

For May 21,2002 Public Hearing Agenda

Memorandum

To:

Joe Erceg

Date:

May 15, 2002

From:

Gordon Chan, P. Eng.

File:

02 - 202908

Director, Transportation

Re:

Rezoning Application - Steveston Academy

Manager, Development Applications

At the April 16, 2002 Planning Committee meeting to consider the rezoning of 4020 Moncton Street from Comprehensive Development Districts (CD/101 and CD/102) to Assembly District (ASY) to accommodate the proposed Steveston Academy, staff were directed to report back on:

"options to resolve the traffic problems in the area of Moncton Street and Garry Street".

This memorandum presents the projected traffic generation by the proposed land use associated with this rezoning application, the planned improvements at various intersections and roadways in the area, and the timing/funding source to undertake such improvements.

1. Proposed Steveston Academy and Related Road Improvements

Steveston Independent School Society has proposed to establish a private school, known as Steveston Academy, with an initial enrolment of 280, increasing to 400 students on a site formerly occupied by BC Packers. This area was planned for single family residential as part of the Imperial Landing redevelopment of the BC Packers land.

Based on the assessment by the traffic consultant retained by the applicant, the school would generate approximately 190 vehicular trips in the a.m. and p.m. peak hours upon opening, increasing to 270 peak hour trips by 2007. All access to the school would be via Moncton Street. By comparison, the overall build-out of Imperial Landing will add 510 and 770 vehicle trips to area roadways during the a.m. and p.m. peak hour respectively. It was concluded by the traffic consultant that the road and traffic improvements being proposed in the vicinity of the site as part of the school development would be adequate to accommodate the anticipated traffic.

As part of the Steveston Academy rezoning requirements, curb extensions will be constructed within the school frontage on Moncton Street to function as traffic calming measures. These devices have proven to be very effective in deterring speeding. Other planned improvements on this roadway include additional curb extensions and streetscape improvements beyond the school frontage as part of the on-going development of the former BC Packers site, the installation of new crosswalks, the designation as a bicycle route, and formalization of on-street parking lanes with the new curb extensions.

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2. Planned Road Improvements in the Area

As for other planned road improvements for locations beyond the proposed Steveston Academy site, the following provides a brief description of the existing intersection configuration, traffic control, and the proposed improvements at five major intersections in the general area.

- Garry Street / No 1 Road This intersection is currently controlled by stop signs on Garry Street together with a special crosswalk equipped with pedestrian-activated amber flashers and enhanced signage which was recently installed. The special crosswalk was introduced to facilitate the crossing of No. 1 Road by pedestrians, especially for the students of McMath Secondary School and area residents. Upon review of the existing traffic volumes, this intersection was found to be functioning well and therefore at this time, no further improvement is considered to be warranted at this location.
- <u>Railway Avenue / Garry Street</u> This is a T-intersection controlled by a stop sign on Garry Street. The critical vehicular movement was found to be the eastbound to northbound left turns with about 200 vehicles per hour making this movement experiencing little delays (30 seconds or less). Based on the observed traffic volumes and extent of delays, the installation of traffic signals at this intersection is not warranted at this time.

Based on the experience gained from other signalized intersections with local side streets, the provision of a traffic signal at this location may have the disadvantage of encouraging additional traffic to short cut through Garry Street. Nevertheless, staff will continue to monitor this location on a regular basis and should the level of pedestrians and traffic volume increases, this location can be considered for upgrade to a pedestrian-activated amber flashers with enhanced signage as an interim measure prior to the ultimate upgrade to a full traffic signal.

• <u>No. 1 Road / Moncton Street</u> - This intersection is controlled by a four-way stop that generally provides an acceptable level of service during the week except for Saturday and Sunday afternoons. The existing traffic control is serving as an effective traffic calming measure to address speed concerns and to preserve Moncton Street (west of No 1 Road) as a pedestrian precinct. This arrangement is similar to the four-way stop control intersection at the only access to Granville Island in Vancouver.

During the weekends, however, the four-way stop control may not be the most effective measure at this intersection when both pedestrian and vehicular volumes are high due to the complexity of right-of-way interpretation by both pedestrians and drivers. This has prompted the need to consider the option of providing full traffic signal control at this intersection. Implementation of a traffic signal at this location is not feasible under the existing road geometry with only a single-lane approach in the northbound and eastbound direction. If this intersection is signalized without widening the approaches, through and right-turning traffic would be impeded by left-turning traffic resulting in great operational inefficiencies.

To explore this option further, the signalization of No. 1 Road and Moncton Street will be examined as part of an overall review of the local road network to improve traffic circulation and maximize on-street parking capacity. This review could include options such a one-way

street system to result in additional on-street parking spaces in the village area. Over the next several months, the Steveston Parking Task Force is expected to discuss these issues, including possible road network changes to complement a new traffic signal at this intersection.

In the longer term, it is also anticipated that when Bayview Road is extended to the east as part of re-development of the former BC Packers site, the traffic through the Steveston Village area would be better distributed and the traffic volume at the intersection of No. 1 Road and Moncton Street would be somewhat relieved.

<u>Railway Avenue / Moncton Street</u> - The intersection is controlled by a pedestrian-activated traffic signal for crossing Moncton Street. Stop signs are also in place for the northbound and southbound approaches on Railway Avenue. A full traffic signal is feasible at this intersection if additional road right-of-way is taken at the northeast corner of the intersection to facilitate a re-alignment of the north-south travel lanes on Railway Avenue. Alternatively, the south leg of the intersection could be widened along the west side to achieve the re-alignment which would require funding allocation from the City's capital program (Roads DCC Program).

At this time, this improvement is not included in the 2002 Major Capital Works Program. The implementation of a full traffic signal at this location will be considered when traffic conditions warrant such an upgrade in the coming years. In the interim, however, it is feasible to add vehicular detection to the northbound approach to activate the "walk" phase when long delays are detected for the northbound vehicles. This would stop the traffic on Moncton Street to allow for the northbound traffic to enter the intersection during peak periods. This improvement is included in the current Traffic Signal Improvement Program for implementation in 2002/3. Vehicular detection is currently provided for the south approach (north leg).

Moncton Street / No 2 Road - This is a three-way stop controlled T-intersection. In the City's Roads DCC Program, the construction of a southbound right-turn lane, a northbound left-turn lane, an eastbound left-turn lane, as well as full traffic signals have been included for implementation when traffic conditions warrant such improvements. This intersection is being monitored on a regular basis for traffic and pedestrian volume changes.

3. Funding of Area Road Improvements

The re-development of the former BC Packers site, including the proposed Steveston Academy, is required to pay the applicable Roads Development Cost Charges (DCC). Beyond this, no other direct funding contribution has been provided by these two developments towards any of the off-site road and traffic improvements described in the previous section of this memorandum. The City's Roads DCC Program would therefore be the sole source of funding for these improvements.

As the Roads DCC funding level is currently projected to be relatively low and diminishing over the next five years, it is most likely that these improvements would be implemented on a "as warranted" basis and under a phased approach within the next five years. Given the present outlook of capital funding availability, it would not be financially feasible for all of the above improvements to be implemented within the short term nor would it be possible to determine the exact timing for implementing these road and traffic projects. Any improvements undertaken by the City under the

Roads DCC program will need to be prioritized on a citywide basis as part the annual review of the Major Capital Works Program.

Gordon Chan, P. Eng.

Director, Transportation

GFC:jh

pc: David McLellan - General Manager, Urban Development