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TO:

Corporate Report

COUNCIL DATE: October 18,

NO: R260

2004

REGULAR COUNCIL

Mayor & Council DATE: October 5, 2004

FROM: General Manager, FILE: 0410-

Engineering 20(MoT/BIP)

SUBJECT: Proposed Highway 10/ King George Highway

Intersection Widening

RECOMMENDATION

That Council receive this report for information.

INTENT

To advise Council on the Border Infrastructure Program's preferred alignment option for the upgrading of the Highway 10 intersection with King George Highway and the status of community consultation and implementation plans.

BACKGROUND

The Border Infrastructure Program (BIP), administered by the Ministry of Transportation with funding from the Federal Government, is undertaking the four-laning of Highway 10 from Scott Road to 176 Street. This will include upgrading the intersection of Highway 10 with King George Highway. Several alternatives have been examined for the intersection with the preferred alternative being an at-grade diamond intersection design (see attached figure). BIP staff presented this option to Council-in-Committee on April 26, 2004, and explained the principal benefits of this option, as compared to the more conventional single intersection options, as being improved operational safety and significantly greater traffic capacity to accommodate future growth in traffic volumes. Council requested further updates with respect to impacts to adjoining properties and the resolution of any issues with affected property owners, as well as the potential for relocation of the Hydro Sub-Station plus expressed concerns regarding safety aspects of accommodating the Sub-Station within the proposed design.

DISCUSSION

Property Impacts/Community Consultation

BIP advises that in the North-East quadrant of the intersection negotiations are proceeding amicably with the two affected private property owners. One total buy-out will be required and one partial acquisition. Property negotiations for City of Surrey lands will commence within the next month or two. At City Hall, approximately 4,650 sq.m. of property will be required for the realignment of the westbound lane at Highway 10. There will be no conflict with proposed City Hall expansion and related site works. BIP has indicated a willingness to provide an enhanced level of landscaping along the highway past City Hall and for screening of the Hydro Sub-Station.

In the South-East quadrant of the intersection property owners are generally pleased with the at-grade diamond intersection configuration due to its lesser property impacts. Some modest property acquisition may be necessary and discussions are ongoing.

In the South-West quadrant, initial contacts have been made with affected property owners. Some question the concept for creation of a frontage road from 56 Avenue to parallel to King George Highway. The Engineering Department has initiated an independent investigation of frontage road concepts in this quadrant and will be providing the results to BIP.

In the North-West quadrant, the most heavily impacted property is owned by the Province, with only minor impacts to private property. Acquisition discussions have yet to be held.

BC Hydro Sub-Station

BIP project team has met with BC Hydro and BC Transmission Corp. subsequent to the Council presentation. They acknowledge that the preferred design has lower impact to the Sub-Station than the more conventional designs. BCTC has no plans in its current 10 year Electrical Systems Plan to upgrade, decommission, or relocate the Sub-Station, noting that relocation would cost in the order of \$15 – \$25 million.

Safety Review

BIP commissioned an independent safety review of the intersection concept, as well as the Hydro Sub-Station location within the intersection. The conclusion was that the at grade diamond intersection option is expected to perform better from a safety perspective and is preferable to a conventional single-point intersection in this regard. The safety review included recommendations with respect to traffic guide signing and roadside barriers to protect the Hydro Sub-Station as well as providing additional safe access for the Sub-Station.

Project Schedule and Coordination

Design and implementation details of the Highway 10/King George Highway intersection are being coordinated with the City of Surrey and the design for the four-laning of King George Highway from Highway 10 to 64 Avenue. BIP is targeting advertising the intersection construction tender in February 2005 and initiating construction in the Spring. Construction will be concurrent with the City's planned construction on King George Highway, which includes the widening of this road from Highway 10 to 64 Avenue including a traffic signal at 60 Avenue.

CONCLUSION

The BIPs preferred option for the improvement to the Highway 10/King George Highway intersection is an atgrade diamond configuration. The BIP's studies indicated that this proposed intersection option has the best traffic operational, safety, and capacity attributes. An independent safety review has confirmed the safety of the BC Hydro Sub-Station location. This option has the least impact to private properties and property acquisition negotiations are proceeding amicably. The BIP is scheduling construction of the intersection improvement for Spring 2005.

Paul Ham, P. Eng. General Manager, Engineering

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Attachment

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