REPORT
1994 February 14

CITY OF BURNABY
TRAFFIC AND TRANSPORTATION COMMITTEE
(TRANSPORTATION AND TRANSIT DIVISION)

HIS WORSHIP, THE MAYOR
AND COUNCILLORS

Re: Forest Glen Area Community Transportation Plan - Experimental Installation of One Pavement Undulation on Bond Street Adjacent to Forest Glen Park

RECOMMENDATIONS:

1. THAT Council approve the installation of the revised design for a pavement undulation on Bond Street adjacent to Forest Glen Park.

2. THAT Council send a letter, and a copy of this report, to B.C. Transit informing them of the installation of the pavement undulation, and the six week "test period" during which data will be gathered on the success of the undulation as a speed control device, as well as its acceptance by the area residents.

REPORT

The Traffic and Transportation Committee (Transportation and Transit Division), at its meeting held o 1994 February 09, adopted the attached staff report supporting the installation of one pavement undulatio on Bond Street adjacent to Forest Glen Park as part of a Community Transportation Plan for the area.

Arising from the discussion, the Committee requested that a letter and copy of this report be sent to Mr Dave Currie of B.C. Transit, and the Independent Canadian Transit Union informing each of th installation of the pavement undulation and inviting their comments during and after the six week te period.

Members:

Mr. Ernest Neumann
Mr. Peter Miller
Mr. Len Werden

Respectfully submitted,

Councillor D. Evans
Chairman

Councillor D. Lawson
Member

Councillor C. Redman
Member

Councillor J. Young
Member

:- COPY - CITY MANAGER
- DIRECTOR PLANNING & BLDG.
- DIRECTOR ENGINEERING
- DIRECTOR REC. & CULT. SERV.

TO: CHAIR & MEMBERS
TRAFFIC & TRANSPORTATION COMMITTEE

1994 FEBRUARY 3

FROM: DIRECTOR PLANNING & BUILDING

OUR FILE: 08-640
"Bond/Nelson Area"

SUBJECT: **FOREST GLEN AREA COMMUNITY TRANSPORTATION PLAN - EXPERIMENTAL INSTALLATION OF ONE PAVEMENT UNDULATION ON BOND STREET ADJACENT TO FOREST GLEN PARK**

PURPOSE: To recommend the installation of one pavement undulation on Bond Street adjacent to Forest Glen Park, as part of a Community Transportation Plan for the area.

RECOMMENDATIONS:

1. **THAT** the Traffic and Transportation Committee recommend Council approve the installation of the revised design for a pavement undulation on Bond Street adjacent to Forest Glen Park.

2. **THAT** the Traffic and Transportation Committee send a letter, and a copy of this report, to BC Transit informing them of the installation of the pavement undulation, and the six week "test period" during which data will be gathered on the success of the undulation as a speed control device, as well as its acceptance by the area residents.

REPORT

1.0 BACKGROUND

The Forest Glen Area Resident Committee has been meeting with City staff over the past year, to develop a Community Transportation Plan for the area. The plan is being developed in response to increasing commuter traffic in the area bounded by Willingdon Avenue, Grange Street, Royal Oak Avenue, and Moscrop Street. To date, staff have held six meetings with the Resident Committee, during which time several traffic control and traffic calming measures have been discussed.

On 1993 July 26, Council approved the installation of one pavement undulation by Forest Glen Park as a first step towards developing a comprehensive Community Transportation Plan for the area. The design, as approved last year, differs from that which is now proposed. This report documents the reason for the change in design, and requests the Committee approval of the revised design.

2.0 DISCUSSION

Figure 1 shows the design as proposed last summer. The undulation was designed with ruts for the wheels of a bus, so that the bus could pass "through" the undulation unimpeded. After approval of the recommendation to install the undulation, staff received information from BC Transit regarding the dimensions of the bus used on the Bond Street/Nelson Avenue route. The bus has double wheels at each side of its rear axle; therefore, the horizontal clearance between the wheels is relatively narrow. Because of the relatively short distance between its rear wheels, if a bus can pass over the undulation unimpeded, so could most other vehicles.

After the design with the "ruts" for bus wheels was rejected, staff looked at other possibilities for designing an undulation which would not impair the passage of a bus, but which would slow general traffic on Bond Street. A design with a "bus lane" down the centre of the undulation, as shown in Figure 2, was reviewed with BC Transit, and with the Resident Committee. The Resident Committee had the following concerns regarding the construction of the undulation with the centre bus lane:

* The potential for violation of the "Bus Only" lane by vehicles attempting to avoid slowing down to drive over the undulation.

* Street parking would have to be removed from four properties in the vicinity of the undulation, in order to allow sufficient width for a centre bus lane.

At its last meeting on 1994 January 13, the Forest Glen Area Resident Committee endorsed a proposal to install a regular pavement undulation, similar to that used on North Fraser Way to slow both cars and buses on Bond Street.

3.0 Discussions with BC Transit

Staff have worked with BC Transit staff develop a method of discouraging short-cutting traffic, and speeding traffic on Bond Street and Nelson Avenue, without adversely impacting the bus route. The aforementioned designs for the modified pavement undulation were reviewed, but neither design managed to meet the objectives of reducing speed and increasing safety on the bus route.

In 1993 October 8, City staff accompanied BC Transit on a field test of the performance of a bus on the pavement undulations on North Fraser Way. The bus travelled over each of the five pavement undulations, at a variety of different speeds to assess the level of discomfort to passengers. At 20km/hr, the bus managed to negotiate the undulation with little discomfort to passengers standing at the rear.

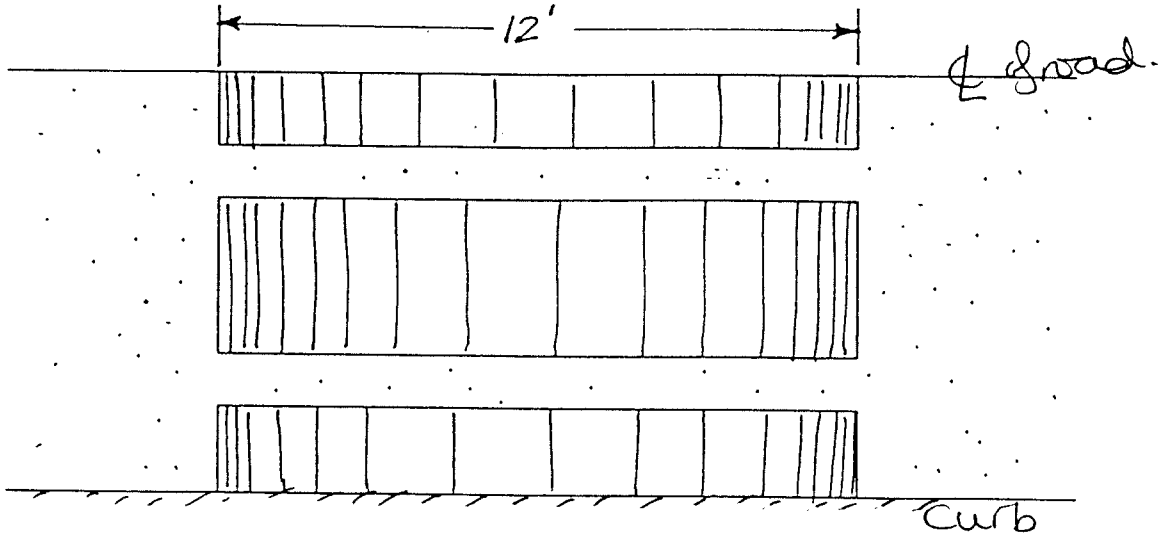
Staff propose that an undulation of the type used on North Fraser Way, be installed on Bond Street by Forest Glen Park. Because of the bus route, however, its height should be limited to 3" instead of 4", to minimise the impact on buses. The undulation should be subject to a six week test period, during which BC Transit will have the opportunity to notify the City of any adverse impacts on the buses using the Bond Street route.

4.0 CONCLUSION

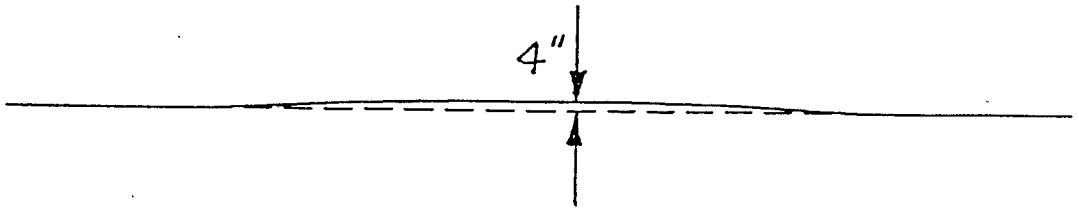
In order to allow residents of the area to become familiar with the concept of pavement undulations, as well as to test the feasibility of their use on a bus route, the Forest Glen Area Resident Committee has recommended the installation of a revised design for a pavement undulation on Bond Street adjacent to Forest Glen Park. The undulation would be subject to a six week test period, during which time its effectiveness would be assessed. The Forest Glen Area Resident Committee will meet again after the installation of the pavement undulation, to finalise the Community Transportation Plan, which will be brought forward for Council consideration in the Spring/Summer of 1994. Funds for the installation of the pavement undulation by Forest Glen Park are available in the Traffic Management Budget for 1994.

D.G. Stenson, Director
PLANNING AND BUILDING

DAB/db
cc. Director Engineering



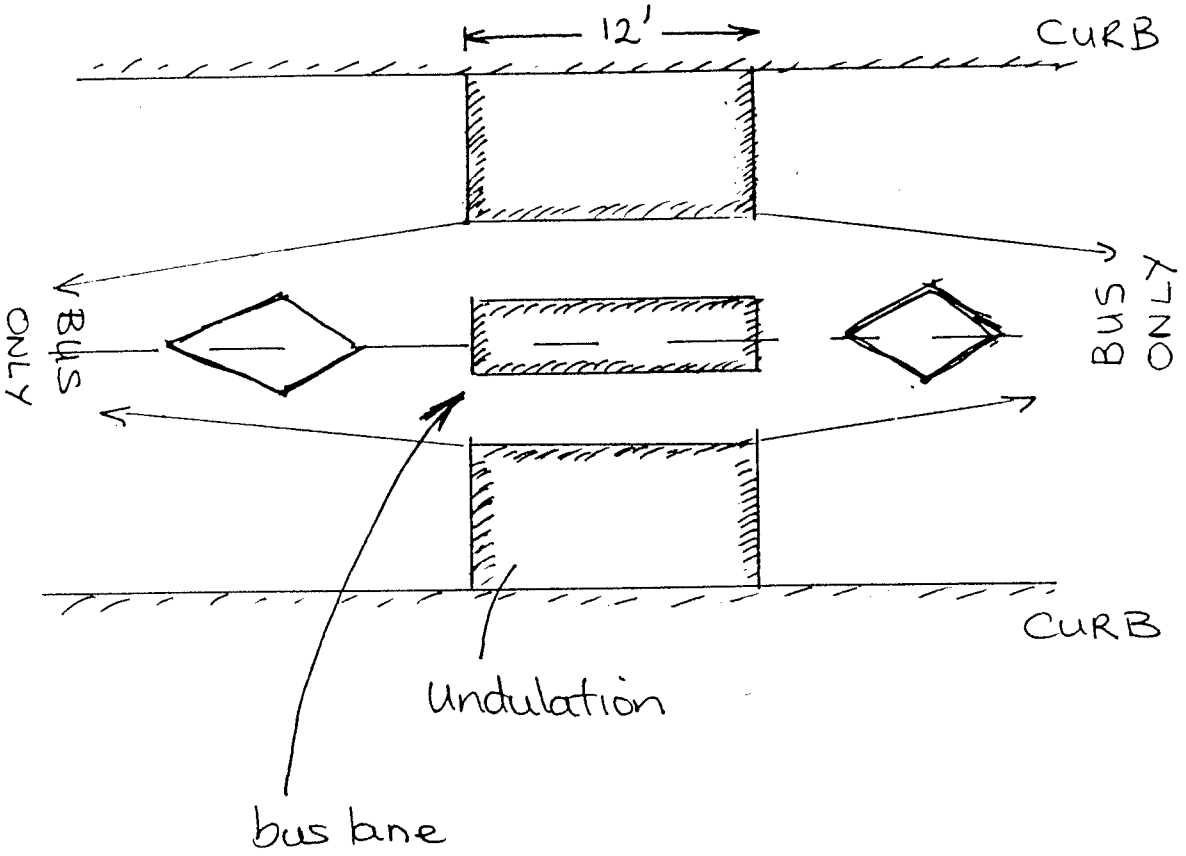
PLAN VIEW



SIDE VIEW

Date: JULY 1993	City of Burnaby Planning & Building Dept.
Scale: NTS	PAVEMENT UNDULATION
Drawn By: RCN.	WITH RUTS FOR BUS WHEELS

FIGURE 1



bus may use centre "bus lane" to avoid passing over the undulation.
general traffic must pass over undulations

Date: 32	City of Burnaby Planning & Building Dept.
Scale:	PAVEMENT UNDULATION WITH CENTRE BUS LANE
Drawn By:	FIGURE 2