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## CITY OF KELOWNA

# MEMORANDUM

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**Date:** March 16, 2001  
**File No.:** 5520-01

**To:** City Manager

**From:** Director of Works and Utilities

**Subject:** **Undergrounding of Wires and Cables**

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### RECOMMENDATION

THAT Council approves the strategy for the burial of electrical wires and communication cables as outlined in the report of the Director of Works and Utilities dated February 28, 2001;

AND THAT staff be directed to bring forward changes to City Policy 101, Subdivision Bylaw and Local Improvement Bylaws to reflect this strategy change.

### DISCUSSION

The City of Kelowna has had an aggressive strategy for many years to require burial of all electrical, telephone and cable wires as part of all new development in the community. In addition, the City Electrical Utility, with cooperation from Telus and Shaw Cable, has been undergrounding existing overhead wires in the City Electrical Utility service area. The benefits of undergrounding are primarily that of beautification of neighborhoods.

There are a number of factors that suggest reconsideration of the present policies and bylaws would be appropriate. Key factors include the following:

- 1) Due to the competitive nature of the telecommunications industry the traditional providers, Telus and Shaw, are financially limited in participating in the cost of undergrounding. Undergrounding typically costs an estimated 3 times what an overhead line would cost. Therefore Telus and Shaw will only participate where they have funds and where there is a benefit to their utility. The net impact is that they are unable to participate on some City undergrounding initiatives or alternatively the City may have to pay up to 100% of the cost of burial of their wires. In addition, new telecommunications companies are in discussion with the City in order to place cables in the City right of way. This will further complicate the coordination and increase costs of undergrounding wires.
- 2) The costs of maintaining, relocating, and upgrading of existing underground cables is very high. For example, as part of the Pandosy project now underway the cost of relocating the existing underground electrical utility is some \$500,000. This includes upgrading of existing plant as well as relocation. It should also be noted that the life span of buried cables is approximately 50-60% of overhead lines.
- 3) West Kootenay Power does not wish to bury transmission and heavy distribution wires due to costs, wire life spans and maintenance reasons.
- 4) The costs of relocating and burial of wires on a redevelopment in an existing area can be a significant impact on the viability of that redevelopment. It has also been suggested that it unfairly places costs on the property owner who is on the side of

the road where the wires are located while providing a benefit to all properties in the area. It is very difficult to establish mechanisms that would share costs among all benefiting properties.

- 5) Deregulation of the telecommunications industry means that customers have choice for service providers. For example a development may chose not to have a television cable provided since there is a conscious decision for satellite service only. As such there may be circumstances where the developer may be unwilling to install or extend wires for a service they do not require.
- 6) In the last two customer surveys done by the City over 70% of respondents indicated an unwillingness to pay increased electrical rates for extending underground wiring to all parts of the City.
- 7) Recent WCB and other safety regulations within the various utilities call for increased separation of cables, larger access chambers to the wires, etc. These have additional cost and road right of way space requirements.

Present policies and bylaws of the City of Kelowna that provide direction on undergrounding of wires include the following:

- 1) OCP – the new draft bylaw continues to encourage undergrounding of wires in all urban town centers and residential urban village areas.
- 2) Subdivision Bylaw – requires burial of wires in all but rural areas for new developments. Standard road cross-section drawings as well as text support the need for undergrounding of wires.
- 3) City Policy 101– identifies that the City will bury wires in the City electrical utility area at it's cost.

With all these factors in mind, recognizing there is still a desire to bury wires in urban town or residential urban village areas and there also may be requests by various residents for burial on specific streets the following strategy is proposed.

- 1) Installation of underground wires and cables will still be required in all new streets created by development.
- 2) Burial of overhead wires will be required in urban town center and residential urban village areas. The City would ensure that new development in these areas would be responsible for burial of wires fronting their property. The City would also look to develop various funding strategies to ensure all wires would ultimately be buried. This would be brought back to Council at a later date.
- 3) Redevelopment in existing areas outside of town and village centers will be given the option whether to bury wires fronting their property. The City's experience is that there is a desire from some developments to bury the fronting wires due to visual impact on their development. Other developments see no benefit.
- 4) In the City electrical utility service area the City will continue burial of wires under the following conditions:
  - a) Where all the telecommunications and City Electrical utilities jointly identify a benefit to burial of the existing wires and agree to financially share in the costs.
  - b) Where requested by residents a local improvement process will be initiated. The Electrical Utility will pay up to 100% of the cost of burial of their wires (depending on costs and local conditions) with all telecommunication costs to the City covered by the Local Improvement process. Residents would pay 100% of any costs assessed by the telecommunications firms.

The impact of the changes in the bylaws would be to reduce the present strategy of burial of wires while resulting in reduced costs of redevelopment of existing areas of the City. There

would be cost savings to the development community as well as to City costs in areas such as Roads DCCs. It also ensures that with new telecommunication players in the market that the excavation of City streets is reduced.

If this strategy direction is supported by Council changes to the City bylaws and policies will be brought before Council for approval. Details of how the bylaw and policy changes impact from a process and cost perspective will be brought forward as part of those changes.

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John Vos

cc. Electric Utility Manager  
Development Engineering Manager  
Director of Planning and Development Services