Location:

School Name: Killarney Junior High School

Edmonton, AB

## School Facility Evaluation Project Part II - Physical Condition

Killarney Junior High School April 6, 2000

1306

School Code: 7516

Facility Code:

Region: North Superintendent: Emery Dosdall

Jurisdiction: Edmonton School District #7 Contact Person: Bob Clark

Telephone: (780) 429 8511

Grades: VII - IX School Capacity: 745

| Building Section         | Year of Compl. | No. of<br>Floors | Gross Bldg Area<br>(Sq.M.) | Type of Construction (i.e., structure, roof, cladding)  | Description of Mechanical Systems (incl. major upgrades)   | Comments/Notes |
|--------------------------|----------------|------------------|----------------------------|---|--|----------------|
| Original Building        | 1959           | 1                |                            | Walls are load bearing masonry with stucco exterior finish (1987 modernization) on concrete grade beam. There is a crawl space beneath. The roof is slop to drain wood joists. MBM roof (1999). | Two steam boilers (1959).<br>Individual in-room unit ventilators<br>with steam heating.  |                |
| Additions/<br>Expansions | 1967           | 2                |                            | Masonry loadbearing walls with brick exterior face concrete on steel deck floor and steel truss roof. MBM roofing (1999).   | Three small hot water heating boilers, two base mounted circulation pumps, one central air handling unit with heating coil, mixing box, filters, supply and return fans. |                |

Evaluator's Name: & Company:

Richard Isaac, MRAIC, MAAA Manasc Isaac Architects Ltd.

| Part | П | - | Physical | Condition |
|------|---|---|----------|-----------|
|      |   |   |          |           |

| Upgrading/<br>Modernization<br>(identify whether<br>minor or major)                | 1984      |               |       | Exterior stucco cladding to 1959.<br>New windows installed.                |  |
|--|-----------|---------------|-------|--|--|
|  | 1987      |               | ,     | Renovation to second floor of 1967 wing to create new Home Economics area. |  |
| Portable Struct. (identify whether attached/perman. or free-standing/ relocatable) | N/A       |               |       |  |  |
| List of Reports/<br>Supplementary<br>Information                                   | No record | d of any repo | orts. |  |  |

| Evaluation Components                              | Summary Assessment   | Estim. Cost    |
|--|--|----------------|
| Site Conditions                                    | The school site is large and has a basic sports area. The staff parking area needs some repairs and resurfacing.   | \$ 35,000.00   |
| 2 Building Exterior                                | Some cracks inside exterior walls. Exterior doors require repair.  | \$ 8,000.00    |
| Building Interior                                  | Replace carpets, some painting required, and countertop require repairs.   | \$ 60,000.00   |
| Mechanical Systems                                 | Original 1959 steam heating and ventilation systems need to be completely replaced. Controls for 1967 system to be replaced and tied into new control systems with DDC controls.   | \$1,025,000.00 |
| Electrical Systems                                 | The school has received some architectural upgrading but some components of the electrical systems require renovation. The communications, power and fire alarm systems are adequate.  Lighting systems, emergency and exit lighting should be upgraded to bring the systems up to current | \$ 335,000.00  |
| Portable Buildings                                 | N/A  | \$ -           |
| / Space Adequacy:<br>7.1 Classrooms                | School capacity = 745, enrollment = 358. There are more classrooms than currently needed.  |                |
| 7.2 Science Rooms/Labs                             | More than enough science classroom space.  |                |
| 7.3 Ancillary Areas                                | Well used spaces.  |                |
| 7.4 Gymnasium                                      | Gym, plus a mini-gym are adequate.   |                |
| 7.5 Library/Resource Areas                         | Library is a good size, minimal books on shelves.  |                |
| 7.6 Administration/Staff Areas                     | More than adequate.  |                |
| 7.7 CTS Areas                                      |  |                |
| 7.8 Other Non-Instructional Areas (incl. gross-up) | School has more than enough classroom and ancillary spaces.  |                |
| Overall School Conditions & Estim. Costs           | Ш  | \$1,463,000.00 |

| Section 1 | Site Conditions   | Rating | Comments/Concerns  | Estim. Cost |
|-----------|---|--------|--|-------------|
| 1.1       | General Site Condions   |        |  |             |
| 1.1.1     | Overall site size.  | 4      | School site is large.  |             |
| 1.1.2     | Outdoor athletic areas.   | 4      | Sports area are large.   |             |
| 1.1.3     | Outdoor playground areas, including condition of equipment and base.                        | 4      | Hard surface courtyard is in good condition.                                 |             |
| 1.1.4     | Site landscaping.   | 4      | Very little on the grass fields, some around the building.                   |             |
| 1.1.5     | Site accessories (i.e., perimeter and other fencing, guard rails, bike stands, flag poles). | 4      | Good   |             |
| 1.1.6     | Surface drainage conditions (i.e., drains away from building, signs of ponding).            | 4      | No reports of ponding or bad drainage.                                       |             |
| 1.1.7     | Evidence of sub-soil problems.  | 3      | Some heaving of sidewalks, required leveling.                                | \$ 5,000.00 |
| 1.1.8     | Safety and security concerns due to site conditions.  |        |  |             |
| Other     |   |        |  |             |
| 1.2       | Access/Drop-Off Areas/Roadways/Bus Lanes  |        |  |             |
|           | Vehicular and pedestrian access points (i.e., size,   | 4      | Drop-off on side street. Main access off side street, parents drop-off here. |             |
|           | number, visibility, safety).  |        |  |             |

| Section 1 | Site Conditions   | Rating | Comments/Concerns  | Estim. Cost |
|-----------|---|--------|--|-------------|
| 1.2.2     | Surfacing of on-site road network (note whether asphalt or gravel). | 3      | Asphalt needs some leveling.   | \$ 4,000.00 |
| 1.2.3     | Bus lanes/drop-off areas (note whether on-site or off-site).        | 4      | Off-site bus drop-off (side street) and public bus route along north side of school. |             |
| 1.2.4     | Fire vehicle access.  | 4      | 3 street access.   |             |
| 1.2.5     | Signage.  | 4      | One sign for school site.  |             |
| Other     |   |        |  |             |
|           |   |        |  |             |

| Section 1 | Site Conditions  | Rating | Comments/Concerns  | Estim. Cost |
|-----------|--|--------|--|-------------|
| 1.3       | Parking Lots and Sidewalks   |        |  |             |
| 1.3.1     | Number of parking spaces for staff, students and visitors (including stalls for disabled persons). | 4      | 20 on-site parking stalls with plug-ins. Visitors park on side street. |             |
| 1.3.2     | Layout and safety of parking lots.   | 4      | Good   |             |
| 1.3.3     | Surfacing and drainage of parking lots (note whether asphalt or gravel).                           | 3      | Asphalt needs repair.  | \$ 6,000.00 |
| 1.3.4     | Layout and safety of sidewalks.  | 4      | Good   |             |
| 1.3.5     | Surfacing and drainage of sidewalks (note type of material).                                       | 3      | Concrete slabs are uneven and cracked. Needs leveling and replacement. | \$20,000.00 |
| 1.3.6     | Curb cuts and ramps for barrier free access.   | 4      | Good. Access is at grade.  |             |
| Other     |  |        |  |             |
|           | Overall Site Conditions & Estimated Costs  | 4      |  | \$35,000.00 |

| Section 2 | Building Exterior   | Rating |                  | Comments/Concerns  | Estim. Cost |
|-----------|---|--------|------------------|--|-------------|
| 2.1       | Overall Structure   |        | Bldg.<br>Section | Description/Condition  |             |
|           | Floor structure and beams (i.e., signs of bending, cracking, heaving, settlement, voids, rust, stains). | 4      | 1959<br>1967     | There are no cracks in floors in corridors, classrooms or other spaces.  |             |
|           | Wall structure and columns (i.e., signs of bending, cracking, settlement, voids, rust, stains).         | 3      | 1959             | There are settlement cracks in the concrete block walls. Some have been repaired. Other require repair.          | \$ 3,000.00 |
|           |   | 4      | 1967             | No structural problems evident.  |             |
| 2.1.3     | Roof structure (i.e., signs of bending, cracking, voids, rust, stains).                                 | 4      |                  | No structural problems evident. Stained ceiling tiles resulting from leaks prior to complete re-roofing in 1999. |             |
| Other     |   |        |                  |  |             |

| Section 2 | Building Exterior  | Rating |  | Comments/Concerns   | Estim. Cost |
|-----------|--|--------|--|---|-------------|
| 2.2.1     | Roofing and Skylights Identify the availability of an up-to-date Inspection report or roofing program. Note if roof sections are of different ages and/or in varying 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      | Bldg.<br>Section<br>or Roof<br>Section<br>1959<br>1967 | Description/Condition/Age  The roof of the school was replaced in 1999 and appears to be functioning well (slopes, etc.). |             |
| 2.2.2     | Roof accessories (i.e., ladders, stairs, hatches,  | 3      | 1959   | Mechanical hoods and other mechanical elements were not replaced during re-   | See 4.      |
|           | masts, exhaust hoods, chimneys, gutters,   | 4      | 1967   | roof. See mechanical report for costs.  Good condition.   |             |
| 2.2.3     | Control of ice and snow falling from roof.   | 4      | 1959<br>1967   | Roof drains internally. No ice or snow falls from roof.   |             |
| 2.2.4     | Skylights (i.e., signs of distress, leaks, ice build-up, condensation, deteriorated materials/seals).  | 4      | 1959   | Existing skylights have been removed and roofed over.   |             |
| Other     |  |        |  |   |             |

| Section 2 | Building Exterior  | Rating |              | Comments/Concerns                    | Estim. Cost |
|-----------|--|--------|--------------|--------------------------------------|-------------|
| 2.3       | Exterior Walls/Building Envelope  Exterior wall finishes (i.e., signs of deterioration, cracks, brick spalling, effluorescence, water stains). | 4      |              | • •                                  |             |
| 2.3.2     | Fascias, soffits, parapets (i.e., signs of looseness, stains, rust, peeling paint).  | 4      | 1959<br>1967 | All appears to be in good condition. |             |
|           | Building envelope (i.e., evidence of air infiltration/<br>exfiltration through the exterior wall or ice build up on<br>wall, eaves, canopy).   | 4      | 1959<br>1967 | No problems reported.                |             |
| 2.3.4     | Interface of roof drainage and ground drainage systems.  | 4      | 1959<br>1967 | Interior drainage.                   |             |
| 2.3.5     | Inside faces of exterior walls (i.e., signs of cracks, water stains, dust spots).  | 4      | 1959<br>1967 | Good condition.                      |             |
| Other     |  |        |              |                                      |             |
|           |  |        |              |                                      |             |

| Section 2 | Building Exterior   | Rating |                          | Comments/Concerns  | Estim. Cost |
|-----------|---|--------|--------------------------|--|-------------|
|           | Exterior Doors and Windows  Doors (i.e., signs of deterioration, rusting metal, glass                                   | 3      | Bldg.<br>Section<br>1959 | Description/Condition  Door needs repaint and some minor surface repair. | \$ 5,000.00 |
|           | cracks, peeling paint, damaged seals, sealed unit failure).   |        | 1967                     | Door noods repairs and come minor canada repair.                         | ψ 0,000.00  |
|           | Door accessories (i.e., latches, hardware, screens, locks, alarms, holders, closers, security devices).                 | 4      | 1959<br>1967             | Good condition.  |             |
| 2.4.3     | Exit door hardware (i.e., safety and/or code concerns).   | 4      | 1959<br>1967             | Good condition.  |             |
|           | Windows (i.e., signs of deterioration, rusting metal, glass cracks, peeling paint, damaged seals, sealed unit failure). | 4      | 1959<br>1967             | Good condition.  |             |
| 2.4.5     | Window accessories (i.e., latches, hardware, screens, locks, alarms, holders, closers, security devices).               | 4      | 1959<br>1967             | Good condition.  |             |
| 2.4.6     | Building envelope (i.e., signs of heavy condensation on doors or windows).  | 4      | 1959<br>1967             | No problems noticed nor reported.  |             |
| Other     |   |        |                          |  |             |
|           |   |        |                          |  |             |
|           | Overall Bldg Exterior Condition & Estim Costs   | 4      |                          |  | \$ 8,000.00 |

| Section 3 | Building Interior - Overall Conditions  | Rating |                  | Comments/Concerns   | Estim. Cost  |
|-----------|---|--------|------------------|---|--------------|
| 3.1       | Interior Structure  |        | Bldg.<br>Section | <u>Description/Condition</u>  |              |
| 3.1.1     | Interior walls and partitions (i.e., signs of cracks, spalling, paint peeling). | 3      |                  | Settlement cracks. See 2.1.2.   | See 2.1.2.   |
|           |   | 4      | 1967             | Good condition.   |              |
| 3.1.2     | Floors (i.e., signs of cracks, heaving, settlement).                            | 4      |                  | Good condition. Terrazzo floor in science room cut for services. Not aesthetically appealing. |              |
| Other     |   |        |                  |   |              |
|           |   |        |                  |   |              |
| 3.2       | Materials and Finishes  |        | Bldg.<br>Section | Description/Condition   |              |
| 3.2.1     | Floor materials and finishes.   | 4      |                  | Flooring in acceptable condition. Will need review in next 5 years.                           |              |
|           |   | 3      | 1967             | Carpets need to be replaced and floor releveled.  | \$ 25,000.00 |
| 3.2.2     | Wall materials and finishes.  | 3      | 1959             | Paint required at cracked areas.  | \$ 2,000.00  |
|           |   | 4      | 1967             | Good condition.   |              |
| 3.2.3     | Ceiling materials and finishes.   | 3      | 1959             | Corridor ceilings - acoustic tiles need replacement.  | \$ 15,000.00 |
|           |   | 4      | 1967             | Good condition.   |              |
|           |   |        |                  |   |              |

|       | Building Interior - Overall Conditions  | Rating |   | Comments/Concerns                          | Estim. Cost  |
|-------|---|--------|---|--|--------------|
|       | Materials and Finishes (cont'd) Interior doors and hardware.                            | 4      | Bldg.<br><u>Section</u><br>1959<br>1967 | Description/Condition  Good condition.     |              |
| 3.2.5 | Millwork  | 3      | 1959<br>1967                            | Selective countertops require replacement. | \$ 10,000.00 |
| 3.2.6 | Fixed/wall mounted equipment (i.e., writing boards, tackboards, display boards, signs). | 4      | 1959<br>1967                            | Good condition.                            |              |
|       | Any other fixed/mounted specialty items (i.e., CTS equipment, gymnasium equipment).     | 4      | 1959<br>1967                            | Good condition.                            |              |
| 3.2.8 | Washroom materials and finishes.  | 4      | 1959<br>1967                            | Good condition.                            |              |
| Other |   |        |   |  |              |
|       |   |        |   |  |              |

| Section 3 | Building Interior - Overall Conditions  | Rating |                  | Comments/Concerns   | Estim. 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 |        | Bldg.<br>Section | Description/Condition  Footprint area = 5,455 m2. Would require sprinklers under present code.                              |             |
| 3.3.1     | Building construction type - combustible or non-<br>combustible, sprinklered or non-sprinklered.  | 4      | 1959<br>1967     | Combustible - non sprinklered.  Non-combustible, non-sprinklered.   |             |
| 3.3.2     | Fire separations (i.e., between buildings, wings, zones if non-sprinklered).  | FI     | 1959<br>1967     | No separation evident.  |             |
|           | Fire resistance rating of materials (i.e., corridor walls and doors).   | FI     | 1959<br>1967     | Separation of exits requires investigation.   |             |
| 3.3.4     | Exiting distances and access to exits.  | FI     | 1959<br>1967     | Travel distances and number of exits requires further investigation.  |             |
| 3.3.5     | Barrier-free access.  | 3      | 1959<br>1967     | School has an elevator to the second floor. No automatic opener at entry is installed. There are no barrier-free washrooms. | \$ 8,000.00 |
|           | Availability of hazardous materials audit (i.e., evidence of safety concerns with respect to asbestos, PCB's, chemicals).   | FI     | 1959<br>1967     | Asbestos investigation report is not available. An investigation is required.   |             |
| 3.3.7     | Other health and safety concerns (i.e., evidence of excessive noise conditions, air quality problems)   | 4      | 1959<br>1967     | None were reported.   |             |
| Other     |   |        |                  |   |             |
|           | Overall Bldg Interior Condition & Estim Costs   | 4      |                  |   | \$60,000.00 |

| Section 4 | Mechanical Systems   | Rating | Comments/Concerns  | Estim. Cost |
|-----------|--|--------|--|-------------|
| 4.1       | Mechanical Site Services   |        |  |             |
| 4.1.1     | Site drainage systems (i.e., surface and underground systems, catch basins).                             |        |  |             |
|           | Exterior plumbing systems (i.e., irrigation systems, hose bibs).   | 4      | All Some exterior hose bibbs installed.  |             |
| 4.1.3     | Outside storage tanks.   |        | N/A  |             |
| Other     |  |        |  |             |
| 4.2       | Fire Suppression Systems   |        | Bldg. <u>Description/Condition</u>   |             |
|           | Fire hydrants and siamese connections.   | 4      | All Municipal fire hydrants located in streets. Building does not have a siamese connection. |             |
|           | Fire suppression systems (i.e., pumps, sprinklers, piping, reservoirs, hoses, stand pipes, CO2 systems). | 4      | All Fire hose cabinets located throughout the building.                                      |             |
|           | Hand extinguishers, blankets and showers (i.e., in CTS areas).   | 4      | All Fire extinguishers installed in fire hose cabinets.                                      |             |
|           | Other special situations (e.g., flammable storage areas, science labs, CTS areas).                       |        | N/A  |             |
| Other     |  |        |  |             |

| Section 4 | Mechanical Systems  | Rating |                  | Comments/Concerns   | Estim. Cost   |
|-----------|---|--------|------------------|---|---------------|
|           | Water Supply and Plumbing Systems   |        | Bldg.<br>Section | <u>Description/Condition</u>  |               |
| 4.3.1     | Domestic water supply (i.e., pressure, volume, quality - note whether municipal or well supply).          | 4      | All              | Municipal water supply. Pressure and volume adequate.   |               |
| 4.3.2     | Water treatment system(s).  |        |                  | N/A   |               |
| 4.3.3     | Pumps and valves (including backflow prevention valves).  | 3      | All              | Valves are old and appear to be deteriorating.  | \$ 400,000.00 |
| 4.3.4     | Piping and fittings.  | 3      | All              | Piping and fittings are between 30 to 40 years old and may be deteriorating internally. Soldered fittings may contain lead. | See 4.3.3     |
| 4.3.5     | Plumbing fixtures (i.e., toilets, urinals, sinks)   | 3      | All              | Fixtures are original installation and finishes have deteriorated.  | See 4.3.3     |
|           | Domestic hot water system (i.e., heater, storage tanks, failure alarms, pressure, volume, recirculation). | 4      | All              | Two gas fired tanks installed with recirculation pump. Meets current demand.  |               |
|           | Sanitary and storm sewers, including sumps and pits (note whether sewage system is municipal or septic).  | 4      | All              | Building is serviced by municipal sanitary and storm drainage systems.  |               |
| Other     |   |        |                  | N/A   |               |
|           |   |        |                  |   |               |

| Section 4 | Mechanical Systems  | Rating |                  | Comments/Concerns  | Estim. Cost   |
|-----------|---|--------|------------------|--|---------------|
| 4.4       | Heating Systems   |        | Bldg.<br>Section | <u>Description/Condition</u>   |               |
| 4.4.1     | Heating capacity and reliability (including backup capacity).                         | 2      |                  | Two L.P. steam boilers (40 years old) provide steam for heating. Maintenance staff report tubes are failing due to corrosion. Boilers may contain asbestos | \$ 200,000.00 |
|           |   | 4      | 1967             | Hot water heating boilers and pumps. No problems reported.   |               |
| 4.4.2     | Heating controls (including use of current energy management technology.              | 2      | All              | Older pneumatic system (no D.D.C.).  | See 4.7.1     |
| 4.4.3     | Fresh air for combustion and condition of the combustion chimney.                     | 2      | 1959             | Replace chimney from steam boilers.  | See 4.4.1     |
|           |   | 4      | 1967             | No problems noted.   |               |
| 4.4.4     | Treatment of water used in heating systems.   | 2      | 1959             | Replace steam system.  | See 4.4.1     |
| I         |   | 4      | 1967             | Chemical pot feeder installed.   |               |
| 4.4.5     | Low water cutoff/pressure relief valves and failure alarms (i.e., hot water heating). | 2      | 1959             | Replace steam system.  | See 4.4.1     |
|           |   | 4      | 1967             | No problems noted.   |               |
| 4.4.6     | Heating air filtration systems and filters.   |        |                  | N/A  |               |
|           |   |        |                  |  |               |
| 4.4.7     | Heating humidification systems and components.  |        |                  | None installed.  |               |
|           |   |        |                  |  |               |
|           |   |        |                  |  |               |

| Section 4 | Mechanical Systems  | Rating |                  | Comments/Concerns  | Estim. Cost |
|-----------|---|--------|------------------|--|-------------|
| 4.4       | Heating Systems (cont'd)  |        | Bldg.<br>Section | <u>Description/Condition</u>   |             |
| 4.4.8     | Heating distribution systems (i.e., piping, ductwork) and associated components (i.e., diffusers, radiators). | 2      | 1959             | Individual room ventilators are installed in each classroom and provide both heating and ventilation. Poor condition.    | See 4.4.1   |
|           |   | 4      | 1967             | Perimeter hot water heating and central ventilation unit.  |             |
| 4.4.9     | Heating piping, valve and/or duct insulation.   | F.I.   | 1959             | Pipe insulation on steam and condensate mains has deteriorated and may contain asbestos. Condensate tank is uninsulated. |             |
| 4.4.10    | Heat exchangers.  |        |                  | N/A  |             |
| 4.4.11    | Heating mixing boxes, dampers and linkages.   | 2      | 1959             | Classroom ventilators have small outside air connections.  | See 4.4.1   |
|           |   | F.I.   | 1967             | Central air handling unit has mixing box. Capacity unknown.  |             |
| 4.4.12    | Heating distribution/circulation in larger spaces (i.e., user comfort, temperature of outside wall surfaces). | 2      | 1959             | Occupants complain.  | See 4.4.1   |
|           |   | 4      | 1967             | No problems noted.   |             |
| 4.4.13    | Zone/unit heaters and controls.   | 2      | 1959             | A number of steam unit heaters have exposed piping components which could be hazardous.                                  | See 4.4.1   |
|           |   | 4      | 1967             | Force flow entrance heating.   |             |
| Other     |   |        |                  | N/A  |             |
|           |   |        |                  |  |             |
|           |   |        |                  |  |             |

| Section 4 | Mechanical Systems   | Rating |                  | Comments/Concerns   | Estim. Cost      |
|-----------|--|--------|------------------|---|------------------|
| 4.5       | Ventilation Systems  |        | Bldg.<br>Section | Description/Condition   |                  |
| 4.5.1     | Air handling units capacity and condition.   | 2      | 1959             | Unit ventilators with steam coils in each classroom. Poor condition.  | \$<br>220,000.00 |
|           |  | 4      | 1967             | One central air handling unit with distribution to individual spaces. Supply and return fans.   |                  |
|           | Outside air for the occupant load (if possible, reference CFM/occupant).               | 2      | 1959             | Fresh air connection through wall to each unit ventilator.  | See 4.5.1        |
|           |  | F.I.   | 1967             | Fresh air ducted to mixing box. Capacity not known.   |                  |
|           | Air distribution system (if possible, reference number of air changes/hour).           | 2      | 1959             | No central system.  | See 4.5.1        |
|           |  | 4      | 1967             | Minor modifications required.   |                  |
| 4.5.4     | Exhaust systems capacity and condition.  | 2      | 1959             | Components have deteriorated and should be replaced. Occupants complain of no exhaust in staff washrooms.   | See 4.5.1        |
|           |  | 4      | 1967             | No problems noted.  |                  |
| 4.5.5     | Separation of out flow from air intakes.   | 4      | 1967             | No problems noted.  |                  |
|           |  |        |                  |   |                  |
| 4.5.6     | Special/dedicated ventilation and/or exhaust systems (i.e., kitchen, labs, CTS areas). | F.I.   | 1959<br>1967     | Recirculation dust collection system in small room (noisy).  Appears to be grease filters on a number of exhaust outlets in home economics (may not meet code). |                  |
| Other     |  |        |                  |   |                  |
|           |  |        |                  |   |                  |
|           |  |        |                  |   |                  |

|        | Mechanical Systems   | Rating |                  | Comments/Concerns                                      | Estim. Cost |
|--------|--|--------|------------------|--|-------------|
| 4.5    | Ventilation Systems (cont'd)   |        | Bldg.<br>Section | Description/Condition                                  |             |
|        | Note: Only complete the following items if there are separate ventilation and heating systems.               |        | <u>Section</u>   |  |             |
| 4.5.7  | Ventilation controls (including use of current energy management technology).                                | 2      | 1959<br>1967     | N/A Older pneumatic system. No D.D.C.                  | See 4.7.1   |
| 4.5.8  | Air filtration systems and filters.  | 4      | 1967             | Low efficiency filters. No applicable to 1959 portion. |             |
| 4.5.9  | Humidification system and components.  |        |                  | N/A  |             |
| 4.5.10 | Heat exchangers.   |        |                  | N/A  |             |
| 4.5.11 | Ventilation distribution system and components (i.e., ductwork, diffusers, mixing boxes, dampers, linkages). | 2      |                  | None.  No major problems reported.                     | See 4.5.1   |
| Other  |  |        |                  |  |             |

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|       | Mechanical Systems  | Rating | Comments/Concerns   | Estim. Cost    |
|-------|---|--------|---|----------------|
| 4.6   | Cooling Systems   |        | Bldg. <u>Description/Condition</u>  |                |
| 4.6.1 | Cooling system capacity and condition (i.e., chillers, cooling towers, condensers).                     |        | Section N/A   |                |
| 4.6.2 | Cooling distribution system and components (i.e., ductwork, diffusers, mixing boxes, dampers, linkages) |        | N/A   |                |
| 4.6.3 | Cooling system controls (including use of current energy management technology).                        |        | N/A   |                |
| 4.6.4 | Special/dedicated cooling systems (i.e., labs, CTS areas).  |        | N/A   |                |
| Other |   |        |   |                |
| 4.7   | Building Control Systems  |        | Bldg. Description/Condition   |                |
| 4.7.1 | Building wide/system wide control systems and/or energy management systems.                             | 2      | <ul> <li>Section</li> <li>1959 Single pneumatic compressor for steam heating controls.</li> <li>1967 Older control system (no D.D.C.).</li> </ul> | \$ 205,000.00  |
|       |   |        |   |                |
|       | Overall Mech Systems Condition & Estim. Costs   | 3      |   | \$1,025,000.00 |

| ection 5 | Electrical Systems   | Rating |                           | Comments/Concerns   | E  | stim. 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). | 4      | s<br>lo<br>r<br>c         | Primary service is underground from a pad mounted utility transformer. Main service is rated at 800 amps, 120/208 volts, 3 phase, 4 wire. Service equipment, ocated in a separate electrical room. The main service panel is 3 years old and eplaced the original equipment that was destroyed by lightning. The original distribution section has been backfed from the new main switch. The service has |    |            |
| 5.1.2    | Site and building exterior lighting (i.e., safety concerns).   | 3      | 1951 T<br>1967 F          | The site lighting consists of a minimal amount of building mounted luminaires. Fixtures are HID and incandescent sources. Exterior lighting is controlled by a photocell. There is minimal lighting in the area of the staff parking lot and no security lighting in most areas.  | \$ | 20,000.00  |
| 5.1.3    | Vehicle plug-ins (i.e., number, capacity, condition).  | 3      | 1951 2                    | 20 staff parking stalls are energized. All are in poor condition.   | \$ | 10,000.00  |
| Other    |  |        |                           |   |    |            |
| 5.2      | Life Safety Systems  |        | Bldg. <u>I</u><br>Section | Description/Condition   |    |            |
| 5.2.1    | Fire and smoke alarm systems (i.e., safety concerns, up-to-date technology, regularly tested).   | 4      | 1951 T<br>1967 g          | The fire alarm system is a Simplex 4002 with the main control panel located in the general Office and an annunciator located near the main entrance. The system is years old, utilizes modern technology and is installed to meet recent code requirements. The system is regularly tested each summer by E.P.S.B.  |    |            |
| 5.2.2    | Emergency lighting systems (i.e., safety concerns, condition).   | 2      | 1967 r                    | Emergency lighting systems consists of local emergency battery packs and emote mounted emergency lighting heads. The battery packs in the 1951 area of the school were replaced recently but the extent of remote lighting heads was not modified. As a result there is no emergency lighting throughout most corridors.  | \$ | 20,000.00  |
| 5.2.3    | Exit lighting and signage (i.e., safety concerns, condition).  | 3      |                           | Exit lighting is obsolete design and uses incandescent lamps many were not in working order. Fixtures are not connected to emergency battery packs.   | \$ | 17,500.00  |
| Other    |  |        |                           |   |    |            |
|          |  |        |                           |   |    |            |
|          |  |        |                           |   |    |            |

| 5.3 Power Supply and Distribution  Bldg. <u>Section</u> 5.3.1 Power service surge protection.  2 Description/Condition  Section  1951 None installed.  |            |          |
|--|------------|----------|
|  |            |          |
|  | \$         | 7,500.00 |
|  |            |          |
| 5.3.2 Panels and wireways capacity and condition.  4 1951 Panelboards are original equipment to the 1951 and 1967 sections of the  | ne school. |          |
| 1967 In most cases panels are in good condition and have space capacity rer  | maining.   |          |
|  |            |          |
| 5.3.3 Emergency generator capacity and condition and/or UPS (if applicable).   |            |          |
|  |            |          |
|  |            |          |
| 5.3.4 General wiring devices and methods.  4 1951 Most wiring is located in conduits concealed in the crawlspace or wall 1967 construction. Some surface mounted conduit and wiremold in place. De in fair condition. A recent modernization project in 1993 included minima |            |          |
| work, but did include the addition of receptacles to the 1951classrooms.  is 4 receptacles per classroom, 2 at the front, 2 at the rear. Extension of  | . Standard |          |
| in many classrooms for computer stations.  5.3.5 Motor controls.  4 1951 Motor control is generally splitter and loose starter arrangement. All equ  |            |          |
| 1967 original and in fair condition.   |            |          |
|  |            |          |
| Other  |            |          |
|  |            |          |
|  |            |          |

| Section 5 | Electrical Systems  | Rating |                  | Comments/Concerns  | Estim. Cost   |
|-----------|---|--------|------------------|--|---------------|
| 5.4       | Lighting Systems  |        | Bldg.<br>Section | <u>Description/Condition</u>   |               |
| 5.4.1     | Interior lighting systems and components (i.e., illumination levels, conditions, controls). | 4      | 1951<br>1967     | Interior lighting generally consists of suspended or surface mounted fluorescent luminaires. Illumination levels in the classrooms are 300 lux(1951) and 550 lux (1967) for classrooms that have all the luminaires in working order, 150 lux(1951) and 350 lux (1967) in rooms that have been delamped for energy conservation. Levels in the corridors are 80 to 150 lux in the 1951 section, 150-250 lux in the 1967 section. The Gymnasium uses strip fluorescents and levels are 250-300 lux. All fixtures are original vintage and controlled by local line voltage switching. |               |
| 5.4.2     | Replacement of ballasts (i.e., health and safety concerns).                                 | 4      | 1951<br>1967     | Many ballasts are original equipment. Failure replacements are energy efficient magnetic type. Original ballasts most likely contain PCB's and failure results in leakage.   |               |
| 5.4.3     | Implementation of energy efficiency measures and recommendations.                           | 3      | 1951<br>1967     | Replace all lighting fixtures with those that use T8 lamps and electronic ballasts. Condition of fixtures and lighting levels do not warrant a retrofit.   | \$ 260,000.00 |
| Other     |   |        |                  |  |               |

| Section 5 | Electrical Systems   | Rating |                                  | Comments/Concerns   | Estim. Cost |
|-----------|--|--------|----------------------------------|---|-------------|
|           | Network and Communication Systems  Telephone system and components (i.e., capacity, reliability, condition). | 4      | Bldg.<br>Section<br>1951<br>1967 | Description/Condition  Telephone system is Meridian Norstar. Each classroom is provided with a telephone handset for communication with the office. All equipment is in good condition.   |             |
| 5.5.2     | Other communication systems (i.e., public address, intercom, CCTV, satellite or cable TV).                   | 4      | 1951<br>1967                     | Bogen Multi-comm 2000 intercom systems is interfaced with the telephone equipment and is in good condition. Cable TV system is distributed throughout the 1967 portion of the school only.  |             |
| 5.5.3     | Network cabling (if available, should be category 5 or better).  | 4      |                                  | Cat. 5 UTP data cabling system is in place throughout. Each classroom is provided with one cat. 5 data jack and 1 telephone jack.   |             |
| 5.5.4     | Network cabling installation (i.e., in conduit, secured to walls or tables).                                 | 4      | 1951<br>1967                     | Data cabling is installed in conduit above the main floor. Cabling is run free air in the crawlspace in the 1951 area of the school.  |             |
| 5.5.5     | Wiring and telecommunication closets (i.e., size, security, ventilation/cooling, capacity for growth).       | 4      |                                  | A storage area adjacent to the main office area contains all terminations and hardware for the main network, telephone and intercom. Room is secure, ventilation is adequate and room for expansion is available. Each computer lab in the 1967 section of the school is wired to a LAN in that area. |             |
| 5.5.6     | Provision for dedicated circuits for network equipment (i.e., hubs, switches, computers).                    | 4      | 1951<br>1967                     | Separate dedicated circuits are available at hub locations for communication equipment use.   |             |
| Other     |  |        |                                  |   |             |
|           |  |        |                                  |   |             |

| ction 5 Electrical Systems   | Rating |         | Comments/Concerns  | Estim. Cost |
|--|--------|---------|--|-------------|
| 5.6 Miscellaneous Systems  |        | Bldg.   | <u>Description/Condition</u>   |             |
| 5.6.1 Site and building surveillance system (if applicable).   | N/A    | Section | None installed.  |             |
| 5.6.2 Intrusion alarms (if applicable).  | 4      | 1951    | Standard E.P.S.B. security system is in place consisting of motion detectors, door   |             |
|  |        | 1967    | contacts, boiler alarm, control panels, etc.   |             |
| 5.6.3 Master clock system (if applicable).   | 4      |         | A master clock is installed in the 1951 portion of the school. The system remains in use but most of the clocks have been replaced with battery operated units as the slave clocks fail. |             |
| 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). | 5      | 1967    | Handi-capped chair lift from main level to second floor of the 1967 section. Lift was installed in 1993. Access is good and operation of lift has been trouble free.                     |             |
| 5.7.2 Condition of elevators/lifts.  | 5      | 1967    | Lift is in excellent condition.  |             |
| 5.7.3 Lighting and ventilation of elevators/lifts.   | 5      | 1967    | Compact fluorescent lighting in place  |             |
| Other  |        |         |  |             |
|  |        |         |  |             |
|  |        | •       |  |             |

| SCLTOII | Portable Buildings   | Rating | Comments/Concerns | Estim. Cost |
|---------|--|--------|-------------------|-------------|
|         | Note: Separate sheets can be completed, if necessary, for portable buildings of different ages and/or conditions.                |        | N/A               |             |
| 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).   |        |                   |             |
|         | 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 Bldgs Condition & Estim Costs   |        |                   | \$ -        |

| ection 7 Space Adequacy  |    | This Facility |            |     | uiv. Nev | w Facility | Surplus/   | 1   |  |
|--|----|---------------|------------|-----|----------|------------|------------|---|--|
|  |    | Size          | Total Area | No. | Size     | Total Area | Deficiency | Comments/Concerns   |  |
| 7.1 Classrooms   | 17 |               | 1395.2     |     |          | 640        | 755.2      | School capacity = 745, enrollment = 358. There are more classrooms than currently needed. |  |
| 7.2 Science Rooms/Labs   | 4  |               | 374.2      |     |          | 240        | 134.2      | More than enough science classroom space.   |  |
| 7.3 Ancillary Areas (i.e., Art, Computer Labs, Drama, Music,)                          | 2  |               | 467.6      |     |          | 310        | 157.6      | Well used spaces.   |  |
| 7.4 Gymnasium (incl. gym storage)  | 1  | 623           | 623        | 1   | 655      | 655        | -32        | Gym, plus a mini-gym are adequate.  |  |
| 7.5 Library/Resource Areas   | 1  | 211.8         | 211.8      | 1   | 170      | 170        | 41.8       | Library is a good size, minimal books on shelves.   |  |
| 7.6 Administration/Staff, Physical Education, Storage Areas                            |    |               | 440.3      |     |          | 452        | -11.7      | More than adequate.   |  |
| 7.7 CTS Areas<br>7.7.1 Business Education  |    |               |            |     |          | 115        | -115       |   |  |
| 7.7.2 Home Economics   | 1  | 306.5         | 306.5      |     |          |            | 306.5      |   |  |
| 7.7.3 Industrial Arts  | 1  | 450.4         | 450.4      |     |          |            | 450.4      |   |  |
| 7.7.4 Other CTS Programs   |    |               |            |     |          |            |            |   |  |
| 7.8 Other Non-Instructional Areas (i.e., circulation, wall area, crush space, wc area) |    |               | 2399.9     |     |          | 914        | 1485.9     |   |  |
| Overall Space Adequacy Assessment  |    |               | 6668.9     |     |          | 3496       | 3172.9     | School has more than enough classroom and ancillary spaces.                               |  |

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