

TO: CITY MANAGER 1994 APRIL 18

FROM: DIRECTOR PLANNING AND BUILDING OUR FILE: 08.640

**SUBJECT: BARNET/HASTINGS PEOPLE MOVING PROJECT:
NOISE ATTENUATION FENCING ALONG INLET DRIVE**

PURPOSE: To advise Council of the results of a consultation process with the residents of Inlet Drive to determine their position on the need and desirability to establish noise attenuation fencing along Inlet Drive as part of the Barnet/Hastings People Moving Project.

RECOMMENDATIONS:

1. **THAT** the Ministry of Transportation and Highways be requested to incorporate decorative, concrete noise attenuation fencing along the Inlet Drive block fronts as shown on Figure 1 *attached*.
2. **THAT** the Ministry prepare the design details of the acoustic fencing in collaboration with the Inlet Drive residents with the intent of ensuring the water views from the east side of Inlet Drive are not impaired.
3. **THAT** in keeping with established municipal policy, the Ministry be requested to incorporate the proposed acoustical fencing as an integral component of the Barnet/Hastings People Moving Project and accept responsibility for its funding.
4. **THAT** a copy of this report be forwarded to the Honourable J. Pement, Minister of Transportation and Highways, the Project Manager, Barnet/Hastings People Moving Project and Mr. Barry Jones, M.L.A. Burnaby North.
5. **THAT** the affected residents abutting Inlet Drive be forwarded a copy of this report.

REPORT

1.0 BACKGROUND

Following receipt of a report on frontage improvements along Inlet Drive associated with the Barnet/Hastings People Moving Project at its meeting of 1994 January 24, Council requested that staff meet with Inlet Drive residents to determine whether there is a consensus concerning the need for noise attenuation fencing along that portion of the project abutting Inlet Drive.

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On 1994 February 23, staff met with the majority of the Inlet Drive residents at Lochdale School to discuss this issue. As a result of this meeting, there appeared to be a consensus opinion that decorative, concrete (as opposed to wood) fencing be incorporated in the project similar to what has been provided along the Upper Levels Highway east of Lonsdale Avenue in North Vancouver.

It was further agreed at the 1994 February 23 meeting that the Planning and Building Department would prepare a preliminary concept for the placement of the fencing material for the review of the residents prior to reporting back to Council. This material was prepared and individual invitations to each householder were sent inviting them to a meeting at the Burnaby Village Museum on 1994 March 26.

At the meeting of 1994 March 26, residents were able to get a more definitive impression as to the probable location of the fencing relative to the property lines and its approximate height. It was indicated to the residents that on average the noise attenuation fencing would result in marginal improvements in the actual noise levels. There was a strong consensus of those who attended the meeting for the fencing. This was particularly evident for those residents on the west side of Inlet Drive. Strong support was also indicated for those on the east side **conditional** to the fencing being of a height that it would not block out the existing views from their dwellings. Generally, the fencing height as discussed with the residents ranges from 1.5m to 1.8m. It was recognized and accepted by those residents that this would somewhat reduce the effectiveness of the noise attenuation fencing.

2.0 SURVEY RESULTS

To ensure that everyone along Inlet Drive was given full opportunity to express their position on the fencing question, a questionnaire (**Attachment 1**) was circulated on 1994 March 28 to every affected household along with the request that it be completed and returned by 1994 April 8.

A total of 38 questionnaires were distributed. As of the date of writing, 31 (82 percent) of the affected households had returned their questionnaires. Of these, 5 returnees indicated that they were not in favour of acoustical fencing along Inlet Drive (3 three south of Ridge Dr. and 2 north of Ridge Dr.). 84 percent of the households returning the questionnaire favoured acoustical fencing. Of these, 65 percent favoured fencing on both sides of Inlet Drive, while 19 percent restricted comment to the owner's side of Inlet Drive.

The following summarizes the results of the survey on a block front by block front basis:

<u>BLOCK FRONT</u>	<u>PROPERTIES</u>
West Side of Inlet Drive (South of Belcarra Drive)	7
In favour of both sides of Inlet Dr.	4
In favour on owner's side of Inlet Dr.	2
No reply	1

6/6 properties (100 percent) returning questionnaire in favour of fencing

Recommendation: Provide fencing along this block front

West Side of Inlet Drive (North of Belcarra Drive)	8
In favour of both sides of Inlet Dr.	4
In favour of owner's side of Inlet Dr.	2
No reply	2

6/6 properties (100 percent) returning questionnaire in favour of fencing

Recommendation: Provide fencing along this block front

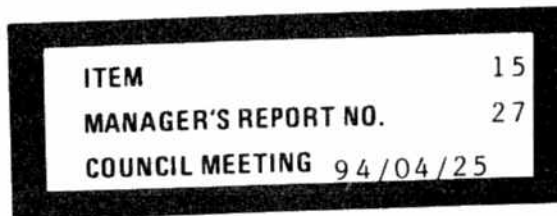
East Side of Inlet Drive (South of Ridge Drive)	4
In favour on owner's side of Inlet Dr.	1
Not in favour on owners' side of Inlet Dr.	*3

*Note: these 3 returns indicated their support for fencing generally along Inlet Drive. Their opposition was in relation to their specific frontages only

1/4 properties (25 percent) returning questionnaire in favour of fencing

Recommendation: Do not provide fencing along this block front

This recommendation recognizes that to be effective noise attenuation fencing needs to have continuity along a block face. It would not be effective from a cost and noise attenuation perspective to construct fencing adjacent to only one property along this frontage.



<u>BLOCK FRONT</u>	<u>PROPERTIES</u>
East Side of Inlet Drive (North of Ridge Drive)	19
In favour of both sides of Inlet Dr.	12
In favour on owners' side of Inlet Dr.	1
Not in favour on owners' side of Inlet Dr.	1
Not in favour of any fencing	1
No reply	4

13/15 properties (87 percent) that returned questionnaire in favour of fencing.

Recommendation: Provide fencing along this block front

It is proposed that the acoustic fencing be constructed slightly lower in front of the two owners that provided a negative response along this block front. This would help alleviate any concern relating to a potential loss of view.

3.0 TRAFFIC NOISE REDUCTION

Acoustic consultants to the Barnet/Hastings Highway Project completed a preliminary acoustical evaluation of the Inlet Drive portion of the project and established a base sound level along Inlet Drive of 66 dBA. Their review indicated that a major noise impact would not occur along Inlet Drive as a result of the widening of Inlet Drive from two lanes to four lanes, with projected changes ranging from -1 to +2 dBA on the west side to +1 to +2 dBA on the east side if no noise fencing were constructed. With a 1.5m noise barrier erected, it has been estimated that there would be a noise reduction, compared to existing levels, of from -1.5 to -6 dBA on the west side of Inlet Drive to -1 to -4 dBA on the east side. As part of our consultation process with the residents, they have been made aware that these are not large noise reduction levels. An increase or decrease of 0 to 2 dBA in traffic noise is not perceptible. A difference of 3 to 4 dBA is barely perceptible, while a difference of 5 to 6 dBA is clearly noticeable. An increase of 10 dBA is subjectively twice as loud.

Staff discussed the issue of reverberation with the acoustic consultant who indicated that this likely can be addressed at the time of detailed design with the introduction of a slight slope of the fencing on the west side of Inlet Drive should it prove to be necessary. This would have the purpose of deflecting any mirrored sound back over the top of the dwellings on the east side of Inlet Drive.

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The residents are aware of the magnitude of the noise improvements that would result from the provision of noise fencing. They have also expressed the view that the fencing will also provide a visual buffer to the road and allow their front yard areas to be more useable.

The specifics of landscaping at street end locations and adjacent to the fencing will have to be addressed at the time of design. Conceptually, it is proposed that planting along road side of the fencing be oriented to low maintenance and hardy plant material such as ivy or other ground cover planting.

4.0 FUNDING RESPONSIBILITY

Staff have discussed the noise fencing issue with the Barnet/Hastings People Moving Project staff and have determined that the Inlet Drive portion of the project is projected to be put out to tender in 1995 January, with construction to commence in 1995 March and completion by the end of the summer. This leaves ample time for the noise attenuation to be designed in collaboration with the residents and incorporated within the project.

The project office has advised that Provincial funding policy stipulates that noise attenuation fencing on urban roadways falls outside project funding, and as such would become the full responsibility of the City. The only exception to this has been on Freeways where the Province has accepted funding responsibility for noise fencing.

A proper estimate for the construction of the decorative, concrete fencing has not been prepared as this would require a more detailed design than has been undertaken. However, this department is of the opinion that a fence along the recommended portions of Inlet Drive (see attached Figure 1) could be in the order of \$375,000.

Two of the policies of the Council adopted Transportation Plan for Burnaby adopted in 1979 included the following:

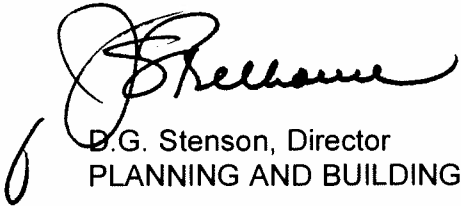
"THAT Council support the development of a long range program to buffer residential areas from existing arterials to help improve the livability and general environment of the flanking residential dwellings", and

"THAT in the development of new arterial routes within the Municipality, every effort will be made to help minimize those particular problems associated with abutting land uses and identified in environmental impact assessments by such possible means as cuts, berming, fencing, acquisition of additional rights-of-way widths and purchase of property".

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In addition, the draft Burnaby Transportation Plan (1994) includes relevant policies under Neighbourhood Livability (#29) that stipulates *"That arterial road improvements be designed to buffer adjacent residential areas from traffic noise and visual intrusion"* and under Managing the Transportation System (#33) *"that the City take the lead in seeking a coordinated position on transportation matters of relevance to Burnaby and adjacent municipalities"*.

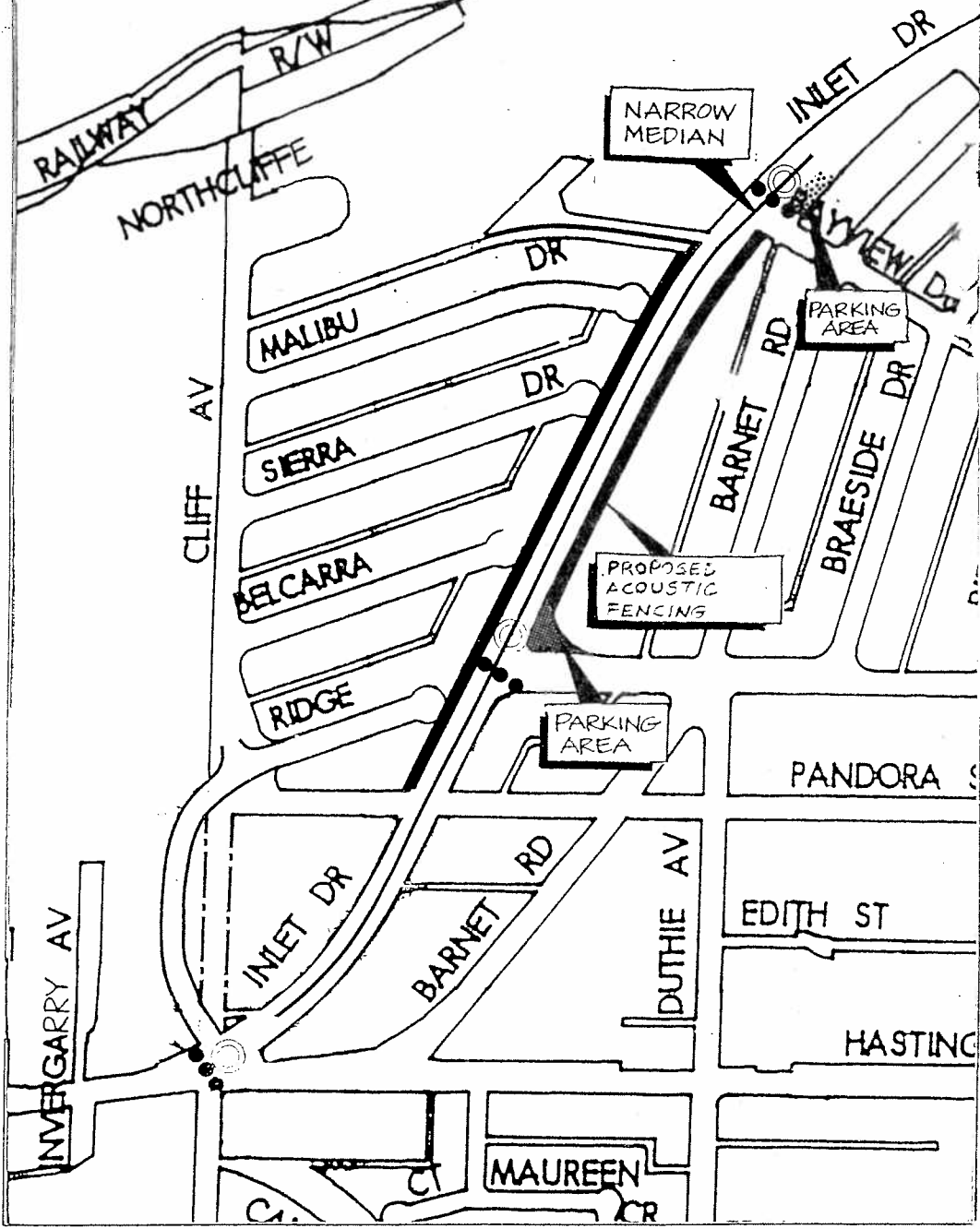
As policy statements for the Municipality, these are intended to be applied not only to City sponsored projects, but as well to those undertaken by senior levels of government. The improvement of urban arterials are undertaken to facilitate movements in the interest of the general community. It is considered that the general community should also assume responsibility for mitigating the effects of these improvements in those areas where it abuts adjacent residential neighbourhoods. It is in this context that it is recommended that the Ministry of Transportation and Highways be requested to reconsider their position and accept responsibility for the inclusion of noise attenuation fencing as a funded component of the overall Barnet/Hastings People Moving Project.


D.G. Stenson, Director
PLANNING AND BUILDING


JSB\jp

Attachments (2)

cc: Director Engineering
Director Recreation & Cultural Services
Director Finance



Date:
1994.04.18

Scale:
NTS.

Drawn By:
JAT

BURNABY
 Planning & Building Inspection Department

●●● PEDESTRIAN CROSSING

⊙ SIGNALS

FIGURE 1
INLET DRIVE
 PROPOSED ACOUSTIC FENCING



4949 Canada Way, Burnaby, B.C. V5G 1M2
Planning & Building Department

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Telephone: (604) 294-7400
Fax: (604) 294-7220

March 28, 1994

Our File: 08.640

Dear Inlet Drive Resident:

Re: Noise Attenuation Fencing Along Inlet Drive

As a result of two meetings with residents abutting Inlet Drive held on 1994 February 23 and 1994 March 26, there appears to be agreement by those attending the meetings that noise attenuation fencing should be provided along both sides of the Inlet Drive portion of the Barnet/Hastings People Moving Project.


The concept as discussed calls for decorative, concrete fencing that would help reduce future and existing traffic noise levels, while at the same time protect the scenic views particularly along the east side of Inlet Drive.

In order that this department can provide the City Council with an accurate accounting of the level of support for such a concept, would you please fill out the **enclosed** questionnaire and return it in the stamped, self-addressed envelope provided. We are requesting that these be returned by **1994 April 8**.

Once the questionnaires have been received, this department will be forwarding a report to the City Council outlining the results and also advising the Ministry of Transportation and Highways.

If you have any questions concerning the questionnaire or the fencing proposals, please contact Mr. Jack Belhouse (294-7431) or Mr. Bob Glover (294-7405) of this department. Thank you for your assistance in this matter.

Yours truly,



D.G. Stenson, Director
PLANNING AND BUILDING

JSB\db

Enclosure

Questionnaire

Inlet Drive Residents

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1. Name _____

2. Address _____

3. Are you an:
(please tick one)

owner/resident

or a tenant

4. Are you in favour of decorative, concrete acoustical fencing?
(please tick one of the following)

along both sides of Inlet Drive?

just along the west side of Inlet Drive?

just along the east side of Inlet Drive?

I am not in favour of any fencing.

Please enclose in stamped and self-addressed envelope provided and return by
1994 April 8.

Thank you.

