

NO: R034

COUNCIL DATE: February 20, 2012

REGULAR COUNCIL

TO: Mayor & Council **DATE: February 16, 2012**

FROM: General Manager, Engineering **FILE: 3807-001/11**
General Manager, Finance & Technology

SUBJECT: Additional Contract Authority - Contract No. M.S. 1220-20-03-07
Costs Related to Wire Replacement Made Necessary due to Wire Theft

RECOMMENDATION

The Engineering Department and the Finance & Technology Department recommend that Council approve an additional allocation of \$2,000,000 in the 2012 expenditure authority for Contract M.S. 1220-20-03-07 between the City of Surrey and Cobra Electric Ltd. that will increase the expenditure authority from \$4,667,392.00 (including HST) to \$6,667,392.00 (including HST) with this additional amount to be funded from the City's Self Insurance Reserve Fund and which will be used to cover unanticipated costs associated with replacing street light wire that has been lost due to theft.

BACKGROUND

Contract M.S. 1220-20-03-07 between the City and Cobra Electric provides for the ongoing maintenance of over 29,000 street lights and 360 electrical traffic control devices across the City. The repair of damage including the replacement of wire in the City's street light systems due to wire theft is a component of the work covered by the Contract.

Council adopted the recommendations of Corporate Report No. R139; 2011 (attached as Appendix I) during its Regular meeting on July 25, 2011, which provided \$1,500,000 to cover wire theft occurrences during the contract. Wire theft has been more prolific than was anticipated when Corporate Report No. R139; 2011 was prepared. Such theft is correlated to the price of copper with Table 1 illustrating this point.

Table 1 – Annual Street Light Wire Theft Repair Costs (Calendar Year)

Year	Wire Theft Repair Costs	Average Copper Price (\$/lb.)
2005	\$15,718.38	\$1.65
2006	\$215,696.80	\$3.25
2007	\$1,235,822.68	\$3.40
2008	\$1,168,381.74	\$3.75
2009	\$145,684.60	\$2.30
2010	\$1,268,529.95	\$3.05
2011	\$2,819,392.19	\$3.85

DISCUSSION

With a view to stemming the losses that are being suffered in this area, several wire theft mitigation measures have been implemented by the City; however, due to the historical high price of copper and extensive network of street lights across the City, full protection of the entire system is very challenging.

Wire Theft Mitigation Measures

The following is a description of measures that have been implemented to date and measures that are being studied with a view to deterring wire theft:

1. Since 2006, over 4000 of the City's 29,000 street light poles have been fitted with locking or security bolt hand hole covers at locations where theft has been prevalent. This has had limited success.
2. New street light installations are fitted with lockable hand hole covers and "baffles" within the pole that make street light wire removal more difficult.
3. Staff is finalizing a review related to the use of aluminum wire in place of copper wire across all of the City's street lights. Upon completion of a review, including the development of a full business case, a report will be forwarded to Council complete with recommendations, which should occur in the late spring of this year. Aluminum wire has only 10% of the value of copper on a weight basis in relation to selling it through recyclers; therefore, this change should discourage theft in that the commodity being stolen is less valuable. Where copper wire in the street light system is stolen it is now being replaced with aluminum wire. In this regard, since May of last year 11,000 metres of aluminum wire has been installed. No significant wire theft loss has been experienced at locations that have been retrofitted with aluminum wire.
4. Where new wire is installed, the insulation jacket on the new wire is labeled with the words "Property of the City of Surrey" and is date coded so that it can be identified for prosecution purposes if it is stolen and then recovered.
5. The RCMP continues to address the issue of wire theft at multiple levels. A team involving RCMP members and crime analysts is actively working on the issue. Timely reporting of thefts to the RCMP by the electrical maintenance contractor (Cobra Electric), City staff and Surrey residents has provided increased law enforcement opportunities. This has translated into an increase in the collection and analysis of evidence as well as intelligence on offenders and theft patterns, which will assist increasing the probability of apprehending the offenders.
6. Public awareness of the wire theft issue has been enhanced through various communication / public awareness strategies being implemented by the City and the RCMP. The RCMP has delivered training to various partner groups including community volunteers and City By-law Enforcement officers.
7. The RCMP and By-law Enforcement staff have undertaken more intensive monitoring of metal recyclers in relation to their receipt of stolen wire and to confirm compliance with City By-law requirements in relation to the receipt and storage of materials.
8. An inter-agency Task Force including Bell, Telus, Shaw, BC Hydro, City staff and Provincial officials is working together to develop other theft mitigation strategies. The agencies represented on this Task Force are all facing significant financial losses due to wire theft.
9. The efforts of the inter-agency Task Force helped to convince the Province that additional legislation was required to help deter metal/wire theft. To achieve this, the

Province enacted new Legislation, Bill 13, that establishes new requirements for Dealers regarding recording and reporting details about any metals purchased. They will also have to record details on the seller's personal information which the police will be able to obtain through a court order.

FUNDING

Funding to cover the recommended increase in the allocation for the subject contract to address the costs related to the theft of wire is available from the City's Self Insurance Reserve.

SUSTAINABILITY CONSIDERATIONS

Clearly, wire theft is contrary to the objectives of the City's Sustainability Charter. The actions identified above that are focused on deterring wire theft will assist in achieving the objectives of the Charter; including the following action items:

- EC3: Sustainable infrastructure maintenance and replacement practices;
- EC4: Sustainable Fiscal Management Practices; and
- EN9: Sustainable Engineering standards and practices.

CONCLUSION

Based on the above discussion it is recommended that Council approve an additional allocation of \$2,000,000 in the expenditure authority for Contract M.S. 1220-20-03-07 between the City of Surrey and Cobra Electric Ltd. that will increase the expenditure authority limit from \$4,667,392.00 (including HST) to \$6,667,392.00 (including HST) with this additional amount to be funded from the City's Self Insurance Reserve Fund and which will be used to cover unanticipated costs associated with replacing street light wire that has been lost due to theft.

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Appendix I - Corporate Report No. R139; 2011