



INTRODUCTION

1. INTRODUCTION

1.1. Background

1.1.1. The Second Review of the 1989 "White Paper: Pollution in Hong Kong -A time to act" has identified the need for a study to review the practicability of reducing the adverse effects of noise impacts due to traffic on existing roads in Hong Kong. A "Scoping Study for Providing Retroactive Road Traffic Noise Measures" study was commissioned in 1994 to define the scale of the traffic noise problems in the territory and to identify roads with potential for retroactive noise mitigation. The initial study is referred to in this Report as the " Scoping Study".

1.1.2. The "Scoping Study" was completed in 1995 and identified 22 road sections of 18 roads for stage 2 investigation (hereinafter called "study"). Subsequently Tolo Highway (Ma Liu Shui and Tai Po Kau) was included in its respective widening study and therefore was excluded for further investigation. The remaining 21 sections of road were consolidated into 16 study areas for further investigation.

1.2. The Assignment

1.2.1. Maunsell Consultants Asia Ltd. in association with Enpac Ltd and Hassell Ltd. were commissioned by the Environmental Protection Department (EPD) to perform the Study under Agreement No. CE 8/96 on 15th October 1996. The study is managed by the Noise Management and Policy Group (NMPG) within EPD.

1.2.2. An Inception Report (IR) which includes the approach, methodology, task definition, liaison and programme for the Study was issued in December 1996. The IR defines the scope of investigation, which is to provide a viable and sound engineering solution to the provision of direct technical remedies (DTR), such as barriers, enclosures etc., on existing roads in Hong Kong.

1.2.3. The engineering and design aspects of the recommended direct technical measures identified in the Scoping Study were reviewed. The costing and programming for the implementation of the proposed measures were also examined.

1.2.4. Sixteen sites were identified for investigation in this Study. Three of them including Island Eastern Corridor at Tai Koo Shing, Hiram's Highway at Sai Kung and Ting Kok Road at Tai Po were excluded from this Study because the noise in these three sites would be addressed in the major works projects currently programmed for implementation in the near future. These 13 sites are shown in Figure 7.1 and the respective road sections are listed as follows:-

<u>Working Paper No.</u>	<u>Road Section</u>	<u>Location</u>
2	Cheung Pei Shan Road	Tsuen Wan
2	Fung Shue Wo Road	Tsing Yi

<u>Working Paper No.</u>	<u>Road Section</u>	<u>Location</u>
2	Tung Tau Tsuen Road	Kowloon City
3	Yuen Wo Road	Sha Tin
3	Tai Chung Kui Road	Sha Tin
3	Che Kung Miu Road	Sha Tin
3	Che Kung Miu Road	Sha Tin
	J/O Hung Mui Kuk Road	
3	Tin Sam Street	Sha Tin
3	Ma On Shan Road	Ma On Shan
4	Tseung Kwan O Road	Kwun Tong
4	Po Lam Road North and Po Hong Road	Tseun Kwan O
5	Tuen Mun Road (Tsuen Wan)	Tsuen Wan
5	Tuen Mun Road (Tsing Lung Tau)	Tsing Lung Tau
5	Tuen Mun Road (Tuen Mun)	Tuen Mun
5	Castle Peak Road (Ping Shan)	Ping Shan
5	Castle Peak Road (Hung Shui Kiu)	Hung Shui Kiu

- 1.2.5. The findings of this Study will form the basis for consideration of traffic noise mitigation on existing roads in different urban environments and for the formulation of strategies to tackle traffic noise from existing roads in Hong Kong.

1.3. Structure of the Report

- 1.3.1. Prior to the submission of this Report, six Working Papers have been issued.

Working Paper No. 1 reviews the recommendations of Scoping Study with particular attention to the 16 selected locations included in this Study.

Working Paper No. 2 describes the investigation for Cheung Pei Shan Road, Tung Tau Tsuen Road and Fung Shue Wo Road.

Working Paper No. 3 describes the investigation for Yuen Wo Road, Tai Chung Kiu Road, Che Kung Miu Road, Tin Sam Street, Hung Miu Kuk Road and Ma On Shan Road.

Working Paper No. 4 describes the noise impact from Tsung Kwan O Tunnel Road in East Kowloon and Po Lam Road North and Po Hong Road within Tseung Kwan O New Town. Possible direct noise mitigation measures were also addressed.

Working Paper No.5 studies sections of road along Tuen Mun Road and Castle Peak Road. The assessed locations include Sam Shing Hui, Tsuen Wan, Tsing Lung Tau, Hung Shui Kiu, and Ping Shan

Working Paper No. 6 studies the air quality impacts on identified road sections covered by working paper nos. 2 to 5 of this study.

1.3.2. This Report summarises, concludes and generalises the findings in the above Working Papers in four sections. Chapter 1 is an introduction of the Study. The contents included in the different sections are highlighted below:

1.3.3. Section I describes the formulation of Road Assessment Scheme in four chapters as below:

Chapter 2 highlights the general approach to retroactive noise mitigation

Chapter 3 summarises the development of screening criteria for providing retroactive mitigation measures.

Chapter 4 describes the scheme evaluation system.

Chapter 5 summarises the priority ranking system.

1.3.4. Section II focuses on the application of the road assessment scheme in two chapters:

Chapter 6 illustrates the application of screening criteria

Chapter 7 summarises the findings from the sections of road being investigated in this Study.

1.3.5. Section III includes Chapter 8, which proposes a set of simplified road assessment procedures to assist in addressing impact of traffic noise generated from existing roads.

1.3.6. Section IV includes Chapter 9, which concludes the findings from the Study and recommends ways to address existing road noise impact from ground level roads on affected developments.