

School Facility Evaluation Project
Part III - Space Adequacy

School Name:	Bow Island Elementary School			School Code:	6903	
Location:	Bow Island			Facility Code:	205	
Region:	South			Superintendent:	Mr. Keith Jones	
Jurisdiction:	Prairie Rose Regional			Contact Person:	Mr. Brian Frey	
	Division No. 8			Telephone:	(403) 527-5516	
Grades:	K - 3			School Capacity:	150	
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	1958	1	1251	Steel & masonry structure, Flat roof (wood), Brick/stucco cladding		
Additions/ Expansions	1973	1	40.7	Steel & masonry structure, Flat roof (wood), Brick/stucco cladding		1973 addition provided gym storage and supplies storage.
					Evaluator's Name:	Alan F. Benson
					& Company:	CJC Architects

School Facility Evaluation Project
Part III - Space Adequacy

Upgrading/ Modernization (identify whether minor or major)	1989	1	225.7	No Change		Minor modernization of architectural finishes in Admin Areas & Library created. Suspended ceilings added. Interior doors renewed. Window modernized.
Portable Struct. (identify whether attached/perman. or free-standing/ relocatable)	1996	1	89.0	Wood Construction		One room free-standing/relocatable portable linked to building with unheated breezeway
		1		Wood Construction		Small free-standing garage. Date and Area unknown.
List of Reports/ Supplementary Information	Provided by Jurisdiction - Fire alarm system annual test and inspection report, dated Aug 2/97. Mini Plans.					

School Facility Evaluation Project
Part III - Space Adequacy

	Evaluation Components	Summary Assessment	Estim. Cost
1	Site Conditions	Upgrade to Athletic & Playground areas, fire lane signage, and sidewalk replacements.	\$26,400.00
2	Building Exterior	Cracked face brick repairs and window/door maintenance. N.B.: Further Investigation recommended for cracked masonry and roofing.	\$8,900.00
3	Building Interior	Minor repairs to finishes. Major upgrade for roof - fire rating to meet Code. Minor door upgrades for fire rated areas. Barrier-free requirements. N.B.: Further investigations recommended for hazardous materials.	\$57,200.00
4	Mechanical Systems	Generally good excepting no ventilation or air conditioning (except in Administration Area). Add ventilation. Some other minor upgrades needed.	\$71,500.00
5	Electrical Systems	Generally acceptable. School needs lighting retrofit. Replace fire alarm system with 24 volt supervised system.	\$83,797.00
6	Portable Buildings	Accessibility and heating upgrades.	\$3,500.00
7	Space Adequacy:		
	7.1 Classrooms	211.6 s.m. surplus	
	7.2 Science Rooms/Labs	N/A	
	7.3 Ancillary Areas	225 s.m. deficiency	
	7.4 Gymnasium	54 s.m. deficiency	
	7.5 Library/Resource Areas	45.6 s.m. surplus	
	7.6 Administration/Staff Areas	152 s.m. deficiency	
	7.7 CTS Areas	N/A	
	7.8 Other Non-Instructional Areas (incl. gross-up)	8.5 s.m. surplus	
			\$251,297.00

School Facility Evaluation Project
Part III - Space Adequacy

Section 1	Site Conditions	Rating	Comments/Concerns	Estim. Cost
1.1	General Site Conditions			
1.1.1	Overall site size.	4	Adequate for educational/functional needs. Expansion possible	
1.1.2	Outdoor athletic areas.	3	Rough Grass areas. Baseball backstop in poor condition - replace	\$5,000.00
1.1.3	Outdoor playground areas, including condition of equipment and base.	3	3 playground sites providing steel swings, steel and wood climbing frame, ball thrower and teeter totter. Equipment in fair condition. Pea gravel base in 2 sites, reject stand in one site - Provide pea gravel where required.	\$700.00
1.1.4	Site landscaping.	4	Irrigated lawn and prairie grass	
1.1.5	Site accessories (i.e., perimeter and other fencing, guard rails, bike stands, flag poles).	4	Chain link and single chain perimeter fence. Metal flagpole requires paint. Two (2) metal bikestands	
1.1.6	Surface drainage conditions (i.e., drains away from building, signs of ponding).	4	Fairly level site, has marginal drainage away from building. No ponding reported, or evident.	
1.1.7	Evidence of sub-soil problems.	4	No problems noted.	
1.1.8	Safety and security concerns due to site conditions.		No site lighting for parking area. See section 5	
Other				
1.2	Access/Drop-Off Areas/Roadways/Bus Lanes			

School Facility Evaluation Project
Part III - Space Adequacy

Section 1	Site Conditions	Rating	Comments/Concerns	Estim. Cost
1.2.1	Vehicular and pedestrian access points (i.e., size, number, visibility, safety).	4	2 vehicular, and 1 pedestrian access off 1st Avenue. No evidence of congestion.	
1.2.2	Surfacing of on-site road network (note whether asphalt or gravel).	4	Asphalt.	
1.2.3	Bus lanes/drop-off areas (note whether on-site or off-site).	4	Bus drop off area part of parking area on site	
1.2.4	Fire vehicle access.	1	Access satisfactory, but no markings - Provide signage & markings.	\$900.00
1.2.5	Signage.	5	Effective sign on building face	
Other				

School Facility Evaluation Project
Part III - Space Adequacy

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	Adequate number, but spaces are non-defined, estimate 18 spaces. No elctrified spaces provided	
1.3.2	Layout and safety of parking lots.	4	Adequate space provided - undefined but appears to function.	
1.3.3	Surfacing and drainage of parking lots (note whether asphalt or gravel).	4	Asphalt parking lot drains to street. Moderate gradient appears adequate. Ponding occurs at street access points due to poor street gradient. Street is surface drained, no catch basins.	
1.3.4	Layout and safety of sidewalks.	4	Layout and safety of sidewalks generally appears adequate.	
1.3.5	Surfacing and drainage of sidewalks (note type of material).	2	Sidewalks all concrete. High percentage of cracking and spalling evident. Estimate 330 square metres replacement required. Poor sidewalk drainage at main entrance due to inadequate slope. It is recommended that a solution be found to provide for proper slopes prior to replacing this concrete.	\$19,800.00
1.3.6	Curb cuts and ramps for barrier free access.	5	Sidewalks level with driveway.	
Other				
Overall Site Conditions & Estimated Costs				\$26,400.00

School Facility Evaluation Project
Part III - Space Adequacy

Section 2	Building Exterior	Rating	Comments		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).	N/A	All	Single storey slab-on-grade - N/A	
2.1.2	Wall structure and columns (i.e., signs of bending, cracking, settlement, voids, rust, stains).	4	1958		
		F.I.	1973	Masonry Cracked where storage area joins gym at South face - structural review recommended. (see print 43)	
2.1.3	Roof structure (i.e., signs of bending, cracking, voids, rust, stains).	4	All	No problems noted.	
Other					

Section 2	Building Exterior	Rating	Comments		Estim. Cost
2.2	Roofing and Skylights <i>Identify the availability of an up-to-date inspection report or roofing program. Note if roof sections are of different ages and/or in varying</i>		Bldg. Section or Roof Section	<u>Description/Condition/Age</u>	
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).	F.I.	All	Built up asphalt. No inspection report available. Believed to be 20+ years - roofing inspection recommended.	
2.2.2	Roof accessories (i.e., ladders, stairs, hatches, masts, exhaust hoods, chimneys, gutters, downspouts, splashpads).	F.I.	All	Generally acceptable. Scuppers and downspouts. No ladder or hatch to roof. Roof not accessed at this time.	
2.2.3	Control of ice and snow falling from roof.	N/A	All	Flat roof, N/A	
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 III - Space Adequacy

Section 2	Building Exterior	Rating	Commen		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).	3	1958	Giant brick spandrel below windows cracked at column locations, requires to be cutout and patched with new brick.	\$5,000.00
		4	1958	The new metal flashing between lower brick spandrel and upper stucco has insufficient slope. Showing signs of stucco deterioration due to ponding water.	-
2.3.2	Fascias, soffits, parapets (i.e., signs of looseness, stains, rust, peeling paint).	4	All	Pre-finished metal - generally acceptable.	
2.3.3		4	All	No problems noted.	
2.3.4	Interface of roof drainage and ground drainage systems.	4	All	No problems noted.	
2.3.5	Inside faces of exterior walls (i.e., signs of cracks, water stains, dust spots).	4	All	Generally acceptable. Scuppers and downspouts. No ladder or hatch to roof. Roof not accessed at this time.	
Other					
2.4	Exterior Doors and Windows		Bldg. Section	Description/Condition	

School Facility Evaluation Project
Part III - Space Adequacy

Section 2	Building Exterior	Rating	Commen		Estim. Cost
2.4.1	Doors (i.e., signs of deterioration, rusting metal, glass cracks, peeling paint, damaged seals, sealed unit failure).	3	All	Aluminum Entrance Door - acceptable. Door to Boiler Room requires paint.	\$100.00
2.4.2	Door accessories (i.e., latches, hardware, screens, locks, alarms, holders, closers, security devices).	4	All	Functioning adequately.	
2.4.3	Exit door hardware (i.e., safety and/or code concerns).	4	All	Functioning adequately.	
2.4.4	Windows (i.e., signs of deterioration, rusting metal, glass cracks, peeling paint, damaged seals, sealed unit failure).	2	All	Aluminum windows need caulking. Gym ventilators are wood - need repainting.	\$3,800.00
2.4.5	Window accessories (i.e., latches, hardware, screens, locks, alarms, holders, closers, security devices).	4	All		
2.4.6	Building envelope (i.e., signs of heavy condensation on doors or windows).	4	All	No problems noted.	
Other					
Overall Bldg Exterior Condition & Estim Costs					\$8,900.00

School Facility Evaluation Project
Part III - Space Adequacy

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).	4	All	Load bearing concrete block corridor walls and drywall (wood studs) between classrooms - generally acceptable.	
3.1.2	Floors (i.e., signs of cracks, heaving, settlement).	4	All	Concrete slab-on-grade - generally acceptable.	
Other					
3.2	Materials and Finishes		Bldg. Section	Description/Condition	
3.2.1	Floor materials and finishes.	4	All	Typically VCT except carpet in Library and Admin., and wood in Gym - generally acceptable.	
		3	1958	Minor VCT cracking at classroom doors - patch and repair.	\$2,400.00
3.2.2	Wall materials and finishes.	4	All	Painted masonry and drywall - generally acceptable.	
3.2.3	Ceiling materials and finishes.	4	1958	Typically 610 x 1219 acoustic tile suspended ceiling. Open steel beams in Gym - generally acceptable.	
		4	1973	Exposed structure.	
3.2	Materials and Finishes (cont'd)		Bldg. Section	Description/Condition	

School Facility Evaluation Project
Part III - Space Adequacy

Section 3	Building Interior - Overall Conditions	Rating	Comments/Concerns		Estim. Cost
3.2.4	Interior doors and hardware.	4	All	Typically P.S. Frames with solid core wood doors renewed in 1989, functioning and good condition.	
3.2.5	Millwork	4	1958	Renewed in 1989. Some minor cracks in plastic laminate cabinet tops. Functional and generally in good condition.	
		N/A	1973	1973 section is storage only.	
3.2.6	Fixed/wall mounted equipment (i.e., writing boards, tackboards, display boards, signs).	4	1958	Mostly renewed in 1989	n/a
		N/A	1973	1973 Section is storage only.	
3.2.7	Any other fixed/mounted specialty items (i.e., CTS equipment, gymnasium equipment).	4	1958	Fixed backstops in gym at heights to suit elementary students	
		N/A	1973	1973 section is storage only.	
3.2.8	Washroom materials and finishes.	4	1958	Renewed in 1989. Ceramic floor tile. Half-height ceramic wall tile. Painted concrete block walls. H/C accessible except for Vanity (see 3.3.5)	
Other					
3.3	Health and Safety Concerns --- Intent is to identify renovations considered necessary to meet applicable codes, primarily due to safety concerns. Basis of evaluation should be an up-to-date inspection report from the authority having jurisdiction together with direct observations as appropriate. Evaluator should note if in his opinion a comprehensive code evaluation is		Bldg. Section	Description/Condition	
		1	All	The combustible roof requires fire protection by sprinklering or application of fire protective materials, in that the Building faces only 1 street and exceeds 800 s.m.	\$38,700.00

School Facility Evaluation Project
Part III - Space Adequacy

Section 3	Building Interior - Overall Conditions	Rating	Comments/Concerns		Estim. Cost
3.3.1	Building construction type - combustible or non-combustible, sprinklered or non-sprinklered.	4	All	Combustible - non-sprinklered	
3.3.2	Fire separations (i.e., between buildings, wings, zones if non-sprinklered).	1	1958	Corridor zone doors do not comply. They are wood construction, non-rated, do not latch, and are not double acting to allow exiting from either side - replace.	\$2,500.00
3.3.3	Fire resistance rating of materials (i.e., corridor walls and doors).	4	1958	20 min. classroom doors Concrete block corridor walls	
		1	1958	Non-rated door on Boiler Room - replace with rated door and frame.	\$2,000.00
		1	1973	Non-rated door on Storage Room - replace with rated door and frame.	\$2,000.00
3.3.4	Exiting distances and access to exits.	4	All		
3.3.5	Barrier-free access.	3	All	Main Entrance requires H/C door operators. Change Washroom vanities to wall hung lavatories to accommodate wheel chair access.	\$9,600.00
3.3.6	Availability of hazardous materials audit (i.e., evidence of safety concerns with respect to asbestos, PCB's, chemicals).	F.I.	All	May be asbestos on some heating lines - no report available.	
3.3.7	Other health and safety concerns (i.e., evidence of excessive noise conditions, air quality problems)		All	No mechanical air supply - refer to Section 4. Considerable hum from fluorescent lights in classrooms - refer to Section 5.	
Other					
	Overall Bldg Interior Condition & Estim Costs				\$57,200.00

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>	4	40' x 24' single classroom, dated 1996.	
6.1.1	Foundation and structure (i.e., signs of bending, cracking, settlement, rust, voids, stains).	4	Wood foundation - minor settlement.	
6.1.2	Roof materials and components (i.e., signs of deterioration, leaks, ice build-up).	4	Fully adhered rubber membrane	
6.1.3	Exterior wall finishes (i.e., signs of deterioration, cracks, water stains).	2	Breezways access to portable is makeshift construction - Reconstruct. Aluminum vertical cladding on portable is in good condition.	\$4,000.00
6.1.4	Doors and windows (i.e., signs of deterioration, rusting hardware, glass cracks, peeling paint, damaged seals).	4		
6.1.5	Interior finishes (i.e., floors, walls, ceiling).	4	Carpet floor. Prefinished vinyl wall and ceiling panels.	
6.1.6	Millwork (i.e., counters, shelving, vanities, cabinets).	4	Setup as computer lab	
6.1.7	Fixed/wall mounted equipment (i.e., writing boards, tackboards, display boards, signs)	4		
6.1.8	Heating system.	3	Coleman DGAT090BDD complete with air conditioning 90,000 BTU/hr input. Non ducted return which uses the furnace room as return air plenum. Duct return air directly to furnace.	\$1,000.00
6.1.9	Ventilation system.	4	Part of above.	
6.1.10	Electrical, communication and data network systems.	4	Computer room in one portable.	
6.1.11	Health and safety concerns (i.e., fire and smoke alarms, fire protection systems, exiting, fire resistance rating of materials).	1	Separate fire alarm system not tied into building. Exit door is binding on exterior steps which impedes exiting - rebuild exterior wood steps to accommodate landing for wheelchair.	\$2,000.00
6.1.12	Barrier-free access.	3	None - due to stair access. H/C lift required.	\$28,000.00
	Overall Portable Bldgs Condition & Estim Costs			\$35,000.00

School Facility Evaluation Project
Part III - Space Adequacy

Section 7	Space Adequacy	This Facility			Equiv. New Facility			Surplus/ Deficiency	Comments/Concerns
		No.	Size	Total Area	No.	Size	Total Area		
7.1	Classrooms	6.0	-	451.6	3.0	80.0	240.0	211.6	All areas are in square meters
7.2	Science Rooms/Labs	-	-	-	-	-	-		
7.3	Ancillary Areas (i.e., Art, Computer Labs, Drama, Music,)	1.0	85.0	85.0	1.0	130.0	310.0	-225.0	Portable
					2.0	90.0			
7.4	Gymnasium (incl. gym storage)	1.0	221.0	221.0	1.0	275.0	275.0	-54.0	
7.5	Library/Resource Areas	1.0	125.6	125.6	1.0	80.0	80.0	45.6	
7.6	Administration/Staff, Physical Education, Storage Areas	-	-	100.0	-	-	252.0	-152.0	No Physical Education
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)			397.5			389.0	8.5	
	Overall Space Adequacy Assessment			1380.7			1546.0	-165.3	