



Engineering & Public Works  
Staff Report to Council

File: 0870-20

**DATE:** April 18, 2016  
**TO:** Mayor and Council  
**FROM:** Jay Jackman, Manager of Assets, Infrastructure & Projects  
**SUBJECT:** **Regional Chamber of Commerce Building HVAC Replacement**

**RECOMMENDATIONS:** Council consider and resolve:

1. That a \$20,000 budget be established to retain a qualified Heating Ventilation and Air Conditioning (HVAC) contractor to replace the Chamber of Commerce heating and cooling system;
2. That the funds required come from the General Capital Reserve Fund; and
3. That the District's Financial Plan be amended accordingly.

**PURPOSE:**

This report provides background information on the Chamber of Commerce building located at 34033 Lougheed Highway and recommends that Council approve a budget of \$20,000 to replace the worn out geothermal system with a new stand-alone heat pump.

**BACKGROUND:**

The Regional Chamber of Commerce has been operating out of the building at 34033 Lougheed Highway for many years under an occupancy agreement with the District of Mission. Under this agreement, they have taken care of most building maintenance with little involvement from the District. As such, the District has not been involved in the maintenance of the existing geothermal heating and cooling system over the years and has never established an annual maintenance budget or budgeted for replacement of any component of this building. However, as per the current agreement the District is responsible for capital costs.

**DISCUSSION AND ANALYSIS:**

The geothermal system that was installed at the chamber is the original heat/cooling plant, dating back to 1996. It was installed and maintained by an existing chamber member and has served the building well up until recently. When the system began to fail, much effort was expended trying to figure out whether the system should be repaired or replaced, and if replaced, what it should be replaced with. Staff have now concluded that due to the complexity and expense of geothermal heating/cooling, and the fact that the building has never been serviced with natural gas, the existing end of life system should be replaced with a conventional above-ground heat pump. This will replace the geothermal system at a fraction of the cost without requiring the addition of a gas service to the building. The heat pump will provide both heating and cooling and should the temperature drop below the level where the heat pump is effective, the system will have a backup electric duct heater.

Quotations were provided by three HVAC contractors ranging from \$15,000 to \$20,000 inclusive of PST, exclusive of GST. Included in the quotations are the removal and disposal of the old heat pump, supply and installation of a new heat pump and air handler, new refrigerant piping and exterior

mounted condensing unit and a new electrical breaker and thermostat. Assuming the work goes to the low bidder and a contingency of 25% is included in the budget, the total requested amount of funding is \$20,000. The contingency, if needed, will cover unforeseen issues that may come to light once the existing system is removed.

**COUNCIL GOALS/OBJECTIVES:**

Staff are currently working on an asset management plan for all assets throughout the District. Progress has been made in many areas, however, a comprehensive audit of all facilities has not been completed to date. In the future, the District will have all facilities inspected and have a complete asset management plan in place to ensure that all facilities are kept up to an acceptable service level, thereby greatly reducing the need for “immediate” repairs to District facilities and buildings.

**FINANCIAL IMPLICATIONS:**

Funds for the HVAC replacement can be obtained from the General Capital Reserve Fund, which currently has an uncommitted balance of approximately \$1.6 million.



I have reviewed the financial implications  
Kris Boland, Director of Finance

**COMMUNICATION:**

No communication action is required.

**SUMMARY AND CONCLUSION:**

The District has recently been advised that the old geothermal heating and cooling plant at the Chamber of Commerce building has reached the end of its useful life and is in need of replacement. The system is no longer providing any heating or cooling to the Chamber building. Staff are asking Council to provide funding of \$20,000. With this funding in place, the District can immediately procure the supply and installation of a new heat pump for this building.

**SIGN-OFFS:**



Jay Jackman, Manager of Assets, Infrastructure  
& Projects



Reviewed by:  
Tracy Kyle, Director of Engineering & Public  
Works

Comment from Chief Administrative Officer:  
Reviewed