

CITY OF BURNABY

TRAFFIC AND TRANSPORTATION COMMITTEE  
(TRANSPORTATION AND TRANSIT DIVISION)

HIS WORSHIP, THE MAYOR  
AND COUNCILLORS

**RE: BARNET HASTINGS PEOPLE MOVING PROJECT: NOISE**  
**ATTENUATION ON LOCAL STREETS INTERSECTING INLET DRIVE**

RECOMMENDATION:

1. THAT Council approve the approach to noise attenuation on local streets intersecting the west side of Inlet Drive as outlined in this report.

REPORT

The Traffic and Transportation Committee (Transportation and Transit Division), at its meeting held on 1995 October 11, adopted the attached staff report outlining an approach to accommodate noise attenuation on local streets intersecting Inlet Drive.

MEMBERS:  
Mrs. Y. Coveney-Boyd  
Mr. E. Neumann  
Ms. L. Tatangelo  
Mr. L. Werden

Respectfully submitted,

Councillor D. Evans  
Chairman

Councillor J. Young  
Member

:-COPY - CITY MANAGER

- DIRECTOR ENGINEERING
- DIRECTOR FINANCE
- DIR. PLNG. & BLDG.
- OFFICER-IN-CHARGE, R.C.M.P.
- ENVIRONMENTAL HEALTH OFFICER
- FIRE CHIEF

TO: CHAIR AND MEMBERS  
TRAFFIC AND TRANSPORTATION COMMITTEE  
(Transportation and Transit Division)

1995 OCTOBER 10

FROM: DIRECTOR PLANNING & BUILDING

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SUBJECT: **BARNET HASTINGS PEOPLE MOVING PROJECT: NOISE ATTENUATION ON LOCAL STREETS INTERSECTING INLET DRIVE**

PURPOSE: To advise the Traffic and Transportation Committee of an approach to accommodate noise attenuation on local streets intersecting Inlet Drive.

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**RECOMMENDATION:**

1. **THAT** the Traffic and Transportation Committee approve the approach to noise attenuation on local streets intersecting the west side of Inlet Drive as outlined in this report.

**REPORT**

**1.0 INTRODUCTION**

At its regular meeting of 1994 November 28, Council approved the installation of acoustic fencing on both sides of Inlet Drive from Pandora Street to Bayview Street. Installation of the acoustic fencing is currently underway as part of the Inlet Drive section of the Barnet-Hastings People Moving Project and will be completed within 4 weeks.

The concept plan which was presented to the residents at a number of public meetings held in the fall of 1994 provided for the installation of acoustic fencing along both sides of Inlet Drive from Pandora to Bayview as shown in Figure 1 *attached*. Concrete fencing was to be continuous along Inlet Drive except for the ends of local streets, including Malibu, Sierra, Belcarra and Ridge Drive where they intersect Inlet Drive. At these points, gaps in the fencing would allow fire trucks to exit from the side streets onto Inlet Drive.

Recently, however, some residents of the intersecting streets have raised concerns that maintaining these openings at street ends would compromise the effectiveness of the acoustic barrier by allowing noise from Inlet Drive to permeate through to the side streets. Residents have suggested the provision of acoustic barrier gates in order to address this issue.

This report proposes an approach to respond to these concerns.

## 2.0 SUGGESTED APPROACH

### 2.1 General

This approach to addressing the issue of noise attenuation on the local streets intersecting Inlet Drive has two aspects including the following:

- i) developing an appropriate design and costing for gates at the street ends which would maintain the option for emergency vehicle access.
- ii) undertaking acoustic studies of the ambient noise levels on the side streets to Inlet Drive including Malibu Drive, Sierra Drive and Ridge Drive before and after completion of the Inlet Drive section of the Barnet Hastings People Moving Project.

The following sections outline the process to be followed in undertaking this work.

### 2.2 Design and Costing

In the course of the design process for the acoustic fencing on Inlet Drive the residents were apprised that to be fully "effective" the acoustic barrier should be continuous. This approach was taken to emphasize the need for unanimity on the part of the residents, thus avoiding the potential for irregular discontinuities in the barrier based on the individual choice of each resident. It was also recognized, however, that access for emergency vehicles and pedestrians was necessary. The Burnaby Fire Department expressed a need for an exit onto Inlet Drive and the acoustic fencing design maintained a gap of approximately 12m at the street ends to permit this access. Alternative access via the street ends was also viewed as necessary in the event of an emergency which could affect the sole access to the Westridge area at the Cliff Avenue/Inlet Drive intersection.

The desire for a fully continuous acoustic barrier and the need for fire access could be accommodated through the provision of "gates" at the street end of Malibu, Sierra, Belcarra and Ridge Drive. These "gates" would consist of a removable barrier at the street ends set back slightly from the existing acoustic barriers to allow free flowing pedestrian access (see **attached** Figures 2 & 3). This approach has been discussed with the Fire Department who have indicated they could adequately function with the gates in place. The cost of these gates is estimated in the range of \$25,000 - 30,000 depending on design. Subject to Committee approval of the approach suggested in this report, staff will develop a design with detailed costs.

### 2.3 Acoustic Studies

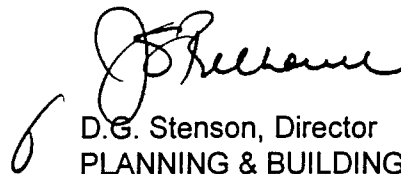
To determine the effectiveness of the acoustic barriers, staff have initiated a study of noise levels on the side streets for both the pre-project and post-project conditions as follows:

- i) **Pre-project** - "baseline" noise measurements were taken at the locations shown in Figure 1 on Malibu, Sierra and Ridge Drive prior to installation of the acoustic barriers. These readings were not taken prior to construction activity commencing of Inlet Drive. Nonetheless, as these noise measurements were averaged over a 24 hour period, the effect of intermittent increases in noise on overall noise levels due to construction activity on Inlet Drive should be minimized.
- ii) **Post-project** - noise measurements will be taken at the same locations over a 24 hour period after installation of the acoustic fencing and opening of Inlet Drive to a four lane standard but before installation of the gates.

These studies will permit an evaluation of the effectiveness of the acoustic barriers in reducing noise exposure on the residences located on the local streets intersecting the west side of Inlet Drive. Staff anticipate that the placement of the gates at the street ends will increase the effectiveness of the acoustic barrier on the west side, particularly for those homes in close proximity to the openings.

### 3.0 CONCLUSION

In response to concerns expressed by some residents on the local streets intersecting the west side of Inlet Drive, staff are suggesting an approach which could involve the installation of gates permitting emergency vehicle and pedestrian access. Design and costing of gates for the acoustic barrier on Inlet Drive will proceed in tandem with acoustic studies. The results of the noise studies will provide guidance with regard to the effectiveness of the acoustic barriers in reducing noise on the local streets in Westridge. A further report to the Committee will be brought forward at the conclusion of the "post-project" noise measurements with design and costing details for the gates.

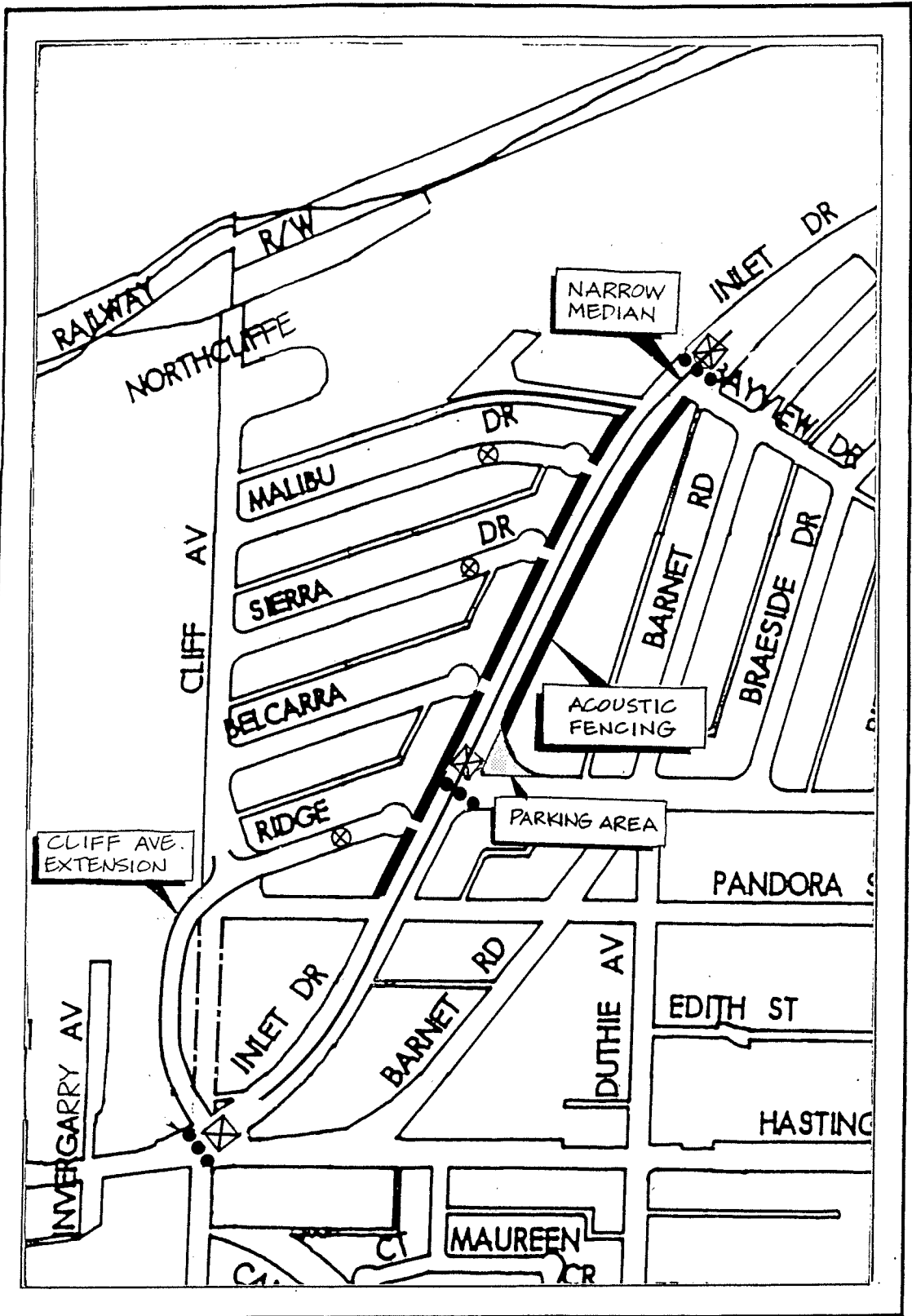
  
D.G. Stenson, Director  
PLANNING & BUILDING

RG/jp

Attachments (3)

cc: City Manager  
Deputy City Manager Corporate Services  
Director Engineering  
Director Finance  
Director Recreation & Cultural Services

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Date:  
1995 OCT

Scale:  
NTS.

Drawn By:  
[Signature]

**THE CORPORATION OF BURNABY**  
Planning & Building Inspection Department

FIGURE 1

- PEDESTRIAN CROSSING
- ⊗ MEASUREMENT LOCATIONS
- ▲

INLET DRIVE  
PROPOSED  
ACOUSTIC FENCING

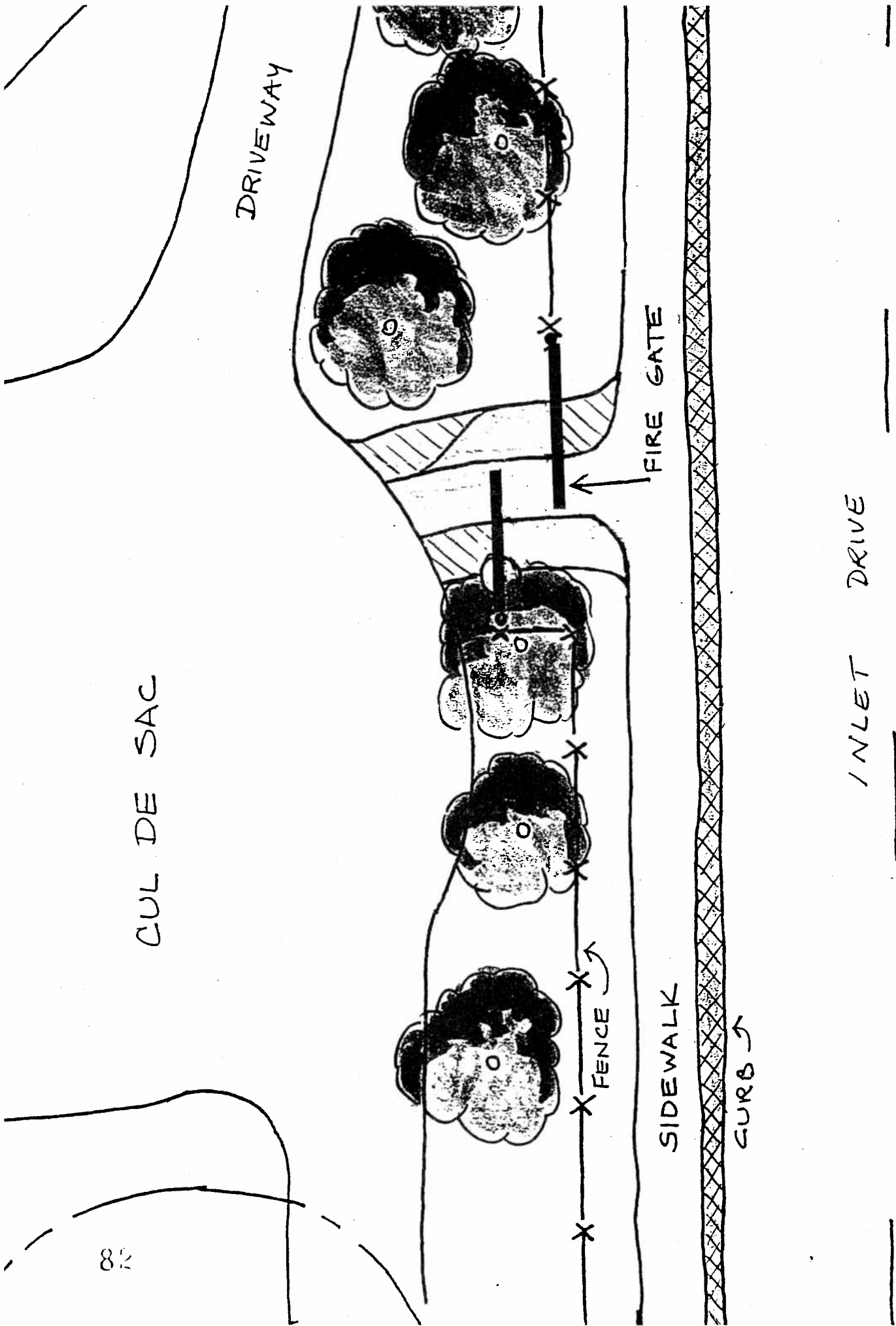
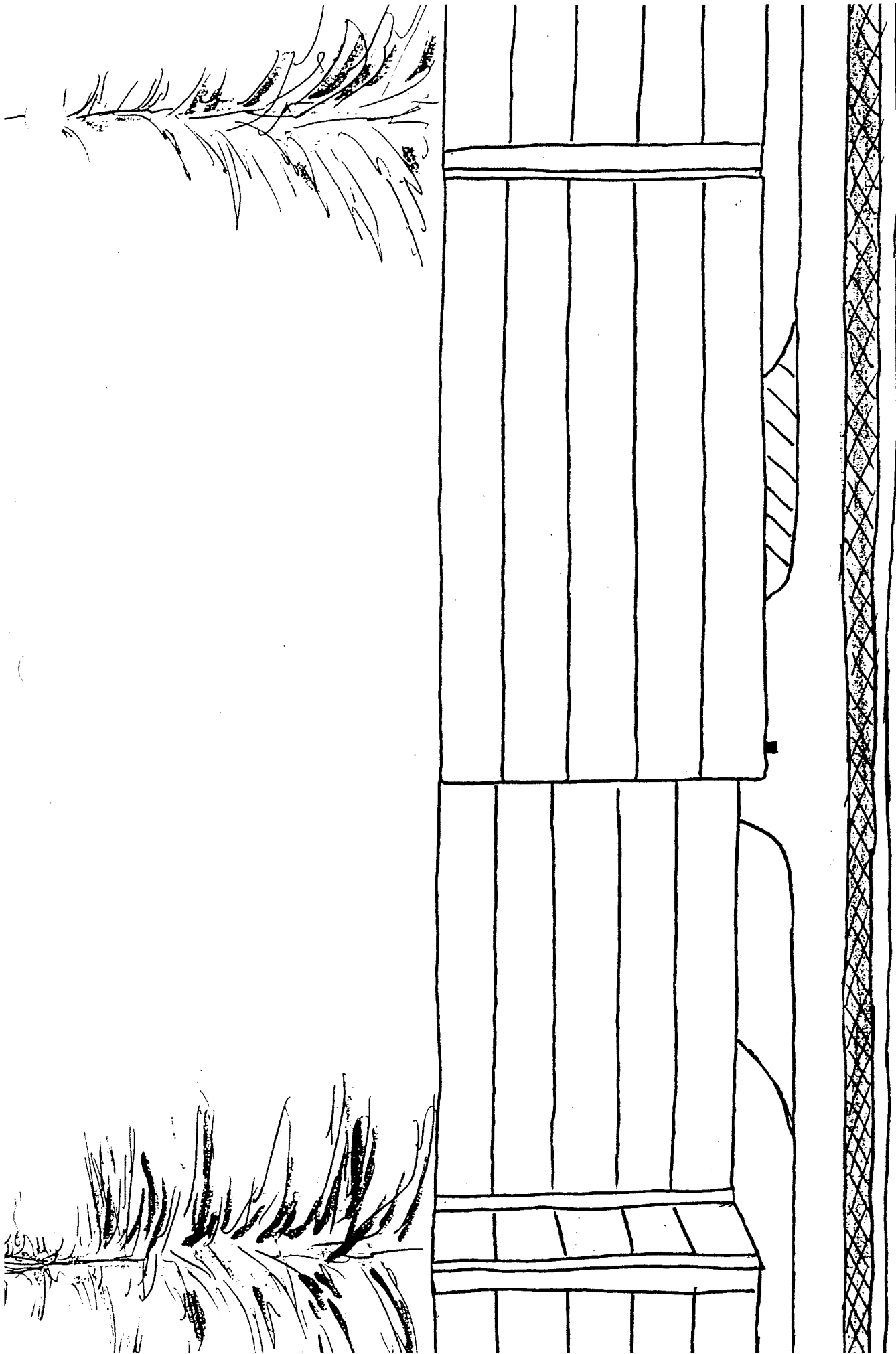


FIGURE 2



MOVEABLE NOISE ATTENUATION GATE

FIGURE 3

