

9. IMPLEMENTATION STRATEGY

9.1 Overview

9.1.1 The identified noise mitigation measures for the studied flyovers can be grouped into 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 mitigation measures on flyovers can be further prioritised into various phases if necessary.

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 typical project programme (Fig 9-1) 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 9-1). 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 CWRP RAS exercise 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 Lands Department; and
- 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, geotechnical, environmental engineering disciplines, and landscaping.

9.3.1.2 Typical project programme of the proposed mitigation measures for the studied flyovers is illustrated in Fig. 9-1.

9.3.1.3 The desirable target for completion of all the identified measures on the studied flyovers, namely Ap Lei Chau Bridge and Tsing Tsuen Bridge, would be within a 6 year period in three separate phases which take into account of the process for resources allocation exercises, design and construction of the various packages. An outlined implementation programme is indicated below:

	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Tsing Tsuen Bridge - Tsuen Wan Approach		Phase I				
Tsing Tsuen Bridge - Tsing Yi Approach			phase II			
Ap Lei Chau Bridge				Phase III		

9.3.1.4 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.

9.3.1.5 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.

Table 9-1 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 per dwelling protected	Total Cost per dwelling benefited	Sum of Exposure Level (Priority Criterion)	Recommended noise mitigation measure
I	Tsing Tsuen Bridge - Tsuen Wan Approach	Rivera Gardens: Hoi Nga Mansion Hoi Kwu Mansion Hoi Sing Mansion Hoi Fung Mansion Hoi Wai Mansion Hoi Yat Mansion Hoi Kwai Mansion Hoi Yin Mansion Hoi Yue Mansion	1545	714	960	46	HK\$124.4M	HK\$0.18M	HK\$0.13M	5754	Partial Enclosure Type I (125m) + Type II (160m)
II	Tsing Tsuen Bridge - Tsing Yi Approach	Cheung On Estate: On Mei House On Pak House On Chiu House	1061	122	657	12	HK\$86M	HK\$0.71M	HK\$0.13M	3030	Partial Enclosure Type II (150m)
III	Ap Lei Chau Bridge	Toho Court Rousseau Heights Sun Ming Building Nam Tack Mansion Ning Fung Mansion	77	34	74	44	HK\$16.1M	HK\$0.48M	HK\$0.22M	349.5	Bent top Vertical Barrier (95m)