



To: Public Works and Transportation Committee **Date:** May 30, 2005
From: Victor Wei, P. Eng. **File:** 10-6450-01/2005-Vol 01
Acting Director, Transportation
Re: **EXISTING TRAFFIC CONDITIONS ON KIMBERLEY DRIVE AND BAMBERTON DRIVE**

Staff Recommendation

That the attached staff report on existing traffic conditions on Kimberley Drive and Bamberton Drive be received for information.

Victor Wei, P. Eng.
Acting Director, Transportation
(4131)

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|--|---|--------------------------------|
| FOR ORIGINATING DIVISION USE ONLY | | |
| CONCURRENCE OF GENERAL MANAGER | | |
| | | |
| REVIEWED BY TAG | YES <input checked="" type="checkbox"/> DW | NO <input type="checkbox"/> |
| REVIEWED BY CAO | YES <input type="checkbox"/> | NO <input type="checkbox"/> |

Staff Report

Origin

At the Monday, September 20, 2004 regular Council meeting for Public Hearings, where the Zoning Amendment Bylaw 7793 to allow a townhouse development at 7171 Steveston Highway (formerly known as 7051, 7071, 7131, 7171, 7191 and 7211 Steveston Highway) was presented, Council directed staff to report on the existing traffic issues on Kimberley Drive and Bamberton Drive and to review the proposed development's access to Steveston Highway. Specifically, the referral states:

That staff:

- i) investigate the existing traffic issues on Kimberley and Bamberton Drives and identify what traffic calming measures and parking restrictions may be applied; and*
- ii) review the access to Steveston Highway.*

This report presents staff's assessment and conclusion on the above.

Analysis

1. Existing Conditions

Bamberton Drive is a local residential road that runs north-south (approximately 12.0 metres wide) for 575 metres with a bend of 230 metres long to the east-west section (which is approximately 11.6 metres wide). The street is constructed with curb and gutter and a sidewalk along the east and north sides.

Kimberley Drive is a short east-west residential road with approximately 15 single family dwellings along its length. The approximately 8.5-metre wide road is located just north of Steveston Highway running between Gilbert Road and Buttermere Drive (150 metres in length) and bends at its east end to connect with Buttermere Drive. It is constructed with curb and gutter and has a sidewalk on the north side only.

A context map of the area is shown in Attachment 1. There are no on-street parking restrictions in place along the entire length of both streets.

2. Traffic Survey Results

Staff conducted traffic surveys on Bamberton Drive and Kimberley Drive in October 2004, with follow-up traffic surveys being conducted in May 2005. The October 2004 survey results indicated that on Bamberton Drive at Manning Court, the majority of drivers (85%) drove at speeds less than 53 km/h with the average speed being 43 km/h. On Kimberley Drive west of Buttermere Drive, the majority of the drivers (85%) drove at speeds less than 47 km/h with the average speed being 39 km/h. The posted speed limit on both roads is 50 km/h. The May 2005 survey results confirmed the October 2004 results, which showed that on Bamberton Drive the majority of drivers drove at speeds less than 55 km/h with an average speed of 44 km/h and on Kimberley Drive the majority of drivers drove at speeds less than 48 km/h with an average speed of 40 km/h.

Recent traffic counts conducted by staff on Bamberton Drive indicate that the volume of traffic has a peak of 26 vehicles per hour (vph) in the southbound direction, while the peak traffic volume on Kimberley Drive is 22 vph in the eastbound direction. The following table summarizes the traffic speed and volumes observed from the recent traffic surveys on both streets.

Summary of Traffic Speed and Volume

| Location | Date | Traffic Speeds | | Posted Speed Limit (km/h) | Peak volume (vph) | AADT* Volume (vpd) |
|--|----------|------------------------------------|--------------------|---------------------------|--------------------|--------------------|
| | | 85 th Percentile (km/h) | Average (km/h) | | | |
| Bamberton Drive at Manning Court - northbound | Oct 2004 | 53 | 43 | 50 | 22 | 242 |
| | May 2005 | 55 | 44 | | 20 | 254 |
| Bamberton Drive at Manning Court - southbound | Oct 2004 | 53 | 42 | 50 | 26 | 173 |
| | May 2005 | 53 | 43 | | n/a ⁽¹⁾ | n/a ⁽¹⁾ |
| Kimberley Drive west of Buttermere Drive - eastbound | Oct 2004 | 47 | 39 | 50 | 22 | 103 |
| | May 2005 | 48 | n/a ⁽¹⁾ | | 13 | 93 |
| Kimberley Drive west of Buttermere Drive - westbound | Oct 2004 | 47 | 39 | 50 | 20 | 122 |
| | May 2005 | 48 | 40 | | 10 | 105 |

* AADT = Average Annual Daily Traffic (vehicles per day)

⁽¹⁾ no data available due to malfunction in traffic counter

In summary, the observed volume of traffic on both Bamberton Drive and Kimberley Drive are well within the expected volume for a local residential road, and the traffic speeds were found to be at a level characteristic of a similar local road (as described in the Geometric Design Guide for Canadian Roads published by the Transportation Association of Canada). Therefore, traffic calming measures are not recommended at this time. Staff will continue to monitor the situation on both Kimberley Drive and Bamberton Drive to determine if changes to traffic volumes or speeds indicate a need for traffic calming measures in the future.

3. On-street Parking Conditions on Bamberton Drive and Kimberley Drive

New on-street parking restrictions on Bamberton Drive and Kimberley Drive are not recommended at this time, as no parking problems were observed by staff. In addition, on-street parking is currently available on Gilbert Road just north of Steveston Highway from 6 p.m. to 7 a.m. on weekdays and all day on weekends. Staff will continue to monitor the on-street parking conditions in this area.

4. Steveston Highway Access at 7171 Steveston Highway

Staff have reviewed the proposed access to Steveston Highway at the townhouse development site at 7171 Steveston Highway. The suggestion to restrict traffic movements to and from this site to right-in / right-out traffic movements could encourage traffic travelling from the north and west of this site to use Bamberton Drive from Gilbert Road due to the inability to make a left turn from Steveston Highway into the site. In addition, introducing a raised centre median to restrict traffic movements at this section of Steveston Highway where there currently are no medians (the nearest raised centre median is 3.0 km east at Seaward Gate) would be a potential safety concern as drivers would not be expecting a median in this area. Staff therefore concluded that full-movement access to the site would be adequate as is currently proposed as part of the development.

5. Future Traffic Assessment

Staff will conduct a traffic assessment following the full occupation of the development site at 7171 Steveston Highway to determine its impact on the surrounding local roads, particularly Bamberton Drive and Kimberley Drive. This study will identify any significant changes in traffic patterns in the area and determine whether any remedial measures are required to address traffic safety concerns generated by traffic to/from the development site.

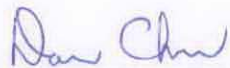
Financial Impact

There is no financial impact to the City at this time.

Conclusion

Staff have reviewed traffic conditions on Bamberton Drive and Kimberley Drive in response to recent concerns raised by area residents regarding a proposed townhouse development at 7171 Steveston Highway, and possible traffic speeding and traffic volumes along these roadways. The review results concluded that current traffic volumes and speeds are not unusually high for a local residential road and that residential parking restrictions are not necessary at this time. Staff also concluded that the Steveston Highway access to the development site at 7171 Steveston Highway would be adequate as planned.

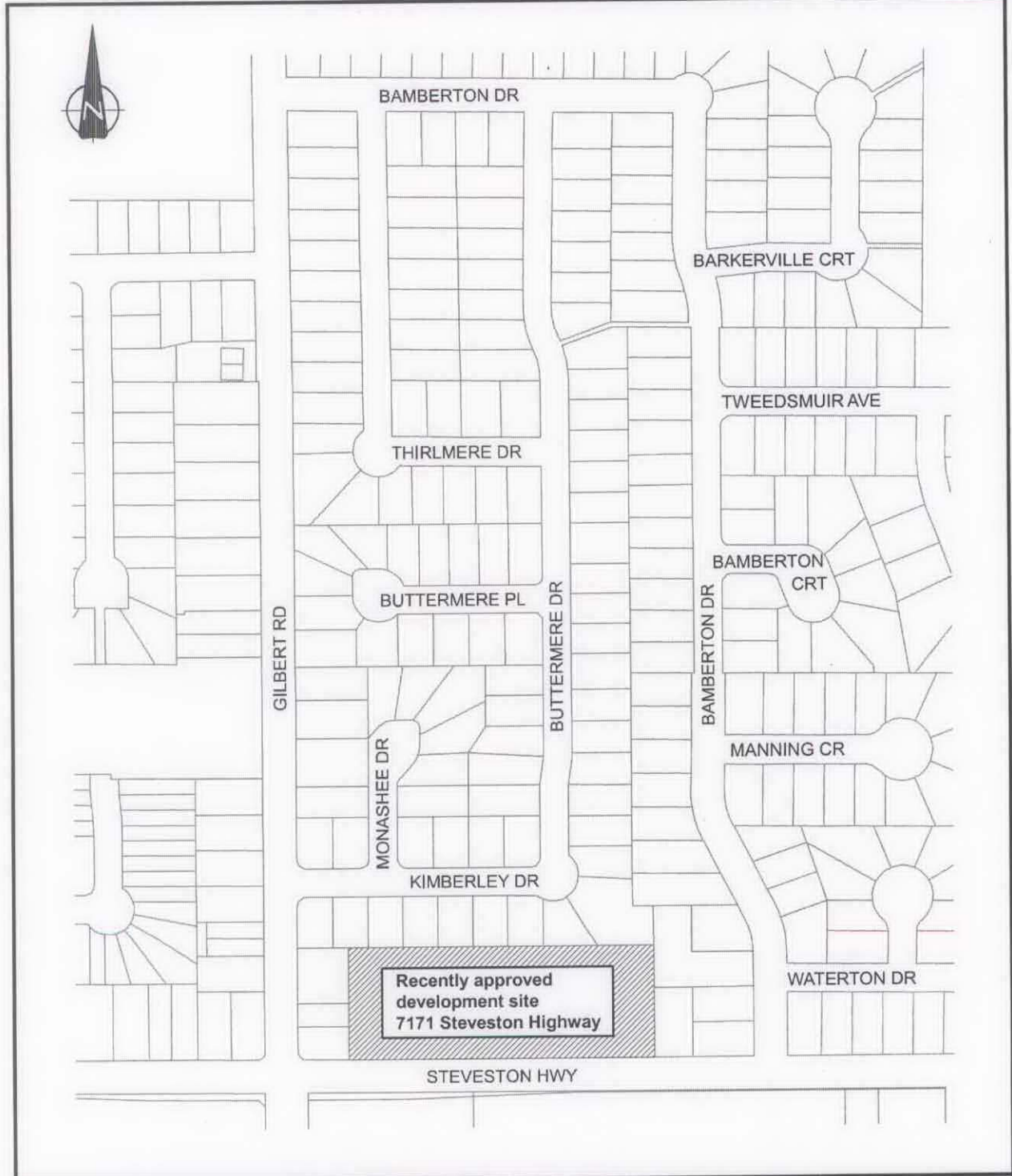
Notwithstanding, staff will continue to monitor the situation by conducting a follow-up traffic study when the development site is fully occupied to determine any impact on the surrounding local roads, particularly Bamberton Drive and Kimberley Drive.



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Local Road Network in Vicinity of
7171 Steveston Highway Development Site