

CITY OF BURNABY

D

TRAFFIC SAFETY COMMITTEE

*HIS WORSHIP, THE MAYOR
AND COUNCILLORS*

SUBJECT: TRAFFIC IN THE ESMOND AVE. AND DOMINION ST. AREA

RECOMMENDATION:

1. **THAT** Council forward a copy of this report to Ms. Pat Morrison, #208 - 3183 Esmond Ave, Burnaby BC, V5G 4V6.

REPORT

The Traffic Safety Committee, at its meeting held on 2004 December 07, received and adopted the attached report in response to correspondence from Ms. Pat Morrison regarding traffic in her immediate neighbourhood.

Respectfully submitted,

Councillor Doug Evans
Chair

Councillor Nick Volkow
Vice Chair

Councillor Lee Rankin
Member

COPY: CITY MANAGER
DIRECTOR PLANNING AND BUILDING
DIRECTOR ENGINEERING

TO: TRAFFIC SAFETY COMMITTEE **DATE:** 2004 11 22
FROM: ASST. DIRECTOR ENGINEERING,
TRAFFIC & ENGINEERING SYSTEMS **FILE:** 38000-20
SUBJECT: TRAFFIC IN THE ESMOND AVE AND DOMINION ST AREA
PURPOSE: To respond to correspondence from Miss Pat Morrison regarding traffic in her immediate neighbourhood.

RECOMMENDATION:

1. **THAT** a copy of this report be sent to Ms. Pat Morrison, #208 - 3183 Esmond Ave, Burnaby BC, V5G 4V6.

REPORT

1.0 INTRODUCTION

At its last meeting, the Committee received referred correspondence from Ms. Pat Morrison who was concerned with traffic in her neighbourhood. Ms. Morrison lives off Esmond in the neighbourhood bounded by Canada Way, Grandview Highway, the Freeway corridor and Broad View Park. In response to prior expressions of concern from Ms. Morrison, staff carried out an extensive series of speed classified traffic counts in her area in 2003 and the data from these are discussed below.

2.0 BACKGROUND

The development of Ms. Morrison's immediate neighbourhood is guided by Community Plan Eight. Apart from commercial development on Canada Way and Boundary, the plan indicates redevelopment of this neighbourhood to medium density residential. A substantial proportion of this plan, including the correspondent's residential development has been achieved. Accordingly, neighbourhood generated traffic will continue to increase. The primary outlet for this traffic is the signalized intersection of Smith Ave and Canada Way.

Norfolk St formerly had access to Boundary Road and Esmond to Canada Way but the links were closed when the development, in which Ms. Morrison resides, was constructed. The Community Plan indicates that the present access to Grandview Highway via Esmond will be terminated by proposed development fronting Manor St. The buffer strip adjacent Grandview anticipates acquisition of south side properties to expand the Grandview Highway right-of-way.

3.0 REVIEW

3.1 Traffic Control

The intersections within the defined residential neighbourhood are stop sign controlled with a generally alternating pattern as shown on Figure 1. Smith Ave, as the major outlet to Canada Way, is provided with more through capacity. Ms. Morrison has noted that some vehicles "California Stop" at the stop control. This unfortunately is endemic, especially at intersections where cross traffic is light. Our observations elsewhere indicate that most motorists who flout the stop control with a rolling stop do so with some prudence in that they can readily stop if there is cross street traffic. In my recent site visits I did not witness any breaches of the stop control. Our tour of the area identified some stop signs partially obscured by foliage and some worn or missing stop bar road markings. These are being remedied. It should be noted that the access from the neighbourhood to Boundary Road is restricted – by the median at Manor and left turn restrictions (2:00pm to 6:00pm) at Esmond. The latter were implemented to address safety concerns at this intersection.

3.2 Traffic Safety

We reviewed the number of collisions at the 6 intersections internal to the neighbourhood over the recent most recent 5 years and found a collision rate of 0.3 per annum. . The number of collisions within the neighbourhood is infrequent, semi random and not considered anomalous. As would be anticipated the number of crashes increases with the volume of conflicting flows and is higher at the major road intersection peripheral to the neighbourhood. The higher crash rate at Boundary Road and Dominion St appears to be diminishing with average of the most recent two years being about half the annual rate for the prior three years while other intersections do not exhibit any trend.

3.3 Traffic Volume

Figure 1, referred to above, also shows the 24 hour weekday traffic volumes we recorded in 2003 in response to Ms. Morrison's prior concerns. The total traffic recorded on each link is well within the residential street limit of 3,000 vehicles per day.

3.4 Traffic Speeds

The 2003 series of traffic counts included a vehicle speed classification. We found that vehicle speeds were moderate. Speeds on Dominion in proximity to the correspondent's residence are tabulated below.

Direction		Speed (Km/H)	
From	To	Median	85th Percentile
Boundary	Esmond	44	48
Esmond	Boundary	33	34
Esmond	Smith	41	53
Smith	Esmond	38	46

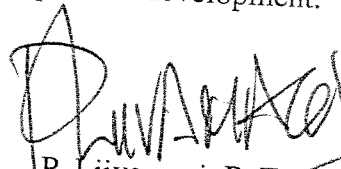
The median (50th percentile) speed is akin to the average and indicates that half of the vehicles are travelling above that speed and the other half below. The 85th percentile speed is generally used as an indicator of speeding for law enforcement purposes although there are jurisdictions which use 85th percentile as a guide for setting speed limits. In the case of Dominion, with stop control at the end of each block, the 85th percentile speeds are typically at or below the 50 km/h urban limit. As would be expected speeds on through streets were found to be somewhat higher.

3.5 Extraneous Traffic

There is some indication of shortcutting traffic based on the directional traffic volumes recorded on Smith St, north of the Canada Way signal. While it is difficult to tease apart the shortcutting traffic from the neighbourhood total we would assume that in the am peak the traffic entering the neighbourhood (northbound) would be less than the traffic exiting and the reverse would apply in the evening. Based on this hypothesis our conclusion is that there is a small number of vehicles that may be shortcutting. The most plausible shortcut is between Smith and Grandview Highway. Other combinations of entering and exiting traffic, in peak hours to avoid congestion on major roads, are much less likely to meet the test of reasonable driver behaviour. The directional flows on Esmond south of Grandview Highway are low and relatively consistent throughout the day – typically less than one vehicle per minute.

4.0 CONCLUSION

Our site observations supplemented by extensive traffic volume and speed counts as well as collision data does not indicate a traffic/safety problem. There is probably a trickle of motorists shortcutting through the neighbourhood between Smith/Canada Way and Esmond/Grandview Highway. We would expect that much of this traffic is attributable to the area immediately south of Canada Way rather than long distance commuting. We also note that the Esmond link to Grandview will be closed with future development along Manor and/or Grandview Highway widening. The volume of traffic in the neighbourhood will not be significantly changed by this as neighbourhood traffic will continue to grow with the higher density of planned development.



P. Liivamagi, P. Eng.
ASST. DIRECTOR ENGINEERING,
TRAFFIC & ENG. SYSTEMS

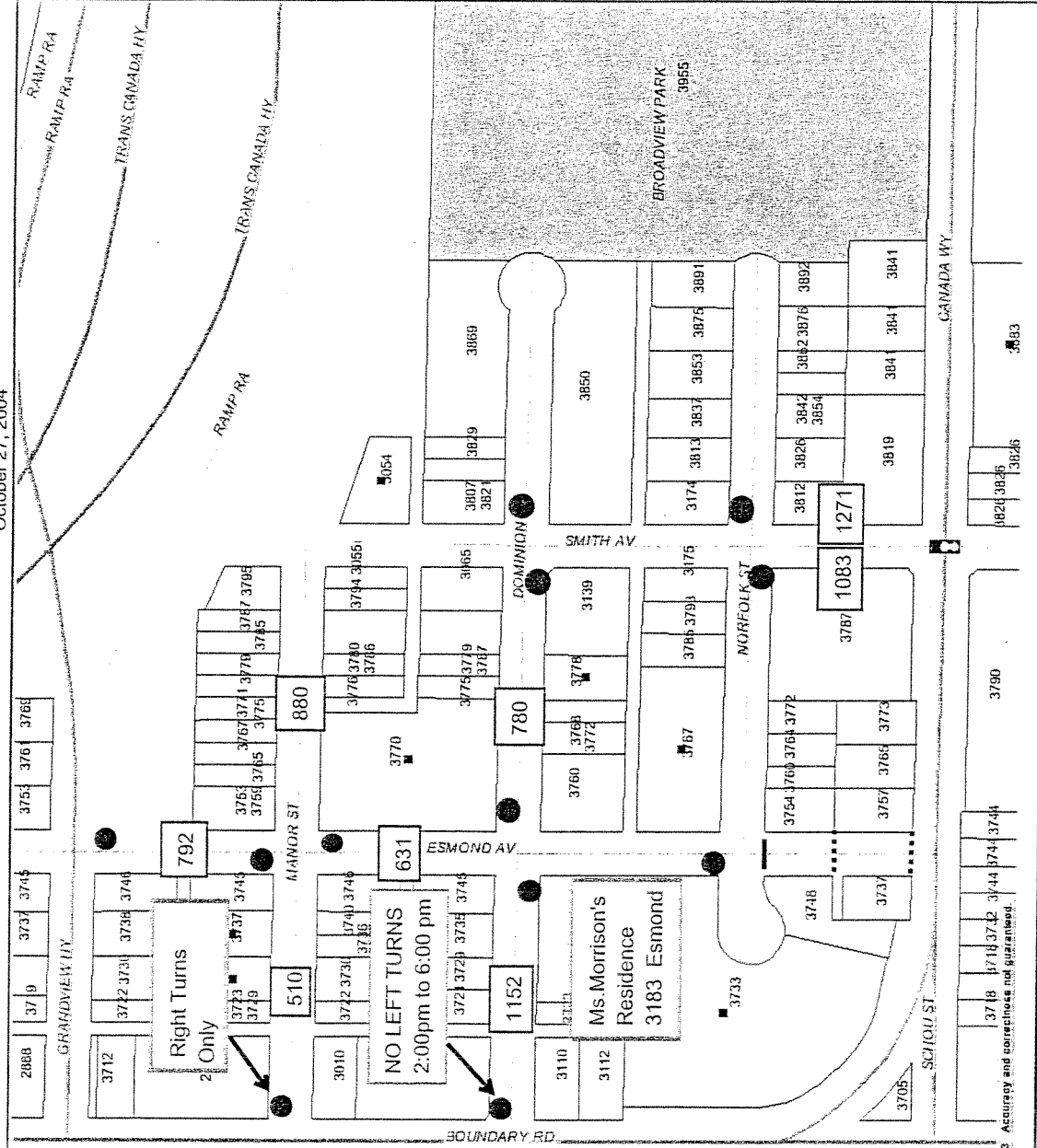
PL:jb
Attach.

cc: City Manager

FIGURE 1

Esmond Ave and Dominion St Area Traffic Data

October 27, 2004



City of Burnaby - Copyright (c) 2003. Accuracy and completeness not guaranteed.

This information has been gathered and assembled on the City of Burnaby's computer systems. Data provided herein is derived from a number of sources with varying levels of accuracy. The City of Burnaby disclaims all responsibility for the accuracy or completeness of information contained herein.

Map Scale
1 : 3000