



**NORFOLK COUNTY**

**BUILDING CONDITION ASSESSMENT REPORT  
FOR VARIOUS COUNTY FACILITIES**

**FINAL**

**April 13, 2017**

Submitted by:



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system.

Lavatory sinks and faucets in the second floor washrooms are corroding and showing signs of leaking. Ductwork penetrating second floor janitor's closet floors and walls do not appear to have fire dampers. Recommend an evaluation of fire ratings and requirements for dampers.

The hydronic unit heater in the Zamboni boiler room has a seized motor. It should be replaced immediately.

The brine pump in the refrigeration plant is deteriorating and should be replaced in 1 to 2 years.

The sump pump in the refrigeration plant is extensively rusted and should be replaced in 1 to 2 years.

## **5.28 Langton Arena & Field House**

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### **Overview**

The Langton Arena and Field House is located at 30 Albert Street in Langton, Ontario. It is an arena and was constructed in phases in 1976 and 1982. It has approximately 35,010 square feet of floor space.

### **5.28.1 Architectural and Structural**

Concrete stairs from the upper level are damaged and require repair. The exterior concrete block is showing signs of structural distress and deteriorating along the north and south elevations, and at the corners of the building. The blocks and mortar joints are cracked in several locations. The exterior original painted concrete block should be repointed, repaired and repainted. Further structural review of the northeast corner of the building is required. There is water infiltration noted in the attic space on south face of concrete block wall. The removed exterior windows should be rebuilt. Observing from the ground level, the shingle roofing appears to have exceeded lifespan and should be replaced. Refer to Photo A26. The overhead door is deteriorated and in need of replacement. The downspouts require replacement.

Finishes are generally old and worn. The cracking and mortar joints in the interior requires repointing. Further investigation is required to determine the extent of the damages. The second floor janitor's room has exposed insulation. The damaged insulation should be removed and new insulation installed, followed by vapour barrier and fire rated gypsum board along with a fire rated door and frame. The countertop and cabinets in the kitchen are in poor condition and are in need of replacement. The second floor washrooms are in fair condition and require renovation.

For the Field House, the exterior concrete block is showing signs of deterioration and in need of repointing and repainting. The interior concrete block walls have holes and cracks that need to

be addressed.

### **5.28.2 Building Electrical**

The 3-phase service disconnect is nearing the end of its useful life expectancy and should be considered for replacement. The age of distribution panels vary throughout the facility. Consideration should be given to replacing the older Federal Pioneer panels as replacement parts may eventually be difficult to attain. It appears some of the exterior lighting has been recently upgraded. We recommend replacing the rest of the exterior lights that appear original. With respect to disconnects and splitters, all Amalgamated Electric, Taylor Electric, Square D and Federal Pioneer disconnects are nearing the end of their useful life expectancy and should be considered for replacement. Both single phase and 3- phase metering enclosure are exhibiting signs of rust and should be replaced in the future. The field house receptacle located near the sink should be protected by a ground fault circuit interrupter.

As of January 1<sup>st</sup> 2014, all new buildings and major renovations are required to install the new "Running Man" Exit signage. The running man exit signs are not currently required for this building. If a major renovation, as defined by the Ontario Building Code (OBC) occurs, or a new building is constructed, then the "Running Man" signs will be required.

### **5.28.3 Building Mechanical**

The arena refrigeration plant equipment was not assessed in detail due to miscommunication. Refrigeration equipment is provided and maintained by Cimco. The overall impression of equipment condition is good. The replacement cost for the refrigeration plant depends on the condition of the existing equipment. For a full replacement of the refrigeration plant (i.e., new piping, brine pumps, cooling tower, compressors etc.), the cost can be as high as \$350,000. However, not all components need to be replaced within 20 years. As is the case for Building 27, the replacement cost within 20 years is approximately \$100,000.

The washroom floor drain grates are in poor condition. The lavatories in the second floor washrooms show minor wear and the drainage pipes have signs of leaks. Shower heads in various dressing rooms are rusting and require replacement. Minor corrosion is present on water piping to plumbing fixtures throughout. Paint on the ductwork in the shower of the change room located in the lobby area is peeling and should be replaced.

The field house water supply is turned off for the season. Washroom fixtures are in poor condition and should be replaced. The field house canteen plumbing is in good condition.

The sump pump in the Zamboni room is deteriorating and aging and should be replaced in 2 to 5 years. The wall mounted exhaust fans in the Rink Area are not functional and should be replaced immediately. Various Fans through the facility are operating beyond expected life

expectancy and should be replaced within five years. The Hot Water Storage tank and Gas Fired Water Heaters are aging and should be replaced within five years.

## **5.29 Port Dover Arena**

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### **Overview**

The Port Dover Arena is located at 809 St. George Street in Port Dover, Ontario. It is an arena constructed in 1987 and has approximately 55,732 square feet of floor space.

#### **5.29.1 Architectural and Structural**

The exterior concrete split face block shows signs of structural distress and deterioration along the north elevation at roof drain leaders. The control joint caulking is cracking and should be replaced. The broken glass block should be replaced. The concrete block piers require additional structural review. Refer to Photo A27. Water damage was noted on the interior rink area from roof drains. Refer to Photo A28. Efflorescence was also noted within rink area. Further detailed structural review is recommended. The missing and damaged weather stripping on exterior doors should be repaired. The double exterior exit door does not close properly and should be replaced in the future.

Roof was not accessed during the site visit; as such, it is recommended that a specific roof audit to be done.

Cracks were observed in several locations in the gypsum board partitions. Evidence of possible mould was found at underside of the concrete structure in the locker rooms and shower area. Further testing should be completed. Staining of grout and tiles within the locker room showers was observed. Fire stopping at the top of walls separating the stairwell from the building is not in place and should be provided. The guards for the exterior exit stair do not meet the requirements on the Ontario Building Code.

#### **5.29.2 Building Electrical**

The meter enclosure appears to have surface rusting. This should be monitored to ensure the integrity of the enclosure is not compromised. Refer to Photo E23.

Disconnects for the rink area exhaust fans are showing signs of enclosure rust. These should be monitored to ensure integrity of enclosure is not compromised.

As of January 1<sup>st</sup> 2014, all new buildings and major renovations are required to install the new "Running Man" Exit signage. The running man exit signs are not currently required for this building. If a major renovation, as defined by the Ontario Building Code (OBC) occurs, or a new building is constructed, then the "Running Man" signs will be required.

#### **5.29.3 Building Mechanical**











Location ID	Asset Hierarchy			Identification			Sustainability Data (Asset Life)				Condition Rating	Comments/ Identified Need	Inflation 2%																												
	Facility			Location	Manufacturer	Description	Year of Installation	Life Expectancy (years)	Current Age (years)	Effective Life Remaining (years)			Schedule of Costs, adjusted for Inflation																												
	Class																																								
	Asset																																								
Attribute			2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036																			
	28.3.1.13	Exhaust Fan	'Attic'	-	Utility type fan serving kitchen exhaust hood	1982	25	34	-9.00	3	Assumed original equipment - tough stopping action. Replace soon.	\$ -	\$ -	\$ -	\$ 2,700.00	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -						
	28.3.1.14	Kitchen Exhaust Hood	Kitchen			1982	25	34	-9.00	3	Grease filters are rusting and need replacement soon	\$ -	\$ -	\$ -	\$ 800.00	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -						
	28.3.1.15	Hot Water Storage Tank	Mechanical Room 1 (Lobby Area)	John Wood		1982	25	34	-9.00	2	Assumed original equipment - Rusting and signs of leaking. Replace immediately	\$ 1,500.00	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -						
	28.3.1.16	Gas Fired Water Heater	Mechanical Room 1 (Lobby Area)	AO Smith		1982	20	34	-14.00	2	Assumed original equipment - Rusting and signs of leaking. Replace immediately	\$ 3,500.00	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -					
	28.3.1.17	Gas Fired Furnace	Mechanical Room 1 (Lobby Area)	Lennox		2005	15	11	4.00	3	Estimated age - Fair condition. Replace in 4 years based on ERL	\$ -	\$ -	\$ -	\$ 3,700.00	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -					
	28.3.1.18	Gas Fired Furnace	Mechanical Room 1 (Lobby Area)	Lennox		2005	15	11	4.00	3	Estimated age - Fair condition. Replace in 4 years based on ERL	\$ -	\$ -	\$ -	\$ 3,700.00	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -				
	28.3.1.19	Gas Fired Furnace	Mechanical Room 1 (Lobby Area)	Lennox		2005	15	11	4.00	3	Estimated age - Fair condition. Replace in 4 years based on ERL	\$ -	\$ -	\$ -	\$ 3,700.00	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -				
	28.3.1.20	UV Disinfection System	Electrical Room	Upstream		2011	25	5	20.00	4	Newer Equipment - Good Condition. No need for replacement in 20 years	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -				
	28.3.1.21	Water Softener	Storage Room	Tahoe		2011	25	5	20.00	4	Newer Equipment - Good Condition. No need for replacement in 20 years	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -			
	28.3.1.22	Exhaust Fan	Storage Room	-	Manual switch operation	2011	25	5	20.00	4	Newer Equipment - Good Condition. No need for replacement in 20 years	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -			
	28.3.1.23	Air Handling Unit	Mechanical Room 2	Engineered Air		2009	25	7	18.00	4	Replace in 18 years based on ERL	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 21,000.00	\$ -	\$ -	\$ -	
	28.3.1.24	Water Softener	Compressor Room			2013	25	3	22.00	4	Newer Equipment - Good Condition. No need for replacement in 20 years	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -		
	28.3.1.25	UV Disinfection System	Field House	Upstream		2011	25	5	20.00	4	Currently disconnected for the winter season. No need for replacement in 20 years	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -		
	28.3.1.26	Electric Water Heater	Field House	John Wood		2011	20	5	15.00	4	Currently disconnected for the winter season. Replace in 15 years based on ERL	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 2,800.00	\$ -	\$ -	\$ -