## **CALTAB** Air Balance (2005) Inc.

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June 15, 2021

Municipality of Lakeshore 419 Notre Dame Street Belle River, Ontario NOR 1A0

Attention: Mr. Frank Jeney Manager of Recreation and Leisure

RE: Air Conditioning for the Rock Arena

Caltab Air Balance was asked to investigate a concept and cost to air condition the existing Rock Arena at the Atlas Tube Centre in Lakeshore, Ontario.

The purpose of the investigation is to be able to create an environment where the Rock Arena can entertain ice events during the months of May through September and also host summer events in the Rock Arena facility with a maximum of 3000 people in addition to the existing systems.

In this report, we are recommending air handling equipment to be mounted outdoors and have conditioned air through a new duct system to condition the space. The budget shown below consists of two air handling units, to accommodate the summer ice events and the summer events.

The recommendation to provide two air handling units is for two reasons.

- 1. It allows the facility to operate the summer ice events with the one air handling unit. If the facility has the summer events, then the additional unit can take care of the additional people load. The smaller unit has a capacity of 30,000 cfm with 100 tons of cooling and the larger unit has a capacity of 50,000 cfm with 140 tons of cooling.
- 2. If we were to use one air handling unit the ductwork would be too large for the space that is available on the existing building.

The budget is from costs as of June 2021. It is important to note that constructions costs at these times are very vulnerable and fluctuate greatly. The intent of this report is to provide a cost for a system to be able to operate the Rock Arena during the summer months.

BUDGET	
Exterior Steel Platform	500,000.00
Civil Work / Repairs	60,000.00
HVAC Equipment	625,000.00
Mechanical Systems	490,000.00
Electrical Systems	220,000.00
Plumbing and Piping	65,000.00
Controls	190,000.00
Engineering	150,000.00
Contingency Fund	230,000.00
	2,530,000.00 + HST

We have assumed that the existing electrical service will accommodate the additional load of the new systems.

Trusting the above will assist you in making an informed decision on conditioning the Rock Arena for summer use.

Yours truly,

Steve Koutsonicolas, P.Eng.