

CITY OF BURNABY

TRAFFIC SAFETY COMMITTEE

*HIS WORSHIP, THE MAYOR
AND COUNCILLORS*

SUBJECT: CORRESPONDENCE: GAGLARDI WAY SOUND AND SAFETY BARRIER

RECOMMENDATION:

1. **THAT** Council forward a copy of this report Mr. Mark Whaley, 2899 Neptune Crescent, Burnaby, B.C. V3J 7A4.

REPORT

The Traffic Safety Committee, at its meeting held on 2003 February 04, received and adopted the *attached* report responding to correspondence including a petition from the residents of Simon Fraser Hills regarding the installation of a traffic safety barrier to attenuate traffic noise.

Respectfully submitted,

Councillor D. Evans
Chair

Councillor N. Volkow
Vice Chair

Councillor L. Rankin
Member

COPY: CITY MANAGER
DIR. PLNG. & BLDG.

City of Burnaby

INTER-OFFICE COMMUNICATION

TO: TRAFFIC SAFETY COMMITTEE **DATE:** 2002 12 18
FROM: ASST. DIRECTOR ENGINEERING,
TRAFFIC & ENGINEERING SYSTEMS **FILE:** 60-09-01
50-01-11
**SUBJECT: CORRESPONDENCE: "GAGLARDI WAY SOUND AND
SAFETY BARRIER"**

PURPOSE: To respond to correspondence including a petition from the residents of Simon Fraser Hills regarding the installation of a traffic safety barrier to attenuate traffic noise.

RECOMMENDATION:

1. **THAT** a copy of this report be sent to Mr. Mark Whaley, 2899 Neptune Crescent, Burnaby BC, V3J 7A4.

R E P O R T

1.0 INTRODUCTION

Council, at its meeting held on 2002 September 30, received correspondence and a petition from the residents in the Simon Fraser Hills townhouses regarding a Gaglardi Way sound and safety barrier. Arising from consideration of the petition, Council resolved to refer the matter to the Traffic & Transportation Committee (Traffic Safety Division) for consideration.

The Traffic & Transportation Committee (Traffic Safety Division), at its meeting held on 2002 November 05, received the referred correspondence and requested that staff report on the matter.

2.0 BACKGROUND

Residents of the townhouse strata complexes abutting the east side of Gaglardi Way have been in contact with the City seeking noise mitigation measures. The properties in this area generally lie below the elevation of the highway which is constructed on a filled embankment to enable the overpassing of Eastlake. The distance from the edge of road to property line varies from approximately 12 to 27 metres approximating the toe of the road embankment at its wider points (Exhibit 1, attached).

Gaglardi Way was constructed by the Provincial Government circa 1965 and the adjacent residential area was developed starting in the early 1970's. The Provincial Government devolved Gaglardi Way to the City in 1999 and the roadway is included in the regional Major Road Network. Traffic volumes on Gaglardi Way in this reach have been recently counted at 21,000 vehicles per (24 hour) weekday.

3.0 TRAFFIC NOISE

The issue of traffic noise was broached by the residents of Strata NW97 in 1999 when they proposed construction of a berm between the roadway and their development. A staff report to Council responded to that suggestion. It was found that the berm proposal was technically infeasible. It was also noted that Council adopted policy states "that arterial road improvements be designed to buffer adjacent residential areas from traffic noise and visual intrusion". This policy is geared to construction of new facilities through existing residential areas. The assumption is that where highways already co-exist with adjacent residential development, the social costs of factors such as noise and visual intrusion have been internalized.

The residents current petition to Council was supported by the attached statement (Exhibit 2) and proposes the introduction of a roadside crash barrier to attenuate traffic noise as well as protect pedestrians.

In response to the residents' concern, staff carried out an on-site noise study over a 24 hour period. It was found that the "average" sound level was 61.5 dBA (LEq). This is not considered anomalous for a residential site adjacent a major road. Staff also estimated the effect of a roadside concrete safety barrier using two different methodologies. It was found that a significant noise attenuation of 6-8 dBA would occur at the strata units closest to the road. At double that distance, the attenuation effect diminished to the point of being imperceptible to the average person. This positive effect of the relatively low roadside barrier can be attributed to the road noise source being higher than the ground elevation of the housing complex. Accordingly, in this instance a roadside crash barrier would be beneficial to the residents closest to it.

4.0 SIDEWALK PROPOSAL

Subsequent to the opening of the new Burnaby Mountain Secondary School, staff counted pedestrians crossing Gaglardi Way at the Broadway (west leg) signal and walking to school along the east side of Gaglardi. Approximately 30 students were observed using the existing footpath shown on Exhibit 1. None of the students accessed the school from Gaglardi Way using the Eastlake overpass.

At that time, staff considered a design concept shown in cross-section on Exhibit 3 to "formalize" the trail. It includes a shared paved shoulder with sidewalk protected by a safety barrier. It is noted that the highway right-of-way narrows as it approaches Broadway while the slope of the embankment steepens thereby reducing the scope for widening the highway with fill. In addition, the widening of the travelled portion of the roadway to provide the left turn at Broadway was retrofitted at the expense of the paved shoulder(s). It would appear that a retaining wall would be required in this critical area and trigger additional expensive drainage work. Accordingly, with these assumed constraints the cost of the work was estimated at \$500,000 and the project was not included with the other more cost effective pedestrian improvements that could be more readily implemented at that time.

5.0 DISCUSSION AND CONCLUSION

The roadside crash barrier sought by residents as a noise attenuation measure warrants consideration in the context of pedestrian safety improvements along this section of Gaglardi Way. Accordingly it is proposed that an off road pedestrian walkway along the east side of Gaglardi Way from the Broadway signal to Eastlake be further considered through more detailed design. The cost of the study would be included in forthcoming budgeting and the cost of the project could then be included in a future Capital Program as priorities warrant.

It is recommended that the coordinator of the petition be sent a copy of this report for dissemination to residents and strata councils.



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

PL:jb
Attach.

cc: City Manager
Director Planning

Exhibit 1 Gaglardi Way : Broadway to Eastlake



"Gaglardi Sound and Safety Barrier"

Exhibit 2

We've been working with City staff for a number of years but have had little success in implementing a sound and safety barrier. We'd like to reiterate our position in hopes that Council will direct staff to do the right thing.

We feel traffic has increased greatly since the addition of the Broadway connection on Gaglardi and our quality of life has greatly diminished with the increase of noise and dust. The traffic is certain to increase even more with the opening of the Sky Train and the planned SFU village. Also, we notice many children walking down the edge of the highway to and from school every day and we are very concerned about their safety.

We do appreciate the fact that the city put some trees along Gaglardi way but unfortunately they do not offer noise reduction and most of them are dying. So instead of replanting we feel the money would be better spent on a 32" New Jersey style barrier placed at the roadside. This would be a great improvement to reduce the noise and dust impacting on our homes especially as the majority of sound is generated at the engine and wheel level and the road is elevated. This barrier would also provide a safe path for the children walking down the highway.

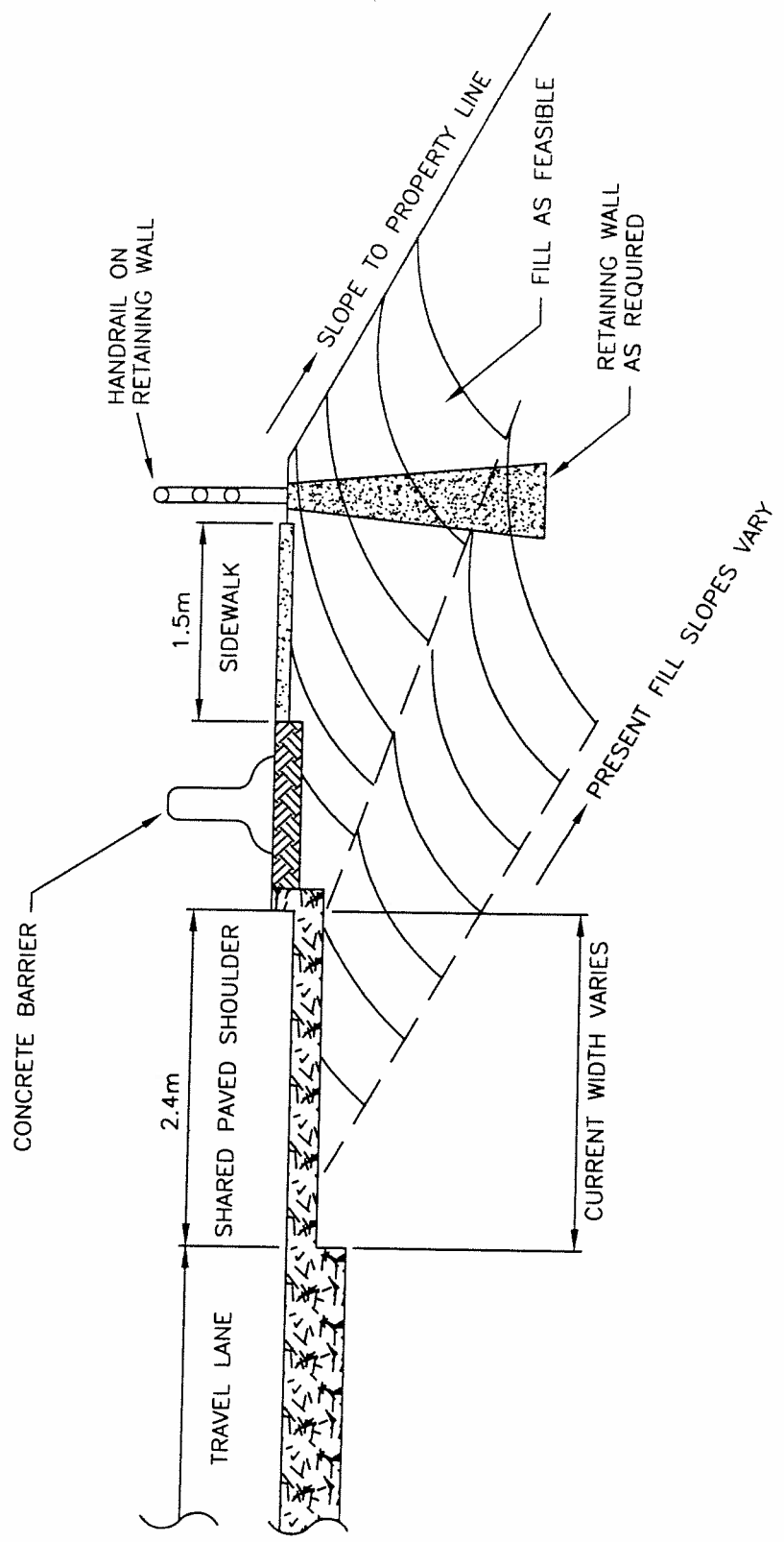
Installing this type of barrier would be substantially cheaper than a proper sound wall and sidewalk and would be almost as effective and there appears to be plenty of space at the roadside and even on the Eastlake overpass.

Another major consideration is that after the first accident involving a child

on this highway the City will be forced to build a full sidewalk and barrier. Our suggestion will save the taxpayers money in the long run and make things safer now, instead of when it's too late.

Submitted by

Mr. Mark Whaley
"Sound and Safety Barrier" Representative
2899 Neptune Crescent
Burnaby, BC V3J 7A4



GAGLARDI WAY EAST SIDE LOOKING NORTH FROM EASTLAKE

NO.	DATE	REVISION



PROPOSED GAGLARDI WAY
EDGE OF ROAD TREATMENT 39

DRAWN BY: G.FUNK	SCALE: N.T.S.	A 585
APPR'V'D BY:	DATE: 02-12-10	

