

Corporate Report

NO: <u>R272</u>

COUNCIL DATE: December 18, 2006

REGULAR COUNCIL

TO: Mayor & Council DATE: December 8, 2006

FROM: General Manager, Engineering PROJECT FILE: 1706-017

SUBJECT: 156 Street/Highway 1 Underpass and

Access Improvements for Fraser Heights

RECOMMENDATION

The Engineering Department recommends that Council receive this report for information.

INTENT

To provide Council with a status report on the proposed 156 Street underpass of Highway 1 for improved access for Fraser Heights, and on other access improvements recently completed or in process.

BACKGROUND AND ACCESS IMPROVEMENTS TO DATE

The City of Surrey and the B.C. Ministry of Transportation have entered into a partnership to improve access for the Fraser Heights community by means of constructing an underpass of Highway No. 1 at 156 Street. This location was chosen as the optimal location, following a joint study which examined options at 152 Street, 156 Street and 160 Street, and has included coordination with the Fraser Gateway Program plans for widening of Highway No. 1. The underpass project will be delivered by the City of Surrey on behalf of the partnership, with the project cost-shared equally with the Ministry.

A project of the scope of the proposed underpass requires two years to plan and implement. In view of this time line, one project to ease access difficulties to/from Fraser Heights during the interim period has just been completed and one project is in process. On 110 Avenue at the entrance to 152 Street and Highway 1 on-ramp (see attached figure), raised median and traffic lane channelization has been installed to separate traffic destined for Guilford from traffic destined to Highway 1, and to prevent traffic from queue-jumping by traveling into opposing traffic lanes. As well, the 154 Street south leg

of the intersection with 110 Avenue has been blocked to prevent shortcutting via 154 Street, and, in consultation with TransLink and Coast Mountain Bus Co., a bus stop has been created within the 110 Avenue channelization. Since implementation of these modifications, staff have received numerous positive comments from Fraser Heights residents, as well as from the Community Association.

The second project, now under construction (see figure attached), is the addition of a right-turn lane on 160 Street at 104 Avenue and installation of a raised centre median on 160 Street. These measures will allow southbound through traffic to Guildford the ability to bypass the queue of right-turn traffic to the 104 Avenue on-ramp to Highway 1, and prevent traffic from driving into the opposing northbound travel lane, as now sometimes occurs. This project is expected to be completed, weather permitting, early in the new year.

Delivery of the 156 Street Underpass

Surrey and the Ministry have chosen Design/Build as the preferred project delivery methodology for the 156 Street/Highway 1 Underpass. Under this methodology, requests are first issued for submission of credentials from competing teams which include both the Design Engineers and the construction Contractors. These credentials are then assessed and a short list determined whose firms are then invited, on the basis of a performance specification, to prepare a detailed design and price proposal. This process compares to the more conventional delivery methodology of Design/Bid/Build where the project design is first completed, following which it is issued for tenders from competing Contractors. For projects of the nature of the 156 Street Underpass, Design/Build delivery is expected to offer the advantage of more potential for innovation in design and time on cost savings in construction.

At this point in time, credentials have been received from six teams and have been evaluated resulting in a short-list comprised of the following three teams:

- Bilfinger Berger (Canada) Ltd., key firm, project management and bridge construction Sandwell Engineering Inc., bridge design
 R. F. Binnie & Associates Ltd., highway design
 MEG Consulting Ltd., geotechnical engineering
 BEL Contracting, highway construction
- B&B Contracting Ltd., key firm and highway construction Neelco Construction Inc., project management and bridge construction SNC-Lavalin Inc., bridge design and highway design GeoPacific Consultants Ltd., geotechnical engineering
- BA Blacktop Ltd., key firm, project management and highway construction Buckland & Taylor Ltd., bridge design McElhanney Engineering Services Ltd., highway design Trow Associates Inc., geotechnical engineering Coquitlam Ridge Construction Ltd., bridge construction

The invitation to these three teams for submission of detailed designs and price proposals will be issued in January. It is anticipated that the successful team will be chosen by early Spring with construction to start shortly thereafter.

An Open House will be scheduled early in 2007 to update residents about the project. The project is targeted for completion in Spring 2008.

CONCLUSION

The 156 Street/Highway 1 Underpass project, in partnership with the Ministry of Transportation, is progressing on schedule. A short list of three design/build teams has now been chosen for the submission of detailed design and price proposals. To ease some key congestion and operational issues in Fraser Heights access in the interim period until the underpass is constructed, one minor improvement project has recently been completed and a second project is under construction.

Paul Ham, P.Eng. General Manager, Engineering

PH/KDZ/brb Attachment

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