

School Facility Evaluation Project  
Part II - Physical Condition

| School Name:             | Good Shepherd Elementary School                       |               |                         |  | School Code:   | 8061   |
|--------------------------|---|---------------|-------------------------|--|--|--|
| Location:                | 18111 - 57th Avenue, Edmonton, Alberta                |               |                         |  | Facility Code:   | 2065   |
| Region:                  | Central   |               |                         |  | Superintendent:  | Mr. Garnet McKee   |
| Jurisdiction:            | Edmonton Roman Catholic Schools Regional Division #40 |               |                         |  | Contact Person:  | Mr. Ken Yakimovich   |
|                          |   |               |                         |  | Telephone:   | (780) 453-4500   |
| Grades:                  | K - VI  |               |                         |  | School Capacity:   | 275  |
|                          |   |               |                         |  |  |  |
| 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        | 1993  | 1             | 2508                    | Masonry construction combination of flat and sloped roofs, block veneer and outslulation exterior. | Consists of Hot Water Heating system, served by hot water heating boiler plant (no glycol), located in that section of the school. The ventilation system consists of two (2) indoor mounted air handling units and overhead ductwork. | Issues with roof leakage currently under investigation. Stability of exterior finishes is also under investigation.<br><br><b>Mechanical:</b> The Boiler Plant serving original school is in good condition. The existing ventilation system can provide minimum fresh air, as is required by ASHRAE 62-1989 Standards and present ventilation codes. Therefore, the heating & ventilation system does not require modification. |
| Additions/<br>Expansions |   |               |                         |  |  |  |
|                          |   |               |                         |  | Evaluator's Name:  | Janusz Najfeldt  |
|                          |   |               |                         |  | & Company:   | Najfeldt Architect   |

School Facility Evaluation Project  
Part II - Physical Condition

|  |                                    |   |     |  |   |   |
|--|------------------------------------|---|-----|--|---|---|
| Upgrading/<br>Modernization<br>(identify whether<br>minor or major)                            |                                    |   |     |  |   |   |
| Portable Struct.<br>(identify whether<br>attached/perman. or<br>free-standing/<br>relocatable) | 1981                               | 1 | 167 | Frame construction, wood siding,<br>exterior flat roofs. | Consist of attached portable<br>classrooms served by Palm-Air<br>individual gas fired furnaces. | Permanantly attached on east side of<br>original building.<br><b>Mechanical:</b> The ventilation and<br>heating system can meet standards for<br>portable classrooms application. |
|  |                                    |   |     |  |   |   |
| List of Reports/<br>Supplementary<br>Information   | Fire alarm test conducted in 1999. |   |     |  |   |   |

School Facility Evaluation Project  
Part II - Physical Condition

|   | Evaluation Components                              | Summary Assessment  |         | Estim. Cost   |
|---|--|---|---------|---------------|
| 1 | Site Conditions                                    | Install catch basins to improve drainage.<br>Provide fence at rear.   |         | \$ 23,500.00  |
| 2 | Building Exterior                                  | Investigate performance of exterior finishes and roofing. Replace front entry window.<br>Remedial work to building envelope will be required including re-roofing, parapets, wall to roof transitions and exterior wall finishes.           |         | \$ 178,500.00 |
| 3 | Building Interior                                  | No issues.  |         | \$ -          |
| 4 | Mechanical Systems                                 | The existing hot water heating system can be reused. The ventilation system meets ASHRAE 62-1989 standards and present ventilation code requirements. Therefore, the existing heating and ventilation system does not require modification. |         | \$ -          |
| 5 | Electrical Systems                                 | Building electrical system is in excellent condition. Retrofit existing luminaires with new T8 lamps and electronic ballasts.   |         | \$ 102,060.00 |
| 6 | Portable Buildings                                 | Replace windows.<br>Provide new T8 lamps and electronic ballasts.<br>Upgrade fire alarm system to current code.   |         | \$ 17,300.00  |
| 7 | Space Adequacy:                                    |   |         |               |
|   | 7.1 Classrooms                                     | Excessive   | 261.10  |               |
|   | 7.2 Science Rooms/Labs                             | Deficient   | -190.00 |               |
|   | 7.3 Ancillary Areas                                | Deficient   | -233.70 |               |
|   | 7.4 Gymnasium                                      | Somewhat Deficient  | -7.20   |               |
|   | 7.5 Library/Resource Areas                         | Slightly Excessive.   | 22.40   |               |
|   | 7.6 Administration/Staff Areas                     | Deficient   | -148.80 |               |
|   | 7.7 CTS Areas                                      |   |         |               |
|   | 7.8 Other Non-Instructional Areas (incl. gross-up) | Excessive   | 96.20   |               |
|   | Overall School Conditions & Estim. Costs           |   | -200.00 | \$ 321,360.00 |

School Facility Evaluation Project  
Part II - Physical Condition

| Section 1 | Site Conditions   | Rating | Comments/Concerns  | Estim. Cost  |
|-----------|---|--------|--|--------------|
| 1.1       | General Site Conditions   |        |  |              |
| 1.1.1     | Overall site size.  | 4      | Adequate   | \$ -         |
| 1.1.2     | Outdoor athletic areas.   | 5      | Two soccer fields.<br>Outdoor basketball hoops on paved play area.   | \$ -         |
| 1.1.3     | Outdoor playground areas, including condition of equipment and base.                        | 5      | City owned playground adjacent to site - excellent condition.  | \$ -         |
| 1.1.4     | Site landscaping.   | 5      | Grass throughout, treed and shrubbery areas. In good condition   | \$ -         |
| 1.1.5     | Site accessories (i.e., perimeter and other fencing, guard rails, bike stands, flag poles). | 4      | No fencing - inadequate.<br>Flag pole and bike stands provided.  | \$ -         |
| 1.1.6     | Surface drainage conditions (i.e., drains away from building, signs of ponding).            | 2      | Problem with drainage swale on south and west side of the building.<br>Recommend catch basins to improve drainage. | \$ 15,000.00 |
| 1.1.7     | Evidence of sub-soil problems.  | N/A    |  | \$ -         |
| 1.1.8     | Safety and security concerns due to site conditions.  | 2      | South end of the site needs fence. Safety concerns with balls on the street.                                       | \$ 8,500.00  |
| Other     |   |        |  | \$ -         |

School Facility Evaluation Project  
Part II - Physical Condition

| Section 1 | Site Conditions  | Rating | Comments/Concerns                                     | Estim. Cost |
|-----------|--|--------|---|-------------|
| 1.2       | Access/Drop-Off Areas/Roadways/Bus Lanes   |        |   |             |
| 1.2.1     | Vehicular and pedestrian access points (i.e., size, number, visibility, safety). | 4      | Two vehicular access points.<br>Adequate.             | \$ -        |
| 1.2.2     | Surfacing of on-site road network (note whether asphalt or gravel).              | 5      | All driveways asphalt paved - in excellent condition. | \$ -        |
| 1.2.3     | Bus lanes/drop-off areas (note whether on-site or off-site).                     | 5      | On-site lane, satisfactory.                           | \$ -        |
| 1.2.4     | Fire vehicle access.   | 5      | Good to all areas of building.                        | \$ -        |
| 1.2.5     | Signage.   | 5      | On building - excellent.                              | \$ -        |
| Other     |  |        |   | \$ -        |

School Facility Evaluation Project  
Part II - Physical Condition

| Section 1 | Site Conditions  | Rating | Comments/Concerns  | Estim. Cost  |
|-----------|--|--------|--|--------------|
| 1.3       | <b>Parking Lots and Sidewalks</b>  |        |  |              |
| 1.3.1     | Number of parking spaces for staff, students and visitors (including stalls for disabled persons). | 5      | Adequate staff parking.<br>Designated barrier free stalls provided.<br>Some visitor parking on site. | \$ -         |
| 1.3.2     | Layout and safety of parking lots.   | 4      | Adequate.  | \$ -         |
| 1.3.3     | Surfacing and drainage of parking lots (note whether asphalt or gravel).                           | 4      | Asphalt - good drainage.   | \$ -         |
| 1.3.4     | Layout and safety of sidewalks.  | 4      | Icy conditions encountered, but manageable.  | \$ -         |
| 1.3.5     | Surfacing and drainage of sidewalks (note type of material).                                       | 4      | Concrete walkways, good drainage.<br>Asphalt play area at rear of gym - good condition.              | \$ -         |
| 1.3.6     | Curb cuts and ramps for barrier free access.   | 5      | Provided.  | \$ -         |
| Other     |  |        |  | \$ -         |
|           | <b>Overall Site Conditions &amp; Estimated Costs</b>   |        |  | \$ 23,500.00 |

School Facility Evaluation Project  
Part II - Physical Condition

| Section 2 | Building Exterior   | Rating | Comments/Concerns |  | Estim. Cost |
|-----------|---|--------|-------------------|--|-------------|
| 2.1       | Overall Structure   |        | Bldg. Section     | Description/Condition  |             |
| 2.1.1     | Floor structure and beams (i.e., signs of bending, cracking, heaving, settlement, voids, rust, stains). | 5      | 1993              | No signs of structural distress or settlement observed or reported. Floor structure components appear in good condition.   | \$ -        |
| 2.1.2     | Wall structure and columns (i.e., signs of bending, cracking, settlement, voids, rust, stains).         | 5      | 1993              | Masonry load bearing walls in combination with reinforced concrete columns in central area. All components in excellent condition.   | \$ -        |
| 2.1.3     | Roof structure (i.e., signs of bending, cracking, voids, rust, stains).                                 | 5      | 1993              | Combination of OWSJ and wood timber frame over open area, exposed, prefinished metal decks. Interior, metal clad sloped roofs on exterior. All components appear in excellent condition. | \$ -        |
| Other     |   | 2      | 1993              | Significant water entry encountered. Study underway.   | See 2.3.1   |

| Section 2 | Building Exterior   | Rating | Comments/Concerns             |  | Estim. Cost  |
|-----------|---|--------|-------------------------------|--|--------------|
| 2.2       | <b>Roofing and Skylights</b><br><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</i>   |        | Bldg. Section or Roof Section | Description/Condition/Age  |              |
| 2.2.1     | Based on the inspection report (and to the extent possible, direct observation), assess and rate roof conditions and estimate costs for required improvements (i.e., covering materials, membrane, insulation, other components). | 2      | 1993                          | Significant water leakage experienced throughout. Study underway.<br><br>Combination of flat and sloping roofs. Metal roofing on raised portions. Flat roofs over remainder of building. | \$ 75,000.00 |
| 2.2.2     | Roof accessories (i.e., ladders, stairs, hatches, masts, exhaust hoods, chimneys, gutters, downspouts, splashpads).   | 5      | 1993                          | Through roof hatch from within building. All drainage internal, within building. All accessories located over flat sections of building.   | \$ -         |
| 2.2.3     | Control of ice and snow falling from roof.  | 5      | 1993                          | No issues reported.  | \$ -         |
| 2.2.4     | Skylights (i.e., signs of distress, leaks, ice build-up, condensation, deteriorated materials/seals).   | N/A    |                               |  | \$ -         |
| Other     |   |        |                               |  | \$ -         |



School Facility Evaluation Project  
Part II - Physical Condition

| Section 2 | Building Exterior   | Rating | Comments/Concerns |  | Estim. Cost   |
|-----------|---|--------|-------------------|--|---------------|
| 2.3       | Exterior Walls/Building Envelope  |        | Bldg. Section     | Description/Condition  |               |
| 2.3.1     | Exterior wall finishes (i.e., signs of deterioration, cracks, brick spalling, effluorescence, water stains).                          | 2      | 1993              | Ceramic tile accents cracking, allowing water entry. Check for expansion joints. Split face concrete block base corners cracking. Check for expansion joints. Outsulation stucco top band cracking, allowing water entry into wall. Extensive repairs are anticipated. | \$ 100,000.00 |
| 2.3.2     | Fascias, soffits, parapets (i.e., signs of looseness, stains, rust, peeling paint).   | 2      | 1993              | Prefinished metal cap flashing in good condition, however, some detailing could be reviewed for better performance (i.e. inadequate overlaps).   | See 2.3.1     |
| 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      | 1993              | Condensation damage at window sill in main entrance, otherwise no evidence of air leakage.   | \$ -          |
| 2.3.4     | Interface of roof drainage and ground drainage systems.   | 5      | 1993              | Excellent, no issues observed or reported relating to interface of the two drainage systems.   | \$ -          |
| 2.3.5     | Inside faces of exterior walls (i.e., signs of cracks, water stains, dust spots).   | 4      | 1993              | Good condition overall. No signs of cracking or water damage observed or reported.   | \$ -          |
| Other     |   |        |                   |  | \$ -          |

School Facility Evaluation Project  
Part II - Physical Condition

| Section 2                                     | Building Exterior   | Rating | Comments/Concerns |  | Estim. Cost   |
|---|---|--------|-------------------|--|---------------|
| 2.4   | Exterior Doors and Windows  |        | Bldg. Section     | Description/Condition  |               |
| 2.4.1   | Doors (i.e., signs of deterioration, rusting metal, glass cracks, peeling paint, damaged seals, sealed unit failure).   | 4      | 1993              | Metal doors and frames in good condition.  | \$ -          |
| 2.4.2   | Door accessories (i.e., latches, hardware, screens, locks, alarms, holders, closers, security devices).                 | 5      | 1993              | All in excellent condition. All accessories are relatively new.                                      | \$ -          |
| 2.4.3   | Exit door hardware (i.e., safety and/or code concerns).   | 5      | 1993              | No concerns, all in good condition.<br>Panic hardware in good condition, no safety or code concerns. | \$ -          |
| 2.4.4   | Windows (i.e., signs of deterioration, rusting metal, glass cracks, peeling paint, damaged seals, sealed unit failure). | 5      | 1993              | Aluminum with integral venetian blinds, awning openers, all in good condition.                       | \$ -          |
| 2.4.5   | Window accessories (i.e., latches, hardware, screens, locks, alarms, holders, closers, security devices).               | 5      | 1993              | In excellent condition throughout. Latches, screens and closers in good, workable condition.         | \$ -          |
| 2.4.6   | Building envelope (i.e., signs of heavy condensation on doors or windows).  | 2      | 1993              | Condensation at front entrance window. Replace pressed steel frame with thermally broken window.     | \$ 3,500.00   |
| Other   |   |        |                   |  |               |
| Overall Bldg Exterior Condition & Estim Costs |   |        |                   |  | \$ 178,500.00 |

| Section 3 | Building Interior - Overall Conditions  | Rating | Comments/Concerns |  | Estim. Cost |
|-----------|---|--------|-------------------|--|-------------|
| 3.1       | Interior Structure  |        | Bldg. Section     | Description/Condition  |             |
| 3.1.1     | Interior walls and partitions (i.e., signs of cracks, spalling, paint peeling). | 5      | 1993              | Combination of block and mostly drywall partitions. No signs of cracks or deterioration, all in excellent condition. | \$ -        |
| 3.1.2     | Floors (i.e., signs of cracks, heaving, settlement).                            | 5      | 1993              | Concrete slabs on grade throughout, no signs of cracks or settlement observed or reported.                           | \$ -        |
| Other     |   |        |                   |  | \$ -        |
| 3.2       | Materials and Finishes  |        | Bldg. Section     | Description/Condition  |             |
| 3.2.1     | Floor materials and finishes.   | 5      | 1993              | VCT tile throughout, central area and offices are carpeted, entrance ceramic tile in excellent condition.            | \$ -        |
| 3.2.2     | Wall materials and finishes.  | 5      | 1993              | Fabric covered drywall in hallways, excellent condition. Painted drywall in classrooms.                              | \$ -        |
| 3.2.3     | Ceiling materials and finishes.   | 5      | 1993              | Exposed structure, excellent condition.  | \$ -        |

School Facility Evaluation Project  
Part II - Physical Condition

| Section 3 | Building Interior - Overall Conditions  | Rating | Comments/Concerns |   | Estim. Cost |
|-----------|---|--------|-------------------|---|-------------|
| 3.2       | Materials and Finishes (cont'd)   |        | Bldg. Section     | Description/Condition   |             |
| 3.2.4     | Interior doors and hardware.  | 5      | 1993              | Wood and metal doors in steel frames, all painted.  | \$ -        |
| 3.2.5     | Millwork  | 5      | 1993              | In excellent condition. Wood cabinets with plastic laminate tops.   |             |
| 3.2.6     | Fixed/wall mounted equipment (i.e., writing boards, tackboards, display boards, signs). | 5      | 1993              | Whiteboards throughout - adequate.  | \$ -        |
| 3.2.7     | Any other fixed/mounted specialty items (i.e., CTS equipment, gymnasium equipment).     | 5      | 1993              | Six basketball hoops.<br>Volleyball and badminton sets.<br>Sports flooring.   | \$ -        |
| 3.2.8     | Washroom materials and finishes.  | 5      | 1993              | Ceiling - Drywall painted.<br>Walls - Ceramic<br>Floor - Ceramic<br>Doors - Wood painted, all in excellent condition.<br>All above finishes are in excellent condition. | \$ -        |
| Other     |   |        |                   |   | \$ -        |

| Section 3  | Building Interior - Overall Conditions  | Rating | Comments/Concerns    |   | Estim. Cost |
|--|---|--------|----------------------|---|-------------|
| 3.3  | <b>Health and Safety Concerns</b> --- <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</i> |        | <b>Bldg. Section</b> | <b>Description/Condition</b>  |             |
|  |   |        |                      |   |             |
|  | 3.3.1 Building construction type - combustible or non-combustible, sprinklered or non-sprinklered.  | 5      | 1993                 | Non combustible and heavy timber construction in combination. Sprinklered throughout. | \$ -        |
|  | 3.3.2 Fire separations (i.e., between buildings, wings, zones if non-sprinklered).  | 5      | 1993                 | Adequate.   | \$ -        |
|  | 3.3.3 Fire resistance rating of materials (i.e., corridor walls and doors).   | 5      | 1993                 | Appears adequate  | \$ -        |
|  | 3.3.4 Exiting distances and access to exits.  | 5      | 1993                 | Adequate.   | \$ -        |
|  | 3.3.5 Barrier-free access.  | 5      | 1993                 | Provided throughout.<br>Automatic doors provided.                                     | \$ -        |
|  | 3.3.6 Availability of hazardous materials audit (i.e., evidence of safety concerns with respect to asbestos, PCB's, chemicals).   | 5      | 1993                 | No audit carried out.<br>No hazardous materials suspected.                            | \$ -        |
|  | 3.3.7 Other health and safety concerns (i.e., evidence of excessive noise conditions, air quality problems)   | 5      | 1993                 | None  | \$ -        |
| Other  |   |        |                      |   |             |
| <b>Overall Bldg Interior Condition &amp; Estim Costs</b> |   |        |                      |   | \$ -        |

| Section 4 | Mechanical Systems   | Rating | Comments/Concerns    |  | Estim. Cost |
|-----------|--|--------|----------------------|--|-------------|
| 4.1       | <b>Mechanical Site Services</b>  |        |                      |  |             |
|           | 4.1.1 Site drainage systems (i.e., surface and underground systems, catch basins).                             | 5      | All sections         | The site drainage system is surface type system and is in good condition. No water accumulation was identified around the building |             |
|           | 4.1.2 Exterior plumbing systems (i.e., irrigation systems, hose bibs).   | 5      | All sections         | The irrigation system does not exist. The NFHB are in fair condition.  |             |
|           | 4.1.3 Outside storage tanks.   | N/A    | All sections         | None   |             |
|           | Other  |        |                      |  |             |
| 4.2       | <b>Fire Suppression Systems</b>  |        | <b>Bldg. Section</b> | <b>Description/Condition</b>   |             |
|           | 4.2.1 Fire hydrants and Siamese connections.   | N/A    |                      | None   |             |
|           | 4.2.2 Fire suppression systems (i.e., pumps, sprinklers, piping, reservoirs, hoses, stand pipes, CO2 systems). | 5      | All sections         | The standpipe system and sprinkler system is in good condition.  |             |
|           | 4.2.3 Hand extinguishers, blankets and showers (i.e., in CTS areas).   | 4      | All sections         | Fire extinguishers are in fair condition.  |             |
|           | 4.2.4 Other special situations (e.g., flammable storage areas, science labs, CTS areas).                       | N/A    | All section          | None are required.   |             |
|           | Other  |        |                      |  |             |
|           |  |        |                      |  |             |

| Section 4 | Mechanical Systems  | Rating | Comments/Concerns |   | Estim. Cost |
|-----------|---|--------|-------------------|---|-------------|
| 4.3       | Water Supply and Plumbing Systems   |        | Bldg.<br>Section  | Description/Condition   |             |
| 4.3.1     | Domestic water supply (i.e., pressure, volume, quality note whether municipal or well supply).            | 5      | All sections      | Domestic water supply is from the water main in the street (municipal water supply ). There is no problem with water pressure, volume and water quality.                |             |
| 4.3.2     | Water treatment system(s).  | 5      | All sections      | The domestic water supply is from the City Main. The water is treated and is in good condition.   |             |
| 4.3.3     | Pumps and valves (including Backflow prevention valves).  | 5      | All sections      | The domestic water circulation pumps and valves are in good condition.  |             |
| 4.3.4     | Piping and fittings.  | 5      | All sections      | All piping and fittings are not showing evidence of corrosion and are in fair condition.  |             |
| 4.3.5     | Plumbing fixtures (i.e., toilets, urinals, sinks)   | 4      | All sections      | All plumbing fixtures have individual isolation valves, meet all code requirements and are in fair condition.   |             |
| 4.3.6     | Domestic hot water system (i.e., heater, storage tanks, failure alarms, pressure, volume, recirculation). | 5      | All sections      | The domestic hot water system consists of two (2) A.O. Smith natural gas fired heater. The capacity and conditions are good.  |             |
| 4.3.7     | Sanitary and storm sewers, including sumps and pits (note whether sewage system is municipal or septic).  | 5      | All sections      | The sanitary sewer system including sumps and pits is municipal type of system and is in fair condition. Storm system inside of the building is also in fair condition. |             |
| Other     |   |        |                   |   |             |

School Facility Evaluation Project  
Part II - Physical Condition

| Section 4 | Mechanical Systems  | Rating | Comments/Concerns |  | Estim. Cost |
|-----------|---|--------|-------------------|--|-------------|
| 4.4       | Heating Systems   |        | Bldg.<br>Section  | Description/Condition  |             |
| 4.4.1     | Heating capacity and reliability (including backup capacity).                         | 4      | All sections      | The existing hot water heating boiler plant consist of two (2) natural gas fired Raypak boilers and two (2) heating pumps. The system is not complete with glycol. The heating capacity and backup are fine. |             |
| 4.4.2     | Heating controls (including use of current energy management technology).             | 4      | All sections      | The existing mechanical system is using pneumatic control system. DDC control system is applied to all components of mechanical system.  |             |
| 4.4.3     | Fresh air for combustion and condition of the combustion chimney.                     | 5      | All sections      | The existing combustion air is sufficient and chimney is in good condition.  |             |
| 4.4.4     | Treatment of water used in heating systems.   | 4      | All sections      | The existing chemical pot feeder is in an accessible location and is in fair condition.  |             |
| 4.4.5     | Low water cutoff/pressure relief valves and failure alarms (i.e., hot water heating). | 4      | All sections      | Each boiler is complete with low water cutoff device and remote alarm system. All are in fair condition.   |             |
| 4.4.6     | Heating air filtration systems and filters.   | 4      | All sections      | All cartridge filters are clean and in fair condition  |             |
| 4.4.7     | Heating humidification systems and components.  | 4      | All sections      | Humidification system consists of steam electronic type humidifiers in each air handling unit. The system is operational.  |             |



| Section 4 | Mechanical Systems  | Rating | Comments/Concerns |  | Estim. Cost |
|-----------|---|--------|-------------------|--|-------------|
| 4.4       | Heating Systems (cont'd)  |        | Bldg.<br>Section  | Description/Condition  |             |
| 4.4.8     | Heating distribution systems (i.e., piping, ductwork) and associated components (i.e., diffusers, radiators). | 5      | All sections      | The hot water heating perimeter radiation system is in good condition. The ductwork serving entire school is in fine condition. No modification is required to the heating system. |             |
| 4.4.9     | Heating piping, valve and/or duct insulation.   | 5      | All sections      | The thermal insulation on the existing ductwork and piping system is in good condition.  |             |
| 4.4.10    | Heat exchangers.  | 5      | All sections      | All heat exchangers serving air handling units and boilers are in good condition.  |             |
| 4.4.11    | Heating mixing boxes, dampers and linkages.   | 5      | All sections      | All mixing boxes are located within Mechanical Room and are in good condition.   |             |
| 4.4.12    | Heating distribution/circulation in larger spaces (i.e., user comfort, temperature of outside wall surfaces). | 4      | All sections      | The hot water unit heaters and coils system serving the Gymnasium, and Library are in fine condition. The system does not require modification.                                    |             |
| 4.4.13    | Zone/unit heaters and controls.   | 5      | All sections      | All unit heaters and entrance forced flow heaters are complete with thermostats and are in good condition  |             |
| Other     |   |        |                   |  |             |

| Section 4 | Mechanical Systems   | Rating | Comments/Concerns |  | Estim. Cost |
|-----------|--|--------|-------------------|--|-------------|
| 4.5       | Ventilation Systems  |        | Bldg. Section     | Description/Condition  |             |
| 4.5.1     | Air handling units capacity and condition.   | 5      | All sections      | The existing two (2) air handling units, one (1) unit serving Gymnasium, second serving the rest of the school, are complete with reheat coil and overhead ductwork. Each air handling unit can meet the present ventilation codes and the ASHRAE 62-1989 Standards. |             |
| 4.5.2     | Outside air for the occupant load (if possible, reference CFM/occupant).               | 4      | All sections      | All air handling units are capable to provide required minimum 15.0 CFM/student of outside air.  |             |
| 4.5.3     | Air distribution system (if possible, reference number of air changes/hour).           | 4      | All sections      | The air distribution system is via ceiling space. The air changes provided to each Classroom are set at 6 and can meet present codes.  |             |
| 4.5.4     | Exhaust systems capacity and condition.  | 5      | All sections      | All exhaust fans have sufficient capacity and are in good condition.   |             |
| 4.5.5     | Separation of out flow from air intakes.   | 5      | All sections      | Are set at min. 10 Ft. which is acceptable   |             |
| 4.5.6     | Special/dedicated ventilation and/or exhaust systems (i.e., kitchen, labs, CTS areas). | N/A    | All sections      |  |             |
| Other     |  |        |                   |  |             |

School Facility Evaluation Project  
Part II - Physical Condition

| Section 4 | Mechanical Systems   | Rating | Comments/Concerns |  | Estim. Cost |
|-----------|--|--------|-------------------|--|-------------|
| 4.5       | Ventilation Systems (cont'd)   |        | Bldg.<br>Section  | Description/Condition  |             |
|           | <i>Note: Only complete the following items if there are separate ventilation and heating systems.</i>        |        |                   |  |             |
| 4.5.7     | Ventilation controls (including use of current energy management technology).                                | 4      | All sections      | The ventilation system is using DDC pneumatic control system, which is current technology system and is in good condition. |             |
| 4.5.8     | Air filtration systems and filters.  | 4      | All sections      | Air filtration system consists of med- efficiency replaceable filters, which are in fair condition.                        |             |
| 4.5.9     | Humidification system and components.  | 4      | All sections      | The humidification system is steam electronic type system. The entire system is fine.                                      |             |
| 4.5.10    | Heat exchangers.   | 5      | All sections      | The water and gas heat exchanger is in good condition.   |             |
| 4.5.11    | Ventilation distribution system and components (i.e., ductwork, diffusers, mixing boxes, dampers, linkages). | 4      | All sections      | The ventilation distribution system and components are in fine condition.  |             |
| Other     |  |        |                   |  |             |

| Section 4 | Mechanical Systems  | Rating | Comments/Concerns |  | Estim. Cost |
|-----------|---|--------|-------------------|--|-------------|
| 4.6       | Cooling Systems   |        | Bldg. Section     | Description/Condition  |             |
| 4.6.1     | Cooling system capacity and condition (i.e., chillers, cooling towers, condensers).                     | N/A    |                   | None   |             |
| 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  |        |                   |  |             |
| 4.7.1     | Building wide/system wide control systems and/or energy management systems.                             | 5      | All sections      | The existing control system is pneumatic DDC control system and is using the current energy management technology. |             |
|           | Overall Mech Systems Condition & Estim. Costs   |        |                   |  |             |

School Facility Evaluation Project  
Part II - Physical Condition

| Section 5 | Electrical Systems   | Rating | Comments/Concerns |  | Estim. Cost |
|-----------|--|--------|-------------------|--|-------------|
| 5.1       | Site Services  |        |                   |  |             |
| 5.1.1     | Primary service capacity and reliability (i.e., access, location, components, installation, bus sizes - note whether overhead or underground). | 5      |                   | Underground electrical service 1200A 120/208V 3 Phase, 4 Wire. Installed in 1984. The peak demand in the last 12 months was 140.8kVA = 391A. The service is original and in excellent condition. Siemens main distribution with sub-feed to a 600A MCC 208V 3 phase.                 |             |
| 5.1.2     | Site and building exterior lighting (i.e., safety concerns).   | 4      |                   | The Building Lighting is in good condition. No safety concerns. Site lights located around the school. HID wallpaks around school perimeter.   |             |
| 5.1.3     | Vehicle plug-ins (i.e., number, capacity, condition).  | 5      |                   | Adequate capacity to handle all staff and teachers. Total of fifteen (15) existing car plugs. Excellent condition.   |             |
|           | Other  |        |                   |  |             |
| 5.2       | Life Safety Systems  |        | Bldg. Section     | Description/Condition  |             |
| 5.2.1     | Fire and smoke alarm systems (i.e., safety concerns, up-to-date technology, regularly tested).   | 5      | 1994              | The fire alarm control panel is a Simplex 4002 and was installed in 1993. Tested on an annual basis. Sixteen (16) zone panel, with nine (9) spare zones. Excellent condition. All fire bells have strobe lights. The building is sprinklered. Sprinkler system is in good condition. |             |
| 5.2.2     | Emergency lighting systems (i.e., safety concerns, condition).   | 4      | 1994              | Emergency lighting is in excellent condition. Remote heads are recessed style in walls.  |             |
| 5.2.3     | Exit lighting and signage (i.e., safety concerns, condition).  | 4      | 1994              | Exit signs are LED Style. Exit lights in excellent condition. No safety concerns.  |             |
|           | Other  |        |                   |  |             |

School Facility Evaluation Project  
Part II - Physical Condition

| Section 5 | Electrical Systems   | Rating | Comments/Concerns |   | Estim. Cost |
|-----------|--|--------|-------------------|---|-------------|
| 5.3       | Power Supply and Distribution  |        | Bldg.<br>Section  | Description/Condition   |             |
| 5.3.1     | Power service surge protection.  | 4      | 1994              | No surge protection. Ground fault relay installed in main distribution Skymatic Controls GFR-3.   |             |
| 5.3.2     | Panels and wireways capacity and condition.                            | 5      | 1994              | Panels are at 80% of capacity. Panels are in excellent condition.   |             |
| 5.3.3     | Emergency generator capacity and condition and/or UPS (if applicable). | N/A    |                   |   |             |
| 5.3.4     | General wiring devices and methods.                                    | 5      | 1994              | Wiring is in excellent condition. All wiring is copper and run in conduit.  |             |
| 5.3.5     | Motor controls.  | 5      | 1994              | Controls are in excellent condition. Andover AC 256M plus control system. All controls are set and monitored by Edmonton School Facilities Management downtown. |             |
| Other     |  |        |                   |   |             |

School Facility Evaluation Project  
Part II - Physical Condition

| Section 5 | Electrical Systems  | Rating | Comments/Concerns |  | Estim. Cost  |
|-----------|---|--------|-------------------|--|--------------|
| 5.4       | Lighting Systems  |        | Bldg. Section     | Description/Condition  |              |
| 5.4.1     | Interior lighting systems and components (i.e., illumination levels, conditions, controls). | 2      | 1994              | Computer Lab 630 Lux; Library 330 Lux; Classroom 650 Lux; Office Area 720 Lux; Gym 440 Lux; Music Room 440 Lux. The existing lighting is T12 magnetic ballasts and lamps. Upgrade to T8 electronic ballasts and lamps. Lighting is controlled by Douglas low voltage relay control system. Library lighting is poor, 300 Lux with outside day light. Some areas are as low as 190 Lux. Additional lighting is required in the library. | \$102,060.00 |
| 5.4.2     | Replacement of ballasts (i.e., health and safety concerns).                                 | 5      | 1994              | NO PCB Ballasts. PCB ballasts were not manufactured in 1994.   |              |
| 5.4.3     | Implementation of energy efficiency measures and recommendations.                           | 3      | 1994              | Upgrade all T12 magnetic ballasts and lamps to T8 electronic ballasts and energy efficient lamps. Computerized energy management system was intalled for mechanical and electrical enegy savings.  | See 5.4.1    |
| Other     |   |        |                   |  |              |

| Section 5 | Electrical Systems   | Rating | Comments/Concerns |   | Estim. Cost |
|-----------|--|--------|-------------------|---|-------------|
| 5.5       | Network and Communication Systems  |        | Bldg. Section     | Description/Condition   |             |
| 5.5.1     | Telephone system and components (i.e., capacity, reliability, condition).                              | 4      | 1994              | There are three (3) outside lines, one (1) fax and one (1) high-speed line. Nitsuko telephone system in good condition.                                 |             |
| 5.5.2     | Other communication systems (i.e., public address, intercom, CCTV, satellite or cable TV).             | 4      | 1994              | P.A. System is in good condition. Bogen MCP 35A. There is cable to each classroom. No satellite, intercom or CCTV. Gymnasium has separate sound system. |             |
| 5.5.3     | Network cabling (if available, should be category 5 or better).  | 5      | 1994              | Category 5 installed in 1999. Installed to all classrooms and offices. Excellent condition.   |             |
| 5.5.4     | Network cabling installation (i.e., in conduit, secured to walls or tables).                           | 4      | 1994              | All data cabling is in conduit or surface mounted modular raceway. Secured to walls.  |             |
| 5.5.5     | Wiring and telecommunication closets (i.e., size, security, ventilation/cooling, capacity for growth). | 4      | 1994              | Adequate capacity for growth. There is ventilation in the Server Room. Rack has a 120 port hub, 80% of capacity.  |             |
| 5.5.6     | Provision for dedicated circuits for network equipment (i.e., hubs, switches, computers).              | 4      | 1994              | Original design of building incorporated dedicated outlets for each classroom. Server is on a dedicated outlet.   |             |
| Other     |  |        |                   |   |             |



School Facility Evaluation Project  
Part II - Physical Condition

| Section 5                                      | Electrical Systems   | Rating | Comments/Concerns |  | Estim. Cost  |
|--|--|--------|-------------------|--|--------------|
| 5.6  | Miscellaneous Systems  |        | Bldg. Section     | Description/Condition  |              |
| 5.6.1  | Site and building surveillance system (if applicable).   | N/A    |                   |  |              |
| 5.6.2  | Intrusion alarms (if applicable).  | 4      | 1994              | Telsco monitoring system with motion sensors in corridors. The system is in good condition. No key-pad access. Master on/off switch in Janitor Room. |              |
| 5.6.3  | Master clock system (if applicable).   | 4      | 1994              | All clocks are 120V. No master clock system. Clocks are in good condition.   |              |
| Other  |  |        |                   |  |              |
| 5.7  | Elevators/Disabled Lifts (If applicable)   |        |                   |  |              |
| 5.7.1  | Elevator/lift size, access and operating features (i.e., sensing devices, buttons, phones, detectors). | N/A    |                   |  |              |
| 5.7.2  | Condition of elevators/lifts.  | N/A    |                   |  |              |
| 5.7.3  | Lighting and ventilation of elevators/lifts.   | N/A    |                   |  |              |
| Other  |  |        |                   |  |              |
| Overall Elect. Systems Condition & Estim Costs |  |        |                   |  | \$102,060.00 |

School Facility Evaluation Project  
Part II - Physical Condition

| Section 6 | Portable Buildings   | Rating | Comments/Concerns  | Estim. Cost         |
|-----------|--|--------|--|---------------------|
|           | <i>Note: Separate sheets can be completed, if necessary, for portable buildings of different ages and/or conditions.</i>         |        | Attached on east side 1981.  |                     |
| 6.1.1     | Foundation and structure (i.e., signs of bending, cracking, settlement, rust, voids, stains).                                    | 4      | Piles, no sign of movement.  | \$ -                |
| 6.1.2     | Roof materials and components (i.e., signs of deterioration, leaks, ice build-up).   | 4      | Flat, roofs in good condition.   | \$ -                |
| 6.1.3     | Exterior wall finishes (i.e., signs of deterioration, cracks, water stains).   | 4      | Wood siding, stained - satisfactory  | \$ -                |
| 6.1.4     | Doors and windows (i.e., signs of deterioration, rusting hardware, glass cracks, peeling paint, damaged seals).                  | 2      | Wood windows dry rot, recommend replacement.   | \$ 10,000.00        |
| 6.1.5     | Interior finishes (i.e., floors, walls, ceiling).  | 4      | Floor - VCT tile - good condition<br>Walls - Drywall painted - good condition<br>Ceilings - Good condition.  | \$ -                |
| 6.1.6     | Millwork (i.e., counters, shelving, vanities, cabinets).   | 4      | Older, but satisfactory.   | \$ -                |
| 6.1.7     | Fixed/wall mounted equipment (i.e., writing boards, tackboards, display boards, signs)   | 4      | Whiteboard and tackboards adequate.  | \$ -                |
| 6.1.8     | Heating system.  | 4      | The heating system consist of individual classroom Palm-Air gas fired furnaces.<br>The system is in fine condition.  | \$ -                |
| 6.1.9     | Ventilation system.  | 4      | The ventilation system is provided by individual classroom gas fired Palm-Air furnaces.<br>The system can meet standards for portable classroom application.   | \$ -                |
| 6.1.10    | Electrical, communication and data network systems.  | 3      | Twelve (12) circuit panel 50% capacity in good condition. T12 magnetic ballasts and lamps.<br>Classrooms 720 Lux. Retrofit with T8 electronic ballasts and lamps. Computers are networked to server. | \$ 6,700.00         |
| 6.1.11    | Health and safety concerns (i.e., fire and smoke alarms, fire protection systems, exiting, fire resistance rating of materials). | 2      | One (1) existing fire bell. Provide one (1) new strobe light in portable corridor.<br>Exit lights are incandescent, retrofit with new energy efficient LED strip                                     | \$ 600.00           |
| 6.1.12    | Barrier-free access.   | 4      | Provided.  | \$ -                |
|           | <b>Overall Portable Bldgs Condition &amp; Estim Costs</b>  |        |  | <b>\$ 17,300.00</b> |

School Facility Evaluation Project  
Part II - Physical Condition

| Section 7 | Space Adequacy   | This Facility |        |            | Equiv. New Facility |      |            | Surplus/<br>Deficiency | Comments/Concerns |
|-----------|--|---------------|--------|------------|---------------------|------|------------|------------------------|-------------------|
|           |  | No.           | Size   | Total Area | No.                 | Size | Total Area |                        |                   |
| 7.1       | Classrooms   | 8             | 84.60  | 781.10     | 4                   | 80   | 520        | 261.1                  |                   |
|           |  | 1             | 104.30 |            | 2                   | 100  |            |                        |                   |
| 7.2       | Science Rooms/Labs   |               |        |            | 2                   | 95   | 190        | -190                   |                   |
| 7.3       | Ancillary Areas (i.e., Art, Computer Labs, Drama, Music,)                          | 1             |        | 76.30      | 1                   | 130  | 310        | -233.7                 |                   |
|           |  |               |        |            | 2                   | 90   |            |                        |                   |
| 7.4       | Gymnasium (incl. gym storage)  | 1             | 430.20 | 465.80     | 1                   | 430  | 473        | -7.2                   |                   |
|           |  | 1             | 35.60  |            | 1                   | 43   |            |                        |                   |
| 7.5       | Library/Resource Areas   | 1             |        | 192.40     | 1                   | 170  | 170        | 22.4                   |                   |
| 7.6       | Administration/Staff, Physical Education, Storage Areas                            |               |        | 219.20     |                     |      | 368        | -148.8                 |                   |
| 7.7       | CTS Areas  |               |        |            |                     |      |            |                        |                   |
|           | 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) |               |        | 773.20     |                     |      | 677        | 96.2                   |                   |
|           | <b>Overall Space Adequacy Assessment</b>   |               |        | 2508.00    |                     |      | 2708       | -200                   |                   |

School Facility Evaluation Project  
Part II - Physical Condition

| Evaluation Component/<br>Sub-Component | Additional Notes and Comments |
|--|-------------------------------|
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