

School Name: St. Pius X Catholic School

Location: 12214 128 Street
Edmonton, Alberta

Region: Central

Jurisdiction: Edmonton Catholic Regional School
Division No. 40

Grades: K to 6

School Code: 8226

Facility Code: 2030

Superintendent: Dr. Dale W. Ripley

Contact Person: Mr. Garnet McKee

Telephone: 1-780-453-4500

Capacity: 550

| | Year of Compl | Number 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 | 967.3 | Wood frame roof structure on wood frame bearing walls on cast-in-place concrete foundations. Exterior walls are finished on interior with painted plaster / gypsum board and on exterior with brick veneer. Interior walls are wood frame with painted plaster / gypsum board finish with wood panelling dados. Roofing to this section is built-up asphalt and gravel. The underside of the roof structure in this area is finished with ship-lap edge 12" x 12" acoustic tiles | Heating is provided to the 1954, 1956 and 1959 sections of the building by a pair of natural gas fired low pressure steam boilers. One boiler was recently installed, the other is several years old. Ventilation is provided by unit ventilators. There is no air conditioning and no humidification in this school | Old boiler shows signs of corrosion and should be replaced. Unit ventilators are approaching end of lifecycle and should be replaced. |
| Additions/Expansions | 1956 | One | 866.4 | Wood frame roof structure on wood frame bearing walls on cast-in-place concrete foundations. Exterior walls are finished on interior with painted plaster / gypsum board and on exterior with brick veneer. Interior walls are wood frame with painted plaster / gypsum board finish and wood panelling dados. Roofing to this section is built-up asphalt and gravel. The underside of the roof structure in this area is finished with ship-lap edge 12" x 12" acoustic tiles | See above | |

Evaluator's Name: Merv Wiess & James Dykes

School Facility Evaluation Project
Part III - Space Adequacy

& Company:

Kasian Kennedy

| | Year of Compl | Number 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) | 1959 | One | 826.0 | Wood frame roof structure on wood frame bearing walls on cast-in-place concrete foundations. Exterior walls are finished on interior with painted plaster / gypsum board and on exterior with brick veneer. Interior walls are wood frame with painted plaster / gypsum board finish and wood panelling dados. Roofing to this section is built-up asphalt and gravel. The underside of the roof structure in this area is finished with ship-lap edge 12" x 12" acoustic tiles. | See above | |
| | 1962 | Two | 1113.9 | Pre-cast concrete double tee roof and floor structure and load-bearing concrete block on cast-in-place concrete foundations. Exterior walls are exposed concrete block finished with paint on the interior and brick veneer on the exterior. Roofing to this section is built-up asphalt and gravel. Ceilings in this section are suspended exposed tee-bar grid with lay-in acoustic tiles. | The 1962 / 1971 sections are heated by a single hot water boiler (485 kW). No Problems reported. Ventilation is provided by unit ventilators. There is no air conditioning and no humidification in this school | |
| | 1971 | One | 864.0 | Tongue and groove wood deck on glue-lam beams on load bearing concrete block and cast-in-place concrete foundations. Interior surfaces of exterior walls are concrete block with paint finish. Exterior surfaces of exterior walls are a brick veneer finish. Roofing to this section is built-up asphalt and gravel. Ceilings in this section are 12" x 12" ship-lap edge acoustic tiles between painted exposed wood beams. | See above | |
| Total Area - Sq.M | | | 4637.6 | | | |

| | Year of Compl | Number of Floors | Gross Bldg Area (Sq.M.) | Type of Construction (i.e., structure, roof, cladding) | Description of Mechanical Systems (incl. major upgrades) | Comments/Notes |
|--------------------------|---------------|------------------|-------------------------|---|--|---------------------|
| Upgrading/ Modernization | 1992 | | | Administration Offices Renovated | | Minow Modernization |
| | 1998 | | | Door added between Library and Computer Room. | | Minor Upgrading |
| | 1999 | | | Security safe added. | | Minor Upgrading |
| | 1998 | | | Food Studies Lab. Upgraded and storage capacity expanded. | | Major Upgrading |

| | | | | | | |
|---|--|--|--|-----|--|--|
| Portable Structures (identify whether attached/permanent or free-standing/relocatable) | | | | N/A | | |
|---|--|--|--|-----|--|--|

| |
|--|
| <p>List of Reports/ Supplementary Information</p> <p>Leased out area = 498.0 Sq.M. Gross Capacity = 550 - 205 for leased and other exemptions = 345 net capacity Current enrolment = 224 or 64.93% of net capacity</p> |
|--|

| | Evaluation Components | Summary Assessment | Estimated Cost |
|---|--|---|----------------|
| 1 | Site Conditions | Parking lot drainage should be corrected. Wheelchair access to the sidewalks should be provided. | \$10,500 |
| 2 | Building Exterior | Except for some minor roofing issues, the exterior of the building is in good condition. | \$1,500 |
| 3 | Building Interior | There are some serious flooring problems, which should be addressed. Wood paneling dados in the 1954 and 1956 sections of the building should be re-finished. Fire doors and frames should be labeled. Aside from these issues, the rest of the interior is in reasonably good condition. | \$138,600 |
| 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 (boiler and condensate systems, make-up air units, unit ventilators, and exhaust fans), the existing domestic water piping (due to probable high lead content) ,and a significant portion of the plumbing fixtures. | \$431,000 |
| 5 | Electrical Systems | Except for the shortage of exterior receptacles, some exit signage which does not conform to code, low lighting levels in the computer lab and lack of surge protection, the electrical systems are in good condition. | \$8,000 |
| 6 | Portable Buildings | N/A | \$0 |
| 7 | Space Adequacy: | | |
| | 7.1 Classrooms | (+) 56.7 | |
| | 7.2 Science Rooms/Labs | (+) 26.9 | |
| | 7.3 Ancillary Areas | (-) 132.4 | |
| | 7.4 Gymnasium | (+) 0.8 | |
| | 7.5 Library/Resource Areas | (-) 111.3 | |
| | 7.6 Administration/Staff Areas | (+) 255.9 | |
| | 7.7 CTS Areas | N/A | |
| | 7.8 Other Non-Instructional Areas (incl. gross-up) | (+) 287 | |
| | Overall Space Adequacy Assessment | (+) 383.6 (Leased out area = 498.0 Sq.M.) | |

| | Evaluation Components | Summary Assessment | Estimated Cost |
|--|---|--------------------|----------------|
| | Overall School Conditions & Estimated Costs | | \$589,600 |

| Section 1 | Site Conditions | Rating | Comments/Concerns | Estimated Cost |
|-----------|---|--------|---|----------------|
| 1.1 | General Site Conditions | | | \$0 |
| 1.1.1 | Overall site size. | 4 | The site is large enough for a school of this size and is well planned. | |
| 1.1.2 | Outdoor athletic areas. | 4 | There are two soccer fields, two fastball / softball diamonds, and three basketball half courts to the west of the school building. All are in good condition with no notable deficiencies. | |
| 1.1.3 | Outdoor playground areas, including condition of equipment and base. | 4 | There is an outdoor playground area with a sand base and a climbing apparatus. It is in good condition. | |
| 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 with no deficiencies to report. | |
| 1.1.6 | Surface drainage conditions (i.e., drains away from building, signs of ponding). | 4 | Surface drainage conditions at the site are good with no notable deficiencies. | |
| 1.1.7 | Evidence of sub-soil problems. | 4 | There is no evidence of sub-soil problems near the building or anywhere else on the site. | |
| 1.1.8 | Safety and security concerns due to site conditions. | 4 | No problems to report. | |
| 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 is only one on-site vehicular and pedestrian access point, that being the staff and visitors parking lot at the west side of the 1962 section of the building. This lot is accessible from 122 Avenue. There are no problems to report concerning this access. | |
| 1.2.2 | Surfacing of on-site road network (note whether asphalt or gravel). | 4 | The only on-site driving surfaces are the staff and visitors parking lot. This lot has an asphalt surface. | |
| 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 loading / unloading areas. The west curb of 128 Street is used for this purpose. | |
| 1.2.4 | Fire vehicle access. | 4 | Fire vehicles can gain access to all sides of the building. The east building elevation is accessible from 128 Street. The south building elevation is accessible from 122 Avenue. The north building elevation is accessible from 123 Avenue. The west building elevation is accessible via a fire lane which extends westward and then northward from the staff and visitors parking lot. | |
| 1.2.5 | Signage. | 4 | There is building identification signage near the primary entrance to the school, that being the east doors at the north end of the 1956 section of the building. This signage is visible to traffic on 128 Street. | |
| Other | | | | |

| Section 1 | Site Conditions | Rating | Comments/Concerns | Estimated Cost |
|------------|--|--------|---|-----------------|
| 1.3 | Parking Lots and Sidewalks | | | \$10,500 |
| 1.3.1 | Number of parking spaces for staff, students and visitors (including stalls for disabled persons). | 4 | There are 18 on-site parking stalls for staff and visitors west of the 1962 section of the building. This lot has one access from 122 Avenue. | |
| 1.3.2 | Layout and safety of parking lots. | 4 | No problems to report. | |
| 1.3.3 | Surfacing and drainage of parking lots (note whether asphalt or gravel). | 3 | The on site parking lot has an asphalt surface and has one internal catchbasin. The north half of the parking lot slopes down toward the catchbasin while the south half of the lot slopes down away from the catchbasin toward 122 Avenue. The catchbasin is not catching all of the run-off as it should. | \$10,000 |
| 1.3.4 | Layout and safety of sidewalks. | 4 | No problems to report. | |
| 1.3.5 | Surfacing and drainage of sidewalks (note type of material). | 4 | No problems to report. | |
| 1.3.6 | Curb cuts and ramps for barrier free access. | 3 | There are no curb cuts in the City Of Edmonton sidewalks surrounding the site. Wheelchair access to the sidewalks is only available at vehicular curb crossings. | \$500 |
| Other | | | | |
| | Overall Site Conditions & Estimated Costs | | Parking lot drainage should be corrected. Wheelchair access to the sidewalks should be provided. | \$10,500 |

| Section 2 | Building Exterior | Rating | Comments/Concerns | | Estimated Cost |
|-----------|---|--------|-------------------------|------------------------------|----------------|
| 2.1 | Overall Structure | | Building 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 deficiencies to report. | |
| 2.1.2 | Wall structure and columns (i.e., signs of bending, cracking, settlement, voids, rust, stains). | 4 | All | No deficiencies to report. | |
| 2.1.3 | Roof structure (i.e., signs of bending, cracking, voids, rust, stains). | 4 | All | No deficiencies to report. | |
| Other | | | | | |

| Section 2 | Building Exterior | Rating | Comments/Concerns | | Estimated Cost |
|-----------|---|--------|---|--|----------------|
| 2.2 | Roofing and Skylights <i>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.</i> | | Building Section or Roof Section | Description/Condition/Age | \$1,500 |
| 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 | 1954& 1956 | The 1954 and 1956 sections of the building were re-roofed in 1984. All are in good condition. | |
| | | 3 | 1959 | The 1959 section of the building was re-roofed in 1984 and is in good condition except that there is organic material establishing itself at many location. The organic material should be treated with a herbicide. | \$500 |
| | | 4 | 1962 & 1971 | The 1962 and 1971 sections of the building were re-roofed in 1991. All are in good condition. | |
| 2.2.2 | Roof accessories (i.e., ladders, stairs, hatches, masts, exhaust hoods, chimneys, gutters, downspouts, splashpads). | 3 | All | Nearly all roof drain covers / grates are missing. | \$1,000 |
| 2.2.3 | Control of ice and snow falling from roof. | 4 | All | No problems to report. | |
| 2.2.4 | Skylights (i.e., signs of distress, leaks, ice build-up, condensation, deteriorated materials/seals). | N/A | | | |
| 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, efflorescence, water stains). | 4 | All | No problems to report. | |
| 2.3.2 | Fascias, soffits, parapets (i.e., signs of looseness, stains, rust, peeling paint). | 4 | All | 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 | All | No problems to report. | |
| 2.3.4 | Interface of roof drainage and ground drainage systems. | 4 | All | All drainage is internal. There are not problems to report. | |
| 2.3.5 | Inside faces of exterior walls (i.e., signs of cracks, water stains, dust spots). | 4 | All | No problems to report. | |
| Other | | | | | |

| Section 2 | Building Exterior | Rating | Comments/Concerns | | Estimated Cost |
|-----------|---|--------|-------------------------|---|----------------|
| 2.4 | Exterior Doors and Windows | | Building Section | Description/Condition | \$0 |
| 2.4.1 | Doors (i.e., signs of deterioration, rusting metal, glass cracks, peeling paint, damaged seals, sealed unit failure). | 4 | All | Routine general maintenance (painting) of exterior wood doors is required. All doors appear to be in sound condition. | |
| 2.4.2 | Door accessories (i.e., latches, hardware, screens, locks, alarms, holders, closers, security devices). | 4 | All | No problems to report. | |
| 2.4.3 | Exit door hardware (i.e., safety and/or code concerns). | 4 | All | No problems to report. | |
| 2.4.4 | Windows (i.e., signs of deterioration, rusting metal, glass cracks, peeling paint, damaged seals, sealed unit failure). | 4 | All | Windows appear to have been replaced throughout the school a few years ago. All are in good condition. No problems to report. | |
| 2.4.5 | Window accessories (i.e., latches, hardware, screens, locks, alarms, holders, closers, security devices). | 4 | All | No problems to report. | |
| 2.4.6 | Building envelope (i.e., signs of heavy condensation on doors or windows). | 4 | All | No problems to report. | |
| Other | | | | | |
| | Overall Building Exterior Condition & Estimated Costs | | | Except for some minor roofing issues, the exterior of the building is in good condition. | \$1,500 |

| 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). | 4 | All | No problems to report. | |
| Other | | | | | |

| Section 3 | Building Interior - Overall Conditions | Rating | Comments/Concerns | | Estimated Cost |
|-----------|---|--------|-------------------------|--|------------------|
| 3.2 | Materials and Finishes | | Building Section | Description/Condition | \$125,000 |
| 3.2.1 | Floor materials and finishes. | 3 | 1954 & 1956 | Linoleum throughout the 1954 and 1956 sections of the building is badly worn and is separating at seams. These floors are due for replacement. | \$40,000 |
| | | | 1956 | The basement locker rooms in the 1956 section of the building have a 9" x 9" vinyl asbestos tile floor. The tiles in this area are loose and are lifting. A new type of flooring should be applied to these areas. They are no longer used as locker rooms but as storage areas. | \$5,000 |
| | | | 1959 & 1962 | Corridors in the 1959 and 1962 sections have a 9" x 9" vinyl asbestos tile floor finish. All such tile of this type should be replaced. | \$10,000 |
| | | | 1971 | The gymnasium consists of linoleum overlaid with multiple coats of laquer. In many areas the laquer is discolored (it appears to have been burned). In many locations the linoleum beneath the laquer is exposed and has been broken. The entire floor should be replaced. | \$50,000 |
| 3.2.2 | Wall materials and finishes. | 3 | 1954 & 1956 | Wood paneling dados in the 1954 and 1956 sections of the building should be re-finished. All are in good condition otherwise. | \$20,000 |
| 3.2.3 | Ceiling materials and finishes. | 4 | All | No problems to report. | |
| 3.2.4 | Interior doors and hardware. | 4 | All | No problems to report. | |
| 3.2.5 | Millwork | 4 | All | No problems to report. | |
| 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). | 4 | All | No problems to report. | |
| 3.2.8 | Washroom materials and finishes. | 4 | All | No problems to report. | |
| Other | | | | | |

| 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 | \$13,600 |
| 3.3.1 | Building construction type - combustible or non-combustible, sprinklered or non-sprinklered. | 4 | 1954, 1956, and 1959 | The 1954, 1956, and 1959 sections of the building are of combustible construction. They are not sprinklered. | |
| | | | 1962 | The 1962 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 | 1971 | The 1971 section of the building is of both combustible (roof assembly) and non-combustible (walls and floor) construction. It is not sprinklered. | |
| 3.3.3 | Fire resistance rating of materials (i.e., corridor walls and doors). | 3 | All | 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 solid wood frames. Doors and frames should be labelled. | \$3,200 |
| 3.3.4 | Exiting distances and access to exits. | 3 | All | Classrooms and ancillary 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. Storage Rooms and Janitorial Supply Rooms have doors with closers but these doors do not bear a fire-resistance label. | \$5,400 |

| Section 3 | Building Interior - Overall Conditions | Rating | Comments/Concerns | | Estimated Cost |
|-----------|--|--------|-------------------------|--|------------------|
| 3.3 | Health and Safety Concerns --- <i>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.</i> | | Building Section | Description/Condition | |
| 3.3.5 | Barrier-free access. | 4 | All | Travel distances to exits appears to conform to code. | |
| | | 3 | All | All entrances to the building with the exception of the east entrance at the south end of the 1962 section, are grade level entrances and could provide access to persons confined to wheelchairs. The second floor of the 1962 section of the building is not barrier free accessible nor is the partial second floor of the original (1954) section of the building. | \$5,000 |
| 3.3.6 | Availability of hazardous materials audit (i.e., evidence of safety concerns with respect to asbestos, PCB's, chemicals). | 4 | All | 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) | | | | |
| Other | | | | | |
| | Overall Building Interior Condition & Estimated Costs | | | There are some serious flooring problems, which should be addressed. Wood panelling dados in the 1954 and 1956 sections of the building should be re-finished. Fire doors and frames should be labelled. Aside from these issues, the rest of the interior is in reasonably good condition. | \$138,600 |

| 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. Roof drains are connected to 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. Old style hose bibs are do not have vacuum breakers. | \$2,500 |
| 4.1.3 | Outside storage tanks. | N/A | All | There are no outside storage tanks. | |
| Other | | | | | |
| 4.2 | Fire Suppression Systems | | Building Section | Description/Condition | \$5,000 |
| 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). | 2 | All | A number of manual pump type extinguishers were observed to have leaked and/or evaporated dry. Extinguishers should be replaced throughout as required. | \$5,000 |
| 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 | | Building Section | Description/Condition | \$64,000 |
| 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. | |
| 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 systems make-up and connection to Firehose cabinet supply. | |
| 4.3.4 | Piping and fittings. | 4 | All | Copper Piping is original and probably contains lead at fittings and calcium build-up on pipe walls. Piping should be corrected or replaced. No breaks, leaks or problems reported. | \$45,000 |
| 4.3.5 | Plumbing fixtures (i.e., toilets, urinals, sinks) | 3 | 1954, 1959 | Fixtures in 1954, 1959 sections are old, discoloured and mismatched in many areas. Fixtures in these areas should be upgraded. Fixtures in 1962, 1971 sections are in good condition with exception of tempered mixing valves serving Gymnasium locker rooms. | \$17,500 |
| 4.3.6 | Domestic hot water system (i.e., heater, storage tanks, failure alarms, pressure, volume, recirculation). | 4 | All | An adequate supply of domestic hot water is supplied by three Natural Gas fired domestic hot water heaters. The oldest unit may require replacement in the near future. DHW recirculation is provided on all systems. Controls and safety valves are 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. Weeping tile sump and pump in basement boiler room are in good condition. | |
| Other | | 2 | All | Several roof drain gravel stops are broken or missing, resulting in partially plugged drains. | \$1,500 |

| Section 4 | Mechanical Systems | Rating | Comments/Concerns | | Estimated Cost |
|-----------|---|--------|-------------------------|---|------------------|
| 4.4 | Heating Systems | | Building Section | Description/Condition | \$219,500 |
| 4.4.1 | Heating capacity and reliability (including backup capacity). | 4 | 1954, 1959 | Heating is provided to the 1954, 1956 and 1959 sections of the building by a pair of natural gas fired low pressure steam boilers. One boiler was recently installed, the other is several years old. | \$75,000 |
| | | | 1962, 1971 | The 1962 / 1971 sections are heated by a single hot water boiler (485 kW). No Problems reported.B. Old boiler shows signs of corrosion and should be replaced. | |
| 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. | FI | All | Combustion Air Provided to all mechanical rooms, Insulation in need of replacement. Flues and Stacks appear to be in good condition within mechanical room, brick chimney may not be lined. | |
| 4.4.4 | Treatment of water used in heating systems. | 3 | All | Steam boiler feed water is not treated. Chemical pot feeder observed on Hot water system. Steam boiler water conditioning system should be installed. | \$45,000 |
| 4.4.5 | Low water cutoff/pressure relief valves and failure alarms (i.e., hot water heating). | 4 | All | All 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. | FI | All | Filter sections provided in Make-up Air Handlers, and changed on a regular schedule. Condition of filters in unit ventilators is unknown and should be investigated. | |
| 4.4.7 | Heating humidification systems and components. | N/A | | No humidification provided. | |

| 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 | Steam radiators in good condition throughout, some problems with isolation and control valves. Hydronic radiators in good condition. Classroom Unit ventilators old, but in good condition, no problems reported. Steam system piping shows signs of external corrosion in boiler room, recommend piping be replaced. | \$60,000 |
| 4.4.9 | Heating piping, valve and/or duct insulation. | 3 | All | Exposed insulation in 1962 section boiler cracking and frayed, possibly asbestos based material. Exposed insulation in other areas in generally good condition. | \$4,500 |
| 4.4.10 | Heat exchangers. | N/A | | No Heat Exchangers | |
| 4.4.11 | Heating mixing boxes, dampers and linkages. | 3 | All | Mixed air dampers and linkages are serviced and repaired regularly. Should be replaced with new units. (Refer to 4.5.1). | Refer to 4.5.1 |
| 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. Some concerns about overheating due to limited control on steam system (wild loop). | |
| 4.4.13 | Zone/unit heaters and controls. | 4 | All | Refer to section 4.4.8 | |
| Other | | 2 | 1954, 1959 | Condensate collection system shows signs of corrosion. Condensate receiver and pump in basement was not functioning at the time of the survey. Maintenance should address this immediately. | \$35,000 |

| Section 4 | Mechanical Systems | Rating | Comments/Concerns | | Estimated Cost |
|-----------|--|--------|-------------------------|--|------------------|
| 4.5 | Ventilation Systems | | Building Section | Description/Condition | \$140,000 |
| 4.5.1 | Air handling units capacity and condition. | 3 | 1954 | Ventilation Unit serving Stage/Library should be replaced. | \$55,000 |
| | | | 1971 | Ventilation Unit serving Gymnasium should be replaced. | |
| 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). | 3 | All | No data available on number of air changes. Unit ventilators are approaching end of lifecycle and should be replaced. | \$75,000 |
| 4.5.4 | Exhaust systems capacity and condition. | 2 | All | General Exhaust Systems require upgrading throughout. Insufficient draw from washrooms to provide adequate odor control, number of janitor closets not exhausted. Exhaust fans serving classrooms not operated due to excessive fan noise. | \$10,000 |
| 4.5.5 | Separation of out flow from air intakes. | 4 | All | No problems or concerns reported or observed. | |
| 4.5.6 | Special/dedicated ventilation and/or exhaust systems (i.e., kitchen, labs, CTS areas). | N/A | | No special systems provided. | |
| Other | | | | | |
| | 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). | 4 | All | Heating controls upgraded in recent past in conjunction with installation of an Andover BMS for remote monitoring and building control. | |
| 4.5.8 | Air filtration systems and filters. | FI | All | Refer to section 4.4.6 | |
| 4.5.9 | Humidification system and components. | N/A | All | No humidification provided. | |
| 4.5.10 | Heat exchangers. | 3 | 1971 | Gas fired heat exchangers in Gym Make-up air unit should be replaced along with unit. | Refer to 4.5.1 |
| 4.5.11 | Ventilation distribution system and components (i.e., ductwork, diffusers, mixing boxes, dampers, linkages). | 3 | All | Refer to Section 4.4.11. | Refer to 4.5.1 |
| Other | | | | | |

| Section 4 | Mechanical Systems | Rating | Comments/Concerns | | Estimated Cost |
|-----------|---|--------|-------------------------|---|------------------|
| 4.6 | Cooling Systems | | Building Section | Description/Condition | \$0 |
| 4.6.1 | Cooling system capacity and condition (i.e., chillers, cooling towers, condensers). | N/A | All | No mechanical cooling is provided. | |
| 4.6.2 | Cooling distribution system and components (i.e., ductwork, diffusers, mixing boxes, dampers, linkages) | N/A | All | No mechanical cooling is provided. | |
| 4.6.3 | Cooling system controls (including use of current energy management technology). | N/A | All | No mechanical cooling is provided. | |
| 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 | The overall building is controlled and monitored remotely by a recently installed Andover building management system. Control accessories such as sensors and thermostats appear to be in good condition. | |
| | Overall Mechanical Systems Condition & Estimated Costs | | | 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 (boiler and condensate systems, make-up air units, unit ventilators, and exhaust fans), the existing domestic water piping (due to probable high lead content) ,and a significant portion of the plumbing fixtures. | \$431,000 |

| Section 5 | Electrical Systems | Rating | Comments/Concerns | | Estimated Cost |
|------------|--|--------|-------------------------|---|----------------|
| 5.1 | Site Services | | Building Section | Description/Condition | \$1,500 |
| 5.1.1 | Primary service capacity and reliability (i.e., access, location, components, installation, bus sizes - note whether overhead or underground). | 5 | | Underground fed 450A 120/240V 1 phase 3 wire FPE distribution. Located in closet at south end of building. | |
| 5.1.2 | Site and building exterior lighting (i.e., safety concerns). | 4 | | No concerns. Site and building lighting is HPS mounted on the building. | |
| 5.1.3 | Vehicle plug-ins (i.e., number, capacity, condition). | 3 | | 18 energized stalls. Receptacles mounted on exterior wall of building. Exterior panel is temperature controlled. Concerns for staff of 40 | \$1,500 |
| Other | | | | | |
| 5.2 | Life Safety Systems | | Building Section | Description/Condition | \$3,000 |
| 5.2.1 | Fire and smoke alarm systems (i.e., safety concerns, up-to-date technology, regularly tested). | 4 | | Simplex 2001 12 zone panel with 10 zones used. Heat detectors provided in all storage rooms and mechanical 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. Fan shutdown is provided for air systems. | |
| 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 monthly. | |
| 5.2.3 | Exit lighting and signage (i.e., safety concerns, condition). | 3 | | Original school has standard 60W incandescent lamp exit signage which does not conform to code. Exit signage has no connection to emergency battery packs. | \$3,000 |
| Other | | | | | |

| Section 5 | Electrical Systems | Rating | Comments/Concerns | | Estimated Cost |
|-----------|--|--------|-------------------------|---|----------------|
| 5.3 | Power Supply and Distribution | | Building Section | Description/Condition | \$2,000 |
| 5.3.1 | Power service surge protection. | 3 | | No surge protection provided | \$2,000 |
| 5.3.2 | Panels and wireways capacity and condition. | 4 | | Panels are manufactured by Square D. 5% 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 | | Loose motor starters are provided where required. Starters appear to be in good condition. Single phase motors are provided with manual motor switches. | |
| Other | | | | | |

| Section 5 | Electrical Systems | Rating | Comments/Concerns | | Estimated Cost |
|-----------|---|--------|-------------------------|--|----------------|
| 5.4 | Lighting Systems | | Building Section | Description/Condition | \$1,500 |
| 5.4.1 | Interior lighting systems and components (i.e., illumination levels, conditions, controls). | 3 | | Fluorescent T-12 surface mounted luminaries used throughout the school. Ballasts are magnetic core and coil type. Luminaries are in good condition Local line voltage switching is provided throughout the school. Computer lab lighting level recorded is low. Additional lighting required to meet standards. Lighting levels: Gymnasium: 450lux, classrooms: 600-700lux, corridors:250-350lux, library: 400lux, office: 450lux, washrooms: 750lux, computer lab: 350lux | \$1,500 |
| 5.4.2 | Replacement of ballasts (i.e., health and safety concerns). | | | No concerns. | |
| 5.4.3 | Implementation of energy efficiency measures and recommendations. | | | 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). | 4 | | Telephone system is adequate with 3 incoming lines. | |
| 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. | |
| 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). | 5 | | Installed in conduit where subject to damage. No concerns on installation | |
| 5.5.5 | Wiring and telecommunication closets (i.e., size, security, ventilation/cooling, capacity for growth). | 4 | | Telecommunications panel is located next to main distribution. | |
| 5.5.6 | Provision for dedicated circuits for network equipment (i.e., hubs, switches, computers). | 5 | | Patch panels switch installation. Dedicated panel located for computer lab. Two separate hubs for the computer lab and office. | |
| 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). | | | none provided | |
| 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). | 4 | | Manufactured by Amano. Connected to the PA/Intercom 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 | | | | | |

| Section 5 | Electrical Systems | Rating | Comments/Concerns | | Estimated Cost |
|-----------|--|--------|-------------------|--|----------------|
| | Overall Electrical Systems Condition & Estimated Costs | | | Overall, electrical systems are in good condition. | \$8,000 |

| Section 6 | Portable Buildings | Rating | Comments/Concerns | Estimated Cost |
|-----------|--|--------|--|----------------|
| | <i>Note: Separate sheets can be completed, if necessary, for portable buildings of different ages and/or conditions.</i> | | No Portables at St. Pius X 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 | 5 | 77.1 | 1336.7 | | | 1280 | 56.7 | |
| | | 1 | 75.7 | | | | | | |
| | | 1 | 74.3 | | | | | | |
| | | 2 | 76.6 | | | | | | |
| | | 1 | 83.1 | | | | | | |
| | | 2 | 39.9 | | | | | | |
| | | 3 | 69.7 | | | | | | |
| | | 3 | 68.3 | | | | | | |
| | | 1 | 71.1 | | | | | | |
| 7.2 | Science Rooms/Labs | 1 | 121.7 | 216.9 | | | 190 | 26.9 | |
| | | 1 | 95.2 | | | | | | |
| 7.3 | Ancillary Areas (i.e., Art, Computer Labs, Drama, Music,) | | | 267.6 | | | 400 | -132.4 | |
| 7.4 | Gymnasium (incl. gym storage) | | | 473.8 | | | 473 | 0.8 | |
| 7.5 | Library/Resource Areas | | | 128.7 | | | 240 | -111.3 | |
| 7.6 | Administration/Staff, Physical Education, Storage Areas | | | 772.9 | | | 517 | 255.9 | |
| 7.7 | CTS Areas | N/A | | | | | 0 | | |
| | 7.7.1 Business Education | | | | | | | | |
| | 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) | | | 1441.0 | | | 1154 | 287.0 | |
| | Overall Space Adequacy Assessment | | | 4637.6 | | | 4254.0 | 383.6 | Current enrolment = 224 or 64.93% of net capacity |

| Evaluation Component/ Sub-Component | Additional Notes and Comments |
|--|-------------------------------|
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