School Name: St. Kevin Catholic School
Location: 10005 84 Street
Edmonton, Alberta
Region: Central
Jurisdiction: Edmonton Catholic Regional School
Division No. 40

Grades: 7 to 9

School Code: 8219
Facility Code: 2023

Superintendent: Dr. Dale W. Ripley
Contact Person: Mr. Garnet McKee
Telephone: 1-780-453-4500

School Capacity: 765

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	1954	One	1624.7	Wood frame roof structure on wood frame / solid brick bearing walls on cast-in-place concrete foundations. Exterior walls are solid brick. Interior walls are plaster / gypsum board wood framing. Roofing to flat areas is built-up asphalt and gravel on insulated wood sheathing. Roofing to sloped area is SBS / MBM. Underside of roof structure is finished with 12" x 12" ship-lap edge acoustic ceiling tiles.	Heating is provided by a combination of 2 natural gas boilers and 7 Natural gas fired downflow furnaces Heating water is circulated to terminal heat rejection units. The capacity of each furnace is on the order of 44 kW. The boilers have a combined capacity of 1230 kW	The boilers should be replaced. Mechanical systems require considerable upgrading.
Additions/ Expansions	1956	One	1038.0	Wood frame structure on cast-in-place concrete foundations. Exterior walls are finished on interior with plaster / gypsum board and on exterior with brick veneer. Roofing to this section is built-up asphalt and gravel. Underside of roof structure is finished with 12" x 12" ship-lap edge acoustic ceiling tiles.	Heating is provided by a combination of 2 natural gas boilers and 11 Natural gas fired downflow furnaces Heating water is circulated to terminal heat rejection units. The capacity of each furnace is on the order of 44 kW.	Mechanical systems require considerable upgrading.

Evaluator's Name: Merv Weiss & James Dykes
& Company: **Kasian Kennedy**

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
Additions/ Expansions (cont'd)		1960	One	454.4	Tongue & groove wood deck on post and beam structure on cast-in-place concrete foundations. Exterior walls are finished on interior with gypsum board and on exterior with brick veneer. Roofing to this section is built-up asphalt and gravel. Underside of roof structure is finished with 12" x 12" ship-lap edge acoustic ceiling tiles.	Heating is provided by a combination of 2 natural gas boilers and 2 Natural gas fired downflow furnaces Heating water is circulated to terminal heat rejection units. The capacity of each furnace is on the order of 44 kW.	Mechanical systems require considerable upgrading.
		1966	One / Two	2843.2	Wood frame floor and roof structure on load-bearing concrete block walls and cast-in-place concrete foundations. Exterior walls are concrete block on the interior with paint finish. Exterior walls are finished with brick veneer on the exterior. Roofing to this section is built-up asphalt and gravel.	Heating is provided by a combination of 2 natural gas boilers and 1 Natural gas fired downflow furnaces Heating water is circulated to terminal heat rejection units. The capacity of each furnace is on the order of 44 kW.	Mechanical systems require considerable upgrading.
		1974	One	484.3	This section of the building is an engineered pre-fabricated metal building. Exterior walls are finished on the interior with painted plywood finish and on the exterior with pre-finished metal cladding. Roofing to this section of the building is pre-finished standing seam panels over faced flexible insulation.	Heating is provided by a combination of 2 natural gas boilers and 2 Natural gas fired downflow furnaces Heating water is circulated to terminal heat rejection units. The capacity of each furnace is on the order of 44 kW.	
	Total Area			6444.6			

Upgrading/ Modernization (identify whether minor or major)		1991			Classroom 124 converted to a Computer Lab.		Major Modernization
		1991			Classroom 203 converted to a Science Classroom		Major Modernization
		1997			Gymnasium floor system upgraded.		Major Upgrading
		1998			Food Studies Lab. Upgraded and storage capacity expanded.		Major Upgrading

Portable Struct. (identify whether attached/perman. or free-standing/ relocatable)				N/A		

List of Reports/ Supplementary Information	Total leased area = 531.4 Gross Capacity = 765 - 215 for leased space and program exemptions = 550 Net Capacity Current Enrollment = 260 or 47.27% of Net Capacity

	Evaluation Components	Summary Assessment	Estimated Cost
1	**Site Conditions**	The site is well planned and seems of a suitable size for a school of this capacity. There are some grading problems at the east half of the north property line.	$8,500.00
2	**Building Exterior**	The building exterior is brick on all sections except the 1974 gymnasium addition which is pre-finished metal cladding. All materials are in good condition.	$18,600.00
3	**Building Interior**	Finishes throughout the interior are in reasonably good condition except at the leased north west wing where the original painted plaster / gypsum board finishes have been clad with vinyl wall covering. The vinyl wall covering is scarred and dirty throughout this wing and should be replaced when and if this area is turned back into classrooms.	$184,250.00
4	**Mechanical Systems**	A major portion of the mechanical systems are approaching the end of their lifecycle and should be replaced in the near future. These systems include the heating and ventilation systems (boilers,piping, terminal units and exhaust fans), the existing domestic water piping (due to probable high lead content) ,and a significant portion of the plumbing fixtures.	$499,500.00
5	**Electrical Systems**	Overall electrical systems are in good condition	$13,500.00
6	**Portable Buildings**	N/A	
7	**Space Adequacy:** **7.1 Classrooms**	(+) 293.3	
	7.2 Science Rooms/Labs	(-) 58.3	
	7.3 Ancillary Areas	(-) 108.2	
	7.4 Gymnasium	(-) 84	
	7.5 Library/Resource Areas	(-) 127.9	
	7.6 Administration/Staff Areas	(-) 123	
	7.7 CTS Areas	(+) 63.8	
	7.8 Other Non-Instructional Areas (incl. gross-up)	(+) 40.9	
	Overall Space Adequacy Assessment	(-) 103.4 Current Enrollment = 260 or 47.27% of Net Capacity	
	Overall School Conditions & Estimated Costs		**$724,350.00**

Section 1	Site Conditions	Rating	Comments/Concerns	Estimated Cost
1.1	**General Site Condions**			**$8,500**
1.1.1	Overall site size.	4	Adequate.	
1.1.2	Outdoor athletic areas.	4	There are three baseball / softball diamonds, three soccer fields, and a basketball court on the site. All are in good condition.	
1.1.3	Outdoor playground areas, including condition of equipment and base.	4	Adequate.	
1.1.4	Site landscaping.	4	No deficiencies to report.	
1.1.5	Site accessories (i.e., perimeter and other fencing, guard rails, bike stands, flag poles).	4	Perimeter chain link and steel post and rail fencing is in good condition. There are no deficiencies to report.	
1.1.6	Surface drainage conditions (i.e., drains away from building, signs of ponding).	3	Surface drainage conditions at the site are acceptable. The grades at the north end of the east wing of the building are quite steep as they slope to the city service lane. This area was icy at the time of the inspection. Ref Photo #33	$3,500
1.1.7	Evidence of sub-soil problems.	4	There is no evidence of sub-soil problems around the perimeter of the building or anywhere on the site.	
1.1.8	Safety and security concerns due to site conditions.	3	The stairs in the sidewalk to the east entrance of the south wing of the school are steep. It would be better served by a handrail at each side instead of a single handrail at its center as is the existing condition.	$5,000
Other				

Section 1	Site Conditions	Rating	Comments/Concerns	Estimated Cost
1.2	**Access/Drop-Off Areas/Roadways/Bus Lanes**			**$0**
1.2.1	Vehicular and pedestrian access points (i.e., size, number, visibility, safety).	4	There are two on-site vehicular and pedestrian access points. One of these is at the south end of the courtyard between the east and west wings of the school. This one is at the end of a vehicular dead end. There is no vehicle turn-around at this location. The other on-site access point is at the south end of the parking lot west of the west wing of the school. This lot has an entrance and an exit and passengers could easily be dropped off directly adjacent to the 84 Street entrance to the building.	
1.2.2	Surfacing of on-site road network (note whether asphalt or gravel).	4	There are two on-site staff parking areas as described in item 1.2.1 above. Both have an asphalt surface and are in good condition. There is no other on-site road network.	
1.2.3	Bus lanes/drop-off areas (note whether on-site or off-site).	4	There are no on-site bus lanes or bus passenger drop-off areas. The west curb of 83 Street is used for this purpose. This is a narrow road and would be very congested if the school enrollment was approaching capacity.	
1.2.4	Fire vehicle access.	4	Fire vehicles can gain access to the north building elevation via the City Of Edmonton service lane north of the site. Access to the east elevation of the building can be gained via 83 Street and access to the west elevation of the building can be gained via 84 Street. No fire vehicle access is readily available to the south elevation of the building.	
1.2.5	Signage.	4	There is building identification signage at both the east and west entrances to the building. The school is planned so that the east entrance is the primary entrance for students as well as for visitors attending school functions. The west entrance serves primarily as a staff entrance.	
Other				

Section 1	Site Conditions	Rating	Comments/Concerns	Estimated Cost
1.3	**Parking Lots and Sidewalks**			**$0**
1.3.1	Number of parking spaces for staff, students and visitors (including stalls for disabled persons).	4	There are approximately 46 on-site staff and visitors parking stalls. This seems adequate.	
1.3.2	Layout and safety of parking lots.	4	The east parking lot is located in a courtyard between the east and west wings of the building. It is a dead-end lot and as such is quite inconvenient to those who park at its south end.	
1.3.3	Surfacing and drainage of parking lots (note whether asphalt or gravel).	4	The on-site parking lots have asphalt surfaces. There are no surface drainage concerns.	
1.3.4	Layout and safety of sidewalks.	3	The layout and safety of sidewalks on the site is acceptable. The sidewalk approaching the north entry to the east wing is quite steep. The stairs in the sidewalk approaching the east entry at the south end of the east wing are quite steep.	Include in 1.1.6 & 1.1.8
1.3.5	Surfacing and drainage of sidewalks (note type of material).	4	Surface drainage of sidewalks is adequate. There are no problems to report.	
1.3.6	Curb cuts and ramps for barrier free access.	4	There are curb cuts in the City Of Edmonton sidewalks surrounding the site. The west entrances of the building are barrier free accessible as is the gymnasium entrance at the extreme south end of the east wing. The gymnasium entrance is set back quite far from 83 Street but is a grade level access.	
Other				
	Overall Site Conditions & Estimated Costs		The site is well planned and seems of a suitable size for a school of this capacity. There are some grading problems at the east half of the north property line.	**$8,500**

Section 2	Building Exterior	Rating	Comments/Concerns		Estimated Cost
2.1	**Overall Structure**		**Building Section**	**Description/Condition**	**$3,600**
2.1.1	Floor structure and beams (i.e., signs of bending, cracking, heaving, settlement, voids, rust, stains).	3		There is evidence of floor slab settlement / heaving in the old (small) gymnasium. There is a noticeable hump in the floor of this gymnasium. Ref Photos #55 & #56	$3,600
2.1.2	Wall structure and columns (i.e., signs of bending, cracking, settlement, voids, rust, stains).	4		No deficiencies to report.	
2.1.3	Roof structure (i.e., signs of bending, cracking, voids, rust, stains).	4		No deficiencies to report.	
Other					

Section 2	Building Exterior	Rating	Comments/Concerns		Estimated 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.***		**Building Section or Roof Section**	**Description/Condition/Age**	**$0**
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		With the exception of the sloped roof of the original (1954) section of the building and the new gymnasium (1974) section of the building, all roofs are built up asphalt and gravel. The sloped roof of the 1954 section of the building is SBS / MBM. The gymnasium roof is a prefinished metal standing seam roof. There are no problems to report.	
2.2.2	Roof accessories (i.e., ladders, stairs, hatches, masts, exhaust hoods, chimneys, gutters, downspouts, splashpads).	4		Roof accessories appear to be in acceptable condition. Roof access is gained via a man door in the north wall of the Music Room (second floor area north of the new gymnasium).	
2.2.3	Control of ice and snow falling from roof.	4		No problems to report.	
2.2.4	Skylights (i.e., signs of distress, leaks, ice build-up, condensation, deteriorated materials/seals).	4		There are no functioning skylights in the building. Those which used to exist have been roofed over. The wells at all old skylights have been closed off with hinged access doors. There are no deficiencies to report.	
Other					

Section 2	Building Exterior	Rating	Comments/Concerns		Estimated Cost
2.3	**Exterior Walls/Building Envelope**		**Building Section**	**Description/Condition**	**$0**
2.3.1	Exterior wall finishes (i.e., signs of deterioration, cracks, brick spalling, effluorescence, water stains).	4		No problems to report.	
2.3.2	Fascias, soffits, parapets (i.e., signs of looseness, stains, rust, peeling paint).	4		No problems to report.	
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		No problems to report.	
2.3.4	Interface of roof drainage and ground drainage systems.	4		All drainage with the exception of the gymnasium addition is internal. There are no problems to report with either condition.	
2.3.5	Inside faces of exterior walls (i.e., signs of cracks, water stains, dust spots).	4		No problems to report.	
Other					

Section 2	Building Exterior	Rating	Comments/Concerns		Estimated Cost
2.4	**Exterior Doors and Windows**		**Building Section**	**Description/Condition**	**$15,000**
2.4.1	Doors (i.e., signs of deterioration, rusting metal, glass cracks, peeling paint, damaged seals, sealed unit failure).	4		Routine general maintenance (painting) of exterior wood doors is required. All are in sound condition but, require re-finishing.	
2.4.2	Door accessories (i.e., latches, hardware, screens, locks, alarms, holders, closers, security devices).	4		No problems to report.	
2.4.3	Exit door hardware (i.e., safety and/or code concerns).	4		No problems to report.	
2.4.4	Windows (i.e., signs of deterioration, rusting metal, glass cracks, peeling paint, damaged seals, sealed unit failure).	3		Seals to 50 per cent of the operable window sections in the building are in poor condition and should be replaced. At least half of the operable window sections have damaged sash and should be replaced.	$10,000
2.4.5	Window accessories (i.e., latches, hardware, screens, locks, alarms, holders, closers, security devices).	3		Window latches require adjustment throughout the school. Most are intact but are worn.	$5,000
2.4.6	Building envelope (i.e., signs of heavy condensation on doors or windows).	4		No problems to report.	
Other					
	Overall Building Exterior Condition & Estimated Costs			The building exterior is brick on all sections except the 1974 gymnasium addition which is pre-finished metal cladding. All materials are in good condition.	**$18,600**

Section 3	Building Interior - Overall Conditions	Rating	Comments/Concerns		Estimated Cost
3.1	**Interior Structure**		**Building Section**	**Description/Condition**	**$0**
3.1.1	Interior walls and partitions (i.e., signs of cracks, spalling, paint peeling).	4	All	No problems to report.	
3.1.2	Floors (i.e., signs of cracks, heaving, settlement).	3		The floor structure in the small gymnasium has either heaved or settled. There is a noticeable level change within the gymnasium.	covered in 2.1.1
Other					

Section 3	Building Interior - Overall Conditions	Rating	Comments/Concerns		Estimated Cost
3.2	**Materials and Finishes**		**Building Section**	**Description/Condition**	**$134,250**
3.2.1	Floor materials and finishes.	3		The floor finish to the main floor Classroom and Corridor of the two storey portion of the 1966 section of the building is 9" x 9" vinyl asbestos tile. Although this product is in good condition, it should be removed and replaced.	$35,000
				The Computer Room in this section has a carpet floor finish but, it is suspected that it was laid over the original vinyl asbestos tiles. The carpet in this area is in good condition but, should be lifted in order to remove the tiles and then re-installed.	include in above
				Classrooms in the west wing have been renovated and made into special use areas. Those in the north east quadrant have been converted to office space as have those in the south west quadrant. It is suspected that carpeting has been laid over the original floor finish which, was vinyl asbestos tile. One of the Classrooms in the north west quadrant of this wing have been converted into a dance studio. The other remains in pretty much its original condition. Again, it is suspected that the original vinyl asbestos tiles exist beneath the new floor finishes. Classrooms in the south east quadrant of this wing have been converted into a child care facility. The old vinyl asbestos tile has been removed in this area. All remaining vinyl asbestos tile in this wing should be removed. Ref Photos # 58 & 59	$30,000
3.2.2	Wall materials and finishes.	3		Most iInterior walls in the north west wing have had vinyl wallcovering applied to them when they were converted to offices and special use areas. The wallcovering is in poor condition everywhere except in the child care area and should be replaced.	$15,000
3.2.3	Ceiling materials and finishes.	3		Ceilings are in reasonably good condition throughout the building except in the north west wing of the building. Here a complete replacement of acoustic lay-in tiles should be undertaken in not only the old classroom areas but the corridors.	$15,000

Section 3	Building Interior - Overall Conditions	Rating	Comments/Concerns		Estimated Cost
3.2	**Materials and Finishes (cont'd)**		**Building Section**	**Description/Condition**	
3.2.4	Interior doors and hardware.	2		Doors in the east and south walls of the two storey 1966 section of the building currently have double fire protection. Proper swing doors with closers have been installed in the walls of an alcove constructed at all openings in these walls. An old style of fire door still exists at these locations. These old doors are the type which are held in the open position by a fusible link. When the link melts the door is released and it slides, by gravity, down its sloping track, and comes to rest across the opening. These doors do not conform to current codes because they do not pivot on a vertical access. They are a safety hazard in that, when closed, they would block the means of egress from the rooms they are intended to protect. They should be removed or made inoperable in the open position. Ref. Photo #27	$5,000
3.2.5	Millwork	3		Millwork against the west (exterior) wall of the Computer Classroom is not suitable for this function. It is too high and too deep to be of use.	$2,500
				Millwork in Science Classrooms 203 and 205 requires repair. The plastic laminate is delaminating.	$5,000
3.2.6	Fixed/wall mounted equipment (i.e., writing boards, tackboards, display boards, signs).	4		No problems to report.	
3.2.7	Any other fixed/mounted specialty items (i.e., CTS equipment, gymnasium equipment).	3		Lockers in the original (1954) section of the building are custom fabricated wood units. While the locker bodies are in good condition, the doors are not. Much of the hardware has come loose in the past and has been re-mounted wherever good solid backing could be found. Screw holes and damage to the wood at the original locations of the hardware have not been patched. The doors to these lockers should all be replaced. Ref Photo #18	$15,000
3.2.8	Washroom materials and finishes.	2		Washroom finishes are in reasonably good condition everywhere except those on the east side of the corridor on both the main and second floors of the two storey 1966 section of the building. Ceilings in these washrooms are suspended tee-bar grid with lay-in acoustic tiles. Ceilings are in poor condition and should be replaced. Ref. Photo #29 & #30	$1,750
Other		2		The epoxy floor finish is broken away at the gang shower in the boys locker room. The entire floor of the shower area should be replaced. Ref. Photo #47	$10,000

Section 3	Building Interior - Overall Conditions	Rating	Comments/Concerns		Estimated 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.***		**Building Section**	**Description/Condition**	**$50,000**
3.3.1	Building construction type - combustible or non-combustible, sprinklered or non-sprinklered.	4		The 1954 and 1956 sections of the building are of combustible construction. They are not sprinklered.	
				The 1966 sections of the building are a mix of combustible and non-combustible construction. They are not sprinklered.	
				The 1974 section of the building is of non-combustible construction. It is not sprinklered.	
3.3.2	Fire separations (i.e., between buildings, wings, zones if non-sprinklered).	4		Each section (construction phase) of the building is separated from adjacent sections by a glazed fire separation which bears no fire-resistance rating. These assemblies have wired glass sidelites and transoms. These assemblies have solid core wood doors with closers. These assemblies are framed with pressed steel sections. Doors and frames should be labelled.	
3.3.3	Fire resistance rating of materials (i.e., corridor walls and doors).	3		Classrooms and ancilliary rooms are not separated from corridors by fire-separations. The walls surrounding these rooms extend to the underside of the roof structure for acoustical control but, doors and frames within them bear no fire-resistance label and, are not fitted with closers.	$5,000
3.3.4	Exiting distances and access to exits.	3		Travel distances to exits appears to conform to code. Guards at open sides of stairs do not conform to current codes.	$5,000

Section 3	Building Interior - Overall Conditions	Rating	Comments/Concerns		Estimated 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.***		**Building Section**	**Description/Condition**	
3.3.5	Barrier-free access.	3		Barrier free access to the building is available at both entrances from 84 Street and at the south entry (at the gymnasium) from 83 Street. Once access to the building is gained, disabled persons would be able to move about most areas of the ground floor. There is no barrier free access to the second floor areas of the east wing, the music room, or the stage.	$40,000
3.3.6	Availability of hazardous materials audit (i.e., evidence of safety concerns with respect to asbestos, PCB's, chemicals).	4		There were no hazardous materials audits available at the time of the inspection. The old 9"x9" floor tile used in various sections of the building is the original floor tile and as such would be vinyl asbestos tile. This tile should be removed.	
3.3.7	Other health and safety concerns (i.e., evidence of excessive noise conditions, air quality problems)	N/A			
Other					
	Overall Building Interior Condition & Estimated Costs			Finishes throughout the interior are in reasonably good condition except at the leased north west wing where the original painted plaster / gypsum board finishes have been clad with vinyl wall covering. The vinyl wall covering is scarred and dirty throughout this wing and should be replaced when and if this area is turned back into classrooms.	**$184,250**

Section 4	Mechanical Systems	Rating	Comments/Concerns		Estimated Cost
4.1	**Mechanical Site Services**		**Building Section**	**Description/Condition**	**$2,500**
4.1.1	Site drainage systems (i.e., surface and underground systems, catch basins).	4	All	Catch Basin in Parking Area, No reports of excessive ponding, ice build-up or other drainage concerns. B. Roof drains are connected to the municipal storm water drainage system.	
4.1.2	Exterior plumbing systems (i.e., irrigation systems, hose bibs).	3	All	Hose bibs at regular intervals around building perimeter. B. Old style hose bibs do not have vacuum breakers.	$2,500
4.1.3	Outside storage tanks.	N/A	All		
Other					
4.2	**Fire Suppression Systems**		**Building Section**	**Description/Condition**	**$0**
4.2.1	Fire hydrants and Siamese connections.	N/A	All	No Hydrant or Siamese connection	
4.2.2	Fire suppression systems (i.e., pumps, sprinklers, piping, reservoirs, hoses, stand pipes, CO2 systems).	4	All	Fire Hose Cabinets throughout.	
4.2.3	Hand extinguishers, blankets and showers (i.e., in CTS areas).	4	All	Mixture of dry chemical type and pump tank fire extinguishers located throughout the school, some in cabinets some bracket mounted. Extinguishers noted in all mechanical rooms.	
4.2.4	Other special situations (e.g., flammable storage areas, science labs, CTS areas).	N/A	All		
Other					

Section 4	Mechanical Systems	Rating	Comments/Concerns		Estimated Cost
4.3	**Water Supply and Plumbing Systems**		**Bulding Section**	**Description/Condition**	**$152,500**
4.3.1	Domestic water supply (i.e., pressure, volume, quality - note whether municipal or well supply).	4	All	Water main from city supply to boiler room. System complete with water meter and by-pass, isolation valves. No concerns about quality or pressure reported.	
4.3.2	Water treatment system(s).	N/A	All	No Water Treatment in place.	
4.3.3	Pumps and valves (including backflow prevention valves).	4	All	No Domestic water Booster Pumps. Valves and Water meter c/w bypass in good working order. Adequate Backflow Protection in place on boiler system make-up and connection to Firehose cabinet supply.	
4.3.4	Piping and fittings.	3	All	Copper Piping is original and may contain lead at fittings and calcium build-up on pipe walls. Piping should be replaced in conjunction with change out of fixtures.	$95,000
4.3.5	Plumbing fixtures (i.e., toilets, urinals, sinks)	3	All	Fixtures are functional, but old and mismatched in many areas, should be upgraded. No handicapped facilities are provided.	$40,000
4.3.6	Domestic hot water system (i.e., heater, storage tanks, failure alarms, pressure, volume, recirculation).	4	1954	DHW provided by 1 Nat gas fired water Heater, piping, valves, recirc pump, controls and safety reliefs in good condition.	
			1966	DHW provided by 1 Nat gas fired water Heater, piping, valves, recirc pump, controls and safety reliefs in good condition.	
			1956	DHW provided by 1 Nat gas fired water Heater, piping, valves, recirc pump, controls and safety reliefs in good condition.	
4.3.7	Sanitary and storm sewers, including sumps and pits (note whether sewage system is municipal or septic).	4	All	Sanitary drainage piping is Cast Iron, no problems or leaks reported. Storm drainage piping from roof drains is Cast Iron c/w external wrap insulation in good condition. Several gravel stops on roof drains are loose or damaged.	
Other		2	1956	Main domestic water storage tank is old and covered with asbestos (clearly indicated) insulation, should be removed and replaced.	$15,000
Other		1	1966	The condition of the floor drain in boys change room gang shower presents a risk to health and safety, immediate remediation required.	$2,500

Section 4	Mechanical Systems	Rating	Comments/Concerns		Estimated Cost
4.4	**Heating Systems**		**Building Section**	**Description/Condition**	**$315,000**
4.4.1	Heating capacity and reliability (including backup capacity).	3	1966 1960 1956 1954 1974	Heating is provided by a combination of 2 natural gas boilers and 22 Natural gas fired downflow furnaces located in various parts of the facility. Heating water is circulated to a heating coil in the air handling unit serving the 2 storey section built in 1966, and to terminal heat rejection units such unit heaters and forceflow units throughout the school. **The boilers** have a combined capacity of 1230 kW and **should be replaced** due to the significant amount of damage and corrosion visible. The furnaces are distributed in a series of mechanical rooms around the building as follows: 1960 Section (2), 1956 Section (11), 1954 Section (7), 1974 Section (2), and 1966 Section (1). The capacity of each furnace is on the order of 44 kW. Refer to Section 4.5.1 for further discussion on furnaces.	$145,000
4.4.2	Heating controls (including use of current energy management technology.	4	All	Heating controls upgraded in recent past in conjunction with installation of an Andover BMS for remote monitoring and building control.	
4.4.3	Fresh air for combustion and condition of the combustion chimney.	3	All	Combustion Air Provided to all mechanical rooms. Insulation is in need of replacement. Flues and Stacks appear to be in good condition.	$5,000
4.4.4	Treatment of water used in heating systems.	4	All	Chemical treatment of boiler water is done manually, chemical pot feeder observed on system.	
4.4.5	Low water cutoff/pressure relief valves and failure alarms (i.e., hot water heating).	4	All	Both boilers equipment with pressure relief valves and Low water cut-offs, controls were serviced at time of Andover BMS installation.	
4.4.6	Heating air filtration systems and filters.	4	All	Filter section are provided and filters are regularly changed in all 21 furnaces and the Central Air handling unit serving the 1966 section.	

Section 4	Mechanical Systems	Rating	Comments/Concerns		Estimated Cost
4.4.7	Heating humidification systems and components.	4	1966	Humidification is provided by a Dri-Steem Steam injection unit to the downstream ductwork of the central air handler serving the 1966 section. No other areas of the building are humidified.	

Section 4	Mechanical Systems	Rating	Comments/Concerns		Estimated Cost
4.4	**Heating Systems (cont'd)**		**Building Section**	**Description/Condition**	
4.4.8	Heating distribution systems (i.e., piping, ductwork) and associated components (i.e., diffusers, radiators).	3	All	Hydronic piping is old and may have scale built-up. Hydronic Baseboard is in acceptable condition throughout the building with the exception of damage to the external enclosures in some locations. Observed ductwork in areas served by furnaces requires extensive patching or replacement. Air terminals (Grilles, Diffusers) are old and damaged and should be replaced with the exception of those located in the 1966 area and the 1974 gymnasium. Piping should be changed in conjunction with replacement of the boilers and terminal units.	$125,000
4.4.9	Heating piping, valve and/or duct insulation.	3	All	Pipe and duct Insulation showing signs of deterioration in various locations, requires patching and partial replacement, some concern about existence of asbestos particularly in insulation at pipe joints.	$20,000
4.4.10	Heat exchangers.	4	All	Hydronic heating coil in central air handling unit serving the 1966 area is O.K., Aluminized heat exchangers in gas fired furnaces should be changed with furnaces when due.	
4.4.11	Heating mixing boxes, dampers and linkages.	4	All	Mixed air dampers and linkages are serviced and repaired regularly.	
4.4.12	Heating distribution/circulation in larger spaces (i.e., user comfort, temperature of outside wall surfaces).	4	All	General Comfort O.K. with regards to temperature control.	
4.4.13	Zone/unit heaters and controls.	3	All	A. Hydronic Unit Heaters and Forced Flow units located throughout corridors and at vestibules. Some wear on cabinets, units functioning satisfactory.	$20,000
Other					

Section 4	Mechanical Systems	Rating	Comments/Concerns		Estimated Cost
4.5	**Ventilation Systems**		**Building Section**	**Description/Condition**	**$25,000**
4.5.1	Air handling units capacity and condition.	4	1966	Large Central Air handler c/w Supply and Return Fans, Mixed air section, Fresh Air Intake, filter section, hydronic heating coil with 3 way valve control and Dri-steem humidifier manifold in supply air ductwork. Unit is in good condition.	
			1960 1956 1954 1974	Gas fired Downflow furnaces are in good condition and operate well.	
4.5.2	Outside air for the occupant load (if possible, reference CFM/occupant).	4	All	Data is not available on cfm / occupant rates being delivered to the building. Not identified as a problem.	
4.5.3	Air distribution system (if possible, reference number of air changes/hour).	N/A	All	No data available on number of air changes.	
4.5.4	Exhaust systems capacity and condition.	2	All	General Exhaust and washrooms, janitor rooms, etc provided by multiple roof mounted exhaust fans. Volume of exhaust felt to be insufficient to ensure proper odor control.	$25,000
4.5.5	Separation of out flow from air intakes.	4	All	No problems or concerns reported.	
4.5.6	Special/dedicated ventilation and/or exhaust systems (i.e., kitchen, labs, CTS areas).	4	1966	Special Exhaust and make-up air System in Industrial arts room in good condition. Dust collector is in good condition.	
Other					

Section 4	Mechanical Systems	Rating	Comments/Concerns		Estimated Cost
4.5	**Ventilation Systems (cont'd)**		**Building Section**	**Description/Condition**	
	Note: Only complete the following items if there are separate ventilation and heating systems.				
4.5.7	Ventilation controls (including use of current energy management technology).	N/A			
4.5.8	Air filtration systems and filters.	N/A			
4.5.9	Humidification system and components.	N/A			
4.5.10	Heat exchangers.	N/A			
4.5.11	Ventilation distribution system and components (i.e., ductwork, diffusers, mixing boxes, dampers, linkages).	N/A			
Other					

Section 4	Mechanical Systems	Rating	Comments/Concerns		Estimated Cost
4.6	**Cooling Systems**		**Building Section**	**Description/Condition**	**$4,500**
4.6.1	Cooling system capacity and condition (i.e., chillers, cooling towers, condensers).	3	1966	Mechanical Cooling provided to furnace serving staff/admin areas. Roof mounted condensing unit requires replacement.	$4,500
4.6.2	Cooling distribution system and components (i.e., ductwork, diffusers, mixing boxes, dampers, linkages)	4	1966	See heating section 4.4.8	
4.6.3	Cooling system controls (including use of current energy management technology).	4	1966	The Andover BMS system has ample capacity to provide control and monitoring of the cooling system.	
4.6.4	Special/dedicated cooling systems (i.e., labs, CTS areas).	N/A	-	There are no special cooling systems	
Other					
4.7	**Building Control Systems**		**Building Section**	**Description/Condition**	**$0**
4.7.1	Building wide/system wide control systems and/or energy management systems.	4	All	A. The overall building is controlled and monitored remotely by a recently installed Andover building management system. B. Control accessories such as sensors and thermostats appear to be in good condition.	
	Overall Mechanical Systems Condition & Estimated Costs			Major portions of the mechanical systems are approaching the end of their lifecycle and should be replaced in the near future. These systems include the heating and ventilation systems (boilers,piping, terminal units and exhaust fans), the existing domestic water piping (due to probable high lead content) ,and a significant portion of the plumbing fixtures.	**$499,500**

Section 5	Electrical Systems	Rating	Comments/Concerns		Estimated Cost
5.1	**Site Services**		**Building Section**	**Description/Condition**	**$1,000**
5.1.1	Primary service capacity and reliability (i.e., access, location, components, installation, bus sizes - note whether overhead or underground).	4		Underground fed 1200A main switch 120/208V 3 phase 3 wire Square D distribution. Located at bottom of north stairwell in 1966 building. Main distribution installed in 1966	
5.1.2	Site and building exterior lighting (i.e., safety concerns).	4		No concerns. Site lighting is HPS mounted on sides of building.	
5.1.3	Vehicle plug-ins (i.e., number, capacity, condition).	3		12 energized stalls. Receptacles mounted outside. Not adequate for a staff of 40.	$1,000
Other					
5.2	**Life Safety Systems**		**Building Section**	**Description/Condition**	**$8,000**
5.2.1	Fire and smoke alarm systems (i.e., safety concerns, up-to-date technology, regularly tested).	3		Edwards 6500 panel 32 zones. Installed in 1987. Heat detectors provided in some storage rooms and in mechanical room. Detectors should be in all storage rooms. Smoke detectors are installed in corridors where coat and boot racks are located. There are adequate fire bells. No visual strobe devices are provided. Corridor doors are provided with door hold open devices. Fan shutdown is provided for air systems.	$3,500
5.2.2	Emergency lighting systems (i.e., safety concerns, condition).	4		12 Volt battery packs are provided throughout the corridors and washrooms. Units are old but are tested frequently.	
5.2.3	Exit lighting and signage (i.e., safety concerns, condition).	3		Original school has some incandescent exit signage which does not conform to code. New exit signage has connection to emergency battery packs.	$4,500
Other					

Section 5	Electrical Systems	Rating	Comments/Concerns		Estimated Cost
5.3	**Power Supply and Distribution**		**Building Section**	**Description/Condition**	**$1,500**
5.3.1	Power service surge protection.	3		No surge protection provided	$1,500
5.3.2	Panels and wireways capacity and condition.	4		Panels are manufactured by Square D. 10-15% spare breaker capacity in panels. Panels are in good condition.	
5.3.3	Emergency generator capacity and condition and/or UPS (if applicable).	N/A		none provided.	
5.3.4	General wiring devices and methods.	4		Wiring method is EMT conduit and wire. Wiring and devices appear in good condition.	
5.3.5	Motor controls.	4		Motor starters are provided where required with good access. Starters appear to be in good condition. Single phase motors are provided with manual motor switches.	
Other					
5.4	**Lighting Systems**		**Building Section**	**Description/Condition**	**$3,000**
5.4.1	Interior lighting systems and components (i.e., illumination levels, conditions, controls).	3		Fluorescent T-12 surface mounted luminaires used throughout school. Ballasts are magnetic core and coil type in throughout. Luminaires are in good condition. Local line voltage switching is provided throughout the school. Gymnasium lighting levels are low for school standards. Computer lab lighting also low. Lighting levels: Gymnasiums: 300-350lux, classrooms: 700-800lux, corridors:250-350lux, library: 700lux, office: 600lux,	$3,000
5.4.2	Replacement of ballasts (i.e., health and safety concerns).	4		No concerns.	
5.4.3	Implementation of energy efficiency measures and recommendations.	N/A		none provided.	
Other					

Section 5	Electrical Systems	Rating	Comments/Concerns		Estimated Cost
5.5	**Network and Communication Systems**		**Building Section**	**Description/Condition**	**$0**
5.5.1	Telephone system and components (i.e., capacity, reliability, condition).	5		Telephone system is adequate for school with 3 incoming lines available.	
5.5.2	Other communication systems (i.e., public address, intercom, CCTV, satellite or cable TV).	4		Public address / intercom system manufactured is Petcom 2200 switchable system c/w tuner and tape player. Most school classrooms are wired for cablevision.	
5.5.3	Network cabling (if available, should be category 5 or better).	5		Category 5 structured cabling system installed.	
5.5.4	Network cabling installation (i.e., in conduit, secured to walls or tables).	4		Installed in conduit and some surface mounted.	
5.5.5	Wiring and telecommunication closets (i.e., size, security, ventilation/cooling, capacity for growth).	4		Telecommunications room is adequate to the standards. Secured room with room for future growth.	
5.5.6	Provision for dedicated circuits for network equipment (i.e., hubs, switches, computers).	4		Computers are connected to local panel with dedicated circuits.	
Other					

Section 5	Electrical Systems	Rating	Comments/Concerns		Estimated Cost
5.6	**Miscellaneous Systems**		**Building Section**	**Description/Condition**	**$0**
5.6.1	Site and building surveillance system (if applicable).	**4**		2 cameras located in stairwells of school for security. Video recorder and TV located in mechanical room.	
5.6.2	Intrusion alarms (if applicable).	4		Motion detectors are provided throughout the school and door contacts installed on exterior doors. System is centrally monitored.	
5.6.3	Master clock system (if applicable).			No master clock system.	
Other					
5.7	**Elevators/Disabled Lifts (If applicable)**		**Building Section**	**Description/Condition**	**$0**
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 Electrical Systems Condition & Estimated Costs	4		Overall electrical systems are in good condition	**$13,500**

Section 6	Portable Buildings	Rating	Comments/Concerns	Estimated Cost
	Note: Separate sheets can be completed, if necessary, for portable buildings of different ages and/or conditions.		**There are no portables at this school**	
6.1.1	Foundation and structure (i.e., signs of bending, cracking, settlement, rust, voids, stains).			
6.1.2	Roof materials and components (i.e., signs of deterioration, leaks, ice build-up).			
6.1.3	Exterior wall finishes (i.e., signs of deterioration, cracks, water stains).			
6.1.4	Doors and windows (i.e., signs of deterioration, rusting hardware, glass cracks, peeling paint, damaged seals).			
6.1.5	Interior finishes (i.e., floors, walls, ceiling).			
6.1.6	Millwork (i.e., counters, shelving, vanities, cabinets).			
6.1.7	Fixed/wall mounted equipment (i.e., writing boards, tackboards, display boards, signs)			
6.1.8	Heating system.			
6.1.9	Ventilation system.			
6.1.10	Electrical, communication and data network systems.			
6.1.11	Health and safety concerns (i.e., fire and smoke alarms, fire protection systems, exiting, fire resistance rating of materials).			
6.1.12	Barrier-free access.			
	Overall Portable Buildings Condition & Estimated Costs			

Section 7	Space Adequacy	This Facility			Equiv. New Facility			Surplus/ Deficiency	Comments/Concerns
		No.	Size	Total Area	No.	Size	Total Area		
7.1	Classrooms			1733.3	18	80	1440	293.3	Gross Capacity = 765 - 215 for leased space and program exemptions = 550 Net Capacity
		5	74.3						Current Enrollment = 260 or 47.27% of Net Capacity
		1	93.8						
		10	79.5						
		1	69.2						
		2	87.3						
		2	72						
		1	65						
		1	79						
		1	20.2						
7.2	Science Rooms/Labs			421.7	4	120	480	-58.3	
		1	87.3						
		1	133.3						
		1	100.8						
		1	100.3						
7.3	Ancillary Areas (i.e., Art, Computer Labs, Drama, Music,)			421.8			530	-108.2	
		1	64.1		2	130			
		1	110.1		3	90			
		1	114.3						
		1	133.3						
7.4	Gymnasium (incl. gym storage)			813			897	-84	
		1	455.2						
		1	357.8						
7.5	Library/Resource Areas	1	202.1	202.1			330	-127.9	
7.6	Administration/Staff, Physical Education, Storage Areas			645			768	-123	
7.7	CTS Areas			408.8			345	63.8	
	7.7.1 Business Education	0			3	115			
	7.7.2 Home Economics	1	130.1						
	7.7.3 Industrial Arts	1	278.7						
	7.7.4 Other CTS Programs	0							
7.8	Other Non-Instructional Areas (i.e., circulation, wall area, crush space, wc area)			1798.9			1758	40.9	
	Overall Space Adequacy Assessment			**6444.6**			**6548**	**-103.4**	Total leased area = 531.4

Evaluation Component/ Sub-Component	Additional Notes and Comments