No isolation between equipment/mechanical and technology (user) loads. 5.3.2 Panels and wireways capacity and condition. 3 1966 -Components still available - not obsolete \$18,000 -Some space in most panels, but several panels are full (inadequate) N/A -None 5.3.3 Emergency generator capacity and condition and/or UPS (if applicable). 5.3.4 General wiring devices and methods. 3 -Recently renovate rooms utilize new panels, pak poles and wireways \$245,000 1966 -Typically two receptacles per classroom, one at front, one at side wall (insufficient) -Some surface conduit and wiring -Lab areas require additional receptacles -Extension cords in use across floor to equipment -upgrade the new receptacles and new branch circuitry throughout. 5.3.5 Motor controls. 4 1966 -Separate feeders from main panel to refrigeration unit and to main MCC -MCC is Westinghouse Class 11-350 (400A feeder) Other

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School Facility Evaluation Project

Section 5	Electrical Systems	Rating		Estim. Cost	
5.4	Lighting Systems		Bldg. Section	Description/Condition	\$300,000
5.4.1	Interior lighting systems and components (i.e., illumination levels, conditions, controls).	4	1966	 -Newly renovated resource centre, and computer room utilize newer type recessed and suspended luminaires (including deep cell parabolics) -All other areas surface fluorescent with wrap around lensing, T12 lamps, standard ballasts -Low voltage switching in classrooms, corridors and large labs/resource rooms -Illumination Levels: Classrooms - 700 - 1000 lux Corridors - 500 - 700 lux Laboratories - 600 - 700 lux Computer areas - 450 - 550 lux Offices - 650 - 700 lux Gymnasium - 300 - 400 lux (underlit) Library - approximately 500 lux -Discoloured and broken lenses exist in several areas of the school 	
5.4.2	Replacement of ballasts (i.e., health and safety concerns).	F1	1966	-Much of the fluorescent luminaires appear to be original (1966) and some ballasts would remain containing PCB	
5.4.3	Implementation of energy efficiency measures and recommendations.	3	All	-All T12 lamps and standard ballasts; upgrade to T8 and electronic ballasts -Upgrade exits to full LED type -Upgrade gymnasium to HID lighting In conjunction with ventilation upgrade luminaires are replaced (new) in lieu of retrofitted	\$300,000
Other					

Section 5 Electrical Systems Rating Comments/Concerns Estim. Cost 5.5 Network and Communication Systems Bldg. \$3,000 Section **Description/Condition** 4 All -Recently upgraded telephone system (main office area) 5.5.1 Telephone system and components (i.e., capacity, reliability, condition). -Incoming multiline cable 5.5.2 Other communication systems (i.e., public address, 4 All -Classroom call and intercom provided via phone handsets in each classroom and intercom, CCTV, satellite or cable TV). office -PA system Dukane; surface speakers in classrooms and corridors with exposed cable -Video messaging system in corridors -Mix of recessed and exposed conduit/boxes/cabling for above systems 5.5.3 Network cabling (if available, should be category 5 or 4 All -Category 5 system (recently upgraded) better). -One dual outlet assembly in each classroom; also in teacher's office -Multi outlet assemblies in computer room, and resource centre 4 5.5.4 Network cabling installation (i.e., in conduit, secured to All -Exposed conduit and surface plastic mold; also wiring via pak pole type assembly walls or tables). 5.5.5 Wiring and telecommunication closets (i.e., size, 4 All -Reasonable infrastructure and wiring links between computer rooms. security, ventilation/cooling, capacity for growth). 5.5.6 Provision for dedicated circuits for network equipment 3 -Dedicated circuits only in recently renovated computer room, library areas \$3,000 (i.e., hubs, switches, computers). Other

Section 5	Electrical Systems	Rating		Comments/Concerns	Estim. Cost
5.6	Miscellaneous Systems		Bldg.		\$0
			Section		ψυ
5.6.1	Site and building surveillance system (if applicable).	4	All	CCTV monitoring of selected corridors and entries recently added.	
5.6.2	Intrusion alarms (if applicable).	4	All	-Custom security system common to all ECS Schools -11 zones, some spare (all intrusion detectors) -LED annunciate and graphic mimic at main entry	
5.6.3	Master clock system (if applicable).	4		-Custom digital clock system provided by ESC electronics group	
Other					
	Elevators/Disabled Lifts (If applicable) Elevator/lift size, access and operating features (i.e.,	4		4500 lb. Capacity by Darp Manufacturing	\$0
5.7.1	sensing devices, buttons, phones, detectors).	4		1500 lb. Capacity by Ram Manufacturing Installed approximately 2 years ago.	
5.7.2	Condition of elevators/lifts.	4			
5.7.3	Lighting and ventilation of elevators/lifts.				
Other					
	Overall Elect. Systems Condition & Estim Costs				\$574,000

tion 6	Portable Buildings	Rating	Comments/Concerns	Estim. Cost
	Note: Separate sheets can be completed, if necessary, for portable buildings of different ages and/or conditions.			
	Foundation and structure (i.e., signs of bending, cracking, settlement, rust, voids, stains).	4	No problem evident.	
	Roof materials and components (i.e., signs of deterioration, leaks, ice build-up).		No reports provided. No problem evident.	
6.1.3	Exterior wall finishes (i.e., signs of deterioration, cracks, water stains).	4	Generally good.	
6.1.4	Doors and windows (i.e., signs of deterioration, rusting hardware, glass cracks, peeling paint, damaged seals).	3	Staff reported problems with leaking windows one classroom.	\$2,0
6.1.5	Interior finishes (i.e., floors, walls, ceiling).	4	Generally good.	
6.1.6	Millwork (i.e., counters, shelving, vanities, cabinets).	4	Generally good.	
6.1.7	Fixed/wall mounted equipment (i.e., writing boards, tackboards, display boards, signs)	4	Generally good.	
6.1.8	Heating system.	3	Palm Air furnaces - 94,500 btuh (input) evidence of heat exchanger deterioration	\$20,0
6.1.9	Ventilation system.	3	Palm Air furnaces - fitted with O/A supply	
6.1.10	Electrical, communication and data network systems.	4	-Newer 2 lamp surface luminaires - line voltage block (row) switched -Typically 2 receptacles at front, two at rear -Systems same as Sections 5.6, 5.7	
	Health and safety concerns (i.e., fire and smoke alarms, fire protection systems, exiting, fire resistance rating of materials).	4	None evident other than barrier free exiting. (see 6.1.12 below)	
6.1.12	Barrier-free access.	3	Access by ramp. Stairs at classroom exits.	
	Overall Portable Bldgs Condition & Estim Costs			\$22,0

	Succes Adamuseu		This Fa	acility	Ec	uiv. Nev	v Facility	Surplus/	
Section 7	Space Adequacy	No.	Size	Total Area	No.	Size	Total Area	Deficiency	Comments/Concerns
7.1	Classrooms	22		1650.5	22	80	1760	-109.5	
7.2	Science Rooms/Labs	6		516.1	5	120	600	-83.9	
7.3	Ancillary Areas (i.e., Art, Computer Labs, Drama, Music,)	5		523.5	2 4	130 90	620	-96.5	
7.4	Gymnasium (incl. gym storage)	3		759.8	1	1150	1150	-390.2	
7.5	Library/Resource Areas	1		274.1	1	455	455	-180.9	
7.6	Administration/Staff, Physical Education, Storage Areas	22		1322.3			914	408.3	
7.7	CTS Areas								
	7.7.1 Business Education				3	115	345	-345	
	7.7.2 Home Economics								
	7.7.3 Industrial Arts								
	7.7.4 Other CTS Programs								
7.8	Other Non-Instructional Areas (i.e., circulation, wall area, crush space, wc area)	13		2593.1			2145	448.1	Data sheets provided do not contain information about circulation, wall area & crush space for this school.(assumed 900 cap.)
	Overall Space Adequacy Assessment			7639.4			7979	-349.6	

Evaluation Component/ Sub-Component	Additional Notes and Comments
Ancillary areas	Staff indicated substantial deficiency in size of cafeteria (cap. 100) for a total capacity of 880. Drawings for expansion completed in 1997 to double of cafeteria size.
Resource Center	Completed 2 years ago. Staff indicate use exceeds capacity.
Ancillary areas	Poor ventilation cited by staff in staff washroom area. Poor ventilation in copying room in administration area.
Electrical	Light fixtures have been an item identified as requiring replacement.
Building Code	Edmonton Catholic Schools provided a document entitled "Educational Facilities Master Plan 2007" dated March 1998 to the study team. This documented a physical evaluation of the schools similar to this study. The Educational Facilities Master Plan gives Archbishop MacDonald a 4 or adequate rating for with reference to Building Code issues. No specifics are given for the reasons for this rating. The study team for the 1999 evaluation did not evaluate the school in terms of 1997 Alberta Building Code, rather made some generalized comments about safety issues within the school. It is possible that the scope of work suggested by this evaluation or other modernizations contemplated by the School Jurisdiction may be considered by a plans examiner with the responsible authority to be a substantial alteration to the building and therefore 1997 Alberta Building Code Compliance may be deemed a requirement. The scope of work
Building Code Cont'd	Alberta Building Code Compliance has not been identified. Further Investigation may be required.

Evaluation Component/ Sub-Component	Additional Notes and Comments
	View of Lane/West Entrance (AM1) Slab Settlement East Entrance (AM2)
(AM1)	South Entrance of school empties on to a congested area which is a public laneway and parking area. Creates congestion at start and end of school day.
(AM2)	At both Entrances on the East side of the school settlement has occurred. The North East has been mud-jacked but the South East may require the same.

Evaluation Component/ Sub-Component	Additional Notes and Comments
	Pre-finished metal panels are potential source of moisture infiltration. Some replacement has occurred but the remaining should be replaced within 5 years.
(AM3)	
(AM4)	Pre-finished metal panels and window assembly are a source of moisture infiltration. Some replacement has occurred but the remaining should be replaced within 5 years.

Evaluation Component/ Sub-Component	Additional Notes and Comments
	Poor Condition Stair Treads (AM5) Poor Condition VCT (AM6)
(AM5)	Flooring materials throughout school in high traffic areas require replacement.
(AM6)	Flooring materials throughout school in high traffic areas require replacement.

Evaluation Component/ Sub-Component	Additional Notes and Comments
	Poor Condition Ceiling Tile (AM7) Poor Condition West Entrance Doors (AM8)
(AM7)	Original ceiling tile throughout school shows signs of damage, water stains, soiling and is in need of replacement.
(AM8)	Main Entrance Doors are in poor condition.

Evaluation Component/ Sub-Component	Additional Notes and Comments
List of Reports/ Supplementary Information	Educational Facilities Master Plan 2007 Edmonton Catholic Schools March 1998 Inventory of Core School Buildings – Edmonton Catholic School District Summary From Alberta Education School Buildings Service Areas in m2 Roofing Projects Revised July 22, 1999 1997 B.Q.R.P. 1998 B.Q.R.P. 1995 B.Q.R.P. Inventoriation and Arit Conditioning Systems Consultants for School Facilities Edmonton Catholic Schools – Gumostion Catholic Schools November 05, 1999 Edmonton Catholic Schools
	Archbishop MacDonald 88/01/06