

2020 Corporate Strategic Asset Management Plan

Appendix E Condition Assessment Framework Part 2 - Facilities

APPENDICES A: Building Assessment Reports



Facility Assessment **CVRD Head Office**



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Cowichan Valley Regional District MH Project No. 5170700.00

November 2017



Cowichan Valley Regional District 175 Ingram Street Duncan, BC V9L 1N8



PROPERTY DESCRIPTION The CVRD Head Office was constructed in 2003 and has had no major renovations since.	PROPERTY STATISTIC Gross Floor Area:	S 25,969 sf.
Refer to Photo 01 for a general overview of the exterior of the building.	Replacement Value: Target FCI: Current FCI:	\$7,063,568 0.050 0.042

REPORT OVERVIEW

We identified Priority 1 - Immediate expenditures totalling \$30,000 as follows:

- Row 49 - F105002 Building Automation Systems (and HVAC commissioning) - \$30,000

The following provides an overview of the visual seismic, building code, accessibility and energy efficiency reviews completed.

Seismic Review

Seismic work completed to date: Recommendations:	N/A None
Building Code Review Built under what code: Deficiencies observed:	1998 British Columbia Building Code N/A
Accessibility Review	
Access into building:	Yes
Access throughout building:	Yes
Access to washrooms:	Yes
Recommendations:	None

We identified recommendations of approximately \$348,000 over the next five years. The following is a summary of the major projects (over \$10,000) we believe will be required the next five years, and elements whose condition is unknown and/or where further investigation is recommended:

- Row 49 F105002 Building Automation Systems (and HVAC commissioning) \$30,000
- Row 63 D503002 Telecommunications Systems \$500,000

PROJECT TEAM

The visual reviews were completed on May 31, 2017 by Chris Raudoy and Jordan Bowie of MH. We began with an interview with Mr. Brad Coleman. During our review of the building, we were accompanied by Mr. Coleman and Mr. Tod LeSergent, who provided access to a sampling of representative areas of the facility, as requested.

Chris Raudoy of Morrison Hershfield reviewed the report for technical content and for compliance with the contract requirements.

REFERENCE DOCUMENTS/INFORMATION

We reviewed the following documents and selected drawings for general background and to

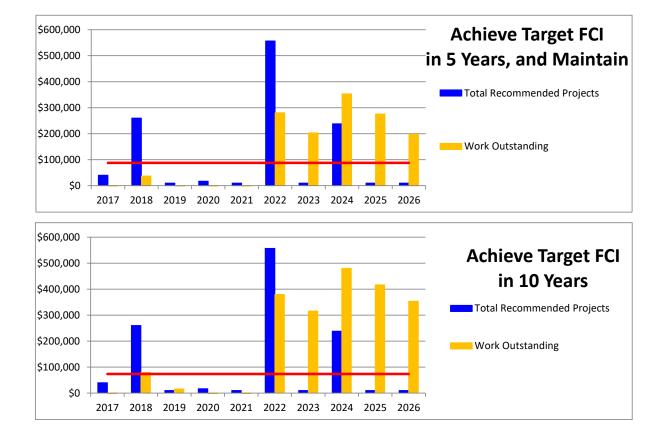
- CVRD New Office Building Drawings "Issued for Tender" set by Moore Patterson Architects Inc., dated February 18, 2002
- Custom Valuation Report by SCM RMS Custom Services, dated June 25, 2013
- Energy Study Report by Building Energy Solutions Ltd., dated February 3, 2014

This report should be reviewed in conjunction with the Objectives, Terms of Reference, Limitations, and Methodology described in the main body of the report.

We recommend budgeting for the following 1 – Immediate, 2 - Restore Functionality, 2b - Exceeded Service Life and 3 - Future Renewal projects by year as follows:

Priority	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026
1 – Immediate	30,000	0	0	0	0	0	0	0	0	0
2 - Restore Functionality	0	0	0	0	0	0	0	0	0	0
2b - Exceeded Service Life	0	0	0	0	0	0	0	0	0	0
3 - Future Renewal	10,000	260,000	10,000	17,000	10,000	557,000	10,000	238,000	10,000	10,000
Total in 2017 dollars	40,000	260,000	10,000	17,000	10,000	557,000	10,000	238,000	10,000	10,000
Minimum Funding to Achiev	ve and Mai	ntain Targ	et FCI wit	hin 5 years	: \$87,647					
Work outstanding	-135,294	37,059	-40,587	-111,234	-188,881	280,472	202,825	353,178	275,532	197,885
-										

Minimum Funding to Achie	ve Target F	CI within 1	LO years: \$	573,529						
Work outstanding	-107,058	79,412	15,883	-40,646	-104,175	379,295	315,766	480,237	416,708	353,178



Starty: 2017 Facility Condition Assessment and Capital Plan CVRD Head Office, 175 Ingram Street, Duncan, BC

	ssa	dno	ments	nal	сом	PONENT		CONDITION ASSESSMENT				LIFE	CYCLE DATA	RECOMMENDATION			Can this	If recommende work not		Can the current			ROBABLE COS	т
BLDG Name	Location / Addr	Level 1 Major Gr Elements	.evel 2 Group Eler	Level 3 Individ Elements	ID	Location / Type	Photo	Description & History	Condition	the Norman and Land	As sessment Date As sessment Date As sessed By	Age in 2017 Typical	Life Cycle or Action Interval Est. Time Remaining to EOL	Recommendation	Type	Priority	work be phased over multiple years ?	complete can th rate of deterioration b expected to	to a loss of	condition adversely affect the buildings security of safety ?	Unit Rate	Subtotal Repair or Replacement Cost	Consult. Contingency	5% Tax
VRD Head ffice	175 Ingram St., Duncan, BC	A Substructure	A10 Foundations	A1030 Standard Foundations	A101001 Wall Foundation	ns Throughout Building/Below Grade	×	The foundations are cast-in-place concrete as visible at grade. We noted normal, isolated, narrow cracking. No evidence of major settlement or heaving was reported or observed.	4 4	2	2003 31-May-17 MH	14	50 36	The foundations are expected to last the life of the building. No major capital expenditures are expected to be required. This item falls outside the ten year plan, costs associated with this item have not been carried into the cash flow		Not Applicable	N/A	N/A	Yes	No				
VRD Head	175 Ingram St.,	A Substructure	A10 Foundations		A103001 Slab on Grade	Below Grade Slab on	×		4 4	2	2003 31-May-17 MH	14	50 36	tables. The slab on grade is expected to last the life of the building. No major capital expenditures are expected to be		Not Applicable	N/A	N/A	Yes	No				+
ce	Duncan, BC			Foundations		Grade		major settlement or heaving was reported or observed.						required. This item falls outside the ten year plan, costs associated with this item have not been carried into the cash flow tables.										
RD Head ice	175 Ingram St., Duncan, BC	A Substructure	A10 Foundations	A1010 Standard Foundations	A103006 Foundation Drainage	Throughout Building/Below Grade	×	Perimeter drainage is present at the footing levels. This system was not exposed for review.		2	2003 31-May-17 MH	14	15 3	Periodic camera inspection and isolated repairs as required.	Study	Not Applicable	No	N/A	No	N/A 1	\$2,500 L	\$\$\$2,500	0% 0%	5%
RD Head ice	175 Ingram St., Duncan, BC	A Substructure	A10 Foundations	A1030 Standard Foundations	A103006 Foundation Drainage	Throughout Building/Below Grade	x	Perimeter drainage is present at the footing levels. This system was not exposed for review.		2	2003 31-May-17 MH	14 1	100 31	The foundation drainage is expected to last the life of the building. No major capital expenditures are expected to be required. This item falls outside the ten year plan, costs associated with this item have not been carried into the cash flow		Not Applicable	N/A	N/A	Yes	No				
/RD Head	175 Ingram St	B Shell	B10	810	B10 Superstructure	Throughout		The superstructure consists of cast in place concrete, cinder blocks and steel framed infill walls	4 4		2003 31-May-17 MH	14	100 31	tables. This should be updated with the results of the foundation drainage review recommended in A103006 Foundation Drainage (above). Interior protected structural components are expected to last the life of the building. No major capital		Not Applicable	N/A	N/A	Yes	No				
ice	175 Ingram St., Duncan, BC	b Shell	Superstructure		Bio Superstructure	Building/Superstructure		The supersubcute consists on use in place conditions etc. There bucks and see in an etc initial ways supported by a cast-in-place concrete foundation. No settlement, cracking, or other evidence of structural distress was observed or reported. There was no evidence or reports of long-term leakage that would lead us to expect concealed structural		-	51-WBY-17 WIT	14	100 31	Interior protectes structure and components are expected to as a time to the domain of the ontain of the optimal expenditures are expected to be required. This time fails outside the ten year plan, costs associated with this item have not been carried into the cash flow tables. It is recommended that the building seismic upgrades be completed. This item is included under P100001		Not Applicable	N/A	N/A		NO				
RD Head	175 Ingram St.,	B Shell	B10	B1020 Roof	B102004 Canopies	Level 1 and Level	2	damage. Low sloped canopies (waterproofed with a 2 ply SBS membrane) are present at the main entrance and	4 4	2	2003 31-May-17 MH	14	15 2	Seismic Screening. The wood and metal framing is expected to last the life of the building. Ongoing treatment of the wood	Repair Allowance	4a- Discretionary	Yes	Yes	No	No 10	\$750 E	A \$7,500	0% 0%	5%
ffice	Duncan, BC		Superstructure	Construction		3/Exterior Canopies		third floor. These canopies are supported by a wood and metal framed structure.						structure will be required. The cost for SBS membrane replacement has been included with main roof (B301002 Roofing - Low Sloped Membrane System SBS).		Renewal								
/RD Head ffice	175 Ingram St., Duncan, BC	B Shell	B20 Exterior Enclosure	B2010 Exterior Walls	B201007 Balcony Railing	s Balcony/Railings	3	A glazed balcony railing is present on the balcony on the north elevation.	4 4	2	2003 31-May-17 MH	14	30 16	Replace railings at end of service life. This item falls outside the ten year plan, costs associated with this item have not been carried into the cash flow	Replacement	3 - Future Renewal	I No	N/A	No	No				
RD Head fice	175 Ingram St., Duncan, BC	B Shell	B20 Exterior Enclosure	B2010 Exterior Walls	B201001 Exterior Walls	Throughout Building/Masonry Cladding	4	Exterior cladding consists mainly of drained masonry wall assemblies. The brick veneer walls are supported on shelf angles at each floor level, with drainage provided via weep holes.	4 4	2	2003 31-May-17 MH	14	20 6	tapies. The masonry cladding is expected to last the life of the building. Budget for localized masonry and mortar joint repairs.	Repair Allowance	3 - Future Renewal	l Yes	N/A	No	No 1	\$15,000 L	S \$15,000	0% 0%	6 5%
RD Head	175 Ingram St.,	B Shell	B20 Exterior	B2010 Exterior	B201001 Exterior Walls	Exterior Walls/Masonry	, 5		4 4	2	2003 31-May-17 MH	14	20 6	The masonry cladding is expected to last the life of the building.	Repair Allowance	3 - Future Renewal	l Yes	N/A	No	No 7000	\$8 S	F \$56,000	0% 10%	6 5%
ice	Duncan, BC		Enclosure	Walls		Cladding		supported on shelf angles at each floor level, with drainage provided via weep holes.						Complete exterior sealer installation on masonry.										
RD Head ice	175 Ingram St., Duncan, BC	B Shell	B20 Exterior Enclosure	B2010 Exterior Walls	B201001 Exterior Walls	Exterior Walls/Cast-in- Place Concrete	6	Exposed cast-in-place concrete is present at the base of the walls.	4 4	2	2003 31-May-17 MH	14	20 6	The cast-in-place concrete is expected to last the life of the building. Complete exterior sealer installation on cast-in-place concrete	Repair Allowance	3 - Future Renewal	Yes	No	No	No 1000	\$8 S	F \$8,000	0% 10%	5%
RD Head ice	175 Ingram St., Duncan, BC	B Shell	B20 Exterior Enclosure	B2010 Exterior Walls	B201001 Exterior Walls	Throughout Building/Composite Metal Panels	7	Composite metal panels have been used throughout the curtain wall system as well as at the parapets (level 3 roof and main roof).	4 4	2	2003 31-May-17 MH	14	30 16	Replace composite metal panels at the end of its service life. This item falls outside the ten year plan, costs associated with this item have not been carried into the cash flow ranker.	Replacement	3 - Future Renewal	I Yes	No	No	No				
/RD Head ffice	175 Ingram St., Duncan, BC	B Shell	B20 Exterior Enclosure	B2010 Exterior Walls	B201008 Exterior Soffits	Throughout Building/Soffits	8	Perforated metal soffits are present on the underside of the roof overhangs and balconies.	4 4	2	2003 31-May-17 MH	14	30 16	Replace soffit material at the end of its service life.	Replacement	3 - Future Renewal	I Yes	No	No	No				
RD Head	175 Ingram St.,	B Shell	B20 Exterior	B2010 Exterior	B201008 Exterior Soffits	Throughout	9	Wood soffits are present at the building entrance canopy.	4 4	2	2003 31-May-17 MH	14	20 6	This item falls outside the ten year plan, costs associated with this item have not been carried into the cash flow tables. Refinish wood soffit material as required.	Replacement	3 - Future Renewal	l Yes	No	No	No 1	\$4,500 L	S \$4,500	0% 0%	5%
fice /RD Head	Duncan, BC	B Shell	Enclosure B20 Exterior	Walls B2010 Exterior	B201011 Joint Sealant	Building/Soffits Exterior Walls/Exterior		Exterior sealant joints are present throughout the building. No sealant replacement work was	3 4	2	2003 31-May-17 MH	14	20 6	The wood soffit material is expected to last the life of the building. Replace sealant between dissimilar materials, around windows and doors.	Replacement	3 - Future Renewal		No	No			s \$30,000		
ice	Duncan, BC		Enclosure	Walls		Sealant		reported by facility staff. No leaks were reported by facility staff.																
'RD Head fice	175 Ingram St., Duncan, BC	B Shell	B20 Exterior Enclosure	B2020 Exterior Windows	B202003 Curtain Walls	Exterior Walls/Aluminun Frame		combining fixed glazing, awning operable windows, opaque glazed spandrels and metal panels/flashing.	3 4	2	2003 31-May-17 MH	14	35 21	Replace aluminum framed windows with new thermally-broken, insulated glass units (IGUs) c/w Low E coatings and argon fill. This item falls outside the ten year plan, costs associated with this item have not been carried into the cash flow	Replacement	3 - Future Renewal	l Yes	No	No	No				
								One ongoing (sporadic) leak was reported on the east elevation. This leak was reported to be intermittent and not causing interior damage.						tables. Complete isolated repairs (including tightening of pressure plates and replacement of gaskets and sealants) on an ongoing basis. The cost of this work is below the project threshold and has not been included in the financial tables.										
RD Head ice	175 Ingram St., Duncan, BC	B Shell	B20 Exterior Enclosure	B2020 Exterior Windows	B202001 Windows	Windows/Insulated Glass Units (IGUs)		The glazing at windows and doors, double-glazed sealed insulating glass units with thermal spacers. We did not note any failed insulating glazing units. We understand localized replacements have been completed to date.	3 4	2	2003 31-May-17 MH	14	20 6	Replace insulated glass units (IGUs) with new as required. A budget has been included for replacement of glazing units at year 6 if required.	Repair Allowance	4a - Discretionary Renewal	Yes	No	No	No 1	\$3,000 L	S \$3,000	0% 0%	5%
'RD Head fice	175 Ingram St., Duncan, BC	B Shell	B20 Exterior Enclosure	B2030 Exterior Doors	B203002 Glazed Doors	Exterior Walls/Glazed Swing Doors	11	Glazed swing doors (four single and one double) are used at the building entrances as well as the second floor balcony.	4 4	2	2003 31-May-17 MH	14	30 16	Replace aluminum framed windows with new thermally-broken, insulated glass units (IGUs) c/w Low E coatings and argon fill.	Replacement	3 - Future Renewal	l Yes	No	No	No				
VRD Head	175 Ingram St., Duncan, BC	B Shell	B20 Exterior Enclosure	B2030 Exterior Doors	B203001 Solid Doors	Exterior Walls/Solid Doors	12	Solid doors (four) with glazed panels have been used at building exits (fire exists) and service rooms.	4 4	2	2003 31-May-17 MH	14	30 16	This item falls outside the ten year plan, costs associated with this item have not been carried into the cash flow tables. Replace door assemblies at the end of their service life.	Replacement	3 - Future Renewal	l Yes	No	No	No				
/RD Head	175 Ingram St.,	B Shell	B30 Roofing	R3010 Roof	B301002 Roofing - Low		13.00	The main roof is a conventional low sloped roof assembly with a 2-ply SBS membrane.	3 3	2	2003 31-May-17 MH	14	22 1	This item falls outside the ten year plan, costs associated with this item have not been carried into the cash flow tables. Complete isolated repairs to the roof membrane.	Repair Allowance	2 - Restore	No	Yes	Yes	No 1	\$3,000 L	s \$3,000	0% 0%	6 5%
ce	Duncan, BC			Coverings	Sloped Membrane System SBS	ī		Isolated areas of debonding membrane were noted at penetrations.								Functionality								
RD Head	175 Ingram St., Duncan, BC	B Shell	B30 Roofing	R3010 Roof Coverings	B301002 Roofing - Low Sloped Membrane System		14.00	The main and level 3 roofs are conventional low sloped roof assembly with a 2-ply SBS membrane. Isolated areas of debonding membrane were noted at penetrations.	3 3	2	2003 31-May-17 MH	14	22 8	Replace roofing membrane at the end of its service life.	Replacement	3 - Future Renewal	I No	Yes	Yes	No 9100	\$22 S	F \$200,200	0% 0%	5%

Start Yr 2017 Facility Condition Assessment and Capital Plan

CVRD Head	Office, 1	175 Ingra	m Street,	Duncan, BC

	ş	dno		nents	ial	COMP	ONENT	CONDITION ASSESSMENT						IFECYCLE		RECOMMENDATION			Can this	If recommende	d Will a failure	Can the curre		1	OPINION OF P	ROBABLE COST	τ
BLDG Name	Location / Addre	Level 1 Major Gro Elements		Level 2 Group Eler	Level 3 Individu. Elements	ID	Location / Type	9 9 2 2 2 2 2 2 2 2 2 2 3 2 3 2 3 2 3 3 2 3	Condition	Performance	Yr New or Last Major Action	As sess ment Date As sessed By	Age in 2017	Typical Life Cycle or Action Interval	Est. Time Remaining to EOL or Maior Action	Recommendation	Type	Priority	work be phased over multiple years ?	complete can th rate of deterioration b	to a loss of	condition adversely affe the building security of safety ?	ect A	Unit Rate	Subtotal Repair or Replacement Cost	Consult. Contingency	5% Tax
CVRD Head Office	175 Ingram Duncan, BC		II B30	-	010 Roof verings	B301002 Roofing - Low Sloped Membrane System SBS		15.00 The balcony roof is low sloped roof assembly with a 2-ply S85 membrane with pavers over top.	4	3	2003 3	1-May-17 MH	14	22	8	Replace roofing membrane at the end of its service life.	Replacement	3 - Future Renewal	No	No	No	No	100	\$100 S	F \$10,000	0% 0%	5%
CVRD Head Office	175 Ingram Duncan, BC		II B30		010 Roof verings	B301002 Roofing - Low Sloped Membrane System SBS		16 Canopies are present over the east and south building doors. These canopies have been waterproofed with a 2-ply SBS membrane.	4	3	2003 3	1-May-17 MH	14	22	8	Replace roofing membrane at the end of its service life.	Replacement	3 - Future Renewal	No	No	No	No	50	\$100 S	F \$5,000	0% 0%	5%
CVRD Head Office	175 Ingram Duncan, BC			0 Interior C10 Instruction Doo	020 Interior ors	C102001 Standard Interior Doors	Throughout Building/Interior Doors	17 Interior doors (77) consists of wood doors, glazed wood doors and glazed doors.	4	4	2003 3	1-May-17 MH	14	30	16	Replace door assemblies at the end of their service life. This item falls outside the ten year plan, costs associated with this item have not been carried into the cash flow tables. Replaced isolated assemblies as required as part of the buildings ongoing maintenance.	Replacement	3 - Future Renewal	Yes	No	No	No					
CVRD Head Office	175 Ingram Duncan, BC			0 Interior C10 Instruction Doo	020 Interior ors	C102003 Fire Doors	Throughout Building/Fire Doors	 Fire rated interior doors (15) are present at the egress routes and service rooms. 	4	4	2003 3	1-May-17 MH	14	30	16	Replace door assemblies at the end of their service life. This item falls outside the ten year plan, costs associated with this item have not been carried into the cash flow tables. Replaced isolated assemblies as required as part of the buildings ongoing maintenance.	Replacement	3 - Future Renewal	Yes	No	No	No					
CVRD Head Office	175 Ingram Duncan, BC		ors C2		020 Stair iishes	C202001 Stair Finishes	Egress Stairs	18 Laminate flooring has been installed on the stairs.	4	4	2003 3	31-May-17 MH	14	25	11	Replace Booring at the end of their service life. Replace flooring at the end of their service life. This item falls outside the ten year plan, costs associated with this item have not been carried into the cash flow tables.	Replacement	3 - Future Renewal	Yes	No	No	No					
VRD Head Office	175 Ingram Duncan, BC	n St., C Interio		0 Interior C10 Instruction	010 Partitions	C101004 Interior Guardrails and Screens	Stair Guardrails	19 Glazed guardrails and handrails are present in the egress stairs	4	4	2003 3	81-May-17 MH	14	30	16	Replace guardrails at the end of their service life. This item fails outside the ten year plan, costs associated with this item have not been carried into the cash flow tables.	Replacement	3 - Future Renewal	Yes	No	No	No					
VRD Head ffice	175 Ingram Duncan, BC			0 Interior C10 Instruction	010 Partitions	C101001 Fixed Partitions	Washrooms/Partitions	20 Fixed washroom partitions are present in the washrooms.	4	4	2003 3	81-May-17 MH	14	30	16	Replace fixed partitions at the end of their service life. This item falls outside the ten year plan, costs associated with this item have not been carried into the cash flow tables.	Replacement	3 - Future Renewal	Yes	No	No	No					
VRD Head ffice	175 Ingram Duncan, BC			0 Interior C10 Instruction		C101006 Glazed Partitions and Storefronts	Throughout Building/Glazed Partitions	x Glazed partitions are used throughout the building.	4	4	2003 3	81-May-17 MH	14	40	34	Replace glazed partitions at the end of their service life. This item falls outside the ten year plan, costs associated with this item have not been carried into the cash flow tables.	Replacement	3 - Future Renewal	Yes	No	No	No					
VRD Head Office	Duncan, BC	:	Fi	inishes Fini	010 Wall iishes	Wall Finishes	Building/Wall Finishes	21 The majority of the interior walls are painted gypsum wall board. No information was available regarding the last repainting cycle.	4			1-May-17 MH		1	1	Repaint interior wall board as required.	Replacement	3 - Future Renewal	Yes		No	No	1	\$4,000 L	S \$4,000	0% 0%	5%
VRD Head Office	175 Ingram Duncan, BC				010 Wall iishes	C301099 Other Wall Finishes	Throughout Building/Wood Finishes	22 Wall paneling has been installed throughout the interior.	4	4	2003 3	1-May-17 MH	14	40	36	Replace wood paneling at the end of its service life. This item falls outside the ten year plan, costs associated with this item have not been carried into the cash flow tables.	Replacement	3 - Future Renewal	Yes	No	No	No					
CVRD Head Office	175 Ingram Duncan, BC				020 Floor iishes	C302001 Tile Floor Finishes	Anite room and Room 305. /Floor Finishes	 Tile flooring has been throughout the Anite room and room 305. 	4	4	2003 3	1-May-17 MH	14	30	16	Replace tile flooring at the end of its service life. This item falls outside the ten year plan, costs associated with this item have not been carried into the cash flow tables.	Replacement	3 - Future Renewal	Yes	No	No	No					
CVRD Head Office	Duncan, BC	2	F	inishes Fini	020 Floor iishes	C302001 Tile Floor Finishes		x Tile flooring has been used in the main lobby.	4			1-May-17 MH		30	16	Replace tile flooring at the end of its service life. This item falls outside the ten year plan, costs associated with this item have not been carried into the cash flow tables.	Replacement	3 - Future Renewal	Yes	No	No	No					
CVRD Head Office	175 Ingram Duncan, BC				020 Floor iishes	C302001 Tile Floor Finishes	Washrooms/Floor Finishes	x Tile flooring has been used in the washroom areas.	4	4	2003 3	1-May-17 MH	14	30	16	Replace tile flooring at the end of its service life. This item falls outside the ten year plan, costs associated with this item have not been carried into the cash flow tables.	Replacement	3 - Future Renewal	Yes	No	No	No					
CVRD Head Office	175 Ingram Duncan, BC				020 Floor iishes	C302005 Carpeting	Throughout Building/Floor Finish	23 Carpet tile has been used throughout the building as the primary flooring. The condition of the carpet varies throughout the building based on the traffic load.	4	4	2015 3	1-May-17 MH	2	20	18	Replace carpeting at the end of its service life. This item falls outside the ten year plan, costs associated with this item have not been carried into the cash flow tables.	Replacement	3 - Future Renewal	Yes	No	No	No					
VRD Head Office	175 Ingram Duncan, BC	n St., C Interio		0 Interior C30 Finishes Finis		C302010 Hardeners and Sealers	Throughout Building/Floor Finish	 Service room floors typically consists of cast-in-place concrete with has been sealed. 	4							Reseal concrete.	Replacement	3 - Future Renewal	Yes	No	No	No	1	\$10,000 L	\$\$\$10,000	0% 0%	5%
VRD Head Iffice	175 Ingram Duncan, BC				020 Floor iishes	C302004 Resilient Floor Finishes	Throughout Building/Floor Finish	x The following rooms have a marmoleum floor finish installed: 111, 112, 1124, 117, 118, 119, 120, 122, 123, 124, 204, 209, 210, 220, 221, 228, 304, 316, 317, 318, 322, 327, 331 & 332.	4	4	2003 3	1-May-17 MH	14	30	16	Replace sheet flooring at the end of its service life. This item falls outside the ten year plan, costs associated with this item have not been carried into the cash flow rables.	Replacement	3 - Future Renewal	Yes	No	No	No		\$5 S	F \$0	0% 0%	5%
VRD Head	175 Ingram Duncan, BC				030 Ceiling iishes	C303004 Ceiling	Throughout Building/Gypsum Wall Board Ceiling Finish	x Gypsum will board has been used in the following rooms: level 1 lobby, 102, 113, 114, 115, 116, 11 118, 119, 121, 121, 121A, 121B, 122, level 2 lobby, 201A, 225, 226, 227, 228, level 3 lobby, 302, 303, 304 305, 306 and the stairwells.		4	2003 3	1-May-17 MH	14	1	1	Repaint interior gypsum wall board as required.	Replacement	3 - Future Renewal	Yes	No	No	No	1	\$4,000 L	S \$4,000	0% 0%	5%
VRD Head ffice VRD Head	Duncan, BC		Fi	inishes Fini	030 Ceiling iishes 010 Energy	C303004 Ceiling D301002 Gas Supply	Throughout Building/Acoustic Tiles Interior of Building/	24 Acoustical tiles have been used as the ceiling finish (where finishes are installed). 25 A utility-owned meter regulates natural gas supply to the building. The fuel is distributed throughout	4			81-May-17 MH				Replace acoustic 2x4 ceiling tiles (excluding suspension system) Replace piping at the end of service life.	Replacement		Yes	No	No Yes	No					
ffice	Duncan, BC			Sup	pply	System	Natural Gas Piping	the building via steel gas piping.								replace plying a three in 0 is a vice ine. This item fails outside the ten year plan, costs associated with this item have not been carried into the cash flow tables.											
VRD Head ffice	175 Ingram Duncan, BC		es D3	Gen	020 Heat nerating stems	D302002 Hot Water Boilers	Mechanical Room/ Primary Heat Boiler	26 One Weil-McLain natural gas-freed boller (model PFG-6-SPN, 305 MBTU/Hr) located in the mechanic room. Boiler provides hydronic heat for heating loop.	al 4	5	2003 3	1-May-17 MH	14	30	16	Reglace the heating boller at the end of service life. Potential energy savings through upgrade to more efficient unit, as recommended in the Energy Evaluation report. This item fails outside the ten year plan, costs associated with this item have not been carried into the cash flow tables.	Replacement	3 - Future Renewal	No	No	Yes	No					
'RD Head fice	175 Ingram Duncan, BC	n St., D Servic	es D3	Gen	020 Heat nerating stems	D302005 Auxiliary Equipment	Mechanical Room/ Expansion Tank	27 An Amtrol Extrol expansion tank serves the space heating system.	4	5	2003 3	81-May-17 MH	14	30	16	Replace the boiler expansion tank at the end of its lifespan. This item falls outside the ten year plan, costs associated with this item have not been carried into the cash flow tables.	Replacement	3 - Future Renewal	No	No	Yes	No					
VRD Head Office	175 Ingram Duncan, BC	n St., D Servic	es D3	Gen	030 Cooling nerating stems	D303001 Chilled Water Systems	Roof/ Cooling Tower	An Evapco cooling tower maintains the temperature of the heating loop.	4	5	2003 3	31-May-17 MH	14	25	11	Replace or substantially rebuild the cooling tower at the end of its lifespan. This item falls outside the ten year plan, costs associated with this item have not been carried into the cash flow	Replacement	3 - Future Renewal	No	No	No	No					+

Starty: 2017 Facility Condition Assessment and Capital Plan CVRD Head Office, 175 Ingram Street, Duncan, BC

		2	<u>۹</u>	ints		COM	PONENT		CONDITION ASSESSMENT						LIFECYCL	E DATA	RECOMMENDATION			If recomm	ended Mill - fe	ilure Can the current		OPINION OF PI	ROBABLE COS	бт	
ame		Addres	or Grou nts) Eleme	lividual nts		e da		CONDITION ASSESSMENT		8	ast on	Date	<u> </u>		E OL			can worl	complete o	ot in th an the			Cost	5		4
N DO I B		Location / J	Level 1 Maji Eleme	Level 2 Group	Level 3 Ind Eleme	ID	Location / T	2	Description & History	Condition	Performan	Yr New or Last Major Action	As sess ment [Assessed B Ave in 201	Typical Typical Life Cycle o Action Inter	Est. Time Remaining to or Maior Act	Recommendation	Type	ξ ov Q mult γea	er deteriorat iple expecte rs ? increas	ion be d to e ?	s of the buildings the security of safety?	Unit Rate	Unit Subtotal Repair or Replacement	Consult. Contingen	5% Tax	Total in 20: Dollars
CVRD Head Office		ngram St., an, BC	D Services	D30 HVAC	D3040 Distributic Systems	n D304001 Air Distribution, Heating and Cooling	Throughout Building within Drop-Ceiling/ Heat Pumps	i	52 terminal heat pump provide heating and cooling throughout the building. Connected to an ambient piping loop. Facility Staff are concerned with the number of compressor failures in recent years.	3	4	2003	31-May-17	MH 14	4 20	6	Replace heat pumps at end of service life.	Replacement	3 - Future Renewal Ye	is Yes	No	No 52	\$2,500 E	EA \$130,000	0% 159	5%	\$157,00
CVRD Head Office		ngram St., an, BC	D Services	D30 HVAC	D3040 Distributio Systems	n D304001 Air Distribution, Heating and Cooling	Mechanical Room/ Heat Pump Loop Station	30 /	A Thermoplus Air Hybrid Unit (model KACB-036, 1,200 CFM)distributes hot water from the boiler to the heating loop.	4	5	2003	31-May-17	MH 14	4 25	11	Replace heat pump loop station at end of service life. This item falls outside the ten year plan, costs associated with this item have not been carried into the cash flow tables.	Replacement	3 - Future Renewal N	o Yes	No	No					
CVRD Head Office		ngram St., an, BC	D Services	D30 HVAC	D3040 Distributio Systems	n D304007 Exhaust Systems	s Washrooms and Service Rooms/ Exhaust Fans <200 cfm	31 1	Fractional horsepower exhaust fans used to exhaust air from washrooms and service rooms.	4	5	2003	31-May-17	MH 14	4 20	6	Replace small exhaust fans as required, which, when replaced as-needed would be less than the threshold value of the report. No budget has been allocated to the capital plan.	e Replacement	3 - Future Renewal Ye	s No	No	No					
CVRD Head Office		ngram St., an, BC	D Services	D30 HVAC	D3040 Distributio Systems	n D304007 Exhaust Systems	s Roof/ Exhaust Fans >200 cfm	32 1	Roof-mounted Loren Cook exhaust units for building ventilation.	4	5	2003	31-May-17	MH 14	4 25	11	Replace or overhaul large capacity fans as required. This item falls outside the ten year plan, costs associated with this item have not been carried into the cash flow tables.	Replacement	3 - Future Renewal Ye	s No	No	No					
CVRD Head Office		ngram St., an, BC	D Services	D30 HVAC	D3040 Distributio Systems	n D304008 Air Handling Units	Roof/ Make-up Air Units	33	Two Engineered Air makeup air units supply fresh air to the building.	4	5	2003	31-May-17	MH 14	4 25	11	Replace MUAs at end of service life. Upgrade to more efficient units, as recommended in the Energy Evaluation report. This item falls outside the ten year plan, costs associated with this item have not been carried into the cash flow		3 - Future Renewal Ye	s No	No	No					. <u></u>
0.000.000.0				D DD 111/10			10.1					2002	24.84			- 11	tables.									_	I
CVRD Head Office		ngram St., an, BC	D Services	D30 HVAC	D3020 Heat Generating Systems	D305005 Electric Heating	Washrooms and Offices/ Radiant and Convective Heaters		Radiant heating panels and convective heaters in the washrooms and miscellaneous spaces around the office, respectively.	4	5	2003	31-Way-17	MH 14	4 25	11	Replace radiant and convective heaters at end of service life. This item falls outside the ten year plan, costs associated with this item have not been carried into the cash flow tables.	Replacement	3 - Future Renewal Ye	s No	No	No					I
CVRD Head Office			F Special Construction and Demolition	F10 Special Construction	F1050 Special Controls and Instrumentation	F105002 Building Automation Systems	Throughout Interior of Building/ BAS	35 i	Building HVAC systems is managed by a Walker building automation system (BAS). Recent report indicated that the system has failed.	2	3	2003	31-May-17	MH 14	4 20	1	Upgrade BAS system and undertake a re-commission the HVAC systems. Depending on the findings of the feasibility study, major changes in the HVAC equipment may be implemented.	Replacement	1 – Immediate N	o No	Yes	No 1	\$30,000 E	EA \$30,000	0% 0%	0%	\$30,0
		2	and Demolition		Instrumentation				It is our understanding that the CVRD is requesting proposals to source a feasibility study to revise the HVAC system platform.	2							An order of magnitude budget has been included in the capital plan to account for replacement of the BAS and to commission the system, assuming that the core infrastructure of the BAS will be remain in place. Revise the budget as decisions are made on maintaining or augmenting the existing HVAC systems.										I
CVRD Head Office		ngram St., an, BC	D Services	D20 Plumbing	5 D2010 Plumbing Fixtures	D201000 Plumbing Fixture	es Washrooms/ Plumbing Fixtures		Two washrooms are present on each floor. The standard plumbing equipment includes stand-up showers (first floor), toilets, urinals in the male bathrooms and sinks in residential-type vanities.	4	5	2003	31-May-17	MH 14	4 30	16	General refurbishment of washrooms at the end of service life. This item falls outside the ten year plan, costs associated with this item have not been carried into the cash flow tables.	Replacement	3 - Future Renewal Ye	s No	No	No					
CVRD Head Office		ngram St., an, BC	D Services	D20 Plumbing	; D2020 Domestic Water Distributio	D202001 Pipes and Fitting	gs Throughout Interior of Building/ Distribution Pining		Primarily copper domestic water distribution piping throughout the building. The heating loop incorporates a chemical pot feeder in the custodian room on the 3rd floor.	4	5	2003	31-May-17	MH 14	4 25	11	Maintain a contingency for capital repairs or partial replacement piping at the mid-point of the life of the piping (25 years).	g Replacement	3 - Future Renewal Ye	s No	Yes	No					
									6 - F F								This item falls outside the ten year plan, costs associated with this item have not been carried into the cash flow tables. The chemical feed equipment is expected to arrive at less than the threshold value of the report.	/									I
CVRD Head Office		ngram St., an, BC	D Services	D20 Plumbing	D2020 Domestic Water Distributio	D202003 Domestic Water n Equipment	Water Entry and Janitorial Closet/ Backflow Preventer	42-43	Backflow prevention has been installed on the incoming water line and on the heating loop.	4	5	2003	31-May-17	MH 14	4 25	11	Install new backflow preventers at end of service life, assuming that annual inspections are undertaken at City- mandated intervals (typically annually, and in conjunction with the fire suppression system inspection). This item falls outside the ten year plan, costs associated with this item have not been carried into the cash flow		3 - Future Renewal N	D NO	No	No					
CVRD Head	d 175 lo	ngram St.,	D Services	D20 Plumbing	D2020 Domestic	D202003 Domestic Water	Machanical Room/	44.45	A 100 gal, 199 MBTU/Hr A.O. Smith Master Fit domestic hot water heating tank (model ETRC200A	4	5	2009	31-May-17	MU 0	12	4	tables. Replace domestic hot water heating tank at end of service life. The recirculation pump would be replaced as-	Replacement	3 - Future Renewal N	o No	No	No 1	\$5,000 8	EA \$5,000	0% 159	K 5%	\$7.00
Office	Dunca	an, BC	b services		Water Distributio	n Systems	Domestic Hot Water Tank	1	118) supplies tempered water to the building's plumbing fixtures. A recirculation pump is fitted on the hot water loop.		5						needed (less than threshold value of the report) or in conjunction with the heating tank.	replacement									\$7,00
CVRD Head Office		ngram St., an, BC	D Services	D20 Plumbing	y D2030 Sanitary Waste	D203001 Waste Pipe and Fittings	Bathrooms, Kitchen, Plumbing Walls/ Storm and Sanitary Piping	46 1	Storm water from roof drains through internal drains. Storm and sanitary piping was primarily cast iron where reviewed, with ABS piping at fixtures.	4	5	2003	31-May-17	MH 14	4 50	36	Complete localized repairs to storm and waste piping as may be necessary as the building ages. This item falls outside the ten year plan, costs associated with this item have not been carried into the cash flow tables.	Replacement	3 - Future Renewal Ye	s No	No	No					I
CVRD Head Office		ngram St., an, BC	D Services	D40 Fire Protection	D4010 Sprinklers	D401002 Sprinkler Water Supply and Piping	Throughout Building/ Sprinkler, Standpipe Piping and Valves		Steel sprinkler and standpipe piping throughout the building. Dry system for sprinklers on exterior soffits at ground floor. A Samese connection for use by the fire department is present at the front entrance to the building.	4	5	2003	31-May-17	MH 14	4 50	11	Maintain a contingency for capital repairs or partial replacement of equipment or piping at the mid-point of the life of the sprinkler (25 years). This item falls outside the ten year plan, costs associated with this item have not been carried into the cash flow		3 - Future Renewal Ye	s No	Yes	No					
CVRD Head	d 175 lo	ngram St.,	G Building	G20 Site	G2050	G205007 Irrigation	Building Exterior/	49	Exterior soft landscaping is serviced by an automatic irrigation system.	4	5	2002	21 May 17	MH 1/	4 25	11	Tables. General contingency for replacement of sections of the irrigation system and automatic controller as required.		3 - Future Renewal Ye	s No	No	No					
Office	Dunca		Sitework		Landscaping	Systems	Irrigation System	2	באנירוסי באור שוואבשקאוק, יו ביר דוכבי סין שו בשנשוושנים או קבוניסי אן בכוור.		5	2003	51 may 17				This item fails outside the ten year plan, costs associated with this item have not been carried into the cash flow tables.										I
CVRD Head Office		ngram St., an, BC	D Services	D50 Electrical	D5010 Electrical Service & Distribution	D501003 Main Switchboards	Electrical Room/ Main switch		The electrical service enters the building via underground wiring from an exterior pad-mounted transformer. Power is distributed to various house panels through an 800A main switch.	4	5	2003	31-May-17	MH 14	4 35	21	Replace main switch as deemed necessary by Infra-red (IR) scan on major switchgear. This item falls outside the ten year plan, costs associated with this item have not been carried into the cash flow tables.	Replacement	3 - Future Renewal N	o No	Yes	No					
CVRD Head Office	d 175 In Dunca		D Services	D50 Electrical	D5010 Electrical Service & Distribution	D501005 Panels	Throughout Interior of Building/ Miscellaneous Breaker Panels		Various Cutler-Hammer, mostly 225 Amp breaker panels, are located throughout the building for lighting and plug loads.	4	5	2003	31-May-17	MH 14	4 35	21	Replace house panels at end of service life as deemed necessary by IR scan. This item falls outside the ten year plan, costs associated with this item have not been carried into the cash flow tables.	Replacement	3 - Future Renewal Ye	s No	No	No					
CVRD Head Office		ngram St., an, BC	D Services	D50 Electrical	D5020 Lighting and Branch Wirin	D502002 Lighting Equipment	Throughout Interior of Building/ Indoor Low- Voltage Fixtures		Interior lighting is primarily T8 fluorescent fixtures in a combination of strip lights or compact tubes in recessed pot lights.	n 4	5	2003	31-May-17	MH 14	4 25	11	Upgrade interior light fixtures to LED units or lamps, as recommended in the Energy Evaluation report. This item falls outside the ten year plan, costs associated with this item have not been carried into the cash flow rables	Replacement	3 - Future Renewal Ye	s No	No	No					. <u> </u>
CVRD Head Office		ngram St., an, BC	D Services	D50 Electrical	D5020 Lighting and Branch Wirin	D502002 Outdoor Lighting	g Canopy and Soffits/ Lighting	53	Various ceiling-mounted high-intensity discharge exterior lights.	4	5	2003	31-May-17	MH 14	4 25	11	Laures. Upgrade interior light fixtures to LED units or lamps, as recommended in the Energy Evaluation report. This item falls outside the ten year plan, costs associated with this item have not been carried into the cash flow	Replacement	3 - Future Renewal Ye	s No	No	No					
CVRD Head Office		ngram St., an, BC	D Services	D50 Electrical	D5020 Lighting and Branch Wirin	D502099 Other Lighting and Branch Wiring	Throughout Interior of Building/ Branch Wiring		Wiring throughout the facility is copper. Devices include all house voltage switches and outlets. An exterior receptacle on the roof top equipment was not GFI protected.	4	5	2003	31-May-17	MH 14	4 35	21	tables. Add GFCI protection to all exterior outlets as needed. Consider occupancy sensors and Plugmaster retrofits, as recommended in the Energy Evaluation report.	Replacement	3 - Future Renewal Ye	s No	Yes	No					
0/00 !!	4 476	aram (*	Disprime	DE0 [DE020	DE02001 Eire Aleren	Electrical Pares 9 Free				c	2002	21 Marc 17	MU	4 25	44	This item falls outside the ten year plan, costs associated with this item have not been carried into the cash flow tables.		2 Enturo Personal		94	N-					
CVRD Head Office		ngram St., an, BC	D Services	D50 Electrical	D5030 Communications Security	D503001 Fire Alarm & Systems	Electrical Room & Front Entrance to Building/ Fire Alarm Panel		An Edwards EST Quick Start addressable device fire alarm system located in the electrical room and is connected to the heat detectors, pull stations and fire bells in the building. A remote annunciator is located at main entrance. System tested and maintained annually.		5	2003	51-IVIBY-17	MH 14	4 25	11	Replace main microprocessor unit and remote addressable modules at end of reliable service life. This item falls outside the ten year plan, costs associated with this item have not been carried into the cash flow tables.	Replacement	3 - Future Renewal N	o No	Yes	No					1
CVRD Head Office		ngram St., an, BC	D Services	D50 Electrical	D5030 Communications Security	D503002 & Telecommunications Systems	Throughout Interior of Building/ Phone, Internet, Cable TV	59	Telephone and internet main cabling and termination boxes located in telecommunications room and communications equipment room. Communications equipment is closely monitored by an in-house specialist.	4	5	2003	31-May-17	MH 14	4 35	0	Replace phone and internet cable infrastructure at end of useful service life. It has been confirmed by the CVRD that a phone system upgrade is planned for 2018, and budgetary figures have been provided herein by the CVRD.	Replacement	3 - Future Renewal N	D NO	No	No 1	\$250,000	LS \$250,000	0% 0%	0%	\$250,00

Starty: 2017 Facility Condition Assessment and Capital Plan CVRD Head Office, 175 Ingram Street, Duncan, BC

		z	đ	ents	-	сом	PONENT	CONDITION ASSESSMENT						LIFE	CYCLE D	DATA	RECOMMENDATION			Can this	If recommended	Will a failure	Can the current		OP	INION OF PROBAI	BLE COST	
Row	BLDG Name	Location / Addre	Level 1 Major Gro Elements	Level 2 Group Elem	Level 3 Individua Elements	ID	Location / Type	Description & History	Condition	Performance	Yr New or Last Major Action	As sess ment Date	As sessed By	Age in 2017 Typical	Life Cycle or Action Interval	Est. Time Remaining to EOL or Major Action	Recommendation	Type	Priority	work be phased over multiple years ?	work not complete can the rate of deterioration be expected to increase ?	in this system lead to a loss of	condition adversely affect the buildings security of safety ?	Quantity Unit Rate	Unit	Subtotal Repair or Replacement Cost Consult.	Contingency 2%	Total in 2017 Dollars
	CVRD Head Office	175 Ingram St., Duncan, BC	D Services	D50 Electrical	D5030 Communications & Security	D503007 Television & Systems	Throughout Building/ CCTV	 CCTV camera system installed around the building. The video display and recording equipment was not reviewed and is assumed to be original (located in Communications Equipment Room). We understand that upgrades were made in 2017. 	4	5	2017	31-May-1	7 MH	0	10	10	Upgrade video surveillance system. This item falls outside the ten year plan, costs associated with this item have not been carried into the cash flow tables.	Replacement	3 - Future Renewal	No	No	No	No					
	CVRD Head Office	175 Ingram St., Duncan, BC	D Services	D50 Electrical	D5030 Communications & Security	D503008 Security System	Throughout Building/ Card Access to Doors	60 Estensive Kantech security card access system throughout the building, upgraded in 2017.	4	5	2017	31-May-1	7 MH	0	10		Upgrade access control system throughout building. This item falls outside the ten year plan, costs associated with this item have not been carried into the cash flow tables.	Replacement	3 - Future Renewal	No	No	Yes	No					
	CVRD Head Office	175 Ingram St., Duncan, BC	D Services	D50 Electrical	D5030 Communications & Security	D503008 Security System	Throughout Building/ Security System	 A security system is present to detect break and enter incidents. The age of the equipment is assumed to be original to construction. 	d 4	5		31-May-1				6	Upgrade security system at end of service life.	Replacement	3 - Future Renewal	No	No	Yes	No	1 \$5,000) LS	\$5,000 0%	5 0% 0%	\$5,000
67	CVRD Head Office	175 Ingram St., Duncan, BC	G Building Sitework	G40 Site Electrica Utilities		D509002 Emergency Lighting and Power	Rear of Building/ Emergency Generator	61-62 Cummins Diesel Quiet Site 60 kW diesel generator located in exterior corral. System annunciator located at the front entrance of the building.	4	5	2003	31-May-1	7 MH	14	35		Replace or conduct major overhaul of the emergency generator at the end of service life. This item falls outside the ten year plan, costs associated with this item have not been carried into the cash flow tables.	Replacement	3 - Future Renewal	No	No	Yes	No					
68	CVRD Head Office	175 Ingram St., Duncan, BC	D Services	D50 Electrical		D509002 Emergency Lighting and Power	Electrical Room/ Emergency Generator Transfer Switch	63 Simson Maxwell transfer switch is located in main electrical room.	4	5		31-May-1					Replace the automatic transfer switch at the end of its lifespan. This item falls outside the ten year plan, costs associated with this item have not been carried into the cash flow tables.	Replacement	3 - Future Renewal	No	No	Yes	No					
69	CVRD Head Office	175 Ingram St., Duncan, BC	D Services	D50 Electrical		D509002 Emergency Lighting and Power	Throughout Interior of Building/ Emergency Lighting & Exit Signs	64-65 Emergency lighting and exit signage located in some rooms throughout the facility. Age of equipment has been approximated.	4	5	2003	31-May-1	7 MH	14	25		Replace emergency lights and exit signs at the end of service life. This item falls outside the ten year plan, costs associated with this item have not been carried into the cash flow tables.	Replacement	3 - Future Renewal	Yes	No	No	No					
	CVRD Head Office	175 Ingram St., Duncan, BC	D Services	D50 Electrical		D509099 Other Special Systems and Devices	Front Entrance/ Automatic Door Opener	66-67 An automatic door opener is present at the front entrance to the building.	4	5	2003	31-May-1	7 MH	14	20	6	Replace mechanism and electronics at end of service life.	Replacement	3 - Future Renewal	Yes	No	No	No	1 \$3,000	D EA	\$3,000 0%	5 15% 5%	\$4,000

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Row	BLDG Name	ID	.ocation / Type	Photo	Description & History	Recommendation	Type	Priority	Total in 2017 Dollars	2017 \$40,000	2018 \$268,000	2019 \$13,000	2020 \$17,000	2021 \$10,000	2022 \$557,000	2023 \$10,000	2024 \$238,000	2025 \$10,000	2026 \$10,000
	CVRD Head Office	A101001 Wall Foundation	5 Throughout Building/Below Grade	x	The foundations are cast-in-place concrete as visible at grade. We noted normal, isolated, narrow cracking. No evidence of major settlement or heaving was reported or observed.	The foundations are expected to last the life of the building. No major capital expenditures are expected to be required.		Not Applicable											
						This item falls outside the ten year plan, costs associated with this item have not been carried into the cash flow tables.													
	CVRD Head Office	A103001 Slab on Grade	Below Grade Slab on Grade	x	The floor is concrete slab-on-grade. We noted normal, isolated, narrow cracking. No evidence of major settlement or heaving was reported or observed.	The slab on grade is expected to last the life of the building. No major capital expenditures are expected to be required.		Not Applicable											
			T 1			This item falls outside the ten year plan, costs associated with this item have not been carried into the cash flow tables.	<u></u>		42.000			<u> </u>							<u> </u>
	CVRD Head Office	A103006 Foundation Drainage	Throughout Building/Below Grade		Perimeter drainage is present at the footing levels. This system was not exposed for review.	Periodic camera inspection and isolated repairs as required.	Study	Not Applicable	\$3,000			\$3,000							
	CVRD Head Office	A103006 Foundation Drainage	Throughout Building/Below Grade	x	Perimeter drainage is present at the footing levels. This system was not exposed for review.	The foundation drainage is expected to last the life of the building. No major capital expenditures are expected to be required.		Not Applicable											
						This item falls outside the ten year plan, costs associated with this item have not been carried into the cash flow tables. This should be updated with the results of the foundation drainage review recommended in A103006 Foundation Drainage (above).													
	CVRD Head Office	B10 Superstructure	Throughout Building/Superstructure	x	The superstructure consists of cast in place concrete, cinder blocks and steel framed infill walls supported by a cast-in-place concrete foundation.	Interior protected structural components are expected to last the life of the building. No major capital expenditures are expected to be required. This item falls outside the ten year plan, costs associated with this item have not been carried into the cash flow tables.		Not Applicable											
					No settlement, cracking, or other evidence of structural distress was observed or reported. There was no evidence or reports of long-term leakage that would lead us to expect concealed structural damage.	It is recommended that the building seismic upgrades be completed. This item is included under P100001 Seismic Screening.													
	CVRD Head Office	B102004 Canopies	Level 1 and Level 3/Exterior Canopies	2	Low sloped canopies (waterproofed with a 2 ply SBS membrane) are present at the main entrance and third floor. These canopies are supported by a wood and metal framed structure.	The wood and metal framing is expected to last the life of the building. Ongoing treatment of the wood structure will be required.	Repair Allowance	4a- Discretionary Renewal	\$8,000		\$8,000								
						The cost for SBS membrane replacement has been included with main roof (B301002 Roofing - Low Sloped Membrane System SBS).													
	CVRD Head Office	B201007 Balcony Railings	Balcony/Railings	3	A glazed balcony railing is present on the balcony on the north elevation.	Replace railings at end of service life. This item falls outside the ten year plan, costs associated with this item have not been carried into the cash flow tables.	Replacement	3 - Future Renewal											
	CVRD Head Office	B201001 Exterior Walls	Throughout Building/Masonry Cladding	4	Exterior cladding consists mainly of drained masonry wall assemblies. The brick veneer walls are supported on shelf angles at each floor level, with drainage provided via weep holes.	The masonry cladding is expected to last the life of the building. Budget for localized masonry and mortar joint repairs.	Repair Allowance	3 - Future Renewal	\$16,000						\$16,000				
	CVRD Head Office	B201001 Exterior Walls	Exterior Walls/Masonry Cladding	5	Exterior cladding consists mainly of drained masonry wall assemblies. The brick veneer walls are supported on shelf angles at each floor level, with drainage provided via weep holes.	The masonry cladding is expected to last the life of the building.	Repair Allowance	3 - Future Renewal	\$65,000						\$65,000				
					- FF	Complete exterior sealer installation on masonry.													
	CVRD Head Office	B201001 Exterior Walls	Exterior Walls/Cast-in- Place Concrete	6	Exposed cast-in-place concrete is present at the base of the walls.	The cast-in-place concrete is expected to last the life of the building. Complete exterior sealer installation on cast-in-place concrete	Repair Allowance	3 - Future Renewal	\$10,000						\$10,000				
	CVRD Head Office	B201001 Exterior Walls	Throughout Building/Composite Metal Panels	7	Composite metal panels have been used throughout the curtain wall system as well as at the parapets (level 3 roof and main roof).	Replace composite metal panels at the end of its service life. This item falls outside the ten year plan, costs associated with this item have not been carried into the cash flow tables.	Replacement	3 - Future Renewal							\$32,000				
	CVRD Head Office	B201008 Exterior Soffits	Throughout Building/Soffits	8	Perforated metal soffits are present on the underside of the roof overhangs and balconies.	Replace soffit material at the end of its service life. This item falls outside the ten year plan, costs associated with this item have not been carried into the cash flow tables.	Replacement	3 - Future Renewal											
	CVRD Head Office	B201008 Exterior Soffits	Throughout Building/Soffits	9	Wood soffits are present at the building entrance canopy.	Refinish wood soffit material as required. The wood soffit material is expected to last the life of the building.	Replacement	3 - Future Renewal	\$5,000						\$5,000				
	CVRD Head Office	B201011 Joint Sealant	Exterior Walls/Exterior Sealant	x	Exterior sealant joints are present throughout the building. No sealant replacement work was reported by facility staff.	Replace sealant between dissimilar materials, around windows and doors.	Replacement	3 - Future Renewal	\$32,000						\$32,000				
					No leaks were reported by facility staff.														ĺ

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ow	BLDG Name	ID	Location / Type	Photo	Description & History	Recommendation	Type	Priority	Total in 2017 Dollars	2017 \$40,000	2018 \$268,000	2019 \$13,000	2020 \$17,000	2021 \$10,000	2022 \$557,000	2023 \$10,000	2024 \$238,000	2025 \$10,000	2026 \$10,00
	VRD Head ffice	B202003 Curtain Walls	Exterior Walls/Aluminum Frame	10	The metal curtain wall and window wall systems are aluminum-framed, and includes assemblies combining fixed glazing, awning operable windows, opaque glazed spandrels and metal panels/flashing. One ongoing (sporadic) leak was reported on the east elevation. This leak was reported to be intermittent and not causing interior damage.	Replace aluminum framed windows with new thermally-broken, insulated glass units (IGUs) c/w Low E coatings and argon fill. This item falls outside the ten year plan, costs associated with this item have not been carried into the cash flow tables. Complete isolated repairs (including tightening of pressure plates and replacement of gaskets and sealants) on an ongoing basis. The cost of this work is below the project threshold and has not been included in the financial tables.	Replacement	3 - Future Renewal											
	VRD Head ffice	B202001 Windows	Windows/Insulated Glass Units (IGUs)	5 X	The glazing at windows and doors, double-glazed sealed insulating glass units with thermal spacers. We did not note any failed insulating glazing units. We understand localized replacements have been completed to date.	Replace insulated glass units (IGUs) with new as required. A budget has been included for replacement of glazing units at year 6 if required.	Repair Allowance	4a - Discretionary Renewal	\$4,000										
	VRD Head ffice	B203002 Glazed Doors	Exterior Walls/Glazed Swing Doors	11	Glazed swing doors (four single and one double) are used at the building entrances as well as the second floor balcony.	Replace aluminum framed windows with new thermally-broken, insulated glass units (IGUs) c/w Low E coatings and argon fill. This item falls outside the ten year plan, costs associated with this item have not been carried into the cash flow tables.	Replacement	3 - Future Renewal											
0	VRD Head ffice	B203001 Solid Doors	Exterior Walls/Solid Doors		Solid doors (four) with glazed panels have been used at building exits (fire exists) and service rooms.	Replace door assemblies at the end of their service life. This item falls outside the ten year plan, costs associated with this item have not been carried into the cash flow tables.	Replacement	3 - Future Renewal											
01	VRD Head ffice	Sloped Membrane System SBS	Main Roof/Roofing		The main roof is a conventional low sloped roof assembly with a 2-ply SBS membrane. Isolated areas of debonding membrane were noted at penetrations.	Complete isolated repairs to the roof membrane.	Repair Allowance	2 - Restore Functionality	\$4,000										
O	VRD Head ffice	Sloped Membrane System SBS			The main and level 3 roofs are conventional low sloped roof assembly with a 2-ply SBS membrane. Isolated areas of debonding membrane were noted at penetrations.	Replace roofing membrane at the end of its service life.	Replacement	3 - Future Renewal	\$211,000								\$211,000		
01	VRD Head ffice VRD Head	Sloped Membrane System SBS	Roof Decks and Balconies/Roofing Level 1 Canopies (solid		The balcony roof is low sloped roof assembly with a 2-ply SBS membrane with pavers over top.	Replace roofing membrane at the end of its service life. Replace roofing membrane at the end of its service life.	Replacement	3 - Future Renewal	\$11,000								\$11,000 \$6,000		
01	ffice VRD Head	Sloped Membrane System SBS C102001 Standard Interior	canopies)		waterproofed with a 2-ply SBS membrane.	Replace door assemblies at the end of their service life. This item falls outside the ten year plan, costs	Replacement	3 - Future Renewal	\$6,000								<i>\$6,000</i>		
	ffice	Doors	Building/Interior Doors			associated with this item have not been carried into the cash flow tables. Replaced isolated assemblies as required as part of the buildings ongoing maintenance.													
	VRD Head ffice	C102003 Fire Doors	Throughout Building/Fire Doors	×	Fire rated interior doors (15) are present at the egress routes and service rooms.	Replace door assemblies at the end of their service life. This item falls outside the ten year plan, costs associated with this item have not been carried into the cash flow tables. Replaced isolated assemblies as required as part of the buildings ongoing maintenance.	Replacement	3 - Future Renewal											l
	VRD Head ffice	C202001 Stair Finishes	Egress Stairs	18	Laminate flooring has been installed on the stairs.	Replace flooring at the end of their service life. This item falls outside the ten year plan, costs associated with this item have not been carried into the cash flow tables.	Replacement	3 - Future Renewal											
	VRD Head ffice	C101004 Interior Guardrails and Screens	Stair Guardrails	19	Glazed guardrails and handrails are present in the egress stairs	Replace guardrails at the end of their service life. This item falls outside the ten year plan, costs associated with this item have not been carried into the cash flow tables.	Replacement	3 - Future Renewal											
	VRD Head ffice	C101001 Fixed Partitions	Washrooms/Partitions	20	Fixed washroom partitions are present in the washrooms.	Replace fixed partitions at the end of their service life. This item falls outside the ten year plan, costs associated with this item have not been carried into the cash flow tables.	Replacement	3 - Future Renewal											
	VRD Head ffice	C101006 Glazed Partitions and Storefronts	Throughout Building/Glazed Partitions	x	Glazed partitions are used throughout the building.	Replace glazed partitions at the end of their service life. This item falls outside the ten year plan, costs associated with this item have not been carried into the cash flow tables.	Replacement	3 - Future Renewal											
	VRD Head ffice	C301005 Gypsum Board Wall Finishes	Throughout Building/Wa Finishes	21	The majority of the interior walls are painted gypsum wall board. No information was available regarding the last repainting cycle.	Repaint interior wall board as required.	Replacement	3 - Future Renewal	\$5,000	\$5,000	\$5,000	\$5,000	\$5,000	\$5,000	\$5,000	\$5,000	\$5,000	\$5,000	\$5,0

		СОМРО	DNENT		CONDITION ASSESSMENT	RECOMMENDATION				10-YEAR	CAPITAL PI	LAN							
Row	BLDG Name	ID	Location / Type	Photo	Description & History	Recommendation	Type	Priority	Total in 2017 Dollars	2017 \$40,000	2018 \$268,000	2019 \$13,000	2020 \$17,000	2021 \$10,000	2022 \$557,000	2023 \$10,000	2024 \$238,000	\$10,000	2026 \$10,000
	CVRD Head Office	C301099 Other Wall Finishes	Throughout Building/Wood Finishes	22	Wall paneling has been installed throughout the interior.	Replace wood paneling at the end of its service life. This item falls outside the ten year plan, costs associated with this item have not been carried into the cash flow tables.	Replacement	3 - Future Renewal											
	CVRD Head Office	C302001 Tile Floor Finishes	Anite room and Room 305. /Floor Finishes	x	Tile flooring has been throughout the Anite room and room 305.	Replace tile flooring at the end of its service life. This item falls outside the ten year plan, costs associated with this item have not been carried into the cash flow tables.	Replacement	3 - Future Renewal											
	CVRD Head Office	C302001 Tile Floor Finishes	Lobby/Floor Finishes	x	Tile flooring has been used in the main lobby.	Replace tile flooring at the end of its service life. This item falls outside the ten year plan, costs associated with this item have not been carried into the cash flow tables.	Replacement	3 - Future Renewal											
	CVRD Head Office	C302001 Tile Floor Finishes	Finishes	x	Tile flooring has been used in the washroom areas.	Replace tile flooring at the end of its service life. This item falls outside the ten year plan, costs associated with this item have not been carried into the cash flow tables.	Replacement	3 - Future Renewal											
	CVRD Head Office	C302005 Carpeting	Throughout Building/Floor Finish	23	Carpet tile has been used throughout the building as the primary flooring. The condition of the carpet varies throughout the building based on the traffic load.	Replace carpeting at the end of its service life. This item falls outside the ten year plan, costs associated with this item have not been carried into the cash flow tables.	Replacement	3 - Future Renewal							\$210,000				
	CVRD Head Office	C302010 Hardeners and Sealers	Throughout Building/Floor Finish	x	Service room floors typically consists of cast-in-place concrete with has been sealed.	Reseal concrete.	Replacement	3 - Future Renewal	\$11,000						\$11,000				
(CVRD Head Office	C302004 Resilient Floor Finishes	Throughout Building/Floor Finish	x	The following rooms have a marmoleum floor finish installed: 111, 112, 112A, 117, 118, 119, 120, 122, 123, 124, 204, 209, 210, 220, 221, 228, 304, 316, 317, 318, 322, 327, 331 & 332.	This item falls outside the ten year plan, costs associated with this item have not been carried into the cash flow tables.	Replacement	3 - Future Renewal	45,000	45.000	Ár. 000	Á5.000	Á5.000	Á5.000	Å5 000	Ár 200	45.000	45.000	45.000
(CVRD Head Office	C303004 Ceiling	Throughout Building/Gypsum Wall Board Ceiling Finish	x	Gypsum wall board has been used in the following rooms: level 1 lobby, 102, 113, 114, 115, 116, 117, 118, 119, 121, 121A, 121B, 122, level 2 lobby, 201A, 225, 226, 227, 228, level 3 lobby, 302, 303, 304, 305, 306 and the stairwells.	Repaint interior gypsum wall board as required.	Replacement	3 - Future Renewal	\$5,000	\$5,000	\$5,000	\$5,000	\$5,000	\$5,000	\$5,000	\$5,000	\$5,000	\$5,000	\$5,000
	CVRD Head Office	C303004 Ceiling	Throughout Building/Acoustic Tiles	24	Acoustical tiles have been used as the ceiling finish (where finishes are installed).	Replace acoustic 2x4 ceiling tiles (excluding suspension system)	Replacement	3 - Future Renewal											
	CVRD Head Office	D301002 Gas Supply System	Interior of Building/ Natural Gas Piping	25	A utility-owned meter regulates natural gas supply to the building. The fuel is distributed throughout the building via steel gas piping.	Replace piping at the end of service life. This item falls outside the ten year plan, costs associated with this item have not been carried into the cash flow tables.	Replacement	3 - Future Renewal											
	CVRD Head Office	D302002 Hot Water Boilers	Mechanical Room/ Primary Heat Boiler	26	One Weil-McLain natural gas-fired boiler (model PFG-6-SPN, 305 MBTU/Hr) located in the mechanical room. Boiler provides hydronic heat for heating loop.	Replace the heating boiler at the end of service life. Potential energy savings through upgrade to more efficient unit, as recommended in the Energy Evaluation report. This item falls outside the ten year plan, costs associated with this item have not been carried into the cash flow tables.	Replacement	3 - Future Renewal											
C	CVRD Head Office	D302005 Auxiliary Equipment	Mechanical Room/ Expansion Tank		An Amtrol Extrol expansion tank serves the space heating system.	Replace the boiler expansion tank at the end of its lifespan. This item falls outside the ten year plan, costs associated with this item have not been carried into the cash flow tables.	Replacement	3 - Future Renewal											
	CVRD Head Office	D303001 Chilled Water Systems	Roof/ Cooling Tower	28	An Evapco cooling tower maintains the temperature of the heating loop.	Replace or substantially rebuild the cooling tower at the end of its lifespan. This item falls outside the ten year plan, costs associated with this item have not been carried into the cash flow tables.	Replacement	3 - Future Renewal											
	CVRD Head Office	D304001 Air Distribution, Heating and Cooling	Throughout Building within Drop-Ceiling/ Heat Pumps	29	52 terminal heat pump provide heating and cooling throughout the building. Connected to an ambient piping loop. Facility Staff are concerned with the number of compressor failures in recent years.	Replace heat pumps at end of service life.	Replacement	3 - Future Renewal	\$157,000						\$157,000				
(CVRD Head Office	Heating and Cooling	Mechanical Room/ Heat Pump Loop Station		A Thermoplus Air Hybrid Unit (model KACB-036, 1,200 CFM)distributes hot water from the boiler to the heating loop.	Replace heat pump loop station at end of service life. This item falls outside the ten year plan, costs associated with this item have not been carried into the cash flow tables.	Replacement	3 - Future Renewal											
	CVRD Head Office	D304007 Exhaust Systems	Washrooms and Service Rooms/ Exhaust Fans <200 cfm	31	Fractional horsepower exhaust fans used to exhaust air from washrooms and service rooms.	Replace small exhaust fans as required, which, when replaced as-needed would be less than the threshold value of the report. No budget has been allocated to the capital plan.	Replacement	3 - Future Renewal											

		COM	ONENT		CONDITION ASSESSMENT	RECOMMENDATION				10-YEAR CAPITAL PLAN										
Row	BLDG Name	ID	ion / Type	Photo	Description & History	Recommendation	Type	riority	Total in 2017 Dollars	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	
	_		Locat					<u>.</u>		\$40,000	\$268,000	\$13,000	\$17,000	\$10,000	\$557,000	\$10,000	\$238,000	\$10,000	\$10,000	
	CVRD Head Office	D304007 Exhaust Systems	Roof/ Exhaust Fans >200 cfm	32	Roof-mounted Loren Cook exhaust units for building ventilation.	Replace or overhaul large capacity fans as required.	Replacement	3 - Future Renewal											1	
						This item falls outside the ten year plan, costs associated with this item have not been carried into the cash flow tables.														
	CVRD Head Office	D304008 Air Handling Uni	s Roof/ Make-up Air Units	33	Two Engineered Air makeup air units supply fresh air to the building.	Replace MUAs at end of service life. Upgrade to more efficient units, as recommended in the Energy Evaluation report.	Replacement	3 - Future Renewal											1	
						This item falls outside the ten year plan, costs associated with this item have not been carried into the cash flow tables.													1	
	CVRD Head Office	D305005 Electric Heating	Washrooms and Offices/ Radiant and Convective	34	Radiant heating panels and convective heaters in the washrooms and miscellaneous spaces around the office, respectively.	Replace radiant and convective heaters at end of service life.	Replacement	3 - Future Renewal											[
			Heaters			This item falls outside the ten year plan, costs associated with this item have not been carried into the cash flow tables.														
	CVRD Head Office	F105002 Building Automation Systems	Throughout Interior of Building/ BAS	35	Building HVAC systems is managed by a Walker building automation system (BAS). Recent report indicated that the system has failed.	Upgrade BAS system and undertake a re-commission the HVAC systems. Depending on the findings of the feasibility study, major changes in the HVAC equipment may be implemented.	Replacement	1 – Immediate	\$30,000	\$30,000										
					It is our understanding that the CVRD is requesting proposals to source a feasibility study to revise the HVAC system platform.	An order of magnitude budget has been included in the capital plan to account for replacement of the BAS and to commission the system, assuming that the core infrastructure of the BAS will be remain in place. Revise the budget as decisions are made on maintaining or augmenting the existing HVAC systems.														
	CVRD Head Office	D201000 Plumbing Fixture	s Washrooms/ Plumbing Fixtures	36-39	Two washrooms are present on each floor. The standard plumbing equipment includes stand-up showers (first floor), toilets, urinals in the male bathrooms and sinks in residential-type vanities.	General refurbishment of washrooms at the end of service life.	Replacement	3 - Future Renewal												
	Jince		Fixtures		snowers (inst noor), conets, unnais in the male oatmoonis and snits in residential-type vanities.	This item falls outside the ten year plan, costs associated with this item have not been carried into the cash flow tables.														
	CVRD Head Office	D202001 Pipes and Fitting	s Throughout Interior of Building/ Distribution	40-41	Primarily copper domestic water distribution piping throughout the building.	Maintain a contingency for capital repairs or partial replacement piping at the mid-point of the life of the piping (25 years).	Replacement	3 - Future Renewal												
			Piping		The heating loop incorporates a chemical pot feeder in the custodian room on the 3rd floor.	This item falls outside the ten year plan, costs associated with this item have not been carried into the cash flow tables. The chemical feed equipment is expected to arrive at less than the threshold value of the report.														
52 C	CVRD Head	D202003 Domestic Water	Water Entry and	12-13	Backflow prevention has been installed on the incoming water line and on the heating loop.	Install new backflow preventers at end of service life, assuming that annual inspections are undertaken at City-	Replacement	3 - Future Renewal											<u> </u>	
	Office	Equipment	Janitorial Closet/ Backflow Preventer		2	mandated intervals (typically annually, and in conjunction with the fire suppression system inspection). This item falls outside the ten year plan, costs associated with this item have not been carried into the cash flow tables.														
						nuv taures.														
	CVRD Head Office	D202003 Domestic Water Systems	Mechanical Room/ Domestic Hot Water Tank		A 100 gal, 199 MBTU/Hr A.O. Smith Master Fit domestic hot water heating tank (model ETRC200A 118) supplies tempered water to the building's plumbing fixtures. A recirculation pump is fitted on the hot water loop.	Replace domestic hot water heating tank at end of service life. The recirculation pump would be replaced as- needed (less than threshold value of the report) or in conjunction with the heating tank.	Replacement	3 - Future Renewal	\$7,000				\$7,000							
	CVRD Head	D203001 Waste Pipe and		46	Storm water from roof drains through internal drains. Storm and sanitary piping was primarily cast	Complete localized repairs to storm and waste piping as may be necessary as the building ages.	Replacement	3 - Future Renewal											<u> </u>	
	Office	Fittings	Plumbing Walls/ Storm and Sanitary Piping		iron where reviewed, with ABS piping at fixtures.	This item falls outside the ten year plan, costs associated with this item have not been carried into the cash flow tables.														
	CVRD Head Office	D401002 Sprinkler Water Supply and Piping	Throughout Building/ Sprinkler, Standpipe Piping and Valves	47	Steel sprinkler and standpipe piping throughout the building. Dry system for sprinklers on exterior soffits at ground floor. A Siamese connection for use by the fire department is present at the front entrance to the building.	Maintain a contingency for capital repairs or partial replacement of equipment or piping at the mid-point of the life of the sprinkler (25 years).	Replacement	3 - Future Renewal												
						This item falls outside the ten year plan, costs associated with this item have not been carried into the cash flow tables.													1	
	CVRD Head Office	G205007 Irrigation System	s Building Exterior/ Irrigation System	48	Exterior soft landscaping is serviced by an automatic irrigation system.	General contingency for replacement of sections of the irrigation system and automatic controller as required. This item falls outside the ten year plan, costs associated with this item have not been carried into the cash	Replacement	3 - Future Renewal												
						flow tables.													1	
	CVRD Head Office	D501003 Main Switchboards	Electrical Room/ Main switch	49	The electrical service enters the building via underground wiring from an exterior pad-mounted transformer. Power is distributed to various house panels through an 800A main switch.	Replace main switch as deemed necessary by Infra-red (IR) scan on major switchgear.	Replacement	3 - Future Renewal											[
						This item falls outside the ten year plan, costs associated with this item have not been carried into the cash flow tables.														
	CVRD Head Office	D501005 Panels	Throughout Interior of Building/ Miscellaneous	50	Various Cutler-Hammer, mostly 225 Amp breaker panels, are located throughout the building for lighting and plug loads.	Replace house panels at end of service life as deemed necessary by IR scan.	Replacement	3 - Future Renewal												
			Breaker Panels			This item falls outside the ten year plan, costs associated with this item have not been carried into the cash flow tables.													<u> </u>	
	CVRD Head Office	D502002 Lighting Equipment	Throughout Interior of Building/ Indoor Low-	51-52	Interior lighting is primarily T8 fluorescent fixtures in a combination of strip lights or compact tubes in recessed pot lights.	Upgrade interior light fixtures to LED units or lamps, as recommended in the Energy Evaluation report.	Replacement	3 - Future Renewal												
			Voltage Fixtures			This item falls outside the ten year plan, costs associated with this item have not been carried into the cash flow tables.													l	

		СОМРО	ONENT		CONDITION ASSESSMENT	RECOMMENDATION					10-YEAR CAPITAL PLAN									
Row	BLDG Name	ID	Location / Type	Photo	Description & History	Recommendation	Type	Priority	Total in 2017 Dollars	2017 \$40,000	2018 \$268,000	2019 \$13,000	2020 \$17,000	2021 \$10,000	2022 \$557,000	2023 \$10,000	2024 \$238,000	2025 \$10,000	2026 \$10,000	
60	CVRD Head Office	D502002 Outdoor Lighting	Canopy and Soffits/ Lighting	53	Various ceiling-mounted high-intensity discharge exterior lights.	Upgrade interior light fixtures to LED units or lamps, as recommended in the Energy Evaluation report. This item falls outside the ten year plan, costs associated with this item have not been carried into the cash flow tables.	Replacement	3 - Future Renewal												
61	CVRD Head Office	D502099 Other Lighting and Branch Wiring	Throughout Interior of Building/ Branch Wiring	54	Wiring throughout the facility is copper. Devices include all house voltage switches and outlets. An exterior receptacle on the roof top equipment was not GFI protected.	Add GFCI protection to all exterior outlets as needed. Consider occupancy sensors and Plugmaster retrofits, as recommended in the Energy Evaluation report. This item falls outside the ten year plan, costs associated with this item have not been carried into the cash flow tables.	Replacement	3 - Future Renewal												
62	CVRD Head Office	D503001 Fire Alarm Systems	Electrical Room & Front Entrance to Building/ Fire Alarm Panel	55-58	An Edwards EST Quick Start addressable device fire alarm system located in the electrical room and is connected to the heat detectors, pull stations and fire bells in the building. A remote annunciator is located at main entrance. System tested and maintained annually.	Replace main microprocessor unit and remote addressable modules at end of reliable service life. This item falls outside the ten year plan, costs associated with this item have not been carried into the cash flow tables.	Replacement	3 - Future Renewal												
63	CVRD Head Office	D503002 Telecommunications Systems	Throughout Interior of Building/ Phone, Internet, Cable TV	59	Telephone and internet main cabling and termination boxes located in telecommunications room and communications equipment room. Communications equipment is closely monitored by an in- house specialist.	Replace phone and internet cable infrastructure at end of useful service life. It has been confirmed by the CVRD that a phone system upgrade is planned for 2018, and budgetary figures have been provided herein by the CVRD.	Replacement	3 - Future Renewal	\$250,000		\$250,000									
64	CVRD Head Office	D503007 Television Systems	Throughout Building/ CCTV	x	CCTV camera system installed around the building. The video display and recording equipment was not reviewed and is assumed to be original (located in Communications Equipment Room). We understand that upgrades were made in 2017.	Upgrade video surveillance system. This item falls outside the ten year plan, costs associated with this item have not been carried into the cash flow tables.	Replacement	3 - Future Renewal												
65	CVRD Head Office	D503008 Security System	Throughout Building/ Card Access to Doors	60	Extensive Kantech security card access system throughout the building, upgraded in 2017.	Upgrade access control system throughout building. This item falls outside the ten year plan, costs associated with this item have not been carried into the cash flow tables.	Replacement	3 - Future Renewal												
66	CVRD Head Office	D503008 Security System	Throughout Building/ Security System	×	A security system is present to detect break and enter incidents. The age of the equipment is assumed to be original to construction.	Upgrade security system at end of service life.	Replacement	3 - Future Renewal	\$5,000						\$5,000					
67	CVRD Head Office	D509002 Emergency Lighting and Power	Rear of Building/ Emergency Generator	61-62	Cummins Diesel Quiet Site 60 kW diesel generator located in exterior corral. System annunciator located at the front entrance of the building.	Replace or conduct major overhaul of the emergency generator at the end of service life. This item falls outside the ten year plan, costs associated with this item have not been carried into the cash flow tables.	Replacement	3 - Future Renewal												
68	CVRD Head Office	D509002 Emergency Lighting and Power	Electrical Room/ Emergency Generator Transfer Switch	63	Simson Maxwell transfer switch is located in main electrical room.	Replace the automatic transfer switch at the end of its lifespan. This item falls outside the ten year plan, costs associated with this item have not been carried into the cash flow tables.	Replacement	3 - Future Renewal												
69	CVRD Head Office	D509002 Emergency Lighting and Power	Throughout Interior of Building/ Emergency Lighting & Exit Signs	64-65	Emergency lighting and exit signage located in some rooms throughout the facility. Age of equipment has been approximated.	Replace emergency lights and exit signs at the end of service life. This item falls outside the ten year plan, costs associated with this item have not been carried into the cash flow tables.	Replacement	3 - Future Renewal												
70	CVRD Head Office	D509099 Other Special Systems and Devices	Front Entrance/ Automatic Door Opener	66-67	An automatic door opener is present at the front entrance to the building.	Replace mechanism and electronics at end of service life.	Replacement	3 - Future Renewal	\$4,000						\$4,000					



Photo 01





Photo 03







Photo 06



Photo 07





Photo 09





Photo 11



Photo 12



Photo 13



Photo 14





Photo 16



Photo 17



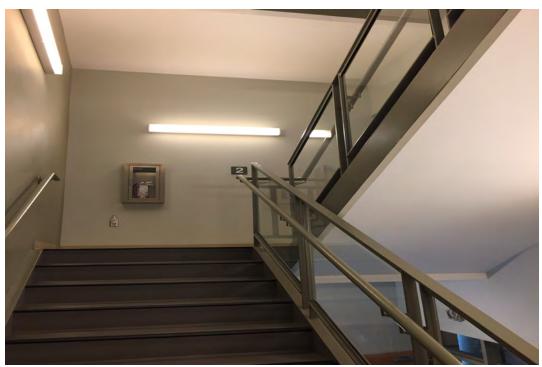


Photo 19



Photo 20



Photo 21









Photo 25



Photo 26



Photo 28



Photo 29



28

Photo 30





Photo 32





Photo 34

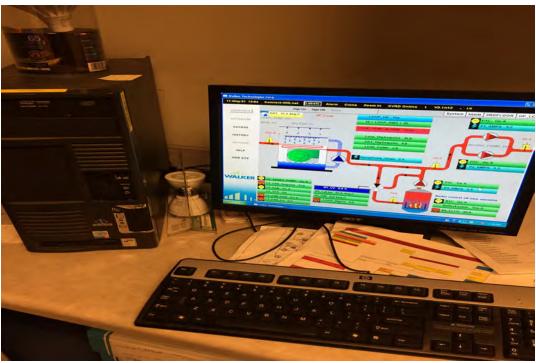


Photo 35





Photo 37





Photo 39





Photo 41



Photo 42





Cowichan Valley Regional District CVRD Head Office - Report Photos

Photo 44





Photo 46



Photo 47



Photo 48



Photo 49





Photo 51





Photo 53





Photo 55





Photo 57



Photo 58



Photo 60



Photo 61





Photo 63

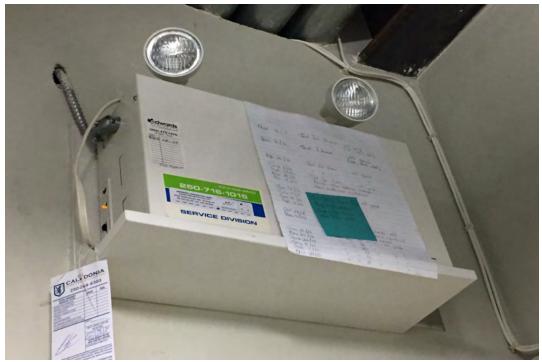




Photo 65



Photo 66



Appendix A

A – 02 Kerry Park Rec Centre

Facility Assessment

Kerry Park Recreation Centre



Cowichan Valley Regional District MH Project No. 5170700.00

November 2017



Cowichan Valley Regional District 175 Ingram Street Duncan, BC V9L 1N8



Cowichan Valley Regional District Facility Condition Assessment and Capital Plan Kerry Park Recreation Centre, 1035 Shawnigan-Mill Bay Rd, Mill Bay, BC

PROPERTY DESCRIPTION	PROPERTY STATISTICS	
KPRC is two storeys and includes an ice arena, a curling rink,	Gross Floor Area:	54,211 sf.
meeting rooms, multipurpose rooms and office space.		
Property includes buildings on the sports fields		
(concession/storage/washrooms). KPRC was built in 1975 with		
major renovations in 1990, 1995 and 2017.		

Refer to Photo 1 for a general overview of the exterior of the building.

Replacement Value:	\$15,287,502
Target FCI:	0.050
Current FCI:	0.019

REPORT OVERVIEW

Recommendations:

We found the safety concerns requiring immediate expenditures.

-D502099 Other Lighting and Branch Wiring - junction boxes with no covers. Note: this item falls below the project threshold and has not been carried forward in the cash flow tables.

The following provides an overview of the visual seismic, building code, accessibility and energy efficiency reviews completed.

Seismic Review Seismic work completed to date: Recommendations:	None Complete a seismic screening of the building to assess seismic vulnerability. The screening will be done according to the "Manual for Screening of Buildings for Seismic Investigation", published by the National Research Council of Canada (1992).
Building Code Review Built under what code:	National Building Code 1970
Accessibility Review	
Access into building:	Yes
Access throughout building:	No
Access to washrooms:	Yes

If accessibility is required conduct a full accessibility study. This should be completed as part of any future renovation work.

We identified recommendations of approximately \$603,400 over the next five years. The following is a summary of the major projects (over \$10,000) we believe will be required the next five years, and elements whose condition is unknown and/or where further investigation is recommended:

Row 6 - '-B201001 Exterior Enclosure - repaint exposed CMU walls (\$16,000) Row 13 -'-B201001 Exterior Enclosure - original metal cladding replacement (\$31,000) Row 16 -'-B202001 Windows - window replacement (\$20,000) Row 18 -'-B203001 Exterior Doors - single doors replacement (\$23,000) Row 19 -'-B203001 Exterior Doors - double doors replacement (\$57,000) Row 21 -'-B203004 Overhead Doors - single overhead garage door replacement (\$11,000) Row 28 -'-B301002 Slope Roof - original metal roof replacement (\$37,000) Row 35 -'-C102001 Standard Interior Doors - replacement (\$11,000) Row 39 -'-C103002 Toilet and Bath Accessories, Rehab - renovate public washrooms (\$53,000) Row 52 -'-C301003 Gypsum Wallboard Finishes - painting (\$11,000) Row 54 -'-C302005 Corridor Flooring - concrete painting (\$16,000) Row 57 -'-D304001 Air Distribution, Heating and Cooling - replace heat pump system (\$11,000) Row 60 -'-D302004 Fuel-fired Unit Heaters - ice rink area (\$16,000) Row 70 -'-D309002 Refrigeration Systems - condensers (\$90,000) Row 97 -'-D501001 Main Transformers - replacement (\$42,000) Row 99 -'-G403098 Other Communication and Alarm - CO2 censors (\$11,000) Row 102 -'-D502002 Lighting Equipment - Lighting Replacement (\$15,000) Row 107 -'-F104005 Ice Rinks - seating replacement (\$16,000) Row 109 -'-F104005 Ice Rinks - guard rail replacement (\$16,000)

PROJECT TEAM

The visual review was completed on June 22, 2017 by Scott Williams and Voytek Gretka. We began with an interview with Tony Liddle, South Cowichan Facility Operations Coordinator. During our review of the building, we were accompanied by Tony Liddle, who provided access to a sampling of representative areas of the facility, as requested.

Chris Raudoy of Morrison Hershfield reviewed the report for technical content and for compliance with the contract requirements.

REFERENCE DOCUMENTS/INFORMATION

We reviewed the following documents and selected drawings for general background and to inform ourselves about the layout and intended construction:

- Architectural Drawings, authored by Cooper, Tanner & Associates Ltd., dated January 1974.
- Architectural Drawings, authored by CannonJohnston Sports Architecture, dated February 2006.
- Electrical Drawings, authored by Wells Electrical Designs Ltd., dated July 24, 1981.
- HVAC Details and Specifications, authored by Hirshfield Williams Timmins Ltd., dated April, 2009.
- Boiler Replacement Drawings, authored by Hirshfield Williams Timmins Ltd., dated May, 2010.
- Energy Study Report, authored by BES, dated February 3, 2014.

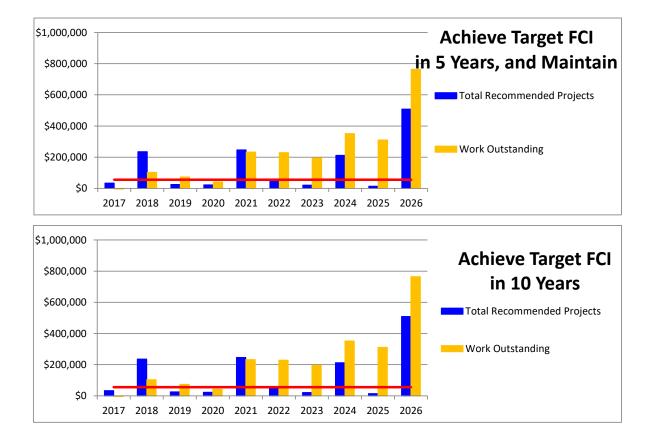
This report should be reviewed in conjunction with the Objectives, Terms of Reference, Limitations, and Methodology described in the main body of the report.

Cowichan Valley Regional District Facility Condition Assessment and Capital Plan Kerry Park Recreation Centre, 1035 Shawnigan-Mill Bay Rd, Mill Bay, BC

We recommend budgeting for the following 1 – Immediate, 2 - Restore Functionality, 2b - Exceeded Service Life and 3 - Future Renewal projects by year as follows:

Priority	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026
1 – Immediate	3,000	0	0	0	0	0	0	0	0	0
2 - Restore Functionality	4,000	134,000	4,000	1,000	1,000	1,000	3,000	1,000	1,000	3,000
2b - Exceeded Service Life	18,000	82,000	0	0	0	0	0	0	0	0
3 - Future Renewal	9,000	20,200	22,000	22,200	246,000	51,200	18,500	211,200	13,500	506,200
Total in 2017 dollars	34,000	236,200	26,000	23,200	247,000	52,200	21,500	212,200	14,500	509,200
Minimum Funding to Achiev	e and Mai	intain Targ	get FCI wit	hin 5 yea	s: \$55,602	2				
Work outstanding	-77,205	103,393	73,791	41,389	232,786	229,384	195,282	351,880	310,777	764,375
Minimum Funding to Achiev	e Target F		10 years: 9	55 602						

winning to Achiev	e laiget r	CI WILIIII	TO years.	955,00Z						
Work outstanding	-77,205	103,393	73,791	41,389	232,786	229,384	195,282	351,880	310,777	764,375



Surry: Cowichan Valley Regional District 2017 Facility Condition Assessment and Capital Plan Kerry Park Recreation Centre, 1035 Shawnigan-Mill Bay Rd, Mill Bay, BC

	ş	đ	ients	=	(COMPONENT	CONDITION ASSESSMENT		1				LIFECY	CLE DATA	RECOMMENDATION	1		Can this	If recommended		Can the current		OPI	NION OF PRO	BABLE COST	
BLDG Name	Location / Addre	Level 1 Major Gro Elements	Level 2 Group Elem	Level 3 Individu Elements	ID	Location / Type	g E Description & History	Condition	Performance	Yr New or Last Major Action	Assessment Date	Assessed By	Age in 2017 Typical Life Cycle or Action	Interval Est. Time Remaining to EOL	Recommendation	Type	Priority	work be phased	work not complete	Will a failure in this system lead to a loss of use of the facility ?	condition adversely affect	Quantity Unit Rate	Unit	Subtotal Repair or Replacement Cost	Consult. Contingency	Total in 2017 Dollars
1 Kerry Park Recreation Centre 2 Kerry Park	1035 Shawnigan-Mil Bay Rd, Mill Bay, BC 1035 Shawnigan-Mil		A10 Foundations	A1010 Standard Foundations A1030 Slab on	A101001 Wall Foundations A103001 Standard	Underground/ Foundations	The foundations are cast-in-place concrete. No evidence of major settlement or heaving was reported or observed. The floor is concrete slab-on-grade. No evidence of major settlement or heaving was	4	4	1975	22-Jun-17 22-Jun-17	MH	42 100		The foundations are expected to last the life of the building. No major capital expenditure are expected to be required. The slab on grade assemblies are expected to last the life of the building. No major capital		Not Applicable	N/A N/A	N/A N/A	No	No					
Recreation Centre	Bay Rd, Mill Bay, BC			Grade A1030 Slab on	Alosoof standard Slab on Grade	Grade Underground/ Perimeter	A International scalar declaration grade. No enderate on import secuence in the many was reported or observed. X Rain water leaders drain into below grade PVC pipes. The continuity of these pipes is not		4	1975	22-Jun-17		42 10		restation of grade assection that is the expected to fast the line of the building. For maps capital expenditures are expected to be required. Remove and replace damaged or failed perimeter weeping tile as required.	Replacement	3 - Future	Yes	No	No	No	1000 \$7	. 16	\$75,000	10% 15%	5% \$100,00
Recreation Centre	Bay Rd, Mill Bay, BC	Asustructure	Alterodications	Grade	Foundation Drainage	Drains	 A hain state reacts drain into being grace in 2 pipes. The community of mere pipes a not known. As per facility staff, we understand that replacement of the perimeter drainage will be conducted when the adjacent parking lot is repaired/replaced. 		4	1373	22:001-17		42 10	10	neniuwe anu replace danlaged on raned permitere weeping the as required.	Replacement	Renewal	165	NO	110	NO	1000 37	,	\$75,000	10/6 13/6	578 \$100,00
4 Kerry Park Recreation Centre	1035 Shawnigan-Mil Bay Rd, Mill Bay, BC	A Substructure	A10 Foundations	A1030 Slab on Grade	A103006 Foundation Drainage	Underground/ Perimeter Drains	 Rain water leaders drain into below grade PVC pipes. The continuity of these pipes is not known. 		4	1975	22-Jun-17	МН	42 10	20	Periodic camera inspection and isolated repairs as required. This item falls outside the ten year plan, costs associated with this item have not been carried into the cash flow tables.	Replacement	3 - Future Renewal	Yes	No	No	No					
5 Kerry Park Recreation Centre	1035 Shawnigan-Mil Bay Rd, Mill Bay, BC	I B Shell	810 Superstructure	810 Superstructure	B10 Superstructur	e Throughout Building/ General Superstructure	The superstructure consists of a combination of cast-in-place concrete, reinforced concrete masonry units, lapered steel column, tapered steel griders with steel beams and a steel roof deck. The roof deck over the Zamboni holding area consists of wood joists with plywoo decking. Minor cracking of the exposed CMU wall noted on the north elevation. No settlement, major cracking, or other evidence of structural distress was observed or reported.		5	1975	22-Jun-17	МН	42 10) 50	Interior protected structural components are expected to last the life of the building. No major capital expenditures are expected to be required. However, CMU on south elevation to be reviewed and repaired as required. Please see item below.		Not Applicable	N/A	N/A	No	No					
6 Kerry Park Recreation Centre	1035 Shawnigan-Mil Bay Rd, Mill Bay, BC	l B Shell	820 Exterior Enclosure	B2010 Exterior Walls	B201001 Exterior Enclosure	Exterior Walls/Exposed Concrete/CMU	2 Cast-in-place concrete structure is exposed at the Zamboni holding area and appears to hav been painted with a latex paint. Painted cast-in-place concrete also exist at the southeast corner of the building at the McLean addition. Exposed CMU is located on the south and north walls. Cracking of CMU evident on the north wall. The exposed CMU walls located or the south elevation have rearrowing hear enginetized and appear to be in good condition. Watk ingress was not indicated by facility staff for the north walls.	1	3	1975	22-Jun-17	MH	42 15	2	Repaint concrete with either latex or elastomeric paint, patch all bug-holes with non- shrink grout prior to painting. Review CMU and repair cracking. Install polyurethane sealant at all penetrations. Paint with acrylic/latex paint.	Repair Allowance	2 - Restore Functionality	Yes	Yes	No	No	1 \$15,0	100 LS	\$15,000	0% 0%	5% \$16,00
7 Kerry Park Recreation Centre	1035 Shawnigan-Mil Bay Rd, Mill Bay, BC		B10 Superstructure	Superstructure		e Exterior/Entrance Canopy	3 The front canopy was constructed in 2016 and consists of wood roof joists with a timber support structure. Structure appeared to be in good condition.	4	5	2016	22-Jun-17	МН	1 50		to replacement are expected to be required. Review exposed timbers as part of regular maintenance and re-stain as required. The timeline and costing provided is associated with this work.		3 - Future Renewal	Yes	Yes	No	No	1 \$3,0		\$3,000		
8 Kerry Park Recreation Centre	1035 Shawnigan-Mil Bay Rd, Mill Bay, BC	I B Shell	B10 Superstructure	B10 Superstructure	B10 Superstructur	e Concession Stand	The concession stand was built in 2008 and consists of re-enforced CMU walls with wood roof joists and exposed timber supports. No structural issues were noted or reported by facility staff.	4	5	2008	22-Jun-17	МН	9 10	9	Structure is expected to last the life of the building. No major capital expenditures related to replacement are expected to be required. Review exposed timbers as part of regular maintenance and re-stain as required. The timeline and costing provided is associated with this work.	Repair Allowance	3 - Future Renewal	Yes	Yes	No	No	1 \$3,0	DO LS	\$3,000	0% 0%	5% \$4,000
9 Kerry Park Recreation Centre	1035 Shawnigan-Mil Bay Rd, Mill Bay, BC	I B Shell	B20 Exterior Enclosure	B2010 Exterior Walls	B201001 Exterior Enclosure	Concession Stand	5 The walls are structural solid masonry using a combination of split face concrete block and smooth faced concrete block. The concession stand was built in 2008.	4	5	2008	22-Jun-17	МН	9 50	41	Structure is expected to last the life of the building. No major capital expenditures related to replacement are expected to be required. Complete isolated mortar repointing and masonry repairs as required (budget for year 20 This item fails outside the eny eary plan, costs associated with this item have not been carried into the cash flow tables.		3 - Future Renewal	Yes	No	No	No					
0 Kerry Park Recreation Centre	1035 Shawnigan-Mil Bay Rd, Mill Bay, BC	I B Shell	B20 Exterior Enclosure	B2010 Exterior Walls	B201001 Exterior Enclosure	Exterior Walls/Cementitious Panels - Replace	6 Cementitious panel cladding has been installed for portions of the south, east and west elevations, installed over the original metal panel cladding. The assembly outboard of the original panels consists of 2 prints, Roux insulation and cementitious panel cladding. The ow cladding was conducted in 2016.		5	2016	22-Jun-17	MH	1 35	35	Install new cementitious siding panels at end of service life. This item falls outside the ten year plan, costs associated with this item have not been carried into the cash flow tables.	Replacement	3 - Future Renewal	Yes	No	No	No					
1 Kerry Park Recreation Centre	1035 Shawnigan-Mil Bay Rd, Mill Bay, BC	I B Shell	B20 Exterior Enclosure	B2010 Exterior Walls	B201001 Exterior Enclosure	Exterior Walls/Cementitious Panels - Repaint	6 Cementitious panel cladding has been installed for portions of the south, east and west elevations, installed over the original metal panel cladding. Paint finish is in good condition	4	5	2016	22-Jun-17	МН	1 15	15	Repaint panel cladding in approximately 15 years. This item falls outside the ten year plan, costs associated with this item have not been carried into the cash flow tables.	Replacement	3 - Future Renewal	Yes	No	No	No					
2 Kerry Park Recreation Centre	1035 Shawnigan-Mil Bay Rd, Mill Bay, BC	l B Shell	B20 Exterior Enclosure	B2010 Exterior Walls	B201001 Exterior Enclosure	Exterior Walls/Corrugated Metal Panels	7 As part of the over cladding undertaken in 2016, new corrugated metal panels were installed on the east and west elevations for the lower portions of the wall.	4	5	2016	22-Jun-17	MH	1 50	49	Install new metal cladding at end of service life. This item falls outside the ten year plan, costs associated with this item have not been carried into the cash flow tables.	Replacement	3 - Future Renewal	Yes	No	No	No					
3 Kerry Park Recreation Centre	1035 Shawnigan-Mil Bay Rd, Mill Bay, BC	I B Shell	B20 Exterior Enclosure	B2010 Exterior Walls	B201001 Exterior Enclosure	Exterior Walls/Metal Panels	8 Original metal panels still remain for a small portion of the upper south wall and north wall The panels on the south elevation have been recently been repainted and appear to be in good condition. The panels on the north elevation are enhibiting advanced levels of deterioration. As per facility staff, water ingress has not been observed at these walls.	3	3	1975	22-Jun-17	МН	42 50	2	We understand that these locations of original metal cladding were not over-clad due to the number of penetrations for ice making equipment, ventilation etc. We recommend that all corroded portions of the cladding be repaired and the cladding re-coated.	Repair Allowance	2b - Exceeded Service Life	Yes	Yes	No	No	1 \$25,0	00 LS	\$25,000	0% 15%	5% \$31,00
4 Kerry Park Recreation Centre	1035 Shawnigan-Mil Bay Rd, Mill Bay, BC	I B Shell	B20 Exterior Enclosure	B2010 Exterior Walls	B201008 Exterior Soffits	Roof Eaves/ Metal Soffit	Painted wood soffits are located on the south elevation and were recently repainted.	4	5	2016	22-Jun-17	MH	1 15	15	Repaint soffits as required. This item falls outside the ten year plan, costs associated with this item have not been carried into the cash flow tables.	Contingency	3 - Future Renewal	Yes	No	No	No	1 \$2,0	00 LS	\$2,000	0% 0%	5% \$3,000
5 Kerry Park Recreation Centre	1035 Shawnigan-Mil Bay Rd, Mill Bay, BC	l B Shell	B20 Exterior Enclosure	B2010 Exterior Walls	B201011 Joint Sealant	Exterior Walls/Sealant Joints	10 There are sealant joints around windows and doors and at wall penetrations. Sealant at wall penetrations on the north elevation were typically missing or deteriorated.	3	3	2005	22-Jun-17	МН	12 10	2	Replace failed/missing sealant between dissimilar materials on the north elevation.	Repair Allowance	2b - Exceeded Service Life	Yes	Yes	No	No	1 \$8,0	00 LS	\$8,000	0% 0%	5% \$9,000
6 Kerry Park Recreation Centre	1035 Shawnigan-Mil Bay Rd, Mill Bay, BC	l B Shell	B20 Exterior Enclosure	B2020 Exterior Windows	B202001 Window	s Exterior Walls/Aluminum Framed Windows	11 Aluminum framed windows are located on the south elevation with awning or silder operable windows. We assume that these windows were installed as part of the expansion in 1980. These windows have moderate over-hang protection. Facility staff did not report any issues with these windows.	4	4	1980	22-Jun-17	MH	37 35	5	Replace aluminum framed windows with new.	Replacement	4a - Discretionary Renewal	Yes	No	No	No	6 \$2,5	00 EA	\$15,000	10% 15%	5% \$20,00
7 Kerry Park Recreation Centre	1035 Shawnigan-Mil Bay Rd, Mill Bay, BC	I B Shell	820 Exterior Enclosure	B2020 Exterior Windows	B202002 Storefrom Assembly	nt Exterior Walls/Aluminum Framed Windows	12 Aluminum framed storefront windows with single pane glazing are located on the south elevation. All storefront assemblies are located under overhang protection. The storefron doos are wheelchiniz accossible. We under stand that the storefront doors were last replace in the mid 80's. All other storefront glazing is original to the building. Facility staff did not report any issues with these windows.		4	1975	22-Jun-17	MH	42 35	8	Replace storefront system including doors with more thermally efficient units with reduced air leakage.	Replacement	4a - Discretionary Renewal	Yes	No	No	No	650 \$11	0 SF	\$71,500	10% 15%	5% \$95,00
8 Kerry Park Recreation Centre	1035 Shawnigan-Mil Bay Rd, Mill Bay, BC	I B Shell	B20 Exterior Enclosure	B2030 Exterior Doors	B203001 Exterior Doors	Exterior Walls/Single Exterior Doors	13 Metal doors are located on the exterior of the building at a number of locations. Most do not have overhang protection and are showing signs of age related deterioration. Water ingress was indicated by facility staff for a number of these metal doors.	2	3	1975	22-Jun-17	MH	42 25	2	Replace doors with new assemblies (including hardware).	Replacement	2 - Restore Functionality	Yes	Yes	No	No	6 \$3,5	00 EA	\$21,000	0% 0%	5% \$23,00

Starty: 2017 Facility Condition Assessment and Capital Plan Kerry Park Recreation Centre, 1035 Shawnigan-Mill Bay Rd, Mill Bay, BC

	ssa	dno	lents	<u>a</u>	C	OMPONENT	CONDITION ASSESSMENT						LIFE	CYCLE DATA	RECOMMENDATION		1	Can this If recommended	Will a failur	Can the curr			OPINI	ION OF PR	ROBABLE CO	ST	
BLDG Name	Location / Addre	Level 1 Major Grc Elements	Level 2 Group Elerr	Level 3 Individu Elements	ID	Location / Type	g E E Description & History	Condition	Performance	Yr New or Last Major Action	Assessment Date	Assessed By	Age in 2017 Typical	Life Cycle or Action Interval Est. Time Remaining to EOL or Major Action	Recommendation	Type	Priority	work be work not complete phased can the rate of over deterioration be multiple expected to increas years ? ?	e in this system lead to a los	condition adversely aff ss the buildin	ect ∧ s III	Unit Rate	Unit	Subtotal Repair or Replacement Cost	Consult. Contingency	5% Tax	Total in 2017 Dollars
Kerry Park Recreation Centre	1035 Shawnigan-Mii Bay Rd, Mill Bay, BC		B20 Exterior Enclosure	B2030 Exterior Doors	B203001 Exterior Doors	Exterior Walls/Double Exterior Doors	14 Metal doors are located on the exterior of the building at a number of locations. Most do not have overhang protection and are showing signs of age related deterioration. Water ingress was indicated by facility staff for a number of these metal doors.	2	3	1975	22-Jun-17	МН	42	25 2	Replace doors with new assemblies (including hardware).	Replacement	2 - Restore Functionality	Yes Yes	No	No	9	\$6,000	EA	\$54,000	0% 0%	5%	\$57,000
Kerry Park Recreation Centre	1035 Shawnigan-Mii Bay Rd, Mill Bay, BC		B20 Exterior Enclosure	B2030 Exterior Doors	B203004 Overhead Garage Doors	Exterior Walls - Workshop/Overhead Garage Doors	15 Overhead garage doors provides access to the workshop at the northeast corner. All are showing signs of age related deterioration.	3	4	1975	22-Jun-17	МН	42	25 5	Replace overhead garage doors.	Replacement	3 - Future Renewal	Yes Yes	No	No	2	\$3,000	EA	\$6,000	0% 0%	5%	\$7,000
Kerry Park Recreation Centre	1035 Shawnigan-Mil Bay Rd, Mill Bay, BC		B20 Exterior Enclosure	B2030 Exterior Doors	B203004 Overhead Doors	Exterior Walls - Hockey Arena/Overhead Garage Doors	16 2 manually overhead doors provide access to the hockey arena.	3	4	1975	22-Jun-17	мн	42	25 5	Replace single overhead garage doors.	Replacement	3 - Future Renewal	Yes Yes	No	No	2	\$5,000	EA	\$10,000	0% 0%	\$ 5%	\$11,0
Kerry Park Recreation Centre	1035 Shawnigan-Mi Bay Rd, Mill Bay, BC		B20 Exterior Enclosure	B2030 Exterior Doors	B203004 Overhead Doors	Exterior Walls - Curling Rink/Overhead Garage Doors	17 1 manually overhead doors is located on the east elevation of the curling rink and was last replaced in 2016.	4	5	2016	22-Jun-17	МН	1	25 24	Replace single overhead garage doors. This item fails outside the ten year plan, costs associated with this item have not been carried into the cash flow tables.	Replacement	3 - Future Renewal	No No	No	No							
Kerry Park Recreation Centre	1035 Shawnigan-Mil Bay Rd, Mill Bay, BC		B20 Exterior Enclosure	B2030 Exterior Doors	B203004 Overhead Garage Doors	Exterior Walls - Concession Stand/Overhead Garage Doors	18 One overhead garage door is located at the concession stand located adjacent to the baseball diamonds.	4	5	2008	22-Jun-17	MH	9	25 16	Replace overhead garage doors at end of service life. This item falls outside the ten year plan, costs associated with this item have not been carried into the cash flow tables.	Replacement	3 - Future Renewal	No No	No	No							
Kerry Park Recreation Centre	1035 Shawnigan-Mil Bay Rd, Mill Bay, BC	ll B Shell	B20 Exterior Enclosure	B2030 Exterior Doors	B203098 Other Exterior Specialty Doors	Exterior Walls - Concession Stand/Overhead Rolling Shutter	19 Z overhead rolling shutters are located at the concession stand located adjacent to the baseball diamonds.	4	5	2008	22-Jun-17	MH	9	22 13	Replace at end of service life. This item fails outside the ten year plan, costs associated with this item have not been carried into the cash flow tables.	Replacement	3 - Future Renewal	No No	No	No							
Kerry Park Recreation Centre	1035 Shawnigan-Mil Bay Rd, Mill Bay, BC	ll B Shell	B30 Roofing	B3010 Roof Coverings	B301002 Roofing - Low Sloped Membrane System SBS	Roofing/ Low Sloped Roofs	A conventional SBS roof system has been installed for the lower-flat roofs located on the south elevation. As per facility staff, the roof system was replaced in 2016. The roof drains by via internal drains and scupper drains. No leaks were observed or reported by facility staff.	4	5	2016	22-Jun-17	МН	1	25 24	Replace roofing system including flashings, sealants, etc. as required. This item fails outside the ten year plan, costs associated with this item have not been carried into the cash flow tables.	Replacement	3 - Future Renewal	Yes No	No	No							
Kerry Park Recreation Centre	1035 Shawnigan-Mil Bay Rd, Mill Bay, BC		B30 Roofing	B3010 Roof Coverings	B301002 Roofing - Low Sloped Membrane System SBS	Roofing/ Low Sloped Roofs	21 An SBS roof system installed directly over the plywood substrate is located at the northwest corner over the ice machine room. Some limited cracking of the granulated cap sheet was noted. We assume that this roof membrane was replaced approximately 10 years ago. No leaks were observed or reported by facility staff.	3	5	2006	22-Jun-17	MH	11	25 14	Replace roofing system including flashings, sealants, etc. as required. This item falls outside the ten year plan, costs associated with this item have not been carried into the cash flow tables.	Replacement	3 - Future Renewal	No No	No	No							
Kerry Park Recreation Centre	1035 Shawnigan-Mi Bay Rd, Mill Bay, BC	II B Shell	B30 Roofing	B3010 Roof Coverings	B301002 Slope Roo	f Roofing/Sloped Metal Roof	22 The roof over the hockey and curling rinks consists of sloped prefinished metal panels with concealed fasteners. As per facility staff, we understand that the metal panels were replaced in 2006 and continuous justion was installed over the metal Q-deck. Water ingress was indicated at one location at the southeast corner of the roof. The fishing terminations were reviewed for a mechanical penetration located up the slope from the location of the water ingress and discontinuities of the sealant were noted.	4	5	2006	22-Jun-17	МН	11	30 19	Replace standing metal seam roof sections at end of service life. This item falls outside the ten year plan, costs associated with this item have not been carried into the cash flow tables. Review mechanical penetration adjacent to area of water ingress and repair any discontinuities in the sealant. Monitor and conduct further investigation as required.	Replacement	3 - Future Renewal	No No	No	No				 			
Kerry Park Recreation Centre	1035 Shawnigan-Mii Bay Rd, Mill Bay, BC		B30 Roofing	B3010 Roof Coverings	B301002 Slope Roo	f Roofing/Sloped Metal Roof	The roof over the workshop, located at the northwest corner of the arena consists of pre- finished metal panels with exposed fasteners. As per facility staff, there have been ongoing issues with water ingress. As a means of repair, injuid applied membrane was installed over fastener penetrations in 2016. We understand that water ingress still continues to be an issue.	2	3	1980	22-Jun-17	МН	37	30 2	Replace metal panel roof system along with the damaged and/or deteriorated insulation.	Replacement	2 - Restore Functionality	No Yes	No	No	1100	\$25	SF	\$27,500	10% 15	% 5%	\$37,0
Kerry Park Recreation Centre	1035 Shawnigan-Mii Bay Rd, Mill Bay, BC	II B Shell	B30 Roofing	B3010 Roof Coverings	8301002 Slope Roo	f Roofing/Sloped Metal Roof	24 Metal panel roofing has been installed over the storage sheds at the north end of the arena. These roofs appear to be in fair condition. We assume they were last replaced in 2000.	3	4	2000	22-Jun-17	MH	17	30 13	Replace metal roof sections at end of service life. This item fails outside the ten year plan, costs associated with this item have not been carried into the cash flow tables. Review mechanical penetration adjacent to area of water ingress and repair any discontinuities in the selant. Monitor and conduct thriter investigation as required.	Replacement	3 - Future Renewal	No No	No	No							
Kerry Park Recreation Centre	1035 Shawnigan-Mil Bay Rd, Mill Bay, BC		B30 Roofing	B3010 Roof Coverings	B301002 Slope Roo	f Roofing/Sloped Metal Roof	25 Metal panel roofing has been installed for the concession stand and canopy adjacent to the baseball diamonds. Both structures were built in 2008. The roofs appears to be in good condition. Some minor corrosion of the structural clips were noted for the canopy.	4	5	2008	22-Jun-17	МН	9	30 21	Replace metal roof sections at end of service life. This item falls outside the ten year plan, costs associated with this item have not been carried into the cash flow tables. Review mechanical penetration adjacent to area of water ingress and repair any discontinuities in the sealant. Monitor and conduct further investigation as required.	Replacement	3 - Future Renewal	No No	No	No							
Kerry Park Recreation Centre	1035 Shawnigan-Mil Bay Rd, Mill Bay, BC		B30 Roofing	B3010 Roof Coverings	B301002 Slope Roo	f Roofing/Sloped Metal Roof	26 Galvalume metal panel roofing has been installed for the roofs over the dug-outs and bull- pens located at the baseball diamonds. Some discolouration of the panels was noted with minor corrosion noted for the mounting brackets at the roof edge. These were last replaced in 2006.	4	5	2006	22-Jun-17	МН	11	30 19	Replace metal roof sections at end of service life. This item falls outside the ten year plan, costs associated with this item have not been carried into the cash flow tables. Review mechanical penetration adjacent to area of water ingress and repair any discontinuities in the sealant. Monitor and conduct further investigation as required.	Replacement	3 - Future Renewal	No No	No	No							
Kerry Park Recreation Centre	1035 Shawnigan-Mi Bay Rd, Mill Bay, BC		B30 Roofing	B3010 Roof Coverings	8301002 Slope Roo	f Roofing/Sloped Metal Roof	27 A corrugated canopy roof has been installed over the main front entrance. We understand that the roof and canopy structure were installed in 2016.	4	5	2016	22-Jun-17	МН	1	30 29	Replace metal roof sections at end of service life. This item falls outside the ten year plan, costs associated with this item have not been carried into the cash flow tables. Review mechanical penetration adjacent to area of water ingress and repair any discontinuities in the sealant. Monitor and conduct further investigation as required.	Replacement	3 - Future Renewal	No No	No	No							
Kerry Park Recreation Centre	1035 Shawnigan-Mii Bay Rd, Mill Bay, BC		B30 Roofing	B3010 Roof Coverings	B301005 Gutters and Downspouts	Roofing/Sloped Metal Roof	28 Gutters and downspouts are located on the east and west elevations of the main roof over the hockey and curling rinks. Gutters were replaced when roof panels were replaced. Gutters are also located at the concession stand. One disconnected down-spout was noted at the concession stand.	4	5	2006	22-Jun-17	MH	11	30 19	Replace gutters and downspouts at the end of service life. This item falls outside the ten year plan, costs associated with this item have not been carried into the cash flow tables.	Replacement	3 - Future Renewal	No No	No	No							
Kerry Park Recreation Centre	1035 Shawnigan-Mil Bay Rd, Mill Bay, BC		C10 Interior Construction	C1010 Partitions	C101007 Interior Glazing	Throughout Building/Interior Glazing	29 Interior glazing has been installed between the lobby and the hockey arena, within the media booth overlooking the ice surface, within the managers office and at a number of locations over looking the curling rink. The glazing is a combination of IGU, single pane and wired safety glass in either wood or aluminum frames. The age of the assemblies vary.	3	4	1975	22-Jun-17	MH	42	10 5	The interior windows will last the life of the building; however a contingency has been provided for selective replacement. Replace as required as a result of breakage. Recommend that glazing be replaced with laminated tempered glass units.	Repair Allowance	Not Applicable	Yes No	No	No	1	\$10,000	EA	\$10,000	0% 0%	5%	\$11,0
Kerry Park Recreation	1035 Shawnigan-Mil Bay Rd, Mill Bay, BC		C10 Interior Construction	C1020 Interior Doors	C102001 Standard Interior Doors	Throughout Building/Interior Doors	30 Interior doors consist of a combination of metal doors, metal clad wood doors and wood doors. The metal doors providing access to the change rooms, hockey rink etc have been	3	4	1975	22-Jun-17	мн	42	5 5	Doors are expected to last the life of the building. However, a budget is provided for some door replacement in the next 5 years. Paint touch-ups and minor repairs are assumed to	Contingency	3 - Future Renewal	Yes No	No	No	1	\$10,000	LS	\$10,000	0% 0%	6 5%	\$11,0

Surry: Cowichan Valley Regional District 2017 Facility Condition Assessment and Capital Plan Kerry Park Recreation Centre, 1035 Shawnigan-Mill Bay Rd, Mill Bay, BC

	ess	dno	nents	nal	c	OMPONENT		CONDITION ASSESSMENT					L		RECOMMENDATION			Can this	If recommended	Will a failure	Can the current		(OPINION OF PI	ROBABLE (COST	
BLDG Name	Location / Addr	Level 1 Major Gr	Level 2 Group Elen	Level 3 Individu Elements	ID	Location / Type	Photo	Description & History	Condition	Yr New or Last Major Action	Assessment Date	Assess ed By	Age in 2017	Typical Life Cycle or Action Interval Est. Time Remaining to EOL	Recommendation	Type	Priority	over	work not complete can the rate of deterioration be expected to increase ?	lead to a loss	the buildings	Quantity	UnitRate	Unit Subtotal Repair or Replacement Cost	Consult.	Contingency xet xez	Total in 2017 Dollars
Kerry Park Recreation Centre	1035 Shawnigan-Mill Bay Rd, Mill Bay, BC	I C Interiors	C10 Interior Construction	C1020 Interior Doors	C102001 Standard Interior Doors	Throughout Building/Interior Storefront Doors	31	Interior storefront doors are located within the main lobby providing access to the hockey arena and are wheel chair accessible. They are also located at the office space at the main front entrance. All appeared to be in good condition.	4 5	1975	22-Jun-17	мн	42	25 12	We assume that the storefront doors will last for approximately another 12 years. Reg maintenance will extend service life. This item falls outside the ten year plan, costs associated with this item have not been carried into the cash flow tables.		3 - Future Renewal	Yes	No	No	No						
Kerry Park Recreation Centre	1035 Shawnigan-Mill Bay Rd, Mill Bay, BC	I C Interiors	C10 Interior Construction	C1020 Interior Doors	C102006 Interior Overhead Gate	Concession Stand/Interior Overhead Gate	32	4 interior overhead doors are located at the concession stand at the south end of the hockey arena. 2 are located in the lounge adjacent to the curling rink.	3 5	1975	22-Jun-17	МН	42	12 15	Replacement of overhead gate. This item falls outside the ten year plan, costs associated with this item have not been carried into the cash flow tables.	Replacement	3 - Future Renewal	Yes	No	No	No						
Kerry Park Recreation Centre	1035 Shawnigan-Mill Bay Rd, Mill Bay, BC	II C Interiors	C10 Interior Construction	C1020 Interior Doors	C102006 Interior Overhead Gate	Zamboni Access/Interior Overhead Gate		1 interior overhead doors is located at the north end of the hockey arena providing egress for the Zamboni ice machine.	3 5	1975	22-Jun-17	MH	42	12 10) Replacement of overhead gate.	Replacement	3 - Future Renewal	Yes	No	No	No	1	\$5,000	EA \$5,000	0%	0% 5%	\$6,000
Kerry Park Recreation Centre	1035 Shawnigan-Mill Bay Rd, Mill Bay, BC	I C Interiors	C10 Interior Construction	C1030 Fittings	C103002 Toilet and Bath Accessories, Rehab	d Througout Building/Public Washrooms	33	Women's and Men's public washrooms are located within the hockey arena and adjacent to the McLean addition. Both appear to be in good condition. The washrooms located adjacent to the hockey arena were refurbished in 2014, while the washrooms adjacent to the McLean addition were refurbished in the 90's.	4 5	2014	22-Jun-17	МН	3	15 5	Renovate common washrooms as required. A contingency has been provided for perio repairs.	dic Contingency	3 - Future Renewal	Yes	No	No	No	1	\$50,000	LS \$50,000	0%	0% 5%	\$53,000
Kerry Park Recreation Centre	1035 Shawnigan-Mill Bay Rd, Mill Bay, BC	I C Interiors	C10 Interior Construction	C1030 Fittings	C103002 Toilet and Bath Accessories, Rehab	d Througout Building/Locker Room Washrooms	34	6 team dressing rooms are located on the first and second floors. As per facility staff, all washrooms and shower facilities were replaced in 2015/2016.	4 5	2015	22-Jun-17	MH	2	10 8	A contingency has been provided for periodic repairs.	Contingency	3 - Future Renewal	Yes	No	No	No	1	\$20,000	LS \$20,000	0%	0% 5%	\$21,000
Kerry Park Recreation Centre	1035 Shawnigan-Mill Bay Rd, Mill Bay, BC		C10 Interior Construction	C1030 Fittings	C103099 Other Interior Specialties	Locker Rooms - Home Team - Level 2		The home team dressing room located on level 2 contains painted gypsum wall board, individual stalls with shelving and sports flooring. Ceilings consist of painted plywood. This change room was last refurbished in 2015.	4 5	2015	22-Jun-17	мн	2	10 10	General refurbishment of home team change room.	Contingency	3 - Future Renewal	Yes	No	No	No	1	\$30,000	LS \$30,000	0%	0% 5%	\$32,000
Kerry Park Recreation Centre	1035 Shawnigan-Mill Bay Rd, Mill Bay, BC	I C Interiors	C10 Interior Construction	C1030 Fittings	C103099 Other Interior Specialties	Locker rooms - Levels 1 and 2	36	S change rooms and referees room typically consist of painted CMU walls, sports flooring, slat benches and hooks. The change rooms appears were last refurbished in 2015.	4 5	2015	22-Jun-17	МН	2	10 8	General refurbishment of change rooms.	Contingency	3 - Future Renewal	Yes	No	No	No	1	\$30,000	LS \$30,000	0%	0% 5%	\$32,000
Kerry Park Recreation Centre	1035 Shawnigan-Mill Bay Rd, Mill Bay, BC	I C Interiors	C10 Interior Construction	C1030 Fittings	C103099 Other Interior Specialties	Concession Stand/Change Rooms/Bathrooms	x	2 change rooms/bathrooms are located within the concession stand adjacent to the baseball diamonds. All components appear to be in good condition.	4 5	2008	22-Jun-17	MH	9	10 6	General refurbishment of change rooms/bath rooms.	Contingency	3 - Future Renewal	Yes	No	No	No	1	\$40,000	LS \$40,000	0%	0% 5%	\$42,000
Kerry Park Recreation Centre	1035 Shawnigan-Mill Bay Rd, Mill Bay, BC	I C Interiors	C10 Interior Construction	C1030 Fittings	C103099 Other Interior Specialties	Yoga Studio/Mclean Addition	37	The yega studio is located at the southeast corner of the building and consists of laminate flooring, painted succo walls and coiling ties. All components appear to be in good condition. We understand the studio was refurbished in the 2015 with the exception of the laminate flooring which was replaced in 2005.	4 5	2015	22-Jun-17	МН	2	12 8	A contingency has been provided for refurbishment of the Yoga studio.	Contingency	3 - Future Renewal	Yes	No	No	No	1	\$10,000	LS \$10,000	0%	0% 5%	\$11,000
Kerry Park Recreation Centre	1035 Shawnigan-Mill Bay Rd, Mill Bay, BC	I C Interiors	C10 Interior Construction	C1030 Fittings	C103099 Other Interior Specialties	Lounge (overlooking curling rink)	38	A lounge is located at the south end of the building overlooking the curling rink. Floors consist of carpet and laminate flooring. Both are in good condition and were installed approximately lovers ago. Walls are painted gypsum. Ceiling tiles have been installed throughout and were replaced in 2015.	4 5	2015	22-Jun-17	мн	2	10 8	A contingency has been provided for refurbishment of the lounge.	Contingency	3 - Future Renewal	Yes	No	No	No	1	\$15,000	LS \$15,000	0%	0% 5%	\$16,000
Kerry Park Recreation Centre	1035 Shawnigan-Mill Bay Rd, Mill Bay, BC		C10 Interior Construction	C1030 Fittings	C103099 Other Interior Specialties	Lounge Kitchen (overlooking curling rink)		A kitchen is located adjacent to the lounge and has ceramic tile floors, cabinets and counter tops. Cabinets are showing signs of wear; however all components appear to be in good condition.	4 4	1975	22-Jun-17	МН	42	10 10	A contingency has been provided for refurbishment of the kitchen finishes.	Contingency	3 - Future Renewal	Yes	No	No	No	1	\$30,000	LS \$30,000	0%	0% 5%	\$32,000
Kerry Park Recreation Centre	1035 Shawnigan-Mill Bay Rd, Mill Bay, BC	II C Interiors	C10 Interior Construction	C1030 Fittings	C103099 Other Interior Specialties	Concession Stand/Interior Specialties	40	The concession stand located at the southwest corner of the hockey arena consists of aging resilient flooring, cabinets and storage space.	3 4	1975	22-Jun-17	MH	42	15 5	Replace resilient flooring within the next 5 years.	Replacement	3 - Future Renewal	N	No	No	No	1	\$10,000	LS \$10,000	0%	0% 5%	\$11,000
Kerry Park Recreation Centre	1035 Shawnigan-Mill Bay Rd, Mill Bay, BC	II C Interiors	C10 Interior Construction	C1030 Fittings	C103099 Other Interior Specialties	Concession Stand/Interior Specialties	41	The concession stand located at the southwest corner of the hockey arena consists of aging resilient flooring, cabinets and storage space.	3 4	1975	22-Jun-17	MH	42	10 10	A contingency has been provided for the replacement of the aging cabinets and counte along with general refurbishment.	rs Replacement	3 - Future Renewal	Yes	No	No	No	1	\$25,000	LS \$25,000	0%	0% 5%	\$27,000
Kerry Park Recreation Centre	1035 Shawnigan-Mill Bay Rd, Mill Bay, BC	I C Interiors	C10 Interior Construction	C1030 Fittings	C103099 Other Interior Specialties	Concession Stand/Interior Specialties	x	The concession stand located adjacent to the baseball diamonds was built in 2008. Interiors consist of painted gypsum, concrete floors, cabinetry and counters. All appeared to be in good condition.	4 5	2008	22-Jun-17	MH	9	10 10	A contingency has been provided for general refurbishment.	Replacement	3 - Future Renewal	Yes	No	No	No	1	\$20,000	LS \$20,000	0%	0% 5%	\$21,000
Kerry Park Recreation Centre	1035 Shawnigan-Mill Bay Rd, Mill Bay, BC	I C Interiors	C10 Interior Construction	C1030 Fittings	C103099 Other Interior Specialties	Manager's Office and Staff Room - Hockey Arena		The manager's office is located on the second floor at the north east corner of the hockey arena adjacent to the staff room. Floors consist of recently replaced laminate flooring, painted wails panel/sypsum boars. Aging caling titte are located within the staff room. Cabinets with counter and sink are located within the staff room along with metal lockers. Both rooms appear to be in good condition.	4 5	2015	22-Jun-17	МН	2	10 10	For the general refurbishment of the cabinetry, and the replacement of interior finishe	s. Contingency	3 - Future Renewal	Yes	No	No	No	1	\$15,000	LS \$15,000	0%	0% 5%	\$16,000
Kerry Park Recreation Centre	1035 Shawnigan-Mill Bay Rd, Mill Bay, BC		C10 Interior Construction	C1030 Fittings	C103099 Other Interior Specialties			The general office is located adjacent to the main front entrance and consists of individual offices along with a main front desk. Carpeting has been installed throughout. Walls consist of painted gypsum. Carpeted statist lead up to a single office on the second floor. All components appeared to be in good condition with no major issues noted.	4 5	2014	22-Jun-17	MH	3	15 15	For the general refurbishment and the replacement of Interior finishes. This item falls outside the ten year plan, costs associated with this item have not been carried into the cash flow tables.	Contingency	3 - Future Renewal	Yes	No	No	No	1	\$30,000	LS \$30,000	0%	0% 5%	\$32,000
Kerry Park Recreation Centre	1035 Shawnigan-Mill Bay Rd, Mill Bay, BC		C30 Interior Finishes	C3010 Wall Finishes	C301003 Gypsum Wallboard Finishes	Throughout Building/Painting	g 44	The gypsum board walls and CMU walls were all repainted in 2016 in the hockey arena, curling rink, hallways and lobbies.	4 5	2016	22-Jun-17	МН	1	5 5	A contingency has b been provided to complete sectional repainting on a 5 year cycle.	Contingency	3 - Future Renewal	Yes	No	No	No	1	\$10,000	LS \$10,000	0%	0% 5%	\$11,000
Kerry Park Recreation Centre	1035 Shawnigan-Mill Bay Rd, Mill Bay, BC	I C Interiors	C30 Interior Finishes	C3020 Floor Finishes	C302004 Resilient Floor Finishes	Throughout Building/Sports Flooring		Sports flooring in located throughout the hockey arena, lobby, hallways dressing rooms and upper concourse. All sports flooring was replaced in 2015.	4 5	2015	22-Jun-17	МН	2	15 13	Replace sports flooring at end of service life. Replace tiles in high traffic areas as requir prior to major replacement.	red Replacement	3 - Future Renewal	Yes	No	No	No						
Kerry Park Recreation Centre	1035 Shawnigan-Mill Bay Rd, Mill Bay, BC	I C Interiors	C30 Interior Finishes	C3020 Floor Finishes	C302005 Corridor Flooring	Concourse -Painting		Painted plywood flooring has been installed for the concourse on either side of the hockey arena. The flooring was repainted in 2015. No major issues were noted with the plywood flooring and reparement is not anticipated within the next 10 years. The paint finish appears to be in good condition.	4 5	2015	22-Jun-17	мн	2	5 5	Given that these floors will see a lot of foot traffic, we recommend that repainting of flu be conducted on a 5 year cyclical basis.	oors Contingency	3 - Future Renewal	Yes	No	No	No	3000	\$5	SF \$15,000	0%	0% 5%	\$16,000
Kerry Park Recreation Centre	1035 Shawnigan-Mill Bay Rd, Mill Bay, BC	II C Interiors	C30 Interior Finishes	C3020 Floor Finishes	C302005 Carpeting	Corridors Throughout Building/Carpet		Carpeting is located within the corridor servicing the lounge and yoga studio and appears to be nearing the end of its predicted service life.	3 4	2005	22-Jun-17	МН	12	15 3	Replace corridor carpeting.	Replacement	3 - Future Renewal	N	No	No	No	1000	\$7	SF \$7,000	0%	0% 5%	\$8,000
Kerry Park Recreation Centre	1035 Shawnigan-Mill Bay Rd, Mill Bay, BC		C30 Interior Finishes	C3020 Floor Finishes	C303004 Ceiling	Arena and Curling Rink/Ceiling Paint	48	The girders and underside of the q-deck for both the hockey arena and the curling rink were cleaned and painted in 2006. The paint finish appears to be in good condition.	4 5	2006	22-Jun-17	МН	11	20 10	Pepaint girders and underside of Q-deck.	Replacement	3 - Future Renewal	Yes	No	No	No	36000	\$5	SF \$180,000	0%	0% 5%	\$189,000
Kerry Park Recreation Centre	1035 Shawnigan-Mill Bay Rd, Mill Bay, BC		D30 HVAC	D3040 Distribution Systems	D304001 Air Distribution, Heating and Coolin	Rooftop/Heat Pump		This heat pump was installed around 2005 and serves the administration offices. Heat pumps typically have a service life of 15 years. It also uses R22 as the refrigerant, which will be phased out in Canada starting in 2020. While it will still be available for years after, the availability will be limited and therefore costs will increase.	4 4	2005	22-Jun-17	мн	12	15 3	Replace unit at end of service life.	Replacement	3 - Future Renewal	No	Yes	No	No	1	\$7,500	EA \$10,000	0%	0% 5%	\$11,000
Kerry Park Recreation Centre	1035 Shawnigan-Mill Bay Rd, Mill Bay, BC	II D Services	D30 HVAC	D3090 Other HVAC Systems an Equipment	D309002 nd Refrigeration Systems	Compressor Room/Cimco Chillers		Chiller system and pumps are in the process of being replaced in 2017. Previous chillers and pumps were installed approximately in 2000. They were at the end of their expected life. New chillers and pumps are expected to last approximately 20 years with regular maintenance.	2 3	2000	22-Jun-17	мн	17	20 1	Replacement of chillers is in progress. As the units have already been purchased, costs associated with this item have not bee carried into the cash flow tables.	Replacement	2 - Restore Functionality	No	Yes	Yes	No				$\left \right $		

Surry: Cowichan Valley Regional District 2017 Facility Condition Assessment and Capital Plan Kerry Park Recreation Centre, 1035 Shawnigan-Mill Bay Rd, Mill Bay, BC

	s	ę	ents	=	C	OMPONENT	CONDITION A	ASSESSMENT					LIFECY	CLE DATA	RECOMMENDATION			Can this	If recommended		Can the current		C	PINION OF PR	OBABLE COS	τ	
Row BUDG	Location / Addre	Level 1 Major Gro Elements	Level 2 Group Elem	Level 3 Individu: Elements	ID	Location / Type	B E Description & History	Condition	Performance	Yr New or Last Major Action	Assessment Date	Assessed By	Age in 2017 Typical Life Cycle or Action	Interval Est. Time Remaining to EOL or Major Action	Recommendation	Type	Priority	work be phased over	work not complete	Will a failure in this system lead to a loss of use of the facility ?	condition	Quantity	Unit Rate	Subtotal Subtotal Repair or Replacement Cost	Consult. Contingency	5% Tax	Total in 2017 Dollars
59 Kerry Park Recreation Centre	1035 Shawnigan-Mil Bay Rd, Mill Bay, BC		D30 HVAC	D3090 Other HVAC Systems a Equipment	D309002 nd Refrigeration Systems	Compressor Room/Brine Pumps	S1 Chiller system and pumps are in the process of being replaced in 201 pumps were installed approximately in 2000. They were at the end of New chillers and pumps are expected to last approximately 20 years of maintenance.	of their expected life.	3	2000	22-Jun-17	MH 1	17 20	1	Replacement of pumps is in progress. As the units have already been purchased, costs associated with this item have not been carried into the cash flow tables.	Replacement	2 - Restore Functionality	No	Yes	Yes	No						
60 Kerry Park Recreation Centre	1035 Shawnigan-Mil Bay Rd, Mill Bay, BC	II D Services	D30 HVAC	D3020 Heat Generating Systems	D302004 Fuel-fire Unit Heaters	Hockey Rink/Radiant Heating for Audience Seating	S2 Appears to be in functional condition but was not tested during walk- (estimated).	-through. Age unknown 4	2	1990	22-Jun-17	MH 2	27 13	4	Replace system at end of service life. Clean radiant surfaces at least once per year to maximize heating efficiency, preferably well in advance of the heating season.	Replacement	3 - Future Renewal	No	Yes	No	No	1	\$15,000 E	A \$15,000	0% 0%	5% \$1	16,000
61 Kerry Park Recreation Centre	1035 Shawnigan-Mil Bay Rd, Mill Bay, BC	II D Services	D20 Plumbing	D2020 Domestic Water Distributi	D202003 Domestic on Water Equipment		53 Storage tanks were replaced during the course of this review.	4	5	2017	22-Jun-17	мн с	0 25	1	We in subvarie of the results associ. Replace the DHW storage tank at the end of their service life. This item fails outside the ten year plan, costs associated with this item have not been carried into the shift own tables.	Replacement	3 - Future Renewal	No	Yes	No	No						
62 Kerry Park Recreation Centre	1035 Shawnigan-Mil Bay Rd, Mill Bay, BC	II D Services	D30 HVAC	D3020 Heat Generating Systems	D302002 Hot Wate Boilers	P Boiler Room/Backup Electric Storage Tank Water Heater	54 Since this is an emergency backup system connected to the emergence infrequently used. Electric hot water tanks have a lifetime of approxim	icy diesel generator, it is 4 imately 15 years.	4	2008	22-Jun-17	MH S	9 15	6	Recommend testing this system annually at the end of its service life to assess overall condition. It could last well beyond its rated life. Replace as necessary.	Replacement	3 - Future Renewal	No	No	No	No	1	\$2,500 E	A \$2,500	0% 0%	5% \$:	3,000
63 Kerry Park Recreation Centre	1035 Shawnigan-Mil Bay Rd, Mill Bay, BC	II D Services	D30 HVAC	D3020 Heat Generating Systems	D302002 Hot Wate Boilers	r Boiler Room/Modulating Boilers and Circulation Pumps	55-57 Three Viessmann stanless steel bollers in saries installed in 2010 series (and the series) standard series (and the series) serie	rooms), and hot water that hot water me time. Boilers	5	2010	22-Jun-17	MH 7	7 25	18	Replace heating units at end of service life. Replacing pump impellers when worn, and performing regular bearing maintenance, will save energy and could extend pump service life. This item fails outside the ten year plan, costs associated with this item have not been carried into the cash flow tables.	Replacement	3 - Future Renewal	No	Yes	Yes	No						
64 Kerry Park Recreation Centre	1035 Shawnigan-Mil Bay Rd, Mill Bay, BC	II D Services	D30 HVAC	D3040 Distribution Systems	D304003 Hot Wate Distribution Syster	r Boiler Room/Flat-Plate Heat s Exchanger	58 Mechanical drawings indicate that the heat exchanger was to be rem cleaned at the time of boiler replacement. Verify with the mechanical this process was completed. Heat exchangers have a typical expected regular maintenance, it could last longer. Age unknown (estimated).	al contractor whether d life of 25 years. With	4	2010	22-Jun-17	MH 3	7 25	18	Replace unit at end of service life. This item falls outside the ten year plan, costs associated with this item have not been carried into the cash flow tables.	Replacement	3 - Future Renewal	No	Yes	No	No	1	\$2,000 E	A \$2,000	0% 0%	5% \$3	3,000
65 Kerry Park Recreation Centre	1035 Shawnigan-Mil Bay Rd, Mill Bay, BC	II D Services	D30 HVAC	D3090 Other HVAC Systems a Equipment	D309099 Other nd Special Mechanica Systems	Back Laneway/ Ammonia Heat Recovery System	59/60 Recently installed ammonia heat recovery system appears to be in go exchangers have a typical lifespan of 24 years.	ood condition. Heat 4	5	2015	22-Jun-17	MH 2	2 24	22	Replace system heat exchanger at end of service life. Verify with firestopping professional whether the current means of firestopping heat recovery supply pipe through exterior wall is code compliant (see photo). This item fails outside the ten year plan, costs associated with this item have not been carried into the cash flow tables.	Replacement	3 - Future Renewal	No	Yes	No	No						
66 Kerry Park Recreation Centre	1035 Shawnigan-Mil Bay Rd, Mill Bay, BC	II D Services	D30 HVAC	D3090 Other HVAC Systems a Equipment	D309099 Other nd Special Mechanica Systems		61 Munters dehumidification system was recently installed to replace an	n aging system. 5	5	2015	22-Jun-17	MH 2	2 15	13	Perform regular maintenance in accordance with manufacturer's guidelines. Replace system heat exchanger at end of service life. This item falls outside the ten year plan, costs associated with this item have not been carried into the cash flow tables.	Replacement	3 - Future Renewal	No	Yes	Yes	No						
67 Kerry Park Recreation Centre	1035 Shawnigan-Mil Bay Rd, Mill Bay, BC		D30 HVAC	D3040 Distribution Systems	D304007 Exhaust Systems	2)	have a typical lifetime of 20 years.		4	2008			9 20		Continue to replace belts and other components on an as needed basis until 2028. Plan to replace units in 2028. This item falls outside the ten year plan, costs associated with this item have not been carried into the cash flow tables.		3 - Future Renewal	Yes	Yes	No	No						
68 Kerry Park Recreation Centre	1035 Shawnigan-Mil Bay Rd, Mill Bay, BC	II D Services	D30 HVAC	D3090 Other HVAC Systems a Equipment	D309002 nd Refrigeration Systems	Mechanical Room/ Reciprocating Compressors (2)	63 Compressors of this type have a typical lifetime of 20 years.	4	4	2014	22-Jun-17	MH 3	3 20	17	Replace motors and belts per manufacturers' recommendations in the interim operationa period. This item falls outside the ten year plan, costs associated with this item have not been carried into the cash flow tables.	al Replacement	3 - Future Renewal	No	Yes	Yes	No						
69 Kerry Park Recreation Centre	1035 Shawnigan-Mil Bay Rd, Mill Bay, BC		D30 HVAC	D3050 Terminal and Package Un	its Heaters	Warm Room/Fan Coils	64 Unit heaters in skate change room appear to be original to the buildir		4	1975	22-Jun-17		12 20		Plan to replace immediately.	Replacement	2b - Exceeded Service Life	No	Yes	No	No			A \$6,000			7,000
70 Kerry Park Recreation Centre	1035 Shawnigan-Mil Bay Rd, Mill Bay, BC	II D Services	D30 HVAC	D3090 Other HVAC Systems a Equipment	D309002 nd Refrigeration Systems	Back Laneway/ Condenser	65/66 Appears to be in functional condition and is washed annually. This pie dated, however, and despite regular cleaning and maintenance, will r shortly. Condensers of this type have a typical life of 20 years.		4	2002	22-Jun-17	MH 1	15 20	5	Fluid-in interface from piping appears to be corroding excessively. Repair/mitigate leaks a soon as possible. Replace unit at end of life.	is Replacement	3 - Future Renewal	No	Yes	Yes	No	1	\$85,000 E	A \$85,000	0% 0%	5% \$9	90,000
71 Kerry Park Recreation Centre	1035 Shawnigan-Mil Bay Rd, Mill Bay, BC	II D Services	D20 Plumbing	D2020 Domestic Water Distributi	D202003 Domestic on Water Equipment		67 Expansion tanks for the domestic water supply system. Age is estimat can be expected to provide trouble free service for 10-15 years.	ited. Expansion tanks 4	4	2008	22-Jun-17	MH S	9 10	1	Replace at end of life.	Replacement	3 - Future Renewal	No	Yes	Yes	No	2	\$1,000 E	A \$2,000	0% 0%	5% \$3	3,000
72 Kerry Park Recreation Centre	1035 Shawnigan-Mil Bay Rd, Mill Bay, BC		D20 Plumbing		D202003 Domestic On Water Equipment	Pump Room/ Booster Pump(s)	68-74 Pumps in the water supply room are aging and are beginning to show wear such as leaks and considerable corrosion. Pump for fire suppres replacing due to leaks. Base-mounted pumps have a lifespan of appro- was unable to be determined and was estimated.	ssion system needs	2	1995	22-Jun-17	MH 2	22 20	1	Plan to replace most, if not all, of these pumps as soon as possible. Some associated piping reportedly burst a few years ago, recommend replacing piping at the same time.	Replacement	2b - Exceeded Service Life	No	Yes	Yes	No	4	\$1,000 E	A \$4,000	0% 0%	5% \$5	5,000
73 Kerry Park Recreation Centre	1035 Shawnigan-Mil Bay Rd, Mill Bay, BC		D30 HVAC	D3050 Terminal and Package Un	D305006 Package Units	Zamboni Room/ Dehumidification Heat Pump	75 Heat pump serves the dehumidification system. Heat pumps have a ty years.	typical lifespan of 15 4	4	2015	22-Jun-17	MH 2	2 15	13	Replace at end of life. This item falls outside the ten year plan, costs associated with this item have not been carried into the cash flow tables.	Replacement	3 - Future Renewal	No	Yes	Yes	No						
74 Kerry Park Recreation Centre	1035 Shawnigan-Mil Bay Rd, Mill Bay, BC		D30 HVAC	D3040 Distribution Systems	D304005 Glycol Distribution Syster	Zamboni Room/ Ice Melt ss Mechanical System	76-82 Most mechanical equipment here was installed at the same time, and approximately 15 years. This includes pumps, expansion tanks, MGT1		4	2014	22-Jun-17	MH 3	3 15	12	Replace failing equipment on a per-instance basis. Re-evaluate condition of system in 12 years. This item fails outside the ten year plan, costs associated with this item have not been carried into the cash flow tables.	Repair Allowance	3 - Future Renewal	Yes	Yes	Yes	No						
75 Kerry Park Recreation Centre	1035 Shawnigan-Mil Bay Rd, Mill Bay, BC		D30 HVAC	D3050 Terminal and Package Un		Heater	83 Electric unit heating the workshop/garage. Age unknown but appears lifetime is 13 years.	rs to be dated. Typical 3	2	1990	22-Jun-17	MH 2	27 13	1	Plan to replace unit immediately.	Replacement	2b - Exceeded Service Life	No	Yes	No	No	1	\$2,500 E	A \$2,500	0% 0%	5% \$3	3,000
76 Kerry Park Recreation Centre	1035 Shawnigan-Mil Bay Rd, Mill Bay, BC		D30 HVAC	D3050 Terminal and Package Un		Dressing Rooms, Staff Room, Pump Room/ Electric Wall Heaters	84-86 Relatively new units. Life expectancy is around 15 years.	4	4	2015	22-Jun-17	MH 2	2 13	11	Replace electric wall heaters at end of service life. This item falls outside the ten year plan, costs associated with this item have not been carried into the cash flow tables.	Replacement	3 - Future Renewal	Yes	No	No	No						
77 Kerry Park Recreation Centre	1035 Shawnigan-Mil Bay Rd, Mill Bay, BC		d E10 Equipment	E1090 Other Equipment	E109002 Food Service Equipment	Kitchen+ Concession/ Range hood/deep fryer/etc.	87/88 Kitchen equipment is expected to last 20 more years with regular clea	aning and maintenance. 4	4	2007	22-Jun-17	MH 1	10 25	15	Clean and maintain kitchen equipment per manufacturers instructions. Replace equipment at end of service life. This item falls outside the ten year plan, costs associated with this item have not been carried into the cash flow tables.	Replacement	3 - Future Renewal	Yes	Yes	No	No						
78 Kerry Park Recreation Centre	1035 Shawnigan-Mil Bay Rd, Mill Bay, BC	II D Services	D30 HVAC	D3040 Distribution Systems	D304099 Other Distribution Syster	Ice Rinks/ In-Floor Brine Loop	89 Hockey Rink slab and loop replaced in 2015. Curling rink loop is origin appears to be in functional condition.	nal to the building and 4	4	1975	22-Jun-17	MH 4	12 50	1	Inspect all loops regularly for leaks and repair promptly as brine is very corrosive. Investigate the condition of the curling rink loop in greater detail. Visual inspection cannol determine the condition of the loop with any accuracy.	Study		No	Yes	Yes	No	1	\$2,500 E	A \$2,500	0% 0%	5% \$3	3,000

start yr 2017 Facility Condition Assessment and Capital Plan

Kerry Park Recreation Centre, 1035 Shawnigan-Mill Bay Rd, Mill Bay, BC

	ss	đ	ents	-	C	OMPONENT	CONDITION ASSESSMENT					LIFE	CYCLE DATA	RECOMMENDATION			Can this	If recommended		Can the current		01	PINION OF PRO	BABLE COS	т	
BLDG Name	Location / Addres	Level 1 Major Gro Elements	Level 2 Group Elem	Level 3 individua Elements	ID	Location / Type	P Description & History	Condition Derformance	Yr New or Last Major Action	Assessment Date	Assessed By	Age in 2017 Typical	Life Cycle or Action Interval Est. Time Remaining to EOL or Maior Action	Recommendation	Type	Priority		vork not complete can the rate of deterioration be pected to increase ?	Will a failure in this system lead to a loss of use of the facility ?	condition	Quantity	Unit Rate Unit	Subtotal Repair or Replacement Cost	Consult. Contingency	5% Tax	Total in 2017 Dollars
Kerry Park Recreation Centre	1035 Shawnigan-Mill Bay Rd, Mill Bay, BC	I D Services	D30 HVAC	D3050 Terminal and Package Unit	D305006 Package s Units	Staff Lounge/ Air Conditioner	90 Appears to be in good condition, but is approaching the end of its useful life. Age unknown and estimated.	4 2	2000	22-Jun-17	MH	17	15 1	Replace at end of life.	Replacement	2b - Exceeded Service Life	No	Yes	No	No	1 \$	2,500 EA	\$2,500	0% 0%	5%	\$3,000
Kerry Park Recreation Centre	1035 Shawnigan-Mill Bay Rd, Mill Bay, BC		E10 Equipment	E1010 Commerci Equipment	al E101004 Laundry Equipment	Referee Room/ Dryer Vent	91 Vent terminates at intersection of interior wall and celling.	3 3	N/A	22-Jun-17	MH	N/A	N/A 1	Recommend connecting this to a roof vent or at least positioning exhaust directly below general exhaust grille for the room. This will minimize humidity build-up on the wall/ceiling next to the exhaust, that will eventually damage interior finishes.	Repair Allowance	4a- Discretionary Renewal	No	Yes	No	No	1 \$	2,500 EA	\$2,500	0% 0%	5%	\$3,000
Kerry Park Recreation Centre	1035 Shawnigan-Mill Bay Rd, Mill Bay, BC	I D Services	D30 HVAC	D3040 Distribution Systems	D304001 Air Distribution, Heating and Cooling	Rooftop/ Aeromatic HRVs (2)	92 Units serve to recover heating/cooling from the McLean room, hallway, and the curling lounge.	4 4	2010	22-Jun-17	MH	7	15 8	Replace units at end of life.	Replacement	3 - Future Renewal	Yes	Yes	No	No	2 \$	15,000 EA	\$30,000	0% 0%	5%	\$32,000
Kerry Park Recreation Centre	1035 Shawnigan-Mill Bay Rd, Mill Bay, BC		D30 HVAC	D3040 Distribution Systems	D304001 Air Distribution, Heating and Cooling	Rooftop/ Trane HPs (3)	93 Units were manufactured and installed in 2010. Heat pumps typically have a lifetime of 15 years.	4 4			MH		15 8	Replace units at end of life.	Replacement	3 - Future Renewal	Yes	Yes	No	No			\$60,000	0% 0%		\$63,000
Kerry Park Recreation Centre	1035 Shawnigan-Mill Bay Rd, Mill Bay, BC	I D Services	D30 HVAC	D3040 Distribution Systems	D304007 Exhaust Systems	Main Washrooms/Exhaust Grilles	94 Washroom exhaust was likely increased at some point to mitigate odors. However, flow rate appears to be excessive given the audible airflow at the exhaust grilles.	3 4	1975	22-Jun-17	MH	42	30 1	Recommend commissioning authority to study and/or verify: consider turning down fan ower, increasing duct size, or adding a third enbaust grillen the washroom to alleviate. Whistling in ducts implies a faster air flow rate than the ducts or grilles can accommodat therefore the fan motor is operating excessively, which wastes energy, and could lead to premature failure.			No	Yes	No	No	1 \$	5,000 EA	\$5,000	0% 0%	5%	\$6,000
Kerry Park Recreation Centre	1035 Shawnigan-Mill Bay Rd, Mill Bay, BC	I D Services	D20 Plumbing		D202003 Domestic in Water Equipment	Concession/Hydronic Pump	95 Pump is original to the building.	4 4	2005	22-Jun-17	MH	12	20 8	Replace at end of life.	Replacement	3 - Future Renewal	No	Yes	Yes	No	1 \$	2,500 EA	\$2,500	0% 0%	5%	\$3,000
rry Park creation ntre	1035 Shawnigan-Mill Bay Rd, Mill Bay, BC		D20 Plumbing		n Water Equipment		concession building.	4 4			MH		15 4	Replace at end of life.	Replacement	3 - Future Renewal	No	Yes	Yes	No		2,500 EA		0% 0%		\$3,000
erry Park ecreation entre	1035 Shawnigan-Mill Bay Rd, Mill Bay, BC	I D Services	D30 HVAC	D3020 Heat Generating Systems	D302002 Hot Wate Boilers	r Storage Room (130)/ Space Saver Hot Water Tank	97 This water heater was manufactured in 2012. Hot water tanks usually have a service life of 8- 10 years for commercial applications, however given its limited usage, could last longer with proper maintenance (replacing anodes).		2012	22-Jun-17	МН	5	10 5	Monitor functionality and set aside nominal budget for replacement at any time over the next 5 years.	Replacement	3 - Future Renewal	No	Yes	No	No	1 \$	2,500 EA	\$2,500	0% 0%	5%	\$3,000
rry Park creation ntre	1035 Shawnigan-Mill Bay Rd, Mill Bay, BC		D20 Plumbing		n Water Equipment		98 Base-mounted pump is of 1998 vintage. Typical base-mounted pumps have a lifetime of about 20 years.	3 4			МН	19		Plan to replace this pump very soon as it is approaching the end of its useful life.	Replacement	3 - Future Renewal	No	Yes	Yes	No	1 \$	2,500 EA	\$2,500	0% 0%	5%	\$3,000
erry Park ecreation entre	1035 Shawnigan-Mill Bay Rd, Mill Bay, BC		E10 Equipment	E1090 Other Equipment	E109002 Food Service Equipment	Concession/ Range hood/deep fryer/etc	99 Original equipment installed at time of building completion.	4 5	2005	22-Jun-17	MH	12	25 13	Replace at end of life. Recommend regular cleaning and maintenance per manufacturer's guidelines. This item falls outside the ten year plan, costs associated with this item have not been carried into the cash flow tables.	Replacement	3 - Future Renewal	Yes	Yes	Yes	No						
Cerry Park tecreation Centre	1035 Shawnigan-Mill Bay Rd, Mill Bay, BC	I D Services	D20 Plumbing	D2010 Plumbing Fixtures	D2010 Plumbing Fixtures	Various/ Plumbing fixtures - sinks, faucets, toilets, urinals, showers, etc	100-104 Relatively new and working as intended. Replace fixtures as needed, but expected to last well beyond 15 years.	4 4	1975	22-Jun-17	МН	42	1 1	Replace on a per-instance basis. Set aside a nominal amount of rolling budget for this work.	Repair Allowance	2 - Restore Functionality	Yes	Yes	No	No	1 \$	9,000 EA	\$9,000	0% 0%	5%	\$10,000
erry Park ecreation entre	1035 Shawnigan-Mill Bay Rd, Mill Bay, BC		G30 Site Civil and Mechanical Utilities	G3030 Storm Sewer	G303001 Storm Sewer Piping	Building/ Perimeter Drain	x Scoped in 2017.	4 4	2017	22-Jun-17	МН	0	3 3	Repeat scoping of perimeter drain every 3 years.	Repair Allowance	2 - Restore Functionality	No	Yes	Yes	No	1 \$	2,500 EA	\$2,500	0% 0%	5%	\$3,000
erry Park ecreation entre	1035 Shawnigan-Mill Bay Rd, Mill Bay, BC	I G Building Sitework	G30 Site Civil and Mechanical Utilities	G3030 Storm Sewer	G301002 Potable Water Distribution	Mechanical Room/Main Water Pipe	105 Visual review suggests that the exterior of the water supply pipe entering the room is showing signs of pitting due to excessive corrosion.	2 2		22-Jun-17	MH	42	50 8	Recommend replacing pipe as a preventative measure.	Replacement	2 - Restore Functionality	No	Yes	Yes	Yes		2,500 EA		0% 0%		\$3,000
erry Park ecreation entre	1035 Shawnigan-Mill Bay Rd, Mill Bay, BC	I D Services	D50 Electrical	D5030 Communication and Security	D503008 Security Systems	Building/ Security Camera System	x Camera system was installed in approximately 2014/2015 and appears to be working adequately. Typical lifetime for security systems is 8-10 years. Replacement parts may be purchased during this timeframe if needed, to extend its life.	4 4	2014	22-Jun-17	МН	3	10 7	Recommend replacing at 10 years as technology advances are likely for these systems.	Replacement	3 - Future Renewal	No	No	No	No	1 \$	15,000 EA	\$15,000	0% 0%	5%	\$16,000
erry Park ecreation entre	1035 Shawnigan-Mill Bay Rd, Mill Bay, BC	I D Services	D50 Electrical	D5020 Lighting and Branch Wirin	D502099 Other Lighting and Branch Wiring	Mechanical Room/ Junction Boxes (multiple cases)	106-109 Several junction boxes are missing cover plates; likely due to maintenance staff undergoing a chiller system upgrades and needing access.	1 3	N/A	22-Jun-17	МН	N/A	N/A N/A	All junction boxes should have cover plates installed per code (for safety). This item falls below the project threshold and has not been carried forward in the cash flow tables.	Repair Allowance	1 – Immediate	No	Yes	Yes	Yes						
erry Park ecreation entre	1035 Shawnigan-Mill Bay Rd, Mill Bay, BC	l G Building Sitework	G40 Site Electrical Utilities	G4090 Other Site Electrical Utilities	G409003 Emergency Power Generation	Back Laneway/ Kohler backup diesel generator	110 Relatively new installation, tested annually. Continue to monitor performance regularly as per manufacturer suggested guidelines. Generators are expected to last 20-30 years depending on number and length of power outages.	5 5	2015	22-Jun-17	MH	2	20 17	Replace emergency generator at end of service life. This item falls outside the ten year plan, costs associated with this item have not been carried into the cash flow tables.	Replacement	3 - Future Renewal	No	Yes	No	No						
erry Park ecreation entre	1035 Shawnigan-Mill Bay Rd, Mill Bay, BC		D30 HVAC	D3060 Control an Instrumentation	d D306099 Other Controls Instrumentation	Various/ Occupancy sensors controlling lighting	111 Phased installation of occupancy sensors from 2012-2014. Sensors have a service life of about 15 years.	4 4	2012	22-Jun-17	MH	5	15 10	Plan to replace approximately 10 years from now. Recommend to replace all in one proje to realize bulk product and installation savings, if budget permits.	ct Replacement	3 - Future Renewal	Yes	No	Yes	No	25	\$200 EA	\$5,000	0% 0%	5%	\$6,000
erry Park ecreation entre	1035 Shawnigan-Mill Bay Rd, Mill Bay, BC	I D Services	D50 Electrical	D5010 Electrical Services and Distribution	D501005 Panels	Electrical Rooms+Closets/ Breaker Panels (various)	112/113 Some panels showing signs of aging, likely original to the building in 1975. Panels have a service life of 30-40 years.	3 2	1975	22-Jun-17	МН	42	2 2	Plan on replacing some of the older panels on an ongoing basis. In particular, older panels can be found near the main washrooms near McLean Room, and near the stairs leading towards 2nd floor office space. This holds true for switches as well (pictured).	s Replacement	3 - Future Renewal	Yes	Yes	Yes	Yes	5 \$	3,000 EA	\$15,000	0% 0%	5%	\$16,000
Cerry Park Lecreation Centre	1035 Shawnigan-Mill Bay Rd, Mill Bay, BC	I D Services	D50 Electrical	D5010 Electrical Services and Distribution	D501001 Main Transformers	Electrical Room/ Transformer	Age unknown and estimated. Likely replaced in the 1980's due to a fire. Typical lifetimes are on the order of 30 years.	3 2	1985	22-Jun-17	MH	32	30 2	Replace main transformer at end of service life. Confirm with IR scan, that this unit will need replacing shortly. The costing provided is associated with the replacement costs an includes a contengency for issolated wire replacement.		2b - Exceeded Service Life	No	Yes	Yes	Yes	1 \$	40,000 EA	\$40,000	0% 0%	5%	\$42,000
erry Park ecreation entre	1035 Shawnigan-Mill Bay Rd, Mill Bay, BC		E10 Equipment	E1020 Institutional Equipment	E102009 Audio- Visual Equipment	Rink/ Scoreboards	115 Replaced 8 years ago.	4 4	2009	22-Jun-17	МН	8	15 7	Replace at end of life.	Replacement	3 - Future Renewal	No	Yes	No	No	1 \$	9,000 EA	\$9,000	0% 0%	5%	\$10,000
erry Park ecreation entre	1035 Shawnigan-Mill Bay Rd, Mill Bay, BC	I G Building Sitework	G40 Site Electrical Utilities	G4030 Site Communication and Security	G403098 Other Communication and Alarm	Rink/ CO&NO2 Sensors	116 3 sensors in the rink area, 1 in the curling area.	4 4	2014	22-Jun-17	МН	3	5 2	Replace at end of life.	Replacement	3 - Future Renewal	Yes	Yes	No	No	4 \$	2,500 EA	\$10,000	0% 0%	5%	\$11,000
erry Park ecreation entre	1035 Shawnigan-Mill Bay Rd, Mill Bay, BC		G40 Site Electrical Utilities	G4030 Site Communication and Security	G403002 Sound Systems	Sound/PA System	117 System was not tested. It was installed in 2011 and is functional according to building staff.	4 4	2011	22-Jun-17	МН	6	20 14	Replace at end of life. This item falls outside the ten year plan, costs associated with this item have not been carried into the cash flow tables.	Replacement	3 - Future Renewal	No	Yes	No	No						
Kerry Park Recreation Centre	1035 Shawnigan-Mill Bay Rd, Mill Bay, BC	G Building Sitework	G40 Site Electrical Utilities	G4010 Electrical Distribution	G401003 Switches, Controls and Devices	Back Laneway/ Exterior Switch	118 Showing signs of corrosion/water ingress.	2 2	1975	22-Jun-17	MH	42	20 1	Replace with new switch suitable for exterior installation, as soon as possible.	Replacement	1 – Immediate	No	Yes	Yes	Yes	1 \$	2,500 EA	\$2,500	0% 0%	5%	\$3,000
Kerry Park Recreation Centre	1035 Shawnigan-Mill Bay Rd, Mill Bay, BC	I D Services	D50 Electrical	D5020 Lighting and Branch Wirin	D502002 Lighting g Equipment	Building/ Interior Lighting (General)	Curling social lounge has LEDs with dimmers. Hallways are outfitted with T5 LEDs. Lighting is continuously being upgraded to LEDs as bulbs or fixtures fail.	4 4	N/A	22-Jun-17	МН	N/A	1 1	Continue to replace with LEDs. LEDs are increasingly more affordable, save a significant amount of energy over incandescent bulbs, and have a much longer lifespan than other lighting technologies, obviating the need for constant replacement.	Contingency	3 - Future Renewal	Yes	No	No	No	1 \$	2,500 EA	\$2,500	0% 0%	5%	\$3,000

Surry: Cowichan Valley Regional District 2017 Facility Condition Assessment and Capital Plan Kerry Park Recreation Centre, 1035 Shawnigan-Mill Bay Rd, Mill Bay, BC

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Row	BLDG Name	Location / Addres	Level 1 Major Grou Elements	Level 2 Group Eleme	Level 3 Individual Elements	ID	Location / Type	Photo	Description & History	Condition	Performance	Yr New or Last Major Action	Assessment Date	Assessed By	Age in 2017 Traited	Typical Life Cycle or Action Interval	Est. Time Remaining to EOL or Major Action	Recommendation	Туре	Priority	work be phased over	If recommended work not complete can the rate of deterioration be expected to increase ?	Will a failure in this system lead to a loss of use of the facility ?			UnitRate	Unit Subtotal Repair or	Replacement Cost Consult.	Contingency	몇 % Total in 2017 Dollars
103 Kerry Recrea Centre	ation B	.035 Shawnigan-Mill Bay Rd, Mill Bay, BC	II D Services	D50 Electrical	D5020 Lighting and Branch Wiring		Building/ Exterior Lighting	x	Exterior lighting appears to be in good shape. It was upgraded in 2016 with LEDs.	4	5	2016	22-Jun-17	МН	1	20	19	Replace system at end of service life. This item falls outside the ten year plan, costs associated with this item have not been carried into the cash flow tables.	Replacement	3 - Future Renewal	Yes	No	No	No						
104 Kerry Recrea Centre	ation B	.035 Shawnigan-Mill Bay Rd, Mill Bay, BC		G40 Site Electrical Utilities	G4010 Electrical Distribution	G401003 Switches, Controls and Devices	Mechanical Rooms/ Variable Frequency Drives	119/120	VFDs typically have a lifetime of 15 years. Age unknown and is estimated.	4	4	2012	22-Jun-17	мн	5	15	10	Replace at end of life.	Replacement	3 - Future Renewal	No	Yes	No	No	2	\$2,500	EA \$5,00	00 0%	0%	5% \$6,000
105 Kerry Recrea Centre	ation B	.035 Shawnigan-Mill Bay Rd, Mill Bay, BC	II D Services	D40 Fire Protection	D4090 Other Fire Protection Systems		Curling Kitchen/Fire suppression system	121	Visual inspection indicates that it appears to be in operational condition. The system was not tested during the walkthrough. Age unknown and estimated.	4	4	2008	22-Jun-17	МН	9	20	11	Regular inspections recommended to ensure proper functionality. This item fails outside the ten year plan, costs associated with this item have not been carried into the cash flow tables.	Replacement	3 - Future Renewal	No	Yes	No	No						
106 Kerry Recrea Centre	ation B	.035 Shawnigan-Mill Bay Rd, Mill Bay, BC		F10 Special d Construction	F1040 Special Facilities	F104005 Ice Rinks	Hockey Arena/Boards and Glass	122	The boards and glass for the hockey arena were replaced in 2015.	4	5	2015	22-Jun-17	МН	2	25	23	Replace boards and glass at end of service life.	Replacement	3 - Future Renewal	Yes	No	No	No						
107 Kerry I Recrea Centre	ation B	.035 Shawnigan-Mill Bay Rd, Mill Bay, BC		F10 Special d Construction	F1040 Special Facilities	F104005 Ice Rinks	Seating - Throughout Hockey Arena/Repaint	123	The bleachers consist of painted wood benches with wood flooring and plywood risers. Portions of bleachers on the east side have recently been refribished [2015] with sports flooring for the seat pans and high density polyethylene paneling installed for the risers. Some minor deterioration of the paint finish was noted on the east elecation. The wood components appear to be in serviceable condition with no major deficiencies noted.	4	5	2015	22-Jun-17	МН	2	5	5	Repaint bleachers on a 5 year cyclical basis.	Replacement	3 - Future Renewal	Yes	No	No	No	3000	\$5	SF \$15,0	00 0%	0%	\$16,000
108 Kerry Recrea Centre	ation B	.035 Shawnigan-Mill Bay Rd, Mill Bay, BC		F10 Special d Construction	F1040 Special Facilities	F104005 Ice Rinks	Ice Rink Stairs/Repaint	124	Similar to the bleachers, the stains are constructed out of wood and phywood. Wearing of the paint finish was noted at a number of locations. The wood components appear to be in serviceable condition with no major deficiencies noted. The lack of tactile warning strips at the top of the stairs was noted throughout.	4	5	2015	22-Jun-17	МН	2	5	5	Repairs stairs on a 5 war cyclical basis. Review requirements for tactile warning strips and install as required. Costs associated with tactile warning strips have not been included.	Replacement	3 - Future Renewal	Yes	No	No	No	1000	\$5	LS \$5,00	00 0%	0%	5% \$6,000
109 Kerry Recrea Centre	ation B	.035 Shawnigan-Mill Bay Rd, Mill Bay, BC		F10 Special d Construction	F1040 Special Facilities	F104005 Ice Rinks	Guards and Handrails - Hockey Arena	125	A combination of wood and metal guardrails and handfalls are present throughout the hody areas. All appear to be in good condition. Climable guard rails are located at the bleachers on both the east and west sides. Lack of guards noted at the wheelchair viewing area on the west side. Lack of handrails noted at a number of stair locations.	3	5	1975	22-Jun-17	МН	42	35	5	Recommend that all area be reviewed and guards/handrails be modified, replaced or installed to meet code requirements.	Contingency	3 - Future Renewal	Yes	No	No	No	1	\$15,000	LS \$15,0	00 0%	0%	5% \$16,000
110 Kerry Recrea Centre	ation B	.035 Shawnigan-Mill Bay Rd, Mill Bay, BC		F10 Special d Construction	F1040 Special Facilities	F104005 Ice Rinks	Hockey Arena and Curling Rink/Concrete Slab	126	The concrete slab located directly below the ice surface was replaced in 2015 for the hockey area. The slab for the curling rink is original to the building and only minor cracking was noted.	4	5	2015	22-Jun-17	МН	2	20	18	Replacement of the curling rink slab is not anticipated within the next 10 years. This item falls outside the ten year plan, costs associated with this item have not been carried into the cash flow tables.	Replacement	3 - Future Renewal	Yes	No	No	No		\$200,000	LS \$0	0%	0%	%
111 Kerry Recrea	ation B	.035 Shawnigan-Mill Bay Rd, Mill Bay, BC		G20 Site Improvements	G2040 Site Development	G204001 Fencing and Gates	Exterior/Chain Link	127	Chain link fences surround the 3 baseball diamonds and are also located at the dug-outs. We understand that the fencing was last replaced in 2005.	4	5	2005	22-Jun-17	МН	12	35	23	Replace outdoor chain link fences at the end of service life. This item falls outside the ten year plan, costs associated with this item have not been carried into the cash flow tables.	Replacement	3 - Future Renewal	Yes	No	No	No						
112 Kerry Recrea Centre	ation B	.035 Shawnigan-Mill Bay Rd, Mill Bay, BC		G90 Other Site Construction	G9090 Other Site Construction	G909099 Other Special Construction	Exterior/Metal Bleachers	128	Three sets of bleachers are located adjacent to the baseball diamonds and consist of aluminum frames and benches with chain-link fencing.	4	5	2005	22-Jun-17	МН	12	45	33	Replace bleachers at end of service life. This item falls outside the ten year plan, costs associated with this item have not been carried into the cash flow tables.	Replacement	3 - Future Renewal	Yes	No	No	No						
113 Kerry Recrea Centre	ation B	.035 Shawnigan-Mill Bay Rd, Mill Bay, BC		P100001 Seismic Screening	P100001 Seismic Screening	P100001 Seismic Screening		x	Complete a seismic screening of the building to assess seismic vulnerability.			1975	22-Jun-17	MH	42	10	1	For conducting a seismic screening of the building. The screening will be done according to the "Manual for Screening of Buildings for Seismic Investigation", published by the National Research Council of Canada (1992).	Study		No	N/A	No	N/A	1	\$6,000	LS \$6,00	00 0%	0%	5% \$7,000

Kerry Park Recreation Centre, 1035 Shawnigan-Mill Bay Rd, Mill Bay, BC

		co	MPONENT		CONDITION ASSESSMENT	RECOMMENDATION				10-YEAR	CAPITAL PL	AN							
Row	ame		Ape						17	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026
	BLDG N	ID	Location / Ty	Photo	Description & History	Recommendation	Type	Priority	Total in 201 Dollars	\$46,000	\$236,200	\$26,000	\$23,200	\$272,000	\$52,200	\$21,500	\$221,200	\$14,500	\$509,200
	Kerry Park Recreation Centre	A101001 Wall Foundations	Underground/ Foundations	×	The foundations are cast-in-place concrete. No evidence of major settlement or heaving was reported or observed.	The foundations are expected to last the life of the building. No major capital expenditures are expected to be required.		Not Applicable											
	Kerry Park Recreation Centre	A103001 Standard Slab on Grade	Througout Building/Slab on Grade	x	The floor is concrete slab-on-grade. No evidence of major settlement or heaving was reported or observed.	The slab on grade assemblies are expected to last the life of the building. No major capital expenditures are expected to be required.		Not Applicable											
	Kerry Park Recreation Centre	A103006 Foundation Drainage	Underground/ Perimeter Drains	x	Rain water leaders drain into below grade PVC pipes. The continuity of these pipes is not known. As per facility staff, we understand that replacement of the perimeter drainage will be conducted when the adjacent parking lot is repaired/replaced.	Remove and replace damaged or failed perimeter weeping tile as required.	Replacement	3 - Future Renewal	\$100,000										\$100,000
	Kerry Park Recreation Centre	A103006 Foundation Drainage	Underground/ Perimeter Drains	x	Rain water leaders drain into below grade PVC pipes. The continuity of these pipes is not known.	Periodic camera inspection and isolated repairs as required. This item falls outside the ten year plan, costs associated with this item have not been carried into the cash flow tables.	Replacement	3 - Future Renewal											
	Kerry Park Recreation Centre	B10 Superstructure	Throughout Building/ General Superstructure	1	The superstructure consists of a combination of cast-in-place concrete, reinforced concrete masonry units, tapered steel columns, tapered steel girders with steel beams and a steel roof deck. The roof deck over the Zamboni holding area consists of wood joists with plywood decking. Minor cracking of the exposed CMU wall noted on the north elevation. No settlement, major cracking, or other evidence of structural distress was observed or reported.	Interior protected structural components are expected to last the life of the building. No major capital expenditures are expected to be required. However, CMU on south elevation to be reviewed and repaired as required. Please see item below.		Not Applicable											
	Kerry Park Recreation Centre	B201001 Exterior Enclosure	Exterior Walls/Exposed Concrete/CMU	2	Cast-in-place concrete structure is exposed at the Zamboni holding area and appears to have been painted with a latex paint. Painted cast-in-place concrete also exists at the southeast corner of the building at the McLean addition. Exposed CMU is located on the south and north walls. Cracking of CMU evident on the north wall. The exposed CMU walls located on the south elevation have recently been repainted and appear to be in good condition. Water ingress was not indicated by facility staff for the north walls.	Repaint concrete with either latex or elastomeric paint, patch all bug-holes with non- shrink grout prior to painting. Review CMU and repair cracking. Install polyurethane sealant at all penetrations. Paint with acrylic/latex paint.	Repair Allowance	2 - Restore Functionality	\$16,000		\$16,000								
	Kerry Park Recreation Centre	B10 Superstructure	Exterior/Entrance Canopy	3	The front canopy was constructed in 2016 and consists of wood roof joists with a timber support structure. Structure appeared to be in good condition.	Structure is expected to last the life of the building. No major capital expenditures related to replacement are expected to be required. Review exposed timbers as part of regular maintenance and re-stain as required. The timeline and costing provided is associated with this work.	Replacement	3 - Future Renewal	\$4,000									\$4,000	
	Kerry Park Recreation Centre	B10 Superstructure	Concession Stand	4	The concession stand was built in 2008 and consists of re-enforced CMU walls with wood roof joists and exposed timber supports. No structural issues were noted or reported by facility staff.	Structure is expected to last the life of the building. No major capital expenditures related to replacement are expected to be required. Review exposed timbers as part of regular maintenance and re-stain as required. The timeline and costing provided is associated with this work.	Repair Allowance	3 - Future Renewal	\$4,000									\$4,000	
	Kerry Park Recreation Centre	B201001 Exterior Enclosure	Concession Stand	5	The walls are structural solid masonry using a combination of split face concrete block and smooth faced concrete block. The concession stand was built in 2008.	Structure is expected to last the life of the building. No major capital expenditures related to replacement are expected to be required. Complete isolated mortar repointing and masonry repairs as required (budget for year 20). This item falls outside the ten year plan, costs associated with this item have not been carried into the cash flow tables.	Replacement	3 - Future Renewal											
	Kerry Park Recreation Centre	B201001 Exterior Enclosure	Exterior Walls/Cementitious Panels - Replace	6	Cementitious panel cladding has been installed for portions of the south, east and west elevations, installed over the original metal panel cladding. The assembly outboard of the original panels consists of 2-girts, Roux insulation and cementitious panel cladding. The over-cladding was conducted in 2016.	Install new cementitious siding panels at end of service life. This item falls outside the ten year plan, costs associated with this item have not been carried into the cash flow tables.	Replacement	3 - Future Renewal											
	Kerry Park Recreation Centre	B201001 Exterior Enclosure	Exterior Walls/Cementitious Panels - Repaint	6	Cementitious panel cladding has been installed for portions of the south, east and west elevations, installed over the original metal panel cladding. Paint finish is in good condition.	Repaint panel cladding in approximately 15 years. This item falls outside the ten year plan, costs associated with this item have not been carried into the cash flow tables.	Replacement	3 - Future Renewal											
	Kerry Park Recreation Centre	B201001 Exterior Enclosure	Exterior Walls/Corrugated Metal Panels	7	As part of the over cladding undertaken in 2016, new corrugated metal panels were installed on the east and west elevations for the lower portions of the wall.	Install new metal cladding at end of service life. This item falls outside the ten year plan, costs associated with this item have not been carried into the cash flow tables.	Replacement	3 - Future Renewal											

Kerry Park Recreation Centre, 1035 Shawnigan-Mill Bay Rd, Mill Bay, BC

		cc	OMPONENT		CONDITION ASSESSMENT	RECOMMENDATION				10-YEAR	CAPITAL PI	LAN							
Row	ame		ype						17	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026
	BLDG N	ID	Location / T	Photo	Description & History	Recommendation	Type	Priority	Total in 20 Dollars	\$46,000	\$236,200	\$26,000	\$23,200	\$272,000	\$52,200	\$21,500	\$221,200	\$14,500	\$509,200
13	Kerry Park Recreation Centre	B201001 Exterior Enclosure	Exterior Walls/Metal Panels	8	Original metal panels still remain for a small portion of the upper south wall and north wall The panels on the south elevation have been recently been repainted and appear to be in good condition. The panels on the north elevation are exhibiting advanced levels of deterioration. As per facility staff, water ingress has not been observed at these walls.	We understand that these locations of original metal cladding were not over-clad due to the number of penetrations for ice making equipment, ventilation etc. We recommend that all corroded portions of the cladding be repaired and the cladding re-coated.	Repair Allowance	2b - Exceeded Service Life	\$31,000		\$31,000								
14	Kerry Park Recreation Centre	B201008 Exterior Soffits	Roof Eaves/ Metal Soffit	9	Painted wood soffits are located on the south elevation and were recently repainted.	Repaint soffits as required. This item falls outside the ten year plan, costs associated with this item have not been carried into the cash flow tables.	Contingency	3 - Future Renewal	\$3,000										
15	Kerry Park Recreation Centre	B201011 Joint Sealant	Exterior Walls/Sealant Joints	10	There are sealant joints around windows and doors and at wall penetrations. Sealant at wall penetrations on the north elevation were typically missing or deteriorated.	Replace failed/missing sealant between dissimilar materials on the north elevation.	Repair Allowance	2b - Exceeded Service Life	\$9,000		\$9,000								
16	Kerry Park Recreation Centre	B202001 Windows	Exterior Walls/Aluminum Framed Windows	11	Aluminum framed windows are located on the south elevation with awning or slider operable windows. We assume that these windows were installed as part of the expansion in 1980. These windows have moderate over-hang protection. Facility staff did not report any issues with these windows.	Replace aluminum framed windows with new.	Replacement	4a - Discretionary Renewal	\$20,000					\$20,000					
17	Kerry Park Recreation Centre	B202002 Storefront Assembly	Exterior Walls/Aluminum Framed Windows	12	Aluminum framed storefront windows with single pane glazing are located on the south elevation. All storefront assemblies are located under overhang protection. The storefront doors are wheelchair accessible. We understand that the storefront doors were last replace in the mid 80's. All other storefront glazing is original to the building. Facility staff did not report any issues with these windows.	Replace storefront system including doors with more thermally efficient units with reduced air leakage.	Replacement	4a - Discretionary Renewal	\$95,000								\$9,000		
18	Kerry Park Recreation Centre	B203001 Exterior Doors	Exterior Walls/Single Exterior Doors	13	Metal doors are located on the exterior of the building at a number of locations. Most do not have overhang protection and are showing signs of age related deterioration. Water ingress was indicated by facility staff for a number of these metal doors.	Replace doors with new assemblies (including hardware).	Replacement	2 - Restore Functionality	\$23,000		\$23,000								
19	Kerry Park Recreation Centre	B203001 Exterior Doors	Exterior Walls/Double Exterior Doors	14	Metal doors are located on the exterior of the building at a number of locations. Most do not have overhang protection and are showing signs of age related deterioration. Water ingress was indicated by facility staff for a number of these metal doors.	Replace doors with new assemblies (including hardware).	Replacement	2 - Restore Functionality	\$57,000		\$57,000								
20	Kerry Park Recreation Centre	B203004 Overhead Garage Doors	Exterior Walls - Workshop/Overhead Garage Doors	15	Overhead garage doors provides access to the workshop at the northeast corner. All are showing signs of age related deterioration.	Replace overhead garage doors.	Replacement	3 - Future Renewal	\$7,000					\$7,000					
21	Kerry Park Recreation Centre	B203004 Overhead Doors	Exterior Walls - Hockey Arena/Overhead Garage Doors	16	2 manually overhead doors provide access to the hockey arena.	Replace single overhead garage doors.	Replacement	3 - Future Renewal	\$11,000					\$11,000					
22	Kerry Park Recreation Centre	B203004 Overhead Doors	Exterior Walls - Curling Rink/Overhead Garage Doors	17	1 manually overhead doors is located on the east elevation of the curling rink and was last replaced in 2016.	Replace single overhead garage doors. This item falls outside the ten year plan, costs associated with this item have not been carried into the cash flow tables.	Replacement	3 - Future Renewal											
23	Kerry Park Recreation Centre	B203004 Overhead Garage Doors	Exterior Walls - Concession Stand/Overhead Garage Doors	18	One overhead garage door is located at the concession stand located adjacent to the baseball diamonds.	Replace overhead garage doors at end of service life. This item falls outside the ten year plan, costs associated with this item have not been carried into the cash flow tables.	Replacement	3 - Future Renewal											
24	Kerry Park Recreation Centre	B203098 Other Exterior Specialty Doors	Exterior Walls - Concession Stand/Overhead Rolling Shutter	19	2 overhead rolling shutters are located at the concession stand located adjacent to the baseball diamonds.	Replace at end of service life. This item falls outside the ten year plan, costs associated with this item have not been carried into the cash flow tables.	Replacement	3 - Future Renewal											

Start Yr 2017 Facility Condition Assessment and Capital Plan Kerry Park Recreation Centre, 1035 Shawnigan-Mill Bay Rd, Mill Bay, BC

		cc	MPONENT		CONDITION ASSESSMENT	RECOMMENDATION				10-YEAR	CAPITAL PI	LAN							
Row	ame		λpe						17	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026
	N 9018	ID	Location / T	Photo	Description & History	Recommendation	Type	Priority	Total in 201 Dollars	\$46,000	\$236,200	\$26,000	\$23,200	\$272,000	\$52,200	\$21,500	\$221,200	\$14,500	\$509,200
25	Kerry Park Recreation Centre	B301002 Roofing – Low Sloped Membrane System SBS	Roofing/ Low Sloped Roofs	20	A conventional SBS roof system has been installed for the lower flat roofs located on the south elevation. As per facility staff, the roof system was replaced in 2016. The roof drains by via internal drains and scupper drains. No leaks were observed or reported by facility staff.	Replace roofing system including flashings, sealants, etc. as required. This item falls outside the ten year plan, costs associated with this item have not been carried into the cash flow tables.	Replacement	3 - Future Renewal											
26	Kerry Park Recreation Centre	B301002 Roofing - Low Sloped Membrane System SBS	Roofing/ Low Sloped Roofs	21	An SBS roof system installed directly over the plywood substrate is located at the northwest corner over the ice machine room. Some limited cracking of the granulated cap sheet was noted. We assume that this roof membrane was replaced approximately 10 years ago. No leaks were observed or reported by facility staff.	Replace roofing system including flashings, sealants, etc. as required. This item falls outside the ten year plan, costs associated with this item have not been carried into the cash flow tables.	Replacement	3 - Future Renewal											
27	Kerry Park Recreation Centre	B301002 Slope Roof	Roofing/Sloped Metal Roof	22	The roof over the hockey and curling rinks consists of sloped prefinished metal panels with concealed fasteners. As per facility staff, we understand that the metal panels were replaced in 2006 and continuous insulation was installed over the metal Q-deck . Water ingress was indicated at one location at the southeast corner of the roof. The flashing terminations were reviewed for a mechanical penetration located up the slope from the location of the water ingress and discontinuities of the sealant were noted.	Replace standing metal seam roof sections at end of service life. This item falls outside the ten year plan, costs associated with this item have not been carried into the cash flow tables. Review mechanical penetration adjacent to area of water ingress and repair any discontinuities in the sealant. Monitor and conduct further investigation as required.	Replacement	3 - Future Renewal											
28	Kerry Park Recreation Centre	B301002 Slope Roof	Roofing/Sloped Metal Roof	23	The roof over the workshop, located at the northwest corner of the arena consists of pre- finished metal panels with exposed fasteners. As per facility staff, there have been ongoing issues with water ingress. As a means of repair, liquid applied membrane was installed over fastener penetrations in 2016. We understand that water ingress still continues to be an issue.	Replace metal panel roof system along with the damaged and/or deteriorated insulation.	Replacement	2 - Restore Functionality	\$37,000		\$37,000								
29	Kerry Park Recreation Centre	B301002 Slope Roof	Roofing/Sloped Metal Roof	24	Metal panel roofing has been installed over the storage sheds at the north end of the arena. These roofs appear to be in fair condition. We assume they were last replaced in 2000.	Replace metal roof sections at end of service life. This item falls outside the ten year plan, costs associated with this item have not been carried into the cash flow tables. Review mechanical penetration adjacent to area of water ingress and repair any discontinuities in the sealant. Monitor and conduct further investigation as required.	Replacement	3 - Future Renewal											
30	Kerry Park Recreation Centre	B301002 Slope Roof	Roofing/Sloped Metal Roof	25	Metal panel roofing has been installed for the concession stand and canopy adjacent to the baseball diamonds. Both structures were built in 2008. The roofs appears to be in good condition. Some minor corrosion of the structural clips were noted for the canopy.	Replace metal roof sections at end of service life. This item falls outside the ten year plan, costs associated with this item have not been carried into the cash flow tables. Review mechanical penetration adjacent to area of water ingress and repair any discontinuities in the sealant. Monitor and conduct further investigation as required.	Replacement	3 - Future Renewal											
31	Kerry Park Recreation Centre	B301002 Slope Roof	Roofing/Sloped Metal Roof	26	Galvalume metal panel roofing has been installed for the roofs over the dug-outs and bull- pens located at the baseball diamonds. Some discolouration of the panels was noted with minor corrosion noted for the mounting brackets at the roof edge. These were last replaced in 2006.	Replace metal roof sections at end of service life. This item falls outside the ten year plan, costs associated with this item have not been carried into the cash flow tables. Review mechanical penetration adjacent to area of water ingress and repair any discontinuities in the sealant. Monitor and conduct further investigation as required.	Replacement	3 - Future Renewal											
32	Kerry Park Recreation Centre	B301002 Slope Roof	Roofing/Sloped Metal Roof	27	A corrugated canopy roof has been installed over the main front entrance. We understand that the roof and canopy structure were installed in 2016.	Replace metal roof sections at end of service life. This item falls outside the ten year plan, costs associated with this item have not been carried into the cash flow tables. Review mechanical penetration adjacent to area of water ingress and repair any discontinuities in the sealant. Monitor and conduct further investigation as required.	Replacement	3 - Future Renewal											
33	Kerry Park Recreation Centre	B301005 Gutters and Downspouts	Roofing/Sloped Metal Roof	28	Gutters and downspouts are located on the east and west elevations of the main roof over the hockey and curling rinks. Gutters were replaced when roof panels were replaced. Gutters are also located at the concession stand. One disconnected down-spout was noted at the concession stand.		Replacement	3 - Future Renewal											

Kerry Park Recreation Centre, 1035 Shawnigan-Mill Bay Rd, Mill Bay, BC

		сс	OMPONENT		CONDITION ASSESSMENT	RECOMMENDATION				10-YEAR	CAPITAL P
Row	Name		Type						017	2017	2018
	BLDG	ID	Location / 1	Photo	Description & History	Recommendation	Type	Priority	Total in 2017 Dollars	\$46,000	\$236,200
34	Kerry Park Recreation Centre	C101007 Interior Glazing	Throughout Building/Interior Glazing	29	Interior glazing has been installed between the lobby and the hockey arena, within the media booth overlooking the ice surface, within the managers office and at a number of locations over looking the curling rink. The glazing is a combination of IGU, single pane and wired safety glass in either wood or aluminum frames. The age of the assemblies vary.	The interior windows will last the life of the building; however a contingency has been provided for selective replacement. Replace as required as a result of breakage. Recommend that glazing be replaced with laminated tempered glass units.	Repair Allowance	Not Applicable	\$11,000		
35	Kerry Park Recreation Centre	C102001 Standard Interior Doors	Throughout Building/Interior Doors	30	Interior doors consist of a combination of metal doors, metal clad wood doors and wood doors. The metal doors providing access to the change rooms, hockey rink etc have been damaged/dented over time.	Doors are expected to last the life of the building. However, a budget is provided for some door replacement in the next 5 years. Paint touch-ups and minor repairs are assumed to fall under general maintenance.	Contingency	3 - Future Renewal	\$11,000		
36	Kerry Park Recreation Centre	C102001 Standard Interior Doors	Throughout Building/Interior Storefront Doors	31	Interior storefront doors are located within the main lobby providing access to the hockey arena and are wheel chair accessible. They are also located at the office space at the main front entrance. All appeared to be in good condition.	We assume that the storefront doors will last for approximately another 12 years. Regular maintenance will extend service life. This item falls outside the ten year plan, costs associated with this item have not been carried into the cash flow tables.	Contingency	3 - Future Renewal			
37	Kerry Park Recreation Centre	C102006 Interior Overhead Gate	Concession Stand/Interior Overhead Gate	32	4 interior overhead doors are located at the concession stand at the south end of the hockey arena. 2 are located in the lounge adjacent to the curling rink.	Replacement of overhead gate. This item falls outside the ten year plan, costs associated with this item have not been carried into the cash flow tables.	Replacement	3 - Future Renewal			
38	Kerry Park Recreation Centre	C102006 Interior Overhead Gate	Zamboni Access/Interior Overhead Gate		1 interior overhead doors is located at the north end of the hockey arena providing egress for the Zamboni ice machine.	Replacement of overhead gate.	Replacement	3 - Future Renewal	\$6,000		
39	Kerry Park Recreation Centre	C103002 Toilet and Bath Accessories, Rehab	Througout Building/Public Washrooms	33	Women's and Men's public washrooms are located within the hockey arena and adjacent to the McLean addition. Both appear to be in good condition. The washrooms located adjacent to the hockey arena were refurbished in 2014, while the washrooms adjacent to the McLean addition were refurbished in the 90's.	Renovate common washrooms as required. A contingency has been provided for periodic repairs.	Contingency	3 - Future Renewal	\$53,000		
40	Kerry Park Recreation Centre	C103002 Toilet and Bath Accessories, Rehab	Througout Building/Locker Room Washrooms	34	6 team dressing rooms are located on the first and second floors. As per facility staff, all washrooms and shower facilities were replaced in 2015/2016.	A contingency has been provided for periodic repairs.	Contingency	3 - Future Renewal	\$21,000		
41	Kerry Park Recreation Centre	C103099 Other Interior Specialties	Locker Rooms - Home Team - Level 2	35	The home team dressing room located on level 2 contains painted gypsum wall board, individual stalls with shelving and sports flooring. Ceilings consist of painted plywood. This change room was last refurbished in 2015.	General refurbishment of home team change room.	Contingency	3 - Future Renewal	\$32,000		
42	Kerry Park Recreation Centre	C103099 Other Interior Specialties	Locker rooms - Levels 1 and 2	36	5 change rooms and referees room typically consist of painted CMU walls, sports flooring, slat benches and hooks. The change rooms appears were last refurbished in 2015.	General refurbishment of change rooms.	Contingency	3 - Future Renewal	\$32,000		
43	Kerry Park Recreation Centre	C103099 Other Interior Specialties	Concession Stand/Change Rooms/Bathrooms	x	2 change rooms/bathrooms are located within the concession stand adjacent to the baseball diamonds. All components appear to be in good condition.	General refurbishment of change rooms/bath rooms.	Contingency	3 - Future Renewal	\$42,000		
44	Kerry Park Recreation Centre	C103099 Other Interior Specialties	Yoga Studio/Mclean Addition	37	The yoga studio is located at the southeast corner of the building and consists of laminate flooring, painted stucco walls and ceiling tiles. All components appear to be in good condition. We understand the studio was refurbished in the 2015 with the exception of the laminate flooring which was replaced in 2005.		Contingency	3 - Future Renewal	\$11,000		
45	Kerry Park Recreation Centre	C103099 Other Interior Specialties	Lounge (overlooking curling rink)	38	A lounge is located at the south end of the building overlooking the curling rink. Floors consist of carpet and laminate flooring. Both are in good condition and were installed approximately 10 years ago. Walls are painted gypsum. Ceiling tiles have been installed throughout and were replaced in 2015.	A contingency has been provided for refurbishment of the lounge.	Contingency	3 - Future Renewal	\$16,000		
46	Kerry Park Recreation Centre	C103099 Other Interior Specialties	Lounge Kitchen (overlooking curling rink)	39	A kitchen is located adjacent to the lounge and has ceramic tile floors, cabinets and counte tops. Cabinets are showing signs of wear; however all components appear to be in good condition.	A contingency has been provided for refurbishment of the kitchen finishes.	Contingency	3 - Future Renewal	\$32,000		
47	Kerry Park Recreation Centre	C103099 Other Interior Specialties	Concession Stand/Interior Specialties	40	The concession stand located at the southwest corner of the hockey arena consists of aging resilient flooring, cabinets and storage space.	Replace resilient flooring within the next 5 years.	Replacement	3 - Future Renewal	\$11,000		
48	Kerry Park Recreation Centre	C103099 Other Interior Specialties	Concession Stand/Interior Specialties	41	The concession stand located at the southwest corner of the hockey arena consists of aging resilient flooring, cabinets and storage space.	A contingency has been provided for the replacement of the aging cabinets and counters along with general refurbishment.	Replacement	3 - Future Renewal	\$27,000		

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3	2019	2020	2021	2022	2023	2024	2025	2026
00	\$26,000	\$23,200	\$272,000	\$52,200	\$21,500	\$221,200	\$14,500	\$509,200
			\$5,000					
			\$11,000					
								\$6,000
			\$53,000					
						\$21,000		
								\$32,000
						\$32,000		
				\$42,000				
						\$11,000		
						\$16,000		

\$32,000

\$27,000

Kerry Park Recreation Centre, 1035 Shawnigan-Mill Bay Rd, Mill Bay, BC

		cc	OMPONENT		CONDITION ASSESSMENT	RECOMMENDATION				10-YEAR	CAPITAL PI	LAN							
Row	ame		/ be						17	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026
	BLDG N	ID	Location / T	Photo	Description & History	Recommendation	Туре	Priority	Total in 20 Dollars	\$46,000	\$236,200	\$26,000	\$23,200	\$272,000	\$52,200	\$21,500	\$221,200	\$14,500	\$509,200
Re	erry Park ecreation entre	C103099 Other Interior Specialties	Concession Stand/Interior Specialties	x	The concession stand located adjacent to the baseball diamonds was built in 2008. Interiors consist of painted gypsum, concrete floors, cabinetry and counters. All appeared to be in good condition.	A contingency has been provided for general refurbishment.	Replacement	3 - Future Renewal	\$21,000										\$21,000
Re	erry Park ecreation entre	C103099 Other Interior Specialties	Manager's Office and Staff Room - Hockey Arena	42	The manager's office is located on the second floor at the north east corner of the hockey arena adjacent to the staff room. Floors consist of recently replaced laminate flooring, painted walls panels/gypsum board. Aging ceiling tiles are located within the staff room. Cabinets with counter and sink are located within the staff room along with metal lockers. Both rooms appear to be in good condition.	For the general refurbishment of the cabinetry, and the replacement of interior finishes.	Contingency	3 - Future Renewal	\$16,000										\$16,000
Re	erry Park ecreation entre	C103099 Other Interior Specialties	General Office	43	The general office is located adjacent to the main front entrance and consists of individual offices along with a main front desk. Carpeting has been installed throughout. Walls consist of painted gypsum. Carpeted stairs lead up to a singles office on the second floor. All components appeared to be in good condition with no major issues noted.	For the general refurbishment and the replacement of interior finishes. This item falls outside the ten year plan, costs associated with this item have not been carried into the cash flow tables.	Contingency	3 - Future Renewal	\$32,000										
Re	erry Park ecreation entre	C301003 Gypsum Wallboard Finishes	Throughout Building/Painting	44	The gypsum board walls and CMU walls were all repainted in 2016 in the hockey arena, curling rink, hallways and lobbies.	A contingency has b been provided to complete sectional repainting on a 5 year cycle.	Contingency	3 - Future Renewal	\$11,000					\$11,000					\$11,000
Re	erry Park ecreation entre	C302004 Resilient Floor Finishes	Throughout Building/Sports Flooring	45	Sports flooring in located throughout the hockey arena, lobby, hallways dressing rooms and upper concourse. All sports flooring was replaced in 2015.	Replace sports flooring at end of service life. Replace tiles in high traffic areas as required prior to major replacement.	Replacement	3 - Future Renewal											
Re	erry Park ecreation entre	C302005 Corridor Flooring	Concourse -Painting	46	Painted plywood flooring has been installed for the concourse on either side of the hockey arena. The flooring was repainted in 2015. No major issues were noted with the plywood flooring and replacement is not anticipated within the next 10 years. The paint finish appears to be in good condition.		Contingency	3 - Future Renewal	\$16,000					\$16,000					
Re	erry Park ecreation entre	C302005 Carpeting	Corridors Throughout Building/Carpet	47	Carpeting is located within the corridor servicing the lounge and yoga studio and appears to be nearing the end of its predicted service life.	Replace corridor carpeting.	Replacement	3 - Future Renewal	\$8,000			\$8,000							
Re	erry Park ecreation entre	C303004 Ceiling	Arena and Curling Rink/Ceiling Paint	48	The girders and underside of the q-deck for both the hockey arena and the curling rink were cleaned and painted in 2006. The paint finish appears to be in good condition.	Repaint girders and underside of Q-deck.	Replacement	3 - Future Renewal	\$189,000										\$189,000
Re	erry Park ecreation entre	D304001 Air Distribution, Heating and Cooling	Rooftop/Heat Pump	49	This heat pump was installed around 2005 and serves the administration offices. Heat pumps typically have a service life of 15 years. It also uses R22 as the refrigerant, which will be phased out in Canada starting in 2020. While it will still be available for years after, the availability will be limited and therefore costs will increase.	Replace unit at end of service life.	Replacement	3 - Future Renewal	\$11,000			\$11,000							
Re	erry Park ecreation entre	D309002 Refrigeration Systems	Compressor Room/Cimco Chillers	50	Chiller system and pumps are in the process of being replaced in 2017. Previous chillers and pumps were installed approximately in 2000. They were at the end of their expected life. New chillers and pumps are expected to last approximately 20 years with regular maintenance.	Replacement of chillers is in progress. As the units have already been purchased, costs associated with this item have not been carried into the cash flow tables.	Replacement	2 - Restore Functionality											
Re	erry Park ecreation entre	D309002 Refrigeration Systems	Compressor Room/Brine Pumps	51	Chiller system and pumps are in the process of being replaced in 2017. Previous chillers and pumps were installed approximately in 2000. They were at the end of their expected life. New chillers and pumps are expected to last approximately 20 years with regular maintenance.	Replacement of pumps is in progress. As the units have already been purchased, costs associated with this item have not been carried into the cash flow tables.	Replacement	2 - Restore Functionality											
Re	erry Park ecreation entre	D302004 Fuel-fired Unit Heaters	Hockey Rink/Radiant Heating for Audience Seating	52	Appears to be in functional condition but was not tested during walk-through. Age unknown (estimated).	Replace system at end of service life. Clean radiant surfaces at least once per year to maximize heating efficiency, preferably well in advance of the heating season.	Replacement	3 - Future Renewal	\$16,000				\$16,000						
Re	erry Park ecreation entre	D202003 Domestic Water Equipment	Boiler Room/Hot Water Storage Tank	53	Storage tanks were replaced during the course of this review.	Replace the DHW storage tank at the end of their service life. This item falls outside the ten year plan, costs associated with this item have not been carried into the cash flow tables.	Replacement	3 - Future Renewal											
Re	erry Park ecreation entre	D302002 Hot Water Boilers	Boiler Room/Backup Electric Storage Tank Water Heater	54	Since this is an emergency backup system connected to the emergency diesel generator, it is infrequently used. Electric hot water tanks have a lifetime of approximately 15 years.	Recommend testing this system annually at the end of its service life to assess overall condition. It could last well beyond its rated life. Replace as necessary.	Replacement	3 - Future Renewal	\$3,000						\$3,000	\$3,000			

Kerry Park Recreation Centre, 1035 Shawnigan-Mill Bay Rd, Mill Bay, BC

		cc	MPONENT		CONDITION ASSESSMENT	RECOMMENDATION				10-YEAR	CAPITAL PI	LAN							
Row	ame		уре						17	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026
	N DOTA	ID	Location / T	Photo	Description & History	Recommendation	Type	Priority	Total in 201 Dollars	\$46,000	\$236,200	\$26,000	\$23,200	\$272,000	\$52,200	\$21,500	\$221,200	\$14,500	\$509,200
63	Kerry Park Recreation Centre	Boilers	Boiler Room/Modulating Boilers and Circulation Pumps	55-57	Three Viessmann stainless steel boilers in series installed in 2010 serve four primary heating loops: DHW supply, AHU-1 (lounge/McLean Room), AHU-2 (dressing rooms), and hot water radiators in washrooms and skate change rooms. Drawings indicate that hot water circulation pumps for the boiler-side system were installed at the same time. Boilers typically have a service life of 25 years. Pumps have an expected service life of about 20 years.	This item falls outside the ten year plan, costs associated with this item have not been carried into the cash flow tables.	Replacement	3 - Future Renewal											
64	Kerry Park Recreation Centre	D304003 Hot Water Distribution Systems	Boiler Room/Flat-Plate Heat Exchanger	58	Mechanical drawings indicate that the heat exchanger was to be removed, flushed, and cleaned at the time of boiler replacement. Verify with the mechanical contractor whether this process was completed. Heat exchangers have a typical expected life of 25 years. With regular maintenance, it could last longer. Age unknown (estimated).	Replace unit at end of service life. This item falls outside the ten year plan, costs associated with this item have not been carried into the cash flow tables.	Replacement	3 - Future Renewal	\$3,000	\$3,000									
65	Kerry Park Recreation Centre	D309099 Other Special Mechanical Systems	Back Laneway/ Ammonia Heat Recovery System	59/60	Recently installed ammonia heat recovery system appears to be in good condition. Heat exchangers have a typical lifespan of 24 years.	Replace system heat exchanger at end of service life. Verify with firestopping professional whether the current means of firestopping heat recovery supply pipe through exterior wall is code-compliant (see photo). This item falls outside the ten year plan, costs associated with this item have not been carried into the cash flow tables.	Replacement	3 - Future Renewal											
66	Kerry Park Recreation Centre	D309099 Other Special Mechanical Systems	Back Laneway/ Munters Dehumidification System	61	Munters dehumidification system was recently installed to replace an aging system.	Perform regular maintenance in accordance with manufacturer's guidelines. Replace system heat exchanger at end of service life. This item falls outside the ten year plan, costs associated with this item have not been carried into the cash flow tables.	Replacement	3 - Future Renewal											
67	Kerry Park Recreation Centre	D304007 Exhaust Systems	Rooftop/ Exhaust Fans (i.e. EF- 2)	62	Belt driven exhaust fans appear to be functioning correctly and are in good condition. Fans have a typical lifetime of 20 years.	Continue to replace belts and other components on an as needed basis until 2028. Plan to replace units in 2028. This item falls outside the ten year plan, costs associated with this item have not been carried into the cash flow tables.	Replacement	3 - Future Renewal											
68	Kerry Park Recreation Centre	D309002 Refrigeration Systems	Mechanical Room/ Reciprocating Compressors (2)	63	Compressors of this type have a typical lifetime of 20 years.	Replace motors and belts per manufacturers' recommendations in the interim operational period. This item falls outside the ten year plan, costs associated with this item have not been carried into the cash flow tables.	Replacement	3 - Future Renewal											
69	Kerry Park Recreation Centre	D305002 Unit Heaters	Warm Room/Fan Coils	64	Unit heaters in skate change room appear to be original to the building. Age was estimated.	Plan to replace immediately.	Replacement	2b - Exceeded Service Life	\$7,000	\$7,000									
70	Kerry Park Recreation Centre	D309002 Refrigeration Systems	Back Laneway/ Condenser	65/66	Appears to be in functional condition and is washed annually. This piece of equipment is dated, however, and despite regular cleaning and maintenance, will reach the end of its life shortly. Condensers of this type have a typical life of 20 years.	Fluid-in interface from piping appears to be corroding excessively. Repair/mitigate leaks as soon as possible. Replace unit at end of life.	Replacement	3 - Future Renewal	\$90,000					\$90,000					
71	Kerry Park Recreation Centre		Pump Room/ Well-x-Trol Expansion Tanks	67	Expansion tanks for the domestic water supply system. Age is estimated. Expansion tanks can be expected to provide trouble free service for 10-15 years.	Replace at end of life.	Replacement	3 - Future Renewal	\$3,000	\$3,000									
72	Kerry Park Recreation Centre	D202003 Domestic Water Equipment	Pump Room/ Booster Pump(s)	68-74	Pumps in the water supply room are aging and are beginning to show signs of excessive wear such as leaks and considerable corrosion. Pump for fire suppression system needs replacing due to leaks. Base-mounted pumps have a lifespan of approximately 20 years. Age was unable to be determined and was estimated.	Plan to replace most, if not all, of these pumps as soon as possible. Some associated piping reportedly burst a few years ago; recommend replacing piping at the same time.	Replacement	2b - Exceeded Service Life	\$5,000	\$5,000									
73	Kerry Park Recreation Centre	D305006 Package Units	Zamboni Room/ Dehumidification Heat Pump	75	Heat pump serves the dehumidification system. Heat pumps have a typical lifespan of 15 years.	Replace at end of life. This item falls outside the ten year plan, costs associated with this item have not been carried into the cash flow tables.	Replacement	3 - Future Renewal											\$16,000
74	Kerry Park Recreation Centre	D304005 Glycol Distribution Systems	Zamboni Room/ Ice Melt Mechanical System	76-82	Most mechanical equipment here was installed at the same time, and is expected to last approximately 15 years. This includes pumps, expansion tanks, MGT1/2, air separators, etc.	Replace failing equipment on a per-instance basis. Re-evaluate condition of system in 12 years. This item falls outside the ten year plan, costs associated with this item have not been carried into the cash flow tables.	Repair Allowance	3 - Future Renewal								\$2,500		\$2,500	

64

Kerry Park Recreation Centre, 1035 Shawnigan-Mill Bay Rd, Mill Bay, BC

	CC	OMPONENT		CONDITION ASSESSMENT	RECOMMENDATION				10-YEAR	CAPITAL P	LAN							
ame		уре						17	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026
BLDG N	ID	Location / T	Photo	Description & History	Recommendation	Type	Priority	Total in 2017 Dollars	\$46,000	\$236,200	\$26,000	\$23,200	\$272,000	\$52,200	\$21,500	\$221,200	\$14,500	\$509,200
5 Kerry Park Recreation Centre	D305005 Electric Heating	Workshop/ Electric Unit Heater	83	Electric unit heating the workshop/garage. Age unknown but appears to be dated. Typical lifetime is 13 years.	Plan to replace unit immediately.	Replacement	2b - Exceeded Service Life	\$3,000	\$3,000									
6 Kerry Park Recreation Centre	D305005 Electric Heating	Dressing Rooms, Staff Room, Pump Room/ Electric Wall Heaters	84-86	Relatively new units. Life expectancy is around 15 years.	Replace electric wall heaters at end of service life. This item falls outside the ten year plan, costs associated with this item have not been carried into the cash flow tables.	Replacement	3 - Future Renewal											
7 Kerry Park Recreation Centre	E109002 Food Service Equipment	Kitchen+ Concession/ Range hood/deep fryer/etc.	87/88	Kitchen equipment is expected to last 20 more years with regular cleaning and maintenance.	Clean and maintain kitchen equipment per manufacturers instructions. Replace equipment at end of service life. This item falls outside the ten year plan, costs associated with this item have not been carried into the cash flow tables.	Replacement	3 - Future Renewal											
8 Kerry Park Recreation Centre	D304099 Other Distribution System	lce Rinks/ In-Floor Brine Loop	89	Hockey Rink slab and loop replaced in 2015. Curling rink loop is original to the building and appears to be in functional condition.	Inspect all loops regularly for leaks and repair promptly as brine is very corrosive. Investigate the condition of the curling rink loop in greater detail. Visual inspection cannot determine the condition of the loop with any accuracy.	Study		\$3,000	\$3,000									
9 Kerry Park Recreation Centre	D305006 Package Units	Staff Lounge/ Air Conditioner	90	Appears to be in good condition, but is approaching the end of its useful life. Age unknown and estimated.	Replace at end of life.	Replacement	2b - Exceeded Service Life	\$3,000	\$3,000									
0 Kerry Park Recreation Centre	E101004 Laundry Equipment	Referee Room/ Dryer Vent	91	Vent terminates at intersection of interior wall and ceiling.	Recommend connecting this to a roof vent or at least positioning exhaust directly below general exhaust grille for the room. This will minimize humidity build-up on the wall/ceiling next to the exhaust, that will eventually damage interior finishes.	Repair Allowance	4a- Discretionary Renewal	\$3,000	\$3,000									
1 Kerry Park Recreation Centre	D304001 Air Distribution, Heating and Cooling	Rooftop/ Aeromatic HRVs (2)	92	Units serve to recover heating/cooling from the McLean room, hallway, and the curling lounge.	Replace units at end of life.	Replacement	3 - Future Renewal	\$32,000								\$32,000		
2 Kerry Park Recreation Centre	D304001 Air Distribution, Heating and Cooling	Rooftop/ Trane HPs (3)	93	Units were manufactured and installed in 2010. Heat pumps typically have a lifetime of 15 years.	Replace units at end of life.	Replacement	3 - Future Renewal	\$63,000								\$63,000		
3 Kerry Park Recreation Centre	D304007 Exhaust Systems	Main Washrooms/Exhaust Grilles	94	Washroom exhaust was likely increased at some point to mitigate odors. However, flow rate appears to be excessive given the audible airflow at the exhaust grilles.	Recommend commissioning authority to study and/or verify: consider turning down fan power, increasing duct size, or adding a third exhaust grille in the washroom to alleviate. Whistling in ducts implies a faster air flow rate than the ducts or grilles can accommodate: therefore the fan motor is operating excessively, which wastes energy, and could lead to premature failure.	Study		\$6,000	\$6,000									
4 Kerry Park Recreation Centre	D202003 Domestic Water Equipment	Concession/Hydronic Pump	95	Pump is original to the building.	Replace at end of life.	Replacement	3 - Future Renewal	\$3,000								\$3,000		
5 Kerry Park Recreation Centre	D202003 Domestic Water Equipment	Concession/Hot Water Tank	96	Tank is original to the building, and serves the DHW and radiant heating loop for the concession building.	Replace at end of life.	Replacement	3 - Future Renewal	\$3,000					\$3,000					
6 Kerry Park Recreation Centre	D302002 Hot Water Boilers	Storage Room (130)/ Space Saver Hot Water Tank	97	This water heater was manufactured in 2012. Hot water tanks usually have a service life of 8-10 years for commercial applications, however given its limited usage, could last longer with proper maintenance (replacing anodes).		Replacement	3 - Future Renewal	\$3,000					\$3,000					
7 Kerry Park Recreation Centre	D202003 Domestic Water Equipment	Mechanical Room/ Pump	98	Base-mounted pump is of 1998 vintage. Typical base-mounted pumps have a lifetime of about 20 years.	Plan to replace this pump very soon as it is approaching the end of its useful life.	Replacement	3 - Future Renewal	\$3,000		\$3,000								
8 Kerry Park Recreation Centre	E109002 Food Service Equipment	Concession/ Range hood/deep fryer/etc	99	Original equipment installed at time of building completion.	Replace at end of life. Recommend regular cleaning and maintenance per manufacturer's guidelines. This item falls outside the ten year plan, costs associated with this item have not been carried into the cash flow tables.	Replacement	3 - Future Renewal											
9 Kerry Park Recreation Centre	D2010 Plumbing Fixtures	Various/ Plumbing fixtures - sinks, faucets, toilets, urinals, showers, etc	100-104	Relatively new and working as intended. Replace fixtures as needed, but expected to last well beyond 15 years.	Replace on a per-instance basis. Set aside a nominal amount of rolling budget for this work.	Repair Allowance	2 - Restore Functionality	\$10,000	\$1,000	\$1,000	\$1,000	\$1,000	\$1,000	\$1,000	\$1,000	\$1,000	\$1,000	\$1,000

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Kerry Park Recreation Centre, 1035 Shawnigan-Mill Bay Rd, Mill Bay, BC

		cc	MPONENT		CONDITION ASSESSMENT	RECOMMENDATION				10-YEAR	CAPITAL PI	LAN							
Row	lame		lype						117	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026
	BLDG N	ID	Location / 1	Photo	Description & History	Recommendation	Type	Priority	Total in 201 Dollars	\$46,000	\$236,200	\$26,000	\$23,200	\$272,000	\$52,200	\$21,500	\$221,200	\$14,500	\$509,200
R	Cerry Park Recreation Centre	G303001 Storm Sewer Piping	Building/ Perimeter Drain	x	Scoped in 2017.	Repeat scoping of perimeter drain every 3 years.	Repair Allowance	2 - Restore Functionality	\$3,000			\$3,000				\$2,000			\$2,000
R	Cerry Park Recreation Centre	G301002 Potable Water Distribution	Mechanical Room/Main Water Pipe	105	Visual review suggests that the exterior of the water supply pipe entering the room is showing signs of pitting due to excessive corrosion.	Recommend replacing pipe as a preventative measure.	Replacement	2 - Restore Functionality	\$3,000	\$3,000									
R	Cerry Park Recreation Centre	D503008 Security Systems	Building/ Security Camera System	x	Camera system was installed in approximately 2014/2015 and appears to be working adequately. Typical lifetime for security systems is 8-10 years. Replacement parts may be purchased during this timeframe if needed, to extend its life.	Recommend replacing at 10 years as technology advances are likely for these systems.	Replacement	3 - Future Renewal	\$16,000								\$16,000		
R	Cerry Park Recreation Centre	D502099 Other Lighting and Branch Wiring	Mechanical Room/ Junction Boxes (multiple cases)	106-109	Several junction boxes are missing cover plates; likely due to maintenance staff undergoing a chiller system upgrades and needing access.	All junction boxes should have cover plates installed per code (for safety). This item falls below the project threshold and has not been carried forward in the cash flow tables.	Repair Allowance	1 – Immediate											
94 K	erry Park		Back Laneway/ Kohler backup	110	Relatively new installation, tested annually. Continue to monitor performance regularly as	Replace emergency generator at end of service life.	Replacement	3 - Future										Į	í
	Recreation Centre	Power Generation	diesel generator		per manufacturer suggested guidelines. Generators are expected to last 20-30 years depending on number and length of power outages.	This item falls outside the ten year plan, costs associated with this item have not been carried into the cash flow tables.		Renewal										ľ	
R	Cerry Park Recreation Centre	D306099 Other Controls Instrumentation	Various/ Occupancy sensors controlling lighting	111	Phased installation of occupancy sensors from 2012-2014. Sensors have a service life of about 15 years.	Plan to replace approximately 10 years from now. Recommend to replace all in one project to realize bulk product and installation savings, if budget permits.	Replacement	3 - Future Renewal	\$6,000										\$6,000
R	Cerry Park Recreation Centre	D501005 Panels	Electrical Rooms+Closets/ Breaker Panels (various)	112/113	Some panels showing signs of aging, likely original to the building in 1975. Panels have a service life of 30-40 years.	Plan on replacing some of the older panels on an ongoing basis. In particular, older panels can be found near the main washrooms near McLean Room, and near the stairs leading towards 2nd floor office space. This holds true for switches as well (pictured).	Replacement	3 - Future Renewal	\$16,000		\$3,200		\$3,200		\$3,200		\$3,200		\$3,200
R	Cerry Park Recreation Centre	D501001 Main Transformers	Electrical Room/ Transformer	114	Age unknown and estimated. Likely replaced in the 1980's due to a fire. Typical lifetimes are on the order of 30 years.	Replace main transformer at end of service life. Confirm with IR scan, that this unit will need replacing shortly. The costing provided is associated with the replacement costs and includes a contengency for issolated wire replacement.	Replacement	2b - Exceeded Service Life	\$42,000		\$42,000								
R	Cerry Park Recreation Centre	E102009 Audio- Visual Equipment	Rink/ Scoreboards	115	Replaced 8 years ago.	Replace at end of life.	Replacement	3 - Future Renewal	\$10,000							\$10,000		 	
R	Cerry Park Recreation Centre	G403098 Other Communication and Alarm	Rink/ CO&NO2 Sensors	116	3 sensors in the rink area, 1 in the curling area.	Replace at end of life.	Replacement	3 - Future Renewal	\$11,000		\$11,000						\$11,000		
R	Cerry Park Recreation Centre	G403002 Sound Systems	Sound/PA System	117	System was not tested. It was installed in 2011 and is functional according to building staff.	Replace at end of life. This item falls outside the ten year plan, costs associated with this item have not been carried into the cash flow tables.	Replacement	3 - Future Renewal											
	Cerry Park Recreation	G401003 Switches, Controls and	Back Laneway/ Exterior Switch	118	Showing signs of corrosion/water ingress.	Replace with new switch suitable for exterior installation, as soon as possible.	Replacement	1 – Immediate	\$3,000	\$3,000									
c	Centre	Devices																	
R	Kerry Park Recreation Centre	D502002 Lighting Equipment	Building/ Interior Lighting (General)	x	Curling social lounge has LEDs with dimmers. Hallways are outfitted with T5 LEDs. Lighting is continuously being upgraded to LEDs as bulbs or fixtures fail.	Continue to replace with LEDs. LEDs are increasingly more affordable, save a significant amount of energy over incandescent bulbs, and have a much longer lifespan than other lighting technologies, obviating the need for constant replacement.	Contingency	3 - Future Renewal	\$3,000	\$3,000	\$3,000	\$3,000	\$3,000	\$3,000	\$3,000	\$3,000	\$3,000	\$3,000	\$3,000
R	Cerry Park Recreation Centre	D502002 Lighting Equipment	Building/ Exterior Lighting	x	Exterior lighting appears to be in good shape. It was upgraded in 2016 with LEDs.	Replace system at end of service life. This item falls outside the ten year plan, costs associated with this item have not been carried into the cash flow tables.	Replacement	3 - Future Renewal											
R	Cerry Park Recreation Centre	G401003 Switches, Controls and Devices	Mechanical Rooms/ Variable Frequency Drives	119/120	VFDs typically have a lifetime of 15 years. Age unknown and is estimated.	Replace at end of life.	Replacement	3 - Future Renewal	\$6,000										\$6,000
R	Cerry Park Recreation Centre		Curling Kitchen/Fire suppression system	121	Visual inspection indicates that it appears to be in operational condition. The system was not tested during the walkthrough. Age unknown and estimated.	Regular inspections recommended to ensure proper functionality. This item falls outside the ten year plan, costs associated with this item have not been carried into the cash flow tables.	Replacement	3 - Future Renewal											

Start YrCowichan Valley Regional District2017Facility Condition Assessment and Capital Plan
Kerry Park Recreation Centre, 1035 Shawnigan-Mill Bay Rd, Mill Bay, BC

		со	MPONENT		CONDITION ASSESSMENT	RECOMMENDATION				10-YEAR	CAPITAL P	LAN							
Row	BLDG Name	ID	Location / Type	Photo	Description & History	Recommendation	Туре	Priority	Total in 2017 Dollars	2017 \$46,000	2018 \$236,200	2019 \$26,000	2020 \$23,200	2021 \$272,000	2022 \$52,200	2023 \$21,500	2024 \$221,200	2025 \$14,500	2026 \$509,20
R	erry Park ecreation Centre	F104005 Ice Rinks	Hockey Arena/Boards and Glass	122	The boards and glass for the hockey arena were replaced in 2015.	Replace boards and glass at end of service life.	Replacement	3 - Future Renewal											
R	erry Park ecreation entre	F104005 Ice Rinks	Seating - Throughout Hockey Arena/Repaint	123	The bleachers consist of painted wood benches with wood flooring and plywood risers. Portions of bleachers on the east side have recently been refurbished (2015) with sports flooring for the seat pans and high density polyethylene paneling installed for the risers. Some minor deterioration of the paint finish was noted on the east elevation. The wood components appear to be in serviceable condition with no major deficiencies noted.	Repaint bleachers on a 5 year cyclical basis.	Replacement	3 - Future Renewal	\$16,000					\$16,000					\$16,00
R	erry Park ecreation centre	F104005 Ice Rinks	lce Rink Stairs/Repaint	124	Similar to the bleachers, the stairs are constructed out of wood and plywood. Wearing of the paint finish was noted at a number of locations. The wood components appear to be in serviceable condition with no major deficiencies noted. The lack of tactile warning strips at the top of the stairs was noted throughout.	and install as required. Costs associated with tactile warning strips have not been	Replacement	3 - Future Renewal	\$6,000					\$6,000					\$6,00
R	erry Park ecreation entre	F104005 Ice Rinks	Guards and Handrails - Hockey Arena	125	A combination of wood and metal guardrails and handrails are present throughout the hockey arena. All appear to be in good condition. Climbable guard rails are located at the bleachers on both the east and west sides. Lack of guards noted at the wheelchair viewing area on the west side. Lack of handrails noted at a number of stair locations.	Recommend that all area be reviewed and guards/handrails be modified, replaced or installed to meet code requirements.	Contingency	3 - Future Renewal	\$16,000					\$16,000					\$16,0
R	erry Park ecreation centre	F104005 Ice Rinks	Hockey Arena and Curling Rink/Concrete Slab	126	hockey area. The slab for the curling rink is original to the building and only minor cracking was noted.	Replacement of the curling rink slab is not anticipated within the next 10 years. This item falls outside the ten year plan, costs associated with this item have not been carried into the cash flow tables.	Replacement	3 - Future Renewal											
R	erry Park ecreation entre	G204001 Fencing and Gates	Exterior/Chain Link	127	We understand that the fencing was last replaced in 2005.	Replace outdoor chain link fences at the end of service life. This item falls outside the ten year plan, costs associated with this item have not been carried into the cash flow tables.	Replacement	3 - Future Renewal											
R	erry Park ecreation entre	G909099 Other Special Construction	Exterior/Metal Bleachers	128	aluminum frames and benches with chain-link fencing.	Replace bleachers at end of service life. This item falls outside the ten year plan, costs associated with this item have not been carried into the cash flow tables.	Replacement	3 - Future Renewal											
R	erry Park ecreation Centre	P100001 Seismic Screening		x		For conducting a seismic screening of the building. The screening will be done according to the "Manual for Screening of Buildings for Seismic Investigation", published by the National Research Council of Canada (1992).	Study		\$7,000										



Cowichan Valley Regional District Kerry Park Recreation Centre - Report Photos

Photo 001



Photo 002



Cowichan Valley Regional District Kerry Park Recreation Centre - Report Photos

Photo 003



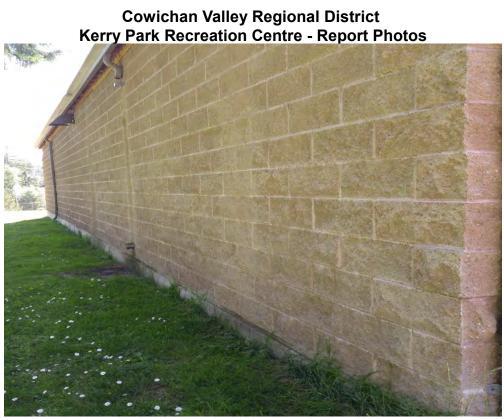


Photo 005







71

Photo 008





Cowichan Valley Regional District Kerry Park Recreation Centre - Report Photos



Photo 011





Cowichan Valley Regional District Kerry Park Recreation Centre - Report Photos

Photo 013

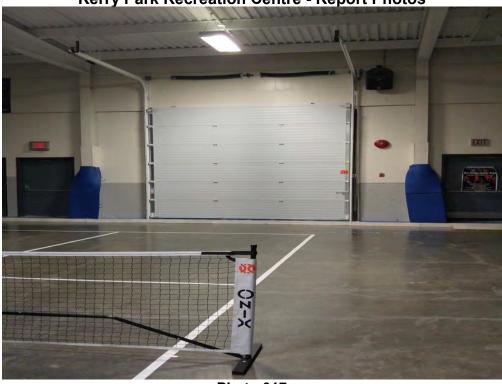


Photo 014





Photo 016



Cowichan Valley Regional District Kerry Park Recreation Centre - Report Photos

Photo 017



Photo 018





Photo 020



Photo 021





Cowichan Valley Regional District Kerry Park Recreation Centre - Report Photos



Photo 024



Cowichan Valley Regional District Kerry Park Recreation Centre - Report Photos

Photo 025



Photo 026



Photo 027



Photo 028





Cowichan Valley Regional District Kerry Park Recreation Centre - Report Photos



Photo 031



Photo 032



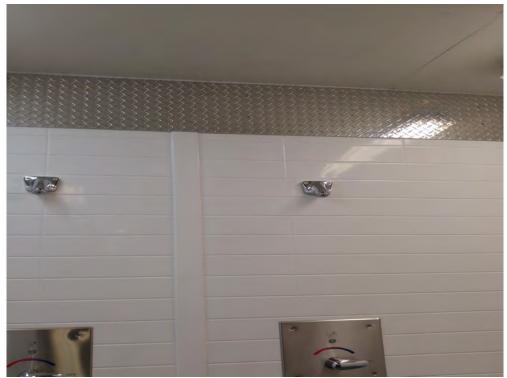


Photo 034

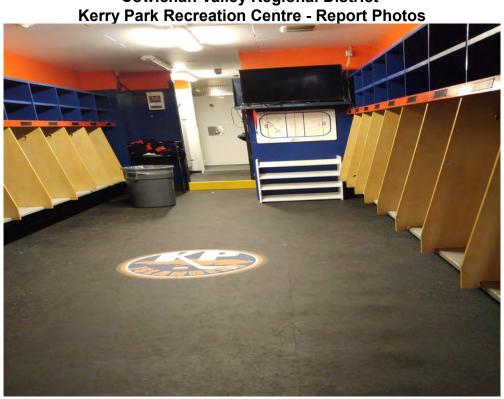


Photo 035



Cowichan Valley Regional District Kerry Park Recreation Centre - Report Photos

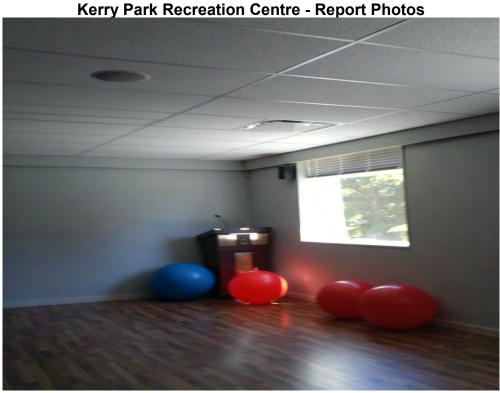


Photo 037



Photo 038





Photo 040



Photo 041





Photo 043





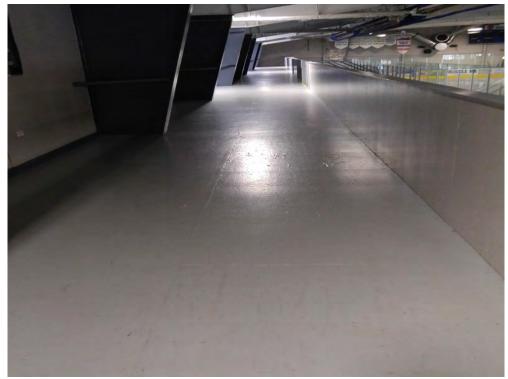


Photo 046



Photo 047



Photo 048





Photo 050



Photo 051



Photo 052



Photo 053



Photo 054



Photo 055



Photo 056



Photo 057



Photo 058



Photo 059



Cowichan Valley Regional District Kerry Park Recreation Centre - Report Photos



Photo 061



Cowichan Valley Regional District Kerry Park Recreation Centre - Report Photos









Photo 066



Cowichan Valley Regional District Kerry Park Recreation Centre - Report Photos

Photo 067



Photo 068



Photo 069



Photo 070



Photo 071



Photo 072



Photo 073



Photo 074



Photo 075



Photo 076

Cowichan Valley Regional District Kerry Park Recreation Centre - Report Photos

Photo 077



Photo 078

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Photo 079



Cowichan Valley Regional District Kerry Park Recreation Centre - Report Photos



Photo 081



Photo 082



Photo 083



Photo 084



Cowichan Valley Regional District Kerry Park Recreation Centre - Report Photos

Photo 085



Photo 086

Cowichan Valley Regional District Kerry Park Recreation Centre - Report Photos

Photo 087





Photo 089

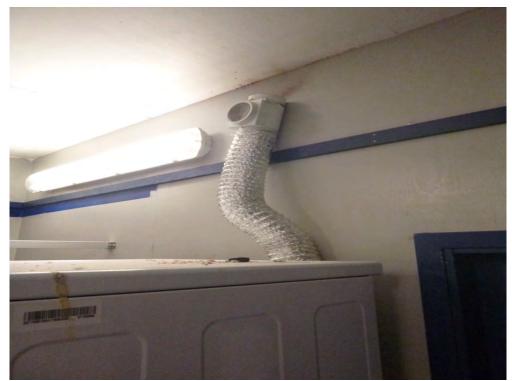


Photo 090



Photo 091





Photo 093





Cowichan Valley Regional District Kerry Park Recreation Centre - Report Photos

Photo 095





Photo 097



Photo 098





Cowichan Valley Regional District Kerry Park Recreation Centre - Report Photos





Cowichan Valley Regional District Kerry Park Recreation Centre - Report Photos





Photo 104



Photo 105





Photo 107



Photo 108



Photo 109



Cowichan Valley Regional District Kerry Park Recreation Centre - Report Photos



Photo 111



Photo 112



Photo 113



Photo 114



Photo 115



Photo 116



Photo 117





Photo 119



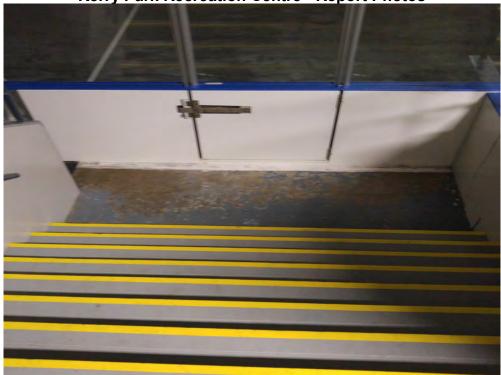
Cowichan Valley Regional District Kerry Park Recreation Centre - Report Photos

Photo 120



Cowichan Valley Regional District Kerry Park Recreation Centre - Report Photos

Photo 122



Cowichan Valley Regional District Kerry Park Recreation Centre - Report Photos

Photo 123



Photo 124



Photo 125



Photo 126



Appendix A

A – 03 & 04 Island Savings Centre Cowichan Performing Arts Centre 133

Island Savings Centre & Cowichan Performing Arts Centre



Cowichan Valley Regional District MH Project No. 5170700.00

November 2017



Cowichan Valley Regional District 175 Ingram Street Duncan, BC V9L 1N8



PROPERTY DESCRIPTION	PROPERTY STATISTIC	S
ISC was built in 1974 with major renovations in 1976 and 2004. It is three storeys and includes an ice arena, meeting rooms, multipurpose rooms, gymnasium, library, gymnastics facility, Cowichan Perfuming Arts Centre, and office space. It	Gross Floor Area:	177,614 sf.
is used daily for recreation and community activities. (Two Passenger Elevators, One Freight Elevator, and One Dumb Waiter)		
	Replacement Value: Target FCI: Current FCI:	\$69,091,866 0.050 0.100

REPORT OVERVIEW

We identified Priority 1 - Immediate expenditures totalling \$9,000 as follows:

- Row 158 D2010 Plumbing Fixtures Various/ Washroom Sinks, Toilets, Showers, Urinalsfastening of piping (\$3,000)
- Row 159 D501001 Main Transformers -Replacement of grates (\$3,000)
- Row 178 E102005 Auditorium and Stage Equipment Rigging (\$3,000)

The following provides an overview of the visual seismic, building code, accessibility and energy efficiency reviews completed.

Seismic Review

Seismic work completed to date:	None
Recommendations:	Conduct seismic review for the complex
Building Code Review	
Built under what code:	NBC 1970, BCBC 1998
Deficiencies observed:	Tactile warning strips
Accessibility Review	
Access into building:	Yes
Access throughout building:	Limited
Access to washrooms:	Yes
Recommendations:	Conduct an accessibility study

We identified recommendations of approximately \$7,447,066 over the next five years. The following is a summary of the major projects (over \$10,000) we believe will be required the next five years, and elements whose condition is unknown and/or where further investigation is recommended:

-Row 6 - B201001 Exterior Walls - Repair to split face masonry cladding at Library (\$16,000)

-Row 9 - B201001 Exterior Walls - Repaint concrete mass walls (\$11,000) -Row 10 - B201001 Exterior Walls - Replace stucco cladding at theatre (\$778,000)

-Row 12 - B2010 Exterior Walls - Replace glass block assemblies (\$35,000) -Row 16 - B201010 Exterior Coatings - Recoating of stucco cladding (\$162,000) -Row 17 - B201010 Exterior Coatings - Recoating of stucco cladding (\$37,000) -Row 19 - B201011 Joint Sealant - Repair/replace exterior joint sealant (\$79,000) -Row 20 - B2020 Exterior Windows - Replace exterior storefront assemblies (\$48,000) -Row 21 - B202001 Windows - Replace aluminum framed windows (\$42,000) -Row 22 - B202001 Windows - Replace aluminum framed windows (\$143,000) -Row 23 - B202001 Windows - Replace aluminum framed windows (\$20,000) - Row 25 - B203001 Solid Doors - Replace exterior solid metal doors (\$16,000) - Row 27 - B301002 Roofing - Low Sloped Membrane System Replace original roof over Gymnastics Club (\$394,000) -Row 28 - B301002 Roofing - Low Sloped Membrane System - Conduct repairs of SBS roof systems (\$27,000) -Row 29 - B301002 Roofing - Low Sloped Membrane System -Replace SBS roof systems (\$3,155,000) -Row 33 - B301002 Roofing - Low Sloped Membrane System - Replace BUR roof assembly - Row 36 - B301006 Roof Openings - Skylights - Replace skylights over theatre lobby (\$12,000) - Row 38 - C101002 Demountable Partitions - Replace demountable floors at theatre stage (\$79,000) -Row 40 - C101003 Retractable Partitions - Replace black masking over theatre stage (\$69,000) -Row 41 - C102001 Standard Interior Doors - Rolling contingency for interior door replacement -Row 42 - C102004 Fire Doors - Rolling contingency for interior door replacement (\$16,000) -Row 46 - C11 Washrooms/Changing Rooms and Spa - Refurbishment of arena dressing rooms (\$27,000) -Row 46 - C11 Washrooms/Changing Rooms and Spa - Refurbishment of theater dressing rooms (\$53,000) - Row 49 - C101006 Glazed Partitions and Storefronts - Contingency for select replacement of interior windows (\$11,000) - Row 52 - C103002 Toilet & Bath Accessories - Rolling contingency for refurbishment of washrooms (\$79,000) -Row 59 - C201002 Exterior Stair Construction - Recoating of exterior stairs (\$16,000) - Row 61 - C202001 Stair Finishes - Recoating of interior stairs (\$11,000) - Row 63 - C301002 Plaster Wall Finishes - Repainting of plaster walls in theatre (\$13,000) - Row 65 - 68 - C301005 Wall Finishes - Repaint gypsum walls in Heritage Hall, Classroom and admin, Library, Theatre (\$73,000) -Row 69 & 70 - C301007 Acoustic Panel Adhered to Wall - Replace acoustic panels in Heritage Hall and Theatre (\$43,000) -Row 71 - C301099 Other Wall Finishes - Replacement of wall paper in Theatre (\$24,000) -Row 75 - 77 - C302004 Resilient Floor Finishes - Replacement of resilient flooring in Theatre, classrooms and Heritage Hall (\$94,000) -Row 79 - C302005 Carpeting - Replacement of carpeting in Library (\$37,000)

-Row 85 - C302099 Other Flooring and Floor Finishes - Replacement of ceramic tile in main hallway (\$11,000) -Row - 86 - C303001 Exposed Concrete Finishes - Recoating of concrete floors in hockey arena (\$10,000) -Row 87 - C303002 Plaster Ceiling Finishes - Painting Theatre - Plaster Ceiling (\$26,000) -Row 89 - C303004 Ceiling - Repainting of trusses and Q-deck in Theatre and Heritage Hall (\$100,000) -Row 90 - C303004 Ceiling - Repainting of trusses in Gymnastics Club (\$21,000) -Row 91 - C303004 Ceiling - Replacement of aging ceiling tiles (\$16,000) -Row 96 - E109005 Kitchens - Refurbishment of kitchens - Flynn's fish and Chips, Heritage Hall (\$79,000) -Row 101 - F101099 Other Special Construction - Repairs to giant hockey stick (\$27,000) -Row 105 - 109 - Assessments for : Building Envelope, Main Roofs, Seismic, Accessibility and Roof Anchors (\$51,000) -Row 111 - D304007 Exhaust Systems - Roof/ Exhaust Fans (typical) - replacement contingency (\$63,000) -Row 113 - D304001 Air Distribution, Heating and Cooling - Replace rooftop York RTU (\$21,000) -Row 114 - D309099 Other Special Mechanical Systems - Cimco dehumidification unit replacement at end of life (\$158,000) - Row 120 - D304001 Air Distribution, Heating and Cooling - Theatre/ Air Handling Unit (S-6) (\$40.000)-Row 121 - D303002 Direct Expansion Systems - Roof/ CU-1 replacement (\$19,000) -Row 128 - D302002 Hot Water Boilers - Boiler Rm. Boiler B-2 repalcement (\$32,000) - Row 129 - D304003 Hot Water Distribution Systems - Various Pipe-Mounted pumps (\$26,500) - Row 129 - D304001 Air Distribution, Heating and Cooling - Roof RTU-1 replacement (\$84,000) - Row 132 - D304001 Air Distribution, Heating and Cooling - Various/ Original Air Handling Units S-1 to S-9 replacement (\$630,000) - Row 140 - D3040 Distribution Systems - Various Radiant Heaters Replacement (\$11,100) - Row 143 - D304001 Air Distribution, Heating and Cooling - Arena Dressing + Referee Rooms Air Handling Units (9) replacement (\$126,000) - Row 163 - D5020 Lighting and Branch Wiring - General lighting replacement (\$105,000) - Row 166 - G403002 Sound Systems - Sound System Equipment replacement (\$21,200) - Row 168 - D501005 Panels - Electrical Service Panels (Circuit Breaker Boxes) and Switches replacement (\$79,000) - Row 170 - D503002 Telecommunications Systems - Various/ Telecommunications Equipment replacement (\$26,500) - Row 171 - D306002 Electronic Controls - Various Equipment replacement (\$10,800) - Row 172 - D101003 Freight Elevators - Repairs (\$11,500) - Row 174 - D503008 Security Systems - Various Equipment replacement (\$16,000) - Row 175 - DE102005 Auditorium and Stage Equipment - Various/ Equipment replacement (\$32,000)

- Row 176 - D402001 Standpipe Equipment and Piping - Valve replacement (\$42,000)

PROJECT TEAM

The visual reviews were completed on July 13 and July 27, 2017 by Scott Williams and Voytek Gretka. We began with an interview with Brad Coleman. During our review of the building, we were accompanied by Tod Lesergent and Michael Shaefer, Technical Director of the Cowichan Performing Arts Centre, who provided access to a sampling of representative areas of the theatre and associated areas, as requested.

REFERENCE DOCUMENTS/INFORMATION

We reviewed the following documents and selected drawings for general background and to inform ourselves about the layout and intended construction:

- Detailed Energy Audit Report, Prism Engineering (2013)
- Appraisal Report of Specified Property of: Cowichan Valley Regional District, Suncorp

This report should be reviewed in conjunction with the Objectives, Terms of Reference, Limitations, and Methodology described in the main body of the report.

We recommend budgeting for the following 1 – Immediate, 2 - Restore Functionality, 2b - Exceeded Service Life and 3 - Future Renewal projects by year as follows:

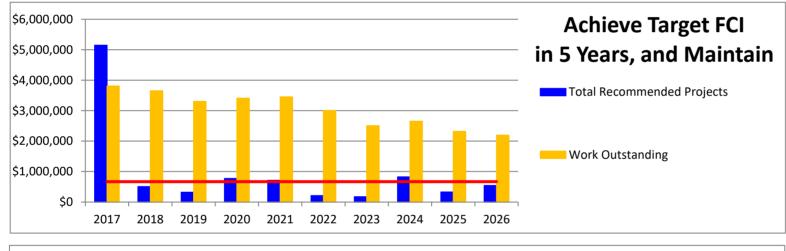
Priority	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026
1 – Immediate	9,000	0	0	0	16,000	0	0	0	0	16,000
2 - Restore Functionality	4,083,800	82,800	3,800	397,800	98,800	3,800	3,800	3,800	3,800	3,800
2b - Exceeded Service Life	953,400	26,400	169,400	68,400	107,400	42,400	42,400	198,400	42,400	42,400
3 - Future Renewal	103,200	401,233	151,200	306,900	492,533	167,900	127,200	621,233	286,200	485,900
Total in 2017 dollars	5,149,400	510,433	324,400	773,100	714,733	214,100	173,400	823,433	332,400	548,100

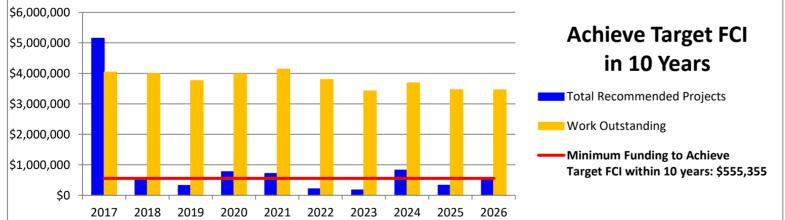
Minimum Funding to Achieve and Maintain Target FCI within 5 years: \$669,579

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Work outstanding	3,810,242	3,651,097	3,305,918	3,409,439	3,454,593	2,999,115	2,502,936	2,656,790	2,319,611	2,198,132
	-									

Minimum Funding to Achieve Target FCI within 10 years: \$555,355

 Work outstanding
 4,038,690
 3,993,768
 3,762,813
 3,980,558
 4,139,936
 3,798,681
 3,416,725
 3,684,803
 3,461,848
 3,454,593





BLDG Name	Location / Address	Level 1 Major Group Elements	Level 2 Group Elements	Level 3 Individual Elements	ID	COMPONENT Location / Type	Photo	CONDITION ASSESSMENT	Condition	Performance Vr New or Last Maior Action	Assessment Date	Assessed By	Age in 2017	Typical Life Cycle or Action Interval	Est. Time Remaining to EOL or Major Action	Recommendation	Type Priority	Can this work be phased over multiple years ?	can the rate of deterioration be	Will a failure in Ca this system lead cond to a loss of use of affe the facility ? secu	dition adversely oct the buildings	Quantity	Unit Rate	Onit Subtotal	OF PROBABLE Consult.	COST Contin- gency	5% Tax	
and Savings entre	2687 James St., Duncan, BC	A Substructure	A10 Foundations	A1030 Standard Foundations		Throughout Building/Below Grade		The foundations are cast-in-place concrete as visible at grade. No evidence of major settlement or heaving was reported or observed.	4	5 197	74 13-Jul-17	MH	43	100	57	The foundations are expected to last the life of the building. No major capital expenditures are expected to be required.								\$0	0%	0%	5%	
and Savings entre	2687 James St., Duncan, BC	A Substructure	A10 Foundations	A1010 Standard Foundations	A10 Foundations	Throughout Building/Below Grade Membrane	1	Below grade membrane has been installed for the foundation walls located on the east elevation adjacent to the hockey arena change rooms. Rigid insulation has been installed over, which has been damaged.	4	5 197	74 13-Jul-17	MH	43	60			Repair 3 - Future lowance Renewal	Yes	No	No	No			\$0	0%	0%	5%	
and Savings entre	2687 James St., Duncan, BC	A Substructure	A10 Foundations	A1010 Standard Foundations	A103001 Slab on Grade	Below Grade Slab on Grade	2	The floor is concrete slab-on-grade. We noted isolated, narrow cracking in areas where the slab has not been covered over with finishes. Evidence of cracking was noted in the tile finish in the main hallway on level 1 and in the Cowichan Suite indicting potential settlement.	4	5 197	74 13-Jul-17	МН	43	60	7		Repair 3 - Future lowance Renewal	Yes	No	No	No	1	\$10,000	LS \$10,00	000 0%	0%	5%	\$
and Savings entre	2687 James St., Duncan, BC	B Shell	B10 Superstructure	B10 Superstructure	B10 Superstructure	Throughout Building/Superstructure	3-5		4	5 197	74 13-Jul-17	MH	43	100		Structural components are expected to last the life of the building. No major capital expenditures are expected to be required. We recommend that further review be conducted of the condition of the slab directly above the Zamboni holding area (see Professional Services - Item P10004). Review and repair cracking for exposed concrete mass walls. Review and repair cracked CMU infill directly above Zamboni in holding area.								\$0	0%	0%	5%	
and Savings entre	2687 James St., Duncan, BC	B Shell	B20 Exterior Enclosure	B2010 Exterior Walls	B201001 Exterior Walls	Exterior Walls/Giant Brick - South and West Elevations	6	Exposed giant brick wall assemblies are located on the south and west elevations for the lower portions of the wall. The cladding appears to be in good condition and is generally under overhang protection. Portions of the giant brick were noted to be buried by adjacent grade on the south elevation adjacent to the entrances to the Gymnastics Club.	4	5 197	74 13-Jul-17	МН	43	50	25	The giant brick will last the life of the building and no major renewals or repairs are Repl expected to occur in the next 25 years.	lacement 3 - Future Renewal	Yes	No	No	No			\$0	0%	0%	5%	
and Savings entre	2687 James St., Duncan, BC		B20 Exterior Enclosure	B2010 Exterior Walls	B201001 Exterior Walls	Exterior Walls/Split Face Masonry Blocks - Library	7	A split face block veneer has been installed for the library walls on the west elevation. Cracking was noted at the north corner as well as adjacent to the sun-shade devices at the north west corner. Failure of the sealant at an expansion joint was also noted on the west elevation.	4	5 200	04 13-Jul-17	МН	13	15	5		Repair 2 - Restore lowance Functionality	No	No	No	No	1	\$15,000	LS \$15,0	000 0%	0%	5%	\$
and Savings entre	2687 James St., Duncan, BC	B Shell	B20 Exterior Enclosure	B2010 Exterior Walls	B201001 Exterior Walls	Exterior Walls/Split Face Masonry Blocks - Library	8	A split face block veneer has been installed for the library walls on the west elevation. The cladding is expected to last the life of the building.	4	5 200	04 13-Jul-17	МН	13	50	37	Replace cladding at end of service life.	lacement 3 - Future Renewal	No	No	No	No			\$0	0%	0%	5%	+
and Savings entre	2687 James St., Duncan, BC	B Shell	B20 Exterior Enclosure	B2010 Exterior Walls	B201001 Exterior Walls	Exterior Walls/CMU Wall - Ice Melt Pit	9	Exposed painted, CMU walls are located at the ice melt pit at the north end of the arena and appear to be in good condition.	4	5 20:	15 13-Jul-17	МН	2	50	36	Replace cladding at end of service life. Repl	lacement 3 - Future Renewal	No	No	No	No			LS \$0	0%	0%	5%	
and Savings entre	2687 James St., Duncan, BC	B Shell	B20 Exterior Enclosure	B2010 Exterior Walls	B201001 Exterior Walls	Exterior Walls/Painted Concrete Mass Walls	10	Painted concrete mass walls are present on the east and north elevations of the arena. Some cracking of the concrete was noted.	3	5 197	74 13-Jul-17	MH	43	50	2		Repair 3 - Future lowance Renewal	Yes	No	No	No	1	\$10,000	LS \$10,00	00 0%	0%	5%	
and Savings entre	2687 James St., Duncan, BC	B Shell	B20 Exterior Enclosure	B2010 Exterior Walls	B201001 Exterior Walls	Exterior Walls/Rock Dash Stucco - Theatre		Original rock dash stucco has been installed for the upper walls of the theatre which was recoated with elastomeric paint. Original stucco is also located adjacent to the roof of the Gymnastics Club which remains unpainted. Facility staff indicated that water ingress is an issue within the theatre, which may be as a result of the stucco walls. The stucco walls were recoated in 2006 with elastomeric paint which apparently reduced the amount of water ingress. Theatre staff indicated that holes in the cladding are evident at a few locations. Staining of the batt insulation was noted for all areas as well as discontinuities in the poly air/vapour barrier. Staining appears to be as a result of air leakage. Some cracking of the cladding was noted for the walls adjacent to the main roof above the Gymnastics Club and for the stucco clad chimney located on the north elevation.		2 197	76 13-Jul-17	MH	41	35		Replace stucco cladding. Prior to any replacement, we recommend that a comprehensive envelope condition assessment be conducted. (see Professional Services Item P10002 BECA)	lacement 2 - Restore Functionality	Yes	Yes	No	No	9000	\$65	LS \$585,0	,000 10%	15%	5%	
and Savings entre	2687 James St., Duncan, BC	B Shell	B20 Exterior Enclosure	B2010 Exterior Walls	B201001 Exterior Walls	Exterior Walls/Stucco - Arena, Multi-purpose Hall, Admin Offices	13	Original stucco cladding exists for the upper portions of the exterior walls on the south, west and east elevations at the arena, multi-purpose hall and the admin offices. Systemic hairline cracking was typically noted on the east elevation. We understand that all stucco areas were recoated with elastomeric paint in 2006. Water ingress associated with these wall assemblies was not indicated by facility staff.		4 197	76 13-Jul-17	МН	41	35			Repair 3 - Future lowance Renewal	Yes	Yes	No	No			\$0	0%	0%	5%	
and Savings entre	2687 James St., Duncan, BC	B Shell	B20 Exterior Enclosure	B2010 Exterior Walls	B201001 Exterior Walls	Exterior Walls/Stair Tower - East Elevation	14	Glass block assemblies are located at the stair tower located on the east elevation adjacent to the entrance to the Heritage Hall. Water ingress for these assemblies were not indicated by facility staff.	3	4 197	76 13-Jul-17	МН	41	20		Glass block assemblies are prone to failure and we recommend that these areas be Repl reviewed as part of the building envelope condition assessment. Replacement to be considered within the next 5 years with thermally broken aluminum framed window assemblies.	lacement 3 - Future Renewal	Yes	No	No	No	1	\$27,000	LS \$27,00	000 10%	10%	5%	
and Savings entre	2687 James St., Duncan, BC	B Shell	B20 Exterior Enclosure	B2010 Exterior Walls	B201001 Exterior Walls	Exterior Walls/Metal Panel Over- Cladding	15	Vertically oriented metal panel over-cladding has been installed on the south, east and north elevations for the upper portions of the wall. We understand that the cladding was installed over the south and the south of the sou	4	5 20:	15 13-Jul-17	МН	2	50	28	Replace at end of service life. Repl	lacement 3 - Future Renewal	Yes	No	No	No			\$0	0%	0%	5%	
and Savings entre	2687 James St., Duncan, BC	B Shell	B20 Exterior Enclosure	B2010 Exterior Walls	B201001 Exterior Walls	Exterior Walls/Metal Panels- Library	16	existing cladding approximately 2 years ago. Metal panel cladding has been installed at the north end of the library addition.	4	5 200	04 13-Jul-17	MH	13	50	16	Replace at end of service life. Repl	lacement 3 - Future Renewal	Yes	No	No	No			\$0	0%	0%	5%	
and Savings entre	2687 James St., Duncan, BC	B Shell	B20 Exterior Enclosure	B2010 Exterior Walls	B201008 Exterior Soffits	Throughout Building/Stucco Soffits	17	Stucco soffits have been installed on the west and east elevations. Some cracking of the stucco soffits were observed at the stucco edge.	3	4 197	74 13-Jul-17	MH	43	25	15	Replace soffits in conjunction with replacement of stucco cladding. Repl	lacement 3 - Future Renewal	Yes	No	No	No			\$0	0%	0%	5%	
and Savings Intre	2687 James St., Duncan, BC	B Shell	B20 Exterior Enclosure	B2010 Exterior Walls	B201010 Exterior Coatings	Exterior Walls/Stucco	18	Elastomeric coating was installed over all stucco surfaces in 2006 and appears to be in fair condition.	3	4 200	06 13-Jul-17	МН	11	15		Repaint stucco cladding. Conduct periodic reviews of elastomeric coating and repair as Repl required prior to major renewal. Repl	lacement 3 - Future Renewal	Yes	No	No	No	22000	\$7	SF \$154,0	000 0%	0%	5%	
and Savings entre	2687 James St., Duncan, BC	B Shell	B20 Exterior Enclosure	B2010 Exterior Walls	B201010 Exterior Coatings	Exterior Walls/Concrete Mass Walls	19	Concrete mass walls have been painted with what appears to be a latex paint. Failure of the paint coating was noted at the base of wall.	3	4 200	06 13-Jul-17	МН	11	15		Repaint concrete mass walls with elastomeric paint in conjunction with stucco cladding. Repl Conduct crack repairs as required prior to repainting. Repl	lacement 3 - Future Renewal	Yes	No	No	No	5000	\$7	SF \$35,00	000 0%	0%	5%	
and Savings entre	2687 James St., Duncan, BC	B Shell	B20 Exterior Enclosure	B2010 Exterior Walls	B201010 Exterior Coatings	Exterior Walls/CMU walls	20	Paint finish of CMU walls of ice melt pit appears to be in good condition.	4	5 202	15 13-Jul-17	МН	2	15	13	Repaint concrete CMU walls. Repl	lacement 3 - Future Renewal	Yes	No	No	No			\$0	0%	0%	5%	
and Savings entre	2687 James St., Duncan, BC	B Shell	B20 Exterior Enclosure	B2010 Exterior Walls	B201011 Joint Sealant	Exterior Walls/Exterior Sealant	21	There are sealant joints typically located at wall penetrations, between dissimilar cladding types and control joints. Failure or lack of joint sealant was noted at a number of locations. We are not aware of the last cycle of renewal.	3	3 197	74 13-Jul-17	МН	43	10		Replace sealant between dissimilar materials, around windows and doors and around wall penetrations.	lacement 2 - Restore Functionality	Yes	Yes	No	No	1	\$75,000	LS \$75,00	00 0%	0%	5%	
and Savings entre	2687 James St., Duncan, BC	B Shell	B20 Exterior Enclosure	B2020 Exterior Windows	B202001 Windows	Exterior Walls/Aluminum Frame		Aluminum framed storefront windows and doors are located at a number of locations on level one providing entry/exit to the building. A number of assemblies remain that are original to the building; however, facility staff indicated that they have a year over year rolling contingency of \$15K for systematic replacement of the assemblies. The original units that still remain are located at the Heritage Hall, the north end of the theatre and the large assembly located at the main entrance adjacent to the Gymnastics Club. All are located under overhang protection. All new assemblies provide wheelchair access. Wheel chair access for aging assemblies varies.	3	4 197	74 13-Jul-17	МН	43	30		Replace aluminum framed storefront windows and doors with new thermally-broken, insulated tempered glass units (IGUs) c/w Low E coatings and argon fill. Provide wheel chair access for all replaced units. A contingency has been provided for \$15K for the next three years. This does not include the replacement of the large storefront assembly located at the main entrance adjacent to the Gymnastics Club on the south elevation (see line item below).	ntingency 3 - Future Renewal	Yes	No	No	No	1	\$15,000	LS \$15,00	000 0%	0%	5%	
and Savings entre	2687 James St., Duncan, BC	B Shell	B20 Exterior Enclosure	B2020 Exterior Windows	B202001 Windows	Exterior Walls/Aluminum Frame		Aluminum framed storefront windows and doors are located at a number of locations on level one providing entry/exit to the building. A number of assemblies remain that are original to the building; however, facility staff indicated that they have a year over year rolling contingency of \$15K for systematic replacement of the assemblies. The original units that still remain are located at the Heritage Hall, the north end of the theatre and the large assembly located at the main entrance adjacent to the Gymnastics Club. All are located under overhang protection. All new assemblies provide wheelchair access. Wheel chair access for aging assemblies varies.	3	4 197	74 13-Jul-17	МН	43	30		Replace aluminum framed storefront windows and doors with new thermally-broken, insulated tempered glass units (IGUs) c/w Low E coatings and argon fill located at the main entrance adjacent to the Gymnastics Club on the south elevation.	lacement 2b - Exceeded Service Life	Yes	No	No	No	700	\$150	SF \$105,0	,000 10%	10%	5%	
and Savings entre	2687 James St., Duncan, BC	B Shell	B20 Exterior Enclosure	B2020 Exterior Windows	B202001 Windows	Exterior Walls/Aluminum Frame	24	Non-thermally broken commercial glazing is located on the second floor at the classrooms located at the southwest corner of the building. Lack of weather seals and damage to the casement operable units was typically noted. Deterioration of the reflective film installed over the IGUs was also noted. We understand that these window units will be replaced in approximately 3 years.	2	4 197	76 13-Jul-17	МН	41	30		Replace insulated tempered glass units (IGUs) c/w Low E coatings and argon fill. Cost of replacement includes access, removal, tie-ins to adjacent cladding.	lacement 2b - Exceeded Service Life	Yes	Yes	No	No	15	\$7,500	EA \$112,5	,500 10%	10%	5%	
and Savings entre	2687 James St., Duncan, BC	B Shell	B20 Exterior Enclosure	B2020 Exterior Windows	B202001 Windows	Exterior Walls/Aluminum Frame	25	Non-thermally broken aluminum framed punched windows with awning type operable are located at the administration offices on the second floor directly above the main entrance and on the north elevation of the theatre. One is also located at the stair tower on the east elevation. All appear to be original to the building		4 197	76 13-Jul-17	МН	41	30		Replace insulated tempered glass units (IGUs) c/w Low E coatings and argon fill. Cost of replacement includes access, removal, tie-ins to adjacent cladding, replacement.	lacement 2b - Exceeded Service Life	Yes	Yes	No	No	6	\$2,500	EA \$15,00	000 10%	10%	5%	
and Savings entre	2687 James St., Duncan, BC	B Shell	B20 Exterior Enclosure	B2020 Exterior Windows	B202001 Windows	Exterior Walls/Aluminum Framed Curtain Wall - Library	26	original to the building. Curtain wall assemblies have been installed throughout the Library and all appear to be in good condition.	4	5 200	04 13-Jul-17	MH	13	30	16	Replace aluminum framed curtain wall assemblies at end of service life. Repl	lacement 3 - Future Renewal	Yes	No	No	No			\$0	0%	0%	5%	+
and Savings entre	2687 James St., Duncan, BC	B Shell	B20 Exterior Enclosure	B2030 Exterior Doors	B203001 Solid Doors	Exterior Walls/Solid Metal Doors	27	Single and double exterior metal doors are located throughout the complex. All are original to the building and are showing signs of age related deterioration. As per facility staff, a year over year rolling contingency will be used for the replacement of these doors and replacement will commence once the glazed commercial doors/windows have been replaced.	3	2 197	76 13-Jul-17	МН	41	25		Replace doors. Replace weather-stripping and complete minor repairs and adjustment as part of maintenance.	lacement 2b - Exceeded Service Life	Yes	Yes	No	No	1	\$15,000	LS \$15,00	00 0%	0%	5%	

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wichan Valley Regior cility Condition Asses and Savings Centre, 2	ssment and Cap																							
	nents	ţ	ents	COMPONENT		CONDITION ASSESSMENT		c			LIFECYCLE DATA	or	RECOMMENDATION								OPINION OF	F PROBABLE (COST	
BLDG Name Location / Address	Level 1 Major Group Elen	Level 2 Group Elemen	Level 3 Individual Elemo	⊡ Location / Type	Photo	Description & History	Condition	r New or Last Major Actio	Assessment Date Assessed By	Age in 2017	Typical ife Cycle or Action Interva	t. Time Remaining to EOL Major Action	Recommendation	Type	Can this wor phased ov multiple yea	er can the rate of deterioration be	this system lead	Can the current condition adversely affect the buildings security of safety ?	Quantity	Unit Rate Unit	Subtotal epair or Replacement Cos	Consult.	Contin- gency	5% Tax
d Savings 2687 James St., re Duncan, BC	B Shell	B30 Roofing	R3010 Roof Coverings	B301002 Roofing - Low Sloped Roofing/Gymnastics Club Membrane System	29	The roof over the original building (formerly the pool, now the Gymnastics Club) is an exposed single- ply Sarnafil membrane. The roof drains via internal drains. Some patch repairs were noted throughout. Some water ingress was indicated by facility staff for a small portion of the roof at a mechanical termination. It appears that roofing mastic has been used to patch the seams. Screens over internal drains were noted to be dislodged and clogged with debris. We understand that the membrane is original to the building.	3 2	1974	13-Jul-17 MH	43	25		Replace roofing system including flashings, sealants, etc. as required. Consider replacing adjacent stucco walls in conjunction with the roof system.		- Restore No Inctionality	Yes	Yes	No	15000	\$25 SF	⊊ F \$375,000	0%	0%	5%
d Savings 2687 James St., re Duncan, BC	B Shell	B30 Roofing	R3010 Roof Coverings	B301002 Roofing - Low Sloped Roofing/Hockey Arena, Theatre, Membrane System Heritage Hall, Admin Offices	30	A conventional SBS roof system has been installed over the hockey arena, theatre, administration office, classrooms, heritage hall and gymnasium. Blistering of the membrane was noted over the admin office and classrooms at the south end of the building as well as over the theatre and the north end of the hockey arena. Patch repairs have been conducted over the admin/classrooms. Water ingress was indicated in a number of locations within the theatre. As per facility staff, it in not clear whether or not the water ingress is as result of the roof system or the stucco wall system. Periodic water ingress was also indicated in the office adjacent to the Heritage Hall. We understand that the roof membrane was replaced approximately 15 years ago.	2 3	2002	13-Jul-17 MH	15	25				- Restore Yes Inctionality	Yes	Yes	No	1	\$25,000 LS	S \$25,000	0%	0%	5%
d Savings 2687 James St., re Duncan, BC	B Shell	B30 Roofing	R3010 Roof Coverings	B301002 Roofing - Low Sloped Roofing/Hockey Arena, Theatre, Membrane System Heritage Hall, Admin Offices.	31	A conventional SBS roof system has been installed over the hockey arena, theatre, administration office, classrooms, heritage hall and gymnasium. Blistering of the membrane was noted over the admin office and classrooms at the south end of the building as well as over the theatre and the north end of the hockey arena. Patch repairs have been conducted over the admin/classrooms. Water ingress was indicated in a number of locations within the theatre. As per facility staff, it in not clear whether or not the water ingress is as result of the roof system or the stucco wall system. Periodic water ingress was also indicated in the office adjacent to the Heritage Hall. We understand that the roof membrane was replaced approximately 15 years ago.	2 3	2002	13-Jul-17 MH	15	25	4	Replace membrane included flashing at end of service life. Repl		- Restore Yes Inctionality	Yes	Yes	No	95000	\$25 SF	F \$2,375,00	00 10%	15%	5%
d Savings 2687 James St., re Duncan, BC	B Shell	B30 Roofing	R3010 Roof Coverings	B301002 Roofing - Low Sloped Roofing/North end of Arena Membrane System	32	The conventional SBS roof system was recently replaced for the lower roof at the north end of the hockey arena where the roof-top mechanical equipment is located. Some staining of the membrane was noted adjacent to one of the mechanical units. We understand that this roof system was replaced 3 years ago.	4 5	2014	13-Jul-17 MH	3	25		Replace membrane included flashing at end of service life. Review staining due to mechanical equipment and make adjustments as required.	placement 3	3 - Future No Renewal	No	Yes	No			\$0	0%	0%	5%
d Savings 2687 James St., re Duncan, BC	B Shell	B30 Roofing	R3010 Roof Coverings	B301002 Roofing - Low Sloped Roofing/Library Membrane System	33	A conventional SBS roof system was installed for the Library in 2004.	4 5	2004	13-Jul-17 MH	13	25	12	Replace membrane included flashing at end of service life.		3 - Future No Renewal	No	Yes	No			\$0	0%	0%	5%
d Savings 2687 James St., re Duncan, BC	B Shell	B30 Roofing	R3010 Roof Coverings	B301002 Roofing - Low Sloped Roofing/Ice Melt Area Membrane System	34	An SBS roof system has been installed over the ice-melt pit. This addition for the ice-melt pit was constructed in 2016.	4 5	2016	13-Jul-17 MH	1	25	24	Replace membrane included flashing at end of service life. Repl	placement 3	3 - Future No Renewal	No	No	No			\$0	0%	0%	5%
d Savings 2687 James St., re Duncan, BC	B Shell	B30 Roofing	R3010 Roof Coverings	B301002 Roofing - Low Sloped Roofing/Arena Entrance Membrane System	35	A built-up roof (BUR) has been installed over the entrance to the arena at the southeast corner of the building. The membrane is original to the building and is showing advanced levels of deterioration. Water ingress was not indicated by facility staff.	2 2	1976	13-Jul-17 MH	41	25	1	Replace BUR with SBS system. Repl	placement 2b Si	- Exceeded No ervice Life	Yes	Yes	No	800	\$25 SF	F \$20,000	10%	10%	5%
d Savings 2687 James St., re Duncan, BC	B Shell	B30 Roofing	R3010 Roof Coverings	B301002 Slope Roof Roofing/Loading Bay	36	A metal panel roof system has been installed for the canopy over the loading area at the north end of the theatre and was installed in 2016.	4 5	2016	13-Jul-17 MH	1	30	29	Replace standing metal seam roof sections at end of service life. Repl		3 - Future No Renewal	No	No	No			\$0	0%	0%	5%
d Savings 2687 James St., re Duncan, BC	B Shell	B30 Roofing	R3010 Roof Coverings	B3010 Roof Coverings Throughout Building/Thermographic Scan		Water ingress through the roof assemblies was reported by facility staff in the Theatre and the Heritage Hall. An exposed membrane can often be repaired or refurbished to defer replacement, though with increased annual costs. The decision is often driven by the extent of wet insulation and the risk tolerance for future leaks.	3	N/A	13-Jul-17 MH	N/A	10		Complete a thermographic scan and test cuts to confirm the extent of wet insulation and develop recommendations for repair or replacement.	Study	N/A	N/A	N/A	N/A	1	\$5,000 LS	S \$5,000	0%	0%	5%
d Savings 2687 James St., re Duncan, BC	B Shell	B30 Roofing	R3010 Roof Coverings	B301006 Roof Openings - Exterior Skylights/Theatre Skylights	37	9 skylights are located above the theatre lobby and are showing signs of water ingress. MH is not aware when the skylights were last replaced.	2 3	1974	13-Jul-17 MH	43	17	1	Replace skylights in conjuntion with roof repairs. Repl	_	- Restore Yes Inctionality	Yes	Yes	No	9	\$1,000 EA	A \$9,000	0%	20%	5%
d Savings 2687 James St., re Duncan, BC	B Shell	B10 Superstructure	B1020 Roof Construction	B102099 Other Roof Glazed Canopy/Main Entrance Construction - Glazed Canopy	38	Sloped glazing with a combination of wood/steel structure has been installed at the main entrance and along the curtain wall glazing at the front of the library.	4 5	2004	13-Jul-17 MH	13	35	22	Replace sloped glazing at the end of its service life. Repl		3 - Future Yes Renewal	No	No	No			\$0	0%	0%	5%
d Savings 2687 James St., re Duncan, BC	C Interiors	C10 Interior Construction	C1010 Partitions	C101002 Demountable Removable panels (orchestra Partitions pit)/Theatre	39	Removable floor panels are located at the elevator pit directly in front of the main stage. Gaps and uneven seams in the panels were indicated by facility staff creating potential safety issues for the performers.	2 3	1976	13-Jul-17 MH	41	25				- Restore Yes Inctionality	No	Yes	No	1	\$75,000 LS	S \$75,000	0%	0%	5%
d Savings 2687 James St., re Duncan, BC	C Interiors	C10 Interior Construction	C1010 Partitions	C101003 Retractable Partitions Stage Curtain/Theater		Stage curtain was last replaced in 2007.	4 5	2007	13-Jul-17 MH	10	25	15	Replace stage curtain at end of service life. Repl		3 - Future Yes Renewal	No	No	No	1	\$25,000 LS	S \$25,000	0%	0%	5%
d Savings 2687 James St., re Duncan, BC	C Interiors	C10 Interior Construction	C1010 Partitions	C101003 Retractable Partitions Black Masking/Theater		Black masking is located above the main stage and was last replaced in 1997.	3 4	1997	13-Jul-17 MH	20	25	5	Replace black masking at end of service life. Repl		3 - Future Yes Renewal	No	No	No	1	\$65,000 LS	S \$65,000	0%	0%	5%
d Savings 2687 James St., re Duncan, BC	C Interiors	C10 Interior Construction	C1020 Interior Doors	C102001 Standard Interior Throughout Building/Interior Doors Doors	40	Single and double doors are located throughout the complex and consist of solid metal or solid wood. Some doors incorporate wired safety glass. All appear to be original to the building. Damage to paint finish was typically noted along with mechanical damage to the door surfaces.	3 4	1974	13-Jul-17 MH	43	5		Doors are expected to last the life of the building. However, a budget is provided for some door replacement and localized repairs on a 5 year cycle.		3 - Future Yes Renewal	No	No	No	1	\$20,000 EA	A \$20,000	0%	0%	5%
d Savings 2687 James St., re Duncan, BC	C Interiors	C10 Interior Construction	C1020 Interior Doors	C102004 Fire Doors Throughout Building/Fire Doors	41	Fire doors are located at various locations throughout the complex and appear to be original.	3 4	1974	13-Jul-17 MH	43	5		Doors are expected to last the life of the building. However, a budget is provided for some door replacement and localized repairs on a 5 year cycle.		3 - Future Yes Renewal	No	Yes	No	1	\$15,000 EA	A \$15,000	0 0%	0%	5%
d Savings 2687 James St., re Duncan, BC	C Interiors	C10 Interior Construction	C1020 Interior Doors	C102005 Interior Overhead Overhead Doors/Theatre and Arena	42	2 overhead roll-up doors are located at the north end of the theatre as well as one at the north end of the hockey arena providing access to the snow machine holding area. All appear to be original to	3 4	1976	13-Jul-17 MH	41	5		Doors are expected to last the life of the building. However, a budget is provided for some Repl door replacement and localized repairs.		3 - Future Yes Renewal	No	No	No	1	\$7,500 LS	S \$7,500	0%	0%	5%
d Savings 2687 James St., re Duncan, BC	C Interiors	C10 Interior Construction	C1020 Interior Doors	C102006 Interior Overhead Heritage Hall and Arena Gates	43	building. Issues with operation were indicated by facility staff. Overhead gates are located at Heritage Hall and the Arena lobby separating the kitchens and skate shop from the adjacent spaces. The overhead gates appear to be original to the building.	3 4	1976	13-Jul-17 MH	41	10	6	A contingency has been provided for replacement of overhead gates as required.		3 - Future Yes Renewal	No	No	No	1	\$6,000 LS	S \$6,000	0%	0%	5%
d Savings 2687 James St.,	C Interiors	C11 Washrooms/Changing	C11 Washrooms/Changing		44	The Capitals dressing room contains sports flooring, cubbies, lockers, painted CMU walls, showers	4 5	2005	13-Jul-17 MH	12	10	10	A contingency has been for general refurbishment of the change rooms and bathroom Cont	ntingency	3 - Future Yes	No	No	No	1	\$50,000 LS	S \$50,000	0 0%	0%	5%
re Duncan, BC	C Interiors	Rooms and Spa C11 Washrooms/Changing	Rooms and Spa	Rooms and Spa C11 Washrooms/Changing Arena - Dressing Rooms -	45	and toilets. All appeared to be in good condition. All dressing rooms are complete with sports flooring, slat benches, toilets, sinks and showers. All	3 5	1976	13-Jul-17 MH	41	5	5	finishes. A rolling contingency (every 5 years) has been provided for general refurbishment of the Cont		Renewal 3 - Future Yes	No	No	No	1	\$25,000 LS	S \$25,000	0 0%	0%	5%
re Duncan, BC	C Interiors	Rooms and Spa	Rooms and Spa	Rooms and Spa Refurbishment C11 Washrooms/Changing Theatre - Dressing Rooms	46	components are in fair condition. 2 dressing rooms are located on the lower level of the theatre. Dressing rooms include shower stalls,	3 3	1976	13-Jul-17 MH	41	20		change rooms and bathroom finishes. A contingency has been provided for refurbishment of theatre dressing rooms. Continue of theatre dressing rooms.		Renewal 3 - Future Yes	No	No	No	1	\$50,000 LS	s \$50,000	0%	0%	5%
re Duncan, BC		Rooms and Spa	Rooms and Spa	Rooms and Spa		vanities, counters, mirrors, painted gypsum walls.								- ·	Renewal						<i> </i>			
l Savings 2687 James St., e Duncan, BC	C Interiors	C11 Washrooms/Changing Rooms and Spa	C11 Washrooms/Changing Rooms and Spa	C11 Washrooms/Changing Multi Purpose Hall & Dressing Rooms and Spa Rooms	47	2 dressing rooms are located adjacent to the Multi-purpose hall and include ceramic tile flooring and slat benches, painted CMU walls, shower stalls with epoxy flooring, sinks, countertops and toilets. These dressing rooms appear to have been refurbished within the last 10 years.	4 5	2007	13-Jul-17 MH	10	20	10	A contingency has been provided for refurbishment of Multi-purpose dressing rooms.		3 - Future Yes Renewal	No	No	No	1	\$50,000 LS	S \$50,000	0%	0%	5%
d Savings 2687 James St., re Duncan, BC	C Interiors	C10 Interior Construction	C1010 Partitions	C101006 Glazed Partitions and Interior Windows/Arena, Theatree Storefronts Gymnastics Club, Heritage Hall,	e, 48	Interior windows are located throughout the complex and typically consist of wired safety glass set in metal frames.	4 5	1974	13-Jul-17 MH	43	10		The windows are expected to last the life of the building; however a contingency has been control provided for replacement as required.		3 - Future Yes Renewal	No	No	No	1	\$10,000 LS	S \$10,000	0%	0%	5%
Savings 2687 James St., e Duncan, BC	C Interiors	C10 Interior Construction	C1010 Partitions	Admin. Office C101005 Interior Windows Interior Windows/Arena	49	Interior storefront glazing with doors are located at the main entrance to the hockey arena and are original to the building.	3 5	1976	13-Jul-17 MH	41	50	11	The storefront doors are expected to last the life of the building.	ntingency 3	3 - Future Yes Renewal	No	No	No			\$0	0%	0%	5%
l Savings 2687 James St., e Duncan, BC	C Interiors	C10 Interior Construction	C1010 Partitions	C101005 Interior Windows Interior Windows/Library		Interior storefront glazing with doors are located at the main entrance to the Library.	4 5	2004	13-Jul-17 MH	13	50	37	The storefront doors are expected to last the life of the building.	ntingency 3	3 - Future Yes	No	No	No	+		\$0	0%	0%	5%
d Savings 2687 James St., re Duncan, BC	C Interiors	C10 Interior Construction		C103002 Toilet & Bath Public Washrooms Accessories - Refurbishment	50	Public washrooms are located adjacent to the arena lobby, the Gymnastics Club, the Multi-Purpose	4 5	1974	13-Jul-17 MH	43	5	5	A rolling contingency has been provided for cyclical refurbishment of the public Con-		3 - Future Yes	No	No	No	1	\$75,000 LS	S \$75,000	0%	0%	5%

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BLDG Name	Location / Address	Level 1 Major Group Eleme	Level 2 Group Elements	Level 3 Individual Elemen	ID	Location / Type	Photo	Description & History		Condition	Performance	Yr New or Last Major Action	Assessment Date	Assessed By Age in 2017	Typical Life Cycle or Action Interval	Est. Time Remaining to EOL or Major Action	Recommendation	Type	Priority	Can this work be phased over multiple years ?	can the rate of deterioration be	Will a failure in this system lead co to a loss of use of af the facility ? se	condition adversely affect the buildings	Quantity	Unit Rate	Unit	Subtotal Repair or Replacement Cost	Consult. Contin- gency	5% Tax
and Savings Intre	2687 James St., Duncan, BC	C Interiors	C15 Office	C15 Office	C15 Office	Arena Office - Refurbishment	51	The arena office with adjacent skate shop, lo counters and painted gypsum wall board.	located adjacent to the arena lobby, includes cabinets,	3	5	1976	13-Jul-17	MH 41	20	14	For complete refurbishment of the Arena Office including wall finishes, cabinets and counters.	Contingency	3 - Future Renewal	Yes	No	No	No	1	\$15,000	LS	\$15,000 0	J% O%	5%
and Savings Intre	2687 James St., Duncan, BC	C Interiors	C16 Office	C16 Office	C16 Office	Portals - Refurbishment	52	millwork and painted gypsum walls. The cal	an Valley Arts Council) has carpet, counters, cabinets, binets appear to be original; however all components ce appears to have been refurbished in the last 5-10 ye	4 ars.	5	2010	13-Jul-17	MH 7	20	14	For complete refurbishment of the Portals Office including wall finishes, flooring, cabine and counters.	ts Contingency	3 - Future Renewal	Yes	No	No	No				\$0 0	1% 0%	5%
and Savings Intre	2687 James St., Duncan, BC	C Interiors	C17 Office	C17 Office	C17 Manager's Office	Theatre - Lower level		The manager's office is located on the lower and cabinets.	r level of the theater and contains resilient flooring des	ks 4	4	1976	13-Jul-17	MH 41	20	10	For the general refurbishment of the cabinetry, and the replacement of interior finishes	. Contingency	3 - Future Renewal	Yes	No	No	No	1	\$7,500	LS	\$7,500 0)% 0%	5%
-	2687 James St., Duncan, BC	C Interiors	C18 Office	C18 Office	C18 Theatre - Rehearsal Hall	I Theatre - Rehearsal Hall	53	painted CMU walls, resilient flooring and exp	evel of the theatre and consists of large wall mirrors, sposed spray applied insulation on the ceiling and uppe replaced approximately 20 years ago. All other finishes		4	1976	13-Jul-17	MH 41	20	7	For the general refurbishment of the rehearsal hall.	Contingency	3 - Future Renewal	Yes	No	No	No	1	\$20,000	LS	\$20,000 0	J% 0%	5%
and Savings Intre	2687 James St., Duncan, BC	C Interiors	C19 Office	C19 Office	C19 Theatre - Green Room	Theatre - Green Room	54	The green room was recently refurbished ar lounge furniture.	nd contains resilient flooring, cabinetry, sink, fridge and	i 4	5	2013	13-Jul-17	MH 4	15	11	For the general refurbishment of the Green Room.	Contingency	3 - Future Renewal	Yes	No	No	No	++			\$0 0	0% 0%	5%
and Savings Intre	2687 James St., Duncan, BC	C Interiors	C19 Office	C19 Office	C19 Theatre - TV Studio	Theatre - TV Studio- Refurbishment	55	of painted concrete floors and painted gyps exposed spray applied insulation on the wal	heatre at the north end. Halls leading to the studio con sum walls. The studio has aging resilient flooring with Ils and ceilings. A 'musty' smell is detectable in the stuc ss. Deteriorated drywall was noted at the top of the sta t the roof drain located directly above.	io	3	1976	13-Jul-17	MH 41	20	7	For the general refurbishment of the TV studio. Prior to refurbishment, we recommend that further investigation be conducted to determine the sources of potential water ingress.	Contingency	3 - Future Renewal	Yes	No	No	No	1	\$25,000	LS !	\$25,000 0	0% 0%	5%
and Savings Intre	2687 James St., Duncan, BC	C Interiors	C20 Stairs	C2010 Stair Construction	C201002 Exterior Stair Construction	Exterior Concrete Stairs	56	throughout the complex. Deterioration of t	the exterior of the building at a number of locations the paint finish was noted as well as some rusting of th The concrete appeared to be in good condition. Lack of as reviewed.		5	1974	13-Jul-17	MH 43	10	1	Repaint stairs with slip resistant coating. Install tactile warning strips at time of renewal well as code compliant demarcations at the edge of stair treads. Review handrails and clean rust and install rust inhibitor.	as Contingency	3 - Future Renewal	Yes	No	No	No	1	\$15,000	LS	\$15,000 0	0% 0%	5%
and Savings ntre	2687 James St., Duncan, BC	C Interiors	C20 Stairs	C2020 Stair Finishes	C202001 Stair Finishes	Stair Finishes/Hockey Arena	57	_	out the seating area within the arena. Finish incorpora to be in good condition with the exception of some high been installed at the top of stairs.		5	2015	13-Jul-17	MH 2	10	8	Repaint stairs. Install tactile warning strips at time of renewal.	Replacement	3 - Future Renewal	Yes	No	No	No	1	\$45,000	LS S	\$45,000 0	0% 0%	5%
ntre	2687 James St., Duncan, BC 2687 James St., Duncan, BC	C Interiors C Interiors	C20 Stairs C20 Stairs	C2020 Stair Finishes C2020 Stair Finishes	C202001 Stair Finishes C202001 Stair Finishes	Stair Finishes/Painted Concrete Stairs Stair Finishes/Resilient finishes	58	concrete/CMU walls. Wearing of the paint f	or the stairs leading to the Theatre and the stairs adjace				13-Jul-17 13-Jul-17		10 15	6	 A contingency has been provided to finishes. Install tactile warning strips as well as cod compliant demarcations at the edge of stair treads at time of renewal. Replace resilient finishes. Install tactile warning strips and code compliant nosing at tim of renewal. 		Renewal	Yes Yes	No	No	No	1	\$10,000 \$10,000		\$10,000 0 \$10,000 0	0% 0% 0% 0%	
and Savings Intre	2687 James St., Duncan, BC	C Interiors	C30 Interior Finishes	C3010 Wall Finishes	C301002 Plaster Wall Finishe	es Wall Finishes/Theatre	60	Painted plaster walls are located in the theat understand that these walls have not been r	atre seating area for the upper portions of the wall. We repainted since original installation.	4	5	1976	13-Jul-17	MH 41	15	5	Repaint plaster walls within theatre.	Replacement	3 - Future Renewal	Yes	No	No	No	3000	\$4	SF S	\$12,000 0	0% 0%	5%
and Savings ntre	2687 James St., Duncan, BC	C Interiors	C30 Interior Finishes	C3010 Wall Finishes	C301005 Wall Finishes	Wall Finishes/Arena and Multi- purpose Room	61	Painted CMU and gypsum wall finished are I and multipurpose room. We understand th	located throughout the arena, arena hallways, arena lo nat the surfaces were recently repainted.	bby 4	5	2015	13-Jul-17	MH 2	15	10	Repaint walls within arena.	Replacement	3 - Future Renewal	Yes	No	No	No	40000	\$3	SF 5	\$120,000 0	0% 0%	5%
nd Savings tre	2687 James St., Duncan, BC	C Interiors	C30 Interior Finishes	C3010 Wall Finishes	C301005 Wall Finishes	Wall Finishes/Classrooms & Admin Offices	62	Painted gypsum is located within the classro appear to have been repainted approximate	ooms and admin office located on the second floor and ely 5 years ago.	4	5	2012	13-Jul-17	MH 5	10	3	Repaint walls in conjunction with replacement of the windows.	Replacement	3 - Future Renewal	Yes	No	No	No	5500	\$3	SF	\$16,500 0)% 0%	5%
and Savings ntre	2687 James St., Duncan, BC	C Interiors	C30 Interior Finishes	C3010 Wall Finishes	C301005 Wall Finishes	Wall Finishes/Heritage Hall	63	Painted gypsum is located within the Heritag	ge Hall.	3	4	1987	13-Jul-17	MH 30	10	3	Repaint walls.	Replacement	3 - Future Renewal	Yes	No	No	No	6000	\$3	SF ?	\$18,000 0	J% O%	5%
and Savings Intre	2687 James St., Duncan, BC	C Interiors	C30 Interior Finishes	C3010 Wall Finishes	C301005 Wall Finishes	Wall Finishes/Library	64		ibrary and appears to be in generally good condition w he paint finish. We understand that repainting is to oc		5	2004	13-Jul-17	MH 13	10	1	Repaint walls as required.	Replacement	3 - Future Renewal	Yes	No	No	No	5000	\$4	SF :	\$20,000 0	0% 0%	5%
and Savings Intre	2687 James St., Duncan, BC	C Interiors	C30 Interior Finishes	C3010 Wall Finishes	C301005 Wall Finishes	Wall Finishes/Theatre	65	Painted gypsum is located throughout the th	heatre stairwells. We understand that the paint is origi	nal. 3	4	1976	13-Jul-17	MH 41	10	5	Repaint walls as required.	Replacement	3 - Future Renewal	Yes	No	No	No	4500	\$3	SF	\$13,500 0	0% 0%	5%
and Savings Intre	2687 James St., Duncan, BC	C Interiors	C30 Interior Finishes	C3010 Wall Finishes	C301007 Acoustic Panel Adhered to Wall	Wall Finishes/Heritage Hall - Acoustic Wall Panels	66	Acoustic panels have been installed on the v	walls within the Heritage hall and are original.	4	4	1987	13-Jul-17	MH 30	35	5	Replace acoustic wall panels at end of service life.	Replacement	3 - Future Renewal	Yes	No	No	No	1	\$15,000	LS	\$15,000 0	0% 0%	5%
and Savings Intre	2687 James St., Duncan, BC	C Interiors	C30 Interior Finishes	C3010 Wall Finishes	C301007 Acoustic Panel Adhered to Wall	Wall Finishes/Theatre - Acoustic Wall Panels	67	Aging acoustic panels are located at the back related deterioration.	ck of the theatre seating area and are showing signs of a	ge 3	4	1976	13-Jul-17	MH 41	35	5	Replace acoustic wall panels at end of service life.	Replacement	3 - Future Renewal	Yes	No	No	No	1	\$25,000	LS	\$25,000 0	0% 0%	5%
nd Savings ntre	2687 James St., Duncan, BC	C Interiors	C30 Interior Finishes	C3010 Wall Finishes	C301099 Other Wall Finishe	vs Wall Finishes/Theatre	68	Aging wallpaper is located within the theatre delaminating from the wall in the seating are	e seating area and the theatre lobby. The wall paper is ea.	2	3	1976	13-Jul-17	MH 41	15	1	Replace wall paper.	Replacement	3 - Future Renewal	Yes	No	No	No	4500	\$5	SF *	\$22,500 0	9% 0%	5%
and Savings ntre	2687 James St., Duncan, BC	C Interiors	C30 Interior Finishes	C3020 Floor Finishes	C302004 Wood Flooring	Floor Finishes/Theatre - Stage flooring		The main stage of the theatre consists of wo	ood flooring and was recently refinished.	4	5	2015	13-Jul-17	MH 2	15	13	Refinish wood flooring as required.	Repair Allowance	3 - Future Renewal	No	No	No	No				\$0 0	J% 0%	5%
and Savings ntre	2687 James St., Duncan, BC	C Interiors	C30 Interior Finishes	C3020 Floor Finishes	C302004 Wood Flooring	Floor Finishes/Genoa Room	69	Wood flooring has been installed throughou within the last 10 years.	ut the Genoa Room and appears to have been replaced	4	5	2007	13-Jul-17	MH 10	20	11	Refinish wood flooring as required.	Repair Allowance	3 - Future Renewal	No	No	No	No				\$0 0	9% 0%	5%
and Savings ntre	2687 James St., Duncan, BC	C Interiors	C30 Interior Finishes	C3020 Floor Finishes	C302004 Resilient Floor Finishes	Floor Finishes/Gymnastics Club	70	Aging vinyl resilient flooring has been installeexcess of 15 years old.	led for the gymnastics club lobby and appears to be in	3	5	2000	13-Jul-17	MH 17	15	5	Replace resilient flooring	Replacement	3 - Future Renewal	No	No	No	No	1000	\$7	SF	\$7,000 0)% 0%	5%
and Savings ntre	2687 James St., Duncan, BC	C Interiors	C30 Interior Finishes	C3020 Floor Finishes	C302004 Resilient Floor Finishes	Floor Finishes/Theatre	71		e been installed throughout the lower level of the theat is showing signs of advanced levels of deterioration. W replacement in approximately 3 years time.		4	1976	13-Jul-17	MH 41	15	3	Replace resilient flooring and cove base. We recommend that Hazmat testing be conducted prior to removal to determine whether or not the floor system contains asbestos.	Replacement	3 - Future Renewal	Yes	No	No	No	3000	\$7	SF	\$21,000 0)% 0%	5%
and Savings ntre	2687 James St., Duncan, BC	C Interiors	C30 Interior Finishes	C3020 Floor Finishes	C302004 Resilient Floor Finishes	Floor Finishes/Classrooms - Level 2	72		i installed for the classrooms and hallways located on le bod condition; however aging flooring is located within		4	1976	13-Jul-17	MH 41	10	3	Replace resilient flooring in classrooms.	Replacement	3 - Future Renewal	Yes	No	No	No	3500	\$7	SF	\$24,500 0)% 0%	5%
and Savings ntre	2687 James St., Duncan, BC	C Interiors	C30 Interior Finishes	C3020 Floor Finishes	C302004 Resilient Floor Finishes	Floor Finishes/Heritage Hall	73	Resilient flooring is located throughout the h and minor damage noted.	heritage hall and appears to be original. Evidence of w	ear 3	4	1987	13-Jul-17	MH 30	15	5	Vinyl tile flooring.	Replacement	2b - Exceeded Service Life	Yes	No	No	No	6000	\$7	SF	\$42,000 0)% 0%	5%
and Savings ntre	2687 James St., Duncan, BC	C Interiors	C30 Interior Finishes	C3020 Floor Finishes	C302004 Resilient Floor Finishes	Floor Finishes/Portals	74	Sheet resilient flooring with vinyl cove base and appears to have been replaced within the second se	is located within Portals - Cowichan Valley Arts Council the last 5- 10 years.	4	5	2010	13-Jul-17	MH 7	15	12	Vinyl sheet flooring.	Replacement	3 - Future Renewal	Yes	No	No	No	++			\$0 0	٥%	5%
and Savings ntre	2687 James St., Duncan, BC	C Interiors	C30 Interior Finishes	C3020 Floor Finishes	C302005 Carpeting	Floor Finishes/Library - Carpet Tiles	75		ding and appear to be in good condition. We understa considered in 2018 and will be replaced with resilient	nd 4	4	2004	13-Jul-17	MH 13	15	2	Replace carpet tiles in library.	Replacement	3 - Future Renewal	No	No	No	No	5000	\$7	SF	\$35,000 0)% 0%	5%
and Savings ntre	2687 James St., Duncan, BC	C Interiors	C30 Interior Finishes	C3020 Floor Finishes	C302005 Carpeting	Floor Finishes/Theatre - Carpet	76	Carpet is located at the exit stairs and stairs and stairs and stairs and within the theatre boardroom.	adjacent to the theatre seating, within the theatre lobb	y 3	4	1992	13-Jul-17	MH 25	15	7	Replace carpeting at end of service life.	Replacement	3 - Future Renewal	Yes	No	No	No	8000	\$5	SF	\$38,000 0)% 0%	5%
and Savings Intre	2687 James St., Duncan, BC	C Interiors	C30 Interior Finishes	C3020 Floor Finishes	C302005 Carpeting	Floor Finishes/Administration Office - Carpet	77	Carpet is located within the admin. office an within the last 10 years.	nd is in good condition and appears to have been replace	ed 4	4	2007	13-Jul-17	MH 10	15	12	Replace carpeting at end of service life.	Replacement	3 - Future Renewal	Yes	No	No	No				\$0 0)% 0%	5%
nd Savings htre	2687 James St., Duncan, BC	C Interiors	C30 Interior Finishes	C3020 Floor Finishes	C302005 Corridors Flooring	Floor Finishes/Ceramic Tile	78	lobby of the theatre and within the Cowicha Some targeted replacement has occurred ov	obby, within the main hallways on level 1, within the ou an Suite. The tile appears to be original to the building. over the years. Cracking in the slab-on-grade and ne main hallway and within the Cowichan Suite.		4	1976	13-Jul-17	MH 41	25	8	Replace tile. Review slab-on-grade once tiles have been removed and repair as required prior to installing new flooring.	d Replacement	2b - Exceeded Service Life	Yes	Yes	No	No	9000	\$15	SF \$	\$135,000 0	0% 10%	5%
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This report should be reviewed in conjunction with the Objectives, Terms of Reference, Limitations, and Methodology included with the full report. cjw_vg_CVRD BCA - Island Savings-FINAL, 11/23/2017

Start Yr Cowichan Valley Regional District

 LIFECYCLE DATA	RECOMMENDATION	

		ints		ئ	CO	MPONENT		CONDITION ASSESSMENT	LIFECYCLE DATA	RECOMMENDATION								OPINION O	OF PROBABLE COST		
BLDG Name	Location / Address	Level 1 Major Group Eleme	Level 2 Group Elements	Level 3 Individual Elemen	ID	Location / Type	Photo	Describtion & Historh Yr New or Last Major Action Assessment Date Assessment Date	Assessed By Age in 2017 Typical Life Cycle or Action Interval	Est. Time Remaining to EOL or Major Action Becommendatiou	Type	Can this work b phased over multiple years	can the rate of deterioration be	Will a failure in this system lead co to a loss of use of a the facility ? so	ondition adversely ffect the buildings	Quantity	Unit Rate	Unit Subtotal Repair or Replacement Cost	Consult.	Contin- gency	5% Tax
U	2687 James St., Duncan, BC	C Interiors	C30 Interior Finishes	C3020 Floor Finishes	C302099 Other Flooring and Floor Finishes	d Floor Finishes/Sports Flooring	80	Sports flooring has been installed within gymnasium of the Multi-Purpose Hall. The flooring system 3 4 1976 13-Jul-17 appears to be showing some wear; however appears to be in fair condition.	MH 41 20	12 Replace sports flooring at end of service life. Re		Future No enewal	No	No	No			\$0	0%	0%	5%
J	687 James St., Duncan, BC	C Interiors	C30 Interior Finishes	C3020 Floor Finishes	C302099 Other Flooring and Floor Finishes	d Floor Finishes/Theatre - Control Room	81	A combination of painted flooring, resilient flooring and laminate flooring are located within the theatre control room located at the back of the theatre. All are showing signs of deterioration.	MH 41 15	4 Replace flooring with laminate flooring. Re		Future No enewal	No	No	No	1000	\$10	SF \$10,000	, 0%	0%	5%
J	687 James St., Duncan, BC	C Interiors	C30 Interior Finishes	C3030 Ceiling Finishes	C303001 Exposed Concrete Finishes	Floor Finishes/Arena - Painted concrete floors	82	Painted concrete concourse floors located within the arena spectator areas. The paint finish appears 4 5 2015 13-Jul-17 to be in good condition.	MH 2 7	5 Repaint concourse floors. Re		Future Yes enewal	No	No	No	3000	\$3	SF \$9,000	0%	0%	5%
	.687 James St., Duncan, BC	C Interiors	C30 Interior Finishes	C3030 Ceiling Finishes	C303002 Plaster Ceiling Finishes	Ceiling Finishes/Theatre - Plaster Ceiling	83	Plaster ceiling finishes are located with the theatre lobby and stairs and theatre boardroom. Some 3 4 2005 13-Jul-17 staining and discolouration was noted. The ceilings appear to have been last painted approximately 10 -15 years ago.	MH 12 15	3 Repaint plaster ceilings located in theatre lobby and boardroom. Re	_	Future Yes enewal	No	No	No	8000	\$3	SF \$24,000) 0%	0%	5%
	:687 James St., Duncan, BC	C Interiors	C30 Interior Finishes	C3030 Ceiling Finishes	C303004 Ceiling	Ceiling Finishes/Arena, Multi Purpose Hall	84	The underside of the Q decking and the trusses were recently repainted in both the arena and the 4 5 2015 13-Jul-17 multi-purpose hall.	MH 2 15	13 Repaint q-decking and trusses. Re		Future Yes enewal	No	No	No			\$0	0%	0%	5%
- -	687 James St., Duncan, BC	C Interiors	C30 Interior Finishes	C3030 Ceiling Finishes	C303004 Ceiling	Ceiling Finishes/Theatre & Heritage Hall	85	The underside of the Q decking and the trusses are exposed for portions of the theatre and Heritage 3 4 1976 13-Jul-17 Hall. The paint finish appears to be in fair condition. 3 4 1976 13-Jul-17	MH 41 15	2 Repaint q-decking and trusses. Re		Future Yes enewal	No	No	No	13500	\$7	SF \$94,500) 0%	0%	5%
U	2687 James St., Duncan, BC	C Interiors	C30 Interior Finishes	C3030 Ceiling Finishes	C303004 Ceiling	Ceiling Finishes/Gymnastics Club	86	Tongue and groove cedar has been installed for the ceiling within the Gymnastics Club and associated 4 5 1974 13-Jul-17 lobby and do not require painting; however, the metal trusses within the gymnastics club appear to need a repainting. 6 6 6 6 1974 13-Jul-17	MH 43 15	5 Repaint trusses. Re		Future Yes enewal	No	No	No	1	\$20,000	LS \$20,000) 0%	0%	5%
U	2687 James St., Duncan, BC	C Interiors	C30 Interior Finishes	C3030 Ceiling Finishes	C303004 Ceiling	Ceiling Finishes/Acoustic Tiles	87	Aging ceiling tiles are located in the hallways of the multi-purpose hall, the hallways adjacent to the theatre rehearsal hall, within the theatre change rooms, within the classrooms and administration34197413-Jul-17office located on the second floor, portions of the Heritage Hall and within the Cowichan Suite and00000	MH 43 5	2 A contingency has been provided for phased replacement of the acoustic 2x4 ceiling tiles (excluding suspension system).		Future Yes enewal	No	No	No	1	\$15,000	SF \$15,000	0 0%	0%	5%
rings 2	687 James St.,	C Interiors	C30 Interior Finishes	C3030 Ceiling Finishes	C303004 Ceiling	Ceiling Finishes/Acoustic Tiles -	88	Portal space. Acoustic ceiling tiles have been installed throughout the library and appear to be in good condition. 4 5 2004 13-Jul-17	MH 13 25	11 Replacement of the acoustic 2x4 ceiling tiles (excluding suspension system). Replacement of the acoustic 2x4 ceiling tiles (excluding suspension system).	placement 3	Future Yes	No	No	No			\$0	0%		5%
	Duncan, BC	C Interiors	C30 Interior Finishes	C3030 Ceiling Finishes	C303007 Suspension System	Library ns Ceiling Finishes/Theatre - Cat		Steel grate catwalks and stairs are located above the main stage and appear to be in good condition. 4 5 1976 13-Jul-17	MH 41 65	26 We expect the catwalk and stairs will last the life of the building. Re		Future Yes	No	No	No			\$0	0%		5%
vings 2	Duncan, BC	D Services	D10 Conveying	D1090 Other Conveying	D109005 Operable Scaffoldi	walk ng Theatre/Flylines and Rigging		Flylines were last replaced in 2013.45201313-Jul-17	MH 4 10	6 Replace flylines and rigging at end of service life. Replace flylines and rigging at end of service life.	placement 3	Future Yes	No	Yes	No	1	\$35,000	LS \$35,000) 0%	0%	5%
ings 2	687 James St., Duncan, BC	E Equipement and Funishings	E10 Equipment	E1090 Other Equipment		nal Sports Equipment/Multi-Purpose Hall and Gymnastics Club	e 89	Basketball nets, backboards and supports are located within the gymnasium of the multi-purpose hall. 4 5 1974 13-Jul-17 Floor matts, gymnastics equipment and a foam pit are located within the Gymnastics Club. All 4 5 1974 13-Jul-17	MH 43 10	8 Replace select equipment as required. A contingency has been provided for select Re replacement.	placement 3	Future Yes	No	No	No	1	\$25,000	LS \$25,000) 0%	0%	5%
	1687 James St.,	E Equipement and	E10 Equipment	E1090 Other Equipment	E109005 Kitchens	Heritage Hall - Flynn's Fish and	90-91	equipment appears to be of varying ages. A kitchen is located in the Heritage Hall as well as adjacent to the main lobby of the hockey arena. 3 4 1976 13-Jul-17	MH 41 10	4 A contingency has been provided for periodic refurbishment which includes replacement Co			No	No	No	1	\$75,000	LS \$75,000	0 0%	0%	5%
D	Duncan, BC	Funishings				Chips		Floors are a combination of ceramic tile and resilient flooring with painted gypsum walls and ceilings along with cupboards and counter tops. The Heritage Hall and Flynn's Fish and Chips have aging finishes.		of flooring, cabinets and counter tops.		enewal									
U	1687 James St., Duncan, BC	E Equipement and Funishings	E10 Equipment	E1090 Other Equipment	E109005 Kitchens	Theatre Concession	92	Image: Control of the second	MH 10 25	15 A contingency has been provided for refurbishment. Contingency has been provided for refurbishment.	0,	Future Yes enewal	No	No	No			\$0	0%	0%	5%
0	2687 James St., Duncan, BC	E Equipement and Funishings	E10 Equipment	E1090 Other Equipment	E109099 Fixed Interior Furnishings	Circulation Desks - Main Lobby, Library	93	The main front desk at the main lobby and the circulation desk of the library are in good condition 4 5 2004 13-Jul-17 and appear to have both been installed in 2004. 1004 <td< td=""><td>MH 13 25</td><td>11 Replace desks Re</td><td></td><td>Future Yes enewal</td><td>No</td><td>No</td><td>No</td><td></td><td></td><td>\$0</td><td>0%</td><td>0%</td><td>5%</td></td<>	MH 13 25	11 Replace desks Re		Future Yes enewal	No	No	No			\$0	0%	0%	5%
-	687 James St., Duncan, BC	E Equipement and Funishings	E20 Furnishings	E2010 Fixed Furnishings	E201002 Window Treatmen	ts Window Blinds/Library	94	Manual control blinds have been installed for the curtain wall window assemblies located within the library. 4 5 2004 13-Jul-17	MH 13 25	11 Replace at end of service life. Re		Future Yes enewal	No	No	No			\$0	0%	0%	59
U	687 James St., Duncan, BC	E Equipement and Funishings	E20 Furnishings	E2010 Fixed Furnishings	E201003 Seating (fixed)	Theatre/Seating	95	Image: Constraint of the building and is showing signs of age related deterioration. Padding in seat pans was replaced in 2015 3 4 2015 13-Jul-17	MH 2 25	8 Replace seating in theatre. Re		Future Yes enewal	No	No	No	1	\$375,000	LS \$375,000	J 0%	10%	5%
_	2687 James St., Duncan, BC	F Special Constructio Demolition	n and F10 Special Construction	F1010 Special Structures	F101099 Other Special Construction	Exterior/Giant Hockey Stick	96	The giant hockey stick, located on the west elevation, was installed in approximately 1987 and is 3 5 1987 13-Jul-17 constructed of wood with steel bracing. Cap flashing has been installed over the top surface. Some deterioration of the wood finish was noted.	MH 30 10	5 A contingency has been provided to conduct repairs on an cyclical basis which includes Re refinishing of wood surfaces, repair/replacement of damaged wood components, review and repair/repainting of steel bracing, repair/replacement of cap flashing.		Future No enewal	No	No	No	1	\$25,000	LS \$25,000	0%	0%	5%
0	687 James St., Duncan, BC	F Special Constructio Demolition	n and F10 Special Construction	F1040 Special Facilities	F104005 Special Facilities - Io Rinks	ce Arena/Boards and Glass	97	The boards and glass located within the hockey arena appear to be in good condition. 4 5 1976 13-Jul-17	MH 41 45	15 Replace boards and glass Re		Future No enewal	No	No	No			\$0	0%	0%	5%
0	687 James St., Duncan, BC	F Special Constructio Demolition	n and F10 Special Construction	F1040 Special Facilities	F104005 Special Facilities - Io Rinks	ce Arena/Spectator Seating	98	Image: Constraint of the spectator seating located within the hockey area appears to be in good condition and appears to 4 5 2007 13-Jul-17 have been installed within the last 10 years. 10 years. 10 years. 10 years. 10 years. 10 years.	MH 10 45	30 Replace seating in arena. Re		Future Yes enewal	No	No	No			\$0	0%	0%	5%
U	687 James St., Duncan, BC	F Special Constructio Demolition	n and F10 Special Construction	F1040 Special Facilities	F104005 Special Facilities - Io Rinks	ce Arena/Slab-on-Grade		The slab-on-grade directly below the ice surface is original to the building. Although not exposed for review, we understand that facility staff are currently experiencing issues with the cooling lines and over-all efficiency.	MH 41 60	12 Consideration be given to replacing slab and cooling lines to increase efficiency. Re		Future No enewal	No	No	No			\$0	0%	0%	5%
- -	2687 James St., Duncan, BC	P Professional Service	es P Professional Services	P Professional Services	P100002 BECA	Building Envelope		Water ingress was indicated by facility staff. Aging cladding systems are currently in place. Staining of batt insulation noted for walls in theatre potentially due to air leakage. 2 N/A 13-Jul-17	MH N/A 10	1 Conduct a BECA to review the conditions of the building envelope.	Study	N/A	N/A	N/A	N/A	1	\$12,000	LS \$12,000	0 0%	0%	5%
•	687 James St., Duncan, BC	P Professional Service	es P Professional Services	P Professional Services	P100003 Roof Review	Main Roofs		Water ingress indicated by facility staff at various roof locations. Blistering of SBS roof system noted at a number of locations. Original roof system remains over Gymnastics Club. 2 N/A 13-Jul-17	MH N/A 10	1 A roof review should be conducted prior to complete replacement of the roof membrane.	Study	N/A	N/A	N/A	N/A	1	\$5,000	LS \$5,000	0%	0%	5%
0	687 James St., Duncan, BC	P Professional Service	es P Professional Services	P Professional Services	P100007 Seismic Review	Entire Complex		We are not aware of the last seismic review conducted for the complex. 2 N/A 13-Jul-17	MH N/A 15	1 Conduct seismic review of entire complex.	Study	N/A	N/A	N/A	N/A	1	\$12,000	LS \$12,000	0 0%	0%	5%
Ū	687 James St., Duncan, BC	P Professional Service	es P Professional Services	P Professional Services	P100008 Building Wheelchai Accessibility	ir Accessibility		Wheelchair accessibility is available for restricted areas of the building. N/A 13-Jul-17	MH N/A 15	5 An Accessibility Review or Study may identify means to improve accessibility for those with mobility issues. Conduct study within the next 5 years.	Study	N/A	N/A	N/A	N/A	1	\$10,000	LS \$10,000) 0%	0%	5%
-	687 James St., Duncan, BC	P Professional Service	es P Professional Services	P Professional Services	P100009 Roof Anchor Study	Roof Anchors		Roof safety anchors were not observed for all roofs reviewed. N/A 13-Jul-17	MH N/A 15	5 Conduct a study regarding roof anchor requirements.	Study	N/A	N/A	N/A	N/A	1	\$10,000	LS \$10,000	0 0%	0%	5%
•	687 James St., Duncan, BC				D304007 Exhaust Systems	Roof/ Flue Vent for Old Boiler		Decomissioned equipment on the rooftop. During the audit it was noted that there have been leaks to the room below through this penetration of an old boiler flue. Upon closer inspection, the flue has rusted through creating voids where water can enter. Additionally, decomissioned equipment with penetrations through the building envelope encourages vermin/wildlife habitats, that could have unknown effects on the building before effects are ever discovered. This includes old exhaust fans and air handlers.			Repair 2b - llowance Se	Exceeded No vice Life	Yes	No	Yes	1	\$5,000	EA \$5,000	0%	100%	5%
U	2687 James St., Duncan, BC				D304007 Exhaust Systems	Roof/ Exhaust Fans (typical)	A3-A10, A22/A23	Rooftop exhaust fans for various appliacations, appear to be operating as intended. During the walkthrough it was noted that some of the fans had the metal grate not properly wrapped around the opening defeating its intended purpose. Bolt-on caps are at times missing a bolt or two, which overload other fasteners in high-load situations and also contribute to rattlling of the cover, both of which can lead to premature failure.GoodRequires 2005200513-Jul-2017 27-Jul-2017This line item includes smaller (interor) fans.This line item includes smaller (interor) fans.InterventInterventInterventInterventIntervent		8 Properly fasten all bolts and adhere all grates appropropriately. Replace units at end of life. Replacement cost has been evenly budgeted over the next 10 years to replace fans as they fail.	·	Future Yes enewal	Yes	No	No	32	\$3,750	EA \$120,000) 0%	0%	5%

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Start YrCowichan Valley Regional District2017Facility Condition Assessment and Capital PlanIsland Savings Centre, 2687 James St., Duncan, B

				CON	/IPONENT		CONDITION ASSESSME					FECYCLE DATA	RECOMMENDATION								OPINION OF	PROBABLE COST		
BLDG Name Location / Address	Level 1 Major Group Elements	Level 2 Group Elements	Level 3 Individual Elements	ID	Location / Type	Photo	Description & History	Condition Performance	Yr New or Last Major Action	Assessment Date Assessed By	Age in 2017	Typical Life Cycle or Action Interval Est. Time Remaining to EOL or Major Action	Recommendation	Type Priority	Can this work be phased over multiple years ?	can the rate of deterioration be	Will a failure in this system lead co to a loss of use of a the facility ? s	ondition adversely affect the buildings	Quantity	Unit Rate	Unit Subtotal Repair or Replacement Cost	Consult.	Contin- gency	5% Tax
nd Savings 2687 James tre Duncan, BC	it., D Services	D30 HVAC	D3040 Distribution Systems	D304001 Air Distribution, Heating and Cooling	Roof/ Trane Heat Pump		Packaged heat pump installed in 2010. The interior of the unit was not inspected. The air intake gra appears to be showing signs of wear.	e 4 4	2010 1	3-Jul-17 MH	7	15 8	Monitor intake air grate integrity and replace as necessary. Replace filters regularly for optimal efficiency and to extend service life. Costs all fan sizes were averaged for budgeting purposes. Replace at end of life.	Replacement 3 - Futur Renewa		Yes	No	No	1	\$15,000	EA \$15,000	0%	0%	5%
Savings 2687 James e Duncan, BC	it., D Services	D30 HVAC	D3040 Distribution Systems	D304001 Air Distribution, Heating and Cooling	Rooftop/ Trane Packaged Heat Pumps 1+2		Packaged heat pump installed in 2010. The interior of the unit was not inspected. Condensate and/ rain water appear to be draining through unitended pathways through the unit, promoting premate corrosion and damage to the condenser coil.		2010 1	3-Jul-17 MH	7	15 8	Recommend service inspection to verity whether condensate is being diverted as per manufacturers' recommendations. Replace at end of life.	Replacement 3 - Futur Renewa		Yes	No	No	2	\$18,000	EA \$45,000	0%	0%	5%
Savings 2687 James Duncan, BC	it., D Services	D30 HVAC	D3040 Distribution Systems	D304001 Air Distribution, Heating and Cooling	Rooftop/ HP-1+2 Ducting		Footings appear to have encountered a heavy shifting load resulting in bending out of place. This section of ducting is therefore structurally unsupported and over time could come ajar or impact the integrity of adjacent sections of ducting. Additionally, metal clips were never attached or have come loose over time in several places along to duct run. This also compromises the structural integrity of the ducting and may lead to premature sfailure. This can affect the ability of the system to deliver heating and/or cooling efficiently (heat pumps could be working under excessive loading, decreasing their lifetime).	the	2010 1	3-Jul-17 MH	7	30 1	Reposition footings to original position. Recommend adding additional bracing to the footigns given that they are positioned on a sloped roof and will likely continue to encounter large masses of snow or ice load annually. Inspect all clips and re-fasten.	Repair 2 - Resto Allowance Functiona		Yes	No	No	1	\$2,500	EA \$2,500	0%	0%	5%
Savings 2687 James Duncan, BC	it., D Services	D30 HVAC	D3040 Distribution Systems	D304001 Air Distribution, Heating and Cooling	Rooftop/ York RTU		This unit appears to have reached the end of its useful life. During the walkthough, a high-pitched noise eminated intermittently from the unit, likely from the compressor. Age unknown and estimated.	2 2	2000 1	3-Jul-17 MH	17	15 -2	Recommend replacing the unit immediately as repairs may be costly, and new units have much better efficiency.	a Replacement 2 - Resto Functiona		Yes	No	No	1	\$20,000	EA \$20,000	0%	0%	5%
avings 2687 James Duncan, BC	it., D Services	D30 HVAC	D3090 Other HVAC Systems Equipment	& D309099 Other Special Mechanical Systems	Rooftop/ Cimco Dehumidifaction Unit		Dehumidifaction system was not running during walkthrough. Some wear is indicated by rusting around the penetrations in the unit, as well as inside the unit. A cover plate is missing from a junctic box within the unit. Filters show signs of debris.	n 3 2	2003 1	3-Jul-17 MH	14	15 1	Install junction box cover plate. Replace filters regularly for optimal functionality. Monito ducting to ensure adequate seal for optimal functionality and to prevent premature equipment failure. Replace at end of life.	Replacement 3 - Futur Renewa		Yes	No	No	1	\$150,000	EA \$150,000	0%	0%	5'
Savings 2687 James Duncan, BC	it., D Services	D30 HVAC	D3030 Cooling Generating Systems	D303002 Direct Expansion Systems	Rooftop/ Carrier Chiller #2		This chiller uses R22 as the refrigerant, which will be phased out in Canada starting in 2020. While it will still be available for years after, the availability will be limited and therefore costs will increase.	4 4		3-Jul-17 MH	10	15 5	Recommend replacing the unit at the time it needs a refrigerant top-up or needs significant repair, after 2020.	Replacement 3 - Futur Renewa	1	Yes	No	No	1	\$15,000	EA \$15,000		0%	5
Savings 2687 James Duncan, BC		D30 HVAC	D3030 Cooling Generating Systems	D303099 Other Cooling Generating Systems	Rooftop/ Cimco Condenser		Evaporative condenser was in the process of being cleaned during the walk-through.	4 4		3-Jul-17 MH	14	20 6	Continue to clean regularly to optimize efficiency. Replace unit at end of life.	Replacement 3 - Futur Renewa	I	Yes	No	No	1	\$75,000	EA \$75,000		0%	5
avings 2687 James Duncan, BC	it., D Services	D30 HVAC	D3030 Cooling Generating Systems	D303002 Direct Expansion Systems	Rooftop/ Carrier Chiller #1		Condenser appears to be in good shape. Some corroding fasteners noted on the pressure vessel, as well as traces of either condensation or working fluid leaks. Heat transfer grilles are slightly obstructed.	4 4	2007 1	3-Jul-17 MH	10	20 10	Recommend cleaning heat transfer grilles of debris for optimum efficiency. Inspect/monitor corroding fasteners and piping interface to pressure vessel. Replace unit at end of life.	Replacement 3 - Futur Renewa		Yes	No	No	1	\$50,000	EA \$50,000	0%	0%	Ē
avings 2687 James Duncan, BC	it., D Services	D30 HVAC	D3040 Distribution Systems	D304007 Exhaust Systems	Rooftop/ Vent Stacks	A50/A51	Exhaust stacks connected to mechanical/boiler room equipment below. Age unknown and estimate	d. 4 4	2012 1	3-Jul-17 MH	5	20 15	Replace at end of life. This item falls outside the ten year plan, costs associated with this item have not been carried into the cash flow tables.	Replacement 3 - Futur Renewa		Yes	No	No						
Savings 2687 James Duncan, BC	it., D Services	D30 HVAC	D3050 Terminal & Package Units	D305005 Electric Heating	Various (Above Exterior Entry Doors)/ Electric Resistance Convection Heaters		Forced fan electric heater (1/6 hp motor). Creates a heated air curtain around the door area to help keep heat in the building when doors are frequently opened. Age unknown and estimated.	4 4	2015 1	3-Jul-17 MH	2	15 13	Replace at end of life. Blow dust off unit on an annual basis to maximize its efficiency. Do this at the end of summer in preparation for the heating season. This item falls outside the ten year plan, costs associated with this item have not been carried into the cash flow tables.	Replacement 3 - Futur Renewa		Yes	No	No						
Savings 2687 James Duncan, BC	it., D Services	D30 HVAC	D3040 Distribution Systems	D304001 Air Distribution, Heating and Cooling	Theatre/ Air Handling Unit (S-6)		Supply fan/coil serving the theatre and backstage. Airflow appears to be excessive based on noise level. Age unknown and estimated.	4 4	1978 1	3-Jul-17 MH	39	20 -19	Air handling unit is well beyond its useful life and should be replaced with newer, more compact and more efficient models. Recommend to replace all associated ductwork as it has also exceeded its useful life (30 years). Staff have been maintaining functionality by replacing motors, controls, and belts on an a needed basis. This is not reccomended as a long-term solution.	Service L		Yes	No	No	1	\$25,000	EA \$25,000	0%	50%	5
Savings 2687 James Duncan, BC	it., D Services	D30 HVAC	D3030 Cooling Generating Systems	D303002 Direct Expansion Systems	Roof/ CU-1	A55	Trane condensing unit for the air handler serving the library.	4 4	2003 1	3-Jul-17 MH	14	15 1	Replace unit at end of life.	Replacement 3 - Futur Renewa		Yes	No	No	1	\$18,000	EA \$18,000	0%	0%	5
Savings 2687 James e Duncan, BC	it., D Services	D30 HVAC	D3030 Cooling Generating Systems	D303002 Direct Expansion Systems	Roof/ Small Condensing Unit	A56	Mitsubishi condensing unit. Uses R-22 refrigerant (phase out begins in 2020).	4 4	2003 1	3-Jul-17 MH	14	15 1	Replace unit at end of life.	Replacement 3 - Futur Renewa		Yes	No	No	1	\$3,500	EA \$3,500	0%	0%	5
Savings 2687 James e Duncan, BC	it., D Services	D30 HVAC	D3040 Distribution Systems	D304001 Air Distribution, Heating and Cooling	Library, 2nd Floor/ AHU-1	A57	Built-up Trane AHU serving the library.	4 4	2003 1	3-Jul-17 MH	14	12 30	Replace filters regularly to optimize efficiency. Inspect motors and melts regularly for wear. Replace at end of life.	Replacement 3 - Futur Renewa		Yes	No	No						
Savings 2687 James e Duncan, BC	it., D Services	D50 Electrical	D5090 Other Electrical Serv	ces D509002 Emergency Lighting and Power	Stage Driveway/ Emergency Diesel Generator	A58	Blue Star emergency backup diesel generator.	4 4	2014 1	3-Jul-17 MH	3	20 17	This item falls outside the ten year plan, costs associated with this item have not been carried into the cash flow tables. Test system regularly per manufacturer's recommendations/ codes.	Replacement 3 - Futur Renewa		Yes	No	No						
													Replace at end of service life. This item falls outside the ten year plan, costs associated with this item have not been carried into the cash flow tables.											
Savings 2687 James e Duncan, BC		D30 HVAC	D3040 Distribution Systems	Distribution Systems	Boiler Rm./ Amtrol Expansion Tank		Large Amtrol expansion tank serving the hydronic heating loop.	3 2		3-Jul-17 MH	31	30 -1	This unit has likely reached the end of its life. Plan to replace immediately.	Replacement 2b - Excee Service L	fe	Yes	No	No	1	\$2,500	EA \$2,500	0%	0%	5
Savings 2687 James e Duncan, BC	it., D Services	D50 Electrical	D5090 Other Electrical Serv	ces D509002 Emergency Lighting and Power	Boiler Rm./ Amtrol Expansion Tank	A60	Small Amtrol expansion tank serving the hydronic heating loop.	4 4	2003 1	3-Jul-17 MH	14	30 16	Replace at end of service life. This item falls outside the ten year plan, costs associated with this item have not been carried into the cash flow tables.	Replacement 3 - Futur Renewa		Yes	No	No						
Savings 2687 James e Duncan, BC	it., D Services	D30 HVAC	D3020 Heat Generating Systems	D302002 Hot Water Boilers	Boiler Rm./ Boiler B-1	A61	Cleaver Brooks natural gas boiler serving the hydronic loop.	5 5	2016 1	3-Jul-17 MH	1	25 24	Replace at end of service life. This item falls outside the ten year plan, costs associated with this item have not been carried into the cash flow tables.	Replacement 3 - Futur Renewa		Yes	No	No						
Savings 2687 James e Duncan, BC	it., D Services	D30 HVAC	D3040 Distribution Systems	D302002 Hot Water Boilers	Boiler Rm./ Boiler B-2	A62	Weil McLain natural gas boiler serving the hydronic loop.	3 4	1991 1	3-Jul-17 MH	26	25 -1	Plan to replace unit immediately. Given that this boiler is mostly on standby (secondary) to B-1 (primary), it may be infrequently utilized depending on occupant behavour and climate; therefore it could have a longer than expected life. However, given that its failure will likely occur during peak heating season, it is a recommended to replace it as soon as possible.	Replacement 2b - Excee Service L		Yes	No	No	1	\$30,000	EA \$30,000	0%	0%	5
	it., D Services	D30 HVAC	D3040 Distribution Systems	D304003 Hot Water	Various/ Pipe-Mounted Pumps	A63 A72-A86	Various pumps serving heating for heating coils, cooling coils, glycol, and DHW. Most pumps are		N/A 1	3-Jul-17 MH	N/A	N/A N/A	Replace pumps at end of service life. Pipe-mounted pumps have a typical lifetime of 10	Replacement 3 - Futu	e Yes	Yes	No	No	20	\$2,500	EA \$50,000	0%	0%	

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This report should be reviewed in conjunction with the Objectives, Terms of Reference, Limitations, and Methodology included with the full report. cjw_vg_CVRD BCA - Island Savings-FINAL, 11/23/2017

		10			COM	IPONENT		CONDITION ASSESSIV	1ENT			LIFECYCLE DATA	RECOMMENDATION								OPINIO	ON OF PROBABL	E COST	
BLDG Name	Location / Address	Level 1 Major Group Elements	Level 2 Group Elements	Level 3 Individual Elements	ID	Location / Type	Photo Description &		Condition Performance	Yr New or Last Major Action	Assessment Date Assessed By Age in 2017	Typical Life Cycle or Action Interval Est. Time Remaining to EOL or	Recommendation	Type	pl کے	ased over deterioration be	this system lead to a loss of use o	n Can the current d condition adversely of affect the buildings security of safety ?	ntit s	Unit Rate	Unit Subtotal	Repair or Replacement Cost Consult.	Contin- gency	5% Ta)
nd Savings 2 tre E	687 James St., Juncan, BC	D Services	D30 HVAC	D3040 Distribution Systems	D304001 Air Distribution, Heating and Cooling	Roof/ RTU-1		d rooftop unit serving backstage rooms including storage, stage prep, TV studio, etc e zones served are pictured. Age unknown and estimated.	c. 1 1	1978	13-Jul-17 MH 39	25 -14	Plan to replace unit immediately. Occupants are currently utilizing zones previously served by this unit. Zones are currently not being conditioned/ventilated, resulting in very poor air quality. Occupants are openin windows as the sole method of introducing fresh air to the spaces. Prolonged exposure in this space is not currently recommended based on the smell of mould. As ductwork has also likely exceeded its recommended service life, suggest to replace it a well. At the very least, clean ductwork throroughly before comissioning replacement equipment.	Fui ng n	Restore ctionality	No Yes	No	Yes	1	\$80,000	EA \$80,	30,000 0%	6 0%	5%
U	687 James St., Juncan, BC	D Services	D30 HVAC	D3040 Distribution Systems	D304003 Hot Water Distribution Systems	Various/Base-Mounted Pumps	Two pumps w	d pumps serving various applications: theatre cooling, fan coil heating, MPH cooling, ere assessed during the walkthrough. This line item excludes the two ice plant brine ed elsewhere).		N/A	13-Jul-17 MH N/A	N/A N/A	Replace pumps at end of service life. Base-mounted pumps have a typical lifetime of 20 years; therefore, assume half of these pumps will need to be replaced over the next 10 years. Equal annual budget is assigned for this purpose. Total number of base-mounted pumps is estimated based on walkthrough and previous reports.	Fu	Restore ctionality	Yes Yes	No	No	10	\$2,500	EA \$25,	25,000 0%	ő 0%	5%
U	687 James St., Puncan, BC	D Services	D30 HVAC	D3040 Distribution Systems	D304001 Air Distribution, Heating and Cooling	Various/ Original Air Handling Units S-1 to S-9	Audit Report f	air handling units serving various zones in the building. Refer to 2013 Prism Energy for zone details. S-4 serving the theatre was not accessed during the walkthrough. S here in this report.		1978	13-Jul-17 MH 39	20 -19	Air handling units are well beyond their useful life and should be replaced with newer, more compact and more efficient models. Recommend to replace all associated ductworl as it has also exceeded its useful life (30 years). Staff have been maintaining functionality by replacing motors, controls, and belts on an a		Exceeded vice Life	Yes Yes	No	No	8	\$50,000	EA \$400	00,000 0%	50%	5%
U	687 James St., Juncan, BC	D Services	E10 Equipment	E1090 Other Equipment	E109002 Food Service Equipment	Arena Concession/ Food Service Equipment		eep fryer, range, hood, etc. Age unknown and estimated. Interview with concession all kitchen equipment is operating without issues.	n 4 4	2005	13-Jul-17 MH 12	25 13	needed basis. This is not reccomended as a long-term solution. Replace at end of service life. This item falls outside the ten year plan, costs associated with this item have not been carried into the cash flow tables.		- Future enewal	Yes Yes	No	No						
Ũ	687 James St., Juncan, BC	E Equipement and Funishings	E10 Equipment	E1090 Other Equipment	E109002 Food Service Equipment	Heritage Hall/ Food Service Equipment		chen for catering larger events. Includes ovens, ranges, deep fryers, griddles, walk- nd frezzer, etc. Age unknown and estimated.	in 4 4	1990	13-Jul-17 MH 27	25 -2	Kitchen equipment is dated, but is in otherwise good condition likely due to intermittent usage. Continued maintenance and replacement of equipment on a per-instance basis is recommended, rather than complete replacement. A rolling budget has been estimated t this end over the next 10 years.	Allowance Se	Exceeded vice Life	Yes Yes	No	No	10	\$1,500	EA \$15,	.5,000 0%	6 0%	5
-	687 James St., Juncan, BC	D Services	D30 HVAC	D3060 Controls & Instrumentation	D306004 Instrument Air Compressors	Boiler Rm./ Compressed Air Dryer	A112 Curtis 10 SCFN	A compressed air dryer. Age unknown and estimated.	4 4	2010	13-Jul-17 MH 7	15 8	Replace at end of service life.		- Future enewal	No Yes	No	No	1	\$1,000	EA \$1,0	1,000 0%	6 0%	5
-	687 James St., puncan, BC	D Services	D30 HVAC	D3060 Controls & Instrumentation	D306004 Instrument Air Compressors	Boiler Rm./ Compressed Air System	A113 DV Systems air	r compressor. Age unkonwn and estimated.	4 4	2010	13-Jul-17 MH 7	15 8	Replace at end of service life.		- Future enewal	No Yes	No	No	1	\$2,500	EA \$2,5	2,500 0%	6 0%	
Ŭ	687 James St., Juncan, BC	D Services	D30 HVAC	D3090 Other HVAC Systems Equipment	& D309099 Other Special Mechanical Systems	Boiler Rm./ Filter Feeder	A114 JL Wingert doi	me bottom filter feeder (50 micron). Age unknown and estimated.	4 4	2010	13-Jul-17 MH 7	15 8	Replace filters as needed. Replace at end of service life.		- Future enewal	No Yes	No	No	1	\$1,000	EA \$1,0	1,000 0%	ő 0%	2
l Savings 2 e [687 James St., Juncan, BC	D Services	D30 HVAC	D3090 Other HVAC Systems Equipment	 & D309099 Other Special Mechanical Systems 	Boiler Rm./ Pot Feeders (2)	A115 Two chemical	pot feeders serving the hot water/radiant loop. Age unknown and estimated.	4 4	2000	13-Jul-17 MH 17	15 -2	Plan to replace these units as they appear to have reached the end of their expected service life.	Replacement 3	- Future enewal	No Yes	No	No	2	\$1,000	EA \$2,0	2,000 0%	6 0%	5
l Savings 2 e [687 James St., Puncan, BC	D Services	D30 HVAC	D3040 Distribution Systems	D304003 Hot Water Distribution Systems	Boiler Rm./ Expansion Tank	A116 Suspended Ta	co expanson tank serving boiler hot water.	5 5	2016	13-Jul-17 MH 1	15 14	Replace at end of service life. This item falls outside the ten year plan, costs associated with this item have not been carried into the cash flow tables.		- Future enewal	No Yes	No	No						
•	687 James St., Juncan, BC	D Services	D30 HVAC	D3040 Distribution Systems	D304003 Hot Water Distribution Systems	Various/ Radiant Heaters (30+)		rs serve various zones including hallways, mechanical rooms, ice plant room, works own and estimated.	hop 4 4	1978	13-Jul-17 MH 39	30 -9	Plan to replace immediately as units appear dated and may not be delivering heat efficiently. Alternatively, replace units when they become non-functional. Rolling budget has been assigned to this item over the 10 year capital plan.		Exceeded vice Life	Yes Yes	No	No	35	\$1,000	EA \$35,	35,000 0%	6 0%	5
d Savings 2 re [687 James St., Puncan, BC	D Services	D30 HVAC	D3050 Terminal & Package Units	D305003 Fan Coil Units	ISC Offices + Exhibition Rooms/ Fan Coils (14)		d exhibition rooms are served by hydronic fan coil units. One representative unit in rdroom storage/closet was accessed during walkthough (pictured). Age unknown b to the building.		1978	13-Jul-17 MH 39	25 -14			Exceeded vice Life	Yes Yes	No	No	1	\$2,500	EA \$2,5	2,500 0%	6 0%	59
C C	687 James St., Puncan, BC	D Services	D30 HVAC	D3040 Distribution Systems	D304001 Air Distribution, Heating and Cooling	Classrooms/ Heating/Cooling Units (8)		s on the 2nd level are served air handling units with heating and cooling capability. I ssible during walkthough. Age unknown but likely original to the building.	Units 2	1978	13-Jul-17 MH 39	25 -14	Recommend performing a detailed/invasive review of this eqiupment to evaluate its condition appropriately. Consider window replacement ahead of this study, to size mechanical equipment	,	Exceeded vice Life	Yes Yes	No	No	1	\$2,500	EA \$2,5	2,500 0%	6 0%	5
	687 James St., Juncan, BC	D Services	D30 HVAC	D3040 Distribution Systems	D304001 Air Distribution, Heating and Cooling	Arena Dressing + Referee Rooms/ Air Handling Units (9)	A121-A128 Air Handling U coaches/traini	Inits with hydronic heating coils serving dressing rooms, referee rooms, and ing rooms.	4 4	1978	13-Jul-17 MH 39	20 -19			Exceeded vice Life	Yes Yes	No	No	8	\$15,000	EA \$120	20,000 0%	ő 0%	5
I Savings 2	687 James St.,	D Services	D30 HVAC	D3040 Distribution Systems	D304001 Air Distribution,	Dressing Room 6/ Ducting	A131/A132 Ducting in dre	ssing room is rusting uncharacteristically rusty in one area. Age unknown and	3 2	1978	13-Jul-17 MH 39	30 -9	At least one of these units appears to have been recently replaced. Continue to replace as budget allows or when units fail.			No Yes	No	No	1	\$500	EA \$50	\$500 0%	6 0%	
	uncan, BC 687 James St.,	D Services	D30 HVAC	D3020 Heat Generating	Heating and Cooling	Ice Plant Rm./ Heat Exchanger	estimated.	Nueller heat recovery tanks. Heat is recovered from compressors and delivered to t	the 4 4	2010	13-Jul-17 MH 7	24 17	water ingress from another source. Replace at end of service life.	Replacement 2b	Exceeded	No Yes	No	No						_
-	puncan, BC			Systems		Tanks (4)	_	vater tank. Age unknown and estimated.					This item falls outside the ten year plan, costs associated with this item have not been carried into the cash flow tables.		vice Life									
Ū.	687 James St., Juncan, BC	D Services	D30 HVAC	D3090 Other HVAC Systems Equipment	& D309002 Refrigeration System	s Ice Plant Rm./ Compressors (2)	A135/A136 Two Mycom r	eciprocating compressors serving the ice rink brine loop.	4 4	2013	13-Jul-17 MH 4	20 16	Replace at end of service life. This item falls outside the ten year plan, costs associated with this item have not been carried into the cash flow tables. Likewise, two 75hp Toshiba motors driving the compressors are of the 2014 vintage and are expected to last approximately 15 more years.		- Future enewal	No Yes	No	No						
Ŭ,	687 James St., puncan, BC	D Services	D30 HVAC	D3090 Other HVAC Systems Equipment	& D309002 Refrigeration System	s Ice Plant Rm./ Chiller	A137 Henry Techno	logies chiller serving the ice rink brine loop.	4 4	2003	13-Jul-17 MH 14	23 9	Replace at end of service life.		- Future enewal	No Yes	No	No	1	\$250,000	EA \$250	50,000 0%	6 0%	5
Ū.	687 James St., Juncan, BC	D Services	D30 HVAC	D3090 Other HVAC Systems Equipment	& D309002 Refrigeration System	s Ice Plant Rm./ Brine Tank	A138 Polymer tank t	that holds make-up brine for the ice rink brine loop. Age unknown and estimated.	4 4	2000	13-Jul-17 MH 17	30 13	Replace at end of service life. This item falls outside the ten year plan, costs associated with this item have not been carried into the cash flow tables.		- Future enewal	No Yes	No	No						+
	687 James St., Juncan, BC	D Services	D30 HVAC	D3040 Distribution Systems	D304099 Other Distribution Systems	Ice Plant Rm./ Brine Pumps (2)	A139 Two Emerson estimated.	pumps (20hp & 7.5hp) serve the brine loop for the ice rink. Age unknown and	4 4	2007	13-Jul-17 MH 10	20 10	Replace at end of service life.		- Future enewal	No Yes	No	No	2	\$7,500	\$15	.5,000 0%	6 0%	5
. –	687 James St., Puncan, BC	D Services	D30 HVAC	D3040 Distribution Systems	D304005 Glycol Distribution Systems	Ice Plant Rm./ Expansion Tank	A140 Expansion tan	k serving the glycol loop. Age unknown and estimated.	4 4	2014	13-Jul-17 MH 3	15 12	Replace at end of service life. This item falls outside the ten year plan, costs associated with this item have not been		- Future enewal	No Yes	No	No	+					+

This report should be reviewed in conjunction with the Objectives, Terms of Reference, Limitations, and Methodology included with the full report. cjw_vg_CVRD BCA - Island Savings-FINAL, 11/23/2017

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	LIFECYCLE DAT	A		REC	COMMENDATIC	NC		

					CC	OMPONENT		CONDITION ASSESSMEN	IT				LIFECYCLE	DATA	RECOMMENDATION								OPINIO	ON OF PROB	ABLE COST	
BLDG Name	Location / Address	Level 1 Major Group Elements	Level 2 Group Elements	Level 3 Individual Elements	ID	Location / Type	Photo	Description & History	Condition	Performance Yr New or Last Major Action	Assessment Date	Assessed By Age in 2017	Typical Life Cycle or Action Interval	Est. Time Remaining to EOL or Major Action	Recommendation	ity	an this work be phased over	can the rate of deterioration be	Will a failure in this system lead co to a loss of use of a the facility ? si	ondition adversely ffect the buildings	Quantity	Unit Rate	Unit	Subtotal Repair or Replacement Cost	Consult. Contin-gency	5% Tax
Island Savings Centre	2687 James St., Duncan, BC	D Services	D30 HVAC	D3020 Heat Generating Systems	D302099 Other Heat Generating Systems	Zamboni Rm./ Hot Water Tank	A141	Hot water heater that uses waste heat drawn from the ice rink refrigeration loop.	3	4 1977	13-Jul-17	MH 40) 24	-16	While the tank may be functioning as intended, it is well beyond its expected service life.Replacement2b -The condition of the internal components could be impacting heat transfer efficiencyService life.Service life.adversely. Plan to replace unit immediately when budget is available.Service life.Service life.	- Exceeded ervice Life	No	Yes	No	No	1	\$7,500	EA \$7	\$7,500	0% 0%	5%
Island Savings Centre	2687 James St., Duncan, BC	D Services	D30 HVAC	D3040 Distribution Systems	s D304001 Air Distribution, Heating and Cooling	Theatre/ Air Supply Grilles and Ductowrk	A172/A173	Supply air grilles are likely original to the building, along with associated ductwork. Dust from ducts is collecting on surfaces.	2	3 1978	13-Jul-17	MH 39	30	-9	Replace filters on air handlers regularly. Repair 2b - Allowance Ser Given the age of the system, ducts may need cleaning to remove particulates. Allowance Ser Cost of complete air handling system replacement is detailed elsewhere. Since cleaning or replacing are likely mutually exclusive, the cost of cleaning is not carried into the cash flow tables. Image: Cost of complete air handling system replacement is detailed elsewhere. Since cleaning or replacing are likely mutually exclusive, the cost of cleaning is not carried into the cash flow tables. Image: Cost of complete air handling system replacement is detailed elsewhere. Since cleaning or replacement is detailed elsewhere. Since cleaning is not carried into the cash flow is the cosh flow is the	- Exceeded ervice Life	Yes	Yes	No	No						
Island Savings Centre	2687 James St., Duncan, BC	D Services	D50 Electrical	D5090 Other Electrical Serv	vices D509005 Electrical Heating	Various/ Baseboard Heaters	A297/A298	Electric baseboard heaters were found in the arena beverage concession/ticket room, and the viewing lounges. Ages unknown but likely original to the building.	3	4 1978	13-Jul-17	MH 39	20	-19	Plan to replace these units as they are well beyond their expected service life. Replacement 2b - Baseboard heater in ticket/beverage concession is obstructed with combustible materials (pictured). This is a fire hazard. Always allow for appropriate clearance to combustibles per manufacturer's recommendations. Note: 100 - 100	- Exceeded ervice Life	Yes	Yes	No	Yes	3	\$800		\$2,400	0% 0%	5%
Island Savings Centre	2687 James St., Duncan, BC	G Building Sitework	G30 Site Civil/Mechanical Utilities	G3010 Water Supply	G301007 Pumping Stations	Northwest Parking Lot/ Sump Pump	x	High water table necessitates a sump pump system. Pump was not accessed during walkthough. Age unknown and estimated.		4 2008	13-Jul-17	МН 9	10	1		3 - Future Renewal	No	Yes	Yes	No	1	\$5,000	EA \$5	\$5,000	0% 0%	5%
Island Savings Centre	2687 James St., Duncan, BC	D Services	D20 Plumbing	D2020 Domestic Water Distribution	D202099 Other Domestic Water Supply	Various/ Other Hot Water Heater/Tanks	x	Four year old, roughly 500 USG tank serving the main building hot water. Additionally, a 75 gal electric hot water tank is approximately the same vintage and serves the old pool area/gymnasium.	c 4	4 2013	13-Jul-17	MH 4	15	9		3 - Future Renewal	No	Yes	No	No						
Island Savings Centre	2687 James St., Duncan, BC	D Services	D20 Plumbing	D2040 Rain Water Drainage	e D204002 Roof Drains	Roof/ PVC Drain Pipe Adjacent HP- 1	P- A17	PVC drain pipe fastener is loose and no longer supporting the pipe.	2	3 N/A	13-Jul-17	MH N/	A N/A	N/A	Re-fasten to restore structural integrity. Repair 1 – I Allowance Allowance Cost of repair is negligible and has not been carried forward in cost tables. 1 – I	Immediate	No	Yes	No	No	1	\$2,500	EA \$2	\$2,500	0% 0%	5%
Island Savings Centre	2687 James St., Duncan, BC	D Services	D20 Plumbing	D2040 Rain Water Drainage	e D204003 Rainwater Drainag Equipment	ge Rooftop/ Drain Grates	A20-A21, A24, A28	Plastic debris grates have degraded over time due to exposure to the elements, comporomising their effectiveness. Debris is akwardly collecting in the drain cavity in certain grates. Other grates are missing entirely. Drains are therefore more likely to backup leaving standing water on the roof.	2	3 N/A	13-Jul-17	MH N/	A N/A	N/A	Remove debris regularly and reposition grate properly or replace with one of correct Replacement 1 – I size/dimensions. Replace damaged or missing grates. Galvanized metal could be more durable for this application. Image: Construction of correct is application of correct is application. Replace damaged or missing grates. Image: Construction of correct is application. Image: Construction of correct is applied of construction. Image: Construction of correct is applied of construction. Image: Construction of construction of correct is applied of construction. Image: Construction of construction of correct is applied of construction. Image: Construction of construction of construction. Image: Construction of construction of construction of construction. Image: Construction of construction of construction. Image: Construction of construction of construction of construction. Image: Construction of construction o	Immediate	No	Yes	No	Yes	1	\$2,500	EA \$2	\$2,500	0% 0%	5%
Island Savings Centre	2687 James St., Duncan, BC	D Services	D20 Plumbing	D2010 Plumbing Fixtures	D2010 Plumbing Fixtures	Various/ Washroom Sinks, Toilets, Showers, Urinals, etc.	A142-A171	Several washrooms were accessed during the walkthough. Most fixtures are in good condition and operating properly.	4	4 N/A	13-Jul-17	MH N/	A N/A	N/A	Consider establishing a standing budget to repair fixtures on a per-instance basis as the need arises. Repair 2b - Allowance	- Exceeded ervice Life	Yes	Yes	No	No	10	\$5,000	EA \$5	50,000	0% 0%	5%
															Some areas are in need of attention. In particular, washrooms in the Heritage Hall area are in need of repair, and it appears as though some work is currently being undertaken (pictured). Additionally, washroom fixtures (showers in particular) found in the theatre dressing rooms are candidates for renovation as they are exhibiting signs of deterioration.											
Island Savings Centre	2687 James St., Duncan, BC	D Services	D50 Electrical	D5010 Electrical Service & Distribution	D501001 Main Transforme	rs Various/ Transformers	A174-A179	Electrical transformers in various locations thoughout the building. Varying vintages; ages unknown and estimated.	4	4 2003	13-Jul-17	MH 14	30	16	Some transformers are newer and will not require upgrading over the next 10 years. However, others are likely original to the building and likely need to be replaced. Based on the walkthough, plan to replace approximately 5 transformers over the next 10 years. Replacement R	3 - Future Renewal	Yes	Yes	f pr	Unknown; recommend procuring services from an electrical ofessional to make this judgement.	5	\$10,000	EA \$5	50,000	0% 0%	5%
Island Savings Centre	2687 James St., Duncan, BC	D Services	D50 Electrical	D5030 Communications & Security	D503007 Television System	s Various/ LCD Screens (Televisions)		Televisions of varying vintages and sizes in numerous locations throughout the building. Some appear to be intermittently used while others are displaying information frequently (or always). Televisions that were not turned on were not reviewed for functionality. Ages unknown and estimated.		4 2015	13-Jul-17	MH 2	10	8	5	4b - scretionary Aesthetic	Yes	Yes	No	No	5	\$1,000	\$5	\$5,000	0% 0%	5%
Island Savings Centre	2687 James St., Duncan, BC	D Services	D50 Electrical	D5020 Lighting and Branch Wiring	D502099 Other Lighting and Branch Wiring	d Theatre Dressing Rooms/ Light Circuits		Bulbs for make-up lighting areas were recently replaced with LEDs. Switches appear to be original and dated; some are very sensitive to position and touch as if the internal components are worn.	d 4	4 2015	13-Jul-17	MH 2	25	23	Replace at end of service life. Study This item falls outside the ten year plan, costs associated with this item have not been carried into the cash flow tables. Study Recommend investigating whether condition of switches is acceptable. Study		No	Yes	No	No	1	\$500	EA \$	\$500	0% 0%	5%
Island Savings Centre	2687 James St., Duncan, BC	D Services	D50 Electrical	D5090 Other Electrical Serv	vices D509099 Other Special Systems and Devices	Main Lobby Parking Lot/ Electric Vehicle Charging Stations (2)	A190/A191	Two electric vehicle charging stations outside the main lobby, in the parking lot. One standard charging station, and one DC fast charging station. Age unknown and estimated.	4	4 2015	13-Jul-17	MH 2	10	8		3 - Future Renewal	Yes	Yes	No	No	2	\$3,000	EA \$6	\$6,000	0% 0%	5%
Island Savings Centre	2687 James St., Duncan, BC	D Services	D50 Electrical	D5020 Lighting and Branch Wiring	D502002 Lighting Equipmen	nt Various/ General Lighting		Facility lighting is mostly fluourescent T8/T12. Some singular CFL and incandescent lighting remains. Specialty lighting includes PAR20 lighting for Art exhibition areas. Excluded from this line item are high bay lighting areas, namely the arena, multipurpose room, and gymnasium. They are detailed elsewhere.		4 N/A	13-Jul-17	MH N/	A N/A	N/A	C I I I I I I I I I I I I I I I I I I I	4a - scretionary Renewal	Yes	Yes	No	No	10	\$20,000	EA \$20	200,000	0% 0%	5%
Island Savings Centre	2687 James St., Duncan, BC	D Services	D50 Electrical	D5020 Lighting and Branch Wiring	D502002 Lighting Equipme	nt Various/ High Bay Lighting		Special purpose lighting is employed in the following recreational areas: arena, multipurpose room, and gymnasium. Age estimated.	4	4 2015	13-Jul-17	MH 2	15	13		- Restore nctionality	Yes	No	No	No	10	\$1,000	EA \$1	10,000	0% 0%	5%
Island Savings Centre	2687 James St., Duncan, BC	D Services	D50 Electrical	D5010 Electrical Service & Distribution	D501007 Motor Control Centres	Various/ Motor Control Centres (4)	A215-A218	Motor control centres were located in theatre mechanical rooms, classroom wing, boiler room, and ice plant room during the walkthrough. Ages unknown and estimated.	4	4 1990	13-Jul-17	MH 27	30	3		3 - Future Renewal	Yes	Yes	No	No	2	\$20,000	EA \$4	40,000	0% 0%	5%
Island Savings Centre	2687 James St., Duncan, BC	G Building Sitework	G40 Site Electrical Utilities	G4030 Site Communication Security	& G403002 Sound Systems	Various/ Sound System Equipment	A219-A227	Sound systems for the theatre, arena, multipurpose hall, classrooms, rehearsal room, etc. Ages unknown, variable, and estimated.	4	4 2005	13-Jul-17	MH 12	2 15	3		4a - scretionary Renewal	Yes	Yes	No	No	5	\$10,000	EA \$5	50,000	0% 0%	5%
Island Savings Centre	2687 James St., Duncan, BC	G Building Sitework	G20 Site Improvements	G2040 Site Development	G204005 Signage	Theatre Roof/ Island Savings Centre Sign	A228-A229	Illuminated sign facing north. Age unknown and estimated.	4	4 2012	13-Jul-17	MH 5	20	15		3 - Future Renewal	No	No	No	No						
Island Savings Centre	2687 James St., Duncan, BC	D Services	D50 Electrical	D5010 Electrical Service & Distribution	D501005 Panels	Various/ Electrical Service Panels (Circuit Breaker Boxes) and Switches		Walkthough revealed numerous breaker panels and switches servicing many areas of the building. Many panels appear to be relatively modern. Arena, heritage hall, and clasroom equipment appear to be the most dated. Ages unknown, variable, and estimated.		4 1978	13-Jul-17	MH 39	30	-9	Given the variety, location, and number of panels and switches, consider establishing a standing budget over the next 10 years to replace aging and failing equipment.Contingency Ser2b - SerEquipment in the arena, heritage hall, and classroom areas appear to be oldest and should be the first priority for replacement.Electrical panels in the backstage theatre area appear to have been updated most recently.Electrical panels in the backstage theatre area appear to have been updated most	- Exceeded ervice Life	Yes	Yes	No	No	10	\$15,000	EA \$15	150,000	0% 0%	5%
Island Savings Centre	2687 James St., Duncan, BC	D Services	D50 Electrical	D5030 Communications & Security	D503099 Other Communications and Alarm Systems	Arena/ Scoreboard	A271	Centaur Products H-2105 scoreboard.	4	4 2008	13-Jul-17	MH 9	20	11		3 - Future Renewal	No	No								
Island Savings Centre	2687 James St., Duncan, BC	D Services	D50 Electrical	D5030 Communications & Security	D503002 Telecommunication Systems	ons Various/ Telecommunications Equipment	A272-A282	Routers, modems, WIFI signal boosters, satellite dish, etc.	4	4 2015	13-Jul-17	MH 2	20	18		4a - scretionary Renewal	Yes	Yes	No	No	10	\$5,000	EA \$5	50,000	0% 0%	5%

2017 Facility Co	n Valley Regio ondition Asse vings Centre, 1		ital Plan Duncan, BC																			
		v			COMPONENT	C	NDITION ASSESSMENT			LIFECYCLE	DATA RECOMMENDATION							OPI	INION OF PRO	OBABLE COST		
Row and BLDG Name	Location / Address	Level 1 Major Group Element	Level 2 Group Elements	Level 3 Individual Elements	ਰ Location / Type	Photo Description & History	Condition	Performance Yr New or Last Major Action	Assessment Date Assessed By	Age in 2017 Typical Life Cycle or Action Interval	Est. Time Remaining to EOL or Major Action Becommendatiou	Type	ک ph	this work be ased over tiple years 2	e Will a failure in this system lead to a loss of use of se the facility ?	condition adversely affect the buildings	Quantity Unit Rate	Unit	Subtotal Repair or Replacement Cost	Consult.	Contin- gency	Total in 2017 Dollars
	2687 James St., Duncan, BC	D Services	D30 HVAC	D3060 Controls & Instrumentation	D306002 Electronic Controls Various/ Control Systems and Components	A284-A286 DDC system circuitry and panels found in mechanical rooms, boiler roo janitorial rooms. Boiler replacement in 2016 likely included interfacing with the DDC. The likely made at that time.		4 N/A 13-	Jul-17 MH	N/A N/A	 N/A Recommend establishing a standing budget for control system component replacment, and retrocomissioning. Library staff noted air quality (stale air) issues in one end of the public/stack area. Additionally, staff noted feeling too cold in certain office/backroom areas. Likewise, staff occupying the ISC offices area near the classroom areas note similar thermal comfort issues. These are likely a due to balancing or temperature setpoint issues with the air distribution system, easily corrected by retrocomissioning the DDC. 	Disc	4a - retionary enewal	Yes Yes	No	No	5 \$5,000	EA	\$25,000	0%	0%	5% \$27,000
174 Island Savings Centre	2687 James St., Duncan, BC	D Services	D10 Conveying	D1010 Elevators & Lifts	D101003 Freight Elevators Various/ Elevators	A287-A290 Ages unknown but likely original to the building. Elevators' functionality walkthrough. Elevators are located in the theatre wing, main lobby, and		2 1978 13-	Jul-17 MH	39 35	-4 Recommend retaining an elevator consultant to study overall condition in detail. Replacement may not be necessary based on condition of mechancial components (not accessible during walkthrough). A retrofit can be far less costly than a complete replacement. Main lobby elevator interior finishes appear to have been modernized, likely with the library upgrade of 2003.	Study		No Yes	No	No	1 \$10,000	EA	\$10,000	0%	0%	5% \$11,000
175 Island Savings Centre	2687 James St., Duncan, BC	E Equipement and Funishings	E10 Equipment	E1010 Commercial Equipmen	t E101004 Laundry Equipment Rehearsal Rm. & Laundry Rm./ Laundry Equipment	A291/A292 Clothes washers and dryers. Ages unknown and estimated.	4	4 2012 13-	Jul-17 MH	5 20	15 Replace at end of service life. This item falls outside the ten year plan, costs associated with this item have not been carried into the cash flow tables.											
176 Island Savings Centre	2687 James St., Duncan, BC	D Services	D50 Electrical	D5030 Communications & Security	D503099 Other Various/ CO & NO2 Sensors Communications and Alarm	A293/A294 Toxic gas sensors located in the ice plant room, and around the arena. A	ges unknown and estimated. 4	4 2014 13-	Jul-17 MH	3 5	2 Establish a standing budget to replace units every 3-5 years.		Future enewal	Yes Yes	No	No	3 \$5,000	EA	\$15,000	0%	0%	5% \$16,000
177 Island Savings Centre	2687 James St., Duncan, BC	D Services	D50 Electrical	D5030 Communications & Security	D503008 Security Systems Various/ Security Camera System	x Security cameras installed throughout the building. Age unknown and e	timated. 4	4 2014 13-	Jul-17 MH	3 7	10 Recommend establishing a contigency every 5 years to upgrade equipment due to failur or to keep up with technological advances.		Future enewal	Yes Yes	No	No	2 \$15,000	EA	\$30,000	0%	0%	5% \$32,000
178 Island Savings Centre	2687 James St., Duncan, BC	E Equipement and Funishings	E10 Equipment	E1020 Institutional Equipmen	t E102005 Auditorium and Stage Theatre/ Stage Rigging Equipment	A301/A302 Stage fly system/ropes were replaced in 2013. Most ropes are showing a	igns of fraying. 3	2 2013 13-	Jul-17 MH	4 N/A	N/A Recommend consulting a rigging professional to evaluate the condition of rigging equipment. Specific types of ropes will have variable life expectancies. Time of replacement will also depend on frequency of usage.	Study 1-I	nmediate	Yes Yes		Unknown; consult rigging professionals	1 \$2,500	EA	\$2,500	0%	0%	5% \$3,000
179 Island Savings Centre	2687 James St., Duncan, BC	D Services	D40 Fire Protection	D4010 Sprinklers	D401002 Sprinkler Water Supply Equipment and Piping Suppression Systems	A299/A300 Fire supression systems serving the kitchen equipment in the heritage h concession appear to be modernized. Ages uknown and estimated.	all and in the arena 4	4 2012 13-	Jul-17 MH	5 20	15 Replace at end of service life. This item falls outside the ten year plan, costs associated with this item have not been carried into the cash flow tables.	Replacement 3 R	Future enewal	Yes Yes	No	No						
180 Island Savings Centre	2687 James St., Duncan, BC	D Services	D40 Fire Protection	D4020 Standpipe Systems	D402001 Standpipe Equipment Main Fire Suppression Valves (6) and Piping	x Six main fire suppression valves. Dry rink system, while remaining are w	t. Age unknown.	2 N/A 13-	Jul-17 MH	N/A N/A	N/A ISC maintenance staff suggest that valves are aging and will need replacing.	Replacement 2b - Se	Exceeded vice Life	No Yes	Yes	Unknown; not reviewed	1 \$40,000	EA	\$40,000	0%	0%	5% \$42,000

		CO	MPONENT	CONDITION ASSESSMENT	RECOMMENDATION			OF PROBA	10-YEAR CA	PITAL PLAN								
Row	BLDG Name	ID	Location / Type	Description & History	Recommendation	Type	Priority	Total in 2017 Dollars	2017 \$5,242,700	2018 \$538,733	2019 \$366,700	2020 \$799,400	2021 \$781,033	2022 \$240,400	2023 \$215,700	2024 \$851,733	2025 \$374,700	2026 \$574,400
1	Island Savings Centre	A10 Foundations	Throughout Building/Below Grade	The foundations are cast-in-place concrete as visible at grade. No evidence of major settlement or heaving was reported or observed.	The foundations are expected to last the life of the building. No major capital expenditures are expected to be required.													
2	Island Savings Centre	A10 Foundations	Throughout Building/Below Grade Membrane	Below grade membrane has been installed for the foundation walls located on the east elevation adjacent to the hockey arena change rooms. Rigid insulation has been installed over, which has been damaged.	The membrane appeared to be in good condition in exposed areas. No water ingress into the adjacent spaces was observed or reported by facility staff. Replace damaged rigid insulation as required.	Repair Allowance	3 - Future Renewal											
3	Island Savings Centre	A103001 Slab on Grade	Below Grade Slab on Grade	The floor is concrete slab-on-grade. We noted isolated, narrow cracking in areas where the slab has not been covered over with finishes. Evidence of cracking was noted in the tile finish in the main hallway on level 1 and in the Cowichan Suite indicting potential settlement.	Budget for repairs at isolated locations during renewals of tile flooring.	Repair Allowance	3 - Future Renewal	\$11,000								\$11,000		
4	Island Savings Centre	B10 Superstructure	Throughout Building/Superstructure		Structural components are expected to last the life of the building. No major capital expenditures are expected to be required. We recommend that further review be conducted of the condition of the slab directly above the Zamboni holding area (see Professional Services - Item P10004). Review and repair cracking for exposed concrete mass walls. Review and repair cracked CMU infill directly above Zamboni in holding area.													
5	Island Savings Centre	B201001 Exterior Walls	Exterior Walls/Giant Brick - Sout and West Elevations	h Exposed giant brick wall assemblies are located on the south and west elevations for the lower portions of the wall. The cladding appears to be in good condition and is generally under overhang protection. Portions of the giant brick were noted to be buried by adjacent grade on the south elevation adjacent to the entrances to the Gymnastics Club.	The giant brick will last the life of the building and no major renewals or repairs are expected to occur in the next 25 years.	Replacement	3 - Future Renewal											
6	Island Savings Centre	B201001 Exterior Walls	Exterior Walls/Split Face Masonr Blocks - Library	ry A split face block veneer has been installed for the library walls on the west elevation. Cracking was noted at the north corner as well as adjacent to the sun-shade devices at the north west corner. Failure of the sealant at an expansion joint was also noted on the west elevation.	Clean, repair and repoint masonry. Review cracking and repair as necessary.	Repair Allowance	2 - Restore Functionality	\$16,000					\$16,000					
7	Island Savings	B201001 Exterior Walls		ry A split face block veneer has been installed for the library walls on the west elevation.	Replace cladding at end of service life.	Replacement	3 - Future											
8	<u>Centre</u> Island Savings Centre	B201001 Exterior Walls	Blocks - Library Exterior Walls/CMU Wall - Ice Melt Pit	The cladding is expected to last the life of the building. Exposed painted, CMU walls are located at the ice melt pit at the north end of the arena and appear to be in good condition.	Replace cladding at end of service life.	Replacement	Renewal 3 - Future Renewal											
9	Island Savings Centre	B201001 Exterior Walls	Exterior Walls/Painted Concrete Mass Walls	Painted concrete mass walls are present on the east and north elevations of the arena. Some cracking of the concrete was noted.	Repair cracked or damaged concrete mass walls.	Repair Allowance	3 - Future Renewal	\$11,000		\$11,000								
10	Island Savings Centre	B201001 Exterior Walls	Exterior Walls/Rock Dash Stucco Theatre	 Original rock dash stucco has been installed for the upper walls of the theatre which was recoated with elastomeric paint. Original stucco is also located adjacent to the roof of the Gymnastics Club which remains unpainted. Facility staff indicated that water ingress is an issue within the theatre, which may be as a result of the stucco walls. The stucco walls were recoated in 2006 with elastomeric paint which apparently reduced the amount of water ingress. Theatre staff indicated that holes in the cladding are evident at a few locations. Staining of the batt insulation was noted for all areas as well as discontinuities in the poly air/vapour barrier. Staining appears to be as a result of air leakage. Some cracking of the cladding was noted for the walls adjacent to the main roof above the Gymnastics Club and for the stucco clad chimney located on the north elevation. 	Replace stucco cladding. Prior to any replacement, we recommend that a comprehensive envelope condition assessment be conducted. (see Professional Services Item P10002 BECA)	Replacement	2 - Restore Functionality	\$778,000	\$778,000									
11	Island Savings Centre	B201001 Exterior Walls	Exterior Walls/Stucco - Arena, Multi-purpose Hall, Admin Office	Original stucco cladding exists for the upper portions of the exterior walls on the south, west and east es elevations at the arena, multi-purpose hall and the admin offices. Systemic hairline cracking was typically noted on the east elevation. We understand that all stucco areas were recoated with elastomeric paint in 2006. Water ingress associated with these wall assemblies was not indicated by facility staff.	Replace stucco cladding in the next 15 years. Prior to any replacement, we recommend that a comprehensive envelope condition assessment be conducted. (see Professional Services Item P10002 BECA)	Repair Allowance	3 - Future Renewal											
12	Island Savings Centre	B201001 Exterior Walls	Exterior Walls/Stair Tower - East Elevation	Glass block assemblies are located at the stair tower located on the east elevation adjacent to the entrance to the Heritage Hall. Water ingress for these assemblies were not indicated by facility staff.	Glass block assemblies are prone to failure and we recommend that these areas be reviewed as part of the building envelope condition assessment. Replacement to be considered within the next 5 years with thermally broken aluminum framed window assemblies.	Replacement	3 - Future Renewal	\$35,000					\$35,000					
13	Island Savings Centre	B201001 Exterior Walls	Exterior Walls/Metal Panel Over Cladding	 Vertically oriented metal panel over-cladding has been installed on the south, east and north elevations for the upper portions of the wall. We understand that the cladding was installed over the existing cladding approximately 2 years ago. 	Replace at end of service life.	Replacement	3 - Future Renewal											
14	Island Savings Centre	B201001 Exterior Walls	Exterior Walls/Metal Panels- Library	Metal panel cladding has been installed at the north end of the library addition.	Replace at end of service life.	Replacement	3 - Future Renewal											
15	Island Savings Centre	B201008 Exterior Soffits	Throughout Building/Stucco Soffits	Stucco soffits have been installed on the west and east elevations. Some cracking of the stucco soffits were observed at the stucco edge.	Replace soffits in conjunction with replacement of stucco cladding.	Replacement	3 - Future Renewal											
16	Island Savings Centre	B201010 Exterior Coatings	Exterior Walls/Stucco	Elastomeric coating was installed over all stucco surfaces in 2006 and appears to be in fair condition.	Repaint stucco cladding. Conduct periodic reviews of elastomeric coating and repair as required prior to major renewal.	Replacement	3 - Future Renewal	\$162,000				\$162,000						

		COM	PONENT	CONDITION ASSESSMENT	RECOMMENDATION			I OF PROBA	E 10-YEAR CAI	PITAL PLAN								
Row	BLDG Name	ID	ation / Type	Description & History	Recommendation	Type	Priority	in 2017 Dollars	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026
			Ĕ					Total	\$5,242,700	\$538,733	\$366,700	\$799,400	\$781,033	\$240,400	\$215,700	\$851,733	\$374,700	\$574,400
17	Island Savings Centre	B201010 Exterior Coatings	Exterior Walls/Concrete Mass Walls	Concrete mass walls have been painted with what appears to be a latex paint. Failure of the paint coating was noted at the base of wall.	Repaint concrete mass walls with elastomeric paint in conjunction with stucco cladding. Conduct crack repairs as required prior to repainting.	Replacement	3 - Future Renewal	\$37,000				\$37,000						
	Island Savings Centre	B201010 Exterior Coatings	Exterior Walls/CMU walls	Paint finish of CMU walls of ice melt pit appears to be in good condition.	Repaint concrete CMU walls.	Replacement	3 - Future Renewal											
19	Island Savings Centre	B201011 Joint Sealant	Exterior Walls/Exterior Sealant	There are sealant joints typically located at wall penetrations, between dissimilar cladding types and control joints. Failure or lack of joint sealant was noted at a number of locations. We are not aware of the last cycle of renewal.		Replacement	2 - Restore Functionality	\$79,000		\$79,000								
20	Island Savings Centre	B202001 Windows	Exterior Walls/Aluminum Frame		Replace aluminum framed storefront windows and doors with new thermally-broken, insulated tempered glass units (IGUs) c/w Low E coatings and argon fill. Provide wheel chair access for all replaced units. A contingency has been provided for \$15K for the next three years. This does not include the replacement of the large storefront assembly located at the main entrance adjacent to the Gymnastics Club on the south elevation (see line item below).	Contingency	3 - Future Renewal	\$16,000	\$16,000	\$16,000	\$16,000							
21	Island Savings Centre	B202001 Windows	Exterior Walls/Aluminum Frame	Aluminum framed storefront windows and doors are located at a number of locations on level one providing entry/exit to the building. A number of assemblies remain that are original to the building; however, facility staff indicated that they have a year over year rolling contingency of \$15K for systematic replacement of the assemblies. The original units that still remain are located at the Heritage Hall, the north end of the theatre and the large assembly located at the main entrance adjacent to the Gymnastics Club. All are located under overhang protection. All new assemblies provide wheelchair access. Wheel chair access for aging assemblies varies.	Replace aluminum framed storefront windows and doors with new thermally-broken, insulated tempered glass units (IGUs) c/w Low E coatings and argon fill located at the main entrance adjacent to the Gymnastics Club on the south elevation.	Replacement	2b - Exceeded Service Life	\$134,000				\$42,000						
22	Island Savings Centre	B202001 Windows	Exterior Walls/Aluminum Frame	Non-thermally broken commercial glazing is located on the second floor at the classrooms located at the southwest corner of the building. Lack of weather seals and damage to the casement operable units was typically noted. Deterioration of the reflective film installed over the IGUs was also noted. We understand that these window units will be replaced in approximately 3 years.	Replace insulated tempered glass units (IGUs) c/w Low E coatings and argon fill. Cost of replacement includes access, removal, tie-ins to adjacent cladding.	Replacement	2b - Exceeded Service Life	\$143,000			\$143,000							
23	Island Savings Centre	B202001 Windows	Exterior Walls/Aluminum Frame	the administration offices on the second floor directly above the main entrance and on the north elevation of the theatre. One is also located at the stair tower on the east elevation. All appear to be	Replace insulated tempered glass units (IGUs) c/w Low E coatings and argon fill. Cost of replacement includes access, removal, tie-ins to adjacent cladding, replacement.	Replacement	2b - Exceeded Service Life	\$20,000					\$20,000					
	Island Savings Centre	B202001 Windows	Exterior Walls/Aluminum Framed Curtain Wall - Library	original to the building. Curtain wall assemblies have been installed throughout the Library and all appear to be in good condition.	Replace aluminum framed curtain wall assemblies at end of service life.	Replacement	3 - Future Renewal											
25	Island Savings Centre	B203001 Solid Doors	Exterior Walls/Solid Metal Doors	Single and double exterior metal doors are located throughout the complex. All are original to the building and are showing signs of age related deterioration. As per facility staff, a year over year rolling contingency will be used for the replacement of these doors and replacement will commence once the glazed commercial doors/windows have been replaced.	Replace doors. Replace weather-stripping and complete minor repairs and adjustment as part of maintenance.	Replacement	2b - Exceeded Service Life	\$16,000					\$16,000	\$16,000	\$16,000	\$16,000	\$16,000	\$16,000
26	Island Savings Centre	B203004 Overhead and Roll-up Doors	Exterior Walls/Overhead and Roll up Doors	- There is an overhead door for entry and exit of the snow machine at the north end of the hockey arena. The door appears to have been replaced in the last 5 to 10 years.	Replace overhead door at end of service life.	Replacement	3 - Future Renewal											
27	Island Savings	B301002 Roofing - Low Sloped Membrane System		The roof over the original building (formerly the pool, now the Gymnastics Club) is an exposed single- ply Sarnafil membrane. The roof drains via internal drains. Some patch repairs were noted throughout. Some water ingress was indicated by facility staff for a small portion of the roof at a mechanical termination. It appears that roofing mastic has been used to patch the seams. Screens over internal drains were noted to be dislodged and clogged with debris. We understand that the membrane is original to the building.	Replace roofing system including flashings, sealants, etc. as required. Consider replacing adjacent stucco walls in conjunction with the roof system.	Replacement		\$394,000				\$394,000						
28	Island Savings Centre		Roofing/Hockey Arena, Theatre, Heritage Hall, Admin Offices	A conventional SBS roof system has been installed over the hockey arena, theatre, administration office, classrooms, heritage hall and gymnasium. Blistering of the membrane was noted over the admin office and classrooms at the south end of the building as well as over the theatre and the north end of the hockey arena. Patch repairs have been conducted over the admin/classrooms. Water ingress was indicated in a number of locations within the theatre. As per facility staff, it in not clear whether or not the water ingress is as result of the roof system or the stucco wall system. Periodic water ingress was also indicated in the office adjacent to the Heritage Hall. We understand that the roof membrane was replaced approximately 15 years ago.	Conduct targeted repairs to SBS membrane including blisters. Conduct further investigation of potential sources of water ingress into the theatre and Heritage Hall (please see Professional Services Item P10002 BECA).	Repair Allowance	2 - Restore Functionality	\$27,000	\$27,000									

		COM	IPONENT	CONDITION ASSESSMENT	RECOMMENDATION			OF PROBA	10-YEAR CA	PITAL PLAN								
Row	DG Name	ID	n / Type	Description & History	Recommendation	be	ority	017 Dollars	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026
	BLI		Locatio			4	Pri	Total in 20	\$5,242,700	\$538,733	\$366,700	\$799,400	\$781,033	\$240,400	\$215,700	\$851,733	\$374,700	\$574,400
29	Island Savings Centre		Roofing/Hockey Arena, Theatre, Heritage Hall, Admin Offices.	A conventional SBS roof system has been installed over the hockey arena, theatre, administration office, classrooms, heritage hall and gymnasium. Blistering of the membrane was noted over the admin office and classrooms at the south end of the building as well as over the theatre and the north end of the hockey arena. Patch repairs have been conducted over the admin/classrooms. Water ingress was indicated in a number of locations within the theatre. As per facility staff, it in not clear whether or not the water ingress is as result of the roof system or the stucco wall system. Periodic water ingress was also indicated in the office adjacent to the Heritage Hall. We understand that the roof membrane was replaced approximately 15 years ago.	Replace membrane included flashing at end of service life.	Replacement	2 - Restore Functionality	\$3,155,000	\$3,155,000									
30	Island Savings Centre	B301002 Roofing - Low Sloped Membrane System	Roofing/North end of Arena	The conventional SBS roof system was recently replaced for the lower roof at the north end of the hockey arena where the roof-top mechanical equipment is located. Some staining of the membrane was noted adjacent to one of the mechanical units. We understand that this roof system was replaced 3 years ago.	Replace membrane included flashing at end of service life. Review staining due to mechanical equipment and make adjustments as required.	Replacement	3 - Future Renewal											
31	Island Savings Centre	B301002 Roofing - Low Sloped Membrane System	Roofing/Library	A conventional SBS roof system was installed for the Library in 2004.	Replace membrane included flashing at end of service life.	Replacement	3 - Future Renewal											
32	Island Savings Centre	B301002 Roofing - Low Sloped Membrane System	Roofing/Ice Melt Area	An SBS roof system has been installed over the ice-melt pit. This addition for the ice-melt pit was constructed in 2016.	Replace membrane included flashing at end of service life.	Replacement	3 - Future Renewal											
33	Island Savings Centre	B301002 Roofing - Low Sloped Membrane System	Roofing/Arena Entrance	A built-up roof (BUR) has been installed over the entrance to the arena at the southeast corner of the building. The membrane is original to the building and is showing advanced levels of deterioration. Water ingress was not indicated by facility staff.	Replace BUR with SBS system.	Replacement	2b - Exceeded Service Life	\$26,000	\$26,000									
34	Island Savings Centre	B301002 Slope Roof	Roofing/Loading Bay	A metal panel roof system has been installed for the canopy over the loading area at the north end of the theatre and was installed in 2016.	Replace standing metal seam roof sections at end of service life.	Replacement	3 - Future Renewal											
35	Island Savings Centre	B3010 Roof Coverings	Throughout Building/Thermographic Scan	Water ingress through the roof assemblies was reported by facility staff in the Theatre and the Heritage Hall. An exposed membrane can often be repaired or refurbished to defer replacement, though with increased annual costs. The decision is often driven by the extent of wet insulation and the risk tolerance for future leaks.	Complete a thermographic scan and test cuts to confirm the extent of wet insulation and develop recommendations for repair or replacement.	Study		\$6,000	\$6,000									
36	Island Savings Centre	B301006 Roof Openings - Skylights	Exterior Skylights/Theatre	9 skylights are located above the theatre lobby and are showing signs of water ingress. MH is not aware when the skylights were last replaced.	Replace skylights in conjuntion with roof repairs.	Replacement	2 - Restore Functionality	\$12,000	\$12,000									
37	Island Savings Centre	B102099 Other Roof Construction - Glazed Canopy	Glazed Canopy/Main Entrance	Sloped glazing with a combination of wood/steel structure has been installed at the main entrance and along the curtain wall glazing at the front of the library.	Replace sloped glazing at the end of its service life.	Replacement	3 - Future Renewal											
38	Island Savings Centre	C101002 Demountable Partitions	Removable panels (orchestra pit)/Theatre	Removable floor panels are located at the elevator pit directly in front of the main stage. Gaps and uneven seams in the panels were indicated by facility staff creating potential safety issues for the performers.	Facility staff indicated that floor panels may be removed to allow for additional seating. A repair allowance has been included to modify existing orchestra pit.	Repair Allowance	2 - Restore Functionality	\$79,000					\$79,000					
39	Island Savings Centre	C101003 Retractable Partitions		Stage curtain was last replaced in 2007.	Replace stage curtain at end of service life.	Replacement	3 - Future Renewal	\$27,000										
40	Island Savings Centre Island Savings	C101003 Retractable Partitions	Black Masking/Theater	Black masking is located above the main stage and was last replaced in 1997. Single and double doors are located throughout the complex and consist of solid metal or solid wood.	Replace black masking at end of service life.	Replacement	3 - Future Renewal 3 - Future	\$69,000					\$69,000					\$21,000
	Centre	Doors	Doors	Some doors incorporate wired safety glass. All appear to be original to the building. Damage to paint finish was typically noted along with mechanical damage to the door surfaces.			Renewal						,000					
42	Island Savings Centre	C102004 Fire Doors	Throughout Building/Fire Doors	Fire doors are located at various locations throughout the complex and appear to be original.	Doors are expected to last the life of the building. However, a budget is provided for some door replacement and localized repairs on a 5 year cycle.	Contingency	3 - Future Renewal	\$16,000					\$16,000					\$16,000
43	Island Savings Centre	C102005 Interior Overhead Doors	Overhead Doors/Theatre and Arena	2 overhead roll-up doors are located at the north end of the theatre as well as one at the north end of the hockey arena providing access to the snow machine holding area. All appear to be original to building. Issues with operation were indicated by facility staff.	Doors are expected to last the life of the building. However, a budget is provided for some door replacement and localized repairs.	Replacement	3 - Future Renewal	\$8,000										\$8,000
44	Island Savings Centre	C102006 Interior Overhead Gates	Heritage Hall and Arena	Overhead gates are located at Heritage Hall and the Arena lobby separating the kitchens and skate shop from the adjacent spaces. The overhead gates appear to be original to the building.	A contingency has been provided for replacement of overhead gates as required.	Replacement	3 - Future Renewal	\$7,000						\$7,000				

		CON	IPONENT	CONDITION ASSESSMENT	RECOMMENDATION			I OF PROBA	10-YEAR CA	PITAL PLAN								
,	BLDG Name	ID	Location / Type	Description & History	Recommendation	Type	Priority	Total in 2017 Dollars	2017 \$5,242,700	2018 \$538,733	2019 \$366,700	2020 \$799,400	2021 \$781,033	2022 \$240,400	2023 \$215,700	2024 \$851,733	2025 \$374,700	\$574
	-	C11 Washrooms/Changing Rooms and Spa	Arena - Capitals Dressing Room	The Capitals dressing room contains sports flooring, cubbies, lockers, painted CMU walls, showers and toilets. All appeared to be in good condition.	A contingency has been for general refurbishment of the change rooms and bathroom finishes.	Contingency	3 - Future Renewal	\$53,000										\$5
	sland Savings Centre	C11 Washrooms/Changing Rooms and Spa	Arena - Dressing Rooms - Refurbishment	All dressing rooms are complete with sports flooring, slat benches, toilets, sinks and showers. All components are in fair condition.	A rolling contingency (every 5 years) has been provided for general refurbishment of the change rooms and bathroom finishes.	Contingency	3 - Future Renewal	\$27,000					\$27,000					
	sland Savings Centre	C11 Washrooms/Changing Rooms and Spa	Theatre - Dressing Rooms	2 dressing rooms are located on the lower level of the theatre. Dressing rooms include shower stalls, vanities, counters, mirrors, painted gypsum walls.	A contingency has been provided for refurbishment of theatre dressing rooms.	Contingency	3 - Future Renewal	\$53,000					\$53,000					+
	sland Savings Centre	C11 Washrooms/Changing Rooms and Spa	Multi Purpose Hall & Dressing Rooms	2 dressing rooms are located adjacent to the Multi-purpose hall and include ceramic tile flooring and slat benches, painted CMU walls, shower stalls with epoxy flooring, sinks, countertops and toilets. These dressing rooms appear to have been refurbished within the last 10 years.	A contingency has been provided for refurbishment of Multi-purpose dressing rooms.	Contingency	3 - Future Renewal	\$53,000										
	sland Savings Centre	C101006 Glazed Partitions and Storefronts	Interior Windows/Arena, Theatre, Gymnastics Club, Heritage Hall, Admin. Office		The windows are expected to last the life of the building; however a contingency has been provided for replacement as required.	Contingency	3 - Future Renewal	\$11,000					\$11,000					+
	sland Savings Centre	C101005 Interior Windows	Interior Windows/Arena	Interior storefront glazing with doors are located at the main entrance to the hockey arena and are original to the building.	The storefront doors are expected to last the life of the building.	Contingency	3 - Future Renewal											
	sland Savings Centre	C101005 Interior Windows	Interior Windows/Library	Interior storefront glazing with doors are located at the main entrance to the Library.	The storefront doors are expected to last the life of the building.	Contingency	3 - Future Renewal											T
	sland Savings Centre	C103002 Toilet & Bath Accessories - Refurbishment	Public Washrooms	Public washrooms are located adjacent to the arena lobby, the Gymnastics Club, the Multi-Purpose Hall, the main lobby, the Heritage Hall, the Theatre, the Administration Office and the Genoa Room. All include partitions, counters, and various flooring types. All finishes vary in age and condition. All are wheel chair accessible.	A rolling contingency has been provided for cyclical refurbishment of the public washrooms which includes replacement of flooring, counters, partitions, paint finishes etc.	Contingency	3 - Future Renewal	\$79,000					\$79,000					
	sland Savings Centre	C15 Office	Arena Office - Refurbishment	The arena office with adjacent skate shop, located adjacent to the arena lobby, includes cabinets, counters and painted gypsum wall board.	For complete refurbishment of the Arena Office including wall finishes, cabinets and counters.	Contingency	3 - Future Renewal	\$16,000										_
	sland Savings Centre	C16 Office	Portals - Refurbishment	The office within the Portals space (Cowichan Valley Arts Council) has carpet, counters, cabinets, millwork and painted gypsum walls. The cabinets appear to be original; however all components appear to be in good condition and the space appears to have been refurbished in the last 5-10 years.	For complete refurbishment of the Portals Office including wall finishes, flooring, cabinets and counters.	Contingency	3 - Future Renewal											_
	sland Savings Centre	C17 Manager's Office	Theatre - Lower level	The manager's office is located on the lower level of the theater and contains resilient flooring desks and cabinets.	For the general refurbishment of the cabinetry, and the replacement of interior finishes.	Contingency	3 - Future Renewal	\$8,000										
	sland Savings Centre	C18 Theatre - Rehearsal Hall	Theatre - Rehearsal Hall	The rehearsal hall is located on the lower level of the theatre and consists of large wall mirrors, painted CMU walls, resilient flooring and exposed spray applied insulation on the ceiling and upper walls. As per facility staff, the flooring was replaced approximately 20 years ago. All other finishes are original.	For the general refurbishment of the rehearsal hall.	Contingency	3 - Future Renewal	\$21,000							\$21,000			1
	sland Savings Centre	C19 Theatre - Green Room	Theatre - Green Room	The green room was recently refurbished and contains resilient flooring, cabinetry, sink, fridge and lounge furniture.	For the general refurbishment of the Green Room.	Contingency	3 - Future Renewal											
	sland Savings Centre	C19 Theatre - TV Studio	Theatre - TV Studio- Refurbishment	The TV studio is located in top level of the theatre at the north end. Halls leading to the studio consist of painted concrete floors and painted gypsum walls. The studio has aging resilient flooring with exposed spray applied insulation on the walls and ceilings. A 'musty' smell is detectable in the studio indicating potential issues with water ingress. Deteriorated drywall was noted at the top of the stairs which may be as a result of water ingress at the roof drain located directly above.	that further investigation be conducted to determine the sources of potential water	Contingency	3 - Future Renewal	\$27,000							\$27,000			
	sland Savings Centre	C201002 Exterior Stair Construction	Exterior Concrete Stairs	Painted concrete stairs areas are located at the exterior of the building at a number of locations throughout the complex. Deterioration of the paint finish was noted as well as some rusting of the vertical supports for the metal hand rails. The concrete appeared to be in good condition. Lack of tactile warning strips was noted for the areas reviewed.	Repaint stairs with slip resistant coating. Install tactile warning strips at time of renewal as well as code compliant demarcations at the edge of stair treads. Review handrails and clean rust and install rust inhibitor.	Contingency	3 - Future Renewal	\$16,000	\$16,000									
	sland Savings Centre	C202001 Stair Finishes	Stair Finishes/Hockey Arena	Painted concrete stairs are located throughout the seating area within the arena. Finish incorporates broadcast aggregate. The finish appeared to be in good condition with the exception of some high wear areas. Tactile warning strips have not been installed at the top of stairs.	Repaint stairs. Install tactile warning strips at time of renewal.	Replacement	3 - Future Renewal	\$48,000								\$48,000		Ť
ls	sland Savings	C202001 Stair Finishes	Stair Finishes/Painted Concrete	Painted concrete stairs are located throughout the complex with painted metal hand-rails and painted	A contingency has been provided to finishes. Install tactile warning strips as well as code	Replacement	3 - Future	\$11,000		\$11,000								+
	Centre sland Savings	C202001 Stair Finishes	Stairs Stair Finishes/Resilient finishes	concrete/CMU walls. Wearing of the paint finish was noted on the stair treads. Resilient stair finishes have been installed for the stairs leading to the Theatre and the stairs adjacent	compliant demarcations at the edge of stair treads at time of renewal. Replace resilient finishes. Install tactile warning strips and code compliant nosing at time	Replacement	Renewal 3 - Future	\$11,000						\$11,000				+
13	Siana Javings			to the Genoa Room. All appear to be in fair condition.	of renewal.		Renewal	Υ±1,000						÷±,000	1			

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63	Island Savings Centre	C301002 Plaster Wall Finishes	Wall Finishes/Theatre	Painted plaster walls are located in the theatre seating area for the upper portions of the wall. We understand that these walls have not been repainted since original installation.	Repaint plaster walls within theatre.	Replacement	3 - Future Renewal	\$13,000					\$13,000					
64	Island Savings Centre	C301005 Wall Finishes	Wall Finishes/Arena and Multi- purpose Room	Painted CMU and gypsum wall finished are located throughout the arena, arena hallways, arena lobby and multipurpose room. We understand that the surfaces were recently repainted.	Repaint walls within arena.	Replacement	3 - Future Renewal	\$126,000										\$126,000
65	Island Savings Centre	C301005 Wall Finishes	Wall Finishes/Classrooms & Admin Offices	Painted gypsum is located within the classrooms and admin office located on the second floor and appear to have been repainted approximately 5 years ago.	Repaint walls in conjunction with replacement of the windows.	Replacement	3 - Future Renewal	\$18,000			\$18,000							
66	Island Savings Centre	C301005 Wall Finishes	Wall Finishes/Heritage Hall	Painted gypsum is located within the Heritage Hall.	Repaint walls.	Replacement	3 - Future Renewal	\$19,000			\$19,000							
67	Island Savings Centre	C301005 Wall Finishes	Wall Finishes/Library	Painted gypsum is located throughout the Library and appears to be in generally good condition with the exception of some isolated damage to the paint finish. We understand that repainting is to occur in 2018.	Repaint walls as required.	Replacement	3 - Future Renewal	\$21,000	\$21,000									
68	Island Savings Centre	C301005 Wall Finishes	Wall Finishes/Theatre	Painted gypsum is located throughout the theatre stairwells. We understand that the paint is original.	Repaint walls as required.	Replacement	3 - Future Renewal	\$15,000					\$15,000					
69	Island Savings Centre	C301007 Acoustic Panel Adhered to Wall	Wall Finishes/Heritage Hall - Acoustic Wall Panels	Acoustic panels have been installed on the walls within the Heritage hall and are original.	Replace acoustic wall panels at end of service life.	Replacement	3 - Future Renewal	\$16,000					\$16,000					
70	Island Savings Centre	C301007 Acoustic Panel Adhered to Wall C301099 Other Wall Finishes	Wall Finishes/Theatre - Acoustic Wall Panels Wall Finishes/Theatre	Aging acoustic panels are located at the back of the theatre seating area and are showing signs of age related deterioration.		Replacement	3 - Future Renewal	\$27,000	\$24,000				\$27,000				ļ	<u> </u>
71	Island Savings Centre Island Savings	C302004 Wood Flooring	Floor Finishes/Theatre - Stage	Aging wallpaper is located within the theatre seating area and the theatre lobby. The wall paper is delaminating from the wall in the seating area. The main stage of the theatre consists of wood flooring and was recently refinished.	Replace wall paper. Refinish wood flooring as required.	Repair	3 - Future Renewal 3 - Future	Ş24,000	\$24,000									<u> </u>
/_	Centre		flooring			Allowance	Renewal											
73	Island Savings Centre	C302004 Wood Flooring	Floor Finishes/Genoa Room	Wood flooring has been installed throughout the Genoa Room and appears to have been replaced within the last 10 years.	Refinish wood flooring as required.	Repair Allowance	3 - Future Renewal											
74	Island Savings Centre	C302004 Resilient Floor Finishes	Floor Finishes/Gymnastics Club	Aging vinyl resilient flooring has been installed for the gymnastics club lobby and appears to be in excess of 15 years old.	Replace resilient flooring	Replacement	3 - Future Renewal	\$8,000					\$8,000					
75	Island Savings Centre	C302004 Resilient Floor Finishes	Floor Finishes/Theatre		Replace resilient flooring and cove base. We recommend that Hazmat testing be conducted prior to removal to determine whether or not the floor system contains asbestos.	Replacement	3 - Future Renewal	\$23,000			\$23,000							
76	Island Savings Centre	C302004 Resilient Floor Finishes	Floor Finishes/Classrooms - Level 2	Resilient flooring of varying ages have been installed for the classrooms and hallways located on level 2. The floors in the halls appears to be in good condition; however aging flooring is located within the classrooms.		Replacement	3 - Future Renewal	\$26,000			\$26,000							
77	Island Savings Centre	C302004 Resilient Floor Finishes	Floor Finishes/Heritage Hall	Resilient flooring is located throughout the heritage hall and appears to be original. Evidence of wear and minor damage noted.	Vinyl tile flooring.	Replacement	2b - Exceeded Service Life	\$45,000					\$45,000					
78	Island Savings Centre	C302004 Resilient Floor Finishes	Floor Finishes/Portals	Sheet resilient flooring with vinyl cove base is located within Portals - Cowichan Valley Arts Council and appears to have been replaced within the last 5- 10 years.	Vinyl sheet flooring.	Replacement	3 - Future Renewal											
79	Island Savings Centre	C302005 Carpeting	Floor Finishes/Library - Carpet Tiles	Carpet tiles are located throughout the building and appear to be in good condition. We understand that replacement of the carpet tile is being considered in 2018 and will be replaced with resilient flooring.	Replace carpet tiles in library.	Replacement	3 - Future Renewal	\$37,000		\$37,000								
	Island Savings Centre	C302005 Carpeting	Floor Finishes/Theatre - Carpet	Carpet is located at the exit stairs and stairs adjacent to the theatre seating, within the theatre lobby and within the theatre boardroom.		Replacement	3 - Future Renewal	\$40,000							\$40,000			
81	Island Savings Centre	C302005 Carpeting	Floor Finishes/Administration Office - Carpet	Carpet is located within the admin. office and is in good condition and appears to have been replaced within the last 10 years.	Replace carpeting at end of service life.	Replacement	3 - Future Renewal											

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82	Island Savings Centre	C302005 Corridors Flooring	Floor Finishes/Ceramic Tile	Ceramic tile flooring is located in the main lobby, within the main hallways on level 1, within the outer lobby of the theatre and within the Cowichan Suite. The tile appears to be original to the building. Some targeted replacement has occurred over the years. Cracking in the slab-on-grade and subsequent cracking of tiles was noted in the main hallway and within the Cowichan Suite.	Replace tile. Review slab-on-grade once tiles have been removed and repair as required prior to installing new flooring.	Replacement	2b - Exceeded Service Life	\$156,000							\$1	56,000	
83	Island Savings Centre	C302099 Other Flooring and Floor Finishes	Floor Finishes/Sports Flooring	Sports flooring has been installed within the arena lobby, at the south end of the arena adjacent to the lobby and on the upper viewing deck at the south end. The sports flooring appears to be in fair condition.	Replace sports flooring in lobby and within arena.	Replacement	3 - Future Renewal										
84	Island Savings Centre	C302099 Other Flooring and Floor Finishes	Floor Finishes/Sports Flooring	Sports flooring has been installed within gymnasium of the Multi-Purpose Hall. The flooring system appears to be showing some wear; however appears to be in fair condition.	Replace sports flooring at end of service life.	Replacement	3 - Future Renewal										
85	Island Savings Centre	C302099 Other Flooring and Floor Finishes	Floor Finishes/Theatre - Control Room	A combination of painted flooring, resilient flooring and laminate flooring are located within the theatre control room located at the back of the theatre. All are showing signs of deterioration.	Replace flooring with laminate flooring.	Replacement	3 - Future Renewal	\$11,000				\$11,000					
86	Island Savings Centre	C303001 Exposed Concrete Finishes	Floor Finishes/Arena - Painted concrete floors	Painted concrete concourse floors located within the arena spectator areas. The paint finish appears to be in good condition.	Repaint concourse floors.	Replacement	3 - Future Renewal	\$10,000					\$10,000				
87	Island Savings Centre	C303002 Plaster Ceiling Finishes	Ceiling Finishes/Theatre - Plaster Ceiling	Plaster ceiling finishes are located with the theatre lobby and stairs and theatre boardroom. Some staining and discolouration was noted. The ceilings appear to have been last painted approximately 10 -15 years ago.	Repaint plaster ceilings located in theatre lobby and boardroom.	Replacement	3 - Future Renewal	\$26,000			\$26,000						
88	Island Savings Centre	C303004 Ceiling	Ceiling Finishes/Arena, Multi Purpose Hall	The underside of the Q decking and the trusses were recently repainted in both the arena and the multi-purpose hall.	Repaint q-decking and trusses.	Replacement	3 - Future Renewal										
89	Island Savings Centre	C303004 Ceiling	Ceiling Finishes/Theatre & Heritage Hall	The underside of the Q decking and the trusses are exposed for portions of the theatre and Heritage Hall. The paint finish appears to be in fair condition.		Replacement	3 - Future Renewal	\$100,000		\$100,000							
90	Island Savings Centre	C303004 Ceiling	Ceiling Finishes/Gymnastics Club	Tongue and groove cedar has been installed for the ceiling within the Gymnastics Club and associated lobby and do not require painting; however, the metal trusses within the gymnastics club appear to need a repainting.	Repaint trusses.	Replacement	3 - Future Renewal	\$21,000					\$21,000				
91	Island Savings Centre	C303004 Ceiling	Ceiling Finishes/Acoustic Tiles	Aging ceiling tiles are located in the hallways of the multi-purpose hall, the hallways adjacent to the theatre rehearsal hall, within the theatre change rooms, within the classrooms and administration office located on the second floor, portions of the Heritage Hall and within the Cowichan Suite and Portal space.	A contingency has been provided for phased replacement of the acoustic 2x4 ceiling tiles (excluding suspension system).	Contingency	3 - Future Renewal	\$16,000		\$16,000					\$16,000		
92	Island Savings Centre	C303004 Ceiling	Ceiling Finishes/Acoustic Tiles - Library	Acoustic ceiling tiles have been installed throughout the library and appear to be in good condition.	Replacement of the acoustic 2x4 ceiling tiles (excluding suspension system).	Replacement	3 - Future Renewal										
93	Island Savings Centre	C303007 Suspension Systems	Ceiling Finishes/Theatre - Cat walk	Steel grate catwalks and stairs are located above the main stage and appear to be in good condition.	We expect the catwalk and stairs will last the life of the building.	Replacement	3 - Future Renewal										
94	Island Savings Centre	D109005 Operable Scaffolding	Theatre/Flylines and Rigging	Flylines were last replaced in 2013.	Replace flylines and rigging at end of service life.	Replacement	3 - Future Renewal	\$37,000						\$37,000			
95	Island Savings Centre		Sports Equipment/Multi-Purpose Hall and Gymnastics Club	Basketball nets, backboards and supports are located within the gymnasium of the multi-purpose hall. Floor matts, gymnastics equipment and a foam pit are located within the Gymnastics Club. All equipment appears to be of varying ages.	Replace select equipment as required. A contingency has been provided for select replacement.	Replacement	3 - Future Renewal	\$27,000							\$2	7,000	
96	Island Savings Centre	E109005 Kitchens	Heritage Hall - Flynn's Fish and Chips	A kitchen is located in the Heritage Hall as well as adjacent to the main lobby of the hockey arena. Floors are a combination of ceramic tile and resilient flooring with painted gypsum walls and ceilings along with cupboards and counter tops. The Heritage Hall and Flynn's Fish and Chips have aging finishes.	A contingency has been provided for periodic refurbishment which includes replacement of flooring, cabinets and counter tops.	Contingency	3 - Future Renewal	\$79,000				\$79,000					
97	Island Savings Centre	E109005 Kitchens	Theatre Concession	The theatre concession is located within the main lobby and includes counters, cabinets and resilient flooring. All finishes appeared to be in good condition and appears to have been refurbished within the last 10 years.	A contingency has been provided for refurbishment.	Contingency	3 - Future Renewal										
98	Island Savings Centre	E109099 Fixed Interior Furnishings	Circulation Desks - Main Lobby, Library	The main front desk at the main lobby and the circulation desk of the library are in good condition and appear to have both been installed in 2004.	Replace desks	Replacement	3 - Future Renewal										

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	sland Savings Centre	E201002 Window Treatments	Window Blinds/Library	Manual control blinds have been installed for the curtain wall window assemblies located within the library.	Replace at end of service life.	Replacement	3 - Future Renewal											
	sland Savings Centre	E201003 Seating (fixed)	Theatre/Seating	Theatre seating is original to the building and is showing signs of age related deterioration. Padding in seat pans was replaced in 2015	Replace seating in theatre.	Replacement	3 - Future Renewal	\$434,000							\$4.	34,000		
	sland Savings Centre	F101099 Other Special Construction	Exterior/Giant Hockey Stick	The giant hockey stick, located on the west elevation, was installed in approximately 1987 and is constructed of wood with steel bracing. Cap flashing has been installed over the top surface. Some deterioration of the wood finish was noted.	A contingency has been provided to conduct repairs on an cyclical basis which includes refinishing of wood surfaces, repair/replacement of damaged wood components, review and repair/repainting of steel bracing, repair/replacement of cap flashing.	Replacement	3 - Future Renewal	\$27,000					\$27,000					
	sland Savings Centre	F104005 Special Facilities - Ice Rinks	Arena/Boards and Glass	The boards and glass located within the hockey arena appear to be in good condition.	Replace boards and glass	Replacement	3 - Future Renewal											
103	sland Savings Centre	F104005 Special Facilities - Ice Rinks	Arena/Spectator Seating	The spectator seating located within the hockey area appears to be in good condition and appears to have been installed within the last 10 years.	Replace seating in arena.	Replacement	3 - Future Renewal											
104	sland Savings Centre	F104005 Special Facilities - Ice Rinks	Arena/Slab-on-Grade	The slab-on-grade directly below the ice surface is original to the building. Although not exposed for review, we understand that facility staff are currently experiencing issues with the cooling lines and over-all efficiency.	Consideration be given to replacing slab and cooling lines to increase efficiency.	Replacement	3 - Future Renewal											
	sland Savings Centre	P100002 BECA	Building Envelope	Water ingress was indicated by facility staff. Aging cladding systems are currently in place. Staining of batt insulation noted for walls in theatre potentially due to air leakage.	Conduct a BECA to review the conditions of the building envelope.	Study		\$13,000	\$13,000									
	sland Savings Centre	P100003 Roof Review	Main Roofs	Water ingress indicated by facility staff at various roof locations. Blistering of SBS roof system noted at a number of locations. Original roof system remains over Gymnastics Club.	A roof review should be conducted prior to complete replacement of the roof membrane.	Study		\$6,000	\$6,000									
	sland Savings Centre	P100007 Seismic Review	Entire Complex	We are not aware of the last seismic review conducted for the complex.	Conduct seismic review of entire complex.	Study		\$13,000	\$13,000									
	sland Savings Centre	P100008 Building Wheelchair Accessibility	Accessibility	Wheelchair accessibility is available for restricted areas of the building.	An Accessibility Review or Study may identify means to improve accessibility for those with mobility issues. Conduct study within the next 5 years.	Study		\$11,000					\$11,000					
	sland Savings Centre	P100009 Roof Anchor Study	Roof Anchors	Roof safety anchors were not observed for all roofs reviewed.	Conduct a study regarding roof anchor requirements.	Study		\$11,000					\$11,000					
	sland Savings Centre	D304007 Exhaust Systems	Roof/ Flue Vent for Old Boiler	Decomissioned equipment on the rooftop. During the audit it was noted that there have been leaks to the room below through this penetration of an old boiler flue. Upon closer inspection, the flue has rusted through creating voids where water can enter. Additionally, decomissioned equipment with penetrations through the building envelope encourages vermin/wildlife habitats, that could have unknown effects on the building before effects are ever discovered. This includes old exhaust fans and air handlers.	accordingly.	Repair Allowance	2b - Exceeded Service Life	\$11,000	\$11,000									
	sland Savings Centre	D304007 Exhaust Systems	Roof/ Exhaust Fans (typical)		Properly fasten all bolts and adhere all grates appropropriately. Replace units at end of life. Replacement cost has been evenly budgeted over the next 10 years to replace fans as they fail.	Replacement	3 - Future Renewal	\$126,000	\$12,600	\$12,600	\$12,600	\$12,600	\$12,600	\$12,600	\$12,600 \$1	2,600 \$	12,600 \$3	2,600
	sland Savings Centre	D304001 Air Distribution, Heating and Cooling	Roof/ Trane Heat Pump	Packaged heat pump installed in 2010. The interior of the unit was not inspected. The air intake grate appears to be showing signs of wear.	Monitor intake air grate integrity and replace as necessary. Replace filters regularly for optimal efficiency and to extend service life. Costs all fan sizes were averaged for budgeting purposes. Replace at end of life.	Replacement	3 - Future Renewal	\$16,000							\$1	6,000		
	sland Savings Centre	D304001 Air Distribution, Heating and Cooling	Rooftop/ Trane Packaged Heat Pumps 1+2	rain water appear to be draining through unitended pathways through the unit, promoting premature corrosion and damage to the condenser coil.		Replacement	3 - Future Renewal	\$48,000							\$4	8,000		

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Row	BLDG Name	ID	Location / Type	Description & History	Recommendation	Туре	Priority	Total in 2017 Dollars	2017 \$5,242,700	2018 \$538,733	2019 \$366,700	2020 \$799,400	2021 \$781,033	2022 \$240,400	2023 \$215,700	2024 \$851,733	2025 \$374,700	2026 \$574,400
114	Island Savings Centre	D304001 Air Distribution, Heating and Cooling	Rooftop/ HP-1+2 Ducting	integrity of adjacent sections of ducting.		Repair Allowance	2 - Restore Functionality	\$3,000	\$3,000									
115	Island Savings Centre	D304001 Air Distribution, Heating and Cooling	Rooftop/ York RTU	This unit appears to have reached the end of its useful life. During the walkthough, a high-pitched noise eminated intermittently from the unit, likely from the compressor. Age unknown and estimated.	Recommend replacing the unit immediately as repairs may be costly, and new units have a much better efficiency.	Replacement	2 - Restore Functionality	\$21,000	\$21,000									
116	Island Savings Centre	D309099 Other Special Mechanical Systems	Rooftop/ Cimco Dehumidifaction Unit	Dehumidifaction system was not running during walkthrough. Some wear is indicated by rusting around the penetrations in the unit, as well as inside the unit. A cover plate is missing from a junction box within the unit. Filters show signs of debris.	Install junction box cover plate. Replace filters regularly for optimal functionality. Monitor ducting to ensure adequate seal for optimal functionality and to prevent premature equipment failure. Replace at end of life.	Replacement	3 - Future Renewal	\$158,000		\$158,000								
117	Island Savings Centre	D303002 Direct Expansion Systems	Rooftop/ Carrier Chiller #2		Recommend replacing the unit at the time it needs a refrigerant top-up or needs significant repair, after 2020.	Replacement	3 - Future Renewal	\$16,000						\$16,000				
118	Island Savings Centre	D303099 Other Cooling Generating Systems	Rooftop/ Cimco Condenser	Evaporative condenser was in the process of being cleaned during the walk-through.	Continue to clean regularly to optimize efficiency. Replace unit at end of life.	Replacement	3 - Future Renewal	\$79,000						\$79,000				
119	Island Savings Centre	D303002 Direct Expansion Systems	Rooftop/ Carrier Chiller #1	Condenser appears to be in good shape. Some corroding fasteners noted on the pressure vessel, as well as traces of either condensation or working fluid leaks. Heat transfer grilles are slightly obstructed.	Recommend cleaning heat transfer grilles of debris for optimum efficiency. Inspect/monitor corroding fasteners and piping interface to pressure vessel. Replace unit at end of life.	Replacement	3 - Future Renewal	\$53,000										\$53,000
120	Island Savings Centre	D304007 Exhaust Systems	Rooftop/ Vent Stacks	Exhaust stacks connected to mechanical/boiler room equipment below. Age unknown and estimated.	Replace at end of life. This item falls outside the ten year plan, costs associated with this item have not been carried into the cash flow tables.	Replacement	3 - Future Renewal											
121	Island Savings Centre	D305005 Electric Heating	Various (Above Exterior Entry Doors)/ Electric Resistance Convection Heaters	Forced fan electric heater (1/6 hp motor). Creates a heated air curtain around the door area to help keep heat in the building when doors are frequently opened. Age unknown and estimated.	Replace at end of life. Blow dust off unit on an annual basis to maximize its efficiency. Do this at the end of summer in preparation for the heating season. This item falls outside the ten year plan, costs associated with this item have not been carried into the cash flow tables.	Replacement	3 - Future Renewal											
122	Island Savings Centre	D304001 Air Distribution, Heating and Cooling	Theatre/ Air Handling Unit (S-6)	Supply fan/coil serving the theatre and backstage. Airflow appears to be excessive based on noise level. Age unknown and estimated.	Air handling unit is well beyond its useful life and should be replaced with newer, more compact and more efficient models. Recommend to replace all associated ductwork as it has also exceeded its useful life (30 years). Staff have been maintaining functionality by replacing motors, controls, and belts on an as- needed basis. This is not reccomended as a long-term solution.	Replacement	2b - Exceeded Service Life	\$40,000	\$40,000									
123	Island Savings Centre	D303002 Direct Expansion Systems	Roof/ CU-1	Trane condensing unit for the air handler serving the library.	Replace unit at end of life.	Replacement	3 - Future Renewal	\$19,000		\$19,000								
124	Island Savings Centre	D303002 Direct Expansion Systems	Roof/ Small Condensing Unit	Mitsubishi condensing unit. Uses R-22 refrigerant (phase out begins in 2020).	Replace unit at end of life.	Replacement	3 - Future Renewal	\$4,000		\$4,000								
125	Island Savings Centre	D304001 Air Distribution, Heating and Cooling	Library, 2nd Floor/ AHU-1	Built-up Trane AHU serving the library.	Replace filters regularly to optimize efficiency. Inspect motors and melts regularly for wear. Replace at end of life. This item falls outside the ten year plan, costs associated with this item have not been	Replacement	3 - Future Renewal											
					carried into the cash flow tables.													

		CON	COMPONENT CONDITION ASSESSMENT RECOMMENDATION				OF PROBAE 10-YEAR CAPITAL PLAN												
Row	BLDG Name	ID	Location / Type	Description & History	Recommendation	Type	Priority	Total in 2017 Dollars	2017 \$5,242,700	2018 \$538,733	2019 \$366,700	2020 \$799,400	2021 \$781,033	2022 \$240,400	2023 \$215,700	2024 \$851,733	2025 \$374,700	2026 \$574,400	
126	Island Savings Centre	D509002 Emergency Lighting and Power	Stage Driveway/ Emergency Diesel Generator	Blue Star emergency backup diesel generator.	Test system regularly per manufacturer's recommendations/ codes. Replace at end of service life. This item falls outside the ten year plan, costs associated with this item have not been carried into the cash flow tables.	Replacement	3 - Future Renewal												
	Island Savings Centre Island Savings	D304003 Hot Water Distribution Systems D509002 Emergency Lighting	Boiler Rm./ Amtrol Expansion Tank Boiler Rm./ Amtrol Expansion	Large Amtrol expansion tank serving the hydronic heating loop. Small Amtrol expansion tank serving the hydronic heating loop.	This unit has likely reached the end of its life. Plan to replace immediately.	Replacement	2b - Exceeded Service Life 3 - Future	\$3,000	\$3,000										
120	Centre	and Power	Tank		This item falls outside the ten year plan, costs associated with this item have not been carried into the cash flow tables.	Replacement	Renewal												
129	Island Savings Centre	D302002 Hot Water Boilers	Boiler Rm./ Boiler B-1	Cleaver Brooks natural gas boiler serving the hydronic loop.	Replace at end of service life. This item falls outside the ten year plan, costs associated with this item have not been carried into the cash flow tables.	Replacement	3 - Future Renewal												
	Island Savings Centre	D302002 Hot Water Boilers	Boiler Rm./ Boiler B-2	Weil McLain natural gas boiler serving the hydronic loop.	Plan to replace unit immediately. Given that this boiler is mostly on standby (secondary) to B-1 (primary), it may be infrequently utilized depending on occupant behavour and climate; therefore it could have a longer than expected life. However, given that its failure will likely occur during peak heating season, it is a recommended to replace it as soon as possible.	Replacement	2b - Exceeded Service Life	\$32,000	\$32,000										
	Island Savings Centre	D304003 Hot Water Distribution Systems	Various/ Pipe-Mounted Pumps	Various pumps serving heating for heating coils, cooling coils, glycol, and DHW. Most pumps are pictured.	Replace pumps at end of service life. Pipe-mounted pumps have a typical lifetime of 10 years; therefore, all of this type will need to be replaced over the next 10 years. Equal annual budget is assigned for this purpose. Total number of pipe-mounted pumps is estimated based on walkthrough and previous reports.	Replacement	3 - Future Renewal	\$53,000	\$5,300	\$5,300	\$5,300	\$5,300	\$5,300	\$5,300	\$5,300	\$5,300	\$5,300	\$5,300	
	Island Savings Centre	D304001 Air Distribution, Heating and Cooling	Roof/ RTU-1	Decomissioned rooftop unit serving backstage rooms including storage, stage prep, TV studio, etc. Representative zones served are pictured. Age unknown and estimated.	Plan to replace unit immediately. Occupants are currently utilizing zones previously served by this unit. Zones are currently not being conditioned/ventilated, resulting in very poor air quality. Occupants are opening windows as the sole method of introducing fresh air to the spaces. Prolonged exposure in this space is not currently recommended based on the smell of mould. As ductwork has also likely exceeded its recommended service life, suggest to replace it as well. At the very least, clean ductwork throroughly before comissioning replacement equipment.	Replacement	2 - Restore Functionality	\$84,000	\$84,000										
	Island Savings Centre	D304003 Hot Water Distribution Systems	Various/Base-Mounted Pumps	Base mounted pumps serving various applications: theatre cooling, fan coil heating, MPH cooling, etc. Two pumps were assessed during the walkthrough. This line item excludes the two ice plant brine pumps (detailed elsewhere).	 Replace pumps at end of service life. Base-mounted pumps have a typical lifetime of 20 years; therefore, assume half of these pumps will need to be replaced over the next 10 years. Equal annual budget is assigned for this purpose. Total number of base-mounted pumps is estimated based on walkthrough and previous reports. 	Replacement	2 - Restore Functionality	\$27,000	\$2,700	\$2,700	\$2,700	\$2,700	\$2,700	\$2,700	\$2,700	\$2,700	\$2,700	\$2,700	
	Island Savings Centre	D304001 Air Distribution, Heating and Cooling	Various/ Original Air Handling Units S-1 to S-9	Original Trane air handling units serving various zones in the building. Refer to 2013 Prism Energy Audit Report for zone details. S-4 serving the theatre was not accessed during the walkthrough. S-6 is detailed elsewhere in this report.	Air handling units are well beyond their useful life and should be replaced with newer, more compact and more efficient models. Recommend to replace all associated ductwork as it has also exceeded its useful life (30 years). Staff have been maintaining functionality by replacing motors, controls, and belts on an as-	Replacement	2b - Exceeded Service Life	\$630,000	\$630,000										
	Island Savings Centre	E109002 Food Service Equipment	Arena Concession/ Food Service Equipment	Concession deep fryer, range, hood, etc. Age unknown and estimated. Interview with concession staff suggests all kitchen equipment is operating without issues.	needed basis. This is not reccomended as a long-term solution	Replacement	3 - Future Renewal												
	Island Savings Centre	E109002 Food Service Equipment	Heritage Hall/ Food Service Equipment	Full service kitchen for catering larger events. Includes ovens, ranges, deep fryers, griddles, walk-in refrigerator and frezzer, etc. Age unknown and estimated.	Kitchen equipment is dated, but is in otherwise good condition likely due to intermittent usage. Continued maintenance and replacement of equipment on a per-instance basis is recommended, rather than complete replacement. A rolling budget has been estimated to this end over the next 10 years.	Repair Allowance	2b - Exceeded Service Life	\$16,000	\$1,600	\$1,600	\$1,600	\$1,600	\$1,600	\$1,600	\$1,600	\$1,600	\$1,600	\$1,600	

		СОМ	PONENT	CONDITION ASSESSMENT	RECOMMENDATION			OF PROBA	E 10-YEAR CA	PITAL PLAN								
	a							ars										
Row	LDG Nam	ID	n / Type	Description & History	Recommendation	ype	iority	2017 Doll	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026
	Ξ		Locati				4	Total in 2	\$5,242,700	\$538,733	\$366,700	\$799,400	\$781,033	\$240,400	\$215,700	\$851,733	\$374,700 \$5	574,400
137	Island Savings Centre	D306004 Instrument Air Compressors	Boiler Rm./ Compressed Air Dryer	r Curtis 10 SCFM compressed air dryer. Age unknown and estimated.	Replace at end of service life.	Replacement	3 - Future Renewal	\$2,000								\$2,000		
138	Island Savings Centre		Boiler Rm./ Compressed Air System	DV Systems air compressor. Age unkonwn and estimated.	Replace at end of service life.	Replacement	3 - Future Renewal	\$3,000								\$3,000		
139	Island Savings Centre	D309099 Other Special Mechanical Systems	Boiler Rm./ Filter Feeder	JL Wingert dome bottom filter feeder (50 micron). Age unknown and estimated.	Replace filters as needed. Replace at end of service life.	Replacement	3 - Future Renewal	\$2,000								\$2,000		
140	Island Savings Centre	D309099 Other Special Mechanical Systems	Boiler Rm./ Pot Feeders (2)	Two chemical pot feeders serving the hot water/radiant loop. Age unknown and estimated.	Plan to replace these units as they appear to have reached the end of their expected service life.	Replacement	3 - Future Renewal	\$3,000	\$3,000									
141	Island Savings Centre	D304003 Hot Water Distribution Systems	Boiler Rm./ Expansion Tank	Suspended Taco expanson tank serving boiler hot water.	Replace at end of service life. This item falls outside the ten year plan, costs associated with this item have not been carried into the cash flow tables.	Replacement	3 - Future Renewal											
142	Island Savings Centre	D304003 Hot Water Distribution Systems	Various/ Radiant Heaters (30+)	Radiant Heaters serve various zones including hallways, mechanical rooms, ice plant room, workshop etc. Age unknown and estimated.	Plan to replace immediately as units appear dated and may not be delivering heat efficiently. Alternatively, replace units when they become non-functional. Rolling budget has been assigned to this item over the 10 year capital plan.	Replacement	2b - Exceeded Service Life	\$37,000	\$3,700	\$3,700	\$3,700	\$3,700	\$3,700	\$3,700	\$3,700	\$3,700	\$3,700 \$	\$3,700
143	Island Savings Centre		ISC Offices + Exhibition Rooms/ Fan Coils (14)	ISC offices and exhibition rooms are served by hydronic fan coil units. One representative unit in the 2nd floor boardroom storage/closet was accessed during walkthough (pictured). Age unknown but likely original to the building.	Replace at end of service life. Recommend performing a detailed/invasive review of this eqiupment to evaluate its condition appropriately. If condition is good, further recommend recommissioning the system as ISC office staff noted comfort issues in the summer.	Study	2b - Exceeded Service Life	\$3,000	\$3,000									
144	Island Savings Centre		Classrooms/ Heating/Cooling Units (8)	ISC classrooms on the 2nd level are served air handling units with heating and cooling capability. Units were not accessible during walkthough. Age unknown but likely original to the building.	Replace at end of service life. Recommend performing a detailed/invasive review of this eqiupment to evaluate its condition appropriately. Consider window replacement ahead of this study, to size mechanical equipment according to updated heat loss calculations.	Study	2b - Exceeded Service Life	\$3,000	\$3,000									
145	Island Savings Centre		Arena Dressing + Referee Rooms/ Air Handling Units (9)	⁷ Air Handling Units with hydronic heating coils serving dressing rooms, referee rooms, and coaches/training rooms.	Replace at end of service life. At least one of these units appears to have been recently replaced. Continue to replace as budget allows or when units fail.	Replacement	2b - Exceeded Service Life	\$126,000	\$126,000									
146	Island Savings Centre	D304001 Air Distribution, Heating and Cooling	Dressing Room 6/ Ducting	Ducting in dressing room is rusting uncharacteristically rusty in one area. Age unknown and estimated.	Investigate whether this condition is cosmetic due to condensation or whether there is water ingress from another source.	Study		\$1,000	\$1,000									
147	Island Savings Centre		Ice Plant Rm./ Heat Exchanger Tanks (4)	Four 119 gal. Mueller heat recovery tanks. Heat is recovered from compressors and delivered to the zamboni hot water tank. Age unknown and estimated.	Replace at end of service life. This item falls outside the ten year plan, costs associated with this item have not been carried into the cash flow tables.	Replacement	2b - Exceeded Service Life											
	Island Savings Centre	D309002 Refrigeration Systems	Ice Plant Rm./ Compressors (2)	Two Mycom reciprocating compressors serving the ice rink brine loop.	Replace at end of service life. This item falls outside the ten year plan, costs associated with this item have not been carried into the cash flow tables. Likewise, two 75hp Toshiba motors driving the compressors are of the 2014 vintage and are expected to last approximately 15 more years.	Replacement	3 - Future Renewal											
	Island Savings Centre	D309002 Refrigeration Systems	Ice Plant Rm./ Chiller	Henry Technologies chiller serving the ice rink brine loop.	Replace at end of service life.	Replacement	3 - Future Renewal	\$263,000									\$263,000	
150	Island Savings Centre	D309002 Refrigeration Systems	Ice Plant Rm./ Brine Tank	Polymer tank that holds make-up brine for the ice rink brine loop. Age unknown and estimated.	Replace at end of service life. This item falls outside the ten year plan, costs associated with this item have not been carried into the cash flow tables.	Replacement	3 - Future Renewal											

		COM	IPONENT	CONDITION ASSESSMENT	RECOMMENDATION	I OF PROBAE 10-YEAR CAPITAL PLAN												
Row	BLDG Name	ID	Location / Type	Description & History	Recommendation	Type	Priority	Total in 2017 Dollars	2017 \$5,242,700	2018 \$538,733	2019 \$366,700	2020 \$799,400	2021 \$781,033	2022 \$240,400	2023 \$215,700	2024 \$851,733	2025 \$374,700	2026 \$574,400
151	Island Savings Centre	D304099 Other Distribution Systems	Ice Plant Rm./ Brine Pumps (2)	Two Emerson pumps (20hp & 7.5hp) serve the brine loop for the ice rink. Age unknown and estimated.	Replace at end of service life.	Replacement	3 - Future Renewal	\$16,000										\$16,000
152	Island Savings Centre	D304005 Glycol Distribution Systems	Ice Plant Rm./ Expansion Tank	Expansion tank serving the glycol loop. Age unknown and estimated.	Replace at end of service life. This item falls outside the ten year plan, costs associated with this item have not been carried into the cash flow tables.	Replacement	3 - Future Renewal											
153	Island Savings Centre	D302099 Other Heat Generating Systems	Zamboni Rm./ Hot Water Tank	Hot water heater that uses waste heat drawn from the ice rink refrigeration loop.	While the tank may be functioning as intended, it is well beyond its expected service life. The condition of the internal components could be impacting heat transfer efficiency adversely. Plan to replace unit immediately when budget is available.	Replacement	2b - Exceeded Service Life	\$8,000	\$8,000									
154	Island Savings Centre		Theatre/ Air Supply Grilles and Ductowrk	Supply air grilles are likely original to the building, along with associated ductwork. Dust from ducts is collecting on surfaces.	Replace filters on air handlers regularly. Given the age of the system, ducts may need cleaning to remove particulates. Cost of complete air handling system replacement is detailed elsewhere. Since cleaning or replacing are likely mutually exclusive, the cost of cleaning is not carried into the cash flow tables.	Repair Allowance	2b - Exceeded Service Life											
155	Island Savings Centre	D509005 Electrical Heating	Various/ Baseboard Heaters	Electric baseboard heaters were found in the arena beverage concession/ticket room, and the viewing lounges. Ages unknown but likely original to the building.	Plan to replace these units as they are well beyond their expected service life. Baseboard heater in ticket/beverage concession is obstructed with combustible materials (pictured). This is a fire hazard. Always allow for appropriate clearance to combustibles per manufacturer's recommendations.	Replacement	2b - Exceeded Service Life	\$3,000	\$3,000									
156	Island Savings Centre	G301007 Pumping Stations	Northwest Parking Lot/ Sump Pump	High water table necessitates a sump pump system. Pump was not accessed during walkthough. Age unknown and estimated.	Recommend reviewing condition in detail. Sump pump should be replaced proactively every 10 years, or at least tested regularly. Consider installing a backup sump as well.	Replacement	3 - Future Renewal	\$6,000		\$6,000								
157	Island Savings Centre	D202099 Other Domestic Water Supply	Various/ Other Hot Water Heater/Tanks	Four year old, roughly 500 USG tank serving the main building hot water. Additionally, a 75 gal electric hot water tank is approximately the same vintage and serves the old pool area/gymnasium.	Replace at end of service life. This item falls outside the ten year plan, costs associated with this item have not been carried into the cash flow tables.	Replacement	3 - Future Renewal											
158	Island Savings Centre	D204002 Roof Drains	Roof/ PVC Drain Pipe Adjacent HF 1	P-PVC drain pipe fastener is loose and no longer supporting the pipe.	Re-fasten to restore structural integrity. Cost of repair is negligible and has not been carried forward in cost tables.	Repair Allowance	1 – Immediate	\$3,000	\$3,000									
159	Island Savings Centre	D204003 Rainwater Drainage Equipment		Plastic debris grates have degraded over time due to exposure to the elements, comporomising their effectiveness. Debris is akwardly collecting in the drain cavity in certain grates. Other grates are missing entirely. Drains are therefore more likely to backup leaving standing water on the roof.	Remove debris regularly and reposition grate properly or replace with one of correct size/dimensions. Replace damaged or missing grates. Galvanized metal could be more durable for this application.	Replacement	1 – Immediate	\$3,000	\$3,000									
	Island Savings Centre	D2010 Plumbing Fixtures	Various/ Washroom Sinks, Toilets Showers, Urinals, etc.	, Several washrooms were accessed during the walkthough. Most fixtures are in good condition and operating properly.	Consider establishing a standing budget to repair fixtures on a per-instance basis as the need arises. Some areas are in need of attention. In particular, washrooms in the Heritage Hall area are in need of repair, and it appears as though some work is currently being undertaken (pictured). Additionally, washroom fixtures (showers in particular) found in the theatre dressing rooms are candidates for renovation as they are exhibiting signs of deterioration.	Repair Allowance	2b - Exceeded Service Life	\$53,000	\$5,300	\$5,300	\$5,300	\$5,300	\$5,300	\$5,300	\$5,300	\$5,300	\$5,300	\$5,300
	Island Savings Centre	D501001 Main Transformers	Various/ Transformers	Electrical transformers in various locations thoughout the building. Varying vintages; ages unknown and estimated.	Some transformers are newer and will not require upgrading over the next 10 years. However, others are likely original to the building and likely need to be replaced. Based on the walkthough, plan to replace approximately 5 transformers over the next 10 years.	Replacement	3 - Future Renewal	\$53,000	\$5,300		\$5,300		\$5,300		\$5,300		\$5,300	
162	Island Savings Centre	D503007 Television Systems	Various/ LCD Screens (Televisions)	Televisions of varying vintages and sizes in numerous locations throughout the building. Some appear to be intermittently used while others are displaying information frequently (or always). Televisions that were not turned on were not reviewed for functionality. Ages unknown and estimated.	Old CRT technology will likely soon fail. Newer LCD screens are more durable; their relative brightness will fade over time and replacement will be considered a cosmetic/aesthetic decision only.	Replacement	4b - Discretionary Aesthetic	\$6,000		\$2,000			\$2,000			\$2,000		

		CON	IPONENT	CONDITION ASSESSMENT	RECOMMENDATION			I OF PROBAE 10-YEAR CAPITAL PLAN												
Row	Name		Type				۲۸	/ Dollars	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026		
	BLDG	ID	Location /	Description & History	Recommendation	Туре	Priori	Total in 201	\$5,242,700	\$538,733	\$366,700	\$799,400	\$781,033	\$240,400	\$215,700	\$851,733	\$374,700	\$574,400		
	Island Savings Centre	D502099 Other Lighting and Branch Wiring	Theatre Dressing Rooms/ Light Circuits	Bulbs for make-up lighting areas were recently replaced with LEDs. Switches appear to be original and dated; some are very sensitive to position and touch as if the internal components are worn.	Replace at end of service life. This item falls outside the ten year plan, costs associated with this item have not been carried into the cash flow tables. Recommend investigating whether condition of switches is acceptable.	Study		\$1,000	\$1,000											
164	Island Savings Centre	D509099 Other Special System and Devices	s Main Lobby Parking Lot/ Electric Vehicle Charging Stations (2)	Two electric vehicle charging stations outside the main lobby, in the parking lot. One standard charging station, and one DC fast charging station. Age unknown and estimated.	Replace at end of service life.	Replacement	3 - Future Renewal	\$7,000								\$7,000				
	Island Savings Centre	D502002 Lighting Equipment	Various/ General Lighting	Facility lighting is mostly fluourescent T8/T12. Some singular CFL and incandescent lighting remains. Specialty lighting includes PAR20 lighting for Art exhibition areas. Excluded from this line item are high bay lighting areas, namely the arena, multipurpose room, and gymnasium. They are detailed elsewhere.	Recommend establishing a contingency budget to relamp with LEDs when budget allows, starting with the oldest fixtures/bulbs. LEDs are now available in a variety of formats as very durable and energy efficient retrofit options.	Replacement	4a - Discretionary Renewal	\$210,000	\$21,000	\$21,000	\$21,000	\$21,000	\$21,000	\$21,000	\$21,000	\$21,000	\$21,000	\$21,000		
	Island Savings Centre	D502002 Lighting Equipment	Various/ High Bay Lighting	Special purpose lighting is employed in the following recreational areas: arena, multipurpose room, and gymnasium. Age estimated.	Replace at end of service life. Recommend establishing a contingency to replace failed bulbs.	Contingency	2 - Restore Functionality	\$11,000	\$1,100	\$1,100	\$1,100	\$1,100	\$1,100	\$1,100	\$1,100	\$1,100	\$1,100	\$1,100		
167	Island Savings Centre	D501007 Motor Control Centres	Various/ Motor Control Centres (4)	Motor control centres were located in theatre mechanical rooms, classroom wing, boiler room, and ice plant room during the walkthrough. Ages unknown and estimated.	Some MCCs appear to be newer and will likely not need replacing during the 10 year evaluation period. Budget for replacement of at least two units over the next 10 years.	Replacement	3 - Future Renewal	\$42,000												
168	Island Savings Centre	G403002 Sound Systems	Various/ Sound System Equipment	Sound systems for the theatre, arena, multipurpose hall, classrooms, rehearsal room, etc. Ages unknown, variable, and estimated.	Replace at end of service life. Consider establishing a standing contingency for sound systems as they fail or require upgrades to meet increasing demand for more capacity or new features. Theatre sound system is the most complex and will likely need the majority of attention in	Contingency	4a - Discretionary Renewal	\$53,000	\$10,600		\$10,600		\$10,600		\$10,600		\$10,600			
	Island Savings Centre	G204005 Signage	Theatre Roof/ Island Savings Centre Sign	Illuminated sign facing north. Age unknown and estimated.	the future Replace at end of service life. This item falls outside the ten year plan, costs associated with this item have not been carried into the cash flow tables.	Replacement	3 - Future Renewal													
170	Island Savings Centre	D501005 Panels	Various/ Electrical Service Panels (Circuit Breaker Boxes) and Switches	Walkthough revealed numerous breaker panels and switches servicing many areas of the building. Many panels appear to be relatively modern. Arena, heritage hall, and clasroom equipment appear to be the most dated. Ages unknown, variable, and estimated.	Given the variety, location, and number of panels and switches, consider establishing a standing budget over the next 10 years to replace aging and failing equipment. Equipment in the arena, heritage hall, and classroom areas appear to be oldest and should be the first priority for replacement. Electrical panels in the backstage theatre area appear to have been updated most recently.	Contingency	2b - Exceeded Service Life	\$158,000	\$15,800	\$15,800	\$15,800	\$15,800	\$15,800	\$15,800	\$15,800	\$15,800	\$15,800	\$15,800		
171	Island Savings Centre	D503099 Other Communications and Alarm Systems	Arena/ Scoreboard	Centaur Products H-2105 scoreboard.	Replace at end of service life. This item falls outside the ten year plan, costs associated with this item have not been carried into the cash flow tables.	Replacement	3 - Future Renewal													
172	Island Savings Centre	D503002 Telecommunications Systems	Various/ Telecommunications Equipment	Routers, modems, WIFI signal boosters, satellite dish, etc.	Recommend establishing a standing contingency to replace failed equipment, or to upgrade equipment to meet growing user demands.	Contingency	4a - Discretionary Renewal	\$53,000	\$5,300	\$5,300	\$5,300	\$5,300	\$5,300	\$5,300	\$5,300	\$5,300	\$5,300	\$5,300		
173	Island Savings Centre	D306002 Electronic Controls	Various/ Control Systems and Components	DDC system circuitry and panels found in mechanical rooms, boiler rooms, ice plant room, and janitorial rooms. Boiler replacement in 2016 likely included interfacing with the DDC. Therefore, adjustments were likely made at that time.	Recommend establishing a standing budget for control system component replacment, and retrocomissioning. Library staff noted air quality (stale air) issues in one end of the public/stack area. Additionally, staff noted feeling too cold in certain office/backroom areas. Likewise, staff occupying the ISC offices area near the classroom areas note similar thermal comfort issues. These are likely a due to balancing or temperature setpoint issues with the air distribution system, easily corrected by retrocomissioning the DDC.	Contingency	4a - Discretionary Renewal	\$27,000	\$5,400		\$5,400		\$5,400		\$5,400		\$5,400			

		СОМ	PONENT	CONDITION ASSESSMENT	CONDITION ASSESSMENT OF PROBAE 10-YEAR CAPITAL PLAN									_				
Row	BLDG Name	ID	tion / Type	Description & History	Recommendation	Type	Priority	עסוומר 2017 Dollars	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026
			Loca					Total ir	\$5,242,700	\$538,733	\$366,700	\$799,400	\$781,033	\$240,400	\$215,700	\$851,733	\$374,700	\$574,400
174	Island Savings Centre	D101003 Freight Elevators	Various/ Elevators	Ages unknown but likely original to the building. Elevators' functionality was not tested during walkthrough. Elevators are located in the theatre wing, main lobby, and heritage hall.	Recommend retaining an elevator consultant to study overall condition in detail. Replacement may not be necessary based on condition of mechancial components (not accessible during walkthrough). A retrofit can be far less costly than a complete replacement. Main lobby elevator interior finishes appear to have been modernized, likely with the library upgrade of 2003.	Study		\$11,000	\$11,000									
175	Island Savings Centre	E101004 Laundry Equipment	Rehearsal Rm. & Laundry Rm./ Laundry Equipment	Clothes washers and dryers. Ages unknown and estimated.	Replace at end of service life. This item falls outside the ten year plan, costs associated with this item have not been carried into the cash flow tables.													
176	Island Savings Centre	D503099 Other Communications and Alarm	Various/ CO & NO2 Sensors	Toxic gas sensors located in the ice plant room, and around the arena. Ages unknown and estimated.	Establish a standing budget to replace units every 3-5 years.	Replacement	3 - Future Renewal	\$16,000		\$5,333			\$5,333			\$5,333		
177	Island Savings Centre	Systems D503008 Security Systems	Various/ Security Camera System	Security cameras installed throughout the building. Age unknown and estimated.	Recommend establishing a contigency every 5 years to upgrade equipment due to failure or to keep up with technological advances.	Contingency	3 - Future Renewal	\$32,000					\$16,000					\$16,000
178	Island Savings Centre	E102005 Auditorium and Stage Equipment	Theatre/ Stage Rigging	Stage fly system/ropes were replaced in 2013. Most ropes are showing signs of fraying.	Recommend consulting a rigging professional to evaluate the condition of rigging equipment. Specific types of ropes will have variable life expectancies. Time of replacement will also depend on frequency of usage.	Study	1 – Immediate	\$3,000	\$3,000				\$16,000					\$16,000
179	Island Savings Centre	D401002 Sprinkler Water Supply Equipment and Piping	-	n Fire supression systems serving the kitchen equipment in the heritage hall and in the arena concession appear to be modernized. Ages uknown and estimated.	Replace at end of service life. This item falls outside the ten year plan, costs associated with this item have not been carried into the cash flow tables.	Replacement	3 - Future Renewal											
180	Island Savings Centre	D402001 Standpipe Equipment and Piping	Main Fire Suppression Valves (6)	Six main fire suppression valves. Dry rink system, while remaining are wet. Age unknown.	ISC maintenance staff suggest that valves are aging and will need replacing.	Replacement	2b - Exceeded Service Life	\$42,000	\$42,000									



Photo 01



Photo 02



Photo 03



Photo 04



Photo 05





Photo 07



Photo 08



Photo 09





Photo 11



Photo 12



Photo 13



Photo 14



Photo 15





Photo 17





Photo 19



Photo 20



Photo 21



Photo 22





Photo 24





Photo 25



Photo 26





Photo 28



Photo 29





Photo 31



Photo 32



Photo 33





Photo 35







Photo 38



Photo 39



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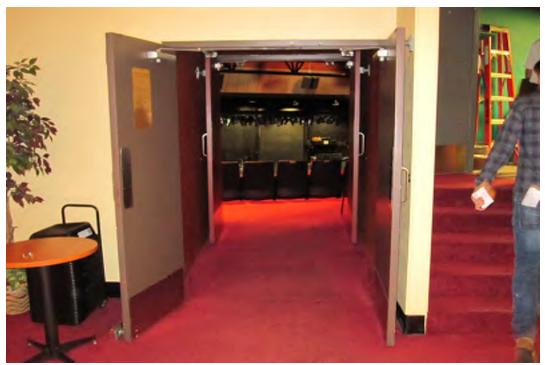


Photo 41





Photo 43





Photo 45





Photo 47



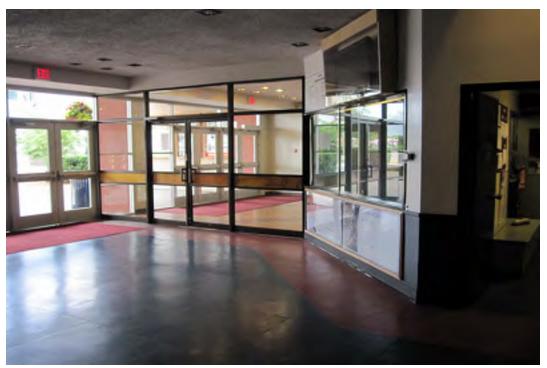


Photo 49



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Photo 50





Photo 52



Photo 53



Photo 54



Photo 55

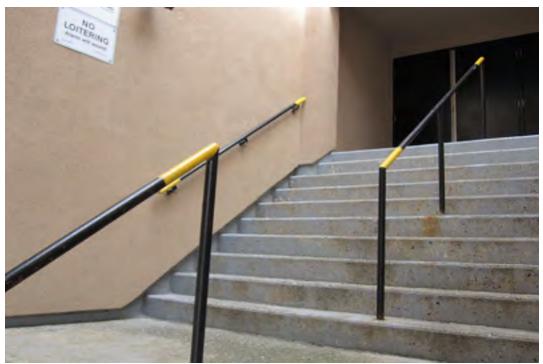


Photo 56





Photo 58



Photo 59





Photo 61



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Photo 64





Photo 66



Photo 67

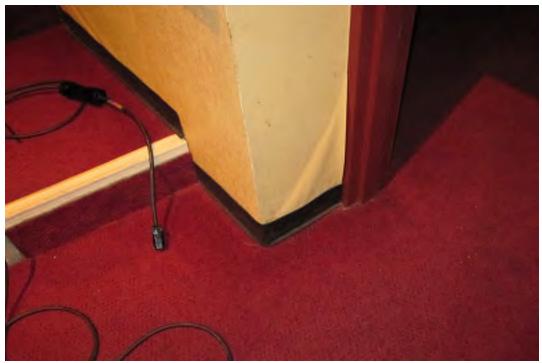






Photo 70



Photo 71



195







Photo 75





Photo 77



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Photo 79



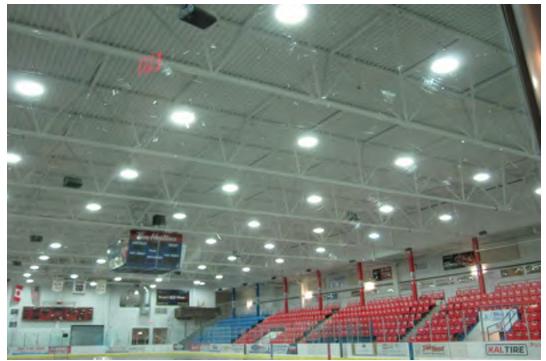




Photo 82



Photo 83



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Photo 86



Photo 87



Photo 88



Photo 89



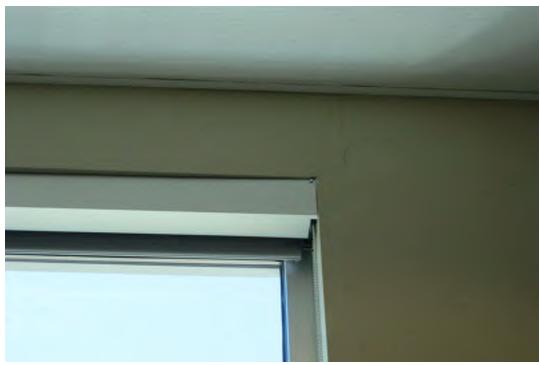




Photo 92



Photo 93



206





Photo 96



Photo 97



208

Photo 98



Photo A001





Photo A003







Photo A006





Photo A008





Photo A010





Photo A012





Photo A014





Photo A016





Photo A018





Photo A020



Photo A021



Photo A022





Photo A024



Photo A025





Photo A027



Photo A028





Photo A030





Photo A032





Photo A034



Photo A035





Photo A037





Photo A039







Photo A042





Photo A044





Photo A046





Photo A048





Photo A050





Photo A052



Photo A053







Photo A056



Photo A057





Photo A059





Photo A061







Photo A064









Photo A068



Photo A069



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Photo A072

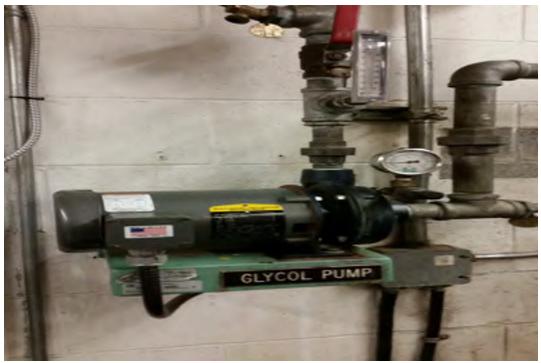


Photo A073



245

Photo A074





Photo A076





Photo A078





Photo A080



Photo A081







Photo A084



Photo A085





Photo A087



Photo A088





Photo A090





Photo A092





Photo A094





Photo A096





Photo A097





Photo A099







Photo A102





Photo A104





Photo A106



Photo A107







Photo A110





Photo A112





Photo A114





Photo A116



Photo A117



Photo A118





Photo A120



Photo A121









Photo A124





Photo A126





Photo A128





Photo A130





Photo A132





Photo A134





Photo A136



Photo A137







Photo A140





Photo A142

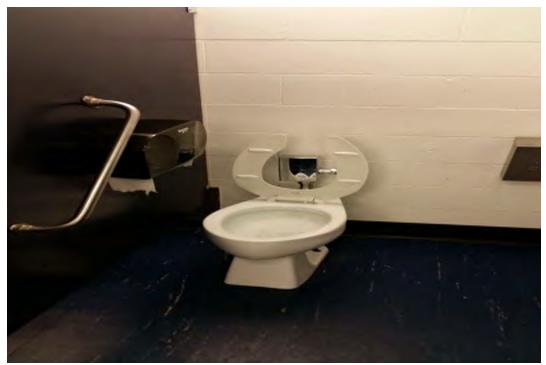




Photo A144

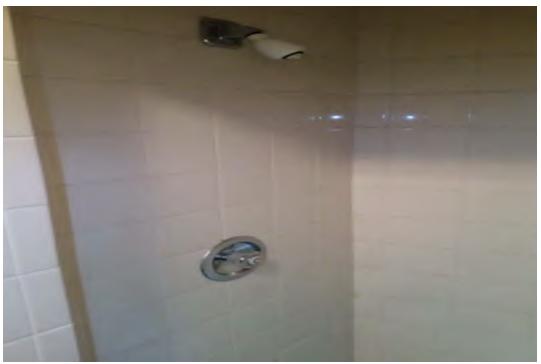




Photo A146





Photo A148





Photo A150



Photo A151



Photo A152



Photo A153



285

Photo A154





Photo A156





Photo A158



Photo A159



Photo A160





Photo A162





Photo A164



Photo A165







Photo A168





Photo A170





Photo A172





Photo A174





Photo A176



Photo A177



Photo A178



Photo A179



Photo A180



Photo A181







Photo A184



Photo A185



301

Photo A186



Photo A187







Photo A190









Photo A194



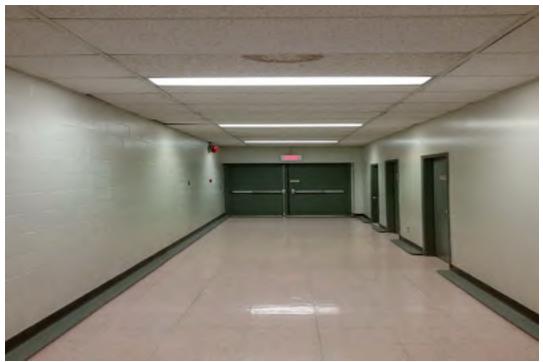


Photo A196





Photo A198





Photo A200



Photo A201







Photo A204



Photo A205



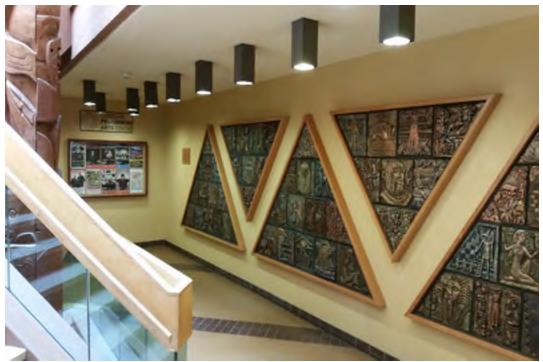


Photo A207





Photo A209



Photo A210





Photo A212



Photo A213





Photo A215







Photo A218





Photo A220





Photo A222



Photo A223



320

Photo A224





Photo A226



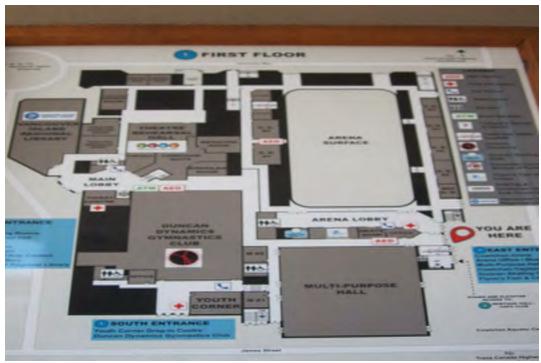


Photo A228





Photo A230





Photo A232





Photo A234





Photo A236





Photo A238

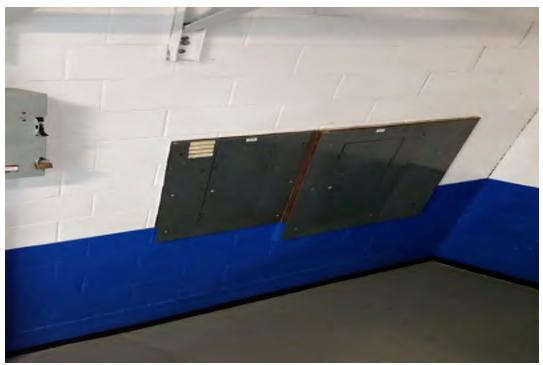




Photo A240





Photo A242





Photo A244





Photo A246





Photo A248



Photo A249







Photo A252





Photo A254





Photo A256





Photo A258





Photo A260





Photo A262





Photo A264





Photo A266





Photo A268



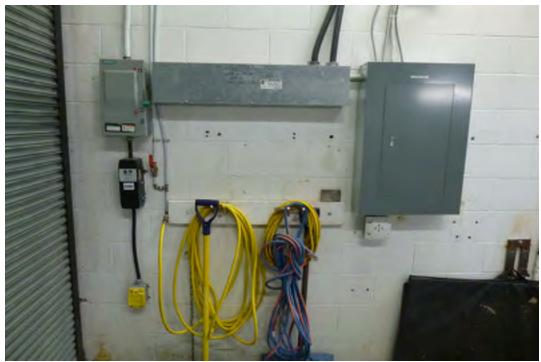


Photo A270





Photo A272



Photo A273



Photo A274





Photo A276

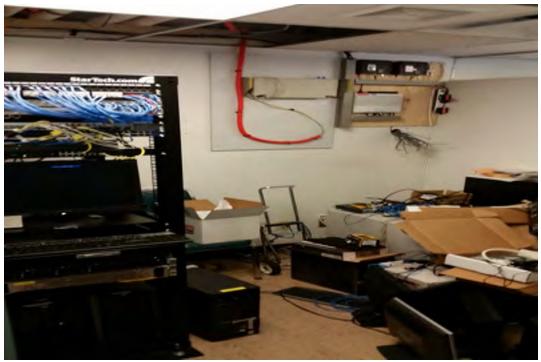




Photo A278





Photo A280



Photo A281





Photo A283







Photo A286





Photo A288



Photo A289



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Photo A292



Photo A293





Photo A295



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Photo A298





Photo A300

Cowichan Valley Regional District Island Savings Centre & Cowichan Performing Arts Centre - Report Photos

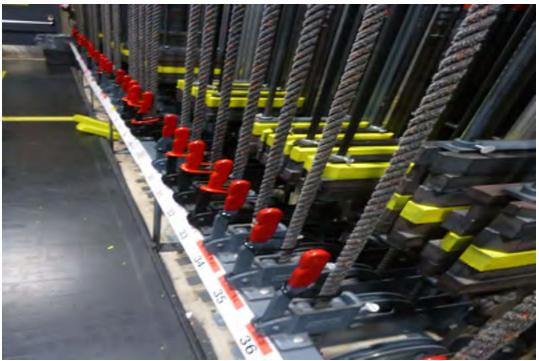


Photo A301



Photo A302

Appendix A

A – 05 Shawnigan Lake Community Centre

361 Facility Assessment Shawnigan Lake Community Centre



Cowichan Valley Regional District MH Project No. 5170700.00

November 2017



Cowichan Valley Regional District 175 Ingram Street Duncan, BC V9L 1N8



PROPERTY DESCRIPTION	PROPERTY STATISTIC	CS
The Shawnigan Lake Community Centre was constructed in	Gross Floor Area:	11,828 sf.
1993 and has had no major renovations since.		

Refer to Photo 1 for a general overview of the exterior of the building.

Replacement Value:	\$3,335,496
Target FCI:	0.050
Current FCI:	0.026

REPORT OVERVIEW

We found no safety concerns requiring immediate expenditures.

The following provides an overview of the visual seismic, building code, accessibility and energy efficiency reviews completed.

Seismic Review

Seismic work completed to date: Recommendations:	None Complete a seismic screening of the building to assess seismic vulnerability. The screening will be done according to the "Manual for Screening of Buildings for Seismic Investigation", published by the National Research Council of Canada (1992).
Building Code Review Built under what code:	BC Building Code 1992
Accessibility Review Access into building: Access throughout building:	Yes Yes. The only area noted was an issue with the step into the gym area. This steps created an issue at the entrance as well as the emergency exits. This step should be reviewed when the floor is replaced.
Access to washrooms: Recommendations:	Yes Review step at the gym floor (entrance and emergency exits).

We identified recommendations of approximately \$387,000 over the next five years. The following is a summary of the major projects (over \$10,000) we believe will be required the next five years, and elements whose condition is unknown and/or where further investigation is recommended:

Row 7 - '-B2010 Exterior Walls - Masonry - issolated repointing and repairs (\$16,000)

Row 8 - '-B2010 Exterior Walls - Metal Siding - issolated repairs (\$11,000)

Row 9 - '-B2010 Exterior Walls - Metal Siding - translucent panel replacement (\$12,000)

Row 11 -'-B201010 Exterior Coatings - masonry sealer (\$19,000) Rows 13 & 14 - '-B202001 Punched Windows - replacement (\$129,000) Row 15 -'-B203001 Exterior Glazed Doors - replacement (\$13,000) Row 16 -'-B203001 Exterior Solid Doors - replacement (\$11,000) Row 17 -'-B301002 Slope Roof - issolated repairs and sealing (\$11,000) Row 18 -'-B301005 Gutters and Downspouts - membrane and drain replacement (\$29,000) Row 23 -'-C101001 Fixed Partitions - Bathroom - replacement (\$15,000) Row 25 -'-C101003 Retractable Partitions - replacement (\$22,000) Row 32 -'-C302099 Other Flooring and Floor Finishes - multipurpose rooms - replacement Row 33 -'-C302099 Other Flooring and Floor Finishes - gym - replacement (\$65,000) Row 37 -'-C103008 Counters/C103009 Cabinets - kitchen - replacement (\$16,000) Row 59 -'-D503008 Security Systems - replacement (\$21,000)

Row 64 -'-D503001 Fire Protection System- component replacement (\$11,000)

PROJECT TEAM

The visual reviews were completed on May 31 and June 16, 2017 by Chris Raudoy. We began with an interview with Tony Liddle, South Cowichan Facility Operations Coordinator. During our review of the building, we were accompanied by Tony Liddle, who provided access to a sampling of representative areas of the facility, as requested. We were unable to access the main roof due to a lack of installed fall-protection equipment.

Jordan Bowie of Morrison Hershfield reviewed the report for technical content and for compliance with the contract requirements.

REFERENCE DOCUMENTS/INFORMATION

We reviewed the following documents and selected drawings for general background and to inform ourselves about the layout and intended construction:

- Architectural Drawings, authored by David N. Spearing & Associates, dated February 1993.
- Mechanical Equipment List (not dated or marked), list was noted to be outdated.
- Energy Study Report, authored by BES, dated January 2014.
- Custom Valuation Report by RMS, dated January 12, 2012

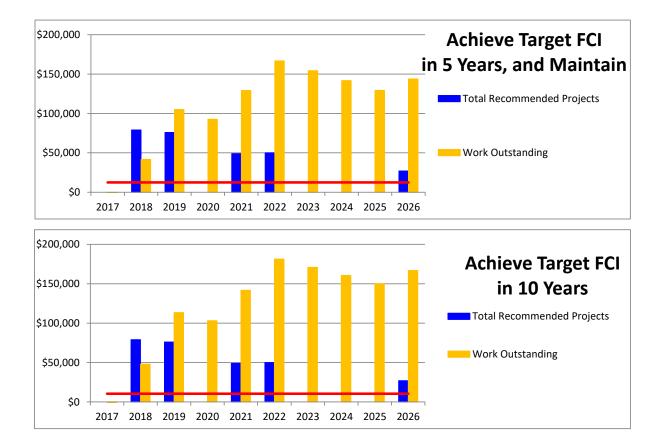
This report should be reviewed in conjunction with the Objectives, Terms of Reference, Limitations, and Methodology described in the main body of the report.

Cowichan Valley Regional District Facility Condition Assessment and Capital Plan Shawnigan Lake Community Centre, 2804 Shawnigan Lake Road, Shawnigan Lake BC

We recommend budgeting for the following 1 – Immediate, 2 - Restore Functionality, 2b - Exceeded Service Life and 3 - Future Renewal projects by year as follows:

Priority	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026
1 – Immediate	0	0	0	0	0	0	0	0	0	0
2 - Restore Functionality	0	0	0	0	9,000	0	0	0	0	0
2b - Exceeded Service Life	0	27,000	0	0	0	0	0	0	0	0
3 - Future Renewal	0	52,000	76,000	0	40,000	50,000	0	0	0	27,000
Total in 2017 dollars	0	79,000	76,000	0	49,000	50,000	0	0	0	27,000
Minimum Funding to Achiev	e and Mai	intain Tar	get FCI wit	thin 5 yea	rs: \$12,46	1				
Work outstanding	-24,921	41,618	105,157	92,696	129,236	166,775	154,314	141,853	129,393	143,932

work outstanding	-24,921	41,010	105,157	92,090	129,230	100,775	134,314	141,000	129,393	145,952
Minimum Funding to Achiev	/e Target F	CI within	10 years:	\$10,384						
Work outstanding	-20,768	47,848	113,464	103,079	141,695	181,311	170,927	160,543	150,159	166,775



Start Yr 2017 Facility Condition Assessment and Capital Plan Shawnigan Lake Community Centre, 2804 Shawnigan Lake Road, Shawnigan Lake, BC

	<u> </u>	ę.	ents	=	CO	MPONENT		CONDITION ASSESSMENT						LIFECYCLE	DATA	RECOMMENDATION				If recommended	Will a failure in	Can the current		OP		ROBABLE COST	
BLDG Name	Location / Addres	Level 1 Major Groi Elements	Level 2 Group Elem	Level 3 Individua Elements	D	location / Type	Photo	Description & History	Condition	Performance	Yr New or Last Major Action	Assessment Date	Assessed By Age in 2017	Age in 2017 Typical Life Cycle or Action Interval	Est. Time Remaining to EOL or Maior Action	Recommendation	Type	Priority	Can this work be phased over multiple years ?	work not complete can the rate of deterioration be expected to increase ?	e this system	condition adversely affect the buildings	Quantity	Unit Rate Unit	Subtotal Repair or Replacement Cost	Consult. Contingency	t 4 Total in 2017 Dollars
Shawnigan Lake Community Centre	2804 Shawnigan Lake Road, Shawnigan Lake, BC	A Substructure	A10 Foundatio	A1010 Wall Foundations	A1010 Wall Foundation	s Underground/ Foundations	2 T S	The foundations are concrete masonry units as visible at grade. No evidence of major ettlement or heaving was reported or observed.	4	5	1993	May 31 & June 1 16	VIH 2	24 50	26	The foundations are expected to last the life of the building. No major capital expenditures are expected to be required. This item falls outside the ten year plan, costs associated with this item have not been carried into the cash flow tables.		Not Applicable	N/A	N/A	Yes	No					
Shawnigan Lake Community Centre	2805 Shawnigan Lake Road, Shawnigan Lake, BC	A Substructure	A1030 Slab on Grade	A1030 Slab on Grade	A103001 Standard Slab on Grade	Throughout Building At- Grade/ Slab-on-Grade	3 T N	The floor is a concrete slab-on-grade. Floor finishes were installed in some locations. No evidence of major settlement or heaving was reported or observed.	4	5	1993	May 31 & June 1 16	VIH 2	24 50	26	The slab-on-grade is expected to last the life of the building. No major capital expenditures are expected to be required. This item falls outside the ten year plan, costs associated with this item have not been carried into the cash flow tables.		Not Applicable	N/A	N/A	Yes	No					
Shawnigan Lake Community Centre	2806 Shawnigan Lake Road, Shawnigan Lake, BC	A Substructure	A1030 Slab on Grade	A1030 Slab on Grade	A103006 Foundation Drainage	Underground/ Perimeter Drains	N	5° perimeter drain pipes are shown at the footing level on the architectural drawings. No issues related to foundation drainage were noted by facility staff. No information was available regarding the scoping of the system to review for continuity.			1993	May 31 & June 1 16	VIH 2	24 5	2	Periodic camera inspection and isolated repairs as required.	Study	Not Applicable	No	N/A	No	N/A	1	\$2,000 LS	\$2,000	0% 0%	5% \$3,000
Shawnigan Lake Community Centre	2807 Shawnigan Lake Road, Shawnigan Lake, BC	A Substructure	A1030 Slab on Grade	A1030 Slab on Grade	A103006 Foundation Drainage	Underground/ Perimeter Drains	N	5° perimeter drain pipes are shown at the footing level on the architectural drawings. No issues related to foundation drainage were noted by facility staff. No information was available regarding the scoping of the system to review for continuity.			1993	May 31 & June 1 16	MH 2	24 50	26	The foundation drainage is expected to last the life of the building. No major capital expenditures are expected to be required. This item falls outside the ten year plan, costs associated with this item have not been carried into the cash flow tables. This should be updated with the results of the foundation drainage review recommended in A103006 Foundation Drainage (above).		Not Applicable	N/A	N/A	No	No					
Shawnigan Lake Community Centre		B Shell	B10 Superstructure	B10 Superstructure	B10 Superstructure	Throughout Building/ General Superstructure	fi V c Is L	The superstructure consists of a combination of 8" structural block walls and wood raming. The roof consists of a wood/steel truss assembly with wood framing on top. With the exception of the wood/metal trusses the majority of framed structure was oncealed by interior finishes. solated cracking was noted in the drywall finishes on the rounded walls on the 104 .ounge Room. These cracks were noted by facility staff to have been present for an extended period of time. No other settlement, cracking, or other evidence of structural distress was observed or reported.	4	5	1993	May 31 & June 1 16	MH 2	24 50	26	Interior protected structural components are expected to last the life of the building. No major capital expenditures are expected to be required. This item falls outside the ten year plan, costs associated with this item have not been carried into the cash flow tables. Continue to monitor cracking in the 104 Lounge Room. It is recommended that the building seismic upgrades be completed. This item is included under P100001 Seismic Screening.		Not Applicable	N/A	N/A	Yes	No					
Shawnigan Lake Community Centre		B Shell	B20 Exterior Enclosure	B2010 Exterior Walls	82010 Exterior Walls - Masonry	Exterior Walls/Masonry Walls	n a T d	The walls are masonry clad assemblies with a combination of rib-face and split-face masonry. The wall are drained assemblies (weeps at base) with rigid insulation (3") ggainst the structural masonry walls. The masonry appeared to be in good condition with no areas of cracking or structural stress observed or reported. Staining was present on the masonry throughout the outh elevation. Evidence of moisture staining was present at the roof/gutter nterface on the east elevation (grid 4F on the architectural drawings).	4	5	1993	May 31 & June 1	MH 2	24 50	26	Cleaning on the masonry should be completed.	Contingency	4b- Discretionary Aesthetics	Yes	N/A	N/A	N/A	1	\$4,000 SF	\$4,000	0% 0%	5% \$5,000
Shawnigan Lake Community Centre	2810 Shawnigan Lake Road, Shawnigan Lake, BC	B Shell	B20 Exterior Enclosure	B2010 Exterior Walls	B201001 Exterior Enclosure	Exterior Walls/Masonry Walls	n S' T d	The walls are masonry clad assemblies with a combination of rib face and split face masonry. The wall are drained assemblies with rigid insulation (3") against the tructural masonry walls. The masonry appeared to be in good condition with no areas of cracking or structural disterss observed or reported. Staining was present on the masonry throughout the outh elevation. Evidence of moisture staining was present at the roof/gutter nterface on the east elevation (grid 4F on the architectural drawings).	4	4	1993	May 31 & June 1 16	MH 2	24 50	10	The masonry cladding is expected to last the life of the building. Localized brick replacement and mortar repointing can be expected to be required in the next 10 years. Complete maintenance to cover missing outlet plates (east elevation).	Contingency	3 - Future Renewal	Yes	Yes	Yes	Yes	1	\$15,000 LS	\$15,000	0% 0%	5% \$16,000
Shawnigan Lake Community Centre	2811 Shawnigan Lake Road, Shawnigan Lake, BC	B Shell	B20 Exterior Enclosure	B2010 Exterior Walls	B201001 Exterior Enclosure	Exterior Walls/Metal Siding	c a a	Vetal siding is present on the upper levels. This siding consists of a combination of corrugated metal cladding installed on 2 gifts with rigid insulation (3") fit between ind standing seam metal installed over wood framed walls (the standing seam areas are continuation of the metal roof areas). Where reviewed the metal siding appeared to be in good condition.	4	4	1993	May 31 & June I	MH 2	24 50	10	The metal cladding is expected to last the life of the building. Localized cladding repairs and recoating can be expected to be required in the next 10 years.	Contingency	3 - Future Renewal	Yes	Yes	Yes	Yes	1	\$10,000 LS	\$10,000	0% 0%	5% \$11,000
Shawnigan Lake Community Centre	Lake Road, Shawnigan Lake, BC		B20 Exterior Enclosure		Metal Siding		ti ti s'	Vetal siding is present on the upper levels. In the walls at the gable ends of the gym, ransucent panels have been installed. These panels have been shingle lapped with the metal panels. No issues associated with these panels were reported by facility taff.	4			16				The translucent panels can be expected to have a shorter service life than the metal. Replace translucent panels at the end of their service life.		3 - Future Renewal		Yes	Yes	Yes	100	\$100 SF	\$10,000	0% 10%	5% \$12,000
Shawnigan Lake Community Centre		B Shell	B20 Exterior Enclosure	B2010 Exterior Walls	B201008 Exterior Soffit	s Roof Eaves/ Metal Soffit	11 S	fits consists of aluminum assemblies with a vent strip installed.	4	4	1993	May 31 & June 1 16	VIH 2	24 50	26	The metal soffits are expected to last the life of the building, isolated replacement may be required due to mechanical damage. No major capital expenditures are expected to be required. This item falls outside the ten year plan, costs associated with this item have not been carried into the cash flow tables.		Not Applicable	N/A	N/A	No	No					
Shawnigan Lake Community Centre		B Shell	B20 Exterior Enclosure	B2010 Exterior Walls	B201010 Exterior Coatings	Exterior Walls/Masonry Sealer	T d	iealer does not appear to have been installed on the concrete masonry units. The masonry appeared to be in good condition with no areas of cracking or structural listress observed or reported. Staining was present on the masonry throughout the outh elevation. Evidence of mosture staining was present at the roof/gutter nterface on the east elevation (grid 4F on the architectural drawings).	4	4	1993	May 31 & June I 16	MH 2	24 10	5	Consideration may be given to installing a clear sealer on the masonry walls. Sealers can make cleaning easier.	Upgrade	4a- Discretionary Renewal	Yes	No	N/A	No	4500	\$4 SF	\$18,000	0% 0%	5% \$19,000
Shawnigan Lake Community Centre		B Shell	B20 Exterior Enclosure	B2010 Exterior Walls	B201011 Joint Sealant	Exterior Walls/Sealant Joints	It	Exterior sealant was not installed at all penetrations. I is our understanding that the majority of the exterior sealant is original to the unulding. Isolated replacements are completed on an as required basis.	3	3	1993	May 31 & June 1 16	VIH 2	24 10	2	Replace sealant between dissimilar materials, and around windows and doors. The majority of the lower floors are well-protected by the roof overhang above. A contingency has been included to complete sealant repairs at exposed locations.	Repair Allowance	2b - Exceeded Service Life	Yes	Yes	No	No					5% \$6,000
Shawnigan Lake Community Centre		B Shell	B20 Exterior Enclosure	B2020 Windows	B202001 Punched Windows	Exterior Walls - Level 1/Metal Framed Window Assemblies	w N	The existing window assemblies consist of thermally-broken metal framed assemblies with single pane glazing units. Operable assemblies consist of awning style operable. No issues of water or air leakage reported or observed throughout the level 1 windows.	3	4	1993	May 31 & June 1 16	VIH 2	24 30	5	Where reviewed the existing level 1 metal framed window assemblies appear to be performing adequately. Replacement of the windows with a more thermally efficient system should be considered in the next 5 years.	Replacement	4a- Discretionary Renewal	Yes	N/A	No	No	600	\$150 SF	\$90,000	10% 15%	5% \$120,000

Start Yr 2017 Facility Condition Assessment and Capital Plan Shawnigan Lake Community Centre, 2804 Shawnigan Lake Road, Shawnigan Lake, BC

	ss	¢	ents	-	COI	MPONENT	CONDITION ASSESSMENT						LIFECYCLE	E DATA	RECOMMENDATION				If recommended	Will a failure in	Can the current		OP	INION OF P	PROBABLE	соѕт	
BLDG Name	Location / Addre	Level 1 Major Gro Elemen ts	Level 2 Group Elem	Level 3 Individua Elements	D	Location / Type	9 E Description & History	Condition	Performance	Yr New or Last Major Action	Assessment Date	Assessed By Age in 2017	Typical Life Cycle or Action	Interval Est. Time Remaining to EOL	B E Recommendation B B	aqyT	Priority	Can this work be phased over multiple years ?	work not complete can the rate of deterioration be expected to increase ?	this system	condition adversely affect the buildings	Quantity	Unit Rate Unit	Subtotal Repair or Replacement Cost	Consult. Contingency	5% Tax	Total in 2017 Dollars
Shawnigan Lake Community Centre	Lake Road, Shawnigan Lake, BC	B Shell	B20 Exterior Enclosure	B2020 Windows	B202001 Punched Windows	Exterior Walls - Clearstory/Metal Framed Window Assemblies	14 The existing window assemblies consist of thermally-broken metal framed assemblie with single pane glazing units. Water ingress was reported on the clerestory windows over the main entrance. Staining of the interior finishes were observed at this location.	s 2	3	1993	May 31 & June 16	MH 24	30	5	Replacement of the clerestory windows should be considered. Until the time the window is replaced the exterior sealant work should be reviewed and repaired as required.	Replacement	2 - Restore Functionality	No	Yes	No	No	30 \$	\$200 SF	\$6,000	10% 20	% 5%	\$9,000
Shawnigan Lake Community Centre	2818 Shawnigan Lake Road, Shawnigan Lake, BC	B Shell	B20 Exterior Enclosure	B2030 Windows	B203001 Exterior Glaze Doors	d Exterior Walls/Glazed Doors	15/16 Four glazed door assemblies are present (three single and one double door assemblies). These assemblies consist of metal frames with single pane glazing. No issues of water or air leakage reported or observed throughout the level 1 glazed doors.	3	4	1993	May 31 & June 16	MH 24	30	5	Where reviewed the existing metal framed glazed door assemblies appear to be performing adequately. Replacement of the door assemblies with a more thermally-efficient system should be considered in the next 5 years.	Replacement	4a- Discretionary Renewal	Yes	N/A	No	No	4 \$.	2,500 EA	\$10,000	10% 10	% 5%	\$13,000
Shawnigan Lake Community Centre	2819 Shawnigan Lake Road, Shawnigan Lake, BC	B Shell	B20 Exterior Enclosure	B2030 Windows	B203002 Exterior Solid Doors	Exterior Walls/Solid Metal Doors	17/18 Five solid metal doors are present (two single and three double door assemblies). These doors are on magnetic locks. Issues related to these doors being pried open from the exterior were reported by facility staff. In the gymnasium area the doors were noted to be warped.	2	3	1993	May 31 & June 16	MH 24	1 25	2	Replace doors with new assemblies (including hardware). Ensure doors have an appropriate threshold to prevent them from being pried open. The use of magnetic locks should be reviewed. Facility staff reported issues of the locks not being engaged during power outages (once backup power is depleted).	Replacement	3 - Future Renewal	Yes	Yes	No	Yes	5\$	1,750 EA	\$8,750	0% 10	% 5%	\$11,000
7 Shawnigan Lake Community Centre		B Shell	B20 Exterior Enclosure	B3010 Roof Coverings	B301002 Slope Roof	Roofs/Metal Roof	19 The main roof consists of sloped prefinished metal panels with concealed fasteners. No leaks were reported or observed. Debris was present throughout the roof. Facility staff confirmed that this is an ongoing issue. No fall arrest tie offs were present on the roof.	3	4	1993	May 31 & June 16	MH 24	50	10	Replace standing metal seam roof sections at end of service life. Isolated repairs to the metal panels and sealant joints can be expected in the next 5 years.	Repair Allowance	3 - Future Renewal	Yes	N/A	Yes	No	1 \$1	10,000 LS	\$10,000	0% 09	6 5%	\$11,000
Shawnigan Lake Community Centre		B Shell	B20 Exterior Enclosure	B3010 Roof Coverings	B301005 Gutters and Downspouts	Roofs/Hidden Gutters	20 A hidden gutter assembly is present at the base of the metal roof. This gutter has been waterproofed with an EPDM membrane. Water drains from the gutter to rain water leaders that carry the water to the below grade drainage. Debris was present throughout the roof. Facility staff confirmed that this is an ongoing issue. Locations were observed where the debris was causing the water to overflow the gutters. One location was noted on the east elevation where the gutter has been dented in.	2	3	1993	May 31 & June 16	MH 24	1 25	5	Replace gutter membranes at the end of its service life. Areas of damaged gutters should be repaired at the time of membrane replacement. Clean gutters as part of the buildings ongoing maintenance plan.	Replacement	3 - Future Renewal	Yes	Yes	No	No	300	\$75 LF	\$22,500	0% 20	% 5%	\$29,000
 Shawnigan Lake Community Centre 		B Shell	B20 Exterior Enclosure	B3010 Roof Coverings	B301005 Gutters and Downspouts	Roofs/Downspouts	 Internal downspouts carry the water from the gutters to the below grade drainage system. Downspouts were concealed by the exterior cladding. Ponding and debris build up was noted throughout the gutters. Facility staff commented this was an ongoing issues. 	4	4	1993	May 31 & June 16	MH 24	1 35	11	Replace downspouts at the end of service life. This item falls outside the ten year plan, costs associated with this item have not been carried into the cash flow tables.	Replacement	3 - Future Renewal	Yes	Yes	No	No						
Shawnigan Lake Community Centre	2823 Shawnigan Lake Road, Shawnigan Lake, BC	C Interiors	C10 Interior Construction	C1020 Interior Doors	C102001 Standard Interior Doors	Throughout Building/Interior Doors	21 & Solid and glazed interior doors are present throughout the building. No issues 22 related to the interior doors were observed or reported by facility staff.	4	4	1993	May 31 & June 16	MH 24	50	26	The interior doors are expected to last the life of the building. No major capital expenditures are expected to be required. This item falls outside the ten year plan, costs associated with this item have not been carried into the cash flow tables.		Not Applicable	N/A	N/A	No	No						
I Shawnigan Lake Community Centre		C Interiors	C10 Interior Construction	C1020 Interior Doors	C102003 Fire Rated Doors	Throughout Building/Fire Rated Doors	23 Fire rated doors are present between the lobby and the adjacent spaces as well as between the gym and adjacent storage room. No issues related to the interior doors were observed or reported by facility staff.	4	4	1993	May 31 & June 16	MH 24	50	26	The interior doors are expected to last the life of the building. No major capital expenditures are expected to be required. This item falls outside the ten year plan, costs associated with this item have not been carried into the cash flow tables.		Not Applicable	N/A	N/A	No	No						
2 Shawnigan Lake Community Centre	Lake Road, Shawnigan Lake, BC	C Interiors	C10 Interior Construction	C1010 Partions	Partitions and Storefronts	Systems	24 & Interior glazing systems are present around the office as well as at the main entrance 25 vestibule.		4		May 31 & June 16				Replace interior glazing at the end of its service life. This item falls outside the ten year plan, costs associated with this item have not been carried into the cash flow tables.		3 - Future Renewal		No	No	No						
Shawnigan Lake Community Centre	Shawnigan Lake, BC	C Interiors	C10 Interior Construction C30 Interior	C1010 Partions	C101001 Fixed Partitions C301005 Gypsum Board	Washrooms/Fixed Partitions	The washroom partitions are in poor shape. Facility staff commented that ongoing repairs are required. Therefore the staff commented that are shaped by the staff commented that are shaped by the staff comment of the staff comment o	2	3		May 31 & June 16 May 31 & June				Replace washroom partition walls. It is assumed that the remainder of the plumbing fixtures and interior finishes throughout the washrooms will remain in place.		3 - Future Renewal 4b- Discretionary	Yes	Yes	No	No				0% 10		
	Lake Road, Shawnigan Lake, BC		Finishes	Finishes	Wall Finishes		finishes appeared to be in good-fair condition. Some cracking was present on the radius walls of the lounge room (104). The timing of the last repainting cycle is unknown and has been assumed. Facility staff commented that typically on patch work is completed.				16				A repainting budget has been included every 5 years to allow for targeted painting.		Aesthetics										
Community Centre	Shawnigan Lake, BC	C Interiors	C10 Interior Construction		Partitions	Partitions	A retractable partition is present between the lounge room (104) and the multipurpose room (103). Tie partition was noted to be in poor shape.	2	2		16				Replace the partition wall.		3 - Future Renewal	No	Yes	No	No	22	5850 LF	\$18,700	0% 10	% 5%	\$22,000
Shawnigan Lake Community Centre		Cinteriors	C10 Interior Construction	Doors	C102005 Interior Overhead Doors	Nitchen/Overnead Doors	29 Two metal overhead doors are present in the kitchen area as well as the main entrance office.	4	4	1993	16	MH 24	35	11	Replace doors at end of service life. This item falls outside the ten year plan, costs associated with this item have not been carried into the cash flow tables.	Replacement	3 - Future Renewal	Yes	No	No	No						
7 Shawnigan Lake Community Centre		C Interiors	C30 Interior Finishes	C3010 Wall Finishes	C301004 Tile Wall Finishes	Washrooms/Tile Wall Finishes	30 Wall tile finishes have been used throughout the washnoom areas (including washroom lobby area). In general, the finishes appeared to be in good-fair condition	4	4	1993	May 31 & June 16	MH 24	35	11	Replace tile at the end of its service life. Prior to replacement review to confirm if tile requires replacement or is grout joints can be replaced where required and the tile retained. This item falls outside the ten year plan, costs associated with this item have not been carried into the cash flow tables.	Replacement	3 - Future Renewal	Yes	No	No	No						
Shawnigan Lake Community Centre	2831 Shawnigan Lake Road, Shawnigan Lake, BC	C Interiors	C30 Interior Finishes	C3010 Wall Finishes	C301099 Other Wall Finishes	Throughout Building/Concrete Block	31 The structural concrete block has been used as the interior finishes in the majority of exterior wall areas.	4	4	1993	May 31 & June 16	MH 24	50	26	The structural masonry walls are expected to last the life of the building. No major capital expenditures are expected to be This item falls outside the ten year plan, costs associated with this item have not been carried into the cash flow tables.		Not Applicable	N/A	N/A	N/A	No						
 Shawnigan Lake Community Centre 	2832 Shawnigan Lake Road, Shawnigan Lake, BC	C Interiors	C30 Interior Finishes	C3020 Floor Finishes	C302001 Tile Floor Finishes	Tile Floor - Washroom and Kitchen Areas	32 Tile flooring has been used throughout the washroom areas (including washroom lobby area) and kitchen area. Where reviewed the tile was noted to be in good condition.	4	4	1993	May 31 & June 16	MH 24	40	16	Replace tile at the end of its service life. This item falls outside the ten year plan, costs associated with this item have not been carried into the cash flow tables.	Replacement	3 - Future Renewal	Yes	No	No	No						

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Starty: 2017 Facility Condition Assessment and Capital Plan Shawnigan Lake Community Centre, 2804 Shawnigan Lake Road, Shawnigan Lake, BC

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BLDG Name	Location / Addree	Level 1 Major Groi Elements	Level 2 Group Elem	Level 3 Individua Elements	D	Location / Type	Description & History	Condition	Performance	Yr New or Last Major Action	Assessment Date Assessed By	Age in 2017	Typical Life Cycle or Action Interval	If 1 The second	Туре	Priority	Can this work be phased over multiple years ?	work not complete can the rate of deterioration be expected to increase ?	this system lead to a	condition adversely affect the buildings security of safety ?	Quantity	Unit Rate Unit	Subtotal Repair or Replacement Cost	Consult. Contingency	Total in 2017
Shawnigan Lake Community Centre	2833 Shawnigan Lake Road, Shawnigan Lake, BC	C Interiors	C30 Interior Finishes	C3020 Floor Finishes	C302003 Wood Flooring	Lounge Area/Wood Flooring 33	Wood flooring is present in the lounge area (Room 104). This flooring has been installed in a circular shaped area. Where reviewed the flooring was noted to be in good condition.	3	4	1993	May 31 & June MH 16	24	30	6 Replace wood flooring at the end of its service life.	Replacement	3 - Future Renewal	No	No	No	No	155 \$3	20 SF	\$3,100	0% 10%	5% \$4,0
Shawnigan Lake Community Centre	2834 Shawnigan Lake Road, Shawnigan Lake, BC	C Interiors	C30 Interior Finishes	C3020 Floor Finishes	C302005 Carpeting	Lounge Area/Carpet 33	Carpeting is present in the lounge area (Room 104). Wood flooring is present in the lounge area (Room 104). This flooring has been installed in a circular shaped area. Where reviewed the flooring was noted to be in good condition.	3	4	1993	May 31 & June MH 16	24	30	6 Replace wood flooring at the end of its service life.	Replacement	3 - Future Renewal	No	No	No	No	200 \$	15 SF	\$3,000	0% 10%	5% \$4,
Shawnigan Lake Community Centre	2835 Shawnigan Lake Road, Shawnigan Lake, BC	C Interiors	C30 Interior Finishes	C3020 Floor Finishes	C302099 Other Flooring and Floor Finishes	Multipurpose Rooms (103 34 and 105)/Interlocking Plastic Flooring	The multipurpose room floors are covered with an interlocking plastic floor.	3	4	1993	May 31 & June MH 16	24	30	6 Replace flooring at the end of its service life.	Replacement	3 - Future Renewal	No	Yes	No	No	1200 \$2	20 SF	\$24,000	0% 0%	5% \$2
Shawnigan Lake Community Centre	2836 Shawnigan Lake Road, Shawnigan Lake, BC	C Interiors	C30 Interior Finishes	C3020 Floor Finishes	C302099 Other Flooring and Floor Finishes	Gym/Interlocking Plastic 35 Flooring	The gym floor is covered with an interlocking plastic 'sports' floor. Facility staff confirmed that this floor is original to the building and planned to be replaced.	3	4	1993	May 31 & June MH 16	24	25	3 Replace flooring at the end of its service life. A lower service life was used for this system due to the high use / impact in the space.		3 - Future Renewal	No	Yes	No	No	4700 \$:	13 SF	\$61,100	0% 0%	5% \$6
Shawnigan Lake Community Centre	2837 Shawnigan Lake Road, Shawnigan Lake, BC	C Interiors	C30 Interior Finishes	C3020 Floor Finishes	C303001 Exposed Concrete Finishes	Throughout Building/Slab on 36 Grade	Slab-on-grade floors consist of exposed aggregate concrete. No evidence of major settlement or heaving was reported or observed.	4	5	1993	May 31 & June MH 16	24	50	26 The slab on grade is expected to last the life of the building. No major capital expenditures are expected to be required. This item falls outside the ten year plan, costs associated with this item have not been carried into the cash flow tables.	n	Not Applicable	N/A	N/A	Yes	No					
Shawnigan Lake Community Centre	2838 Shawnigan Lake Road, Shawnigan Lake, BC	C Interiors	C30 Interior Finishes	C3030 Ceiling Finishes	C303003 Gypsum Board Ceiling Finishes	Throughout Building/Ceiling 37 Paint	Interior ceiling finishes include painted (textured) gypsum wall board. In general the finishes appeared to be in good-fair condition. The timing of the last re-painting cycle is unknown and has been assumed. Facility	4	5	1993	May 31 & June MH 16	24	20		Contingency	4b- Discretionary Aesthetics	Yes	No	No	No	1 \$5,	,000 LS	\$5,000	0% 0%	5% \$
Shawnigan Lake Community Centre	2839 Shawnigan Lake Road, Shawnigan Lake,	C Interiors	C1030 Fittings	C103008 Counters	C103008 Counters	Washroom/Counters 38	staff commented that typically on patch work is completed. Countertops are present in the washroom areas. Where reviewed the finishes were chipping off.	2	3	1993	May 31 & June MH 16	24	25	Replace countertops at end of service life. It is assumed sinks will be removed and reinstalled.	Replacement	4b- Discretionary Aesthetics	Yes	No	No	No	2 \$3,	,000 LS	\$6,000	0% 0%	5% :
Shawnigan Lake Community Centre	2840 Shawnigan Lake Road, Shawnigan Lake, BC	C Interiors	C1030 Fittings	C103008 Counters	C103008 Counters/C103009 Cabinets	Kitchen/Counters 39	Countertops and cupboards are present throughout the kitchen area. Where reviewed, the kitchen finishes were in fair condition.	3	4	1993	May 31 & June MH 16	24	30	6 Replace countertops and cupboards at end of service life. Replacement of kitchen applances not been included in this cost.	Replacement	4b- Discretionary Aesthetics	Yes	No	No	No	1 \$15	5,000 LS	\$15,000	0% 0%	5% 3
Shawnigan Lake Community Centre	2841 Shawnigan Lake Road, Shawnigan Lake, BC	C Interiors	C1030 Fittings	C103008 Counters	C103008 Counters/C103009 Cabinets	Office/Counters 40	Built-in desks, countertops and storage units are present throughout the main entrance offices.	4	5	2012	May 31 & June MH 16	5	25	20 Replace built-in furnishings at end of service life. This item falls outside the ten year plan, costs associated with this item have not been carried into the cash flow tables.	Replacement	4b- Discretionary Aesthetics	Yes	No	No	No					
Shawnigan Lake Community Centre	2842 Shawnigan Lake Road, Shawnigan Lake, BC	D Services	D30 HVAC	D3040 Distribution System	D304008 Air Handling Units	Mechanical Rooms/Interior 41 Air Handling Units	There are five air handling units (Mitsubishi Electric systems) within the building, these are located in the mechanical room spaces above the washrooms and the gym storage area. These air handling units are tied to the heat pump units for heating and cooling. No issues related to these air handling units were reported on site.	4	4	2015	May 31 & June MH 16	2	20	18 Replace the make-up air units at the end of their lifespan. This item falls outside the ten year plan, costs associated with this item have not been carried into the cash flow tables.	Replacement	3 - Future Renewal	Yes	No	Yes	No					
Shawnigan Lake Community Centre		D Services	D30 HVAC	D3040 Distribution System	D304001 Air Distribution, Heating and Cooling	Throughout Building/Duct 42 Work	Exposed duct work is present throughout the building.	4	5	1993	May 31 & June MH 16	24	50	26 The duct work is expected to last the life of the building. No major capital expenditur are expected to be required. This item falls outside the ten year plan, costs associated with this item have not been carried into the cash flow tables.		Not Applicable	N/A	N/A	Yes	No					
Shawnigan Lake Community Centre	2844 Shawnigan Lake Road, Shawnigan Lake, BC	D Services	D30 HVAC	D3040 Distribution System	D304007 Ventilation Systems	Gym/Exhaust Fans 43	Exhaust fans are present in the gym area at the gable ends of the roofs (one at each end). Dampers are present on these fans. No issues related to these fan units were reported on site.	4	4	2015	May 31 & June MH 16	2	15	Replace fans and dampers at end of service life. This item falls outside the ten year plan, costs associated with this item have not been carried into the cash flow tables.		3 - Future Renewal	Yes	No	Yes	No					
Shawnigan Lake Community Centre	2845 Shawnigan Lake Road, Shawnigan Lake, BC	D Services	D30 HVAC	D3040 Distribution System	D304007 Ventilation Systems	Kitchen and x Washroom/Exhaust Fans	Exhaust fans are present in the washrooms and kitchen area. No issues related to these fan units were reported on site.	3	4	1993	May 31 & June MH 16	24	25	roof. The cost of these fan units falls below the project threshold and have been excluded	e Replacement	3 - Future Renewal	Yes	No	Yes	No					
Shawnigan Lake Community Centre	2846 Shawnigan Lake Road, Shawnigan Lake, BC	D Services	D30 HVAC	D3040 Distribution Systems	D304001 Air Distribution, Heating and Cooling	Exterior/Heat Pumps 44	Two heat pumps (Mitsubishi Electric systems) are present on the east elevation of the building (exterior). These system include: Model # PUHY-P144TKMU-A and Model # PUHY-P96TKMU-A. No issues related to these heat pump units were reported on site.	4	4	2015	May 31 & June MH 16	2	20	from the study. Replace heat pump assemblies at end of service life. Prior to replacement review heat pumps to confirm is condenser unit can be replaced. This item falls outside the ten year plan, costs associated with this item have not been carried into the cash flow tables.		3 - Future Renewal	Yes	No	Yes	No					
5hawnigan Lake Community Centre	2847 Shawnigan Lake Road, Shawnigan Lake, BC	D Services	D30 HVAC	D3020 Heat Generating Systems	D302099 Other Heat Generating Systems	Washrooms/Radiant Ceiling 45 Heaters	Radiant ceiling heaters are present in the washrooms and janitors room (previously shower area).	3	4	1993	May 31 & June MH 16	24	30	6 Replace system at end of service life.	Replacement	3 - Future Renewal	Yes	No	No	No	3 \$1,	,000 EA	\$3,000	0% 0%	5%
Shawnigan Lake Community Centre	2848 Shawnigan Lake Road, Shawnigan Lake, BC	D Services	D30 HVAC	D3020 Heat Generating Systems	D302099 Other Heat Generating Systems	Throughout Building/Space 46 Heaters	Gas-fired space heaters are present in the multipurpose rooms and lounge rooms. Facility staff confirmed that these were a post construction addition; however, are rarely used with the additional of the new heat pump and air handling units.	4	4	2000	May 31 & June MH 16	17	30	13 Replace heating units at end of service life. This item falls outside the ten year plan, costs associated with this item have not been carried into the cash flow tables.		3 - Future Renewal	Yes	No	No	No					
hawnigan Lake Community Centre	2849 Shawnigan Lake Road, Shawnigan Lake, BC	D Services	D20 Plumbing	D2020 Domesti Water Distribution	c G3010 Water Supply	Throughout Building/Water 47 Supply	Water for domestic service enters through a 1.5" diameter pipe (this was estimated at the pipe was wrapped with insulation) located in the mechanical room in the gym area. The water service is metered. No backflow preventer is in place. No issues related to water supply were reported by facility staff.	4	4	1993	May 31 & June MH 16	24	50	Water distribution piping is expected to last the life of the building. Complete localizer repairs as may be necessary as the building ages. Install backflow preventer in existing water entry room.	d Upgrade	4a- Discretionary Renewal	No	N/A	No	No	1 \$3,	,000 EA	\$3,000	0% 0%	5%
Shawnigan Lake Community Centre	2850 Shawnigan Lake Road, Shawnigan Lake, BC	D Services	D20 Plumbing	D2020 Domesti Water Distribution	c D202099 Other Domestic Water Supply		A filter is present at the water entry. Facility staff confirmed that the filter is cleaned on a regular basis (or it will impede water flow due to sand build-up).	4	4	1993	May 31 & June MH 16	24	25	Replace filter at the end of its service life. The cost of this work is below the project threshold and has not been included in the financial tables.	Replacement	3 - Future Renewal	No	No	Yes	No					
hawnigan Lake Community Centre	2851 Shawnigan Lake Road, Shawnigan Lake,	D Services	D20 Plumbing	D2020 Domesti Water Distribution	c D202001 Pipes and Fittings	Throughout Building/Water x Supply	Piping is copper, where observed, and typically insulated.	4	4	1993	May 31 & June MH 16	24	50	26 Water distribution piping is expected to last the life of the building. Complete localize repairs as may be necessary as the building ages.	d	Not Applicable	N/A	N/A	Yes	No				+	-
	BC			DISTINUTION										This item falls outside the ten year plan, costs associated with this item have not been carried into the cash flow tables.	n										

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Row BLDG Name	Location / Address	Level 1 Major Grou Elements	Level 2 Group Eleme	Level 3 Individual Elements	a	Location / Type Photo	Description & History	Condition	Performance Yr New or Last	<	Accesced Rv	Assessed By Age in 2017	Typical Life Cycle or Action Interval Est. Time Remaining to EOL	Recommendation	Туре	Priority	Can this work be phased over multiple years ?	work not complete can the rate of deterioration be expected to increase ?	this system lead to a	Can the current condition adversely affect the buildings security of safety ?	Quantity	Unit Rate Unit	Subtotal Repair or Replacement Cost	Consult. Contingency	2% 5% Tax Total in 2017
49 Shawnigan Lake Community Centre	2852 Shawnigan Lake Road, Shawnigan Lake, BC	D Services	D20 Plumbing	D2020 Domestic Water Distribution	D202003 Domestic Water Equipment - Tanks	Mechanical Room/Hot Water 49 Tank	A 33.3 gallon, 36k BTU Giant domestic gas-fired hot water heating tank in the penthouse mechanical room. The age of this system was unknown and has been estimated.	4	4 20	07 May 31 16	& June M	1H 10	12 2	Replace hot water tank at the end of its service life. Facility staff commented that an electric tank would be preferred as no other equipment that is used on a regular basis are on natural gas.		3 - Future Renewal	No	No	No	No	1	\$3,000 EA	\$3,000	0% 0%	5% \$4,0
50 Shawnigan Lake Community Centre		D Services	D20 Plumbing	D2030 Sanitary Waste	D2030 Sanitary Waste	e Throughout Building/Sanitary x Waste	The sanitary systems are concealed and not accessible for visual review. We understand they are cleaned as required and no problems have been reported.	4	4 19	93 May 31 16	& June M	1H 24	50 26	Sanitary piping is expected to last the life of the building. Complete localized repairs as may be necessary as the building ages.	Not Applicable	N/A	N/A	Yes	Yes	No	ę	\$15,000 LS	\$0	0% 0%	5%
51 Shawnigan Lake Community Centre	2854 Shawnigan Lake Road, Shawnigan Lake, BC				G302005 Septic Syste	em Exterior/Septic System x	The complex is serviced by a septic field.		19	93 May 31 16		1H		This item falls outside the scope of this study and has not been included.	Not Applicable	N/A	N/A	Yes	Yes	No					
52 Shawnigan Lake Community Centre	2855 Shawnigan Lake Road, Shawnigan Lake, BC	D Services	D20 Plumbing	D2010 Plumbing Fixtures	D201000 Plumbing Fixtures	Throughout x Building/Plumbing Fixtures	Plumbing futures include sinks (3 throughout the bathrooms, kitchen, room 103), water fountains, toilets (12), urinals (3) and two janitors sink.	4	4 15	93 May 31 16		1H 24	35 11	Replace fixtures at the end of their service life. This item falls outside the ten year plan, costs associated with this item have not been carried into the cash flow tables.	Replacement	3 - Future Renewal	No	No	No	No					
53 Shawnigan Lake Community Centre	2856 Shawnigan Lake Road, Shawnigan Lake, BC	D Services	D50 Electrical	D5010 Electrical Service and Distribution	D501003 Main Switchgear	Electrical Room/Main 50/5 Switchgear	1 The main disconnect is rated 1200A, 120/208V 3PH 4W system. No issues related to electrical distribution were reported on site.	4	4 19	93 May 31 16	& June M	1H 24	50 26	Replace distribution switches. This item falls outside the ten year plan, costs associated with this item have not been carried into the cash flow tables.	Replacement	3 - Future Renewal	No	No	Yes	No					
54 Shawnigan Lake Community Centre	2857 Shawnigan Lake Road, Shawnigan Lake, BC	D Services	D50 Electrical	D5010 Electrical Service and Distribution	D401003 Main Switchgear and Panel	Electrical Room/Main x Switchgear and Panel - IR Scanning	The main electrical system consists of the main switch gear and 3 panels.	4	4 19	93 May 31 16	& June M	1H 24	5 1	Conduct Infra-red (IR) scan on major switchgear and panels. The cost of this work is below the project threshold and has not been included in the financial tables.	Study	Not Applicable	N/A	N/A	N/A	N/A					
55 Shawnigan Lake Community Centre	2858 Shawnigan Lake Road, Shawnigan Lake, BC	D Services	D50 Electrical	D5010 Electrical Service and Distribution	D501005 Panels	Throughout x Building/Electrical Panels	There are three intermediate distribution panels rated 100A. No issues related to distribution were reported on site.	4	4 19	93 May 31 16		1H 24	35 11	Replace house panels at end of service life. This item falls outside the ten year plan, costs associated with this item have not been carried into the cash flow tables.	Replacement	3 - Future Renewal	No	No	Yes	No					
56 Shawnigan Lake Community Centre	2859 Shawnigan Lake Road, Shawnigan Lake, BC	D Services	D50 Electrical	D5020 Lighting and Branch Wiring	D502002 Interior Lighting	Throughout Building/Interior 52/5 Lighting Fixtures	3 Interior lighting varies throughout the building. The majority of the interior lighting has been upgraded to LED systems. Some T8 florescent systems remain in the storage room and service room areas.	4	4 20	15 May 31 16		1H 2	25 23	Replace lighting at end of service life. This item falls outside the ten year plan, costs associated with this item have not been carried into the cash flow tables.	Replacement	3 - Future Renewal	No	No	Yes	No					
57 Shawnigan Lake Community Centre	2860 Shawnigan Lake Road, Shawnigan Lake, BC	D Services	D50 Electrical	D5020 Lighting and Branch Wiring	D502002 Interior Lighting	Room 104/Stage Lighting 54	Stage lighting is present in lounge room (suite 104). Facility staff reported that this lighting is in working order but is rarely used.	3	4 19	93 May 31 16	& June M	1H 24	35 11	Replace lighting at end of service life. This item falls outside the ten year plan, costs associated with this item have not been carried into the cash flow tables.	Replacement	3 - Future Renewal	No	No	Yes	No					
58 Shawnigan Lake Community Centre	2861 Shawnigan Lake Road, Shawnigan Lake, BC	D Services	D50 Electrical	D5020 Lighting and Branch Wiring	D502002 Lighting Equipment	Throughout Building/Exterior x Lighting Fixtures	Exterior lighting includes wall mounted lights (8) and soffit mounted lights (10). The lower wall mounted lights are newer LED systems. No issues related to the exterior lighting systems were reported during the course of this review.	3	4 19	93 May 31 16		1H 24	35 11	Replace at end of service life. Assumes replacement lighting will be LED systems. This item falls outside the ten year plan, costs associated with this item have not been carried into the cash flow tables.	Replacement	3 - Future Renewal	No	No	No	No					
59 Shawnigan Lake Community Centre	2862 Shawnigan Lake Road, Shawnigan Lake, BC	D Services	D50 Electrical	D5030 Communication and Security	D503008 Security Systems	Throughout Building/Security x Systems	The interior security system includes a series of motion sensors and door hardware that are tied to a monitored panel. Facility staff reported ongoing issues with the existing system.	2	3 19	93 May 31 16		1H 24	20 2	Replace security system at end of service life. A contingency has been provided to replace / upgrade the existing security system.	Upgrade	2b - Exceeded Service Life	No	No	No	Yes	1 \$	\$20,000 LS	\$20,000	0% 0%	5% \$21,0
60 Shawnigan Lake Community Centre	2863 Shawnigan Lake Road, Shawnigan Lake, BC	D Services	D50 Electrical	D5020 Lighting and Branch Wiring	D502099 Branch Wiri	ing Throughout Building/Branch x Wiring	Branch wiring is present throughout the building. Facility staff reported no issues with electrical distribution.	4	4 19	93 May 31 16		1H 24	50 26	Branch wiring is expected to last the life of the building. This item falls outside the ten year plan, costs associated with this item have not been carried into the cash flow tables. Replace exterior outlet covers where missing (east elevation) as part of the buildings ongoing maintenance.	Replacement	3 - Future Renewal	Yes	No	Yes	No					
61 Shawnigan Lake Community Centre	2864 Shawnigan Lake Road, Shawnigan Lake, BC	D Services	D50 Electrical	D5030 Communication and Security	D509099 Other Specia Systems and Devices	al Exterior/Electric Car Charging 55 Station	One electric car charging station is present at the front of the building.	4	4 20	15 May 31 16	& June M	1H 2	20 18	Replace system at the end of its service life. This item falls outside the ten year plan, costs associated with this item have not been carried into the cash flow tables.	Replacement	3 - Future Renewal	No	No	No	No					
62 Shawnigan Lake Community Centre	2865 Shawnigan Lake Road, Shawnigan Lake, BC	D Services	D50 Electrical	D5030 Communication and Security	D509099 Other Specia Systems and Devices	al Room 103/Audio System 56	An audio system is present in the multipurpose room (103) with speakers in the multipurpose rooms, lounge and gym area.	4	4 19	93 May 31 16		1H 24	35 11	Replace system at end of service life. This item falls outside the ten year plan, costs associated with this item have not been carried into the cash flow tables.	Replacement	3 - Future Renewal	Yes	No	No	No					
63 Shawnigan Lake Community Centre	2866 Shawnigan Lake Road, Shawnigan Lake, BC	D Services	D50 Electrical	D5030 Communication and Security	D503001 Fire Alarm Systems	Throughout Building/Fire 57 Alarm Systems	The building is equipped with a Cantec Fire Protection System. This system includes a main panel that is located in the electrical room, a series of smoke and heat detectors, annunciators and exit signs located throughout the building. Facility staff confirmed that the fire alarm system is reviewed on an annual basis.	3	4 19	93 May 31 16	k June M	1H 24	35 11	Replace the fire alarm panel at the end of its lifespan, including an allowance to replace some wiring and devices. This item falls outside the ten year plan, costs associated with this item have not been carried into the cash flow tables.	Replacement	3 - Future Renewal	No	No	Yes	No					
64 Shawnigan Lake Community Centre	2867 Shawnigan Lake Road, Shawnigan Lake, BC	D Services	D50 Electrical	D5030 Communication and Security	D503001 Fire Protecti System	ion Throughout Building/Fire 58/5 Alarm Systems	9 The building is equipped with a Cantec Fire Protection System. This system includes a main panel that is located in the electrical room and a series of smoke and heat detectors connecters, annunciators and signs located throughout the building. Facility staff confirmed that the fire alarm system is reviewed on an annual basis.	3	4 15	93 May 31 16	& June M	1H 24	10 3	Replace isolated detectors, lights, annunciators and hardware as required. A ten-year cycle has been set for isolated replacement. The frequency of this cycle should be reviewed as the building ages.	Replacement	3 - Future Renewal	Yes	No	Yes	No	1 \$	\$10,000 LS	\$10,000	0% 0%	5% \$11,0
65 Shawnigan Lake Community Centre	2868 Shawnigan Lake Road, Shawnigan Lake,	P Professional Services	P100001 Seismic Screening	P100001 Seismic Screening	P100001 Seismic Screening	Seismic Screening x	Complete a seismic screening of the building to assess seismic vulnerability.		19	93 May 31	& June M	1H 24	10 1	For conducting a seismic screening of the building. The screening will be done according to the "Manual for Screening of Buildings for Seismic Investigation", published by the National Research Council of Canada (1992).	Study		No	N/A	No	N/A	1	\$4,000 LS	\$4,000	0% 0%	5% \$5,00

Starty: 2017 Facility Condition Assessment and Capital Plan Shawnigan Lake Community Centre, 2804 Shawnigan Lake Road, Shawnigan Lake, BC

		COL	MPONENT	CONDITION ASSESSMENT	RECOMMENDATION				10-YEAR	CAPITAL PL	AN							
	ame		Туре					1	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026
Row	BLDG N	ID	Location / Ty	Description & History	Recommendation	Туре	Priority	Total in 2017 Dollars	\$9,000	\$89,000	\$76,000	\$0	\$213,000	\$66,000	\$0	\$0	\$0	\$33,000
1	Shawnigan Lake Community Centre	A1010 Wall Foundation	s Underground/ Foundations	The foundations are concrete masonry units as visible at grade. No evidence of major settlement or heaving was reported or observed.	The foundations are expected to last the life of the building. No major capital expenditures are expected to be required.		Not Applicable											
					This item falls outside the ten year plan, costs associated with this item have not been carried into the cash flow tables.													
2	Shawnigan Lake Community Centre	A103001 Standard Slab on Grade	Throughout Building At- Grade/ Slab-on-Grade	The floor is a concrete slab-on-grade. Floor finishes were installed in some locations. No evidence of major settlement or heaving was reported or observed.	The slab-on-grade is expected to last the life of the building. No major capital expenditures are expected to be required.		Not Applicable											
					This item falls outside the ten year plan, costs associated with this item have not been carried into the cash flow tables.													
3	Shawnigan Lake Community Centre	A103006 Foundation Drainage	Underground/ Perimeter Drains	6" perimeter drain pipes are shown at the footing level on the architectural drawings. No issues related to foundation drainage were noted by facility staff. No information was available regarding the scoping of the system to review for continuity.	Periodic camera inspection and isolated repairs as required.	Study	Not Applicable	\$3,000		\$3,000								
4	Shawnigan Lake Community Centre	A103006 Foundation	Underground/ Perimeter Drains	6" perimeter drain pipes are shown at the footing level on the architectural drawings. No issues related to foundation drainage were noted by facility staff. No information			Not Applicable											
	community centre	Dranlage		was available regarding the scoping of the system to review for continuity.	This item falls outside the ten year plan, costs associated with this item have not been carried into the cash flow tables. This should be updated with the results of the foundation drainage review recommended in A103006 Foundation Drainage (above).													
5	Shawnigan Lake	B10 Superstructure	Throughout Building/	The superstructure consists of a combination of 8" structural block walls and wood	Interior protected structural components are expected to last the life of the building.		Not Applicable											
	Community Centre		General Superstructure	framing. The roof consists of a wood/steel truss assembly with wood framing on top. With the exception of the wood/metal trusses the majority of framed structure was concealed by interior finishes.	ten year plan, costs associated with this item have not been carried into the cash flow tables.													
				Isolated cracking was noted in the drywall finishes on the rounded walls on the 104 Lounge Room. These cracks were noted by facility staff to have been present for an extended period of time.	Continue to monitor cracking in the 104 Lounge Room. It is recommended that the building seismic upgrades be completed. This item is included under P100001 Seismic Screening.													
				No other settlement, cracking, or other evidence of structural distress was observed or reported.	included under F100001 Jelsinic Screening.													
6	Shawnigan Lake Community Centre	B2010 Exterior Walls - Masonry	Exterior Walls/Masonry Walls	The walls are masonry clad assemblies with a combination of rib-face and split-face masonry. The wall are drained assemblies (weeps at base) with rigid insulation (3") against the structural masonry walls.	Cleaning on the masonry should be completed.	Contingency	4b- Discretionary Aesthetics	\$5,000										
				The masonry appeared to be in good condition with no areas of cracking or structural distress observed or reported. Staining was present on the masonry throughout the south elevation. Evidence of moisture staining was present at the roof/gutter interface on the east elevation (grid 4F on the architectural drawings).														
7	Shawnigan Lake Community Centre	B201001 Exterior	Exterior Walls/Masonry Walls	The walls are masonry clad assemblies with a combination of rib face and split face masonry. The wall are drained assemblies with rigid insulation (3") against the	The masonry cladding is expected to last the life of the building. Localized brick replacement and mortar repointing can be expected to be required in the next 10 years.	Contingency	3 - Future Renewal	\$16,000										\$16,000
				structural masonry walls. The masonry appeared to be in good condition with no areas of cracking or structural	Complete maintenance to cover missing outlet plates (east elevation).		henendi											
				distress observed or reported. Staining was present on the masonry throughout the south elevation. Evidence of moisture staining was present at the roof/gutter interface on the east elevation (grid 4F on the architectural drawings).														
8	Shawnigan Lake Community Centre	B201001 Exterior Enclosure	Exterior Walls/Metal Siding	Metal siding is present on the upper levels. This siding consists of a combination of corrugated metal cladding installed on z-girts with rigid insulation (3") fit between and standing seam metal installed over wood framed walls (the standing seam areas are continuation of the metal roof areas).	The metal cladding is expected to last the life of the building. Localized cladding repairs and recoating can be expected to be required in the next 10 years.	Contingency	3 - Future Renewal	\$11,000										\$11,000
				Where reviewed the metal siding appeared to be in good condition.														
9	Shawnigan Lake Community Centre	B2010 Exterior Walls - Metal Siding	Exterior Walls/Metal Siding	Metal siding is present on the upper levels. In the walls at the gable ends of the gym, translucent panels have been installed. These panels have been shingle lapped with the metal panels. No issues associated with these panels were reported by facility staff.	The translucent panels can be expected to have a shorter service life than the metal. Replace translucent panels at the end of their service life.	Replacement	3 - Future Renewal	\$12,000						\$12,000				

		CON	IPONENT	CONDITION ASSESSMENT	RECOMMENDATION				10-YEAR	CAPITAL P	LAN							
	ame		Ape					17	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026
Rov	BLDG N	ID	Location / T	Description & History	Recommendation	Type	Priority	Total in 2017 Dollars	\$9,000	\$89,000	\$76,000	\$0	\$213,000	\$66,000	\$0	\$0	\$0	\$33,000
10	Shawnigan Lake Community Centre	B201008 Exterior Soffits	Roof Eaves/ Metal Soffit	Soffits consists of aluminum assemblies with a vent strip installed.	The metal soffits are expected to last the life of the building, isolated replacement may be required due to mechanical damage. No major capital expenditures are expected to be required. This item falls outside the ten year plan, costs associated with this item have not been		Not Applicable											
					carried into the cash flow tables.													
11	Shawnigan Lake Community Centre	B201010 Exterior Coatings	Exterior Walls/Masonry Sealer	Sealer does not appear to have been installed on the concrete masonry units. The masonry appeared to be in good condition with no areas of cracking or structural distress observed or reported. Staining was present on the masonry throughout the south elevation. Evidence of moisture staining was present at the roof/gutter interface on the east elevation (grid 4F on the architectural drawings).	Consideration may be given to installing a clear sealer on the masonry walls. Sealers can make cleaning easier.	Upgrade	4a- Discretionary Renewal	\$19,000					\$19,000					
12	Shawnigan Lake	B201011 Joint Sealant	Exterior Walls/Sealant Joints	Exterior sealant was not installed at all penetrations.	Replace sealant between dissimilar materials, and around windows and doors.	Repair Allowance		\$6,000		\$6,000								
	Community Centre			It is our understanding that the majority of the exterior sealant is original to the building. Isolated replacements are completed on an as required basis.	The majority of the lower floors are well-protected by the roof overhang above. A contingency has been included to complete sealant repairs at exposed locations.		Service Life											
13	Shawnigan Lake Community Centre	B202001 Punched Windows		I The existing window assemblies consist of thermally-broken metal framed assemblies with single pane glazing units. Operable assemblies consist of awning style operable. No issues of water or air leakage reported or observed throughout the level 1 windows.	Where reviewed the existing level 1 metal framed window assemblies appear to be performing adequately. Replacement of the windows with a more thermally efficient system should be considered in the next 5 years.	Replacement	4a- Discretionary Renewal	\$120,000					\$120,000					
14	Shawnigan Lake Community Centre	B202001 Punched Windows	Exterior Walls - Clearstory/Metal Framed Window Assemblies	The existing window assemblies consist of thermally-broken metal framed assemblies with single pane glazing units. Water ingress was reported on the clerestory windows over the main entrance. Staining of the interior finishes were observed at this location.	Replacement of the clerestory windows should be considered. Until the time the window is replaced the exterior sealant work should be reviewed and repaired as required.	Replacement	2 - Restore Functionality	\$9,000					\$9,000					
15	Shawnigan Lake		Exterior Walls/Glazed Doors		Where reviewed the existing metal framed glazed door assemblies appear to be	Replacement	4a- Discretionary	\$13,000					\$13,000					
	Community Centre	Doors		assemblies). These assemblies consist of metal frames with single pane glazing. No issues of water or air leakage reported or observed throughout the level 1 glazed doors.	performing adequately. Replacement of the door assemblies with a more thermally-efficient system should be considered in the next 5 years.		Renewal											
16	Shawnigan Lake Community Centre		Exterior Walls/Solid Metal Doors	Five solid metal doors are present (two single and three double door assemblies). These doors are on magnetic locks.	Replace doors with new assemblies (including hardware). Ensure doors have an appropriate threshold to prevent them from being pried open.	Replacement	3 - Future Renewal	\$11,000		\$11,000								
				Issues related to these doors being pried open from the exterior were reported by facility staff. In the gymnasium area the doors were noted to be warped.	The use of magnetic locks should be reviewed. Facility staff reported issues of the locks not being engaged during power outages (once backup power is depleted).		henewai											
17	Shawnigan Lake Community Centre	B301002 Slope Roof	Roofs/Metal Roof	The main roof consists of sloped prefinished metal panels with concealed fasteners. No leaks were reported or observed. Debris was present throughout the roof. Facility staff confirmed that this is an ongoing issue. No fall arrest tie offs were present on the roof.	Replace standing metal seam roof sections at end of service life. Isolated repairs to the metal panels and sealant joints can be expected in the next 5 years.	Repair Allowance	3 - Future Renewal	\$11,000					\$11,000					
18	Shawnigan Lake Community Centre		Roofs/Hidden Gutters	A hidden gutter assembly is present at the base of the metal roof. This gutter has been waterproofed with an EPDM membrane. Water drains from the gutter to rain water leaders that carry the water to the below grade drainage. Debris was present throughout the roof. Facility staff confirmed that this is an ongoing issue. Locations were observed where the debris was causing the water to overflow the gutters. One location was noted on the east elevation where the gutter has been dented in.	Replace gutter membranes at the end of its service life. Areas of damaged gutters should be repaired at the time of membrane replacement. Clean gutters as part of the buildings ongoing maintenance plan.	Replacement	3 - Future Renewal	\$29,000					\$29,000		<u> </u>			

		CON	IPONENT	CONDITION ASSESSMENT	RECOMMENDATION				10-YEAR	CAPITAL P	LAN							
-	ame		ype					17	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026
Row	N 9018	ID	Location / T	Description & History	Recommendation	Type	Priority	Total in 2017 Dollars	\$9,000	\$89,000	\$76,000	\$0	\$213,000	\$66,000	\$0	\$0	\$0	\$33,000
19	Shawnigan Lake Community Centre	B301005 Gutters and Downspouts	Roofs/Downspouts	Internal downspouts carry the water from the gutters to the below grade drainage system. Downspouts were concealed by the exterior cladding. Ponding and debris build up was noted throughout the gutters. Facility staff commented this was an ongoing issues.	Replace downspouts at the end of service life. This item falls outside the ten year plan, costs associated with this item have not been carried into the cash flow tables.	Replacement	3 - Future Renewal											
20	Shawnigan Lake Community Centre	C102001 Standard Interior Doors	Throughout Building/Interio Doors	r Solid and glazed interior doors are present throughout the building. No issues related to the interior doors were observed or reported by facility staff.	The interior doors are expected to last the life of the building. No major capital expenditures are expected to be required. This item falls outside the ten year plan, costs associated with this item have not been carried into the cash flow tables.		Not Applicable											
21	Shawnigan Lake Community Centre	C102003 Fire Rated Doors	Throughout Building/Fire Rated Doors	Fire rated doors are present between the lobby and the adjacent spaces as well as between the gym and adjacent storage room. No issues related to the interior doors were observed or reported by facility staff.	The interior doors are expected to last the life of the building. No major capital expenditures are expected to be required. This item falls outside the ten year plan, costs associated with this item have not been carried into the cash flow tables.		Not Applicable											
22	Shawnigan Lake Community Centre	C101006 Glazed Partitions and Storefronts	Main Lobby/Interior Glazing Systems	Interior glazing systems are present around the office as well as at the main entrance vestibule.	Replace interior glazing at the end of its service life. This item falls outside the ten year plan, costs associated with this item have not been carried into the cash flow tables.	Replacement	3 - Future Renewal											
23	Shawnigan Lake Community Centre	C101001 Fixed Partitions	s Washrooms/Fixed Partitions	The washroom partitions are in poor shape. Facility staff commented that ongoing repairs are required.	Replace washroom partition walls. It is assumed that the remainder of the plumbing fixtures and interior finishes throughout the washrooms will remain in place.	Replacement	3 - Future Renewal	\$15,000		\$15,000								
24	Shawnigan Lake Community Centre		Throughout Building/Paint	Interior wall finishes include painted (textured) gypsum wall board. In general the finishes appeared to be in good-fair condition. Some cracking was present on the radius walls of the lounge room (104). The timing of the last repainting cycle is unknown and has been assumed. Facility staff commented that typically on patch work is completed.	Repaint interior walls. A repainting budget has been included every 5 years to allow for targeted painting.	Contingency	4b- Discretionary Aesthetics	\$6,000					\$6,000					\$6,000
25	Shawnigan Lake Community Centre	C101003 Retractable Partitions	Room 103-104/Retractable Partitions	A retractable partition is present between the lounge room (104) and the multipurpose room (103). Tie partition was noted to be in poor shape.	Replace the partition wall.	Replacement	3 - Future Renewal	\$22,000		\$22,000								
26	Shawnigan Lake Community Centre	C102005 Interior Overhead Doors	Kitchen/Overhead Doors	Two metal overhead doors are present in the kitchen area as well as the main entrance office.	Replace doors at end of service life. This item falls outside the ten year plan, costs associated with this item have not been carried into the cash flow tables.	Replacement	3 - Future Renewal											
27	Shawnigan Lake Community Centre	C301004 Tile Wall Finishes	Washrooms/Tile Wall Finishes	Wall tile finishes have been used throughout the washroom areas (including washroom lobby area). In general, the finishes appeared to be in good-fair condition.	Replace tile at the end of its service life. Prior to replacement review to confirm if tile requires replacement or is grout joints can be replaced where required and the tile retained. This item falls outside the ten year plan, costs associated with this item have not been carried into the cash flow tables.	Replacement	3 - Future Renewal											
28	Shawnigan Lake Community Centre	C301099 Other Wall Finishes	Throughout Building/Concrete Block	The structural concrete block has been used as the interior finishes in the majority of exterior wall areas.	The structural masonry walls are expected to last the life of the building. No major capital expenditures are expected to be This item falls outside the ten year plan, costs associated with this item have not been carried into the cash flow tables.		Not Applicable											
29	Shawnigan Lake Community Centre	C302001 Tile Floor Finishes	Tile Floor - Washroom and Kitchen Areas	Tile flooring has been used throughout the washroom areas (including washroom lobby area) and kitchen area. Where reviewed the tile was noted to be in good condition.	Replace tile at the end of its service life. This item falls outside the ten year plan, costs associated with this item have not been carried into the cash flow tables.	Replacement	3 - Future Renewal											
30	Shawnigan Lake Community Centre	C302003 Wood Flooring	Lounge Area/Wood Flooring	Wood flooring is present in the lounge area (Room 104). This flooring has been installed in a circular shaped area. Where reviewed the flooring was noted to be in good condition.	Replace wood flooring at the end of its service life.	Replacement	3 - Future Renewal	\$4,000						\$4,000				
31	Shawnigan Lake Community Centre	C302005 Carpeting	Lounge Area/Carpet	Carpeting is present in the lounge area (Room 104). Wood flooring is present in the lounge area (Room 104). This flooring has been installed in a circular shaped area. Where reviewed the flooring was noted to be in good condition.	Replace wood flooring at the end of its service life.	Replacement	3 - Future Renewal	\$4,000						\$4,000				

		CON	IPONENT	CONDITION ASSESSMENT	RECOMMENDATION				10-YEAR	CAPITAL P	LAN								
	ame		Ape	Description & History	Recommendation			17	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	
Row	BLDG Na	ID	Location / Ty			Type	Priority	Total in 2017 Dollars	\$9,000	\$89,000	\$76,000	\$0	\$213,000	\$66,000	\$0	\$0	\$0	\$33,000	
32	Shawnigan Lake Community Centre		Multipurpose Rooms (103 and 105)/Interlocking Plastic Flooring	The multipurpose room floors are covered with an interlocking plastic floor.	Replace flooring at the end of its service life.	Replacement	3 - Future Renewal	\$26,000						\$26,000					
33	Shawnigan Lake Community Centre		Gym/Interlocking Plastic Flooring	The gym floor is covered with an interlocking plastic 'sports' floor. Facility staff confirmed that this floor is original to the building and planned to be replaced.	Replace flooring at the end of its service life. A lower service life was used for this system due to the high use / impact in the space.	Replacement	3 - Future Renewal	\$65,000			\$65,000								
34	Shawnigan Lake Community Centre	C303001 Exposed Concrete Finishes	Throughout Building/Slab on Grade	Slab-on-grade floors consist of exposed aggregate concrete. No evidence of major settlement or heaving was reported or observed.	The slab on grade is expected to last the life of the building. No major capital expenditures are expected to be required. This item falls outside the ten year plan, costs associated with this item have not been carried into the cash flow tables.		Not Applicable												
35	Shawnigan Lake Community Centre		Throughout Building/Ceiling Paint	Interior ceiling finishes include painted (textured) gypsum wall board. In general the finishes appeared to be in good-fair condition. The timing of the last re-painting cycle is unknown and has been assumed. Facility staff commented that typically on patch work is completed.	Repaint interior common walls. A repainting budget has been included every 5 years to allow for targeted painting.	Contingency	4b- Discretionary Aesthetics	\$6,000					\$6,000						
36	Shawnigan Lake Community Centre	C103008 Counters	Washroom/Counters	Countertops are present in the washroom areas. Where reviewed the finishes were chipping off.	Replace countertops at end of service life. It is assumed sinks will be removed and reinstalled.	Replacement	4b- Discretionary Aesthetics	\$7,000		\$7,000									
37	Shawnigan Lake Community Centre	C103008 Counters/C103009 Cabinets	Kitchen/Counters	Countertops and cupboards are present throughout the kitchen area. Where reviewed, the kitchen finishes were in fair condition.	Replace countertops and cupboards at end of service life. Replacement of kitchen appliances not been included in this cost.	Replacement	4b- Discretionary Aesthetics	\$16,000						\$16,000					
38	Shawnigan Lake Community Centre	C103008 Counters/C103009 Cabinets	Office/Counters	Built-in desks, countertops and storage units are present throughout the main entrance offices.	Replace built-in furnishings at end of service life. This item falls outside the ten year plan, costs associated with this item have not been carried into the cash flow tables.	Replacement	4b- Discretionary Aesthetics												
39	Shawnigan Lake Community Centre	D304008 Air Handling Units	Mechanical Rooms/Interior Air Handling Units	There are five air handling units (Mitsubishi Electric systems) within the building, these are located in the mechanical room spaces above the washrooms and the gym storage area. These air handling units are tied to the heat pump units for heating and cooling. No issues related to these air handling units were reported on site.	Replace the make-up air units at the end of their lifespan. This item falls outside the ten year plan, costs associated with this item have not been carried into the cash flow tables.	Replacement	3 - Future Renewal												
40	Shawnigan Lake Community Centre	D304001 Air Distribution, Heating and Cooling	Throughout Building/Duct Work	Exposed duct work is present throughout the building.	The duct work is expected to last the life of the building. No major capital expenditures are expected to be required. This item falls outside the ten year plan, costs associated with this item have not been carried into the cash flow tables.		Not Applicable												
41	Shawnigan Lake Community Centre	D304007 Ventilation Systems	Gym/Exhaust Fans	Exhaust fans are present in the gym area at the gable ends of the roofs (one at each end). Dampers are present on these fans. No issues related to these fan units were reported on site.	Replace fans and dampers at end of service life. This item falls outside the ten year plan, costs associated with this item have not been carried into the cash flow tables.	Replacement	3 - Future Renewal												
42	Shawnigan Lake Community Centre	D304007 Ventilation Systems	Kitchen and Washroom/Exhaust Fans	Exhaust fans are present in the washrooms and kitchen area. No issues related to these fan units were reported on site.	Replace fans and dampers at end of service life. Repair damaged fan vent units on the roof. The cost of these fan units falls below the project threshold and have been excluded from the study.	Replacement	3 - Future Renewal												
43	Shawnigan Lake Community Centre	D304001 Air Distribution, Heating and Cooling	Exterior/Heat Pumps	Two heat pumps (Mitsubishi Electric systems) are present on the east elevation of the building (exterior). These system include: Model # PUHY-P144TKMU-A and Model # PUHY-P96TKMU-A. No issues related to these heat pump units were reported on site.	Replace heat pump assemblies at end of service life. Prior to replacement review heat pumps to confirm is condenser unit can be replaced. This item falls outside the ten year plan, costs associated with this item have not been carried into the cash flow tables.	Replacement	3 - Future Renewal												
44	Shawnigan Lake Community Centre	D302099 Other Heat Generating Systems	Washrooms/Radiant Ceiling Heaters	Radiant ceiling heaters are present in the washrooms and janitors room (previously shower area).	Replace system at end of service life.	Replacement	3 - Future Renewal	\$4,000						\$4,000					

	COMPONENT			CONDITION ASSESSMENT	CONDITION ASSESSMENT RECOMMENDATION 10-YEAR CAPITAL PLAN									TAL PLAN											
	ě		Type					~	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026							
Row	BLDG Na	ID	Location / Ty	Description & History	Recommendation	Type	Priority	Total in 2017 Dollars	\$9,000	\$89,000	\$76,000	\$0	\$213,000	\$66,000	\$0	\$0	\$0	\$33,000							
45	Shawnigan Lake Community Centre	D302099 Other Heat Generating Systems	Throughout Building/Space Heaters	Gas-fired space heaters are present in the multipurpose rooms and lounge rooms. Facility staff confirmed that these were a post construction addition; however, are rarely used with the additional of the new heat pump and air handling units.	Replace heating units at end of service life. This item falls outside the ten year plan, costs associated with this item have not been carried into the cash flow tables.	Replacement	3 - Future Renewal																		
46	Shawnigan Lake Community Centre	G3010 Water Supply	Throughout Building/Water Supply	Water for domestic service enters through a 1.5" diameter pipe (this was estimated at the pipe was wrapped with insulation) located in the mechanical room in the gym area. The water service is metered. No backflow preventer is in place. No issues related to water supply were reported by facility staff.	Water distribution piping is expected to last the life of the building. Complete localized repairs as may be necessary as the building ages. Install backflow preventer in existing water entry room.	Upgrade	4a- Discretionary Renewal	\$4,000	\$4,000																
47	Shawnigan Lake Community Centre	D202099 Other Domestic Water Supply	Water Entry Room/Filter	A filter is present at the water entry. Facility staff confirmed that the filter is cleaned on a regular basis (or it will impede water flow due to sand build-up).	Replace filter at the end of its service life. The cost of this work is below the project threshold and has not been included in the financial tables.	Replacement	3 - Future Renewal																		
48	Shawnigan Lake Community Centre	D202001 Pipes and Fittings	Throughout Building/Water Supply	Piping is copper, where observed, and typically insulated.	Water distribution piping is expected to last the life of the building. Complete localized repairs as may be necessary as the building ages. This item falls outside the ten year plan, costs associated with this item have not been carried into the cash flow tables.		Not Applicable																		
49	Shawnigan Lake Community Centre	D202003 Domestic Water Equipment - Tanks	Mechanical Room/Hot Wate Tank	r A 33.3 gallon, 36k BTU Giant domestic gas-fired hot water heating tank in the penthouse mechanical room. The age of this system was unknown and has been estimated.	Replace hot water tank at the end of its service life. Facility staff commented that an electric tank would be preferred as no other equipment that is used on a regular basis are on natural gas.	Replacement	3 - Future Renewal	\$4,000		\$4,000															
50	Shawnigan Lake Community Centre	D2030 Sanitary Waste	Throughout Building/Sanitar Waste	y The sanitary systems are concealed and not accessible for visual review. We understand they are cleaned as required and no problems have been reported.	Sanitary piping is expected to last the life of the building. Complete localized repairs as may be necessary as the building ages.	Not Applicable	N/A																		
51	Shawnigan Lake Community Centre	G302005 Septic System	Exterior/Septic System	The complex is serviced by a septic field.	This item falls outside the scope of this study and has not been included.	Not Applicable	N/A																		
52	Shawnigan Lake Community Centre	D201000 Plumbing Fixtures	Throughout Building/Plumbing Fixtures	Plumbing fixtures include sinks (8 throughout the bathrooms, kitchen, room 103), water fountains, toilets (12), urinals (3) and two janitors sink.	Replace fixtures at the end of their service life. This item falls outside the ten year plan, costs associated with this item have not been carried into the cash flow tables.	Replacement	3 - Future Renewal																		
53	Shawnigan Lake Community Centre	D501003 Main Switchgear	Electrical Room/Main Switchgear	The main disconnect is rated 1200A, 120/208V 3PH 4W system. No issues related to electrical distribution were reported on site.	Replace distribution switches. This item falls outside the ten year plan, costs associated with this item have not been carried into the cash flow tables.	Replacement	3 - Future Renewal																		
54	Shawnigan Lake Community Centre	D401003 Main Switchgear and Panels	Electrical Room/Main Switchgear and Panel - IR Scanning	The main electrical system consists of the main switch gear and 3 panels.	Conduct Infra-red (IR) scan on major switchgear and panels. The cost of this work is below the project threshold and has not been included in the financial tables.	Study	Not Applicable																		
55	Shawnigan Lake Community Centre	D501005 Panels	Throughout Building/Electrical Panels	There are three intermediate distribution panels rated 100A. No issues related to distribution were reported on site.	Replace house panels at end of service life. This item falls outside the ten year plan, costs associated with this item have not been carried into the cash flow tables.	Replacement	3 - Future Renewal																		
56	Shawnigan Lake Community Centre	D502002 Interior Lighting	Throughout Building/Interior Lighting Fixtures	r Interior lighting varies throughout the building. The majority of the interior lighting has been upgraded to LED systems. Some T8 florescent systems remain in the storage room and service room areas.	Replace lighting at end of service life. This item falls outside the ten year plan, costs associated with this item have not been carried into the cash flow tables.	Replacement	3 - Future Renewal																		
57	Shawnigan Lake Community Centre	D502002 Interior Lighting	Room 104/Stage Lighting	Stage lighting is present in lounge room (suite 104). Facility staff reported that this lighting is in working order but is rarely used.	Replace lighting at end of service life. This item falls outside the ten year plan, costs associated with this item have not been carried into the cash flow tables.	Replacement	3 - Future Renewal																		

		CON	MPONENT	CONDITION ASSESSMENT	RECOMMENDATION		10-YEAR CAPITAL PLAN											
Row	BLDG Name	םו	Location / Type	Description & History	Recommendation	Type	Priority	Total in 2017 Dollars	2017 \$9,000	2018 \$89,000	2019 \$76,000	2020 \$0	2021 \$213,000	2022 \$66,000	2023 \$0	2024 \$0	2025 \$0	2026 \$33,000
58	Shawnigan Lake Community Centre	D502002 Lighting Equipment	Throughout Building/Exterior Lighting Fixtures	Exterior lighting includes wall mounted lights (8) and soffit mounted lights (10). The lower wall mounted lights are newer LED systems. No issues related to the exterior lighting systems were reported during the course of this review.	This item falls outside the ten year plan, costs associated with this item have not been	Replacement	3 - Future Renewal											
59	Shawnigan Lake Community Centre	D503008 Security Systems	Throughout Building/Security Systems	The interior security system includes a series of motion sensors and door hardware that are tied to a monitored panel. Facility staff reported ongoing issues with the existing system.	Replace security system at end of service life. A contingency has been provided to replace / upgrade the existing security system.	Upgrade	2b - Exceeded Service Life	\$21,000		\$21,000								
60	Shawnigan Lake Community Centre	D502099 Branch Wiring	Throughout Building/Branch Wiring	Branch wiring is present throughout the building. Facility staff reported no issues with electrical distribution.	Branch wiring is expected to last the life of the building. This item falls outside the ten year plan, costs associated with this item have not been carried into the cash flow tables. Replace exterior outlet covers where missing (east elevation) as part of the buildings ongoing maintenance.	Replacement	3 - Future Renewal											
61	Shawnigan Lake Community Centre	D509099 Other Special Systems and Devices	Exterior/Electric Car Charging Station	One electric car charging station is present at the front of the building.	Replace system at the end of its service life. This item falls outside the ten year plan, costs associated with this item have not been carried into the cash flow tables.	Replacement	3 - Future Renewal											
62	Shawnigan Lake Community Centre	D509099 Other Special Systems and Devices	Room 103/Audio System	An audio system is present in the multipurpose room (103) with speakers in the multipurpose rooms, lounge and gym area.	Replace system at end of service life. This item falls outside the ten year plan, costs associated with this item have not been carried into the cash flow tables.	Replacement	3 - Future Renewal											
63	Shawnigan Lake Community Centre	D503001 Fire Alarm Systems	Throughout Building/Fire Alarm Systems	The building is equipped with a Cantec Fire Protection System. This system includes a main panel that is located in the electrical room, a series of smoke and heat detectors, annunciators and exit signs located throughout the building. Facility staff confirmed that the fire alarm system is reviewed on an annual basis.	Replace the fire alarm panel at the end of its lifespan, including an allowance to replace some wiring and devices. This item falls outside the ten year plan, costs associated with this item have not been carried into the cash flow tables.	Replacement	3 - Future Renewal											
64	Shawnigan Lake Community Centre	D503001 Fire Protection System	Throughout Building/Fire Alarm Systems	The building is equipped with a Cantec Fire Protection System. This system includes a main panel that is located in the electrical room and a series of smoke and heat detectors connecters, annunciators and signs located throughout the building. Facility staff confirmed that the fire alarm system is reviewed on an annual basis.	Replace isolated detectors, lights, annunciators and hardware as required. A ten-year cycle has been set for isolated replacement. The frequency of this cycle should be reviewed as the building ages.	Replacement	3 - Future Renewal	\$11,000			\$11,000							
65	Shawnigan Lake Community Centre	P100001 Seismic Screening	Seismic Screening	Complete a seismic screening of the building to assess seismic vulnerability.	For conducting a seismic screening of the building. The screening will be done according to the "Manual for Screening of Buildings for Seismic Investigation", published by the National Research Council of Canada (1992).	Study		\$5,000	\$5,000									





Photo 02

Photo 03





Photo 05



Photo 07





Cowichan Valley Regional District Shawnigan Lake Community Centre - Report Photos

Photo 08



Photo 09





Cowichan Valley Regional District Shawnigan Lake Community Centre - Report Photos

Photo 11



Photo 12





Photo 14





Photo 16







Photo 19



Cowichan Valley Regional District Shawnigan Lake Community Centre - Report Photos

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Photo 21

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Cowichan Valley Regional District Shawnigan Lake Community Centre - Report Photos



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Cowichan Valley Regional District Shawnigan Lake Community Centre - Report Photos



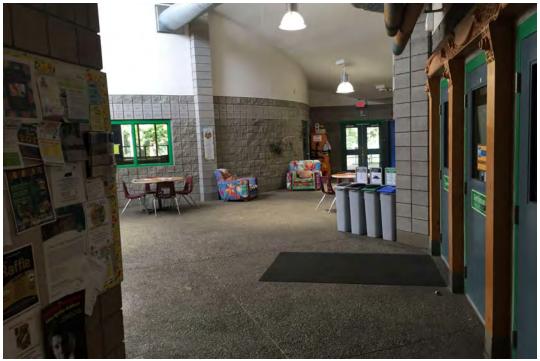
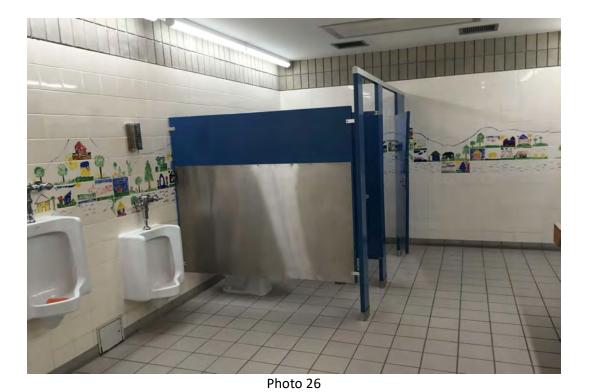


Photo 24



Photo 25



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Photo 27



Photo 29





Cowichan Valley Regional District Shawnigan Lake Community Centre - Report Photos

Photo 30

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Cowichan Valley Regional District Shawnigan Lake Community Centre - Report Photos



Photo 31



Photo 32





Photo 34







Photo 36



Photo 37



Cowichan Valley Regional District Shawnigan Lake Community Centre - Report Photos

Photo 39



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Photo 41





Cowichan Valley Regional District Shawnigan Lake Community Centre - Report Photos

Photo 42







Photo 44



Photo 46



Photo 47



Cowichan Valley Regional District Shawnigan Lake Community Centre - Report Photos



Photo 49

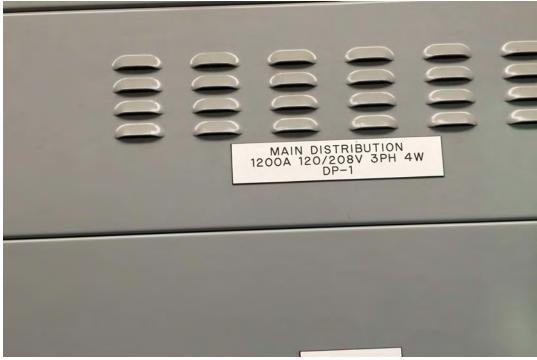




Photo 51



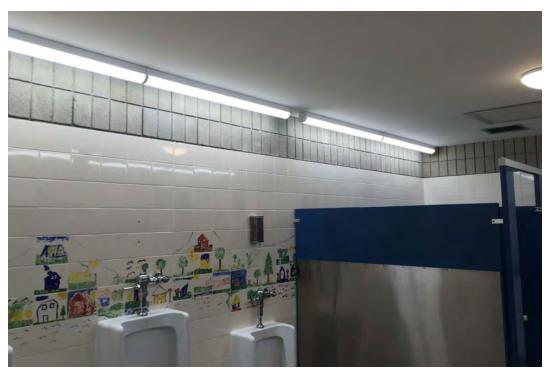


Photo 53



Photo 55





Cowichan Valley Regional District Shawnigan Lake Community Centre - Report Photos

Photo 56

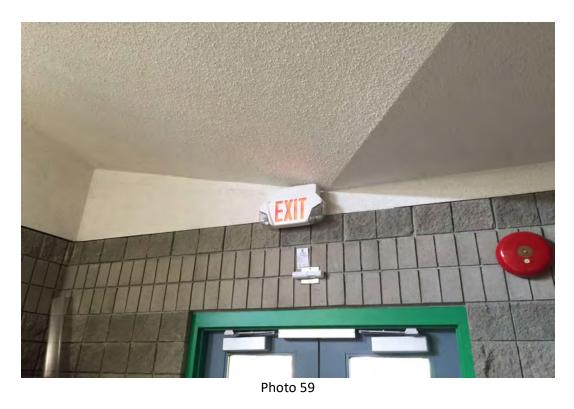
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Cowichan Valley Regional District Shawnigan Lake Community Centre - Report Photos





Photo 58



Appendix A

A – 06 Elsie Miles School

Facility Assessment **Elsie Miles School**



Cowichan Valley Regional District MH Project No. 5170700.00

November 2017



Cowichan Valley Regional District 175 Ingram Street Duncan, BC V9L 1N8



PROPERTY DESCRIPTION

Elsie Miles School was constructed in 1951 and has had no major renovations since.

PROPERTY STATISTICS

Gross Floor Area: 6 594 sf.

Refer to Photo 1 for a general overview of the exterior of the building.

Replacement Value:	\$1,859,508
Target FCI:	0.050
Current FCI:	0.087
Ten-Year RI:	0.134

REPORT OVERVIEW

We found no safety concerns requiring immediate expenditures.

The following provides an overview of the visual seismic, building code, accessibility and energy efficiency reviews completed.

Seismic Review

Seismic work completed to date: Recommendations:	None Complete a seismic screening of the building to assess seismic vulnerability. The screening will be done according to the "Manual for Screening of Buildings for Seismic Investigation", published by the National Research Council of Canada (1992).
Building Code Review	
Built under what code:	BC Building Code 1992
Accessibility Review	
Access into building:	Yes
A a a a a thug ugh a ut huilding.	Vec

Access throughout building:YesAccess to washrooms:YesRecommendations:None

We identified recommendations of approximately \$242,000 over the next five years. The following is a summary of the major projects (over \$10,000) we believe will be required the next five years, and elements whose condition is unknown and/or where further investigation is recommended:

Row 8 - '-B201010 Exterior Coatings - exterior painting (\$12,000) Row 14 -'-B301002 Low Slope Roof - roof replacement (\$81,000) Row 22 -'-C302004 Resilient Floor Finishes - flooring replacement (\$56,000) Row 36 -'-D201002 Urinals - replacement (\$10,000) Row 37 -'-D501003 Main Switchgear - replacement (\$28,000)

PROJECT TEAM

The visual reviews were completed on June 29 and August 11, 2017 by Chris Raudoy. We began with an interview with Tony Liddle, South Cowichan Facility Operations Coordinator. During our July 29th review of the building, we were accompanied by Tony Liddle, who provided access to a sampling of representative areas of the facility, as requested.

Jordan Bowie of Morrison Hershfield reviewed the report for technical content and for compliance with the contract requirements.

REFERENCE DOCUMENTS/INFORMATION

We reviewed the following documents and selected drawings for general background and to inform ourselves about the layout and intended construction:

- Floor Plans, authored by School District 79, dated November 1991.

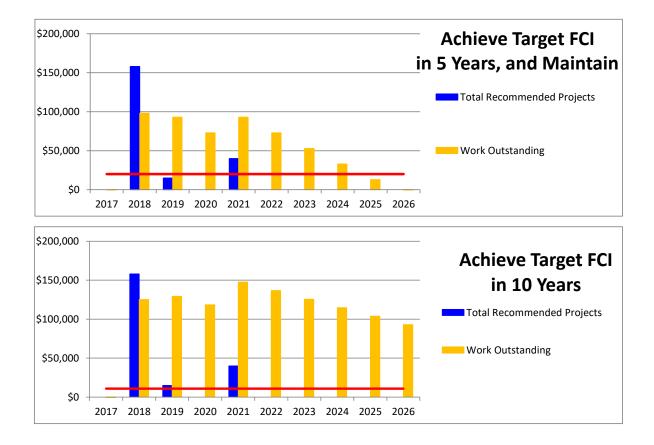
This report should be reviewed in conjunction with the Objectives, Terms of Reference, Limitations, and Methodology described in the main body of the report.

We recommend budgeting for the following 1 – Immediate, 2 - Restore Functionality, 2b - Exceeded Service Life and 3 - Future Renewal projects by year as follows:

Priority	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026
1 – Immediate	0	0	0	0	0	0	0	0	0	0
2 - Restore Functionality	0	8,000	0	0	0	0	0	0	0	0
2b - Exceeded Service Life	0	91,000	3,000	0	0	0	0	0	0	0
3 - Future Renewal	0	59,000	12,000	0	40,000	0	0	0	0	0
Total in 2017 dollars	0	158,000	15,000	0	40,000	0	0	0	0	0

Minimum Funding to Achieve and Maintain Target FCI within 5 years: \$20,004

Work outstanding	-40,008	97,988	92,984	72,980	92,975	72,971	52,967	32,963	12,959	-7,045
Minimum Funding to Achiev	e Target F	Cl within :	10 years: \$	510,911						
Work outstanding	-21,823	125,266	129,355	118,443	147,532	136,621	125,709	114,798	103,887	92,975



Surt Vr. 2017 Facility Condition Assessment and Capital Plan Elsie Miles School, 1801 Shawnigan-Mill Bay Rd., Shawnigan Lake, BC

		9		hents	a	c	COMPONENT		CONDITION ASSESSMENT					LIFECY	CLE DATA		RECOMMENDATIO	N		Can this I	lf recommended	Will a failure	Can the current			OPINION	OF PROBABLE	COST	
Row ame N DOL N	Location / Addres	Level 1 Major Gro		Level 2 Group Elem	Level 3 Individua Elements		Location / Type	Photo	Description & History	Condition	Performance	Yr New or Last Major Action	Assessment Date	Assessed By	Age in 2017 Typical Life Cycle or Action	Est. Time Remaining to EOL	Recommendation	Type	Priority	work be wi phased over c	for recommended fork not complete can the rate of deterioration be expected to increase ?	in this system lead	condition adversely affect the buildings	ntit	Unit Rate	Unit Subtotal Repair or Replacement Cost	Consult.	Contin-gency Contin-gency Contin-gency	Total in 2015 Dollars
1 Elsie Miles School	1801 Shawnigan-f Bay Rd., Shawnig: Lake, BC		re A10 Foun	ndations A1010 St Foundati	tandard A ions F	A101001 Wall Foundations	Underground/ Foundations	2	The foundations are ccast-in-place concrete as visible at grade. No evidence o major settlement or heaving was reported or observed.	of 4	5	1951	11-Aug-17	MH 6	6 100	44	The foundations are expected to last the life of the building. No major capital expenditures are expected to be required. This item falls outside the ten year plan, costs associated with this item have carried into the cash flow tables.		Not Applicable	N/A	N/A	Yes	No						
2 Elsie Miles School		an		ndations A1030 Si	S	ilab on Grade	d Throughout Building At- Grade/ Slab-on-Grade	3	The floor is a concrete slab-on-grade. Floor finishes were installed in the majority of focations. No evidence of major settlement or heaving was reported or observed.	4	5			МН 6			expenditures are expected to be required. This item falls outside the ten year plan, costs associated with this item have a carried into the cash flow tables.		Not Applicable	N/A	N/A	Yes	No						
3 Elsie Miles School	1803 Shawnigan-I Bay Rd., Shawniga Lake, BC		re A10 Foun	ndations A1010 St Foundati		A103006 Foundation Drainage	Underground/ Perimeter Drains	4	Rain water leaders drain down inonto grade. It is assumed that no perimeter drainage system is present. No issues related to foundation drainage were noted by facility staff.			1951	11-Aug-17	МН 6	5 5	2	No major capital expenditures are expected to be required. Consideration could be given to installing a perimeter drainage system, costir item has not been included within this report.	g for this	Not Applicable	N/A	N/A	Yes	No						
4 Elsie Miles School	1806 Shawnigan-1 Bay Rd., Shawnig Lake, BC		B10 Super	erstructure B10 Supe	erstructure E	810 Superstructure	Throughout Building/ Genera Superstructure	1	The superstructure consists primarily of wood framing with some metal posts. The majority of framed structure was concealed by interior finishes. No excessive settlement, cracking, or other evidence of structural distress was observed or reported.		5	1951	11-Aug-17	MH 6	56 100	44	Interior protected structural components are expected to last the life of the b major capital expenditures are expected to be required. This item falls outsid year plan, costs associated with this item have not been carried into the cash it is recommended that the building seismic upgrades be completed. This iter included under P100001 Seismic Screening.	e the ten flow tables.	Not Applicable	N/A	N/A	Yes	No						
5 Elsie Miles School	1807 Shawnigan- Bay Rd., Shawniga Lake, BC		B10 Super	erstructure B1020 Rd			Throughout Building/ Genera Superstructure	al 5/6	Exterior metal support posts are present on the north west exterior elevation, at the covered exterior area. These columns have been set into the ground, corrosion was noted at the base of the columns.	, 2	3	1951	11-Aug-17	MH 6	56 100	2	Post should be father reviewed to confirm if the metal corrosion can be treat base of the columns incased in concrete. If columns cannot be site treated th be replaced with new metal columns. New columns should be installed onto place concrete slabs to bring them off of grade. Costing provided assumes column replacement.	ey should Allowance	2b - Exceeded Service Life	No	Yes	Yes	Yes	3	\$2,000	LS \$6,000	0%	0% 5%	\$7,000
6 Elsie Miles School	1808 Shawnigan-1 Bay Rd., Shawniga Lake, BC		B20 Enclo	iosure B2010 E		3201001 Exterior Enclosure	Exterior Walls/Stucco Cladding	7/8	The walls are primarily clad in stucco cladding. The cladding has been installed in a concealed barrier assembly in which no provision has been made of drainage or venting. solated areas were noted where grade has been installed above the cladding. solated damage to the stucco cladding was noted at the base of walls, this appears to be related to mechanical damage. Facility staff did no fice nay issues of water ingress associated with the exterior walls.		3	1951	11-Aug-17	MH 6	6 25	2	The stucco cladding is expected to last the life of the building. A contingency has been included to cover isolated repairs to the damaged stu cladding.	Repair Allowance	2 - Restore Functionality	Yes	N/A	N/A	N/A	1	\$4,000	SF \$4,000	0%	0% 5%	\$5,000
7 Elsie Miles School	1809 Shawnigan-1 Bay Rd., Shawniga Lake, BC		B20 Enclo	iosure B2010 Ex	kterior Walls E	3201001 Exterior inclosure	Exterior Walls/Wood Claddir	ıg 9	Areas of wood siding have been installed between windows as well as trim an fascias. The cladding has been installed in a concealed barrier assembly in which no provision has been made of drainage or venting. Facility staff did not report any issues of water ingress associated with the exterior walls.	d 3	3	1951	11-Aug-17	MH 6	56 25	2	Isolated repairs to the cladding should be completed.	Repair Allowance	2 - Restore Functionality	Yes	N/A	N/A	N/A	1	\$2,000	LS \$2,000	0%	0% 5%	\$3,000
8 Elsie Miles School	1810 Shawnigan-f Bay Rd., Shawniga Lake. BC		B20 Enclo	losure B2010 Ex	cterior Walls E	3201010 Exterior Coatings	Exterior Walls/Coatings	10	The exterior cladding (stucco and wood) has been painted.	3	3	1951	11-Aug-17	MH 6	i6 10	3	Repaint exterior cladding.	Replacement	3 - Future Renewal	Yes	No	N/A	No	3500	\$3	SF \$10,500	0%	0% 5%	\$12,000
9 Elsie Miles School	1811 Shawnigan-f Bay Rd., Shawniga Lake, BC		B20 Enclo	osure B2010 Ex	cterior Walls E	3201008 Exterior Soffits	Roof Eaves/Wood Soffits	11	Soffits consists of painted wood assemblies.	3	4	1951	11-Aug-17	MH 6	56 50	11	Soffits are expected to last the life of the building, isolated replacement may due to mechanical damage. The wood should be painted to help prolong its The cost of the painting has been included in 2020ID Station Costaling. This item fails outside the ten year plan, costs associated with this item have carried into the cash flow tables.	ervice life.	Not Applicable	N/A	N/A	No	No						
10 Elsie Miles School		an	B20 Enclo		S	3201011 Joint Gealant	Exterior Walls/Sealant Joints		Exterior sealant was not installed at all penetrations. It is our understanding that the majority of the exterior sealant is original to th building. Isolated replacements are completed on an as required basis.		3			MH 6				Allowance	2b - Exceeded Service Life	Yes	Yes	No	No	1	\$2,500	LS \$2,500	0%	0% 5%	\$3,000
11 Elsie Miles School	1813 Shawnigan-I Bay Rd., Shawnig Lake, BC		B20 Enclo	osure B2020 Ex		3202001 Punched Windows	Exterior Walls/Vinyl Framed Window Assemblies	13	The existing window assemblies consist of viny framed windows with Insulating Glazing Units (IGU's) installed. No issues of water or air leakage reported or observed throughout the level 1 windows.	4	5	2015	11-Aug-17	мн з	2 25	23	Where reviewed the existing window assemblies appear to be performing ad No major capital expenditures are anticipated. This item fails outside the ten year plan, costs associated with this item have carried into the cash flow tables.		Not Applicable	N/A	N/A	No	No						
12 Elsie Miles School	1814 Shawnigan-I Bay Rd., Shawniga Lake, BC		B20 Enclo	losure B2030 Ex		3203002 Exterior Golid Doors	Exterior Walls/Solid Door with Glazed Panel	14	Two double glazed door assemblies are present at the main and rear entrance These assemblies consist of metal frames with single pane glazing. At the mai entrance as ide lite is adjacent to the window. No issues related to water or air leakage were reported associated with the doors.		4	1951	11-Aug-17	MH 6	56 30	5	Where reviewed the existing metal framed glazed door assemblies appear to performing adequately. Replacement of the door assemblies with a more thermally-efficient system s considered in the next 5 years.		4a- Discretionary Renewal	Yes	N/A	No	No	2	\$2,500	EA \$5,000	10%	10% 5%	\$7,000
13 Elsie Miles School	Bay Rd., Shawniga		B20 Enclo	losure B2030 Ex		3203002 Exterior Golid Doors	Exterior Walls/Solid Metal Doors	15	Two solid metal doors are present. No issues related to water or air leakage were reported associated with the doors.	3	4	1951	11-Aug-17	MH 6	66 50	2	Where reviewed the existing door assemblies appear to be performing adeque major capital expenditures are anticipated. This item fails outside the ten year plan, costs associated with this item have carried into the cash flow tables.		Not Applicable	N/A	N/A	No	No						
14 Elsie Miles School	1816 Shawnigan-1 Bay Rd., Shawnig Lake, BC		830 Roofi	fing 833010 i	Roof Coverings E S	3301002 Low Slope Roof	Main Roof/SBS Roofing	16	The main roof is a low slope roof assembly with a 2-ply SBS membrane. The membrane is installed directly over the roof sheathing, venting is provided under the sheathing. The age of the membrane is unknown and has been assumed. The roof is sloped to drain to the edge where scuppers are present four in total). These scuppers are drained into rain water leader which drain either to grade or below grade. The roof membrane was in poor shape with crazing and bistering noted throughout. Debris was present throughout the roof. Facility staff confirmed that this is an ongoing issue. No fall arrest tie offs were present on the roof.		2	1990	11-Aug-17	MH 2	25	2	Replace the existing roof with a new 2-ply SBS membrane. The roof venting insulation should be reviewed at the time of the roof replacement to confirm are required.		2b - Exceeded Service Life	No	Yes	Yes	No	6400	\$12	SF \$76,800	0%	0% 5%	\$81,000
15 Elsie Miles School	1817 Shawnigan- Bay Rd., Shawniga Lake, BC		B30 Roofi	fing B33010 f	Roof Coverings E	3301005 Downspouts	Main Roof/Downspouts	17	Downspouts carry the water from the gutters to grade, no below grade drainage system appears to be installed.	4	4	1990	11-Aug-17	MH 2	27 35	11	Replace downspouts at the end of service life. It is assumed that this work we completed with the roof replacement, costing associated with this item has b included in B301002 Low Slope Roof (replacement). This should be updated with the results of the foundation drainage review rev in A103006 Foundation Drainage (above).	een	3 - Future Renewal	Yes	Yes	No	No						

Suarty: 2017 Facility Condition Assessment and Capital Plan Elsie Miles School, 1801 Shawnigan-Mill Bay Rd., Shawnigan Lake, BC

			9	ŧ			COMPONENT		CONDITION ASSESSMENT				L	LIFECYCLE DA	ATA		RECOMMENDATION									OPINION O	F PROBABLE	COST	
b b	ame wo	Address	or Grou nts) Ele me	lividual nts		Кре			_ 8	ast	Date	Ŋ	2	ction	EOL					work not complete	in this	condition			Cost ,		<u>ک</u>	2 15
	NDQ18	Location / /	Level 1 Maji Eleme	Level 2 Group	Level 3 Ind Eleme	ID	Location / T	Photo	Description & History	Condition	Yr New or L Major Activ	Ass essment [Ass essed E	Age in 201	Iypical Life Cycle or A Interval	Est. Time Remaining to or Major Act	Recommendation	Type	Priority	over multiple	deterioration be expected to	to a loss of use of the	the buildings		Unit Rate	Unit Subtotal Replacement	Consult.	Contin-gen	total in 201 Dollars
No. No. No. No. No.	16 Elsie Miles School	Bay Rd., Shawnigan	C Interiors		C1020 Interior Doors			18		4 4	1951	11-Aug-1	.7 MH	66	50	26			Not Applicable	N/A	N/A	No	No						
													_		50		anneled into the and them to blan								42.500	51 15 15			*****
	Miles	Bay Rd., Shawnigan	C Interiors		C1020 Interior Doors			19	adjacent space. This door is original to the building and is on counter-weight	3 3	1951	11-Aug-1	.7 MH	1 66	50	2	Consideration should be given to replacing the existing fire door with a modern system.	Upgrade		No	N/A	No	No	1	\$2,500	EA \$2,500	0%	0% 5	% \$3,000
No. No. <td>Miles</td> <td>Bay Rd., Shawnigan</td> <td>C Interiors</td> <td></td> <td>C1010 Partitions</td> <td></td> <td>Washrooms/Fixed Partitions</td> <td>20</td> <td></td> <td>3 4</td> <td>1951</td> <td>11-Aug-1</td> <td>.7 MH</td> <td>66</td> <td>50</td> <td>11</td> <td></td> <td></td> <td>Not Applicable</td> <td>N/A</td> <td>N/A</td> <td>No</td> <td>No</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>	Miles	Bay Rd., Shawnigan	C Interiors		C1010 Partitions		Washrooms/Fixed Partitions	20		3 4	1951	11-Aug-1	.7 MH	66	50	11			Not Applicable	N/A	N/A	No	No						
N N																	completed with the interior painting program (C301005 Wall Finishes)												
N N	Miles	Bay Rd., Shawnigan	C Interiors	C30 Interior Finish	es C3010 Wall Finishes	C301005 Wall Finishes	Throughout Building/Paint	21		3 4	1951	11-Aug-1	.7 MH	66	5	2		Contingency		Yes	No	No	No	1	\$3,000	LS \$3,000	0%	0% 5	\$4,000
No. No. <td>301001</td> <td>Lake, BC</td> <td></td> <td>n repaining under us neen includer every 3 years to anow in raiferen baining.</td> <td></td>	301001	Lake, BC															n repaining under us neen includer every 3 years to anow in raiferen baining.												
No No<			C Interiors	C30 Interior Finish	es C3020 Floor Finishes	C302001 Tile Floo Finishes	or Washrooms/Tile Floor	22		4 4	1951	11-Aug-1	.7 MH	66	50	16	Replace tile at the end of its service life.	Replacement	3 - Future Renewal	N/A	N/A	No	No						
No. N																													
I I	Miles	Bay Rd., Shawnigan	C Interiors	C30 Interior Finish	es C3020 Floor Finishes			23		4 5	2015	11-Aug-1	.7 MH	2	20	19		Replacement	3 - Future Renewal	N/A	N/A	No	No						
No. N	School	Lake, BC																											
N No No </td <td>Miles</td> <td>Bay Rd., Shawnigan</td> <td>C Interiors</td> <td>C30 Interior Finish</td> <td>es C3020 Floor Finishes</td> <td></td> <td>Hallways/Resilient Floor</td> <td>24/25</td> <td></td> <td>2 3</td> <td>1951</td> <td>11-Aug-1</td> <td>.7 MH</td> <td>66</td> <td>30</td> <td>2</td> <td></td> <td>Replacement</td> <td>3 - Future Renewal</td> <td>Yes</td> <td>Yes</td> <td>No</td> <td>No</td> <td>4800</td> <td>\$10</td> <td>SF \$48,000</td> <td>0%</td> <td>10% 5</td> <td>\$56,000</td>	Miles	Bay Rd., Shawnigan	C Interiors	C30 Interior Finish	es C3020 Floor Finishes		Hallways/Resilient Floor	24/25		2 3	1951	11-Aug-1	.7 MH	66	30	2		Replacement	3 - Future Renewal	Yes	Yes	No	No	4800	\$10	SF \$48,000	0%	10% 5	\$56,000
No. N																													
No. Normal Normal <td>Miles</td> <td>Bay Rd., Shawnigan</td> <td>C Interiors</td> <td>C30 Interior Finish</td> <td>es C3030 Ceiling Finishes</td> <td>Acoustical Ceiling</td> <td></td> <td>26</td> <td>Ceiling tiles have been used in the majority of areas as the ceiling finish.</td> <td>3 5</td> <td>1951</td> <td>11-Aug-1</td> <td>.7 MH</td> <td>66</td> <td>50</td> <td>11</td> <td>The cost of this work is below the project threshold and has not been included in the</td> <td></td> <td>Not Applicable</td> <td>N/A</td> <td>N/A</td> <td>No</td> <td>No</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>	Miles	Bay Rd., Shawnigan	C Interiors	C30 Interior Finish	es C3030 Ceiling Finishes	Acoustical Ceiling		26	Ceiling tiles have been used in the majority of areas as the ceiling finish.	3 5	1951	11-Aug-1	.7 MH	66	50	11	The cost of this work is below the project threshold and has not been included in the		Not Applicable	N/A	N/A	No	No						
Normal	Elsie Miles	Bay Rd., Shawnigan	C Interiors		C1030 Fittings	C103008 Counter	rs Washroom/Countertops	27	Countertops are present in the washroom areas.	3 4	1993	11-Aug-1	.7 MH	i 24	30	6			Not Applicable	N/A	N/A	No	No	3	\$1,000	SF \$3,000	0%	10% 5	\$4,000
No. N	Elsie	1828 Shawnigan-Mill	D Services	D30 HVAC	D3040 Distribution		Throughout Building/Duct	28	Exposed duct work is present throughout the building.	4 5	1993	11-Aug-1	.7 MH	1 24	50	26			Not Applicable	N/A	N/A	Yes	No						
Image: Note with the second	Miles School				System	Heating and	Work										This item falls outside the ten year plan, costs associated with this item have not been												
No. N	Elsie		D Services	D30 HVAC				29	Exhaust fans are present in the washrooms and kitchen area.	3 4	1993	11-Aug-1	.7 MH	1 24	25	5	Replace fans and dampers at end of service life. Repair damaged fan vent units on the	Replacement	3 - Future Renewal	Yes	No	Yes	No						
bits	School				System				No issues related to these fan units were reported on site.									n											
Instrument Instrument <td></td> <td></td> <td>D Services</td> <td>D30 HVAC</td> <td>-</td> <td></td> <td></td> <td>30</td> <td></td> <td>4 4</td> <td>2015</td> <td>11-Aug-1</td> <td>.7 MH</td> <td>2</td> <td>20</td> <td></td> <td></td> <td>Replacement</td> <td>3 - Future Renewal</td> <td>Yes</td> <td>No</td> <td>Yes</td> <td>No</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>			D Services	D30 HVAC	-			30		4 4	2015	11-Aug-1	.7 MH	2	20			Replacement	3 - Future Renewal	Yes	No	Yes	No						
No. No. Sinter Sinter Sinter Sinter					Systems	Turnaces	runisce										This item falls outside the ten year plan, costs associated with this item have not been												
Image: And problem in the second of the second o	Elsie Miles	Bay Rd., Shawnigan	D Services	D30 HVAC	D3040 Distribution System	Distribution,	Exterior/Heat Pump	31	of the building (exterior). These system include: Model # PUHY-P144TKMU-A	4 4	2015	11-Aug-1	.7 MH	2	20	18		Replacement	3 - Future Renewal	Yes	No	Yes	No						
Math. Burnery Math. Burnery<	School	Lake, BC																											
No. N			D Services	D30 HVAC			Room 04/Unit Heat Pump	32		3 4	2015	11-Aug-1	.7 MH	1 2	15	13	Replace unit heater assemblies at end of service life.	Upgrade	3 - Future Renewal	No	N/A	No	No						
Mode					System	Heating and																							
Image: Register in the second secon	Miles	Bay Rd., Shawnigan	D Services	D20 Plumbing		D202001 Pipes and Fittings	Throughout Building/Water Supply	x	estimated at the pipe was wrapped with insulation) located in the mechanical	4 4	1951	11-Aug-1	.7 MH	66	50	2		Upgrade		No	N/A	No	No	1	\$3,000	EA \$3,000	0%	0% 5	% \$4,000
Mark Bary AG, Shawnigan Supple Distribution Supple S	School	Lake, BC							in place.								Install backflow preventer in existing water entry room.												
Image: Register in the standing standing freg standing	Miles	Bay Rd., Shawnigan	D Services	D20 Plumbing		D202001 Pipes and Fittings		×		4 4	1951	11-Aug-1	.7 MH	66	50	11	Water distribution piping is expected to last the life of the building. Complete localized repairs as may be necessary as the building ages.		Not Applicable	N/A	N/A	Yes	No	+					
Mile By Rd, Shawigan Distribution Vature Equipment Tank prom. The age of this system was unknown and has been estimated 2005. prom. The age of this system was unknown and has been estimated 2005. prom. The age of this system was unknown and has been estimated 2005. prom. The age of this system was unknown and has been estimated 2005. prom. The age of this system was unknown and has been estimated 2005. prom. The age of this system was unknown and has been estimated 2005. prom. The age of this system was unknown and has been estimated 2005. prom. The age of this system was unknown and has been estimated 2005. prom. The age of this system was unknown and has been estimated 2005. prom. The age of this system was unknown and has been estimated 2005. prom. The age of this system was unknown and has been estimated 2005. prom. The age of this system was unknown and has been estimated 2005. prom. The age of this system was unknown and has been estimated 2005. prom. The age of this system was unknown and has been estimated 2005. prom. The age of this system was unknown and has been estimated 2005. prom. The age of this system was unknown and has been estimated 2005. prom. The age of this system was unknown and has been estimated 2005. prom. The age of this system was unknown and has been estimated 2005. prom. The age of this system was unknown and has been estimated 2005. prom. The age of this system was unknown and has been estimated 2005. prom. The age of this system was unknown and has been estimated 2005. prom. The age of this system was unknown and has been estimated 2005. prom. The age	301001	concy de																											
Mise Bay Rd, Shawnigan Vaste Waste Waste <td>Miles</td> <td>Bay Rd., Shawnigan</td> <td>D Services</td> <td>D20 Plumbing</td> <td></td> <td></td> <td></td> <td>33</td> <td>room. The age of this system was unknown and has been estimated at 2005</td> <td>3 3</td> <td>2004</td> <td>11-Aug-1</td> <td>.7 MH</td> <td>13</td> <td>12</td> <td></td> <td>Condition and replacement recommendations are based on typical life spans for electric</td> <td></td> <td>3 - Future Renewal</td> <td>No</td> <td>No</td> <td>No</td> <td>No</td> <td>1</td> <td>\$2,000</td> <td>EA \$2,000</td> <td>0%</td> <td>0% 5</td> <td>\$3,000</td>	Miles	Bay Rd., Shawnigan	D Services	D20 Plumbing				33	room. The age of this system was unknown and has been estimated at 2005	3 3	2004	11-Aug-1	.7 MH	13	12		Condition and replacement recommendations are based on typical life spans for electric		3 - Future Renewal	No	No	No	No	1	\$2,000	EA \$2,000	0%	0% 5	\$3,000
Miss Bay Rd, Shawnigan Vest Waste Waste understand they are cleaned as required and no problems have been reported. No issues reported during recent washroom upgrades. Des			D Services	D20 Plumbing	D2020 Sanitary Waste	D2030 Sanitary	Throughout Building/Sanitary	/ x		4 4	1951	11-Aug-1	.7 MH	66	50	26			Not Applicable	N/A	N/A	Yes	No	-					
Miles Bay Rd., Shawnigan work Civil/Mechanical System	Miles	Bay Rd., Shawnigan				Waste	Waste		understand they are cleaned as required and no problems have been reported.								may be necessary as the building ages.												
	Elsie Miles				G3020 Sanitary Sewer	G302005 Septic System	Exterior/Septic System	x	The complex is serviced by a septic field.		1951	11-Aug-1	.7 MH				anneled into the meth flow, to blow		Not Applicable	N/A	N/A	Yes	No						

start yr 2017 Facility Condition Assessment and Capital Plan

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Elsie Miles School,	1801 Shawnigan-Mill Bay Rd.,	Shawnigan Lake, BC

				- м			COMPONENT							1166	ECYCLE DATA			RECOMMENDATION									0	PINION OF PR		т	
	e	dress	group	ement	dual				CONDITION ASSESSMENT				0				ಸ -	RECOMMENDATION				If recommended vork not complete	Will a failure in this	Can the curren condition	it			កាលាលា OF FR	IOBABLE COS		
Row	BLDG Nam	Location / Ad	Level 1 Major G Elements	Level 2 Group El	Level 3 Indivi Elements	ID	Location / Type	Photo	Description & History	Condition	Performance	Yr New or Last Major Action	Assessment Dat	Assessed By	Age in 2017 Typical	Interval Est. Time	Remaining to EO or Major Actior	Recommendation	Type	Priority	phased	can the rate of deterioration be expected to increase ?	system lead to a loss of	adversely affect the buildings	i gi	Unit Rate	Unit	suprotai Repair or Replacement Co:	Consult.	λου 5% 9- 10- 10- 10- 10- 10- 10- 10- 10- 10- 10	Total in 2015 Dollars
35 EI N	liles Ba	336 Shawnigan-Mill ay Rd., Shawnigan	D Services	D20 Plumbing	D2010 Plumbing Fixt	ures D2010 Plumbing Fixtures	Throughout Building/Plumbing Fixtures	34-37	Plumbing fixtures include sinks (7 throughout the bathrooms, kitchen), toilets (9), a water fountain and two janitors sink.	4	4	1951	11-Aug-17	MH	66 3	5	11	Replace fixtures at the end of their service life.		Not Applicable	N/A	N/A	Yes	No		Ì					
Si	thool La	ike, BC					(sinks and toilets)		Urinals are covered under D201000 Plumbing Fixtures - Urinals.									This item falls outside the ten year plan, costs associated with this item have not been carried into the cash flow tables.													
36 EI M	sie 18 liles Ba	337 Shawnigan-Mill ay Rd., Shawnigan	D Services	D20 Plumbing	D2010 Plumbing Fixt	ures D201002 Urinals	Throughout Building/Plumbing Fixtures -	38	Three urinals are present. These urinals are original to the building and are flushed with a continuous gravity feed system.	4	4	1951	11-Aug-17	MH	66 3	5	2	Replace fixtures at the end of their service life.	Replacement	4a- Discretionary Renewal	No	No	No	No	3	\$3,000	EA	\$9,000	0% 0	% 5%	\$10,000
s	:hool La	ike, BC					Urinals		No issues with the operation of the urinals were reported; however, facility staff reported that replacement was being considered due to the water waste associated with these systems.									The fee includes the interior tile work that would be required to facilitate new urinals.													
N	liles Ba	338 Shawnigan-Mill ay Rd., Shawnigan	D Services	D50 Electrical	D5010 Electrical Serv and Distribution	rices D501003 Main Switchgear	Electrical Room/Main Switchgear	39	The main switch gear is a 200 Amp system that is original to the building. Minimal information was available on the exterior of the switch gear panel.	2	3	1951	11-Aug-17	MH	66 5)	5	Replace distribution switches.	Replacement	3 - Future Renewal	No	No	Yes	No	1	\$22,000	EA \$	\$22,000	10% 1	0% 5%	\$28,000
Si	thool La	ike, BC							No issues related to electrical distribution were reported on site.									Although no issues related to the electrical distribution were noted replacement should be considered due to the age of the system and availability of replacement parts.													
	liles Ba	339 Shawnigan-Mill ay Rd., Shawnigan	D Services	D50 Electrical	D5010 Electrical Serv and Distribution	Services and	Electrical Room/Main Switchgear and Panel - IR	x	The main electrical system consists of the main switch gear and 2 sub panels.	4	4	1951	11-Aug-17	МН	66 5		1	Conduct Infra-red (IR) scan on major switchgear and panels.	Study	Not Applicable	N/A	N/A	N/A	N/A							
S		ike, BC				Distribution	Scanning											The cost of this work is below the project threshold and has not been included in the financial tables.													
39 EI M Se	liles Ba	341 Shawnigan-Mill ay Rd., Shawnigan Ike, BC	D Services	D50 Electrical	D5010 Electrical Serv and Distribution	rices D501005 Panels	Throughout Building/Electrical Panels	40/41	There are two intermediate distribution panels throughout the building. The panel in the hallway are is 100 Amp fuse panel that is original to the building. The panel in the mechanical room has been updated to a 200 Amp breaker panel, no information was available on the date of this upgrade.	4	4	1993	11-Aug-17	МН	24 3	5	5	Replace house panels at end of service life. Although no issues related to the electrical distribution were noted replacement of the hallway fuse panel should be considered due to the age of the system and availability of replacement tarfs.	Replacement	3 - Future Renewal	No	No	Yes	No	1	\$7,000	EA	\$7,000	10% 1	D% 5%	\$9,000
									No issues related to distribution were reported on site.									reparement of the updated panel in the mechanical room falls outside the ten year plan, costs associated with this item have not been carried into the cash flow tables.													
N	liles Ba	342 Shawnigan-Mill ay Rd., Shawnigan	D Services	D50 Electrical	D5020 Lighting and Branch Wiring	D502002 Interior Lighting	Throughout Building/Interior Lighting Fixtures	42	Interior lighting varies throughout the building. The majority of the interior lighting has been upgraded to T8 florescent systems.	4	4	2012	11-Aug-17	MH	5 2	5	20	Replace lighting at end of service life.	Replacement	3 - Future Renewal	No	No	Yes	No							
S	thool La	ıke, BC							The age of the lighting was not known and has been assumed.									This item fails outside the ten year plan, costs associated with this item have not been carried into the cash flow tables.													
41 EI M Si	liles Ba	343 Shawnigan-Mill ay Rd., Shawnigan ike, BC	D Services	D50 Electrical	D5020 Lighting and Branch Wiring	D502002 Lighting Equipment	; Throughout Building/Exterior Lighting Fixtures	43	Exterior lighting includes well mounted lights (8) and soffit mounted lights (10). The lower wall mounted lights are newer LED systems. No issues related to the exterior lighting systems were reported during the course of this review.	3	4	1993	11-Aug-17	МН	24 3	5	11	Replace at end of service life. Assumes replacement lighting will be LED systems. This item falls outside the ten year plan, costs associated with this item have not been carried into the cash flow tables.	Replacement	3 - Future Renewal	No	No	No	No							
N	liles Ba	344 Shawnigan-Mill ay Rd., Shawnigan ike. BC	D Services	D50 Electrical	D5050 Communication and Security	ons D503008 Security Systems	 Throughout Building/Security Systems 	44/45	The interior security system includes a series of motion sensors and door hardware that are tied to a monitored panel. Facility staff reported ongoing	2	3	2012	11-Aug-17	MH	5 2)	15	Replace security system at end of service life. Complete isolated replacement work as part of the buildings ongoing maintenance work.	Upgrade	2b - Exceeded Service Life	No	No	No	No							
S	nooi La	ike, BC							issues with the existing system. The age of the system was not known and has been assumed.									This item falls outside the ten year plan, costs associated with this item have not been carried into the cash flow tables.													
43 EI N Se	liles Ba	345 Shawnigan-Mill ay Rd., Shawnigan ake, BC	D Services	D50 Electrical	D5020 Lighting and Branch Wiring	D502099 Branch Wiring	Throughout Building/Branch Wiring	x	Branch wiring is present throughout the building. It is assumed some of the branch wiring was updated when the mechanical room panel was replaced. Facility staff reported no issues with electrical distribution.	4	4	1951	11-Aug-17	МН	66 10	0	44	Branch wiring is expected to last the life of the building. This item falls outside the ten year plan, costs associated with this item have not been carried into the cash flow tables. Contingency costs have been included in DS01005 Panels and DS01003 Main Switchgear to allow for some branch wiring replacement.	Replacement	3 - Future Renewal	Yes	No	Yes	No							
																		Replace exterior outlet covers where missing (east elevation) as part of the buildings ongoing maintenance.													
N	liles Ba	346 Shawnigan-Mill ay Rd., Shawnigan	D Services	D50 Electrical	D5050 Communication and Security	D503001 Fire Alarm Systems	Throughout Building/Fire Alarm Systems	46	The building is equipped with a Mircom Fire Alarm Control Unit. This system includes a main panel that is located in the electrical room, a series of smoke	3	4	1993	11-Aug-17	MH	24 3	5	11	Replace the fire alarm panel at the end of its lifespan, including an allowance to replace some wiring and devices.	Replacement	3 - Future Renewal	No	No	Yes	No	1						
S	:hool La	ıke, BC							and heat detectors, annunciators and exit signs located throughout the building. Facility staff confirmed that the fire alarm system is reviewed on an annual basis. The age of the system was not known.									This item falls outside the ten year plan, costs associated with this item have not been carried into the cash flow tables.													
45 EI		347 Shawnigan-Mill	D Services	D50 Electrical	D5050 Communicatio		Throughout Building/Fire	45/48	This fire alarm system includes a series of smoke and heat detectors	3	4	1993	11-Aug-17	МН	24 1)	5	Replace isolated detectors, lights, annunciators and hardware as required.	Replacement	3 - Future Renewal	Yes	No	Yes	No	1	\$2,000	LS	\$2,000	0% 0	% 5%	\$3,000
S	illes Ba chool La	ay Rd., Shawnigan Ike, BC			and Security	Protection System	n Alarm Systems		connecters, annunciators and signs located throughout the building. Facility staff confirmed that the fire alarm system is reviewed on an annual basis.									A ten-year cycle has been set for isolated replacement. The frequency of this cycle should be reviewed as the building ages.													
46 EI M Si	liles Ba	348 Shawnigan-Mill ay Rd., Shawnigan Ike, BC	P Professional Services	P Professional Services	P Professional Service	es P100001 Seismic Screening	Seismic Screening	×	Complete a seismic screening of the building to assess seismic vulnerability.			1951	11-Aug-17	МН	66 1)	1	For conducting a seismic screening of the building. The screening will be done according to the "Manual for Screening of Buildings for Seismic Investigation", published by the National Research Council of Canada (1992).	; Study		No	N/A	No	N/A	1	\$3,000	LS	\$3,000	0% 0	% 5%	\$4,000

		C	OMPONENT	CONDITION ASSESSMENT	RECOMMENDATION				10-YEAR (CAPITAL PL	AN							
Row	ame		ype					ollars	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026
	BLDG N	ID	Location / T	Description & History	Recommendation	Type	Priority	Total in 2015 D	\$4,000	\$176,000	\$15,000	\$0	\$47,000	\$4,000	\$4,000	\$0	\$0	\$0
1	Elsie Miles School	A101001 Wall Foundations	Underground/ Foundations	The foundations are ccast-in-place concrete as visible at grade. No evidence of major settlement or heaving was reported or observed.	The foundations are expected to last the life of the building. No major capital expenditures are expected to be required.		Not Applicable											
					This item falls outside the ten year plan, costs associated with this item have not been carried into the cash flow tables.													
2	Elsie Miles School		Throughout Building At- Grade/ Slab-on-Grade	The floor is a concrete slab-on-grade. Floor finishes were installed in the majority of locations. No evidence of major settlement or heaving was reported or observed.	The slab-on-grade is expected to last the life of the building. No major capital expenditures are expected to be required. This item falls outside the ten year plan, costs associated with this item have not been carried into the cash flow tables.		Not Applicable											
3	Elsie Miles School	A103006 Foundation	Underground/ Perimeter Drains	Rain water leaders drain down inonto grade. It is assumed that no perimeter drainage system is present.	No major capital expenditures are expected to be required.		Not Applicable											
		Drainage		No issues related to foundation drainage were noted by facility staff.	Consideration could be given to installing a perimeter drainage system, costing for this item has not been included within this report.													
4	Elsie Miles School	B10 Superstructure	Throughout Building/ General Superstructure	The superstructure consists primarily of wood framing with some metal posts. The majority of framed structure was concealed by interior finishes. No excessive settlement, cracking, or other evidence of structural distress was	Interior protected structural components are expected to last the life of the building. No major capital expenditures are expected to be required. This item falls outside the ten year plan, costs associated with this item have not been carried into the cash flow tables.		Not Applicable											
				observed or reported.	It is recommended that the building seismic upgrades be completed. This item is included under P100001 Seismic Screening.													
5	Elsie Miles School	B102001 Structural Frame	Throughout Building/ General Superstructure	Exterior metal support posts are present on the north west exterior elevation, at the covered exterior area. These columns have been set into the ground, corrosion was noted at the base of the columns.	Post should be father reviewed to confirm if the metal corrosion can be treated and the base of the columns incased in concrete. If columns cannot be site treated they should be replaced with new metal columns. New columns should be installed onto cast-in-place concrete slabs to bring them off of grade.	Repair Allowance	2b - Exceeded Service Life	\$7,000		\$7,000								
					Costing provided assumes column replacement.													
6	Elsie Miles School	B201001 Exterior Enclosure	Exterior Walls/Stucco Cladding	The walls are primarily clad in stucco cladding. The cladding has been installed in a concealed barrier assembly in which no provision has been made of drainage or venting.	The stucco cladding is expected to last the life of the building. A contingency has been included to cover isolated repairs to the damaged stucco	Repair Allowance	2 - Restore Functionality	\$5,000		\$5,000								
				Isolated areas were noted where grade has been installed above the cladding. Isolated damage to the stucco cladding was noted at the base of walls, this appears to be related to mechanical damage.	cladding.													
				Facility staff did not report any issues of water ingress associated with the exterior walls.														
7	Elsie Miles School	B201001 Exterior Enclosure	Exterior Walls/Wood Cladding	Areas of wood siding have been installed between windows as well as trim and fascias.	Isolated repairs to the cladding should be completed.	Repair Allowance	2 - Restore Functionality	\$3,000		\$3,000								
				The cladding has been installed in a concealed barrier assembly in which no provision has been made of drainage or venting.														
				Facility staff did not report any issues of water ingress associated with the exterior walls.														
8	Elsie Miles School	B201010 Exterior Coatings	Exterior Walls/Coatings	The exterior cladding (stucco and wood) has been painted.	Repaint exterior cladding.	Replacement	3 - Future Renewal	\$12,000			\$12,000							
9	Elsie Miles School	B201008 Exterior Soffits	Roof Eaves/Wood Soffits	Soffits consists of painted wood assemblies.	Soffits are expected to last the life of the building, isolated replacement may be required due to mechanical damage. The wood should be painted to help prolong its service life. The cost of this painting has been included in B201010 Exterior Coatings.		Not Applicable											
					This item falls outside the ten year plan, costs associated with this item have not been carried into the cash flow tables.													

			COMPONENT	CONDITION ASSESSMENT	RECOMMENDATION				10-YEAR	CAPITAL PL	AN							
Row	ame		/pe					ollars	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026
	BLDG N	ID	Location / Ty	Description & History	Recommendation	Type	Priority	Total in 2015 D	\$4,000	\$176,000	\$15,000	\$0	\$47,000	\$4,000	\$4,000	\$0	\$0	\$0
10	Elsie Miles School	s B201011 Joint Sealant	Exterior Walls/Sealant Joints	Exterior sealant was not installed at all penetrations.	Replace sealant between dissimilar materials, and around windows and doors.	Repair Allowance	2b - Exceeded Service Life	\$3,000			\$3,000							
				It is our understanding that the majority of the exterior sealant is original to the building. Isolated replacements are completed on an as required basis.														
11	Elsie Miles School	s B202001 Punched Windows	Exterior Walls/Vinyl Framed Window Assemblies	The existing window assemblies consist of vinyl framed windows with Insulating Glazing Units (IGU's) installed.	Where reviewed the existing window assemblies appear to be performing adequately. No major capital expenditures are anticipated.		Not Applicable											
				No issues of water or air leakage reported or observed throughout the level 1 windows.	This item falls outside the ten year plan, costs associated with this item have not been carried into the cash flow tables.													
12	Elsie Miles School	s B203002 Exterior Solid Doors	Exterior Walls/Solid Door with Glazed Panel	Two double glazed door assemblies are present at the main and rear entrance. These assemblies consist of metal frames with single pane glazing. At the main entrance a side lite is adjacent to the window.	Where reviewed the existing metal framed glazed door assemblies appear to be performing adequately. Replacement of the door assemblies with a more thermally-efficient system should be	Replacement	4a- Discretionary Renewal	\$7,000					\$7,000					
				No issues related to water or air leakage were reported associated with the doors.	considered in the next 5 years.													
13	Elsie Miles School	s B203002 Exterior Solid Doors	Exterior Walls/Solid Metal Doors	Two solid metal doors are present. No issues related to water or air leakage were reported associated with the doors.	Where reviewed the existing door assemblies appear to be performing adequately. No major capital expenditures are anticipated. This item falls outside the ten year plan, costs associated with this item have not been		Not Applicable											
					carried into the cash flow tables.													
14	Elsie Miles School	s B301002 Low Slop Roof	e Main Roof/SBS Roofing	The main roof is a low slope roof assembly with a 2-ply SBS membrane. The membrane is installed directly over the roof sheathing, venting is provided under the sheathing. The age of the membrane is unknown and has been assumed. The roof is sloped to drain to the edge where scuppers are present (four in total). These scuppers are drained into rain water leader which drain either to grade or below grade.	Replace the existing roof with a new 2-ply SBS membrane. The roof venting and insulation should be reviewed at the time of the roof replacement to confirm if changes are required.	Replacement	2b - Exceeded Service Life	\$81,000		\$81,000								
				The roof membrane was in poor shape with crazing and blistering noted throughout. Debris was present throughout the roof. Facility staff confirmed that this is an														
				ongoing issue. No fall arrest tie offs were present on the roof.														
15	Elsie Miles School	s B301005 Downspouts	Main Roof/Downspouts	Downspouts carry the water from the gutters to grade, no below grade drainage system appears to be installed.	Replace downspouts at the end of service life. It is assumed that this work would be completed with the roof replacement, costing associated with this item has been included in B301002 Low Slope Roof (replacement). This should be updated with the results of the foundation drainage review recommended	Replacement	3 - Future Renewal											
					in A103006 Foundation Drainage (above).													
16	Elsie Miles School	s C102001 Standard Interior Doors	Throughout Building/Interior Doors	Solid and glazed interior doors are present throughout the building. No issues related to the interior doors were observed or reported by facility staff.	expenditures are expected to be required.		Not Applicable											
47	51			· ~ · · · · · · · · · · · · · · · · · ·	This item falls outside the ten year plan, costs associated with this item have not been			<u> </u>		42.000								
17	Elsie Miles School	s C102003 Fire Rate Doors	d Throughout Building/Fire Rated Doors	A fire rated doors are present between the electrical/mechanical room and the adjacent space. This door is original to the building and is on counter-weight closer system.	Consideration should be given to replacing the existing fire door with a modern system.	Upgrade	2b - Exceeded Service Life	\$3,000		\$3,000								
18	Elsie Miles School	s C101001 Fixed Partitions	Washrooms/Fixed Partitions	Washroom partitions are painted plywood assemblies.	It is assumed that the washroom partitions will last the life of the building.		Not Applicable		1									
	301001			Doors have been removed from some of the stalls, it is assumed that this is a function of the buildings program.	Portions should be repainted on an ongoing basis. Is assumed that this will be completed with the interior painting program (C301005 Wall Finishes)													

		cc	OMPONENT	CONDITION ASSESSMENT	RECOMMENDATION				10-YEAR	CAPITAL PI	LAN							
Row	G Name		/ Type			ų	ity	15 Dollars	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026
	BLD	ID	Location	Description & History	Recommendation	Тур	Prior	Total in 2015	\$4,000	\$176,000	\$15,000	\$0	\$47,000	\$4,000	\$4,000	\$0	\$0	\$0
19	Elsie Miles School	C301005 Wall Finishes	Throughout Building/Paint	Interior wall finishes include painted gypsum wall board and plywood. In general the finishes appeared to be in good-fair condition. The timing of the last repainting cycle is unknown and has been assumed. Facility staff commented that typically on patch work is completed.	Repaint interior walls. A repainting budget has been included every 5 years to allow for targeted painting.	Contingency	4b- Discretionary Aesthetics	\$4,000		\$4,000					\$4,000			
20	Elsie Miles School	C302001 Tile Floor Finishes	Washrooms/Tile Floor	Tile flooring has been used throughout the washroom areas. Where reviewed the tile was noted to be in good condition.	Replace tile at the end of its service life. This item falls outside the ten year plan, costs associated with this item have not been carried into the cash flow tables.	Replacement	3 - Future Renewal											
21	Elsie Miles School		Room 04 and 09/Resilient Floor Finishes	New sheet flooring has been installed in Rooms 09. Where reviewed this flooring was in good condition.	Replace flooring at the end of its service life. This item falls outside the ten year plan, costs associated with this item have not been carried into the cash flow tables.	Replacement	3 - Future Renewal											
22	Elsie Miles School	Floor Finishes	Rooms 01 -04 and Hallways/Resilient Floor Finishes	The original sheet flooring is in place in Rooms 01-04 and the hallway area. This flooring is in poor condition with areas pealing up and sections missing. Facility staff reported that the flooring is asbestos containing.	Replace flooring at the end of its service life. Confirm requirements for HAZMAT work associated with flooring removal.	Replacement	3 - Future Renewal	\$56,000		\$56,000								
23	Elsie Miles School		Throughout Building/Ceiling Tiles	Ceiling tiles have been used in the majority of areas as the ceiling finish.	Replace damaged tiles as required. The cost of this work is below the project threshold and has not been included in the financial tables.		Not Applicable											
24	Elsie Miles School	C103008 Counters	Washroom/Countertops	Countertops are present in the washroom areas.	Replace countertops at end of service life. It is assumed the sinks will be removed and reinstalled.		Not Applicable	\$4,000						\$4,000				
25	Elsie Miles School	D304001 Air Distribution, Heating and Cooling	Throughout Building/Duct Work	Exposed duct work is present throughout the building.	The duct work is expected to last the life of the building. No major capital expenditures are expected to be required. This item falls outside the ten year plan, costs associated with this item have not been carried into the cash flow tables.		Not Applicable											
26	Elsie Miles School		Washroom and Kitchen/Exhaust Fans	Exhaust fans are present in the washrooms and kitchen area. No issues related to these fan units were reported on site.	Replace fans and dampers at end of service life. Repair damaged fan vent units on the roof. The cost of these fan units falls below the project threshold and have been excluded from the study.	Replacement	3 - Future Renewal											
27	Elsie Miles School		Mechanical Room/Electric Furnace	One electric furnace (Mitsubishi Electric systems) is present in the mechanical room. Model # PVFY-P48NAMU-E <g>. No issues related to the furnace were reported by facility staff.</g>	Replace furnace system at end of service life. Prior to replacement review distribution fan to see if it can be replaced. This item falls outside the ten year plan, costs associated with this item have not been carried into the cash flow tables.	Replacement	3 - Future Renewal											
28	Elsie Miles School	D304001 Air Distribution, Heating and Cooling	Exterior/Heat Pump	Two heat pumps (Mitsubishi Electric systems) are present on the east elevation of the building (exterior). These system include: Model # PUHY-P144TKMU-A and Model # PUHY-P96TKMU-A. No issues related to these heat pump units were reported on site.	Replace heat pump assemblies at end of service life. Prior to replacement review heat pumps to confirm is condenser unit can be replaced. This item falls outside the ten year plan, costs associated with this item have not been carried into the cash flow tables.	Replacement	3 - Future Renewal											

		C	OMPONENT	CONDITION ASSESSMENT	RECOMMENDATION				10-YEAR (APITAL PL	AN							
Row	ame		ed					ollars	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026
	BLDG Na	D	Location / Ty	Description & History	Recommendation	Type	Priority	Total in 2015 D	\$4,000	\$176,000	\$15,000	\$0	\$47,000	\$4,000	\$4,000	\$0	\$0	\$0
29	Elsie Miles School	D304001 Air Distribution, Heating and Cooling	Room 04/Unit Heat Pump	A wall mounted split style heat pumps (Mitsubishi Electric systems) is present in room 04. The Model is # PKFY-18NHMU-E2. No issues related to the unit heaters were reported by facility staff.	Replace unit heater assemblies at end of service life. This item falls outside the ten year plan, costs associated with this item have not been carried into the cash flow tables.	Upgrade	3 - Future Renewal											
30	Elsie Miles School	D202001 Pipes and Fittings	Throughout Building/Water Supply	Water for domestic service enters through a 1.5" diameter pipe (this was estimated at the pipe was wrapped with insulation) located in the mechanical room in the gym area. The water service is metered. No backflow preventer is in place. No issues related to water supply were reported by facility staff.	Water distribution piping is expected to last the life of the building. Complete localized repairs as may be necessary as the building ages. Install backflow preventer in existing water entry room.	Upgrade	4a- Discretionary Renewal	\$4,000		\$4,000								
31	Elsie Miles School	D202001 Pipes and Fittings	Throughout Building/Water Supply	The water supply piping was copper, where observed. Facility staff did not report any issues of leaks in the domestic water supply piping.	Water distribution piping is expected to last the life of the building. Complete localized repairs as may be necessary as the building ages. This item falls outside the ten year plan, costs associated with this item have not been carried into the cash flow tables.		Not Applicable											
32	Elsie Miles School	D202003 Domestic Water Equipment - Tanks		A 38 gallon Giant domestic electric hot water heating tank in the mechanical room. The age of this system was unknown and has been estimated at 2005 based on the manufacturers date of 2004.	Replace hot water tank at the end of its service life. Condition and replacement recommendations are based on typical life spans for electric hot water tanks.	Replacement	3 - Future Renewal	\$3,000		\$3,000								
33	Elsie Miles School	D2030 Sanitary Waste	Throughout Building/Sanitary Waste	The sanitary systems are concealed and not accessible for visual review. We understand they are cleaned as required and no problems have been reported. No issues reported during recent washroom upgrades.	Sanitary piping is expected to last the life of the building. Complete localized repairs as may be necessary as the building ages. This item falls outside the ten year plan, costs associated with this item have not been		Not Applicable											
34	Elsie Miles School	G302005 Septic System	Exterior/Septic System	The complex is serviced by a septic field.	This item falls outside the scope of this study and has not been included.		Not Applicable											
35	Elsie Miles School	D2010 Plumbing Fixtures	Throughout Building/Plumbing Fixtures (sinks and toilets)	Plumbing fixtures include sinks (7 throughout the bathrooms, kitchen), toilets (9), a water fountain and two janitors sink. Urinals are covered under D201000 Plumbing Fixtures - Urinals.	Replace fixtures at the end of their service life. This item falls outside the ten year plan, costs associated with this item have not been carried into the cash flow tables.		Not Applicable											
36	Elsie Miles School	D201002 Urinals	Throughout Building/Plumbing Fixtures - Urinals	Three urinals are present. These urinals are original to the building and are flushed with a continuous gravity feed system. No issues with the operation of the urinals were reported; however, facility staff reported that replacement was being considered due to the water waste associated with these systems.	Replace fixtures at the end of their service life. The fee includes the interior tile work that would be required to facilitate new urinals.	Replacement	4a- Discretionary Renewal	\$10,000		\$10,000								
37	Elsie Miles School	D501003 Main Switchgear	Electrical Room/Main Switchgear	The main switch gear is a 200 Amp system that is original to the building. Minimal information was available on the exterior of the switch gear panel. No issues related to electrical distribution were reported on site.	Replace distribution switches. Although no issues related to the electrical distribution were noted replacement should be considered due to the age of the system and availability of replacement parts.	Replacement	3 - Future Renewal	\$28,000					\$28,000					
38	Elsie Miles School	D5010 Electrical Services and Distribution	Electrical Room/Main Switchgear and Panel - IR Scanning	The main electrical system consists of the main switch gear and 2 sub panels.	Conduct Infra-red (IR) scan on major switchgear and panels. The cost of this work is below the project threshold and has not been included in the financial tables.	Study	Not Applicable											
39	Elsie Miles School	D501005 Panels	Throughout Building/Electrical Panels	There are two intermediate distribution panels throughout the building. The panel in the hallway are is 100 Amp fuse panel that is original to the building. The panel in the mechanical room has been updated to a 200 Amp breaker panel, no information was available on the date of this upgrade. No issues related to distribution were reported on site.	Replace house panels at end of service life. Although no issues related to the electrical distribution were noted replacement of the hallway fuse panel should be considered due to the age of the system and availability of replacement parts. Replacement of the updated panel in the mechanical room falls outside the ten year plan, costs associated with this item have not been carried into the cash flow tables.	Replacement	3 - Future Renewal	\$9,000					\$9,000					

		COMPONENT		CONDITION ASSESSMENT	RECOMMENDATION				10-YEAR CAPITAL PLAN										
Row	BLDG Name	ID	Location / Type	Description & History	Recommendation	Type	Priority	Total in 2015 Dollars	2017 \$4,000	2018 \$176,000	2019 \$15,000	2020 \$0	2021 \$47,000	2022 \$4,000	2023 \$4,000	2024 \$0	2025 \$0	2026 \$0	
40	Elsie Mile School	D502002 Interior Lighting	Throughout Building/Interior Lighting Fixtures	Interior lighting varies throughout the building. The majority of the interior lighting has been upgraded to T8 florescent systems. The age of the lighting was not known and has been assumed.	Replace lighting at end of service life. This item falls outside the ten year plan, costs associated with this item have not been carried into the cash flow tables.	Replacement	3 - Future Renewal												
41	Elsie Mile: School	5 D502002 Lighting Equipment	Throughout Building/Exterior Lighting Fixtures	Exterior lighting includes wall mounted lights (8) and soffit mounted lights (10). The lower wall mounted lights are newer LED systems. No issues related to the exterior lighting systems were reported during the course of this review.	Replace at end of service life. Assumes replacement lighting will be LED systems. This item falls outside the ten year plan, costs associated with this item have not been carried into the cash flow tables.	Replacement	3 - Future Renewal												
42	Elsie Miles School	5 D503008 Security Systems	Throughout Building/Security Systems	The interior security system includes a series of motion sensors and door hardware that are tied to a monitored panel. Facility staff reported ongoing issues with the existing system. The age of the system was not known and has been assumed.	Replace security system at end of service life. Complete isolated replacement work as part of the buildings ongoing maintenance work. This item falls outside the ten year plan, costs associated with this item have not been carried into the cash flow tables.	Upgrade	2b - Exceeded Service Life												
43	Elsie Miles School	5 D502099 Branch Wiring	Throughout Building/Branch Wiring	Branch wiring is present throughout the building. It is assumed some of the branch wiring was updated when the mechanical room panel was replaced. Facility staff reported no issues with electrical distribution.	Branch wiring is expected to last the life of the building. This item falls outside the ten year plan, costs associated with this item have not been carried into the cash flow tables. Contingency costs have been included in D501005 Panels and D501003 Main Switchgear to allow for some branch wiring replacement. Replace exterior outlet covers where missing (east elevation) as part of the buildings ongoing maintenance.	Replacement	3 - Future Renewal												
44	Elsie Mile: School	5 D503001 Fire Alarm Systems	Throughout Building/Fire Alarm Systems	The building is equipped with a Mircom Fire Alarm Control Unit. This system includes a main panel that is located in the electrical room, a series of smoke and heat detectors, annunciators and exit signs located throughout the building. Facility staff confirmed that the fire alarm system is reviewed on an annual basis. The age of the system was not known.	Replace the fire alarm panel at the end of its lifespan, including an allowance to replace some wiring and devices. This item falls outside the ten year plan, costs associated with this item have not been carried into the cash flow tables.	Replacement	3 - Future Renewal												
45	Elsie Mile: School	5 D503001 Fire Protection System	Throughout Building/Fire Alarm Systems	This fire alarm system includes a series of smoke and heat detectors connecters, annunciators and signs located throughout the building. Facility staff confirmed that the fire alarm system is reviewed on an annual basis.	Replace isolated detectors, lights, annunciators and hardware as required. A ten-year cycle has been set for isolated replacement. The frequency of this cycle should be reviewed as the building ages.	Replacement	3 - Future Renewal	\$3,000					\$3,000						
46	Elsie Miles School	P100001 Seismic Screening	Seismic Screening	Complete a seismic screening of the building to assess seismic vulnerability.	For conducting a seismic screening of the building. The screening will be done according to the "Manual for Screening of Buildings for Seismic Investigation", published by the National Research Council of Canada (1992).	Study		\$4,000	\$4,000										



Photo 01





Photo 03





Photo 05





Photo 07





Photo 09





Photo 11



Photo 12

Photo 13





Photo 15



Photo 16



Photo 18

Photo 19



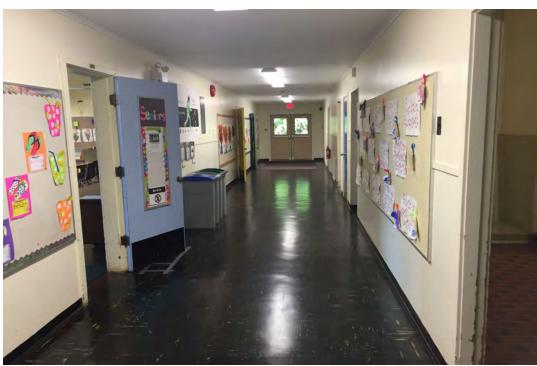


Photo 21



Photo 22





Photo 23

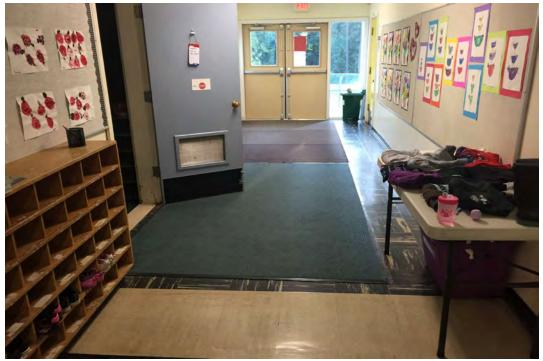




Photo 25





Photo 27





Photo 29





Photo 31



Photo 32

Photo 33



Photo 35



Photo 36





Photo 38



Photo 39







Photo 42





Photo 44



Photo 45



Appendix A

A – 07 Cowichan Lake Sports Arena

Facility Assessment **Cowichan Lake Sports Arena**



Cowichan Valley Regional District MH Project No. 5170700.00

November 2017



Cowichan Valley Regional District 175 Ingram Street Duncan, BC V9L 1N8



Cowichan Valley Regional District Facility Condition Assessment and Capital Plan Cowichan Lake Sports Arena, 311 South Shore Road, Lake Cowichan, BC

PROPERTY DESCRIPTION

PROPERTY STATISTICS

Gross Floor Area:

60,034 sf.

The Cowichan Sports Arena was constructed in 1971. Major renovations were undertaken in 1999 with an addition constructed in 2011. The facility is comprised of a concrete and steel framed covered arena. The arena include an ice rink and a curling rink (the latter is equipped as a pickle ball court for the summer season). Amenities include elevated seating, food and beverage services, commercial kitchen, a lounge, a variety of washrooms and dressing rooms, offices, skate shop and multi purpose / activity rooms. An elevator accesses both floors of the facility.

Refer to Photo 01.

Replacement Value:	\$16,929,588
Target FCI:	0.050
Current FCI:	0.014

REPORT OVERVIEW

We identified Priority 1 - Immediate expenditures totalling \$3,000 as follows:

- Row 11 B201007 Balcony Walls and Railings \$3,000
- Row 117 D501099 Other Service and Distribution Junction Box Covers Cost Negligible

The following provides an overview of the visual seismic, building code, accessibility and energy efficiency reviews completed.

Seismic Review

Seismic work completed to date: Recommendations:	None Complete a seismic screening of the building to assess seismic vulnerability. The screening will be done according to the "Manual for Screening of Buildings for Seismic Investigation", published by the National Research Council of Canada (1992).
Building Code Review	
Built under what code:	1977 National Building Code, 1992 and 2006 British
	Columbia Building Code
Deficiencies observed:	N/A
Accessibility Review	
Access into building:	Yes
Access throughout building:	Yes

Access to washrooms:	Yes
Recommendations:	None

We identified recommendations of approximately \$1,043,000 over the next five years. The following is a summary of the major projects (over \$10,000) we believe will be required the next five years, and elements whose condition is unknown and/or where further investigation is recommended:

- Row 4 A1030 Slab on Grade (service room) \$13,000
- Row 16 B201001 Exterior Enclosure (metal cladding original) \$718,000
- Row 19 B201001 Exterior Enclosure (wood siding addition) \$13,000
- Row 22 B203001 Solid Doors (original) \$28,000
- Row 27 B301002 Low Slope Membrane Systems (main roof addition) \$22,000
- Row 28 B301002 Low Slope Membrane Systems (service room roofs original) \$12,000
- Row 43 C301003 Gypsum Wallboard Finishes (gypsum walls and ceilings) \$20,000
- -Row 47 C302004 Resilient Floor Finishes (dressing rooms / ice rink) \$21,000

- Row 56 - D304003 Hot Water Distribution Systems (Mech. 216/ Pipe-mounted pumps) - \$19.000

- Row 104 D306001 HVAC Controls (Elec. 256/ Reliable Controls Panels) \$11,000
- Row 106 D501005 Panels (Curling Electrical Room/ Panels & Switches) \$32,000
- Row 122 D502002 Lighting Equipment (General/ Interior and Exterior Lighting) \$25,000
- Row 123 D501005 Panels (Zamboni Room/ Panels and Switches) \$16,000
- Row 130 P100001 Commissioning Services (mechanical and electrical systems) \$16,000

PROJECT TEAM

The visual reviews were completed on July 5, 2017 by Jordan Bowie and Voytek Gretka of MH. We began with an interview with Rob Frost, Operations Manager. During our review of the building, we were accompanied by Mr. Frost, who provided access to a sampling of representative areas of the facility. as requested.

Chris Raudoy of Morrison Hershfield reviewed the report for technical content and for compliance with the contract requirements.

Cowichan Valley Regional District Facility Condition Assessment and Capital Plan Cowichan Lake Sports Arena, 311 South Shore Road, Lake Cowichan, BC

REFERENCE DOCUMENTS/INFORMATION

We reviewed the following documents and selected drawings for general background and to inform ourselves about the layout and intended construction:

- Addition and Renovation Mechanical Drawings "Record Drawing" set by Hirschfield, Williams, Timmins Ltd., dated June 30, 2011

- Addition and Renovation Electrical Drawings "Issued for Construction" set by Applied Engineering Solutions Limited, dated January 20, 2010

- Appraisal Report by Suncorp Valuations, dated January 12, 2012
- Energy Study Report by Building Energy Solutions Ltd., dated February 3, 2014

This report should be reviewed in conjunction with the Objectives, Terms of Reference, Limitations, and Methodology described in the main body of the report.

Cowichan Valley Regional District Facility Condition Assessment and Capital Plan Cowichan Lake Sports Arena, 311 South Shore Road, Lake Cowichan, BC

107,600

84,698

9,795

Work outstanding

We recommend budgeting for the following 1 – Immediate, 2 - Restore Functionality, 2b - Exceeded Service Life and 3 - Future Renewal projects by year as follows:

Priority	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026				
1 – Immediate	3,000	0	0	0	0	0	0	0	0	0				
2 - Restore Functionality	26,600	37,600	1,600	1,600	13,600	14,600	1,600	1,600	1,600	1,600				
2b - Exceeded Service Life 73,000 0 0 31,000 0 0 0 3,000 0														
2b - Exceeded Service Life 73,000 0 31,000 0 0 0 3,000 3 - Future Renewal 5,000 25,000 9,000 760,000 32,000 31,000 25,000 60,000 304,000 153,000														
Total in 2017 dollars	107,600	62,600	10,600	792,600	45,600	45,600	26,600	61,600	308,600	154,600				
Minimum Funding to Achiev	e and Maiı	ntain Targe	et FCI withi	in 5 years:	\$85,502									
Work outstanding	107,600	84,698	9,795	716,893	676,991	637,089	578,186	554,284	777,382	846,479				
Minimum Funding to Achiev	e Target FO	CI within 1	0 years: \$8	5,502										

716,893

676,991

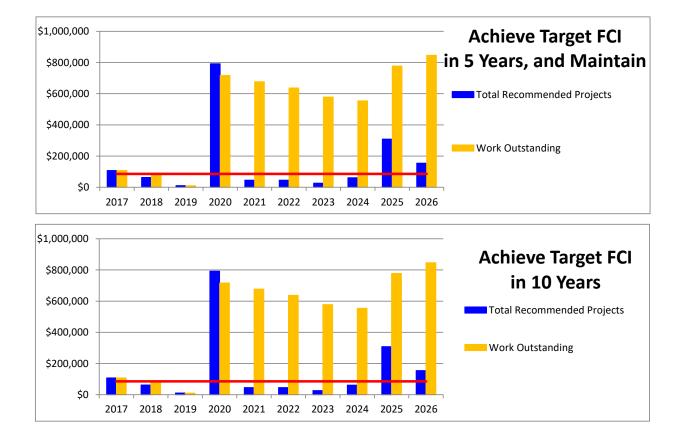
637,089

578,186

554,284

777,382

846,479



			٩	ţ		CO	MPONENT		CONDITION ASSESSMENT						LIFECYCLE D	ATA	RECOMMENDATION				Will a	Can the current		OF	INION OF P	ROBABLE CO	ST	
Row SOUL		Location / Address	Level 1 Major Grou Elements	Level 2 Group Elemen	Level 3 Individual Elements	aı	Location / Type	Photo	Description & History	Condition	Performance	Yr New or Last Major Action	Assessment Date Assessed By	Age in 2017	Typical Life Cycle or Action Interval	Est. Time Remaining to EOL or Major Action	Recommendation g	Priority	Can this work be phased over multiple years ?	If recommended work not complete can the rate of deterioration be expected to increase ?		condition adversely affect the buildings security of	Quantity Unit Rate	Unit	Subtotal Repair or Replacement Cost	Consult. Contingency	5% Tax	Total in 2017 Dollars
	n Lake 311 Sou rena Cowich		A Substructure	A10 Foundations	A1010 Standard Foundations	A10 Foundations	Basement Concrete Foundation/ Original		The foundations are cast-in-place concrete strip footings and foundation walls, as visible from the grade and basement level. No evidence of major settlement or heaving was reported or observed. Some cracking was noted at door openings where existing form wood was left in place.		5	1971	5-Jul-17 Mł	46	100	54	The foundations are expected to remain serviceable for the life of the building. The damage noted corresponds to the service rooms on the rear of the original building. Repairs should be undertaken in conjunction with exterior door replacement.	able Not Applicabl	e N/A	N/A	Yes	No						
	n Lake 311 Sou rena Cowich	uth Shore Road, nan Lake, BC	A Substructure	A10 Foundations	A1010 Standard Foundations	A10 Foundations	Basement Concrete Foundation/ Addition	04	The foundations are cast-in-place concrete strip footings and foundation walls, as visible from the grade and basement level. No evidence of major settlement or heaving was reported or observed.	4	5	2011	5-Jul-17 Mł	6	100	94	The foundations are expected to remain serviceable for the life of the building. Not Applic	able Not Applicabl	e N/A	N/A	Yes	No						
	n Lake 311 Sou rena Cowich		A Substructure	A10 Foundations	A1030 Slab on Grade	A1030 Slab on Grade	Rinks/ Slab on Grade		The floor is concrete slab-on-grade. The skating rink was installing in 1999 and the curling rink was installed in 2011. No evidence of major settlement or heaving was reported or observed. The average age of rinks has been used in this capital plan.	4	5	2005	5-Jul-17 Mł	12	50	94	The concrete slab-on-grade is expected to remain serviceable for the life of Not Applic: the building, with isolated repairs, if needed.	able Not Applicabl	N/A e	N/A	Yes	No						
	n Lake 311 Sou rena Cowich	uth Shore Road, nan Lake, BC	A Substructure	A10 Foundations	A1030 Slab on Grade	A1030 Slab on Grade	Service Rooms/ Slab on Grade	07,08	The floor is concrete slab-on-grade. The slabs date to original construction. The Zamboni parking slab is scaling.	3	4	1971	5-Jul-17 MH	46	50	4	The concrete slab-on-grade is expected to remain serviceable for the life of Repair the building, with isolated repairs at the Zamboni parking area. Allowand			Yes	Yes	No	200 \$50	SF	\$10,000	0% 15%	5%	\$13,000
	n Lake 311 Sou rena Cowich		A Substructure	A10 Foundations	A1030 Slab on Grade	A103006 Foundation Drainage	Original Building/ Foundation Walls	×	Perimeter drain pipes are assumed to be installed at the footing level. No issues related to foundation drainage were noted by facility staff. No information was available regarding the scoping of the system to review for continuity.			1971	5-Jul-17 MH	46	60	14	The foundation drainage is expected to last the life of the building. No major capital expenditures are expected to be required. This should be updated with the results of the foundation drainage review recommended in A103006 Foundation Drainage (above).	ncy 3 - Futur Renewa		Yes	No	No						
	n Lake 311 Sou rena Cowich		A Substructure	A10 Foundations	A1030 Slab on Grade	A103006 Foundation Drainage	Foundation Walls/ Addition	n x	Perimeter drain pipes are assumed to be installed at the footing level. No issues related to foundation drainage were noted by facility staff. No information was available regarding the scoping of the system to review for continuity.			2011	5-Jul-17 Mł	6	60	54	The foundation drainage is expected to last the life of the building. No major capital expenditures are expected to be required. This should be updated with the results of the foundation drainage review recommended in A103006 Foundation Drainage (above).	ncy 3 - Futur Renewa		Yes	No	No						
	n Lake 311 Sou rena Cowich	uth Shore Road, nan Lake, BC	A Substructure	A10 Foundations	A1030 Slab on Grade	A103006 Foundation Drainage	Foundation Walls/ Genera	l x	Perimeter drain pipes are assumed to be installed at the footing level. No issues related to foundation drainage were noted by facility staff. No information was available regarding the scoping of the system to review for continuity.			N/A	5-Jul-17 Mł	N/A	5	2	Periodic camera inspection and isolated repairs as required. Study	Not Applicabl	No	No	No	No	1 \$6,00	10 LS	\$6,000	0% 0%	0%	\$6,000
	n Lake 311 Sou rena Cowich	uth Shore Road, 1an Lake, BC	B Shell	B10 Superstructure	B10 Superstructure	B10 Superstructure	General/ Original	09 - 11	The superstructure is comprised of concrete masonry unit (CMU) walls at the building perimeter with steel structure supporting the lee rink roof. The service room roofs are wood framing supported on CMU walls. No settlement or other evidence of structural distress was observed or reported. There was no evidence or reports of long-term leakage that would allude to concealed structural damage. Stating observed on the underside of the roof sheathing (plywood) was a result of the previous roof leaking. No recent leakage was reported.	4	5	1971	S-Jul-17 MF	46	100	56	Interior protected structural components are expected to last the life of the building. No major capital expenditures are expected to be required.	ent 3 - Futur Renewa		No	Yes	No						
	n Lake 311 Sou rena Cowich	uth Shore Road, 1an Lake, BC	B Shell	B10 Superstructure	B10 Superstructure	B10 Superstructure	General/ Addition	09 - 10	The superstructure is comprised of elevated concrete floor slabs, with light gauge steel framed walls. Roof framing is a steel with steel joists and roof decks. No settlement or other evidence of structural distress was observed or reported. There was no evidence or reports of long-term leakage that would allude to concealed structural damage.	4	5	2011	5-Jul-17 MF	6	100	94	Interior protected structural components are expected to last the life of the building. No major capital expenditures are expected to be required.	ent 3 - Futur Renewa		No	Yes	No						
	n Lake 311 Sou rena Cowich	uth Shore Road, nan Lake, BC	B Shell	B10 Superstructure	B1010 Floor Construction	B101004 Balcony Construction	Egress Stairs/ South Elevation	12 - 14	The egress stairs on the south elevation are of steel pan with concrete infill treads, with painted steel railings. The steel is corroded.	3	4	2011	5-Jul-17 Mł	6	40	2	The stairs, with proper maintenance should remain serviceable for several Repair decades; however, the steel appears to be corroding at an accelerated Allowanc rate. Grind corrosion, prime with zinc-rich organic paint and re-coat with finish paint.			Yes	No	No	1 \$5,00	IO LS	\$5,000	0% 0%	5%	\$6,000
	n Lake 311 Sou rena Cowich	uth Shore Road, nan Lake, BC	B Shell	B10 Superstructure	B1010 Floor Construction	B201007 Balcony Wal and Railings	Is Patio/ Wood Railings & Framing	15, 16	A concrete patio with painted wood railings and a canopy roof is accessed from the curling lounge. Railings do not appear to meet BC Buildig Code 3.3.1.8. Age of wood framing / railings approximated.	3	3	1999	5-Jul-17 MF	18	20	1	Bring railings up to code if the distance between the upper walkway is more than 600 mm in height from the patio surface below (to be verified by the CVRD).	ent 1 – Immediat	No	No	No	Yes	1 \$2,00	IO LS	\$2,000	0% 0%	5%	\$3,000
	n Lake 311 Sou rena Cowich	uth Shore Road, nan Lake, BC	B Shell	CB20 Exterior Enclosure	B2010 Exterior Walls	B201007 Balcony Wal and Railings	ls Roof	17, 18	Cedar shake roof protects the walkway / top tier of the patio. Light is visible between the shakes, indicating that significant roof leakage occurs during storms. Age of wood framing / railings approximated.	2	3	1999	5-Jul-17 Mł	18	30	1	Replace shake canopy roof. Replacem	ent 2 - Restor Functional	-	Yes	No	No	1000 \$7	SF	\$7,000	0% 15%	5%	\$9,000
	n Lake 311 Sou rena Cowich	uth Shore Road, han Lake, BC	B Shell	CB20 Exterior Enclosure	B2010 Exterior Walls	B201099 Other Exterio Walls	or North Elevation/ Enclosur	e 19, 20	A predominately painted plywood enclosure on the north elevation of the building, partially protected with a pitched metal roof. Painted vertical wood siding clads the enclosure off the lounge's patio. Faded paint on the interior of the enclosure and corroded metal roofing was observed. The age of the enclosure has been approximated.	3	4	1999	5-Jul-17 MF	18	30	12	Paint wood elements to extend the service life. The metal roof will likely outlast the wood framing. Replacement of the wood elements falls outside the ten year plan, costs associated with this item have not been carried into the cash flow tables. The cost to repaint is expected to arrive at less than the threshold value of the report and has not been carried into the cash flow tables.	ent 2 - Restor Functional	e No ity	Yes	No	No						
	n Lake 311 Sou rena Cowich	uth Shore Road, nan Lake, BC	B Shell	CB20 Exterior Enclosure	B2010 Exterior Walls	B201001 Exterior Enclosure	Exerior Walls/ CMU Walls Original	- 21	The exterior of the arena is partially clad with painted concrete masonry unit (CMU) walls and a some wood trim. The paint coating is peeling in some locations. Other locations exhibit organic build-up. The units were in good condition, where reviewed.	3	5	1971	5-Jul-17 MH	46	75	2	Remove organic growth, prepare walls and apply new, breathable paint coating. If any bubbling or premature paint failure occurs, consider Installing a continuous air barrier on the interior face of the CMU.			Yes	No	No	1650 \$4	SF	\$6,600	0% 15%	5%	\$8,000
	n Lake 311 Sou rena Cowich	uth Shore Road, Ian Lake, BC	B Shell	CB20 Exterior Enclosure	B2010 Exterior Walls	B201001 Exterior Enclosure	Exterior Walls/ CMU Wall Addition	s - 22	The exterior of the addition is partially clad with split-face concrete masonry unit (CMU) walls. Efflorescence is prevalent.	4	5	2011	5-Jul-17 MF	6	75	69	Clean exterior of split-face CMU and monitor. If precipitation / heavy wetting is causing the efforescence, either repeat cleaning or install overhang protection (at the discretion of the CVRD). If efforescence re- occurs under minimal wetter, consider reviewing the integrity of the wall assembly's air barrier. In general, efforescence is usually considered an aesthetic nuisace and is n't likely to lead to deterioration. This item falls outside the ten year plan, costs associated with this item have not been carried into the cash flow tables.			No	No	No						
	n Lake 311 Sou rena Cowich	uth Shore Road, han Lake, BC	B Shell	CB20 Exterior Enclosure	B2010 Exterior Walls	B201001 Exterior Enclosure	Exterior Walls/ Metal Cladding - Original	23, 24	Prefinished metal cladding on the exterior walls on the original portion of the building. The metal has been repainted and the coating is failing. Fastener back- out was observed and corrosion of the panels was noted where in contact with grade.	2	5	1971	5-Jul-17 Mł	46	40	4	Replace metal cladding at end of service life. The cost includes installing code-compliant rain screen cavity and increased insulation outboard of the wall.	ent 3 - Futur Renewa		Yes	No	No	10800 \$50	SF	\$540,000	10% 15%	5%	\$718,000
	n Lake 311 Sou rena Cowich	uth Shore Road, nan Lake, BC	B Shell	CB20 Exterior Enclosure	B2010 Exterior Walls	B201001 Exterior Enclosure	Exterior Walls/ Metal Cladding - Addition	25	Prefinished standing seam metal cladding on the exterior walls / interior of parapets on the addition.	4	5	2011	5-Jul-17 Mł	6	40	34	Replace metal cladding at end of service life. Replacem This item falls outside the ten year plan, costs associated with this item have not been carried into the cash flow tables.	ent 3 - Futur Renewa	e Yes	Yes	No	No						

This report should be reviewed in conjunction with the Objectives, Terms of Reference, Limitations, and Methodology included with the full report. cjw_CVRD BCA - 07 - Cowichan Lake Sports Arena_FINAL, 11/17/2017

	8	<u>e</u>	ents		со	MPONENT	CONDITION ASSESSMENT						IFECYCLE D	ATA	RECOMMENDATION			Can this	If recommended		Can the current		0	PINION OF PR	OBABLE CO	л	
BLDG Name	Location / Addre	Level 1 Major Gro Elements	Level 2 Group Elem	Level 3 Individua Elements	D	Location / Type	B B E E Description & History	Condition	Performance	Yr New or Last Major Action	Assessment Date Assessed Bv	Age in 2017	Typical Life Cycle or Action Interval	Est. Time Remaining to EOL or Major Action	Recommendation	Type	Priority	work be w phased over	can the rate of	failure in this system lead to a loss of use of the facility ?	condition adversely affect the buildings security of safety ?	Quantity Init Poto	Cu k	Subtotal Repair or Replacement Cost	Consult. Contingency	5% Tax	Total in 2017 Dollars
	311 South Shore Road, Cowichan Lake, BC	B Shell	CB20 Exterior Enclosure	B2010 Exterior Walls	B201001 Exterior Enclosure	Exterior Walls/ Wood Sidin - Addition	g 26 - 28 Stained tongue and groove ceder siding on the addition. The soffits on the upper roof projection is stained wood slat. Stained glulam beams support the roof projection, whose tips have begun to weather.	4	5	2011	5-Jul-17 Mł	6	20	14	Replace redar siding at end of service life. It is unlikely that the soffits will require replacement if maintained. The reduced service life of the cedar is attributed to the lack of overhand protection, south/southeasterly exposure and the inability of tongue and groove to shed water in the same manner as a lap siding. This Item fails outside the ten year plan, costs associated with full replacement of this item have not been carried into the cash flow tables.	Replacement	3 - Future Renewal	Yes	Yes	No	No						
	311 South Shore Road, Cowichan Lake, BC	B Shell	CB20 Exterior Enclosure	B2010 Exterior Walls	B201001 Exterior Enclosure	Exterior Walls/ Wood Sidin - Addition	g 26-28 Stained tongue and groove cedar siding on the addition. The soffits on the upper roof projection is stained wood slat. Stained glulam beams support the roof projection, whose tips have begun to weather.	3	3	2011	5-Jul-17 Mł	6	5	1	Replace cedar siding at end of service life. It is unlikely that the soffits will require replacement if maintained. The reduced service life of the cedar is attributed to the lack of overhand protection, south/southeasterly exposure and the inability of tongue and groove to shed water in the same manner as a lap siding. It is our understanding the siding will be restrained in 2017. We recommend including the beams in the staining project. An allowance for staining has been included in the capital plan in year 1 and 6.	Repair Allowance	2 - Restore Functionality	Yes	Yes	No	No	2500 \$	4 SF	\$10,000	0% 15%	5%	\$13,0
Sports Arena	311 South Shore Road, Cowichan Lake, BC		CB20 Exterior Enclosure	B2010 Exterior Walls	Enclosure	Exterior Walls/ Fibre Cement Lap Siding	29 A small amount of painted fibre cement lap siding installed on the interior of parapets.	4	5		5-Jul-17 Mł		40		Replace fibre cement siding at end of service life. Include this material in exterior painting project. This item falls outside the ten year plan, costs associated with this item have not been carried into the cash flow tables.		3 - Future Renewal	No	Yes	No	No						
	311 South Shore Road, Cowichan Lake, BC	B Shell	CB20 Exterior Enclosure	B2020 Exterior Windows	B202003 Curtain Walls	s Exterior Walls/ Windows	30 - 32 Aluminum framed punched windows with awning sashes and curtain wall extrusions are present on the exterior walls of the addition. The glass is comprised of double paned insulated glazing units (IGUS). An egress migg door of similar construction is present at the top of the steel egress stairs.	4	5	2011	5-Jul-17 Mł	6	40	34	Replace fenestration and associated metal flashings at end of service life. Replace weatherstripping and hardware (operable units) as-needed to maintain the units. This item falls outside the ten year plan, costs associated with this item have not been carried into the cash flow tables.	Replacement	3 - Future Renewal	Yes	Yes	No	No						I
Sports Arena	311 South Shore Road, Cowichan Lake, BC		CB20 Exterior Enclosure		B203001 Solid Doors	Original	33, 34 Single wood swing doors and single / double steel swing doors are present at service rooms on the original building.	3	4	1971	5-Jul-17 Mł		40	4	Replace doors in conjunction with metal siding. Select more energy efficient doors. At the time of replacement, consider repairing the concrete foundation wall, where damaged.	Replacement	Service Life	Yes	Yes	No	No	14 \$1,	500 EA	\$21,000	10% 15%	5%	\$28
Sports Arena	311 South Shore Road, Cowichan Lake, BC		CB20 Exterior Enclosure		B203001 Solid Doors	Original	35 Double steel swing doors are present as egress from the ice arena on the addition.		5	2011	5-Jul-17 Mł		40	34	Replace the double doors at end of service life. This item falls outside the ten year plan, costs associated with this item have not been carried into the cash flow tables.	Replacement	3 - Future Renewal	Yes	Yes	No	No						[
	311 South Shore Road, Cowichan Lake, BC	B Shell	CB20 Exterior Enclosure	B2030 Exterior Doors	B203002 Glazed Doors	s Exterior Walls/ Sliding Glas: Doors	Aluminum framed sliding glass doors with double paned IGUs give access to the lounge's exterior patio.	4	5	1999	5-Jul-17 Mł	18	35	17	Replace silding glass doors at end of service life. Service rollers and clean tracks annually, and replace weatherstripping as-needed, to extend the life of the doors. This item fails outside the ten year plan, costs associated with this item have not been carried into the cash flow tables.	Replacement	3 - Future Renewal	Yes	Yes	No	No						L
Sports Arena	311 South Shore Road, Cowichan Lake, BC		CB20 Exterior Enclosure		Roll-up Doors	d Exterior Wall/ Overhead Door - Addition	37 Vinyl-coated steel overhead doors accesses the curling rink and the Zamboni garage. The age of the door has been approximated.	4	5	2011	5-Jul-17 Mł		40	34	Replace the overhead door at end of service life. This item falls outside the ten year plan, costs associated with this item have not been carried into the cash flow tables.	Replacement	Renewal	Yes	Yes	No	No						
	311 South Shore Road, Cowichan Lake, BC	B Shell	CB20 Exterior Enclosure	B2030 Exterior Doors	B203004 Overhead an Roll-up Doors	d Exterior Wall/ Overhead Door - Original	 A steel overhead door accesses a service room on the original building. The age of the door has been approximated. 	4	5	1971	5-Jul-17 Mł	46	40	4	Replace the original overhead door in conjunction with metal siding. Select a more energy efficient door.	Replacement	2b - Exceeded Service Life	Yes	Yes	No	No	1 \$2,	000 EA	\$2,000	0% 15%	5%	\$3
	311 South Shore Road, Cowichan Lake, BC	B Shell	B30 Roofing	B3010 Roof Coverings	B301002 Low Slope Membrane Systems	Main Roof/ Addition	38 - 40 The roof is comprised of a 2-pity SSS modified bitumen assembly. The roof was generally in good condition; however, wearing of the granulated surface was observed at higher traffic areas. Exposed bitumen breaks down at an accelerated rate if left unchecked.	4	5		5-Jul-17 Mł		25	19	Replace the membrane assembly including the flashing, sealants, and interfaces at the end of service life (this action falls outside the ten year plan). In the interim, consider repairing the degranulated areas with a liquid- applied coating, to avoid exposure to damaging UV rays. An allowance for this work, where needed, has been included in year 1. Re-coating the entire lower root is slightly premature; actual scope can be fine-tuned at the time of repairs.	Allowance	2 - Restore Functionality	No	Yes	Partial	No			\$16,000			
	311 South Shore Road, Cowichan Lake, BC	B Shell	B30 Roofing	B3010 Roof Coverings	B301002 Low Slope Membrane Systems	Service Room Roofs	41, 42 The roofs over service rooms are comprised of 2-ply SBS modified bitumen assemblies. The age of the roofs vary and the roofs appeared to be in fair-to-good condition. The age of the roofs has been approximated and averaged.	4	5	2002	5-Jul-17 Mł	15	25	5	Replace the service room low sloped roofs at the end of service life. The opportunity to extend the service life of some of the roofs by way of a liquid-applied coating may be possible. It would be prudent to evaluate this option and a placeholder value to restore the roofs has been considered in the capital plan (year 5).	Repair Allowance	2 - Restore Functionality	No	Yes	No	No	700 \$1	L2 SF	\$8,400	10% 15%	5%	\$12
	311 South Shore Road, Cowichan Lake, BC	B Shell	B30 Roofing	B3010 Roof Coverings	B301001 High Slope Roof Coverings	ice Arena Roof	43 The ice arena roof is comprised of a pitched, prefinished standing seam metal roof.	4	5	2011	5-Jul-17 Mł	6	40	34	Replace the sloped roof at the end of service life. Review the roof annually to undertake sealant and/or fastener repairs (where exposed) as-needed. This item falls outside the ten year plan, costs associated with this item have not been carried into the cash flow tables.	Replacement	3 - Future Renewal	No	Yes	Partial	No						
	311 South Shore Road, Cowichan Lake, BC	B Shell	B30 Roofing	B3010 Roof Coverings	B301001 High Slope Roof Coverings	Service Room Roof	44, 45 A service room roof is comprised of pitched metal panels. Multiple penetrations exist between the roof protrusions and fasteners. No active leakage was reported or observed. A wood support strut tying an exhaust stack back to the adjacent pararget was decayed. The age of the roof has been approximated.	2	3	1971	5-Jul-17 Mł	46	40	1	Replace the sloped roof at the end of service life. Replace stack support with durable material.	Replacement	2 - Restore Functionality	No	Yes	No	No	1 \$2,	000 LS	\$2,000	10% 15%	5%	\$3,0
	311 South Shore Road, Cowichan Lake, BC	B Shell	B30 Roofing	B3010 Roof Coverings	B301005 Gutters and Downspouts	Ice Arena Roof/ Eaves Troughs	46 The ice area roof drains to prefinished metal eaves troughs, which in turn, drain into internal roof drains (south pitch) and to the below grade perimeter drains via rain water leaders (north pitch). The troughs were in good condition; however, contained standing water and organic debris.	4	3	2010	5-Jul-17 Mł	7	40	33	Adjust the slope of the eaves troughs containing standing water and clean regularly to maintain free-flowing troughs (maintenance). The cost to repair the eaves troughs is expected to arrive at less than the threshold value of the report and has not been carried into the cash flow tables.	Repair Allowance	2 - Restore Functionality	No	Yes	No	No						
	311 South Shore Road, Cowichan Lake, BC	B Shell	B30 Roofing	B3010 Roof Coverings	B301099 Other Roofin	g Second Floor Decks/ Roofing Assembly	47 Decks comprised of concrete pavers over SBS modified bitumen roofing assembly (membrane not visible, assumed) accessed via multi-purpose rooms.	4	5	2011	5-Jul-17 Mł	6	30	24	Replace the deck assemblies at the end of service life. Exposed and review the concealed internal drain strainers annually. Unclog where necessary. This item fails outside the ten year plan, costs associated with this item have not been carried into the cash flow tables.	Replacement	3 - Future Renewal	No	Yes	Partial	No						

	10	٩	nts		CON	IPONENT		CONDITION ASSESSMENT						IFECYCLE D	ATA	RECOMMENDATION					Will a	Can the current			PINION OF PR	OBABLE C	OST	
RLDG Name	Location / Address	Level 1 Major Grou Elements	Level 2 Group Eleme	Level 3 Individual Elements	ID	Location / Type	Photo	Description & History	Condition	Performance	Yr New or Last Major Action	Assessment Date Assessed By	Age in 2017	Typical Life Cycle or Action Interval	Est. Time Remaining to EOL or Major Action	Recommendation	Type	ority		If recommended work not complete can the rate of deterioration be expected to increase ?	failure in this system lead to a loss of use of the facility ?	condition adversely affect the	Quantity	Unit Rate Unit	Subtotal Repair or Replacement Cost	Consult. Contingency	5% Tax	Total in 2017 Dollars
	e 311 South Shore Road, Cowichan Lake, BC	B Shell	B30 Roofing	B3010 Roof Coverings	B301099 Other Roofing	Second Floor Decks/ Railings	47	Aluminum framing with glass infill panels are present at the perimeter of the second floor decks.	4	5	2011	5-Jul-17 Mł	16	40	34	Replace the railings at the end of service life. Review railing post anchorage-to-substrate during annual roof and deck maintenance reviews. This item falls outside the ten year plan, costs associated with this item have not been carried into the cash flow tables.	Replacement	3 - Future Renewal	No	Yes	Partial	No						
	e 311 South Shore Road, Cowichan Lake, BC	C Interiors	C10 Interior Construction	C1010 Partitions	C101003 Retractable Partitions	Multi-Purpose Rooms/ Partition Walls	48	Retractable partition walls within multi-purpose rooms.	4	5	2011	5-Jul-17 MH	1 6	30	24	Replace retractable partitions at end of service life. This item falls outside the ten year plan, costs associated with this item have not been carried into the cash flow tables.	Replacement	3 - Future Renewal	Yes	No	No	No						
	e 311 South Shore Road, Cowichan Lake, BC	C Interiors	C10 Interior Construction	C1020 Interior Doors		Interior Doors/ Throughout Building	49, 50	Painted wood and steel swing doors in steel frames. The age of the doors has been averaged.	4	5	1994	5-Jul-17 Mł	1 23	40	17	Replace doors if damage. Service and/or replace hardware as-needed to extend the service life of the doors. This item falls outside the ten year plan, costs associated with this item	Replacement	3 - Future Renewal	Yes	No	No	No						
	e 311 South Shore Road, Cowichan Lake, BC	C Interiors	C10 Interior Construction	C1020 Interior Doors	C102004 Sliding and Folding Doors	Curling Rink/ Door	51	Painted barn door on a steel track accesses the storage room adjacent to the curling rink.	4	5	2011	5-Jul-17 Mł	1 6	30	24	have not been carried into the cash flow tables. Replace the door at end of service life. This item falls outside the ten year plan, costs associated with this item have not been carried into the cash flow tables.	Replacement	3 - Future Renewal	No	No	No	No						
	e 311 South Shore Road, Cowichan Lake, BC	C Interiors	C10 Interior Construction	C1020 Interior Doors	C102005 Interior Overhead Doors	Skate Shop, Concession Window, Reception/ Overhead Doors	52	Aluminum rolling overhead doors at the windows to the skate shop and concession window / cashier.	4	5	2011	5-Jul-17 Mł	1 6	30	24	Replace overhead doors at end of service life. This item falls outside the ten year plan, costs associated with this item have not been carried into the cash flow tables.	Replacement	3 - Future Renewal	Yes	No	No	No						
	e 311 South Shore Road, Cowichan Lake, BC	C Interiors	C10 Interior Construction		C103001 Compartments, Cubicles and Toilet Partitions	Washrooms/ Toilet Stalls	53	Composite tollet stall partitions in washrooms.	4	5	2011	5-Jul-17 MH	1 6	30	24	Replace toilet stall partitions at end of service life. This item falls outside the ten year plan, costs associated with this item have not been carried into the cash flow tables.	Replacement	3 - Future Renewal	Yes	No	No	No						
	e 311 South Shore Road, Cowichan Lake, BC	C Interiors	C10 Interior Construction	C1030 Fittings	C103002 Toilet and Bath Accessories	n Washrooms/ Counter Tops	54	Laminate wood counter tops to support sinks in washrooms. Minor laminate chipping on vertical edges was observed in a washroom.	4	5	2011	5-Jul-17 MH	1 6	30	24	Replace counter tops at end of service life. Make repairs with matching laminate as required. This item falls outside the ten year plan, costs associated with this item have not bene carried into the cash flow tables.	Replacement	3 - Future Renewal	Yes	Yes	No	No						
	e 311 South Shore Road, Cowichan Lake, BC	C Interiors	C10 Interior Construction	C1030 Fittings	C103006 Shelving	Dressing Rooms/ Millwork	55	Stained wood benches and wood veneer shelving for sports teams within the dressing rooms.	4	5	2011	5-Jul-17 MH	1 6	30	24		Replacement	3 - Future Renewal	Yes	Yes	No	No						
	e 311 South Shore Road, Cowichan Lake, BC	C Interiors	C10 Interior Construction	C1030 Fittings	C103009 Cabinets	Kitchenettes/ Millwork	56, 57	Laminate and wood veneer cabinets and laminate counter tops provided in kitchenettes throughout the facility. The average age of equipment has been taken.	4	5	2005	5-Jul-17 Mł	1 12	30	18	Replace millwork at end of service life. This item falls outside the ten year plan, costs associated with this item have not been carried into the cash flow tables.	Replacement	3 - Future Renewal	Yes	Yes	No	No						
	e 311 South Shore Road, Cowichan Lake, BC	C Interiors	C20 Stairs	C2010 Stair Construction		Interior of Building/ Stairs and Railings	58, 59	Steel stairs with both aluminum picket railing and glass railing accesses the upper floor / mezzanine. The average age of equipment has been taken.	4	5	2005	5-Jul-17 MH	1 12	75	63	life of the building. This item falls outside the ten year plan, costs associated with this item	Replacement	3 - Future Renewal	Yes	No	No	No						
	e 311 South Shore Road, Cowichan Lake, BC	C Interiors	C30 Interior Finishes	C3010 Wall Finishes	C301003 Gypsum Wallboard Finishes	Gypsum Walls and Ceilings/ Throughout Building	60	Painted gypsum walls and ceilings throughout the building.	4	5	2011	5-Jul-17 MH	1 6	5	2	have not been carried into the cash flow tables. A cyclical painting allowance has been included in the capital plan. Facility staff paint areas as-needed to maintain aesthetics.	Replacement	3 - Future Renewal	Yes	No	No	No	1	\$20,000 LS	\$20,000	0% 0%	0%	\$20,00
Sports Arena	e 311 South Shore Road, Cowichan Lake, BC	C Interiors		s C3010 Wall Finishes	Finishes	Kitchen/ Wall Panels		Wall paneling within the kitchen.	4	5	2011	5-Jul-17 MH		30	24	Replace wall paneling in the kitchen at the end of service life. This item fails outside the ten year plan, costs associated with this item have not been carried into the cash flow tables.	Replacement	3 - Future Renewal	Yes	No	No	No						
	e 311 South Shore Road, Cowichan Lake, BC	C Interiors	C30 Interior Finishes	s C3020 Floor Finishes	C302001 Tile Floor Finishes	Washrooms and Showers/ Flooring	62	Wall and floor tile in some washrooms and dressing room showers. Average age of equipment taken.	4	5	2005	5-Jul-17 Mł	1 12	30	18	Replace tile finishes at end of service life. Generally tile is replaced during renovations and can exceed the service life assigned. This item falls outside the ten year plan, costs associated with this item have not been carried into the cash flow tables.	Replacement	3 - Future Renewal	Yes	No	No	No						
	e 311 South Shore Road, Cowichan Lake, BC	C Interiors	C30 Interior Finishes	C3020 Floor Finishes	C302003 Wood Flooring	Multi-Purpose Rooms & Lounge/ Flooring		Sprung maple flooring in the multi-purpose rooms and engineered flooring in the lounge. Average age of equipment taken.	4	5	2005	5-Jul-17 Mł	1 12	20	8	Refinish floors after approximately 20 years of use. Full replacement falls outside the ten year plan.	Repair Allowance	3 - Future Renewal	Yes	Yes	No	No	2462	\$6 SF	\$14,772	0% 15%	6 5%	\$18,00
	e 311 South Shore Road, Cowichan Lake, BC	C Interiors	C30 Interior Finishes	s C3020 Floor Finishes	C302004 Resilient Floor Finishes	Dressing Rooms & Ice Rink/ Flooring	64	Resilient flooring present within the dressing rooms and corridors of the ice arena. Average age of equipment taken.	4	5	2005	5-Jul-17 MH	1 12	5	5	Replace flooring where worn and beyond serviceability. Allowances have been provided assuming that areas will be replaced in zones, rather than all resilient flooring in one project.	Replacement	3 - Future Renewal	Yes	Yes	No	No	1422	\$12 SF	\$17,064	0% 15%	6 5%	\$21,00
Sports Arena	Cowichan Lake, BC	C Interiors		s C3020 Floor Finishes		Rooms/ Flooring		Commercial grade carpet in the lounge and meeting rooms. Average age of equipment taken.	4	5		5-Jul-17 Mł		20	8	Replace carpet flooring at end of service life. The lounge and office carpet has been included, whereas the meeting room carpet fails outside the ten year plan.		Renewal	Yes	Yes	No		1762	\$12 SF	\$21,144	0% 15%	6 5%	\$26,00
Sports Arena	e 311 South Shore Road, Cowichan Lake, BC	C Interiors		s C3020 Floor Finishes	and Traffic Membranes	Washrooms & Kitchen/ Flooring Kitchen/ Acoustic Ceiling		Liquid-applied coatings installed on the floors in the kitchen and some washrooms.	4	5		5-Jul-17 Mł		30	24	Replace flooring coatings at end of service life. This item falls outside the ten year plan, costs associated with this item have not been carried into the cash flow tables. Replace acoust: Uties at end of service life.	Replacement	3 - Future Renewal 3 - Future	Yes	No	No	No						_
Sports Arena	e 311 South Shore Road, Cowichan Lake, BC	C Interiors			Ceiling Tiles and Panels			Acoustic ceiling tiles in suspended 1-bar assembly within the commercial kitchen.	4	5		5-Jul-17 MF		30	69	Nepiace acoustic titles at end of service inte. This item falls outside the ten year plan, costs associated with this item have not been carried into the cash flow tables. The wood slat ceilings are anticipated to remain serviceable for the life of		3 - Future Renewal 3 - Future	Yes	No	No	No						
	Cowichan Lake, BC	- 11013				, cr, wood shat Cennig		en e	-	-		- Jul 1/		,,	09	The wood start changes are an cupated to remain service and in the me of the building. This item falls outside the ten year plan, costs associated with this item have not been carried into the cash flow tables.	procement	Renewal		10								
Sports Arena	e 311 South Shore Road, Cowichan Lake, BC	E Equipment & Furnishings E Equipment &		E1090 Other Equipment E1090 Other	E2010 Fixed Furnishings E2010 Fixed Furnishings			Folding spectator seating of plastic and steel is present on the interior of the addition.	4	5	2005	5-Jul-17 Mł		40	28	Replace seating at end of service life. Although the seating is expected to remain serviceable beyond the next ten years, a budget for incidental replacement is included. Replace boards at end of service life. Although the boards are expected to		3 - Future Renewal 3 - Future	Yes Yes	Yes	No	No	1	\$3,000 LS \$3,000 LS	\$3,000			\$3,000
Sports Arena		E Equipment & Furnishings	ero i unimilia	Equipment	-1010 Fixed Formishings	Joe may Joe us			-	,	2003	5 700-17 WIF	. 12	40	20	Replace boards at end of service life. Although the boards are expected to remain serviceable beyond the next ten years, a budget for incidental replacement is included.	nepacentent	3 - Future Renewal	163	163	NU	no	-	23,000 LS	23,000	5.5 0%	. 0%	\$3,000

This report should be reviewed in conjunction with the Objectives, Terms of Reference, Limitations, and Methodology included with the full report. cjw_CVRD BCA - 07 - Cowichan Lake Sports Arena_FINAL, 11/17/2017

	8	ę	ents	_	COM	MPONENT		CONDITION ASSESSMENT						LII	FECYCLE DA	TA	RECOMMENDATION			
BLDG Name	Location / Addre	Level 1 Major Gro Elements	Level 2 Group Elem	Level 3 Individua Elements	ID	Location / Type	Photo	Description & History	Condition	Performance	Yr New or Last Major Action	Assessment Date	Assessed By	Age in 2017	Typical Life Cycle or Action Interval	Est. Time Remaining to EOL or Major Action	Recommendation	Type	Priority	,
Cowichan Sports Are	ake 312 South Shore Road, Cowichan Lake, BC	D Services	D20 Plumbing	D2020 Domestic Water Distribution	D202003 Domestic Water Equipment	Mech. 255/ Expansion Tank	71		4	4	2011	5-Jul-17	MH	6	15	9	Strongly suggest adding a support bracket around the expansion tank, immediately below the nameplate around the shell for added structural support. Replace at end of life.	Replacement	3 - Future Renewal	
Cowichan Sports Are	ake 313 South Shore Road, Cowichan Lake, BC	D Services	D30 HVAC	D3020 Heat Generating Systems	D302002 Hot Water Boilers	Mech. 216/ Lochnivar Boiler	72	Boiler appeared to be operating at 20% of full load during walkthrough. It appeared to be running smoothly.	4	4	2011	5-Jul-17	МН	6	25	19	Replace at end of life. This item falls outside the ten year plan, costs associated with this item have not been carried into the cash flow tables.	Replacement	3 - Future Renewal	
Sports Are		D Services	D30 HVAC	D3040 Distribution Systems	D304003 Hot Water Distribution Systems	Mech. 216/ Pipe-mounted pumps		Pumps appear to be in good condition.	4	4	2011	5-Jul-17	MH	6	10	4	Replace at end of life.	Replacement	3 - Future Renewal	1
Cowichan Sports Are	ake 315 South Shore Road, a Cowichan Lake, BC	D Services	D30 HVAC	D3040 Distribution Systems	D304003 Hot Water Distribution Systems	Mech. 216/ Pre-heat tank	75	250 gal. preheat tank serving the hot water tanks.	4	4	2011	5-Jul-17	МН	6	20	14	Replace at end of life. This item falls outside the ten year plan, costs associated with this item have not been carried into the cash flow tables.	Replacement	3 - Future Renewal	
Sports Are		D Services	D30 HVAC	D3040 Distribution Systems	D304001 Air Distribution, Heating and Cooling	Elec. 256/ Supply Fans 1, 2, 3 & 4	76	Supply fan serving electrical room (SF-3) (citured). Similar fan serves lower corridor make-up air (SF-4). Similar fans employed for lower corridor make up air, c/w integrated duct heaters (SF-1/2).	4	4	2011	5-Jul-17		6	15	9	Replace at end of life.	Replacement	3 - Future Renewal	
Cowichan Sports Are	ake 317 South Shore Road, a Cowichan Lake, BC	D Services	D30 HVAC	D3040 Distribution Systems	D304007 Exhaust Systems	Mech. 255/ Exhaust Fan 4 & other	77	Exhaust fan serving the electrical room (EF-4/pictured). Similar exhaust fan serves bolier mechanical room (EF-7).	4	4	2011	5-Jul-17	МН	6	25	19	Repace at end of life. This item falls outside the ten year plan, costs associated with this item have not been carried into the cash flow tables.	Replacement	3 - Future Renewal	
Cowichan Sports Are	ake 318 South Shore Road, na Cowichan Lake, BC	D Services	D20 Plumbing	D2020 Domestic Water Distribution	D202003 Domestic Water Equipment	Mech. 216/ Expansion Tanks (2)	78	Overhead expansion tank for water heating loop.	4	4	2011	5-Jul-17	MH	6	15	9	Replace at end of life.	Replacement	3 - Future Renewal	
Cowichan Sports Are	ake 319 South Shore Road, na Cowichan Lake, BC	D Services	D20 Plumbing	D2020 Domestic Water Distribution	D202003 Domestic Water Equipment	Mech. 216/ DHW Storage Tanks (3)	79	Three 100 gal. DHW storage tanks servicing building potable hot water requirements.	4	4	2011	5-Jul-17	МН	6	20	14	Replace at end of life. This item falls outside the ten year plan, costs associated with this item have not been carried into the cash flow tables.	Replacement	3 - Future Renewal	
Cowichan Sports Are	ake 320 South Shore Road, Cowichan Lake, BC	D Services	D30 HVAC	D3040 Distribution Systems	D304005 Glycol Distribution Systems	Mech. 216/ Hot Buffer Tanks (2)	80	Two 250 gal. buffer tanks serve the DHW tanks.	4	4	2011	5-Jul-17	MH	6	20	14	Replace at end of life. This item falls outside the ten year plan, costs associated with this item have not been carried into the cash flow tables.	Replacement	3 - Future Renewal	
Cowichan Sports Are	ake 321 South Shore Road, na Cowichan Lake, BC	D Services	D30 HVAC	D3040 Distribution Systems	D304099 Other Distribution Systems	Mech. 216/ Bypass Feeder	81	Introduces treatment chemicals into the circulating hot water system.	4	4	2011	5-Jul-17	МН	6	15	9	Replace at end of life. The cost of this work is below the project threshold and has not been included in the financial tables.	Replacement	3 - Future Renewal	
Cowichan Sports Are	ake 322 South Shore Road, a Cowichan Lake, BC	D Services	D30 HVAC	D3050 Terminal and Package Units	D305003 Fan Coil Units	Mtg. 217/ Fan Coil FC-1	82	HVAC system has trouble maintaining temperature set points at certain times of the day, likely due to excessive solar heat gain through harge windows on south and west exposures. Overhead fan with switch was added to allow occupants to be able to control comfort to some degree.	4	4	2011	5-Jul-17	MH	6	20	14	Replace at end of life. Recommend recommissioning of the mechanical system, particular in this zone. Other zones were noted to have problems as well, such as the multipurpose/divided room for classes. Other options to limit solar gain could include adding exterior shading devices over windows, or entirely replacing windows with high-thermal performance and low solar heat gain products.	Replacement	3 - Future Renewal	
Sports Are		D Services	D30 HVAC	D3040 Distribution Systems	D304001 Air Distribution, Heating and Cooling	Children's 207/ Fabric Duct	83	Air is delivered through a perforated fabric duct for even distribution.	4	4	2011	5-Jul-17	MH	6	15	9	Clean fabric regularly per manufacturers instructions. One fluorescent lamp is burned out and requires replacing.	Replacement	3 - Future Renewal	
Cowichan Sports Are		D Services	D30 HVAC	D3040 Distribution Systems	D304001 Air Distribution, Heating and Cooling	Multi. 202+206/ HVAC	84	Air transfer between rooms appears to be inadequate through transfer grilles when rooms are divided, based on feedback from cocupants. Further, different occupant types require unique comfort set points which are not easily achievable with the current system/layout.	4	4	N/A	5-Jul-17	МН	N/A	N/A	N/A	Recommend commissioning authority to investigate heating/cooling loads and appropriate air delivery to the zones. Cost of retaining a commissioning authority is accounted for elsewhere in this table.	Study	2b - Exceede Service Life	
Cowichan Sports Are	ake 325 South Shore Road, na Cowichan Lake, BC	D Services	D30 HVAC	D3040 Distribution Systems	D304007 Exhaust Systems	208+214/ Exhaust Fans 1&2	85	Exhaust fans serving the child-minding washrooms and janitor room on the 2nd level. The cost of this work is below the project threshold and has not been included in the financial tables.		4	2011	5-Jul-17	МН	6	15	9	Replace at end of life.	Replacement	3 - Future Renewal	
Cowichan Sports Are	ake 326 South Shore Road, Ta Cowichan Lake, BC	D Services	D30 HVAC	D3040 Distribution Systems	D304007 Exhaust Systems	Cash 105/ Exhaust Fans 3&8	x	Exhaust fan serving the cash office. The cost of this work is below the project threshold and has not been included in the financial tables.		4	2011	5-Jul-17	MH	6	15	9	Replace at end of life.	Replacement	3 - Future Renewal	
Cowichan Sports Are	ake 327 South Shore Road, na Cowichan Lake, BC	D Services	D30 HVAC	D3040 Distribution Systems	D304007 Exhaust Systems	Janitor (Sprinkler) 134/ Exhaust Fan 5	86	Exhaust fan serving the sprinkler and janitor rooms. The cost of this work is below the project threshold and has not been included in the financial tables.	4	4	2011	5-Jul-17	МН	6	15	9	Replace at end of life.	Replacement	3 - Future Renewal	
Cowichan Sports Are	ake 328 South Shore Road, na Cowichan Lake, BC	D Services	D30 HVAC	D3040 Distribution Systems	D304007 Exhaust Systems	Roof/Exhaust Fan 6	x	Exhaust fan serving the change room(s).		4	2011	5-Jul-17	MH	6	20	14	Replace at end of life. This item falls outside the ten year plan, costs associated with this item have not been carried into the cash flow tables.	Replacement	3 - Future Renewal	-
Cowichan Sports Are		D Services	D30 HVAC	D3040 Distribution Systems	D304005 Glycol Distribution Systems	Mech. 216/ Glycol Feed Make-up System	87	Automatic glycol feed make up system located in the mechanical room.	4	4	2011	5-Jul-17	МН	6	20	14	Replace at end of life. This item falls outside the ten year plan, costs associated with this item have not been carried into the cash flow tables.	Replacement	3 - Future Renewal	
Sports Are		D Services	D30 HVAC	D3040 Distribution Systems	D304001 Air Distribution, Heating and Cooling	Roof/ Heat Pump 1		AirStack Heat Pump serving building hydronic space and water heating.	4	4	2011	5-Jul-17		6	15	9	Replace at end of life.	Replacement	3 - Future Renewal	1
Sports Are	ake 331 South Shore Road, Cowichan Lake, BC ake 332 South Shore Road,	D Services	D30 HVAC	D3040 Distribution Systems D3040 Distribution	D304001 Air Distribution, Heating and Cooling D304001 Air	Roof/ Heat Recovery Ventilator 1 Roof/ Heat Recovery	89	Bousquet HRV serving dressing rooms.	4	4	2011	5-Jul-17 5-Jul-17	MH	6	15	9	Replace at end of life. Replace at end of life.	Replacement	3 - Future Renewal 3 - Future	I
Sports Are	na Cowichan Lake, BC			Systems	Distribution, Heating and Cooling	Ventilators 2 & 3		2 was not accessible during walkthrough.											Renewal	
Cowichan Sports Are	ake 333 South Shore Road, na Cowichan Lake, BC	D Services	D30 HVAC	D3040 Distribution Systems	D304001 Air Distribution, Heating and Cooling	Roof/ AHU 1	91	Trane Heat Pump serves the children's room.	4	4	2011	5-Jul-17	MH	6	15	9	Replace at end of life.	Replacement	3 - Future Renewal	

Row

Starty: 2017 Facility Condition Assessment and Capital Plan Cowichan Lake Sports Arena, 311 South Shore Road, Lake Cowichan, BC

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	Type	Priority	Can this work be phased over	If recommended work not complete can the rate of deterioration be	failure in this system lead to a loss of use	condition adversely affect the buildings	Quantity	Unit Rate	Unit	Subtotal Repair or Replacement Cost	Consult.	Contingency	5% Tax	Total in 2017 Dollars
	F	Pr	multiple years?	expected to increase ?	of the facility ?	security of safety ?	ñ	Uni		Sul Rep Replace	Co	Cont		To tal D
-	Replacement	3 - Future Renewal	No	Yes	No	No	1	\$500	EA	\$750	0%	0%	5%	\$1,000
1	Replacement	3 - Future Renewal	No	Yes	No	No								
	Replacement	3 - Future	Yes	Yes	No	No	7	\$1,500	EA	\$17,500	0%	0%	5%	\$19,000
	Replacement	Renewal 3 - Future Renewal	No	Yes	No	No								
I														
	Replacement	3 - Future Renewal	No	Yes	No	No	3	\$2,000	EA	\$7,500	0%	0%	5%	\$8,000
	Replacement	3 - Future Renewal	No	Yes	No	No								
	Replacement	3 - Future Renewal	No	Yes	No	No	2	\$750	EA	\$2,000	0%	0%	5%	\$3,000
	Replacement	3 - Future Renewal	No	Yes	No	No								
	Replacement	3 - Future Renewal	No	Yes	No	No								
	Replacement	3 - Future Renewal	No	Yes	No	No								
	Replacement	3 - Future Renewal	No	Yes	No	No								
his ain														
	Replacement	3 - Future Renewal	No	Yes	No	No	1	\$3,500	EA	\$4,000	0%	0%	5%	\$5,000
)	Study	2b - Exceeded Service Life	No	Yes	No	No								
	Replacement	3 - Future Renewal	No	Yes	No	No								
	Replacement	3 - Future Renewal	No	Yes	No	No								
	Replacement	3 - Future Renewal	No	Yes	No	No								
	Replacement	3 - Future Renewal	No	Yes	No	No								
	Replacement	3 - Future Renewal	No	Yes	No	No								
	Replacement	3 - Future Renewal	No	Yes	No	No	1	\$20,000	EA	\$25,000	0%	0%	5%	\$27,000
	Replacement	3 - Future Renewal	No	Yes	No	No	1	\$25,000	EA	\$30,000	0%	0%	5%	\$32,000
	Replacement	3 - Future Renewal	No	Yes	No	No	2	\$15,000	EA	\$35,000	0%	0%	5%	\$37,000
	Replacement	3 - Future Renewal	No	Yes	No	No	1	\$12,000	EA	\$14,000	0%	0%	5%	\$15,000

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				ţ		CON	MPONENT							L L	FECYCLE DAT	A	RECOMMENDATION								OF	PINION OF PROB	ABLE COS	т	
Row	BLDG Name	Location / Address	Level 1 Major Group Elements	Level 2 Group Elemen	Level 3 Individual Elements	ID	Location / Type	Photo	CONDITION ASSESSMENT	Condition	Performance	Yr New or Last Major Action	Assessment Date Assessed By	Age in 2017	Typical Life Cycle or Action Interval	in EOL	Recommendation	Type	Priority	Can this work be phased over multiple years ?	If recommended work not complete can the rate of deterioration be expected to increase ?		affect the buildings	Quantity Unit Rate	Cuit	Subtotal Repair or Replacement Cost Consult.	Contingency	5% Tax	Total in 2017 Dollars
		334 South Shore Road, Cowichan Lake, BC	D Services	D30 HVAC	D3050 Terminal and Package Units	D305003 Fan Coil Units	Referee+ Curling Change Rooms/ Indoor Heating/Cooling Units (multiple)	92	Designed to be charged with R22 refrigerant. R22 will be phased out in Canada starting in 2020. While it will still be available for years after, the availability will be limited and therefore costs will increase.	4	4	2007	5-Jul-17 MH	10	15	6	If operational, replace filters regularly per manufacturers instructions. Recommend replacing the unit after 2020, when the unit needs a refigrerant refilt or when it becomes non-functional any reason, whichever comes first. Drawings from 2011 indicate that fan colls were installed to supersede these units. If they are not operational, they should be	Replacement	3 - Future Renewal	Yes	Yes	No	No	4 \$4,00	IO EA	\$20,000 09	6 0%	5%	\$21,000
		335 South Shore Road,	D Services	D30 HVAC	D3040 Distribution		Roof/ AHU 2	93	Trane Heat Pump serves the children's room.	4	4	2011	5-Jul-17 MH	6	15	9	decommissioned and removed. Replace at end of life.	Replacement	3 - Future	No	Yes	No	No	1 \$7,50	10 EA	\$10,000 09	6 0%	5%	\$11,000
78 Co		Cowichan Lake, BC 336 South Shore Road, Cowichan Lake, BC	D Services	D30 HVAC	D3040 Distribution	Distribution, Heating and Cooling D304001 Air Distribution, Heating	Roof/ AHU 3	94	Bousquet air handler serves warm room viewing area.	4	4	2011	5-Jul-17 MH	6	15	9	Replace at end of life.	Replacement	Renewal 3 - Future Renewal	No	Yes	No	No	1 \$15,0	00 EA	\$17,500 09	6 0%	5%	\$19,000
79 Co	owichan Lake	337 South Shore Road, Cowichan Lake, BC	D Services	D30 HVAC	D3040 Distribution Systems	Distribution, Heating and Cooling D304008 Air Handling Units	HRV 4		Clean Air HRV serves the main corridor/culling change room area. Unit not accessible during walkthrough.		4	2011	5-Jul-17 MH	6	15	9	Replace at end of life.	Replacement	3 - Future Renewal	No	Yes	No	No	1 \$15,0	00 EA	\$17,500 09	6 0%	5%	\$19,000
80 Co	owichan Lake	338 South Shore Road, Cowichan Lake, BC	D Services	D30 HVAC	D3050 Terminal and	D305003 Fan Coil Units	Main Lobby/ Fan Coil 2		Fan coil serving the main lobby. Unit not accessible during walkthrough.		4	2011	5-Jul-17 MH	6	20	14	Replace at end of life.	Replacement		No	Yes	No	No						
24	JUILS ATELIA	COWICIAIT Lake, BC			Package Units												This item falls outside the ten year plan, costs associated with this item have not been carried into the cash flow tables.		Reliewal										
		339 South Shore Road, Cowichan Lake, BC	D Services	D30 HVAC	D3040 Distribution Systems	D304001 Air Distribution, Heating and Cooling	Curling Lounge Cleaning/ MUA-1	×	Make up air fan coil serves the main kitchen. Unit not accessible during waikthrough.		4	2011	5-Jul-17 MH	6	20	14	Replace at end of life. This item falls outside the ten year plan, costs associated with this item have not been carried into the cash flow tables.	Replacement	3 - Future Renewal	No	Yes	No	No						
		340 South Shore Road, Cowichan Lake, BC	D Services	D30 HVAC	D3040 Distribution Systems	D304001 Air Distribution, Heating	Cash 105 & Rooftop/ AHU 4	95	Split system heat pump that serves the main office areas. Indoor unit located in office area and was not reviewed; condensing unit located on the rooftop.	4	4	2011	5-Jul-17 MH	6	20	14	Replace at end of life.	Replacement	3 - Future Renewal	No	Yes	No	No						
						and Cooling											This item falls outside the ten year plan, costs associated with this item have not been carried into the cash flow tables.												
																	Suggest that a commissioning authority review this item and its distribution system. It could be the source of occupant comfort issues reported from front office staff.												
		341 South Shore Road, Cowichan Lake, BC	D Services	D20 Plumbing	D2020 Domestic Water Distribution	D202003 Domestic Water Equipment	Curling Lounge/ Pony Wate Tank		Infrequently utilized water heater for curling lounge/bar area. Appears to be in good condition and fully functional but has exceeded its useful service life.	3	4	2000	5-Jul-17 MH	17	15	1	Recommend planning to replace at first indication of trouble. The cost of this work is below the project threshold and has not been	Replacement	2b - Exceeded Service Life	No	Yes	No	No						
		342 South Shore Road,	D Services	D30 HVAC	D3040 Distribution	D304004 Change Over		x	8 similar hydronic re-heat coils serving various zones. Not accessible during	4	4	2011	5-Jul-17 MH	6	20	14	included in the financial tables.	Replacement		Yes	Yes	No	No						<u> </u>
		Cowichan Lake, BC			Systems	Distribution Systems			walkthrough.								This item falls outside the ten year plan, costs associated with this item have not been carried into the cash flow tables.		Renewal										
		343 South Shore Road, Cowichan Lake, BC	D Services	D20 Plumbing	D2020 Domestic Water Distribution	D202003 Domestic Water Equipment	Curling Kitchen/ Hot Water Tank	97	284L John Wood hot water tank serving the food service areas.	4	4	2012	5-Jul-17 MH	5	15	10	Replace at end of life.	Replacement	3 - Future Renewal	No	Yes	No	No	1 \$1,80	IO EA	\$2,500 09	6 0%	5%	\$3,000
		344 South Shore Road, Cowichan Lake, BC	E Equipment & Furnishings	E10 Equipment	E1090 Other Equipment	E109002 Food Service Equipment	Main Kitchen/ Capture Hood, Range, Deep Fryer, etc.	98/99	Food service equipment in the main kitchen. Age estimated	4	4	2011	5-Jul-17 MH	6	25	19	Replace at end of life. This item falls outside the ten year plan, costs associated with this item have not been carried into the cash flow tables.	Replacement	3 - Future Renewal	Yes	Yes	No	No						
		345 South Shore Road, Cowichan Lake, BC	D Services	D30 HVAC	D3040 Distribution Systems	D304007 Exhaust Systems	Roof/ Exhaust Fans (various)	100/101	Older exhaust fans were not accessible. Age unknown and estimated.	3	4	2005	5-Jul-17 MH	12	20	8	Plan to budget for replacement at any time. Extend lifespan of fans by replacing belts and bearings as needed.	Replacement	3 - Future Renewal	Yes	Yes	No	No	5 \$1,50	IO EA	\$10,000 09	6 0%	5%	\$11,000
	owichan Lake ports Arena	346 South Shore Road, Cowichan Lake, BC	G Building Site work	G30 Site Civil and Mechanical Utilitie		G305006 On-site Coolin Towers	ng Rear Laneway Rooftop/ Condenser	102	Condenser for the refrigeration loop.	4	4	2006	5-Jul-17 MH	11	20	9	Clean regularly to optimize efficiency. Replace at end of life.	Replacement	3 - Future Renewal	No	Yes	Yes	No	1 \$50,0	00 EA	\$65,000 09	6 0%	5%	\$69,000
		347 South Shore Road, Cowichan Lake, BC	D Services	D30 HVAC	D3030 Cooling Generating Systems		Compressor Room/ Chiller	103	Alfa Laval Chiller serving the refrigeration loop.	5	5	2017	5-Jul-17 MH	0	23	24	Replace at end of life. This item falls outside the ten year plan, costs associated with this item have not been carried into the cash flow tables.	Replacement	3 - Future Renewal	No	Yes	No	No						
		348 South Shore Road, Cowichan Lake, BC	D Services	D30 HVAC	D3030 Cooling Generating Systems	D303099 Other Cooling Generating Systems	Compressor Room/ Compressors	104	Compressors serving the refrigeration loop.	4	4	2012	5-Jul-17 MH	5	15	10	Replace at end of life.	Replacement	3 - Future Renewal	No	Yes	Yes	No	2 \$40,0	00 EA	\$100,000 09	6 0%	5%	\$105,000
		349 South Shore Road, Cowichan Lake, BC	D Services	D30 HVAC	D3030 Cooling Generating Systems		Compressor Room/ Heat Exchanger	105	Heat recovery condenser/ heat exchanger. Age unknown and estimated.	4	4	2005	5-Jul-17 MH	12	24	12	Replace at end of life. This item falls outside the ten year plan, costs associated with this item have not been carried into the cash flow tables.	Replacement	3 - Future Renewal	No	Yes	No	No						
		350 South Shore Road, Cowichan Lake, BC	D Services	D30 HVAC	D3020 Heat Generating Systems	D302002 Hot Water Boilers	Boiler Room/ Boiler	106	Navien boiler serving hot water tanks for Zamboni usage.	5	5	2016	5-Jul-17 MH	1	25	24	Replace at end of life. This item falls outside the ten year plan, costs associated with this item	Replacement	3 - Future Renewal	No	Yes	No	No						
			D Services	D20 Plumbing	D2020 Domestic	D202003 Domestic	Boiler Room/ Hot Water		Five newer hot water storage tanks, and one extra-large decommissioned storage	4	4	2016	5-Jul-17 MH	1	25	24	have not been carried into the cash flow tables. Replace at end of life.	Replacement		Yes	Yes	No	No						<u> </u>
St	oorts Arena	Cowichan Lake, BC			Water Distribution	Water Equipment	Storage Tanks (6)		tank. Age unknown and estimated.								Remove decommissioned tanks to facilitate easier access for repairs and to allow for future equipment. This item falls outside the ten year plan, costs associated with this item		Renewal										
	owichan Lake	352 South Shore Road, Cowichan Lake, BC	D Services	D20 Plumbing	D2020 Domestic Water Distribution	D202003 Domestic Water Equipment	Boiler Room/ Expansion Tank	108	Expansion tank serving the hot water system. Age unknown and estimated.	4	4	2012	5-Jul-17 MH	5	15	10	have not been carried into the cash flow tables. Replace at end of life.	Replacement	3 - Future Renewal	No	Yes	No	No	1 \$3,00	10 EA	\$3,500 09	6 0%	5%	\$4,000
95 Co	owichan Lake	353 South Shore Road,	D Services	D20 Plumbing	D2020 Domestic	D202003 Domestic	Boiler Room/ Flat-Plate	x	Heat exchanger serving the hot water system. Age unknown and estimated.	5	5	2016	5-Jul-17 MH	1	24	23	Replace at end of life.	Replacement	3 - Future	No	Yes	No	No						<u> </u>
Sp	oorts Arena	Cowichan Lake, BC			Water Distribution	Water Equipment	Heat Exchanger										This item falls outside the ten year plan, costs associated with this item have not been carried into the cash flow tables.		Renewal										
		354 South Shore Road, Cowichan Lake, BC	G Building Sitework	G30 Site Civil and Mechanical Utilitie		G301099 Other Water Supply	Compressor Room/ Water Storage Tanks	152	Water storage tanks for the waste water loop system.	4	4	2014	5-Jul-17 MH	3	15	12	Replace at end of life. This item falls outside the ten year plan, costs associated with this item have not been carried into the cash flow tables.	Replacement	3 - Future Renewal	No	Yes	No	No						
		355 South Shore Road, Cowichan Lake, BC	G Building Sitework	G30 Site Civil and Mechanical Utilitie		G301006 Non-potable Water Distribution	Compressor Room/ Waste Water Loop Pumps	153	3 water circulation pumps for the waste water loop system.	4	4	2014	5-Jul-17 MH	3	15	12	Replace at end of life. This item falls outside the ten year plan, costs associated with this item have not been carried into the cash flow tables.	Replacement	3 - Future Renewal	No	Yes	No	No						
		356 South Shore Road, Cowichan Lake, BC	G Building Sitework	G30 Site Civil and Mechanical Utilitie		G304006 Pumping Stations	Compressor Room/ Chiller Pumps	154	Two pumps that serve the chiller loop. One appears to be recently replaced while the other is dated. Age unknown and estimated.	4	4	2006	5-Jul-17 MH	11	15	4	Replace the older at end of life.	Replacement	3 - Future Renewal	No	Yes	No	No						

Starty: 2017 Facility Condition Assessment and Capital Plan Cowichan Lake Sports Arena, 311 South Shore Road, Lake Cowichan, BC

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	S	đ	ents		CO	MPONENT		CONDITION ASSESSMENT					u	FECYCLE D	ATA	RECOMMENDATION			Can this	If recommended		Can the current	t	0	PINION OF P	ROBABLE	COST	
BLDG Name	Location / Addre	Level 1 Major Gro Elements	Level 2 Group Elem	Level 3 Individua Elements	D	Location / Type	Photo	Description & History	Condition	Performance	Yr New or Last Major Action	Assessment Date Assessed By	Age in 2017	Typical Life Cycle or Action Interval	Est. Time Remaining to EOL or Major Action	Recommendation	Type	Priority	work be phased over multiple years ?	work not complete can the rate of deterioration be expected to increase ?	failure in this system lead to a loss of use of the facility ?	adversely affect the	Quantity	Unit Rate Unit	Subtotal Repair or Replacement Cost	Consult.	59 Ta	Total in 2017
	357 South Shore Road, Cowichan Lake, BC	D Services	D30 HVAC	D3040 Distribution Systems	D304001 Air Distribution, Heating and Cooling	Rear Laneway/ Munters Dehumidifier	155 /	Vunters dehumidification system serving the rink areas.	5	5	2016	5-Jul-17 MH	1	15	14	Replace at end of life. This item falls outside the ten year plan, costs associated with this item have not been carried into the cash flow tables.	Replacement	3 - Future Renewal	No	Yes	Yes	No						
	358 South Shore Road, Cowichan Lake, BC	D Services	D30 HVAC	Systems	D304001 Air Distribution, Heating and Cooling	Zamboni Room/ Heat Pump	ip 156 H	Heat pump serving the boiler room for water preheating. Age unknown and stimated.	4	4	2012	5-Jul-17 MH	5	15	10	Replace at end of life.	Replacement	3 - Future Renewal	No	Yes	No	No	1	\$5,000 EA	\$5,000	0% 0	1% 55	% \$6,00
Sports Arena	359 South Shore Road, Cowichan Lake, BC		D30 HVAC	D3030 Cooling Generating Systems	D303002 Direct Expansion Systems	Curling Kitchen Freezer/ Refrigeration Unit	e	KeepRite refrigeration unit for cooling of food storage area. Age unknown and stimated.	4	4		5-Jul-17 MH		15	3	Replace at end of life.	Replacement	3 - Future Renewal	No	No	No	No	1	\$2,500 EA	\$3,000	0% 0	1% 55	% \$4,00
Sports Arena	360 South Shore Road, Cowichan Lake, BC		D20 Plumbing	Systems	Plumbing Systems	I Rink(s)/Sub-Slab Brine Loop(s)	6	sub-slab brine loop for maintaining ice temperature. Condition sub-slab was not evaluated. Age unknown and estimated.	4	4		5-Jul-17 MH		30	13	Replace at end of life. This item falls outside the ten year plan, costs associated with this item have not been carried into the cash flow tables.	Replacement	Renewal	No	Yes	Yes	No						
Sports Arena	371 South Shore Road, Cowichan Lake, BC		D50 Electrical	D5010 Electrical Service and Distribution	Centers	2 Motor Control Centre		MCC-4 for MUA-1 and AHU-2 are in good condition.	4	5		5-Jul-17 MH		30	24	Replace at end of life. This item falls outside the ten year plan, costs associated with this item have not been carried into the cash flow tables.	Replacement	3 - Future Renewal	No	Yes	No	No						
	372 South Shore Road, Cowichan Lake, BC	. D Services	D30 HVAC	D3060 Control and Instrumentation	D306001 HVAC Contro	pls Elec. 256/ Reliable Controls Panels	c t	Panels and controls in good condition; arranged neatly. Staff noted that commissioning process was rushed and could use re-commissioning, particular, the multi-purpose (divisible) room and lobby areas were noted to have occupant comfort issues.	4	4	2011	5-Jul-17 MH	6	20	14	Replace at end of life. Recommend re-commissioning building HVAC systems through Reliable Controls. This would mitigate occupant comfort issues and likely save energy as a side benefit. The cost of a control system replacement falls outside the ten year plan, costs associated with this item have not been carried into the cash flow	Study	Not Applicable	No	Yes	Yes	No	1	\$10,000 EA	\$10,000	0% 0	1% 51	% \$11,0
	373 South Shore Road, Cowichan Lake, BC	. D Services	D50 Electrical	D5010 Electrical Service and Distribution	D501005 Panels	Electrical Room/ Decommissioned Panels	112 6	Panels marked with an "X" are decommissioned.		1	Not Applicable	5-Jul-17 MH		Not Applicable	Not Applicable	Luss associated with this term have no been carried into the cash now tables. Decommissioned equipment should be removed to facilitate usage and to make room for other future equipment.	Repair Allowance	2b - Exceeded Service Life	Yes	No	No	No						
	374 South Shore Road, Cowichan Lake, BC	D Services	D50 Electrical	D5010 Electrical Service and	D501005 Panels	Curling Electrical Room/ Panels & Switches (various)		Did, likely original breaker panels and switches	3	2	1971	5-Jul-17 MH	46	30	1	Recommend replacing with new breaker panels and switches as the current equipment has exceeded its normal service life.	Replacement	2b - Exceeded Service Life	Yes	Yes	No	No	20	\$1,500 EA	\$30,000	0% 0	1% 55	% \$32,
	375 South Shore Road, Cowichan Lake, BC	D Services	D50 Electrical	Distribution D5020 Lighting and Branch Wiring	D502099 Other Lightin and Branch Wiring	ng Curling Kitchen/ Undersink Wiring	× 119 \	Wiring uninsulated and unattached to a surface. Age unknown and is estimated.	3	3	1971	5-Jul-17 MH	46	30	1	Recommend immediately verifying with electrical contractor whether the wiring (a) is in acceptable condition and (b) the installation meets current code.	Study	2b - Exceeded Service Life	No	Yes	Yes	Yes						
	376 South Shore Road, Cowichan Lake, BC	D Services	D50 Electrical	D5020 Lighting and Branch Wiring	D502002 Lighting Equipment	Curling Change Room/ Shower Lighting		Verify whether this fixture meets electrical code for wet/damp areas. Age unknown and is estimated.	3	2	1990	5-Jul-17 MH	27	30	1	Recommend retrofitting to a fixture and bulb designated for wet/damp applications, in a water tight enclosure.	Study	2b - Exceeded Service Life	No	Yes	Yes	Yes						
	377 South Shore Road, Cowichan Lake, BC	D Services	D50 Electrical	D5010 Electrical Service and Distribution	D501005 Panels	Main Kitchen/ Breaker Panel	121 F	Panel is obstructed. Age unknown and estimated.	4	3	2011	5-Jul-17 MH	6	30	24	Panels need to be unobstructed for quick access in any situation. Store items elsewhere.	Repair Allowance	2b - Exceeded Service Life	No	No	No	Yes						
	378 South Shore Road, Cowichan Lake, BC	D Services	D50 Electrical	D5030 Communication and Security	n D503002 Telecommunications Systems	Rooftop/ Spotwave Cellular Signal Booster	ır 123 E	300sts signal for cellular devices. Age unknown and estimated.	4	4	2011	5-Jul-17 MH	6	15	9	Replace at end of life.	Replacement	2b - Exceeded Service Life	No	Yes	No	No	1	\$1,500 EA	\$2,000	0% 0	1% 55	% \$3,0
	379 South Shore Road, Cowichan Lake, BC	D Services	D30 HVAC	D3060 Control and Instrumentation	D306002 Electronic Controls	Various/Occupancy Sensors	rs 124 0	Occupancy sensors controlling lighting fixtures. Age unknown and estimated.	4	4	2008	5-Jul-17 MH	9	15	6	Replace at end of life.	Replacement	3 - Future Renewal	Yes	No	No	No	20	\$100 EA	\$4,000	0% 0	% 55	% \$5,0
	380 South Shore Road, Cowichan Lake, BC	D Services	D50 Electrical	D5010 Electrical Service and Distribution	D501007 Motor Contro Centers	ol Compressor Room/ Motor Control Centre		MCC-1 for brine pumps and compressors appears to be in good condition. Age unknown and estimated.	4	4	2002	5-Jul-17 MH	15	30	15	Replace at end of life. This item falls outside the ten year plan, costs associated with this item have not been carried into the cash flow tables.	Replacement	3 - Future Renewal	No	Yes	Yes	No						
	381 South Shore Road, Cowichan Lake, BC	D Services	D50 Electrical	D5030 Communication and Security	n D503002 Telecommunications Systems	Elec. 256/ Telecommunications Equipment	131/132	nternet and cable data service equipment.	4	4	2011	5-Jul-17 MH	6	10	4	Replace at end of life.	Replacement	3 - Future Renewal	No	Yes	No	No	1	\$4,000 EA	\$4,000	0% 0'	1% 55	6 \$5,0
	382 South Shore Road, Cowichan Lake, BC	D Services	D30 HVAC		D306002 Electronic Controls	Elec 256./ Lighting Controls	ls 133 L	ighting control panel.	4	4	2011	5-Jul-17 MH	6	30	26	Replace at end of life. This item falls outside the ten year plan, costs associated with this item have not been carried into the cash flow tables.	Replacement	3 - Future Renewal	No	Yes	No	No						
	383 South Shore Road, Cowichan Lake, BC	D Services	D50 Electrical	D5010 Electrical Service and Distribution	D501003 Main Switchboards	Elec 256./ Generator Transfer Switch	134 0	Senerator transfer switch panel.	4	4	2011	5-Jul-17 MH	6	30	26	Replace at end of life. This item falls outside the ten year plan, costs associated with this item have not been carried into the cash flow tables.	Replacement	3 - Future Renewal	No	Yes	No	No						
	384 South Shore Road, Cowichan Lake, BC	F Special Construction and Demolition	F10 Special Construction	F1050 Special Controls and Instrumentation	F105002 Building Automation Systems	Compressor Room/ DDC System	137/138 [Digital control system and hub controlling building HVAC systems.	4	4	2011	5-Jul-17 MH	6	15	9	Replace at end of life.	Replacement	3 - Future Renewal	No	Yes	Yes	No	1	\$40,000 EA	\$50,000	0% 0	1% 55	s \$53,
	385 South Shore Road, Cowichan Lake, BC	. D Services	D50 Electrical	D5010 Electrical Service and Distribution	D501099 Other Service and Distribution	e Compressor Room/ Junction Boxes (Various)		Electrical junction boxes are missing cover plates. This is likely due to maintenance being performed on the system.	3	2	N/A	5-Jul-17 MH	N/A	N/A	N/A	Junction boxes should have cover plates installed for safety. Cost is negligible and has not been carried forward in cost tables.	Repair Allowance	1 – Immediate	No	Yes	No	Yes						
	386 South Shore Road, Cowichan Lake, BC	E Equipment & Furnishings	E10 Equipment		E102009 Audio-Visual Equipment	Various/ Sound System Components	141 /	Advanced sound system is controllable from multiple locations in the building.	4	4	2013	5-Jul-17 MH	4	15	11	Replace at end of life. This item fails outside the ten year plan, costs associated with this item have not been carried into the cash flow tables.	Replacement	3 - Future Renewal	No	Yes	No	No						
Sports Arena	387 South Shore Road, Cowichan Lake, BC		D50 Electrical		Communications and Alarm Systems	Rink side/ CO&NO sensors		Toxic gas sensors situated around the rink areas. Total number estimated.	4	4		5-Jul-17 MH				Plan to replace immediately as gas sensors have a finite useful life.		2b - Exceeded Service Life	Yes	Yes	Yes	Yes	4	\$1,500 EA	\$8,000	0% 0	1% 55	6 \$9,i
	388 South Shore Road, Cowichan Lake, BC	D Services	D50 Electrical	D5030 Communication	1 D503008 Security Systems	Various/ Security Camera System	x S	security camera system located at various locations on the interior and exterior of the building.	4	4	2016	5-Jul-17 MH	1	15	14	Replace at end of life. This item falls outside the ten year plan, costs associated with this item have not been carried into the cash flow tables.	Replacement	3 - Future Renewal	No	Yes	No	No						
	389 South Shore Road, Cowichan Lake, BC	G Building Sitework	G40 Site Electrica Utilities	G4010 Electrical Distribution	G401099 Other Electric Transmission and Distribution	C Parking Area/ Electric Vehicle Charging Station	×	Ferminal for charging electric vehicles.	4	4	2013	5-Jul-17 MH	4	15	11	Replace at end of life. This item falls outside the ten year plan, costs associated with this item have not been carried into the cash flow tables.	Replacement	3 - Future Renewal	No	Yes	No	No						

This report should be reviewed in conjunction with the Objectives, Terms of Reference, Limitations, and Methodology included with the full report. cjw_CVRD BCA - 07 - Cowichan Lake Sports Arena_FINAL, 11/17/2017

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Row	BLDG Name	Location / Addres	Level 1 Major Grou Elements	Level 2 Group Eleme	Level 3 Individua Elements	ID	Location / Type	Photo	Description & History	Condition	Performance	Yr New or Last Major Action	Assessment Date	Assessed By	Age in 2017	Typical Life Cycle or Action Interval	Est. Time Remaining to EOL or Major Action	Recommendation	Type	ority	Can this work be phased over multiple years ?	If recommended work not complete can the rate of deterioration be expected to increase ?	failure in this system lead to a loss of use of the facility ?	condition adversely affect the buildings security of safety ?	Quantity	Unit Rate Unit	Subtotal Repair or Replacement Cost	Consult. Contingency	5% Tax	Total in 2017 Dollars
		390 South Shore Road, Cowichan Lake, BC	D Services	D50 Electrical	D5020 Lighting and Branch Wiring	D502002 Lighting Equipment	General/ Interior and Exterior Lighting	×	Recent lighting upgrades included controls in 2008, parking lot in 2012, and interior in 2017.	4	4	N/A	5-Jul-17 N	ин і	N/A	N/A		Replace failed fixtures or bulbs at end of life. Budget approximately \$50k over the next 10 years to upgrade all lighting to LED where possible.	Upgrade	3 - Future Renewal	Yes	Yes	No	No	1 \$	50,000 E/	\$50,000	0% 0%	0%	\$50,000
		391 South Shore Road, Cowichan Lake, BC	D Services	D50 Electrical	D5010 Electrical Service and Distribution	D501005 Panels	Zamboni Room/ Panels and Switches	150	Old, likely original breaker panels and switches	3	2	1971	5-Jul-17 N	ин	46	30		Recommend replacing with new breaker panels and switches as the current equipment has exceeded its normal service life.	Replacement	2b - Exceeded Service Life	Yes	Yes	No	No	10 5	\$1,500 E/	\$15,000	0% 0%	5%	\$16,000
		399 South Shore Road, Cowichan Lake, BC	D Services	D20 Plumbing	D2010 Plumbing Fixtures	D201004 Sinks	Mtg. Room 217/ Sink Plumbing	125	Running the faucet while holding the fixture revealed an intermittent vibration resembling a water hammer.	4	4	2011	5-Jul-17 N	ин	6	20		Possible water supply design issue or drain blockage. Investigate with plumbing professional. This item falls outside the ten year plan, costs associated with this item have not been carried into the cash flow tables.	Study	Not Applicable	No	Yes	No	No						
		400 South Shore Road, Cowichan Lake, BC	D Services	D20 Plumbing	D2010 Plumbing Fixtures	D201001 Water closet D201002 Urinals and D201004 Sinks	ts,, Various/Plumbing Fixtures	142-14	9 Toilets, urinals, showers and sinks located throughout the building.	4	4	2011	5-Jul-17 N	ИН	N/A	N/A		Recommend setting aside repair contingency budget for failed fixtures. They all appeared to be in functional condition during walkthrough.	Repair Allowance	2 - Restore Functionality	Yes	Yes	No	No	10 5	\$1,500 E/	\$15,000	0% 0%	5%	\$16,000
		413 South Shore Road, Cowichan Lake, BC	D Services	D40 Fire Protectio	DA090 Other Fire Protection Systems	D409005 Hood and Du Fire Protection	uct Main Kitchen/ Fire Suppression System	126	Appears to be new but age is unknown; age is estimated.	4	4	2012	5-Jul-17 N	ин	5	15		Test system on a regular basis per manufacturer's recommendations. Replace at end of life.	Replacement	3 - Future Renewal	No	No	Yes	No	1 :	\$2,500 E/	\$2,500	0% 0%	5%	\$3,000
		414 South Shore Road, Cowichan Lake, BC	D Services	D40 Fire Protectio	D4010 Sprinklers	D401002 Sprinkler Water Supply Equipme and Piping	Sprinkler Rm 135/ Main Fire ent Safety Valves & System	127-13	0 Appears to be in good condition.	4	4	2011	5-Jul-17 N	ин	6	25		Inspect/test system regularly. I Replace at end of life. This item fails outside the ten year plan, costs associated with this item have not been carried into the cash flow tables.	Replacement	3 - Future Renewal	No	Yes	Yes	No						
		415 South Shore Road, Cowichan Lake, BC	D Services	D50 Electrical	D5030 Communicatio and Security	n D503001 Fire Alarm Systems	Curling Rink Electrical Rm./ Fire Sensor Monitor Panel	141	Alert system for fire system. Age unknown and estimated	4	4	2011	5-Jul-17 N	ИН	6	20		Inspect/test system regularly. I Replace at end of life. This item fails outside the ten year plan, costs associated with this item have not been carried into the cash flow tables.	Replacement	3 - Future Renewal	No	Yes	Yes	No						
		311 South Shore Road, Cowichan Lake, BC	P Professional Services	P Professional Services	P Professional Service	s P100001 Seismic Screening	Seismic Screening	x	Complete a seismic screening of the building to assess seismic vulnerability.			2011	5-Jul-17 N	ИН	6	10		For conducting a selsmic screening of the building. The screening will be done according to the "Manual for Screening of Buildings for Seismic Investigation", published by the National Research Council of Canada (1992).	Study	Not Applicable	No	No	No	No	1 ;	\$6,000 LS	\$6,000	0% 0%	5%	\$7,000
		311 South Shore Road, Cowichan Lake, BC	P Professional Services	P Professional Services	P Professional Service	s P100001 Commissioni Services	ing Mechanical and Electrical Systems	×	Facility Staff have indicated that the mechanical and electrical systems are out of balance, as they heating and cooling, specifically, is not suitable for the occupants of the building.			2011	5-Jul-17 N	ин	6	10	1	Re-commission the Mechanical and Electrical Systems.	Study	2b - Exceeded Service Life	No	No	No	No	1 \$	15,000 LS	\$15,000	0% 0%	5%	\$16,000

2017 Facility Condition Assessment and Capital Plan

		CON	IPONENT	CONDITION ASSESSMENT	RECOMMENDATION				10-YEAR C	APITAL PL	AN							
Row	BLDG Name	IJ	Location / Type	Description & History	Recommendation	Type	Priority	Total in 2017 Dollars	2017 \$125,600	2018 \$68,600	2019 \$10,600	2020 \$792,600	2021 \$45,600	2022 \$45,600	2023 \$26,600	2024 \$61,600	2025 \$308,600	2026 \$154,600
1	Cowichan Lake Sports Arena	A10 Foundations	Basement Concrete Foundation/ Original	The foundations are cast-in-place concrete strip footings and foundation walls, as visible from the grade and basement level. No evidence of major settlement or heaving was reported or observed. Some cracking was noted at door openings where existing form wood was left in place.	The foundations are expected to remain serviceable for the life of the building. The damage noted corresponds to the service rooms on the rear of the original building. Repairs should be undertaken in conjunction with exterior door replacement.	Not Applicable	Not Applicable											
2	Cowichan Lake Sports Arena	A10 Foundations	Basement Concrete Foundation/ Addition	The foundations are cast-in-place concrete strip footings and foundation walls, as visible from the grade and basement level. No evidence of major settlement or heaving was reported or observed.	The foundations are expected to remain serviceable for the life of the building.	Not Applicable	Not Applicable											
3	Cowichan Lake Sports Arena	A1030 Slab on Grade	Rinks/ Slab on Grade	The floor is concrete slab-on-grade. The skating rink was installing in 1999 and the curling rink was installed in 2011. No evidence of major settlement or heaving was reported or observed. The average age of rinks has been used in this capital plan.	The concrete slab-on-grade is expected to remain serviceable for the life of the building, with isolated repairs, if needed.	Not Applicable	Not Applicable											
4	Cowichan Lake Sports Arena	A1030 Slab on Grade	Service Rooms/ Slab on Grade	The floor is concrete slab-on-grade. The slabs date to original construction. The Zamboni parking slab is scaling.	The concrete slab-on-grade is expected to remain serviceable for the life of the building, with isolated repairs at the Zamboni parking area.	Repair Allowance	3 - Future Renewal	\$13,000				\$13,000						
5	Cowichan Lake Sports Arena	A103006 Foundation Drainage	Original Building/ Foundation Walls	Perimeter drain pipes are assumed to be installed at the footing level. No issues related to foundation drainage were noted by facility staff. No information was available regarding the scoping of the system to review for continuity.	The foundation drainage is expected to last the life of the building. No major capital expenditures are expected to be required. This should be updated with the results of the foundation drainage review recommended in A103006 Foundation Drainage (above).	Contingency	3 - Future Renewal											
6	Cowichan Lake Sports Arena	A103006 Foundation Drainage	Foundation Walls/ Addition	Perimeter drain pipes are assumed to be installed at the footing level. No issues related to foundation drainage were noted by facility staff. No information was available regarding the scoping of the system to review for continuity.	The foundation drainage is expected to last the life of the building. No major capital expenditures are expected to be required. This should be updated with the results of the foundation drainage review recommended in A103006 Foundation Drainage (above).	Contingency	3 - Future Renewal											
7	Cowichan Lake Sports Arena	A103006 Foundation Drainage	Foundation Walls/ General	Perimeter drain pipes are assumed to be installed at the footing level. No issues related to foundation drainage were noted by facility staff. No information was available regarding the scoping of the system to review for continuity.	Periodic camera inspection and isolated repairs as required.	Study	Not Applicable	\$6,000		\$6,000								
8	Cowichan Lake Sports Arena	B10 Superstructure	General/ Original	The superstructure is comprised of concrete masonry unit (CMU) walls at the building perimeter with steel structure supporting the ice rink roof. The service room roofs are wood framing supported on CMU walls. No settlement or other evidence of structural distress was observed or reported. There was no evidence or reports of long-term leakage that would allude to concealed structural damage. Staining observed on the underside of the roof sheathing (plywood) was a result of the previous roof leaking. No recent leakage was reported.	Interior protected structural components are expected to last the life of the building. No major capital expenditures are expected to be required.	Replacement	3 - Future Renewal											
9	Cowichan Lake Sports Arena	B10 Superstructure	General/ Addition	The superstructure is comprised of elevated concrete floor slabs, with light gauge steel framed walls. Roof framing is a steel with steel joists and roof decks. No settlement or other evidence of structural distress was observed or reported. There was no evidence or reports of long-term leakage that would allude to concealed structural damage.	Interior protected structural components are expected to last the life of the building. No major capital expenditures are expected to be required.	Replacement	3 - Future Renewal											
10	Cowichan Lake Sports Arena	B101004 Balcony Construction	Egress Stairs/ South Elevation	The egress stairs on the south elevation are of steel pan with concrete infill treads, with painted steel railings. The steel is corroded.	The stairs, with proper maintenance should remain serviceable for several decades; however, the steel appears to be corroding at an accelerated rate Grind corrosion, prime with zinc-rich organic paint and re-coat with finish paint.	Repair Allowance	2 - Restore Functionality	\$6,000		\$6,000								

2017 Facility Condition Assessment and Capital Plan

Cowichan Lake Sports Arena, 311 South Shore Road, Lake Cowichan, BC

		СОМ	IPONENT	CONDITION ASSESSMENT	RECOMMENDATION				10-YEAR	CAPITAL P	LAN							
Row	BLDG Name	ID	on / Type	Description & History	Recommendation	Type	iority	in 2017 Dollars	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026
	۵		Locati				ł	Total in 2	\$125,600	\$68,600	\$10,600	\$792,600	\$45,600	\$45,600	\$26,600	\$61,600	\$308,600	\$154,60
11	Cowichan Lake Sports Arena	B201007 Balcony Walls and Railings	Patio/ Wood Railings & Framing	A concrete patio with painted wood railings and a canopy roof is accessed from the curling lounge. Railings do not appear to meet BC Buildig Code 3.3.1.8. Age of wood framing / railings approximated.	Bring railings up to code if the distance between the upper walkway is more than 600 mm in height from the patio surface below (to be verified by the CVRD).	Replacement	1 – Immediate	\$3,000	\$3,000									
12		B201007 Balcony Walls and Railings	Roof	Cedar shake roof protects the walkway / top tier of the patio. Light is visible between the shakes, indicating that significant roof leakage occurs during storms. Age of wood framing / railings approximated.	Replace shake canopy roof.	Replacement	2 - Restore Functionality	\$9,000	\$9,000									
13	Cowichan Lake Sports Arena	B201099 Other Exterior Walls	North Elevation/ Enclosure	A predominately painted plywood enclosure on the north elevation of the building, partially protected with a pitched metal roof. Painted vertical wood siding clads the enclosure off the lounge's patio. Faded paint on the interior of the enclosure and corroded metal roofing was observed. The age of the enclosure has been approximated.	Paint wood elements to extend the service life. The metal roof will likely outlast the wood framing. Replacement of the wood elements falls outside the ten year plan, costs associated with this item have not been carried into the cash flow tables. The cost to repaint is expected to arrive at less than the threshold value of the report and has not been carried into the cash flow tables.	Replacement	2 - Restore Functionality											
14	Cowichan Lake Sports Arena	B201001 Exterior Enclosure	Exerior Walls/ CMU Walls - Original	The exterior of the arena is partially clad with painted concrete masonry unit (CMU) walls and a some wood trim. The paint coating is peeling in some locations. Other locations exhibit organic build-up. The units were in good condition, where reviewed.	Remove organic growth, prepare walls and apply new, breathable paint coating. If any bubbling or premature paint failure occurs, consider installing a continuous air barrier on the interior face of the CMU.	Repair Allowance	2 - Restore Functionality	\$8,000		\$8,000								
15	Cowichan Lake Sports Arena	B201001 Exterior Enclosure	Exterior Walls/ CMU Walls - Addition	The exterior of the addition is partially clad with split-face concrete masonry unit (CMU) walls. Efflorescence is prevalent.	Clean exterior of split-face CMU and monitor. If precipitation / heavy wetting is causing the efflorescence, either repeat cleaning or install overhang protection (at the discretion of the CVRD). If efflorescence re- occurs under minimal wetter, consider reviewing the integrity of the wall assembly's air barrier. In general, efflorescence is usually considered an aesthetic nuisance and isn't likely to lead to deterioration. This item falls outside the ten year plan, costs associated with this item have not been carried into the cash flow tables.	Repair Allowance	2 - Restore Functionality											
16	Cowichan Lake Sports Arena	B201001 Exterior Enclosure	Exterior Walls/ Metal Cladding - Original	Prefinished metal cladding on the exterior walls on the original portion of the building. The metal has been repainted and the coating is failing. Fastener back-out was observed and corrosion of the panels was noted where in contact with grade.	Replace metal cladding at end of service life. The cost includes installing code-compliant rain screen cavity and increased insulation outboard of the wall.	Replacement	3 - Future Renewal	\$718,000				\$718,000						
17	Cowichan Lake Sports Arena	B201001 Exterior Enclosure	Exterior Walls/ Metal Cladding - Addition	Prefinished standing seam metal cladding on the exterior walls / interior of parapets on the addition.	Replace metal cladding at end of service life. This item falls outside the ten year plan, costs associated with this item	Replacement	3 - Future Renewal											
18	Cowichan Lake Sports Arena	B201001 Exterior Enclosure	Exterior Walls/ Wood Siding Addition	Stained tongue and groove cedar siding on the addition. The soffits on the upper roof projection is stained wood slat. Stained glulam beams support the roof projection, whose tips have begun to weather.	have not been carried into the cash flow tables. Replace cedar siding at end of service life. It is unlikely that the soffits will require replacement if maintained. The reduced service life of the cedar is attributed to the lack of overhand protection, south/southeasterly exposure and the inability of tongue and groove to shed water in the same manner as a lap siding. This item falls outside the ten year plan, costs associated with full replacement of this item have not been carried into the cash flow tables.	Replacement	3 - Future Renewal											
19	Cowichan Lake Sports Arena	B201001 Exterior Enclosure	Exterior Walls/ Wood Siding	Stained tongue and groove cedar siding on the addition. The soffits on the upper roof projection is stained wood slat. Stained glulam beams support the roof projection, whose tips have begun to weather.	Replace cedar siding at end of service life. It is unlikely that the soffits will require replacement if maintained. The reduced service life of the cedar is attributed to the lack of overhand protection, south/southeasterly exposure and the inability of tongue and groove to shed water in the same manner as a lap siding. It is our understanding the siding will be restrained in 2017. We recommend including the beams in the staining project. An allowance for staining has been included in the capital plan in year 1 and 6.	Repair Allowance	2 - Restore Functionality	\$13,000	\$13,000					\$13,000				

This report should be reviewed in conjunction with the Objectives, Terms of Reference, Limitations, and Methodology included with the full report. cjw_CVRD BCA - 07 - Cowichan Lake Sports Arena_FINAL, 11/17/2017

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		COM	MPONENT	CONDITION ASSESSMENT	RECOMMENDATION				10-YEAR	CAPITAL P	LAN							
Row	lame		ype					Dollars	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026
	BLDG N	ID	Location / T	Description & History	Recommendation	Type	Priority	Total in 2017 [\$125,600	\$68,600	\$10,600	\$792,600	\$45,600	\$45,600	\$26,600	\$61,600	\$308,600	\$154,600
20	Cowichan Lake Sports Arena	B201001 Exterior Enclosure	Exterior Walls/ Fibre Cement Lap Siding	A small amount of painted fibre cement lap siding installed on the interior of parapets.	Replace fibre cement siding at end of service life. Include this material in exterior painting project.	Replacement	3 - Future Renewal											
					This item falls outside the ten year plan, costs associated with this item have not been carried into the cash flow tables.													
21	Cowichan Lake Sports Arena	B202003 Curtain Walls	Exterior Walls/ Windows	Aluminum framed punched windows with awning sashes and curtain wall extrusions are present on the exterior walls of the addition. The glass is comprised of double paned insulated glazing units (IGUs). An egress swing door of similar construction is present at the top of the steel egress stairs.	Replace fenestration and associated metal flashings at end of service life. Replace weatherstripping and hardware (operable units) as-needed to maintain the units. This item falls outside the ten year plan, costs associated with this item	Replacement	3 - Future Renewal											
					have not been carried into the cash flow tables.													
22	Cowichan Lake Sports Arena	B203001 Solid Doors	Exterior Walls/ Doors - Original	Single wood swing doors and single / double steel swing doors are present at service rooms on the original building.	Replace doors in conjunction with metal siding. Select more energy efficient doors. At the time of replacement, consider repairing the concrete foundation wall, where damaged.	Replacement	2b - Exceeded Service Life	\$28,000				\$28,000						
23	Cowichan Lake Sports Arena	B203001 Solid Doors	Exterior Walls/ Doors - Original	Double steel swing doors are present as egress from the ice arena on the addition.	Replace the double doors at end of service life. This item falls outside the ten year plan, costs associated with this item	Replacement	3 - Future Renewal											
					have not been carried into the cash flow tables.													
24	Cowichan Lake Sports Arena	B203002 Glazed Doors	Exterior Walls/ Sliding Glass Doors	S Aluminum framed sliding glass doors with double paned IGUs give access to the lounge's exterior patio.	Replace sliding glass doors at end of service life. Service rollers and clean tracks annually, and replace weatherstripping as-needed, to extend the life of the doors.	Replacement	3 - Future Renewal											
					This item falls outside the ten year plan, costs associated with this item have not been carried into the cash flow tables.													
25	Cowichan Lake Sports Arena	B203004 Overhead and Roll-up Doors	Exterior Wall/ Overhead Door - Addition	Vinyl-coated steel overhead doors accesses the curling rink and the Zamboni garage. The age of the door has been approximated.	Replace the overhead door at end of service life.	Replacement	3 - Future Renewal											
					This item falls outside the ten year plan, costs associated with this item have not been carried into the cash flow tables.													
26	Cowichan Lake Sports Arena	B203004 Overhead and Roll-up Doors	Exterior Wall/ Overhead Door - Original	A steel overhead door accesses a service room on the original building. The age of the door has been approximated.	Replace the original overhead door in conjunction with metal siding. Select a more energy efficient door.	Replacement	2b - Exceeded Service Life	\$3,000				\$3,000						
27	Cowichan Lake Sports Arena	B301002 Low Slope Membrane Systems	Main Roof/ Addition	The roof is comprised of a 2-ply SBS modified bitumen assembly. The roof was generally in good condition; however, wearing of the granulated surface was observed at higher traffic areas. Exposed bitumen breaks down at an accelerated rate if left unchecked.	Replace the membrane assembly including the flashing, sealants, and interfaces at the end of service life (this action falls outside the ten year plan).	Repair Allowance	e 2 - Restore Functionality	\$22,000		\$22,000								
					In the interim, consider repairing the degranulated areas with a liquid- applied coating, to avoid exposure to damaging UV rays. An allowance for this work, where needed, has been included in year 1. Re-coating the entire lower roof is slightly premature; actual scope can be fine-tuned at the time of repairs.													
28		B301002 Low Slope Membrane Systems	Service Room Roofs	The roofs over service rooms are comprised of 2-ply SBS modified bitumen assemblies. The age of the roofs vary and the roofs appeared to be in fair-to-good condition.	opportunity to extend the service life of some of the roofs by way of a liquid-applied coating may be possible. It would be prudent to evaluate this option and a placeholder value to restore the roofs has been	Repair Allowance	e 2 - Restore Functionality	\$12,000					\$12,000					
29	Cowichan Lake	B301001 High Slope Rod	of Ice Arena Roof	The age of the roofs has been approximated and averaged. The ice arena roof is comprised of a pitched, prefinished standing seam metal roof.	considered in the capital plan (year 5).	Replacement	3 - Future Renewal											
29		Coverings			to undertake sealant and/or fastener repairs (where exposed) as-needed. This item falls outside the ten year plan, costs associated with this item have not been carried into the cash flow tables.	hepideement												
30		B301001 High Slope Rod Coverings	of Service Room Roof	A service room roof is comprised of pitched metal panels. Multiple penetrations exist between the roof protrusions and fasteners. No active leakage was reported or observed. A wood support strut tying an exhaust stack back to the adjacent parapet was decayed.	Replace the sloped roof at the end of service life. Replace stack support with durable material.	Replacement	2 - Restore Functionality	\$3,000	\$3,000									
				The age of the roof has been approximated.														

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		COM	IPONENT	CONDITION ASSESSMENT	RECOMMENDATION				10-YEAR	CAPITAL P	LAN							
Row	G Name		/ Type			е	rity	17 Dollars	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026
	BLDG	ID	Location	Description & History	Recommendation	TYR	Prio	Total in 2017	\$125,600	\$68,600	\$10,600	\$792,600	\$45,600	\$45,600	\$26,600	\$61,600	\$308,600	\$154,60
31	Cowichan Lake Sports Arena	B301005 Gutters and Downspouts	lce Arena Roof/ Eaves Troughs	The ice arena roof drains to prefinished metal eaves troughs, which in turn, drain into internal roof drains (south pitch) and to the below grade perimeter drains via rain water leaders (north pitch). The troughs were in good condition; however, contained standing water and organic debris.	Adjust the slope of the eaves troughs containing standing water and clean regularly to maintain free-flowing troughs (maintenance). The cost to repair the eaves troughs is expected to arrive at less than the threshold value of the report and has not been carried into the cash flow tables.	Repair Allowance	2 - Restore Functionality											
32	Cowichan Lake Sports Arena	B301099 Other Roofing	Second Floor Decks/ Roofin Assembly	p Decks comprised of concrete pavers over SBS modified bitumen roofing assembly (membrane not visible, assumed) accessed via multi-purpose rooms.	Replace the deck assemblies at the end of service life. Exposed and review the concealed internal drain strainers annually. Unclog where necessary. This item falls outside the ten year plan, costs associated with this item have not been carried into the cash flow tables.	Replacement	3 - Future Renewal											
33	Cowichan Lake Sports Arena	B301099 Other Roofing	Second Floor Decks/ Railing	s Aluminum framing with glass infill panels are present at the perimeter of the second floor decks.	Replace the railings at the end of service life. Review railing post anchorage-to-substrate during annual roof and deck maintenance reviews. This item falls outside the ten year plan, costs associated with this item have not been carried into the cash flow tables.	Replacement	3 - Future Renewal											
34	Cowichan Lake Sports Arena	C101003 Retractable Partitions	Multi-Purpose Rooms/ Partition Walls	Retractable partition walls within multi-purpose rooms.	Replace retractable partitions at end of service life. This item falls outside the ten year plan, costs associated with this item have not been carried into the cash flow tables.	Replacement	3 - Future Renewal											
35	Cowichan Lake Sports Arena	C102001 Standard Interior Doors	Interior Doors/ Throughout Building	Painted wood and steel swing doors in steel frames. The age of the doors has been averaged.	Replace doors if damage. Service and/or replace hardware as-needed to extend the service life of the doors. This item falls outside the ten year plan, costs associated with this item have not been carried into the cash flow tables.	Replacement	3 - Future Renewal											
36	Cowichan Lake Sports Arena	C102004 Sliding and Folding Doors	Curling Rink/ Door	Painted barn door on a steel track accesses the storage room adjacent to the curling rink.	Replace the door at end of service life. This item falls outside the ten year plan, costs associated with this item have not been carried into the cash flow tables.	Replacement	3 - Future Renewal											
37	Cowichan Lake Sports Arena	C102005 Interior Overhead Doors	Skate Shop, Concession Window, Reception/ Overhead Doors	Aluminum rolling overhead doors at the windows to the skate shop and concession window / cashier.	Replace overhead doors at end of service life. This item falls outside the ten year plan, costs associated with this item have not been carried into the cash flow tables.	Replacement	3 - Future Renewal											
38	Cowichan Lake Sports Arena	C103001 Compartments, Cubicles and Toilet Partitions	Washrooms/ Toilet Stalls	Composite toilet stall partitions in washrooms.	Replace toilet stall partitions at end of service life. This item falls outside the ten year plan, costs associated with this item have not been carried into the cash flow tables.	Replacement	3 - Future Renewal											
39	Cowichan Lake Sports Arena	C103002 Toilet and Bath Accessories	Washrooms/ Counter Tops	Laminate wood counter tops to support sinks in washrooms. Minor laminate chipping on vertical edges was observed in a washroom.	Replace counter tops at end of service life. Make repairs with matching laminate as required. This item falls outside the ten year plan, costs associated with this item have not been carried into the cash flow tables.	Replacement	3 - Future Renewal											
40	Cowichan Lake Sports Arena	C103006 Shelving	Dressing Rooms/ Millwork	Stained wood benches and wood veneer shelving for sports teams within the dressing rooms.	Replace shelving and benches as-needed. This item falls outside the ten year plan, costs associated with this item have not been carried into the cash flow tables.	Replacement	3 - Future Renewal											
41	Cowichan Lake Sports Arena	C103009 Cabinets	Kitchenettes/ Millwork	Laminate and wood veneer cabinets and laminate counter tops provided in kitchenettes throughout the facility. The average age of equipment has been taken.	Replace millwork at end of service life. This item falls outside the ten year plan, costs associated with this item have not been carried into the cash flow tables.	Replacement	3 - Future Renewal											
42		C201001 Interior Stair Construction	Interior of Building/ Stairs and Railings	Steel stairs with both aluminum picket railing and glass railing accesses the upper floor / mezzanine. The average age of equipment has been taken.	The interior stairs and railings are expected to remain serviceable for the life of the building. This item falls outside the ten year plan, costs associated with this item have not been carried into the cash flow tables.	Replacement	3 - Future Renewal											

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		СОМ	IPONENT	CONDITION ASSESSMENT	RECOMMENDATION				10-YEAR	CAPITAL P	LAN							
Row	ame		Type					ollars	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026
	N 9018	ID	Location / T	Description & History	Recommendation	Type	Priority	Total in 2017 D	\$125,600	\$68,600	\$10,600	\$792,600	\$45,600	\$45,600	\$26,600	\$61,600	\$308,600	\$154,600
43	Cowichan Lake Sports Arena	C301003 Gypsum Wallboard Finishes	Gypsum Walls and Ceilings/ Throughout Building	Painted gypsum walls and ceilings throughout the building.	A cyclical painting allowance has been included in the capital plan. Facility staff paint areas as-needed to maintain aesthetics.	Replacement	3 - Future Renewal	\$20,000		\$20,000					\$20,000			
44	Cowichan Lake Sports Arena	C301099 Other Wall Finishes	Kitchen/ Wall Panels	Wall paneling within the kitchen.	Replace wall paneling in the kitchen at the end of service life. This item falls outside the ten year plan, costs associated with this item have not been carried into the cash flow tables.	Replacement	3 - Future Renewal											
45	Cowichan Lake Sports Arena	C302001 Tile Floor Finishes	Washrooms and Showers/ Flooring	Wall and floor tile in some washrooms and dressing room showers. Average age of equipment taken.	Replace tile finishes at end of service life. Generally tile is replaced during renovations and can exceed the service life assigned. This item falls outside the ten year plan, costs associated with this item have not been carried into the cash flow tables.	Replacement	3 - Future Renewal											
46	Cowichan Lake Sports Arena	C302003 Wood Flooring	Multi-Purpose Rooms & Lounge/ Flooring	Sprung maple flooring in the multi-purpose rooms and engineered flooring in the lounge. Average age of equipment taken.	Refinish floors after approximately 20 years of use. Full replacement falls outside the ten year plan.	Repair Allowance	2 3 - Future Renewal	\$18,000								\$18,000		
47	Cowichan Lake Sports Arena	C302004 Resilient Floor Finishes	Dressing Rooms & Ice Rink/ Flooring	Resilient flooring present within the dressing rooms and corridors of the ice arena. Average age of equipment taken.	Replace flooring where worn and beyond serviceability. Allowances have been provided assuming that areas will be replaced in zones, rather than all resilient flooring in one project.	Replacement	3 - Future Renewal	\$21,000					\$21,000					\$21,000
48	Cowichan Lake Sports Arena	C302005 Carpeting	Lounge, Office and Meeting Rooms/ Flooring	Commercial grade carpet in the lounge and meeting rooms. Average age of equipment taken.	Replace carpet flooring at end of service life. The lounge and office carpet has been included, whereas the meeting room carpet falls outside the ten year plan.	Replacement	3 - Future Renewal	\$26,000								\$26,000		
49	Cowichan Lake Sports Arena	C302009 Floor Toppings and Traffic Membranes		Liquid-applied coatings installed on the floors in the kitchen and some washrooms.	Replace flooring coatings at end of service life. This item falls outside the ten year plan, costs associated with this item have not been carried into the cash flow tables.	Replacement	3 - Future Renewal											
50	Cowichan Lake Sports Arena	C303004 Acoustical Ceiling Tiles and Panels		Acoustic ceiling tiles in suspended T-bar assembly within the commercial kitchen.	Replace acoustic tiles at end of service life. This item falls outside the ten year plan, costs associated with this item have not been carried into the cash flow tables.	Replacement	3 - Future Renewal											
51	Cowichan Lake Sports Arena	C303005 Wood Ceilings	Foyer/ Wood Slat Ceiling	Wood slats finish the ceilings in foyer of the addition.	The wood slat ceilings are anticipated to remain serviceable for the life of the building. This item falls outside the ten year plan, costs associated with this item have not been carried into the cash flow tables.	Replacement	3 - Future Renewal											
52	Cowichan Lake Sports Arena	E2010 Fixed Furnishings	Arena/ Seating	Folding spectator seating of plastic and steel is present on the interior of the addition.	Replace seating at end of service life. Although the seating is expected to remain serviceable beyond the next ten years, a budget for incidental replacement is included.	Replacement	3 - Future Renewal	\$3,000					\$3,000					\$3,000
53	Cowichan Lake Sports Arena	E2010 Fixed Furnishings	Ice Rink/ Boards	Ice rink boards with Plexiglas protective screens surround the ice rink.	Replace boards at end of service life. Although the boards are expected to remain serviceable beyond the next ten years, a budget for incidental replacement is included.	Replacement	3 - Future Renewal	\$3,000					\$3,000					\$3,000
54	Cowichan Lake Sports Arena	D202003 Domestic Water Equipment	Mech. 255/ Expansion Tank		Strongly suggest adding a support bracket around the expansion tank, immediately below the nameplate around the shell for added structural support.	Replacement	3 - Future Renewal	\$1,000									\$1,000	
					Replace at end of life.			 	 			ļ						
55	Cowichan Lake Sports Arena	D302002 Hot Water Boilers	Mech. 216/ Lochnivar Boiler	Boiler appeared to be operating at 20% of full load during walkthrough. It appeared to be running smoothly.	Replace at end of life. This item falls outside the ten year plan, costs associated with this item have not been carried into the cash flow tables.	Replacement	3 - Future Renewal											
56	Cowichan Lake Sports Arena	D304003 Hot Water Distribution Systems	Mech. 216/ Pipe-mounted pumps	Pumps appear to be in good condition.	Replace at end of life.	Replacement	3 - Future Renewal	\$19,000				\$19,000						

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		CON	/IPONENT	CONDITION ASSESSMENT	RECOMMENDATION				10-YEAR C	APITAL PI	AN							
Row	BLDG Name	םו	Location / Type	Description & History	Recommendation	Type	Priority	Total in 2017 Dollars	2017 \$125,600	2018 \$68,600	2019 \$10,600	2020 \$792,600	2021 \$45,600	2022 \$45,600	2023 \$26,600	2024 \$61,600	2025 \$308,600	2026 \$154,600
57	Sports Arena	D304003 Hot Water Distribution Systems	Mech. 216/ Pre-heat tank	250 gal. preheat tank serving the hot water tanks.	Replace at end of life. This item falls outside the ten year plan, costs associated with this item have not been carried into the cash flow tables.	Replacement	3 - Future Renewal											
58		D304001 Air Distribution Heating and Cooling	n, Elec. 256/ Supply Fans 1, 2, 3 & 4	Supply fan serving electrical room (SF-3/pictured). Similar fan serves lower corridor make-up air (SF-4). Similar fans employed for lower corridor make up air, c/w integrated duct heaters (SF-1/2).	Replace at end of life.	Replacement	3 - Future Renewal	\$8,000									\$8,000	
59	Cowichan Lake Sports Arena	D304007 Exhaust Systems	Mech. 255/ Exhaust Fan 4 & other	Exhaust fan serving the electrical room (EF-4/pictured). Similar exhaust fan serves boiler mechanical room (EF-7).	Repace at end of life. This item falls outside the ten year plan, costs associated with this item have not been carried into the cash flow tables.	Replacement	3 - Future Renewal											
60	Cowichan Lake Sports Arena	D202003 Domestic Water Equipment	Mech. 216/ Expansion Tank: (2)	s Overhead expansion tank for water heating loop.	Replace at end of life.	Replacement	3 - Future Renewal	\$3,000									\$3,000	
61	Cowichan Lake Sports Arena	D202003 Domestic Water Equipment	Mech. 216/ DHW Storage Tanks (3)	Three 100 gal. DHW storage tanks servicing building potable hot water requirements.	Replace at end of life. This item falls outside the ten year plan, costs associated with this item have not been carried into the cash flow tables.	Replacement	3 - Future Renewal											
62	Cowichan Lake Sports Arena	D304005 Glycol Distribution Systems	Mech. 216/ Hot Buffer Tanks (2)	Two 250 gal. buffer tanks serve the DHW tanks.	Replace at end of life. This item falls outside the ten year plan, costs associated with this item have not been carried into the cash flow tables.	Replacement	3 - Future Renewal											
63	Cowichan Lake Sports Arena	D304099 Other Distribution Systems	Mech. 216/ Bypass Feeder	Introduces treatment chemicals into the circulating hot water system.	Replace at end of life. The cost of this work is below the project threshold and has not been included in the financial tables.	Replacement	3 - Future Renewal											
64	Cowichan Lake Sports Arena	D305003 Fan Coil Units	Mtg. 217/ Fan Coil FC-1	HVAC system has trouble maintaining temperature set points at certain times of the day, likely due to excessive solar heat gain through large windows on south and west exposures. Overhead fan with switch was added to allow occupants to be able to control comfort to some degree.	Replace at end of life. Recommend recommissioning of the mechanical system, particular in this zone. Other zones were noted to have problems as well, such as the multipurpose/divided room for classes. Other options to limit solar gain could include adding exterior shading devices over windows, or entirely replacing windows with high-thermal performance and low solar heat gain products.	Replacement	3 - Future Renewal											
65	Cowichan Lake Sports Arena	D304001 Air Distribution Heating and Cooling	n, Children's 207/ Fabric Duct	Air is delivered through a perforated fabric duct for even distribution.	Clean fabric regularly per manufacturers instructions. One fluorescent lamp is burned out and requires replacing.	Replacement	3 - Future Renewal	\$5,000									\$5,000	
66		D304001 Air Distribution Heating and Cooling	n, Multi. 202+206/ HVAC	Air transfer between rooms appears to be inadequate through transfer grilles when rooms are divided, based on feedback from occupants. Further, different occupant types require unique comfort set points which are not easily achievable with the current system/layout.	Recommend commissioning authority to investigate heating/cooling loads and appropriate air delivery to the zones. Cost of retaining a commissioning authority is accounted for elsewhere in this table.	Study	2b - Exceeded Service Life											
67		D304007 Exhaust Systems	208+214/ Exhaust Fans 1&2	Exhaust fans serving the child-minding washrooms and janitor room on the 2nd level. The cost of this work is below the project threshold and has not been included in the financial tables.	Replace at end of life.	Replacement	3 - Future Renewal											
68		D304007 Exhaust Systems	Cash 105/ Exhaust Fans 3&8	Exhaust fan serving the cash office. The cost of this work is below the project threshold and has not been included in the financial tables.	Replace at end of life.	Replacement	3 - Future Renewal											

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	СОМ	IPONENT	CONDITION ASSESSMENT	RECOMMENDATION				10-YEAR	CAPITAL PI	LAN							
Row	BLDG Name D	Location / Type	Description & History	Recommendation	Type	Priority	Total in 2017 Dollars	2017 \$125,600	2018 \$68,600	2019 \$10,600	2020 \$792,600	2021 \$45,600	2022 \$45,600	2023 \$26,600	2024 \$61,600	2025 \$308,600	2026 \$154,600
69	Cowichan Lake D304007 Exhaust Sports Arena Systems	Janitor (Sprinkler) 134/ Exhaust Fan 5	Exhaust fan serving the sprinkler and janitor rooms. The cost of this work is below the project threshold and has not been included in the financial tables.	Replace at end of life.	Replacement	3 - Future Renewal											
70	Cowichan Lake D304007 Exhaust Sports Arena Systems	Roof/Exhaust Fan 6	Exhaust fan serving the change room(s).	Replace at end of life. This item falls outside the ten year plan, costs associated with this item have not been carried into the cash flow tables.	Replacement	3 - Future Renewal											
71	Cowichan Lake D304005 Glycol Sports Arena Distribution Systems	Mech. 216/ Glycol Feed Make-up System	Automatic glycol feed make up system located in the mechanical room.	Replace at end of life. This item falls outside the ten year plan, costs associated with this item have not been carried into the cash flow tables.	Replacement	3 - Future Renewal											
72	Cowichan Lake D304001 Air Distribution, Sports Arena Heating and Cooling	, Roof/ Heat Pump 1	AirStack Heat Pump serving building hydronic space and water heating.	Replace at end of life.	Replacement	3 - Future Renewal	\$27,000									\$27,000	
73	Cowichan Lake D304001 Air Distribution, Sports Arena Heating and Cooling	, Roof/ Heat Recovery Ventilator 1	Bousquet HRV serving dressing rooms.	Replace at end of life.	Replacement	3 - Future Renewal	\$32,000									\$32,000	
74	Cowichan Lake D304001 Air Distribution, Sports Arena Heating and Cooling	, Roof/ Heat Recovery Ventilators 2 & 3	Renewaire HRV serving washrooms in the curling lounge and on the 2nd floor. HRV- 2 was not accessible during walkthrough.	Replace at end of life.	Replacement	3 - Future Renewal	\$37,000									\$37,000	
75	Cowichan Lake D304001 Air Distribution, Sports Arena Heating and Cooling	, Roof/ AHU 1	Trane Heat Pump serves the children's room.	Replace at end of life.	Replacement	3 - Future Renewal	\$15,000									\$15,000	
76	Cowichan Lake D305003 Fan Coil Units Sports Arena	Referee+ Curling Change Rooms/ Indoor Heating/Cooling Units (multiple)	Designed to be charged with R22 refrigerant. R22 will be phased out in Canada starting in 2020. While it will still be available for years after, the availability will be limited and therefore costs will increase.	If operational, replace filters regularly per manufacturers instructions. Recommend replacing the unit after 2020, when the unit needs a refrigerant re-fill or when it becomes non-functional any reason, whichever comes first. Drawings from 2011 indicate that fan coils were installed to supersede these units. If they are not operational, they should be decommissioned and removed.	Replacement	3 - Future Renewal	\$21,000						\$21,000				
77	Cowichan Lake D304001 Air Distribution, Sports Arena Heating and Cooling	, Roof/ AHU 2	Trane Heat Pump serves the children's room.	Replace at end of life.	Replacement	3 - Future Renewal	\$11,000									\$11,000	
78	Cowichan Lake D304001 Air Distribution, Sports Arena Heating and Cooling	, Roof/ AHU 3	Bousquet air handler serves warm room viewing area.	Replace at end of life.	Replacement	3 - Future Renewal	\$19,000									\$19,000	
79	Cowichan Lake D304008 Air Handling Sports Arena Units	HRV 4	Clean Air HRV serves the main corridor/culling change room area. Unit not accessible during walkthrough.	Replace at end of life.	Replacement	3 - Future Renewal	\$19,000									\$19,000	
80	Cowichan Lake D305003 Fan Coil Units Sports Arena	Main Lobby/ Fan Coil 2	Fan coil serving the main lobby. Unit not accessible during walkthrough.	Replace at end of life. This item falls outside the ten year plan, costs associated with this item have not been carried into the cash flow tables.	Replacement	3 - Future Renewal											
81	Cowichan Lake D304001 Air Distribution, Sports Arena Heating and Cooling	, Curling Lounge Cleaning/ MUA-1	Make up air fan coil serves the main kitchen. Unit not accessible during walkthrough.	Replace at end of life. This item falls outside the ten year plan, costs associated with this item have not been carried into the cash flow tables.	Replacement	3 - Future Renewal											
82	Cowichan Lake D304001 Air Distribution, Sports Arena Heating and Cooling	, Cash 105 & Rooftop/ AHU 4	Split system heat pump that serves the main office areas. Indoor unit located in office area and was not reviewed; condensing unit located on the rooftop.	Replace at end of life. This item falls outside the ten year plan, costs associated with this item have not been carried into the cash flow tables. Suggest that a commissioning authority review this item and its distribution system. It could be the source of occupant comfort issues reported from front office staff.	Replacement	3 - Future Renewal											

2017 Facility Condition Assessment and Capital Plan

Cowichan Lake Sports Arena, 311 South Shore Road, Lake Cowichan, BC

		СОМ	PONENT	CONDITION ASSESSMENT	RECOMMENDATION				10-YEAR	CAPITAL P	LAN							
Row	BLDG Name	ID	Location / Type	Description & History	Recommendation	Туре	Priority	Total in 2017 Dollars	2017 \$125,600	2018 \$68,600	2019 \$10,600	2020 \$792,600	2021 \$45,600	2022 \$45,600	2023 \$26,600	2024 \$61,600	2025 \$308,600	2026 \$154,600
83	Cowichan Lake Sports Arena	D202003 Domestic Water Equipment	Curling Lounge/ Pony Water Tank	Infrequently utilized water heater for curling lounge/bar area. Appears to be in good condition and fully functional but has exceeded its useful service life.	Recommend planning to replace at first indication of trouble. The cost of this work is below the project threshold and has not been included in the financial tables.	Replacement	2b - Exceeded Service Life											
84	Cowichan Lake Sports Arena	D304004 Change Over Distribution Systems	Various/ Hydronic Heating Coils	8 similar hydronic re-heat coils serving various zones. Not accessible during walkthrough.	Replace at end of life. This item falls outside the ten year plan, costs associated with this item have not been carried into the cash flow tables.	Replacement	3 - Future Renewal											
85	Cowichan Lake Sports Arena		Curling Kitchen/ Hot Water Tank	284L John Wood hot water tank serving the food service areas.	Replace at end of life.	Replacement	3 - Future Renewal	\$3,000										\$3,000
86	Cowichan Lake Sports Arena	E109002 Food Service Equipment	Main Kitchen/ Capture Hood, Range, Deep Fryer, etc.	Food service equipment in the main kitchen. Age estimated	Replace at end of life. This item falls outside the ten year plan, costs associated with this item have not been carried into the cash flow tables.	Replacement	3 - Future Renewal											
87	Cowichan Lake Sports Arena	D304007 Exhaust Systems	Roof/ Exhaust Fans (various)	Older exhaust fans were not accessible. Age unknown and estimated.	Plan to budget for replacement at any time. Extend lifespan of fans by replacing belts and bearings as needed.	Replacement	3 - Future Renewal	\$11,000								\$11,000		
88	Cowichan Lake Sports Arena	-	Rear Laneway Rooftop/ Condenser	Condenser for the refrigeration loop.	Clean regularly to optimize efficiency. Replace at end of life.	Replacement	3 - Future Renewal	\$69,000									\$69,000	
89	Cowichan Lake Sports Arena	D303099 Other Cooling Generating Systems	Compressor Room/ Chiller	Alfa Laval Chiller serving the refrigeration loop.	Replace at end of life. This item falls outside the ten year plan, costs associated with this item have not been carried into the cash flow tables.	Replacement	3 - Future Renewal											
90	Cowichan Lake Sports Arena	D303099 Other Cooling Generating Systems	Compressor Room/ Compressors	Compressors serving the refrigeration loop.	Replace at end of life.	Replacement	3 - Future Renewal	\$105,000										\$105,0
91	Cowichan Lake Sports Arena	D303099 Other Cooling Generating Systems	Compressor Room/ Heat Exchanger	Heat recovery condenser/ heat exchanger. Age unknown and estimated.	Replace at end of life. This item falls outside the ten year plan, costs associated with this item have not been carried into the cash flow tables.	Replacement	3 - Future Renewal											
92	Cowichan Lake Sports Arena	D302002 Hot Water Boilers	Boiler Room/ Boiler	Navien boiler serving hot water tanks for Zamboni usage.	Replace at end of life. This item falls outside the ten year plan, costs associated with this item have not been carried into the cash flow tables.	Replacement	3 - Future Renewal											
93			Boiler Room/ Hot Water Storage Tanks (6)	Five newer hot water storage tanks, and one extra-large decommissioned storage tank. Age unknown and estimated.	Replace at end of life. Remove decommissioned tanks to facilitate easier access for repairs and to allow for future equipment. This item falls outside the ten year plan, costs associated with this item have not been carried into the cash flow tables.		3 - Future Renewal											
94	Cowichan Lake Sports Arena		Boiler Room/ Expansion Tank	Expansion tank serving the hot water system. Age unknown and estimated.	Replace at end of life.	Replacement	3 - Future Renewal	\$4,000										\$4,000
95	Cowichan Lake Sports Arena		Boiler Room/ Flat-Plate Heat Exchanger	Heat exchanger serving the hot water system. Age unknown and estimated.	Replace at end of life. This item falls outside the ten year plan, costs associated with this item have not been carried into the cash flow tables.	Replacement	3 - Future Renewal											
96	Cowichan Lake Sports Arena		Compressor Room/ Water Storage Tanks	Water storage tanks for the waste water loop system.	Replace at end of life. This item falls outside the ten year plan, costs associated with this item have not been carried into the cash flow tables.	Replacement	3 - Future Renewal											

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2017 Facility Condition Assessment and Capital Plan

	СОМ	IPONENT	CONDITION ASSESSMENT	RECOMMENDATION				10-YEAR	CAPITAL PI								
Row	BLDG Name	Location / Type	Description & History	Recommendation	Type	Priority	Total in 2017 Dollars	2017 \$125,600	2018 \$68,600	2019 \$10,600	2020 \$792,600	2021 \$45,600	2022 \$45,600	2023 \$26,600	2024 \$61,600	2025 \$308,600	2026 \$154,600
97	Cowichan Lake G301006 Non-potable Sports Arena Water Distribution	Compressor Room/ Waste Water Loop Pumps	3 water circulation pumps for the waste water loop system.	Replace at end of life. This item falls outside the ten year plan, costs associated with this item have not been carried into the cash flow tables.	Replacement	3 - Future Renewal											
98	Cowichan Lake G304006 Pumping Sports Arena Stations	Compressor Room/ Chiller Pumps	Two pumps that serve the chiller loop. One appears to be recently replaced while the other is dated. Age unknown and estimated.	Replace the older at end of life.	Replacement	3 - Future Renewal											
99	Cowichan Lake D304001 Air Distribution, Sports Arena Heating and Cooling	, Rear Laneway/ Munters Dehumidifier	Munters dehumidification system serving the rink areas.	Replace at end of life. This item falls outside the ten year plan, costs associated with this item have not been carried into the cash flow tables.	Replacement	3 - Future Renewal											
100	Cowichan Lake D304001 Air Distribution, Sports Arena Heating and Cooling	, Zamboni Room/ Heat Pump	Heat pump serving the boiler room for water preheating. Age unknown and estimated.	Replace at end of life.	Replacement	3 - Future Renewal	\$6,000										\$6,000
101	Cowichan Lake D303002 Direct Sports Arena Expansion Systems	Curling Kitchen Freezer/ Refrigeration Unit	KeepRite refrigeration unit for cooling of food storage area. Age unknown and estimated.	Replace at end of life.	Replacement	3 - Future Renewal	\$4,000			\$4,000							
102	Cowichan Lake D209099 Other Special Sports Arena Plumbing Systems	Rink(s)/Sub-Slab Brine Loop(s)	Sub-slab brine loop for maintaining ice temperature. Condition sub-slab was not evaluated. Age unknown and estimated.	Replace at end of life. This item falls outside the ten year plan, costs associated with this item have not been carried into the cash flow tables.	Replacement	3 - Future Renewal											
103	Cowichan Lake D501007 Motor Control Sports Arena Centers	Elec. 256/ MUA-1 and AHU- 2 Motor Control Centre	MCC-4 for MUA-1 and AHU-2 are in good condition.	Replace at end of life. This item falls outside the ten year plan, costs associated with this item have not been carried into the cash flow tables.	Replacement	3 - Future Renewal											
104	Cowichan Lake D306001 HVAC Controls Sports Arena	Elec. 256/ Reliable Controls Panels	Panels and controls in good condition; arranged neatly. Staff noted that commissioning process was rushed and could use re-commissioning. In particular, the multi-purpose (divisible) room and lobby areas were noted to have occupant comfort issues.	Replace at end of life. Recommend re-commissioning building HVAC systems through Reliable Controls. This would mitigate occupant comfort issues and likely save energy as a side benefit. The cost of a control system replacement falls outside the ten year plan, costs associated with this item have not been carried into the cash flow tables.	Study	Not Applicable	\$11,000	\$11,000									
105	Cowichan Lake D501005 Panels Sports Arena	Electrical Room/ Decommissioned Panels	Panels marked with an "X" are decommissioned.	Decommissioned equipment should be removed to facilitate usage and to make room for other future equipment.	Repair Allowance	2b - Exceeded Service Life	2										
106		Curling Electrical Room/ Panels & Switches (various)	Old, likely original breaker panels and switches	Recommend replacing with new breaker panels and switches as the current equipment has exceeded its normal service life.	Replacement	2b - Exceeded Service Life	\$32,000	\$32,000									
107		Curling Kitchen/ Undersink Wiring	Wiring uninsulated and unattached to a surface. Age unknown and is estimated.	Recommend immediately verifying with electrical contractor whether the wiring (a) is in acceptable condition and (b) the installation meets current code.	Study	2b - Exceeded Service Life	2										
108	Cowichan Lake D502002 Lighting Sports Arena Equipment	Curling Change Room/ Shower Lighting	Verify whether this fixture meets electrical code for wet/damp areas. Age unknown and is estimated.	Recommend retrofitting to a fixture and bulb designated for wet/damp applications, in a water tight enclosure.	Study	2b - Exceeded Service Life	2										
109		Main Kitchen/ Breaker Panel	Panel is obstructed. Age unknown and estimated.	Panels need to be unobstructed for quick access in any situation. Store items elsewhere.	Repair Allowance	2b - Exceeded Service Life	2										
110	Cowichan Lake D503002 Sports Arena Telecommunications Systems	Rooftop/ Spotwave Cellular Signal Booster	Boosts signal for cellular devices. Age unknown and estimated.	Replace at end of life.	Replacement	2b - Exceeded Service Life	e \$3,000									\$3,000	

2017 Facility Condition Assessment and Capital Plan

		COM	IPONENT	CONDITION ASSESSMENT	RECOMMENDATION				10-YEAR C	APITAL PL	AN							
Row	BLDG Name	ID	Location / Type	Description & History	Recommendation	Type	Priority	Total in 2017 Dollars	2017 \$125,600	2018 \$68,600	2019 \$10,600	2020 \$792,600	2021 \$45,600	2022 \$45,600	2023 \$26,600	2024 \$61,600	2025 \$308,600	2026 \$154,600
111	Cowichan Lake Sports Arena	D306002 Electronic Controls	Various/Occupancy Sensors	Occupancy sensors controlling lighting fixtures. Age unknown and estimated.	Replace at end of life.	Replacement	3 - Future Renewal	\$5,000						\$5,000				
112	Cowichan Lake Sports Arena	D501007 Motor Control Centers	Compressor Room/ Motor Control Centre	MCC-1 for brine pumps and compressors appears to be in good condition. Age unknown and estimated.	Replace at end of life. This item falls outside the ten year plan, costs associated with this item have not been carried into the cash flow tables.	Replacement	3 - Future Renewal											
113	Cowichan Lake Sports Arena	D503002 Telecommunications Systems	Elec. 256/ Telecommunications Equipment	Internet and cable data service equipment.	Replace at end of life.	Replacement	3 - Future Renewal	\$5,000				\$5,000						
114	Cowichan Lake Sports Arena	D306002 Electronic Controls	Elec 256./ Lighting Controls	Lighting control panel.	Replace at end of life. This item falls outside the ten year plan, costs associated with this item have not been carried into the cash flow tables.	Replacement	3 - Future Renewal											
115	Cowichan Lake Sports Arena	Switchboards	Elec 256./ Generator Transfer Switch	Generator transfer switch panel.	Replace at end of life. This item falls outside the ten year plan, costs associated with this item have not been carried into the cash flow tables.	Replacement												
116	Cowichan Lake Sports Arena	F105002 Building Automation Systems	Compressor Room/ DDC System	Digital control system and hub controlling building HVAC systems.	Replace at end of life.	Replacement	3 - Future Renewal	\$53,000									\$53,000	
117	Cowichan Lake Sports Arena	D501099 Other Service and Distribution	Compressor Room/ Junction Boxes (Various)	Electrical junction boxes are missing cover plates. This is likely due to maintenance being performed on the system.	Junction boxes should have cover plates installed for safety. Cost is negligible and has not been carried forward in cost tables.	Repair Allowance	e 1 – Immediate											
118	Cowichan Lake Sports Arena	E102009 Audio-Visual Equipment	Various/ Sound System Components	Advanced sound system is controllable from multiple locations in the building.	Replace at end of life. This item falls outside the ten year plan, costs associated with this item have not been carried into the cash flow tables.	Replacement	3 - Future Renewal											
119	Cowichan Lake Sports Arena	D503099 Other Communications and Alarm Systems	Rink side/ CO&NO sensors	Toxic gas sensors situated around the rink areas. Total number estimated.	Plan to replace immediately as gas sensors have a finite useful life.	Replacement	2b - Exceeded Service Life	\$9,000	\$9,000									
120	Cowichan Lake Sports Arena		Various/ Security Camera System	Security camera system located at various locations on the interior and exterior of the building.	Replace at end of life. This item falls outside the ten year plan, costs associated with this item have not been carried into the cash flow tables.	Replacement	3 - Future Renewal											
121	Cowichan Lake Sports Arena	G401099 Other Electric Transmission and Distribution	Parking Area/ Electric Vehicle Charging Station	Terminal for charging electric vehicles.	Replace at end of life. This item falls outside the ten year plan, costs associated with this item have not been carried into the cash flow tables.	Replacement	3 - Future Renewal											
122	Sports Arena	D502002 Lighting Equipment	General/ Interior and Exterior Lighting	Recent lighting upgrades included controls in 2008, parking lot in 2012, and interior in 2017.	over the next 10 years to upgrade all lighting to LED where possible.	Upgrade	3 - Future Renewal	\$50,000	\$5,000	\$5,000	\$5,000	\$5,000	\$5,000	\$5,000	\$5,000	\$5,000	\$5,000	\$5,000
123	Cowichan Lake Sports Arena	D501005 Panels	Zamboni Room/ Panels and Switches	Old, likely original breaker panels and switches	Recommend replacing with new breaker panels and switches as the current equipment has exceeded its normal service life.	Replacement	2b - Exceeded Service Life	\$16,000	\$16,000									
124	Cowichan Lake Sports Arena	D201004 Sinks	Mtg. Room 217/ Sink Plumbing	Running the faucet while holding the fixture revealed an intermittent vibration resembling a water hammer.	Possible water supply design issue or drain blockage. Investigate with plumbing professional. This item falls outside the ten year plan, costs associated with this item have not been carried into the cash flow tables.	Study	Not Applicable											

2017 Facility Condition Assessment and Capital Plan

		CON	IPONENT	CONDITION ASSESSMENT	RECOMMENDATION				10-YEAR		LAN							
Row	Name		Type				Ŷ	' Dollars	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026
	BUDG	ID	Location /	Description & History	Recommendation	Туре	Priorit	Total in 2017	\$125,600	\$68,600	\$10,600	\$792,600	\$45,600	\$45,600	\$26,600	\$61,600	\$308,600	\$154,600
125	Cowichan Lake Sports Arena	D201001 Water closets,, D201002 Urinals and D201004 Sinks	Various/Plumbing Fixtures	Toilets, urinals, showers and sinks located throughout the building.	Recommend setting aside repair contingency budget for failed fixtures. They all appeared to be in functional condition during walkthrough.	Repair Allowance	2 - Restore Functionality	\$16,000	\$1,600	\$1,600	\$1,600	\$1,600	\$1,600	\$1,600	\$1,600	\$1,600	\$1,600	\$1,600
126	Cowichan Lake Sports Arena	D409005 Hood and Duct Fire Protection	Main Kitchen/ Fire Suppression System	Appears to be new but age is unknown; age is estimated.	Test system on a regular basis per manufacturer's recommendations. Replace at end of life.	Replacement	3 - Future Renewal	\$3,000										\$3,000
127		D401002 Sprinkler Water Supply Equipment and Piping		Appears to be in good condition.	Inspect/test system regularly. Replace at end of life. This item falls outside the ten year plan, costs associated with this item have not been carried into the cash flow tables.	Replacement	3 - Future Renewal											
128	Cowichan Lake Sports Arena	D503001 Fire Alarm Systems	Curling Rink Electrical Rm./ Fire Sensor Monitor Panel	Alert system for fire system. Age unknown and estimated	Inspect/test system regularly. Replace at end of life. This item falls outside the ten year plan, costs associated with this item have not been carried into the cash flow tables.	Replacement	3 - Future Renewal											
129	Cowichan Lake Sports Arena	P100001 Seismic Screening	Seismic Screening	Complete a seismic screening of the building to assess seismic vulnerability.	For conducting a seismic screening of the building. The screening will be done according to the "Manual for Screening of Buildings for Seismic Investigation", published by the National Research Council of Canada (1992).	Study	Not Applicable	\$7,000	\$7,000									
130	Cowichan Lake Sports Arena	P100001 Commissioning Services	Mechanical and Electrical Systems	Facility Staff have indicated that the mechanical and electrical systems are out of balance, as they heating and cooling, specifically, is not suitable for the occupants of the building.	Re-commission the Mechanical and Electrical Systems.	Study	2b - Exceeded Service Life	\$16,000	\$16,000									

Cowichan Valley Regional District Cowichan Lake Sports Arena - Report Photos





Photo 002

Cowichan Valley Regional District Cowichan Lake Sports Arena - Report Photos



Photo 003





Photo 005



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Photo 007



Photo 008

Cowichan Valley Regional District Cowichan Lake Sports Arena - Report Photos



Photo 009



Photo 011



Cowichan Valley Regional District Cowichan Lake Sports Arena - Report Photos



Photo 013



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Photo 015





Photo 017





Photo 019







Photo 022

Photo 023



Cowichan Valley Regional District Cowichan Lake Sports Arena - Report Photos

Photo 024



Photo 026



Photo 027





Photo 029





Photo 031





Photo 033





Photo 035





Photo 037



Photo 039





Cowichan Valley Regional District Cowichan Lake Sports Arena - Report Photos

Photo 040



Photo 041



485



Photo 043







Photo 046

Photo 047





Cowichan Valley Regional District Cowichan Lake Sports Arena - Report Photos

Photo 048



Photo 049





Photo 051





Photo 053



Cowichan Lake Sports Arena - Report Photos

Cowichan Valley Regional District



Photo 055







Photo 058



Photo 059





Photo 061





Photo 063





Photo 065



Cowchan Lake Sports Arena - Report Photos

Cowichan Valley Regional District Cowichan Lake Sports Arena - Report Photos

Photo 067





Photo 069



499

500

Cowichan Valley Regional District Cowichan Lake Sports Arena - Report Photos





Photo 072

Photo 073

SMARTCHMINS



Cowichan Valley Regional District Cowichan Lake Sports Arena - Report Photos

12/20





Photo 076

Photo 077





Photo 078



Photo 079





Photo 081



Photo 083





Photo 084



Photo 085





Photo 087





Photo 089







Photo 092

Photo 093





Photo 094



Photo 095





Photo 097







Photo 101



Photo 102





Photo 104





Photo 106



Photo 107







Photo 110

520



Cowichan Valley Regional District Cowichan Lake Sports Arena - Report Photos



Photo 112





Photo 114



Photo 115







Photo 118





Photo 120





Photo 122

Photo 123





Photo 124



Photo 125



Photo 126

Photo 127





Photo 128





Photo 130

530

Cowichan Valley Regional District Cowichan Lake Sports Arena - Report Photos





Photo 132





Photo 134





Photo 136







Photo 138





Photo 140





Photo 142





Photo 144





Photo 146





Photo 148





Photo 150

540



Cowichan Valley Regional District Cowichan Lake Sports Arena - Report Photos

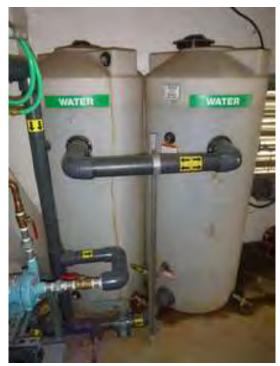


Photo 152







Photo 155





Photo 157



Appendix A

A – 08 Honeymoon Bay Community Hall

Facility Assessment

Honeymoon Bay Community Hall



Cowichan Valley Regional District MH Project No. 5170700.00

November 2017



Cowichan Valley Regional District 175 Ingram Street Duncan, BC V9L 1N8



PROPERTY DESCRIPTION

Honeymoon Bay Community Hall was constructed in 1948 and has had no major renovations since.

PROPERTY STATISTICSGross Floor Area:8,515 sf.

Refer to Photo 1 for a general overview of the exterior of the building.

Replacement Value:	\$2,401,230
Target FCI:	0.100
Current FCI:	0.007

REPORT OVERVIEW

We identified Priority 1 - Immediate expenditures totalling \$18,000 as follows: -C201001 Interior Stair Construction

The following provides an overview of the visual seismic, building code, accessibility and energy efficiency reviews completed.

Seismic Review

Seismic work completed to date: Recommendations:	None Complete a seismic screening of the building to assess seismic vulnerability. The screening will be done according to the "Manual for Screening of Buildings for Seismic Investigation", published by the National Research Council of Canada (1992).
Building Code Review	
Built under what code:	1941 National Building Code
Deficiencies observed:	None
Accessibility Review	
Access into building:	Yes
Access throughout building:	Yes (except stage area)
Access to washrooms:	Yes
Recommendations:	None

We identified recommendations of approximately \$ over the next five years. The following is a summary of the major projects (over \$10,000) we believe will be required the next five years, and elements whose condition is unknown and/or where further investigation is recommended:

Item 8 - '-B201001 Exterior Walls - painting (\$19,000) Item 14 - '-B301001 Slope Roof - metal roof repairs (\$38,000) Item 18 - '-C201001 Interior Stair Construction - repairs (\$18,000)

Cowichan Valley Regional District Facility Condition Assessment and Capital Plan Honeymoon Bay Community Hall, 10022 Park Drive, Honeymoon Bay, BC

PROJECT TEAM

The visual reviews were completed on June 29 and August 11, 2017 by Chris Raudoy. We began with an interview with Rob Frost. During our review of the building, we were accompanied by Rob Frost and other CVRD staff who provided access to a sampling of representative areas of the facility, as requested.

Jordan Bowie, of Morrison Hershfield reviewed the report for technical content and for compliance with the contract requirements.

REFERENCE DOCUMENTS/INFORMATION

We reviewed the following documents and selected drawings for general background and to inform ourselves about the layout and intended construction:

- Floor Plans, completed by Graphic Office Interiors, dated January 2016
- Project Summary Sheet (2005-2014), provided by the CVRD

This report should be reviewed in conjunction with the Objectives, Terms of Reference, Limitations, and Methodology described in the main body of the report.

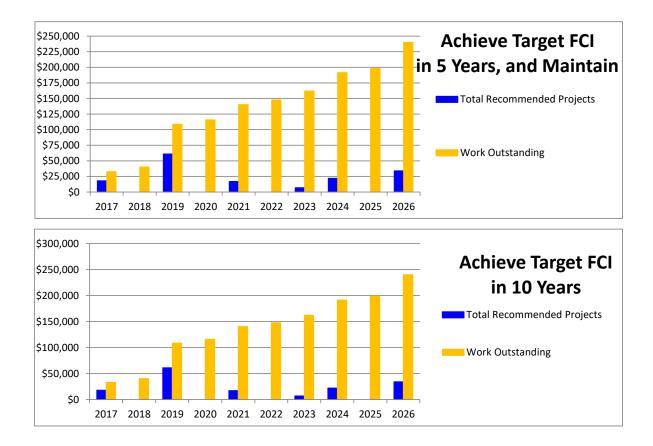
Cowichan Valley Regional District Facility Condition Assessment and Capital Plan Honeymoon Bay Community Hall, 10022 Park Drive, Honeymoon Bay, BC

We recommend budgeting for the following 1 – Immediate, 2 - Restore Functionality, 2b - Exceeded Service Life and 3 - Future Renewal projects by year as follows:

Priority	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026
1 – Immediate	18,000	0	0	0	0	0	0	0	0	0
2 - Restore Functionality	0	0	0	0	0	0	0	0	0	0
2b - Exceeded Service Life	0	0	0	0	0	0	0	0	0	0
3 - Future Renewal	0	0	61,000	0	17,000	0	7,000	22,000	0	34,000
Total in 2017 dollars	18,000	0	61,000	0	17,000	0	7,000	22,000	0	34,000
•										

Minimum Funding to Achieve and Maintain Target FCI within 5 years: -\$7,375

Work outstanding	32,750	40,124	108,499	115,874	140,249	147,624	161,999	191,373	198,748	240,123
Minimum Funding to Achiev	e Target F	CI within :	10 years:	-\$7 <i>,</i> 375						
Work outstanding	32,750	40,124	108,499	115,874	140,249	147,624	161,999	191,373	198,748	240,123



Start Yr 2017 Facility Condition Assessment and Capital Plan Honeymoon Bay Community Hall, 10022 Park Drive, Honeymoon Bay, BC

BLDG Name	Addr							CONDITION ASSESSMENT				-						Can this	If recommended	failure in	Can the current						1
	Location /	Level 1 Major (Elements	Level 2 Group Ele	Level 3 Individ Elements	ID	Location / Type	Photo	Description & History	Condition	Yr New or Last	Major Action Age in 2017	As sess ment Date	Assessed By	Typical Jfe Cycle or Action Interval	Est. Time Remaining to EOL or Major Action	Recommendation	Type	vork be be phased ov phased ov multiple years ?	work not comple can the rate of deterioration be	te this system	condition adversely affect the buildings security of safety ?	Quantity	Unit Rate Unit	Subtotal Repair or Replacement Cost	Consult	Contin- gency Xen Zax	Total in 2017 Dollars
	022 Park Drive, neymoon Bay, BC	A Substructure	A10 Foundations	A1030 Standard Foundations		Underground/ Foundati	ons 2	The foundations are cast-in-place concrete as visible at grade. We noted normal, isolated, narrow cracking. No evidence of major settlement or heaving was reported or observed. The foundation walls separate interior and exterior space on the west elevation where storage and service space is present below grade.	4 4	194	18 69	29-Jun-17	MH	100	31	The foundations are expected to last the life of the building. No major capital expenditures are expected to be required. Completed ongoing reviews of below grade interior space for evidence of water ingress.	А	Not N/A pplicable	N/A	Yes	No						
loneymoon Bay 1002	023 Park Drive,	A Substructure	A10 Foundations	A1030 Standard	A101001 Wall	Underground/Retaining	3	Cast-in-place concrete retaining walls are present on the west elevation at	4 4	194	18 69	29-Jun-17	МН	100	31	This item falls outside the ten year plan, costs associated with this item have not been carried into the cash flow tables.		Not N/A	N/A	No	No						
	neymoon Bay, BC			Foundations	Foundations	Walls		the lower level access stairs. Ne evidence of major settlement or heaving was reported or observed.								capital expenditures are expected to be required. This item falls outside the ten year plan, costs associated with this item have not been carried into the cash flow tables.	А	pplicable	.,								
	D24 Park Drive, neymoon Bay, BC	A Substructure	A10 Foundations	A1010 Standard Foundations	i A103001 Slab on Gr	ade Throughout Building At Grade/ Slab-on-Grade	×	The floor is a concrete slab-on-grade. Floor finishes were installed in some locations. No evidence of major settlement or heaving was reported or observed.	4 4	194	18 69	29-Jun-17	MH	100	31	The slab-on-grade is expected to last the life of the building. No major capital expenditures are expected to be required. This item falls outside the ten year plan, costs associated with this item have not been carried into the cash flow tables.	A	Not N/A pplicable	N/A	No	No						
	025 Park Drive, neymoon Bay, BC	A Substructure	A10 Foundations	A1010 Standard Foundations		n Underground/ Perimete Drains	r 4	Rain water leaders drain into below grade PVC pipes. The continuity of these pipes is not known. We understand that the perimeter drainage system underwent a major replacement in 2013.		201	13 4	29-Jun-17	MH	100	3	Periodic camera inspection and isolated repairs as required. St	Study	Not No pplicable	N/A	No	N/A	1 5	\$2,000 LS	\$2,000	0%	0% 5%	\$3,000
	026 Park Drive, neymoon Bay, BC	A Substructure	A10 Foundations	A1030 Standard Foundations		n Underground/Perimete Drains	r x	Rain water leaders drain into below grade PVC pipes. The continuity of these pipes is not known. We understand that the perimeter drainage system underwent a major replacement in 2013.		201	13 4	29-Jun-17	MH	100	31	The foundation drainage is expected to last the life of the building. No major capital expenditures are expected to be required. This item falls outside the ten year plan, costs associated with this item have not been carried into the cash flow tables. This should be updated with the results of the foundation drainage review recommended in A103006 Foundation Drainage (above).	A	Not N/A pplicable	N/A	Yes	No						
	027 Park Drive, neymoon Bay, BC	B Shell	B10 Superstructure	B10 Superstructure	e B10 Superstructure	Throughout Building/ General Superstructure	x	The superstructure consists of wood framed construction supported by a cast-in-place concrete foundation. No settlement, cracking, or other evidence of structural distress was observed or reported. There was no evidence or reports of long-term leakage that would lead us to expect concealed structural damage.	4 4	194	18 69	29-Jun-17	MH	100	31	Interior protected structural components are expected to last the life of the building. No major capital expenditures are expected to be required. This item falls outside the ten year plan, costs associated with this item have not been carried into the cash flow tables. It is recommended that the building seismic upgrades be completed. This item is included under P100001 Seismic Screening.											
	028 Park Drive, neymoon Bay, BC	B Shell	820	B2010 Exterior Wa	alls B201001 Exterior W	/alls Exterior Walls/Wood Cladding	5/6	The exterior cladding consists of lapped painted cedar siding. Where reviewed this cladding was installed in a concealed barrier assembly. Isolated locations of cracking in the cladding were observed. No areas of water ingress associated with the cladding were reported by facility staff.	4 4	194	18 69	29-Jun-17	МН	80	3	The cedar siding installed appears to be a high quality wood. With ongoing painting and maintenance this cladding can be expected to last 10-15 year and potentially more. Replacement of the cladding falls outside the ten year plan, costs associated with this item have not been carried into the cash flow tables. Refer to B2010 Exterior Walls regarding painting.	lacement 3	i - Future Yes Renewal	Yes	No	No						
	029 Park Drive, neymoon Bay, BC	B Shell	B20	B2010 Exterior Wa	B201001 Exterior W	/alls Exterior Walls/Wood Cladding	5/6	The exterior cladding consists of lapped painted cedar siding (lower areas) and vertical tongue and groove cedar siding on the gable ends. Where reviewed this cladding was installed in a concealed barrier assembly. The gable end cladding appeared showed signed of paint deterioration. Facility staff reported the last exterior painting project was completed in 2010.	4 4	201	10 7	29-Jun-17	МН	10	3		Repair 3 Iowance	i - Future Yes Renewal	Yes	No	No	1 \$	16,000 LS	\$16,000	0%	10% 5%	\$19,000
	030 Park Drive, neymoon Bay, BC	B Shell	B20	B2010 Exterior Wa	alls B201008 Exterior S	offits Roof Eaves/Wood Soffit	s 7	The existing soffits are painted wood assemblies. Facility staff reported the last exterior painting project was completed in 2010.	4 4	201	10 7	29-Jun-17	MH	10	3	Repaint wood soffit. Completed isolated repairs as required. Replan The costing for this item has been included in B2010 Exterior Walls, cladding painting.	lacement 3	- Future Yes Renewal	Yes	No	No						
	031 Park Drive, neymoon Bay, BC	B Shell	820	B2020 Exterior Windows	B202001 Windows	Exterior Walls/Window:	8	The majority of the original windows have been boarded over (dad over). It is not clear if the windows are still in place behind the cladding or if they were removed.	t	194	18 69	29-Jun-17	МН	100	31	No action is required at the boarded windows unless facility staff wishes to reinstate them. The painting of the exterior cladding installed over the windows has been included in the cladding painting budget. This item falls outside the ten year plan, costs associated with this item have not been carried into the cash flow tables.	A	Not N/A pplicable	N/A	No	No						
	031 Park Drive, neymoon Bay, BC	B Shell	B20	B2020 Exterior Windows	B202001 Windows	Exterior Walls/Vynil Windows	9	The majority of the original windows have been boarded over (dad over). It is not clear if the windows are still in place behind the cladding or if they were removed. Vinyl windows have been installed in the kitchen area/adjacent to the main entrance. The vinyl windows are double pain IGU, date stamped 2002.	t 4 4	200	02 15	29-Jun-17	MH	30	15	Replace vinyl window assemblies at the end of their service life. Upg This item falls outside the ten year plan, costs associated with this item have not been carried into the cash flow tables.	lpgrade 3	- Future Yes Renewal	No	No	No						
	031 Park Drive, neymoon Bay, BC	B Shell	B20	B2020 Exterior Windows	B202001 Windows	Exterior Walls/Wood Windows	10	The majority of the original windows have been boarded over (dad over). Wood windows remain at the main entrance. These windows are fully protected from the elements by the roof over the entrance area. The wood windows are single pane and appear to be original to the building. Missing sealant was noted at the window to wood frame interface.	3 3	: 194	18 69	29-Jun-17	MH	30	2	Reseal all glazing to wood interfaces. Upg Consideration should be given to fitting in double pane IGU into the wood frames to help increase efficiency.	Di	4a - Yes scretionar Renewal	No	No	No	8	\$500 EA	\$4,000	0%	0% 5%	\$5,000
	032 Park Drive, neymoon Bay, BC	B Shell	B20	B2030 Exterior Do	ors 8203001 Exterior So Doors	blid Exterior Walls/Exterior Doors	11/12	A total of eleven (11) exterior doors are present, this includes nine (9) single and two (2) double doors. The doors are a combination of solid wood, wood with glazing and teal doors. The age of these doors appear to vary throughout, no information was available on the individual assemblies. No issues related to the operation of the doors were observed or reported	r	200	0 17	29-Jun-17	MH	30	5	A contingency has been included to repair existing door hardware. Isolated replacement of doors may be considered.	ntingency 3	- Future Yes Renewal	No	No	No	1 5	\$4,000 EA	\$4,000	0%	0% 5%	\$5,000

Start Yr 2017 Facility Condition Assessment and Capital Plan Honeymoon Bay Community Hall, 10022 Park Drive, Honeymoon Bay, BC

	so.	9	ents	_	со	MPONENT	CONDITION ASSESSMENT			LIF	ECYCLE DA	TA			RECOMMENDATION			frecommended	Will a	Can the current			OPINION OF P	ROBABLE C	OST	
Row	Addres	or Grou	Eleme	lividua nts		pe			8	is r	/ Date	ň	ction	EOL			Can this w	ork not complete can the rate of	failure in this system	condition adversely affect					5	2
N SULDG N	Location / /	Level 1 Maji Eleme	Level 2 Group	Level 3 Inc Eleme	ID	Location / T	B Description & History	Condition	Performan	Major Acti	Age In 201 Assessment [Assessed E	Typical Life Cycle or A Interval	Est. Time Remaining to or Major Act	Recommendation	Priority		deterioration be expected to increase ?	lead to a loss of use of the facility ?	the buildings security of safety ?	Quantity	Unit Rate Unit	Subtotal Repair or Replacement Cos	Consult.	S% Contrin Contrin Contrin Contrin	Total in 20: Dollars
14 Honeymoon Bay Community Hall		B Shell	B30 Roof	B3010 Roof Covering	s B301001 Slope Roof	Sloped Roof/Metal Roof	13 The roof installed over the original building consists of a concealed fastener standing seam metal roof assembly. A snow guard assembly is present, based on information provided we understand that this system was installed in 2010.	3	3 1	990 2	7 29-Jur	1-17 MH	30	3	The majority of the metal roof appears to be functioning; however, issues Repair are reported at the slope transition on the south elevation. Allowance Consideration should be given to replain gith ero for on the lower slope to allow the tie-in details to be repaired. The repair timing provided is based on the timing of the previous repairs completed (2005 & 2014).		No	Yes	Yes	No	1750	\$17 SF	\$29,750	10%	10% 5%	\$38,000
							Issues of water ingress were reported at the slope transition on the south elevation. MH notes that the lower slope roof appears to be a low enough slope that a fully adhered roofing membrane under the metal roof may be required.								In the other locations where the existing metal roof is performing the service life can be expected to be 40 years (+).											
							The age of the metal roof was not known and has been assumed. Based on the information provided by facility staff we understand that the last roof repair program was completed in 2014.																			
15 Honeymoon Bay Community Hall		B Shell C	B30 Roof	B3010 Roof Covering	s B301001 Slope Roof	Sloped Roof/Asphalt Shingle	14 The sloped roofs over the west elevation (washroom addition) are finished with asphalt shingles. Attic areas are insulated and vented to the exterior . No issues related to this roof were reported by facility staff.	4	5 2	016 1	1 29-Jur	n-17 MH	30	29	Replace shingles and underlay at the end of their service life. Replacemer This item falls outside the ten year plan, costs associated with this item have not been carried into the cash flow tables.	nt 3 - Future Renewal	Yes	No	No	No						
16 Honeymoon Bay Community Hall		B Shell	B30 Roof	B3010 Roof Covering	s B301005 Gutters and Downspouts	Sloped Roof/Gutters and Downspouts	Gutters are present at the base of the sloped roofs. These gutters drain into rain water leaders.	4	5 2	009 8	3 29-Jun	n-17 MH	30	29	Replace gutters and downspouts at the end of service life. Replacement Will likely be required at the time of roof replacement work to allow tie- ins	nt 3 - Future Renewal	Yes	No	No	No						
															This item falls outside the ten year plan, costs associated with this item have not been carried into the cash flow tables.											
17 Honeymoon Bay Community Hall	y 10036 Park Drive, I Honeymoon Bay, B	C Interiors	C10 Interior Construction	C1020 Interior Door	C102001 Standard Interior Doors	Throughout Building/Interio Doors	r 16/17 Various interior doors are present throughout the building. No fire separation doors appear to be present.	4	5 2	000 1	7 29-Jur	n-17 MH	30	13	Replace interior doors at the end of their service life. Replacement	nt 3 - Future Renewal	Yes	No	No	No						
18 Honeymoon Bay	y 10039 Park Drive,	C Interiors	C10 Interior	C2010 Stair	C201001 Interior Stair	Basement & Stage/Interior	The age and quality of the doors vary throughout the building. No issues related to this roof were reported by facility staff. If the interior wood framed stairs are present near the front entrance providing	1	3 1	049 6	9 29-lur	1-17 MH	100	1	This item falls outside the ten year plan, costs associated with this item have not been carried into the cash flow tables. The existing stair assemblies are in poor shape and should be rebuilt (to Repair	1-	Yes	Yes	No	Yes	2	\$7,500 LS	\$15,000	0%	10% 5%	6 \$18,000
Community Hall			Construction	Construction	Construction	Stairs	20 Interior woon names can are present near the non-endance providing access to the basement and stage area. The stairs are in poor shape (treads) and railings are not present on all assemblies.	1	5 1	946 0	9 29-30	-17 IVIN	100	Ĩ	rine existing stail assembles are in poor single and shorte be requirt (u) hepan current code requirements). Allowance		165	Tes	NO	Tes	2	\$7,500	515,000	0%	10% 5%	\$18,000
19 Honeymoon Bay Community Hall		C Interiors	C30 Interior Finish	es C3010 Wall Finishes	C3010 Wall Finishes	Thoughout Building/Interior Wall Finishes - Paint	19 The majority of the interior walls are painted gypsum, wood and acoustical tiles (main hall area). Facility staff commented that interior painting is completed on an ongoing basis. The last painting update was completed in 2013 to the main hall	4	4 2	013 4	1 29-Jun	n-17 MH	5	2	Repaint interior on an ongoing as needed basis. Contingenc	y 4b - Discretionar y Aesthetic	Yes	Yes	No	No	1	\$2,500 LS	\$2,500	0%	0% 5%	% \$3,000
20 Honeymoon Bay Community Hall		C Interiors	C30 Interior Finish	es C3010 Wall Finishes	C301006 Wall Covering	gs Thoughout Building/Interior Wall Finishes - Wood Panel	area. 19/20 Wood paneling has been used at the main entrance, in the main hall (including stage area) and in the common room.	4	4 2	013 4	1 29-Jur	1-17 MH	10	6	Repaint and/or refinish interior wood on an ongoing as needed basis. Contingenc	y 4b - Discretionar y Aesthetic	Yes	Yes	No	No	1	\$2,000 LS	\$2,000	0%	0% 5%	6 \$3,000
21 Honeymoon Bay Community Hall		C Interiors	C30 Interior Finish	es C3020 Floor Finishe	C302001 Tile Floor Finishes	Washrooms/Tile Floor Finishes	The wood in the main hall was last refurbished in 2014. 21 Tile flooring has been used throughout the washroom areas. Isolated cracks in the tile were noted. Facility staff reported that cracking is not an	4	5 2	015 2	2 29-Jur	1-17 MH	30	28	Replace tile floors at the end of their service life. This item falls outside Contingenc the ten year plan, costs associated with this item have not been carried		Yes	No	No	No						
							ongoing item.								into the cash flow tables. Cracked tiles should be replaced to prevent damage from water ingress and/or tripping hazard. The cost of these fan units falls below the project threshold and have been excluded from the study.											
22 Honeymoon Bay Community Hall	y 10043 Park Drive, I Honeymoon Bay, B	C Interiors	C30 Interior Finish	es C3020 Floor Finishe	C302004 Resilient Floor Finishes	r Throughout Building/Resilient Floor Finishes	22 Resilient floor finishes have been used throughout the building. The last replacement section was the kitchen in 2009 and the entrance lobby in 2010.	3	4 2	009 8	3 29-Jur	n-17 MH	10	3	Replace flooring as required. A budget has been included to replace sections as required on an ongoing basis. Repair	3 - Future Renewal	Yes	Yes	No	No	1	\$3,000 LS	\$3,000	0%	0% 5%	%\$4,000
23 Honeymoon Bay Community Hall	y 10044 Park Drive, I Honeymoon Bay, B	C Interiors	C30 Interior Finish	es C3020 Floor Finishes	; C302099 Other Floorin; and Floor Finishes	g Gym Floor/Resilient Floor Finishes	23 The gym floor is covered with an interlocking plastic 'sports' floor. Facility staff confirmed that this floor is original to the building and planned to be replaced.	3	4 2	015 2	2 29-Jun	n-17 MH	20	18	Replace flooring as required. A budget has been included to replace Repair sections as required on an ongoing basis. Allowance		Yes	No	No	No						
24 Honeymoon Bay Community Hall		C Interiors	C30 Interior Finish	es C3020 Floor Finishe	C302003 Wood Floorin	g Stage Area/Wood Floor	24 Wood flooring is present on the stage area.	3	4 1	948 6	9 29-Jur	n-17 MH	25	5	Refinish floor to expend service life. Repair This item falls outside the ten year plan, costs associated with this item have not been carried into the cash flow tables.	3 - Future Renewal	Yes	No	No	No	600	\$4 SF	\$2,400	0%	0% 5%	% \$3,000
25 Honeymoon Bay Community Hall		C Interiors	C30 Interior Finish	es C3030 Ceiling Finishes	C30006 Painting and Staining Ceilings	Throughout Building/Painted Ceilings	25 With the exception of the main hall area (not the mezzanine) the majority of the interior ceilings throughout the building are painted (wood, gypsum/plaster and accouncil tiles). Facility staff commented that interior painting is completed on an ongoing	4	4 2	008 5	9 29-Jun	n-17 MH	5	3	Repaint interior on an ongoing as needed basis. Contingenc The costing provided is based on the historical information provided.	y 4b - Discretionar y Aesthetic	Yes	Yes	No	No	1	\$2,500 LS	\$2,500	0%	0% 5%	% \$3,000
	y 10046 Park Drive,	C Interiors	C30 Interior Finish	es C3010 Wall Finishes		g Main Hall/Reflective Ceiling	basis. The last painting update was completed in 2008, 26 A reflective ceiling finish was added to the main hall.	4	4 2	006 1	1 29-Jur	1-17 MH	25	14	Replace ceiling finish at end of service life. Replacemer	nt 4b - Discretionar	Yes	Yes	No	No						
Community Hall		-			and Ceiling Finishes										This item falls outside the ten year plan, costs associated with this item have not been carried into the cash flow tables.	y Aesthetic										
27 Honeymoon Bay Community Hall	I Honeymoon Bay, B		C30 Interior Finish		C103008 Counters	Kitchen/Counters	26 Counters are present throughout the kitchen area. The age of the counters is unknown and has been assumed.				7 29-Jun			5	Replace counters at the end of survive life. Repair Allowance		Yes	No	No	No	1	\$2,000 LS		0%	0% 5%	
28 Honeymoon Bay Community Hall	y 10048 Park Drive, I Honeymoon Bay, B	C Interiors	C30 Interior Finish	es C1030 Fittings	C103008 Cabinets	Kitchen/Cabinets	27 Wood cabinets are present in the kitchen area.	3	4 1	948 6	9 29-Jun	n-17 MH	50	10	Replace cabinets at the end of their service life. Repair Allowance		Yes	Yes	No	No	1	\$10,000 LS	\$10,000	0%	0% 5%	6 \$11,000
29 Honeymoon Bay Community Hall	y 10049 Park Drive, I Honeymoon Bay, B		C30 Interior Finish	es C1030 Fittings	C103099 Other Interior Specialties	r Post Office/Mailboxes	x A post office is present at the main entrance. This area includes an office space and public mail boxes.		2	008 9	9 29-Jur	n-17 MH	20	11	Facility staff confirmed that the post office and furnishings are not owned by the CVRD. No costing associated with the post office areas are included in the cash flow tables.	Not Applicable	N/A	N/A	No	No						

Starty: 2017 Facility Condition Assessment and Capital Plan Honeymoon Bay Community Hall, 10022 Park Drive, Honeymoon Bay, BC

	<u>s</u>	9	ents		COMPONENT	CONDITION ASSESSMENT			LIF	ECYCLE DAT	TA			RECOMMENDATION			If recommende	Will a	Can the current			OPINION OF PI	ROBABLE CO	ST	
e e	Addres	or Groi	Eleme	lividua nts	be			ast ce	5 -	Date	2	ction	ie of			Can this work be	work not comple	this system	condition adversely affect					کو ا	R
N SQ18	Location / /	Level 1 Maj	Level 2 Group	Level 3 Inc Eleme	⊡ Location / 1;	9 £ Description & History	Condition	Performan Yr New or L	Major Acti	As sess ment [Assessed E	Typical Life Cycle or A Interval	Est. Time Remaining to or Major Act	Recommendation	Priority	phased over multiple years ?	deterioration b expected to increase ?	e lorr of uro	the buildings	Quantity	Unit Rate Unit	Subtotal Repair or Replacement Cost	Consult.	- Tax - Tax	Total in 20: Dollars
IO Honeymoon Bay Community Hall	10050 Park Drive, Honeymoon Bay, BC	D Services	D30 HVAC	D3020 Heat Generating System	D304008 Air Handling Mechanical Rooms/Interior Units Air Handling Units	28 There are four air handling units (Mitsubshi) Electric systems) within the building, these are located in the mechanical room spaces above the stage area. These system include: Model # PVIY-V3EE008 (V2) AND PVFY- PSE00A. These air handling units are tied to the heat pump units for heating and cooling. No issues related to these air handling units were reported on site.	4	4 20	013 4	29-Jun-	17 MH	20	16	Replace the make-up air units at the end of their lifespan. Replacement This item falls outside the ten year plan, costs associated with this item have not been carried into the cash flow tables.	3 - Future Renewal	Yes	No	Yes	No						
	10046 Park Drive,	D Services	D30 HVAC	D3040 Distribution		29 Exposed duct work is present throughout the building.	4	5 20	013 4	29-Jun-	17 MH	50	46	The duct work is expected to last the life of the building. No major	Not	N/A	N/A	Yes	No						
Community Hall	Honeymoon Bay, BC			System	Distribution, Heating and Work Cooling									capital expenditures are expected to be required. This item falls outside the ten year plan, costs associated with this item have not been carried into the cash flow tables.	Applicable	2									
I2 Honeymoon Bay Community Hall		D Services	D30 HVAC	D3040 Distribution System	D304007 Ventilation Washrooms and Systems Kitchen/Exhaust Fans	30/31 Exhaust fans are present in the washrooms and kitchen area. No issues related to these fan units were reported on site. The age of these systems was not known and has been assumed.	3	4 20	000 1	7 29-Jun-	17 MH	25	8	Replace fans and dampers at end of service life. Repair damaged fan vent Replacement units on the roof. The cost of these fan units falls below the project threshold and have been excluded from the study.	3 - Future Renewal	Yes	No	Yes	No						
		D Services	D30 HVAC	D3040 Distribution System	D304001 Air Exterior/Heat Pump Distribution, Heating and Cooling	32/33 Four head pumps (Mitsubishi Electric systems) are present on the north and south elevations of the building (exterior). This systems are Model # PUHY-PGONKMU.	4	4 20	007 1) 29-Jun-	17 MH	20	18	Replace heat pump assemblies at end of service life. Prior to Replacement replacement review heat pumps to confirm is condenser unit can be replaced.	: 3 - Future Renewal	Yes	No	Yes	No						
						No issues related to this heat pump units were reported on site.								This item falls outside the ten year plan, costs associated with this item have not been carried into the cash flow tables.											
4 Honeymoon Bay Community Hall	10050 Park Drive, Honeymoon Bay, BC	D Services	D30 HVAC	D3040 Distribution System	D304001 Air Throughout Building/Heat Distribution, Heating and Cooling	34 Four wall mounted split style heat pumps (Mitsubishi Electric systems) is present throughout the building. The Model of the unit reviewed in the common com wis # PKP-15MMU-E. No issues related to the unit heaters were reported by facility staff.	4	4 20	007 10) 29-Jun-	17 MH	20	10	Replace heating units at end of service life. Replacement	: 3 - Future Renewal	Yes	No	No	No	4	\$1,500 EA	\$6,000	0%	0% 5%	\$7,000
Honeymoon Bay Community Hall	10050 Park Drive, Honeymoon Bay, BC	D Services	D30 HVAC	D3050 Terminal and Package Units	D305005 Eclectic Throughout Building/Base Heating Board Heaters	35/36 Electric baseboard heaters are present in the washroom and kitchen area. Facility staff confirmed that these were a post construction addition. The age of these systems are not known and have been assumed.	4	4 20	000 1	7 29-Jun-	17 MH	30	13	Replace heating units at end of service life. Replacement This item falls outside the ten year plan, costs associated with this item have not been carried into the cash flow tables.	: 3 - Future Renewal	Yes	No	No	No						
6 Honeymoon Bay Community Hall	9350 S Shore Rd, Lake Cowichan, BC	D Services	D30 HVAC	D3010 Energy Supply	r D301002 Gas Supply Exterior/Propane Tank System	 A propane tank is present on the north elevation. Facility staff confirmed this equipment is leased and maintained by the supplier. 		20	011 6	29-Jun-	17 MH	20	14	The existing propane tank is leased and taken care of by the supplier, the tank was not reviewed as part of this assessment.	Not Applicable	N/A	N/A	No	No						
Honeymoon Bay Community Hall	10051 Park Drive, Honeymoon Bay, BC	D Services	D20 Plumbing	D2020 Domestic Water Distribution	0202001 Pipes and Throughout Building/Wate Fittings Supply	37 Water for domestic service enters through a 1.5" diameter pipe (this was estimated at the pipe was wrapped with insulation) located in the mechanical room in the gym area. No backflow preventer is in place. No issues related to water supply were reported by facility staff.	4	4 19	948 6	9 29-Jun-	17 MH	100	2	Water distribution piping is expected to last the life of the building. Complete localized repairs as may be necessary as the building ages. Install backflow preventer in existing water entry room.	4a - Discretiona y Renewa	No ar I	N/A	No	No	1	\$3,000 EA	\$3,000	0%	0% 5%	\$4,000
8 Honeymoon Bay Community Hall	10052 Park Drive, Honeymoon Bay, BC	D Services	D20 Plumbing	D2020 Domestic Water Distribution	D202001 Pipes and Throughout Building/Wate Fittings Supply	Piping is copper, where observed, and typically insulated.	4	4 15	993 24	1 29-Jun-	17 MH	50	26	Water distribution piping is expected to last the life of the building. Complete localized repairs as may be necessary as the building ages. This item falls outside the ten year plan, costs associated with this item have not been carried into the cash flow tables.	Not Applicable	N/A	N/A	Yes	No						
	10053 Park Drive, Honeymoon Bay, BC	D Services	D20 Plumbing	D2020 Domestic Water Distribution	D202003 Domestic Water Equipment - Tanks	39/40 A electric hot water heating tank is present in the janitors closet area (adjacent to the washrooms) as well as the kitchen. The age of these systems was unknown and has been estimated. The tanks appear to be 33.3 gallon units; however, limited access was available to the tank to confirm.	4	4 20	012 5	29-Jun-	17 MH	12	7	Replace hot water tanks at the end of its service life. Replacement	: 3 - Future Renewal	. No	No	No	No	2	\$2,000 EA	\$4,000	0%	0% 5%	\$5,000
	10054 Park Drive, Honeymoon Bay, BC	D Services	D20 Plumbing	D2030 Sanitary Waste	D203001 Waste Pipe and Fitting Building/Sanitary Waste	x The sanitary systems are concealed and not accessible for visual review. W understand they are cleaned as required and no problems have been reported.	e 4	4 15	948 69	9 29-Jun-	17 MH	50	26	Sanitary piping is expected to last the life of the building. Complete localized repairs as may be necessary as the building ages. Applicable	N/A	N/A	Yes	Yes	No						
1 Honeymoon Bay Community Hall	10055 Park Drive, Honeymoon Bay, BC	G Building Site work	G30 Site Civil/Mechanical Utilities	G3020 Sanitary Sewe	r G302005 Septic System Exterior/Septic System	x The complex is serviced by a septic field.		15	948	29-Jun-	17 MH			This item falls outside the scope of this study and has not been included. Not Applicable	N/A	N/A	Yes	Yes	No						-
I2 Honeymoon Bay Community Hall		D Services	D20 Plumbing	D2010 Plumbing Fixtures	D2010 Plumbing Fixtures Building/Plumbing Fixtures	41-44 Plumbing fixtures include sinks (8 throughout the bathrooms and kitchen), toilets (7) and urinals (3).	4	4 20	000 1	7 29-Jun-	17 MH	35	18	Replace fixtures at the end of their service life. Replacement This item falls outside the ten year plan, costs associated with this item have not been carried into the cash flow tables.	3 - Future Renewal	No	No	No	No						
I3 Honeymoon Bay Community Hall	10057 Park Drive, Honeymoon Bay, BC	D Services	D50 Electrical	D5010 Electrical Service and Distribution	D501003 Main Electrical Room/Main Switchgear Switchgear - Replacement	45 The main electrical panel is a 400 Amp panel that was upgraded in 2007. Facility staff reported that the upgrade included replacement of large runs of branch wiring. No issues related to electrical distribution were reported on site.	4	4 20	007 1) 29-Jun-	17 MH	50	40	Replace distribution switches. Replacement This item falls outside the ten year plan, costs associated with this item have not been carried into the cash flow tables.	3 - Future Renewal	No No	No	Yes	No						
Honeymoon Bay Community Hall	10058 Park Drive, Honeymoon Bay, BC	D Services	D50 Electrical	D5010 Electrical Service and Distribution	D401003 Main Electrical Room/Main Switchgear and Panels Switchgear and Panel - IR Scanning	The main electrical system consists of the main switch gear and 3 active panels. The system varies in age throughout the building.	4	4 19	948 6	9 29-Jun-	17 MH	5	1	Conduct Infra-red (IR) scan on major switchgear and panels. Study The cost of this work is below the project threshold and has not been included in the financial tables.	Not Applicable	N/A	N/A	N/A	N/A						
	10059 Park Drive, Honeymoon Bay, BC	D Services	D50 Electrical	D5010 Electrical Service and Distribution	D501005 Panels Throughout Building/Electrical Panels	46-48 Acrea are three intermediate distribution panels rated 175A. The age and condition of these panels appears to vary. No issues related to distribution were reported on site.	3	4 15	948 6	9 29-Jun-	17 MH	35	10	Replace house panels at end of service life. Replacement	: 3 - Future Renewal	No	No	Yes	No	3	\$5,000 Ea	\$15,000	0%	0% 5%	\$16,000
6 Honeymoon Bay Community Hall	10060 Park Drive, Honeymoon Bay, BC	D Services	D50 Electrical	D5020 Lighting and Branch Wiring	D502002 Lighting Throughout Building/Interi Equipment Lighting	or 49/50 The majority of the interior lighting consists of florescent T8 tube lighting. This lighting was updated in 2007.	4	5 20	007 1) 29-Jun-	17 MH	25	15	Replace interior lighting system at end of service life. Consider upgrading Replacement lighting to LED systems.	: 3 - Future Renewal	Yes	No	No	No						-
						Isolated incandescent lighting is in place in service room areas.								This item falls outside the ten year plan, costs associated with this item have not been carried into the cash flow tables.											

Start Yr 2017 Facility Condition Assessment and Capital Plan Honeymoon Bay Community Hall, 10022 Park Drive, Honeymoon Bay, BC

		s	g	ents	-	COM	NPONENT	CONDITION ASSESSMENT				LIFECY	CLE DATA				RECOMMENDATION			If recommended	Will a	Can the current			OPINION OF PR	OBABLE CO	ST	
Row Puper		Location / Addre	Level 1 Major Gro Elements	Level 2 Group Elem	Level 3 Individua Elements	D	Location / Type	Description & History	Condition	Performance	Yr New or Last Major Action	Age in 2017	Assessment Date	Assessed By	Typical Life Cycle or Action Interval	Est. Time Remaining to EOL or Major Action	Recommendation	Priority	Can this work be phased over multiple years ?	work not complete	failure in this system lead to a loss of use of the facility ?	condition adversely affect the buildings security of safety ?	Quantity	Unit Rate Unit	Subtotal Repair or Replacement Cost	Consult.	Contin- gency 2% 2%	Total in 2017 Dollars
47 Honeymoo Community		ark Drive, Ioon Bay, BC	D Services	D50 Electrical	D5020 Lighting and Branch Wiring	D502002 Lighting Equipment	Throughout x Building/Exterior Lighting	New LED lighting is planning to be installed throughout the exterior this year. For the purpose of this report the exterior lighting system is being considered as new.	4	5	2017	0	29-Jun-17	MH	25	25	Replace exterior lighting system at end of service life. Replacement This item falls outside the ten year plan, costs associated with this item have not been carried into the cash flow tables.	3 - Future Renewal	Yes	No	No	No						
48 Honeymoo Community	n Bay 10061 Par Hall Honeymo	ark Drive, loon Bay, BC	D Services	D50 Electrical	D5020 Lighting and Branch Wiring	D502002 Other Lighting and Branch Wiring	Throughout Building/Branch x Wiring	A electrical upgrade was completed in 2007 when the main panel was replaced. Some original wiring remains in place. No issues related to the electrical distribution were reported by facility staff however, facility staff reported that the exiting wire that was replaced in 2007 was in poor shape (the exterior sheathing was brittle).	4	5	1948	69	29-Jun-17	MH	100	5	Based on the condition of the existing wiring reported by facility staff a contingency has been included to allow for replacement of sections of branch wiring when required.	3 - Future Renewal	Yes	No	No	No	1	\$5,000 LS	\$5,000	0%	0% 5%	\$6,000
49 Honeymoo Community	n Bay 10061 Par Hall Honeymo	ark Drive, Ioon Bay, BC	D Services	D50 Electrical		D502002 Other Lighting and Branch Wiring	Exterior/Exterior 51 Receptacles	The exterior receptacles do not have ground fault circuit interrupter (GFCI).	2	3	1948	69	29-Jun-17	MH	100	1	It is recommended that ground fault circuit interrupter (GFCI) receptacles Replacement be installed. The cost of these fan units fails below the project threshold and have	3 - Future Renewal	No	N/A	No	Yes						
	n Bay 10062 Par Hall Honeymo		D Services	D50 Electrical	D5030 Communications and Security	D503008 Security Systems	Throughout 52 Building/Security System	A houle electric security system is present, the main panel is located adjacent to the main electrical panel. The system consists of door lock timers and sensors. The system is monitored and tied to an exterior light that illuminates when the alert is activated.	4	5	2000	17	29-Jun-17	MH	25	8	Replace security system at end of service life. Replacement	3 - Future Renewal	No	No	No	No	1	\$10,000 LS	\$10,000	0%	0% 5%	\$11,000
51 Honeymoo Community	n Bay 10063 Par Hall Honeymo	ark Drive, Ioon Bay, BC	D Services	D40 Fire Protection	D5030 Communications and Security	D503001 Fire Alarm Systems	Throughout Building/Fire 53-5 Alarm Systems	The fire alarm system in the building is limited to smoke and heat sensors in the kitchen area. Emergency lighting (battery pack) and exit signs are present throughout the building.	4	5	2000	17	29-Jun-17	MH	25	8	Replace security system at end of service life. Replacement	3 - Future Renewal	No	No	No	No	1	\$10,000 LS	\$10,000	0%	0% 5%	\$11,000
52 Honeymoo Community	n Bay 10065 Par Hall Honeymo	ark Drive, Ioon Bay, BC	P Professional Services	P Professional Services	P Professional Services	P100001 Seismic Screening	Seismic Screening x	Complete a seismic screening of the building to assess seismic vulnerability.			1948	69	29-Jun-17	MH	10	1	For conducting a seismic screening of the building. The screening will be done according to the "Manual for Screening of Buildings for Seismic Investigation", published by the National Research Council of Canada (1992).	Not Applicable	No	N/A	No	N/A	1	\$4,000 LS	\$4,000	0%	0% 5%	\$5,000

2017 Facility Condition Assessment and Capital Plan

		CON	/IPONENT	CONDITION ASSESSMENT	RECOMMENDATION				10-YEAR	CAPITAL PI	AN							
Row	BLDG Name	ID	Location / Type	Description & History	Recommendation	Type	Priority	Total in 2017 Dollars	2017 \$23,000	2018 \$12,000	2019 \$67,000	2020 \$0	2021 \$17,000	2022 \$3,000	2023 \$10,000	2024 \$25,000	2025 \$0	2026 \$34,000
1	Honeymoon Bay Community Hall	A101001 Wall Foundations	Underground/ Foundations	The foundations are cast-in-place concrete as visible at grade. We noted normal, isolated, narrow cracking. No evidence of major settlement or heaving was reported or observed. The foundation walls separate interior and exterior space on the west elevation where storage and service space is present below grade.	The foundations are expected to last the life of the building. No major capital expenditures are expected to be required. Completed ongoing reviews of below grade interior space for evidence of water ingress. This item falls outside the ten year plan, costs associated with this item have not been carried into the cash flow tables.		Not Applicable											
2	Honeymoon Bay Community Hall	A101001 Wall Foundations	Underground/Retaining Walls	Cast-in-place concrete retaining walls are present on the west elevation at the lower level access stairs. No evidence of major settlement or heaving was reported or observed.	The foundations are expected to last the life of the building. No major capital expenditures are expected to be required. This item falls outside the ten year plan, costs associated with this item have not been carried into the cash flow tables.		Not Applicable											
3	Honeymoon Bay Community Hall	A103001 Slab on Grade	Throughout Building At- Grade/ Slab-on-Grade	The floor is a concrete slab-on-grade. Floor finishes were installed in some locations. No evidence of major settlement or heaving was reported or observed.	The slab-on-grade is expected to last the life of the building. No major capital expenditures are expected to be required. This item falls outside the ten year plan, costs associated with this item have not been carried into the cash flow tables.		Not Applicable											
4	Honeymoon Bay Community Hall	A103006 Foundation Drainage	Underground/ Perimeter Drains	Rain water leaders drain into below grade PVC pipes. The continuity of these pipes is not known. We understand that the perimeter drainage system underwent a major replacement in 2013.	Periodic camera inspection and isolated repairs as required.	Study	Not Applicable	\$3,000			\$3,000							
5	Honeymoon Bay Community Hall	A103006 Foundation Drainage	Underground/ Perimeter Drains	Rain water leaders drain into below grade PVC pipes. The continuity of these pipes is not known. We understand that the perimeter drainage system underwent a major replacement in 2013.	The foundation drainage is expected to last the life of the building. No major capital expenditures are expected to be required. This item falls outside the ten year plan, costs associated with this item have not been carried into the cash flow tables. This should be updated with the results of the foundation drainage review recommended in A103006 Foundation Drainage (above).		Not Applicable											
6	Honeymoon Bay Community Hall	B10 Superstructure	Throughout Building/ General Superstructure	The superstructure consists of wood framed construction supported by a cast-in-place concrete foundation. No settlement, cracking, or other evidence of structural distress was observed or reported. There was no evidence or reports of long-term leakage that would lead us to expect concealed structural damage.	Interior protected structural components are expected to last the life of the building. No major capital expenditures are expected to be required. This item falls outside the ten year plan, costs associated with this item have not been carried into the cash flow tables. It is recommended that the building seismic upgrades be completed. This item is included under P100001 Seismic Screening.													
7	Honeymoon Bay Community Hall	B201001 Exterior Walls	Exterior Walls/Wood Cladding	The exterior cladding consists of lapped painted cedar siding. Where reviewed this cladding was installed in a concealed barrier assembly. Isolated locations of cracking in the cladding were observed. No areas of water ingress associated with the cladding were reported by facility staff.	The cedar siding installed appears to be a high quality wood. With F ongoing painting and maintenance this cladding can be expected to last 10- 15 year and potentially more. Replacement of the cladding falls outside the ten year plan, costs associated with this item have not been carried into the cash flow tables. Refer to B2010 Exterior Walls regarding painting.	Replacement	3 - Future Renewal											

2017 Facility Condition Assessment and Capital Plan

		COM	IPONENT	CONDITION ASSESSMENT	RECOMMENDATION				10-YEAR	CAPITAL P	LAN							
Row	ame		Хре					17	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026
	BLDG N	ID	Location / T	Description & History	Recommendation	Type	Priority	Total in 2017 Dollars	\$23,000	\$12,000	\$67,000	\$0	\$17,000	\$3,000	\$10,000	\$25,000	\$0	\$34,000
8	Honeymoon Bay Community Hall	B201001 Exterior Walls	Exterior Walls/Wood Cladding	The exterior cladding consists of lapped painted cedar siding (lower areas) and vertical tongue and groove cedar siding on the gable ends. Where reviewed this cladding was installed in a concealed barrier assembly. The gable end cladding appeared showed signed of paint deterioration. Facility staff reported the last exterior painting project was completed in 2010.	Repaint wood cladding. Completed isolated repairs as required. Costing provided based on 2010 costs.	Repair Allowance	3 - Future Renewal	\$19,000			\$19,000							
9	Honeymoon Bay Community Hall	B201008 Exterior Soffits	Roof Eaves/Wood Soffits	The existing soffits are painted wood assemblies. Facility staff reported the last exterior painting project was completed in 2010.	Repaint wood soffit. Completed isolated repairs as required. The costing for this item has been included in B2010 Exterior Walls, cladding painting.	Replacement	3 - Future Renewal											
10	Honeymoon Bay Community Hall	B202001 Windows	Exterior Walls/Windows	The majority of the original windows have been boarded over (clad over). It is not clear if the windows are still in place behind the cladding or if they were removed.	No action is required at the boarded windows unless facility staff wishes to reinstate them. The painting of the exterior cladding installed over the windows has been included in the cladding painting budget. This item falls outside the ten year plan, costs associated with this item have not been carried into the cash flow tables.		Not Applicable											
11	Honeymoon Bay Community Hall	B202001 Windows	Exterior Walls/Vynil Windows	The majority of the original windows have been boarded over (clad over). It is not clear if the windows are still in place behind the cladding or if they were removed. Vinyl windows have been installed in the kitchen area/adjacent to the main entrance. The vinyl windows are double pain IGU, date stamped 2002.	Replace vinyl window assemblies at the end of their service life. This item falls outside the ten year plan, costs associated with this item have not been carried into the cash flow tables.	Upgrade	3 - Future Renewal											
12	Honeymoon Bay Community Hall	B202001 Windows	Exterior Walls/Wood Windows	The majority of the original windows have been boarded over (clad over). Wood windows remain at the main entrance. These windows are fully protected from the elements by the roof over the entrance area. The wood windows are single pane and appear to be original to the building. Missing sealant was noted at the window to wood frame interface.	Reseal all glazing to wood interfaces. Consideration should be given to fitting in double pane IGU into the wood frames to help increase efficiency.	Upgrade	4a - Discretionar y Renewal	\$5,000		\$5,000								
13	Honeymoon Bay Community Hall	B203001 Exterior Solid Doors	Exterior Walls/Exterior Door	s A total of eleven (11) exterior doors are present, this includes nine (9) single and two (2) double doors. The doors are a combination of solid wood, wood with glazing and metal doors. The age of these doors appear to vary throughout, no information was available on the individual assemblies. No issues related to the operation of the doors were observed or reported by facility staff.	A contingency has been included to repair existing door hardware. Isolated replacement of doors may be considered.	Contingency	3 - Future Renewal	\$5,000					\$5,000					
14	Honeymoon Bay Community Hall	B301001 Slope Roof	Sloped Roof/Metal Roof	The roof installed over the original building consists of a concealed fastener standing seam metal roof assembly. A snow guard assembly is present, based on information provided we understand that this system was installed in 2010. Issues of water ingress were reported at the slope transition on the south elevation. MH notes that the lower slope roof appears to be a low enough slope that a fully adhered roofing membrane under the metal roof may be required. The age of the metal roof was not known and has been assumed. Based on the information provided by facility staff we understand that the last roof repair program was completed in 2014.	The majority of the metal roof appears to be functioning; however, issues are reported at the slope transition on the south elevation. Consideration should be given to replacing the roof on the lower slope to allow the tie-in details to be repaired. The repair timing provided is based on the timing of the previous repairs completed (2005 & 2014). In the other locations where the existing metal roof is performing the service life can be expected to be 40 years (+).	Repair Allowance	3 - Future Renewal	\$38,000			\$38,000							

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		CON	IPONENT	CONDITION ASSESSMENT	RECOMMENDATION				10-YEAR	CAPITAL P	LAV							
Row	Jame		ype					11	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026
	BLDG N	ID	Location / T	Description & History	Recommendation	Type	Priority	Total in 2017 Dollars	\$23,000	\$12,000	\$67,000	\$0	\$17,000	\$3,000	\$10,000	\$25,000	\$0	\$34,000
15	Honeymoon Bay Community Hall	B301001 Slope Roof	Sloped Roof/Asphalt Shingle	The sloped roofs over the west elevation (washroom addition) are finished with asphalt shingles. Attic areas are insulated and vented to the exterior . No issues related to this roof were reported by facility staff.	Replace shingles and underlay at the end of their service life. This item falls outside the ten year plan, costs associated with this item have not been carried into the cash flow tables.	Replacement	3 - Future Renewal											
16	Honeymoon Bay Community Hall	B301005 Gutters and Downspouts	Sloped Roof/Gutters and Downspouts	Gutters are present at the base of the sloped roofs. These gutters drain into rain water leaders.	Replace gutters and downspouts at the end of service life. Replacement will likely be required at the time of roof replacement work to allow tie- ins. This item falls outside the ten year plan, costs associated with this item have not been carried into the cash flow tables.	Replacement	3 - Future Renewal											
17	Honeymoon Bay Community Hall	C102001 Standard Interior Doors	Throughout Building/Interior Doors	Various interior doors are present throughout the building. No fire separation doors appear to be present. The age and quality of the doors vary throughout the building. No issues related to this roof were reported by facility staff.	Replace interior doors at the end of their service life. This item falls outside the ten year plan, costs associated with this item have not been carried into the cash flow tables.	Replacement	3 - Future Renewal											
18	Honeymoon Bay Community Hall	C201001 Interior Stair Construction	Basement & Stage/Interior Stairs	Interior wood framed stairs are present near the front entrance providing access to the basement and stage area. The stairs are in poor shape (treads) and railings are not present on all assemblies.	The existing stair assemblies are in poor shape and should be rebuilt (to current code requirements).	Repair Allowance	1 – Immediate	\$18,000	\$18,000									
19	Honeymoon Bay Community Hall	C3010 Wall Finishes	Thoughout Building/Interior Wall Finishes - Paint	The majority of the interior walls are painted gypsum, wood and acoustical tiles (main hall area). Facility staff commented that interior painting is completed on an ongoing basis. The last painting update was completed in 2013 to the main hall area.	Repaint interior on an ongoing as needed basis.	Contingency	4b - Discretionar y Aesthetic	\$3,000		\$3,000					\$3,000			
20	Honeymoon Bay Community Hall	C301006 Wall Coverings	Thoughout Building/Interior Wall Finishes - Wood Panel	Wood paneling has been used at the main entrance, in the main hall (including stage area) and in the common room. The wood in the main hall was last refurbished in 2014.	Repaint and/or refinish interior wood on an ongoing as needed basis.	Contingency	4b - Discretionar y Aesthetic	\$3,000						\$3,000				
21	Honeymoon Bay Community Hall	C302001 Tile Floor Finishes	Washrooms/Tile Floor Finishes	Tile flooring has been used throughout the washroom areas. Isolated cracks in the tile were noted. Facility staff reported that cracking is not an ongoing item.		Contingency	3 - Future Renewal											
22	Honeymoon Bay Community Hall	C302004 Resilient Floor Finishes	Throughout Building/Resilient Floor Finishes	Resilient floor finishes have been used throughout the building. The last replacement section was the kitchen in 2009 and the entrance lobby in 2010.	Replace flooring as required. A budget has been included to replace sections as required on an ongoing basis.	Repair Allowance	3 - Future Renewal	\$4,000			\$4,000							
23	Honeymoon Bay Community Hall	C302099 Other Flooring and Floor Finishes	Gym Floor/Resilient Floor Finishes	The gym floor is covered with an interlocking plastic 'sports' floor. Facility staff confirmed that this floor is original to the building and planned to be replaced.	Replace flooring as required. A budget has been included to replace sections as required on an ongoing basis.	Repair Allowance	3 - Future Renewal											
24	Honeymoon Bay Community Hall	C302003 Wood Flooring	Stage Area/Wood Floor	Wood flooring is present on the stage area.	Refinish floor to expend service life. This item falls outside the ten year plan, costs associated with this item have not been carried into the cash flow tables.	Repair Allowance	3 - Future Renewal	\$3,000					\$3,000					

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		CON	IPONENT	CONDITION ASSESSMENT	RECOMMENDATION				10-YEAR	CAPITAL PI	LAN							
Row	BLDG Name	ID	Location / Type	Description & History	Recommendation	Type	Priority	Total in 2017 Dollars	2017 \$23,000	2018 \$12,000	2019 \$67,000	2020 \$0	2021 \$17,000	2022 \$3,000	2023 \$10,000	2024 \$25,000	2025 \$0	2026 \$34,000
25	Honeymoon Bay Community Hall	C30006 Painting and Staining Ceilings	Throughout Building/Paintec Ceilings	With the exception of the main hall area (not the mezzanine) the majority of the interior ceilings throughout the building are painted (wood, gypsum/plaster and acoustical tiles) Facility staff commented that interior painting is completed on an ongoing basis. The last painting update was completed in 2008,	Repaint interior on an ongoing as needed basis. The costing provided is based on the historical information provided.	Contingency	4b - Discretionar y Aesthetic	\$3,000			\$3,000					\$3,000		
26	Honeymoon Bay Community Hall	C303099 Other Ceiling and Ceiling Finishes	Main Hall/Reflective Ceiling	A reflective ceiling finish was added to the main hall.	Replace ceiling finish at end of service life. This item falls outside the ten year plan, costs associated with this item have not been carried into the cash flow tables.	Replacement	4b - Discretionar y Aesthetic											
27	Honeymoon Bay Community Hall	C103008 Counters	Kitchen/Counters	Counters are present throughout the kitchen area. The age of the counters is unknown and has been assumed.	Replace counters at the end of survive life.	Repair Allowance	3 - Future Renewal	\$3,000					\$3,000					
28	Honeymoon Bay Community Hall	C103008 Cabinets	Kitchen/Cabinets	Wood cabinets are present in the kitchen area.	Replace cabinets at the end of their service life.	Repair Allowance	3 - Future Renewal	\$11,000										\$11,000
29		C103099 Other Interior Specialties	Post Office/Mailboxes	A post office is present at the main entrance. This area includes an office space and public mail boxes.	Facility staff confirmed that the post office and furnishings are not owned by the CVRD. No costing associated with the post office areas are included in the cash flow tables.		Not Applicable											
30	Honeymoon Bay Community Hall	D304008 Air Handling Units	Mechanical Rooms/Interior Air Handling Units	There are four air handling units (Mitsubishi Electric systems) within the building, these are located in the mechanical room spaces above the stage area. These system include: Model # PVFY-P36E00B (X2) AND PVFY- P54E00A. These air handling units are tied to the heat pump units for heating and cooling. No issues related to these air handling units were reported on site.	Replace the make-up air units at the end of their lifespan. This item falls outside the ten year plan, costs associated with this item have not been carried into the cash flow tables.	Replacement	3 - Future Renewal											
31		D304001 Air Distribution, Heating and Cooling	Throughout Building/Duct Work	Exposed duct work is present throughout the building.	The duct work is expected to last the life of the building. No major capital expenditures are expected to be required. This item falls outside the ten year plan, costs associated with this item have not been carried into the cash flow tables.		Not Applicable											
32		D304007 Ventilation Systems	Washrooms and Kitchen/Exhaust Fans	Exhaust fans are present in the washrooms and kitchen area. No issues related to these fan units were reported on site. The age of these systems was not known and has been assumed.	Replace fans and dampers at end of service life. Repair damaged fan vent units on the roof. The cost of these fan units falls below the project threshold and have beer excluded from the study.		3 - Future Renewal											
33		D304001 Air Distribution, Heating and Cooling	Exterior/Heat Pump	Four head pumps (Mitsubishi Electric systems) are present on the north and south elevations of the building (exterior). This systems are Model # PUHY- P60NKMU. No issues related to this heat pump units were reported on site.	Replace heat pump assemblies at end of service life. Prior to replacement review heat pumps to confirm is condenser unit can be replaced. This item falls outside the ten year plan, costs associated with this item have not been carried into the cash flow tables.	Replacement	3 - Future Renewal											
34		D304001 Air Distribution, Heating and Cooling	Throughout Building/Heat Pump	Four wall mounted split style heat pumps (Mitsubishi Electric systems) is present throughout the building. The Model of the unit reviewed in the common room was # PKFY-15NHMU-E2. No issues related to the unit heaters were reported by facility staff.	Replace heating units at end of service life.	Replacement	3 - Future Renewal	\$7,000										\$7,000

2017 Facility Condition Assessment and Capital Plan

		COMPONENT		CONDITION ASSESSMENT	RECOMMENDATION	10-YEAR CAPITAL PLAN												
Row	BLDG Name	ID	Location / Type	Description & History	Recommendation	Type	Priority	Total in 2017 Dollars	2017 \$23,000	2018 \$12,000	2019 \$67,000	2020 \$0	2021 \$17,000	2022 \$3,000	2023 \$10,000	2024 \$25,000	2025 \$0	2026 \$34,000
35	Honeymoon Bay Community Hall	D305005 Eclectic Heating	; Throughout Building/Base Board Heaters	Electric baseboard heaters are present in the washroom and kitchen area. Facility staff confirmed that these were a post construction addition. The age of these systems are not known and have been assumed.	Replace heating units at end of service life. This item falls outside the ten year plan, costs associated with this item have not been carried into the cash flow tables.	Replacement	3 - Future Renewal											
36	Honeymoon Bay Community Hall	D301002 Gas Supply System	Exterior/Propane Tank	A propane tank is present on the north elevation. Facility staff confirmed this equipment is leased and maintained by the supplier.	The existing propane tank is leased and taken care of by the supplier, the tank was not reviewed as part of this assessment.		Not Applicable											
37	Honeymoon Bay Community Hall	D202001 Pipes and Fittings	Throughout Building/Water Supply	Water for domestic service enters through a 1.5" diameter pipe (this was estimated at the pipe was wrapped with insulation) located in the mechanical room in the gym area. No backflow preventer is in place. No issues related to water supply were reported by facility staff.	Water distribution piping is expected to last the life of the building. Complete localized repairs as may be necessary as the building ages. Install backflow preventer in existing water entry room.	Upgrade	4a - Discretionar y Renewal	\$4,000		\$4,000								
38	Honeymoon Bay Community Hall	D202001 Pipes and Fittings	Throughout Building/Water Supply	Piping is copper, where observed, and typically insulated.	Water distribution piping is expected to last the life of the building. Complete localized repairs as may be necessary as the building ages. This item falls outside the ten year plan, costs associated with this item have not been carried into the cash flow tables.		Not Applicable											
39		D202003 Domestic Water Equipment - Tanks	Supply Closet/Hot Water Tank	A electric hot water heating tank is present in the janitors closet area (adjacent to the washrooms) as well as the kitchen. The age of these systems was unknown and has been estimated. The tanks appear to be 33.3 gallon units; however, limited access was available to the tank to confirm.	Replace hot water tanks at the end of its service life.	Replacement	3 - Future Renewal	\$5,000							\$7,000			
40	Honeymoon Bay Community Hall		Throughout Building/Sanitar Waste	y The sanitary systems are concealed and not accessible for visual review. We understand they are cleaned as required and no problems have been reported.	Sanitary piping is expected to last the life of the building. Complete localized repairs as may be necessary as the building ages.	Not Applicable	N/A											
41	Honeymoon Bay Community Hall	G302005 Septic System	Exterior/Septic System	The complex is serviced by a septic field.	This item falls outside the scope of this study and has not been included.	Not Applicable	N/A											
42	Honeymoon Bay Community Hall	D2010 Plumbing Fixtures	Throughout Building/Plumbing Fixtures	Plumbing fixtures include sinks (8 throughout the bathrooms and kitchen), toilets (7) and urinals (3).	Replace fixtures at the end of their service life. This item falls outside the ten year plan, costs associated with this item have not been carried into the cash flow tables.	Replacement	3 - Future Renewal											
43	Honeymoon Bay Community Hall		Electrical Room/Main Switchgear - Replacement	The main electrical panel is a 400 Amp panel that was upgraded in 2007. Facility staff reported that the upgrade included replacement of large runs of branch wiring. No issues related to electrical distribution were reported on site.	Replace distribution switches. This item falls outside the ten year plan, costs associated with this item have not been carried into the cash flow tables.	Replacement	3 - Future Renewal											
44	Honeymoon Bay Community Hall	D401003 Main Switchgear and Panels	Electrical Room/Main Switchgear and Panel - IR Scanning	The main electrical system consists of the main switch gear and 3 active panels. The system varies in age throughout the building.	Conduct Infra-red (IR) scan on major switchgear and panels. The cost of this work is below the project threshold and has not been included in the financial tables.	Study	Not Applicable											
45	Honeymoon Bay Community Hall	D501005 Panels	Throughout Building/Electrical Panels	There are three intermediate distribution panels rated 175A. The age and condition of these panels appears to vary. No issues related to distribution were reported on site.	Replace house panels at end of service life.	Replacement	3 - Future Renewal	\$16,000										\$16,000

2017 Facility Condition Assessment and Capital Plan

		COMPONENT		CONDITION ASSESSMENT	RECOMMENDATION				10-YEAR CAPITAL PLAN										
Row	BLDG Name	ID	tion / Type	Description & History	Recommendation	Type	Priority	Total in 2017 Dollars	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	
			Loca						\$23,000	\$12,000	\$67,000	\$0	\$17,000	\$3,000	\$10,000	\$25,000	\$0	\$34,000	
46	Honeymoon Bay Community Hall	D502002 Lighting Equipment	Throughout Building/Interior Lighting	The majority of the interior lighting consists of florescent T8 tube lighting. This lighting was updated in 2007.	Replace interior lighting system at end of service life. Consider upgrading lighting to LED systems.	Replacement	3 - Future Renewal												
				Isolated incandescent lighting is in place in service room areas.	This item falls outside the ten year plan, costs associated with this item have not been carried into the cash flow tables.														
47	Honeymoon Bay Community Hall	D502002 Lighting Equipment	Throughout Building/Exterior Lighting	New LED lighting is planning to be installed throughout the exterior this year. For the purpose of this report the exterior lighting system is being	Replace exterior lighting system at end of service life.	Replacement	3 - Future Renewal												
				considered as new.	This item falls outside the ten year plan, costs associated with this item have not been carried into the cash flow tables.														
48	Honeymoon Bay Community Hall	D502002 Other Lighting and Branch Wiring	Throughout Building/Branch Wiring	A electrical upgrade was completed in 2007 when the main panel was replaced. Some original wiring remains in place.	Based on the condition of the existing wiring reported by facility staff a contingency has been included to allow for replacement of sections of branch wiring when required.	Replacement	3 - Future Renewal	\$6,000					\$6,000						
				No issues related to the electrical distribution were reported by facility staff; however, facility staff reported that the exiting wire that was replaced in 2007 was in poor shape (the exterior sheathing was brittle).															
49		D502002 Other Lighting and Branch Wiring	Exterior/Exterior Receptacles	The exterior receptacles do not have ground fault circuit interrupter (GFCI).	It is recommended that ground fault circuit interrupter (GFCI) receptacles be installed.	Replacement	3 - Future Renewal												
					The cost of these fan units falls below the project threshold and have											4			
50	Honeymoon Bay Community Hall	D503008 Security Systems	Throughout Building/Security System	A houle electric security system is present, the main panel is located adjacent to the main electrical panel. The system consists of door lock timers and sensors. The system is monitored and tied to an exterior light that illuminates when the alert is activated.	Replace security system at end of service life.	Replacement	: 3 - Future Renewal	\$11,000								\$11,000			
51	Honeymoon Bay Community Hall	D503001 Fire Alarm Systems	Throughout Building/Fire Alarm Systems	The fire alarm system in the building is limited to smoke and heat sensors in the kitchen area. Emergency lighting (battery pack) and exit signs are present throughout the building.	Replace security system at end of service life.	Replacement	: 3 - Future Renewal	\$11,000								\$11,000			
52	Honeymoon Bay Community Hall	P100001 Seismic Screening	Seismic Screening	Complete a seismic screening of the building to assess seismic vulnerability.	For conducting a seismic screening of the building. The screening will be done according to the "Manual for Screening of Buildings for Seismic Investigation", published by the National Research Council of Canada (1992).	Study	Not Applicable	\$5,000	\$5,000										





Cowichan Valley Regional District Honeymoon Bay Community Hall - Report Photos

Photo 02

Photo 03







Cowichan Valley Regional District Honeymoon Bay Community Hall - Report Photos

Photo 06



Photo 07



T-





Photo 10





Cowichan Valley Regional District Honeymoon Bay Community Hall - Report Photos

Photo 12





Cowichan Valley Regional District Honeymoon Bay Community Hall - Report Photos

Photo 14





Photo 16





Cowichan Valley Regional District Honeymoon Bay Community Hall - Report Photos

Photo 18



Photo 19







Photo 22



Photo 23



Photo 24



Photo 25







Photo 28





Photo 30



Photo 31







Photo 34





Photo 36



Photo 37





Photo 39



Cowichan Valley Regional District Honeymoon Bay Community Hall - Report Photos



Photo 41

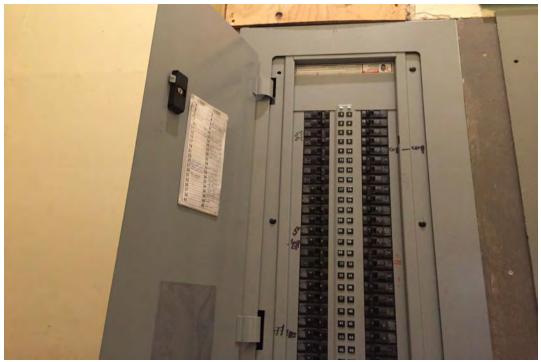






Photo 44



Photo 45





Photo 47





Photo 49





Photo 51





Photo 53





Appendix A

A – 09 Mesachie Lake Community Hall

Facility Assessment

Mesachie Lake Community Hall



Cowichan Valley Regional District MH Project No. 5170700.00

November 2017



Cowichan Valley Regional District 175 Ingram Street Duncan, BC V9L 1N8



Cowichan Valley Regional District Facility Condition Assessment and Capital Plan Mesachie Lake Community Hall, 9315 S Shore Rd, Lake Cowichan, BC

PROPERTY DESCRIPTION	PROPERTY STATISTIC	S
Mesachie Lake Community Hall was constructed in 1951 and	Gross Floor Area:	5010 sf.
has had no major renovations since.	Replacement Value:	\$1,412,820
Refer to Photo 1 for a general overview of the exterior of the	Target FCI:	0.100
building.	Current FCI:	0.025

REPORT OVERVIEW

We identified Priority 1 - Immediate expenditures totalling \$15,000 as follows: -B101001 Structural Frame - railing between hall and service room -C101001 Fixed Partitions - mezzanine railing

The following provides an overview of the visual seismic, building code, accessibility and energy efficiency reviews completed.

Seismic Review Seismic work completed to date: Recommendations:	None Complete a seismic screening of the building to assess seismic vulnerability. The screening will be done according to the "Manual for Screening of Buildings for Seismic Investigation", published by the National Research Council of Canada (1992).
Building Code Review Built under what code: Deficiencies observed:	1941 National Building Code Interior guardwall height on the mezzanine area is not to current code requirements and poses a risk to users. Fall hazard between the hall and the service room.
Accessibility Review Access into building: Access throughout building: Access to washrooms: Recommendations:	Yes No (mezzanine, stage and service/storage area not accesible Yes None

We identified recommendations of approximately \$312,000 over the next five years. The following is a summary of the major projects (over \$10,000) we believe will be required the next five years, and elements whose condition is unknown and/or where further investigation is recommended:

Row 7 - '-B201001 Exterior Walls - cladding replacement (\$280,000)

Cowichan Valley Regional District Facility Condition Assessment and Capital Plan Mesachie Lake Community Hall, 9315 S Shore Rd, Lake Cowichan, BC

PROJECT TEAM

The visual reviews were completed on August 11, 2017 by Chris Raudoy. During our review of the building, we were accompanied by CVRD staff who provided access to a sampling of representative areas of the facility, as requested.

Jordan Bowie, of Morrison Hershfield reviewed the report for technical content and for compliance with the contract requirements.

REFERENCE DOCUMENTS/INFORMATION

We reviewed the following documents and selected drawings for general background and to inform ourselves about the layout and intended construction:

- Floor Plans, drawn byGraphic Office Interiors, dated January 2016.

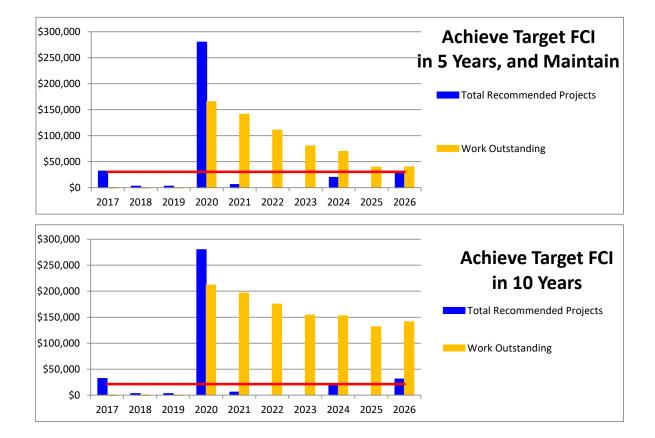
This report should be reviewed in conjunction with the Objectives, Terms of Reference, Limitations, and Methodology described in the main body of the report.

Cowichan Valley Regional District Facility Condition Assessment and Capital Plan Mesachie Lake Community Hall, 9315 S Shore Rd, Lake Cowichan, BC

We recommend budgeting for the following 1 – Immediate, 2 - Restore Functionality, 2b - Exceeded Service Life and 3 - Future Renewal projects by year as follows:

Priority	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026
1 – Immediate	15,000	0	0	0	0	0	0	0	0	0
2 - Restore Functionality	6,000	0	0	0	0	0	0	0	0	0
2b - Exceeded Service Life	6,000	0	0	0	0	0	0	0	0	0
3 - Future Renewal	5,000	3,000	3,000	280,000	6,000	0	0	20,000	0	31,000
Total in 2017 dollars	32,000	3,000	3,000	280,000	6,000	0	0	20,000	0	31,000
Minimum Funding to Achiev	e and Mai	intain Targ	get FCI wit	thin 5 year	rs: \$30,45	3				

Work outstanding	-28,906	-56,359	-83,812	165,735	141,282	110,829	80,376	69,923	39,470	40,017
Minimum Funding to Achiev	e Target F	CI within	10 years:	\$21,247						
Work outstanding	-10,494	-28,741	-46,988	211,765	196,517	175,270	154,023	152,776	131,529	141,282



Surtyr Cowichan Valley Regional District 2017 Facility Condition Assessment and Capital Plan Mesachie Lake Community Hall, 9315 S Shore Rd, Lake Cowichan, BC

e	dress	dnoug	9	dual	CO	MPONENT	CONDITION ASSESSMENT			LIFE	CYCLE DATA		RECOMMENDATI	ON			If recommended work not	Will a failure in	Can the current			OPINION O	F PROBABL	COST	
BLDG Nam	.ocation / Add	evel 1 Major C	Level 2 Groi Elements	Level 3 Indivii Elements	ID	Location / Type	B Description & History	Performance	r New or Last Major Action	Age in 2017 Assessment Date Assessed By	Typical Life Cycle or ction Interval	Est. Time temaining to OL or Major Action	Recommendation	Type	Priority	Can this work be phased over multiple years ?	complete can the rate of deterioration be expected to	this system lead to a loss of use of	condition adversely affect the buildings security of safety ?	Quantity	Unit Rate Unit	Subtotal Repair or Replacement Cos	Consult.	Aguan S% unitro Tax	fotal in 2017 Dollars
Mesachie Lake S Community Hall L	9315 S Shore Rd, Lake Cowichan, BC	A Substructure	A10 Foundations	A1030 Standard Foundations	A101001 Wall Foundations	Underground/ Foundations	2/3 The foundations of the original building consists of wood posts on concrete pads. The addition on the north elevation has cast-in- place concrete foundations. No evidence of major settlement or heaving was reported or observed.	3	1947	70 MH	100	31	The foundations are expected to last the life of the building. Completed ongoing reviews of below grade interior space for evidence of water ingress. This item is included under P100001 Seismic Screening.		Not Applicable	N/A	increase ? N/A	Yes	Unknown						
							The original majority of the wood post and concrete pad foundations were concealed by the base of wall clading. In some locations the wood posts appear to extende below grade. Facility staff reported that the structure was visually reviewed by CVRD staff within the last 2 years and no areas of deterioration were noted.						No major capital expenditures are expected to be required. This item fails outside the ten year plan, costs associated with this item have not been carried into the cash flow tables.												
	9315 S Shore Rd, Lake Cowichan, BC	B Shell	B10 Superstructure	B2010 Exterior Walls	B201099 Other Exte Walls	rior Storage Room/Fire Place (interior and exterior sections)	A masonry chimney is present where the oil furnace was in place. The masonry chimney is not supported. The masonry appears to require repair to the mortar joints.	3	1947	70 MH	100	1	If the chimney is no longer in use it is recommended to be removed or repaired and braced for seismic stability. The costing included assumes removal of the chimney.	Repair Allowance	2b - Exceeded Service Life	No	Yes	Yes	Yes	1	\$5,000 LS	\$5,000	0%	0% 5%	\$6,000
Mesachie Lake S Community Hall L		B Shell	B10 Superstructure	B1010 Floor Construction	B101001 Structural Frame	Wood Framed Floor	 The original floor is wood framed structure. Floor finishes were installed in some locations. No evidence of major settlement or heaving was reported or observed. 	3	1947	70 MH	100	31	Interior protected structural components are expected to last the life of the building. No major capital expenditures are expected to be required. This item is included under P100001 Seismic Screening.		1 – Immediate	No	No	No	Yes	1	\$2,000 LS	\$2,000	0%	0% 5%	\$3,000
							The condition of the concealed wood framing should be confirmed during the recommended foundation review.						Due to the height difference between the adjacent floors it is recommended that an access gate and signage be added. The budget provided in this row is intended to cover these costs.												
Mesachie Lake S Community Hall L		A Substructure	A10 Foundations	A1030 Slab on Grade	A103001 Standard S on Grade	llab Slab on Grade (storage/service room)	A cast-in-place concrete slab on grade is present in the storage/service room (north elevation). The slab appared in good shape with no signs of heaving or cracking.	4	2000	17 MH	100	83	The slab on grade is expected to last the life of the building. No major capital expenditures are expected to be required. This item fails outside the ten year plan, costs associated with this item have not been carried into the cash flow tables.	Upgrade	2 - Restore Functionality	No	No	No	Yes	1	\$2,000 LS	\$2,000	0%	0% 5%	\$3,000
Mesachie Lake 9 Community Hall 1		A Substructure	A10 Foundations	A1010 Standard Foundations	A103006 Foundation Drainage	n Underground/ Perimeter Drains	6/7 One rain water leaders drain into below grade PVC pipes (at the main entrance). The continuity of these pipes is not known. No information was available regarding the perimeter drainage system (including its age). All other rain water leaders drain onto grade.		1947	70 MH	100	31	The foundation drainage is expected to last the life of the building. Scoping of the below grade perimeter drainage should be completed to confirm system. The costing included in this line item is intended to cover this work. Consideration may be give to installing a perimeter		Not Applicable	No	N/A	No	N/A	1	\$2,000 LS	\$2,000	0%	0% 5%	\$3,000
Mesachie Lake	9320 S Shore Rd,	B Shell	B10 Superstructure	B10 Superstructure	B10 Superstructure	Throughout Building/	x The superstructure consists of wood framed construction. 4	4	1947	70 МН	100	31	drainage system. Costing for this work has not been included in this table. This item should be updated with the results of the foundation drainage review recommended in A103006 Foundation Drainage Interior protected structural components are expected		Not Applicable	N/A	N/A	Yes	Unknown						
Community Hall I	Lake Cowichan, BC					General Superstructure	No settlement, cracking, or other evidence of structural distress was observed or reported. There was no evidence or reports of long-term leakage that would lead us to expect concealed structural damage.						In last the life of the building. No major capital expenditures are expected to be required. This item falls outside the teny ear plan, costs associated with this item have not been carried into the cash flow tables. It is recommended that the building seismic upgrades be completed. This item is included under P100001												
Mesachie Lake	9321 S Shore Rd,	B Shell	B20	B2010 Exterior Walls	B201001 Exterior W	alls Exterior	8/9 The exterior cladding consists of vinyl siding (with expanded 2	3	1997	20 MH	20	4	Seismic Screening. Consideration should be given to replacing the vinyl	Replacement	: 3 - Future	Yes	Yes	No	No	4000	\$55 LS	\$220,000	10%	10% 5%	\$280,00
	Lake Cowichan, BC					Cladding/Vinyl	polystyrene foam on the back side), this clading appears to have been installed over lapped wood siding. It was reported that the ving's iding was installed approximately 20 years ago. Areas of cracked and damaged viny's lading were noted throughout the installation. In some areas patches have been installed. No areas of water ingress associated with the cladding were reported by facility staff.						siding with a new, more durable cladding system. Further investigation would be required to determine an appropriate cladding system and installation method. At this time we have assumed that both the vinyl and existing wood siding would be removed and new sheatling, sheathing methore and rain screen cladding system would be installed.	9	Renewal										
													Temporary patches should be installed over the damaged areas until a repair plan is developed.												
Mesachie Lake S Community Hall L	9321 S Shore Rd, Lake Cowichan, BC	B Shell	820	B2010 Exterior Walls	B201001 Exterior W	alls Exterior Cladding/Vinyl	8/9 The exterior cladding consists of vinyl siding (with expanded polystyrene foam on the back side) installed over lapped wood siding. It was reported that the vinyl siding was installed approximately 20 years ago. Areas of cracked and damaged vinyl siding were noted throughout the installation. In some areas patches have been installed.	3	1997	20 MH	25	1	Complete temporary patches to the vinyl cladding to prevent water ingress. MH notes that damage to the vinyl can be expected to continue and potentially increase as the system ages and the vinyl becomes more brittle.	Replacement	: 3 - Future Renewal	Yes	Yes	No	No	1	\$4,000 LS	\$4,000	0%	0% 5%	\$5,000
							No areas of water ingress associated with the cladding were reported by facility staff.																		
Mesachie Lake S Community Hall L	9323 S Shore Rd, Lake Cowichan, BC	B Shell	820	B2010 Exterior Walls	B201008 Exterior So	offits Roof Eaves/Metal Soffits	10 The soffits consist of perforated aluminum assembiles. 4 These assembiles are a post construction addition. The age of these assemblies was not known and has been assumed. 10	4	1997	20 MH	30	10	Replace soffits at then end of their service life.	Replacement	: 3 - Future Renewal	Yes	No	No	No	330	\$7 LF	\$2,310	0%	0% 5%	\$3,000
Mesachie Lake S Community Hall L		B Shell	B20	B2020 Exterior Windows	B202001 Windows	Exterior Walls/Windows	11 The original windows have been boarded over (dad over). It is not clear if the windows are still in place behind the cladding or if they were removed. Facility staff reported that the windows were not planned to be reinstated.	4	1947	70 MH	30	13	No major capital expenditures are expected to be required.												
Mesachie Lake S Community Hall L	9325 S Shore Rd, Lake Cowichan, BC	B Shell	820	B2030 Exterior Doors	8203001 Exterior Sa Doors	lid Exterior Walls/Doors	11 - 13 A total of seven (7) exterior doors are present, this includes four 4 4 (4) single and three (3) double doors. The doors are a combination of solid wood, wood with glazing and metal doors. The age of these doors appear to vary throughout, no Information was available on the individual assemblies. The last	4	2010	7 MH	30	5	Replace doors at end of service life. Replace weather- stripping and complete minor repairs and adjustment as part of maintenance. Major capital expenditures are expected to fall outside		3 - Future Renewal	Yes	No	No	No	1	\$2,500 EA	\$2,500	0%	0% 5%	\$3,000
							information was available on the individual assemblies. The last major remedial program to the doors and hardware was in 2010. No issues related to the operation of the doors were observed or reported by facility staff.						Major capital expenditures are expected to fall outside the ten year plan; however, a contingency has been included to cover isolated replacement.												

start yr 2017 Facility Condition Assessment and Capital Plan

Mesachie Lake Community Hall, 9315 S Shore Rd, Lake Cowichan, BC	

a	Iress	dnou	<u>e</u>	lual	COM	PONENT		CONDITION ASSESSI	MENT				LIFECYCL	E DATA		RECOMMENDATI	ON			If recommended work not	Will a failure in	Can the current			OPINI	ON OF PROE	BABLE COST		
Row BLDG	Location / Add	Level 1 Major G Elements	level 2 Groi Elements	Level 3 Indivi Elements	D	Location / Type	Photo	Description & History	Condition	Performance	Yr New or Last Major Action	Age in 2017	As sessment Date Asses sed By	Typical Life Cycle or Action Interval	Est. Time Remaining to EOL or Major Action	Recommendation	Type	Priority	Can this work be phased over multiple years ?	complete can the rate of deterioration be expected to increase ?	this system lead to a loss of use of	condition adversely affect the buildings security of safety ?	Quantity	Unit Rate	Subto S Repair Replaceme	or	Contin-gency	5% Tax	Total in 2017 Dollars
12 Mesachie Lake Community Hal		B Shell	B30 Roof	B3010 Roof Coverings	B301001 Slope Roof	Sloped Roof/Asphalt Shingle	14/15	The sloped roofs are finished with asphalt shingles. Isolated moss build up was note don the north elevation. Attic areas are insulated and vented to the exterior . No issues related to this roof were reported by facility staff.	4	5	2007	10	MH	25	15	Replace shingles and underlay at the end of their service life. This item falls outside the ten year plan, costs associated with this item have not been carried into the cash flow tables.	Replacement	3 - Future Renewal	Yes	Yes	No	No							
13 Mesachie Lake Community Hal		B Shell	B30 Roof	B3010 Roof Coverings	B301005 Gutters and Downspouts	Sloped Roof/Gutters and Downspouts	14/15	Gutters are present at the base of the sloped roofs. These gutters drain into rain water leaders which drain into PVC pipes below grade (main entrance) or directly only grade.	5 4	5	2008	9	MH	25	15	Replace gutters and downspouts at the end of service life. Replacement will likely be required at the time of roof replacement work to allow tie-ins. This item falls outside the ten year plan, costs associated with his tem have not been carried into the cash flow tables.		3 - Future Renewal	Yes	Yes	No	No							
14 Mesachie Lake Community Hal		C Interiors	C10 Interior Construction	C1020 Interior Doors	C102001 Standard Interior Doors	Throughout Building/Interior Doo		Various interior doors are present throughout the building. No fire separation doors appear to be present. The age and quality of the doors vary throughout the building. No issues related to this roof were reported by facility staff.		5	1947	70	MH	30	13	Replace interior doors at the end of their service life. This item falls outside the ten year glan, costs associated with this item have not been carried into the cash flow tables.	Replacement	3 - Future Renewal	Yes	Yes	No	No							
15 Mesachie Lake Community Hal		C Interiors	C10 Interior Construction	C2010 Stair Construction	C201001 Interior Stair Construction	Mezzanine and Stair Access/Interior Stairs	18/19	Interior wood framed stairs are present in the main hall providing access to the mezzanine area as well as the stage area.	3	4	1947	70	МН	100	2	The existing stair assemblies are in good shape with no areas of damage or deterioration noted. Consideration could be given to updating handrails to current code requirements. The costing provided assumes only the railings will be updated.	Repair Allowance	2 - Restore Functionality	Yes	No	No	Yes	1	\$2,500	LS \$2,50	0 0	% 10%	5%	\$3,000
16 Mesachie Lake Community Hal		C Interiors	C10 Interior Construction	C1020 Partitions	C101001 Fixed Partitions	Mezzanine Area/Interior Partitions	20	A fixed portion is present at the edge of the mezzanine which is acting as a railing. This portion railing is below 42	1	3	1947	70	МН	100	1	The existing guard wall is below minimum code requirements for height. A railing should be installed that is code compliant. Facility staff commented that screening may be installed to prevent object from being thrown onto the mezzanine area. Costing for this item has not been included.		1 – Immediate	Yes	Yes	No	Yes	34	\$150	LF \$5,10	0 0	% 10%	5%	\$6,000
17 Mesachie Lake Community Hal		C Interiors	C30 Interior Finishes	C3010 Wall Finishes	C3010 Wall Finishes	Throughout Building/Interior Wal Finishes - Paint	21/22	The majority of the interior walls are painted (wood, gypsum/plaster and acoustical tiles). Facility staff commented that interior painting is completed on ar ongoing basis. The last painting update was completed in 2008,		4	2008	9	МН	5	2	Repaint interior on an ongoing as needed basis. The costing provided is based on the historical information provided.	Contingency	4b - Discretionary Aesthetic	Yes	Yes	No	No	1	\$2,500	LS \$2,50	0 0	% 0%	5%	\$3,000
18 Mesachie Lake Community Hal	9332 S Shore Rd, I Lake Cowichan, BC	C Interiors	C30 Interior Finishes	C3030 Ceiling Finishes	C30006 Painting and Staining Ceilings	Throughout Building/Painted Ceilings	22	With the exception of the main hall area (not the mezzanine) the majority of the interior ceilings throughout the building are painted (wood, gypsum/plaster and acoustical tiles) Facility staff commended that interior painting is completed on ar ongoing basis. The last painting update was completed in 2008,	1	4	2008	9	МН	5	2	Repaint interior on an ongoing as needed basis. The costing provided is based on the historical information provided.	Replacement	4b - Discretionary Aesthetic	Yes	Yes	No	No	1	\$2,500	LS \$2,50	0 0	% 0%	5%	\$3,000
19 Mesachie Lake Community Hal		C Interiors	C30 Interior Finishes	C3010 Wall Finishes	C303099 Other Ceiling and Ceiling Finishes	g Main Hall/Reflective Ceiling	23	A reflective ceiling finish was added to the main hall.	4	4	2006	11	МН	25	14	Replace ceiling finish at end of service life.	Replacement	4b - Discretionary Aesthetic	Yes	Yes	No	No	1	\$2,500	LS \$2,50	0 0	% 0%	5%	\$3,000
20 Mesachie Lake Community Hal		C Interiors	C30 Interior Finishes	C3020 Floor Finishes	C302004 Resilient Floo Finishes	r Throughout Building/Resilient Floor Finishes	24	Resilient floor finishes have been used throughout the building in the main entrance, washrooms and kitchen. The last replacemen section was the kitchen in 2009 and washroom and main entrance in 2014.	4 t	4	2009	8	МН	10	8	Replace flooring as required. A budget has been included to replace sections as required on an ongoing basis.	Repair Allowance	3 - Future Renewal	Yes	Yes	No	No	1	\$3,000	LS \$3,00	0 0	% 0%	5%	\$4,000
21 Mesachie Lake Community Hal		C Interiors	C30 Interior Finishes	C3020 Floor Finishes		Building/Wood Flooring	25	The main hall, mezzanine and common room floors are wood assemblies. Facility staff confirmed that this floor is original to the building and was refinished in the last 10 years.	3	4	2007	10	МН	15	5	Refinish wood floors to extend service life.	Repair Allowance	3 - Future Renewal	Yes	Yes	No	No	3700	\$4	SF \$14,8	0 0	% 0%	5%	\$16,000
	Lake Cowichan, BC	C Interiors	C30 Interior Finishes		C302003 Wood Floorin	Building/Wood Flooring	x	The main hall, mezzanie and common room floors are wood assemblies. Facility staff confirmed that this floor is original to the building and was refinished in the last 10 years.	3	4	1947	70	МН	100	30	Replace flooring as required. This item falls outside the ten year plan, costs associated with this item have not been carried into the cash flow tables.		Renewal	Yes	Yes	No	No							
23 Mesachie Lake Community Hal 24 Mesachie Lake Community Hal	Lake Cowichan, BC	C Interiors C Interiors	C30 Interior Finishes C30 Interior Finishes	C1030 Fittings C1030 Fittings	C103008 Counters C103008 Cabinets	Kitchen/Counters Kitchen/Cabinets	26	Counters are present throughout the kitchen area. The age of th counters is unknown and has been assumed. Wood cabinets are present in the kitchen area.	e 3 3	4	1990 1947	27	MH	30	5	Replace counters at the end of service life. Replace cabinets at the end of their service life.	Repair Allowance Repair Allowance	3 - Future Renewal 3 - Future Renewal	Yes	No Yes	No	No	1	\$2,000			% 0%	5%	\$3,000 \$6,000
25 Mesachie Lake Community Hal		C Interiors	C30 Interior Finishes	C1030 Fittings	C103099 Other Interior Specialties	r Post Office/Mailboxe	s x	A post office is present at the main entrance. This area includes an office space and public mail boxes.			2008	9	мн	20	1	Facility staff confirmed that the post office and furnishings are not owned by the CVRD. No costing associated with the post office areas are included in the cash flow tables.		Not Applicable	N/A	N/A	No	No							
26 Mesachie Lake Community Hal	9338 S Shore Rd, I Lake Cowichan, BC	D Services	D30 HVAC	D3040 Distribution Syster	n D304001 Air Distribution, Heating and Cooling	Throughout Building/Duct Work	x	Exposed duct work is present throughout the building. Facility staff confirmed that this duct work is decommissioned.	4	4	1947	70	МН	50	46	No major capital expenditures are expected to be required. This item falls outside the ten year plan, costs associated with this item have not been carried into the cash flow tables.		Not Applicable	N/A	N/A	Yes	No							
27 Mesachie Lake Community Hal	9339 S Shore Rd, Lake Cowichan, BC	D Services	D30 HVAC	D3040 Distribution System	n D304007 Ventilation Systems	Kitchen and Washroom/Exhaust Fans	27	Exhaust fans are present in the washrooms and kitchen area. No issues related to these fan units were reported on site. The age of these systems was not known and has been assumed.	3	4	2007	10	MH	15	5	Replace fans and dampers at end of service life. Repai damaged fan vent units on the roof. The cost of these fan units falls below the project threshold and have been excluded from the study.	Replacement	3 - Future Renewal	Yes	No	Yes	No							

Surtyr Cowichan Valley Regional District 2017 Facility Condition Assessment and Capital Plan Mesachie Lake Community Hall, 9315 S Shore Rd, Lake Cowichan, BC

	ş	đ		al	COMP	PONENT	CONDITION ASSESSM	1ENIT			LIFECY	CLE DATA		RECOMMENDATION	1			If recommended				0	PINION OF I	PROBABLE CO	OST	
Row N	/ / Addre	la jor Gro ments	2 Group ments	Individu		2			rr Last ction	2017	d By	val	ist. Time maining to L or Major Action				an this work be phased over	complete can the	this system lead	Can the current condition adversely	ity ate		ubtotal	÷	August S%	2017 rs
28 Mesachie Lake	9340 S Shore Rd,	D Services	D30 HVAC	ਸ਼ੇਂ ਸ਼ੁੱਚ ਯੂ ਦੇ ਤ D3090 Other HVAC Systems	ID s D304001 Air	Exterior/Heat Pump 28/	Description & History 29 There are a total of six heat pumps (Fijtisu) around the building.	Perform t	Yr New o Maior A.	Age in 2 Assessm Date	H Assesse	Typical Typical Life Cycle o Action Inter	Est. Ti Est. Ti Remaini EOL or M Actio	Recommendation Replace heat pump assemblies at end of service life. Re				deterioration he		affect the buildings security of safety ? No	E 22 E 25 E 25 E 25 E 25 E 25 E 25 E 25	Repla	epair or cement Cost \$18,000	Consu Consu MO	0% 5%	Total in 20 Dollars
Community Hall	Lake Cowichan, BC	U Services	bonve	and Equipment	Distribution, Heating and Cooling	Exercity real runp 25	There is a constant or stream journey (1) (1) out of the constant of the const	~ ~	2007	10		20	5	nepace met point assentiates at endor service met, ene Prior to replacement review heat pumps to confirm is condenser unit can be replaced.		Renewal	18	NO	165	NO	0 33,000		518,000	0,6	5/8	\$15,000
29 Mesachie Lake Community Hall	9341 S Shore Rd, Lake Cowichan, BC	D Services	D30 HVAC	D3040 Distribution System	D304001 Air Distribution, Heating and Cooling	Throughout 30/ Building/Split Heat Pump (interior)	31 Eight (8) wall mounted split source heat pumps (Fijitu) are present throughout the building. Five (5) large units are present in the gym area and three are present throughout the main entrance, bitchen and common room). Based on the information provided we understand that these units were installed in 2013 when the oil furnace was removed.	4 4	2013	. 4	MH	20	16	Replace heating units at end of service life. Re This item falls outside the ten year plan, costs associated with this item have not been carried into the cash flow tables.		3 - Future Renewal	Yes	No	No	No						
30 Mesachie Lake Community Hall	9343 S Shore Rd, Lake Cowichan, BC	D Services	D20 Plumbing	D3040 Distribution System	D202001 Pipes and Fittings	Throughout 3: Building/Water Supply	Water for domestic service enters through a 1.5° diameter pipe (this was estimated) located in the mechanical shed. No backflow preventer is in place. Facility staff reported that the water supply system was upgraded within the last 5 years. No issues related to water supply were reported by facility staff.	4 4	2012	. 5	MH	100	2	Water distribution piping is expected to last the life of the building. Complete localized repairs as may be necessary as the building ages. Install backflow preventer in existing water entry room.		Discretionary Renewal	No	N/A	No	No	1 \$3,000	EA	\$3,000	0%	0% 5%	\$4,000
31 Mesachie Lake Community Hall		D Services	D30 HVAC	D3010 Energy Supply	D301001 Oil Supply System	Storage Room/Oil x Tank	A steel oil tank is present on the north elevation. Facility staff confirmed that this tank is decommissioned (and the furnace was removed).		2011	6	МН	20	14	The existing oil tank is decommissioned and was not reviewed as part of this assessment.	No	ot Applicable	N/A	N/A	No	No						
32 Mesachie Lake Community Hall	9350 S Shore Rd, Lake Cowichan, BC	D Services	D30 HVAC	D3010 Energy Supply	D301002 Gas Supply System	Exterior/Propane Tank x	A propane tank is present on the north elevation. Facility staff confirmed this equipment is leased and maintained by the supplier.		2011	. 6	MH	20	14	The existing propane tank is leased and taken care of by the supplier, the tank was not reviewed as part of this assessment.	No	ot Applicable	N/A	N/A	No	No						
33 Mesachie Lake Community Hall	9344 S Shore Rd, Lake Cowichan, BC	D Services	D20 Plumbing	D2020 Domestic Water Distribution	D202001 Pipes and Fittings	Throughout x Building/Water Supply	Piping is copper, where observed, and typically insulated.	4 4	1947	70	MH	50	26	Water distribution piping is expected to last the life of the building. Complete localized repairs as may be necessary as the building ages. This item fails outside the tany war plan, costs associated with this item have not been carried into the cash flow tables.	No	nt Applicable	N/A	N/A	Yes	No						
34 Mesachie Lake Community Hall	9345 S Shore Rd, Lake Cowichan, BC	D Services	D20 Plumbing	D2020 Domestic Water Distribution	D202003 Domestic Water Equipment - Tanks	Kitchen/Hot Water 3: Tank	A electric hot water heating tank in the kitchen area. The age of this system was unknown and has been estimated. The tank appears to be a 33.3 gallon unit; however, limited access was available to the tank to confirm.	4 4	2004	13	MH	12	2	Replace hot water tank at the end of its service life. Re The timeline for replacement is based on the systems age. Facility staff discussed using an on demand system in place of the hot water tank.		3 - Future Renewal	No	No	No	No	1 \$2,000	EA	\$2,000	0%	0% 5%	\$3,000
35 Mesachie Lake Community Hall		D Services	D20 Plumbing	D2030 Sanitary Waste	D203001 Waste Pipe and Fitting	Throughout x Building/Sanitary Waste	The sanitary systems are concealed and not accessible for visual review. We understand they are cleaned as required and no problems have been reported.	4 4	1947	70	MH	50	26	Sanitary piping is expected to last the life of the building. Complete localized repairs as may be necessary as the building ages.	Not Applicable	N/A	N/A	Yes	Yes	No						
36 Mesachie Lake Community Hall	9347 S Shore Rd, Lake Cowichan, BC	G Building Site work	G30 Site Civil/Mechanical Utilities	G3020 Sanitary Sewer	G302005 Septic System	Exterior/Septic System x	The complex is serviced by a septic field.		1947	,	МН			This item falls outside the scope of this study and has not been included.	Not Applicable	N/A	N/A	Yes	Yes	No						
37 Mesachie Lake Community Hall		D Services	D20 Plumbing	D2010 Plumbing Fixtures	D2010 Plumbing Fixtures	Throughout 3: Building/Plumbing Fixtures	Plumbing fixtures include sinks (3 throughout the bathrooms and kitchen), toilets (3) and urinals (1). The age of this system was unknown and has been estimated.	4 4	2000) 17	MH	35	18	Replace fixtures at the end of their service life. Re This item falls outside the ten year plan, costs associated with this item have not been carried into the cash flow tables.		3 - Future Renewal	No	No	No	No						
38 Mesachie Lake Community Hall	9350 S Shore Rd, Lake Cowichan, BC	D Services	D50 Electrical	D5010 Electrical Service and Distribution	D501005 Panels	Throughout 34/ Building/Electrical Panels	35 The main electrical system consists of one main panel (200 Amp) and one sub panel (no information on size was present on the panel). One other electrical panels are present, hower, facility staff confirmed that these panels were decommissioned. The age of the panels was not confirmed on site. No issues related to distribution were reported on site.		2000) 17	MH	5	1	Conduct Infra-red (IR) scan on major switchgear and panels. The cost of this work is below the project threshold and has not been included in the financial tables.	Study No	at Applicable	N/A	N/A	N/A	N/A						
39 Mesachie Lake Community Hall		D Services	D50 Electrical	D5010 Electrical Service and Distribution	DS01005 Panels	Throughout x Building/Electrical Panels	The main electrical system consists of one main panel (200 Amp) and one sub panel (no information on size was present on the panel). One other electrical panels are present, hower, facility staff confirmed that these panels were decommissioned. The age of the panels was not confirmed on site. No issues related to distribution were reported on site.		2000) 17	MH	35	18	Replace house panels at end of service life. Re This item falls outside the ten year plan, costs associated with this item have not been carried into the cash flow tables.		3 - Future Renewal	No	No	Yes	No						
40 Mesachie Lake Community Hall		D Services	D50 Electrical	D5020 Lighting and Branch Wiring	D502002 Lighting Equipment	Throughout 36/ Building/Interior Lighting	37 The majority of the interior lighting consists of florescent T8 tube lighting. This lighting was updated in 2006 and 2009. Isolated incandescent lights are present in some service rooms.	4 5	1947	70	MH	25	15	Replace interior lighting system at end of service life. Re Consider upgrading lighting to LED systems. This item falls outside the ten year plan, costs associated with this item have not been carried into the cash flow tables.		3 - Future Renewal	Yes	No	No	No						
41 Mesachie Lake Community Hall	9353 S Shore Rd, Lake Cowichan, BC	D Services	D50 Electrical	D5020 Lighting and Branch Wiring	D502002 Lighting Equipment	Throughout 31 Building/Exterior Lighting	Exterior lights are limited to one incandescent bulb at the buildings main entrance. No other exterior lights are present on the building.	3 5	2000	17	MH	20	3	Replace exterior light fixture. Re The cost of the current exterior lighting falls below the project threshold and have been excluded from the study.		3 - Future Renewal	Yes	No	No	No						

Surtyr Cowichan Valley Regional District 2017 Facility Condition Assessment and Capital Plan Mesachie Lake Community Hall, 9315 S Shore Rd, Lake Cowichan, BC

	ess	dno	٩	ual	COMI	PONENT		CONDITION ASSESSMENT					u	IFECYCLE D	DATA		RECOMMENDATIO	N			If recommended work not					OPINION	OF PROBAE	BLE COST		
Row WoR	Location / Addr	Level 1 Major G	Level 2 Grou	Level 3 Individ Elements	ID	Location / Type	Photo	Description & History	Darformance	Yr New or Last	Major Action	Age in 2017	As sessment Date Asses sed Bv	ka nascasst	Typical Life Cycle or Action Interval	Est. Time Remaining to EOL or Major Action	Recommendation	Type	Priority	Can this work be phased over multiple years ?	complete can the	this system lead to a loss of use of	Can the current condition adversely affect the buildings security of safety ?	Quantity	Unit Rate	Subtotal Repair or Replacement	consult.	Contin-gency	5% Tax	Total in 2017 Dollars
42 Mesachie La Community	e 9354 S Shore Rd, łall Lake Cowichan, BC	D Services	D50 Electrical	D5020 Lighting and Branch Wiring	D502002 Other Lightin and Branch Wiring	g Throughout Building/Branch Wiring		The electrical system is originate the building. Isolated upgrade 4 work was completed to the brank timing in 2007 during the installation of the main house panel. No issues related to the electrical distribution were reported by facility staff.	1 5	19	947	70	M	Н	100		Replace sections of branch wiring when required. This item falls outside the ten year plan, costs associated with this item have not been carried into the cash flow tables.	Replacement	3 - Future Renewal	Yes	No	No	No							
43 Mesachie La Community	ee 9357 S Shore Rd, Hall Lake Cowichan, BC	D Services	D40 Fire Protection	D5030 Communications and Security	D503001 Fire Protectio System	n Fire Alarm	x	No fire alarm system is present.		19	947	70	M	н	25		It is recommended that a fire alarm system be installed within the building.	Upgrade	1 – Immediate	Yes	No	No	Yes	1	\$5,000	LS \$5,000	0%	0%	5%	\$6,000
44 Mesachie La Community	ee 9357 S Shore Rd, Hall Lake Cowichan, BC	B Shell	B10 Superstructure		B101003 Floor Decks and Slabs	Exterior/Entrance Decks		Wood framed and masonry/concrete entrance decks with stairs 4 and ramps are present in four locations around the building. The wood framed stairs and ramps were last repaired in 2013 (isolated replacement).	1 4	20	013	4	M	н	7	3	It is recommended that a contingency be carried for ongoing repairs (on an as required basis).	Repair Allowance	3 - Future Renewal	Yes	Yes	No	No	1	\$2,000	LS \$2,000	0%	0%	5%	\$3,000
45 Mesachie La Community	e 9358 S Shore Rd, Iall Lake Cowichan, BC	P Professional Services	P Professional Services	P Professional Services	P100001 Seismic Screening	Seismic Screening and Foundation Study	x	Complete a seismic screening and foundation study of the building to assess seismic vulnerability.		19	947	70	M	н	10		For conducting a seismic screening of the building. The screening will be done according to the "Manual for Screening of Buildings for Seismic Investigation", published by the National Research Council of Canada (1992). Due to the unknown nature of the foundation this study should include a detailed review of the	Study		No	N/A	No	N/A	1	\$5,000	LS \$5,000	0%	0%	5%	\$6,000

2017 Facility Condition Assessment and Capital Plan

Mesachie Lake Community Hall, 9315 S Shore Rd, Lake Cowichan, BC

		СОМРО	ONENT	CONDITION ASSESSMENT	RECOMMENDATIO	ON			10-YEAR	CAPITAL PI	LAN							
Row	BLDG Name	ID	Location / Type	Description & History	Recommendation	Type	Priority	otal in 2017 Dollars	2017 \$37,000	2018 \$16,000	201 9 \$6,000	2020 \$280,000	2021 \$6,000	2022 \$0	2023 \$3,000	2024 \$20,000	2025 \$0	2026 \$31,000
1	Mesachie Lake Community Hall	A101001 Wall Foundations	Underground/ Foundations		building. Completed ongoing reviews of below grade interior space for evidence of water ingress. This item is included under P100001 Seismic Screening. No major capital expenditures are expected to be		Not Applicable	Ľ										
2	Mesachie Lake Community Hall	B201099 Other Exterior Walls	Storage Room/Fire Place (interior and exterior sections)	A masonry chimney is present where the oil furnace was in place. The masonry chimney is not supported. The masonry appears to require repair to the mortar joints.	If the chimney is no longer in use it is recommended to be removed or repaired and braced for seismic stability. The costing included assumes removal of the chimney.	Repair Allowance	2b - Exceeded Service Life	\$6,000	\$6,000									
3	Mesachie Lake Community Hall	B101001 Structural Frame	Wood Framed Floor	The original floor is wood framed structure. Floor finishes were installed in some locations. No evidence of major settlement or heaving was reported or observed. The condition of the concealed wood framing should be confirmed during the recommended foundation review.	Interior protected structural components are expected to last the life of the building. No major capital expenditures are expected to be required. This item is included under P100001 Seismic Screening. Due to the height difference between the adjacent floors it is recommended that an access gate and signage be added. The budget provided in this row is intended to cover these costs.		1 – Immediate	\$3,000	\$3,000									
4	Mesachie Lake Community Hall	A103001 Standard Slab on Grade		A cast-in-place concrete slab on grade is present in the storage/service room (north elevation). The slab appeared in good shape with no signs of heaving or cracking.	The slab on grade is expected to last the life of the building. No major capital expenditures are expected to be required. This item falls outside the ten year plan, costs associated with this item have not been carried into the cash flow tables.	Upgrade	2 - Restore Functionality	\$3,000	\$3,000									
5	Mesachie Lake Community Hall	A103006 Foundation Drainage	Underground/ Perimeter Drains	One rain water leaders drain into below grade PVC pipes (at the main entrance). The continuity of these pipes is not known. No information was available regarding the perimeter drainage system (including its age). All other rain water leaders drain onto grade.	The foundation drainage is expected to last the life of the building. Scoping of the below grade perimeter drainage should be completed to confirm system. The costing included in this line item is intended to cover this work. Consideration may be give to installing a perimeter drainage system. Costing for this work has not been included in this table. This item should be updated with the results of the foundation drainage review recommended in A103006 Foundation Drainage	Study	Not Applicable	\$3,000			\$3,000							
6	Mesachie Lake Community Hall	B10 Superstructure	Throughout Building/ General Superstructure	The superstructure consists of wood framed construction. No settlement, cracking, or other evidence of structural distress was observed or reported. There was no evidence or reports of long-term leakage that would lead us to expect concealed structural damage.	Interior protected structural components are expected to last the life of the building. No major capital expenditures are expected to be required. This item falls outside the ten year plan, costs associated with this item have not been carried into the cash flow tables. It is recommended that the building seismic upgrades be completed. This item is included under P100001 Seismic Screening.		Not Applicable											

This report should be reviewed in conjunction with the Objectives, Terms of Reference, Limitations, and Methodology included with the full report. cjw_CVRD BCA - Mesachie Lake Community Hall_FINAL, 11/17/2017

2017 Facility Condition Assessment and Capital Plan

		СОМРО	DNENT	CONDITION ASSESSMENT	RECOMMENDATIO	ON			10-YEAR (APITAL PL	AN							
Row	G Name		on / e			e	ity	tal in 2017 Dollars	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026
	BLDG	ID	Location Type	Description & History	Recommendation	Type	Prior	Total in Doll	\$37,000	\$16,000	\$6,000	\$280,000	\$6,000	\$0	\$3,000	\$20,000	\$0	\$31,000
7	Mesachie Lake Community Hall	B201001 Exterior Walls	Exterior Cladding/Vinyl	The exterior cladding consists of vinyl siding (with expanded polystyrene foam on the back side), this cladding appears to have been installed over lapped wood siding. It was reported that the vinyl siding was installed approximately 20 years ago. Areas of cracked and damaged vinyl siding were noted throughout the installation. In some areas patches have been installed. No areas of water ingress associated with the cladding were reported by facility staff.	Consideration should be given to replacing the vinyl siding with a new, more durable cladding system. Further investigation would be required to determine an appropriate cladding system and installation method. At this time we have assumed that both the vinyl and existing wood siding would be removed and a new sheathing, sheathing membrane and rain screen cladding system would be installed. Temporary patches should be installed over the damaged areas until a repair plan is developed.	Replacement	3 - Future Renewal	\$280,000				\$280,000						
8	Mesachie Lake Community Hall	B201001 Exterior Walls	Exterior Cladding/Vinyl	The exterior cladding consists of vinyl siding (with expanded polystyrene foam on the back side) installed over lapped wood siding. It was reported that the vinyl siding was installed approximately 20 years ago. Areas of cracked and damaged vinyl siding were noted throughout the installation. In some areas patches have been installed. No areas of water ingress associated with the cladding were reported by facility staff.	Complete temporary patches to the vinyl cladding to prevent water ingress. MH notes that damage to the vinyl can be expected to continue and potentially increase as the system ages and the vinyl becomes more brittle.	Replacement	3 - Future Renewal	\$5,000	\$5,000									
9	Mesachie Lake Community Hall	B201008 Exterior Soffits	Roof Eaves/Metal Soffits	The soffits consist of perforated aluminum assemblies. These assemblies are a post construction addition. The age of these assemblies was not known and has been assumed.	Replace soffits at then end of their service life.	Replacement	3 - Future Renewal	\$3,000										\$3,000
10	Mesachie Lake Community Hall	B202001 Windows	Exterior Walls/Windows		No major capital expenditures are expected to be required.													
11	Mesachie Lake Community Hall	B203001 Exterior Solid Doors	Exterior Walls/Doors	(4) single and three (3) double doors. The doors are a		Contingency	3 - Future Renewal	\$3,000					\$3,000					
12	Mesachie Lake Community Hall	B301001 Slope Roof	Sloped Roof/Asphalt Shingle	The sloped roofs are finished with asphalt shingles. Isolated moss build up was note don the north elevation. Attic areas are insulated and vented to the exterior . No issues related to this roof were reported by facility staff.	Replace shingles and underlay at the end of their service life. This item falls outside the ten year plan, costs associated with this item have not been carried into the cash flow tables.	Replacement	3 - Future Renewal											

2017 Facility Condition Assessment and Capital Plan

		СОМР	ONENT	CONDITION ASSESSMENT	RECOMMENDATIO	ON			10-YEAR O	APITAL PL	.AN							
Row	BLDG Name	ID	Location / Type	Description & History	Recommendation	Type	Priority	Total in 2017 Dollars	2017 \$37,000	2018 \$16,000	2019 \$6,000	2020 \$280,000	2021 \$6,000	2022 \$0	2023 \$3,000	2024 \$20,000	2025 \$0	2026 \$31,000
13	Mesachie Lake Community Hall	B301005 Gutters and Downspouts	Sloped Roof/Gutters and Downspouts	Gutters are present at the base of the sloped roofs. These gutters drain into rain water leaders which drain into PVC pipes below grade (main entrance) or directly only grade.	Replace gutters and downspouts at the end of service life. Replacement will likely be required at the time of roof replacement work to allow tie-ins. This item falls outside the ten year plan, costs associated with this item have not been carried into the cash flow tables.		3 - Future Renewal											
14	Mesachie Lake Community Hall	C102001 Standard Interior Doors	Throughout Building/Interior Doors	Various interior doors are present throughout the building. No fire separation doors appear to be present. The age and quality of the doors vary throughout the building. No issues related to this roof were reported by facility staff.	Replace interior doors at the end of their service life. This item falls outside the ten year plan, costs associated with this item have not been carried into the cash flow tables.	Replacement	3 - Future Renewal											
15	Mesachie Lake Community Hall	C201001 Interior Stair Construction	Mezzanine and Stair Access/Interior Stairs	Interior wood framed stairs are present in the main hall providing access to the mezzanine area as well as the stage area.	The existing stair assemblies are in good shape with no areas of damage or deterioration noted. Consideration could be given to updating handrails to current code requirements. The costing provided assumes only the railings will be updated.	Allowance	2 - Restore Functionality	\$3,000	\$3,000									
16	Mesachie Lake Community Hall	C101001 Fixed Partition	s Mezzanine Area/Interior Partitions	A fixed portion is present at the edge of the mezzanine which is acting as a railing. This portion railing is below 42	The existing guard wall is below minimum code requirements for height. A railing should be installed that is code compliant. Facility staff commented that screening may be installed to prevent objects from being thrown onto the mezzanine area. Costing for this item has not been included.	Repair Allowance	1 – Immediate	\$6,000	\$6,000									
17	Mesachie Lake Community Hall	C3010 Wall Finishes	Throughout Building/Interior Wall Finishes - Paint	The majority of the interior walls are painted (wood, gypsum/plaster and acoustical tiles). Facility staff commented that interior painting is completed on an ongoing basis. The last painting update was completed in 2008,	Repaint interior on an ongoing as needed basis. The costing provided is based on the historical information provided.	Contingency	4b - Discretionary Aesthetic	\$3,000		\$3,000					\$3,000			
18	Mesachie Lake Community Hall	C30006 Painting and Staining Ceilings	Throughout Building/Painted Ceilings	With the exception of the main hall area (not the mezzanine) the majority of the interior ceilings throughout the building are painted (wood, gypsum/plaster and acoustical tiles) Facility staff commented that interior painting is completed on an ongoing basis. The last painting update was completed in 2008,	Repaint interior on an ongoing as needed basis. The costing provided is based on the historical information provided.	Replacement	4b - Discretionary Aesthetic	\$3,000		\$3,000								
19	Mesachie Lake Community Hall	C303099 Other Ceiling and Ceiling Finishes		A reflective ceiling finish was added to the main hall.	Replace ceiling finish at end of service life.	Replacement	4b - Discretionary Aesthetic	\$3,000		\$3,000								

2017 Facility Condition Assessment and Capital Plan

		COMPONENT		CONDITION ASSESSMENT	RECOMMENDATIO		10-YEAR CAPITAL PLAN											
Row	BLDG Name	ID	Location / Type	Description & History	Recommendation	Type	Priority	Total in 2017 Dollars	2017 \$37,000	2018 \$16,000	2019 \$6,000	2020 \$280,000	2021 \$6,000	2022 \$0	2023 \$3,000	2024 \$20,000	2025 \$0	2026 \$31,000
20	Mesachie Lake Community Hall	C302004 Resilient Floor Finishes	Throughout Building/Resilient Floor Finishes	Resilient floor finishes have been used throughout the building in the main entrance, washrooms and kitchen. The last replacement section was the kitchen in 2009 and washroom and main entrance in 2014.	included to replace sections as required on an ongoing	Repair Allowance	3 - Future Renewal	\$4,000								\$4,000		
21	Mesachie Lake Community Hall	C302003 Wood Flooring	Throughout Building/Wood Flooring	The main hall, mezzanine and common room floors are wood assemblies. Facility staff confirmed that this floor is original to the building and was refinished in the last 10 years.	Refinish wood floors to extend service life.	Repair Allowance	3 - Future Renewal	\$16,000								\$16,000		
22	Mesachie Lake Community Hall	C302003 Wood Flooring	Throughout Building/Wood Flooring	The main hall, mezzanine and common room floors are wood assemblies. Facility staff confirmed that this floor is original to the building and was refinished in the last 10 years.	Replace flooring as required. This item falls outside the ten year plan, costs associated with this item have not been carried into the cash flow tables.	Replacement	3 - Future Renewal											
23	Mesachie Lake Community Hall	C103008 Counters	Kitchen/Counters	Counters are present throughout the kitchen area. The age of the counters is unknown and has been assumed.	Replace counters at the end of service life.	Repair Allowance	3 - Future Renewal	\$3,000					\$3,000					
24	Mesachie Lake Community Hall	C103008 Cabinets	Kitchen/Cabinets	Wood cabinets are present in the kitchen area.	Replace cabinets at the end of their service life.	Repair Allowance	3 - Future Renewal	\$6,000										\$6,000
25	Mesachie Lake Community Hall	C103099 Other Interior Specialties	Post Office/Mailboxes	A post office is present at the main entrance. This area includes an office space and public mail boxes.	Facility staff confirmed that the post office and furnishings are not owned by the CVRD. No costing associated with the post office areas are included in the cash flow tables.		Not Applicable											
26	Mesachie Lake Community Hall	D304001 Air Distribution, Heating and Cooling	Throughout Building/Duct Work	Exposed duct work is present throughout the building. Facility staff confirmed that this duct work is decommissioned.	No major capital expenditures are expected to be required. This item falls outside the ten year plan, costs associated with this item have not been carried into the cash flow tables.		Not Applicable											
27	Mesachie Lake Community Hall	D304007 Ventilation Systems	Kitchen and Washroom/Exhaust Fans	Exhaust fans are present in the washrooms and kitchen area. No issues related to these fan units were reported on site. The age of these systems was not known and has been assumed.	Replace fans and dampers at end of service life. Repair damaged fan vent units on the roof. The cost of these fan units falls below the project threshold and have been excluded from the study.	Replacement	3 - Future Renewal											
28	Mesachie Lake Community Hall	D304001 Air Distribution, Heating and Cooling	Exterior/Heat Pump	There are a total of six heat pumps (Fijtisu) around the building. The Fijtisu model number includes: AOU36RLX (X3), AOU36RML and AOU36CLX (x2). Based on the information provided we understand that these heat pumps were installed in 2007 and 2008. No issues related to this heat pump units were reported on site.	Replace heat pump assemblies at end of service life. Prior to replacement review heat pumps to confirm is condenser unit can be replaced.	Replacement	3 - Future Renewal	\$19,000										\$19,000

2017 Facility Condition Assessment and Capital Plan

		COMPONENT		CONDITION ASSESSMENT	RECOMMENDATIO		10-YEAR CAPITAL PLAN											
Row	OG Name	ID	cation / Type	Decoration & History	Parammandation	be	rity	Total in 2017 Dollars	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026
	BLDG	U U	Locat	Description & History	Recommendation	Тур	Prio	Total i Doll	\$37,000	\$16,000	\$6,000	\$280,000	\$6,000	\$0	\$3,000	\$20,000	\$0	\$31,000
29	Mesachie Lake Community Hall	D304001 Air Distribution, Heating and Cooling	Throughout Building/Split Heat Pump (interior)	Eight (8) wall mounted split source heat pumps (Fjitsu) are present throughout the building. Five (5) large units are present in the gym area and three are present throughout the main entrance, kitchen and common room). Based on the information provided we understand that these units were installed in 2013 when the oil furnace was removed.	Replace heating units at end of service life. This item falls outside the ten year plan, costs associated with this item have not been carried into the cash flow tables.	Replacement	3 - Future Renewal											
30	Mesachie Lake Community Hall	D202001 Pipes and Fittings	Throughout Building/Water Supply	Water for domestic service enters through a 1.5" diameter pipe (this was estimated) located in the mechanical shed. No backflow preventer is in place. Facility staff reported that the water supply system was upgraded within the last 5 years. No issues related to water supply were reported by facility staff.	Water distribution piping is expected to last the life of the building. Complete localized repairs as may be necessary as the building ages. Install backflow preventer in existing water entry room.	Upgrade	4a - Discretionary Renewal	\$4,000		\$4,000								
31	Mesachie Lake Community Hall	D301001 Oil Supply System	Storage Room/Oil Tank	A steel oil tank is present on the north elevation. Facility staff confirmed that this tank is decommissioned (and the furnace was removed).	The existing oil tank is decommissioned and was not reviewed as part of this assessment.		Not Applicable											
32		D301002 Gas Supply System	Exterior/Propane Tank	A propane tank is present on the north elevation. Facility staff confirmed this equipment is leased and maintained by the supplier.	The existing propane tank is leased and taken care of by the supplier, the tank was not reviewed as part of this assessment.		Not Applicable											
33	Mesachie Lake Community Hall	D202001 Pipes and Fittings	Throughout Building/Water Supply	Piping is copper, where observed, and typically insulated.	Water distribution piping is expected to last the life of the building. Complete localized repairs as may be necessary as the building ages. This item falls outside the ten year plan, costs associated with this item have not been carried into the cash flow tables.		Not Applicable											
34	Mesachie Lake Community Hall	D202003 Domestic Water Equipment - Tanks	Kitchen/Hot Water Tank	A electric hot water heating tank in the kitchen area. The age of this system was unknown and has been estimated. The tank appears to be a 33.3 gallon unit; however, limited access was available to the tank to confirm.	Replace hot water tank at the end of its service life. The timeline for replacement is based on the systems age. Facility staff discussed using an on demand system in place of the hot water tank.	Replacement	3 - Future Renewal	\$3,000		\$3,000								
35	Mesachie Lake Community Hall	D203001 Waste Pipe and Fitting	Throughout Building/Sanitary Waste	The sanitary systems are concealed and not accessible for visual review. We understand they are cleaned as required and no problems have been reported.	Sanitary piping is expected to last the life of the building. Complete localized repairs as may be necessary as the building ages.	Not Applicable	N/A											
36	Mesachie Lake Community Hall	G302005 Septic System	Exterior/Septic System	The complex is serviced by a septic field.	This item falls outside the scope of this study and has not been included.	Not Applicable	N/A											

2017 Facility Condition Assessment and Capital Plan

		COMPONENT		CONDITION ASSESSMENT	RECOMMENDATI		10-YEAR CAPITAL PLAN											
Row	BLDG Name	ID	ocation / Type	Description & History	Recommendation	Type	Priority	otal in 2017 Dollars	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026
37	Mesachie Lake Community Hall	D2010 Plumbing Fixtures	Throughout Building/Plumbing Fixtures	Plumbing fixtures include sinks (3 throughout the bathrooms and kitchen), toilets (3) and urinals (1). The age of this system was unknown and has been estimated.	Replace fixtures at the end of their service life. This item falls outside the ten year plan, costs associated with this item have not been carried into the cash flow tables.	Replacement	3 - Future Renewal	10	\$37,000	\$16,000	\$6,000	\$280,000	\$6,000	\$0	\$3,000	\$20,000	\$0	\$31,000
38	Mesachie Lake Community Hall	D501005 Panels	Throughout Building/Electrical Panels	The main electrical system consists of one main panel (200 Amp) and one sub panel (no information on size was present on the panel). One other electrical panels are present; however, facility staff confirmed that these panels were decommissioned. The age of the panels was not confirmed on site. No issues related to distribution were reported on site.	Conduct Infra-red (IR) scan on major switchgear and panels. The cost of this work is below the project threshold and has not been included in the financial tables.	Study	Not Applicable											
39	Mesachie Lake Community Hall	D501005 Panels	Throughout Building/Electrical Panels	The main electrical system consists of one main panel (200 Amp) and one sub panel (no information on size was present on the panel). One other electrical panels are present; however, facility staff confirmed that these panels were decommissioned. The age of the panels was not confirmed on site. No issues related to distribution were reported on site.	Replace house panels at end of service life. This item falls outside the ten year plan, costs associated with this item have not been carried into the cash flow tables.	Replacement	3 - Future Renewal											
40	Mesachie Lake Community Hall	D502002 Lighting Equipment	Throughout Building/Interior Lighting	The majority of the interior lighting consists of florescent T8 tube lighting. This lighting was updated in 2006 and 2009. Isolated incandescent lights are present in some service rooms.	Replace interior lighting system at end of service life. Consider upgrading lighting to LED systems. This item falls outside the ten year plan, costs associated with this item have not been carried into the cash flow tables.	Replacement	3 - Future Renewal											
41	Mesachie Lake Community Hall	D502002 Lighting Equipment	Throughout Building/Exterior Lighting	Exterior lights are limited to one incandescent bulb at the buildings main entrance. No other exterior lights are present on the building.	Replace exterior light fixture. The cost of the current exterior lighting falls below the project threshold and have been excluded from the study.	Replacement	3 - Future Renewal											
42	Mesachie Lake Community Hall	D502002 Other Lighting and Branch Wiring	Throughout Building/Branch Wiring	work was completed to the brank wiring in 2007 during the installation of the main house panel.	Replace sections of branch wiring when required. This item falls outside the ten year plan, costs associated with this item have not been carried into the cash flow tables.	Replacement	3 - Future Renewal											
43	Mesachie Lake Community Hall	D503001 Fire Protection System	Fire Alarm	No fire alarm system is present.	It is recommended that a fire alarm system be installed within the building.	Upgrade	1 – Immediəte	\$6,000	\$6,000									

2017 Facility Condition Assessment and Capital Plan

		COMPONENT		CONDITION ASSESSMENT	RECOMMENDATION				10-YEAR CAPITAL PLAN										
Row	G Name	ID	cation / Type		Recommendation	e	Priority	Total in 2017 Dollars	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	
	BLD		Locat	Description & History I	Recommendation	Тур			\$37,000	\$16,000	\$6,000	\$280,000	\$6,000	\$0	\$3,000	\$20,000	\$0	\$31,000	
44	Mesachie Lake Community Hall	B101003 Floor Decks and Slabs	Exterior/Entrance Decks	Wood framed and masonry/concrete entrance decks with stairs and ramps are present in four locations around the building. The wood framed stairs and ramps were last repaired in 2013 (isolated replacement).	It is recommended that a contingency be carried for ongoing repairs (on an as required basis).	Repair Allowance	3 - Future Renewal	\$3,000			\$3,000							\$3,000	
45	Mesachie Lake Community Hall	P100001 Seismic Screening	-	Complete a seismic screening and foundation study of the building to assess seismic vulnerability.	For conducting a seismic screening of the building. The screening will be done according to the "Manual for Screening of Buildings for Seismic Investigation", published by the National Research Council of Canada (1992). Due to the unknown nature of the foundation this study should include a detailed review of the	Study		\$6,000	\$5,000										

Photo 01





Cowichan Valley Regional District Mesachie Lake Community Hall - Report Photos

Photo 02

Cowichan Valley Regional District Mesachie Lake Community Hall - Report Photos



Photo 03



Cowichan Valley Regional District Mesachie Lake Community Hall - Report Photos



Photo 05



Cowichan Valley Regional District Mesachie Lake Community Hall - Report Photos





Photo 08

Cowichan Valley Regional District Mesachie Lake Community Hall - Report Photos

Photo 09



Cowichan Valley Regional District Mesachie Lake Community Hall - Report Photos





Photo 12

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Cowichan Valley Regional District Mesachie Lake Community Hall - Report Photos



Photo 14

Cowichan Valley Regional District Mesachie Lake Community Hall - Report Photos



Photo 15



Photo 16

Photo 17



Photo 18

Cowichan Valley Regional District Mesachie Lake Community Hall - Report Photos

Photo 19



Photo 21



Cowichan Valley Regional District Mesachie Lake Community Hall - Report Photos

Photo 23



Mesachie Lake Community Hall - Report Photos

Photo 25







Photo 27



Photo 28



Photo 29



617



Photo 31

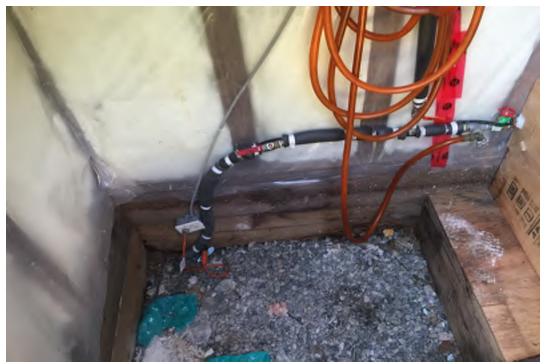


Photo 32





Photo 34

Cowichan Valley Regional District Mesachie Lake Community Hall - Report Photos

Photo 35



Cowichan Valley Regional District Mesachie Lake Community Hall - Report Photos

Photo 37



Photo 38

Cowichan Valley Regional District Mesachie Lake Community Hall - Report Photos

Photo 39



Photo 41

Cowichan Valley Regional District Mesachie Lake Community Hall - Report Photos

Appendix A

A – 10 Lake Cowichan Community Hall

Lake Cowichan Community Hall



Cowichan Valley Regional District MH Project No. 5170700.00

November 2017



Cowichan Valley Regional District 175 Ingram Street Duncan, BC V9L 1N8



Cowichan Valley Regional District Facility Condition Assessment and Capital Plan Lake Cowichan Community Hall, 309 S Shore Road, Lake Cowichan, BC

PROPERTY DESCRIPTION	PROPERTY STATISTIC	S
Lake Cowichan Community Hall is a two storey wood framed	Gross Floor Area:	10,904 sf.
structure buildt in 1967.		

Reference to Photo 1 for an overview of the building

Replacement Value:	\$3,047,928
Target FCI:	0.100
Current FCI:	0.033

REPORT OVERVIEW

We found no safety concerns requiring immediate expenditures.

The following provides an overview of the visual seismic, building code, accessibility and energy efficiency reviews completed.

Seismic Review

None
Complete a seismic screening of the building to assess
seismic vulnerability. The screening will be done according
to the "Manual for Screening of Buildings for Seismic
Investigation", published by the National Research Council
of Canada (1992).

Building Code Review

Built under what code: Deficiencies observed:

Accessibility Review

Access into building:	Level 1 only
Access throughout building:	Not between floors
Access to washrooms:	Yes (level 1)
Recommendations:	

We identified recommendations of approximately \$265,000 over the next five years. The following is a summary of the major projects (over \$10,000) we believe will be required the next five years, and elements whose condition is unknown and/or where further investigation is recommended:

Row 6 - '-B201001 Exterior Enclosure - stucco cladding repairs (\$18,000) Row 14 - '-B301002 Roofing - Low Sloped Membrane System SBS - Level 2 replacement (\$119,000) Row 15 - '-B301002 Roofing - Low Sloped Membrane System SBS - Level 1 roof repairs (\$64,000) Row 21 - '-C302003 - Wood Flooring - refinished (\$16,000)

Cowichan Valley Regional District Facility Condition Assessment and Capital Plan Lake Cowichan Community Hall, 309 S Shore Road, Lake Cowichan, BC

PROJECT TEAM

The visual reviews were completed on June 27th, 2017 by Craig Labas. We began with an interview with Rob Frost, Facilities Manager. During our review of the building, we were accompanied by Rob Frost, Facilities Manager, who provided access to a sampling of representative areas of the facility, as requested.

Chris Raudoy of Morrison Hershfield reviewed the report for technical content and for compliance with the contract requirements.

REFERENCE DOCUMENTS/INFORMATION

We reviewed the following documents and selected drawings for general background and to inform ourselves about the layout and intended construction:

- Floor Plans by Graphic Office Interiors, dated January, 2016
- Project summary list, authored by CVRD (2005-2016)

This report should be reviewed in conjunction with the Objectives, Terms of Reference, Limitations, and Methodology described in the main body of the report.

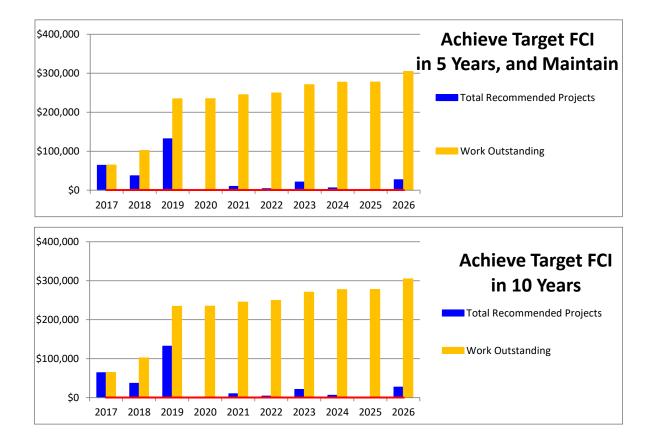
Cowichan Valley Regional District Facility Condition Assessment and Capital Plan Lake Cowichan Community Hall, 309 S Shore Road, Lake Cowichan, BC

We recommend budgeting for the following 1 – Immediate, 2 - Restore Functionality, 2b - Exceeded Service Life and 3 - Future Renewal projects by year as follows:

2017	2018	2019	2020	2021	2022	2023	2024	2025	2026
0	0	0	0	0	0	0	0	0	0
64,000	18,000	0	0	0	0	0	0	0	0
0	3,000	0	0	0	0	0	0	0	0
0	16,000	132,000	0	10,000	4,000	21,000	6,000	0	27,000
64,000	37,000	132,000	0	10,000	4,000	21,000	6,000	0	27,000
	0 64,000 0 0	0 0 64,000 18,000 0 3,000 0 16,000	0 0 0 64,000 18,000 0 0 3,000 0 0 16,000 132,000	0 0 0 0 0 64,000 18,000 0 0 0 0 3,000 0 0 0 0 16,000 132,000 0 0	0 0 0 0 0 64,000 18,000 0 0 0 0 3,000 0 0 0 0 16,000 132,000 0 10,000	0 0	0 0	0 0 0 0 0 0 0 0 64,000 18,000 0 <td< td=""><td>0 0</td></td<>	0 0

Minimum Funding to Achieve and Maintain Target FCI within 5 years: -\$345

Work outstanding	64,690	102,034	234,379	234,724	245,069	249,414	270,758	277,103	277,448	304,793
Minimum Funding to Achiev	e Target F	CI within	10 years:	-\$345						
Work outstanding	64,690	102,034	234,379	234,724	245,069	249,414	270,758	277,103	277,448	304,793



Suarty: 2017 Facility Condition Assessment and Capital Plan Lake Cowichan Community Hall, 309 S Shore Road, Lake Cowichan, BC

an	ddress	Group	d no	idual	CO	MPONENT		CONDITION ASSESSMENT			<u>ن</u> م			LIFECYCLE		RECOMMENDATION			Can this work be	f recommended work not	Will a failure in this system	Can the current condition				OF PROBABI	E COST	
Lake Cowichan	9 / Log 9 S 9 Shore Road, Lake	Level 1 Major Element	2 5 7 12 9 12 9 12 9 12 9 12 9 12 9 12 9 12	Ap te u c panaj s A1010 Standard	ID A101001 Wall	Dudergroun/	Photo	Description & History The foundations and foundation walk are cast-in-place concrete as visible at rear	Condition	> Performance	Yr New or Last Major Action	Assessment Date	Assessed By	Typical Life Cycle or Action Interva	Est. Time Remaining to EOL or Major Action	Recommendation The foundation walls are expected to last the life of the building,	Type	Au out Applicable	phased over multiple years ? N/A	rate of	lead to a loss of use of the	adversly affect the buildings security of safety ?	Quantity Unit Rate	Unit Unit	Subtotal Repair or Replacement Cost	Consult.	Contingency %5	Total in 2017 Dollars
Community Hall		A Superstructur	Alteroundations	Foundations	Foundations	Foundations		Ine rounauous and rounauour was are cash place concrete as visual at real (north) elevation. The depth of foundation walls unknown. Foundation walls are concealed by interior finishes at most locations inside the building. No current leaks were reported or observed.	4	4	1307	27-5011-17	WIT 50	100	30	with isolated repairs only. Complete localized crack injection/parging repair/waterproofing replacement as needed to correct leakage.		Not Applicable	17/2	N/A	NO	NO						
Lake Cowichan Community Hall	309 S Shore Road, Lake Cowichan, BC	A Superstructur	e A10 Foundations	s A1030 Slab on Grade	A103001 Standard Sla on Grade	b Throughout Building/Slab on Grade	b 2	The 1st floor level is concrete slab-on-grade. 99% of the floor is covered with linoleum floor covering so inspection of the actual slab could not be done; however, no cracks were noted during our review. No evidence of moisture, major settlement of heaving was reported or observed.	4	5	1967	27-Jun-17	MH 50	100	50	The slab on grade is expected to last the life of the building, with isolated repairs only.		Not Applicable	N/A	N/A	Yes	No						
	309 S Shore Road, Lake Cowichan, BC	A Superstructur	e A10 Foundations	s A1030 Slab on Grade	A103006 Foundation Drainage	Underground/ Perimeter Drains	×	Roof downspouts are collected by a underground collection system. Given the age of the building it is likely the foundation drainage doubles as roof drainage collection system. Note, roof downspouts were replaced in 2014.	3	5	1967	27-Jun-17	MH 50	100	50	The foundation drainage is expected to last the life of the building. No major capital expenditures are expected to be required other than periodic camera testing to verify function. This item falls outside the ten year plan, costs associated with this		Not Applicable	No	N/A	No	N/A						
Lake Cowichan	309 S Shore Road, Lake	A Superstructur	e A10 Foundations	s A1030 Slab on	A103006 Foundation	Underground/ Perimeter	×	Roof downspouts are collected by a underground collection system. Given the age			1967	27-Jun-17	MH 50	10	2	item have not been carried into the cash flow tables. This should be updated with the results of the foundation drainage review recommended in A103006 Foundation Drainage. Periodic camera testing to verify function.	Study	Not Applicable	No	N/A	No	N/A	1 \$2,0	000 LS	\$2,000	0%	0% 5%	\$3,000
Community Hall				Grade	Drainage	Drains		of the building it is likely the foundation drainage doubles as roof drainage collection system. Note, roof downspouts were replaced in 2014.																				
Lake Cowichan Community Hall	309 S Shore Road, Lake Cowichan, BC	B Shell	B10 Superstructure	B10 Superstructure	B10 Superstructure	Throughout Building/ General Superstructure	3-6	The superstructure consists of reinforced cast in place concrete footings & foundation walls of varying heights depending on the elevation of the exterior grade. Steel columns support the roof level open-web steel roof joists. The structural roof deck consists of tounge and groove wood, the exact dimensions are unknown. The second or main floor level is expected to be constructed using conventional wood framing. The exterior walls are infliled with wood framing. Interior steel posts support the 2nd floor assembly. No settlement, cracking, or other evidence of structural distress was observed or reported. There was no evidence or reports of long-term leakage that would lead	3	5	1967	27-Jun-17	MH 50	100	50	Interior protected structural components are expected to last the life of the building. One 1st floor post was said to be slightly off vertical but a structural review was done (by others) and no damage or deficiency was present. No major capital expenditures are expected to be required		Not Applicable	No	N/A	No	N/A						
	309 S Shore Road, Lake Cowichan, BC	B Shell	B20 Exterior Enclosure	B2010 Exterior Walls	B201001 Exterior Enclosure	Exterior Cladding/Stucco Cladding	7-8	us to expect concealed structural damage. Face sealed stucco cladding is used throughout this development. Localized water ingress was noted in a south elevation lower floor storage room ceiling area. The source of the water ingress is believed to be originating from a south elevation 2nd floor level roof area.		3	1967	27-Jun-17	MH 50	35	2	The stucco dadding has been painted recently (in 2014) but is showing no signs of distress. Deficiencies at the 2nd floor level roof membrane to stucco cladding interface were noted and water ingress at this area is strongly suspected. Our of review showed a open roof to cladding joint along the south and east elevation and this deficiency is believed to be the source of the water ingress.	Repair Allowance	e 2 - Restore Functionality	No	Yes	No	No	1 \$17,	.000 LS	\$17,000	0%	0% 5%	\$18,00
Lake Cowichan Community Hall	309 S Shore Road, Lake Cowichan, BC	B Shell	B20 Exterior Enclosure	B2010 Exterior Walls	B201001 Exterior Enclosure	Exterior Cladding/Stucco Cladding	7-8	Face sealed stucco cladding is used throughout this development. The stucco was last painted in 2014.	3	3	2014	27-Jun-17	MH 3	10	7	Repaint stucco cladding.	Repair Allowance	e 3 - Future Renewal	Yes	Yes	No	No	1 \$12,	.000 LS	\$12,000	0%	0% 5%	\$13,00
Lake Cowichan Community Hall	309 S Shore Road, Lake Cowichan, BC	B Shell	B20 Exterior Enclosure	B2010 Exterior Walls	E201008 Exterior Soffits	Roof Eaves/ Metal Soffit	9	Metal soffits provided are generally 1'-6' wide and are in good shape.	4	5	2014	27-Jun-17	MH 3	25	22	Costing based on 2014 project costs. Replace metal soffit at end of service life. This item falls outside the ten year plan, costs associated with this item have not been carried into the cash flow tables.	Repair Allowance	e 3 - Future Renewal	Yes	Yes	No	No						
Lake Cowichan Community Hall	309 S Shore Road, Lake Cowichan, BC	B Shell	B20 Exterior Enclosure	B2010 Exterior Walls	B201001 Exterior Enclosure	Exterior Walls/Windows and Doors	10	Window and door trims were painted as part of the 2014 building painting program. Door overhang wood supports were also painted.	4	5	2014	27-Jun-17	MH 3	5	3	Regular maintenance dictates all wood trim around windows, doors plus stained door overhang framing requires re-painting/re-staining every 5 years		e 3 - Future Renewal	No	Yes	No	No	1 \$2,0	000 LS	\$2,000	0%	0% 5%	\$3,000
Lake Cowichan Community Hall	309 S Shore Road, Lake Cowichan, BC	B Shell	B20 Exterior Enclosure	B2010 Exterior Walls	B201011 Joint Sealan	t Exterior Walls/Exterior Sealant Joints	x	There are fillet type sealant joints at exterior stucco to window and door perimeters. Sealants are in acceptable condition where reviewed; however, the durability of fillet style joints is low. No leaks originating from windows & doors were reported by building staff.	4	4	2014	27-Jun-17	MH 3	5	3	Fillet style sealant joints lack long term durability so regular inspection is required. When required, remove existing sealant then install new sealant between dissimilar materials, around windows and doors.	Repair Allowance	e 3 - Future Renewal	No	Yes	No	No	1 \$2,0	000 LS	\$2,000	0%	0% 5%	\$3,000
	309 S Shore Road, Lake Cowichan, BC	B Shell	B20 Exterior Enclosure	B2020 Exterior Windows	B202001 Windows	Exterior Walls/Windows- Insulated Glass Units (IGUs)	×	The window glazing is clear, double-glazed sealed insulating glass units with desiccant-filled spacers. We did not note any failed insulating glazing units. We understand the existing wood window frames were fitted with new twin sealed units in 2013.	4	4	2013	27-Jun-17	MH 4	20	16	Replace insulated glass units (IGUs) with new when required	Study	4a - Discretionary Renewal	Yes	No	No	No	\$2	24 SF	\$0	0%	0% 5%	
Lake Cowichan Community Hall	309 S Shore Road, Lake Cowichan, BC	B Shell	B20 Exterior Enclosure	B2030 Exterior Doors	B203001 Exterior Soli Doors - single	d Exterior Walls/Single Doors	11	Single exterior doors are solid core. Doors are aged and worn. Hardware & openers appeared to be 15+ years old but fully functional	3	4	2000	27-Jun-17	MH 17	25	7	Replace doors at end of service life. Replace weatherstripping and complete minor repairs and adjustment as part of maintenance. Lower floor door striker place appeared damaged and should be renaired	Replacement	4a - Discretionary Renewal	Yes	Yes	No	No	3 \$1,7	750 EA	\$5,250	0%	0% 5%	\$6,000
Lake Cowichan Community Hall	309 S Shore Road, Lake Cowichan, BC	B Shell	B20 Exterior Enclosure	B2030 Exterior Doors	B203001 Exterior Soli Doors - double	d Exterior Walls/Double Doors	12	Double exterior doors are solid core. Doors are aged and worn. Hardware & openers appeared to be 15+ years old but fully functional	3	4	2000	27-Jun-17	MH 17	25	9	Replace doors at end of service life. Replace weatherstripping and complete minor repairs and adjustment as part of maintenance.	Replacement	4a - Discretionary Renewal	Yes	Yes	No	No	5 \$2,5	500 EA	\$12,500	0%	0% 5%	\$14,000
	309 S Shore Road, Lake Cowichan, BC	B Shell	B30 Roof Coverings	B3010 Roof Coverings	B301002 Roofing - Lo Sloped Membrane System SBS	w Upper Roof/Low Sloped Roof	13-14	2nd floor roofs were aged and deteriorated. Blisters existed in 2 locations where cap sheet has become delaminated from base sheet. Flashing assemblies on 1st floor level roofs are poor, flashings on 2nd floor level roof are acceptable	3	3	1995	27-Jun-17	MH 22	25	3	Replace and reslope insulated roofing system including flashings, sealants, etc. as required.	Replacement	3 - Future Renewal	No	Yes	No	No	4525 \$2	25 SF	\$113,125	0%	0% 5%	\$119,00
Lake Cowichan Community Hall	309 S Shore Road, Lake Cowichan, BC	B Shell	B30 Roof Coverings	B3010 Roof Coverings	B301002 Roofing - Lo Sloped Membrane System SBS	w Lower Roof/Low Sloped Roof	15-16	1st floor level roof membranes had serious potential for water ingress at the roof to wall interface. Replacement is required.	2	1	1995	27-Jun-17	MH 22	25	1	Roof to wall interface is severely deteriorated. Replace and reslope insulated roofing system including flashings, sealants, etc. as required (discontinuous roof areas)	Replacement	2 - Restore Functionality	No	Yes	No	No	1600 \$3	38 SF	\$60,800	0%	0% 5%	\$64,00
Lake Cowichan Community Hall	309 S Shore Road, Lake Cowichan, BC	B Shell	B30 Roof Coverings	B3010 Roof Coverings	B301005 Gutters and Downspouts	Roofs/Gutters and Downspouts	17	Exterior metal downspouts were replaced in 2014	4	5	2014	27-Jun-17	MH 3	30	27	Replace gutters and downspouts at the end of service life. This item falls outside the ten year plan, costs associated with this item have not been carried into the cash flow tables.	Replacement	3 - Future Renewal	Yes	No	No	No						
Lake Cowichan Community Hall	309 S Shore Road, Lake Cowichan, BC	C Interiors	C10 Interior Construction	C1020 Interior Doors	C102001 Standard Interior Doors	Throughout Building/Interior Doors	18-21	Solid core and hollow core wood interior doors are present throughout the interior of the building. No issues were related to the interior doors were observed or reported by facility staff	4	4	1967	27-Jun-17	MH 50	50	20	The interior doors are expected to last the life of the building. No major capital expenditures are expected to be required. This item falls outside the ten year plan, cost associated with this item have not been carried into the cash flow tables.	Study	Not Applicable	Yes	No	No	No						
Lake Cowichan Community Hall	309 S Shore Road, Lake Cowichan, BC	C Interiors	C10 Interior Construction	C1020 Interior Doors	C102001 Standard Interior Doors	Throughout Building/Interior Doors	18-21	Solid core and hollow core wood interior doors are present throughout the interior of the building. No issues were related to the interior doors were observed or reported by facility staff	4	4	1967	27-Jun-17	MH 50	50	15	Doors are expected to last the life of the building. However, a budget is provided for some door replacement at heavily used areas and localized repairs. This item fails outside the ten year plan, costs associated with this item have not been carried into the cash flow tables.	Contingency	Not Applicable	Yes	No	No	No						
Lake Cowichan Community Hall	309 S Shore Road, Lake Cowichan, BC	C Interiors	C10 Interior Construction	C1020 Fittings	C103002 Toilet and Bath Accessories	Washrooms	22-24	Upgrades were completed to tollet, urinals, faucets and flooring in 2014, no upgrades or repairs are planned	4	5	2014	27-Jun-17	MH 3	15	12	Update washroom at the end of its service life. This item falls outside the ten year plan, costs associated with this item have no been carried into the cash flow tables.	Replacement	3 - Future Renewal	Yes	No	No	No						

Suarty: 2017 Facility Condition Assessment and Capital Plan Lake Cowichan Community Hall, 309 S Shore Road, Lake Cowichan, BC

	ress	dno.	9	lual	CON	MPONENT		CONDITION ASSESSMENT						LIFECYCLE	DATA	RECOMMENDATION			Can this Wo	mmended ork not	Will a failure	Can the current condition			OPINION OF	F PROBABLE	COST	
BLDG Nam	Location / Add	Level 1 Major G Elements	Level 2 Grou Elements	Level 3 Indivic Elements	ID	Location / Type	Photo	Description & History	Condition	Performance	Yr New or Last Major Action	Assessment Date	Assess ed By Age in 2017	Typical Life Cycle or Action Interval	Est. Time Remaining to EOL or Major Action	Recommendation	Type	Priority	over deteri	ate of	in this system lead to a loss of use of the facility ?	adversly affect the buildings security of safety ?	Quantity	Unit Rate Unit	Subtotal Repair or Replacement Cost	Consult.	Contingency 2%	Total in 2017 Dollars
Lake Cowichan Community Hall	309 S Shore Road, Lake Cowichan, BC	C Interiors	C30 Interior Finishes	C3020 Floor Finishes	C302001 Tile flooring	Level 1 Washrooms/Tile Flooring	25	1st floor washroom tile flooring was recently added and is in good condition.	4	5	2014	27-Jun-1	7 MH 3	25	22	Update flooring at the end of its service life. This item falls outside the ten year plan, costs associated with this item have not been carried into the cash flow tables.	Repair Allowance	3 - Future Renewal	Yes	No	No	No						
Lake Cowichan Community Hall	309 S Shore Road, Lake Cowichan, BC	C Interiors	C30 Interior Finishes	C3020 Floor Finishes	C302003 - Wood Flooring	Throughout Building/Wood Flooring	26-27	The main floor level hardwood floor is in good shape however the finish is worn and re-finishing is recommended.	3	3	1967	27-Jun-1	7 MH 50	50	2	Refinish the hardwood flooring.	Repair Allowance	3 - Future Renewal	No	Yes	No	No	3600	\$4 SF	\$14,400	0%	0% 5%	\$16,000
Lake Cowichan Community Hall	309 S Shore Road, Lake Cowichan, BC	C Interiors	C30 Interior Finishes	C3020 Floor Finishes	C302004 Resilient flooring - lower floor kitchen area	Throughout Building/Resilient Flooring		Lower main hall floor appears to be using the original flooring. The floor is still in acceptable condition	3	4	1967	27-Jun-1	7 MH 50	10	11	Replace flooring at the end of its service life. This item falls outside the ten year plan, costs associated with this	Replacement	4a - Discretionary Renewal	No	Yes	No	No						
Lake Cowichan Community Hall	309 S Shore Road, Lake Cowichan, BC	C Interiors	C30 Interior Finishes	C3020 Floor Finishes	C302004 Resilient flooring - lower floor kitchen area		30-31	Kitchen floor is not original and appears to be in fair to good condition	4	3	2000	27-Jun-1	7 MH 17	30	13	item have not been carried into the cash flow tables. Replace flooring at the end of its service life. This item falls outside the ten year plan, costs associated with this	Replacement	3 - Future Renewal	No	No	No	No				\vdash		
Lake Cowichan Community Hall	309 S Shore Road, Lake Cowichan, BC	C Interiors	C30 Interior Finishes	C3020 Floor Finishes	C302003 - Wood Flooring	Stage/Perimeter Wood Flooring	32	Perimeter wood framing is quite worn and requires repairs. The floor surface appears to be in acceptable condition	2	3	1967	27-Jun-1	7 MH 50	50	2	item have not been carried into the cash flow tables. The existing hardwood perimeter band is in a deteriorated state. Refinishing it may be possible but some deep gouges are present that may necessitate replacement	Repair Allowance	2b - Exceeded Service Life	No	Yes	No	No	1 \$2	2,500 LS	\$2,500	0%	0% 5%	\$3,000
Lake Cowichan Community Hall	309 S Shore Road, Lake Cowichan, BC	C Interiors	C30 Interior Finishes	C3020 Floor Finishes	C302004 Resilient flooring	Level 2 Kitchen/Resilient Flooring	33	Kitchen floor appears to be original and is in poor condition. Replacement is recommended	2	3	1967	27-Jun-1	7 MH 50	20	3	Remove and replace kitchen floor area. The cost for this work is below the project threshold and has not	Repair Allowance	2b - Exceeded Service Life	No	No	No	No						
Lake Cowichan Community Hall	309 S Shore Road, Lake Cowichan, BC	C Interiors	C20 Stairs	C2020 Stair Finishes	C202001 Interior Stair Finishes	r Interior Stairs	34-35	Stair treads and finishes are in good condition	4	4		27-Jun-1	7 MH 0	10	12	been included in the financial tables. Stair tread & finish replacement isn't expected to be needed within the 10 year study period.	Contingency	4a - Discretionary Renewal	No	Yes	No	No				\vdash	_	-
Lake Cowichan Community Hall	309 S Shore Road, Lake Cowichan. BC	C Interiors	C20 Stairs	C2020 Stair Finishes	C202001 Interior Stair Finishes	r South Elevation/Exit Stairs	5 X	Stairs are in good condition but the stair finishes are showing signs of age, refinishing is recommended.	3	3	1967	27-Jun-1	7 MH 50	10	3	This item falls outside the ten year plan, costs associated with this item have not been carried into the cash flow tables. Refinish the hardwood stairs, add non-slip surfaces	Repair Allowance	3 - Future Renewal	No	Yes	No	No	1 \$3	1,500 LS	\$3,500	0%	0% 5%	\$4,000
Lake Cowichan Community Hall	309 S Shore Road, Lake Cowichan, BC	C Interiors	C30 Interior Finishes	C3010 Wall Finishes	C301003 Gypsum Wallboard Finishes	Throughout Building/Pain	t x	Painted wall finishes are generally in good condition but some limited GWB damage was noted.	3	4	2000	27-Jun-1	7 MH 17	10	7	Repaint as age and usage dictates	Repair Allowance	4b - Discretionary	Yes	Yes	No	No	1 \$3	1,500 LS	\$3,500	0%	0% 5%	\$4,000
Lake Cowichan Community Hall	309 S Shore Road, Lake Cowichan, BC	C Interiors	C30 Interior Finishes	C3010 Wall Finishes	C301003 Gypsum Wallboard Finishes	Throughout Building/Pain	t x	Painted wall finishes are in good condition.	4	5	2013	27-Jun-1	7 MH 4	10	6	Repaint as age and usage dictates	Repair Allowance	Aesthetic 4b - Discretionary	Yes	Yes	No	No	1 \$3	1,000 LS	\$3,000	0%	0% 5%	\$4,000
Lake Cowichan	309 S Shore Road, Lake	C Interiors	C30 Interior		C303004 Ceiling	Level 1/Ceiling Tiles and	36-37	Ceiling tiles on 1st floor painting / replacement	4	4	2012	27-Jun-1	7 MH 5	15	11	Replace or repaint acoustic ceiling tiles (excluding suspension	Repair Allowance	Aesthetic 4b -	Yes	Yes	No	No						
Community Hall	Cowichan, BC		Finishes	Finishes		Panels										system). This item falls outside the ten year plan, costs associated with this item have not been carried into the cash flow tables.		Discretionary Aesthetic										
Lake Cowichan Community Hall	309 S Shore Road, Lake Cowichan, BC	C Interiors	C30 Interior Finishes	C3030 Ceiling Finishes	C303005 Wood Ceiling Painting	g Level 2/Painted Wood Ceiling	38	Ceiling consists of painted 2 x 6 dimensional lumber	3	4	2000	27-Jun-1	7 MH 17	25	8	Repaint ceiling as age and condition dictate	Contingency	4b - Discretionary Aesthetic	Yes	Yes	No	No	1 \$5	5,000 SF	\$5,000	0%	0% 5%	\$6,000
Lake Cowichan Community Hall	309 S Shore Road, Lake Cowichan, BC	C Interiors	C10 Interior Construction	C1020 Fittings	C103008 Countertops			Point of Service countertop is in a deteriorated state and replacement is recommended. Countertops in 1st floor kitchen area are in good condition.	2	3			7 MH 50		3	Replace point of service countertop and sinks	Replacement	3 - Future Renewal	No	Yes	No	No		2,000 LS	\$2,000		0% 5%	\$3,000
Lake Cowichan Community Hall	309 S Shore Road, Lake Cowichan, BC	C Interiors	C10 Interior Construction	C1020 Fittings	C103009 Cabinets	Kitchen/Cabinets		Both 1st and 2nd floor kitchen cabinets appear original but are still functional. Replacement is discretionary based on their overall dated appearance.	3	4			7 MH 50		7	Continue to re-use. Replacement would be discretionary	Replacement	3 - Future Renewal		No	No	No	1 \$7	7,500 LS	\$7,500	0%	0% 5%	\$8,000
Lake Cowichan Community Hall	309 S Shore Road, Lake Cowichan, BC	D Services	D30 HVAC	D3040 Distribution System	n D304001 Air Distribution, Heating and Cooling	Rooftop/Heat Pump	40	3 - 5 ton "RHEEM" brand roof top heat pump units (Model # RNIN-A660K) control the heating and cooling within the building. Each unit has its own air handling unit that is installed directly beneath each unit. These units were installed in 2013 and no service problems were reported and replacement is not expected during this study period.	4	5	2013	27-Jun-1.	7 MH 4	20	16	Replace at end of service life. This item falls outside the ten year plan, costs associated with this item have not been carried into the cash flow tables.	Replacement	3 - Future Renewal	Yes	Yes	No	No						
Lake Cowichan Community Hall	309 S Shore Road, Lake Cowichan, BC	D Services	D30 HVAC	D3040 Distribution System	n D304001 Air Distribution, Heating and Cooling	Exterior/Heat Pump	41	1 - 5 ton at grade mounted heat pump unit (model # RP1560AJINA) control the heating and cooling within the building. These units were installed in 2013 and no service problems were reported and replacement is not expected during this study period	4	5	2013	27-Jun-1	7 MH 4	20	16	Replace at end of service life. This item falls outside the ten year plan, costs associated with this item have not been carried into the cash flow tables.	Replacement	3 - Future Renewal	Yes	Yes	No	No						
Lake Cowichan Community Hall	309 S Shore Road, Lake Cowichan, BC	D Services	D30 HVAC	D3040 Distribution System	n D304007 Exhaust System	Level 1 Kitchen/Exhaust Fans	42-43	Stainless steel range hood exhaust fan, ducting and exterior exhaust hood. Age of system is approximated. No service problems were reported.	4	5	2000	27-Jun-1	7 MH 17	30	13	Replace at end of service life. This item falls outside the ten year plan, costs associated with this item have not been carried into the cash flow tables.	Replacement	3 - Future Renewal	No	Yes	No	No						
Lake Cowichan Community Hall	309 S Shore Road, Lake Cowichan, BC	D Services	D30 HVAC	D3040 Distribution System	n D304008 Air Handling Units	g Level 1 Storage Area/Interior Air Handling Units		There is one air handling unit (Rheem model RHLL-HM6024JA) and associated ducting located in a 1st floor storage area. This air handling unit is connected to grade level heat pump unit for heating and cooling.	4	4	2013	27-Jun-1	7 MH 4	20	16	Replace the make-up air units at the end of their lifespan. This item falls outside the ten year plan, costs associated with this	Replacement	3 - Future Renewal	Yes	No	Yes	No				\vdash		
Lake Cowichan Community Hall	309 S Shore Road, Lake Cowichan, BC	D Services	D20 Plumbing		D202003 Domestic Water Equipment -	Level 1 Storage Area/Hot Water Tank	46	No issues related to these air handling units were reported on site. A 50 gallon, John Wood brand domestic electric hot water heating tank is installed in a 1st floor storage area but services the 2nd floor kitchen. This tank was installed		4	2013	27-Jun-1	7 MH 4	10	6	item have not been carried into the cash flow tables. Replace hot water tank at the end of its service life.	Replacement	3 - Future Renewal	No	No	No	No						
	309 S Shore Road, Lake	D Services	D20 Plumbing		Tanks D202003 Domestic	Level 1 Storage Area/Hot	47	In 2013 and no reports of problems have been reported 2 - 80 gallon, John Wood professional series electric hot water tanks are installed in		4	2013	27-Jun-1	7 MH 4	10	6	The cost for this work is below the project threshold and has not been included in the financial tables. Replace hot water tanks at the end of its service life.	Replacement	3 - Future	No	No	No	No	2 \$1	1,500 EA	\$3,000	0%	0% 5%	\$4.000
Community Hall					Water Equipment - Tanks	Water Tank		2 - So gainon, John Wood protessional series setted in (water tains are instanted in a 1st floor storage area and likely service the 1st floor (whether area and the 1st & second floor bathrooms. This tank is estimated to be installed in 2013 and no problems have been reported							_			Renewal							-3,000			<i></i>
Community Hall	309 S Shore Road, Lake Cowichan, BC		D20 Plumbing	Water Distribution		Throughout Building/Water Supply	x	Piping is copper where observed.	4				7 MH 50		5	Complete localized repairs as may be necessary as the building ages.	Contingency	3 - Future Renewal		Yes	No			1,000 LS	\$4,000		0% 5%	\$5,000
Lake Cowichan Community Hall	Cowichan, BC		D20 Plumbing		D203001 Waste Pipe and Fittings	Building/Sanitary Piping	X 49	Piping was concealed. No issues associated with the sanitary piping were reported by facility staff.							5	Complete localized repairs as may be necessary as the building ages.	Contingency	3 - Future Renewal		Yes	No			1,000 LS	\$4,000		0% 5%	
Lake Cowichan Community Hall	309 S Shore Road, Lake Cowichan, BC	D Services	D50 Electrical	D5010 Electrical Services and Distribution	D501003 Main & Secondary Switchgear	Electrical Room/Main & r Secondary Switchgea	48	The main disconnect is rated at 200A, 600V, three phase. Power is supplied via an exterior, overhead power pole located in the north parking area	4	4	1961	27-Jun-1	7 MH 50	65	15	Replace distribution switches at end of service life. This item falls outside the ten year plan, costs associated with this item have not been carried into the cash flow tables.	Repair Allowance	3 - Future Renewal	No	Yes	No	No	1 \$2	5,000 LS	\$25,000	0%	0% 5%	\$27,000

Suarty: 2017 Facility Condition Assessment and Capital Plan Lake Cowichan Community Hall, 309 S Shore Road, Lake Cowichan, BC

	si Si	9		a	CON	MPONENT		CONDITION ASSESSMENT						LIFECYCLE	DATA	RECOMMENDATION			Can this	If recommended		Can the current		OPINION	I OF PROBAB	LE COST	
BLDG Name	Location / Addre	Level 1 Major Grc Elements	Level 2 Group Elements	Level 3 Individu. Elements	ID	Location / Type	Photo	Description & History	Condition	Performance	Yr New or Last Major Action	Assessment Date	Assessed By Age in 2017	Typical Life Cycle or Action Interval	Est. Time Remaining to EOL or Major Action	Recommendation	Type	Priority	work be phased over multiple years ?	rate of	of use of the	condition adversly affect the buildings security of safety ?	Unit Rate	Unit Subtotal Repair or Replacement	Cost Consult.	Contingency %5	Total in 2017 Dollars
13 Lake Cowichan Community Hall	309 S Shore Road, Lake Cowichan, BC	D Services	D50 Electrical	D5010 Electrical Services and Distribution	D501005 Panels	Stage Area/Electrical Panel	49-50	1 - 100 amy service panel provides power to the 2nd floor stage area and to the fire alarm panel. This panel is powered by a 200 amp disconnect. The age of the panel is estimated		4	1967	27-Jun-17	MH 50	65	15	Replace panels at end of service life. This item falls outside the ten year plan, costs associated with this item have not been carried into the cash flow tables.	Repair Allowance	3 - Future Renewal	Yes	Yes	No	No					
	309 S Shore Road, Lake Cowichan, BC	D Services	D50 Electrical	D5010 Electrical Services and Distribution	D501005 Panels	Level 1 Storage Area/Electrical Panel	51	1 - 100 amp service panel provides power to the 1st floor lighting, kitchen area and hot water tanks. This panel is powered by a 100 amp disconnect. The age of the panel is estimated	3	4	1967	27-Jun-17	MH 50	65	33	Replace panels at end of service life. This item falls outside the ten year plan, costs associated with this Item have not been carried into the cash flow tables.	Repair Allowance	3 - Future Renewal	Yes	Yes	No	No					
15 Lake Cowichan Community Hall		D Services	D50 Electrical	D5010 Electrical Services and Distribution	D501005 Panels	Level 1 Storage Area/Electrical Panel	x	1 - 100 amp older service panel provides power to other lights and misc. electrical services. This panel is powered by a "Square D" brand 100 amp disconnect. The age of the panel is estimated	3	4	1967	27-Jun-17	MH 50	65	15	Replace panels at end of service life. This item fails outside the ten year plan, costs associated with this item have not been carried into the cash flow tables.	Repair Allowance	3 - Future Renewal	Yes	Yes	No	No					
Lake Cowichan Community Hall	309 S Shore Road, Lake Cowichan, BC	D Services	D50 Electrical	D5010 Electrical Services and Distribution	D501006 Enclosed Circuit Breakers	Throughout Level 1/Enclosed Circuit Breakers	52	5 - enclosed circuit breakers service the 3 roottop heat pumps, the air handling unit and the exterior, at grade heat pump. Each breaker is 60 amp, 240 volt.	4	5	2013	27-Jun-17	MH 4	60	54	Replace enclosed circuit breakers at end of service life. This item falls outside the ten year plan, costs associated with this item have not been carried into the cash flow tables.	Study	Not Applicable	Yes	Yes	No	No					
Community Hall			D50 Electrical	Services and Distribution		Electrical Room/Main Switchgear and Panel - IR Scanning	×	The main electrical system consists of the main switch gear, 3 panels and 5 newer enclosed circuit breakers	4		1993			5	1	Conduct Infra-red (IR) scan on major switchgear and panels. The cost of this work is below the project threshold and has not been included in the financial tables.	Study	Not Applicable	N/A	N/A	N/A	N/A					
18 Lake Cowichan Community Hall	309 S Shore Road, Lake Cowichan, BC	D Services	D50 Electrical	D5020 Lighting and Branch Wirin	D502002 Interior g Lighting	Throughout Building/Interior Lighting Fixtures	53-54	Interior lighting varies throughout the building. The vast majority of the interior lighting has been upgraded in either 2011 & 2012 to T8 fixtures.	4	4	2012	27-Jun-17	MH 5	25	23	Replace lighting at end of service life. This item falls outside the ten year plan, costs associated with this item have not been carried into the cash flow tables.	Replacement	3 - Future Renewal	No	No	Yes	No					
19 Lake Cowichan Community Hall	309 S Shore Road, Lake Cowichan, BC	D Services	D50 Electrical	D5020 Lighting and Branch Wirin	D502002 Interior Lighting	Stage/Lighting	55	Stage lighting is present in the second floor stage area. Facility staff reported that this lighting is in working order and no problems were reported.	3	4	1993	27-Jun-17	MH 24	35	11	Replace lighting at end of service life. This item falls outside the ten year plan, costs associated with this Item have not been carried into the cash flow tables.	Replacement	3 - Future Renewal	No	No	Yes	No					
50 Lake Cowichan Community Hall		D Services	D50 Electrical	D5020 Lighting and Branch Wirin	D502002 Lighting g Equipment	Throughout Building/Exterior Lighting Fixtures	x	Exterior lighting includes wall mounted lights and soffit mounted lights. The exterior lights were recently replaced / upgraded. No issues related to the exterior lighting systems were reported during the course of this review.	4	4	2009	27-Jun-17	MH 8	25	17	Replace at end of service life. Assumes replacement lighting will be LED systems. This item falls outside the ten year plan, costs associated with this item have not been carried into the cash flow tables.	Replacement	3 - Future Renewal	No	No	No	No					
51 Lake Cowichan Community Hall	309 S Shore Road, Lake Cowichan, BC	D Services	D50 Electrical	D5030 Communications and Security	D503008 Security Systems	Throughout Building/Security Systems	x	The interior security system includes a series of motion sensors and door hardware that are tied to a monitored panel.	4	4	2004	27-Jun-17	MH 13	25	12	Replace security system at end of service life.	Repair Allowance	2b - Exceeded Service Life	No	No	No	Yes					
Community Hall	Cowichan, BC		D50 Electrical	and Branch Wirin		Throughout Building/Branch Wiring	×	Branch wiring is present throughout the building. Facility staff reported no issues with electrical distribution. Various upgrades have resulted in a combination of original and new wiring. The age of the wiring is estimated.	4	4	1993		MH 24		26	Branch wiring is expected to last the life of the building. This item fails outside the ten year plan, costs associated with this item have not been carried into the cash flow tables.	Repair Allowance	3 - Future Renewal	Yes	No	Yes	No					
53 Lake Cowichan Community Hall	309 S Shore Road, Lake Cowichan, BC	D Services	D50 Electrical	D5030 Communications and Security	D503001 Fire Alarm Systems	Throughout Building/Fire Alarm Systems	55-56	The building is equipped with a Mircom Protection System. This system includes a main panel that is located in the 2nd floor electrical room, a series of smoke and heat detectors, anunciators and exit signs located throughout the building. Facility staff confirmed that the fire alarm system is reviewed on an annual basis.	3	4	1993	27-Jun-17	MH 24	35	11	Replace the fire alarm panel at the end of its lifespan, including an allowance to replace some wiring and devices. This item falls outside the ten year plan, costs associated with this item have not been carried into the cash flow tables.	Replacement	3 - Future Renewal	No	No	Yes	No					
4 Lake Cowichan Community Hall	309 S Shore Road, Lake Cowichan, BC	P Professional Services	P100002 BECA	P100002 BECA	P100001 Seismic Screening	Seismic Screening	x	Complete a seismic screening of the building to assess seismic vulnerability.			1967	27-Jun-17	MH 50	-40896	1	For conducting a seismic screening of the building. The screening will be done according to the "Manual for Screening of Buildings for Seismic Investigation", published by the National Research Council of Canada (1992).	Study	Not Applicable	No	Yes	No	No 1	\$5,000	LS \$5,000	0%	0% 5%	\$6,000
55 Lake Cowichan Community Hall	309 S Shore Road, Lake Cowichan, BC	P Professional Services	P100002 BECA	P100002 BECA	P100002 BECA	Stucco Cladding	x	Water penetration issues at 1st floor ceiling suggest water ingress is ongoing. A roof inspection identified the likely source			1967	27-Jun-17	MH 50	-40896	1	Conduct a BECA to review the conditions of the building envelope, specifically examine the lower roof to wall interfaces where deficient roof membrane to stucco cladding interface exists. Examine the potential for any resultant wood frame damage.	Study	Not Applicable	No	Yes	No	No 1	\$5,000	LS \$5,000	0%	0% 5%	\$6,000
56 Lake Cowichan Community Hall	309 S Shore Road, Lake Cowichan, BC	P Professional Services	P100003 Roof Review	P100003 Roof Review	P100003 Roof Review	1st and 2nd floor levels	x	The roof on both the 1st & second floor roof levels is aged and nearing the end of its service life. A further review is required to assess the condition of the roof plus provide a recommendation for a replacement roof assembly that provides adequate insulation levels etc.			1967	27-Jun-17	MH 50	-40896	1	A roof review should be conducted prior to complete replacement of the roof membrane.	Study	Not Applicable	No	Yes	No	No 1	\$4,500	LS \$4,500	0%	0% 5%	\$5,000

Lake Cowichan Community Hall, 309 S Shore Road, Lake Cowichan, BC

	a	CON	IPONENT	CONDITION ASSESSMENT	RECOMMENDATION				10-YEAR	CAPITAL P	LAN							
Row	G Name		/ Type			ų	ity	2017 ars	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026
	BLDG N	ID	ocation	Description & History	Recommendation	Түр	Prior	Total in 2017 Dollars	\$83,000	\$40,000	\$132,000	\$0	\$10,000	\$8,000	\$31,000	\$12,000	\$14,000	\$27,000
1	Lake Cowichan Community Hall	A101001 Wall Foundations	Underground/ Foundations	The foundations and foundation walls are cast-in-place concrete as visible at rear (north) elevation. The depth of foundation wall is unknown. Foundation walls are concealed by interior finishes at most locations inside the building.	The foundation walls are expected to last the life of the building, with isolated repairs only.		Not Applicable											
				No current leaks were reported or observed.	Complete localized crack injection/parging repair/waterproofing replacement as needed to correct leakage.													
2	Lake Cowichan Community Hall	A103001 Standard Slab on Grade	Throughout Building/Slab on Grade	The 1st floor level is concrete slab-on-grade. 99% of the floor is covered with linoleum floor covering so inspection of the actual slab could not be done; however, no cracks were noted during our review. No evidence of moisture, major settlement or heaving was reported or observed.	The slab on grade is expected to last the life of the building, with isolated repairs only.		Not Applicable											
4	Lake Cowichan Community Hall	A103006 Foundation Drainage	Underground/ Perimeter Drains	Roof downspouts are collected by a underground collection system. Given the age of the building it is likely the foundation drainage doubles as roof drainage collection system. Note, roof downspouts were replaced in 2014.	The foundation drainage is expected to last the life of the building. No major capital expenditures are expected to be required other than periodic camera testing to verify function.		Not Applicable											
					This item falls outside the ten year plan, costs associated with this item have not been carried into the cash flow tables. This should be updated with the results of the foundation drainage review recommended in A103006 Foundation Drainage.													
4	Lake Cowichan Community Hall	A103006 Foundation Drainage	Underground/ Perimeter Drains	Roof downspouts are collected by a underground collection system. Given the age of the building it is likely the foundation drainage doubles as roof drainage collection system. Note, roof downspouts were replaced in 2014.	Periodic camera testing to verify function.	Study	Not Applicable	\$3,000		\$3,000								
	Lake Cowichan Community Hall	B10 Superstructure	Throughout Building/ General Superstructure	The superstructure consists of reinforced cast in place concrete footings & foundation walls of varying heights depending on the elevation of the exterior grade. Steel columns support the roof level open-web steel roof joists. The structural roof deck consists of tounge and groove wood. the exact dimensions are unknown. The second or main floor level is expected to be constructed using conventional wood framing. The exterior walls are infilled with wood framing. Interior steel posts support the 2nd floor assembly.	Interior protected structural components are expected to last the life of the building. One 1st floor post was said to be slightly off vertical but a structural review was done (by others) and no damage or deficiency was present. No major capital expenditures are expected to be required.		Not Applicable											
6	Lake Cowichan	B201001 Exterior	Exterior Cladding/Stucco	No settlement, cracking, or other evidence of structural distress was observed or reported. There was no evidence or reports of long-term leakage that would lead us to expect concealed structural damage. Face sealed stucco cladding is used throughout this development. Localized water	The stucco cladding has been painted recently (in 2014) but is	Repair Allowance	2 - Restore	\$18,000		\$18,000								
0	Community Hall	Enclosure	Cladding	ingress was noted in a south elevation lower floor storage room ceiling area. The source of the water ingress is believed to be originating from a south elevation 2nd floor level roof area.	Deficiencies at the 2nd floor level roof membrane to stucco cladding interface were noted and water ingress at this area is strongly suspected. Our roof review showed a open roof to cladding joint along the south and east elevation and this deficiency is believed to be the source of the water ingress.		Functionality	\$10,000		\$15,000								
	Lake Cowichan Community Hall	B201001 Exterior Enclosure	Exterior Cladding/Stucco Cladding	Face sealed stucco cladding is used throughout this development. The stucco was last painted in 2014.	Repaint stucco cladding. Costing based on 2014 project costs.	Repair Allowance	3 - Future Renewal	\$13,000							\$13,000			
8	Lake Cowichan Community Hall	E201008 Exterior Soffits	Roof Eaves/ Metal Soffit	Metal soffits provided are generally 1'-6' wide and are in good shape.	Replace metal soffit at end of service life. This item falls outside the ten year plan, costs associated with this item have not been carried into the cash flow tables.	Repair Allowance	3 - Future Renewal											
	Lake Cowichan Community Hall	B201001 Exterior Enclosure	Exterior Walls/Windows and Doors	Window and door trims were painted as part of the 2014 building painting program. Door overhang wood supports were also painted.	Regular maintenance dictates all wood trim around windows, doors plus stained door overhang framing requires re-painting/re-staining every 5 years	Repair Allowance	3 - Future Renewal	\$3,000			\$3,000					\$3,000		
10	Lake Cowichan Community Hall	B201011 Joint Sealant	Exterior Walls/Exterior Sealant Joints	There are fillet type sealant joints at exterior stucco to window and door perimeters. Sealants are in acceptable condition where reviewed; however, the durability of fillet style joints is low. No leaks originating from windows & doors were reported by building staff.	Fillet style sealant joints lack long term durability so regular inspection is required. When required, remove existing sealant then install new sealant between dissimilar materials, around windows and doors.	Repair Allowance	3 - Future Renewal	\$3,000			\$3,000					\$3,000		
	Lake Cowichan Community Hall	B202001 Windows	Exterior Walls/Windows- Insulated Glass Units (IGUs)	The window glazing is clear, double-glazed sealed insulating glass units with desiccant-filled spacers. We did not note any failed insulating glazing units. We understand the existing wood window frames were fitted with new twin sealed units in 2013.	Replace insulated glass units (IGUs) with new when required	Study	4a - Discretionary Renewal											

This report should be reviewed in conjunction with the Objectives, Terms of Reference, Limitations, and Methodology included with the full report. cjw_CVRD BCA - Lake Cowichan Com Hall_FINAL, 11/20/2017

Lake Cowichan Community Hall, 309 S Shore Road, Lake Cowichan, BC

		CON	IPONENT	CONDITION ASSESSMENT	RECOMMENDATION				10-YEAR	CAPITAL PL	.AN							
Row	Name		, Type				ž	2017 IS	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026
	BLDG Na	ID	Location /	Description & History	Recommendation	Туре	Priori	Total in 2017 Dollars	\$83,000	\$40,000	\$132,000	\$0	\$10,000	\$8,000	\$31,000	\$12,000	\$14,000	\$27,000
12	Lake Cowichan Community Hall	B203001 Exterior Solid Doors - single	Exterior Walls/Single Doors	Single exterior doors are solid core. Doors are aged and worn. Hardware & openers appeared to be 15+ years old but fully functional	Replace doors at end of service life. Replace weatherstripping and complete minor repairs and adjustment as part of maintenance. Lower floor door striker place appeared damaged and should be repaired	Replacement	4a - Discretionary Renewal	\$6,000							\$6,000			
13	Lake Cowichan Community Hall	B203001 Exterior Solid Doors - double	Exterior Walls/Double Doors	Double exterior doors are solid core. Doors are aged and worn. Hardware & openers appeared to be 15+ years old but fully functional	Replace doors at end of service life. Replace weatherstripping and complete minor repairs and adjustment as part of maintenance.	Replacement	4a - Discretionary Renewal	\$14,000									\$14,000	
14	Lake Cowichan Community Hall	B301002 Roofing - Lov Sloped Membrane System SBS	/ Upper Roof/Low Sloped Roof	2nd floor roofs were aged and deteriorated. Blisters existed in 2 locations where cap sheet has become delaminated from base sheet. Flashing assemblies on 1st floor level roofs are poor, flashings on 2nd floor level roof are acceptable	Replace and reslope insulated roofing system including flashings, sealants, etc. as required.	Replacement	3 - Future Renewal	\$119,000			\$119,000							
15	Lake Cowichan Community Hall	B301002 Roofing - Lov Sloped Membrane System SBS	/ Lower Roof/Low Sloped Roof	1st floor level roof membranes had serious potential for water ingress at the roof to wall interface. Replacement is required.	Roof to wall interface is severely deteriorated. Replace and reslope insulated roofing system including flashings, sealants, etc. as required (discontinuous roof areas)	Replacement	2 - Restore Functionality	\$64,000	\$64,000									
16	Lake Cowichan Community Hall	B301005 Gutters and Downspouts	Roofs/Gutters and Downspouts	Exterior metal downspouts were replaced in 2014	Replace gutters and downspouts at the end of service life. This item falls outside the ten year plan, costs associated with this item have not been carried into the cash flow tables.	Replacement	3 - Future Renewal											
17	Lake Cowichan Community Hall	C102001 Standard Interior Doors	Throughout Building/Interior Doors	Solid core and hollow core wood interior doors are present throughout the interior of the building. No issues were related to the interior doors were observed or reported by facility staff	The interior doors are expected to last the life of the building. No major capital expenditures are expected to be required. This item falls outside the ten year plan, costs associated with this item have not been carried into the cash flow tables.	Study	Not Applicable											
18	Lake Cowichan Community Hall	C102001 Standard Interior Doors	Throughout Building/Interior Doors	Solid core and hollow core wood interior doors are present throughout the interior of the building. No issues were related to the interior doors were observed or reported by facility staff	Doors are expected to last the life of the building. However, a budget is provided for some door replacement at heavily used areas and localized repairs. This item falls outside the ten year plan, costs associated with this item have not been carried into the cash flow tables.	Contingency	Not Applicable											
19	Lake Cowichan Community Hall	C103002 Toilet and Bath Accessories	Washrooms	Upgrades were completed to toilet, urinals, faucets and flooring in 2014, no upgrades or repairs are planned	Update washroom at the end of its service life. This item falls outside the ten year plan, costs associated with this item have not been carried into the cash flow tables.	Replacement	3 - Future Renewal											
20	Lake Cowichan Community Hall	C302001 Tile flooring	Level 1 Washrooms/Tile Flooring	1st floor washroom tile flooring was recently added and is in good condition.	Update flooring at the end of its service life. This item falls outside the ten year plan, costs associated with this item have not been carried into the cash flow tables.	Repair Allowance	3 - Future Renewal											
21	Lake Cowichan Community Hall	C302003 - Wood Flooring	Throughout Building/Wood Flooring	The main floor level hardwood floor is in good shape however the finish is worn and re-finishing is recommended.	Refinish the hardwood flooring.	Repair Allowance	3 - Future Renewal	\$16,000		\$16,000								
22	Lake Cowichan Community Hall	C302004 Resilient flooring - lower floor kitchen area	Throughout Building/Resilient Flooring	Lower main hall floor appears to be using the original flooring. The floor is still in acceptable condition	Replace flooring at the end of its service life. This item falls outside the ten year plan, costs associated with this item have not been carried into the cash flow tables.	Replacement	4a - Discretionary Renewal											
23	Lake Cowichan Community Hall	C302004 Resilient flooring - lower floor kitchen area	Level 1 Kitchen/Resilient Flooring	Kitchen floor is not original and appears to be in fair to good condition	Replace flooring at the end of its service life. This item falls outside the ten year plan, costs associated with this item have not been carried into the cash flow tables.	Replacement	3 - Future Renewal											
24	Lake Cowichan Community Hall	C302003 - Wood Flooring	Stage/Perimeter Wood Flooring	Perimeter wood framing is quite worn and requires repairs. The floor surface appears to be in acceptable condition	The existing hardwood perimeter band is in a deteriorated state. Refinishing it may be possible but some deep gouges are present that may necessitate replacement	Repair Allowance	2b - Exceeded Service Life	\$3,000		\$3,000								
25	Lake Cowichan Community Hall	C302004 Resilient flooring	Level 2 Kitchen/Resilient Flooring	Kitchen floor appears to be original and is in poor condition. Replacement is recommended	Remove and replace kitchen floor area. The cost for this work is below the project threshold and has not been included in the financial tables.	Repair Allowance	2b - Exceeded Service Life											

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Lake Cowichan Community Hall, 309 S Shore Road, Lake Cowichan, BC

		СОМ	PONENT	CONDITION ASSESSMENT	RECOMMENDATION				10-YEAR (CAPITAL PI	LAN							
Row	Name		Type				٨	017 s	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026
	BLDG	ID	Location /	Description & History	Recommendation	Type	Priority	Total in 2017 Dollars	\$83,000	\$40,000	\$132,000	\$0	\$10,000	\$8,000	\$31,000	\$12,000	\$14,000	\$27,000
26	Lake Cowichan Community Hall	C202001 Interior Stair Finishes	Interior Stairs	Stair treads and finishes are in good condition	Stair tread & finish replacement isn't expected to be needed within the 10 year study period.	Contingency	4a - Discretionary Renewal											
					This item falls outside the ten year plan, costs associated with this item have not been carried into the cash flow tables.													
27	Lake Cowichan Community Hall	C202001 Interior Stair Finishes	South Elevation/Exit Stairs	Stairs are in good condition but the stair finishes are showing signs of age, refinishing is recommended.	Refinish the hardwood stairs, add non-slip surfaces	Repair Allowance	3 - Future Renewal	\$4,000			\$4,000							
28	Lake Cowichan Community Hall	C301003 Gypsum Wallboard Finishes	Throughout Building/Paint	Painted wall finishes are generally in good condition but some limited GWB damage was noted.	Repaint as age and usage dictates	Repair Allowance	4b - Discretionary Aesthetic	\$4,000							\$4,000			
29	Lake Cowichan Community Hall	C301003 Gypsum Wallboard Finishes	Throughout Building/Paint	Painted wall finishes are in good condition.	Repaint as age and usage dictates	Repair Allowance	4b - Discretionary Aesthetic	\$4,000						\$4,000				
30	Lake Cowichan Community Hall	C303004 Ceiling	Level 1/Ceiling Tiles and Panels	Ceiling tiles on 1st floor painting / replacement	Replace or repaint acoustic ceiling tiles (excluding suspension system). This item falls outside the ten year plan, costs associated with this item have not been carried into the cash flow tables.	Repair Allowance	4b - Discretionary Aesthetic											
31	Lake Cowichan Community Hall	C303005 Wood Ceiling Painting	Level 2/Painted Wood Ceiling	Ceiling consists of painted 2 x 6 dimensional lumber	Repaint ceiling as age and condition dictate	Contingency	4b - Discretionary Aesthetic	\$6,000								\$6,000		
32	Lake Cowichan Community Hall	C103008 Countertops	Kitchen/Counters	Point of Service countertop is in a deteriorated state and replacement is recommended. Countertops in 1st floor kitchen area are in good condition.	Replace point of service countertop and sinks	Replacement	3 - Future Renewal	\$3,000			\$3,000							
33	Lake Cowichan Community Hall	C103009 Cabinets	Kitchen/Cabinets	Both 1st and 2nd floor kitchen cabinets appear original but are still functional. Replacement is discretionary based on their overall dated appearance.	Continue to re-use. Replacement would be discretionary	Replacement	3 - Future Renewal	\$8,000							\$8,000			
34	Lake Cowichan Community Hall	D304001 Air Distribution, Heating and Cooling	Rooftop/Heat Pump	3 - 5 ton "RHEEM" brand roof top heat pump units (Model # RJNL-A060JK) control the heating and cooling within the building. Each unit has its own air handling unit that is installed directly beneath each unit. These units were installed in 2013 and no service problems were reported and replacement is not expected during this study period.	Replace at end of service life. This item falls outside the ten year plan, costs associated with this item have not been carried into the cash flow tables.	Replacement	3 - Future Renewal											
35	Lake Cowichan Community Hall	D304001 Air Distribution, Heating and Cooling	Exterior/Heat Pump	1 - 5 ton at grade mounted heat pump unit (model # RP1560AJINA) control the heating and cooling within the building. These units were installed in 2013 and no service problems were reported and replacement is not expected during this study period	Replace at end of service life. This item falls outside the ten year plan, costs associated with this item have not been carried into the cash flow tables.	Replacement	3 - Future Renewal											
	Lake Cowichan Community Hall	D304007 Exhaust System	Level 1 Kitchen/Exhaust Fans	Stainless steel range hood exhaust fan, ducting and exterior exhaust hood. Age of system is approximated. No service problems were reported.	Replace at end of service life. This item falls outside the ten year plan, costs associated with this item have not been carried into the cash flow tables.	Replacement	3 - Future Renewal											
37	Lake Cowichan Community Hall	D304008 Air Handling Units		There is one air handling unit (Rheem model RHLL-HM6024JA) and associated ducting located in a 1st floor storage area. This air handling unit is connected to grade level heat pump unit for heating and cooling. No issues related to these air handling units were reported on site.	Replace the make-up air units at the end of their lifespan. This item falls outside the ten year plan, costs associated with this item have not been carried into the cash flow tables.	Replacement	3 - Future Renewal											
38	Lake Cowichan Community Hall	D202003 Domestic Water Equipment - Tanks	Level 1 Storage Area/Hot Water Tank	A 50 gallon, John Wood brand domestic electric hot water heating tank is installed in a 1st floor storage area but services the 2nd floor kitchen. This tank was installed in 2013 and no reports of problems have been reported	Replace hot water tank at the end of its service life. The cost for this work is below the project threshold and has not been included in the financial tables.	Replacement	3 - Future Renewal											

Lake Cowichan Community Hall, 309 S Shore Road, Lake Cowichan, BC

		COMPONENT		CONDITION ASSESSMENT	RECOMMENDATION				10-YEAR CAPITAL PLAN										
Row	Name		Type				≥	2017 IS	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	
	BLDG	ID	Location /	Description & History	Recommendation	Type	Priori	Total in 2017 Dollars	\$83,000	\$40,000	\$132,000	\$0	\$10,000	\$8,000	\$31,000	\$12,000	\$14,000	\$27,000	
39	Lake Cowichan Community Hall	D202003 Domestic Water Equipment - Tanks	Level 1 Storage Area/Hot Water Tank	2 - 80 gallon, John Wood professional series electric hot water tanks are installed in a 1st floor storage area and likely service the 1st floor kitchen area and the 1st & second floor bathrooms. This tank is estimated to be installed in 2013 and no problems have been reported	Replace hot water tanks at the end of its service life.	Replacement	3 - Future Renewal	\$4,000						\$4,000					
40	Lake Cowichan Community Hall	D202001 Pipes and Fittings	Throughout Building/Water Supply	Piping is copper where observed.	Complete localized repairs as may be necessary as the building ages.	Contingency	3 - Future Renewal	\$5,000					\$5,000						
41	Lake Cowichan Community Hall	D203001 Waste Pipe and Fittings	Throughout Building/Sanitary Piping	Piping was concealed. No issues associated with the sanitary piping were reported by facility staff.	Complete localized repairs as may be necessary as the building ages.	Contingency	3 - Future Renewal	\$5,000					\$5,000						
42	Lake Cowichan Community Hall	D501003 Main & Secondary Switchgear	Electrical Room/Main & Secondary Switchgea	The main disconnect is rated at 200A, 600V, three phase. Power is supplied via an exterior, overhead power pole located in the north parking area	Replace distribution switches at end of service life. This item falls outside the ten year plan, costs associated with this item have not been carried into the cash flow tables.	Repair Allowance	3 - Future Renewal	\$27,000										\$27,000	
43	Lake Cowichan Community Hall	D501005 Panels	Stage Area/Electrical Panel	1 - 100 amp service panel provides power to the 2nd floor stage area and to the fire alarm panel. This panel is powered by a 200 amp disconnect. The age of the panel is estimated	Replace panels at end of service life. This item falls outside the ten year plan, costs associated with this item have not been carried into the cash flow tables.	Repair Allowance	3 - Future Renewal												
44	Lake Cowichan Community Hall	D501005 Panels	Level 1 Storage Area/Electrical Panel	1 - 100 amp service panel provides power to the 1st floor lighting, kitchen area and hot water tanks. This panel is powered by a 100 amp disconnect. The age of the panel is estimated	Replace panels at end of service life. This item falls outside the ten year plan, costs associated with this item have not been carried into the cash flow tables.	Repair Allowance	3 - Future Renewal												
45	Lake Cowichan Community Hall	D501005 Panels	Level 1 Storage Area/Electrical Panel	1 - 100 amp older service panel provides power to other lights and misc. electrical services. This panel is powered by a "Square D" brand 100 amp disconnect. The age of the panel is estimated	Replace panels at end of service life. This item falls outside the ten year plan, costs associated with this item have not been carried into the cash flow tables.	Repair Allowance	3 - Future Renewal												
46	Lake Cowichan Community Hall	D501006 Enclosed Circuit Breakers	Throughout Level 1/Enclosed Circuit Breakers	5 - enclosed circuit breakers service the 3 rooftop heat pumps, the air handling unit and the exterior, at grade heat pump. Each breaker is 60 amp, 240 volt.	Replace enclosed circuit breakers at end of service life. This item falls outside the ten year plan, costs associated with this item have not been carried into the cash flow tables.	Study	Not Applicable												
47	Lake Cowichan Community Hall	D501003 Main & Secondary Switchgear	Electrical Room/Main Switchgear and Panel - IR Scanning	The main electrical system consists of the main switch gear, 3 panels and 5 newer enclosed circuit breakers	Conduct Infra-red (IR) scan on major switchgear and panels. The cost of this work is below the project threshold and has not been included in the financial tables.	Study	Not Applicable												
48	Lake Cowichan Community Hall	D502002 Interior Lighting	Throughout Building/Interior Lighting Fixtures	Interior lighting varies throughout the building. The vast majority of the interior lighting has been upgraded in either 2011 & 2012 to T8 fixtures.	Replace lighting at end of service life. This item falls outside the ten year plan, costs associated with this item have not been carried into the cash flow tables.	Replacement	3 - Future Renewal												
49	Lake Cowichan Community Hall	D502002 Interior Lighting	Stage/Lighting	Stage lighting is present in the second floor stage area. Facility staff reported that this lighting is in working order and no problems were reported.	Replace lighting at end of service life. This item falls outside the ten year plan, costs associated with this item have not been carried into the cash flow tables.	Replacement	3 - Future Renewal												
50	Lake Cowichan Community Hall	D502002 Lighting Equipment	Throughout Building/Exterior Lighting Fixtures	Exterior lighting includes wall mounted lights and soffit mounted lights. The exterior lights were recently replaced / upgraded. No issues related to the exterior lighting systems were reported during the course of this review.	Replace at end of service life. Assumes replacement lighting will be LED systems. This item falls outside the ten year plan, costs associated with this item have not been carried into the cash flow tables.	Replacement	3 - Future Renewal												
51	Lake Cowichan Community Hall	D503008 Security Systems	Throughout Building/Security Systems	The interior security system includes a series of motion sensors and door hardware that are tied to a monitored panel.	Replace security system at end of service life.	Repair Allowance	2b - Exceeded Service Life												
52	Lake Cowichan Community Hall	D502099 Branch Wirin	g Throughout Building/Branch Wiring	Branch wiring is present throughout the building. Facility staff reported no issues with electrical distribution. Various upgrades have resulted in a combination of original and new wiring. The age of the wiring is estimated.	Branch wiring is expected to last the life of the building. This item falls outside the ten year plan, costs associated with this item have not been carried into the cash flow tables.	Repair Allowance	3 - Future Renewal												

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Lake Cowichan Community Hall, 309 S Shore Road, Lake Cowichan, BC

		COM	IPONENT	CONDITION ASSESSMENT Description & History	RECOMMENDATION				10-YEAR CAPITAL PLAN									
Row	BLDG Name	ਰ Location / Type	Location / Type		Recommendation	Type	Priority	Total in 2017 Dollars	2017 \$83,000	2018 \$40,000	2019 \$132,000	2020 \$0	2021 \$10,000	2022 \$8,000	2023 \$31,000	2024 \$12,000	2025 \$14,000	2026 \$27,000
53	Lake Cowichan Community Hall	D503001 Fire Alarm Systems	Alarm Systems	main panel that is located in the 2nd floor electrical room, a series of smoke and heat detectors, annunciators and exit signs located throughout the building. Facility staff confirmed that the fire alarm system is reviewed on an annual basis.	Replace the fire alarm panel at the end of its lifespan, including an allowance to replace some wiring and devices. This item falls outside the ten year plan, costs associated with this item have not been carried into the cash flow tables.	Replacement	3 - Future Renewal											
54	Lake Cowichan Community Hall	P100001 Seismic Screening	Seismic Screening		For conducting a seismic screening of the building. The screening will be done according to the "Manual for Screening of Buildings for Seismic Investigation", published by the National Research Council of Canada (1992).	Study	Not Applicable	\$6,000	\$6,000									
55	Lake Cowichan Community Hall	P100002 BECA	-		Conduct a BECA to review the conditions of the building envelope, specifically examine the lower roof to wall interfaces where deficient roof membrane to stucco cladding interface exists. Examine the potential for any resultant wood frame damage.	Study	Not Applicable	\$6,000	\$8,000									
56	Lake Cowichan Community Hall	P100003 Roof Review		The roof on both the 1st & second floor roof levels is aged and nearing the end of its service life. A further review is required to assess the condition of the roof plus provide a recommendation for a replacement roof assembly that provides adequate insulation levels etc.	A roof review should be conducted prior to complete replacement of the roof membrane.	Study	Not Applicable	\$5,000	\$5,000									

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Photo 01



Photo 03





Photo 05





Photo 07







Photo 10

Cowichan Valley Regional District Lake Cowichan Community Hall - Report Photos





Cowichan Valley Regional District Lake Cowichan Community Hall - Report Photos



Photo 13



Photo 14



Photo 15





Photo 17



Photo 18



Photo 19



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Cowichan Valley Regional District Lake Cowichan Community Hall - Report Photos

Photo 21



Lake Cowichan Community Hall - Report Photos



Photo 23



Photo 24





Photo 26

650



Cowichan Valley Regional District Lake Cowichan Community Hall - Report Photos

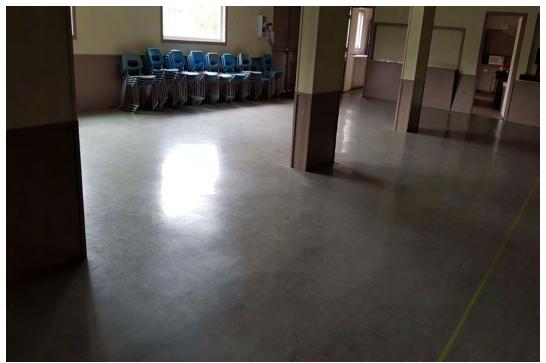


Photo 28





Photo 30



Photo 31





Photo 33

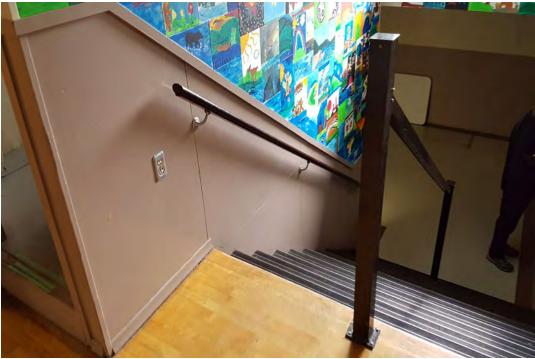


Photo 34



Photo 35



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Cowichan Valley Regional District Lake Cowichan Community Hall - Report Photos

Photo 37



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Cowichan Valley Regional District Lake Cowichan Community Hall - Report Photos





Photo 40

Cowichan Valley Regional District Lake Cowichan Community Hall - Report Photos

Photo 41



Photo 42





Photo 44



Photo 45



Photo 46



Photo 47





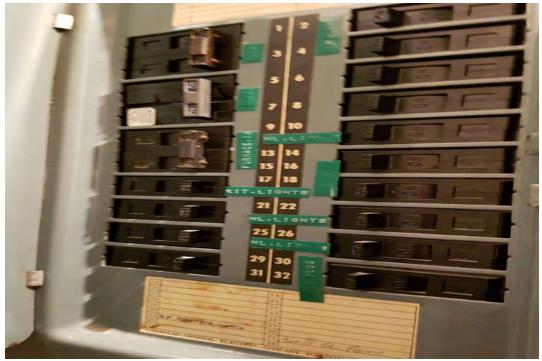


Photo 50

Cowichan Valley Regional District Lake Cowichan Community Hall - Report Photos

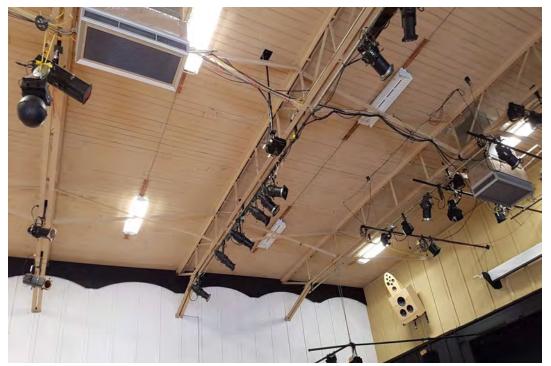
Photo 51



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Cowichan Valley Regional District Lake Cowichan Community Hall - Report Photos

Photo 53



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Cowichan Valley Regional District Lake Cowichan Community Hall - Report Photos





Photo 56

Appendix A

A – 11 Youbou Community Hall

Facility Assessment Youbou Community Hall



Cowichan Valley Regional District MH Project No. 5170700.00

November 2017



Cowichan Valley Regional District 175 Ingram Street Duncan, BC V9L 1N8



Cowichan Valley Regional District Facility Condition Assessment and Capital Plan Youbou Community Hall, 8550 Hemlock St. Youbou, BC

PROPERTY DESCRIPTION	PROPERTY STATISTICS	
Youbou Community Hall, 8550 Hemlock St. Youbou, BC was constructed in two phases, the main hall in 1931 and the bowling alley in 1951. There was a renovation done 1986.	Gross Floor Area:	11,800 sf.
Refer to Photo 1 for a general overview of the exterior of the building.		

Replacement Value:	\$3,696,456
Target FCI:	0.100
Current FCI:	0.013

REPORT OVERVIEW

We found no safety concerns requiring immediate expenditures.

The following provides an overview of the visual seismic, building code, accessibility and energy efficiency reviews completed.

Se	eisi	mic	Review		
-					

Seismic work completed to date: Recommendations:	None Complete a seismic screening of the building to assess seismic vulnerability. The screening will be done according to the "Manual for Screening of Buildings for Seismic Investigation", published by the National Research Council of Canada (1992).
Building Code Review	
Built under what code:	Heritage (not listed)
Accessibility Review	
Access into building:	Yes
Access throughout building:	Yes. Wheel chair access is achieved via a ramp leading into
Access to washrooms:	Yes
Recommendations:	Review step at the gym floor (entrance and emergency
	exits). The bowling area and the upper banquet areas are
	not wheel chair accessible.

We identified recommendations of approximately \$84,500 over the next five years. The following is a summary of major projects (over 10,000) we believe will be required the next five years, and elements whose condition is unknown and/or where further investigation is recommended:

Row 12 - '-B202001 Punched Windows - replacement (\$16000) Row 26 -'-C302001 Refinish flooring in banquet hall (\$16,000)

Cowichan Valley Regional District Facility Condition Assessment and Capital Plan Youbou Community Hall, 8550 Hemlock St. Youbou, BC

PROJECT TEAM

The visual reviews were completed on May 31 and June 27, 2017 by Craig Labas. We began with an interview with Robert Frost, Lake Cowichan Facility Operations Coordinator who provided access to a sampling of representative areas of the facility, as requested. We were unable to access the main roof due to a lack of installed fall-protection equipment.

Chris Raudoy of Morrison Hershfield reviewed the report for technical content and for compliance with the contract requirements.

REFERENCE DOCUMENTS/INFORMATION

We reviewed the following documents and selected drawings for general background and to inform ourselves about the layout and intended construction:

- Architectural Drawings, authored by Shane Davis marked "Proposed Renovation for Youbou Community Hall, dated June 23rd, 1986

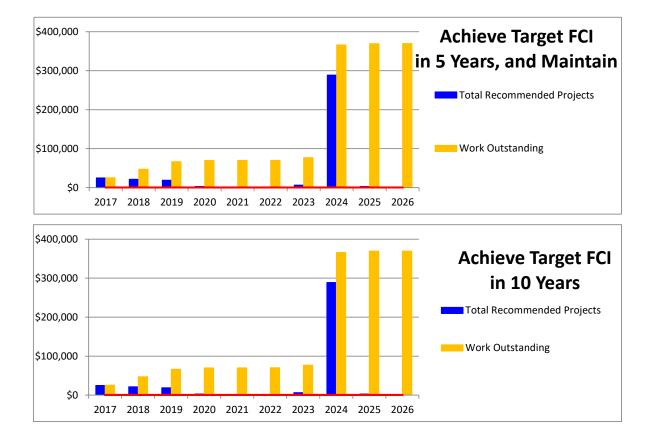
This report should be reviewed in conjunction with the Objectives, Terms of Reference, Limitations, and Methodology described in the main body of the report.

Cowichan Valley Regional District Facility Condition Assessment and Capital Plan Youbou Community Hall, 8550 Hemlock St. Youbou, BC

We recommend budgeting for the following 1 – Immediate, 2 - Restore Functionality, 2b - Exceeded Service Life and 3 - Future Renewal projects by year as follows:

Priority	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026
1 – Immediate	0	0	0	0	0	0	0	0	0	0
2 - Restore Functionality	0	9,000	0	0	0	0	0	0	0	0
2b - Exceeded Service Life	0	0	0	0	0	0	0	0	0	0
3 - Future Renewal	25,000	12,500	19,000	3,000	0	0	6,500	289,000	3,000	0
Total in 2017 dollars	25,000	21,500	19,000	3,000	0	0	6,500	289,000	3,000	0
Minimum Funding to Achiev	e and Mai	ntain Targ	get FCI wit	thin 5 year	s: -\$241					
Work outstanding	25,481	47,222	66,462	69,703	69,943	70,184	76,924	366,165	369,405	369,646
-										

Minimum Funding to Achiev	e Target F	CI within	10 years: -	\$241						
Work outstanding	25,481	47,222	66,462	69,703	69,943	70,184	76,924	366,165	369,405	369,646



			ts	ents	CON	1PONENT		CONDITION ASSESSMENT	ī				LIFE	CYCLE D	ATA	RECOMMENDATION					Will a	Can the		(OPINION OF P	ROBABLE	соѕт	
Row BLDG Name	Location / Address	Level 1 Major Groul Elements	Level 2 Group Elemer	Level 3 Individual Elem	ID	Location / Type	Photo	Description & History	Condition	Performance Yr New or Last Major	Action Assessment Date	Assessed By	Age in 2017 Typical	Life Cycle or Action Interval	test. Time Remaining to EOL or Major Action	Recommendation	Type	Priority	Can this work be phased over multiple years ?	work not complete can the rate of deterioration be expected to increase ?	failure in this system lead to a	current condition adversely affect the buildings security of safety ?	Quantity	Unit Rate	Unit Subtotal Repair or Replacement Cost	Consult.	Contingency xex	Total in 2017 Dollars
1 Youbou Community Hall	8550 Hemlock St. Youbou, BC		A10 Foundations	A1010 Wall Foundations	A1010 Wall Foundations	Underground/ Foundations		The building is constructed over a varying height crawlspace that uses cast in place concrete foundation walls and pad footings to support the wood pony wall & wood post foundation. No evidence of rot, major settlement or heaving was reported or observed. The crawlspace was insulated with mineral wool in 2013.	4	5 193	1 31-May-1 27-Jun-1		86 3	100	14	The foundations are expected to last the life of the building. No major capital expenditures are expected to be required. This item falls outside the ten year plan, costs associated with this item have not been carried into the cash flow tables.		Not Applicable	N/A	N/A	Yes	No						
2 Youbou Community Hall		A Substructure	A1030 Slab on Grade	A1030 Slab on Grade	A103006 Foundation Drainage	Underground/ Perimeter Drains		Roof leaders were noted to be connected to subsurface drainage. No excavation was undertaken but history suggests the roof drainage and perimeter drainage systems are the same. No issues related to foundation drainage were noted by facility staff. No information was available regarding the scoping of the system to review for continuity.		193	1 31-May-1 27-Jun-1		86	5	2	Periodic camera inspection and isolated repairs as required.	Study	Not Applicable	No	N/A	No	N/A	1	\$2,000	LS \$2,000	0% (0% 5%	\$3,000
3 Youbou Community Hall		A Substructure	A1030 Slab on Grade	A1030 Slab on Grade	A103006 Foundation Drainage	Underground/ Perimeter Drains		Roof leaders were noted to be connected to subsurface drainage. No excavation was undertaken but history suggests the roof drainage and perimeter drainage systems are the same. No issues related to foundation drainage were noted by facility staff. No information was available regarding the scoping of the system to review for continuity.		193	1 31-May-1 27-Jun-1		86 3	100		The foundation drainage is expected to last the life of the building. No major capital expenditures are expected to be required. This item falls outside the ten year plan, costs associated with this item have not been carried into the cash flow tables. This should be updated with the results of the foundation drainage review recommended in A103006 Foundation Drainage (above).		Not Applicable	N/A	N/A	No	No						
4 Youbou Community Hall	8550 Hemlock St. Youbou, BC		B10 Superstructur	re B10 Superstructure	B10 Superstructur	e General		The superstructure consists of conventional wood framing over a wood frame crawkpace. The roof uses conventional wood trusses with phywood sheathing. The majority of framed structure was concealed by interior finishes. No settlement, cracking, or other evidence of structural distress was observed or reported.	4	5 193	1 31-May-1 27-Jun-1		86 3	100		Interior protected structural components are expected to last the life of the building. No major capital expenditures are expected to be required. This item fails outside the ten year plan, costs associated with this item have not been carried into the cash flow tables. It is recommended that the building seismic upgrades be completed. This item is included under P100001 Seismic Screening.		Not Applicable	N/A	N/A	Yes	No						
5 Youbou Community Hall	8550 Hemlock St. Youbou, BC		B10 Superstructur	re B10 Superstructure	B101004 Balcony Construction	Front Entrance Balcony / Landings	7-9	Wood framed landings with stairs provide access to the main entrance doors. The balcony surface consists of painted plywood sheathing, no non-skid surface was observed. Renewal related structural repairs were made to these decks and stairs in 2011 and 2013.	4	4 201	3 31-May-1 27-Jun-1		4	15	11	Balcony surface plywood is partially covered and maintenance related Re repairs are undertaken as needed; however, long term durability is questionable and at a minimum, a non-skid membrane surface is recommended to be added within this study period.	Repair Allowance	2 - Restore Functionality	Yes	Yes	Yes	Yes	1	\$3,000	LS \$3,000	0% (0% 5%	\$4,000
6 Youbou Community Hall	8550 Hemlock St. Youbou, BC	B Shell	B10 Superstructu	re B10 Superstructure	B101005 Ramps	Front Entrance/Wheel Chair Ramp		Wood framed wheelchair ramp uses conventional wood framing. The ramp surface uses painted plywood. No non-skid membrane was observed. This wheelchair ramp was added in 2007 and railing related renewals were undertaken in 2013. No evidence of structural distress was observed or reported.	4	4 201	3 31-May-1 27-Jun-1		4	15	11	Wheelchair ramp surface plywood is exposed and lacks a non-skid surface. Iong term durability of the painted plywood surface is questionable. At a minimum, a non-skit liquid applied membrane is recommended to be added within this study period.	Repair Allowance	2 - Restore Functionality	Yes	Yes	Yes	Yes	1	\$3,500	LS \$3,500	0% (0% 5%	\$4,000
7 Youbou Community Hall	8550 Hemlock St. Youbou, BC		B20 Exterior Enclosure	B2010 Exterior Walls	B201001 Exterior Walls	Exterior/Vinyl Cladding		The exterior walls are clad with vinyl siding and the water barrier is assumed to be asphalt impregnated building paper. The siding was generally in fair with small areas of isolated damage at the bowling area roof level, south west building corner. No record of siding installation was available and its age is estimated at between 20 to 25 years old. Small portions of Hardieplank siding exist along the front (south elevation) of the building which appears to have been recently installed (2013).	3	4 199	5 31-May-1 27-Jun-1		22	30	8	Vinyl siding is aged and recommended for replacement	Contingency	3 - Future Renewal	Yes	N/A	N/A	N/A	11000	\$25	SF \$275,000	0% (0% 5%	\$289,000
8 Youbou Community Hall	8550 Hemlock St. Youbou, BC		B20 Exterior Enclosure	B2010 Exterior Walls	B201008 Exterior Soffits	Roof Eaves/ Wood Soffit		Vented aluminum soffits are used at the majority of the upper roof areas. Solid wood soffit is used at some lower level vaulted roof areas.	4	4 199	5 31-May-1 27-Jun-1		22	50	26	The metal and vented wood soffits are expected to last the life of the building, isolated replacement may be required due to mechanical damage. No major capital expenditures are expected to be required. This item falls outside the ten year plan, costs associated with this item have not been carried into the cash flow tables.		Not Applicable	N/A	N/A	No	No						
9 Youbou Community Hall			B20 Exterior Enclosure	B2010 Exterior Walls	Sealant	Exterior/Sealant Joints		Exterior sealant was not installed around siding penetrations.	2		27-Jun-1	7				Replace sealant between dissimilar materials, and around windows Re and doors. A contingency has been included to complete sealant repairs at exposed locations.		Renewal	Yes	Yes	No	No			LS \$5,000			
10 Youbou Community Hall	8550 Hemlock St. Youbou, BC		B20 Exterior Enclosure	B2010 Exterior Walls		Exterior/Front Entrance Railings	16	Wood framed railings that use wood pickets & wood railings are used around the balconies and whechchair ramps. The railings on the wheel chair ramp were constructed in 2007 and the railings into the bowling alley were refurbished in 2013. The main entrance railings and treads appear to be older and their age is estimated at 14 years old.	3	4 200	4 31-May-1 27-Jun-1		13	15	7	Refurbish main entrance railings and stair treads as needed. Railings R and stair treads appear in good shape so the estimated remaining life has been extended past their estimated age.	Repair Allowance	3 - Future Renewal	Yes	Yes	Yes	Yes	1	\$2,500	LS \$2,500	0% (0% 5%	\$3,000
11 Youbou Community Hall	8550 Hemlock St. Youbou, BC		B20 Exterior Enclosure	B2010 Exterior Walls	Walls and Railings	Entrance Staircase Railings		Wood framed railings that use wood pickets & wood railings are used by the rear entrance staircase and landing. The stairs and railings were refurbished in 2013	4	4 201	27-Jun-1	7				This item falls outside the ten year plan, costs associated with this item have not been carried into the cash flow tables.	Repair Allowance	3 - Future Renewal	Yes	Yes	Yes	Yes						
12 Youbou Community Hall	8550 Hemlock St. Youbou, BC		B20 Exterior Enclosure	B2020 Windows	B202001 Punched Windows	Exterior Walls/Level 1 Metal Framed Window Assemblies		elevation) are non-thermally broken aluminum windows. Water ingress was suspected in the most southerly window, possibly the result of an exterior flashing deficiency. Age of window is estimated.	3	3 198	27-Jun-1	7				adequately; however, water ingress is suspected at the window in the south west corner of the upper hall. Wood frame damage may be present. Given the window's suspected age, replacement of the windows with a more thermally efficient system should be considered in the next 3 years.	Replacement	3 - Future Renewal	Yes	Yes	No	No	12	\$1,000	EA \$12,000	10% 1	5% 5%	\$16,000
13 Youbou Community Hall	8550 Hemlock St. Youbou, BC		B20 Exterior Enclosure	B2020 Windows	B202001 Punched Windows	Exterior Walls/Vinyl Framed Windows	21	Vinyl framed windows (4) appear to have been recently installed in the south elevation entrance buildout.	4	5 200	0 31-May-1 27-Jun-1		17	30	13	Vinyl windows are in good condition. This item falls outside the ten year plan, costs associated with this item have not been carried into the cash flow tables.	Replacement	3 - Future Renewal	No	Yes	No	No						

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Row	BLDG Name	Location / Address	Level 1 Major Grou Elements	Level 2 Group Eleme	Level 3 Individual Elem	ID	Location / Type	Photo	Description & History	Condition	Performance	Yr New or Last Major Action	Assessment Date	Assessed By	Age in 2017 Typical Life Cycle or Action	Interval Est. Time Remaining	to EOL or Major Action	ecommendation	Type	Priority	Can this work be phased over multiple years ?	work not complete can the rate of deterioration be expected to increase ?	failure in this system lead to a loss of use	current condition adversely affect the buildings security of safety ?	Quantity	Unit Rate	Subtotal Subtotal Repair or Replacement Cost	Consult. Contingency	Total in 2017 Dollars	
14	Youbou Community Hall	8550 Hemlock St. Youbou, BC	B Shell	B20 Exterior Enclosure	B2030 Exterior Doors	B203002 Exterior Solid Doors	Exterior Walls/Solid Metal & Wood Doors	22	The main entrance door is solid, decorative wood. There are 5 more double wood or metal doors followed by 3 single wood or metal faced doors. Some door and door hardware replacements were undertaken in 2010. All double doors are in good shape, two of the 3 single doors appear to be original and should be replaced.	3	4	2010	31-May-17 27-Jun-17	MH	7 30		e T	eplace the two older single storage room doors on the north evation. All other doors are expected to last the life of the building. nis item falls outside the ten year plan, costs associated with this em have not been carried into the cash flow tables.	Replacement	3 - Future Renewal	Yes	Yes	No	Yes						
15	Youbou Community Hall	8550 Hemlock St. Youbou, BC	B Shell	B20 Exterior Enclosure	B2040 Windows	B204004 Exterior Glazing	Exterior/Aluminum Skylights	23	Aluminum framed skylights exist on the east elevation, 1st floor level roof. No issues of Leakage were observed or reported. Skylights were reported to be replaced in 2007	4	5	2007	31-May-17 27-Jun-17	мн	10 25	1	g	luminum framed skylights have been recently replaced and are in ood condition. Replace skylights at the end of their service life. his item falls outside the ten year plan, costs associated with this em have not been carried into the cash flow tables.	Replacement	3 - Future Renewal	Yes	Yes	No	No						
16	Youbou Community Hall	8550 Hemlock St. Youbou, BC	B Shell	B20 Exterior Enclosure	B3010 Roof Coverings	B301001 High Sloped Roof Coverings	Sloped Roof/Asphalt Shingles		The main roof uses asphalt shingles with concealed fasteners. This roof was installed in 2007. Facia and gutters were replaced in 2014. No leaks or damage was reported or observed. No fall arrest tie offs were present on the roof.	4	5	2007	31-May-17 27-Jun-17	MH	10 30	2	т	eplace roof at the end of the service life. nis item falls outside the ten year plan, costs associated with this em have not been carried into the cash flow tables.	Replacement	3 - Future Renewal	Yes	N/A	Yes	No						
17	Youbou Community Hall	8550 Hemlock St. Youbou, BC	B Shell	B20 Exterior Enclosure	B3010 Roof Coverings	B301002 Low Slope Membrane Systems	Upper Hall/Low Sloped Roof		The low sloped roof areas use a torch applied SBS rolled roofing assembly. This roof was installed in 2016. Facia and gutters were replaced in 2014. No leaks or damage was reported or observed. No fall arrest tie offs were present on the roof. One location was noted on the east elevation where the gutter	4	5	2016	31-May-17 27-Jun-17	МН	1 30		т	eplace roof at the end of the service life. his item falls outside the ten year plan, costs associated with this em have not been carried into the cash flow tables.	Replacement	3 - Future Renewal	Yes	N/A	Yes	No						
18	Youbou Community	8550 Hemlock St. Youbou, BC	B Shell	B30 Roof	B3010 Roof Coverings	B301005 Gutters and Downspouts		x	has been dented in. Gutters are present at the base of the sloped roofs. These gutters drain into rain water leaders.	4	5	2016	31-May-17 27-Jun-17	МН	1 30			eplace gutters and downspouts at the end of service life. eplacement will likely be required at the time of roof replacement	Replacement	3 - Future Renewal	Yes	N/A	Yes	No						
	Hall	St. TOUDOU, BC					Downspouls		gutters urani nitu rani water reauers.				27-3011-17				w T	processing with the processing of the second		Kellewal										
19	Youbou Community Hall	8550 Hemlock St. Youbou, BC	C Interiors	C10 Interior Construction	C1020 Interior Doors	C102001 Standard Interior Doors	d Throughout Building/Interior Doors	25	Solid and glazed interior doors are present throughout the building. Some doors in the gym area were damaged and replacement is recommended. No other issues related to the interior doors were observed or reported by facility staff.	4	4	1951	31-May-17 27-Jun-17	мн	66 85	1	n T	ne interior doors are expected to last the life of the building. No ajor capital expenditures are expected to be required. his item falls outside the ten year plan, costs associated with this em have not been carried into the cash flow tables.		Not Applicable	N/A	N/A	No	No						
20	Youbou Community Hall	8550 Hemlock St. Youbou, BC	C Interiors	C10 Interior Construction	C1010 Portions	C101001 Fixed Partitions	Washrooms/Fixed Partitions	26	The washroom partitions in the gym area, the upper hall area, and in the bowling area are in good shape. Facility staff commented that recent repairs and renewals have been completed. Most toilets, Urinals & faucets were replaced in 2014 other than one toilet it the bowling alley (men's). All bathroom facilities are in good working order and facility staff did not indicate any problems.	4	4	2014	31-May-17 27-Jun-17	MH	3 25	2		ollet partitions are adequate and no repairs during this study period e required.	Replacement	3 - Future Renewal	Yes	Yes	No	No						
21	Youbou Community Hall	8550 Hemlock St. Youbou, BC	C Stairs	C20 Stair Construction	C2010 Exterior Stair Construction	C201002 Exterior Stair Construction	North Elevation/Exterior Stairs	28	Multiple flights of conventional wood framed stairs exist on the south elevation. A two story staircase also provides access to the 2nd floor hall exit. The south elevation stair access to the bowling alley were repaired in 2013 and the north elevation 2nd floor hall exit staircase was repaired in 2013.	4	4	2013	31-May-17 27-Jun-17	мн	4 15	1		Il staircases are fit for use and no repairs / replacements are commended during this study period.	Study	3 - Future Renewal	Yes	Yes	No	No						
22	Youbou Community Hall	8550 Hemlock St. Youbou, BC	C Stairs	C20 Stair Finishes	s C2020 Interior Stair Finishes	C202001 Interior Stair Finishes	Gym to Upper Hall/Exterior Stairs	29, 30	A 2 flight interior staircase connects the gym are to the upper hall. These stairs are carpeted with handrails present on both sides. The age of the staircase carpet is unknown but it is in good shape and does not require replacement.	4	4	2013	31-May-17 27-Jun-17	МН	4 15	1		aircases is fit for use and no repairs / replacements are commended during this study period.	Study	3 - Future Renewal	Yes	Yes	No	No						
23	Youbou Community Hall	8550 Hemlock St. Youbou, BC	C Interiors	C30 Interior Finishes	C3010 Wall Finishes	C301003 Gypsum Board Wall Finishes	Washroom/Paint	31 - 43	Interior wall finishes include painted (textured) gypsum wall board or cedar T&G wall paneling. In general the finishes appeared to be in good-fair condition. The bowling alley front interior area was painted in 2014. The timing of the other repainting cycles is unknown and has been assumed. Facility staff commented that typically patch work is completed.	4	4		31-May-17 27-Jun-17	MH	3 10		А	epaint interior walls. repainting budget has been included every 5 years to allow for rgeted painting.	Repair Allowance	4b- Discretionary Aesthetics	Yes	No	No	No	1	\$5,000 L	\$\$,000	0% 0%	5% \$6,0	00
24	Youbou Community Hall	8550 Hemlock St. Youbou, BC	C Interiors	C30 Interior Finishes	C3010 Wall Finishes	C301004 Tile Wall Finishes	II Washrooms/Tile Wall Finishes		A combination of painted GWB and Wall tile finishes have been used throughout the washroom areas (including gym, hall & bowing alley). In general, the finishes appeared to be in good- fair condition.	4	4	2012	31-May-17 27-Jun-17	MH	5 10		to ri fa n	eplace tile at the end of its service life. Prior to replacement review o confirm if tile requires replacement or is grout joints can be placed where required and the tile retained. The tile replacement Is outside the ten year plan, costs associated with this item here ot been carried into the cash flow tables. Repaint washroom areas very 5 years; a re-painting allowance has been provided.	Replacement	3 - Future Renewal	Yes	No	No	No	1	\$2,000 L	5 \$2,000	0% 0%	5% \$3,0	00
25	Youbou Community Hall	8550 Hemlock St. Youbou, BC	C Interiors	C30 Interior Finishes	C3020 Floor Finishes	C302001 Tile Floo Finishes	or Gym & Banquet Hall Washroom/Tile Floors	52	Tile flooring has been used in the gym and upper hall washroom areas. Where reviewed the tile was noted to be in good condition.	4	4	1993	31-May-17 27-Jun-17	мн	24 40		т	eplace tile at the end of its service life. his item falls outside the ten year plan, costs associated with this em have not been carried into the cash flow tables.	Replacement	3 - Future Renewal	Yes	No	No	No						
26	Youbou Community Hall	8550 Hemlock St. Youbou, BC	C Interiors	C30 Interior Finishes	C3020 Floor Finishes	C302003 Wood Flooring	Upper Hall/Wood Flooring	53 - 57	Wood flooring is present in the Banquet Hall and in the adjacent storage area. Where reviewed the flooring finish was in poor condition.	2	3	1970	31-May-17 27-Jun-17	МН	47 30		0 R	efinish Banquet Hall area wood flooring.	Replacement	3 - Future Renewal	No	No	No	No	3000	\$5 S	\$13,500	0% 10%	5% \$16,0	00
27	Youbou Community Hall	8550 Hemlock St. Youbou, BC	C Interiors	C30 Interior Finishes	C3020 Floor Finishes	C302005 Carpetin	ng Lounge Area/Carpet	58 - 60	Carpeting is present in the daycare area, portions of the bowling alley, and the main staircase. Where reviewed the carpeted flooring was noted to be in good condition. The Daycare carpet was replaced in 2005	3	4	2005	31-May-17 27-Jun-17	МН	12 25	1	Т	eplace carpet flooring at the end of its service life. his item falls outside the ten year plan, costs associated with this em have not been carried into the cash flow tables.	Replacement	3 - Future Renewal	No	No	No	No						

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Row	BLDG Name	Location / Address	Level 1 Major Group Elements	Level 2 Group Elements	Level 3 Individual Elemen	ID	Location / Type	Photo	CONDITION ASSESSMENT	Condition	Performance	Yr New or Last Major Action	Assessment Date	Assessed By	Age in 2017 Typical	Life Cycle or Action Interval	to EOL or Major to EOL or Major Action	Recommendation	Type	Priority	Can this work be phased over multiple years ?	If recommended work not complete can the rate of deterioration be expected to increase ?	lead to a loss of use	adversely affect the	Quantity	Unit Rate	Unit Subtotal Repair or Repair or	Consult.	Contingency	Total in 2017 Dollars
28	Youbou Community Hall	8550 Hemlock St. Youbou, BC	C Interiors	C30 Interior Finishes	C3020 Floor Finishes	C302004 Resilient Floor Finishes	Throughout Building/Resilient Floor	61 - 70	The resilient flooring in the gym kitchen requires replacement. All other resilient flooring is in good condition.	4	3	2010	31-May-17 27-Jun-17	MH	7	25	18	Replace flooring in gym kitchen area. All other resilient flooring does not require replacement during this study period.	Replacement	3 - Future Renewal	No	Yes	No	No	300	\$13	SF \$3,900	0%	0% 5'	% \$5,000
29	Youbou Community Hall	8550 Hemlock St. Youbou, BC	C Interiors	C30 Interior Finishes	C3020 Floor Finishes	C302099 Other Flooring and Floor Finishes	Gym/Floor	71, 72	The gym floor is covered with an interlocking plastic 'sports' floor. The floor is in fair to good condition. Some lines require repainting however the cost of line repainting under the threshold limit of this study therefor this cost has not been included.	3	4		31-May-17 27-Jun-17	MH	22	35	13	Replace flooring at the end of its service life.	Replacement	3 - Future Renewal	No	Yes	No	No						
30	Youbou Community Hall	8550 Hemlock St. Youbou, BC	C Interiors	C30 Interior Finishes	C3030 Ceiling Finishe	s C303003 Gypsum Board Ceiling Finishes	Throughout Building/Ceiling Finishes		Interior ceiling finishes include painted (textured) gypsum wall board, ceiling tile, or painted wood paneling (gym). In general the finishes appeared to be in good-fair condition. The timing of the last re-painting cycle is unknown and has been assumed. Facility staff commented that typically patch work repairs or spot painting is done on a regular basis.	4	5		31-May-17 27-Jun-17	MH	17	25		A repainting budget has been included to allow for targeted painting and ceiling repairs in the bowling alley.	Contingency	4b- Discretionary Aesthetics	Yes	No	No	No	1	\$2,500	LS \$2,500	0%	0% 5	% \$3,000
31	Youbou Community Hall Youbou	8550 Hemlock St. Youbou, BC 8550 Hemlock	C Interiors C Interiors	C30 Interior Finishes	C3030 Ceiling Finishe	Ceiling Tiles and Panels	Bowling Alley/Ceiling Tiles	76 - 78 46, 48,	The bowling alley and some washrooms use acoustical ceiling tiles	4			31-May-17 27-Jun-17 31-May-17				5	A repainting budget has been included every 5 years to allow for targeted ceiling tile repairs / replacement	Contingency	4b- Discretionary Aesthetics 3 - Future	Yes	No	No	No	1		LS \$1,500			
32	Community Hall	St. Youbou, BC	C interiors	C1030 Fittings			ops	61, 66, 79, 80	is estimated. Where reviewed the countertops were aged but still serviceable but some isolated chipping was noted. Some faucets were replaced in 2014 but the countertops were re- used.	2			27-Jun-17			23		Replace countertops at end of service life. It is assumed that the sinks and faucets will be re-used.	Replacement	Renewal	Tes	NO	NO	NO	3					% \$3,000
33	Youbou Community Hall	8550 Hemlock St. Youbou, BC	C Interiors	C1030 Fittings	C1030 Counters	C103009 Counters		81, 82, 83	Countertops and cupboards are present throughout the kitchen area. Where reviewed, the kitchen finishes were in fair condition with the except of the gym kitchen which was quite damaged. The bowling alley kitchen sink area is quite dated, but still serviceable.	3	4		31-May-17 27-Jun-17	MH	27	30	2	Replace cupboards at the end of their service life, Replace gym kitchen cupboards in 1 to 2 years. Replacement of kitchen appliances has not been included in this cost.	Replacement	3 - Future Renewal	Yes	No	No	No	1	\$2,000	LS \$2,000	0%	0% 5	% \$3,000
34	Youbou Community Hall	8550 Hemlock St. Youbou, BC	D Services	D30 HVAC	D3040 Distribution System	D304001 Air Distribution, Heating and Cooling	Exterior/Heat Pump		There are four - 5 ton heat pumps (Mitsubishi Electric systems, model PUMY-P608JMU) installed in 2013. 2 are located on the west elevation and service the Upper Hall and the Bowling alley. 2 more are located near the south east building corner, both of which service the gym. No issues related to these air handling units were reported on site.	4	4		31-May-17 27-Jun-17	МН	4	20	18	Replace the make-up air units at the end of their lifespan. This item falls outside the ten year plan, costs associated with this item have not been carried into the cash flow tables.	Replacement	3 - Future Renewal	Yes	No	Yes	No						
35	Youbou Community Hall	8550 Hemlock St. Youbou, BC	D Services	D30 HVAC	D3040 Distribution System	D304001 Air Distribution, Heating and Cooling	Interior/Heat Pump	86	Mitsubishi MSZ D30NA wall mounted Air handler provide heating and cooling in the Upper Hall (2 units) and the Bowling Alley (2 units). No issues related to these air handling units were reported on site	4	4		31-May-17 27-Jun-17	MH	4	20	18	Replace the make-up air units at the end of their lifespan. This item falls outside the ten year plan, costs associated with this item have not been carried into the cash flow tables.	Replacement	3 - Future Renewal	Yes	No	Yes	No						
36	Youbou Community Hall	8550 Hemlock St. Youbou, BC	D Services	D30 HVAC	D3040 Distribution System	D304008 Air Handling Units	Wall mounted indoor air handler	86	Two - Mitsubishi PVFY-P48E00B air handling units provide Twoating and cooling to the Gym area. No issues related to these air handling units were reported on site.	4	4		31-May-17 27-Jun-17	MH	4	20	18	Replace the make-up air units at the end of their lifespan. This item falls outside the ten year plan, costs associated with this item have not been carried into the cash flow tables.	Replacement	3 - Future Renewal	Yes	No	Yes	No						
37	Youbou Community Hall	8550 Hemlock St. Youbou, BC	D Services	D30 HVAC	D3040 Distribution System	D304001 Air Distribution, Heating and Cooling	Throughout Building/Duct Work		Exposed duct work is present in the gym that provides heating and cooling.	4	5		31-May-17 27-Jun-17	MH	4	50	26	The duct work is expected to last the life of the building. No major capital expenditures are expected to be required. This item falls outside the ten year plan, costs associated with this item have not been carried into the cash flow tables.		Not Applicable	N/A	N/A	Yes	No						
38	Youbou Community Hall	8550 Hemlock St. Youbou, BC	D Services	D30 HVAC	D3040 Distribution System		Washrooms/Exhaust Fans		Exhaust fans are present in the washrooms. No issues related to these fan units were reported on site.	3			27-Jun-17					Replace fans and dampers at end of service life. Repair damaged fan vent units on the roof. The cost of these fan units falls below the project threshold and have been excluded from the study.		3 - Future Renewal	Yes	No	Yes	No						
39	Youbou Community Hall	8550 Hemlock St. Youbou, BC	D Services	D20 Plumbing	D2020 Domestic Water Distribution	D2010 Water Supply	Throughout Building/Water Supply		Water for domestic service enters through a 1.5" diameter pipe (this was estimated at the pipe was wrapped with insulation) located in the mechanical room in the gym area. The water service is metered. No backflow preventer is in place. No issues related to water supply were reported by facility staff.	4	4		31-May-17 27-Jun-17	МН	66	50	1	Water distribution piping is expected to last the life of the building. Complete localized repairs as may be necessary as the building ages. Install backflow preventer, if one currently does not exist.	Upgrade	3 - Future Renewal	No	N/A	No	No	1	\$3,000	EA \$3,000	0%	0% 5'	%\$4,000
40	Youbou Community Hall	8550 Hemlock St. Youbou, BC	D Services	D20 Plumbing	D2020 Domestic Water Distribution	D202001 Pipes and Fittings	l Throughout Building/Water Supply			4	4		31-May-17 27-Jun-17	МН	37	50		Water distribution piping is expected to last the life of the building. Complete localized repairs as may be necessary as the building ages. This item falls outside the ten year plan, costs associated with this item have not been carried into the cash flow tables.		Not Applicable	N/A	N/A	Yes	No						
41	Youbou Community Hall	8550 Hemlock St. Youbou, BC	D Services	D20 Plumbing	D2020 Domestic Water Distribution		: Throughout Building/Hot Water Tank		4 - full size (184 linter to 270 liter) electric hot water tanks are present (gym kitchen, banquet hall kitchen, bowing alley storage room). A 90 liter space saver electric tank is also present in the handycap washroom. Age of all tanks are unknown but two (The small space saver & the gym kitchen) appear to need replacement.	3	4		27-Jun-17					Replace two hot water tanks soon, the second two, at the end of their service life.	Replacement	3 - Future Renewal	No	No	No	No	4	\$1,500	EA \$6,000	0%	0% 5	% \$7,000
42	Youbou Community Hall	8550 Hemlock St. Youbou, BC		D20 Plumbing	D2030 Sanitary Wast	Waste	Throughout Building/Sanitary Waste		review. We understand they are cleaned as required and no problems have been reported.	4	4		31-May-17 27-Jun-17 31-May-17	MH	47	50		Sanitary piping is expected to last the life of the building. Complete localized repairs as may be necessary as the building ages.			N/A N/A	Yes	Yes	No						
43	Youbou Community Hall	8550 Hemlock St. Youbou, BC	G Building Sitewor	rk G30 Site Civil/Mechanical Utilities		r G302005 Septic Tanks	Exterior/Septic System	87	The complex is serviced by a septic field.				31-May-17 27-Jun-17	IVITI				This item falls outside the scope of this study and has not been included.	Not Applicable	N/A	N/A	Yes	Yes	No						

				tts	ents	CON	IPONENT		CONDITION ASSESSMENT						LIFECYCI	E DATA	RECOMMENDATION				If recommended	Will a	Can the		OF	INION OF PROBA	BLE COST	
Row	BLDG Name	Location / Address	Level 1 Major Grou Elements	Level 2 Group Elemen	Level 3 Individual Elem	D	Location / Type	Photo	Description & History	Condition	Performance	Yr New or Last Major Action	Assessment Date	Assessed By	Age in 2017 Typical Life Cycle or Action Interval	Est. Time Remaining to EOL or Major Action	Recommendation	Туре	Priority	Can this work be phased over multiple years ?	work not complete can the rate of deterioration be expected to increase ?	failure in this system lead to a	current condition adversely affect the buildings security of safety ?	Quantity	Unit Rate Unit	Subtotal Repair or Replacement Cost Consult.	Contin Don Don Don Contin Contin Don Contin	Total in 2017 Dollars
	Youbou Community Hall	8550 Hemlock St. Youbou, BC	D Services	D20 Plumbing	D2010 Plumbing Fixtures	D201000 Plumbin Fixtures	g Throughout Building/Plumbing Fixtures	x	Plumbing fixtures include sinks (8 throughout the bathrooms), (Banquet Kitchen, 1 stainless single, 1 stainless triple), (Daycare, 1 stainless double), (Gym kitchen, 1 stainless single), toilets (8), urinals (3).	4	4		1-May-17 7-Jun-17	MH	0 35	11	Replace fixtures at the end of their service life. This item falls outside the ten year plan, costs associated with this item have not been carried into the cash flow tables.	Replacement	3 - Future Renewal	No	No	No	No					
	Youbou Community Hall	8550 Hemlock St. Youbou, BC	D Services	D50 Electrical	D5010 Electrical Service and Distribution	D501003 Main Switchgear	Electrical Room/Main Switchgear	89	The main disconnect is rated 400A, 125/250V 3Phase system. No issues related to electrical distribution were reported on site.	4	4 1		1-May-17 7-Jun-17	МН	24 50	26	Replace distribution switches. This item falls outside the ten year plan, costs associated with this item have not been carried into the cash flow tables.	Replacement	3 - Future Renewal	No	No	Yes	No					
0	Youbou Community Hall	8550 Hemlock St. Youbou, BC	D Services	D50 Electrical	D5010 Electrical Service and Distribution	D401003 Main Switchgear and Panels	Electrical Room/Main Switchgear and Panel IR Scanning		The main electrical service consists of the main switch gear and 2 panels.	4	4 1		1-May-17 ?7-Jun-17	MH	24 5	1	Conduct Infra-red (IR) scan on major switchgear and panels. The cost of this work is below the project threshold and has not been included in the financial tables.	Study	Not Applicable	N/A	N/A	N/A	N/A					
	Youbou Community Hall	8550 Hemlock St. Youbou, BC	D Services	D50 Electrical	D5010 Electrical Service and Distribution	D501005 Panels	Throughout Building/Electrical Panels		There are 4 intermediate distribution panels rated 100A to 200 A No issues related to distribution were reported on site.	4	4 1		1-May-17 7-Jun-17	MH	24 35	11	Replace house panels at end of service life. This item falls outside the ten year plan, costs associated with this item have not been carried into the cash flow tables.	Replacement	3 - Future Renewal	No	No	Yes	No					
	Youbou Community Hall	8550 Hemlock St. Youbou, BC	D Services	D50 Electrical	D5020 Lighting and Branch Wiring	D502002 Interior Lighting	Throughout Building/Interior Lighting Fixtures		Interior lighting varies throughout the building. The majority of the interior lighting has been upgraded to LED systems. Some T8 florescent systems remain in the storage rooms, it appears that T5's were installed in the gym although a close-up inspection was not done.	4	4 2		1-May-17 7-Jun-17	МН	2 25	23	Replace lighting at end of service life. This item falls outside the ten year plan, costs associated with this item have not been carried into the cash flow tables.	Replacement	3 - Future Renewal	No	No	Yes	No					
	Youbou Community Hall	8550 Hemlock St. Youbou, BC	D Services	D50 Electrical	D5020 Lighting and Branch Wiring	D502002 Interior Lighting	Stage/Lighting		Minimal stage lighting is present in the gym area. Facility staff reported that this lighting is in working order.	3	4 1		1-May-17 7-Jun-17	MH	24 35	11	Replace lighting at end of service life. This item falls outside the ten year plan, costs associated with this item have not been carried into the cash flow tables.	Replacement	3 - Future Renewal	No	No	Yes	No					
0	Youbou Community Hall	8550 Hemlock St. Youbou, BC	D Services	D50 Electrical	D5020 Lighting and Branch Wiring	D502002 Lighting Equipment	Throughout Building/Exterior Lighting Fixtures		Exterior lighting includes wall mounted lights, parking area lights (installed in 2011) and soffit mounted lights. The west elevation exterior light is a newer LED systems (installed in 2007). No issues related to the exterior lighting systems were reported during the course of this review.	4	4 2		1-May-17 7-Jun-17	мн	6 35	11	Replace at end of service life. Assumes replacement lighting will be LED systems. This item falls outside the ten year plan, costs associated with this item have not been carried into the cash flow tables.	Replacement	3 - Future Renewal	No	No	No	No					
(Youbou Community Hall	8550 Hemlock St. Youbou, BC	D Services	D50 Electrical	D5020 Lighting and Branch Wiring	D502099 Branch Wiring	Throughout Building/Branch Wiring		Branch wiring is present throughout the building. Facility staff reported no issues with electrical distribution.	4	4 1		1-May-17 7-Jun-17	МН	24 50	26	Branch wiring is expected to last the life of the building. This item falls outside the ten year plan, costs associated with this item have not been carried into the cash flow tables. Replace exterior outlet covers where missing (east elevation) as part of the buildings ongoing maintenance.	Replacement	3 - Future Renewal	Yes	No	Yes	No					
	Youbou Community Hall	8550 Hemlock St. Youbou, BC	D Services	D50 Electrical	D5030 Communication and Security	D503001 Fire Alarm Systems	Throughout Building/Fire Alarm Systems	98	The building is equipped with a "Fire Shield" Protection System. This system includes a main panel that is located in the stairwell from the gym to the Banquet electrical room, a series of smoke and heat detectors, annunciators and exit signs located throughout the building. Facility staff confirmed that the fire alarm system is reviewed on an annual basis.	3	4 1		1-May-17 7-Jun-17	МН	24 35	11	Replace the fire alarm panel at the end of its lifespan, including an allowance to replace some wiring and devices. This item falls outside the ten year plan, costs associated with this item have not been carried into the cash flow tables.	Replacement	3 - Future Renewal	No	No	Yes	No					
	Youbou Community Hall	8550 Hemlock St. Youbou, BC	P Professional Services	P100001 Seismic Screening	P100001 Seismic Screening	P100001 Seismic Screening	Seismic Screening	x	Complete a seismic screening of the building to assess seismic vulnerability.		1		1-May-17 7-Jun-17	МН	24 10	1	For conducting a seismic screening of the building. The screening will be done according to the "Manual for Screening of Buildings for Seismic Investigation", published by the National Research Council of Canada (1992).	Study		No	N/A	No	N/A	1	\$4,000 LS	\$4,000 0%	0% 5%	\$5,000

2017 Facility Condition Assessment and Capital Plan

		СОМ	PONENT		CONDITION ASSESSMENT	RECOMMENDATION				10-YEAR (CAPITAL PI	.AN							
	a		e						illars	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026
Row	BLDG Nai	ID	Location / Tyr	Photo	Description & History	Recommendation	Type	Priority	Total in 2017 Do	\$30,000	\$24,500	\$19,000	\$9,000	\$2,000	\$0	\$12,500	\$289,000	\$9,000	\$2,000
1	Youbou Community Hall	A1010 Wall Foundations	Underground/ Foundations	2 - 4	The building is constructed over a varying height crawlspace that uses cast in place concrete foundation walls and pad footings to support the wood pony wall & wood post foundation. No evidence of rot, major settlement or heaving was reported or observed. The crawlspace was insulated with mineral wool in 2013.	This item falls outside the ten year plan, costs associated with this		Not Applicable											
2	Youbou Community Hall	A103006 Foundation Drainage	Underground/ Perimeter Drains	5	Roof leaders were noted to be connected to subsurface drainage. No excavation was undertaken but history suggests the roof drainage and perimeter drainage systems are the same. No issues related to foundation drainage were noted by facility staff. No information was available regarding the scoping of the system to review for continuity.	Periodic camera inspection and isolated repairs as required.	Study	Not Applicable	\$3,000		\$3,000					\$3,000			
3	Youbou Community Hall	A103006 Foundation Drainage	Underground/ Perimeter Drains	6	Roof leaders were noted to be connected to subsurface drainage. No excavation was undertaken but history suggests the roof drainage and perimeter drainage systems are the same. No issues related to foundation drainage were noted by facility staff. No information was available regarding the scoping of the system to review for continuity.	major capital expenditures are expected to be required. This item falls outside the ten year plan, costs associated with this item have not been carried into the cash flow tables. This should be		Not Applicable											
4	Youbou Community Hall	B10 Superstructure	General	x	The superstructure consists of conventional wood framing over a wood frame crawlspace. The roof uses conventional wood trusses with plywood sheathing. The majority of framed structure was concealed by interior finishes. No settlement, cracking, or other evidence of structural distress was observed or reported.	Interior protected structural components are expected to last the life of the building. No major capital expenditures are expected to be required. This item falls outside the ten year plan, costs associated with this item have not been carried into the cash flow tables. It is recommended that the building seismic upgrades be completed. This item is included under P100001 Seismic Screening.		Not Applicable											
5	Youbou Community Hall	B101004 Balcony Construction	Front Entrance Balcony / Landings	7 - 9	Wood framed landings with stairs provide access to the main entrance doors. The balcony surface consists of painted plywood sheathing, no non-skid surface was observed. Renewal related structural repairs were made to these decks and stairs in 2011 and 2013.	Balcony surface plywood is partially covered and maintenance related repairs are undertaken as needed; however, long term durability is questionable and at a minimum, a non-skid membrane surface is recommended to be added within this study period.	Repair Allowance	2 - Restore Functionality	\$4,000		\$4,000								
6	Youbou Community Hall	B101005 Ramps	Front Entrance/Wheel Chair Ramp	10	Wood framed wheelchair ramp uses conventional wood framing. The ramp surface uses painted plywood. No non-skid membrane was observed. This wheelchair ramp was added in 2007 and railing related renewals were undertaken in 2013. No evidence of structural distress was observed or reported.	Wheelchair ramp surface plywood is exposed and lacks a non-skid surface. long term durability of the painted plywood surface is questionable. At a minimum, a non-skit liquid applied membrane is recommended to be added within this study period.	Repair Allowance	2 - Restore Functionality	\$4,000		\$5,000								
7	Youbou Community Hall	B201001 Exterior Walls	Exterior/Vinyl Cladding	11 - 13	The exterior walls are clad with vinyl siding and the water barrier is assumed to be asphalt impregnated building paper. The siding was generally in fair with small areas of isolated damage at the bowling area roof level, south west building corner. No record of siding installation was available and its age is estimated at between 20 to 25 years old. Small portions of Hardieplank siding exist along the front (south elevation) of the building which appears to have been recently installed (2013).		Contingency	3 - Future Renewal	\$289,000								\$289,000		
8	Youbou Community Hall	B201008 Exterior Soffits	Roof Eaves/ Wood Soffit	14, 15	Vented aluminum soffits are used at the majority of the upper roof areas. Solid wood soffit is used at some lower level vaulted roof areas.	The metal and vented wood soffits are expected to last the life of the building, isolated replacement may be required due to mechanical damage. No major capital expenditures are expected to be required. This item falls outside the ten year plan, costs associated with this item have not been carried into the cash flow tables.		Not Applicable											

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		CON	IPONENT		CONDITION ASSESSMENT	RECOMMENDATION				10-YEAR O	CAPITAL PI	AN.							
Row	BLDG Name	IJ	Location / Type	Photo	Description & History	Recommendation	Type	Priority	Total in 2017 Dollars	2017 \$30,000	2018 \$24,500	2019 \$19,000	2020 \$9,000	2021 \$2,000	2022 \$0	2023 \$12,500	2024 \$289,000	2025 \$9,000	2026 \$2,000
9	Youbou Community Hall	B201011 Joint Sealant	Exterior/Sealant Joints	x	Exterior sealant was not installed around siding penetrations.	Replace sealant between dissimilar materials, and around windows and doors. A contingency has been included to complete sealant repairs at exposed locations.	Repair Allowance	3 - Future Renewal	\$6,000		\$6,000								
10	Youbou Community Hall	B201007 Balcony Walls and Railings	Exterior/Front Entrance Railings	16	used around the balconies and wheelchair ramps. The railings on	Refurbish main entrance railings and stair treads as needed. Railings and stair treads appear in good shape so the estimated remaining life has been extended past their estimated age.	Repair Allowance	3 - Future Renewal	\$3,000							\$3,000			
11	Youbou Community Hall	B201007 Balcony Walls and Railings	Exterior/Rear Entrance Staircase Railings	17	Wood framed railings that use wood pickets & wood railings are used by the rear entrance staircase and landing. The stairs and railings were refurbished in 2013	Refurbish banquet hall railings and stair treads as needed. This item falls outside the ten year plan, costs associated with this item have not been carried into the cash flow tables.	Repair Allowance	3 - Future Renewal											
12	Youbou Community Hall	B202001 Punched Windows	Exterior Walls/Level 1 Metal Framed Window Assemblies	- 18-20	The existing window assemblies in the 2nd floor hall area (west elevation) are non-thermally broken aluminum windows. Water ingress was suspected in the most southerly window, possibly the result of an exterior flashing deficiency. Age of window is estimated.	11 of the 12 windows are aged but appear to be performing adequately; however, water ingress is suspected at the window in the south west corner of the upper hall. Wood frame damage may be present. Given the window's suspected age, replacement of the windows with a more thermally efficient system should be considered in the next 3 years.	Replacement	3 - Future Renewal	\$16,000			\$16,000							
13	Youbou Community Hall	B202001 Punched Windows	Exterior Walls/Vinyl Framed Windows	21	Vinyl framed windows (4) appear to have been recently installed in the south elevation entrance buildout.	Vinyl windows are in good condition. This item falls outside the ten year plan, costs associated with this item have not been carried into the cash flow tables.	Replacement	3 - Future Renewal											
14	Youbou Community Hall	B203002 Exterior Solid Doors	Exterior Walls/Solid Metal & Wood Doors	22	The main entrance door is solid, decorative wood. There are 5 more double wood or metal doors followed by 3 single wood or metal faced doors. Some door and door hardware replacements were undertaken in 2010. All double doors are in good shape, two of the 3 single doors appear to be original and should be replaced.	Replace the two older single storage room doors on the north elevation. All other doors are expected to last the life of the building. This item falls outside the ten year plan, costs associated with this item have not been carried into the cash flow tables.	Replacement	3 - Future Renewal											
15	Youbou Community Hall	B204004 Exterior Glazing	Exterior/Aluminum Skylights	23	Aluminum framed skylights exist on the east elevation, 1st floor level roof. No issues of Leakage were observed or reported. Skylights were reported to be replaced in 2007	Aluminum framed skylights have been recently replaced and are in good condition. Replace skylights at the end of their service life. This item falls outside the ten year plan, costs associated with this item have not been carried into the cash flow tables.	Replacement	3 - Future Renewal											
16	Youbou Community Hall	B301001 High Sloped Roof Coverings	Sloped Roof/Asphalt Shingles	23	The main roof uses asphalt shingles with concealed fasteners. This roof was installed in 2007. Facia and gutters were replaced in 2014. No leaks or damage was reported or observed. No fall arrest tie offs were present on the roof.	Replace roof at the end of the service life. This item falls outside the ten year plan, costs associated with this item have not been carried into the cash flow tables.	Replacement	3 - Future Renewal											
17	Youbou Community Hall	B301002 Low Slop Membrane Systems	e Upper Hall/Low Sloped Roof	24	The low sloped roof areas use a torch applied SBS rolled roofing assembly. This roof was installed in 2016. Facia and gutters were replaced in 2014. No leaks or damage was reported or observed. No fall arrest tie offs were present on the roof. One location was noted on the east elevation where the gutter has been dented in.	Replace roof at the end of the service life. This item falls outside the ten year plan, costs associated with this item have not been carried into the cash flow tables.	Replacement	3 - Future Renewal											

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	COMPONENT				CONDITION ASSESSMENT	RECOMMENDATION				10-YEAR CAPITAL PLAN										
Row	BLDG Name	D	Location / Type	Photo	Description & History	Recommendation	Type	Priority	Total in 2017 Dollars	2017 \$30,000	2018 \$24,500	2019 \$19,000	2020 \$9,000	2021 \$2,000	2022 \$0	2023 \$12,500	2024 \$289,000	2025 \$9,000	2026 \$2,000	
18	Youbou Community Hall	B301005 Gutters and Downspouts	Roof/Gutters and Downspouts	x	Gutters are present at the base of the sloped roofs. These gutters drain into rain water leaders.	Replace gutters and downspouts at the end of service life. Replacement will likely be required at the time of roof replacement work to allow tie-ins. This item falls outside the ten year plan, costs associated with this item have not been carried into the cash flow tables.	Replacement	3 - Future Renewal												
19	Youbou Community Hall	C102001 Standard Interior Doors	Throughout Building/Interior Doors	25	Solid and glazed interior doors are present throughout the building. Some doors in the gym area were damaged and replacement is recommended. No other issues related to the interior doors were observed or reported by facility staff.	The interior doors are expected to last the life of the building. No major capital expenditures are expected to be required. This item falls outside the ten year plan, costs associated with this item have not been carried into the cash flow tables.		Not Applicable												
20	Youbou Community Hall	C101001 Fixed Partitions	Washrooms/Fixed Partitions	26	The washroom partitions in the gym area, the upper hall area, and in the bowling area are in good shape. Facility staff commented that recent repairs and renewals have been completed. Most toilets, Urinals & faucets were replaced in 2014 other than one toilet it the bowling alley (men's). All bathroom facilities are in good working order and facility staff did not indicate any problems.	Toilet partitions are adequate and no repairs during this study period are required.	Replacement	3 - Future Renewal												
21	Youbou Community Hall	C201002 Exterior Stair Construction	North Elevation/Exterior Stairs	17, 27, 28	Multiple flights of conventional wood framed stairs exist on the south elevation. A two story staircase also provides access to the 2nd floor hall exit. The south elevation stair access to the bowling alley were repaired in 2013 and the north elevation 2nd floor hall exit staircase was repaired in 2013.	All staircases are fit for use and no repairs / replacements are recommended during this study period.	Study	3 - Future Renewal												
22	Youbou Community Hall	C202001 Interior Stair Finishes	Gym to Upper Hall/Exterior Stairs	29, 30	A 2 flight interior staircase connects the gym are to the upper hall. These stairs are carpeted with handrails present on both sides. The age of the staircase carpet is unknown but it is in good shape and does not require replacement.	Staircases is fit for use and no repairs / replacements are recommended during this study period.	Study	3 - Future Renewal												
23	Youbou Community Hall	C301003 Gypsum Board Wall Finishes	Washroom/Paint	31 - 43	Interior wall finishes include painted (textured) gypsum wall board or cedar T&G wall paneling. In general the finishes appeared to be in good-fair condition. The bowling alley front interior area was painted in 2014. The timing of the other repainting cycles is unknown and has been assumed. Facility staff commented that typically patch work is completed.	Repaint interior walls. A repainting budget has been included every 5 years to allow for targeted painting.	Repair Allowance	4b- Discretionary Aesthetics	\$6,000				\$6,000					\$6,000		
24	Youbou Community Hall	C301004 Tile Wall Finishes	Washrooms/Tile Wall Finishes	44 - 51	A combination of painted GWB and Wall tile finishes have been used throughout the washroom areas (including gym, hall & bowling alley). In general, the finishes appeared to be in good- fair condition.	Replace tile at the end of its service life. Prior to replacement review to confirm if tile requires replacement or is grout joints can be replaced where required and the tile retained. The tile replacement falls outside the ten year plan, costs associated with this item have not been carried into the cash flow tables. Repaint washroom areas every 5 years; a re-painting allowance has been provided.	Replacement	3 - Future Renewal	\$3,000				\$3,000					\$3,000		
25	Youbou Community Hall	C302001 Tile Floor Finishes	Gym & Banquet Hall Washroom/Tile Floors	52	Tile flooring has been used in the gym and upper hall washroom areas. Where reviewed the tile was noted to be in good condition.	Replace tile at the end of its service life. This item falls outside the ten year plan, costs associated with this item have not been carried into the cash flow tables.	Replacement	3 - Future Renewal												
26	Youbou Community Hall	C302003 Wood Flooring	Upper Hall/Wood Flooring	53 - 57	Wood flooring is present in the Banquet Hall and in the adjacent storage area. Where reviewed the flooring finish was in poor condition.	Refinish Banquet Hall area wood flooring.	Replacement	3 - Future Renewal	\$16,000	\$16,000										

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	COMPONENT				CONDITION ASSESSMENT	RECOMMENDATION				10-YEAR (APITAL PI	LAN							
Row	BLDG Name	ID	Location / Type	Photo	Description & History	Recommendation	Туре	Priority	Total in 2017 Dollars	2017 \$30,000	2018 \$24,500	2019 \$19,000	2020 \$9,000	2021 \$2,000	2022 \$0	2023 \$12,500	2024 \$289,000	2025 \$9,000	2026 \$2,000
27	Youbou Community Hall	C302005 Carpeting	Lounge Area/Carpet	58 - 60	Carpeting is present in the daycare area, portions of the bowling alley, and the main staircase. Where reviewed the carpeted flooring was noted to be in good condition. The Daycare carpet was replaced in 2005	Replace carpet flooring at the end of its service life. This item falls outside the ten year plan, costs associated with this item have not been carried into the cash flow tables.	Replacement	3 - Future Renewal											
28	Youbou Community Hall	C302004 Resilient Floor Finishes	Throughout Building/Resilient Floor	61 - 70	The resilient flooring in the gym kitchen requires replacement. All other resilient flooring is in good condition.	Replace flooring in gym kitchen area. All other resilient flooring does not require replacement during this study period.	Replacement	3 - Future Renewal	\$5,000	\$5,000									
29	Youbou Community Hall	C302099 Other Flooring and Floor Finishes	Gym/Floor	71, 72	The gym floor is covered with an interlocking plastic 'sports' floor. The floor is in fair to good condition. Some lines require repainting however the cost of line repainting under the threshold limit of this study therefor this cost has not been included.	Replace flooring at the end of its service life.	Replacement	3 - Future Renewal											
30	Youbou Community Hall	C303003 Gypsum Board Ceiling Finishes	Throughout Building/Ceiling Finishes	73 - 75	Interior ceiling finishes include painted (textured) gypsum wall board, ceiling tile, or painted wood paneling (gym). In general the finishes appeared to be in good-fair condition. The timing of the last re-painting cycle is unknown and has been assumed. Facility staff commented that typically patch work repairs or spot painting is done on a regular basis.	A repainting budget has been included to allow for targeted painting and ceiling repairs in the bowling alley.	Contingency	4b- Discretionary Aesthetics	\$3,000							\$3,000			
31	Youbou Community Hall	C303004 Acoustical Ceiling Tiles and Panels	Washrooms & Bowling Alley/Ceiling Tiles	76 - 78	The bowling alley and some washrooms use acoustical ceiling tiles	A repainting budget has been included every 5 years to allow for targeted ceiling tile repairs / replacement	Contingency	4b- Discretionary Aesthetics	\$2,000					\$2,000					\$2,000
32	Youbou Community Hall	C103008 Counters	Washroom/Counterto ps	46, 48, 61, 66, 79, 80		sinks and faucets will be re-used.	Replacement	3 - Future Renewal	\$3,000			\$3,000							
33	Youbou Community Hall	C103009 Counters	Kitchen/Countertops	37, 38, 81, 82, 83	condition with the except of the gym kitchen which was quite damaged. The bowling alley kitchen sink area is quite dated, but still serviceable.	Replace cupboards at the end of their service life, Replace gym kitchen cupboards in 1 to 2 years. Replacement of kitchen appliances has not been included in this cost.	Replacement	3 - Future Renewal	\$3,000		\$3,000								
34	Youbou Community Hall	D304001 Air Distribution, Heating and Cooling	Exterior/Heat Pump	84, 85	There are four - 5 ton heat pumps (Mitsubishi Electric systems, model PUMY-P60BJMU) installed in 2013. 2 are located on the west elevation and service the Upper Hall and the Bowling alley. 2 more are located near the south east building corner, both of which service the gym. No issues related to these air handling units were reported on site.		Replacement	3 - Future Renewal											
35	Youbou Community Hall	D304001 Air Distribution, Heating and Cooling	Interior/Heat Pump	86	Mitsubishi MSZ D30NA wall mounted Air handler provide heating and cooling in the Upper Hall (2 units) and the Bowling Alley (2 units). No issues related to these air handling units were reported on site.	Replace the make-up air units at the end of their lifespan. This item falls outside the ten year plan, costs associated with this item have not been carried into the cash flow tables.	Replacement	3 - Future Renewal											
36	Youbou Community Hall	D304008 Air Handling Units	Wall mounted indoor air handler	86	Two - Mitsubishi PVFY-P48E00B air handling units provide heating and cooling to the Gym area. No issues related to these air handling units were reported on site.	Replace the make-up air units at the end of their lifespan. This item falls outside the ten year plan, costs associated with this item have not been carried into the cash flow tables.	Replacement	3 - Future Renewal											

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	COMPONENT				CONDITION ASSESSMENT	RECOMMENDATION				10-YEAR	10-YEAR CAPITAL PLAN										
	ame		/pe						ollars	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026		
Row	N BILDG N	ID	Location / Ty	Photo	Description & History	Recommendation	Туре	Priority	Total in 2017 D	\$30,000	\$24,500	\$19,000	\$9,000	\$2,000	\$0	\$12,500	\$289,000	\$9,000	\$2,000		
37	Youbou Community Hall	D304001 Air Distribution, Heating and Cooling	Throughout Building/Duct Work	87	Exposed duct work is present in the gym that provides heating and cooling.	The duct work is expected to last the life of the building. No major capital expenditures are expected to be required. This item falls outside the ten year plan, costs associated with this item have not been carried into the cash flow tables.		Not Applicable													
38	Youbou Community Hall	D304007 Ventilation Systems	Washrooms/Exhaust Fans		Exhaust fans are present in the washrooms. No issues related to these fan units were reported on site.	Replace fans and dampers at end of service life. Repair damaged fan vent units on the roof. The cost of these fan units falls below the project threshold and have been excluded from the study.	Replacement	3 - Future Renewal													
39	Youbou Community Hall	D2010 Water Supply	Throughout Building/Water Supply		Water for domestic service enters through a 1.5" diameter pipe (this was estimated at the pipe was wrapped with insulation) located in the mechanical room in the gym area. The water service is metered. No backflow preventer is in place. No issues related to water supply were reported by facility staff.	Water distribution piping is expected to last the life of the building. Complete localized repairs as may be necessary as the building ages. Install backflow preventer, if one currently does not exist.	Upgrade	3 - Future Renewal	\$4,000	\$4,000											
40	Youbou Community Hall	D202001 Pipes and Fittings	d Throughout Building/Water Supply		Piping is a combination of copper or grey "pex" pipe where observed. The pipe typically is insulated.	Water distribution piping is expected to last the life of the building. Complete localized repairs as may be necessary as the building ages. This item falls outside the ten year plan, costs associated with this item have not been carried into the cash flow tables.		Not Applicable													
41	Youbou Community Hall	D202003 Domesti Water Equipment Tanks	-		4 - full size (184 linter to 270 liter) electric hot water tanks are present (gym kitchen, banquet hall kitchen, bowing alley storage room). A 90 liter space saver electric tank is also present in the handycap washroom. Age of all tanks are unknown but two (The small space saver & the gym kitchen) appear to need replacement.	Replace two hot water tanks soon, the second two, at the end of their service life.	Replacement	3 - Future Renewal	\$7,000		\$3,500					\$3,500					
42	Youbou Community Hall	D2030 Sanitary Waste	Throughout Building/Sanitary Waste		The sanitary systems are concealed and not accessible for visual review. We understand they are cleaned as required and no problems have been reported.	Sanitary piping is expected to last the life of the building. Complete localized repairs as may be necessary as the building ages.	Not Applicable	N/A													
43	Youbou Community Hall	G302005 Septic Tanks	Exterior/Septic System	87	The complex is serviced by a septic field.	This item falls outside the scope of this study and has not been included.	Not Applicable	N/A													
44		D201000 Plumbing Fixtures	g Throughout Building/Plumbing Fixtures	x	Plumbing fixtures include sinks (8 throughout the bathrooms), (Banquet Kitchen, 1 stainless single, 1 stainless triple), (Daycare, 1 stainless double), (Gym kitchen, 1 stainless single), toilets (8), urinals (3).	Replace fixtures at the end of their service life. This item falls outside the ten year plan, costs associated with this item have not been carried into the cash flow tables.	Replacement	3 - Future Renewal													
45	Youbou Community Hall	D501003 Main Switchgear	Electrical Room/Main Switchgear	89	·	Replace distribution switches. This item falls outside the ten year plan, costs associated with this item have not been carried into the cash flow tables.	Replacement	3 - Future Renewal													
46	Youbou Community Hall	D401003 Main Switchgear and Panels	Electrical Room/Main Switchgear and Panel IR Scanning	91, 91	The main electrical service consists of the main switch gear and 2 panels.	Conduct Infra-red (IR) scan on major switchgear and panels. The cost of this work is below the project threshold and has not been included in the financial tables.	Study	Not Applicable													
47	Youbou Community Hall	D501005 Panels	Throughout Building/Electrical Panels		There are 4 intermediate distribution panels rated 100A to 200 A No issues related to distribution were reported on site.	Replace house panels at end of service life. This item falls outside the ten year plan, costs associated with this item have not been carried into the cash flow tables.	Replacement	3 - Future Renewal													

2017 Facility Condition Assessment and Capital Plan

		COMPONENT			CONDITION ASSESSMENT	RECOMMENDATION			10-YEAR (CAPITAL PI	.AN								
Row	BLDG Name	ID	on / Type	Photo	Description & History	Recommendation	Type	iority	2017 Dollars	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026
	۵		Locati	L.			F	ā	Total in	\$30,000	\$24,500	\$19,000	\$9,000	\$2,000	\$0	\$12,500	\$289,000	\$9,000	\$2,000
48	Youbou Community Hall	D502002 Interior Lighting	Throughout Building/Interior Lighting Fixtures		the interior lighting has been upgraded to LED systems. Some T8	Replace lighting at end of service life. This item falls outside the ten year plan, costs associated with this item have not been carried into the cash flow tables.	Replacement	3 - Future Renewal											
49	Youbou Community Hall	D502002 Interior Lighting	Stage/Lighting		Minimal stage lighting is present in the gym area. Facility staff reported that this lighting is in working order.	Replace lighting at end of service life. This item falls outside the ten year plan, costs associated with this item have not been carried into the cash flow tables.	Replacement	3 - Future Renewal											
50	Youbou Community Hall	D502002 Lighting Equipment	Throughout Building/Exterior Lighting Fixtures	92 - 97	Exterior lighting includes wall mounted lights, parking area lights (installed in 2011) and soffit mounted lights. The west elevation exterior light is a newer LED systems (installed in 2007). No issues related to the exterior lighting systems were reported during the course of this review.	This item falls outside the ten year plan, costs associated with this	Replacement	3 - Future Renewal											
51	Youbou Community Hall	D502099 Branch Wiring	Throughout Building/Branch Wiring		Branch wiring is present throughout the building. Facility staff reported no issues with electrical distribution.	Branch wiring is expected to last the life of the building. This item falls outside the ten year plan, costs associated with this item have not been carried into the cash flow tables. Replace exterior outlet covers where missing (east elevation) as part of the buildings ongoing maintenance.	Replacement	3 - Future Renewal											
52	Youbou Community Hall	D503001 Fire Alarm Systems	Throughout Building/Fire Alarm Systems	98	The building is equipped with a "Fire Shield" Protection System. This system includes a main panel that is located in the stairwell from the gym to the Banquet electrical room, a series of smoke and heat detectors, annunciators and exit signs located throughout the building. Facility staff confirmed that the fire alarm system is reviewed on an annual basis.	Replace the fire alarm panel at the end of its lifespan, including an allowance to replace some wiring and devices. This item falls outside the ten year plan, costs associated with this item have not been carried into the cash flow tables.	Replacement	3 - Future Renewal											
53	Youbou Community Hall	P100001 Seismic Screening	Seismic Screening	x	Complete a seismic screening of the building to assess seismic vulnerability.	For conducting a seismic screening of the building. The screening will be done according to the "Manual for Screening of Buildings for Seismic Investigation", published by the National Research Council of Canada (1992).	Study		\$5,000	\$5,000									



Youbou Community Hall

Photo 01



Photo 02

Seaforth - Defficiency Review



Youbou Community Hall

Photo 03



Photo 04

Seaforth - Defficiency Review

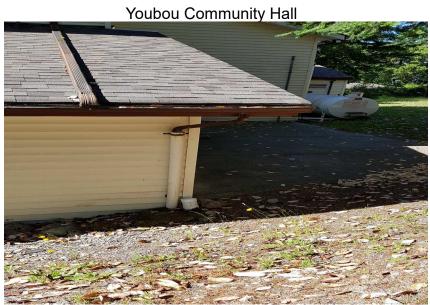


Photo 05



Photo 06

Seaforth - Defficiency Review

682



Photo 07



Photo 08



Photo 09



Photo 10



Photo 11



Photo 12

Seaforth - Defficiency Review

685



Photo 13



Photo 14



Photo 15



Photo 16



Photo 17



Photo 18

Seaforth - Defficiency Review

688



Photo 19



Photo 20

Youbou Community Hall

Cowichan Valley Regional District

Photo 21



Photo 22



Photo 23



Photo 24

Youbou Community Hall



Photo 25



Photo 26



Youbou Community Hall

Photo 27

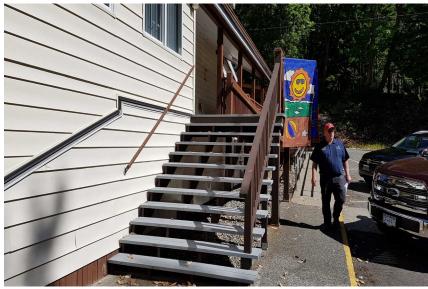


Photo 28



Photo 29

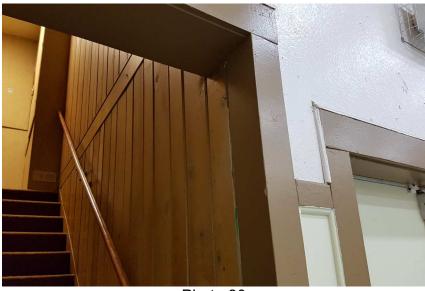


Photo 30





Photo 31



Photo 32

Seaforth - Defficiency Review

695





Youbou Community Hall

Photo 33



Photo 34



Photo 35



Photo 36



Youbou Community Hall

Photo 37



Photo 38



Youbou Community Hall

Photo 39

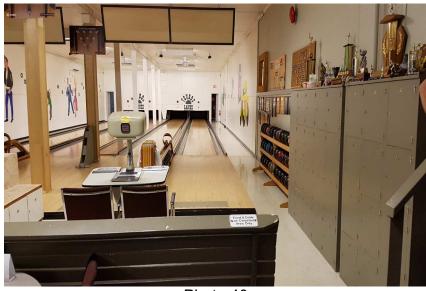


Photo 40



Photo 41



Photo 42

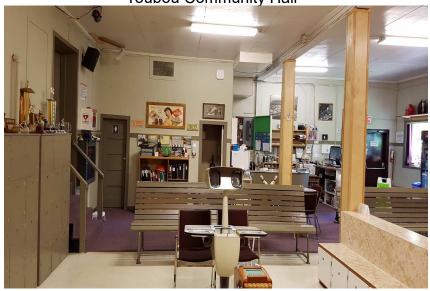


Photo 43



Photo 44

Seaforth - Defficiency Review

Youbou Community Hall





Photo 46

Seaforth - Defficiency Review

Youbou Community Hall



Youbou Community Hall

Photo 47



Photo 48





Youbou Community Hall

Photo 49



Photo 50





Photo 51



Photo 52



Youbou Community Hall

Photo 53



Photo 54



Photo 55



Photo 56



Youbou Community Hall

Photo 57



Photo 58



Photo 59



Photo 60

Seaforth - Defficiency Review

709



Photo 61



Photo 62



FACILITY CONDITION ASSESSMENT SALTAIR COMMUNITY CENTRE

3850 South Oyster Road, Ladysmith British Columbia



Prepared for:	Austin Tokarek, Asset Coordinator Engineering Services Department Cowichan Valley Regional District 175 Ingram Street Duncan, BC V9L 1N8
Prepared by:	McCuaig & Associates Engineering Ltd. #201 – 33 East 8th Avenue Vancouver, BC V5T 1R5
Date:	July 21, 2017
McCuaig Ref.:	20170401-C-RPT-FCA-01-FNL

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- **Appendix B** Estimated 5-Year Capital Expenditure
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- **Appendix D** Building Deficiency Photos



1.0 INTRODUCTION

1.1 TERMS OF REFERENCE

McCuaig & Associates Engineering Ltd. (MAE) was retained by Cowichan Valley Regional District (CVRD) to conduct a Facility Condition Assessment (FCA) for Saltair Community Centre (SCC), located at 3850 South Oyster Road in Ladysmith, BC.

The purpose of this assessment was to complete a visual, non-destructive walkthrough review of the building to produce a qualitative and quantitative assessment of the building condition in order to identify the condition of the building assets and any deficient components. This report is accompanied by a lifecycle report forecasting future renewals and major maintenance work over 5-year and 10-year periods.

In the gymnasium area, an invasive review involving multiple exploratory openings was conducted to review various building envelope components both exposed and normally hidden. Note that the invasive reviews were limited to the gymnasium area only and a separate report is prepared for the gymnasium at SCC.

The detailed terms of reference are described in MAE's written proposal entitled: 'Request for Proposal No. ES-017-17 Facility Condition Assessment for Saltair Community Centre.'

1.2 DOCUMENTS REVIEWED

The following documents were provided to MAE for our review and reference:

- Copies of architectural drawings dated April 21, 1950 by Thomas B. McArravy Architect
- Asbestos Air Sampling and Condition Assessment Report dated July 7, 2016 by North West Environmental Group Ltd.
- Air Quality Review dated July 7, 2016 by North West Environmental Group Ltd.
- Hazardous Materials Survey by Hazpro Environmental Ltd.
- Custom Valuation and Loss Control Report dated December 11, 2015 by SCM Risk Management Services
- Roof Condition Survey and Report dated July 20, 2014 by Westcoast Roof Inspection Services Ltd.
- Fire Safety Inspection Form dated May 5, 2016 by Firewise Consulting



1.3 METHDOLOGY

This section describes how this assessment was conducted.

- 1. Prior or our site work, available drawings, maintenance documents, and relevant previous assessment reports were reviewed in order to become familiar with the project.
- 2. An interview with Bill Clearly, former Mt. Brenton Elementary School principal and current president of Saltair Community Society, was conducted to review recent major repair and renewals history.
- 3. Visual non-invasive reviews of a representative sample of the facility's elements listed in Uniformat II Elemental Classification systems were conducted.

Our on-site review was completed on May 29, 2017. The weather was generally dry and sunny during the site visit with temperatures ranging from 20 to 25 degrees Celsius.

MAE applied the following condition rating to each component as per *Schedule B: Condition Assessment Matrix* provided in RFP ES-017-17:

Condition (Grade)	Performance	Structure	External	Internal	Services	Fittings	Typical Usefu Life Remainin
5 - Excellent (A)	Fits for Future	Sound structure.	Constructed with sound materials, true to line and level. No evidence of deterioration or discolouration.	Constructed with sound materials, true to line and level. No evidence of deterioration or discolouration.	All components operable and well maintained.	Well secured and operational, sound of function and appearance.	Greater than 45%
4 - Good (B)	Adequate for Now	Functionally sound structure.	Showing minor wear and tear and minor deterioration of surfaces.	Showing minor wear and tear and minor deterioration of surfaces.	All components operable.	Operational and functional, minor wear and tear.	
3 - Fair (C)	Requires Intervetion	Adequate structure, some evicence of foundation movement, minor cracking.	Appearance affected by minor cracking, staining, or minor leakage. Indications of breaches of weatherproofing. Minor damage to coatings.	Appearance affected by minor cracking, staining, or minor leakage, some dampness or mildew. Minor damage to wall/ceiling finishes.	Occasional outages, breakdowns or blockages. Increased maintenance required.	Generally operational. Minor breakage.	Between 10 t
2 - Poor (D)	At Risk	Structure functioning but with problems due to foundation movement. Some significant cracking.	Damaged, weakened or displaced. Appearnce affected by cracking, staining, overflows, or brekages. Breaches of weatherproofing evident. Coatings in need of heavy maintenance or renewal.	Damaged, weakened or displaced. Appearance affected by cracking, staining, dampness, leakage, or breakages. Breaches of waterproofing evident. Finishes of poor quality and in need of replacement.	Failures of plumbing electrical and mechanical components common place.	Fittings of poor quality and appearance, often inoperable and damaged.	4378
1- Very Poor (F)	Unfit for Sustained Service	Structure has serious problems and concern is held for the integrity of the structure.	Badly damaged or weakened. Appearance affected by cracking, staining, overflows, leakage or damage. Breaches of waterproofing. Coating badly damaged.	Badly damaged or weakened. Appearance affected by cracking, staining,	Plumbing electrical and mechanical components are unsafe or inoperable.	Most are inoperable or damaged	Less than 109



1.4 ASSUMPTIONS & LIMITATIONS

For the purpose of this study, we have assumed that the design service life of the building to be in the range of 50 to 99 years, which we consider to be reasonable for an educational building of this type. The building's design service life has not been verified on any of the documentation that was made available to MAE. We also assumed an annual inflation rate of 2 percent.

It should be noted that reviews that are described in this report were limited to the areas and assemblies that are specifically noted in the report. No testing or dismantling of any assemblies was performed and reviews were made on a random basis with no attempt to review or inspect every element or portion of the buildings; therefore, it is possible that some deficiencies may not have been discovered. Our comments are not a guarantee or warranty of any aspect of the condition of the buildings whatsoever.

Our opinions of probable costs are based on normal engineering practice using "square foot" or unit cost and/or our own experience with similar projects. The costs provided constitute an "order of magnitude" value to assist the CVRD with planning for predicted future expenses. Opinions of probable costs allocated to maintenance or renewal items should not be considered set costs. These values are established based on current market conditions and product availability. The cost of construction materials and labour are influenced by many variables. Where applicable, our opinions of probable costs allow for consulting fees, taxes, and inflation.

Please also note that it is difficult to provide an accurate opinion of cost estimate without some preliminary design and a clearly defined scope of work. The actual cost of the work cannot be known until an accurate scope of work is prepared, material quantities have been reliably estimated, project drawings and specifications have been produced, contractors have bid on the project, and the extent of any hidden damage is known.

Given the volatility of construction prices, MAE assumes no responsibility for the future accuracy of our projected estimated costs. Moreover, our opinion of remaining service life is not guarantee that the components will not fail earlier than projected.

This study should be viewed as a dynamic process that necessitates regular review and updating for both projected remaining service life and related costs. Items that are to be undertaken in several years should be reviewed closer to the date of the work.

Should our services be required, MAE is available to assist the CVRD in obtaining quotations for future maintenance or renewals work.



2.0 BUILDING DESCRIPTION

SCC was constructed in approximately 1950 in the residential neighbourhood of the Township of Ladysmith. The building is predominantly surrounded by single family homes to the west, east and north and park to the south.

Address:	3850 South Oyster Road, Ladysmith, BC
Zoning District:	P-2 Institutional 1 Zone
Construction Year:	1950
Gross Floor Area:	18,300 sq. ft.
Replacement Value*:	\$2,722,337.00

Table 1. General Information of Saltair Community Centre

*Custom Valuation and Loss Control report prepared by SCM Risk Management Services dated December 11, 2015

The building consists of a 1-storey wood-frame structure on top of a concrete foundation. The exterior of the building is clad with face sealed stucco and wood siding. The windows and sliding doors are wood-framed with single-glazing. The low-sloped roofs, commonly referred to as a "flat roof", are covered with built-up roofing and 2-ply modified bituminous sheet membrane with perimeter scuppers and drains.

From 1950 to 2014, the building was used as an elementary school. It is our understanding that the original building was expanded by three additions at separate times; however, the time of each expansion is unknown. In 2014, the CVRD purchased the property and the building has been leased to a licensed daycare and Saltair Community Society.

SCC contains nine classrooms, a gymnasium, three mechanical rooms, five washrooms, and various other work/storage spaces. The gymnasium is currently closed off due to water damage and falling ceiling tiles.



3.0 BUILDING ASSET EVALUATION

Overall, SCC is in fair condition for a building of its age. The building's equipment and grounds have been maintained at standards that would be considered average for a building of this type. This maintenance has allowed most components to remain serviceable throughout their expected life.

Detailed condition evaluations of each component including location, description, chronological age, remaining service life, and outstanding deficiencies are presented in Appendices A, B and C.

3.1 STRUCTURAL SUMMARY

As most structural elements are concealed by finishes, comments are limited to visible portions. Generally, the wood-frame structure and cast-in-place concrete foundation with crawlspace appeared to be in good condition. MAE did not observe any excessive cracking or other evidence of structural distress. Water ingress through the gymnasium roof and its structural implications have been discussed in detail in a separate report.

3.2 ARCHITECTURAL SUMMARY

There are two types of above grade wall claddings at Saltair Community Centre: face-sealed stucco and painted wood siding.

The use of face-sealed stucco cladding systems has ceased due to their generally poor performance history in the coastal climate of British Columbia, which is characterized by high wetting exposure and low drying potential, due to the difficulty in achieving a perfect seal at interfaces and joints. Face sealed assemblies rely on the stucco as the primary defense against exterior moisture. Many factors such as workmanship, building settlement, material deterioration, and lack of maintenance can contribute to moisture penetration in to a face-sealed assembly. Due to the lack of a drainage cavity and limited drying capacity, any moisture that migrates beyond the stucco can compromise the overall performance and durability of the wall assembly.

Rainscreen assemblies are now mandated for all new and remediated cladding systems. This system is a form of double-wall construction that uses an outer layer to keep out the rain and an inner layer to provide thermal insulation, prevent excessive air leakage and carry wind loading. The outer layer breathes like a skin while the inner layer reduces energy losses. The structural frame of the building is kept dry, as water never reaches it or the thermal insulation. Evaporation and drainage in the cavity removes water that penetrates between panel joints. Water droplets are not driven through the panel joints or openings



because the rainscreen principle means that wind pressure acting on the outer face of the panel is equalized in the cavity.

The existing exterior wall claddings at SCC have exhausted their expected service life. We noted surface cracks, moderate staining and poor interface details. We would expect the areas clad with face-sealed assemblies to be due for remediation within approximately 5 years' time. At the time of renewals, a new rainscreen exterior wall assembly will be required to be installed. If CVRD were to carry this work out in a single year, a budget of roughly \$500,000 is anticipated in 2021.

The existing windows at SCC are wood-framed, single-glazed windows. The windows reviewed were typically without any sealant or flashings to direct moisture away from the wall surface below. We noted deteriorating paint finishes in the window frames and sills at most windows we reviewed and moisture related issues such as water stains and microbial growth at the gymnasium windows. We also noted that some awnings have been replaced with aluminum framed single glazed units.

The windows have far exceeded their reliable service life and do not meet today's standards. We recommend that they be replaced with high-performance windows that meet the new requirements of the British Columbia Building Code incorporating new details such as proper head/sill flashing and sealant. This work should be completed in conjunction with the exterior wall cladding replacement. The estimated budget for window replacement is in the range of \$92,000.

From our experience with building rehabilitations, it is not uncommon for some high price items to be completed in phases rather than in a single year. This strategy usually comes with a higher overall cost but the owners have the ability of spreading the costs over several years. Depending on the CVRD's preference and availability of funds, the building envelope rehabilitation at SCC including exterior wall cladding, windows, and doors could be completed over a multi-year period. We recommend roughly 25% of work to be completed annually from 2021 to 2024. Approximately \$150,000 is anticipated in the first year and this budget is to be increased at 2% annually until the project completion.

The roofs provided at SCC are predominantly low-sloped roofs protected with built-up roofing (BUR) and two-ply SBS membrane. The roofs appeared to be in poor condition with extensive moss growth, missing drain covers, evidence of multiple past repairs, deteriorating metal flashing and rainwater leaders, stains in ceiling and soffit finishes below, and bleeding, bubbling and alligatoring in the SBS cap sheet.

We recommend all the roofs be replaced as soon as possible. Estimated renewal cost is in the range of \$682,000.



3.3 MECHANICAL SUMMARY

The domestic water distribution system and sanitary drainage system appeared to be functioning without any reported issues. As most of the distribution pipes are concealed in finishes, we were not able to verify piping materials. We are not aware of any recent major repair or replacement related to these systems. Given the age and pipe materials typically used, a wholesale replacement will be likely in the next 5 to 7 years for the plumbing systems. Prior to the replacement, we recommend engaging a qualified professional (i.e. mechanical/plumbing engineer) to conduct a detailed condition assessment. An invasive condition assessment involving taking samples of the existing pipes to measure remaining pipe wall thickness would provide a more accurate estimate of the remaining service life of the copper pipes. Depending on the findings of the assessment, the wholesale replacement of the domestic water distribution system and sanitary drainage system may be required.

Four furnaces operating on fuel oil were found at SCC. It is our understanding that Furnaces 1, 2 and 3 are no longer being used. We recommend these furnaces along with the fuel oil storage tanks be properly decommissioned and removed from the site at an estimated budget of \$7,000. Note that we did not verify presence of Furnace 3 due to limited access.



Furnace 4, found in the daycare area, was last maintained in January 2017. It is our understanding that the Saltair Community Society is planning to replace this equipment with a gas-fired furnace. We recommend replacing the existing furnace with an energy efficient furnace at an estimated budget of \$7,600. CVRD may also consider heat pump as an alternative option that is more energy efficient than a gas-fired furnace at an approximate value of \$10,000.

Three fuel storage tanks connected to the furnaces are provided outside the building at east and west elevations. As mentioned above, at the time of the furnace renewal with gas connection, these tanks will no longer be needed and will have to be properly decommissioned and removed from the site.

Two chimney vents constructed with bricks and mortar provide ventilation for the furnace equipment. The chimneys appeared to be in fair condition with efflorescence, moss growth, hairline cracks, and deteriorating sealants and flashing at roof-to-chimney interfaces. Depending on the building's future needs, these chimneys should be reviewed in detail, any deficiencies noted should be addressed and bricks and mortar should be re-pointed as required.

The wall-mounted gymnasium exhaust fan appeared to be dated. It is our understanding that the gymnasium has not been actively used and as such the fan has not been used for some time. We did not test the fan; however, given the age and poor interior condition of the



gymnasium, an upgrade in ventilating system is recommended along with a humidistat at an estimated budget of \$5,000 immediately. Refer to *Building Envelope Condition Assessment for Gymnasium* prepared by MAE for detailed analysis and recommendations.

Ceiling mounted exhaust fans are provided at washrooms. The fans typically have 20 years of service life and will require replacement in the next 5 years at a budget of \$2,200.

Several electric baseboard heaters and wall mounted heaters provide heating at various rooms. It is our understanding that the wall mounted electric heaters were added in 2013 due to the lack of heat. The heaters reviewed were functional without any reported issues and no major replacement work is anticipated in the short term.

3.4 ELECTRICAL SUMMARY

The main power distribution system with sub-panels and breaker panels located throughout the building have been functioning without any reported issues. We were not aware of any recent maintenance or repair activities related to the electrical distribution system. Given the age of the equipment, we recommend the CVRD to engage a qualified professional (i.e. electrical engineer) to conduct a detailed condition assessment including infrared scanning and cleaning of the equipment to provide a more precise estimate on the remaining service life and comment on the capacity of the existing system. This assessment will be in the range of \$7,500.

Wall and soffit-mounted exterior light fixtures were present throughout the site. The exterior light fixtures appear to be functioning without any reported issues. We noted a broken light fixture near the fenced play area. The exterior light fixtures are recommended to be replaced in conjunction with the exterior wall renewal scheduled for 2021. The associated cost is approximately \$11,000.

Ceiling mounted fluorescent lighting was found throughout the interior of the building. Generally, the interior lighting equipment was functioning without any reported issues. We noted water stains inside the light fixture above the hallway between Staff Rm 5 and Stores 11. We were told this was from the roof leak in the past. A wholesale replacement of the interior light fixtures is anticipated in 2024 with an estimate budget of \$43,000.



Consideration should be given to upgrading the interior and exterior light fixtures and lamps with daylight or motion sensors, dimmers, timers, high intensity lighting and/or LEDs to provide energy savings and enhance security.



3.5 FIRE & LIFE SAFETY SUMMARY

The fire safety system reviewed during the investigation included fire control annunciator panel, fire detection and alarms, emergency egress equipment, and fire sprinkler system. Generally, the equipment was in good condition and properly tagged, which indicated that the required regular reviews and repairs were being completed.

However, the fire sprinkler system found in Furnace Room 3 did not have any service tags. The latest report from Firewise Consulting dated May 5, 2017 also indicated that it appeared to have not been serviced. We recommend engaging a qualified professional (i.e. fire sprinkler system engineer or contractor) to review the existing fire sprinkler system and address any outstanding deficiencies for occupant safety.

The rest of the building does not have a fire sprinkler system. A major renovation may trigger a fire sprinkler system requirement. Comments on the likelihood of the CRVD requiring this upgrade is beyond the scope of this report.

3.6 INTERIOR SUMMARY

The interior of the building has a variety of floor coverings such as carpeting, ceramic tile and resilient flooring. Painted walls and ceilings were present throughout the building. Acoustic ceiling tiles were found in Classroom 6 and the gymnasium.

The interior finishes were generally in fair condition with the areas with higher traffic in worse condition than the areas with low traffic. It is our understanding that some of the areas received new finishes approximately 4 years ago. The carpet flooring and wall finishes are due for renewal in the next 5 to 7 years. Deteriorating ceiling finishes due to past water leaks in Staff Rm 5 and gymnasium should be repaired and replaced as soon as possible. A budget of \$15,000 and \$36,000 have been assigned to the gymnasium ceiling tile replacement and repainting of ceiling respectively.

Various interior swing doors reviewed were in fair condition. We recommend repainting the doors and frames as required.

3.7 SITE SUMMARY

Concrete and asphalt paving are provided at the perimeter of the building. The concrete and asphalt paving reviewed were generally in fair condition with cracks and heaving. Causes for cracks may include prolonged exposure to exterior weather conditions, settlement, and uplift due to tree roots. We recommend cracks and uneven surface be repaired as soon as possible to prevent a tripping hazard.



A wholesale replacement of the concrete pavement is expected in 2022 at a budget of \$41,000.

Sanitary sewer waste from the building is directed to an onsite underground septic tank and distribution system. According to Bill Clearly, the septic system was pumped out in 2015 and minor repairs were completed to the connection to the building. There are no current reported issues. Given the age, we recommend that a study to confirm performance and remaining useful life be undertaken.



4.0 5-YEAR CAPITAL PLANNING

Major maintenance and renewal costs are those costs required when the components must be replaced, even if adequate regular on-going maintenance has been carried out. Renewal costs are not intended to provide "upgrades" to any building components unless the present requirements (codes or technology) dictate that an upgrade is necessary. Otherwise all estimates for renewals assumes replacing "like for like."

A 5-year capital plan consisting of keep up costs that are required to maintain the existing building running in the short term has been prepared. Refer to Appendix A for a detailed breakdown of the renewals cost by each component over the next 5 years. Some of the key major maintenance and asset renewal projects contemplated in the next 5 years are:

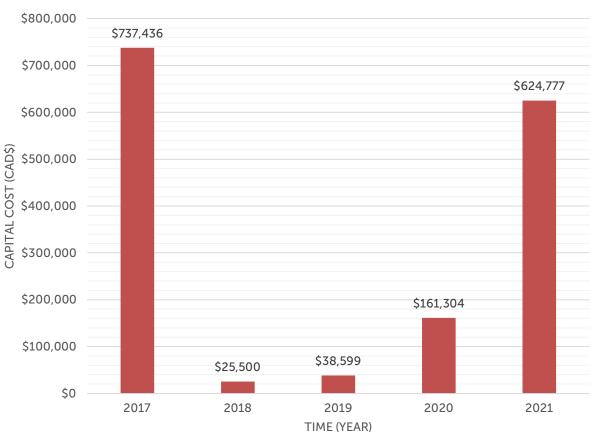
- Renewal of roofing systems
- Renewal of exterior wall claddings (approximately 25%)
- Renewal of exterior windows and doors (approximately 25%)
- Renewal of ceiling finishes
- Condition assessment of domestic water plumbing distribution system
- Condition assessment of sanitary drainage system
- Replacement of furnace
- Decommissioning and removal of furnaces
- Decommissioning and removal of oil storage tanks
- Renewal of ventilation system
- Condition assessment and maintenance of the furnace room sprinkler system
- Condition assessment of electrical equipment
- Renewal of electrical service and distribution system
- Renewal of exterior light fixtures
- Repair of asphalt paving
- Repair of concrete paving
- Condition assessment of septic system

Table 2 lists estimated annual capital expenditure anticipated in each year from 2017 to 2021.



YEAR	ESTIMATED ANNUAL
	CAPITAL EXPENDITURE
	(Future \$)
2017	\$737,436
2018	\$25,500
2019	\$38,599
2020	\$161,304
2021	\$624,777
TOTAL	\$1,587,615

Table 2. Five Year Capital Expenditure Summary



Graph 1. Estimated 5-Year Capital Expenditures

The total amount of expected expenditures for the next 5-years in future dollars is approximately \$1.7 million to achieve the major maintenance and renewals goals. The peak predicted renewal year in the 5-year plan is 2017 with \$737,436 of forecasted expenditures.



The building components that are subject to major renewals in 2017 are roofing, soffit, gymnasium ceiling tiles, and gymnasium fan.

It should be noted that the forecasted renewal items in the above tactical plan might not occur in the particular listed fiscal year. The allocated timelines for the major maintenance and renewals are based on the expected service life of the asset and further study may be required to determine when the assets will require replacement.



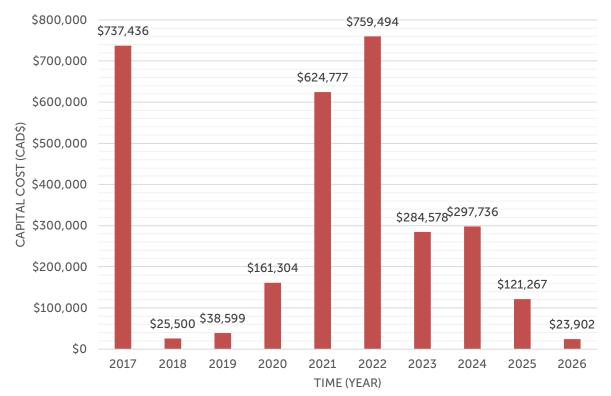
5.0 10-YEAR CAPITAL PLANNING

The recommended ten-year cost forecast involves renewals items that are due in the next 10 years. The total amount of expected expenditures for the next 10-years in future dollars is approximately \$3 million to achieve the major maintenance and renewals goals. As is shown in the table and graph below, the peak predicted renewal year is 2022. The major renewals included in this year involve exterior wall cladding, windows, doors, interior finishes, plumbing fixtures, domestic water system, sanitary waste system, concrete pavement, concrete stairs and ramps, and septic system. The ten-year forecast should be considered a planning tool, as it is not as accurate as the previously discussed 5-Year Tactical Plan.

YEAR	ESTIMATED ANNUAL CAPITAL EXPENDITURE (Future \$)
2017	\$737,436
2018	\$25,500
2019	\$38,599
2020	\$161,304
2021	\$624,777
2022	\$759,494
2023	\$284,578
2024	\$297,736
2025	\$121,267
2026	\$23,902
TOTAL	\$3,074,593

Table 3. Ten Year Capital Expenditure Summary





Graph 2. Estimated 10-Year Capital Expenditures



6.0 CLASS D COST ESTIMATE FOR DEMOLITION

For the demolition of the SSC, we estimate a budget of 300,000 to 350,000 would be required. This budget includes demolition and disposal of building structure, concrete foundation, roofing, various building equipment and services, and removal and disposal of all hazardous building materials. The accuracy range of a Class D cost estimate is $\pm 50\%$ as per Budget Guidelines for Consulting Engineering Services by Association of Professional Engineers and Geoscientists of BC (APEGBC).



7.0 FINAL REMARKS

It should be noted that reviews that are described in this report were limited to the areas and assemblies that are specifically noted in the report. Except where specifically noted, no testing or dismantling of any assemblies was performed and reviews were made on a random basis with no attempt to review or inspect every element or portion of the buildings. Our comments are not a guarantee or warranty of any aspect of the condition of the buildings whatsoever.

This report was prepared by McCuaig & Associates Engineering Limited (MAE) for the account of CVRD. The material in it reflects MAE's best judgment in light of the information available to us at the time of preparation. MAE accepts no responsibility for damages, if any, suffered by any third party as a result of decisions made or actions based on this report. The recommendations that are described in this report are not intended to replace detailed engineering specifications and therefore the recommendations contained this report should not be used as the basis of a contract to perform remedial work on the subject building.

We would be pleased to meet with CVRD to review this report and answer questions that may exist. We trust this meets your requirements at this time, and should you have any questions or concerns, please contact our office.

McCUAIG & ASSOCIATES ENGINEERING LTD.

Prepared by:

Claire Ha, P. Eng.

Reviewed by:

J. J. McCuaig, P. Eng.

Ref. No. 20170401-C-RPT-CRF-01-FNL

APPENDIX A BUILDING ASSET INVENTORY & 10-YEAR CAPITAL PLANNING

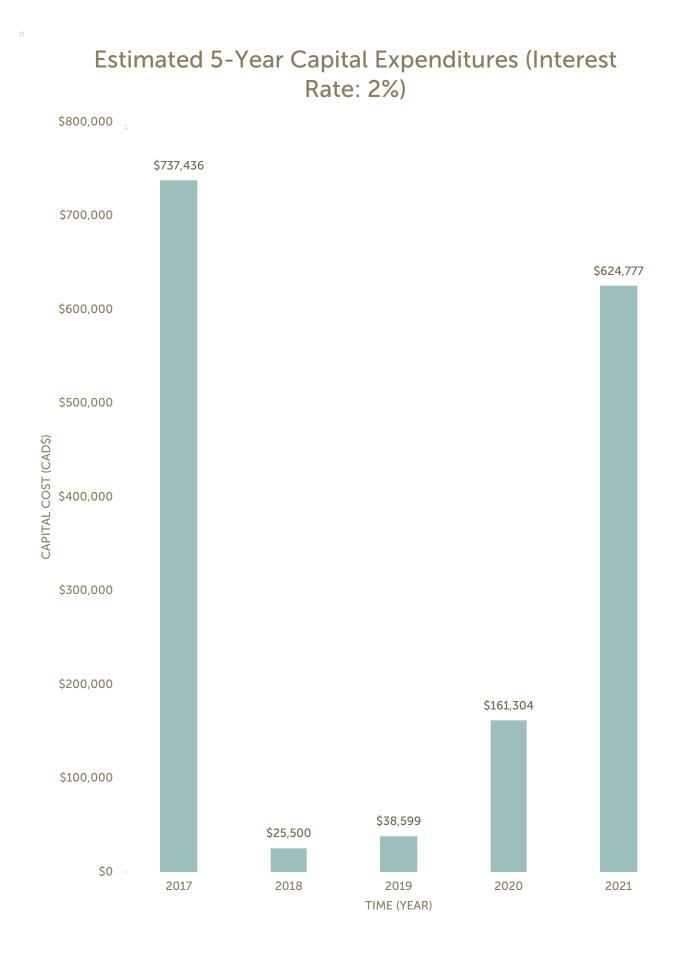
			Component Information				Estin	mates	Cost (Pre	esent \$)			Asset Life Anal							10-Year C	apital Plan (F	uture \$)				
													-		Recommended											
UNIFORMAT	Category	Component	Comments Cast-in-place concrete foundation reviewed appeared to be i	Recommendations	Condition (Grade)	Deficiency Type	Quantity	Unit	Unit Cost Rep	lacement Cost	Service Life	Action Year	Age	Renewal Year	Action Year	2017	2018	2019	2020	2021	2022	2023	2024 2	2025 2	2026	Total
A10	Foundation	Foundation with Crawlspace	good condition without any reported issues. Replacement of this component is not anticipated.	Not applicable	5 - Excellent (A)	No Known / Reported Deficiency	18300	SF	\$40	\$732,000	100	1950	67	2050	2050	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
A10	Foundation	Crawlspace Dampproofing & Perimeter Drainage	that some portions of this work may be necessary as early as , years but portions of this work may never be necessary. The existing pipes and damp proofing are underground and canno be assessed visually as part of this report. Prior to replacement, we recommend a detailed review to determine	Subject to the study, a provision for the 25 replacement is included. Replace dampproofing and perimeter drainage ot system as required.	Not Applicable	Not Applicable	821	LF	\$500	\$410,500	40	1950	67	2021	2021	\$0	\$0	\$0	\$0	\$444,338	\$0	\$0	\$0	\$0	\$0	\$444,338
A10	Foundation	Perimeter Drain & Dampproofing Assessment	the reasonable replacement cost and timeframe for this wor We did not verify presence of dampproofing and perimeter drainage as it is a normally hidden component. The replacement cost of perimeter drainage and/or foundation damp proofing may range from \$500 to \$1,500 per linear foo which could be a significant cost. It has been our experience that some portion of this work may be necessary as early as years but portions of this work may never be necessary. The existing pipes and damp proofing are underground and cann be assessed visually as part of this report. Prior to replacement, we recommend a detailed review to determine the reasonable replacement cost and timeframe for this wor	Verify presence of dampproofing and perimeter drainage. Engage a qualified professional (e.g. building envelope engineer) to conduct a detailed condition assessment of these components if they are present.	Not Applicable	Not Applicable	1	Each	\$10,000	\$10,000	25	1950	67	2021	2017	\$10,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$10,000
B10	Superstructure	Wood Framing, Exterior Wall	Superstructure assumed to be consisting of dimensional is lumber, joists, studs and beams. Replacement of this component is not anticipated.	Not applicable	4 - Good (B)	No Known / Reported Deficiency	18300	SF	\$40	\$732,000	100	1950	67	2050	2050	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
B2010	Exterior Walls	Painted Wood Siding, Face Sealed	Painted vertical wood siding installed over building paper, wood substrate and wood framing found at north gymnasiun wall and southeast corner of the building.	Replace wood siding along with associated flashing and sealants. Consideration should be given to replacement of the exterior wall assembly to a rainscreen assembly incorporating a drainage cavity. We have assumed the renewal would be carried out	3 - Fair (C)	Backlog Maintenance / Renewal	963	SF	\$15	\$14,445	25	1950	67	2021	2021	\$0	\$0	\$0	\$0	\$3,909	\$3,987	\$4,067	\$4,148	\$0	\$0	\$16,111
B2010	Exterior Walls	Painted Wood Soffit with Vent Strip	Painted wood soffit over a wood framing substrate. Most soffits reviewed appeared to be in fair condition. The soffit below canopy on south side were in poor condition with microbial growth and stains. They were wet to touch and presence of moisture was found in the roof framing cavity.	Replace wood soffit and associated components in conjunction with roofing replacement.	1- Very Poor (F)	Backlog Maintenance / Renewal	1642	SF	\$3	\$4,105	30	1950	67	2017	2017	\$4,105	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$4,105
B2010	Exterior Walls	Painted Stucco, Face Sealed	Acrylic coated stucco applied directly over building paper on exterior sheathing. The face-sealed exterior wall assembly generally was lacking flashing and sealants. Most exterior wa were protected under roof overhangs. Some deficiencies observed during the site visit included staining and cracks on wall surfaces, poor interface details and etc. When the existin wall assembly is renewed, a rainscreen assembly is required and unit costs reflect this upgrade.	improved insulation, air barrier, drain cavity, flashing and sealants. Consideration should be given to replacement of vent hoods, light fixtures, exterior doors and windows, and other accessories that penetrated the cladding at the time of	2 - Poor (D)	Backlog Maintenance / Renewal	7722	SF	\$55	\$424,710	25	1950	67	2021	2021	\$0	\$0	\$0	\$0	\$114,930	\$117,229	\$119,573	\$121,965	\$0	\$0	\$473,696
B2010	Exterior Walls	Painted Stucco, Face Sealed	observed ouring the site visit included staining and cracks on wall surfaces, poor interface details and etc. When the existii wall assembly is renewed, a rainscreen assembly is required and unit costs reflect this upgrade.	Lean exterior stucco surfaces to remove atmospheric dirt, vegetative growth and other stains. This work to include all building envelope components including middows, doors, and roots. [Extent of work and frequency depende on environmental	2 - Poor (D)	Backlog Maintenance / Renewal	1	Allowance	\$20,000	\$20,000	2	1950	67	2021	2023	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$23,902	\$23,902
B2010	Exterior Walls	Above Grade Foundation Wall, Coating	Exposed concrete foundation perimeter walls are coated. Deteriorating paint finishes, hairline cracks and stains were noted.		2 - Poor (D)	Backlog Maintenance / Renewal	880	SF	\$5	\$4,400	10	1950	67	2021	2021	\$0	\$0	\$0	\$0	\$4,871	\$0	\$0	\$0	\$0	\$0	\$4,871
B2020	Exterior Windows	Wood Framed, Single Glazed Windows	Wood framed windows with single glazing units, and awning operators.	the renewal would be carried out over a 4- year period, approximately 25% annually.		Backlog Maintenance / Renewal	1125	SF	\$75	\$84,375	25	1950	67	2021	2021	\$0	\$0	\$0	\$0	\$22,833	\$23,289	\$23,755	\$24,230	\$0	\$0	\$94,107
B2030	Exterior Doors	Metal Swing Doors in Wood Frame	Metal swing doors with glass inserts in painted wood frame a the main entrance.	Replace main entrance swing doors. We thave assumed the renewal would be carried out over a 4-year period, approximately 25% annually.	3 - Fair (C)	Backlog Maintenance / Renewal	1	Each	\$5,000	\$5,000	40	1950	67	2021	2021	\$0	\$0	\$0	\$0	\$5,412	\$0	\$0	\$0	\$0	\$0	\$5,412
B2030	Exterior Doors	Metal Swing Exit Doors	Painted metal swing doors with or without glass inserts at various exits.	Replace metal exit doors.	3 - Fair (C)	Backlog Maintenance / Renewal	8	Each	\$2,000	\$16,000	40	1950	67	2021	2021	\$0	\$0	\$0	\$0	\$4,330	\$4,416	\$4,505	\$4,595	\$0	\$0	\$17,845
B30	Roofing	Flat Roof - SBS	Two plies of manufactured modified bituminous (styrene- butadiene-styrene aka SBS) membrane at low-sloped roofs. Some deficiencies such as blistering, alligatoring cracks in the membrane, loss of granules, moss growth, and collection of debris were observed. No reported active leak. We recommend conducting regular maintenance seasonally and roof condition assessment prior to renewal to accurately estimate the remaining service life of the roof.	Replace SBS membrane root assembly and associated component such as drains and flashing.	2 - Poor (D)	Backlog Maintenance / Renewal	5617	SF	\$35	\$196,597	25	1990	27	2017	2017	\$196,597	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$196,597
B30	Roofing	Tar & Gravel Roofing	Multiple layers of built-up roofing (BUR), also known as tar a gravel roofs. The BUR systems generally are comprised of alternating layers of bitumen and reinforcing fabrics. The roo appeared to have far exceeded their service life. Evidences o leaks were found in the roofing assemblies, ceiling and/or soffit finishes below.	ofs Replace existing BUR with a new 2-ply SBS f roof assembly.	1- Very Poor (F)	Backlog Maintenance / Renewal	13864	SF	\$35	\$485,234	25	1950	67	2017	2017	\$485,234	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$485,234
C1030	Fittings	Washroom Partition	Privacy panels and miscellaneous hardware fittings such as pilaster, panel, door, anchors, hinges, latches and brackets.	Replace washroom partitions and associated hardware.	3 - Fair (C)	No Known / Reported Deficiency	7	Each	\$1,500	\$10,500	25	1950	67	2022	2022	\$0	\$0	\$0	\$0	\$0	\$11,593	\$0	\$0	\$0	\$0	\$11,593
C1030	Fittings	Classroom Cabinets	Built in cabinets, shelving, and countertops with laminate facing.	Replace classroom cabinets, shelving and countertops.	3 - Fair (C)	Backlog Maintenance / Renewal	9	Per Room	\$7,500	\$67,500	20	1950	67	2023	2023	\$0	\$0	\$0	\$0	\$0	\$0	\$76,016	\$0	\$0	\$0	\$76,016
C1040	Interior Doors	Painted Interior Swing Doors	Solid core wood swing doors with and without wired glazing. Last paint year is unknown. Swing doors appeared to be in fa condition.	required.	3 - Fair (C)	Backlog Maintenance / Renewal	35	Each	\$600	\$21,000	25	1950	67	2027	2027	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
C1040	Interior Doors	Painted Interior Swing Doors	Solid core wood swing doors with and without wired glazing. Last paint year is unknown. Swing doors appeared to be in fa condition.		3 - Fair (C)	Backlog Maintenance / Renewal	467	SF	\$3	\$1,401	10	1950	67	2027	2020	\$0	\$0	\$0	\$1,592	\$0	\$0	\$0	\$0	\$0	\$0	\$1,592

			Component Information				Estim	ates	Cost (Present \$)			Asset Life Anal	ysis						10-Year C	Capital Plan (Future S	\$)			
											Expected	Last Major	Chronological	Recommended Component	Recommended										
UNIFORMAT	Category	Component Painted Metal Swing Doors	Comments	Recommendations	Condition (Grade)	Deficiency Type	Quantity	Unit	Unit Cost F	Replacement Cost					Action Year	2017	2018	2019	2020	2021	2022 202	23 20	024 202	25 202	26 Total
C1040	Interior Doors	with and without Wired Glazing	Painted metal swing doors in pressed steel or painted wood frames at hallways.	Replace interior metal swing doors as required.	3 - Fair (C)	Backlog Maintenance / Renewal	2	Each	\$2,000	\$4,000	30	1950	67	2027	2027	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0 \$0
C1040	Interior Doors	Painted Metal Swing Doors with and without Wired Glazing	Painted metal swing doors in pressed steel or painted wood frames at hallways and gymnasium.	Repaint interior metal swing doors as required.	3 - Fair (C)	Backlog Maintenance / Renewal	27	SF	\$3	\$80	10	1950	67	2020	2020	\$0	\$0	\$0	\$531	\$0	\$0	\$0	\$0	\$0	\$0 \$531
C20	Stairs	Interrior Stairs	Internal stairs with resilient flooring, rubber nosing, and handrails.	The building is not fully accessible due to a lack of wheelchair lift at the stairs. In the event of a major renovation within the building, modifications may be required to meet the current requirements of the code.	4 - Good (B)	Grandfathered Code Issue	1	Each	\$2,500	\$2,500	100	1950	67	2050	2050	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0 \$0
C3010	Wall Finishes	Interior Windows	Glass set in finished wood frame as demising wall between interior spaces.	Replace interior glazing assembly.	4 - Good (B)	No Known / Reported Deficiency	6	each	\$250	\$1,500	20	2010	7	2030	2030	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0 \$0
C3010	Wall Finishes	Painted Drywall	Primers and multiple pigmented coating finishes applied to interior gypsum wallboard.	Repaint wall surface including preparation of substrate. Given the age of the building, a HAZMAT survey should be conducted prior to any interior renovation work.	3 - Fair (C)	No Known / Reported Deficiency	17000	SF	\$2	\$34,000	10	2013	4	2023	2023	\$0	\$0	\$0	\$0	\$0	\$0 \$3	8,290	\$0	\$0	\$0 \$38,290
C3020	Floor Finishes	Resilient Flooring	Various types of sheet flooring appeared to have been installed at varying times. They generally appeared dated wit evidences of past localized repairs.	work.	3 - Fair (C)	No Known / Reported Deficiency	14000	SF	\$10	\$140,000	20	1950	67	2022	2022	\$0	\$0	\$0	\$0	\$0	\$154,571	\$0	\$0	\$0	\$0 \$154,571
C3020	Floor Finishes	Ceramic Tiles	Ceramic tile on mortar bed and substrate with grout. Ceramic tile flooring appeared to have been installed at various years and it was generally dated.		2 - Poor (D)	Backlog Maintenance / Renewal	1000	SF	\$10	\$10,000	25	1950	67	2022	2022	\$0	\$0	\$0	\$0	\$0	\$11,041	\$0	\$0	\$0	\$0 \$11,041
C3020	Floor Finishes	Laminate Wood Flooring	Laminate wood flooring over floor substrate. It was reported that the laminate flooring was installed approximately 4 year ago.		5 - Excellent (A)	No Known / Reported Deficiency	1000	SF	\$10	\$10,000	15	2014	3	2029	2029	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0 \$0
C3020	Floor Finishes	Sports Flooring at Gymnasium	Sports flooring with game lines appeared to be in fair condition.	Replace gymnasium flooring and game lines.	3 - Fair (C)	No Known / Reported Deficiency	3000	SF	\$16	\$48,000	30	1950	67	2024	2024	\$0	\$0	\$0	\$0	\$0	\$0	\$0 \$	\$55,137	\$0	\$0 \$55,137
C3030	Ceiling Finishes	Acoustic Ceiling Tile at Classroom 6	Suspended grid of metal T channels with infill acoustic tiles that form a drop ceiling. Acoustic ceiling appeared to be in good condition.	Replace ceiling tiles as required.	5 - Excellent (A)	No Known / Reported Deficiency	915	SF	\$5	\$4,575	30	2014	3	2044	2044	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0 \$ (
C3030	Ceiling Finishes	Fibreboard Ceiling Tile at Gymnasium	Glued and stapled fabreboard ceiling tiles in gymnasium ceilir appeared to be in poor condition with staining, microbial growth, dampness, and peeling finishes. Ceiling tiles have bee fallen off at a few areas.	Replace ceiling tiles in conjunction with	1- Very Poor (F)	Safety Risk	3000	SF	\$5	\$15,000	30	1950	67	2017	2017	\$15,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0 \$15,000
C3030	Ceiling Finishes	Painted Ceiling	Primer and multiple pigmented finish coat applied to interior gypsum wallboard. Painting ceiling appeared in fair condition with some staining and peeling paint at some locations from roof leaks above.	the building, a HAZMAT survey should be	3 - Fair (C)	Backlog Maintenance / Renewal	17385	SF	\$2	\$34,770	10	1950	67	2019	2019	\$0	\$0	\$36,414	\$0	\$0	\$0	\$0	\$0	\$0	\$0 \$36,414
D2010	Plumbing Fixtures	Toilets & Urinals	Toilets and urinals in washrooms appeared to be in fair condition without any reported issues. Last replacement year is unknown.	Replace toilets and urinals as required. Replacement in conjunction with domestic water distribution system is recommended.	3 - Fair (C)	No Known / Reported Deficiency	15	Each	\$1,000	\$15,000	30	1950	67	2022	2022	\$0	\$0	\$0	\$0	\$0	\$16,561	\$0	\$0	\$0	\$0 \$16,561
D2010	Plumbing Fixtures	Sinks and Lavatories	Sinks and lavatoris are provided at each classroom; staff roon and washrooms. They generally appeared to be in fair condition without any reported issues. Last replacement year is unknown.	Replace sinks and lavatories as required. Replacement in conjunction with domestic	3 - Fair (C)	No Known / Reported Deficiency	17	Each	\$600	\$10,200	25	1950	67	2022	2022	\$0	\$0	\$0	\$0	\$0	\$11,262	\$0	\$0	\$0	\$0 \$11,262
D2020	Domestic Water Distribution	Copper Distribution Piping Throughout	Copper distribution piping throughout the building, it appeared to have been replaced on an as-needed basis and there is no record of last major replacement/repair. We recommend engaging a qualified professional (i.e. mechanical/plumbing engineer) to conduct a condition assessment to estimate remaining service life prior to renewa of this component.	Replace components of domestic plumbing distribution system, including domestic valves.	3 - Fair (C)	No Known / Reported Deficiency	1	Allowance	\$50,000	\$50,000	25	1950	67	2022	2022	\$0	\$0	\$0	\$0	\$0	\$55,204	\$0	\$0	\$0	\$0 \$55,204
D2020	Domestic Water Distribution	Copper Distribution Piping Throughout	Copper distribution piping throughout the building. It appeared to have been replaced on an as-needed basis and	mechanical/plumbing engineer) to conduct a domestic water system condition	3 - Fair (C)	Backlog Maintenance / Renewal	1	Each	\$10,000	\$10,000	n/a	1950	67	2022	2018	\$0	\$10,200	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0 \$10,200
D2030	Sanitary Waste	Sanitary Waste System	Mixture of copper, ABS and cast iron piping with mechanical joints, p-traps, and fittings. Given the material and age we recommend conducting a condition assessment to accurately estimate the remaining service life.	Repair components of sanitary drainage	3 - Fair (C)	No Known / Reported Deficiency	1	Allowance	\$50,000	\$50,000	50	1950	67	2022	2022	\$0	\$0	\$0	\$0	\$0	\$55,204	\$0	\$0	\$0	\$0 \$55,204
D2030	Sanitary Waste	Sanitary Waste System	Mixture of copper, ABS and cast iron piping with mechanical joints, p-traps, and fittings. Last fluxhing year is unknown. Given the material and age we recommend conducting a condition assessment to accurately estimate the remaining service life.	Engage a qualified professional (i.e. mechanical/plumbing engineer) to conduct a detailed condition assessment of the sanitary drainage system.	3 - Fair (C)	Backlog Maintenance / Renewal	1	Each	\$10,000	\$10,000	n/a	1950	67	2022	2018	\$0	\$10,200	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0 \$10,200
D2095	Domestic Water Heaters	DHW Storage & Heating	Electric water heater by John Wood (Model: JW50SDE30 Seri No.: U1310F703434 Capacity: 184 L) installed in 2013. No reported issues.	al Replace domestic hot water heater every 10 years.	5 - Excellent (A)	No Known / Reported Deficiency	1	Each	\$1,500	\$1,500	10	2013	4	2023	2023	\$0	\$0	\$0	\$0	\$0	\$0 \$:	1,689	\$0	\$0	\$0 \$1,689
D3012	Gas Supply System	Gas Distribution System	It is our understanding that the gas meter was installed by utility provider for future connection to gas fired appliances. No appliance is connected to the gas supply at the time of ou site visit.		Not Applicable	Not Applicable	0	Each	\$0	\$0	50	N/A	N/A	N/A	N/A	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0 \$0
D3023	Furnaces	Furnace 4	Oil burning furnace (100,000 BTU) by Kumfort Furnace Limite The last maintenance was completed in Jan 2017 by Columbi Fuels. It is our understanding that the Saltair Community Society plans to replace this furnace with a gas-fired furnace near future.	a Replace furnace with an energy efficient furnace.	3 - Fair (C)	Backlog Maintenance / Renewal	1	Each	\$7,000	\$7,000	20	1950	67	2021	2021	\$0	\$0	\$0	\$0	\$7,577	\$0	\$0	\$0	\$0	\$0 \$7,577
D3023	Furnaces	Furnace 1, 2 & 3	Three oil furnaces with chimney vents. It is our understanding that these furnaces have not been used for years. Due to limited access, MAE was not able to verify presence of Furnac 3.	Decomission and remove furnaces and	Not Applicable	Backlog Maintenance / Renewal	3	Each	\$2,000	\$6,000	20	1950	67	2017	2017	\$6,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0 \$6,000
D3041	Air Distribution Systems	Ductwork for heating and venting.	No reported issues. This is a normally hidden component and was not visually reviewed for this report. Full replacement of this component is not anticipated.		3 - Fair (C)	No Known / Reported Deficiency	1	Allowance	\$15,000	\$15,000	75	1950	67	2030	2030	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0 \$0

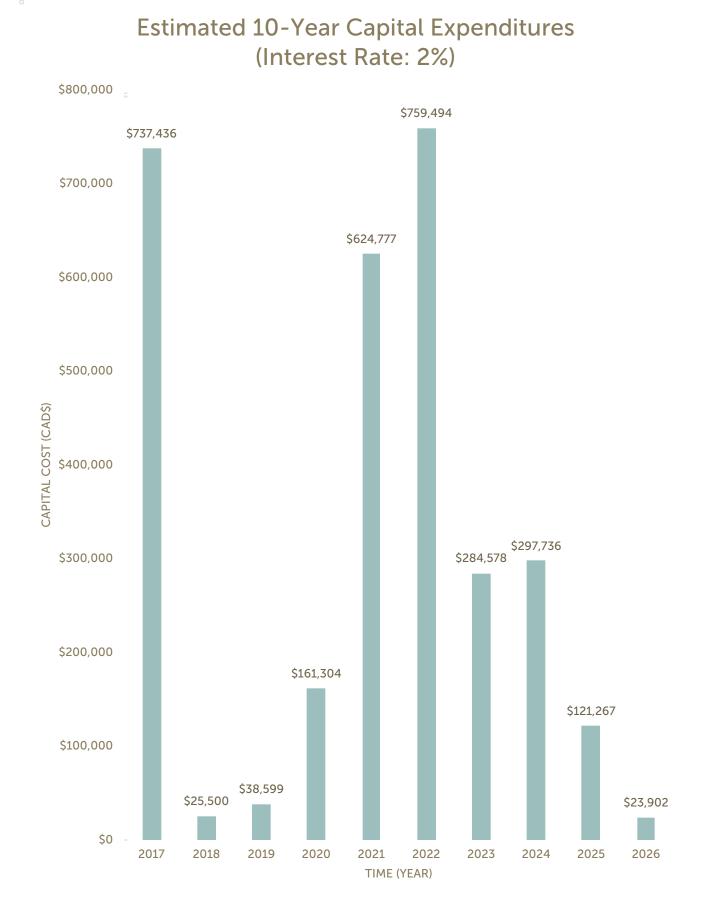
			Component Information				Esti	mates	Cost	(Present \$)			Asset Life Anal	ysis						10-Year Ca	apital Plan (Fu	ture \$)				
											Expected	Last Maior	Chronological	Recommended Component	Recommended											
UNIFORMAT	Category	Component	Comments	Recommendations	Condition (Grade)	Deficiency Type	Quantity	Unit	Unit Cost	Replacement Cost			-		Action Year	2017	2018	2019	2020	2021	2022	2023	2024 2	025 20	2026	fotal
D3045	Exhaust Ventilation Syte	ms Washroom Exhaust Fans	Exhaust fans appeared to be dated. We did not test these fans	Replace washroom exhaust fans with higher efficiency fans. Consideration should be given to installation of humidistats where applicable.	3 - Fair (C)	Backlog Maintenance / Renewal	3	Each	\$700	\$2,100	20	1950	67	2019	2019	\$0	\$0	\$2,185	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$2,185
D3045	Exhaust Ventilation Syte		Wall mounted exhaust fan in gymnasium. It is our ke understanding that the gym has not been actively used and th fan has not been used for the past 3 years.	Review the adequacy of existing fan and fresh air intake. Upgrade the gymnasium e exhaust fan with a higher efficiency fan along with a humidistat as required.	1- Very Poor (F)	Backlog Maintenance / Renewal	1	Allowance	\$5,000	\$5,000	20	1950	67	2017	2017	\$5,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$5,000
D3045	Exhaust Ventilation Syte	ms Chimneys	Chimney vents constructed with brick and mortar for furnaces It is our understanding that Furnace 1, 2 and 3 are no longer being used. Depending on the CVRD's future plan for this facility, the chimney may be demolished or repointed.		2 - Poor (D)	Backlog Maintenance / Renewal	2	Alowance	\$2,500	\$5,000	40	1950	67	2018	2018	\$0	\$5,100	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$5,100
D4010	Sprinklers	Sprinkler System in Furnace Room	Exposed wet sprinklers, upright sprinkler heads, and steel	existing sprinkler system and address any	1- Very Poor (F)	Safety Risk	1	Allowance	\$2,500	\$2,500	50	1950	67	2017	2017	\$2,500	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$2,500
D5010	Electrical Service and Distribution	Electrical Service and Distribution	Electrical room equipment with main switch, breakers and wiring to several local sub-panels and mechanical loads. Given the age, we recommend conducting a detailed condition assessment including infrared scanning and cleaning of equipment.	Engage qualified professionals (i.e. electrical engineer and electrical contractor) to review the eixisting electrical distribution system. Conduct infrared	3 - Fair (C)	Backlog Maintenance / Renewal	1	Allowance	\$7,500	\$7,500	40	1950	67	2020	2017	\$7,500	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$7,500
D5010	Electrical Service and Distribution	Electrical Service and Distribution	Electrical room equipment with main switch, breakers and wiring to several local sub-panels and mechanical loads. Given the age, we recommend conducting a detailed condition assessment including infrared scanning and cleaning of equipment.		3 - Fair (C)	Backlog Maintenance / Renewal	1	Each	\$150,000	\$150,000	40	1950	67	2020	2020	\$0	\$0	\$0	\$159,181	\$0	\$0	\$0	\$0	\$0	\$0 \$	\$159,181
D5022	Lighting Equipment	Interior Light Fixtures	Ceiling mounted fluorescent lighting throughout for interior direct, indirect and accent lighting applications.	Replace interior light fixtures, as required, for aesthetic purposes, to match ballast replacement cycles, or technological obsolescence.	3 - Fair (C)	No Known / Reported Deficiency	150	Each	\$250	\$37,500	20	1950	67	2024	2024	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$43,076	\$0	\$0	\$43,076
D5022	Lighting Equipment	Exterior Light Fixtures	Wall mounted and recessed soffit pot lighting controlled by timers for exterior direct, indirect and security applications. We recommend replacing the light fixtures in conjunction with exterior cladding replacement.	Replace exterior light fixtures, as required, for aesthetic purposes, to match ballast replacement cycles, or technological obsolescence.	2 - Poor (D)	Backlog Maintenance / Renewal	1	Allowance	\$10,000	\$10,000	20	1950	67	2021	2021	\$0	\$0	\$0	\$0	\$10,824	\$0	\$0	\$0	\$0	\$0	\$10,824
D5037	Fire Alarm System	Annunciator Panel, Gongs, Pull Stations, Fire Extinguishers, Smoke and Heat Detectors	Microprocessor based fire alarm control panel by Mircom Series 4001 unit with DSC PowerSeries PC 4020 fire alarm monitoring system. Fire detection devices to detect fire and smoke conditions and initiate timely response. Fire alarm system is inspected annually and repaired/replaced as required. Last inspection was at May 17, 2016.	Replace fire alarm annunciator panels, control panel, and field devices, excluding field wiring	4 - Good (B)	No Known / Reported Deficiency	1	Each	\$20,000	\$20,000	20	1950	67	2024	2024	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$22,974	\$0	\$0	\$22,974
D5091	Exit & Emergency Light Systems	Exit and Emergency Lights	Exit lights and emergency lighting equipment to facilitate evacuation from the interior of the building in the event of an emergency. Emergency lighting is tested annually and repairs made as required.		4 - Good (B)	No Known / Reported Deficiency	1	Allowance	\$1,500	\$1,500	15	1950	67	2024	2024	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$1,723	\$0	\$0	\$1,723
D5090.05	Electric Heating	Electric Baseboard Heaters with Thermostats	Wall mounted, electric convector baseboard heaters with electrical fins for localized space heating and integral thermostat control. No reported issues. Wall-mounted electric fan heaters with integral thermostat	Cyclical replacement of electric baseboard heaters, as required.	3 - Fair (C)	No Known / Reported Deficiency	5	Each	\$500	\$2,500	20	1950	67	2024	2024	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$2,872	\$0	\$0	\$2,872
D5090.05	Electric Heating	Wall Mount Electric Heaters	control for localized space heating. We did not test this equipment. No reported issues.	Cyclic replacement of wall mounted electric heaters, as required.	5 - Excellent (A)	No Known / Reported Deficiency	4	Each	\$600	\$2,400	20	2013	4	2033	2033	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
G2020	Parking Lots	Asphalt Paved Parking	Asphalt paving was in fair condition with cracks and heaving. Unenven paving should repaired to avoid a trip hazard and for the parking areas to remain serviceable. Asphalt paving was in fair condition with cracks and heaving.	Repair asphalt cracks and heaving.	3 - Fair (C)	Safety Risk	1	Allowance	\$1,000	\$1,000	25	1950	67	2025	2017	\$1,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$1,000
G2020	Parking Lots	Asphalt Paved Parking	Unenven paving should repaired to avoid a trip hazard and for the parking areas to remain serviceable.		3 - Fair (C)	Safety Risk	20700	SF	\$5	\$103,500	25	1950	67	2025	2025	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0 \$	121,267	\$0 \$	\$121,267
G2030	Pedestrian Paving	Concrete Paved Pedestrian Walkway	settlement, and uplift due to tree roots. We recommend crack and uneven surface be repaired as soon as possible to prevent a tripping hazard.	s Repair concrete cracks and heaving. t	3 - Fair (C)	Safety Risk	1	Allowance	\$1,000	\$1,000	40	1950	67	2022	2017	\$1,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$1,000
G2030	Pedestrian Paving	Concrete Paved Pedestrian Walkway	The concrete paving reviewed were generally in fair condition with cracks and heaving. Causes for cracks may include prolonged exposure to exterior weather conditions, settlement, and uplift due to tree roots. We recommend crack and uneven surface be repaired as soon as possible to prevent a tripping hazard.	Replace concrete paved pedestrian s walkways.	3 - Fair (C)	Safety Risk	2500	SF	\$15	\$37,500	40	1950	67	2022	2022	\$0	\$0	\$0	\$0	\$0	\$41,403	\$0	\$0	\$0	\$0	\$41,403
G2030	Pedestrian Paving	Concrete Stairs & Ramps	Several exterior stairs and ramps are provided at entry/exit points of SCC. The stairs and ramps reviewed were generally if fair condition. The stairs and ramps probably met the requirements at the time of construction; however, they do not meet the current requirements of the accessibility. At the time of the renewal, modifications to the stairs, ramps, guardraits and handrails should be incorporated to meet the latest edition of British Columbia Building Code and Accessibility Handbook.	Replace exterior concrete stairs, ramps, guardrails and handrails.	3 - Fair (C)	Grandfathered Code Issue	4	Each	\$45,000	\$180,000	30	1950	67	2022	2022	\$0	\$0	\$0	\$0	\$0	\$198,735	\$0	\$0	\$0	\$0 \$	\$198,735
G3020	Sanitary Sewer	Septic Tanks	Sanitary sewer waste form the building is directed to an onsite underground septic tank and distribution system. According to the site contact, the septic system was pumped out in 2015 and minor repairs were completed to the connection to the building. There are no current reported issues. Given the age, we recommend that a study to confirm performance and remaining useful life be undertaken.	Engage qualified professionals (i.e. plumbing contractor and mechanical ongineer) to conduct a detailed condition	3 - Fair (C)	No Known / Reported Deficiency	1	Allowance	\$ 2,500.00	\$ 2,500.00	40	1950	67	2022	2017	\$2,500	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$2,500

			Component Information				Estin	nates	Cost	(Present \$)			Asset Life Anal	ysis						10-Year Capital F	an (Future \$)				
UNIFORMAT	Category	Component	Comments	Recommendations	Condition (Grade)	Deficiency Type	Quantity	Unit	Unit Cost	Replacement Cost	Expected Service Life	Last Major Action Year	Chronological Age		Recommended	2017 2)18 20	019 20	020	2021 202	2023	2024	2025	2026	Total
G3020	Sanitary Sewer	Septic Tanks	and minor repairs were completed to the connection to the building. There are no current reported issues. Given the age,	Subject to the study, a provision for the replacement is included. Replace underground septic services, including all appurtenances.	3 - Fair (C)	No Known / Reported Deficiency	1	Allowance	****	\$ 35,000.00	40	1950	67	2022	2022	\$0	\$0	\$0	\$0	\$0 \$38	643	\$0	\$0 \$0	\$0	\$38,643
G3060	Fuel Distribution	Fuel Oil Storage Tank Remov	ral Society plans to replace the furnace with a gas-fired furnace in	Decomission and remove two oil storage tanks that are no longer being used and related piping and accessories.	2 - Poor (D)	Backlog Maintenance / Renewal	2	Each	\$ 500.00	\$ 1,000.00	40	1950	67	2017	2017	\$1,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0 \$0	\$0	\$1,000
G3060	Fuel Distribution	Fuel Oil Storage Tank Remov	ral Society plans to replace the furnace with a gas-fired furnace in	Decomission and remove one oil storage tank and related piping and accessories in conjunctio with Furnace 4 renewal.	3 - Fair (C)	Backlog Maintenance / Renewal	1	Each	\$ 500.00	\$ 500.00	40	1950	67	2021	2021	\$0	\$0	\$0	\$0	\$541	\$0	\$0	\$0 \$0	\$0	\$541
									Total Cost:	\$4,326,891						\$737,436	25,500 \$	\$38,599 \$1	61,304	\$619,565 \$754	,178 \$279	156 \$292,	206 \$121,267	\$23,902	\$3,053,117
Approvals	Employe Checked I								Submitted: e Approved:																

APPENDIX B ESTIMATED 5-YEAR CAPITAL EXPENDITURES



APPENDIX C ESTIMATED 10-YEAR CAPITAL EXPENDITURES



APPENDIX D BUILDING DEFICIENCY PHOTOS



UNIFORMAT	COMPONENT		COMPONENT PHOTOS & DEFICIENCIES
A10 – Foundation	Foundation with Crawl Space		
		Photo 1 – General view of foundation crawlspace	Photo 2 – A crack in foundation wall
B10 – Superstructure	Wood Framing		
		Photo 3 – View of an attic space	Photo 4 – View of a crawlspace



UNIFORMAT	COMPONENT		COMPONENT PHOTOS & DEFICIENCIES	
B2010 – Exterior Walls	Painted Wood Siding, Face Sealed	Photo 5 – Painted wood siding on north elevation		Pr
			elevation	
B2010 – Exterior Walls	Painted Wood Soffit with Vent Strip			and the second s
		Photo 8 – Typical painted wood soffit with perimeter vent strips	Photo 9– Painted wood soffit with blistering and microbial growth	



Photo 7 – Poor painted wood siding wall-to-brick chimney interface detail



Photo 10 – Moisture and microbial growth on painted wood soffit



UNIFORMAT	COMPONENT		COMPONENT PHOTOS & DEFICIENCIES	
B2010 – Exterior Walls	Painted Stucco, Face Sealed			
		Photo 11 – Typical stucco exterior wall	Photo 12 – Graffitti on stucco wall	
		Photo 14 – Base of wall at northwest corner of the gymnasium	Photo 15 – Typical flasshing and sealant detail at roof-to-wall interface	F

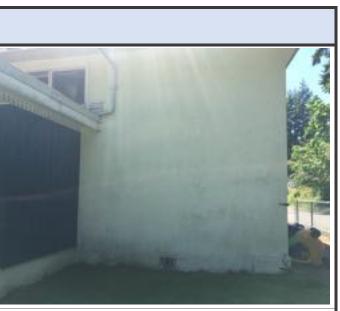


Photo 13 – Stains on stuccon wall



Photo 16 – Opening in stucco and sealant at a roof-to-wall interface



UNIFORMAT	COMPONENT		COMPONENT PHOTOS & DEFICIENCIES	
B2010 – Exterior Walls	Painted Stucco, Face Sealed (continued)		<image/>	
		Photo 17 – Delaminating stucco cladding at a corner	Photo 18 – Poor stucco wall-to-brick chimney interface detail	Pr
B2010 – Exterior Walls	Above Grade Foundation Wall, Coating			
		Photo 20 — Typical painted above-grade foundation wall	Photo 21 – Deteriorating coating at base of wall	Ρ

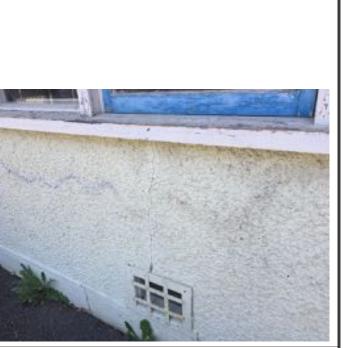


Photo 19 – Hairline crack, stains, and deteriorating stucco coating



Photo 22 – Hairline cracks in foundation wall and coating



UNIFORMAT	COMPONENT		COMPONENT PHOTOS & DEFICIENCIES	
B2010 – Exterior Walls	Above Grade Foundation Wall, Coating (continued)	Photo 23 – Cracks in concrete wall and deteriorating coating		
B2020 – Exterior Windows	Wood Framed, Single Glazed Windows	Fhoto 24 – Typical window	Photo 25 – Condensation on window panes inside gymnasium	Pho

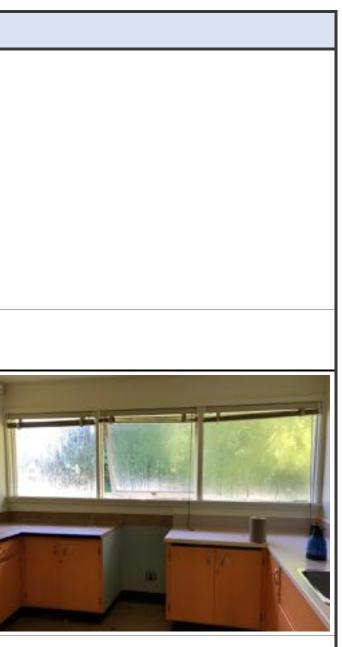


Photo 26 – Condensation on window panes inside gymnasium



UNIFORMAT	COMPONENT		COMPONENT PHOTOS & DEFICIENCIES
B2020 – Exterior Windows	Wood Framed, Single Glazed Windows (continued)	Photo 27 – Close up of condensation on a window pane	Photo 28 – Microbial growth at window perimeter F
		Photo 30 – Deteriorating window sill	Photo 31 - Microbial growth on window coverings at gymnasium storage room





Photo 32 – Close up of microbial growth on window coverings



UNIFORMAT	COMPONENT		COMPONENT PHOTOS & DEFICIENCIES
B2020 – Exterior Windows	Wood Framed, Single Glazed Windows (continued)		
		Photo 33 – Typical awning window	Photo 34 – Deteriorating wood frames and paint finishes
		Photo 36 – Broken glazing in Storage Room 20	Whether the set of th

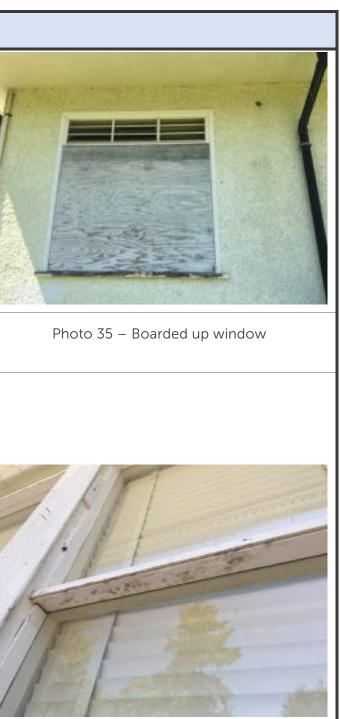


Photo 38 – Staining and microbial growth on window frames



UNIFORMAT	COMPONENT		COMPONENT PHOTOS & DEFICIENCIES
B2020 – Exterior Windows	Wood Framed, Single Glazed Windows (continued)	Photo 39 – Deteriorating window frame and paint finishes & deteriorating sealant around glazing	
B2030 – Exterior Doors	Metal Swing Exit Doors in Wood Frame	perimeter	



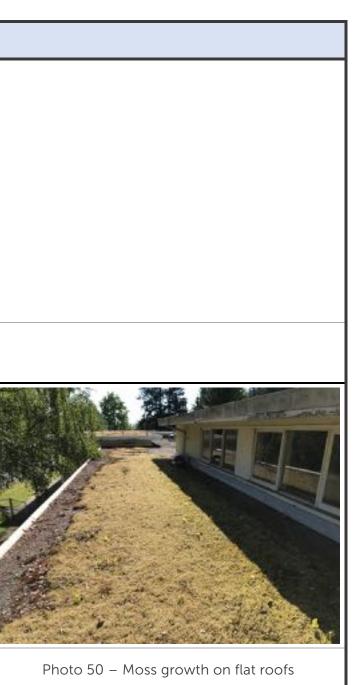
UNIFORMAT	COMPONENT		COMPONENT PHOTOS & DEFICIENCIES
B2030 – Exterior Doors	Metal Swing Exit Doors		
		Photo 41 – Double swing gymnasium exit doors	Photo 42 – Double swing exit doors with wired glazing
B30 – Roofing	Flat Roof - SBS	Photo 43 – General view of SBS roofing	Photo 44 – Typical drain



Photo 45 – Staining and collection of debris on roof surface



UNIFORMAT	COMPONENT		COMPONENT PHOTOS & DEFICIENCIES
B30 – Roofing	Flat Roof – SBS (continued)		
		Photo 46 – Alligator cracks and bubbling in SBS cap sheet	Photo 47 – Damaged and corroded mechanical vent
B30 – Roofing	Tar & Gravel Roofing		
		Photo 48 – An overview of tar & gravel roofing	Photo 49 – Extensive moss growth on sloped roofs





UNIFORMAT	COMPONENT		COMPONENT PHOTOS & DEFICIENCIES
B30 – Roofing	Tar & Gravel Roofing (continued)		<image/>
		Photo 51 – Peeling pain in fascia boards; staining on perimeter flashing	Photo 52 – Evidence of past repair
		Photo 54 – Typical drain without drain cover	Photo 55 - A mechanical penetration in roof assembly with a plastic seal

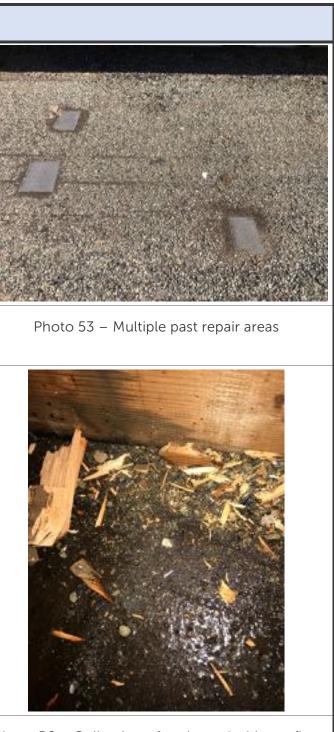


Photo 56 – Collection of moisture inside roofing assembly at gymnasium canopy



UNIFORMAT	COMPONENT		COMPONENT PHOTOS & DEFICIENCIES
B30 – Roofing	Tar & Gravel Roofing (continued)		
		Photo 57 – Pooling water sitting on soffit	Photo 58 – Stains and microbial growth on framing members; rusted nail penetrating through sheathing above
		Photo 60 – Water stains and microbial growth on wood members within gymnasium roofing assembly	Photo 61 — A nail penetrating through the wood decking at gymnasium roofing assembly

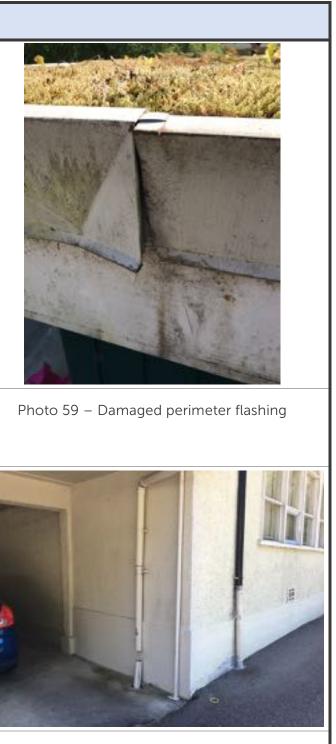


Photo 62 – A disconnected rainwater leader; different rainwater leader materials



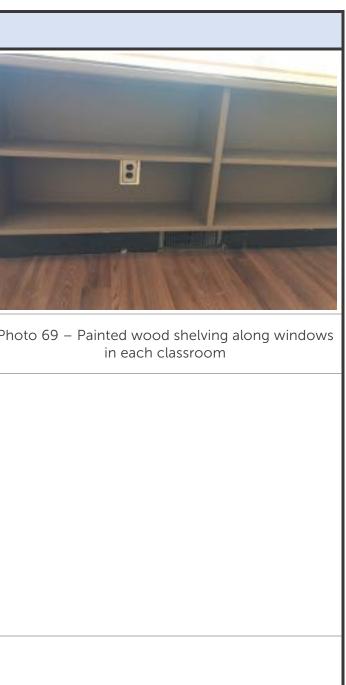
UNIFORMAT	COMPONENT		COMPONENT PHOTOS & DEFICIENCIES
B30 – Roofing	Tar & Gravel Roofing (continued)		
		Photo 63 – Rusted base of column under gymnasium canopy	Photo 64 – Rusted base of column and damaged concrete column base under gymnasium canopy
C1030 – Fittings	Washroom Partitions		
		Photo 66 – Typical washroom partition	



Photo 65 – Damaged concrete column base under gymnasium canopy



	COMPONENT		COMPONENT PHOTOS & DEFICIENCIES	
C1030 – Fittings	Classroom Cabinets			
		Photo 67 — Cabinets and countertops at gymnasium kitchen	Photo 68 – Painted wood shelving found at each classroom	Pho
		Photo 70 – Typical cabinets and countertops found in each classroom		





COMPONENT		COMPONENT PHOTOS & DEFICIENCIES	
Painted Interior Swing Doors			
	Photo 71 – Typical classroom door with a glazing insert	Photo 72 – Typical painted wood swing door	Pho
	Photo 74 – Doors to gymnaisum sealed and		
	Painted Interior Swing	Painted Interior Swing Doors Image: Construction of the second secon	Painted Interior Swing Doors Painted Interior Swing Painted Interior Swing Image: Construction of the system of the s



Photo 73 – Metal swing doors with glazing inserts near main entrance



UNIFORMAT	COMPONENT		COMPONENT PHOTOS & DEFICIENCIES
C1040 – Interior Doors	Painted Metal Swing Doors with and without Wired Glazing	This day This day Lossed	
		Photo 75 – Metal door to the electrical/mechanical service room	Photo 76 – Unfinished finishes around hallway swing doors
C20 – Stairs	Interior Stairs		
		Photo 78 – View of interior stairs	



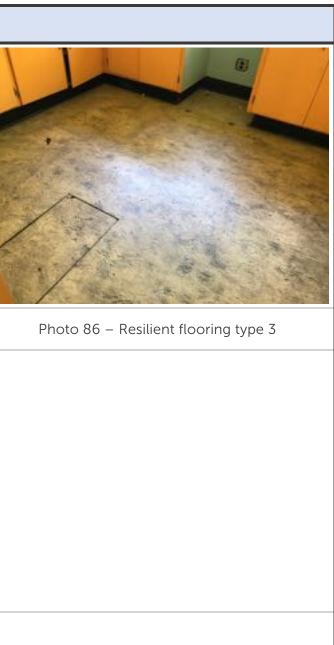


UNIFORMAT	COMPONENT		COMPONENT PHOTOS & DEFICIENCIES
C3010 – Wall Finishes	Interior Windows	$\label{eq:product} Photo 79 - Interior windows between Classroom 6\&7$	Photo 80 – Interior windows at Office 4
C3010 – Wall Finishes	Painted Drywall	Photo 81 – Typical painted wall	Photo 82 – Painted hallway wall





UNIFORMAT	COMPONENT		COMPONENT PHOTOS & DEFICIENCIES
C3020 – Floor Finishes	Resilient Flooring		
		Photo 84 – Resilient flooring type 1	Photo 85 – Resilient flooring type 2
		Photo 87 – Resilient flooring type 4	





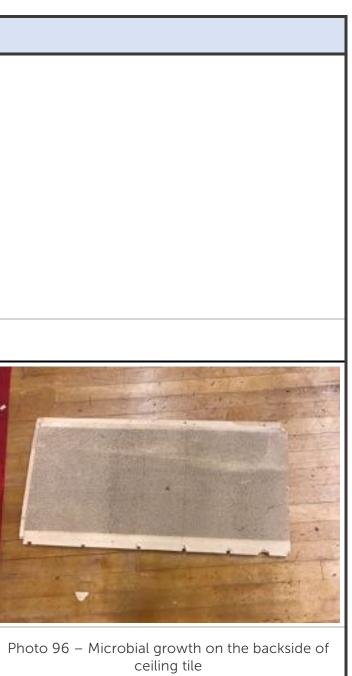
UNIFORMAT	COMPONENT		COMPONENT PHOTOS & DEFICIENCIES
C3020 – Floor Finishes	Ceramic Tiles	Photo 88 – Tiled flooring in Boys Lav 13 & Girls	Photo 89 – Tiled flooring in Lav 10
C3020 – Floor Finishes	Laminate Wood Flooring	Lav 15 Floor 90 - Laminate wood flooring in Classroom 18	



UNIFORMAT	COMPONENT	COMPONENT PHOTOS & DEFICIENCIES	
C3020 – Floor Finishes	Carpet Flooring	Photo 91 – Carpet flooring throughout daycare areas	
C3020 – Floor Finishes	Sports Flooring at Gymnasium	Photo 92 – Gymnasium flooring with game lines	



UNIFORMAT	COMPONENT		COMPONENT PHOTOS & DEFICIENCIES	
C3030 – Ceiling Finishes	Acoustic Ceiling Tile at Library 6	Photo 93 – Acoustic ceiling tiles at Library 6		
C3030 – Ceiling Finishes	Fibreboard Ceiling Tile at Gymnasium	Photo 94 – Bulging and sagging tiles throughout gymnasium	Photo 95 - West gymnasium ceiling where multiple ceiling tiles have fallen off	P





UNIFORMAT	COMPONENT		COMPONENT PHOTOS & DEFICIENCIES
C3030 – Ceiling Finishes	Painted Ceiling		
		Photo 97 – Typical ceiling view	Photo 98 – Stain found in hallway ceiling
		Photo 100 – Peeling paint finishes in Staff Rm 5	





UNIFORMAT	COMPONENT		COMPONENT PHOTOS & DEFICIENCIES
D2010 – Plumbing Fixtures	Toilets & Urinals	Photo 101 – Typical toilet and lavatory	Photo 102 – Typical toilet in Boys and Girls Lav
D2010 – Plumbing Fixtures	Sinks & Lavatories	Fried and the second	Frank and

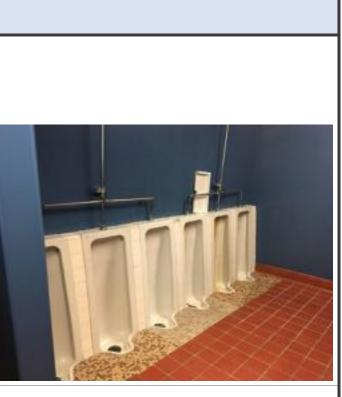


Photo 103 – Typical urinals in Boys Lav



UNIFORMAT	COMPONENT		COMPONENT PHOTOS & DEFICIENCIES
D2020 – Domestic Water Distribution	Copper Distribution Piping Throughout	Photo 106 – Copper pipes from hot water tank	
D2030 – Sanitary Waste	Sanitary Waste System	Photo 107 – Typical under sink pipes	Photo 108 – Copper pipes found under a sink



UNIFORMAT	COMPONENT		COMPONENT PHOTOS & DEFICIENCIES
D2095 – Domestic Water Heaters	DHW Storage & Heating		
		Photo 109 – Hot water storage and heating tank	
D3012 – Gas Supply System	Gas Distribution System	Photo 110 – Gas meter found at northeast corner of the building	



UNIFORMAT	COMPONENT		COMPONENT PHOTOS & DEFICIENCIES
D3023 - Furnaces	Furnace 4		
		Photo 111 – Furnace 4 in Furnace Rm 9	
D3023 - Furnaces	Furnaces 1, 2 & 3		
		Photo 112 – Furnace 1 in Furnace Room 3	Photo 113 – View of ducting and Furnace 2





UNIFORMAT	COMPONENT		COMPONENT PHOTOS & DEFICIENCIES
D3041 – Air Distribution System	Ductwork for Heating and Ventilation	Photo 115 – Ducting inside Furnace Room 3	
D3045 – Exhaust Ventilation Systems	Washroom Exhaust Fans	Photo 116 – Exhaust fan in Lav 10	Photo 117 – Exhaust fan in Boys Lav 13



UNIFORMAT	COMPONENT		COMPONENT PHOTOS & DEFICIENCIES	
D3045 – Exhaust Ventilation Systems	Gymnasium Wall Mounted Fan	Photo 118 – Wall mounted gymnasium fan		
D3045 – Exhaust Ventilation Systems	Chimneys	Photo 119 – Chimney found in the middle of the roofs	Photo 120 – Chimney found at the southeast corner of the building	Př



Photo 121 – Moss growth, deteriorating brick and mortar, and efflorescence found on chimney



UNIFORMAT	COMPONENT		COMPONENT PHOTOS & DEFICIENCIES
D4010 – Sprinklers	Sprinkler System in Furnace 4 Room		
		Photo 122 – View of sprinkler pipe and head	Photo 123 – Sprinkler valve found in Furn 9
D5010 – Electrical Service and Distribution	Electrical Service and Distribution		
		Photo 124 – Main incoming power	Photo 125 – Electrical service found in Furnace Room 3



UNIFORMAT	COMPONENT		COMPONENT PHOTOS & DEFICIENCIES
D5022 – Lighting Equipment	Interior Light Fixtures		
		Photo 126 – Typical fluorescent lights	Photo 127 – View of T-8 fluorescent tubes
D5022 – Lighting Equipment	Exterior Light Fixtures	Photo 129 – Typical exterior wall mounted light	Photo 130 - A broken exterior light overlooking fenced play area





UNIFORMAT	COMPONENT		COMPONENT PHOTOS & DEFICIENCIES	
D5037 – Fire Alarm System	Annunciator Panel, Gongs, Pull Stations, Fire Extinguishers, Smoke and Heat Detectors			
		Photo 131 – Typical pull station	Photo 132 – Typical fire extinguisher	Pł
		Photo 134 – Typical heat detector		





UNIFORMAT	COMPONENT	COMPONENT PHOTOS & DEFICIENCIES	
D5091 – Exit & Emergency Light Systems	Exit and Emergency Lights		
		Photo 135 – Typical exit light	
D5090.05 – Electric Heating	Electric Baseboard Heaters with Thermostats		
		Photo 136 – Typical electric baseboard heater	



UNIFORMAT	COMPONENT		COMPONENT PHOTOS & DEFICIENCIES
D5090.05 – Electric Heating	Electric Cadet Heaters	Photo 137 – Typical wall mounted electric cadet	
		heater	
G2020 – Parking Lots	Asphalt Paved Parking	Photo 138 - View of asphalt paved fenced play area	Whether the second se





UNIFORMAT	COMPONENT		COMPONENT PHOTOS & DEFICIENCIES	
		Deta 141 A patantial trip bagand page		
		Photo 141 - A potential trip hazard near basketball court		
G2030 – Pedestrian Paving	Concrete Paved Pedestrian Walkway	sitair Community Centr un sumyseltair.co		「「「「「」」」
		Photo 142 – Typical concrete paved walkway	Photo 143 – Crack in concrete paved walkway	Ph





UNIFORMAT	COMPONENT		COMPONENT PHOTOS & DEFICIENCIES	
		Photo 145 – A sizeable crack at walkway and exterior stairs transition at east elevation		
G2030 – Pedestrian Paving	Concrete Stairs & Ramps			
		Photo 146 – Stairs and ramp at south exit	Photo 147 – Stairs at east exit	PI





UNIFORMAT	COMPONENT		COMPONENT PHOTOS & DEFICIENCIES
G2030 – Pedestrian Paving	Concrete Stairs & Ramps (continued)	Photo 149 – A temporary ramp found on southeast corner of the building	
CZ020 Sanitany	Contia Tanka	southeast comer or the building	
G3020 – Sanitary Sewer	Septic Tanks		
		Photo 150 – View of septic system	Photo 151 – Septic system access point



UNIFORMAT	COMPONENT		COMPONENT PHOTOS & DEFICIENCIES
G3060 – Fuel Distribution	Fuel oil storage tanks		
		Photo 152 – Corroded fuel tank found on southeast elevation	Photo 153 – A fuel tank found on northeast elevation

