



IMPLEMENTATION STRATEGY

9. **IMPLEMENTATION STRATEGY**

9.1. **Overview**

9.1.1. The identified retroactive noise mitigation measures can be grouped into a number of packages for implementation purposes. The grouping may be based on the priority ranking as identified in the study. Works within the same jurisdiction with similar priority ranking should be grouped in the same package for administrative convenience. Based on the above consideration and according to resources/timing requirements, these identified retroactive noise mitigation measures are further prioritised into various phases as shown on Table 5.

9.1.2. The key statutory, administrative and consultative steps, staffing and process for the implementation of the identified measures are briefly highlighted in this section.

9.2. **Key Statutory, Administrative and Consultative Steps**

9.2.1. Status Process

9.2.1.1. The project needs to be gazette under the Roads (Works, Use and Compensation) Ordinance. The timing for the gazette procedures is shown in the project programme that includes allowance for ExCo papers submission under the Ordinance.

9.2.2. Administrative Steps

9.2.2.1. The project will be subdivided into packages based on the priority rating and jurisdiction. (See Table 5) The key administrative steps for each of the packages are highlighted as follows,

- Approval of Preliminary Project Feasibility Study (PPFS) Report
- Public Works Programme upgrading procedures including the earmarking of funds for the projects in the **Central Works Reserve Fund Resources Allocation Exercise (CWRF RAE)** and subsequent upgrading of projects to Category A for construction to proceed,
- Submission to District Lands Conference, as required for transplantation and felling of trees,
- Submission of Clearance Application Form to Land Department,
- Gazette for tender.

9.2.3. Consultation

9.2.3.1. The parties need to be consulted for the proposed packages include:

- The relevant District Boards,
- Advisory Council for Environment,
- Advisory Committee on Appearance of Bridges and Associated Structures,
- Various relevant government departments and offices.

9.3. **Staffing**

9.3.1. Government In-house Staff verse Consultants

9.3.1.1. The provision of identified mitigation measures is a multidisciplinary project that input from civil, traffic, structural, geo-technical, environmental engineering disciplines, and landscaping.

9.3.1.2. The desirable target for completion of all the identified measures would be within a 10 year period which takes account of the process for resources allocation exercises, design and construction of the various packages. An outlined implementation programme of the proposed measures for the various section of roads are indicated in the following programme.

Proposed Outlined Implementation Programme

	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
Cheung Pei Shan Road Tseung Kwan O Road Tuen Mun Road	Phase I										
Ma On Shan Road Tai Chung Kiu Road Che Kung Miu Road J/O Hung Miu Kuk Road Che Kung Miu Road Tin Sam Street Yuen Wo Road	Phase II										
Po Lam Road North Fung Shue Wo Road Castle Peak Road	Phase III										

9.3.1.3. The engagement of consultants to carry out the detailed design for the various packages and the subsequent supervision of construction works would be desirable. The reasons are:

- provide specialist expertise in a multidisciplinary approach for delivery of the packages,
- provide extra staff to supplement the existing government in-house staff resources for the delivery of packages within the target period.

9.3.1.4. The Environmental Protection Department would monitor the functional design of the mitigation measures. The works department, Highways Department, would manage the consultants for supervising the works.

9.4. Funding for Consultants

9.4.1. Detailed design and supervision of the construction for the defined packages would be via an agreement with the selected consultants. The fees for site investigation, design and contract stage would be funded under a Block Vote. At the construction stage, the consultants fees and the resident site staff costs would be paid under the Project Vote.

9.5. Process

9.5.1. Contract Options

9.5.1.1. There is no need to take advantage of the design and build contracts because there would be adequate lead time for detailed design and tender documentation. Lump sum contract with bills of quantities should be adopted in line with the current government policy.

9.5.1.2. Contractual provision for extension of time due to inclement weather should be included. The contract options should be further reviewed at the detailed design stage to take account of any possible changes to the conditions that may arise.

FEASIBILITY STUDY FOR ROAD TRAFFIC NOISE MITIGATION MEASURES

TYPICAL PROJECT PROGRAMME

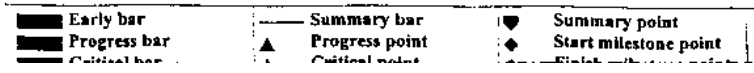
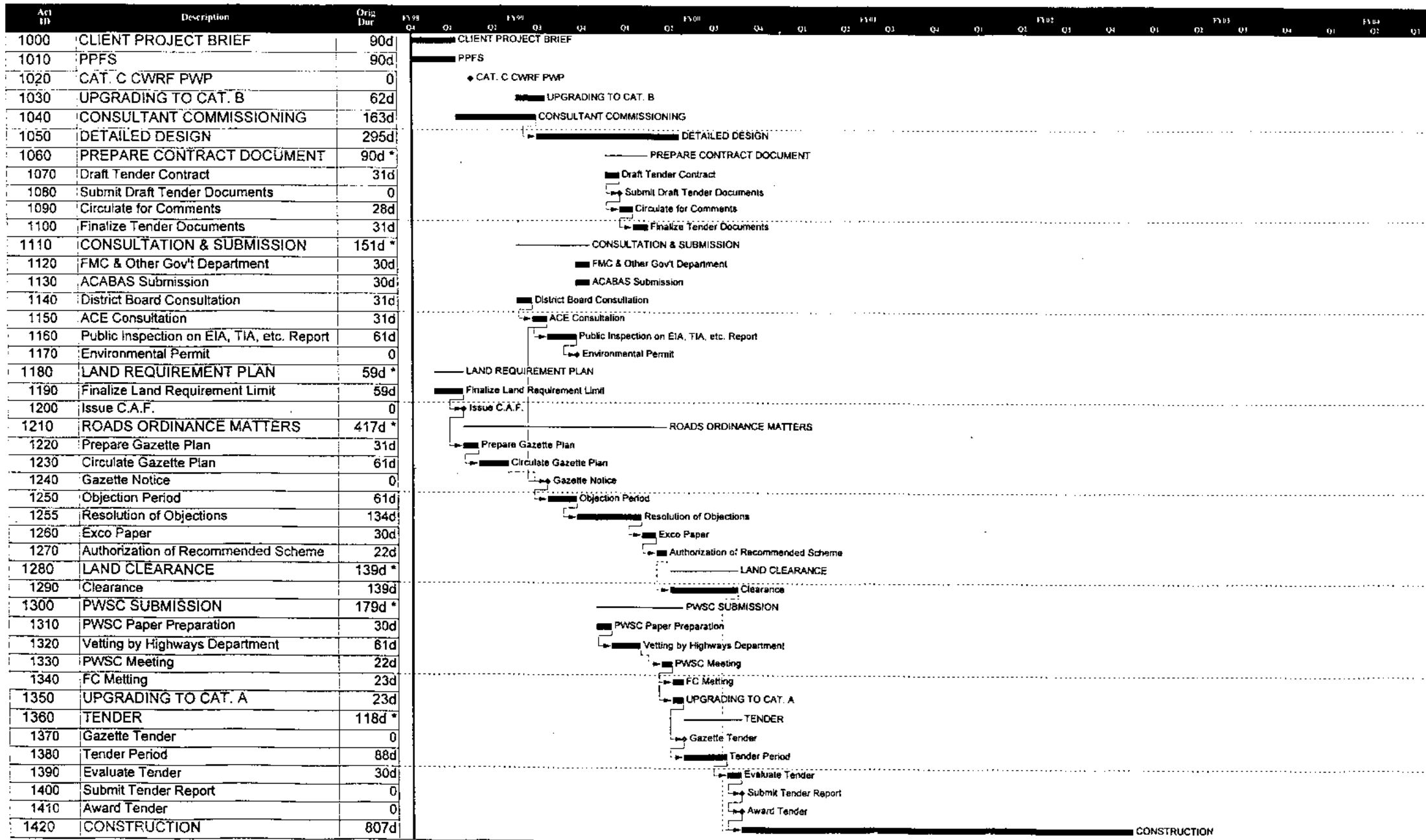


Table 5 Project Implementation Table

Phasing	Location		Protected NSRs	No. of exposed dwelling	No. of dwelling protected	No. of dwelling benefited	% of Protection	Total Cost	Total Cost/dwelling protected	Total Cost/dwelling benefited	Sum of Exposure Level 1 (priority Criterion)	Recommend noise mitigation measure
I	Cheung Pei Shan Road		a) Cheung Shan Estate - Sau Shan House and Lok Shan House b) Shek Wai Kok Estate - Shek Tsui House, Shek Kuk House, Shek Lan House and Shek To House c) Hoi Pa Village South d) Hoi Pa Resite Village e) Sam Tung Uk Resite Village	2,200	1,171	1,996	53	\$157.3M	\$0.13M	\$0.08M	19,094	3M on footing - 127m 4.5C on footing - 607m PE(A) - 103m PE(G) - 555m
		Tseung Kwan O Road	a) Hong Wah Court - Chung Hong House and Yee Hong House b) Lam Tin Estate - Block 4,5,7,8 and 10 c) Tsui Ping Estate - Block A to F	3,903	2,538	3,730	65	\$345.6M	\$0.14M	\$0.09M	18,228.5	PE(C) - 96m PE(D) - 133m PE(E) - 311m PE(F) - 70m PE - 210m
	Tuen Mun Road	Tsuen Wan	a) Belvedere Garden - Block 1 to 3 and 5 to 9 b) Greenview Court - Block 2 and 3	2,006	1,540	1,879	77	\$71.5M	\$0.05M	\$0.04M	9,839	5.5C on footing - 1,153m
		Tsing Lung Tau	a) Hong Kong Garden - Carmel Height, Dominion Height, Estoril Height, Fontana Height, Greenville Height, Hoover Height, Kingston Height, Lincoln Height, Manhattan Height, Welling Height, Orchid Height and Peony Height	377	339	373	90	\$22.1M	\$0.07M	\$0.06M	1,249.5	3M on footing - 416.5m 3M on pile - 3.5m 4.5C on footing - 270m
		Sam Shing Hui	a) Kam Fai Garden - Block 1 to 3	180	100	180	56	\$18.2M	\$0.18M	\$0.10M	1,698	5.5C on footing - 292m
	II	Ma On Shan Road		a) Heng On Estate - Heng Fung House, Heng Shan House and Heng Kong House b) Yiu On Estate - Yiu Shun House, Yiu Chung House, Yiu Yee House and Yiu Wing House	1,355	963	1,143	71	\$39.6M	\$0.04M	\$0.03M	2,732.5
Tai Chung Kiu Road			a) Jat Miu Chuen - Ming Shun Lau and Ming Yiu Lau b) Yue Shing Court	1,340	670	793	50	\$31.2M	\$0.05M	\$0.04M	4,338.6	5.5C on pile - 447m
Che Kung Miu Road J/O Hung Mui Kuk Road			a) Sun Chui Estate - Sun Ming House, Sun Yuet House and Sun Yee House b) Tin Sam Village	907	581	859	64	\$56.4M	\$0.10M	\$0.07M	2,972.5	3M on footing - 20m 4M on footing - 28m 5M on footing - 28m 5M on pile - 45m 6M on footing - 35m 5.5C on pile - 60m PE(B) - 155m

Phasing		Location	Protected NSRs	No. of exposed dwelling	No. of dwelling protected	No. of dwelling benefited	% of Protection	Total Cost	Total Cost/dwelling protected	Total Cost/dwelling benefited	Sum of Exposure Level 1 (priority Criterion)	Recommend noise mitigation measure
II	Che Kung Miu Road		a) Chun Shek Estate - Shek Yuk House and Shek Fai House	428	228	408	53	\$36M	\$0.16M	\$0.09M	2,156	PE(B) - 134m
	Tin Sam Street		a) Lung Hang Estate - Wing Sam house and Lok Sam House b) Carado Garden - Block 4 to 6	573	446	514	78	\$69.6M	\$0.16M	\$0.14M	1,677.5	5.5C on pile - 255m PE(A) - 80m PE(B) - 138m
	Yuen Wo Road		a) Wo Che Estate - Hong Wo House and Hip Wo House	357	261	305	73	\$12M	\$0.05M	\$0.04M	1,283.5	5.5C on pile - 110m 5.5C on footing - 7.5m
III	Po Lam Road North		a) Po Lam Estate - Po Tak House and Po Yau House b) Ying Ming Court - Ming On House, Ming Chi House and Ming Tat House c) Yan Ming Court - Yan Chung House, Yan Kuk House and Yan Lan House d) King Lam Estate - King Yu House, King Lui House, King Min House and King Nam House	1,334	706	746	53	\$90M	\$0.13M	\$0.12M	3,243	5.5C on pile - 662m PE(A) - 142m PE(B) - 112m
	Fung Shue Wo Road		a) Tsing Yi Estate - Yee Yat House, Yee Yip House and Yee Kui House b) Tsing Yi Garden - Block 1 to 5 c) Chung Mei Lo Uk Village d) Tai Wong Ha Resite Village	936	787	812	84	\$30M	\$0.04M	\$0.04M	1,976	3M on footing - 68m 4M on footing - 51m 4.5C on footing - 20m 5.5C on footing - 15m 5.5C on pile - 65m
	Castle Peak Road	Ping Shan	a) Fui Sha Wai - village houses b) Ping Tong Street West - village houses c) Ping Shan Lane - village houses	70	64	70	91	\$12M	\$0.19M	\$0.17M	213	2M on footing - 241m 4.5C on pile - 150m
	Castle Peak Road	Hung Shui Kiu	a) Parkview Garden	30	22	22	73	\$4M	\$0.18M	\$0.18M	141	4M on pile - 110m