	School Name:	Archbishop O'Leary				School Code:	404
	Location:	8760 - 132 avenue Edmonton, Alberta T5E 0X8				Facility Code:	2055
	Region:	Central				Superintendent:	Dr. Dale W. Ripley
	Jurisdiction:	Edmonton RCSSD No. 40				Contact Person:	Mr. Garnet McKee
						Telephone:	(780) 453-4500 (Garnet)
	Grades:	X-XII				School Capacity:	Total 1610

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	1959	2	6164.7	Concrete/Masonry/B.U.R./Stucco/Ceramic Tile	Unit ventilators with perimeter steam heat; exhaust ventilation; all air heating & ventilation in gymnasium	
Additions/ Expansions	1963 1965 1968 1994	2 2 2 2	1314.8 2911.0 3630.4 466.6	Masonry/B.U.R. Masonry/B.U.R. Masonry/B.U.R. Masonry/B.U.R.	1963: Unit ventilators with perimeter steam heat; exhaust ventilation. 1966: Perimeter hot water heat and separate ventilation. 1994: Perimeter hot water heat with rooftop ventilation unit.	

						Evaluator's Name:	George Brandt
						& Company:	Henderson Inglis Partridge

Upgrading/ Modernization (identify whether minor or major)	1992 1995 1994 1997 1998					-Minor Modernization install comp. network system, upgrade Stage curtains & elec. for lighting, subdivide teaching area & provide computer, Office. -Minor Modernization upgrade plumbing facilities in Science Rm. -Major Modernization $2,000,000 -Minor Modernization upgrade HVAC system in I.A. Lab. -Minor Modernization new Time-Keeper cabinet for Gym, install hoist Beam in I.A. remove corr. doors & modify exist.stairs. -Minor Modernization renovate Science Rm., C.R., Prep. Rm. & resource area. upgrade Music Rm. finishes & Student Services Office & Reception. enclose Wood Fab. area from I.A. & C.T.S. Lab.
Portable Struct. (identify whether attached/perman. or free-standing/ relocatable)						
List of Reports/ Supplementary Information	See Section 8 for complete list.					

	Evaluation Components	Summary Assessment	Estim. Cost
1	**Site Conditions**	A formalized drop-off and an expanded parking lot with an additional access roadway will improve overa	$75,000
2	**Building Exterior**	Replacement of windows throughout, replacement of sunshades at south façade, new stucco panels.	$1,057,000
3	**Building Interior**	Installation of new suspended acoustic tile ceilings in the 1959 section, millwork replacement, tile & grou	$165,000
4	**Mechanical Systems**	Replace classroom unit ventilators with perimeter hot water heating.; install new ventilation systems.	$1,833,000
5	**Electrical Systems**	Building demand load is likely approaching service capacity and further investigation is required. Older sections of school require more receptacles and panelboards. Luminaires should be upgraded to energy efficient type.	$842,000
6	**Portable Buildings**	Millwork and exterior siding replacement.	$54,000
7	**Space Adequacy:**		
	7.1 Classrooms	Deficient 277.1 S.M.	
	7.2 Science Rooms/Labs	Deficient 104.1 S.M.	
	7.3 Ancillary Areas	Deficient 166.1 S.M.	
	7.4 Gymnasium	Deficient 234.7 S.M.	
	7.5 Library/Resource Areas	Deficient 102.2 S.M.	
	7.6 Administration/Staff Areas	Deficient 306.4 S.M.	
	7.7 CTS Areas	Deficient 914.5 S.M.	
	7.8 Other Non-Instructional Areas (incl. gross-up)	Surplus 2348.6 S.M. Shortage of storage space for administration files and records. Cafeteria space crowded despite recent addition.	
	Overall School Conditions & Estim. Costs	Despite previous modernizations, there are many upgrades still required to raise standards to current levels.	$4,026,000

Section 1	Site Conditions	Rating	Comments/Concerns	Estim. Cost
1.1	**General Site Conditions**			$0
1.1.1	Overall site size.	3		
1.1.2	Outdoor athletic areas.	4	No problems noted.	
1.1.3	Outdoor playground areas, including condition of equipment and base.	N/A		
1.1.4	Site landscaping.	4	Mature landscaping around building.	
1.1.5	Site accessories (i.e., perimeter and other fencing, guard rails, bike stands, flag poles).	4		
1.1.6	Surface drainage conditions (i.e., drains away from building, signs of ponding).	4		
1.1.7	Evidence of sub-soil problems.	4		
1.1.8	Safety and security concerns due to site conditions.	4	Unobstructed views in all directions.	
Other				

Section 1	Site Conditions	Rating	Comments/Concerns	Estim. Cost
1.2	**Access/Drop-Off Areas/Roadways/Bus Lanes**			$30,000
1.2.1	Vehicular and pedestrian access points (i.e., size, number, visibility, safety).	3	The front entrance of the school is situated on a busy roadway with parking along its entire length. There is no formal drop-off or bus lane, so passenger loading & unloading is hazardous and causes congestion during peak hours. A simple ban on street parking or the creation of a formal drop-off lane would alleviate this problem. The rear of the school is also a major access point but becomes congested at various times throughout the day. This is most likely due to there being only one access roadway to the rear lot.	$25,000
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).	2	See 1.2.1	Cost in 1.2.1
1.2.4	Fire vehicle access.	3	See 1.2.1	Cost in 1.2.1
1.2.5	Signage.	2	Signage is difficult if not impossible to see for first time visitors or emergency vehicles.	$5,000
Other				

Section 1	Site Conditions	Rating	Comments/Concerns	Estim. Cost
1.3	**Parking Lots and Sidewalks**			$45,000
1.3.1	Number of parking spaces for staff, students and visitors (including stalls for disabled persons).	3	Appears to be insufficient for size of school and number of students.	$20,000
1.3.2	Layout and safety of parking lots.	3	Poor layout and single access roadway creates congestion during peak hours.	$25,000
1.3.3	Surfacing and drainage of parking lots (note whether asphalt or gravel).	4	Asphalt surface - positive slope to catch basins noted.	
1.3.4	Layout and safety of sidewalks.	4	No problems noted.	
1.3.5	Surfacing and drainage of sidewalks (note type of material).	4	Concrete - No problems noted.	
1.3.6	Curb cuts and ramps for barrier free access.	3	None provided.	
Other				
	Overall Site Conditions & Estimated Costs	3		$75,000

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	All	No problems noted.	
2.1.2	Wall structure and columns (i.e., signs of bending, cracking, settlement, voids, rust, stains).	4	All	No problems noted.	
2.1.3	Roof structure (i.e., signs of bending, cracking, voids, rust, stains).	4	All	No problems noted.	
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**	$32,000
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	1959 1963 1965 1968 1994	B.U.R. B.U.R. B.U.R. B.U.R. B.U.R. Last inspection report done in 1998 with no problems identified.	
2.2.2	Roof accessories (i.e., ladders, stairs, hatches, masts, exhaust hoods, chimneys, gutters, downspouts, splashpads).	4			
2.2.3	Control of ice and snow falling from roof.	4		No problems noted.	
2.2.4	Skylights (i.e., signs of distress, leaks, ice build-up, condensation, deteriorated materials/seals).	3		Round plastic dome skylights appear to be leaking at various locations. A closer investigation is required to determine extent of failure and if units require replacement or refitting.	$32,000
Other					

Section 2	Building Exterior	Rating	Comments/Concerns		Estim. Cost
2.3	**Exterior Walls/Building Envelope**		**Bldg. Section**	**Description/Condition**	$90,000
2.3.1	Exterior wall finishes (i.e., signs of deterioration, cracks, brick spalling, effluorescence, water stains).	3	64/69	Panels which are located above and below windows are showing signs of age and deterioration. These are finished with ceramic tile and vertical metal siding and should be replaced with a low maintenance material such as stucco.	$60,000
2.3.2	Fascias, soffits, parapets (i.e., signs of looseness, stains, rust, peeling paint).	3	59	Sunshades at front of school are badly dented and aged. Complete replacement or total removal recommended.	$30,000
2.3.3	Building envelope (i.e., evidence of air infiltration/ exfiltration through the exterior wall or ice build up on wall, eaves, canopy).	4	All	No problems noted.	
2.3.4	Interface of roof drainage and ground drainage systems.	4	All	No problems noted.	
2.3.5	Inside faces of exterior walls (i.e., signs of cracks, water stains, dust spots).	4	All	No problems noted.	
Other					
2.4	**Exterior Doors and Windows**		**Bldg. Section**	**Description/Condition**	$935,000
2.4.1	Doors (i.e., signs of deterioration, rusting metal, glass cracks, peeling paint, damaged seals, sealed unit failure).	4	All	No problems noted.	

Section 2	Building Exterior	Rating	Comments/Concerns		Estim. Cost
2.4.2	Door accessories (i.e., latches, hardware, screens, locks, alarms, holders, closers, security devices).	4	All	No problems noted.	
2.4.3	Exit door hardware (i.e., safety and/or code concerns).	4	All	No problems noted.	
2.4.4	Windows (i.e., signs of deterioration, rusting metal, glass cracks, peeling paint, damaged seals, sealed unit failure).	3	All	Most windows are original and are nearing the end of their life expectancy. The majority of them are aluminum sliders which perform poorly from a thermal point of view and also present security problems. Although none have actually failed, a program of gradual replacement with energy efficient windows should be implemented to lower maintenance and operational costs.	$500,000
2.4.5	Window accessories (i.e., latches, hardware, screens, locks, alarms, holders, closers, security devices).	3	All	Windows throughout have hardware which is either broken or not operating smoothly. There are also screen missing from many windows.	Incl. in 2.4.4 cost
2.4.6	Building envelope (i.e., signs of heavy condensation on doors or windows).	4	All	No problems noted.	
Other		3		Mechanical Systems Upgrades may require additional building space to accommodate requirements. Allowance is based on 3% of Gross Building Area.	$435,000
	Overall Bldg Exterior Condition & Estim Costs	3			$1,057,000

Section 3	Building Interior - Overall Conditions	Rating	Comments/Concerns		Estim. Cost
3.1	**Interior Structure**		**Bldg. Section**	**Description/Condition**	$0
3.1.1	Interior walls and partitions (i.e., signs of cracks, spalling, paint peeling).	5	All	No problems noted.	
3.1.2	Floors (i.e., signs of cracks, heaving, settlement).	4	All	No problems noted.	
Other					
3.2	**Materials and Finishes**		**Bldg. Section**	**Description/Condition**	$125,000
3.2.1	Floor materials and finishes.	4	All	Many upgrades and renovations have improved the overall appearance of the school.	
3.2.2	Wall materials and finishes.	4	All	Many upgrades and renovations have improved the overall appearance of the school.	
3.2.3	Ceiling materials and finishes.	3	1959	Heavy Stipple ceiling finishes applied directly to underside of structure create problems for upgrades to mechanical, electrical and communications systems. Ceilings appear dirty and worn and do not reflect light well. Installation of new suspended acoustic tile ceilings will improve overall light levels as well as acoustics.	$110,000
3.2	**Materials and Finishes (cont'd)**		**Bldg. Section**	**Description/Condition**	

Section 3	Building Interior - Overall Conditions	Rating	Comments/Concerns		Estim. Cost
3.2.4	Interior doors and hardware.	4	All	Solid core wood doors and hollow metal frames in most locations - in reasonable condition.	
3.2.5	Millwork	3	All	Some millwork in the 1959 section should be replaced gradually as it is are nearing the end of its life expectancy. . New millwork in the chemistry and science rooms have cracked countertops due to the use of particle board (or MDF).	$10,000
3.2.6	Fixed/wall mounted equipment (i.e., writing boards, tackboards, display boards, signs).	4	All	Most writing surfaces are new and of the whiteboard type.	
3.2.7	Any other fixed/mounted specialty items (i.e., CTS equipment, gymnasium equipment).	4	All	No problems noted.	
3.2.8	Washroom materials and finishes.	3	All	Some washrooms require cleaning or replacement of grout.	$5,000
Other					
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**	$40,000
		F.I.		No up to date inspection report provided. Educational Facilities Master Plan 2007 Edmonton Catholic Schools gives Archbishop O'Leary an acceptable rating of 3 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.	

Section 3	Building Interior - Overall Conditions	Rating	Comments/Concerns		Estim. Cost
3.3.1	Building construction type - combustible or non-combustible, sprinklered or non-sprinklered.	4	All	Non-combustible, sprinklered in new areas and basement.	
3.3.2	Fire separations (i.e., between buildings, wings, zones if non-sprinklered).	4	All	No problems noted.	
3.3.3	Fire resistance rating of materials (i.e., corridor walls and doors).	4	All	Concrete block walls and rated doors noted.	
3.3.4	Exiting distances and access to exits.	F.I.	All	Further investigation required to determine code compliance.	
3.3.5	Barrier-free access.	3	1984	H.C. elevator too small - one person capacity. No access to basement	$40,000
3.3.6	Availability of hazardous materials audit (i.e., evidence of safety concerns with respect to asbestos, PCB's, chemicals).	4	All	Program of asbestos removal completed in 1997.	
3.3.7	Other health and safety concerns (i.e., evidence of excessive noise conditions, air quality problems)	F.I.	All		
Other					
	Overall Bldg Interior Condition & Estim Costs	4			$165,000

Section 4	Mechanical Systems	Rating	Comments/Concerns		Estim. Cost
4.1	**Mechanical Site Services**				$0
4.1.1	Site drainage systems (i.e., surface and underground systems, catch basins).	4		Catch basins in parking lot (northeast corner) and asphalt paving to west and courtyard. Roof drains collected, except portables which splash to grade. Ground sloped away from building.	
4.1.2	Exterior plumbing systems (i.e., irrigation systems, hose bibs).	4		Good distribution of hose bibbs around perimeter of school.	
4.1.3	Outside storage tanks.	N/A			
Other					
4.2	**Fire Suppression Systems**		**Bldg. Section**	**Description/Condition**	$0
4.2.1	Fire hydrants and siamese connections.	4		Fire hydrant located near front of school (Northwest corner). Siamese connection in front of school to support sprinkler system.	
4.2.2	Fire suppression systems (i.e., pumps, sprinklers, piping, reservoirs, hoses, stand pipes, CO2 systems).	4		Sprinklers provided in office area with recent renovations; sprinklers provided in basement. Standpipe and hose distributed throughout the school.	
4.2.3	Hand extinguishers, blankets and showers (i.e., in CTS areas).	4		Adequate distribution of hand extinguishers in hose cabinets and standalone.	
4.2.4	Other special situations (e.g., flammable storage areas, science labs, CTS areas).				
Other					

Section 4	Mechanical Systems	Rating	Comments/Concerns		Estim. Cost
4.3	**Water Supply and Plumbing Systems**		**Bldg. Section**	**Description/Condition**	$90,000
4.3.1	Domestic water supply (i.e., pressure, volume, quality - note whether municipal or well supply).	4	1959	100 mm water service from municipal supply; 50 mm meter.	
4.3.2	Water treatment system(s).	N/A			
4.3.3	Pumps and valves (including backflow prevention valves).	4	1959	Double check backflow preventer on water supply to sprinkler and standpipe service. Valves generally in good condition.	
4.3.4	Piping and fittings.	3	1959 1966	Generally in good condition; some signs of deterioration; some leaks reported, but repaired immediately.	$10,000
4.3.5	Plumbing fixtures (i.e., toilets, urinals, sinks)	3	1959 1966	Generally in good condition; stall urinals are subject to breakage; several fixtures have been replaced.	$40,000
4.3.6	Domestic hot water system (i.e., heater, storage tanks, failure alarms, pressure, volume, recirculation).	3	1959	Very large storage tank with integral steam immersion heater; A.O. Smith Model HW460 SWH 8905 gas fired domestic hot water heater, 460,000 btuh (input) for summer periods when steam boilers are off; Armstrong circulating pump.	$40,000
4.3.7	Sanitary and storm sewers, including sumps and pits (note whether sewage system is municipal or septic).	4	All Wings	Sanitary and storm sewers extended to Municipal services. Sump pit below music room with a lift pump.	
Other					

Section 4	Mechanical Systems	Rating	Comments/Concerns		Estim. Cost
4.4	**Heating Systems**		**Bldg. Section**	**Description/Condition**	$933,000
4.4.1	Heating capacity and reliability (including backup capacity).	4	1959 1966	Two (2) low pressure Reliance steam boilers; boilers in good condition. Two (2) low pressure Peerless C.I. Sectional boilers, Model 210-17-S-W; each at 2,062,000 btuh (input)	
4.4.2	Heating controls (including use of current energy management technology.	3	All Wings	Building is overheating in several rooms and areas. Central plant equipment and several room temperatures are monitored by Andover BCMS.	$200,000
4.4.3	Fresh air for combustion and condition of the combustion chimney.	2	1966 1955	Combustion air is connected to same louvre for outside air supply to fan system intake - insufficient combustion air is flowing. Door to outside is open to provide cooling in boiler room. Combustion air for boilers is not extended to floor level; combustion air enters the boiler room from gravity louvres high up on sidewall.	$20,000
4.4.4	Treatment of water used in heating systems.	4	1955 1966	Chemical treatment system for boiler feedwater.	
4.4.5	Low water cutoff/pressure relief valves and failure alarms (i.e., hot water heating).	2	1955 1955 1966	Discharge from boiler relief valves are not piped to drain, nor to outside; free discharge into room. Relief valves, low water cutoffs and boiler safety controls are adequate.	$3,000
4.4.6	Heating air filtration systems and filters.	3	All Wings	Filters on fan coils in classrooms are clean; maintenance intensive.	Refer to item 4.4.8
4.4.7	Heating humidification systems and components.				
4.4	**Heating Systems (cont'd)**		**Bldg. Section**	**Description/Condition**	

Section 4	Mechanical Systems	Rating	Comments/Concerns		Estim. Cost
4.4.8	Heating distribution systems (i.e., piping, ductwork) and associated components (i.e., diffusers, radiators).	3	1959 1963	Steam/condensate piping to fan coil units in classrooms. Several spaces are overheating; poor controllability with areas where air supply systems are used. Fan coils are generally in good repair; some are noisy. Replace steam distribution and fan coils with hot water heating using radiant panels.	$650,000
4.4.9	Heating piping, valve and/or duct insulation.	3	1955 1966	Insulation in mechanical rooms is damaged in several areas; it appears that insulation has been removed in some locations for asbestos removal and not replaced. Insulation on condensate piping is omitted in several areas.	$60,000
4.4.10	Heat exchangers.	4	1966	Steam to hot water heat exchanger generates hot water for building heat.	
4.4.11	Heating mixing boxes, dampers and linkages.	3	1959 1963	Fan coils in classrooms use mixing damper at each unit for outside air/return air.	Refer to item 4.4.1
4.4.12	Heating distribution/circulation in larger spaces (i.e., user comfort, temperature of outside wall surfaces).	4	1968 1959 1994	Perimeter heating with hot air supply in both he small gym (1968) and the large gym 1959. Perimeter radiation extended along outside wall in cafeteria.	
4.4.13	Zone/unit heaters and controls.	3	All Wings	Entrance heaters and convectors in corridors are worn.	Refer to item 4.4.1
Other					

Section 4	Mechanical Systems	Rating	Comments/Concerns		Estim. Cost
4.5	**Ventilation Systems**		**Bldg. Section**	**Description/Condition**	$900,000
4.5.1	Air handling units capacity and condition.	2	1959	Gym System: Sturtevent 1648 MZ (multizone) complete with filters, O/A,R/A. E/A dampers; centrifugal return air fan; steam grid humidifier; steam heating coil.	$725,000
			1968	Gym System: O/A/R/A mixing section; not heating coils in unit; 2 zones; one with reheat coil; roll filter; no humidification.	
			1966	Classroom Ventilation: Built-up air system with axial supply fan and return fan; flat filters/ F/A; R/A; E/A dampers; steam grid humidifier, steam heating coil.	
			1968	Classroom Ventilation: Built-up air system; Chicago centrifugal return fan (7-1/2 h.p.); mixing dampers; roll filter; Chicago centrifugal supply fan (40 h.p.); no heating	
			1968	Music/Cosmotology: System in crawlspace (inaccessible) - warm air supply; substantial overheating in music room.coil; humidifier (water pa	
			1984	Staff Room: Rooftop Unit - Engineered Air DJ-40-0; 5385 cfm supply; 4745 cfm return; 250,000 btuh (input); 35 deg. F temperature rise.n) is decommissioned.	
			1984	Cafeteria and kitchen: Rooftop unit - Engineered Air FWA-61 HE-40-0 (complete with air conditioning) - 100% outside air; 2800 cfm; 338,000 btuh (input); 110 deg.F temperature rise.	
			1997	Automotives Shop - Indirect gas fired make-up air unit; Engineered Air.	
4.5.2	Outside air for the occupant load (if possible, reference CFM/occupant).	3	All Wings	Outside air to classrooms will be limited to that exhausted by central exhaust fans on roof (6 in total). Several air systems have no heating coils which limits the minimum volumes of outside air delivered by central system.	Refer to item 4.5.1
4.5.3	Air distribution system (if possible, reference number of air changes/hour).	3	1959 1966	Central exhaust fans on roof draws air from classrooms.	Refer to item 4.5.1
			1984	Overhead distribution in office renovations - good.	
			1968	Good distribution in library and associated rooms.	
4.5.4	Exhaust systems capacity and condition.	3	1959 1966	Limited exhaust volume and freshness in rooms. Several storage/utility rooms have no exhaust ventilation.	$75,000

Section 4	Mechanical Systems	Rating	Comments/Concerns		Estim. Cost
4.5.5	Separation of out flow from air intakes.	3	1959	Gym system - intake/exhaust is "back to back". All other systems have good separation.	$10,000
4.5.6	Special/dedicated ventilation and/or exhaust systems (i.e., kitchen, labs, CTS areas).	4	1984 1997	Kitchen exhaust system is adequate. Industrial Arts shop area - Murphy dust collector is located outside.	
Other					
4.5	**Ventilation Systems (contend)**		**Bldg. Section**	**Description/Condition**	
	Note: Only complete the following items if there are separate ventilation and heating systems.				

Section 4	Mechanical Systems	Rating	Comments/Concerns		Estim. Cost
4.5.7	Ventilation controls (including use of current energy management technology).	2	All Air Systems	Central plant air systems controls are integrated with Andover CMS system.	$50,000
4.5.8	Air filtration systems and filters.	4	All Systems	All systems are filtered.	
4.5.9	Humidification system and components.	3	1966 1968 1959 1968 1984 1968	Classroom system - steam grid humidifier installed - good Classroom system - water pan humidifier out of service. Gym air system - steam grid humidifier installed - good Gym system - no humidifier installed. Roof mounted units - no humidifier installed. Music room - no humidifier installed.	$40,000
4.5.10	Heat exchangers.	N/A			
4.5.11	Ventilation distribution system and components (i.e., ductwork, diffusers, mixing boxes, dampers, linkages).	3	All Systems	Damper linkages are old; worn; continual sources of maintenance.	Refer to item 4.5.1
Other					

Section 4	Mechanical Systems	Rating	Comments/Concerns		Estim. Cost
4.6	**Cooling Systems**		**Bldg. Section**	**Description/Condition**	$0
4.6.1	Cooling system capacity and condition (i.e., chillers, cooling towers, condensers).	N/A			
4.6.2	Cooling distribution system and components (i.e., ductwork, diffusers, mixing boxes, dampers, linkages)	N/A			
4.6.3	Cooling system controls (including use of current energy management technology).	N/A			
4.6.4	Special/dedicated cooling systems (i.e., labs, CTS areas).	N/A			
Other					
4.7	**Building Control Systems**		**Bldg. Section**	**Description/Condition**	$0
4.7.1	Building wide/system wide control systems and/or energy management systems.	4	All Sections	Central plant equipment and systems are monitored and controlled and several room temperatures are monitored from Andover BCMS system.	
		2	All Sections	System upgrades recommend should integrate direct digital control.	Refer to 4.4.2 & 4.5.7
	Overall Mech Systems Condition & Estim. Costs				$1,833,000

Section 5	Electrical Systems	Rating	Comments/Concerns		Estim. Cost
5.1	**Site Services**				$4,000
5.1.1	Primary service capacity and reliability (i.e., access, location, components, installation, bus sizes - note whether overhead or underground).	4 F.I.	1968 1963 1968	-Main distribution (1966), 1200A, 3 phase, 208/120 VAC, main ACB 1600 FPE 50H-2 -ACB and feeder CDP in one lineup (1966) to distribution -Full size CDP 1200A added to lineup (1968) and separate CDP added in 1994 -Some breaker spaces available for future in each of these CPPs. -Underground feeders from pad mount transformer near main entrance -meter peak demand 400 KVA (assessed capacity 432 KVA, 1200A, 576 KVA at 1600A)	
5.1.2	Site and building exterior lighting (i.e., safety concerns).	2	All	-HPS or LPS wall units, canopy and door incandescent luminaires -Inadequate illumination on west side of school (main public walkway) -Add luminaires	$4,000
5.1.3	Vehicle plug-ins (i.e., number, capacity, condition).	4	All	-Electrified plugs for entire staff of parking area	
Other		4	All	-Telephone service underground and via crawlspace to main backboard in general office (recent installation upgrade) -Old telephone backboard in main electrical room still partially in service -Removal of unused cabling and old style terminals should be done	
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	All	-Edwards 6500 system, non-addressable -Approximately 30 zones in use, space for 8 additional device zones -40 zone annunciator and newer coloured graphic at main entry -Generally devices exist where required in storage rooms, IA areas, etc. -Verified October 1999	
5.2.2	Emergency lighting systems (i.e., safety concerns, condition).	4	All	-Dual head battery packs in key corridors, gymnasium computer rooms and in mechanical rooms -Tested every 3 months -Properly located, adequate illumination levels expected.	
5.2.3	Exit lighting and signage (i.e., safety concerns, condition).	4	All	-Exit luminaires generally where required -Exits not connected to battery back-up or emergency power -Exits are incandescent or LED retrofit kits	
Other					

Section 5	Electrical Systems	Rating	Comments/Concerns		Estim. Cost
5.3	**Power Supply and Distribution**		**Bldg. Section**	**Description/Condition**	$309,000
5.3.1	Power service surge protection.	3	All	-None -No isolation between equipment/mechanical and technology (user) loads. -Add TUSS	$15,000
5.3.2	Panels and wireways capacity and condition.	3	1968 1994 1959 1965	-Panels in mechanical rooms, storage/housekeeping rooms -Components still available for 68 and 94 wings - not obsolete -Approximately one-third space in 68&94 panels '-Some of the panels have been upgraded to new panels -Remaining original panels are obsolete with limited space for additions	$36,000
5.3.3	Emergency generator capacity and condition and/or UPS (if applicable).	4	1968	-Small generator supplies exit and emergency lighting in 1968 wing only -Also supplies main fire alarm system. -Kohler Model K241EP	
5.3.4	General wiring devices and methods.	3	1994 1965 1959 1968	-Recently renovated rooms utilize new panels, pak poles, new circuiting and receptacles -The east portion of the 1959 wing recently renovated. '-Typically 3 duplexes per room configured on 2 or 3 walls -Some surface conduit and wiring -Original lab areas (not renovated) -Insufficient receptacles	$252,000
5.3.5	Motor controls.	2	1965 1968 1994	-Motor services and controls are generally splitter/disconnect/starter configurations -Some original motor starters in 1959 sections are obsolete and should be replaced.	$6,000
Other					

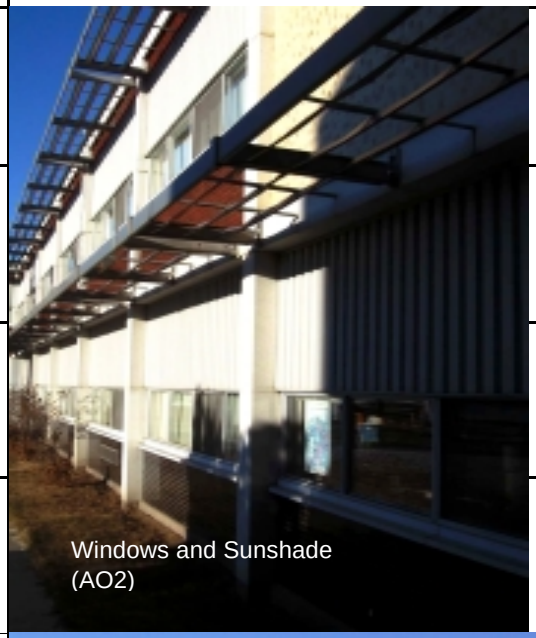
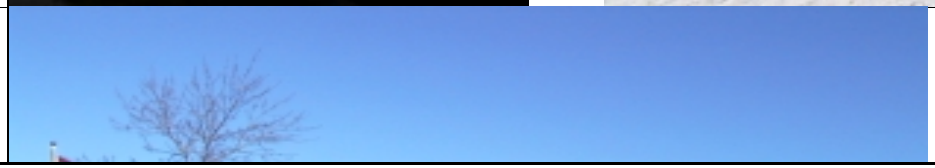
Section 5	Electrical Systems	Rating	Comments/Concerns		Estim. Cost
5.4	**Lighting Systems**		**Bldg. Section**	**Description/Condition**	$529,000
5.4.1	Interior lighting systems and components (i.e., illumination levels, conditions, controls).	4	1954 1965 1968 1994	-Newly renovated General Office, IA, computer and science rooms utilize new recessed and suspended luminaires -Gymnasium utilizes metal halide HID luminaires with some fluorescent -All other areas surface fluorescent with wrap around lensing, T12 lamps, standard ballasts -All line voltage switched except low voltage switching in 1994 and recent 1959 renovated east section -Illumination Levels: Classrooms - 700 - 1000 lux Corridors - 500 - 700 lux Laboratories (existing) - 700 - 1000 lux Computer areas - 450 - 550 lux Shop areas - 600 - 700 lux Offices - 500 - 650 lux Gymnasium - 500 - 700 lux Library - 500 - 600 lux	
5.4.2	Replacement of ballasts (i.e., health and safety concerns).	F.I.	F.I. 1959 1965	-Vintage of older style fluorescent wrap arounds not known; may be pre 1968 and original ballasts would contain PCB.	
5.4.3	Implementation of energy efficiency measures and recommendations.	3	All	-All T12 lamps and standard ballasts -Upgrade exits to full LED type. In Conjunction with ventilation upgrade and ceiling replacement in older sections of school replace luminaires in lieu of retrofit.	$529,000
Other					

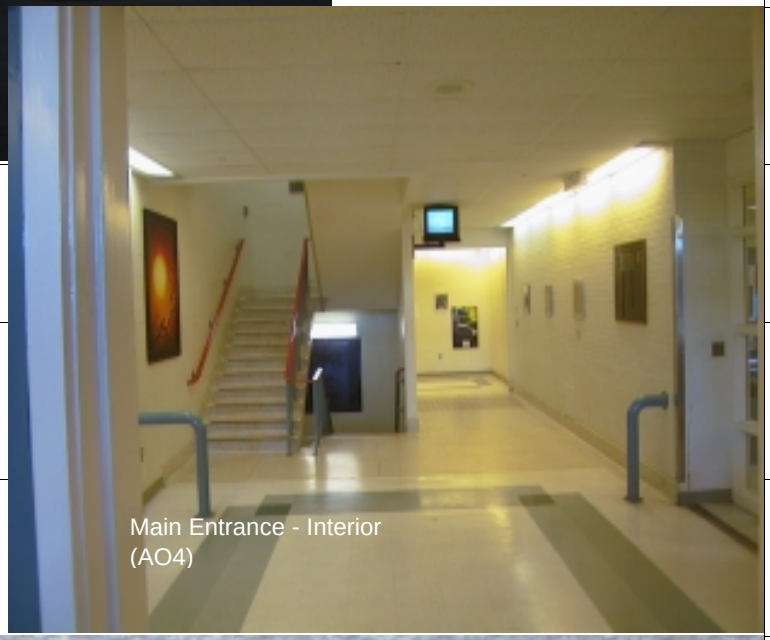
Section 5	Electrical Systems	Rating	Comments/Concerns		Estim. Cost
5.5	**Network and Communication Systems**		**Bldg. Section**	**Description/Condition**	$0
5.5.1	Telephone system and components (i.e., capacity, reliability, condition).	4	All	-Recently upgraded telephone system Nitsuko large cabinet racks type -Incoming multiline cable	
5.5.2	Other communication systems (i.e., public address, intercom, CCTV, satellite or cable TV).	4	All	-Classroom call provided via local telephone handsets in each classroom and in teacher's offices -PA system Dukane Petcom 2200; surface speakers in classrooms and corridors with exposed cable -RFTV distribution to all classrooms -Local VCR and TV's installed in most classrooms -Video messaging system installed in corridors -Mix of recessed and exposed conduit/boxes/cabling for	
5.5.3	Network cabling (if available, should be category 5 or better).	4	All	-Category 5 system (recently upgraded) -One dual or quad outlet assembly in each classroom; also in teacher's office -Multi outlet assemblies in computer room and library	
5.5.4	Network cabling installation (i.e., in conduit, secured to walls or tables).	4	All	-Exposed conduit and surface plastic mold in unrenovated portions of school; also wiring via crawlspace -Use of pak poles for computer rooms and library clusters	
5.5.5	Wiring and telecommunication closets (i.e., size, security, ventilation/cooling, capacity for growth).	4	All	-Local hubs in various locations interconnected -Piecemeal, non-structured without dedicated closets/hub rooms	
5.5.6	Provision for dedicated circuits for network equipment (i.e., hubs, switches, computers).	4	All	-Dedicated circuits in recently renovated areas and for servers and hubs.	
Other					

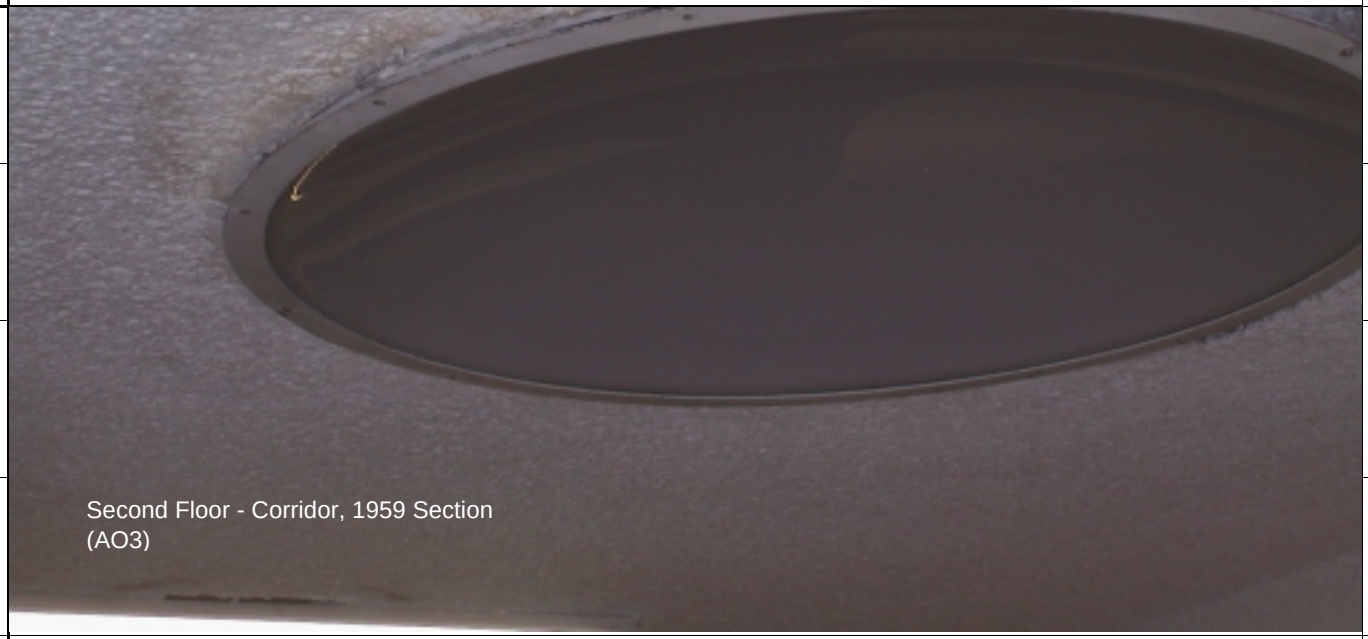
Section 5	Electrical Systems	Rating	Comments/Concerns		Estim. Cost
5.6	**Miscellaneous Systems**		**Bldg. Section**	**Description/Condition**	$0
5.6.1	Site and building surveillance system (if applicable).	4	All	-Recently added CCTV monitoring at entry/exit corridors and computer rooms.	
5.6.2	Intrusion alarms (if applicable).	4	All	-Custom security system common to all ECS Schools -17 zones, 3 spare (all intrusion detectors) -LED annunciator and graphic mimic at main entry	
5.6.3	Master clock system (if applicable).	4		-Custom digital clock system as provided by ECS electronics group for all new and recently renovated areas -Custom system interfaced to operate prior Simplex clocks in 1966 and 1968 sections -In west portion of 1959 wing and where original Simplex clocks have failed, local electrical clocks have been installed.	
Other					
5.7	**Elevators/Disabled Lifts (If applicable)**				$0
5.7.1	Elevator/lift size, access and operating features (i.e., sensing devices, buttons, phones, detectors).	2	1994	One person capacity, key operated	
5.7.2	Condition of elevators/lifts.	4	1994	Fairly new, minimal usage	
5.7.3	Lighting and ventilation of elevators/lifts.	4	1994	No issues	
Other					
	Overall Elect. Systems Condition & Estim Costs				$842,000

Section 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.			
6.1.1	Foundation and structure (i.e., signs of bending, cracking, settlement, rust, voids, stains).	4	Preserved wood foundations - difficult to assess internal structure due to lack of access.	
6.1.2	Roof materials and components (i.e., signs of deterioration, leaks, ice build-up).	FI	Further investigation required to determine type and condition of membrane.	
6.1.3	Exterior wall finishes (i.e., signs of deterioration, cracks, water stains).	3	Metal and wood siding of various orientations are a maintenance problem and should be replaced with a low maintenance material such as stucco.	$10,000
6.1.4	Doors and windows (i.e., signs of deterioration, rusting hardware, glass cracks, peeling paint, damaged seals).	4	Solid core wood doors in hollow metal frames and wood windows, both in reasonable condition.	
6.1.5	Interior finishes (i.e., floors, walls, ceiling).	4		
6.1.6	Millwork (i.e., counters, shelving, vanities, cabinets).	3	Original millwork nearing end of its' life expectancy. Replacement or refurbishing recomn	$8,000
6.1.7	Fixed/wall mounted equipment (i.e., writing boards, tackboards, display boards, signs)	4		
6.1.8	Heating system.	2	Inadequate outside air for ventilation; furnace flues showing deterioration.	$36,000
6.1.9	Ventilation system.			
6.1.10	Electrical, communication and data network systems.		-Systems services matching to remainder of school (see 5.6, 5.7) -Line voltage switched surface fluorescents; classrooms 700 - 1000 lux -2 receptacles at front; 2 at rear of classroom.	
6.1.11	Health and safety concerns (i.e., fire and smoke alarms, fire protection systems, exiting, fire resistance rating of materials).	4	None identified.	
6.1.12	Barrier-free access.	3	No physical barriers on first level. Access to second level via handicap elevator which is undersized.	
	Overall Portable Bldgs Condition & Estim Costs			$54,000

Section 7	Space Adequacy	This Facility			Equiv. New Facility			Surplus/ Deficiency	Comments/Concerns
		No.	Size	Total Area	No.	Size	Total Area		
7.1	Classrooms	36		2762.9	38	80	3040	-277.1	Equivalent New Facility chart dose not indicate a capacity of 1600 for a senior high school, therefore Equivalent New Facility numbers where arrived at by estimation.
7.2	Science Rooms/Labs	10		855.9	8	120	960	-104.1	
7.3	Ancillary Areas (i.e., Art, Computer Labs, Drama, Music,)	8		723.9	2 7	130 90	890	-166.1	
7.4	Gymnasium (incl. gym storage)	7		1540.3	1	1775	1775	-234.7	
7.5	Library/Resource Areas	1		617.8	1	720	720	-102.2	
7.6	Administration/Staff, Physical Education, Storage Areas	49		1117.6			1424	-306.4	
7.7	CTS Areas								
	7.7.1 Business Education				5	115	575	-575	
	7.7.2 Home Economics	1		104.8	1	160	160	-55.2	
	7.7.3 Industrial Arts	3		693.1	1 1 1	280 375 300	955	-261.9	
	7.7.4 Other CTS Programs	2		237.6	1 1	100 160	260	-22.4	
7.8	Other Non-Instructional Areas (i.e., circulation, wall area, crush space, wc area)	37		5833.6			3485	2348.6	Data sheets provided do not contain information about circulation, wall area & crush space for this school.
	Overall Space Adequacy Assessment			14487.5			14244	243.5	

Evaluation Component/ Sub-Component	Additional Notes and Comments	
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 Facilites Master Plan gives O'Leary a 3 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 Jurisdication 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 or costs for 1997	
Building Code Cont'd	Alberta Building Code Compliance has not been identified. Further Investigation may be required.	
General	Although this school has undergone many upgrades and modernizations, there are areas which have been totally ignored. Most of the exterior of the building is vintage and was suitable for buildings of that era. Increasing operational and maintenance costs have made it neccessary to develop cost saving measures, especially in the area of energy saving programs and products. Since windows are a major component in this building envelope (see AO2, AO5 below), and also the weakest in terms of thermal performance, it is logical to conclude that a program of window replacement would eventually pay for itself by lowering overall energy costs. Additionally, this would also extend the overall life expectancy of the building to carry it well into the next millenium.	
	 Windows and Sunshade (AO2)	 Windows (AO5)
Main Entrnace		

Evaluation Component/ Sub-Component	Additional Notes and Comments	
		
	Main Entrance - Exterior (AO1)	
		
	Main Entrance - Interior (AO4)	
		

Evaluation Component/ Sub-Component	Additional Notes and Comments	
	 Second Floor - Corridor, 1959 Section (AO3)	
Skylights	Round plastic dome skylights appear to be leaking at various locations. A closer investigation is required to determine extent of failure and if units require replacement or refitting. The above photo shows that the skylight is no longer beeing used, and that the leakage caused damage to adjacent ceiling finishes.	

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. 1996 B.Q.R.P. 1995 B.Q.R.P. 1993 B.Q.R.P. Heating, Vemtilation and Air Conditioning Systems Portable Classroom Locations – Edmonton Catholic Schools Edmonton Catholic Schools Fire Alarm Systems Consultants for School Facilities Edmonton Catholic Schools – Legal Description December 01, 1998 Inventory of School Buildings – Edmonton Catholic Schools November 05, 1999 Edmonton Catholic Schools – Gymnasium Inventory Edmonton Catholic Schools – 1999/2000 Summary of Minor Modernization Projects From 1990 through to 1999 Major Modernizations and Additions Summary of Alternately Funded Renovation Projects Standard Assessment and Utilization Report 0018 Edmonton RCS REG DIV #40 Data Sheets Archbishop O'Leary 88/01/06 Mini-Plans Archbishop O'Leary March 1965 – Last Rev. Nov.1994	