

NO: **R189**

COUNCIL DATE: **October 5, 2009**

REGULAR COUNCIL

TO: **Mayor & Council**

DATE: **October 5, 2009**

FROM: **General Manager, Planning and Development**

FILE: **0800-20**
(Newton Wave Pool)

SUBJECT: **Award of Contract for the Supply and Installation of a Dehumidification System at the Newton Wave Pool**

RECOMMENDATION

The Planning and Development Department recommends that Council approve the award of a contract to B.C. Comfort Air Conditioning Ltd. for the supply and installation of a dehumidification system at the Newton Wave Pool in the amount of \$850,800, excluding GST.

PURPOSE

The purpose of this report is to obtain Council approval to award a contract to B.C. Comfort Air Conditioning Ltd. for the supply and installation of a dehumidification system at the Newton Wave Pool.

BACKGROUND

The Newton Wave pool currently utilizes three air handling units ("AHU") to control the humidity level and the amount of evaporated chlorine in the pool room. To maintain a comfortable environment for patrons of the pool, the existing AHU exhaust some of the heated internal air to the outside. This air is replaced by fresh outside air that is mixed with the returning inside air and heated to the indoor temperature of the room within which the pool is located.

The existing AHU at the Newton Wave Pool have been in service since its construction 22 years ago. They are not energy efficient and do not achieve the air quality that newer AHU systems provide. Procon Engineering was commissioned by the City to undertake a cost/benefit analysis in relation to replacing the existing AHU with a new high-efficiency dehumidification system. The study concluded that with new units, energy consumption (thereby costs) would be reduced by about 53%. This will result in a payback period for the cost of the new units of approximately six years.

On this basis, staff decided that replacement of the three AHU with a high efficiency dehumidification system is appropriate. A Request for Quotations (RFQ Ref. No. 1220-41-16-09) to replace the three AHU with a highly efficient dehumidification and heat recovery system was issued. There were seven respondents to the RFQ process. The following is a list of the respondents:

- BC Comfort Air Conditioning Ltd.;
- Davidson Brothers Mechanical;
- Fraser Valley Refrigeration;
- Hytek Mechanical;
- Johnson controls L.P.;
- PML Professional Mechanical Ltd.; and
- Custom Air Conditioning/

Based on an evaluation of the responses, staff has determined that the proposal and quote from B.C. Comfort Air Conditioning Ltd. provides the best value to the City.

Funding for this dehumidification project will come from the City's Energy Efficiency Program. Repayment of the amount will be available from the pool operating budget as energy cost savings are realized. As noted above, it is expected that full repayment will occur over the next six years. If energy costs increase during this timeframe, the repayment period will be shorter.

Sustainability Considerations

The Sustainability Charter commits the City, through its Action Framework, to incorporate sustainability elements in its daily business activities and move the City towards reducing its environmental footprint. This project falls within the "Corporate Operations Sphere of Influence" of the Charter. It supports two (Economic and Environmental) of the three "Pillars of Sustainability" within the Charter. Specifically, the installation of the proposed energy efficient dehumidification system will significantly reduce (-53%) the consumption of energy (electricity and gas) by capturing and reusing the energy/heat from the air that would otherwise be exhausted and wasted. Capture and reuse of energy means that less natural gas is required to heat the air and water, which, in turn, reduces the amount of Greenhouse Gases that are emitted into the air thus reducing the City's overall carbon footprint.

CONCLUSION

Based on the above, it is recommended that Council approve the award of a contract to B.C. Comfort Air Conditioning Ltd. for the supply and installation of a dehumidification system at the Newton Wave Pool in the amount of \$850,800, excluding GST.

Original signed by
Jean Lamontagne
General Manager,
Planning and Development

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